

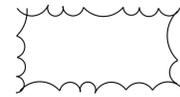
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	301	437


 LICENSED LANDSCAPE ARCHITECT
 6-24-13
 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.

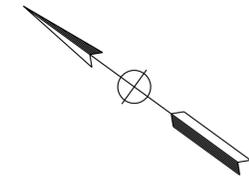


NOTE:

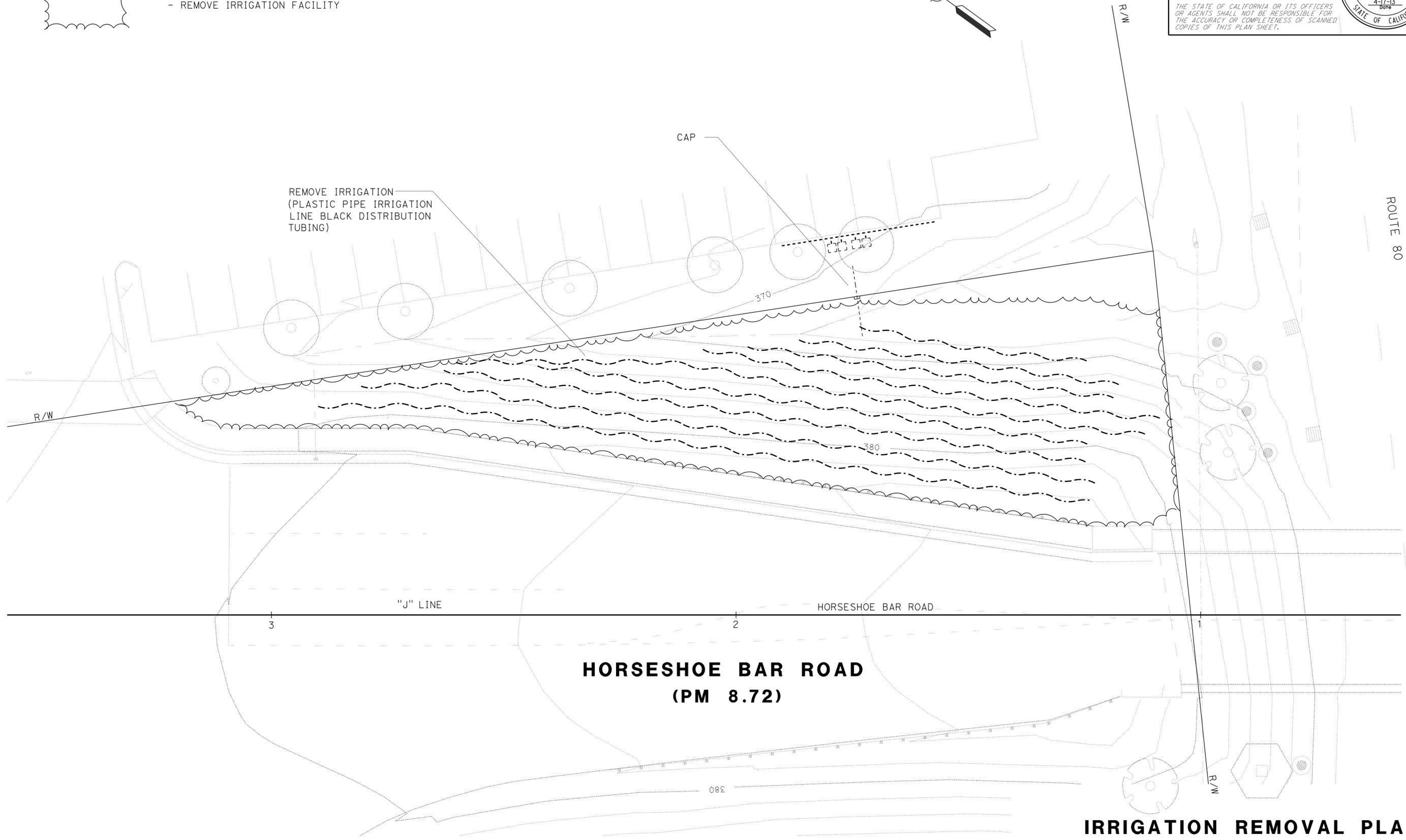
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



- REMOVE IRRIGATION FACILITY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	J. WILLIAMSON	REVISOR BY	DATE	REVISED
Caltrans	LANDSCAPE ARCHITECTURE	T CHRIS JOHNSON	CHECKED BY				



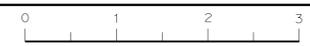
**HORSESHOE BAR ROAD
(PM 8.72)**

IRRIGATION REMOVAL PLAN

SCALE: 1" = 10'

IR-1

APPROVED FOR IRRIGATION WORK ONLY

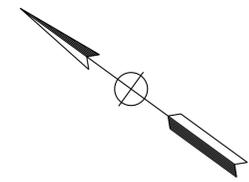


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	302	437

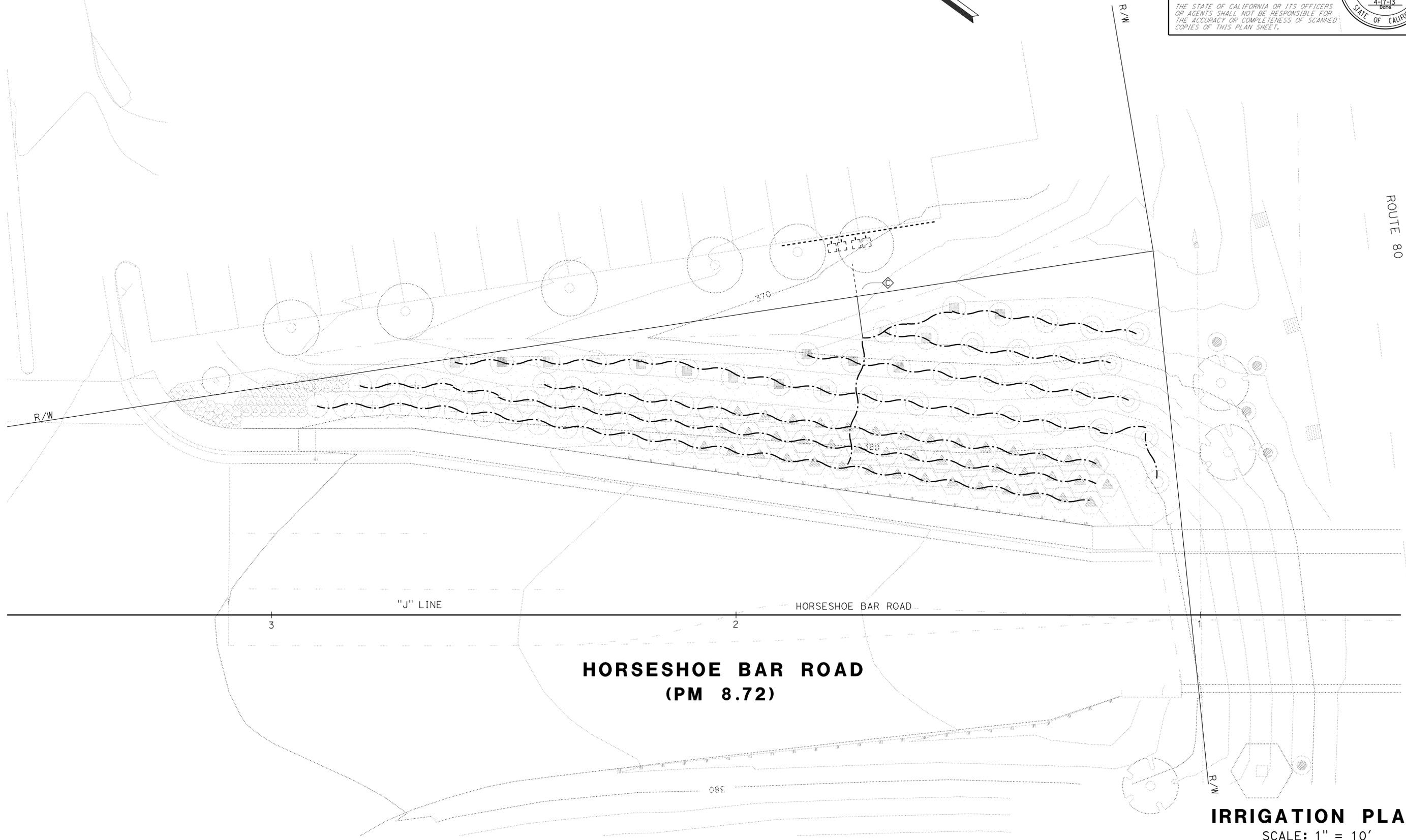

 LICENSED LANDSCAPE ARCHITECT
 6-24-13
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED- DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	T CHRIS JOHNSON	CHECKED BY	J. WILLIAMSON
			DATE REVISOR



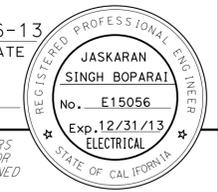
APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN
 SCALE: 1" = 10'
IP-1

LAST REVISION | DATE PLOTTED => 01-JUL-2013
 03-06-13 | TIME PLOTTED => 07:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	304	437

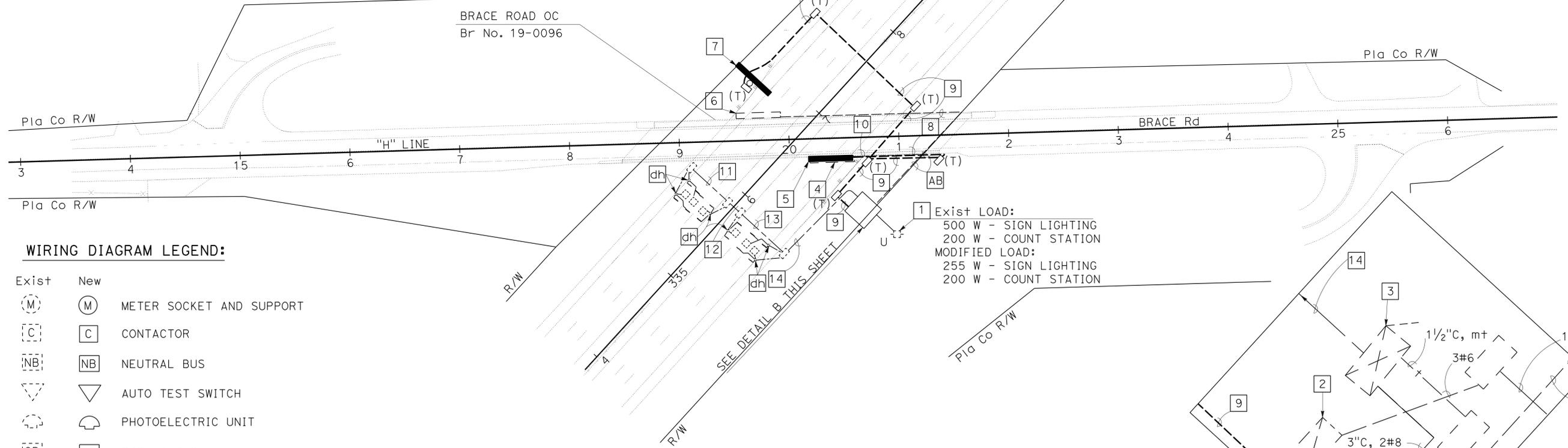
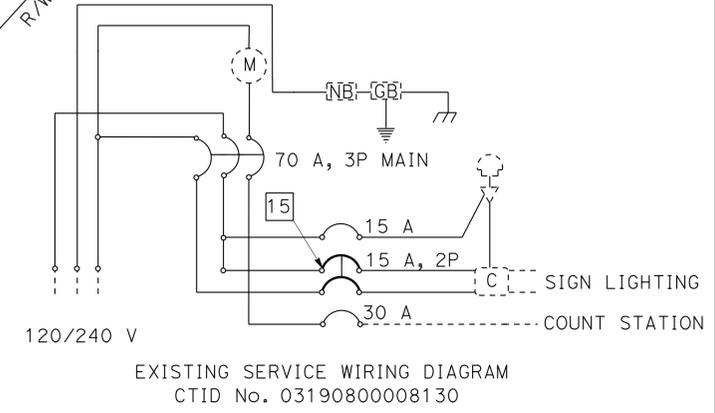
Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 - FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.

LEGEND: (THIS SHEET ONLY)

- sp, PG&E (120/240 V)
- Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800008130
- Exist MODEL 170 CONTROLLER ASSEMBLY
- Exist DS-48. RC SIGN ILLUMINATION AND ELECTRICAL EQUIPMENT
- DS-48. INSTALL 1 ISL, 1 SC2A
- Exist DS-49. RC mv AND ELECTRICAL EQUIPMENT
- DS-49, INSTALL 2 ISL, 1 SC2A
- RC EXISTING CONDUCTORS AND CONDUIT MOUNTING ON BRIDGE
- 2"C, 2#8
- 2"C, 2#8 (SIGN LIGHTING) SEE STRUCTURE PLANS FOR CONDUIT INSIDE THE BRIDGE RAILING. INSTALL 1"C, 2#8 FROM BACK OF No. 9A PULL BOX OUT OF BRIDGE RAILING.
- Exist 2 dlc, 4 SCREENED TRANSMISSION CABLE
- Exist 3 dlc, 6 SCREENED TRANSMISSION CABLE
- Exist 4 dlc, 8 SCREENED TRANSMISSION CABLE
- Exist 2"C, 6 dlc, 12 SCREENED TRANSMISSION CABLE
- RC 30 A CIRCUIT BREAKER. INSTALL 15 A CIRCUIT BREAKER



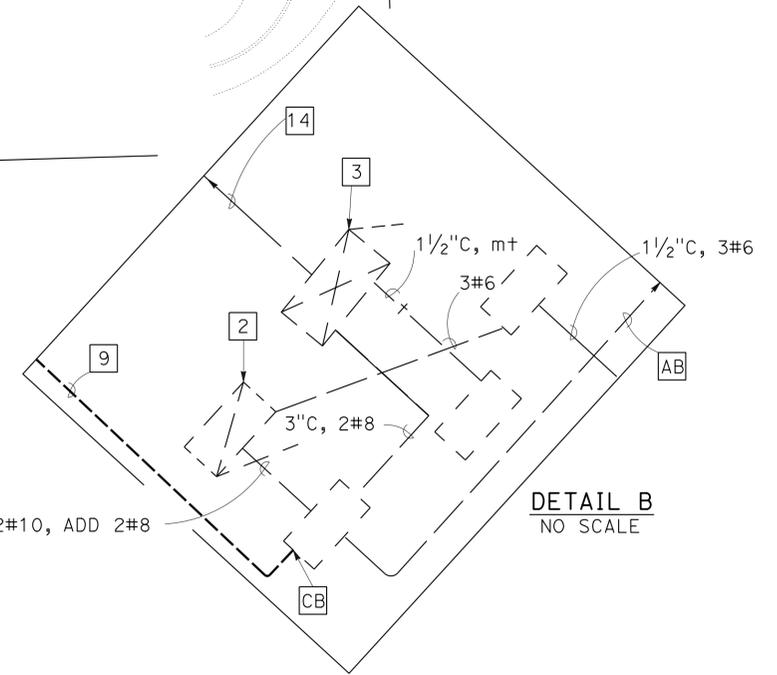
WIRING DIAGRAM LEGEND:

- | | | |
|-------|-------|--------------------------|
| Exist | New | |
| (M) | (M) | METER SOCKET AND SUPPORT |
| (C) | (C) | CONTACTOR |
| (NB) | (NB) | NEUTRAL BUS |
| (ATS) | (ATS) | AUTO TEST SWITCH |
| (PEU) | (PEU) | PHOTOELECTRIC UNIT |
| (GB) | (GB) | GROUND BUS |

ABBREVIATIONS:

- DHAR DIGITAL HIGHWAY ADVISORY RADIO
 PG&E PACIFIC GAS AND ELECTRIC COMPANY

- 1 Exist LOAD:
 500 W - SIGN LIGHTING
 200 W - COUNT STATION
 MODIFIED LOAD:
 255 W - SIGN LIGHTING
 200 W - COUNT STATION



MODIFY SIGN ILLUMINATION
 SCALE: 1" = 50'

E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 REVISIONS: 03-08-13
 LAST REVISION: DATE PLOTTED => 01-JUL-2013
 TIME PLOTTED => 07:45

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	307	437

Jaskaran Boparai 4-16-13
REGISTERED ELECTRICAL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

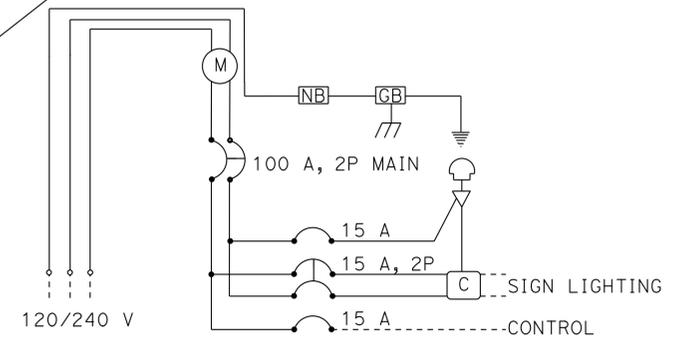
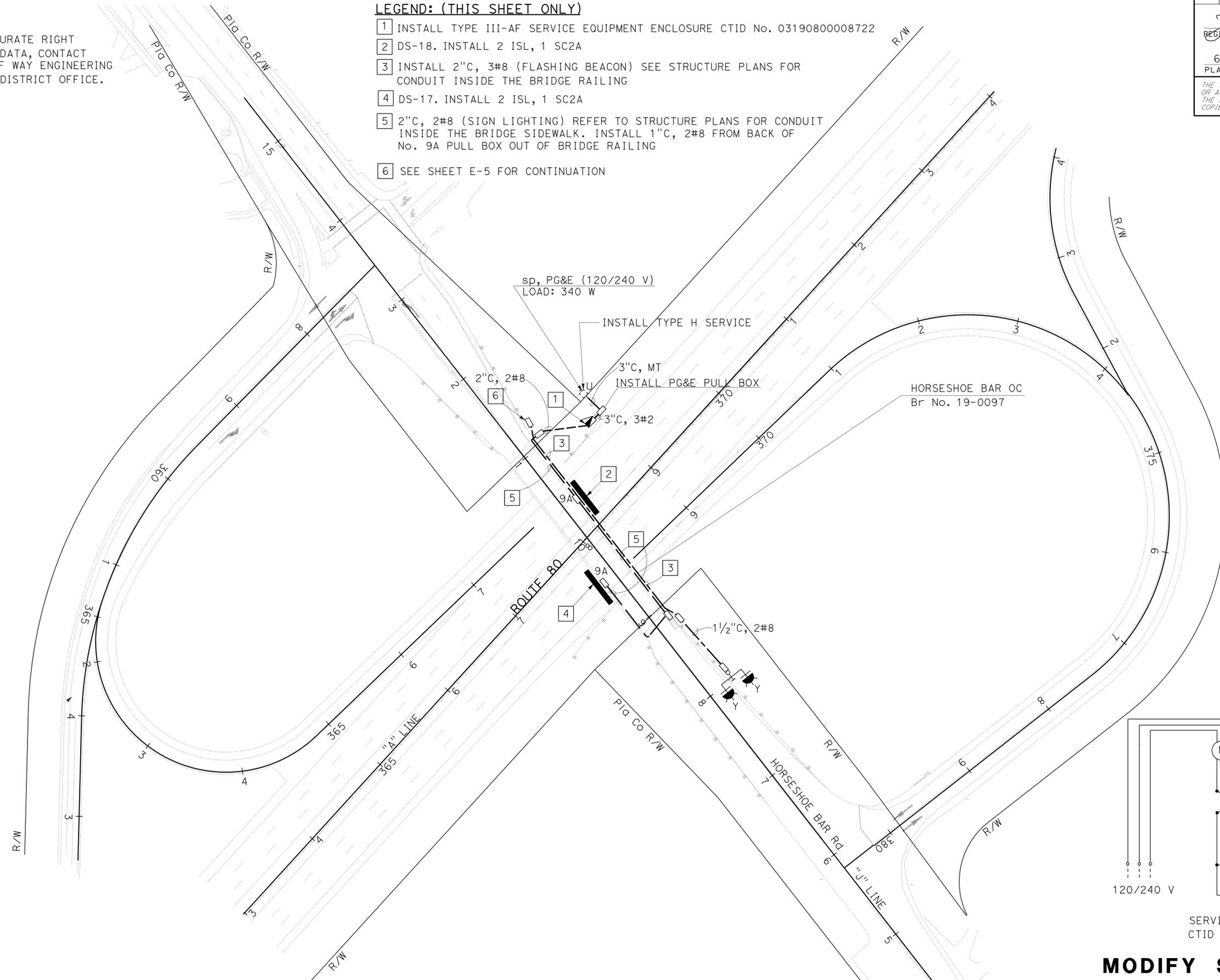
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- 1 INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800008722
- 2 DS-18. INSTALL 2 ISL, 1 SC2A
- 3 INSTALL 2" C, 3#8 (FLASHING BEACON) SEE STRUCTURE PLANS FOR CONDUIT INSIDE THE BRIDGE RAILING
- 4 DS-17. INSTALL 2 ISL, 1 SC2A
- 5 2" C, 2#8 (SIGN LIGHTING) REFER TO STRUCTURE PLANS FOR CONDUIT INSIDE THE BRIDGE SIDEWALK. INSTALL 1" C, 2#8 FROM BACK OF No. 9A PULL BOX OUT OF BRIDGE RAILING
- 6 SEE SHEET E-5 FOR CONTINUATION



SERVICE WIRING DIAGRAM
CTID No. 03190800008722

MODIFY SIGN ILLUMINATION
SCALE: 1" = 50'

E-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: NELSON LEE
DESIGNED BY: JASKARAN S BOPARAI
CHECKED BY: OANH D NGUYEN
REVISOR: JASKARAN S BOPARAI
DATE: 4-16-13

APPROVED FOR ELECTRICAL WORK ONLY

LAST REVISION: 0-08-13
DATE PLOTTED => 01-JUL-2013
TIME PLOTTED => 07:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	308	437

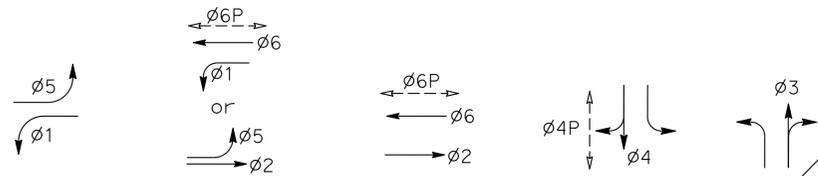
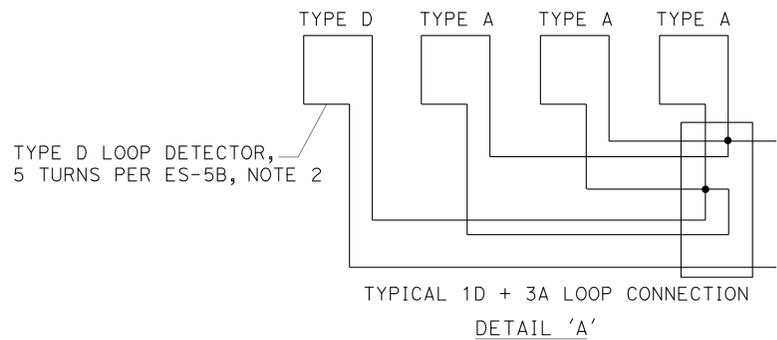
Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
JASKARAN SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 STATE OF CALIFORNIA

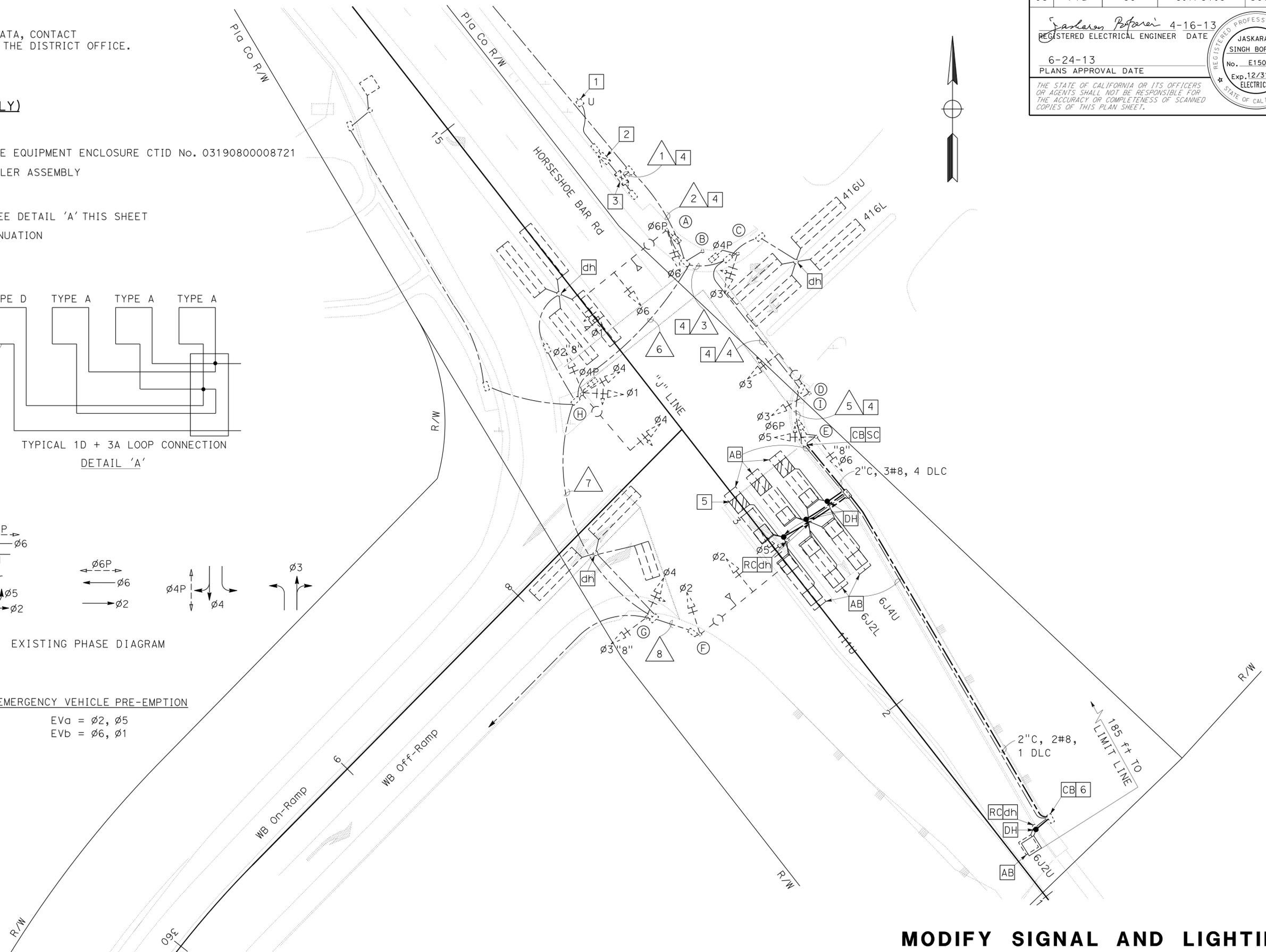
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- 1 sp, PG&E (120/240 V)
- 2 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800008721
- 3 Exist MODEL 170 CONTROLLER ASSEMBLY
- 4 RC 4 dlc. ADD 4 DLC
- 5 FOR LOOP INSTALLATION SEE DETAIL 'A' THIS SHEET
- 6 SEE SHEET E-4 FOR CONTINUATION



EMERGENCY VEHICLE PRE-EMPTION
 EVa = $\phi 2, \phi 5$
 EVb = $\phi 6, \phi 1$



MODIFY SIGNAL AND LIGHTING
 SCALE: 1" = 20'

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 OANH D NGUYEN
 JASKARAN S BOPARAI
 NELSON LEE
 FUNCTIONAL SUPERVISOR
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED
 BORDER LAST REVISED 7/2/2010

USERNAME => s121614
 DGN FILE => 0300000473ua005.dgn

RELATIVE BORDER SCALE
 15" IN INCHES



UNIT 0403

PROJECT NUMBER & PHASE

03000004731

LAST REVISION | DATE PLOTTED => 01-JUL-2013
 03-08-13 | TIME PLOTTED => 07:45

EXISTING CONDUIT AND CONDUCTOR SCHEDULE

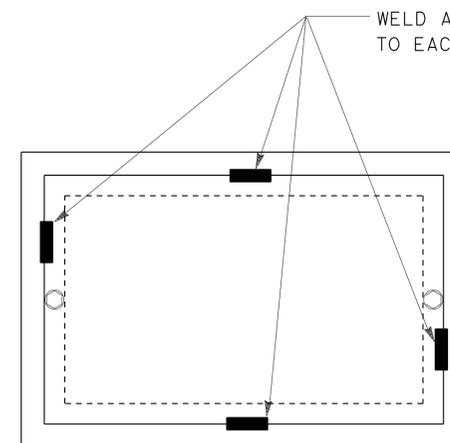
CONDUCTOR		CONDUIT RUN							
TYPE	DESIGNATION	1	2	3	4	5	6	7	8
14 AWG	ø1	3	3				3		
	ø2	3	3				3	3	3
	ø3	3	3	3	3		3	3	
	ø4	3	3				3	3	
	ø5	3	3	3	3	3	3	3	3
	ø6	3	3	3	3	3			
	ø4P	2	2	2			2		
	ø6P	2	2	2	2	2			
	ø4PPB	1	1				1		
	ø6PPB	1	1	1	1				
	PPB NEUTRAL		3				1		
	SPARES	6	6	3	3	3	3	3	3
	TOTAL	30	33	17	15	11	22	15	9
	12 AWG	PPB COMMON	1	1	1	1		1	
8 AWG	SIGNAL COMMON	1	1	1	1	1	1	1	1
10 AWG	LUMINAIRES		4	2	2		2	2	2
	FLASHING BEACON	3	3	3	3	3			
DLC	ø1	1 *	1 *	1 *	1 *	1 *			
	ø2	2	2				2		
	ø3	4	4				4	4	
	ø4	2	2	2					
	ø5	1	1				1		
	ø6	3 **	3 **	3 **	3 **	3 **			
	TOTAL	13	13	6	4	4	7	4	
EVC	Eva	1	1				1	1	1
	Evc	1	1						
	TOTAL	2	2				1	1	1
CONDUIT SIZE		2-3"	2-3"	3"	3"	2"	3"	3"	2"
TOTAL PERCENT FILL		13%	15%	13%	11%	18%	17%	13%	12%

* RC 1 dlc. ADD 1 DLC

** RC 3 dlc. ADD 3 DLC

EXISTING POLE AND EQUIPMENT SCHEDULE

	TYPE	STANDARD		VEH SIG MTG			PED SIGNAL		PPB		LUMINAIRE
		SMA	LMA	Ø	MAST ARM	Ø	POLE	Ø	MTG	Ø	
(A)	26-4-80	45	15	1/6	MAT MAS	6	SV-1-T	6	SP-1-T		200 W
(B)	PPB POST									4/6	← →
(C)	1-B					3	TV-1-T	4	SP-1-T		
(D)	17-3-80	20	12	3	MAS-4A	3	SV-1-T				200 W
(E)	1-B					5/6	TV-2-T	6	SP-1-T		
(F)	26-4-80	45	15	5/2	MAT MAS	2	SV-1-T				200 W
(G)	1-B					4/3	TV-2-T				
(H)	19-4-80	30	15	4	MAS-4A	1/2/4	SV-3-TA	4	SP-1-T	4	← →
(I)	PPB POST									6	→



WELD A MINIMUM 3" WELD TO EACH SIDE, SEE NOTE 1.

TOP VIEW
NO SCALE

TRAFFIC PULL BOX DETAIL

NOTES ON PULL BOXES:

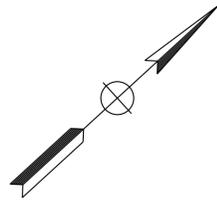
- WELDING MUST COMPLY WITH STANDARD SPECIFICATION SECTIONS 75-1.01, 75-1.02, 75-1.05 AND 75-1.06.
- CONDUITS ENTERING TRAFFIC THE PULL BOX MUST BE ENCASED IN PCC (3" ALL AROUND). PCC ENCASEMENT MUST EXTEND 5'-6" FROM THE PULL BOX.
- PULL BOXES FOR ELECTROLIERS, POST AND SIGNAL STANDARDS MUST BE LOCATED WITHIN 5'-0" FROM THE STATION OF THE ADJACENT ELECTROLIER, POST OR SIGNAL STANDARD.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	310	437

Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JASKARAN SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 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.



NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

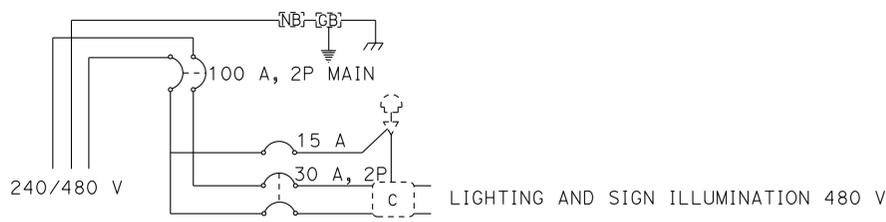
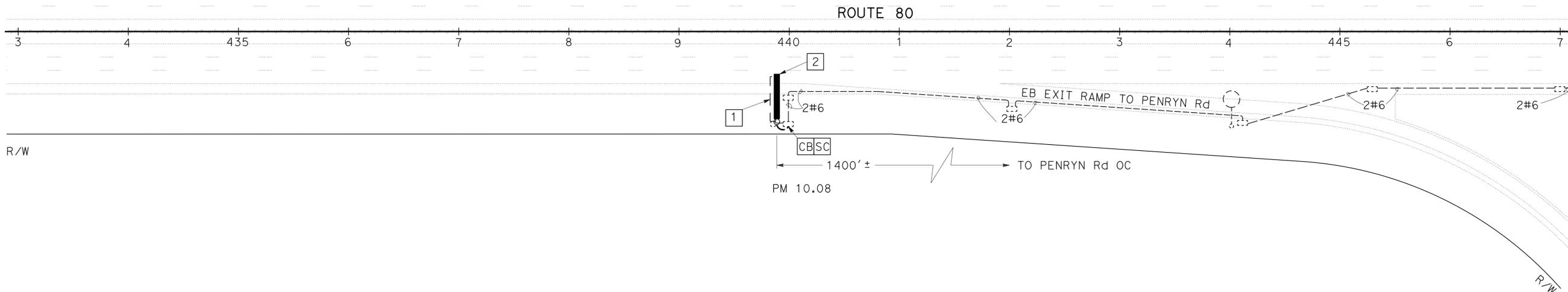
- 1 Exist DS-126. RC 1 mv AND ELECTRICAL EQUIPMENT
- 2 DS-126. INSTALL 1 ISL, 1 SC3A

Pla Co R/W

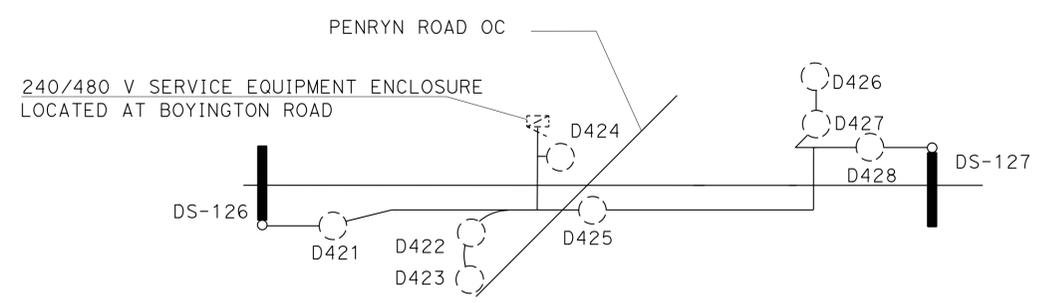
Pla Co R/W

R/W

R/W



EXISTING SERVICE WIRING DIAGRAM
CTID 03190800010350
NO SCALE



EXISTING LIGHTING DIAGRAM
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED/DESIGNED BY
 CHECKED BY

OANH D NGUYEN
 JASKARAN BOPARAI

REVISED BY
 DATE REVISED

APPROVED FOR ELECTRICAL WORK ONLY



MODIFY SIGN ILLUMINATION
SCALE: 1" = 50'

E-7

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	311	437

Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

6-24-13
 PLANS APPROVAL DATE

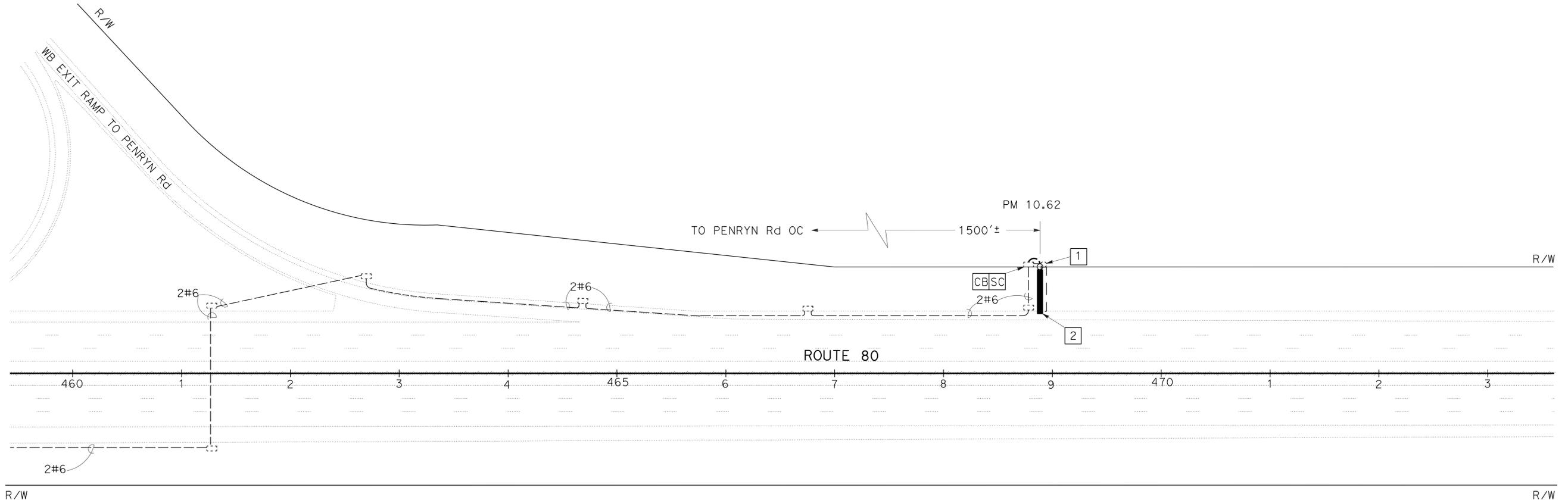
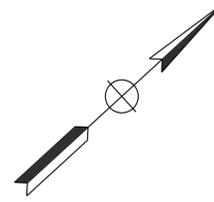
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- 1 Exist DS-127. RC 1 mv AND ELECTRICAL EQUIPMENT
- 2 DS-127. INSTALL 1 ISL, 1 SC3A

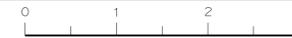


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: OANH D NGUYEN
 CHECKED BY: JASKARAN S BOPARAI
 REVISED BY: [blank]
 DATE REVISED: [blank]

MODIFY SIGN ILLUMINATION
 SCALE: 1" = 50'

E-8

APPROVED FOR ELECTRICAL WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED-DESIGNED BY
 CHECKED BY

OANH D NGUYEN
 JASKARAN S BOPARAI

REVISED BY
 DATE REVISED

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.

LEGEND: (THIS SHEET ONLY)

- 1 2"C, 2 TYPE 2 LOOP WIRE

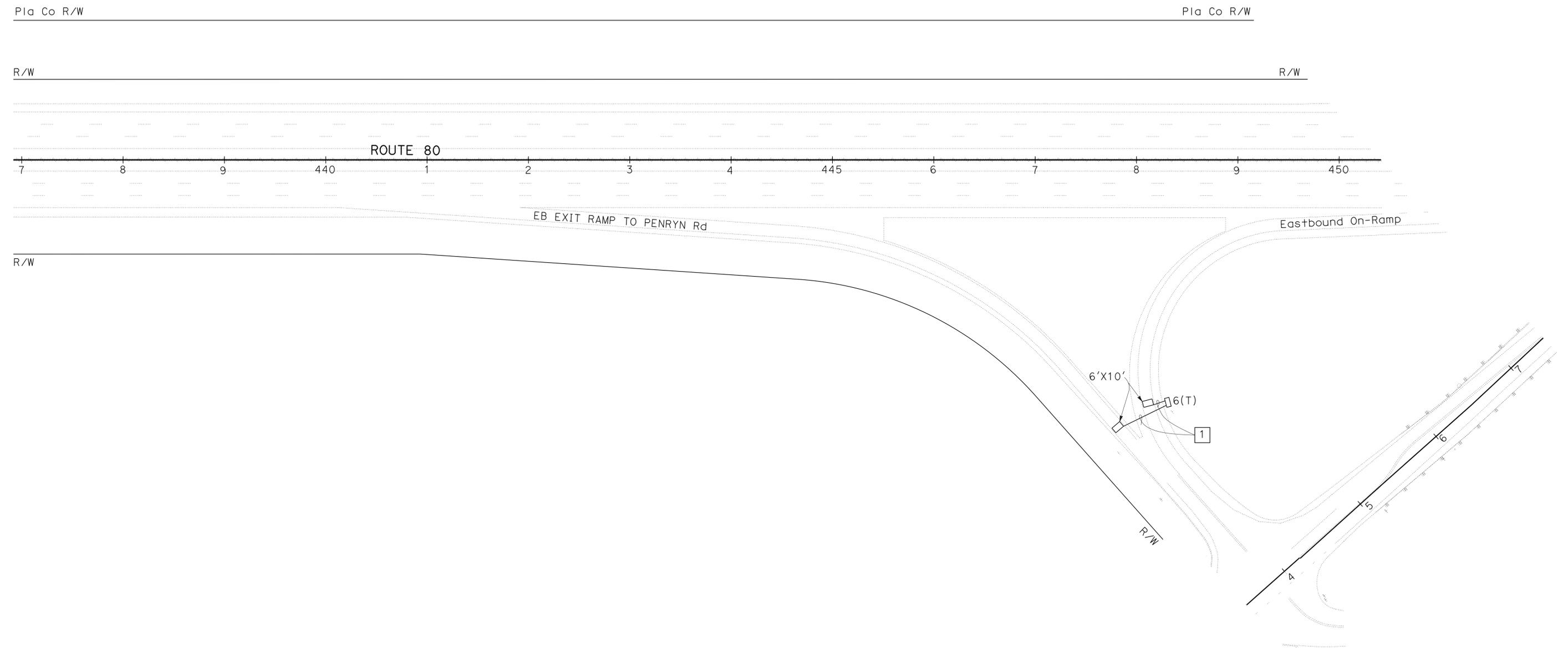
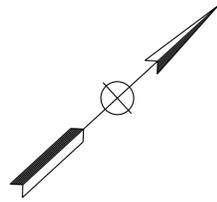
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	313	437

Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

6-24-13
 PLANS APPROVAL DATE

JASKARAN SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 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.



TRAFFIC MONITORING STATION (COUNT)
 SCALE: 1" = 50'

E-10

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	314	437

Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 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.

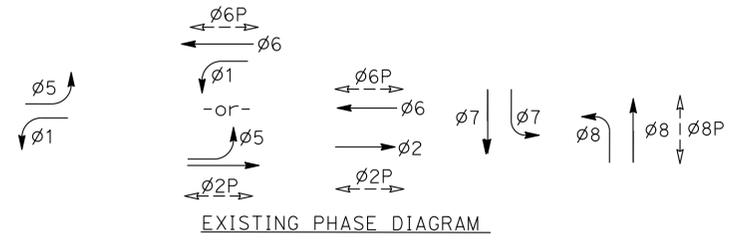
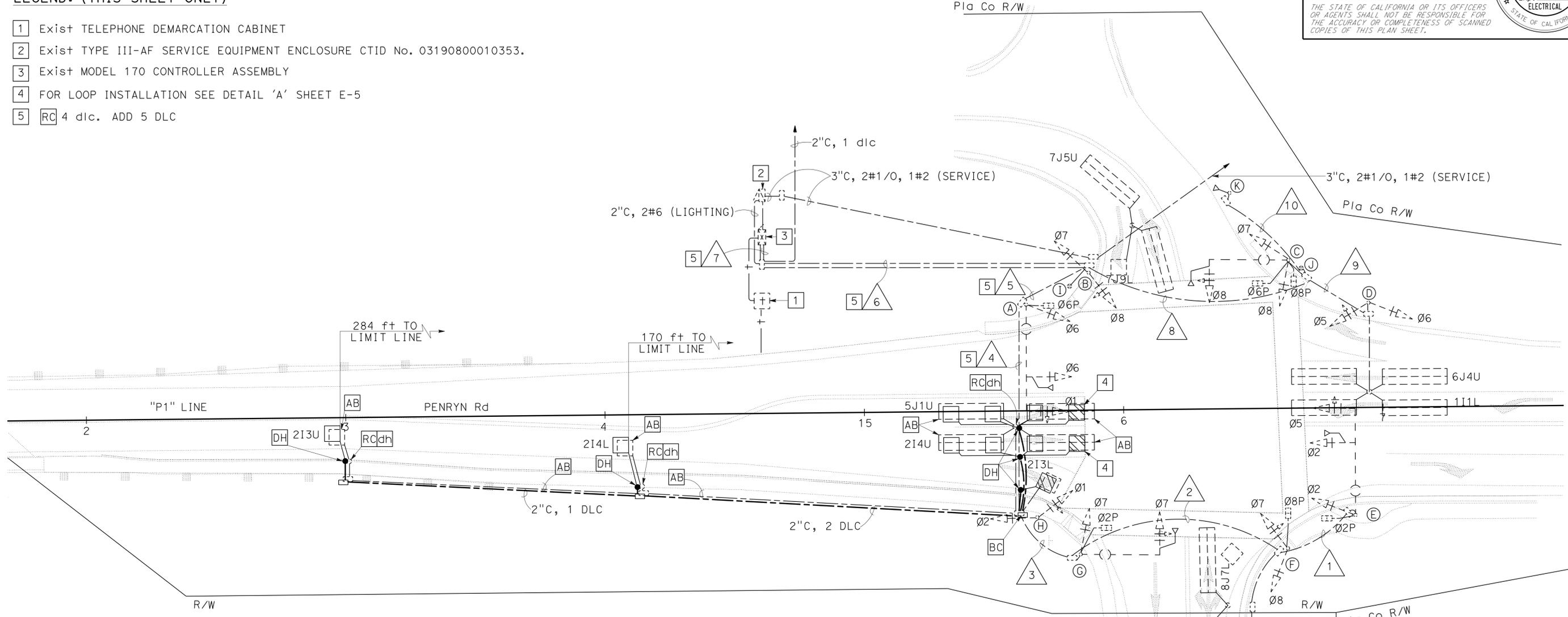
REGISTERED PROFESSIONAL ENGINEER
JASKARAN SINGH BOPARAI
No. E15056
Exp. 12/31/13
ELECTRICAL
STATE OF CALIFORNIA

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- 1 Exist TELEPHONE DEMARCATION CABINET
- 2 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800010353.
- 3 Exist MODEL 170 CONTROLLER ASSEMBLY
- 4 FOR LOOP INSTALLATION SEE DETAIL 'A' SHEET E-5
- 5 RC 4 dlc. ADD 5 DLC



EMERGENCY VEHICLE PRE-EMPTION

EVa = Ø2, Ø5
 EVb = Ø7
 EVc = Ø6, Ø1
 EVd = Ø8

MODIFY SIGNAL AND LIGHTING
SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR
NELSON LEE
CALCULATED/DESIGNED BY
CHECKED BY
REVISOR
DATE
REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	315	437

Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JASKARAN SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 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.

EXISTING CONDUIT AND CONDUCTOR SCHEDULE

CABLE SCHEDULE			CONDUCTOR RUN NUMBER AND SIZE																
CABLE TYPE	Std	PHASE	1	2	3	4	5	6	7	8	9	10							
VEH-PED 12CSC	(A)	1,6,6P					1	1	1										
	(B)	7,8						1	1										
	(C)	7,8,6P,8P						1	1	1									
	(D)	5,6						1	1	1	1								
PPB 3CSC	(E)	2,5,2P	1	1	1	1	1	1	1	1									
	(F)	7,8,8P	2 PPB,8 PPB		1	2	1	2	1	2	1	2							
	(G)	7,2P	2 PPB		1	1	1	1	1	1	1								
	(H)	1,2					1	1	1	1									
	(I)		6 PPB							1	1								
	(J)		6 PPB,8 PPB							2	2	2							
	(K)	PHASE 7 - EVD																	
	TOTAL CABLES 12/3 CONDUCTORS			1	2	2	3	3	4	3	5	3	8	6	8	6	2	2	1
	#8	LIGHTING		2	2	2	2	2	2	2	2	2							
DLC	ø1									2	2	2	2						
	ø2						4 *	4 *	4 *	4 *									
	ø5						1 **	1 **	1 **	1 **									
	ø6									3	3	3	3						
	ø7				2	2	2	2	2	3	3								
	ø8									2	2								
	WB ON				1	1	1	1	1	1	1								
	WB OFF				1	1	1	1	1	1	1								
TOTAL DLC'S PER RUN				4	4	9	9	17	17	5	5								
EVC			1	1	2	2	3	5	5	2		1							
CONDUIT SIZE			3"	3"	4"	4"	4"	2-4"	2-4"	3"	3"								

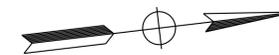
* RC 3 dlc. ADD 4 DLC
 ** RC 1 dlc. ADD 1 DLC

EXISTING POLE AND EQUIPMENT SCHEDULE

	STANDARD			VEH SIG		MTG	PED SIGNAL		PPB	HPS		
	TYPE	SMA	LMA	Ø	MAST ARM	Ø	POLE	Ø	MTG	Ø	ARROW	LUMINAIRE
(A)	26-4-100	40	15	1	MAS MAS	6	SV-1-T	6	SP-1-T			200 W
(B)	1-B					7	TV-2-T					
(C)	19-3-100	30	15	8	MAS-4B	7	SV-1-T	8	SP-2-T			200 W
(D)	1-B					5	TV-2-T					
(E)	26-4-100	40	15	2	MAS MAS	2	SV-1-T	2	SP-1-T			200 W
(F)	1-B					7	TV-2-T	8	SP-1-T	8	→	
(G)	24-4-100	35	15	7	MAS-4B	7	SV-1-T	2	SP-1-T	2	←	200 W
(H)	1-B					1	TV-2-T					
(I)	PPB POST									6	→	
(J)	PPB POST									8	↑	
(K)	1-B									6	↑	

MODIFY SIGNAL AND LIGHTING

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 ELECTRICAL DESIGN
 OANH D NGUYEN
 JASKARAN S BOPARAI
 OANH D NGUYEN
 JASKARAN S BOPARAI
 NELSON LEE
 REVISIONS: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	317	437

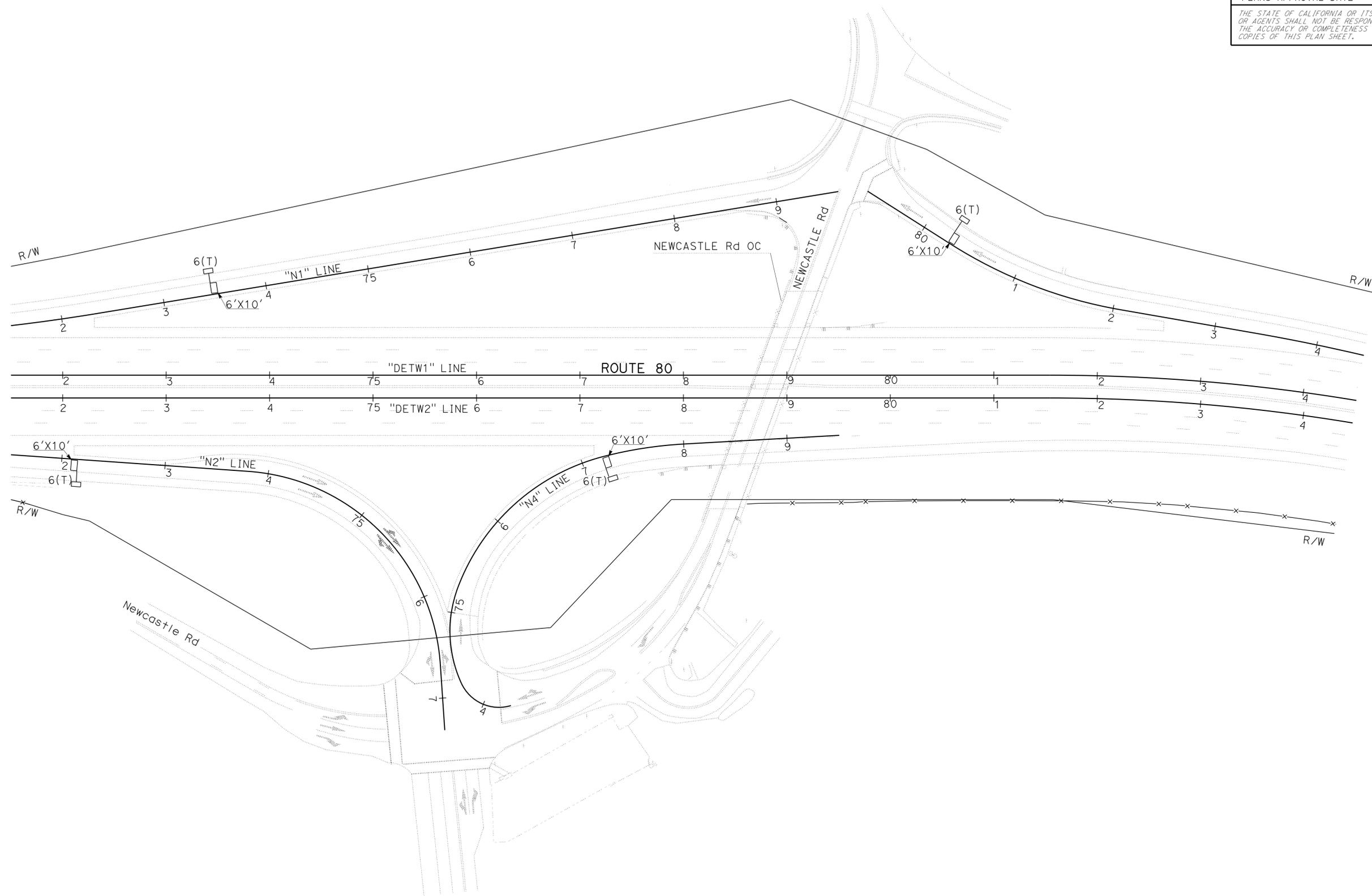
Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JASKARAN SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 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.

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans ELECTRICAL DESIGN	NELSON LEE	JASKARAN S BOPARAI	DATE
		OHANH D NGUYEN	DATE
			REVISOR
			DATE
			REVISOR
			DATE

TRAFFIC MONITORING STATION (COUNT)

SCALE: 1" = 50'

E-14

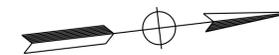
APPROVED FOR ELECTRICAL WORK ONLY



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	318	437

Jaskaran Boparai 4-16-13	
REGISTERED ELECTRICAL ENGINEER	DATE
6-24-13	
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.

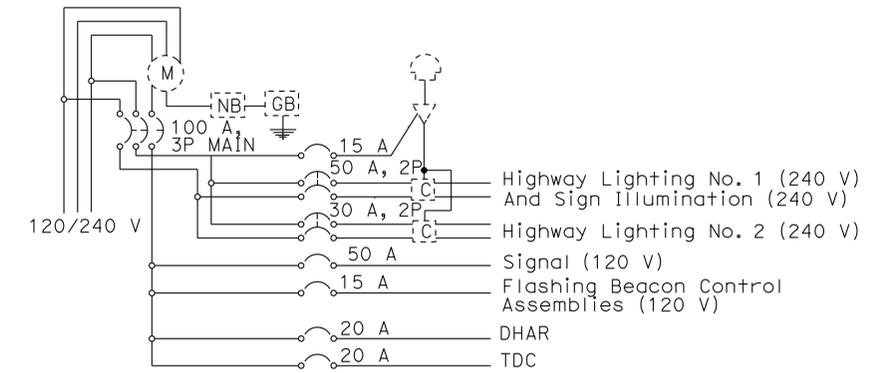
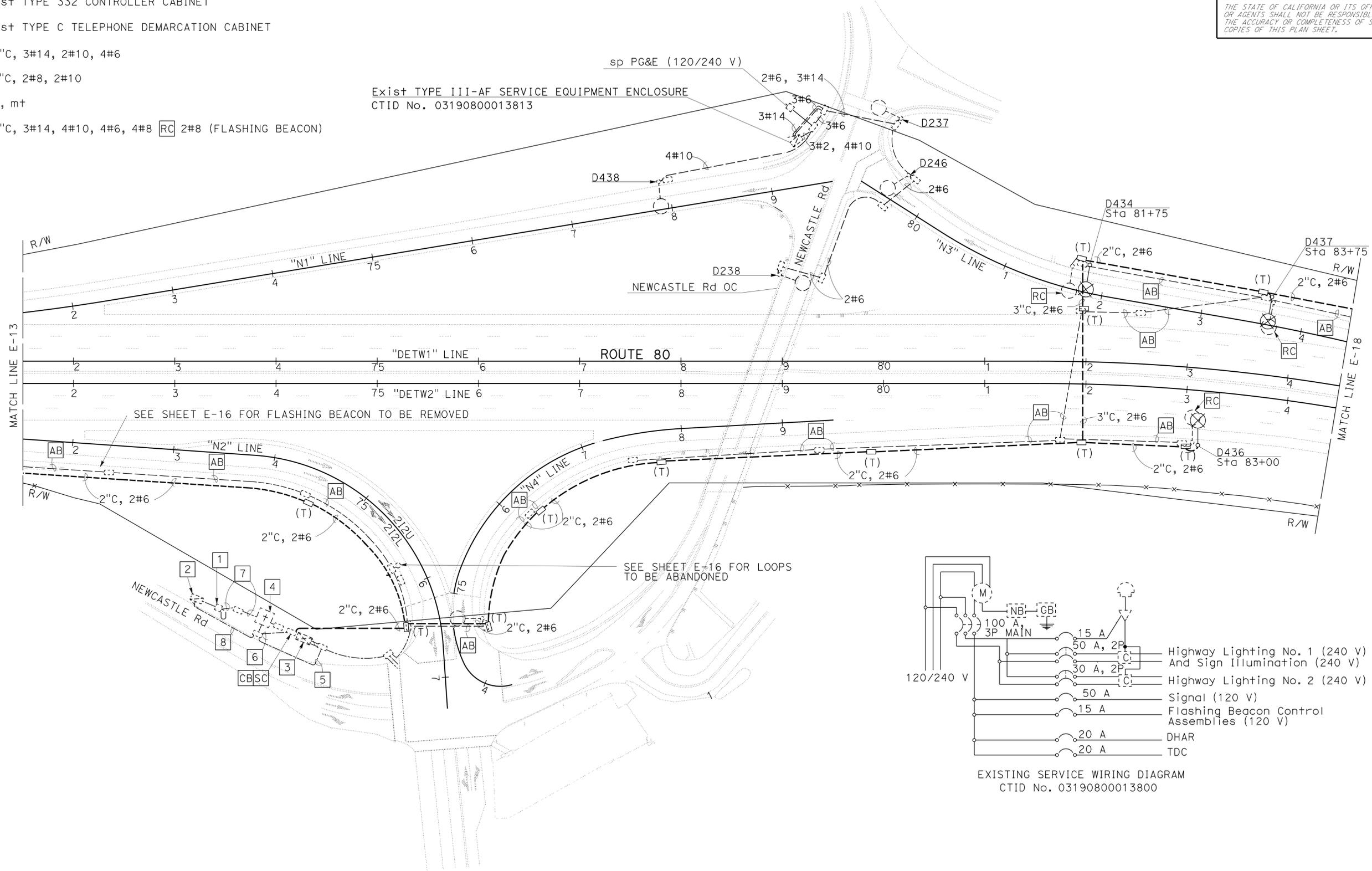


LEGEND: (THIS SHEET ONLY)

- 1 sp, PG&E (120/240 V)
- 2 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800013800
- 3 Exist TYPE 332 CONTROLLER CABINET
- 4 Exist TYPE C TELEPHONE DEMARCATION CABINET
- 5 1 1/2"C, 3#14, 2#10, 4#6
- 6 1 1/2"C, 2#8, 2#10
- 7 2"C, mt
- 8 1 1/2"C, 3#14, 4#10, 4#6, 4#8 RC 2#8 (FLASHING BEACON)

NOTE:

- 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- 2. FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Electrical Design
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CHECKED BY: JASKARAN S BOPARAI
 DESIGNED BY: OANH D NGUYEN
 REVISIONS: (None listed)

MODIFY LIGHTING AND SIGN ILLUMINATION

SCALE: 1" = 50'

E-15

APPROVED FOR ELECTRICAL WORK ONLY

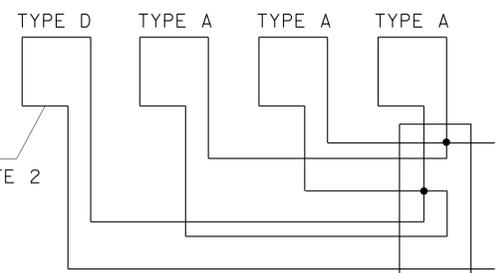
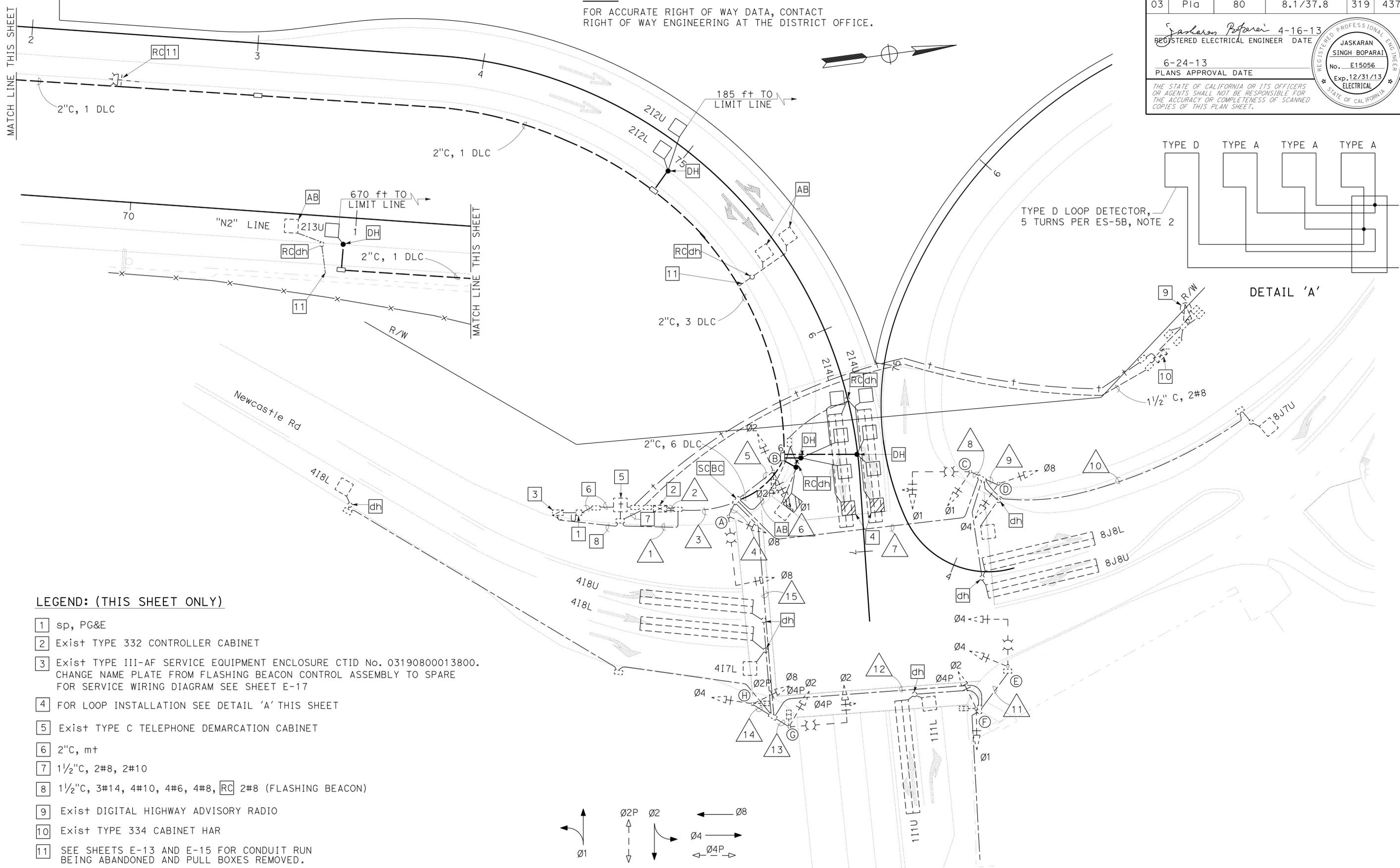


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	319	437

Jaskaran S. Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 6-24-13
 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
JASKARAN SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 STATE OF CALIFORNIA

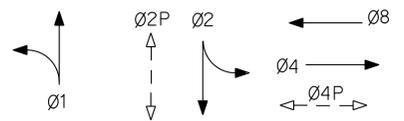
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



DETAIL 'A'

LEGEND: (THIS SHEET ONLY)

- 1 sp, PG&E
- 2 Exist TYPE 332 CONTROLLER CABINET
- 3 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800013800. CHANGE NAME PLATE FROM FLASHING BEACON CONTROL ASSEMBLY TO SPARE FOR SERVICE WIRING DIAGRAM SEE SHEET E-17
- 4 FOR LOOP INSTALLATION SEE DETAIL 'A' THIS SHEET
- 5 Exist TYPE C TELEPHONE DEMARCATION CABINET
- 6 2" C, mt
- 7 1 1/2" C, 2#8, 2#10
- 8 1 1/2" C, 3#14, 4#10, 4#6, 4#8, RC 2#8 (FLASHING BEACON)
- 9 Exist DIGITAL HIGHWAY ADVISORY RADIO
- 10 Exist TYPE 334 CABINET HAR
- 11 SEE SHEETS E-13 AND E-15 FOR CONDUIT RUN BEING ABANDONED AND PULL BOXES REMOVED.



EXISTING PHASE DIAGRAM

APPROVED FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL AND LIGHTING

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: OANH D NGUYEN
 CHECKED BY: JASKARAN S BOPARAI
 REVISED BY: OANH D NGUYEN
 DATE REVISED:

LAST REVISION DATE PLOTTED => 01-JUL-2013
 03-08-13 TIME PLOTTED => 09:00

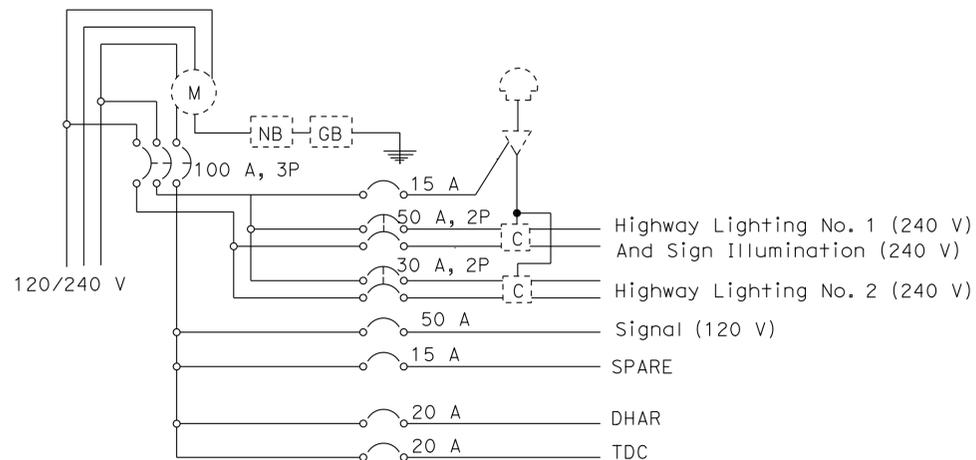
EXISTING CONDUIT AND CONDUCTOR SCHEDULE

TYPE	CONDUCTOR	CONDUIT RUN														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	∅1		3	3		3		3	3				3		3	
	∅2		3	3		3						3	3		3	
	∅4		3	3				3		3		3		3	3	
	∅8		3	3	3			3		3				3	3	
#14	∅2P		2	2		2							2		2	
	∅4P		2	2								2		2	2	
	∅2PPB		1	1	1									1	1	
	∅4PPB		1	1							1	1			1	
	PPB COM		1	1	1						1	1			1	
	PEU	3		3	3									1		
	SPARES		3	3					3				3		3	3
TOTAL		3	22	25	8	8		12	3	6		3	15	7	13	22
#10	LUMINAIRES	2		2	2				2	2		2	2	2		2
	SIGNAL COMMON		2	2	1	1			1	1	1		1	1	1	1
	TOTAL	2	2	4	3	1			3	3	1		3	3	1	3
#8	FLASHING BECON	2 *		2 *				2 *								2
	SIGNAL SERVICE	2	2													
#6	LUMINAIRES	2		2												
	TOTAL	4	2	2												
DLC	∅1		4	4								4			4	
	∅2		6	6			6 **									
	∅4		4	4											4	
	∅8		4	4				4			1					
	QUEUE		1	1												
	TOTAL DLC		19	19			6 *	4			1		4			8
CONDUIT	SIZE (INCHES)	1 1/2"	2-3"	3 1/2"	2"	2"	2"	3"	2"	2"	1 1/2"	2"	3"	2"	2"	3"

* RC 2#8 ** RC dlc

EXISTING POLE AND EQUIPMENT SCHEDULE

No.	STANDARD		VEH SIG MTG		PED SIGNAL		PPB		HPS LUMINAIRE			
	TYPE	SMA	LMA	∅	TYPE	MTG	∅	TYPE		MTG	∅	ARROW
(A)	26-3-80	40	15	8	12"	MAS-4B				2	→	200 W
(B)	1-B			2	8"	TV-2-TB	2	A	SP-1-T			
				1	12"							
(C)	19-3-80	35	15	1	12"	MAS-4B						200 W
				1	8"							
(D)	1-B			8	12"	TV-2-T						
				4	12"							
(E)	17-3-80	20	15	4	12"	MAS-4B						200 W
				4	8"							
(F)	1-B			1	8"	TV-2-TB	4	A	SP-1-T	4	→	
				2	12"							
(G)	24-3-80	35	15	2	12"	MAS-4B	2	A	SP-1-T	4	←	200 W
				2	8"							
(H)	1-B			4	12"	TV-2-T	4	A	SP-1-T	2	←	
				8	12"							



MODIFIED SERVICE WIRING DIAGRAM
 CTID No. 03190800013800
 NO SCALE

MODIFY SIGNAL AND LIGHTING E-17

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	321	437

Jaskaran Boparai 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

6-24-13
 PLANS APPROVAL DATE

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

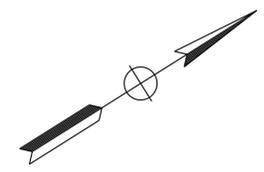
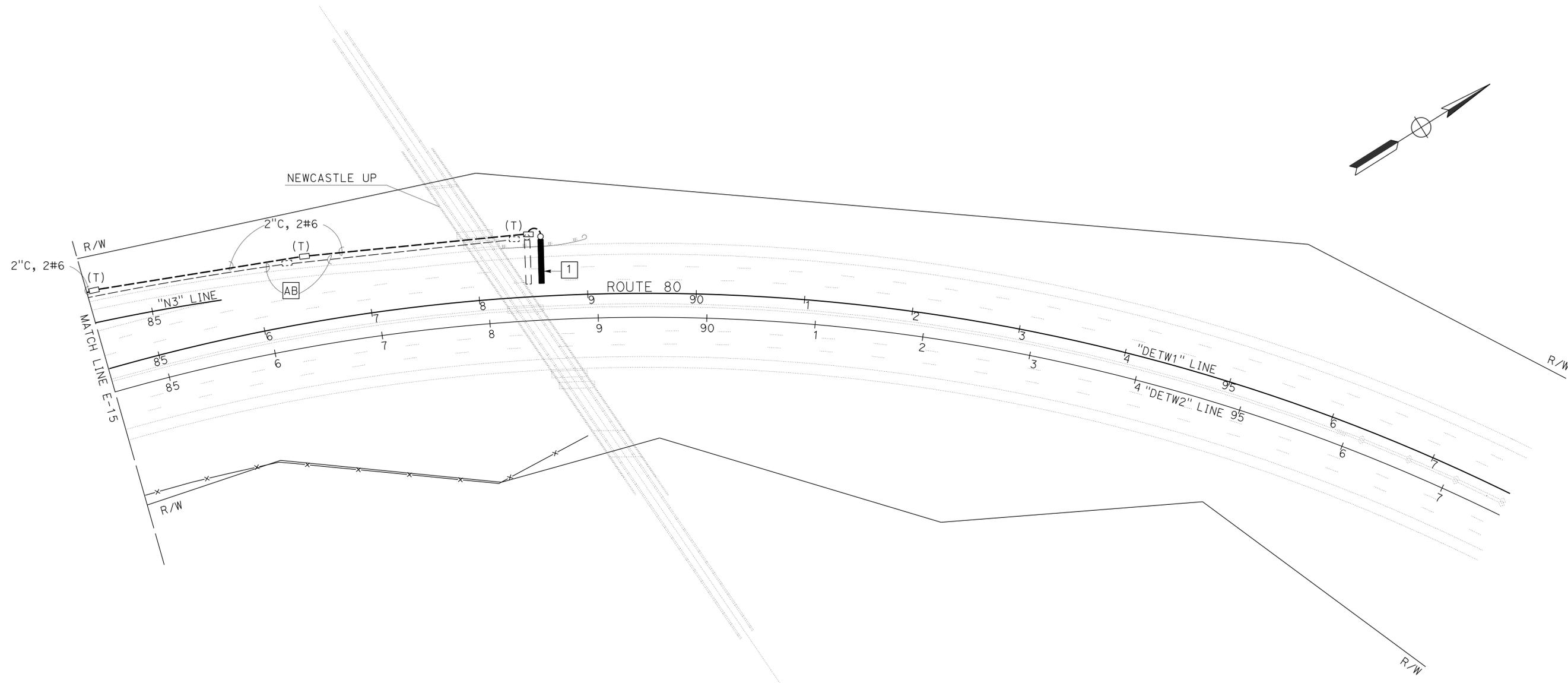
REGISTERED PROFESSIONAL ENGINEER
 JASKARAN
 SINGH BOPARAI
 No. E15056
 Exp. 12/31/13
 ELECTRICAL
 STATE OF CALIFORNIA

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.

LEGEND: (THIS SHEET ONLY)

1 DS-51, INSTALL 2 ISL, 1 SC2A



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans ELECTRICAL DESIGN	REVISOR	DATE
FUNCTIONAL SUPERVISOR	DESIGNED BY	CHECKED BY
NELSON LEE	JASKARAN S BOPARAI	
	REVISOR	DATE
	REVISOR	DATE
	REVISOR	DATE

MODIFY LIGHTING AND SIGN ILLUMINATION

SCALE: 1" = 50'

E-18

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	322	437

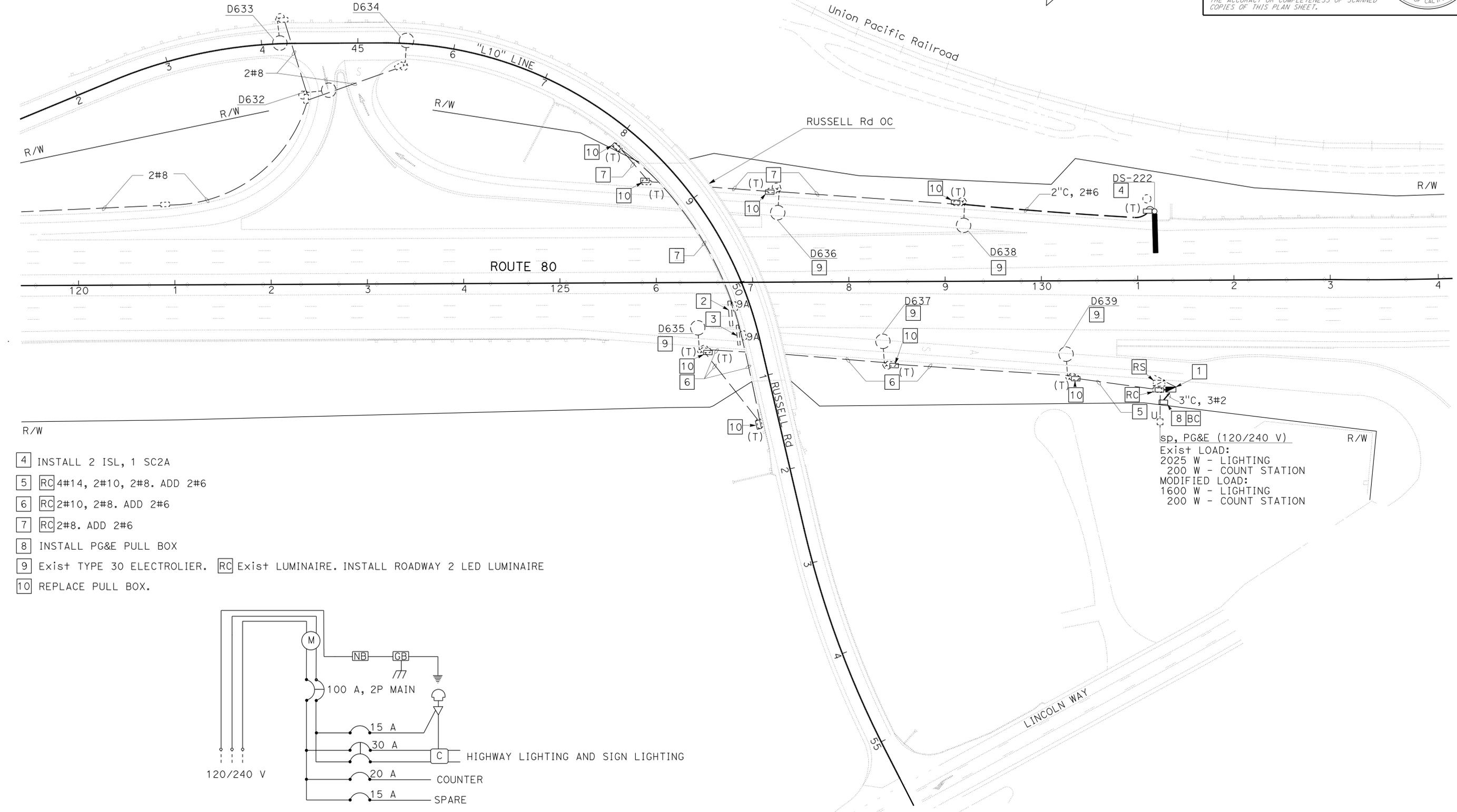
Jaskaran Boparai 4-16-13	
REGISTERED ELECTRICAL ENGINEER	DATE
6-24-13	
PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>	

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.

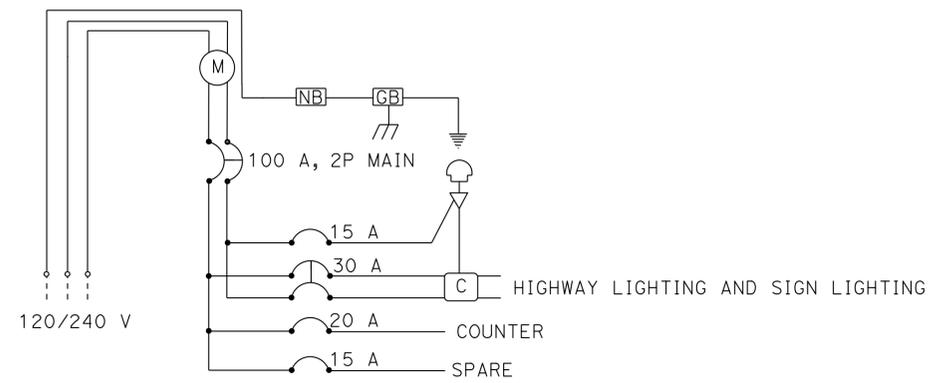
LEGEND: (THIS SHEET ONLY)

- INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800018500 FOR SERVICE WIRING DIAGRAM SEE THIS SHEET
- Exist DS-80. RC 2 mv AND ELECTRICAL EQUIPMENTS INSTALL 2 ISL, 1 SC2A.
- Exist DS-81. RC 1 mv AND ELECTRICAL EQUIPMENTS INSTALL 1 ISL, 1 SC2A.



- INSTALL 2 ISL, 1 SC2A
- RC 4#14, 2#10, 2#8. ADD 2#6
- RC 2#10, 2#8. ADD 2#6
- RC 2#8. ADD 2#6
- INSTALL PG&E PULL BOX
- Exist TYPE 30 ELECTROLIER. RC Exist LUMINAIRE. INSTALL ROADWAY 2 LED LUMINAIRE
- REPLACE PULL BOX.

sp, PG&E (120/240 V)
 Exist LOAD:
 2025 W - LIGHTING
 200 W - COUNT STATION
 Modified LOAD:
 1600 W - LIGHTING
 200 W - COUNT STATION



SERVICE WIRING DIAGRAM
 CTID No. 03190800018500

MODIFY LIGHTING AND SIGN ILLUMINATION

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Electrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: JASKARAN S BOPARAI
 CHECKED BY:
 REVISED BY: OANH D NGUYEN
 DATE REVISED:

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	323	437

<i>Jaskaran Boparai</i>	4-16-13
REGISTERED ELECTRICAL ENGINEER	DATE
6-24-13	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER JASKARAN SINGH BOPARAI No. E15056 Exp. 12/31/13 ELECTRICAL STATE OF CALIFORNIA	
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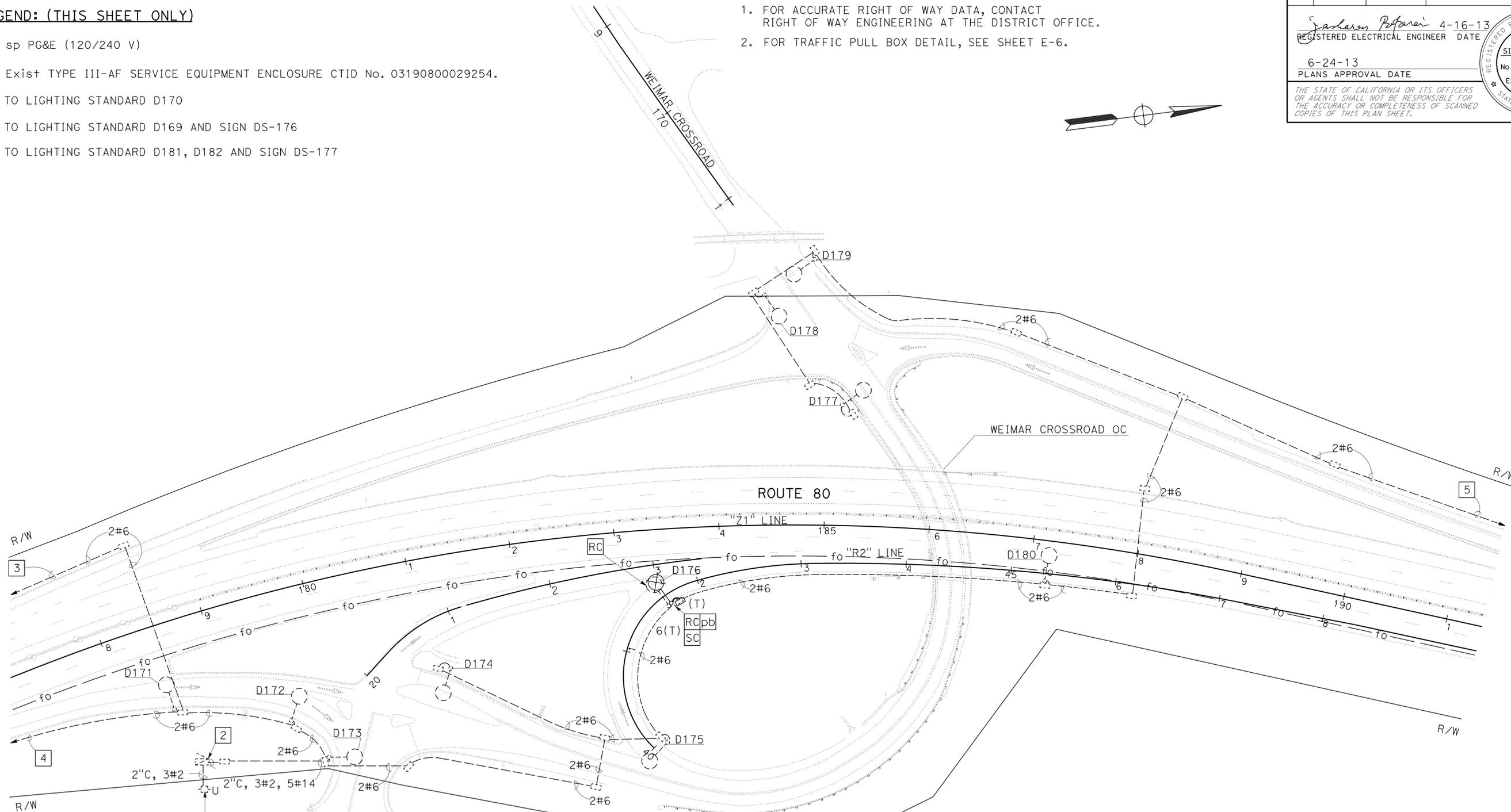
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND: (THIS SHEET ONLY)

- 1 sp PG&E (120/240 V)
- 2 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE CTID No. 03190800029254.
- 3 TO LIGHTING STANDARD D170
- 4 TO LIGHTING STANDARD D169 AND SIGN DS-176
- 5 TO LIGHTING STANDARD D181, D182 AND SIGN DS-177

NOTES:

- 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- 2. FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.



Exist LOAD:
3520 W - LIGHTING AND SIGN ILLUMINATION
MODIFIED LOAD:
3485 W - LIGHTING AND SIGN ILLUMINATION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
NELSON LEE

CALCULATED/DESIGNED BY
CHECKED BY

DESIGNED BY
OANH D NGUYEN
JASKARAN S BOPARAI

REVISOR
DATE

REVISIONS

APPROVED FOR ELECTRICAL WORK ONLY



MODIFY LIGHTING
SCALE: 1" = 50'
E-20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	324	437

<i>Jaskaran Boparai</i> 4-16-13	
REGISTERED ELECTRICAL ENGINEER	DATE
6-24-13	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER JASKARAN SINGH BOPARAI No. E15056 Exp. 12/31/13 ELECTRICAL STATE OF CALIFORNIA	
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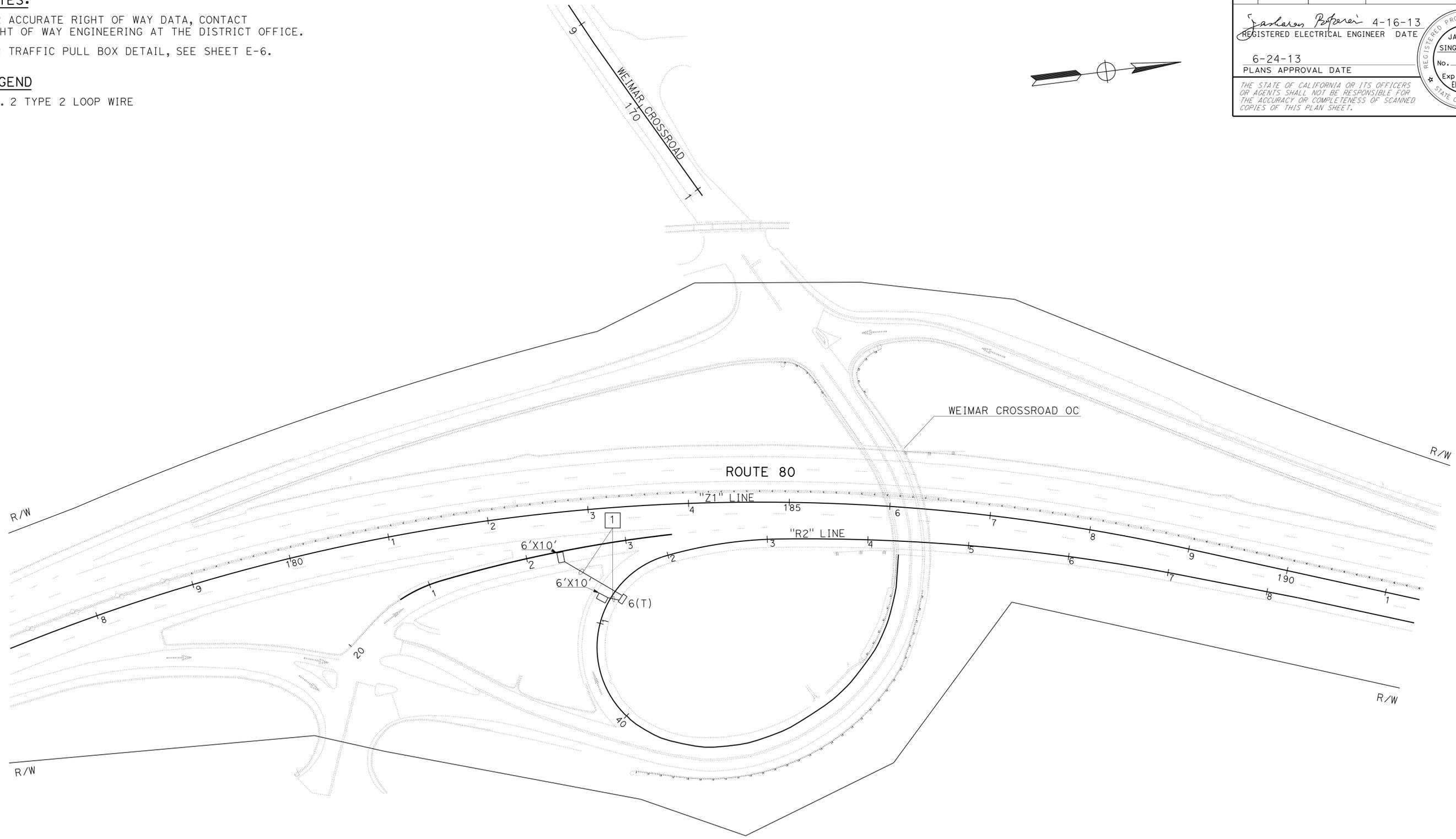
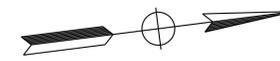
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR TRAFFIC PULL BOX DETAIL, SEE SHEET E-6.

LEGEND

- 1 2"C. 2 TYPE 2 LOOP WIRE



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank] CHECKED BY: [blank]
 OANH D NGUYEN JASKARAN S BOPARAI
 REVISED BY: [blank] DATE REVISED: [blank]

TRAFFIC MONITORING STATION (COUNT)

SCALE: 1" = 50'

E-21

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	325	437

Jaskaran Bopara 4-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

6-24-13
 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.

MODIFY SIGN ILLUMINATION

SHEET No.	(N) 1 1/2" TYPE 1 CONDUIT	(N) No. 8 CONDUCTOR	(N) No. 10 CONDUCTOR	(N) INDUCTION SIGN LIGHTING	(N) TYPE III-AF SERVICE EQUIPMENT ENCLOSURE	(N) 2" CONDUIT	(N) No. 5 PULL BOX	(N) No. 5(T) PULL BOX	(N) PG&E (17" X 30") PULL BOX	(N) No. 9A PULL BOX	(N) FLASHING BEACON
	FT	FT	FT	EA	EA	FT	EA	EA	EA	EA	EA
E-1	650	1400	200	3		400		6			
E-4	100	1500		2	1		6		1	2	1
E-7				1							
E-8				1							

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

MODIFY SIGNAL AND LIGHTING

SHEET No.	(N) TYPE A LOOP	(N) TYPE D LOOP	(N) No. 5 PULL BOX	(N) DLC	(N) 2" CONDUIT	(N) No. 8 CONDUCTOR	(N) No. 6 CONDUCTOR
	EA	EA	EA	FT	FT	FT	FT
E-5	10	3	1	2900	600	4000	
E-11	8	3	3	4900	700		
E-16	9	3	4	1100	600		1300

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

TRAFFIC MONITORING STATION (COUNT)

SHEET No.	(N) TYPE A LOOP 6" X 10'	(N) No. 6(T) PULL BOX
	EA	EA
E-2	4	2
E-9	2	1
E-10	2	1
E-14	4	4
E-21	2	1

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

MODIFY LIGHTING AND SIGN ILLUMINATION

SHEET No.	(N) INDUCTION SIGN LIGHTING	(N) TYPE 30 STANDARD	(N) No. 5(T) PULL BOX	(N) No. 5 PULL BOX	(N) 2" CONDUIT	(N) 3" CONDUIT	(N) No. 6 CONDUCTOR	(N) PG&E (17" X 30") PULL BOX	(N) TYPE III-AF SERVICE EQUIPMENT ENCLOSURE
	EA	EA	EA	EA	FT	FT	FT	EA	EA
E-11			14		2000	300	4500		
E-13	2	3	6		650	200	1800		
E-15			3	11	1800	80	3600		
E-18	2		3		500		1200		
E-19	2		7	2	200		3000	1	1

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

MODIFY LIGHTING

SHEET No.	(N) TYPE 30 STANDARD	(N) No. 5(T) PULL BOX
	EA	EA
E-20	1	1

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

ELECTRICAL QUANTITIES E-22

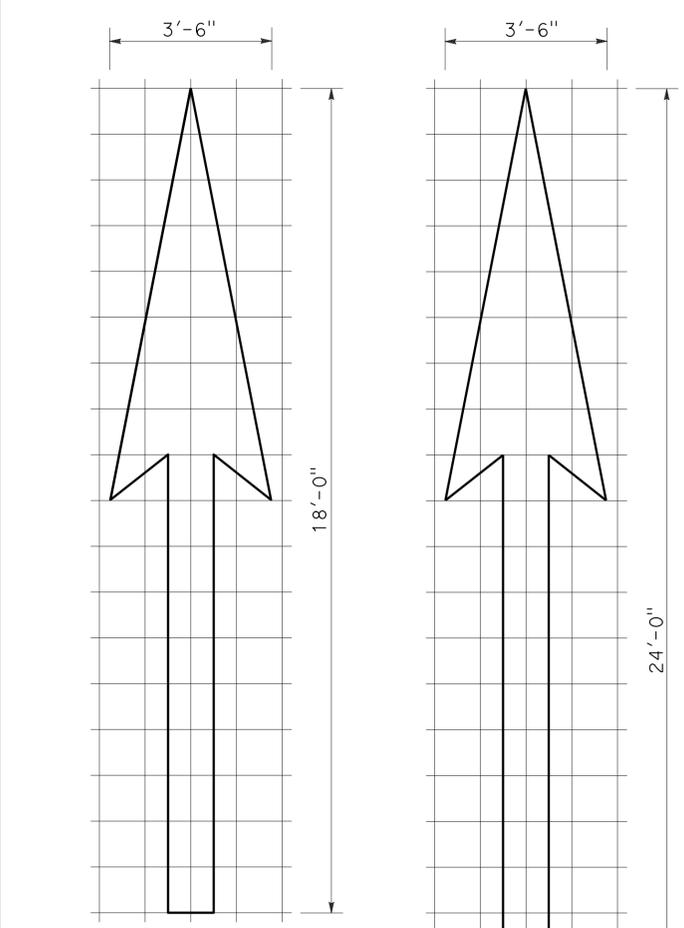
APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	326	437

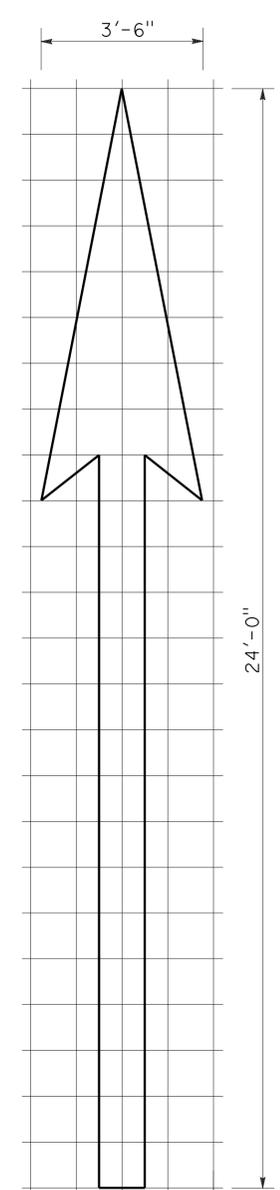
Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

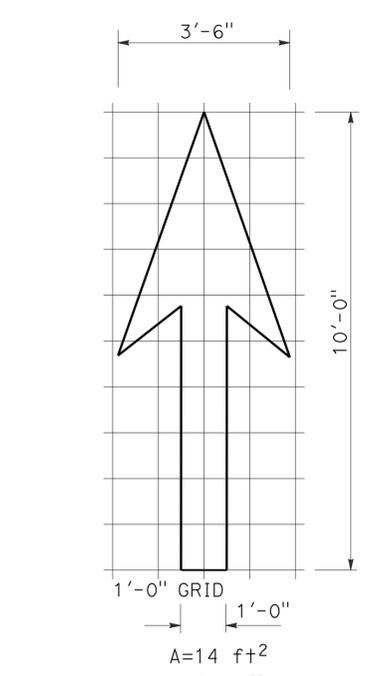
TO ACCOMPANY PLANS DATED 6-24-13



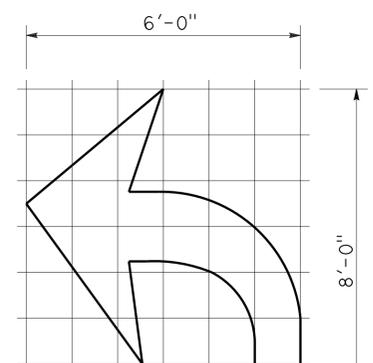
TYPE I 18'-0" ARROW
A=25 ft²



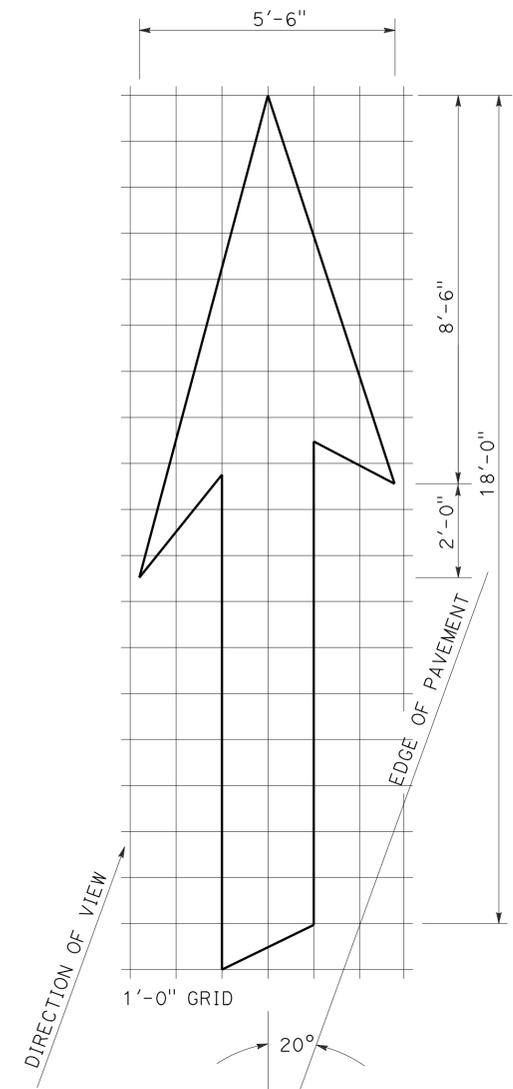
TYPE I 24'-0" ARROW
A=31 ft²



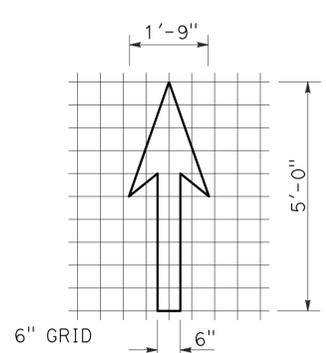
TYPE I 10'-0" ARROW
A=14 ft²



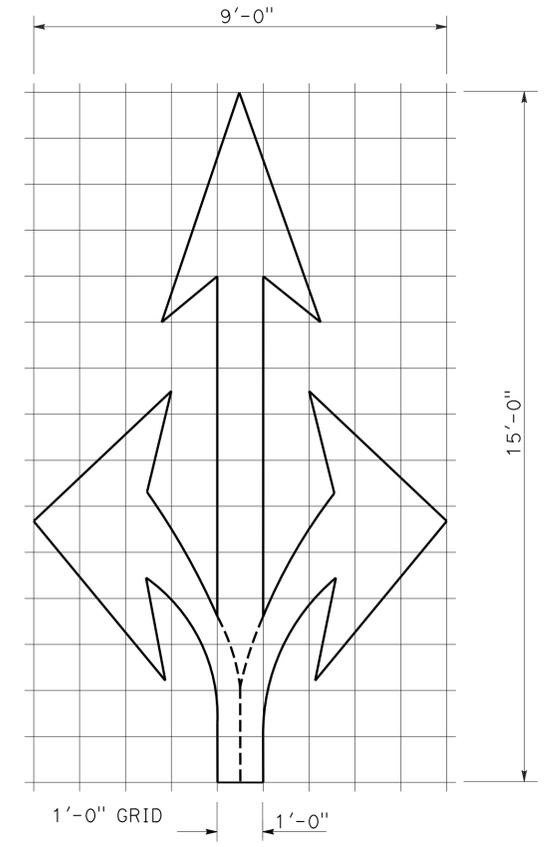
TYPE IV (L) ARROW
A=15 ft²
(For Type IV (R) arrow, use mirror image)



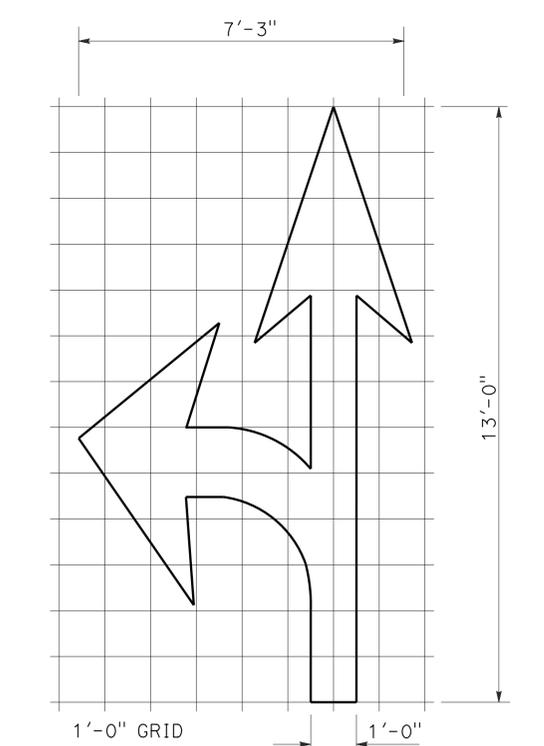
TYPE VI ARROW
A=42 ft²
Right lane drop arrow
(For left lane, use mirror image)



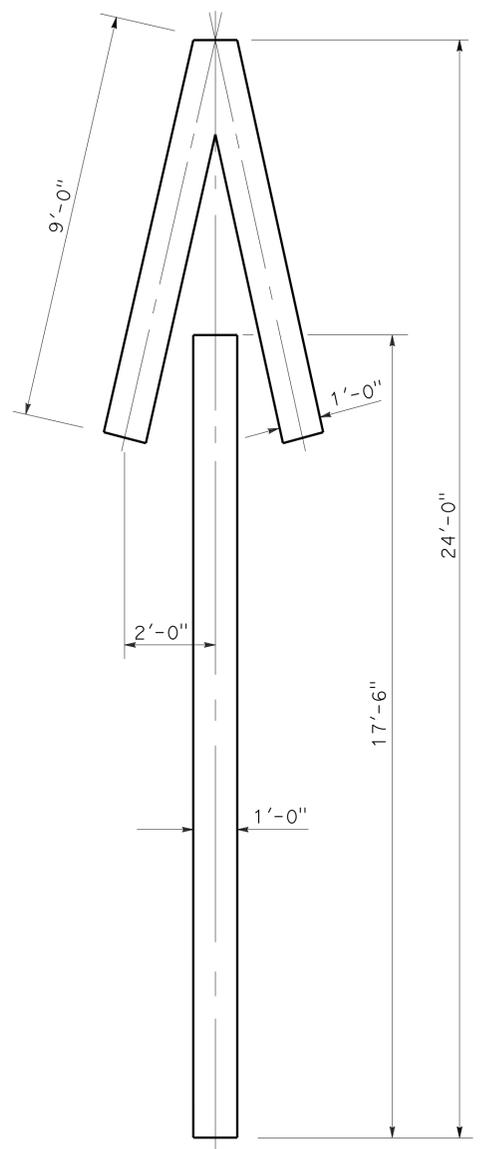
BIKE LANE ARROW
A=3.5 ft²



TYPE VIII ARROW
A=36 ft²



TYPE VII (L) ARROW
A=27 ft²
(For Type VII (R) arrow, use mirror image)



TYPE V ARROW
A=33 ft²

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

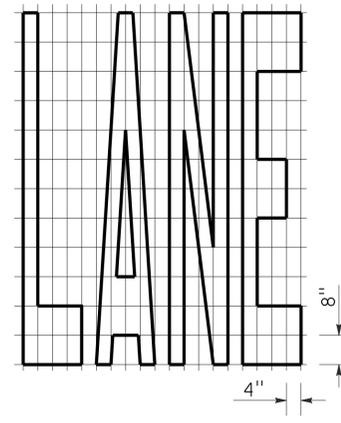
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

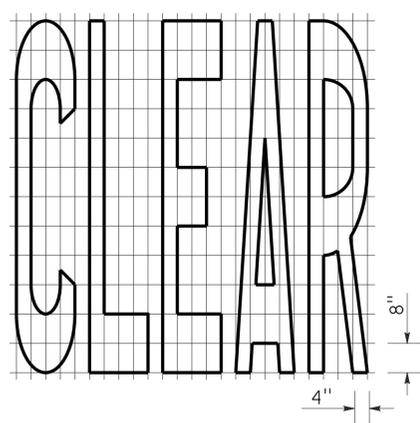
REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

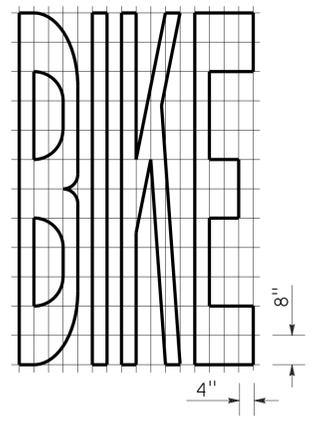
TO ACCOMPANY PLANS DATED 6-24-13



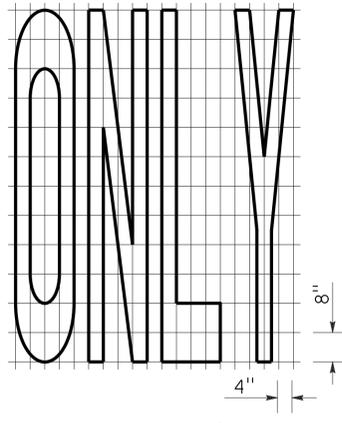
A=24 ft²



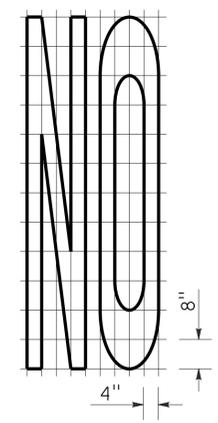
A=27 ft²



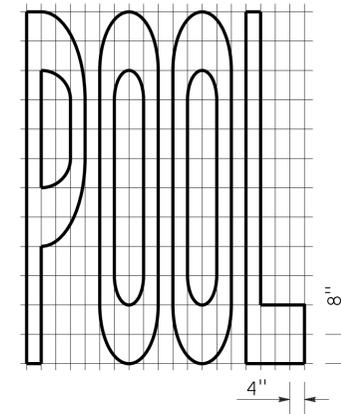
A=21 ft²



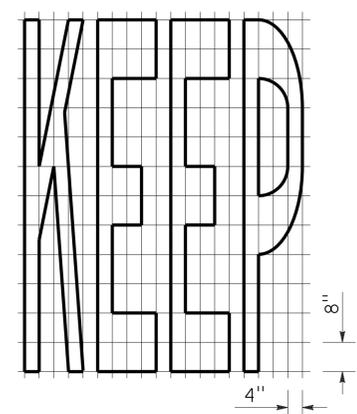
A=22 ft²



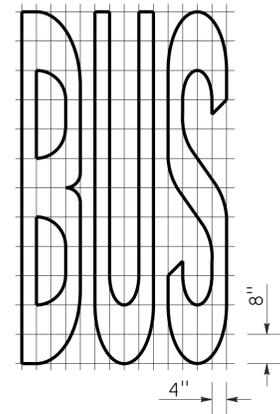
A=14 ft²



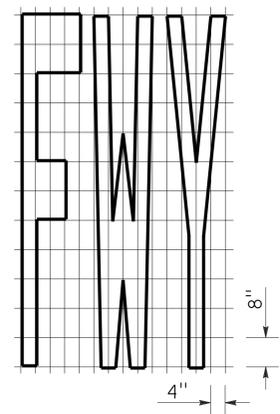
A=23 ft²



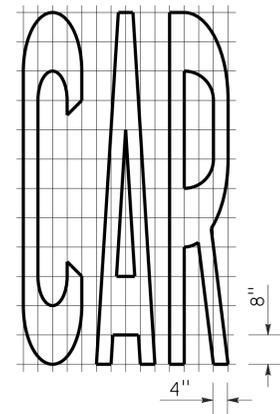
A=24 ft²



A=20 ft²

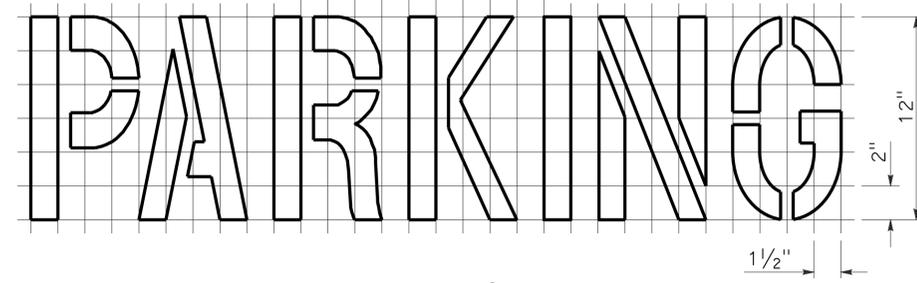
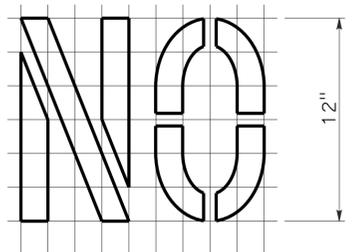


A=16 ft²

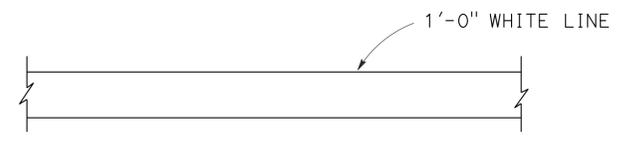


A=17 ft²

WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

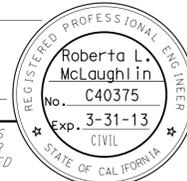
NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

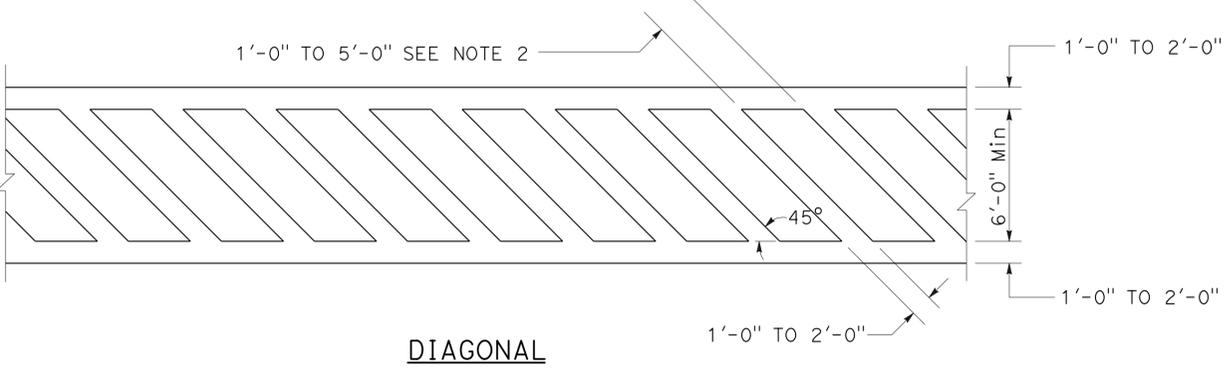
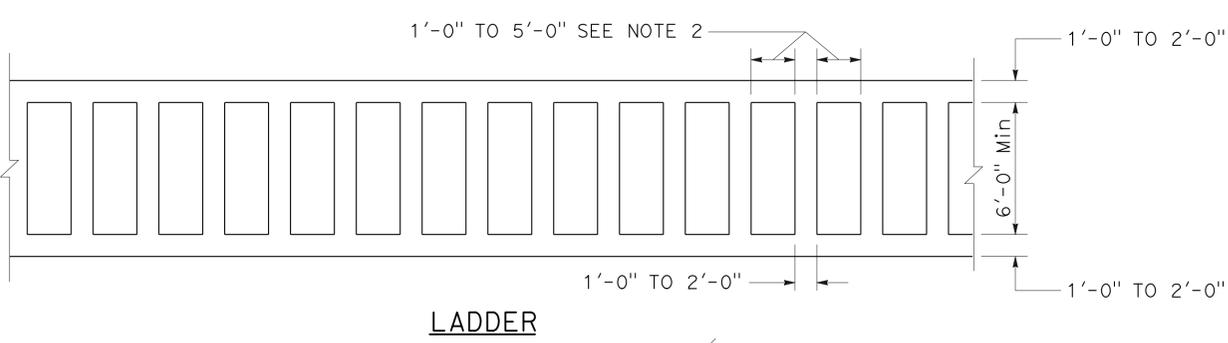
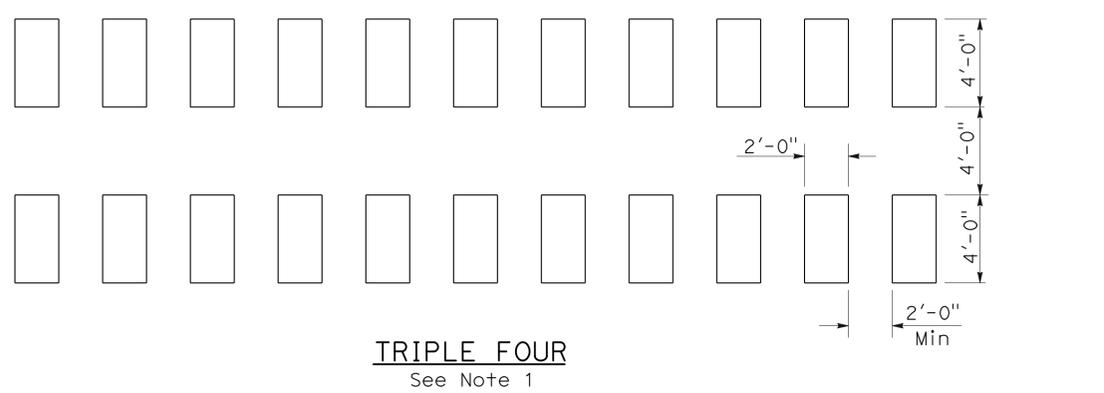
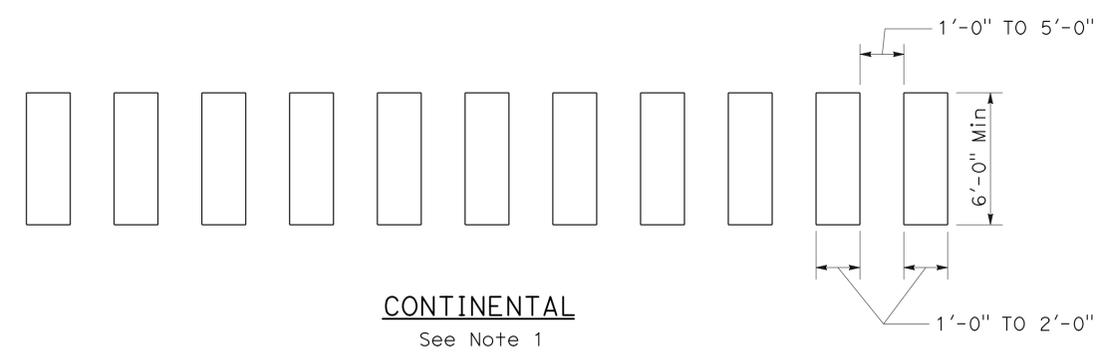
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	328	437

 REGISTERED CIVIL ENGINEER		
July 20, 2012 PLANS APPROVAL DATE		
<small>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.</small>		

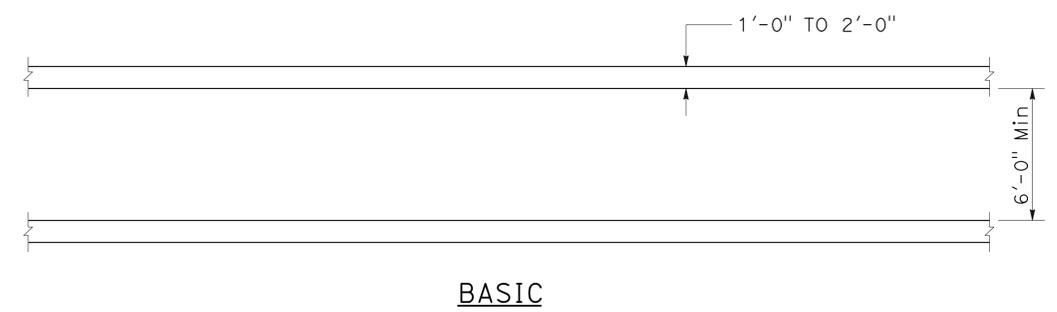
TO ACCOMPANY PLANS DATED 6-24-13



HIGHER VISIBILITY CROSSWALKS

NOTES:

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**
NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	329	437

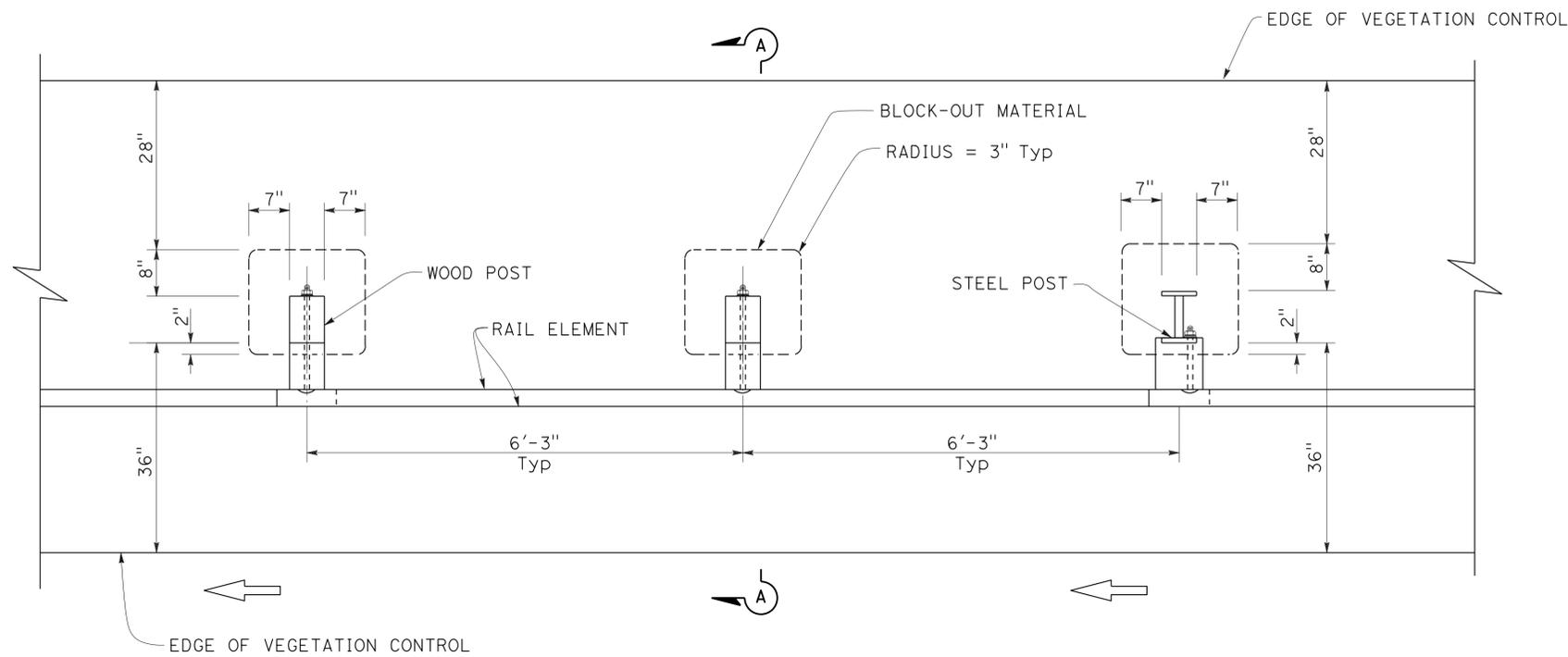
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

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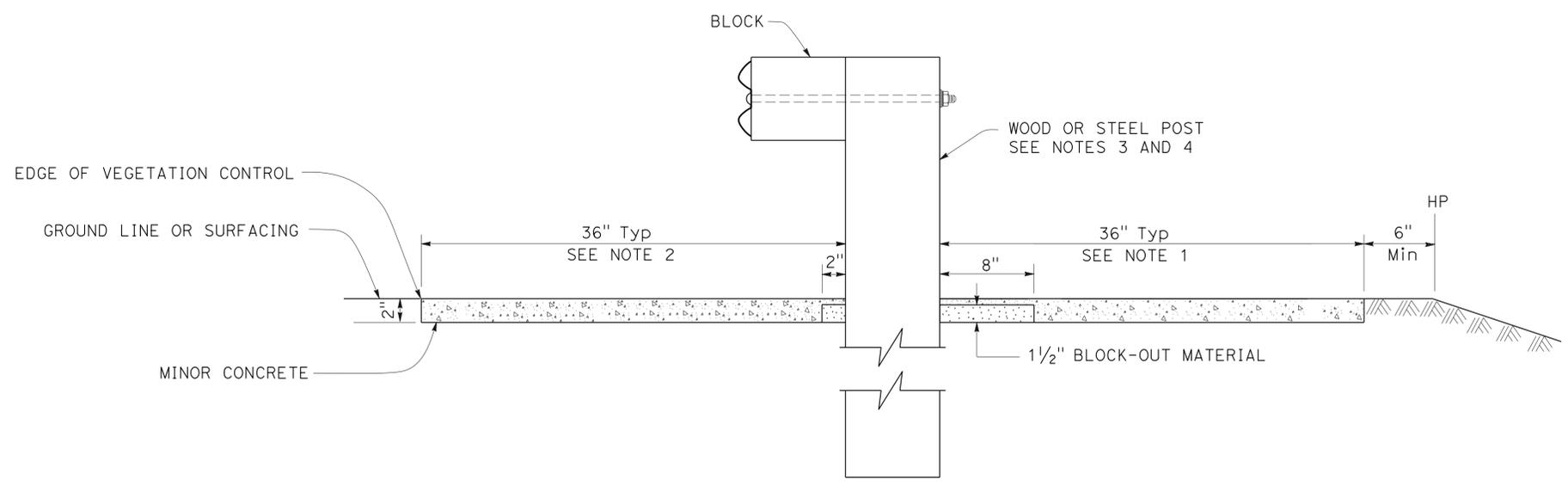
TO ACCOMPANY PLANS DATED 6-24-13



PLAN

NOTES:

1. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
3. For wood post sizes, see Standard Plan A77C1.
4. For steel post sizes, see Standard Plan A77C2.
5. For details not shown, see Standard Plans A77A1 and A77A2.



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
STANDARD RAILING SECTION**

NO SCALE

RSP A77C5 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C5
DATED MAY 20, 2011 - PAGE 53 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77C5

2010 REVISED STANDARD PLAN RSP A77C5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	330	437

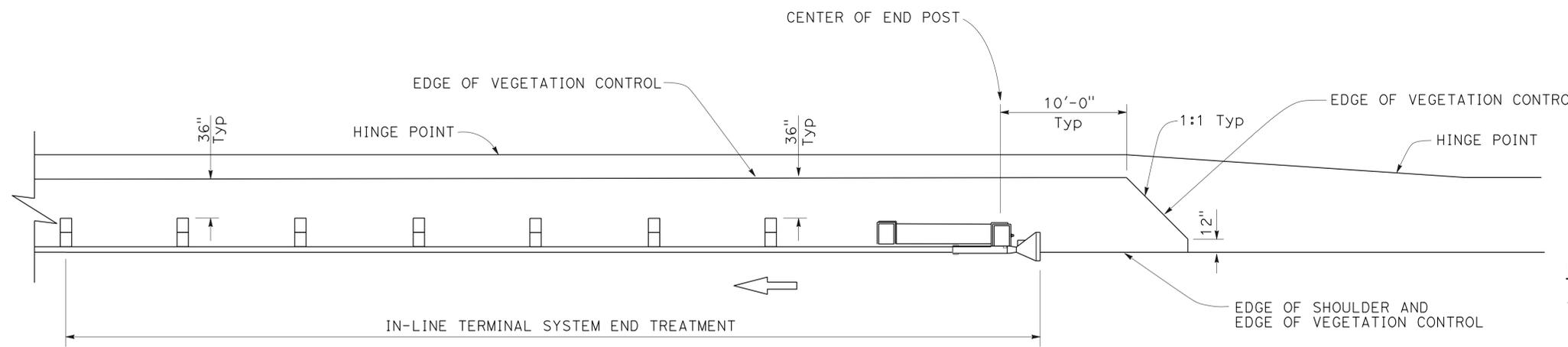
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 19, 2012
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
No. C50200
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

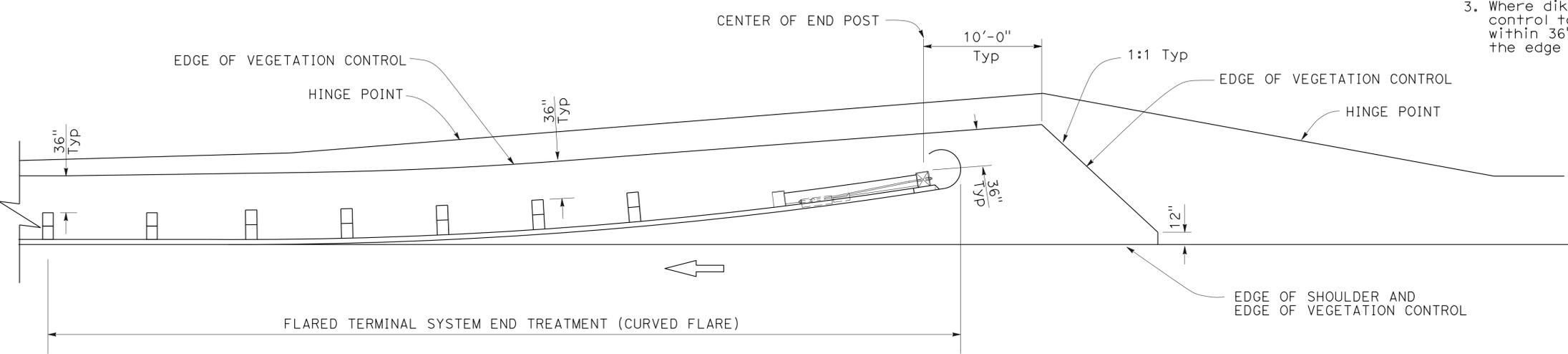
TO ACCOMPANY PLANS DATED 6-24-13



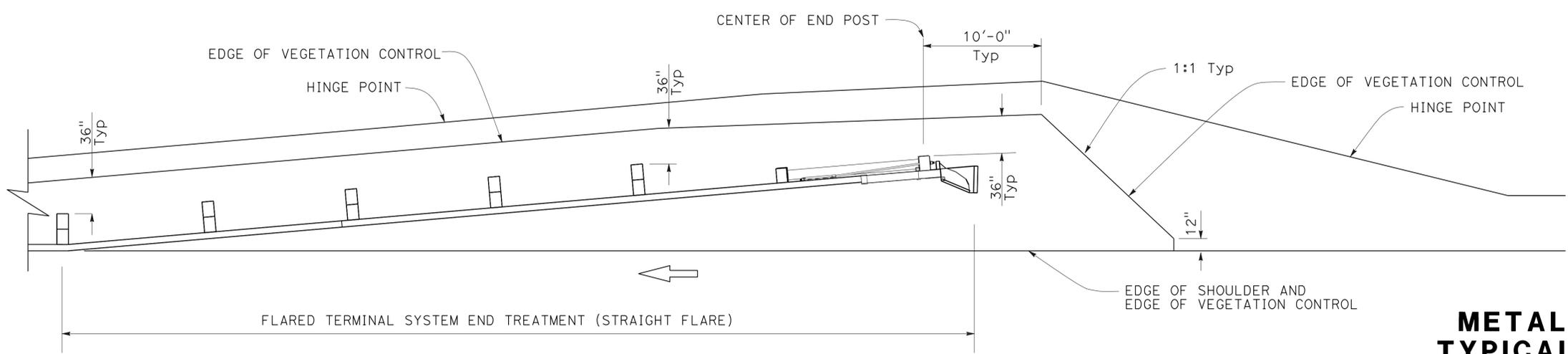
PLAN

NOTES:

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



PLAN



PLAN

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
FOR TERMINAL SYSTEM END TREATMENTS**

NO SCALE
RSP A77C6 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C6
DATED MAY 20, 2011 - PAGE 54 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77C6

2010 REVISED STANDARD PLAN RSP A77C6

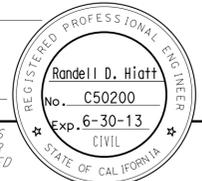
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	331	437

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

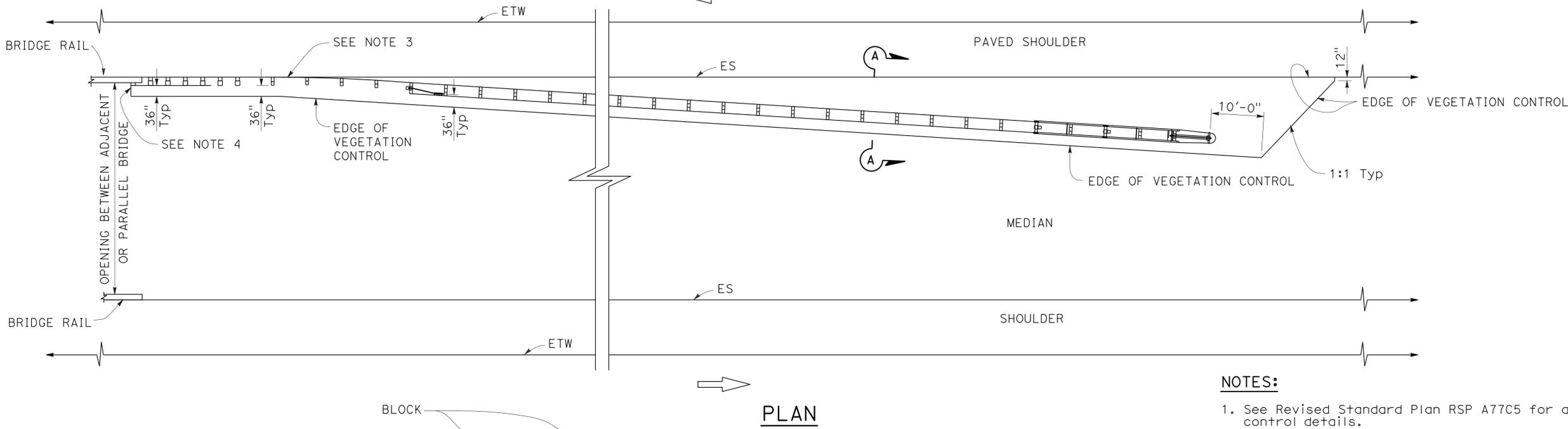
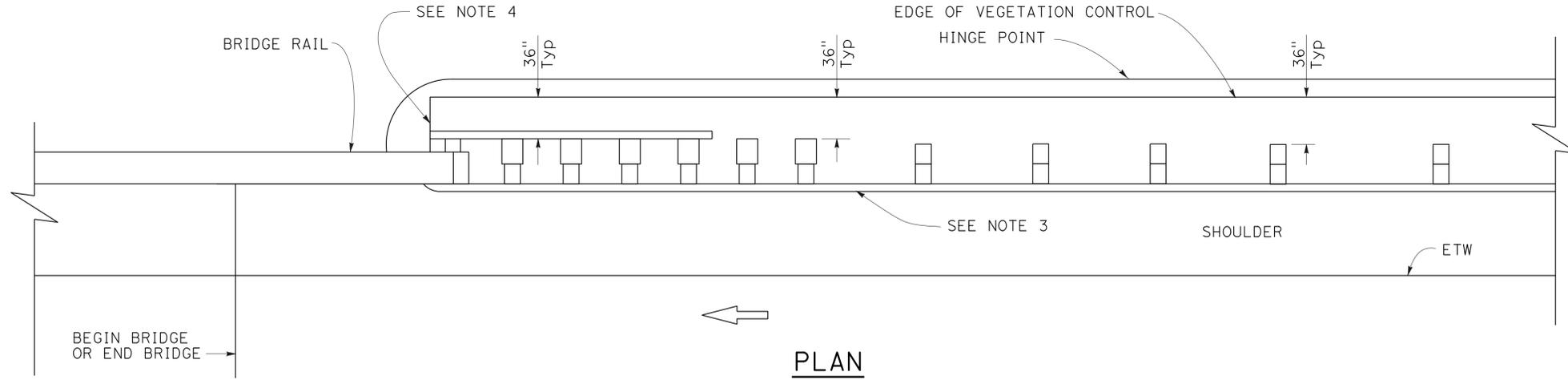
October 19, 2012
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 6-24-13

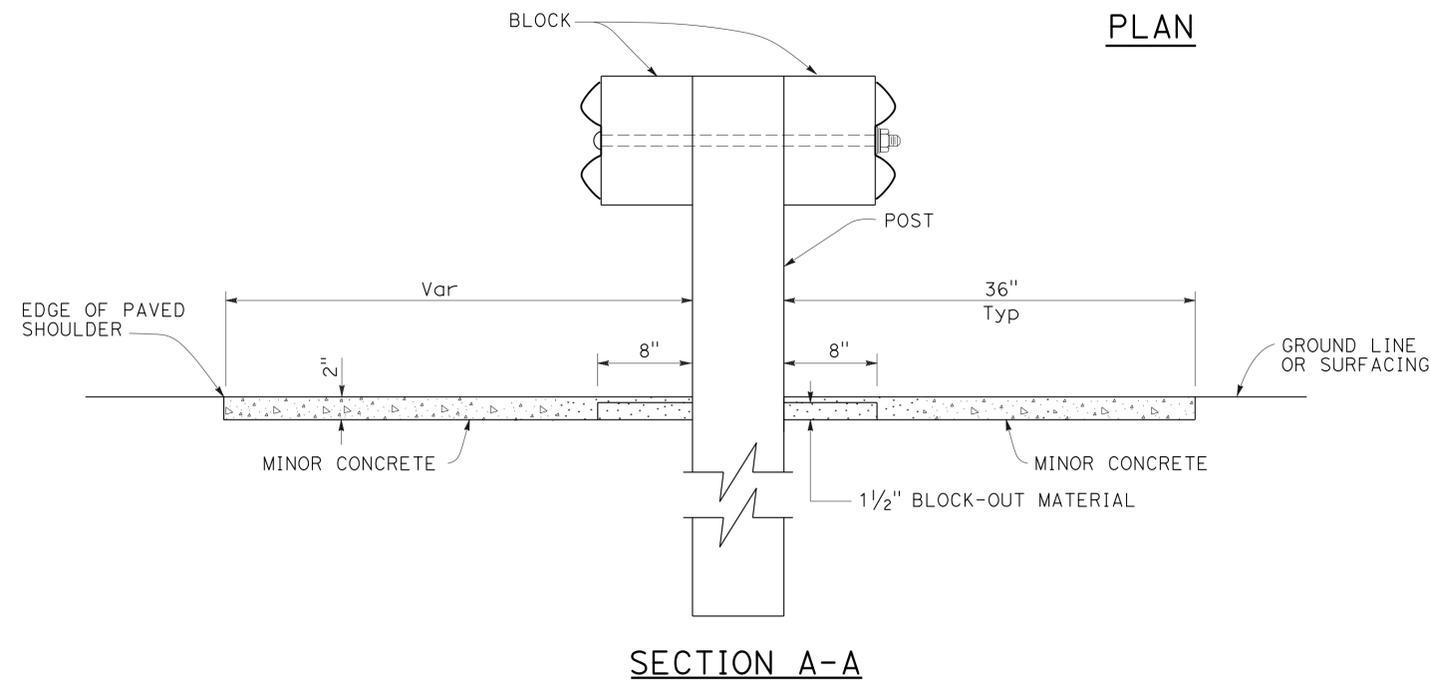


2010 REVISED STANDARD PLAN RSP A77C7



NOTES:

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
4. End vegetation control at end of backside rail element.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
AT STRUCTURE APPROACH**

NO SCALE

RSP A77C7 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C7
DATED MAY 20, 2011 - PAGE 55 OF THE STANDARD PLANS BOOK DATED 2010.

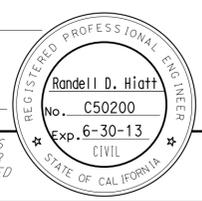
REVISED STANDARD PLAN RSP A77C7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	332	437

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 19, 2012
PLANS APPROVAL DATE

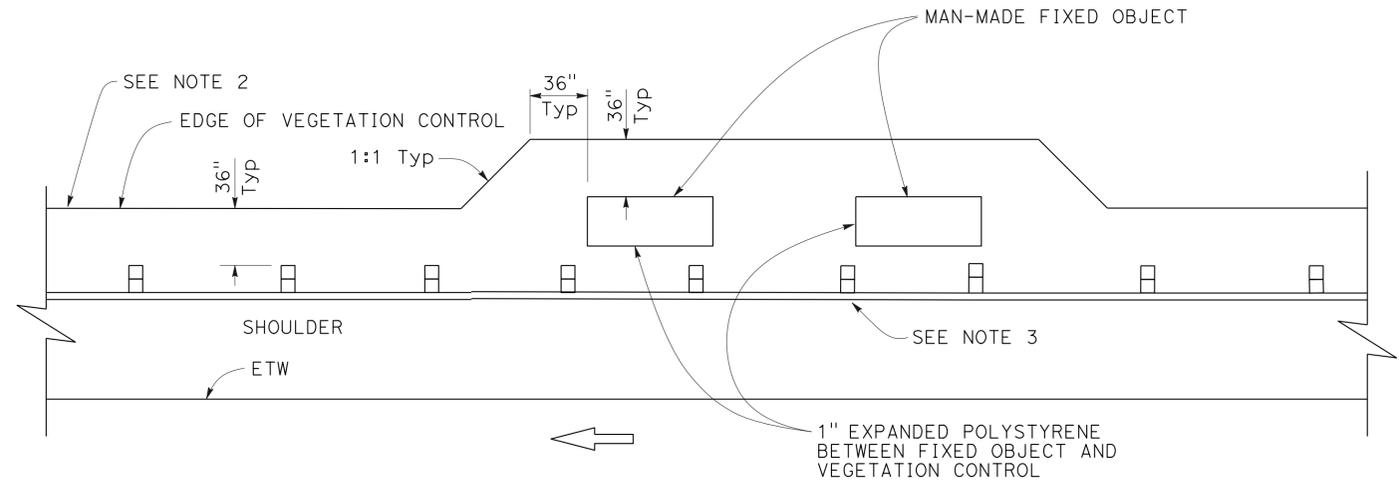
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



TO ACCOMPANY PLANS DATED 6-24-13

NOTES:

1. See Revised Standard Plan RSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.



PLAN
Fixed object(s) on shoulder

2010 REVISED STANDARD PLAN RSP A77C8

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
AT FIXED OBJECT**

NO SCALE

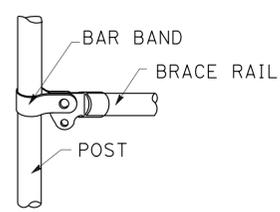
RSP A77C8 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A77C8
DATED MAY 20, 2011 - PAGE 56 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77C8

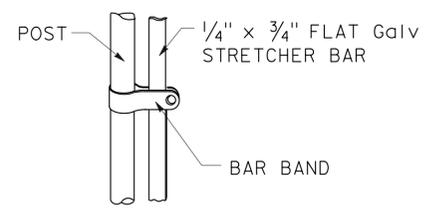
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	333	437

Glenn DeCou
 REGISTERED CIVIL ENGINEER
 October 19, 2012
 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.

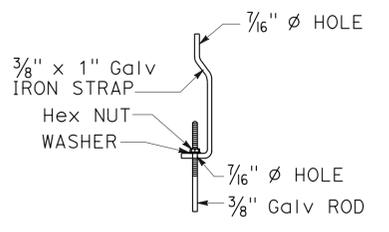
REGISTERED PROFESSIONAL ENGINEER
 Glenn DeCou
 No. C34547
 Exp. 9-30-13
 CIVIL
 STATE OF CALIFORNIA



BRACE RAIL



STRETCHER BAR

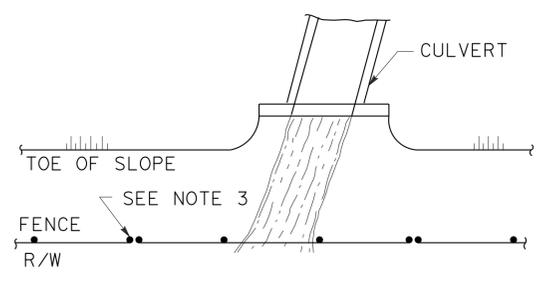


TRUSS TIGHTENER

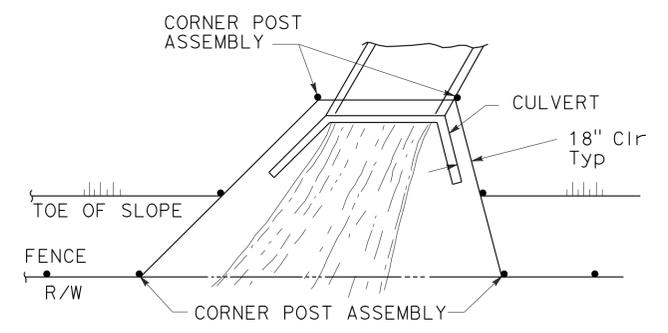
NOTES:

1. All material for abutment connection to be galvanized.
2. The chain link fabric shall be replaced by barbed wire strands at 12" maximum centers between the double posts.
3. When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.
4. Fencing over stream and around headwall may also use Barbed Wire or Wire Mesh fencing with either wood post or steel post installation.
5. See Standard Plan A85 for Chain Link fence dimensions. See Standard Plan A86 for Barbed Wire and Wire Mesh fence dimensions and for wood post and steel post installation.

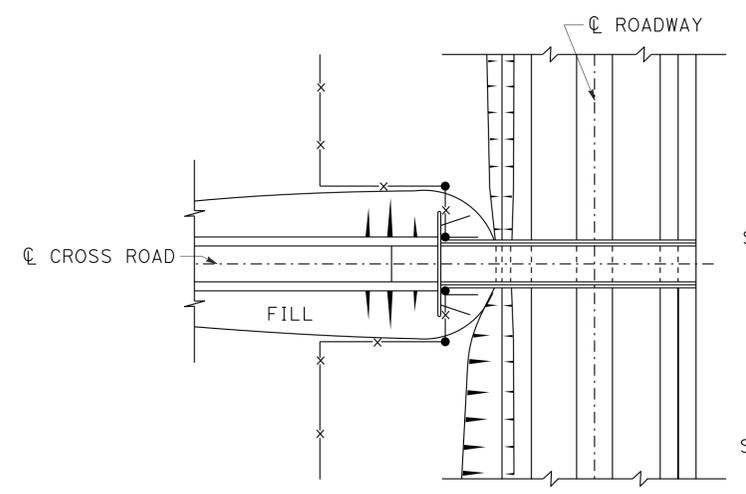
TO ACCOMPANY PLANS DATED 6-24-13



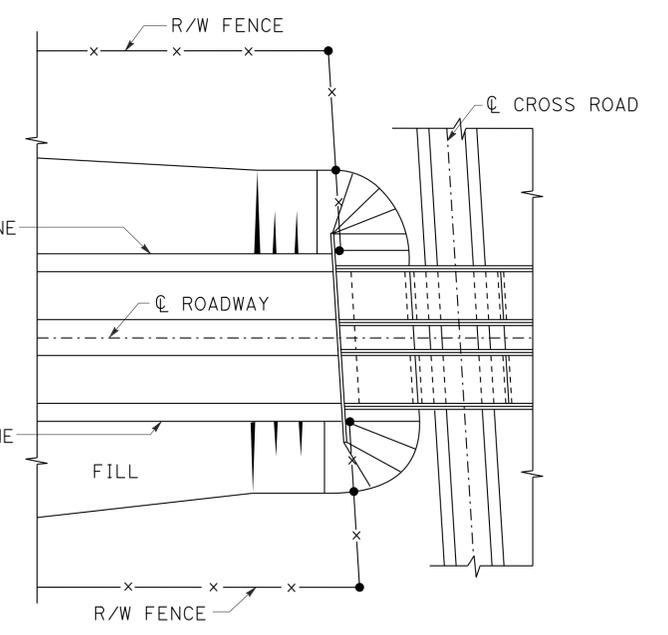
PLAN



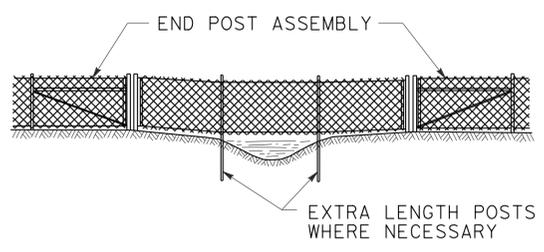
PLAN



PLAN OF ROADWAY - OVERCROSSING

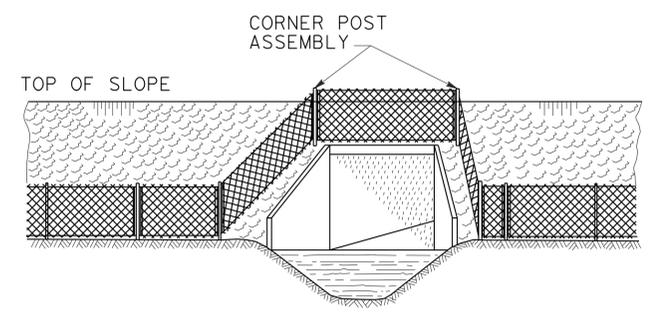


PLAN OF ROADWAY - UNDERCROSSING



ELEVATION

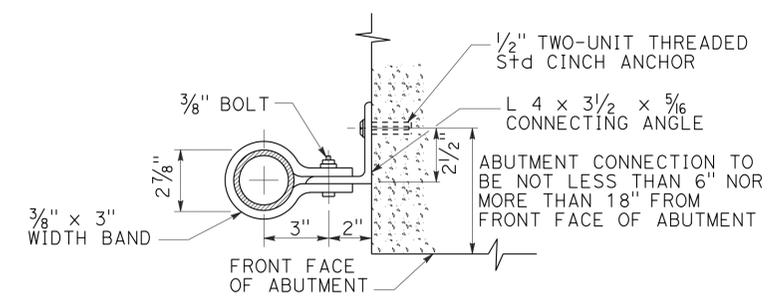
INSTALLATION OVER STREAM



ELEVATION

INSTALLATION AROUND HEADWALL

See Note 4



ABUTMENT CONNECTION

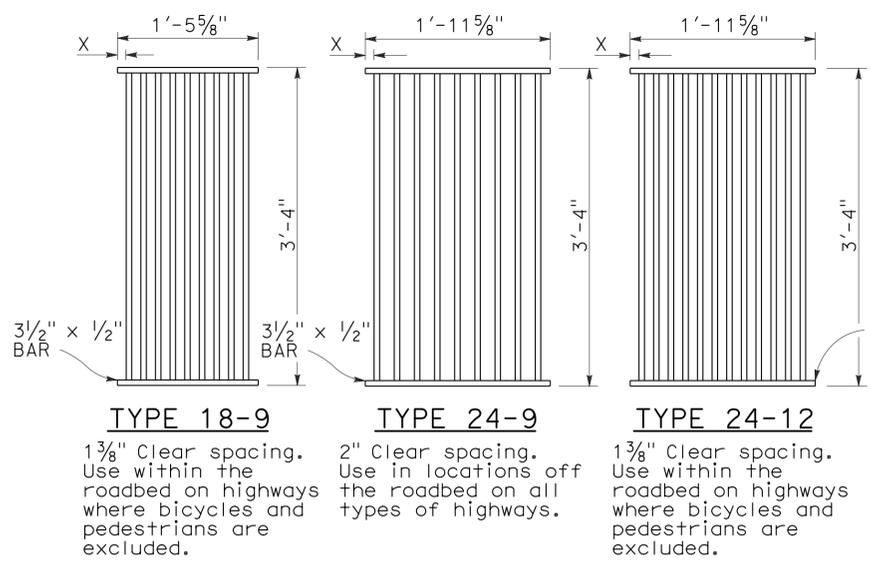
TYPICAL INSTALLATION AT BRIDGES

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CHAIN LINK FENCE DETAILS
 NO SCALE

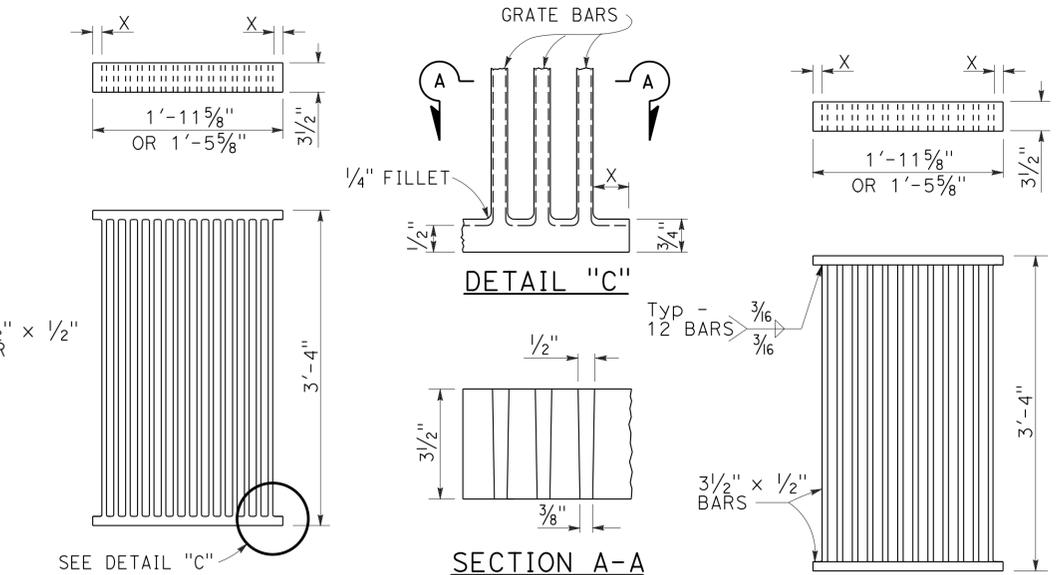
RSP A85B DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A85B DATED MAY 20, 2011 - PAGE 114 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A85B

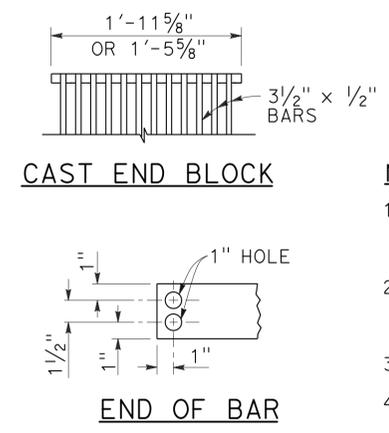
2010 REVISED STANDARD PLAN RSP A85B



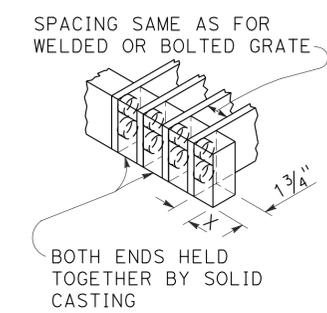
RECTANGULAR GRATE DETAILS
(See table below)



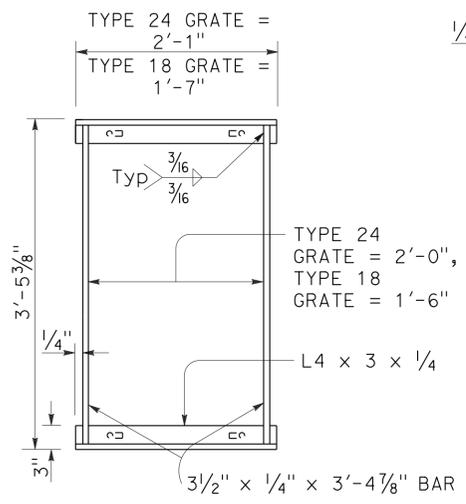
ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE



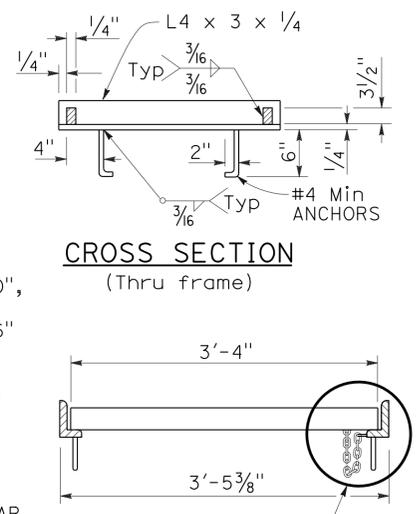
ALTERNATIVE WELDED GRATE



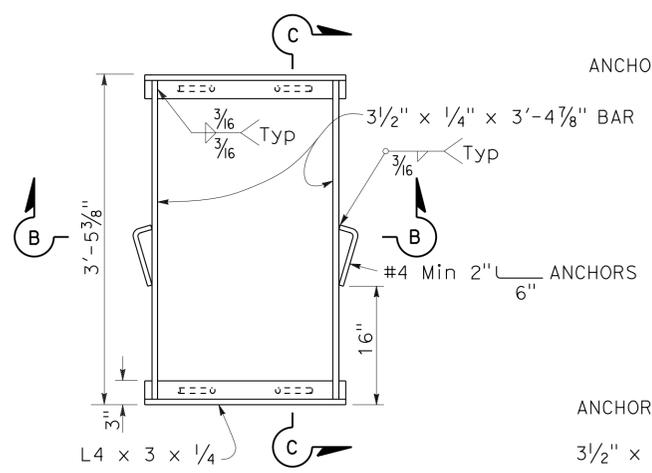
ALTERNATIVE CAST DUCTILE IRON OR CAST CARBON STEEL END BLOCK GRATE



TYPICAL FRAME

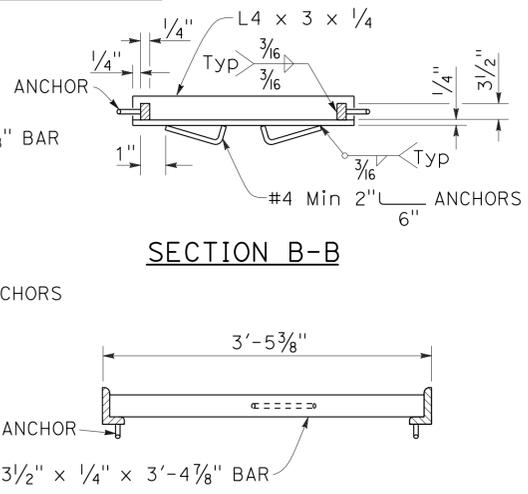


LONGITUDINAL SECTION
(Thru frame and grate)

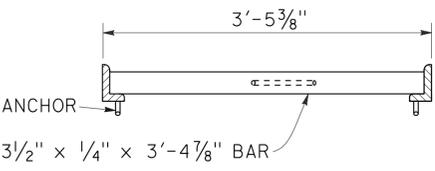


TYPICAL FRAME

ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME
(For details not shown, See Rectangular Frame Details)



SECTION B-B



SECTION C-C

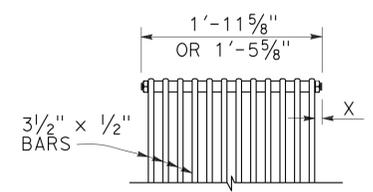
RECTANGULAR FRAME DETAILS
(For all rectangular grates)

GRATE BAR SPACING TABLE

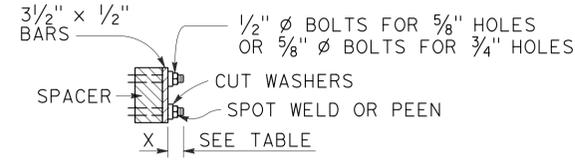
TYPE	NO. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 3/8"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1 3/8"	1 1/4"

INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	PLATE	112
OMP	PLATE	177
OMPI	PLATE	177

INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
G0,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22
GRATE CHAIN			3

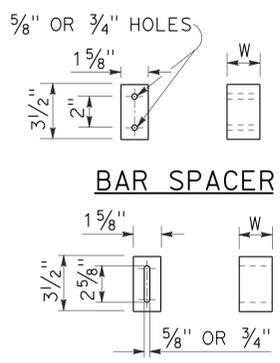


BOLTED END BLOCK



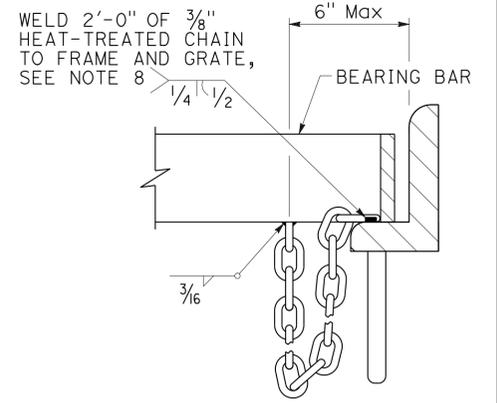
BOLTING DETAIL

ALTERNATIVE BOLTED GRATE



BAR SPACER

ALTERNATIVE SPACER
W = 1 3/8" or 2"



DETAIL "D"
(Steel grates only)

NOTES:

- Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
- Contractor has the option of using cast ductile iron, cast carbon steel, welded, bolted, or cast end block grate.
- Rounded top of bars optional on all grates.
- Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
- Complete joint penetration butt welds may be substituted for the fillet welds on all anchors.
- Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
- Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).
- Connect chain to grate and frame only at locations shown on the plans. When chain is required, do not use cast ductile iron grates.

GRATE DETAILS No. 1
NO SCALE

RSP D77A DATED APRIL 19, 2013 SUPERSEDES RSP D77A DATED JULY 20, 2012 AND STANDARD PLAN D77A DATED MAY 20, 2011 - PAGE 164 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP D77A

2010 REVISED STANDARD PLAN RSP D77A

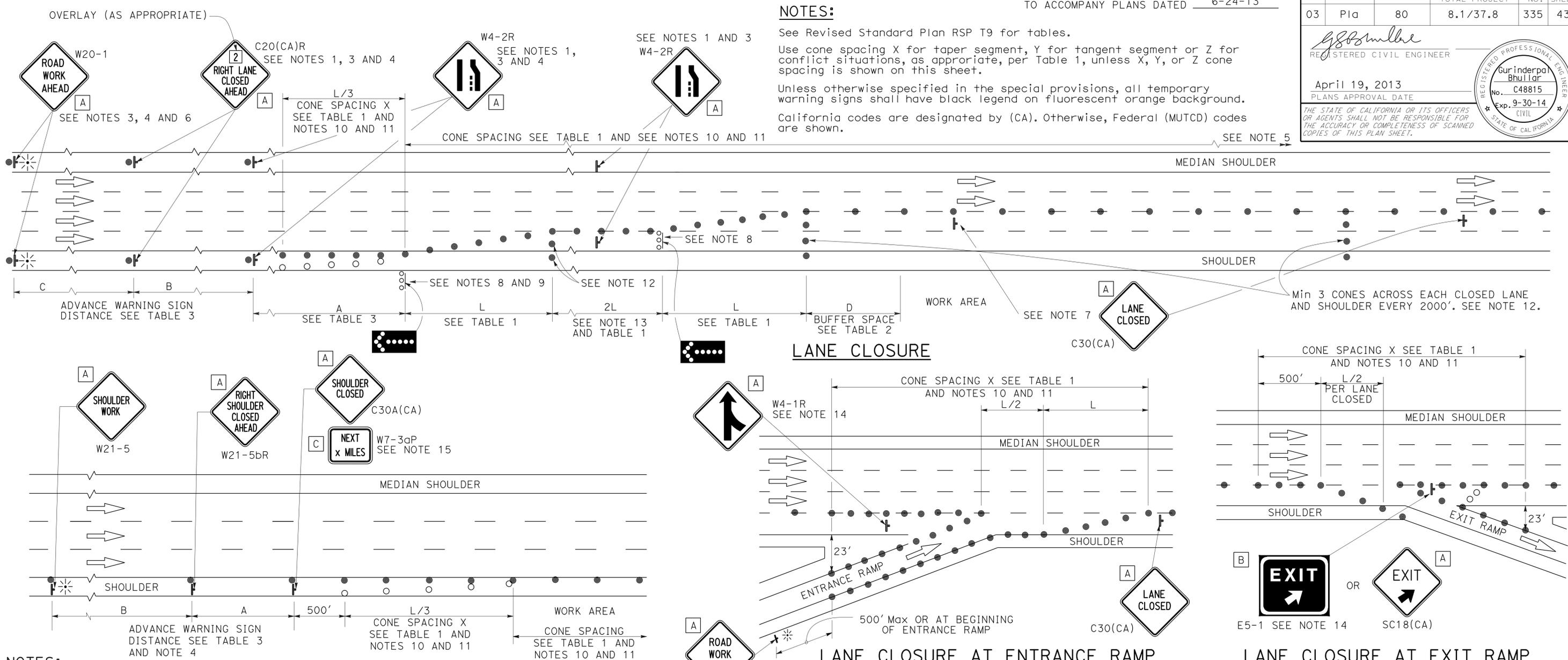
BASIS FOR Misc IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS
(See Note 7)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	335	437

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Gurinderpal Bhullar
 No. C48815
 Exp. 9-30-14
 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.



- NOTES:**
1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
 2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
 3. Duplicate sign installations are not required:
 - a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
 4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

- SHOULDER CLOSURE**
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA)L and W4-2L signs shall be used.
 7. Place a C30(CA) sign every 2000' throughout length of lane closure.
 8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
 9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
 10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
 11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.

- LANE CLOSURE AT ENTRANCE RAMP**
- LANE CLOSURE AT EXIT RAMP**
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
 13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
 14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
 15. A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- † TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A	48" x 48"
B	72" x 60"
C	36" x 30"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 FREEWAYS AND EXPRESSWAYS**

NO SCALE

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

2010 REVISED STANDARD PLAN RSP T10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	336	437

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Gurinderpal Bhullar
 No. C48815
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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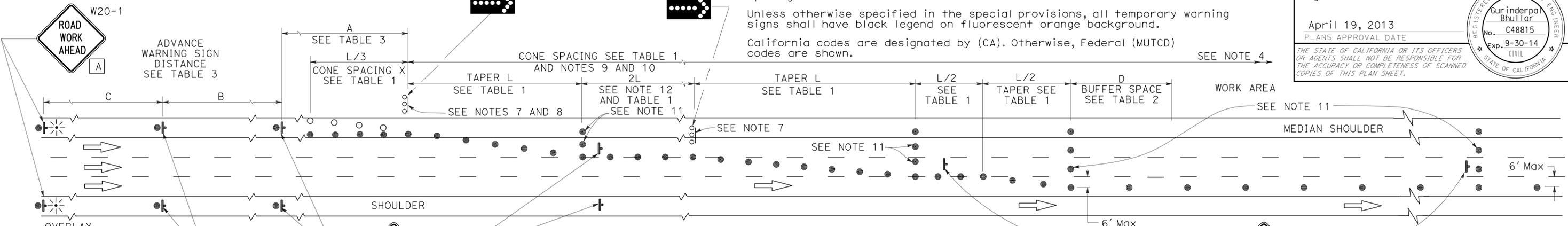
NOTES: See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

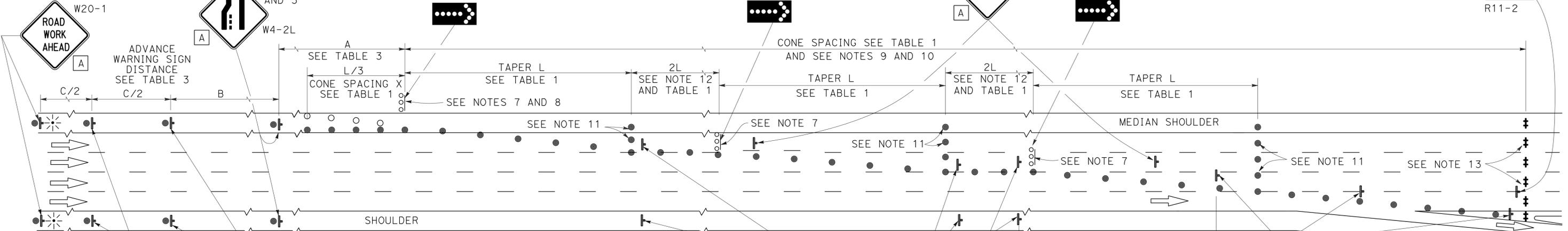
California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

SEE NOTES 3 AND 5



LANE CLOSURE WITH PARTIAL SHOULDER USE

SEE NOTES 3 AND 5



COMPLETE CLOSURE

NOTES:

- Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details as shown except that C20(CA)R and W4-2R signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT ___ MILES", use a C20(CA) sign for the first advance warning sign.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure With Partial Shoulder Use" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- When specified in the special provisions, a W20-2 "DETOUR AHEAD" sign is to be used in place of the W20-3 "FREEWAY CLOSED AHEAD" sign.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 18"
- C 48" x 30"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- † TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURES ON
 FREEWAYS AND EXPRESSWAYS**

NO SCALE

RSP T10A DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10A DATED MAY 20, 2011 - PAGE 238 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10A

2010 REVISED STANDARD PLAN RSP T10A

NOTES:

See Revised Standard Plan RSP T9 for tables.

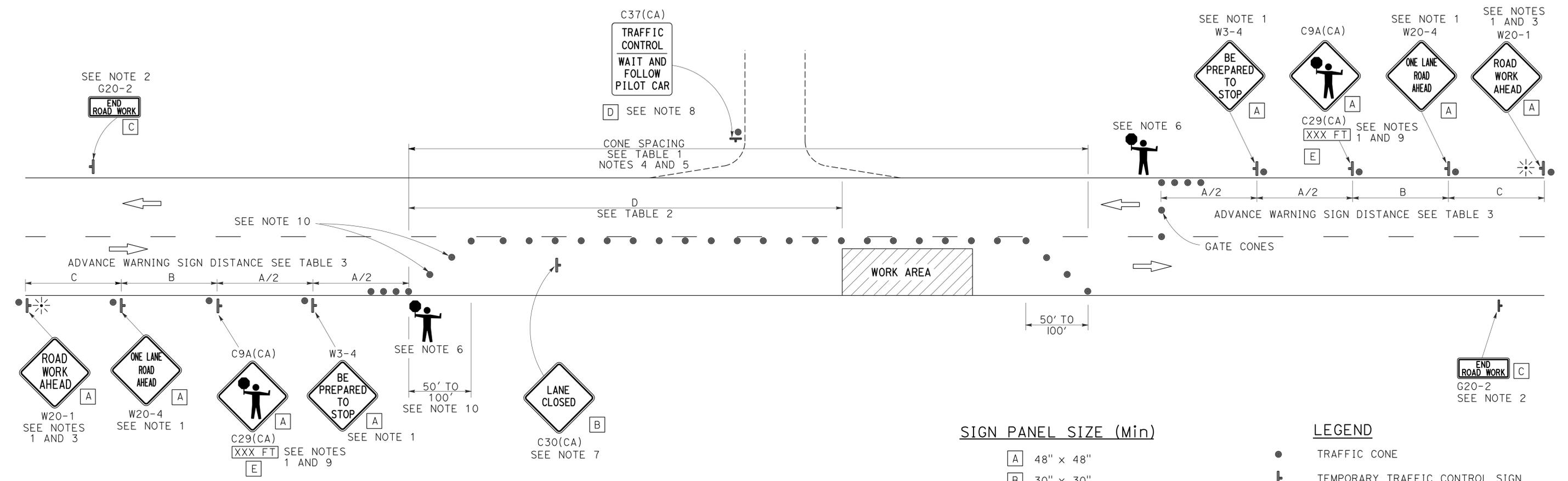
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 6-24-13



NOTES:

- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 👤 FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR LANE CLOSURE ON
TWO LANE CONVENTIONAL
HIGHWAYS**

NO SCALE

RSP T13 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T13
DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T13

2010 REVISED STANDARD PLAN RSP T13

TYPICAL RAMP CLOSURES

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 36" x 36"
- D 48" x 36"

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ‡ BARRICADES
- ⚡ PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	338	437

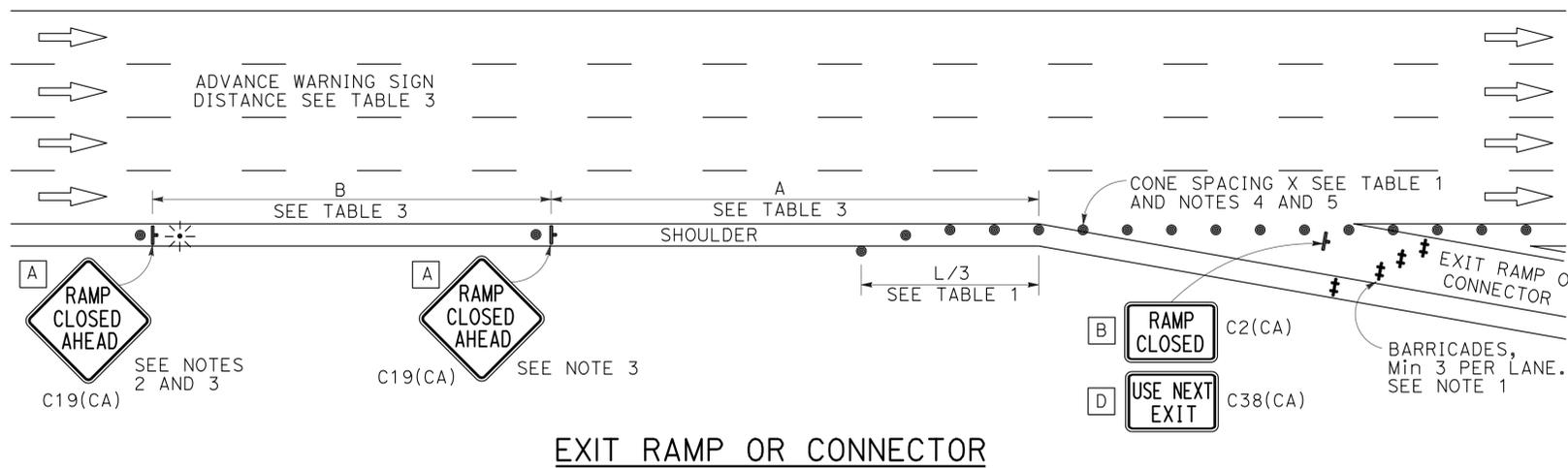
Gurinderpal Bhullar
 REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Gurinderpal Bhullar
 No. C48815
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

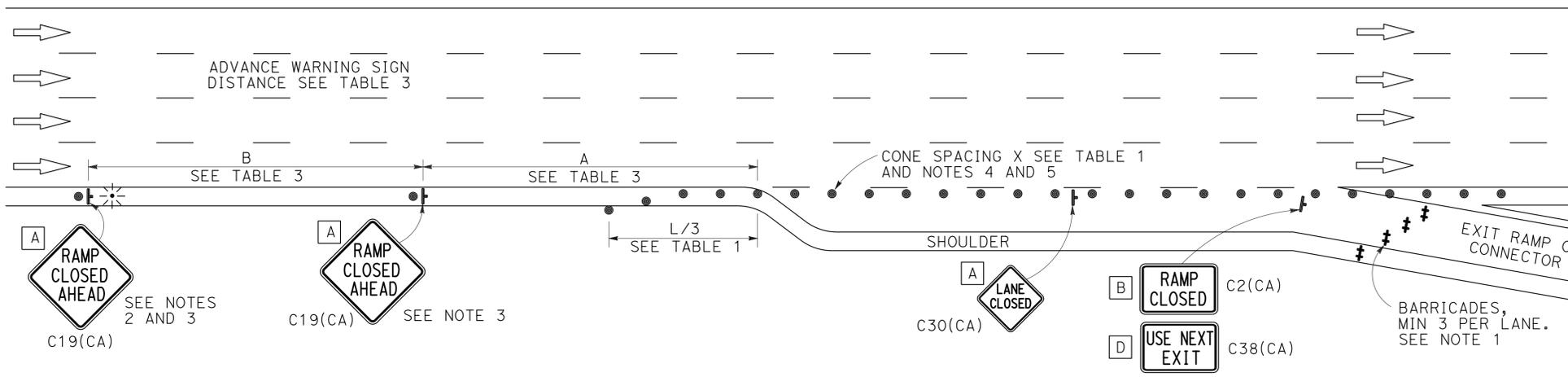
TO ACCOMPANY PLANS DATED 6-24-13

NOTES:

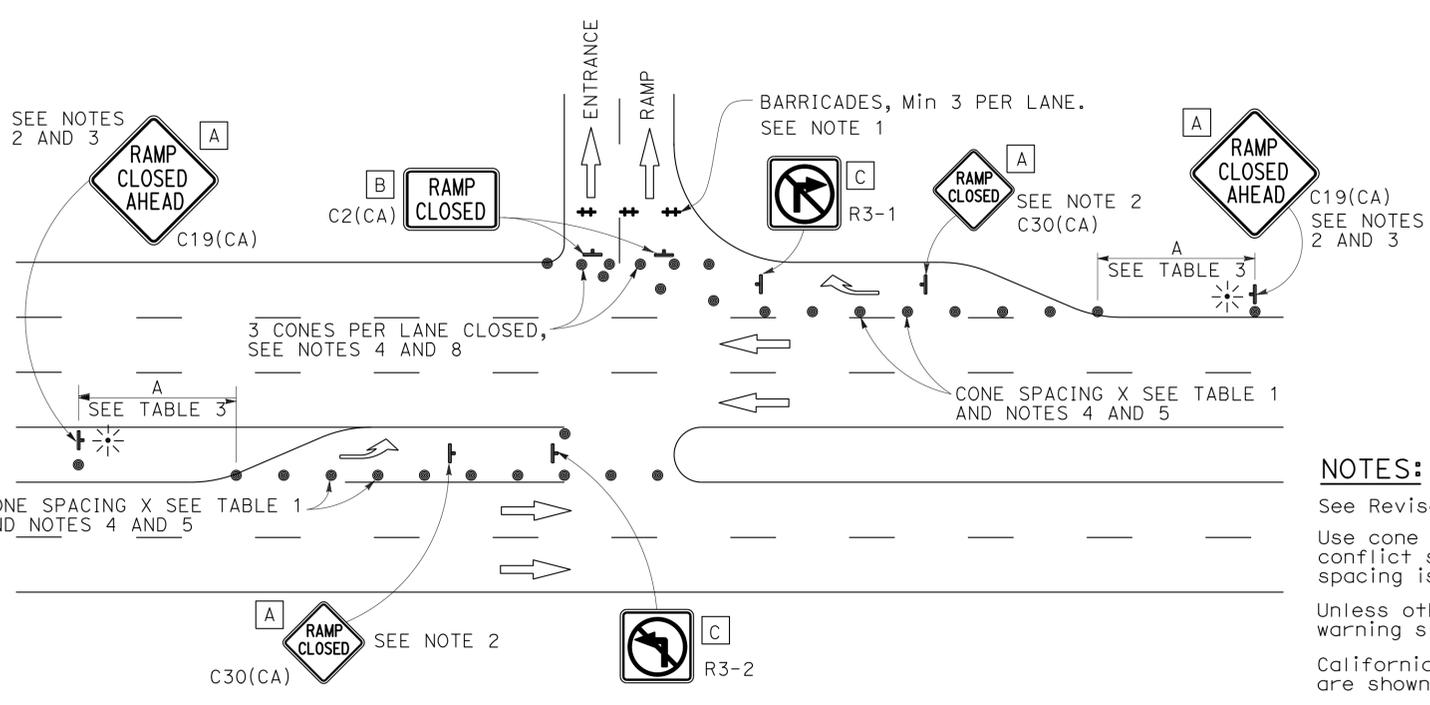
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
- Each advance C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
- All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
- At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
- The existing "EXIT" signs shall be covered during ramp closures.
- A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.



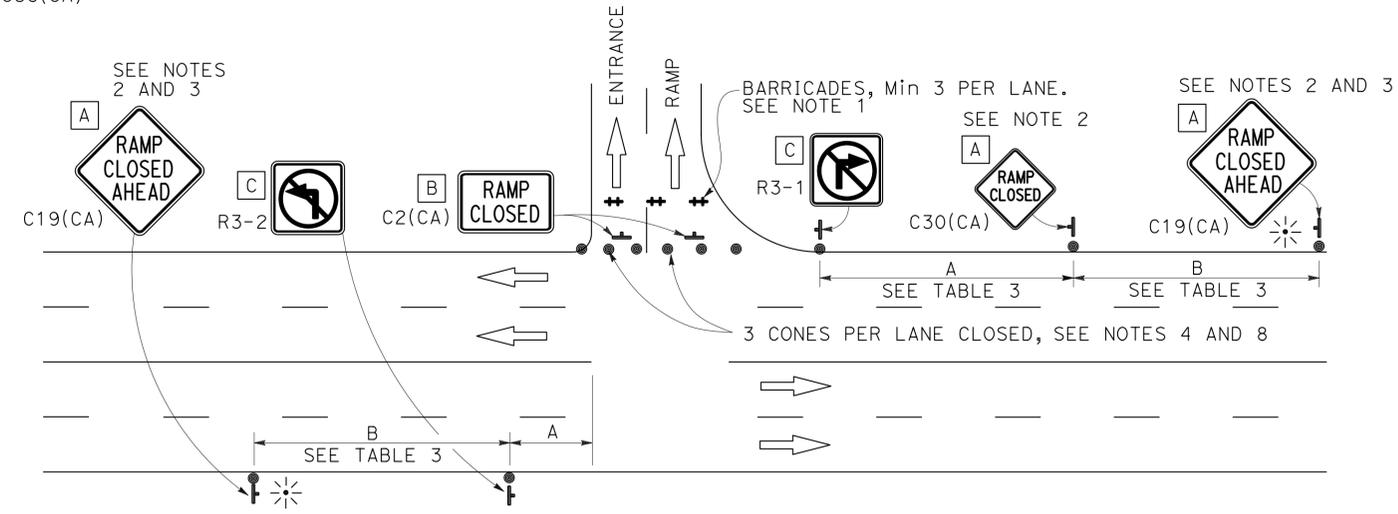
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES:

- See Revised Standard Plan RSP T9 for tables.
- Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
- Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
- California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

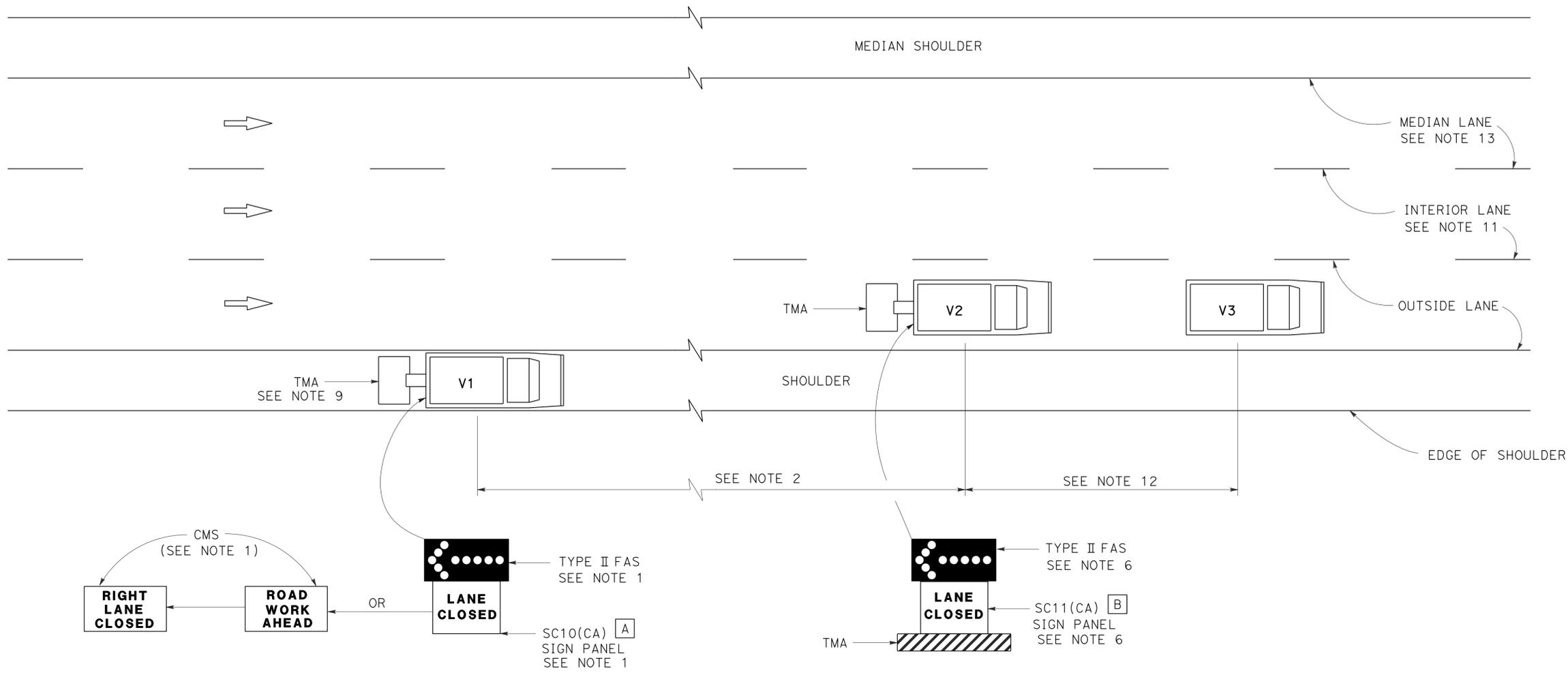
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURE**
 NO SCALE

RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14
 DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T14

2010 REVISED STANDARD PLAN RSP T14

TO ACCOMPANY PLANS DATED 6-24-13



SIGN PANEL SIZE (Min)

- A 66" x 36"
- B 54" x 42"

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- FLASHING ARROW SIGN (FAS)
- CMS CHANGEABLE MESSAGE SIGN
- TMA TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

NOTES:

1. Either a changeable message sign or a SC10(CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "RIGHT LANE CLOSED" message. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right and the changeable message sign shall show "LEFT LANE CLOSED".
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on interior lane of multilane highways, use Revised Standard Plan T16.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
13. When the work/application vehicle V3 occupies the median lane, sign vehicle V1 should drive in the median shoulder and indicate left lane closed ahead.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

RSP T15 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T15 DATED MAY 20, 2011 - PAGE 243 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T15

2010 REVISED STANDARD PLAN RSP T15

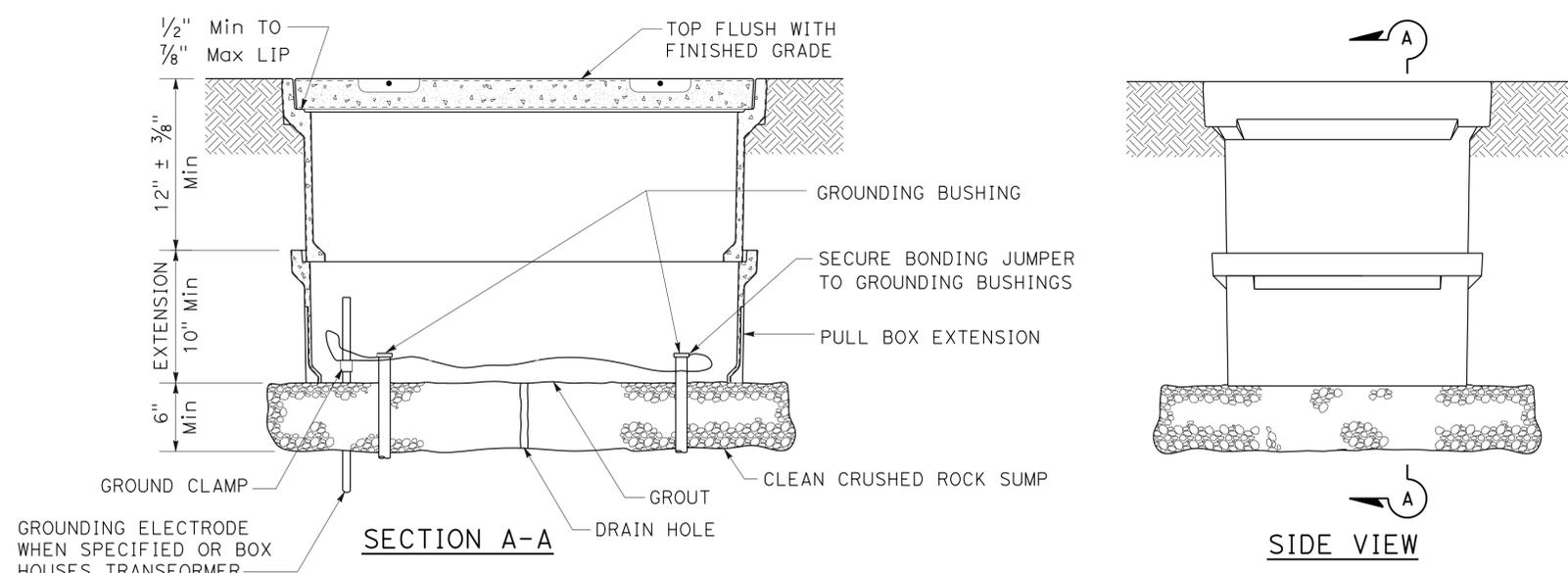
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	8.1/37.8	340	437

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

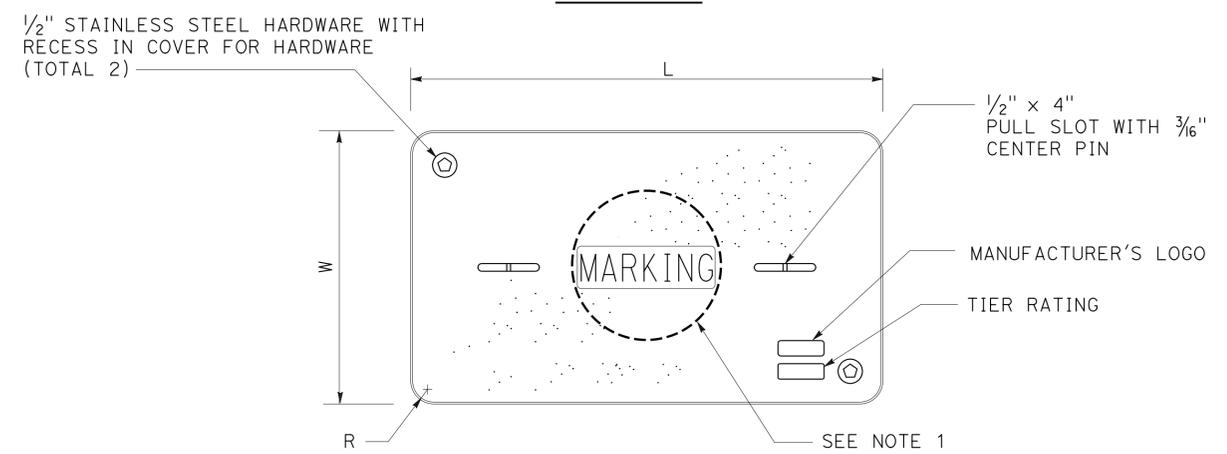
January 20, 2012
 PLANS APPROVAL DATE

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

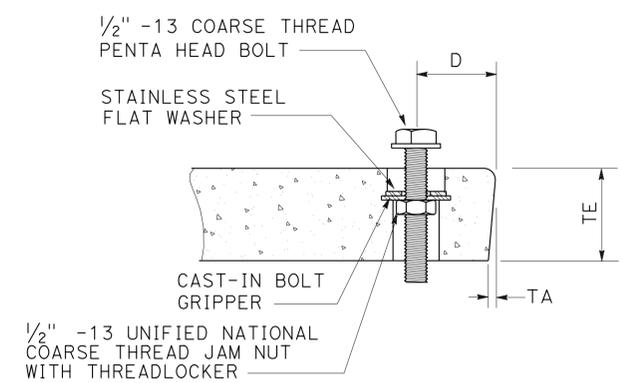
TO ACCOMPANY PLANS DATED 6-24-13



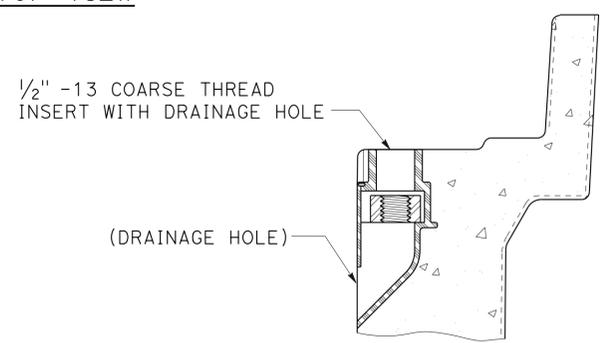
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES ON PULL BOXES:

1. Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - A) No. 3/2 pull box.
 - 1) "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - B) No. 5, 6, 9 or 9A pull box.
 - 1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - 3) "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - 4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - 5) "RAMP METER" - Ramp meter circuits.
 - 6) "COUNT STATION" - Count or speed monitor circuits.
 - 7) "COMMUNICATIONS" - Communication circuits.
 - 8) "TOS COMMUNICATIONS" - TOS communication line.
 - 9) "TOS POWER" - TOS power.
 - 10) "TDC POWER" - Telephone demarcation cabinet power.
 - 11) "CCTV" - Closed circuit television circuits.
 - 12) "TMS" - Traffic monitoring station circuits.
 - 13) "CMS" - Changeable message sign circuits.
 - 14) "HAR" - Highway advisory radio circuits.
2. The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions (L and W) plus 1/8" or greater.
3. Covers and boxes must be interchangeable with California Standard. When interchanged with a standard, the top surfaces must be flush within 1/8". Top outside radius of covers and pull boxes must have a 1/8" radius.
4. Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(PULL BOX)
 NO SCALE

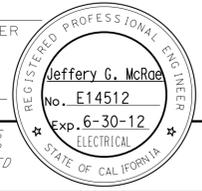
RSP ES-8A DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-8A

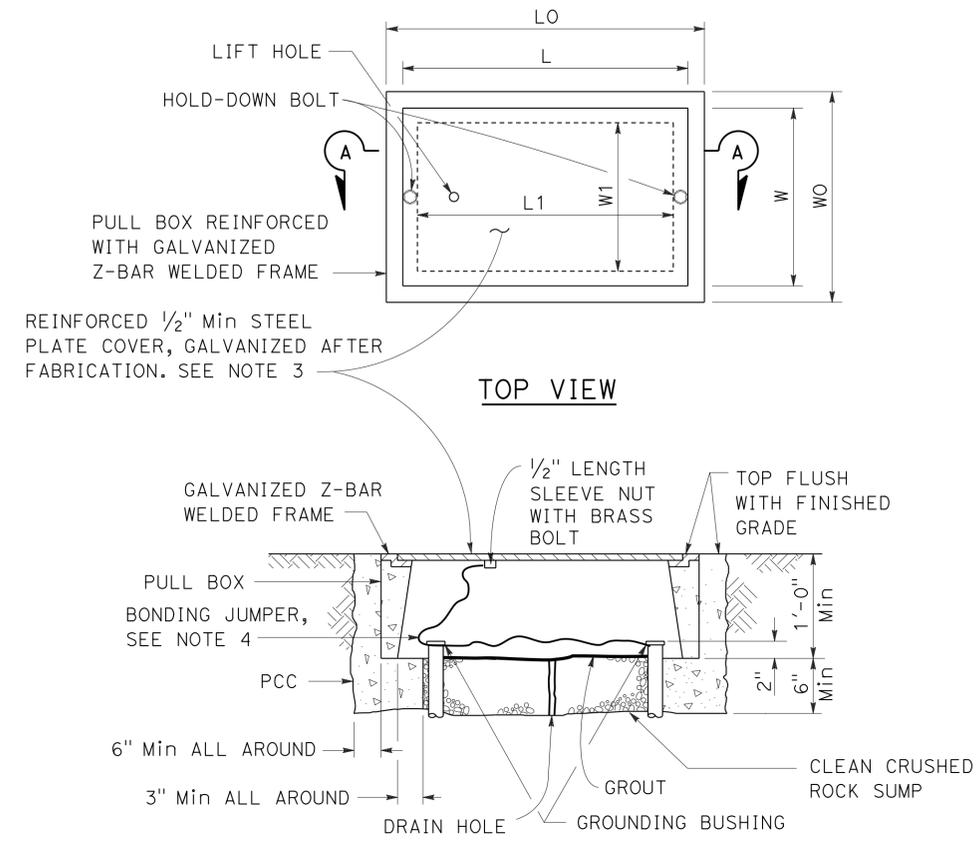
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	8.1/37.8	341	437

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 January 20, 2012
 PLANS APPROVAL DATE

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



TO ACCOMPANY PLANS DATED 6-24-13



No. 3 1/2(T), No. 5(T) AND No. 6(T) TRAFFIC PULL BOX

NOTES ON PULL BOXES:

- Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
- Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
- Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less; "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service.
 - No. 3 1/2(T) pull box.
 - "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - No. 5(T) or 6(T) pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATION" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communications line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
- Bonding jumper for metal covers shall be 3' long, minimum.
- The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
- Covers and boxes must be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces must be flush within 1/8".

PULL BOX	BOX						COVER				
	MINIMUM * THICKNESS	MINIMUM DEPTH BOX AND EXTENSION	W0	L0	L1	W1	L **	W **	R	EDGE THICKNESS	EDGE TAPER
No. 3 1/2(T)	1 1/2"	1'-0"	1'-5"± 1"	1'-8 7/8"±	1'-2 1/2"±	10 5/8"± 1"	1'-8"±	1'-1 3/4"±	0"	1/2"	NONE
No. 5(T)	1 3/4"	1'-0"	1'-11 1/2"± 1"	2'-5 1/2"±	1'-7"±	1'-1"± 1"	2'-3"±	1'-4"±	0"	1/2"	NONE
No. 6(T)	2"	1'-0"	2'-6"± 1"	2'-11 1/2"±	1'-11 1/2"±	1'-5"± 1"	2'-9"±	1'-8"±	0"	1/2"	NONE

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(TRAFFIC RATED PULL BOX)**
NO SCALE

RSP ES-8B DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-8B

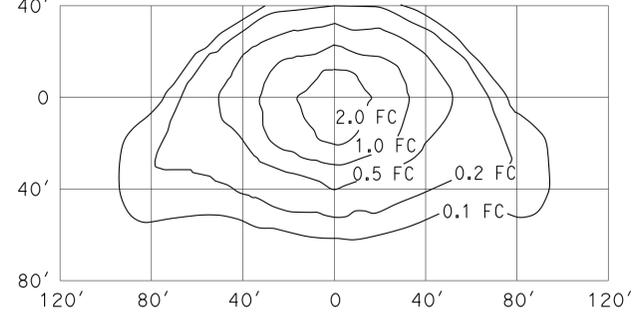
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	342	437

Jeffrey B. McRae
 REGISTERED ELECTRICAL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
Jeffrey G. McRae
 No. E14512
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 6-24-13

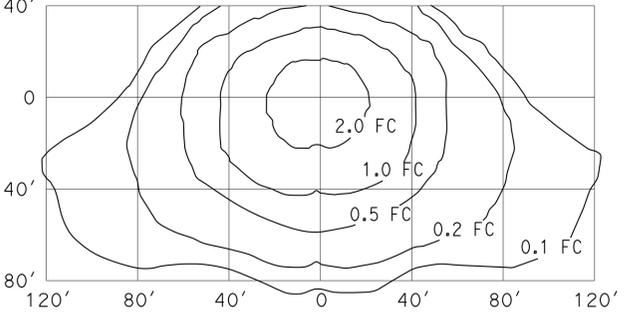
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 34' Mounting Height
 Lamp operated at 22,000 lm
 200-W high pressure sodium lamp
 ANSI Designation S66

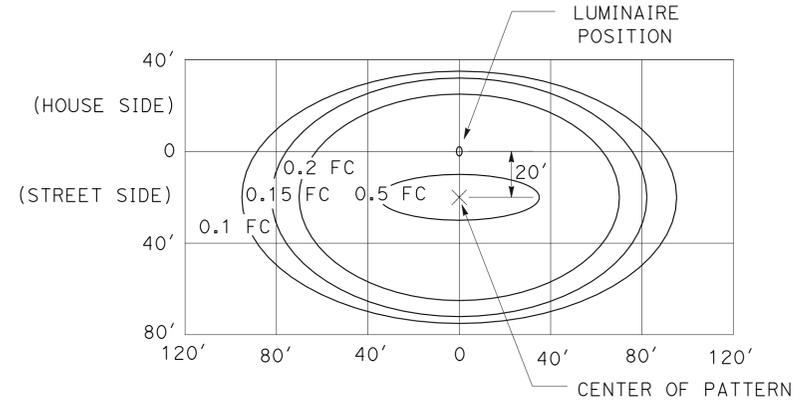
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 40' Mounting Height
 Lamp operated at 37,000 lm
 310-W high pressure sodium lamp
 ANSI Designation S67

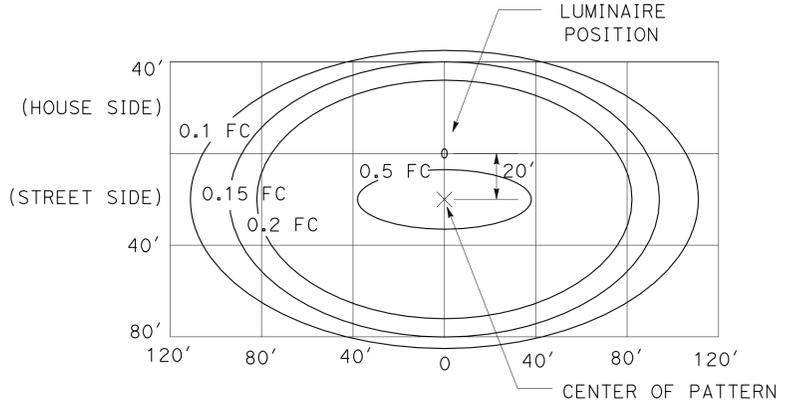
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 1

200-W HPS Equivalent at 34' Mounting Height

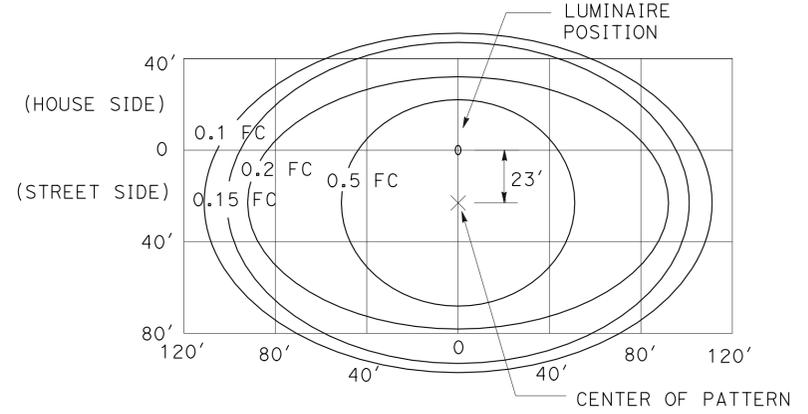
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 2

310-W HPS Equivalent at 40' Mounting Height

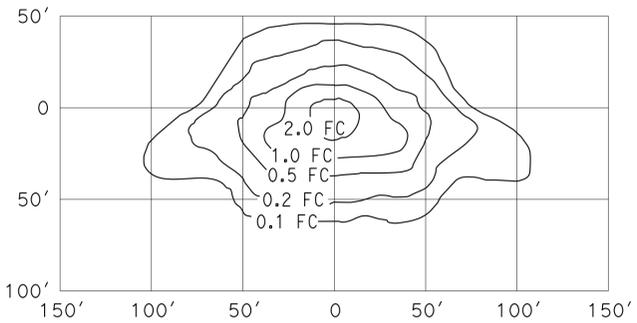
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 4

400-W HPS Equivalent at 40' Mounting Height

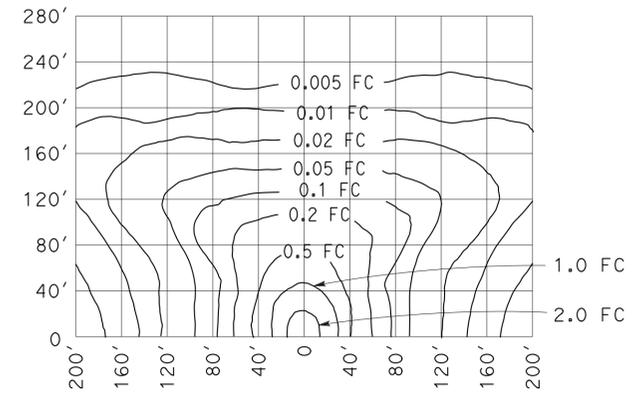
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 30' Mounting Height
 Lamp operated at 16,000 lm
 150-W high pressure sodium lamp
 ANSI Designation S55

ISOFOOTCANDLE CURVE - MINIMUM



LOW PRESSURE SODIUM LUMINAIRE

40' Mounting Height
 Lamp operated at 33,000 lm
 180-W low pressure sodium lamp

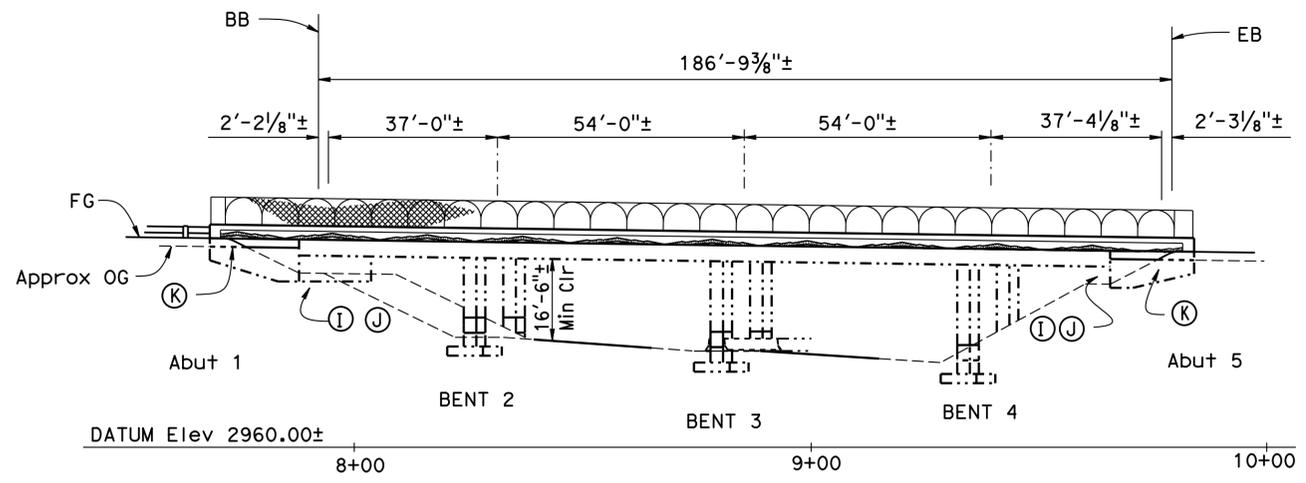
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

RSP ES-10A DATED JULY 20, 2012 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED 2010.

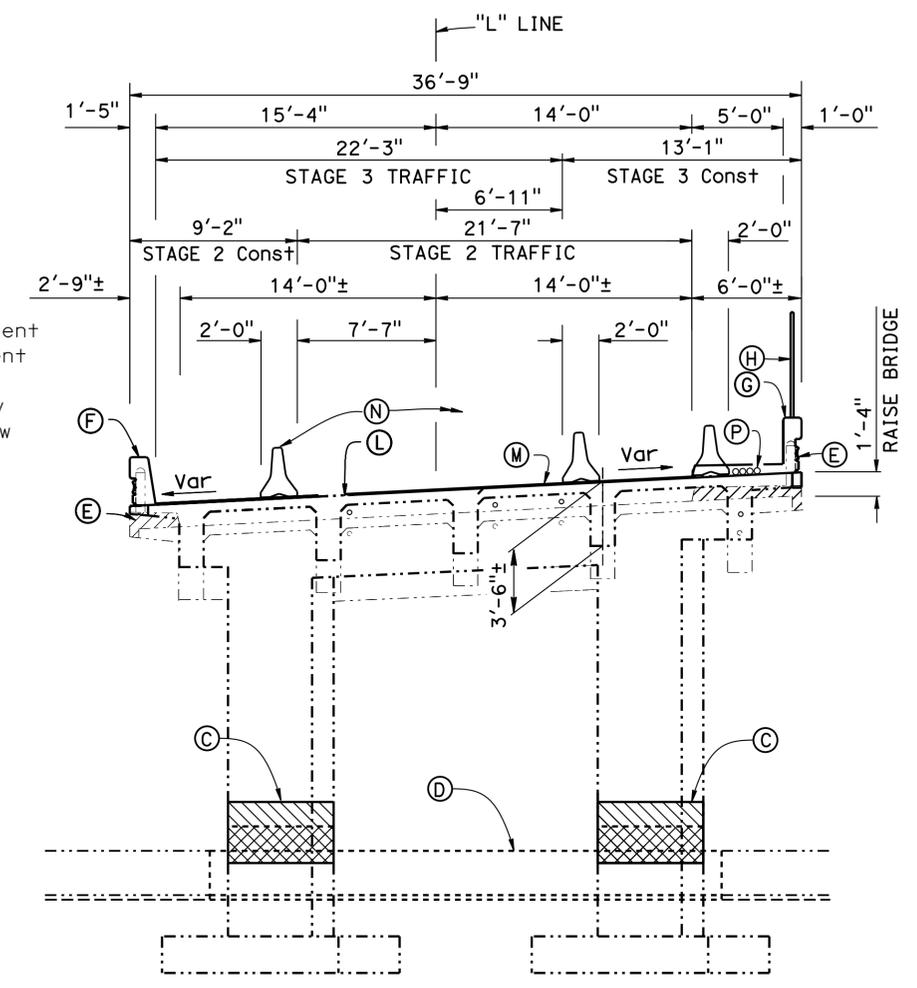
2010 REVISED STANDARD PLAN RSP ES-10A



ELEVATION
1" = 20'

- LEGEND:
- * The BB and EB elevations shown are after bridge raising, plus 3/4" polyester concrete overlay
 - Indicates bridge removal (portion)
 - Indicates new concrete
 - Limit of exist 3" AC & membrane seal removal
 - Indicates existing structure
 - Indicates new construction
 - Indicates point of minimum vertical clearance

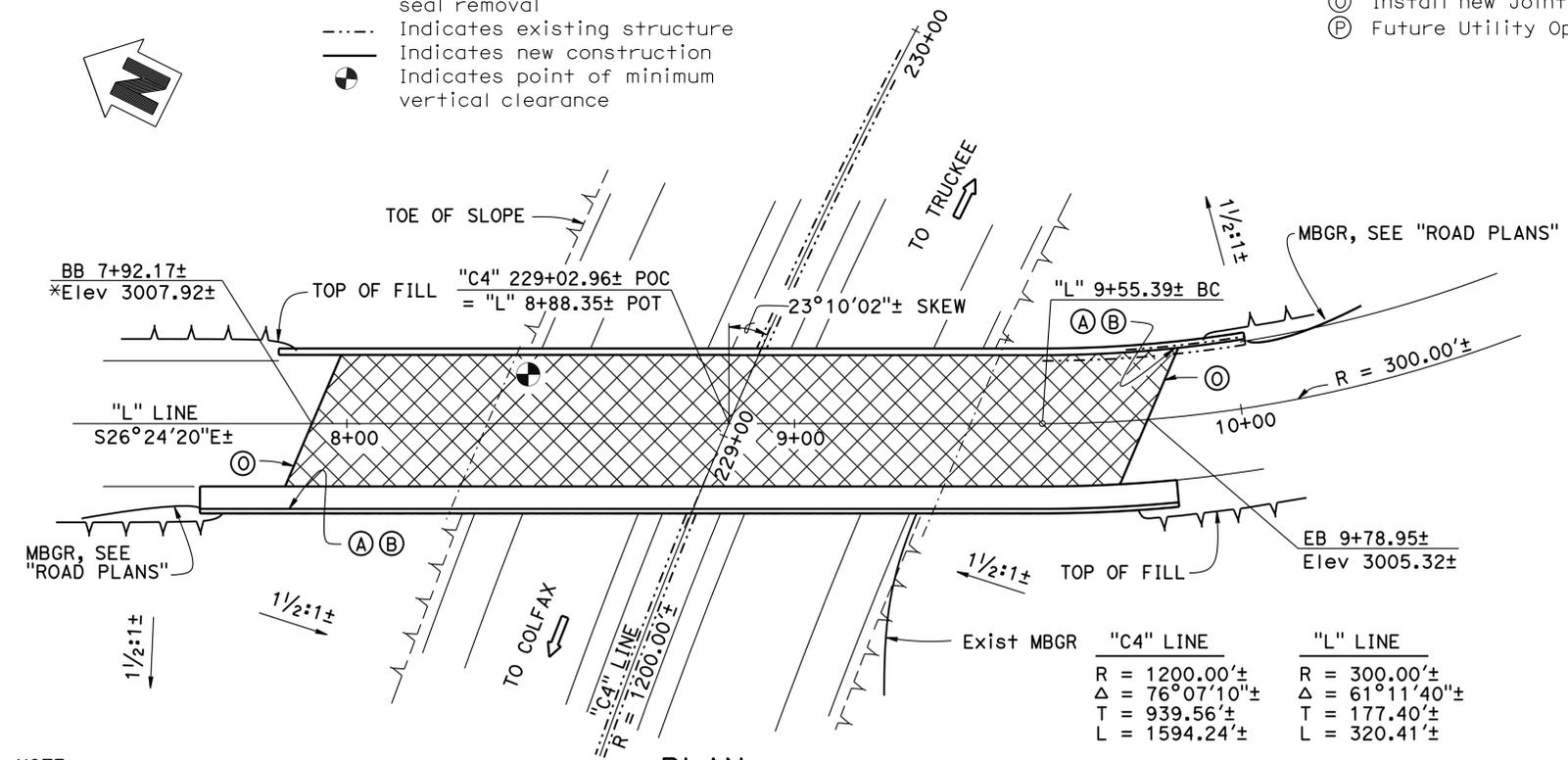
- NOTES:
- Stage 1 Construction: Detour traffic, raise bridge, construct columns, abutment backwall, wingwalls and abutment pedestal
- (A) Paint "Bridge No. 19-0092"
 - (B) Paint "MAGRA OVERCROSSING"
 - (C) Remove portion of bridge & raise bridge
 - (D) Existing Barrier to be removed, see "ROAD PLANS"
 - (E) Remove existing Barrier Railing
 - (F) Concrete Barrier Type 732 (Mod) w/Aesthetic Treatment
 - (G) Concrete Barrier Type 26 (Mod) w/Aesthetic Treatment
 - (H) Chain Link Railing Type 6
 - (I) Remove part of existing expansion bearing assembly
 - (J) Rebuild the existing abutment pedestal & install new Elastomeric Bearing Pad
 - (K) Remove portion of existing wingwall & construct wingwall to match new bridge height
 - (L) Exist 3" AC Overlay to be removed
 - (M) Place 3/4" Polyester Concrete Overlay
 - (N) Temporary Railing (Type K), see "ROAD PLANS"
 - (O) Install new Joint Seal
 - (P) Future Utility Openings (4)



TYPICAL SECTION
1" = 5'

QUANTITIES

REMOVE ASPHALT CONCRETE SURFACING	5,230	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	5,480	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	411	CF
PLACE POLYESTER CONCRETE OVERLAY	5,480	SQFT
BRIDGE REMOVAL (PORTION), LOCATION F	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	6	CY
STRUCTURE BACKFILL (BRIDGE)	6	CY
RAISE BRIDGE (LOCATION F)	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	44	CY
DRILL AND BOND DOWEL	252	LF
JOINT SEAL (MR 1")	80	LF
BAR REINFORCING STEEL (BRIDGE)	7,890	LB
CHAIN LINK RAILING (TYPE 6)	212	LF
CONCRETE BARRIER (TYPE 26 MODIFIED)	212	LF
CONCRETE BARRIER (TYPE 732 MODIFIED)	212	LF



PLAN
1" = 20'

- NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
- NOTES:
- For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS NO. 1" sheet
 - Elevation Shown are based from NAVD88 vertical datum

DESIGN	BY Quang H Nguyen	CHECKED Lewis L Shen	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	19-0092	MAGRA OVERCROSSING (RAISE) GENERAL PLAN	
DETAILS	BY Nancy Gwynn/Shadi Motalebi	CHECKED Lewis L Shen	LAYOUT	BY Quang H Nguyen		CHECKED Lewis L Shen	POST MILE		37.8
QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino	SPECIFICATIONS	BY Dave Klein		CHECKED Dave Klein			

Joseph E Downing
 DESIGN ENGINEER

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 0 1 2 3

UNIT: 3578
 PROJECT NUMBER & PHASE: 03000004731
 CONTRACT NO.: 3E1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
8-14-09 10-18-12 8-28-12	1	13

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10)
 FILE => 19-0092-a-gp.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plac	80	8.1/37.8	344	437

Ali Asnaashari 10-22-12
 REGISTERED CIVIL ENGINEER DATE

6-24-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

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GENERAL NOTES

EXISTING STRUCTURE

SPECIFICATIONS: DESIGN:

AASHTO dated 1953 with revisions, and as Supplemented by Bridge Planing and Design Manual

CONSTRUCTION:

Standard Specifications, Division of Highways, dated August 1954 and the Special Provisions

LIVE LOADING:

H20-S16-44

UNIT STRESSES:

Reinforced Concrete:
 $f_y = 20 \text{ ksi}$
 $f'_c = 1.2 \text{ ksi}$
 $n = 10$

FOOTING PRESSURE:

4 tons per square feet

NEW CONSTRUCTION

DESIGN:

Bridge Design Specifications-April 2000 (LFD)
 (1996 AASHTO with Interims and Revisions by CALTRANS)

DEAD LOAD:

Includes 9 psf of polyester concrete overlay
 No future additional deck overlay allowed

LIVE LOADING:

HS20-44 design load.

SEISMIC DESIGN:

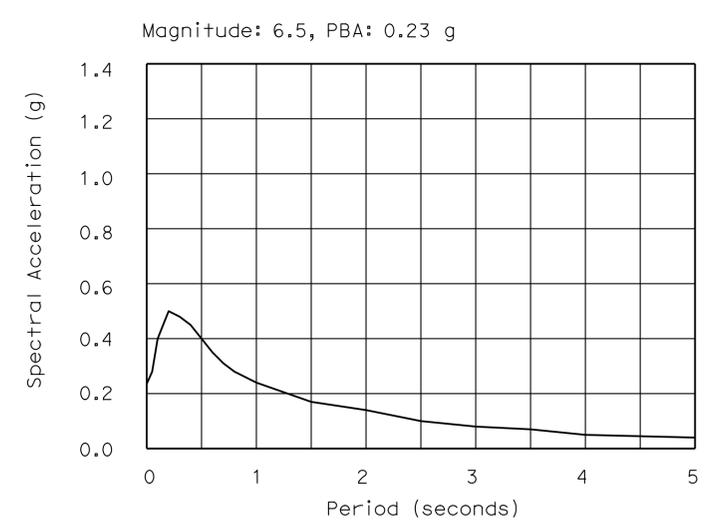
See "SITE SPECIFIC ARS CURVE"

REINFORCED CONCRETE:

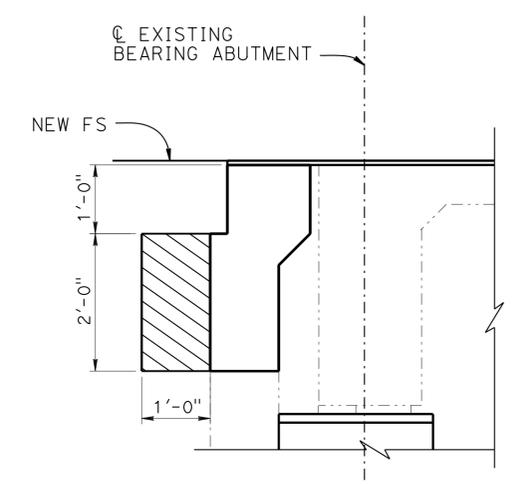
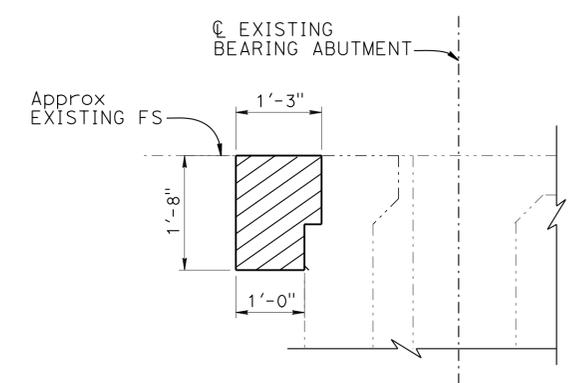
$f_y = 60 \text{ ksi}$
 $f'_c = 4000 \text{ psi}$
 $n = 9$

FOOTING PRESSURE:

Allowable for working stress design
 Abut 1,5 4 tons per square feet
 Bent 2,3,4 4 tons per square feet



SITE SPECIFIC ARS CURVE
NO SCALE



INDICATES STRUCTURE EXCAVATION
 INDICATES STRUCTURE BACKFILL

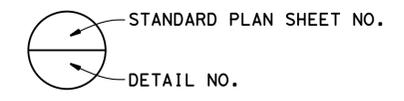
NOTE:
For wingwall backfill limits, see "ROAD PLANS"
LIMITS OF EXCAVATION AND BACKFILL
NO SCALE

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS NO. 1
3	INDEX TO PLANS NO. 2
4	ABUTMENT DETAILS NO. 1
5	ABUTMENT DETAILS NO. 2
6	ABUTMENT DETAILS NO. 3
7	BENT DETAILS
8	TYPICAL SECTION
9	AESTHETIC DETAILS NO. 1
10	AESTHETIC DETAILS NO. 2
11	CONCRETE REMOVAL DETAILS NO. 1
12	CONCRETE REMOVAL DETAILS NO. 2
13	CHAIN LINK RAILING TYPE 6

STANDARD PLANS Dated 2010

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)
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B7-10	UTILITY OPENING BOX GIRDER
B11-54	CONCRETE BARRIER TYPE 26
B11-55	CONCRETE BARRIER TYPE 732



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY Quang H Nguyen CHECKED Lewis Shen DETAILS BY Shadi Motalebi CHECKED Lewis Shen QUANTITIES BY Mike Bergman CHECKED Joey Aquino	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 19-0092 POST MILE 37.8	MAGRA OVERCROSSING (RAISE) INDEX TO PLANS NO. 1
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 3E1001
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 3-20-11, 10-18-12, 5-22-12 SHEET 2 OF 13

USERNAME => s124496 DATE PLOTTED => 28-JUN-2013 TIME PLOTTED => 11:19

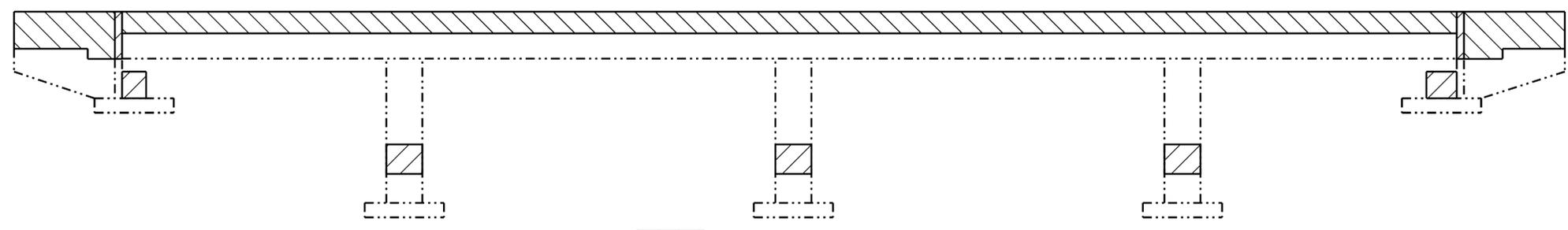
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	345	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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 STRUCTURAL CONCRETE, BRIDGE
 STRUCTURAL CONCRETE, BRIDGE (3600 psi PRIOR TO TEMPORARY SUPPORT RELEASE)

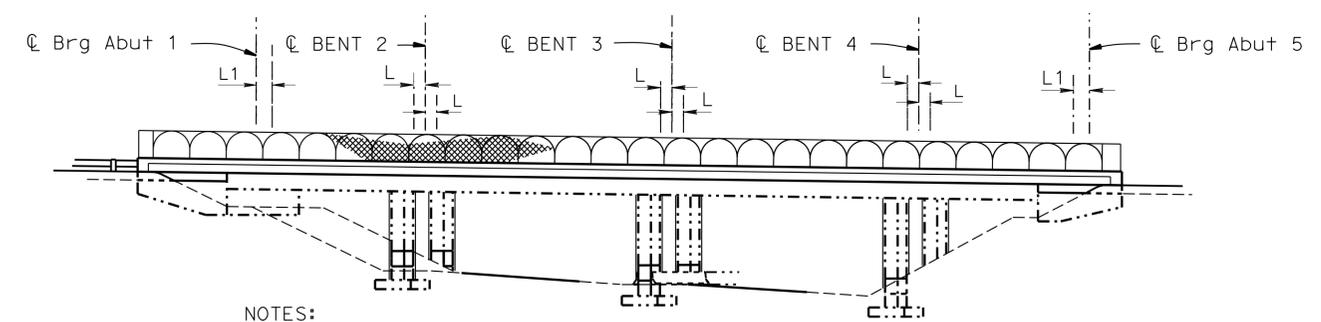
CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

TEMPORARY SUPPORT LOADING

Required capacity of Temporary support

LOCATION	DEAD LOAD
Abutment 1	170 kips
Bent 2	500 kips
Bent 3	540 kips
Bent 4	500 kips
Abutment 5	170 kips

Temporary support loads do not include loads the Contractor places on the bridge



NOTES:
Maximum jack location eccentricity on Bent Caps or at Abutments
L = 0'-6" Max
L1 = 1'-0" Max

SUPPORT LOCATION
NO SCALE

NOTES:
Jacks required at each side of existing bents

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

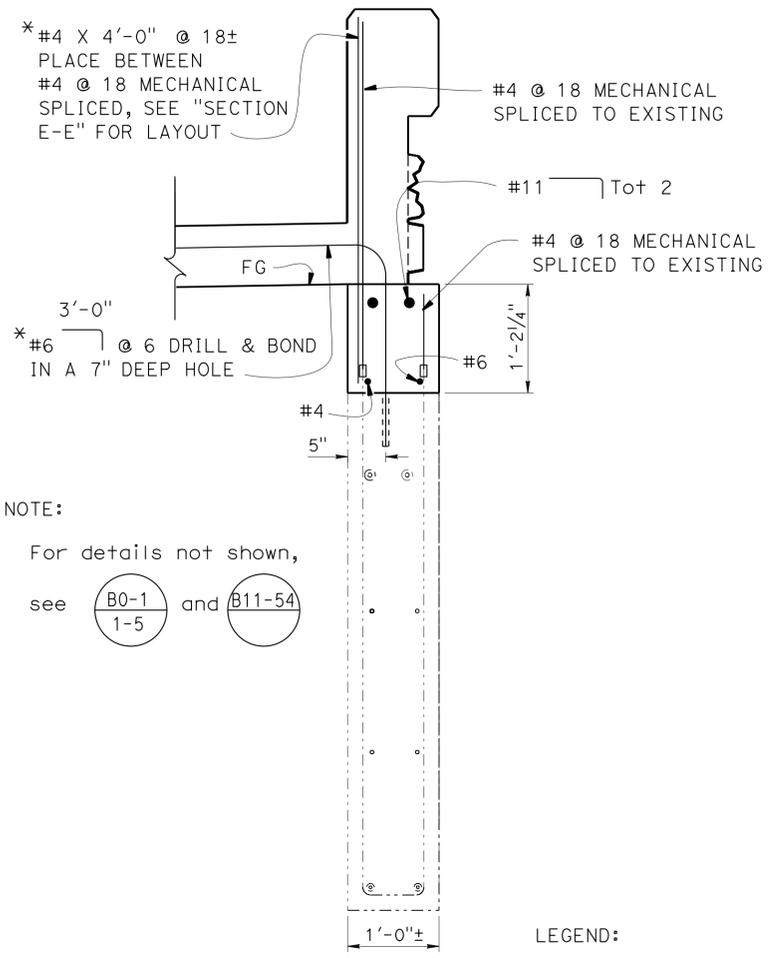
DESIGN BY Quang H Nguyen CHECKED Lewis Shen DETAILS BY Shadi Motalebi CHECKED Lewis Shen QUANTITIES BY Mike Bergman CHECKED Joey Aquino	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 19-0092	MAGRA OVERCROSSING (RAISE) INDEX TO PLANS NO. 2
			POST MILE 37.8	
			UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

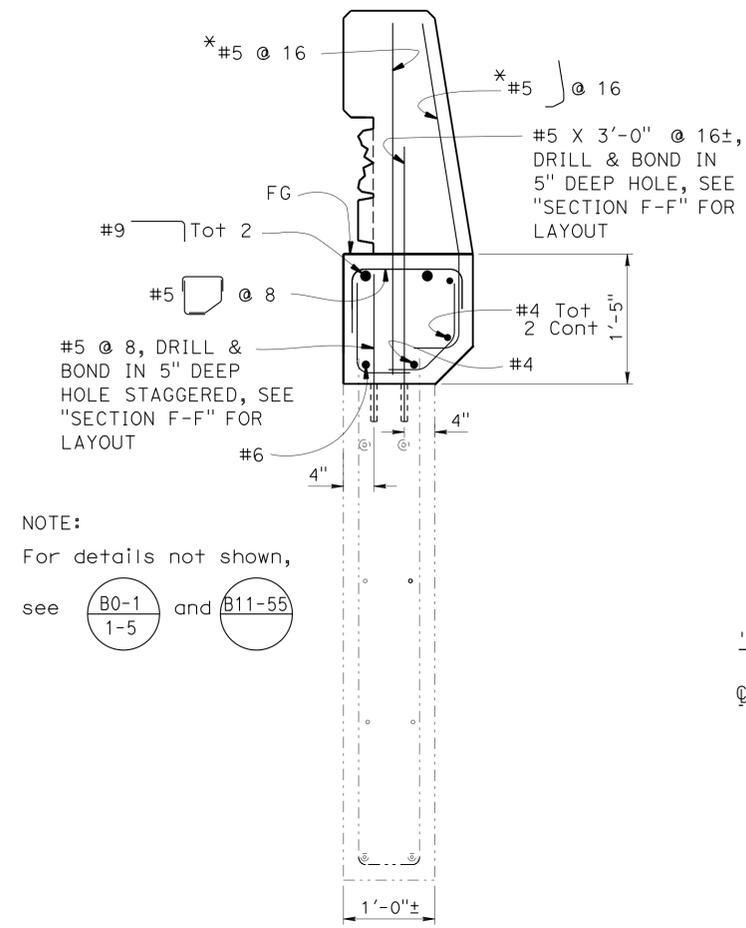
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TIME PLOTTED => 11:19
DATE PLOTTED => 28-JUN-2013
USERNAME => s124496

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	346	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			PLANS APPROVAL DATE		
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REGISTERED PROFESSIONAL ENGINEER ALI ASNAASHARI No. 36092 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA					



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

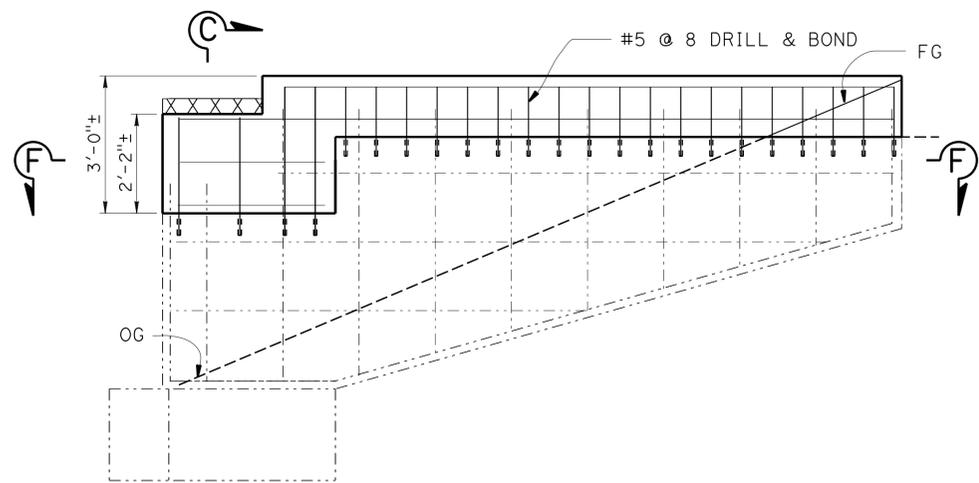


SECTION D-D
1" = 1'-0"

LEGEND:
* Indicates Barrier Reinforcement

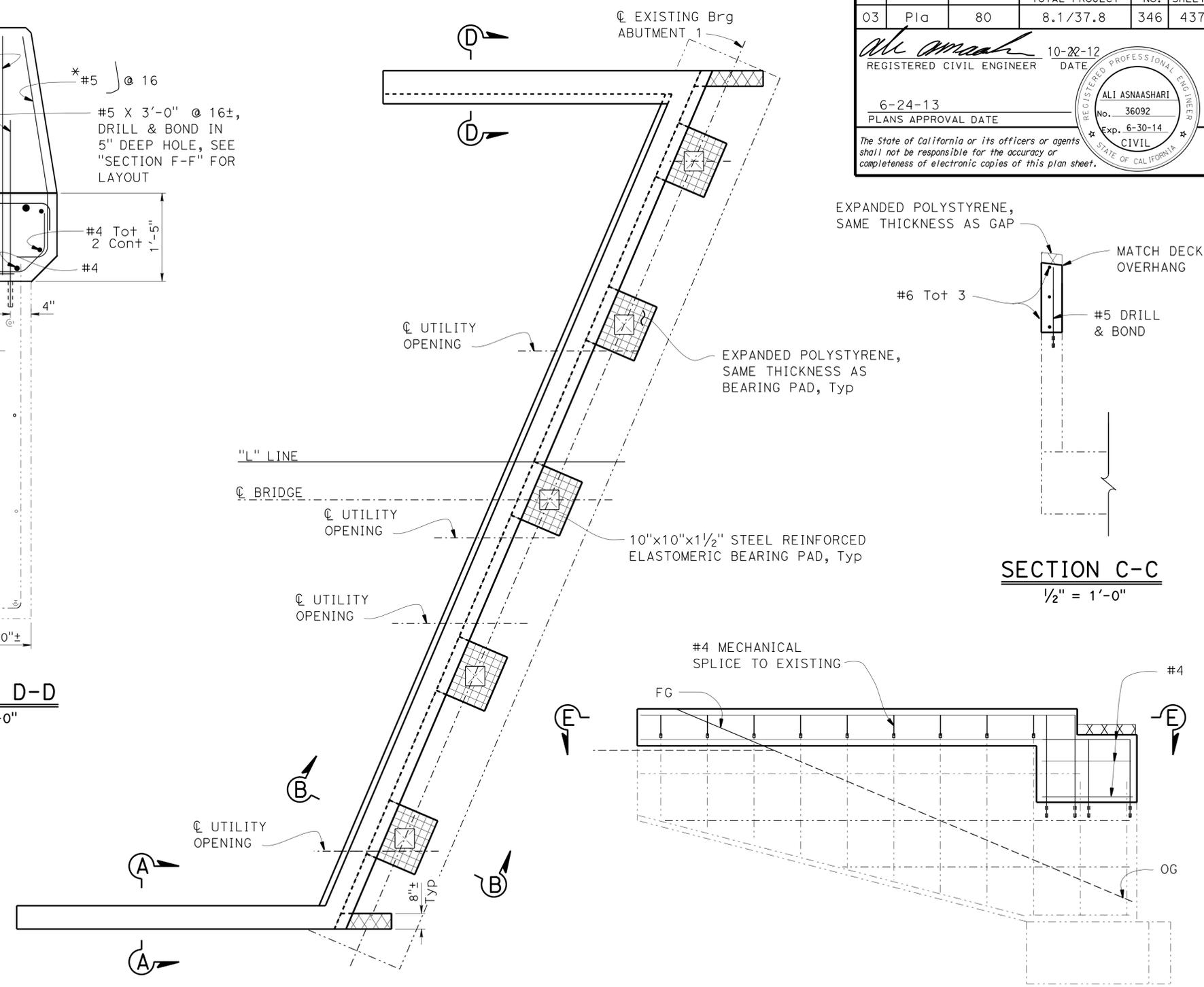
NOTE:
For details not shown, see  and 

NOTE:
For details not shown, see  and 



LEFT SIDE WINGWALL ELEVATION
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



ABUTMENT PLAN
3/8" = 1'-0"

RIGHT SIDE WINGWALL ELEVATION
1/2" = 1'-0"

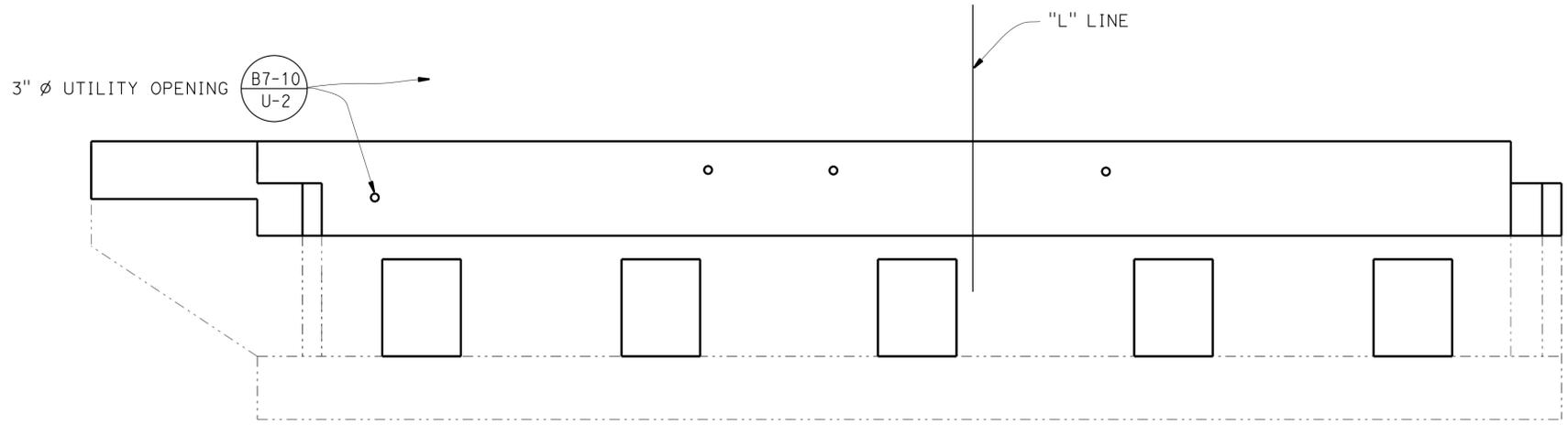
- NOTES:
1. New Abutment Pedestal dimensions and Wingwall length matches existing dimensions
 2. For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 1" sheet
 3. For "SECTION B-B" see "ABUTMENT DETAILS NO. 2" sheet
 4. For "SECTION E-E" and "SECTION F-F" see "ABUTMENT DETAILS NO 3" sheet

DESIGN	BY	Quang H Nguyen	CHECKED	Lewis Shen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0092	MAGRA OVERCROSSING (RAISE) ABUTMENT DETAILS NO. 1						
	DETAILS	BY	Shadi Motalebi	CHECKED			Lewis Shen	POST MILE		37.8					
QUANTITIES	BY	Mike Bergman	CHECKED	Joey Aquino	UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF				
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)										0	1	2	3	4	13

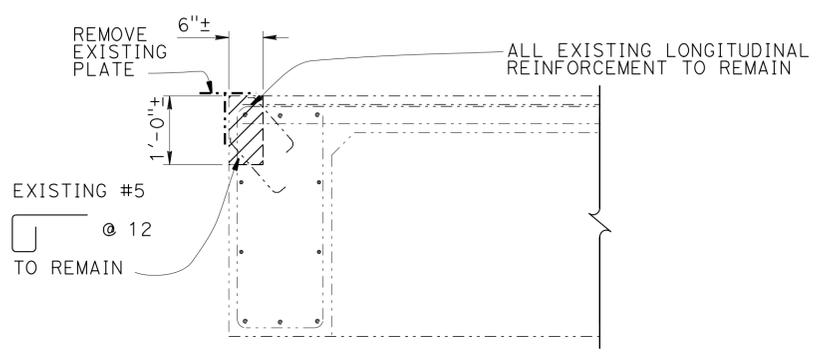
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	347	437

Ali Asnaashari 10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

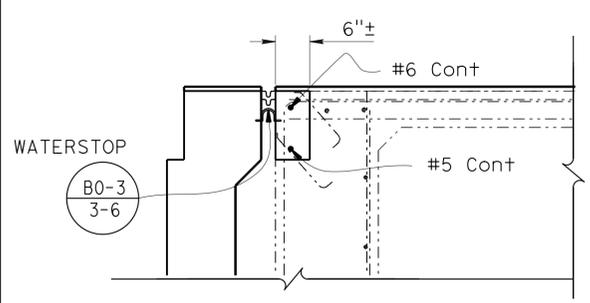
REGISTERED PROFESSIONAL ENGINEER
 ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA



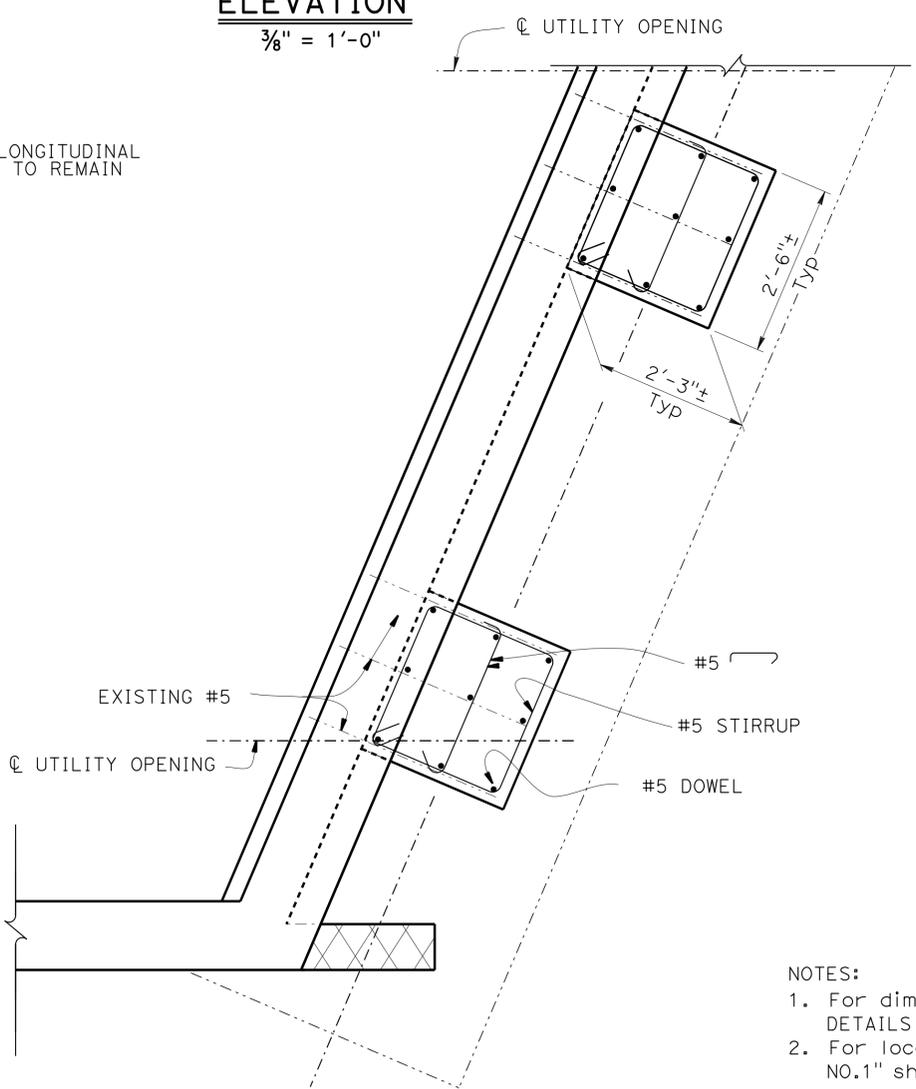
ELEVATION
 $\frac{3}{8}'' = 1'-0''$



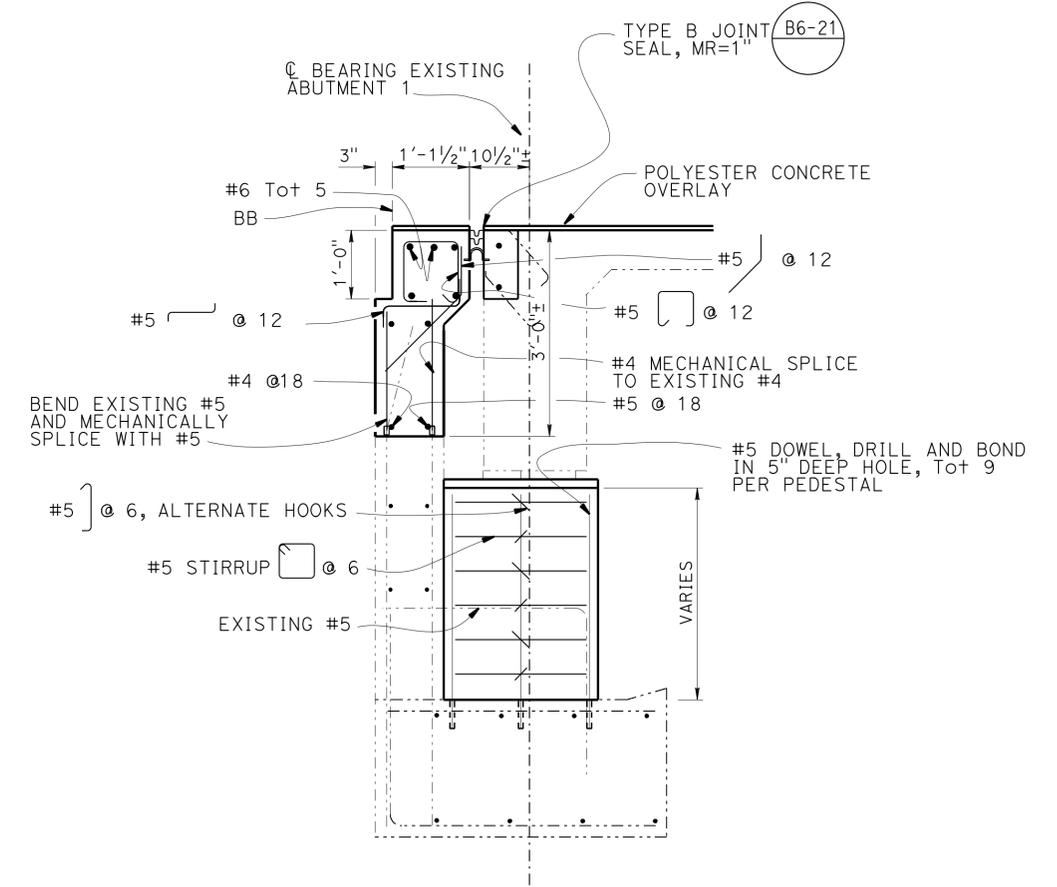
EXISTING DIAPHRAGM
 $\frac{3}{4}'' = 1'-0''$



END DIAPHRAGM
 $\frac{3}{4}'' = 1'-0''$



PART PLAN
 $\frac{3}{4}'' = 1'-0''$



SECTION B-B
 $\frac{3}{4}'' = 1'-0''$

- NOTES:
- For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO.1" sheet
 - For location of "SECTION B-B" see "ABUTMENT DETAILS NO.1" sheet

LEGEND:
 Indicates bridge removal (portion)

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">DESIGN</td> <td style="width: 30%;">BY Quang H Nguyen</td> <td style="width: 30%;">CHECKED Lewis Shen</td> </tr> <tr> <td>DETAILS</td> <td>BY Shadi Motalebi</td> <td>CHECKED Lewis Shen</td> </tr> <tr> <td>QUANTITIES</td> <td>BY Mike Bergman</td> <td>CHECKED Joey Aquino</td> </tr> </table>	DESIGN	BY Quang H Nguyen	CHECKED Lewis Shen	DETAILS	BY Shadi Motalebi	CHECKED Lewis Shen	QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO. 19-0092 POST MILE 37.8	MAGRA OVERCROSSING (RAISE) ABUTMENT DETAILS NO. 2
DESIGN	BY Quang H Nguyen	CHECKED Lewis Shen											
DETAILS	BY Shadi Motalebi	CHECKED Lewis Shen											
QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino											
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731									
		CONTRACT NO.: 3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES										
		REVISION DATES	SHEET 5 OF 13	DATE PLOTTED => 28-JUN-2013 11:19									

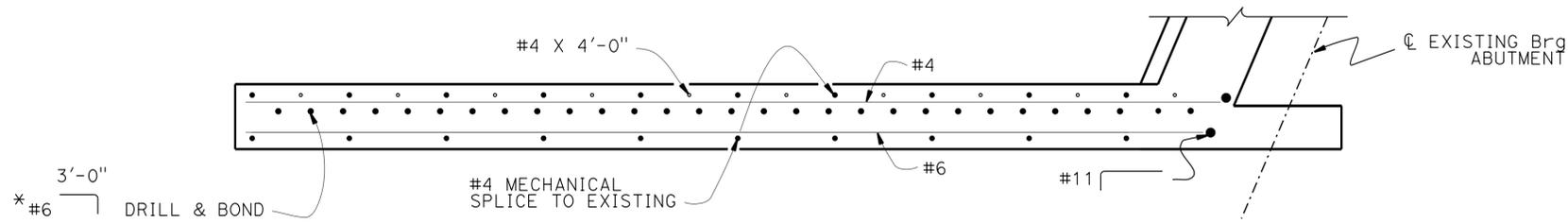
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plac	80	8.1/37.8	348	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

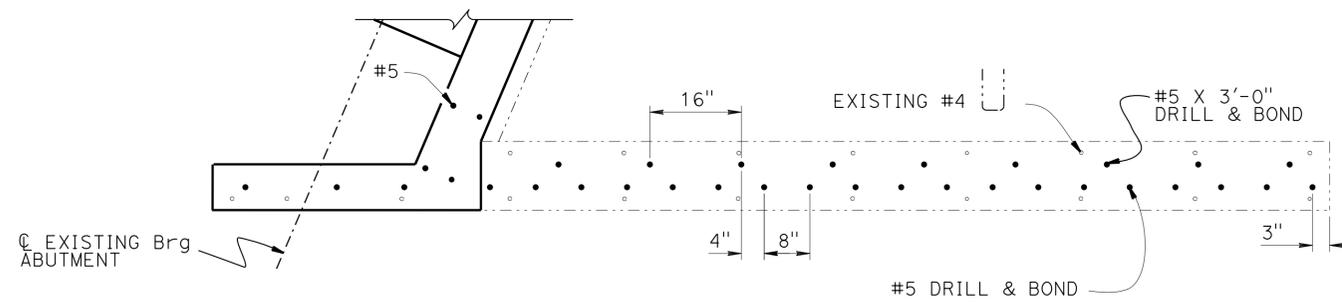
ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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NOTE:
All reinforcement not shown
LEGEND:
* Indicates Barrier Reinforcement

SECTION E-E
 $\frac{3}{4}'' = 1'-0''$



NOTE:
All reinforcement not shown

SECTION F-F
 $\frac{3}{4}'' = 1'-0''$

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
For location of "SECTION E-E" and "SECTION F-F" see "ABUTMENT DETAILS NO. 1" sheet

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Lewis Shen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0092	MAGRA OVERCROSSING (RAISE) ABUTMENT DETAILS NO. 3				
	DETAILS	BY Shadi Motalebi	CHECKED Lewis Shen			POST MILE	37.8					
	QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino									
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731		CONTRACT NO.: 3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 6	OF 13

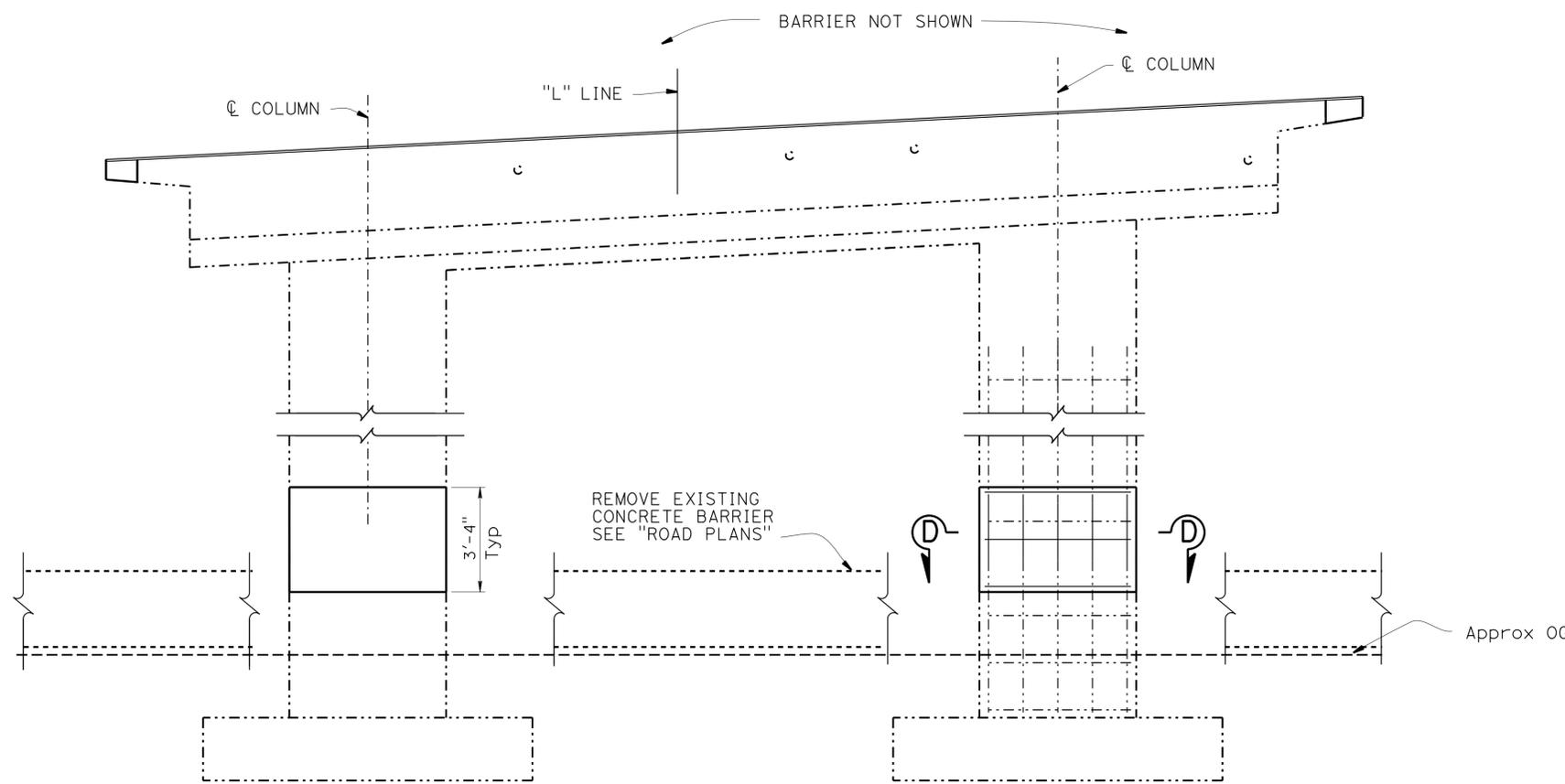
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	349	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

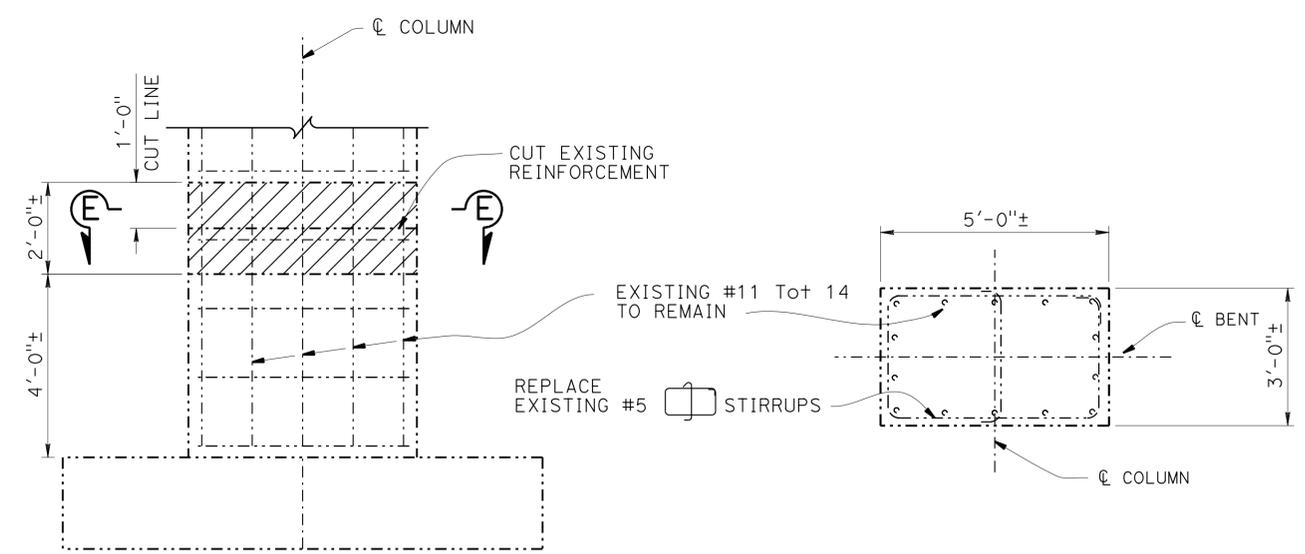
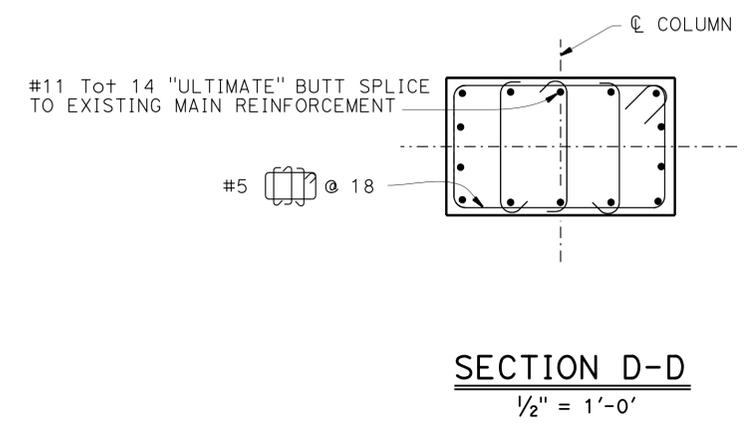
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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ELEVATION
 $\frac{3}{8}'' = 1'-0''$



PART ELEVATION **SECTION E-E**

CONCRETE REMOVAL AT COLUMNS
 $\frac{1}{2}'' = 1'-0''$

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Details are typical for all columns

LEGEND:
 Indicates bridge removal (portion)

DESIGN	BY Quang H Nguyen	CHECKED Lewis Shen
DETAILS	BY Shadi Motalebi	CHECKED Lewis Shen
QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino

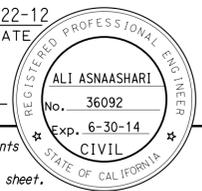
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

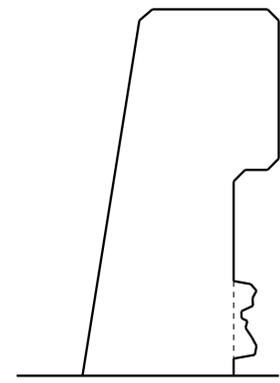
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0092
POST MILE	37.8

MAGRA OVERCROSSING (RAISE)
BENT DETAILS

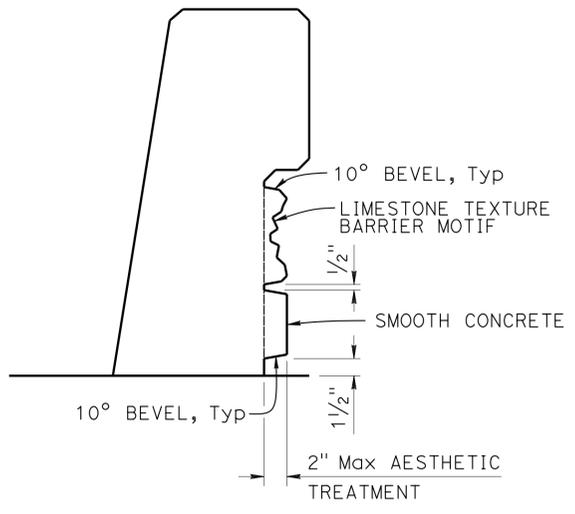
DATE PLOTTED => 11:19
TIME PLOTTED =>
28-JUN-2013
8:124486
USERNAME =>

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	351	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					
					

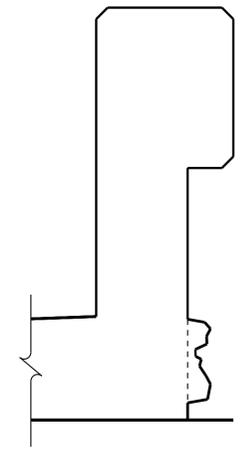


NOTE:
For details not shown, see "SECTION B-B"

SECTION A-A
1/2" = 1'-0"

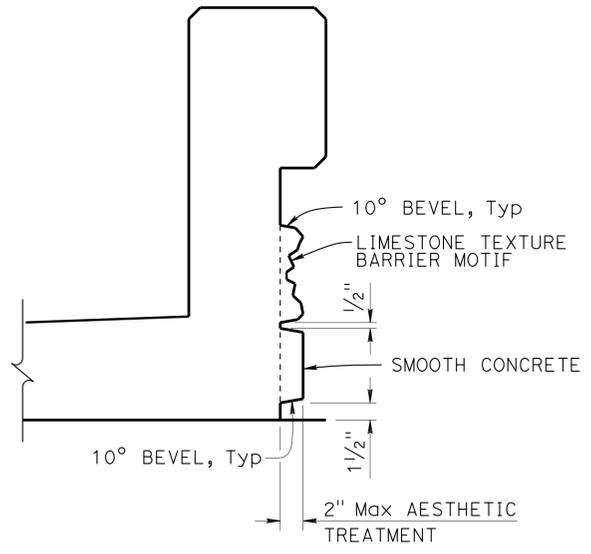


SECTION B-B
1/2" = 1'-0"



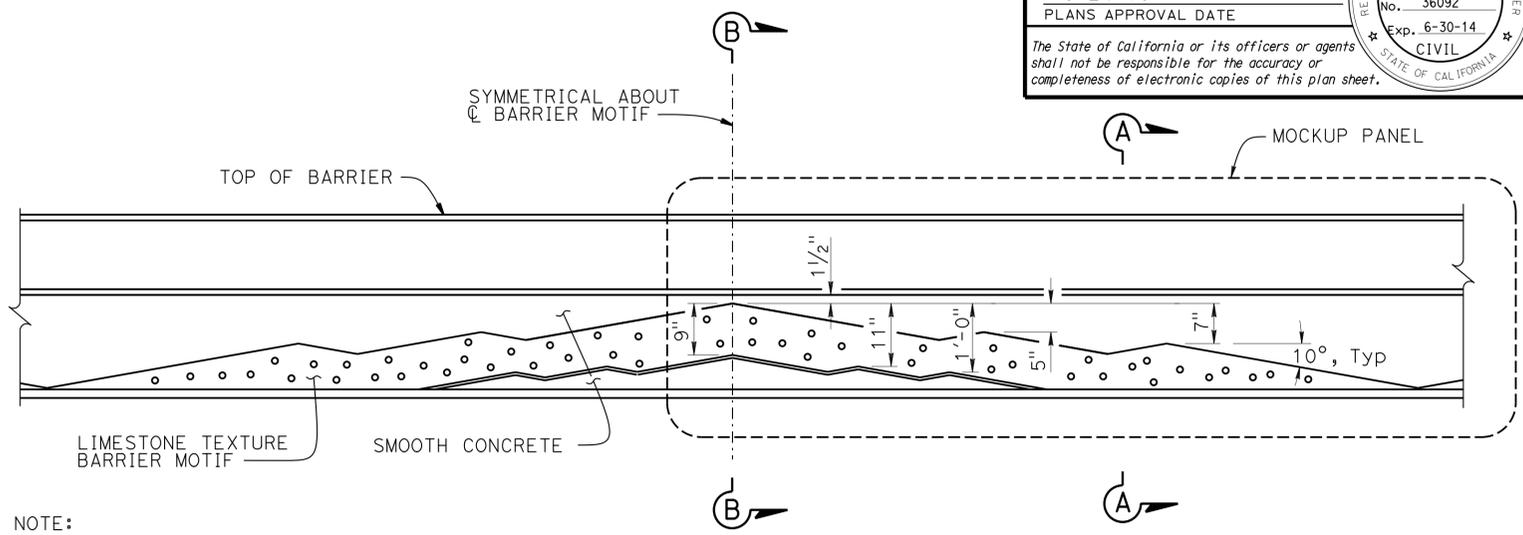
NOTE:
For details not shown, see "SECTION D-D"

SECTION C-C
1/2" = 1'-0"



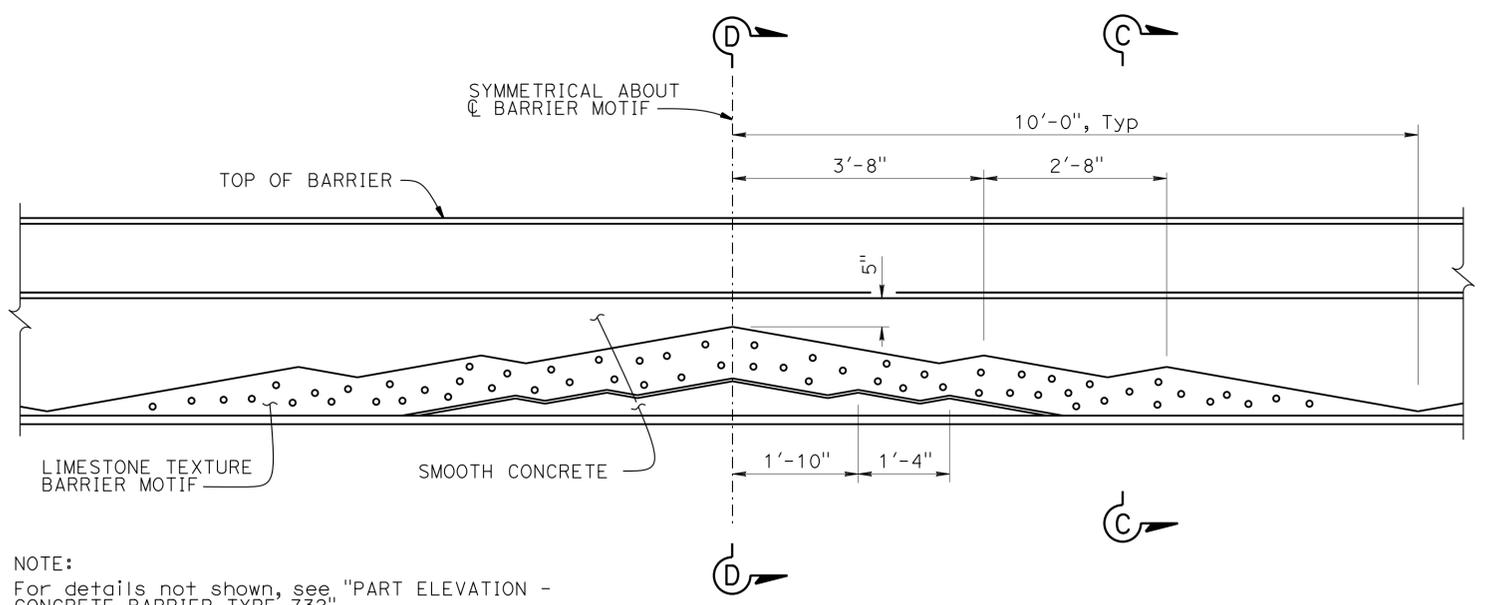
SECTION D-D
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 26"

PART ELEVATION - CONCRETE BARRIER TYPE 732
3/4" = 1'-0"



NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 732"

PART ELEVATION - CONCRETE BARRIER TYPE 26
3/4" = 1'-0"

DESIGN	BY David Fowkes	CHECKED Lewis Shen
DETAILS	Nancy C Gwynn	CHECKED Lewis Shen
QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 19-0092
POST MILE 37.8

MAGRA OVERCROSSING (RAISE)
AESTHETIC DETAILS NO. 1

DATE PLOTTED => 11:19 28-JUN-2013 USERNAME => s124496

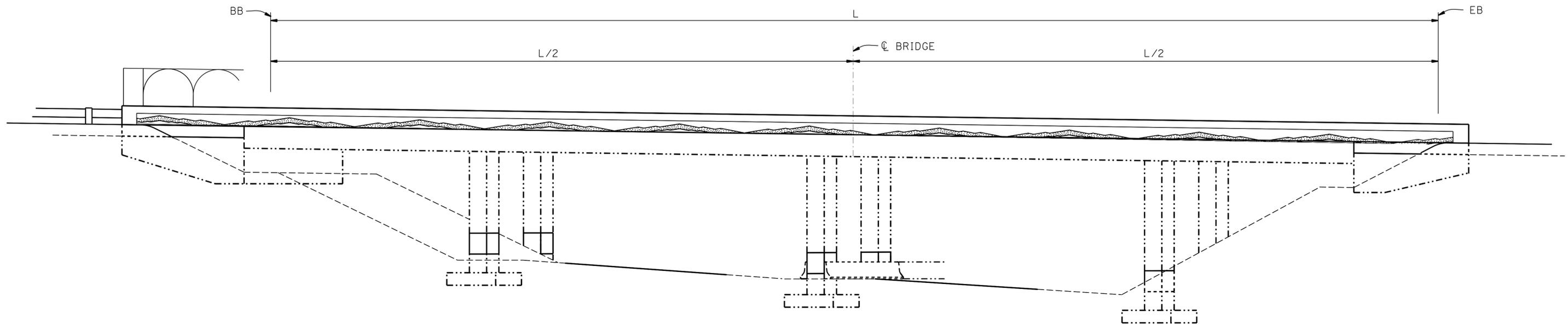
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	352	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

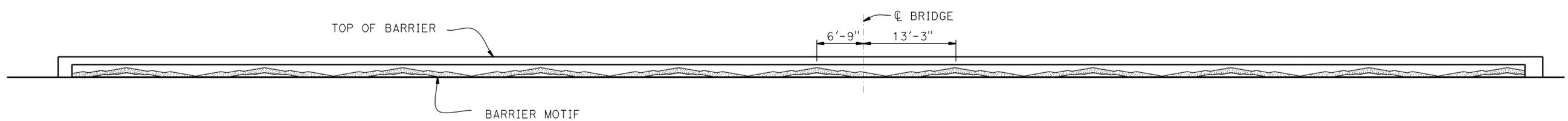
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

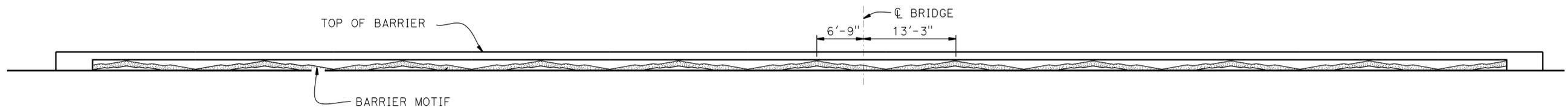
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ELEVATION
1/8" = 1'-0"



BARRIER TYPE 26 AESTHETIC TREATMENT
1/8" = 1'-0"



BARRIER TYPE 732 AESTHETIC TREATMENT
1/8" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY David Fowkes	CHECKED Lewis Shen
DETAILS	Jay Reid	CHECKED Lewis Shen
QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0092
POST MILE	37.8

MAGRA OVERCROSSING (RAISE)
AESTHETIC DETAILS NO. 2



REVISION DATES	SHEET	OF
11-22-12	10	13

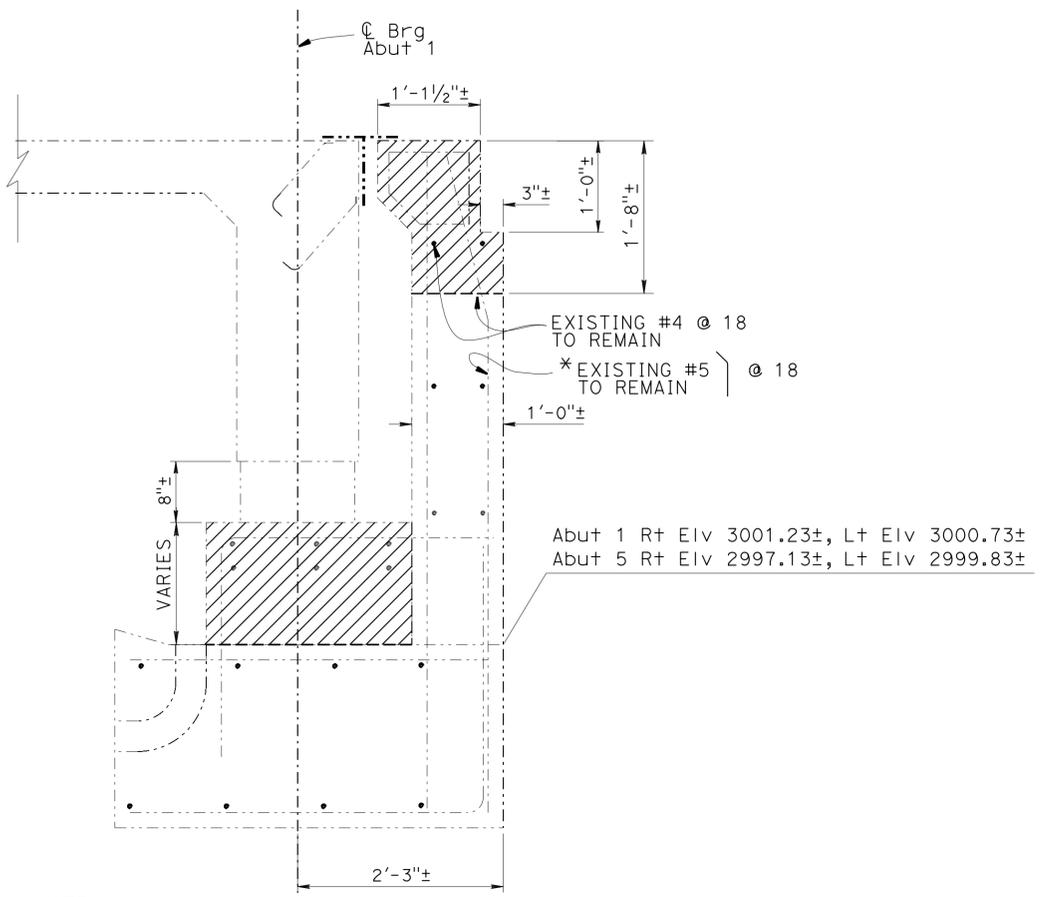
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	353	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

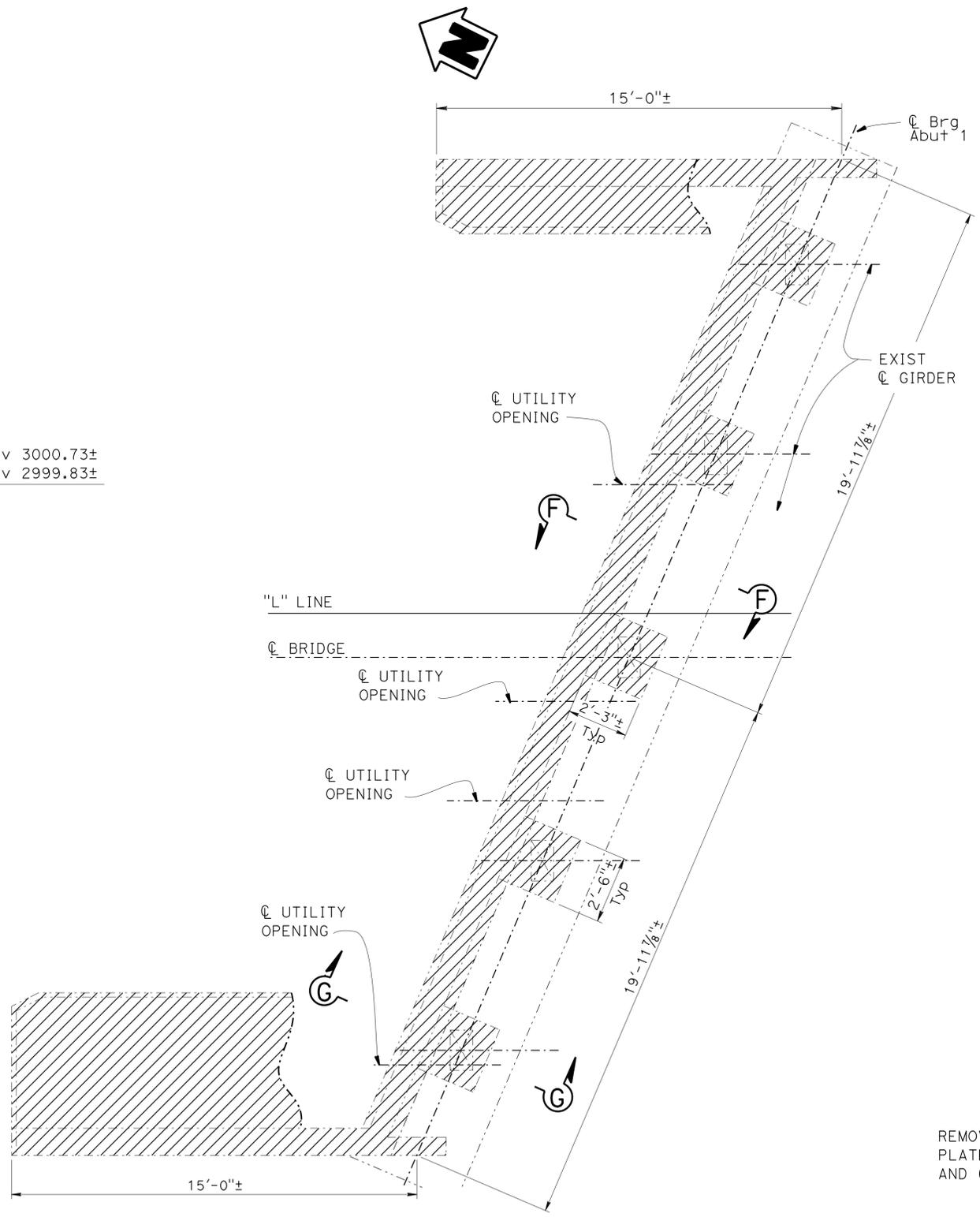
ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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NOTE:
* Cut existing, reinf, as directed by engineer. Mechanical splice to existing abutment reinforcement

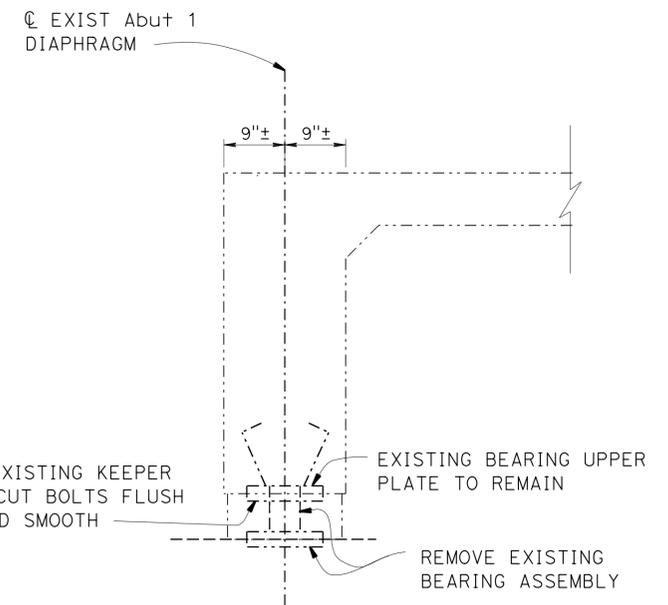
SECTION F-F
1" = 1'-0"



PLAN
3/8" = 1'-0"

NOTE:
For limit of removal wingwall & sidewalk and dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 2" sheet

LEGEND:
 Indicates bridge removal (portion)

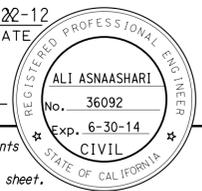


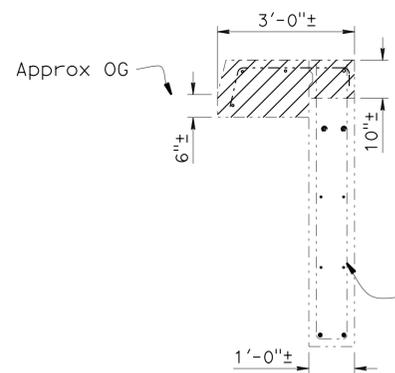
SECTION G-G
1" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

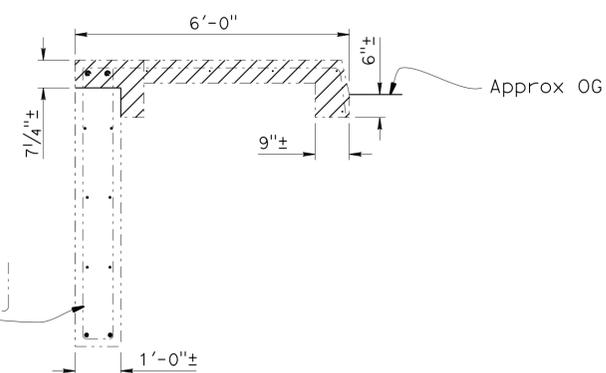
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Lewis Shen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0092	MAGRA OVERCROSSING (RAISE) CONCRETE REMOVAL DETAILS NO. 1
	DETAILS	BY Shadi Motalebi	CHECKED Lewis Shen			POST MILE	37.8	
	QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino			UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 3E1001	

DATE PLOTTED => 28-JUN-2013 11:20
USERNAME => s124496

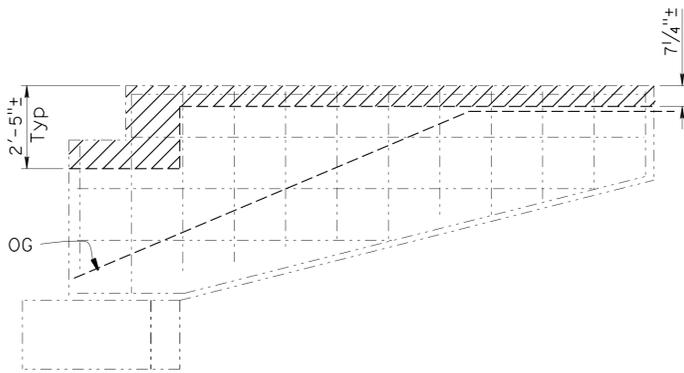
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	354	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			PLANS APPROVAL DATE		
					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



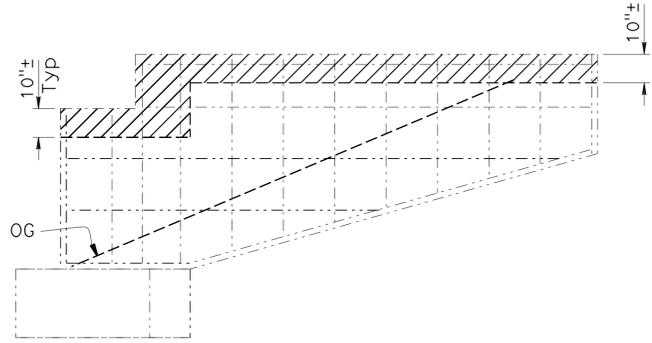
SECTION H-H
1/2" = 1'-0"



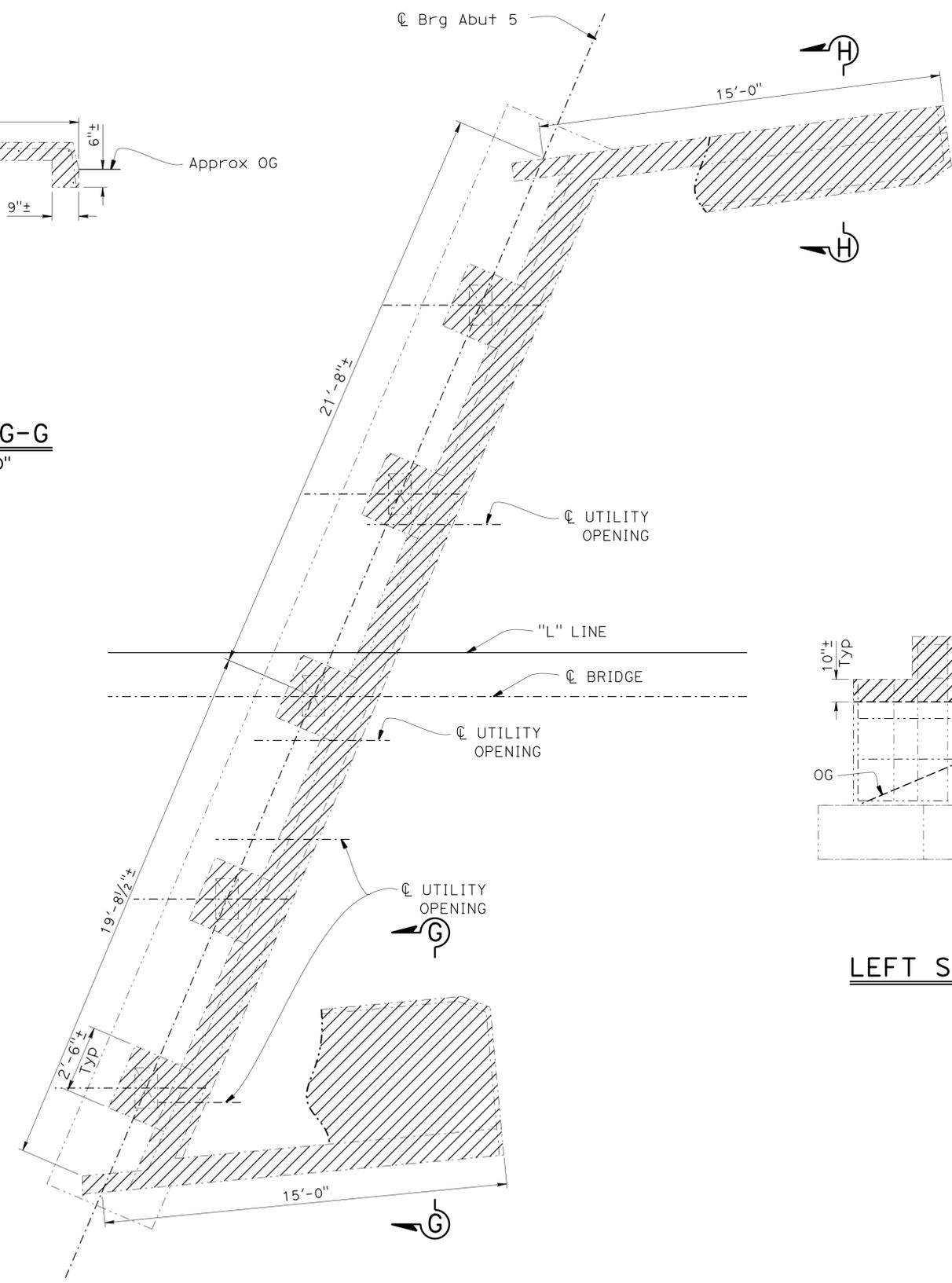
SECTION G-G
1/2" = 1'-0"



RIGHT SIDE WINGWALL ELEVATION
3/8" = 1'-0"



LEFT SIDE WINGWALL ELEVATION
3/8" = 1'-0"



PLAN
3/8" = 1'-0"

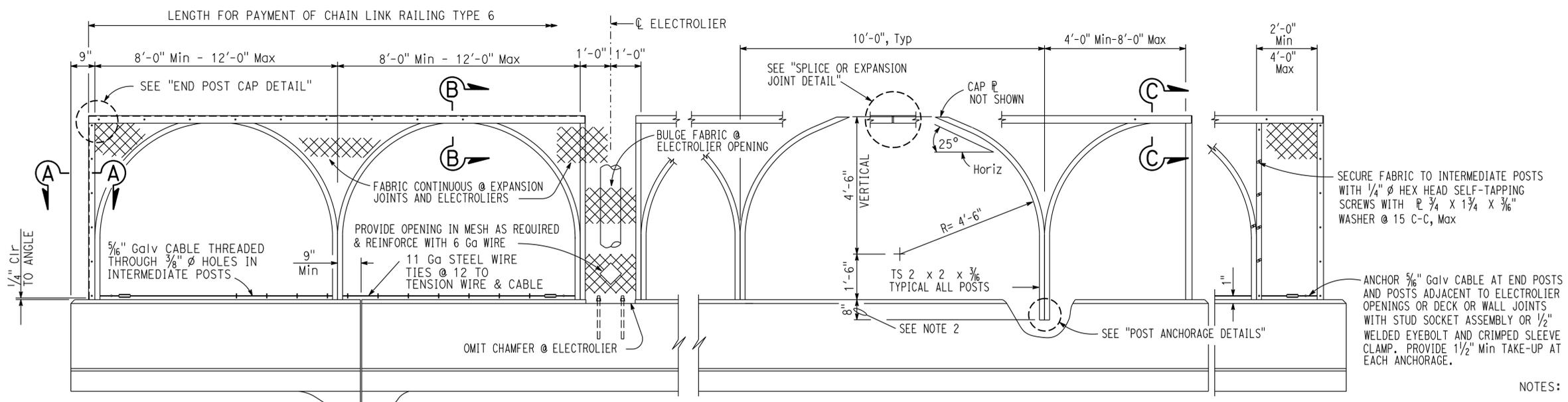
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

LEGEND:
 Indicates concrete removal

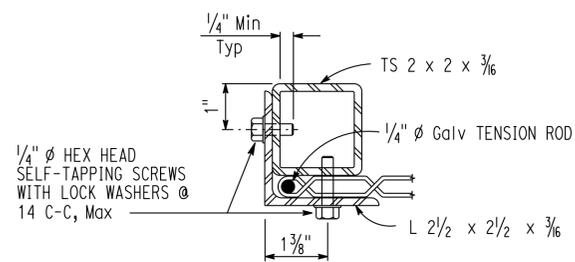
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Quang H Nguyen	CHECKED Lewis Shen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0092	MAGRA OVERCROSSING (RAISE) CONCRETE REMOVAL DETAILS NO. 2	
	DETAILS	BY Shadi Motalebi	CHECKED Lewis Shen			POST MILE	37.8		
	QUANTITIES	BY Mike Bergman	CHECKED Joey Aquino			UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 3E1001		REVISION DATES
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 12 OF 13

USERNAME => s124496 DATE PLOTTED => 28-JUN-2013 TIME PLOTTED => 11:20

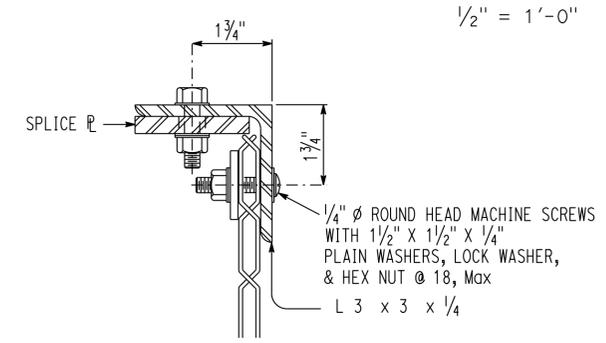
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	355	437
			10/01/12	REGISTERED CIVIL ENGINEER DATE	
			6-24-13	PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



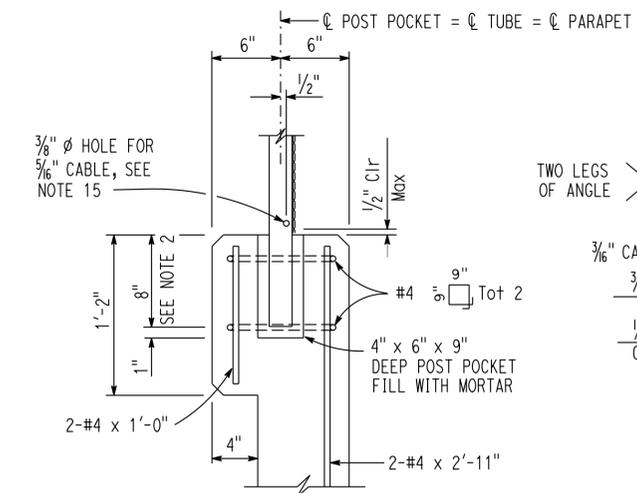
END PANEL 8'-0" - 12'-0" EXPANSION PANEL AT ELECTROLIER TYPICAL INTERIOR PANEL 10'-0", Typ END PANEL 4'-0" - 8'-0" END PANEL 2'-0" - 4'-0"



SECTION A-A
6" = 1'-0"



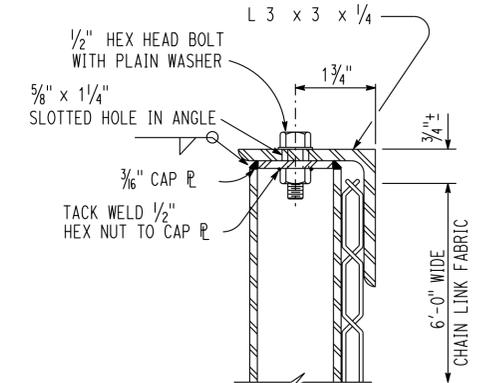
SECTION B-B
6" = 1'-0"



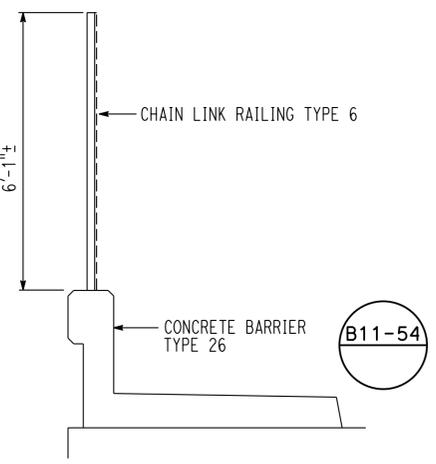
POST ANCHORAGE DETAIL
1 1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

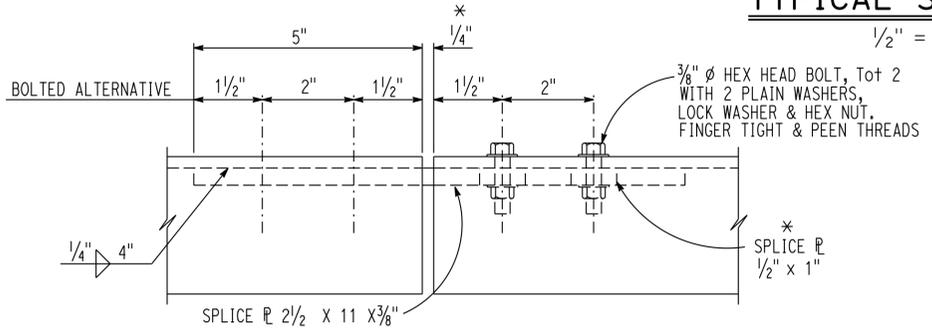
ELEVATION
1/2" = 1'-0"



SECTION C-C
6" = 1'-0"



TYPICAL SECTION
1/2" = 1'-0"



SPLICE OR EXPANSION JOINT DETAIL
6" = 1'-0"

* Expansion joint same dimension as expansion joint in deck or wall. Increase slotted hole length and splice plate length correspondingly.

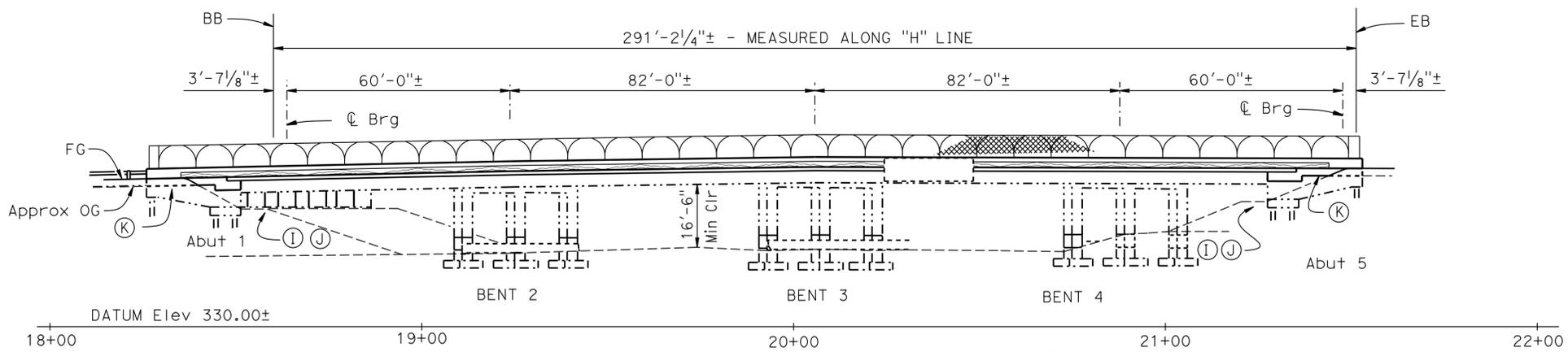
- NOTES:
- Horizontal angle shall be continuous over not less than two intermediate posts except that a shorter length is permitted at expansion joints, electroliers and other rail discontinuities.
 - One post may be embedded 6" minimum to accommodate grade changes, otherwise fabricate post lengths as required.
 - Curved posts may be rotated in plan within its post pocket to accommodate curved horizontal alignment.
 - Straight posts and straight portions of curved posts shall be installed normal to bridge profile grade.
 - Top horizontal angle shall be parallel to bridge profile grade and shall be shop bent to fit horizontal curves.
 - When railing is on slope, fabric shall be placed parallel to slope.
 - Alternative details may be submitted by Contractor for Engineer's approval.
 - For details and reinforcement not shown, see "CONCRETE BARRIER TYPE 26" sheet. (B11-54)
 - See Bridge Plans for limits of Chain Link Railing Type 6.
 - Provide thimbles at all cable loops.
 - Chain link fabric to be 6'-0" wide with 1" mesh and with knuckled selvage top and bottom.
 - When railing is placed on a horizontal alignment with a radius of 150'-0" or less, thread 5/16" cable through 3/8" diameter welded eye rods embedded 4" into the top of the concrete parapet and equally spaced to limit the middle ordinate distance between 5/16" cable and the curve to 1" maximum.
 - Splices and expansion joints shall be located at center panel.
 - Holes in posts for 5/16" cable and its anchorage may be field drilled and painted with zinc rich paint.

STANDARD DRAWING	APPROVAL DATE July 2011
FILE NO. xs16-200	

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 19-0092 POST MILE 37.8	MAGRA OVERCROSSING (RAISE) CHAIN LINK RAILING TYPE 6
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	356	437

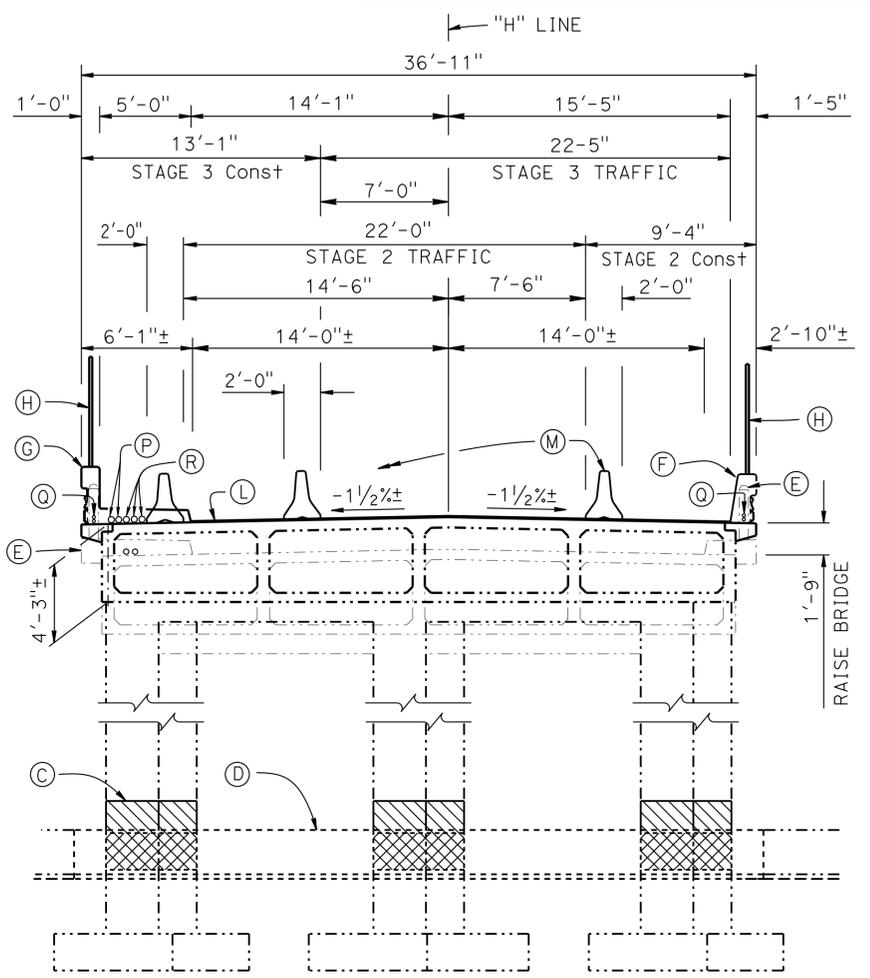
10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
 Ali Asnaashari
 REGISTERED PROFESSIONAL ENGINEER
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



ELEVATION
1:20

- LEGEND:**
- * The BB and EB elevations shown are after bridge raising, plus 3/4" Polyester Concrete Overlay
 - Indicates bridge removal (portion)
 - Indicates new concrete
 - Indicates existing structure
 - Indicates new construction
 - Indicates point of minimum vertical clearance

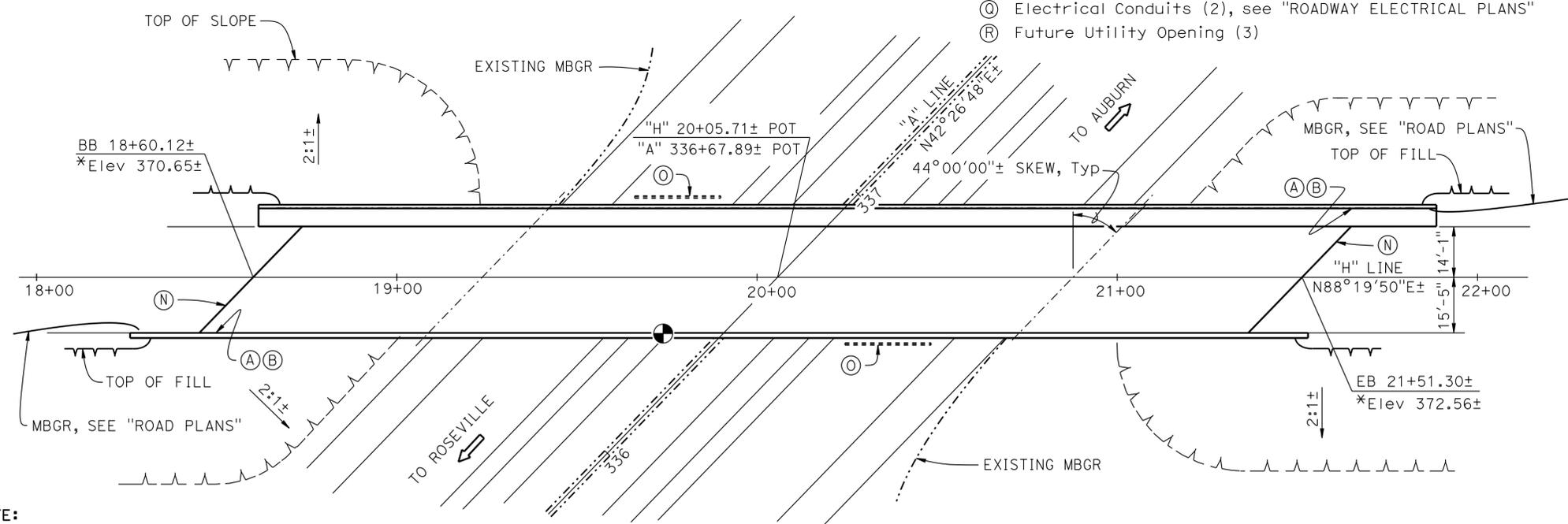
- NOTES:**
- Stage 1 Construction: Detour traffic, raise bridge, construct columns, abutment backwall, wingwalls and abutment pedestal
- (A) Paint "Bridge No. 19-0096"
 - (B) Paint "BRACE ROAD OVERCROSSING"
 - (C) Remove portion of bridge & raise bridge
 - (D) Existing Barrier to be removed, see "ROAD PLANS"
 - (E) Remove existing Barrier Railing
 - (F) Concrete Barrier Type 732 (Mod) w/Aesthetic Treatment
 - (G) Concrete Barrier Type 26 (Mod) w/Aesthetic Treatment
 - (H) Chain Link Railing Type 6
 - (I) Remove part of existing expansion bearing assembly
 - (J) Rebuild the existing pedestal & install new Elastomeric Bearing Pad
 - (K) Remove portion of existing wingwall and construct wingwall to match new bridge height
 - (L) Place 3/4" Polyester Concrete Overlay
 - (M) Temporary Railing (Type K), see "ROAD PLANS"
 - (N) Install new Joint Seal
 - (O) Replace existing road signs, see "ROAD PLANS"
 - (P) Utility Opening for Telephone Conduits (2), see "ROAD PLANS"
 - (Q) Electrical Conduits (2), see "ROADWAY ELECTRICAL PLANS"
 - (R) Future Utility Opening (3)



TYPICAL SECTION
1:5

QUANTITIES

	LUMP SUM	SUM
PUBLIC SAFETY PLAN	8,580	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	644	CF
FURNISH POLYESTER CONCRETE OVERLAY	8,580	SQFT
PLACE POLYESTER CONCRETE OVERLAY		
BRIDGE REMOVAL (PORTION), LOCATION A		LUMP SUM
STRUCTURE EXCAVATION (BRIDGE)	7	CY
STRUCTURE BACKFILL (BRIDGE)	14	CY
RAISE BRIDGE (LOCATION A)		LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	74	CY
DRILL AND BOND DOWEL	543	LF
JOINT SEAL (MR 1")	82	LF
BAR REINFORCING STEEL (BRIDGE)	12,690	LB
CHAIN LINK RAILING (TYPE 6)	654	LF
CONCRETE BARRIER (TYPE 26 MODIFIED)	327	LF
CONCRETE BARRIER (TYPE 732 MODIFIED)	327	LF



PLAN
1:20

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE: For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS NO. 1" sheet

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	19-0096	BRACE ROAD OVERCROSSING (RAISE) GENERAL PLAN
DETAILS	BY N Gwynn/S Motalebi	CHECKED Ali Asnaashari	LAYOUT	BY Art V Herrera		POST MILE	8.1	
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen	SPECIFICATIONS	BY Dave Klein				

DESIGN ENGINEER: Joseph E Downing
 PROJECT NUMBER & PHASE: 03000004731
 CONTRACT NO.: 03-3E1001
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 8-18-09, 10-1-12, 6-20-13
 SHEET 1 OF 16

GENERAL NOTES

EXISTING STRUCTURE

SPECIFICATIONS:

DESIGN:

AASHTO dated 1953 with subsequent revisions, and Bridge Department Supplement dated 1953

CONSTRUCTION:

Standard Specifications, Division of Highways, dated August 1954 and the Special Provisions

LIVE LOADING:

H20-S16-44

UNIT STRESSES:

Reinforced Concrete:

fs = 20,000 psi
n = 10
fc = 1,200 psi (Except as noted)
fc = 1,000 psi (Roadway slab on girders)

Structural Steel:

fs = 18,000 psi

FOOTING PRESSURE:

7 tons per square foot (tsf)

PILE LOADING:

45 tons Type: Concrete

NEW CONSTRUCTION

DESIGN:

Bridge Design Specifications-April 2000 (LFD)
(1996 AASHTO with Interims and Revisions by CALTRANS)

DEAD LOAD:

Include 9 psf for 3/4" Polyester concrete overlay. No future additional deck overlay allowed

LIVE LOADING:

HS20-44 design load. No Permit truck loading considered

SEISMIC DESIGN:

See "SITE SPECIFIC ARS CURVE"

REINFORCED CONCRETE:

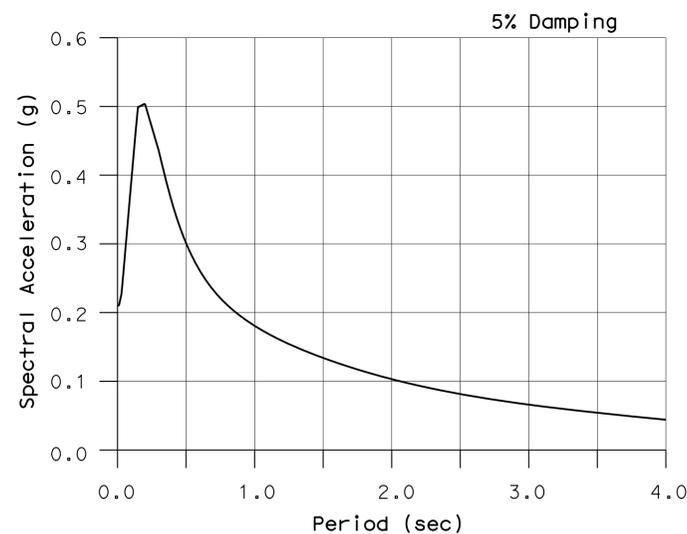
fy = 60 ksi
f'c = 3600 psi
n = 8

FOOTING ALLOWABLE PRESSURE:

7 tsf

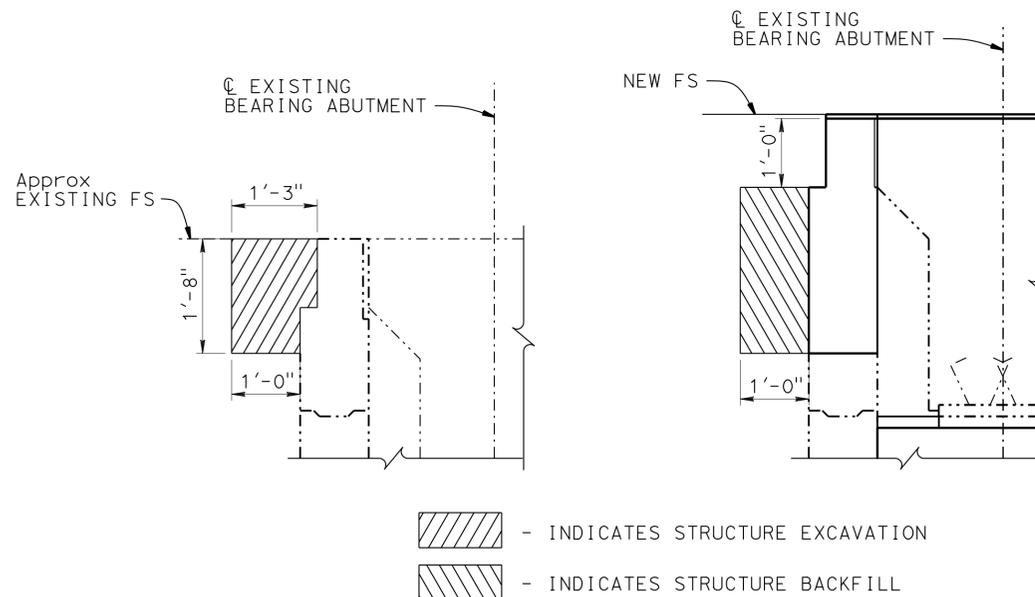
PILE LOADING:

49 Tons Type: Concrete



SITE SPECIFIC ARS CURVE

NO SCALE



NOTE:
For Wingwall backfill limits, see "ROAD PLANS"

LIMITS OF EXCAVATION AND BACKFILL

NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	357	437

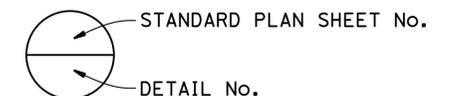

 REGISTERED CIVIL ENGINEER DATE 10-22-12
 6-24-13
 PLANS APPROVAL DATE
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS NO. 1
3	INDEX TO PLANS NO. 2
4	ABUTMENT DETAILS NO. 1
5	ABUTMENT DETAILS NO. 2
6	ABUTMENT DETAILS NO. 3
7	ABUTMENT DETAILS NO. 4
8	BENT DETAILS
9	TYPICAL SECTION NO. 1
10	TYPICAL SECTION NO. 2
11	AESTHETIC DETAILS NO. 1
12	AESTHETIC DETAILS NO. 2
13	CONCRETE REMOVAL DETAILS NO. 1
14	CONCRETE REMOVAL DETAILS NO. 2
15	CONCRETE REMOVAL DETAILS NO. 3
16	CHAIN LINK RAILING TYPE 6

STANDARD PLANS Dated 2010

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)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B11-54	CONCRETE BARRIER TYPE 26
B11-55	CONCRETE BARRIER TYPE 732



STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0096	BRACE ROAD OVERCROSSING (RAISE) INDEX TO PLANS NO. 1	
	DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari			POST MILE	8.1		
	QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen			UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731 CONTRACT NO.: 03-3E1001			
DISREGARD PRINTS BEARING EARLIER REVISION DATES								REVISION DATES 7-28-11 10-17-12 2-28-13	SHEET 2 OF 16

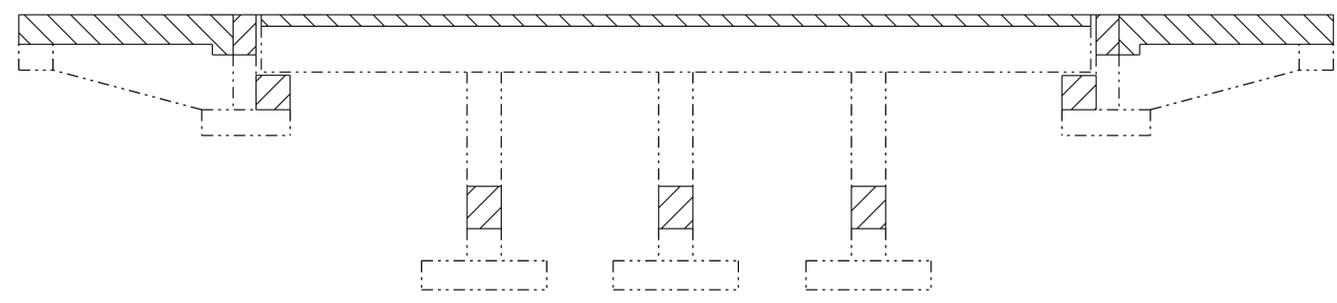
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	358	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
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STATE OF CALIFORNIA

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- STRUCTURAL CONCRETE, BRIDGE
- STRUCTURAL CONCRETE, BRIDGE (3,600 psi PRIOR TO TEMPORARY SUPPORT RELEASE)

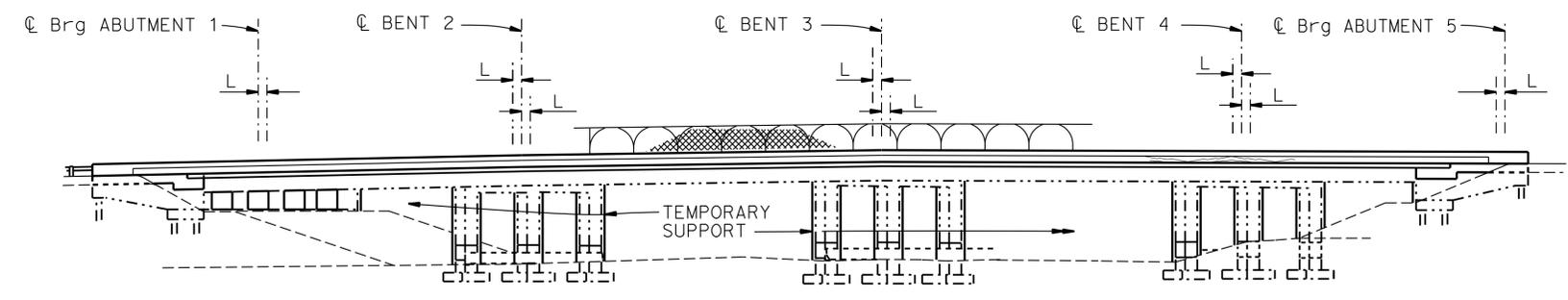
CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

TEMPORARY SUPPORT LOADING

Required capacity of Temporary support

LOCATION	DEAD LOAD
Abutment 1	250 kips
Bent 2	995 kips
Bent 3	1050 kips
Bent 4	995 kips
Abutment 5	250 kips

Temporary support loads do not include loads the Contractor places on the bridge



NOTES:
Maximum jack location eccentricity on Bent caps or at Abutments
L = 6"

SUPPORT LOCATION
NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

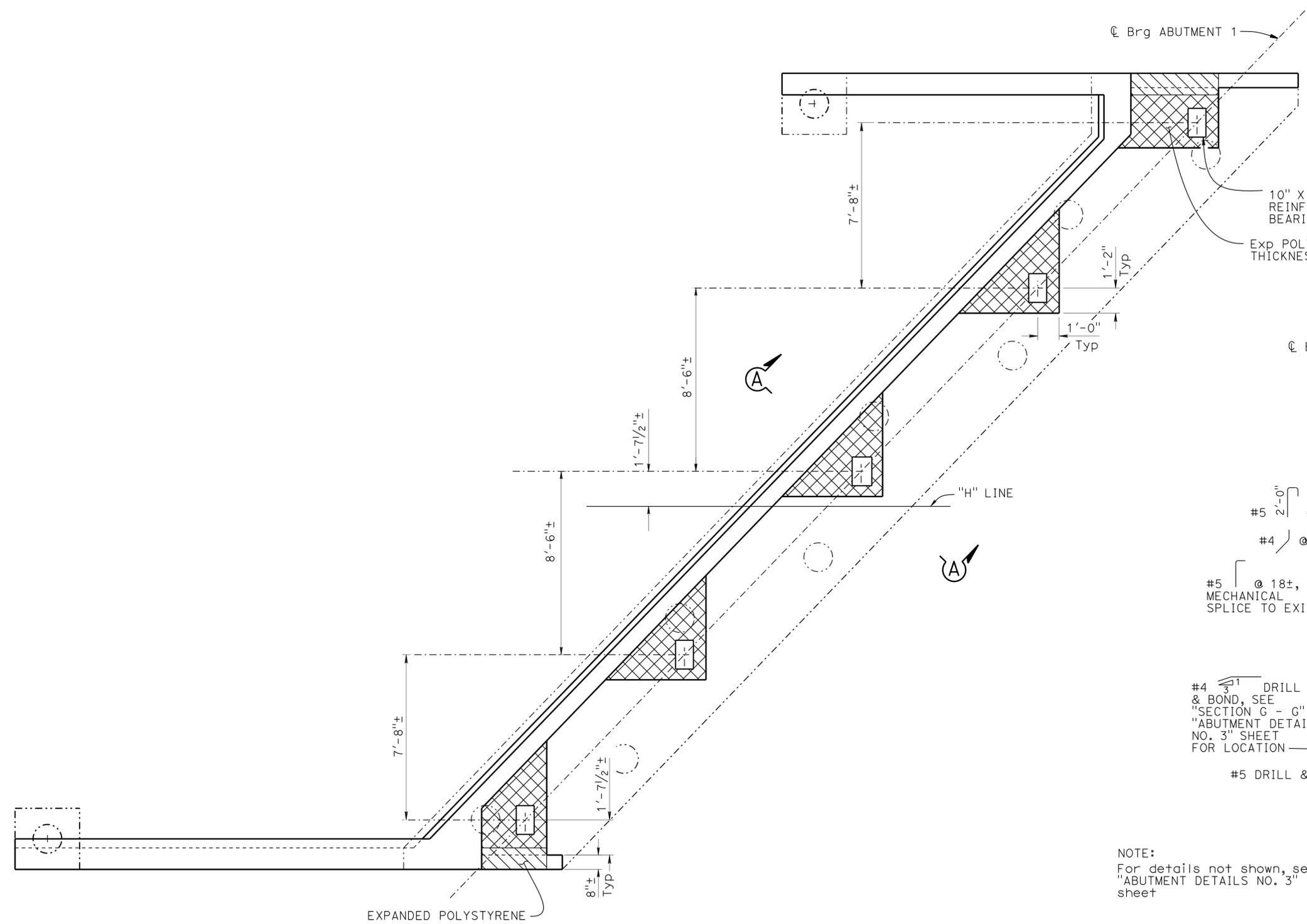
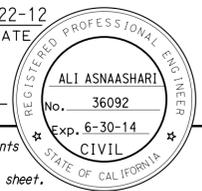
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	8.1

BRACE ROAD OVERCROSSING (RAISE)
INDEX TO PLANS NO. 2

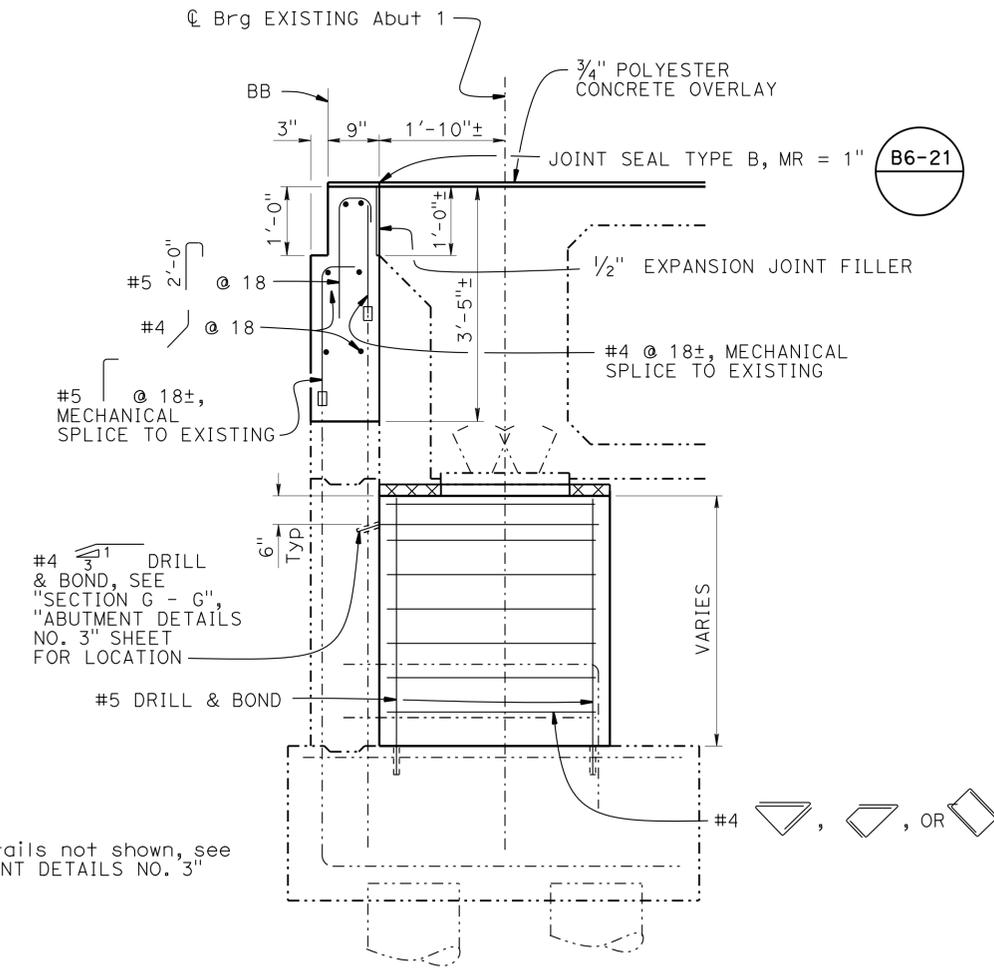
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DATE PLOTTED => 28-JUN-2013
USERNAME => s124496

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	359	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13 PLANS APPROVAL DATE					
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PLAN
3/8" = 1'-0"

10" X 1'-4" X 2" STEEL REINFORCED ELASTOMERIC BEARING PAD, Typ
Exp POLYSTYRENE, SAME THICKNESS OF BEARING PAD



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

NOTE:
For details not shown, see "ABUTMENT DETAILS NO. 3" sheet

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- NOTES:
1. New Abutment Pedestal dimensions and Wingwall length matches existing dimensions
 2. For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 1" sheet
 3. Abutment 1 shown, Abutment 5 similar

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	8.1

BRACE ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 1

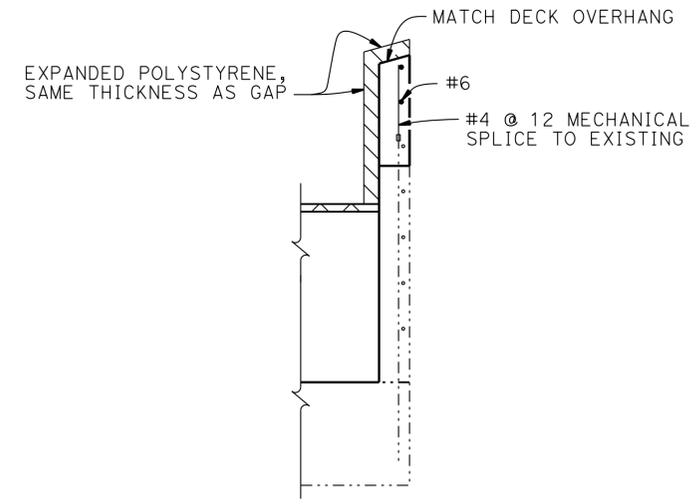
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plac	80	8.1/37.8	360	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

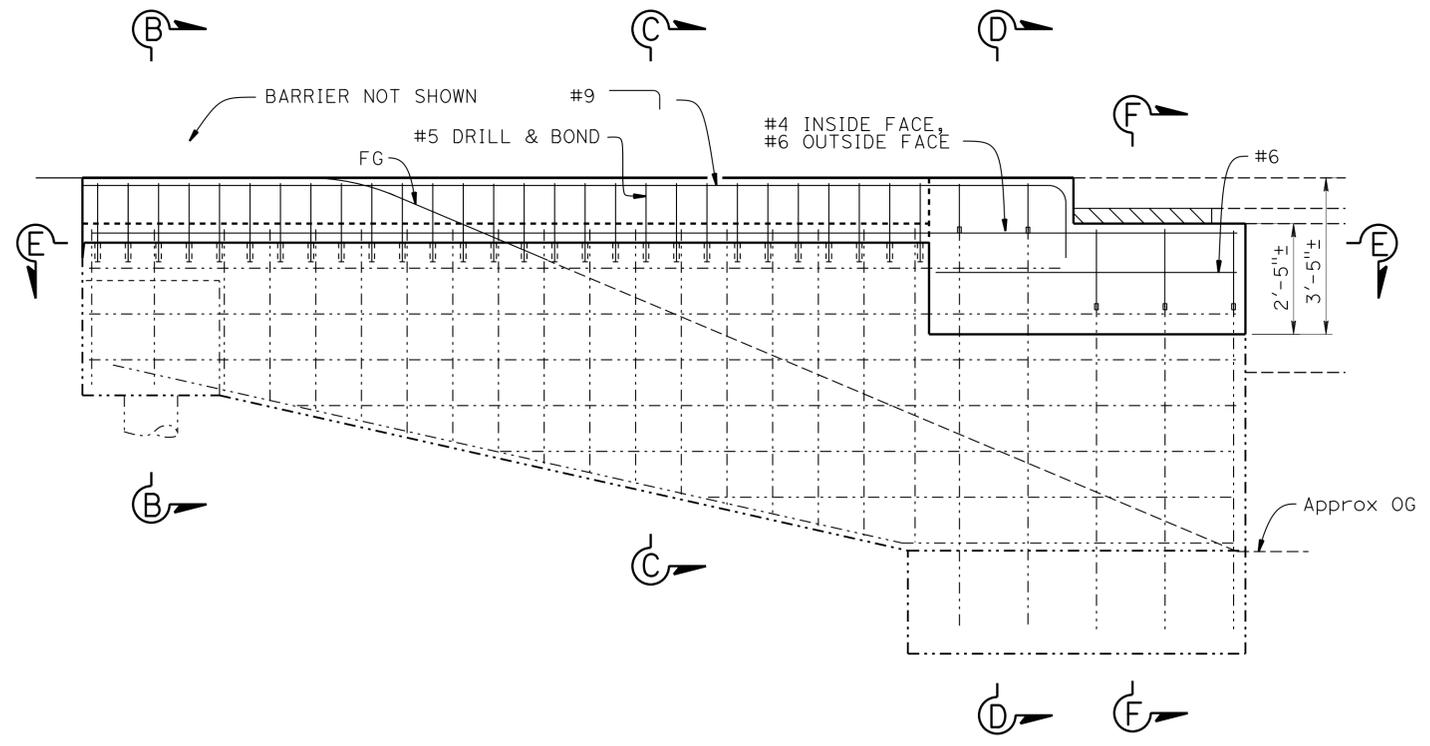
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

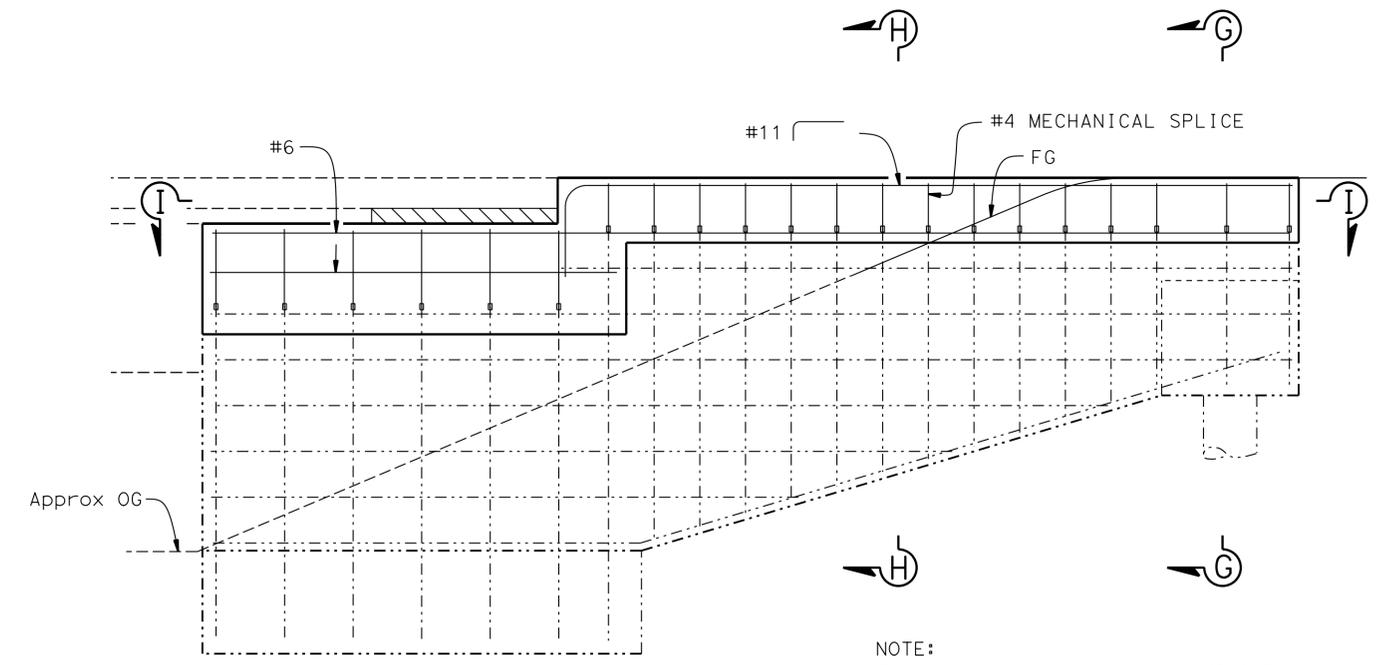
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SECTION F - F
1/2" = 1'-0"



RIGHT SIDE WINGWALL ELEVATION
1/2" = 1'-0"



LEFT SIDE WINGWALL ELEVATION
1/2" = 1'-0"

NOTE:
For details not shown, see "RIGHT SIDE WINGWALL ELEVATION"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- NOTES:
1. Abutment 1 shown, Abutment 5 similar
 2. For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 2" sheet
 3. For "SECTION B - B", "SECTION C - C", "SECTION D - D", "SECTION E - E", "SECTION G - G", "SECTION H - H" and "SECTION I - I" see "ABUTMENT DETAILS NO. 4" sheet

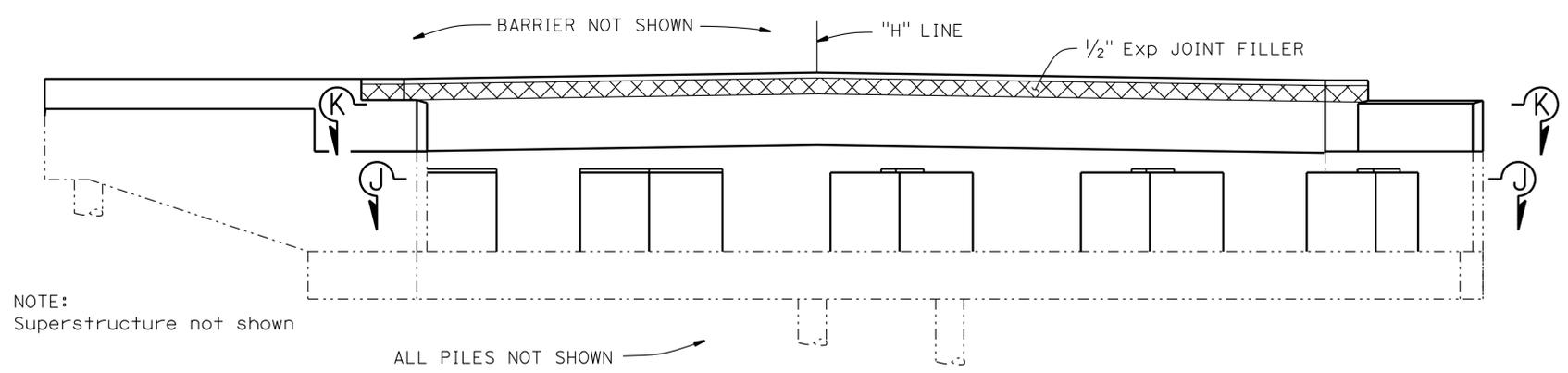
DESIGN	BY	Art V Herrera	CHECKED	Ali Asnaashari	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0096	BRACE ROAD OVERCROSSING (RAISE) ABUTMENT DETAILS NO. 2	
	DETAILS	BY	Nancy C Gwynn	CHECKED			Ali Asnaashari	POST MILE		8.13
QUANTITIES	BY	Eric G Burgeson	CHECKED	Sharon Yen	UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 5 OF 16

TIME PLOTTED => 12:38
DATE PLOTTED => 28-JUN-2013
USERNAME => s124496

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	361	437


 REGISTERED CIVIL ENGINEER DATE 10-22-12
 PLANS APPROVAL DATE 6-24-13
 No. 36092
 Exp. 6-30-14
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 STATE OF CALIFORNIA

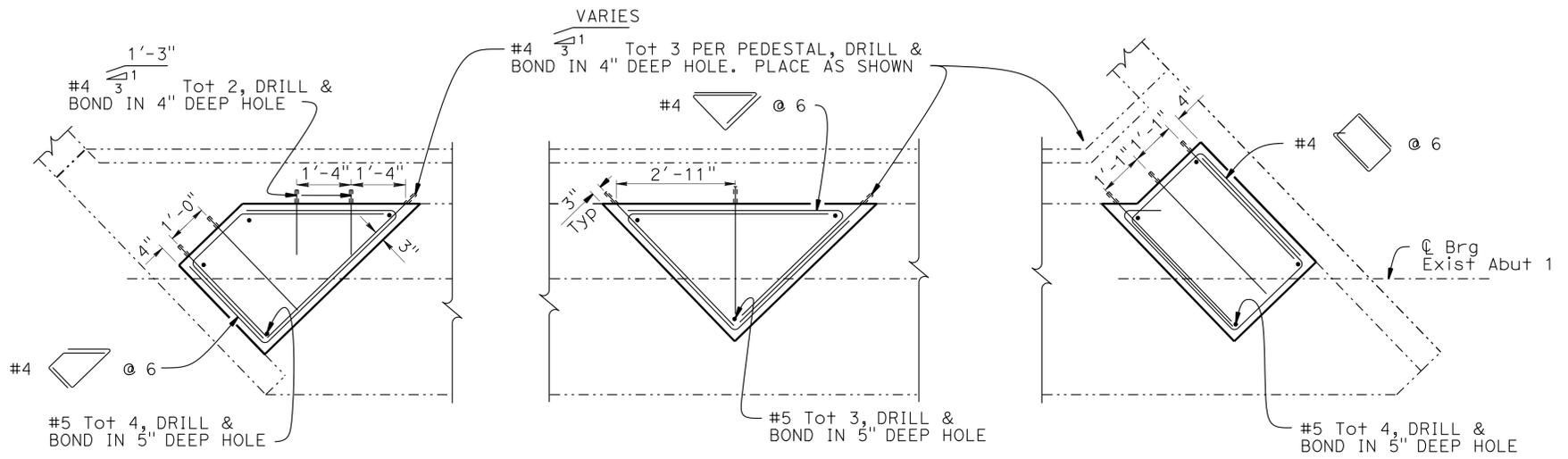
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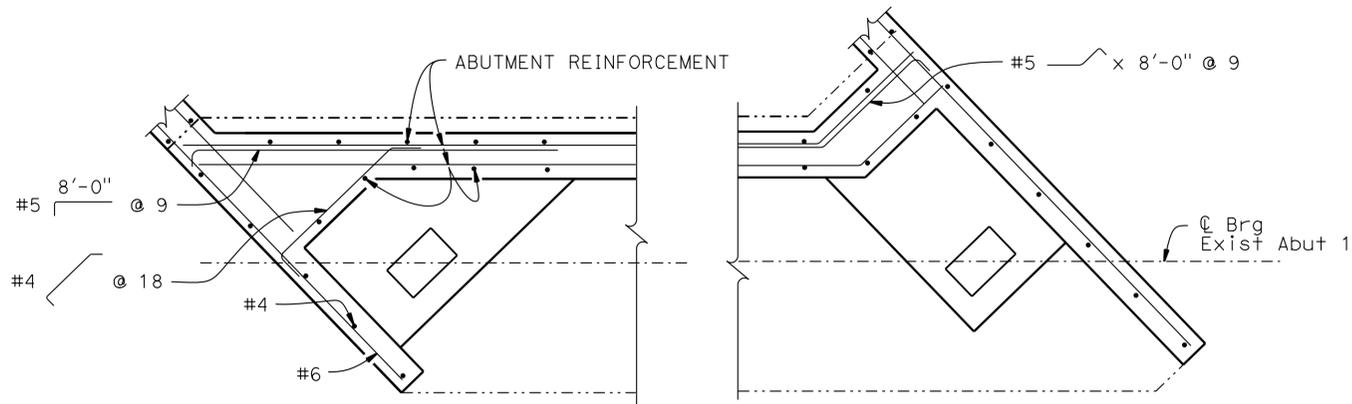
NOTE:
Superstructure not shown

ALL PILES NOT SHOWN

ELEVATION
1/4" = 1'-0"



SECTION J - J
1/2" = 1'-0"



SECTION K - K
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Abutment 1 shown, Abutment 5 similar

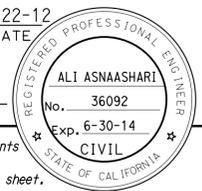
DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

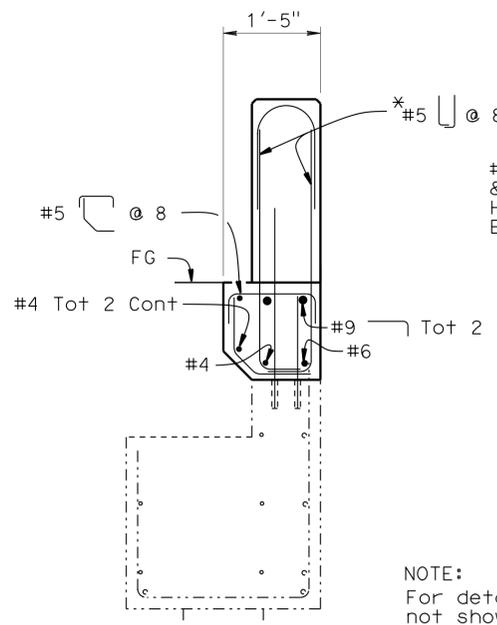
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

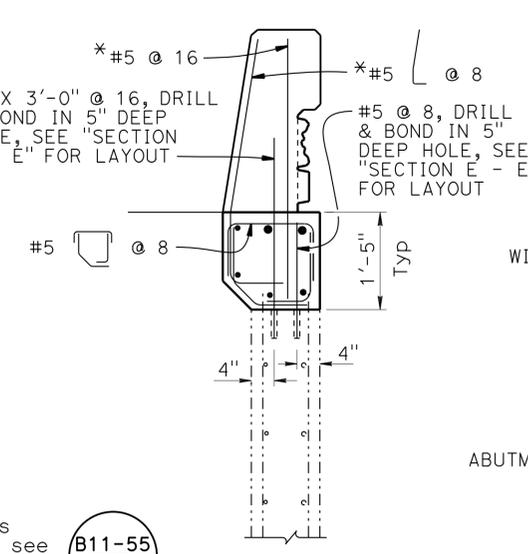
BRIDGE NO.	19-0096
POST MILE	8.13

BRACE ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 3

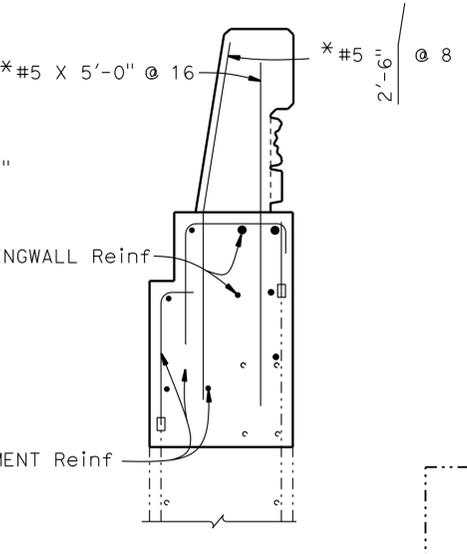
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	362	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



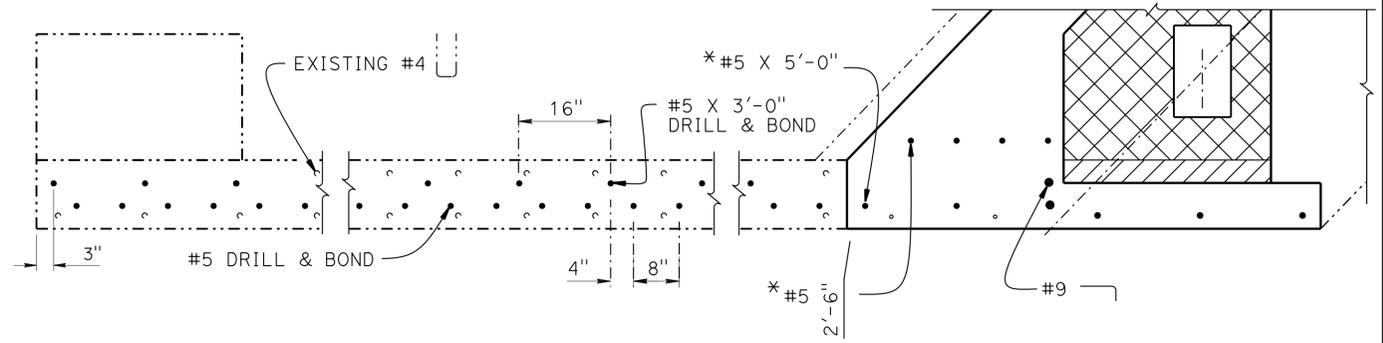
SECTION B - B
3/4" = 1'-0"



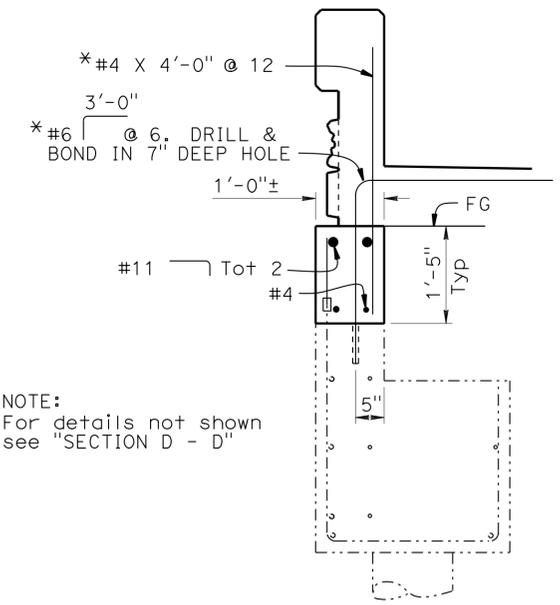
SECTION C - C
3/4" = 1'-0"



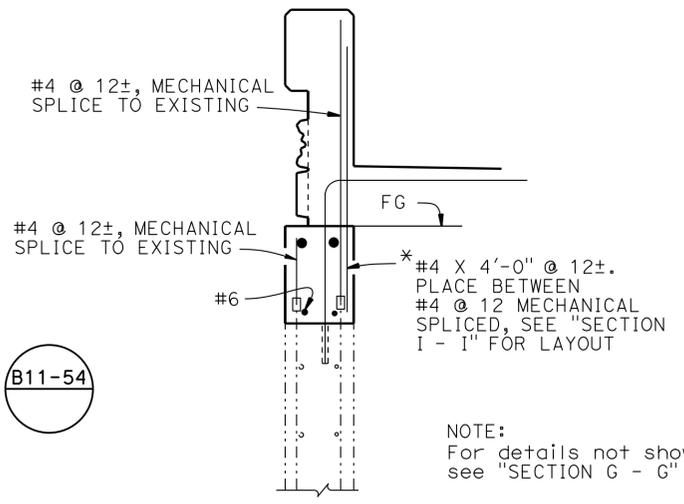
SECTION D - D
3/4" = 1'-0"



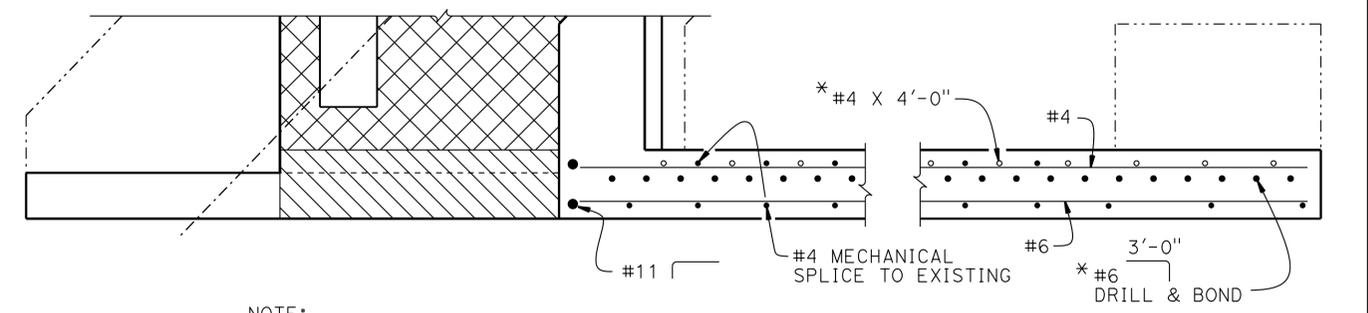
SECTION E - E
3/4" = 1'-0"



SECTION G - G
3/4" = 1'-0"



SECTION H - H
3/4" = 1'-0"



SECTION I - I
3/4" = 1'-0"

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

NOTE:
For details not shown,
see B11-55

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

NOTE:
All reinforcement not shown

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

NOTE:
For details not shown,
see B11-54

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

NOTE:
All reinforcement not shown

NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS
BEFORE ORDERING OR FABRICATING
ANY MATERIAL.

LEGEND:
* Barrier Reinforcement

- NOTES:
- For location of "SECTION B - B", "SECTION C - C", "SECTION D - D", "SECTION E - E", "SECTION G - G", "SECTION H - H", AND "SECTION I - I", see "ABUTMENT DETAILS NO. 2" sheet
 - For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 2" sheet
 - Chain Link Railing not shown

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 19-0096
POST MILE 8.13

BRACE ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 4

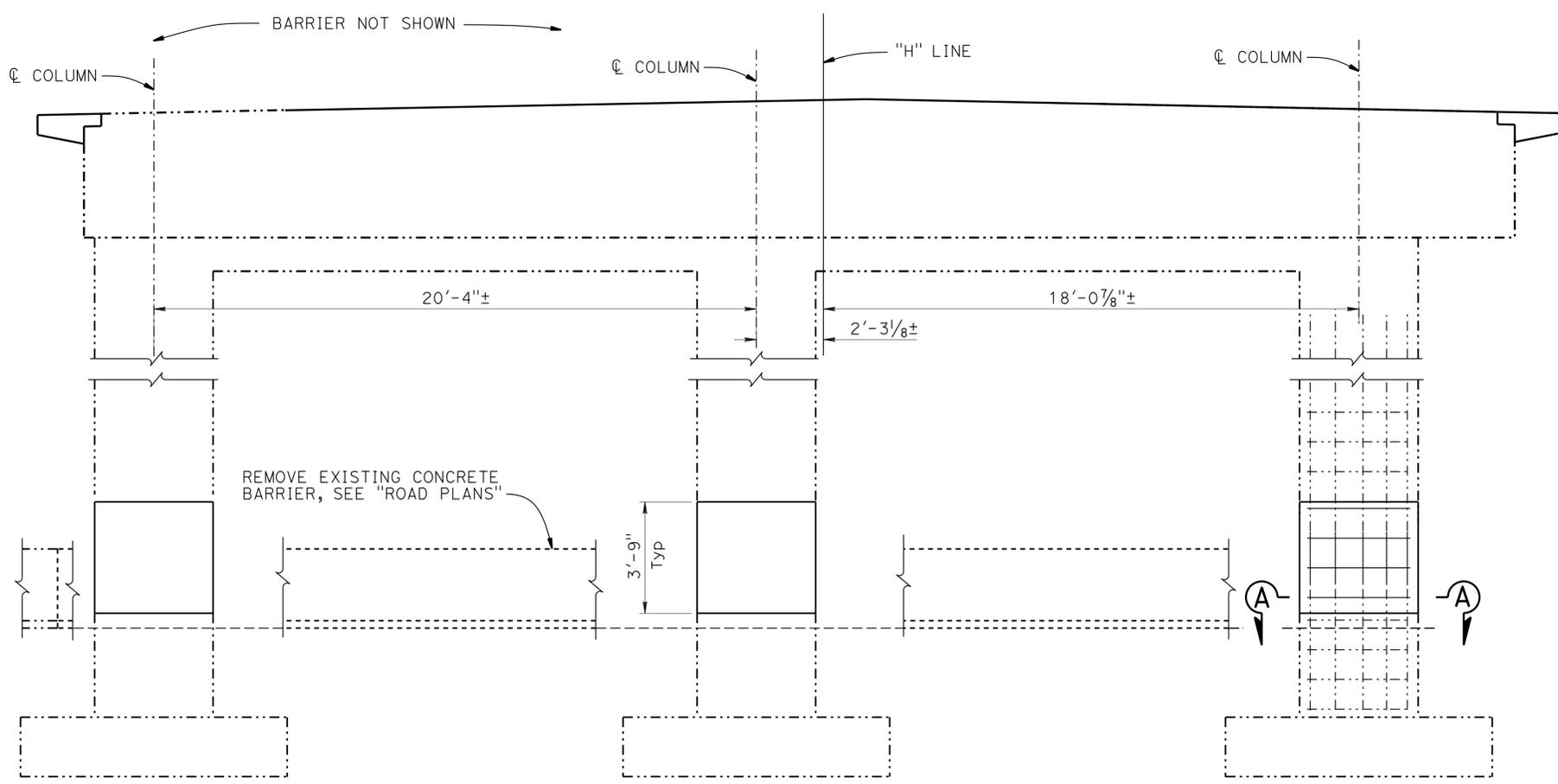
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	363	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

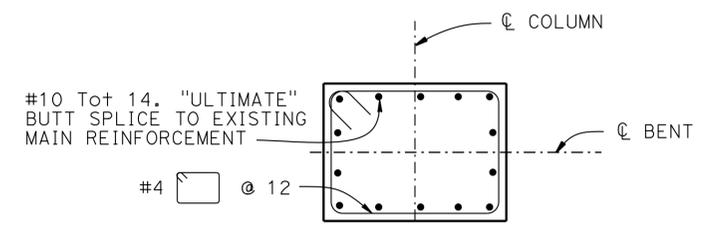
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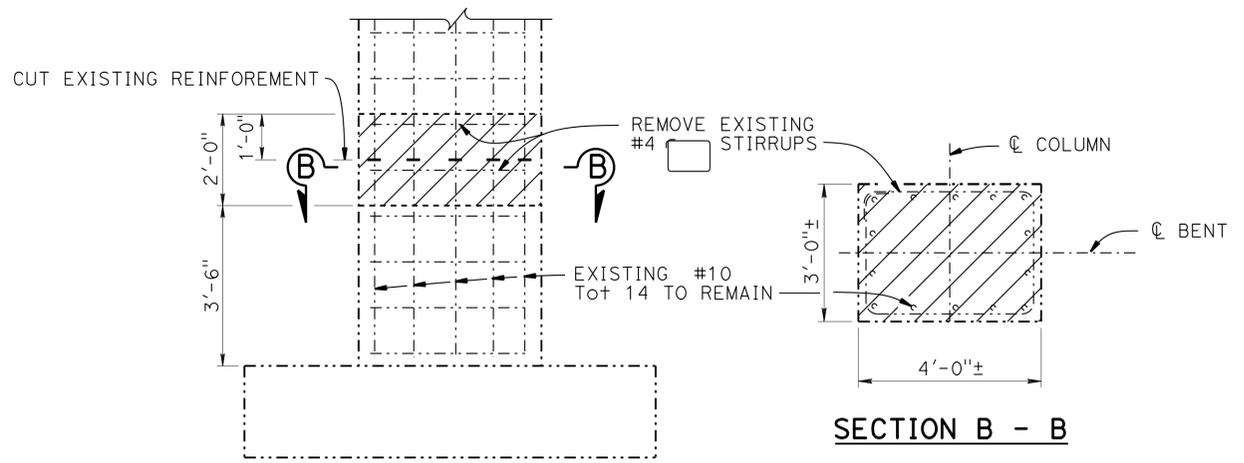


ELEVATION
 $\frac{3}{8}'' = 1'-0''$



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

NOTE:
For details not shown, see "SECTION B - B"



PART ELEVATION

SECTION B - B

LEGEND:
 - Indicates bridge removal (portion)

NOTE:
Details are typical for all columns

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

CONCRETE REMOVAL AT COLUMNS
 $\frac{1}{2}'' = 1'-0''$

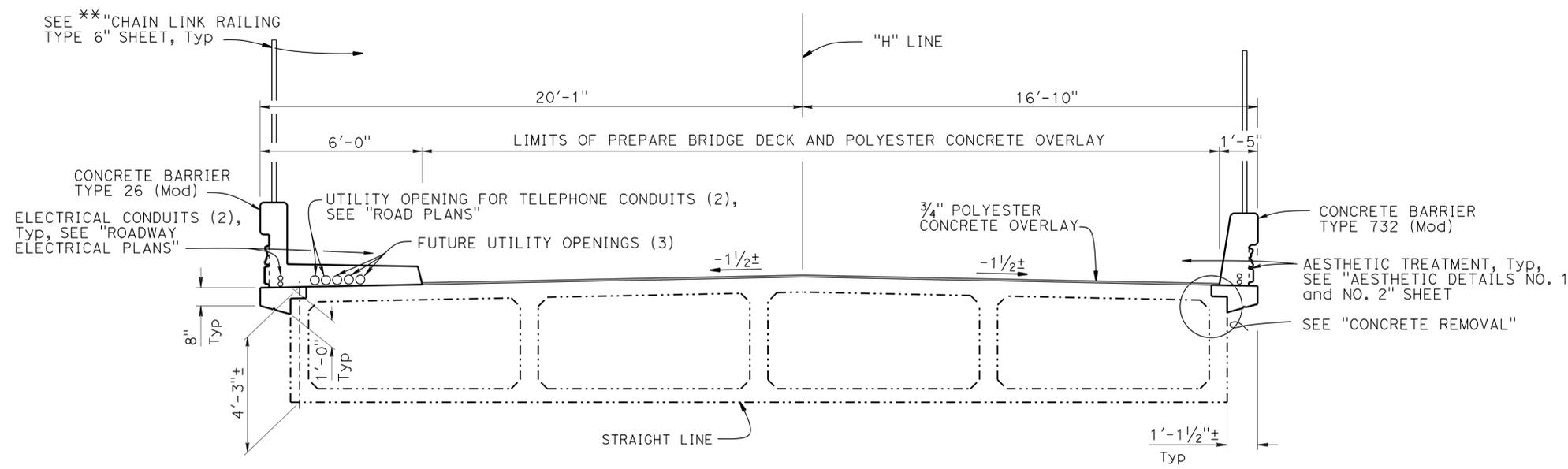
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	BRACE ROAD OVERCROSSING (RAISE) BENT DETAILS
	DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari			19-0096	
	QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen			POST MILE 8.13	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	REVISION DATES	SHEET 8 OF 16
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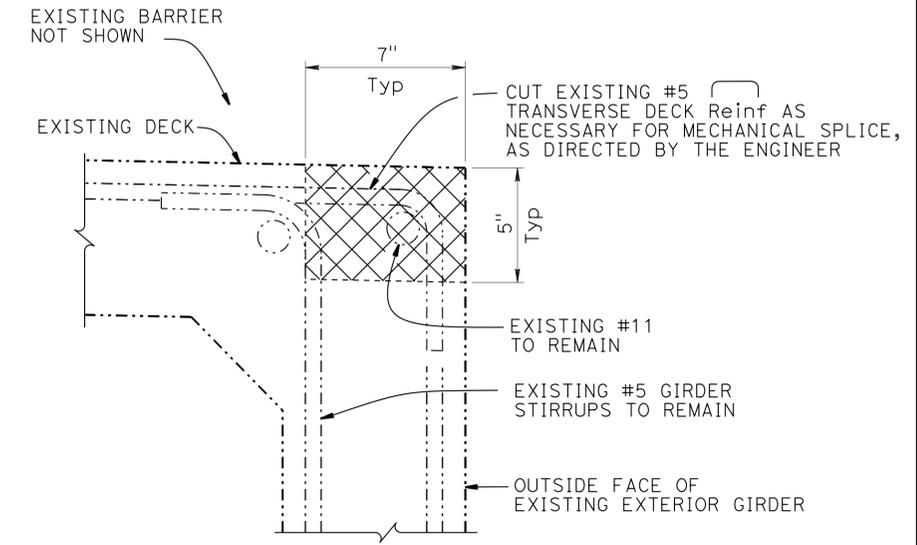
DATE PLOTTED => 12:39
28-JUN-2013
USERNAME => s124496

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	364	437

10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
 ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA
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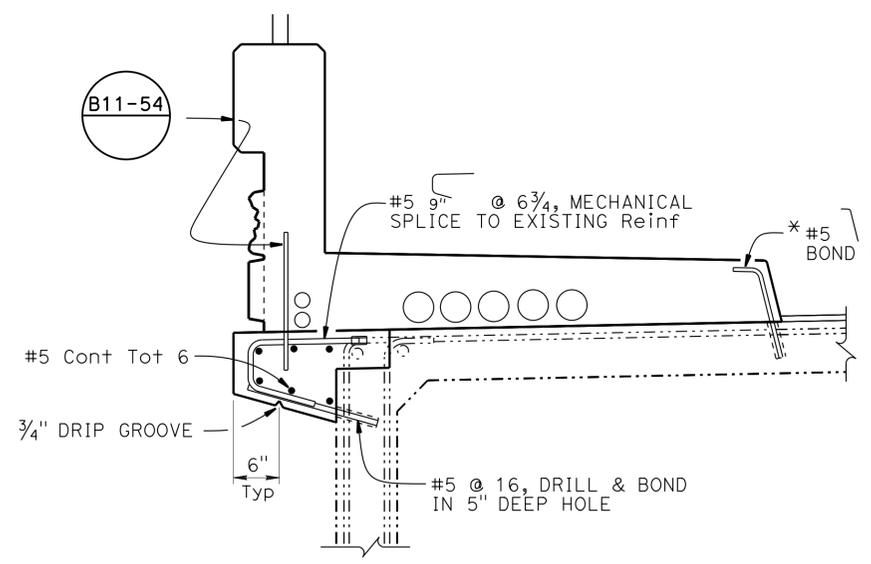


TYPICAL SECTION
3/8" = 1'-0"

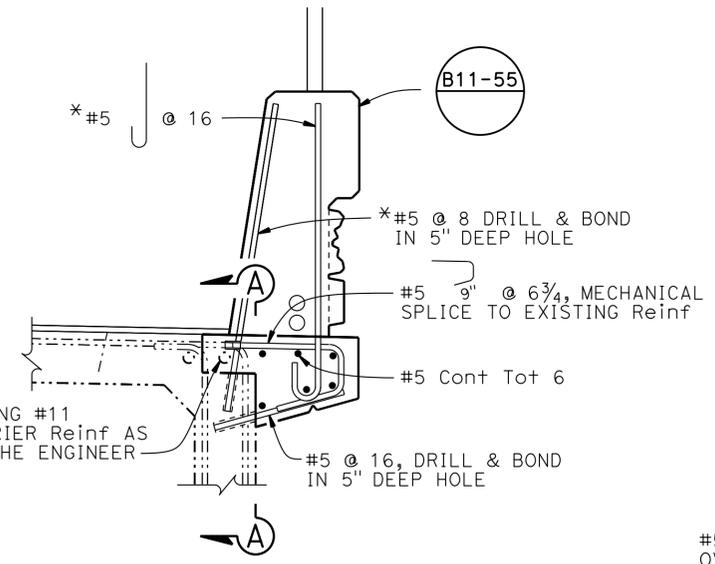


LEGEND:
 - Indicates concrete removal (portion), Low Impact Hammer
NOTE:
 Right edge of deck shown, left edge of deck similar

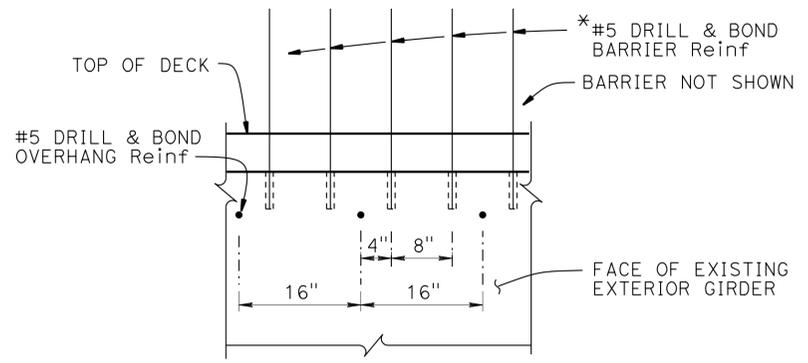
CONCRETE REMOVAL
3" = 1'-0"



PART TYPICAL SECTION
1" = 1'-0"



LEGEND:
 * Barrier Reinforcement
 ** Fence fabric to be black vinyl coated mesh



NOTE:
 All reinforcement not shown
SECTION A - A
 1" = 1'-0"

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	8.1

BRACE ROAD OVERCROSSING (RAISE)
TYPICAL SECTION NO. 1

USERNAME => s121614 DATE PLOTTED => 01-JUL-2013 TIME PLOTTED => 10:50

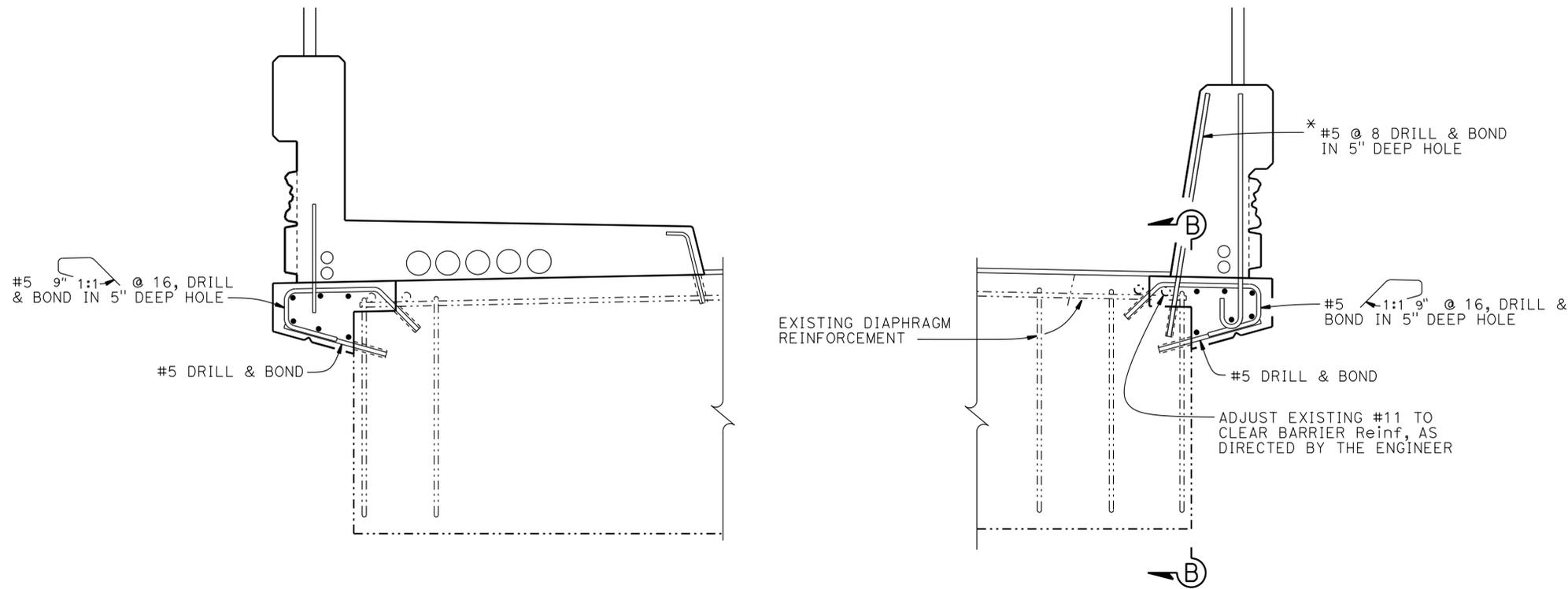
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	365	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

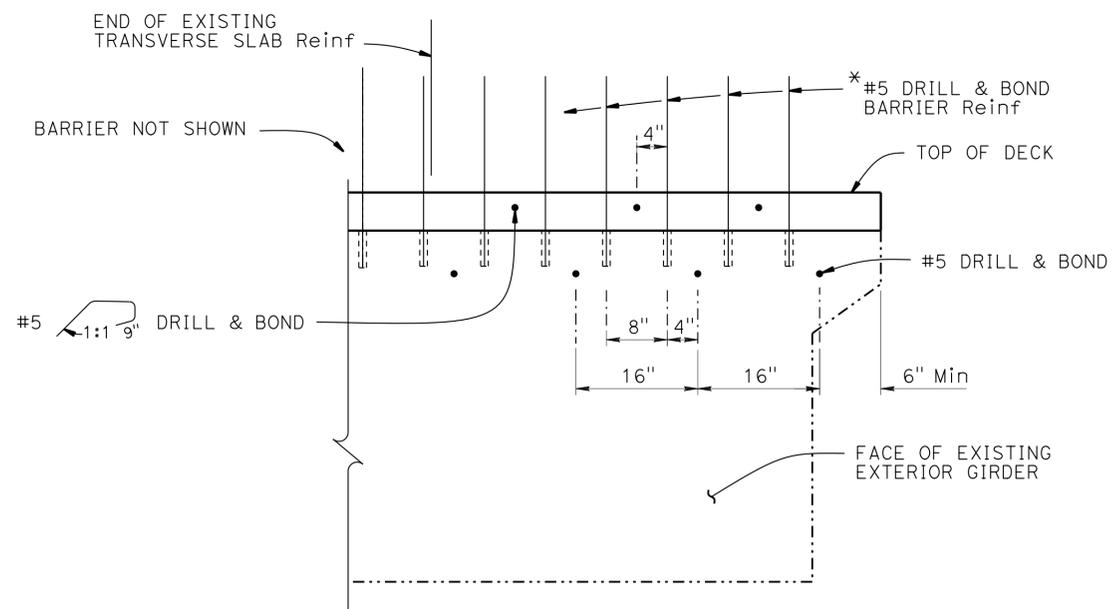
ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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PART TYPICAL SECTION @ ABUTMENT DIAPHRAGM

1" = 1'-0"



SECTION B - B

1" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

LEGEND:
* Barrier Reinforcement

NOTES:
1. For details not shown, see "TYPICAL SECTION NO. 1" sheet
2. All diaphragm reinforcement not shown

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

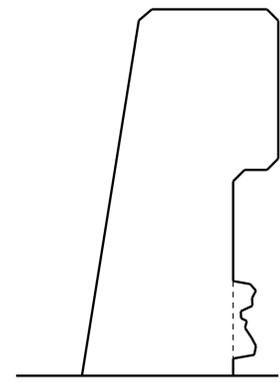
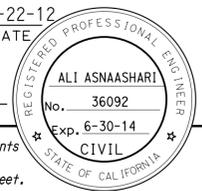
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	8.1

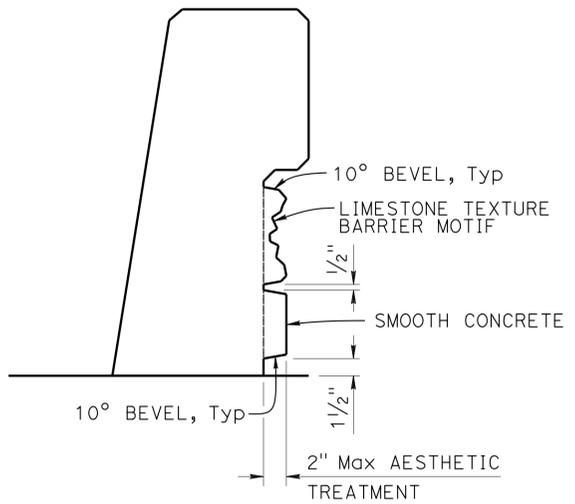
BRACE ROAD OVERCROSSING (RAISE)
TYPICAL SECTION NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	366	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			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.					

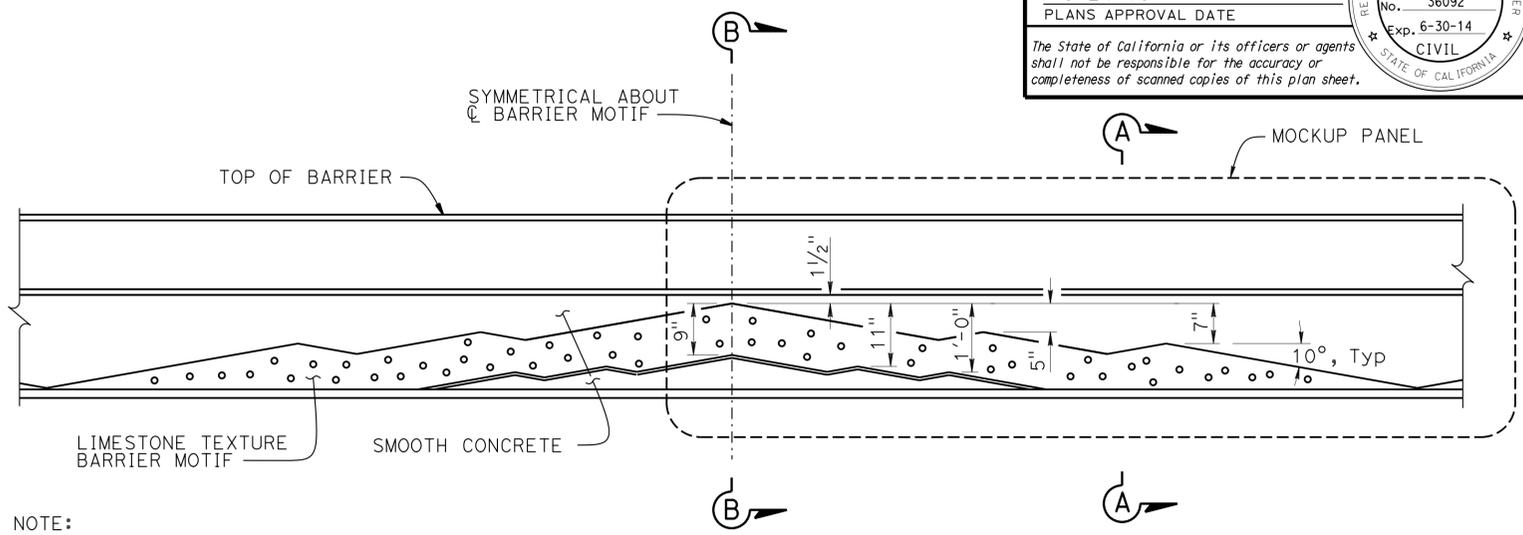


NOTE:
For details not shown, see "SECTION B - B"

SECTION A - A
1/2" = 1'-0"

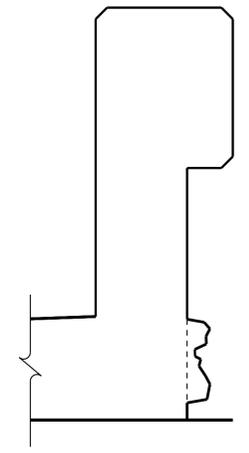


SECTION B - B
1/2" = 1'-0"



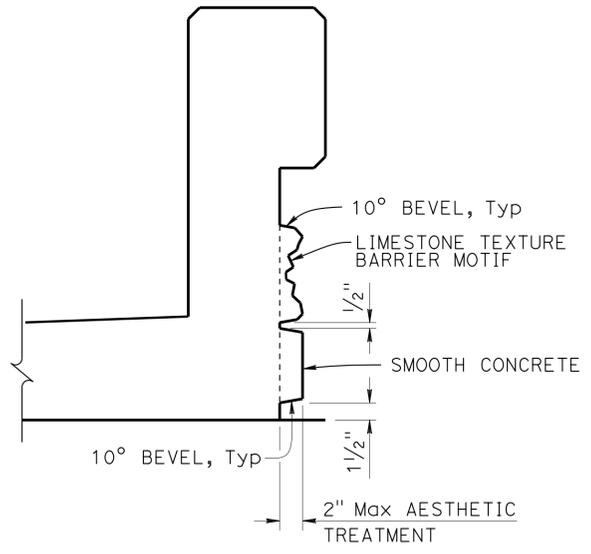
NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 26"

PART ELEVATION - CONCRETE BARRIER TYPE 732
3/4" = 1'-0"

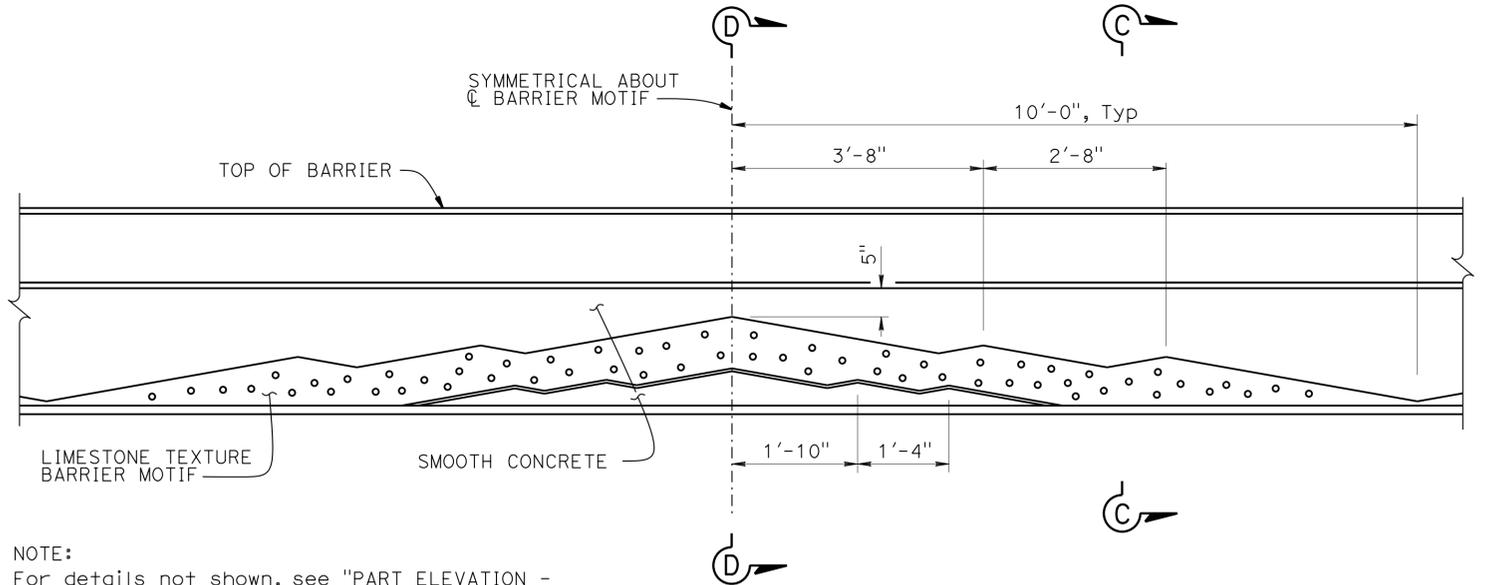


NOTE:
For details not shown, see "SECTION D - D"

SECTION C - C
1/2" = 1'-0"



SECTION D - D
1/2" = 1'-0"



NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 732"

PART ELEVATION - CONCRETE BARRIER TYPE 26
3/4" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY David Fowkes	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	X

BRACE ROAD OVERCROSSING (RAISE)
AESTHETIC DETAILS NO. 1

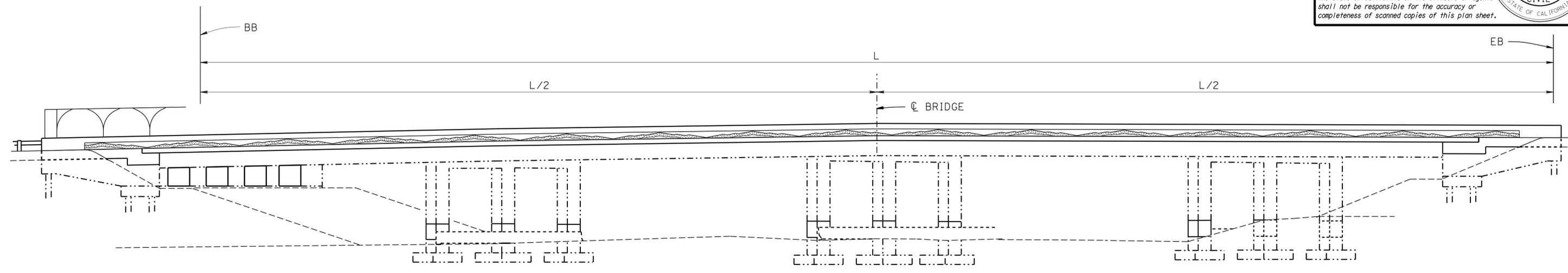
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	367	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

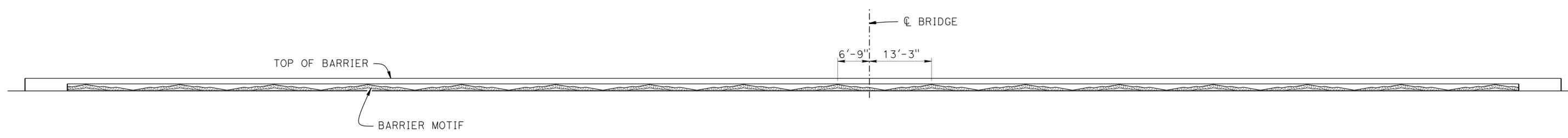
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

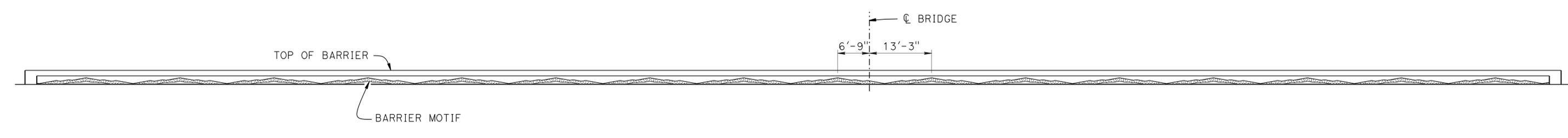
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ELEVATION
 $\frac{3}{32}'' = 1'-0''$



BARRIER TYPE 732 AESTHETIC TREATMENT
 $\frac{3}{32}'' = 1'-0''$



BARRIER TYPE 26 AESTHETIC TREATMENT
 $\frac{3}{32}'' = 1'-0''$

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY David Fowkes	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	8.1

BRACE ROAD OVERCROSSING (RAISE)
AESTHETIC DETAILS NO. 2

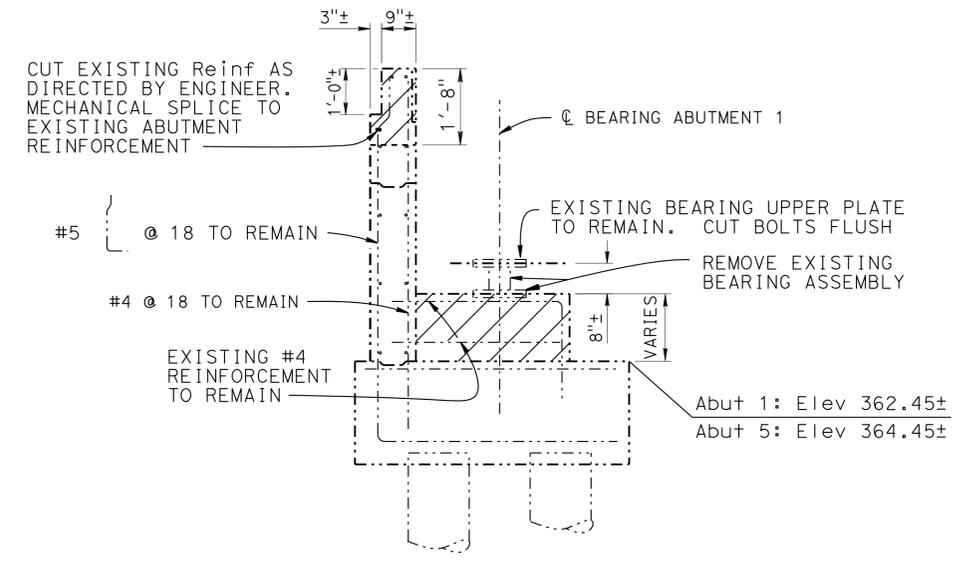
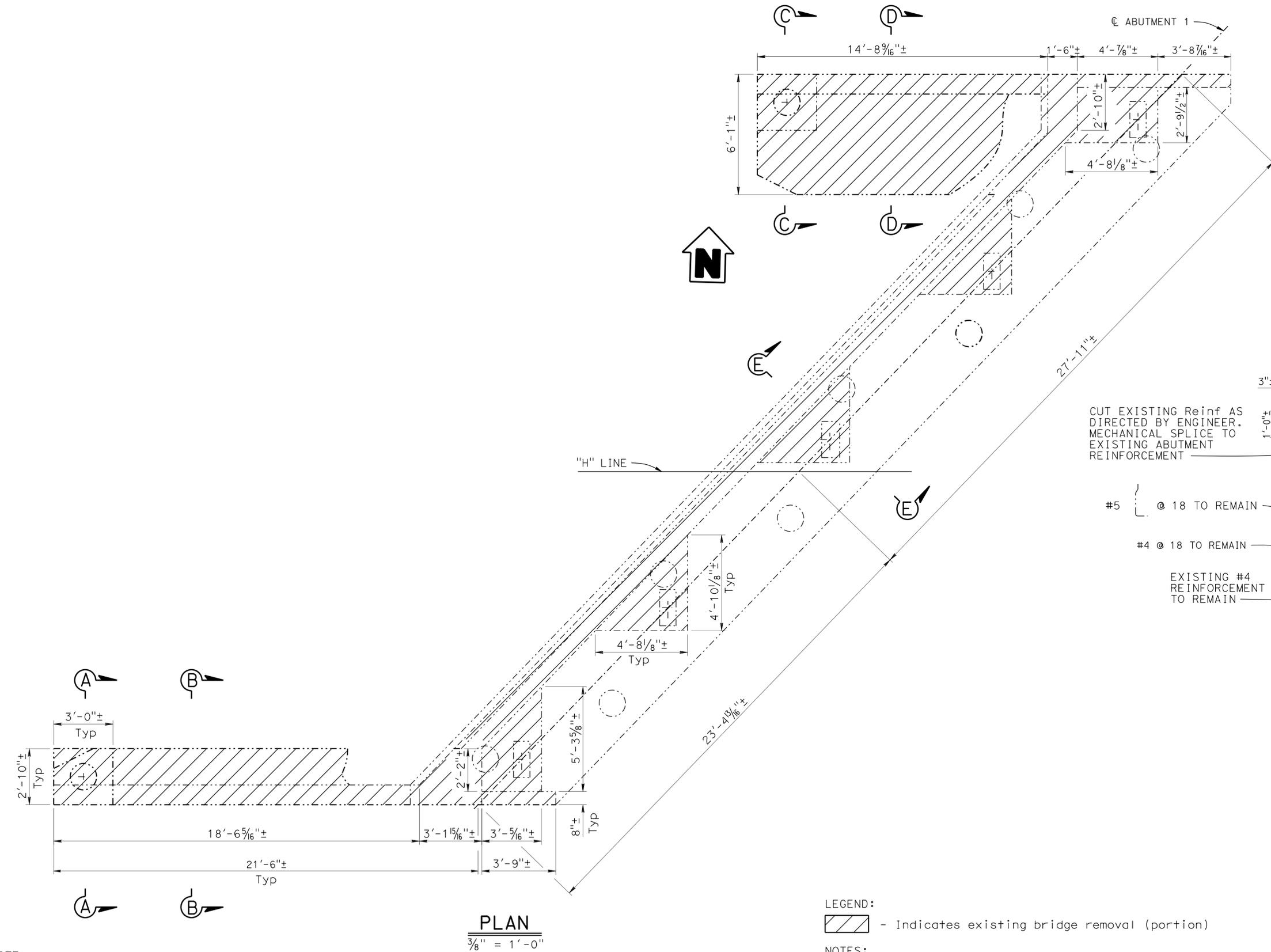
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	368	437

Ali Asnaashari
REGISTERED CIVIL ENGINEER DATE 10-22-12

6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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SECTION E - E
1/2" = 1'-0"

PLAN
3/8" = 1'-0"

NOTE:
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LEGEND:
 - Indicates existing bridge removal (portion)

- NOTES:**
- Abutment 1 shown, Abutment 5 similar
 - For "SECTION A - A", "SECTION B - B", "SECTION C - C" and "SECTION D - D", see "CONCRETE REMOVAL DETAILS NO. 2" sheet

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0096
POST MILE	8.13

BRACE ROAD OVERCROSSING (RAISE)
CONCRETE REMOVAL DETAILS NO. 1

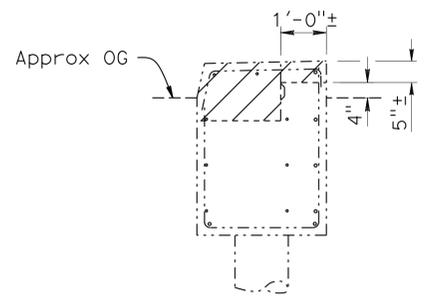
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	369	437

Ali Asnaashari 10-22-12
 REGISTERED CIVIL ENGINEER DATE

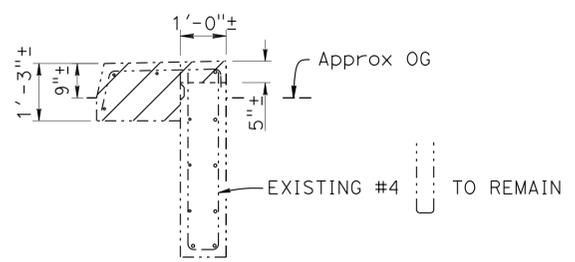
6-24-13
 PLANS APPROVAL DATE

No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

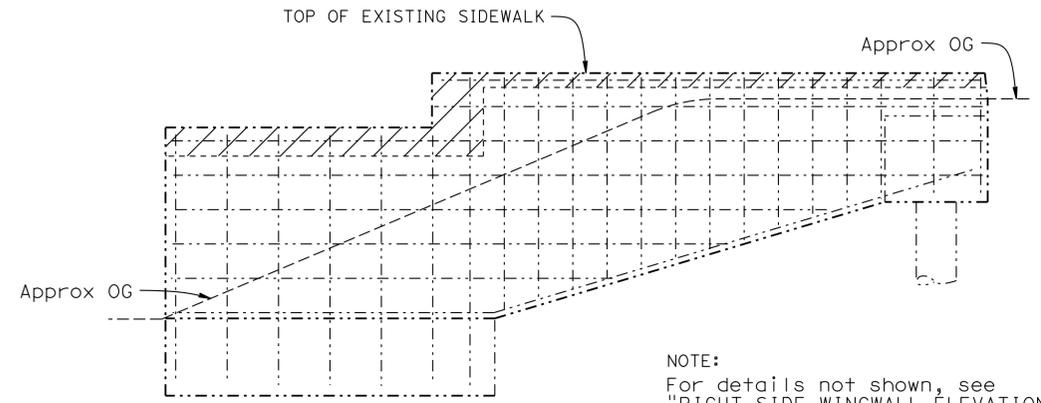
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



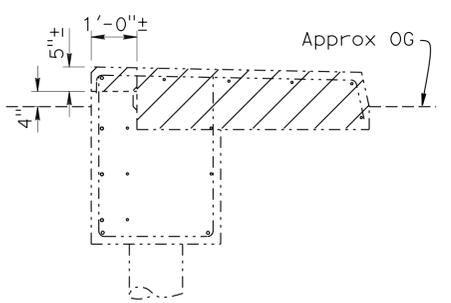
SECTION A - A
1/2" = 1'-0"



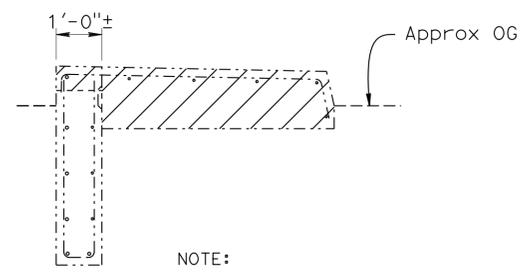
SECTION B - B
1/2" = 1'-0"



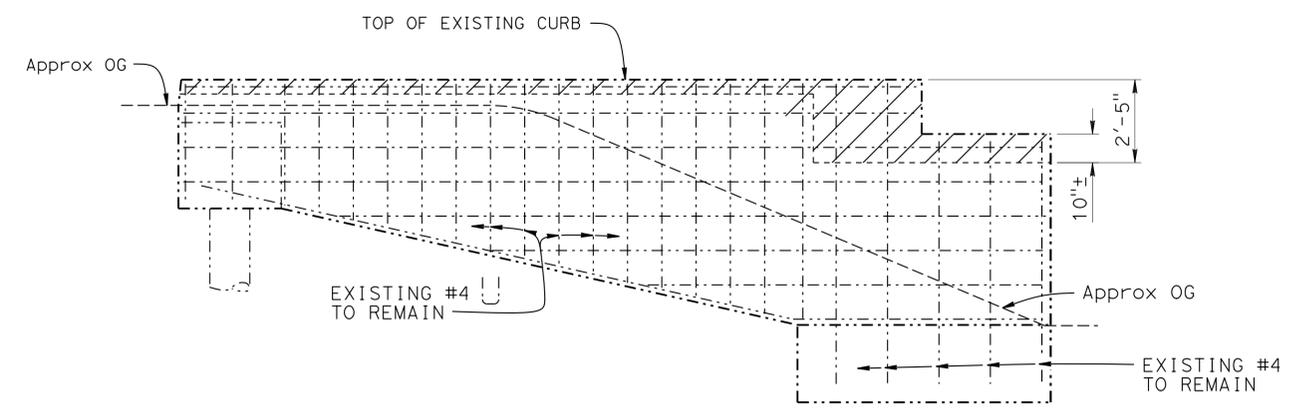
RIGHT SIDE WINGWALL ELEVATION
3/8" = 1'-0"



SECTION C - C
1/2" = 1'-0"



SECTION D - D
1/2" = 1'-0"



RIGHT SIDE WINGWALL ELEVATION
3/8" = 1'-0"

NOTE:
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LEGEND:
 - Indicates existing bridge removal (portion)

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	BRACE ROAD OVERCROSSING (RAISE) CONCRETE REMOVAL DETAILS NO. 2				
	DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari			19-0096					
	QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen			POST MILE 8.13					
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 14	OF 16

TIME PLOTTED => 12:39
 DATE PLOTTED => 28-JUN-2013
 USERNAME => s124496

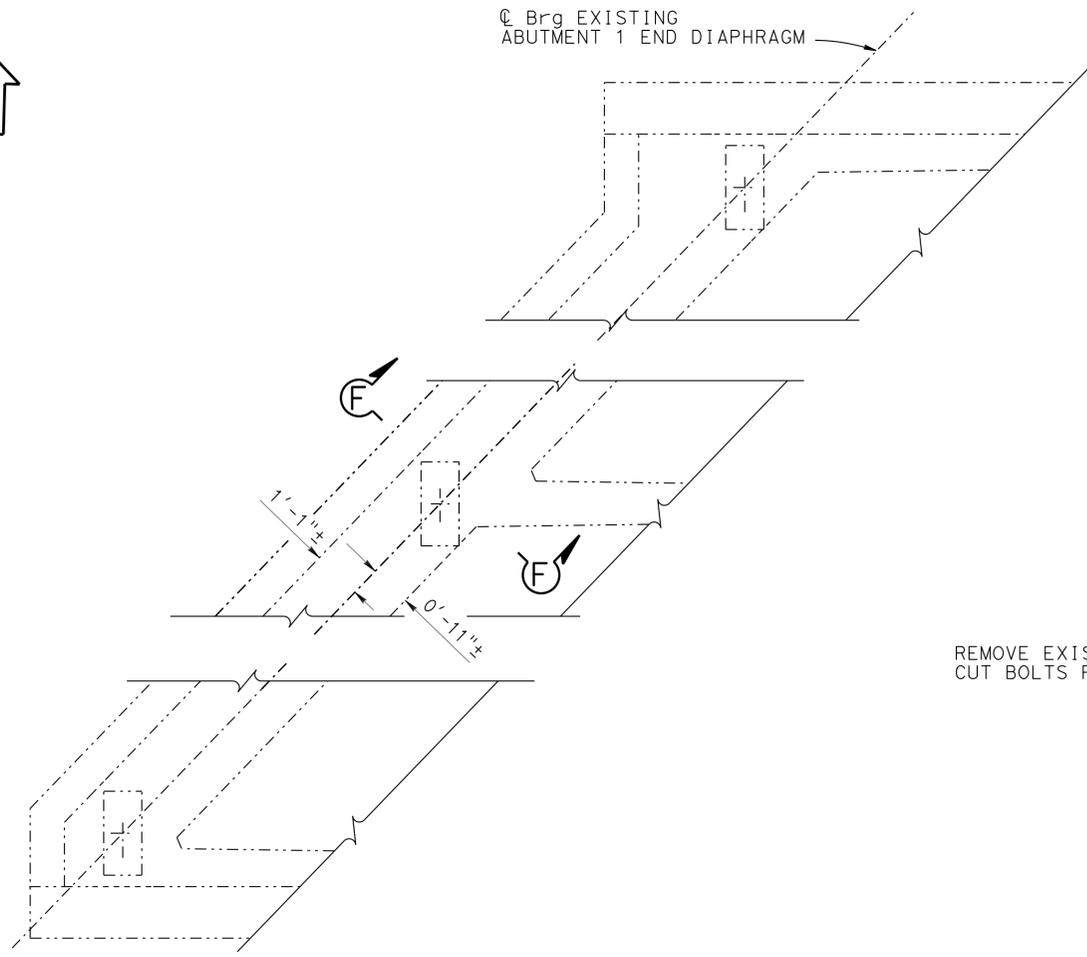
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	370	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

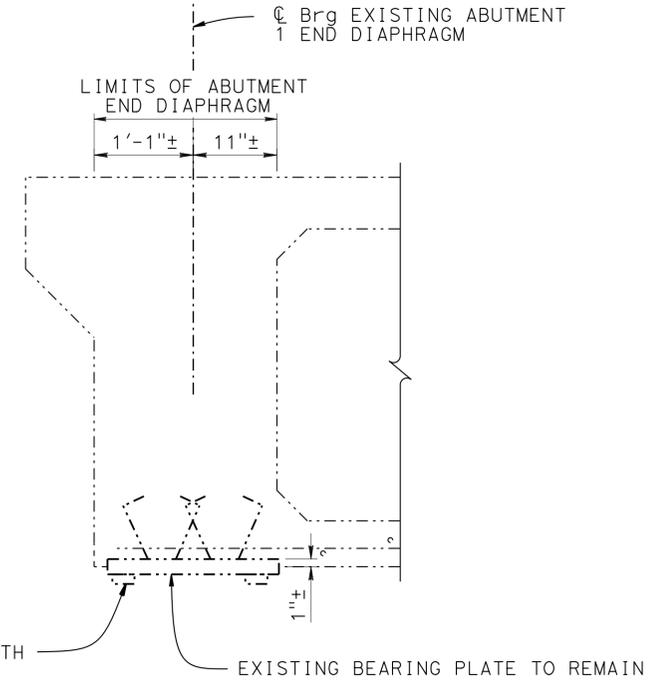
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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PART PLAN
1/2" = 1'-0"



SECTION F - F
1" = 1'-0"

NOTE:
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NOTE:
Abutment 1 shown, Abutment 5 similar

DESIGN	BY Art V Herrera	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Eric G Burgeson	CHECKED Sharon Yen

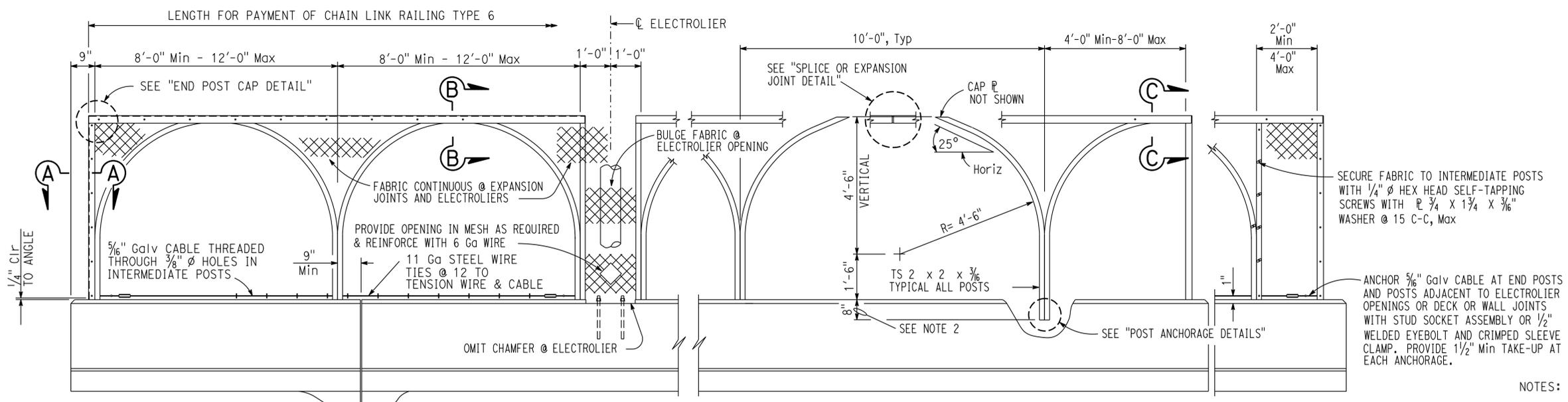
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

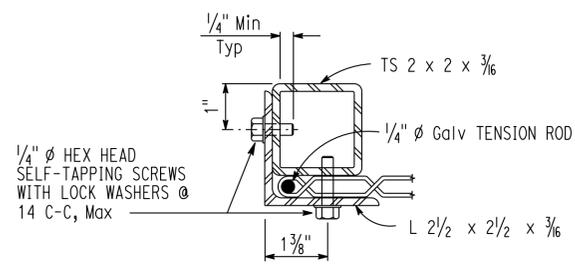
BRIDGE NO.	19-0096
POST MILE	8.13

BRACE ROAD OVERCROSSING (RAISE)
CONCRETE REMOVAL DETAILS NO. 3

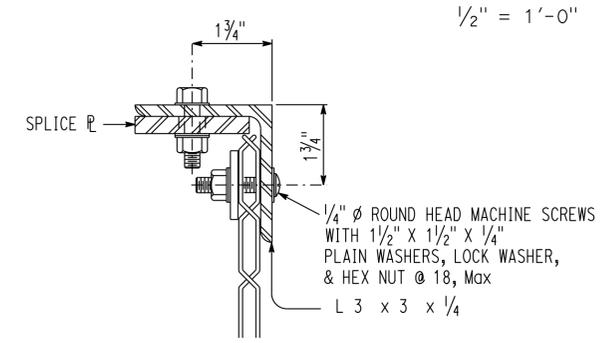
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	371	437
			10/01/12	REGISTERED CIVIL ENGINEER DATE	
			6-24-13	PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



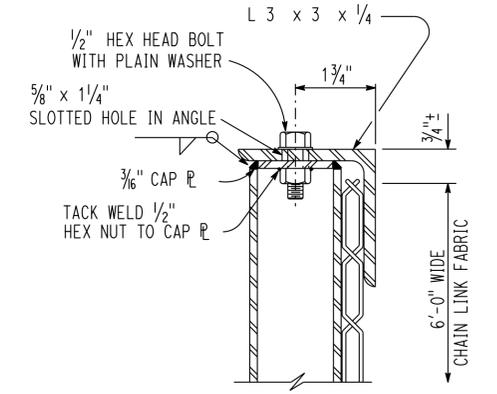
END PANEL 8'-0" - 12'-0" EXPANSION PANEL AT ELECTROLIER TYPICAL INTERIOR PANEL 10'-0", Typ END PANEL 4'-0" - 8'-0" END PANEL 2'-0" - 4'-0"



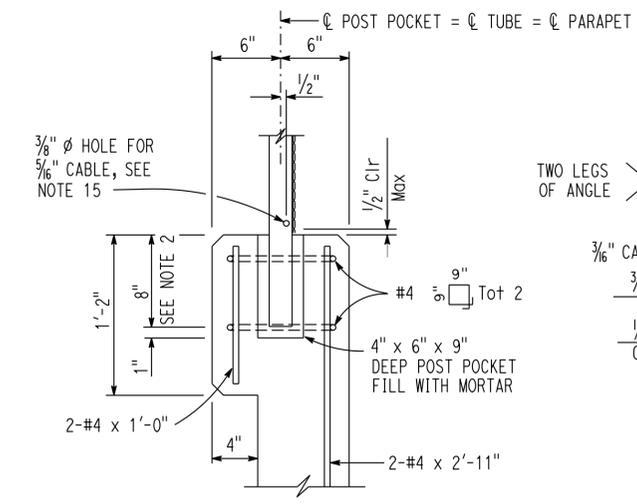
SECTION A-A
6" = 1'-0"



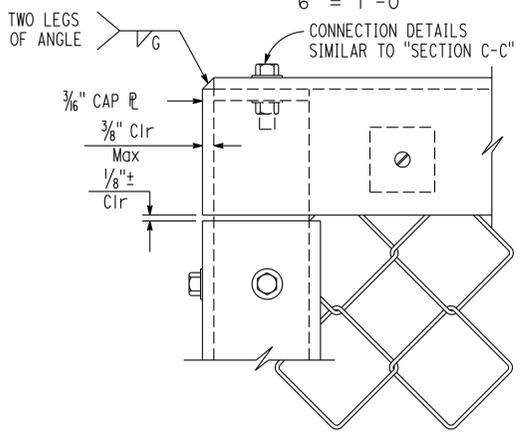
SECTION B-B
6" = 1'-0"



SECTION C-C
6" = 1'-0"

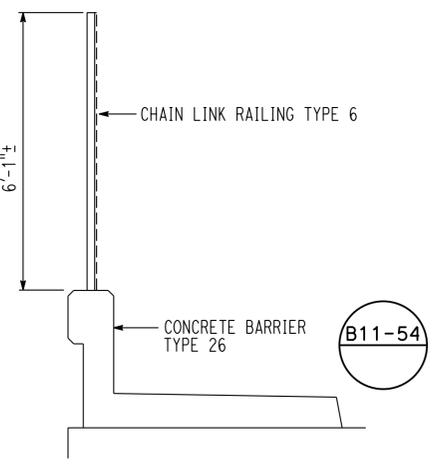


POST ANCHORAGE DETAIL
1 1/2" = 1'-0"

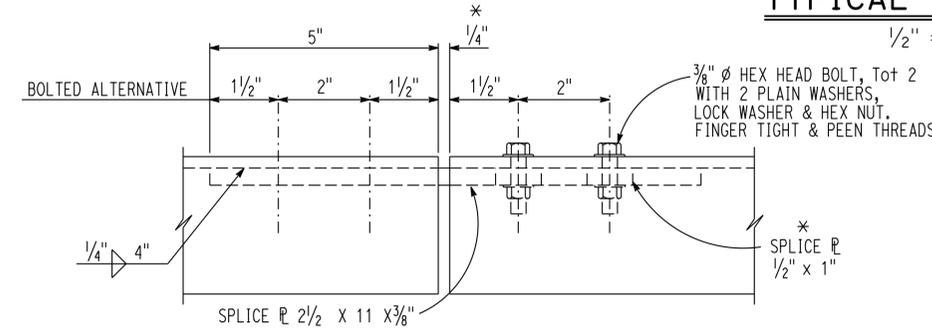


END POST CAP DETAIL
6" = 1'-0"

ELEVATION
1/2" = 1'-0"



TYPICAL SECTION
1/2" = 1'-0"

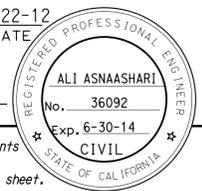


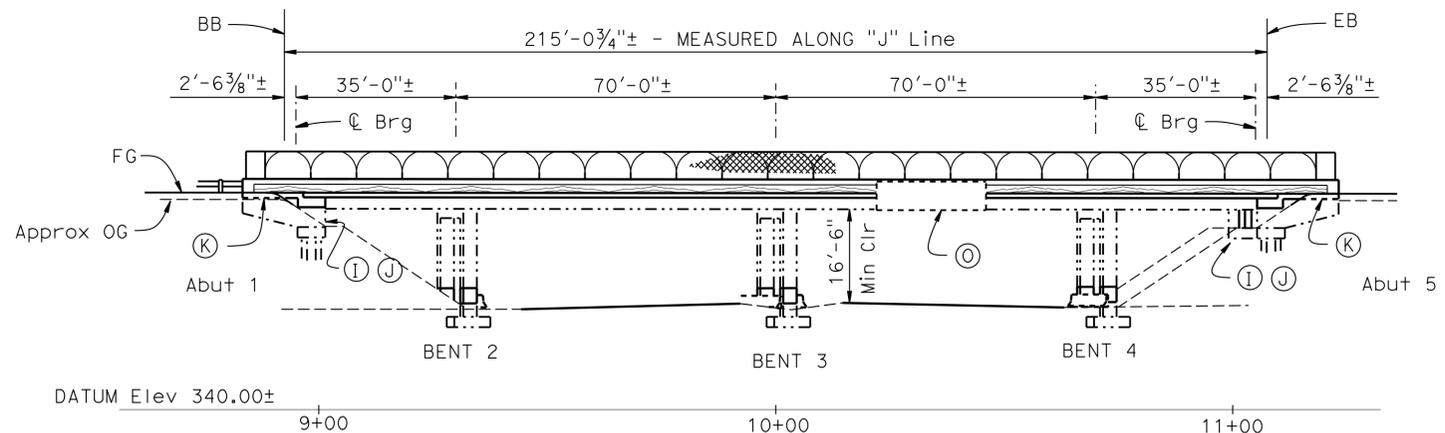
SPLICE OR EXPANSION JOINT DETAIL
6" = 1'-0"

- NOTES:
- Horizontal angle shall be continuous over not less than two intermediate posts except that a shorter length is permitted at expansion joints, electroliers and other rail discontinuities.
 - One post may be embedded 6" minimum to accommodate grade changes, otherwise fabricate post lengths as required.
 - Curved posts may be rotated in plan within its post pocket to accommodate curved horizontal alignment.
 - Straight posts and straight portions of curved posts shall be installed normal to bridge profile grade.
 - Top horizontal angle shall be parallel to bridge profile grade and shall be shop bent to fit horizontal curves.
 - When railing is on slope, fabric shall be placed parallel to slope.
 - Alternative details may be submitted by Contractor for Engineer's approval.
 - For details and reinforcement not shown, see "CONCRETE BARRIER TYPE 26" sheet. (B11-54)
 - See Bridge Plans for limits of Chain Link Railing Type 6.
 - Provide thimbles at all cable loops.
 - Chain link fabric to be 6'-0" wide with 1" mesh and with knuckled selvage top and bottom.
 - When railing is placed on a horizontal alignment with a radius of 150'-0" or less, thread 5/16" cable through 3/8" diameter welded eye rods embedded 4" into the top of the concrete parapet and equally spaced to limit the middle ordinate distance between 5/16" cable and the curve to 1" maximum.
 - Splices and expansion joints shall be located at center panel.
 - Holes in posts for 5/16" cable and its anchorage may be field drilled and painted with zinc rich paint.

NOTE:
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STANDARD DRAWING		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES		BRIDGE NO. 19-0096 POST MILE 12.3		BRACE ROAD OVERCROSSING (RAISE) CHAIN LINK RAILING TYPE 6	
FILE NO. xs16-200	APPROVAL DATE July 2011	UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731		CONTRACT NO.: 03-3E1001		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 16 OF 16

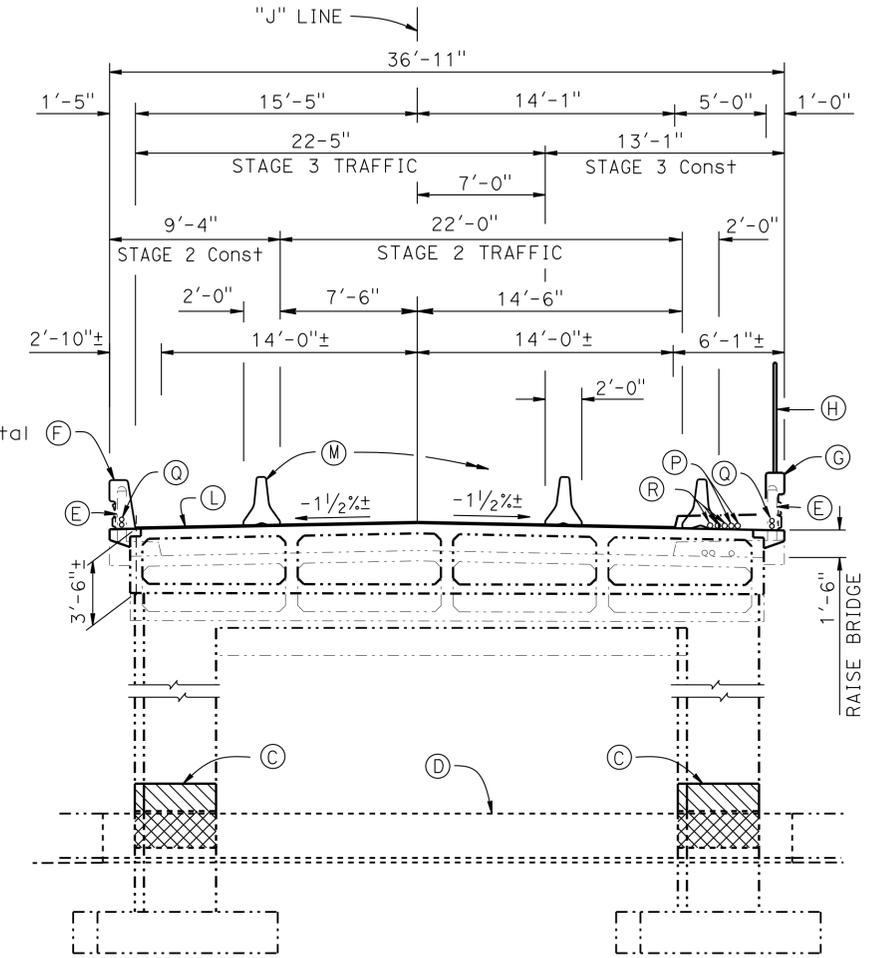
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	372	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



ELEVATION
1" = 20'

- LEGEND:**
- *The BB and EB elevations shown are after bridge raising, plus 3/4" Polyester Concrete Overlay
 -  Indicates bridge removal (portion)
 -  Indicates existing structure
 -  Indicates new construction
 -  Indicates point of minimum vertical clearance

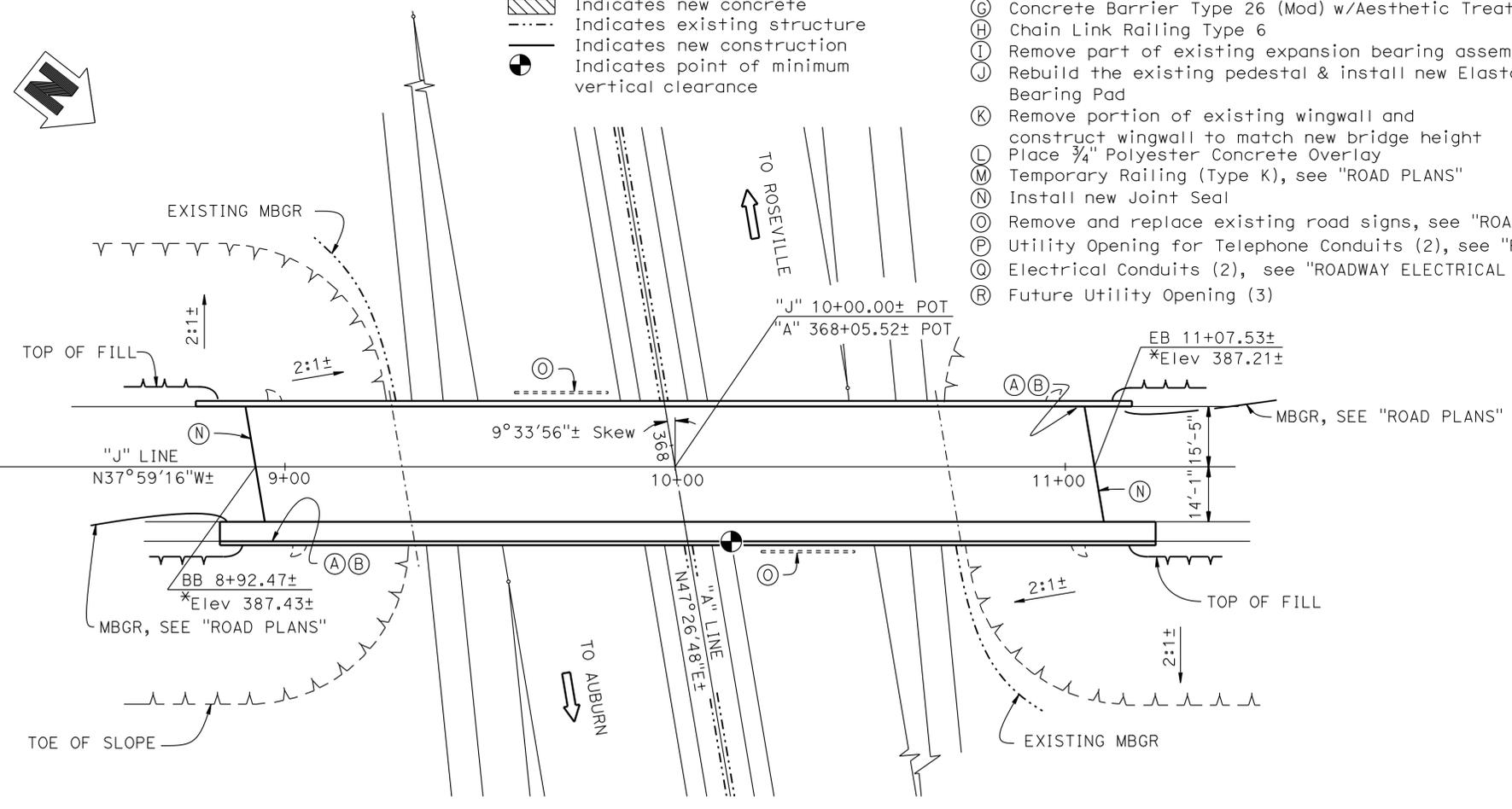
- NOTES:**
- Stage 1 Construction: Detour traffic, raise bridge, construct columns, abutment backwall, wingwalls and abutment pedestal
- (A) Paint "Bridge No. 19-0097"
 - (B) Paint "HORSESHOE BAR OVERCROSSING"
 - (C) Remove portion of bridge & raise bridge
 - (D) Existing Barrier to be removed, see "ROAD PLANS"
 - (E) Remove existing Barrier Railing
 - (F) Concrete Barrier Type 732 (Mod) w/Aesthetic Treatment
 - (G) Concrete Barrier Type 26 (Mod) w/Aesthetic Treatment
 - (H) Chain Link Railing Type 6
 - (I) Remove part of existing expansion bearing assembly & pedestal
 - (J) Rebuild the existing pedestal & install new Elastomeric Bearing Pad
 - (K) Remove portion of existing wingwall and construct wingwall to match new bridge height Place 3/4" Polyester Concrete Overlay
 - (L) Temporary Railing (Type K), see "ROAD PLANS"
 - (M) Install new Joint Seal
 - (N) Remove and replace existing road signs, see "ROAD PLANS"
 - (P) Utility Opening for Telephone Conduits (2), see "ROAD PLANS"
 - (Q) Electrical Conduits (2), see "ROADWAY ELECTRICAL PLANS"
 - (R) Future Utility Opening (3)



TYPICAL SECTION
1" = 5'

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	6,350	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	476	CF
PLACE POLYESTER CONCRETE OVERLAY	6,350	SQFT
BRIDGE REMOVAL (PORTION), LOCATION B		LUMP SUM
STRUCTURE EXCAVATION (BRIDGE)	5	CY
STRUCTURE BACKFILL (BRIDGE)	13	CY
RAISE BRIDGE (LOCATION B)		LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	51	CY
DRILL AND BOND DOWEL	403	LF
JOINT SEAL (MR 1")	75	LF
BAR REINFORCING STEEL (BRIDGE)	9,710	LB
CHAIN LINK RAILING (TYPE 6)	240	LF
CONCRETE BARRIER (TYPE 26 MODIFIED)	240	LF
CONCRETE BARRIER (TYPE 732 MODIFIED)	240	LF



PLAN
1" = 20'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE: For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS NO. 1" sheet

DESIGN ENGINEER Joseph E Downing	DESIGN	BY Michael K Bergman	CHECKED Sharon Yen	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	HORSESHOE BAR OC (RAISE) GENERAL PLAN
	DETAILS	BY N Gwynn/S Motalebi	CHECKED Sharon Yen	LAYOUT	BY Michael K Bergman			CHECKED Sharon Yen	
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen	SPECIFICATIONS	BY Dave Klein	PLANS AND SPECS COMPARED Dave Klein	PROJECT NUMBER & PHASE: 03000004731		8.7	CONTRACT NO.: 03-3E1001

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3578
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 8-11-09, 10-17-12, 6-20-13
 SHEET 1 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	373	437
			10-22-12		
			REGISTERED CIVIL ENGINEER	DATE	
			6-24-13	PLANS APPROVAL DATE	
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

GENERAL NOTES

EXISTING STRUCTURE

SPECIFICATIONS:

DESIGN:

AASHTO dated 1953 with subsequent revisions, and Bridge Department Supplement dated 1953 Standard Specifications, Division of Highways, dated August 1954 and the Special Provisions

LIVE LOADING:

H20-S16-44

UNIT STRESSES:

Reinforced Concrete:

fs = 20,000 psi
fc = 1200 psi (Except as noted)
fc = 1000 psi (Roadway slab on girders)
n = 10

FOUNDATION DATA:

Footing Pressure: 5 tons per square feet
Pile Loading: 45 tons Type: Concrete

NEW CONSTRUCTION

DESIGN:

Bridge Design Specifications-April 2000 (LFD)
(1996 AASHTO with Interims and Revisions by CALTRANS)

DEAD LOAD:

Include 9 psf for 3/4" polyester concrete overlay.
No future additional deck overlay allowed

LIVE LOADING:

HS20-44, Permit load not considered

SEISMIC DESIGN:

See "SITE SPECIFIC ARS CURVE"

REINFORCED CONCRETE:

fy = 60 ksi
f'c = 3600 psi
n = 8

FOOTING ALLOWABLE PRESSURE:

5 tsf at all locations

PILE LOADING:

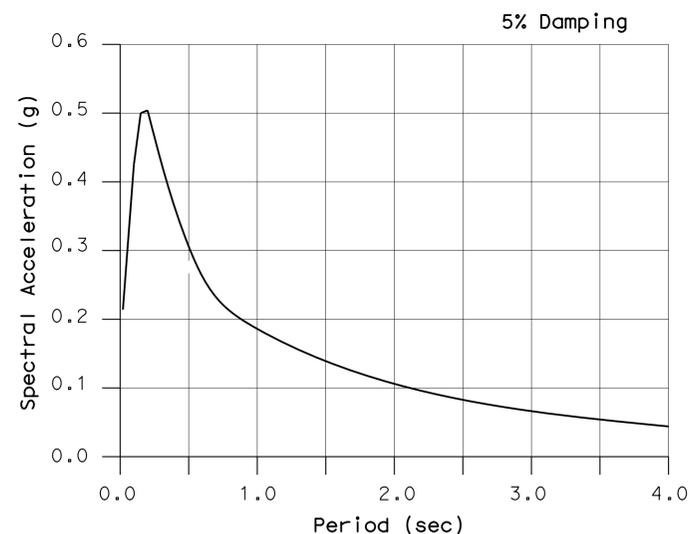
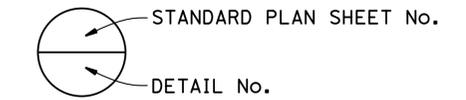
49.5 Tons

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS NO. 1
3	INDEX TO PLANS NO. 2
4	ABUTMENT DETAILS NO. 1
5	ABUTMENT DETAILS NO. 2
6	ABUTMENT DETAILS NO. 3
7	BENT DETAILS
8	TYPICAL SECTION NO. 1
9	TYPICAL SECTION NO. 2
10	AESTHETIC DETAILS NO. 1
11	AESTHETIC DETAILS NO. 2
12	CONCRETE REMOVAL DETAILS NO. 1
13	CONCRETE REMOVAL DETAILS NO. 2
14	CHAIN LINK RAILING TYPE 6

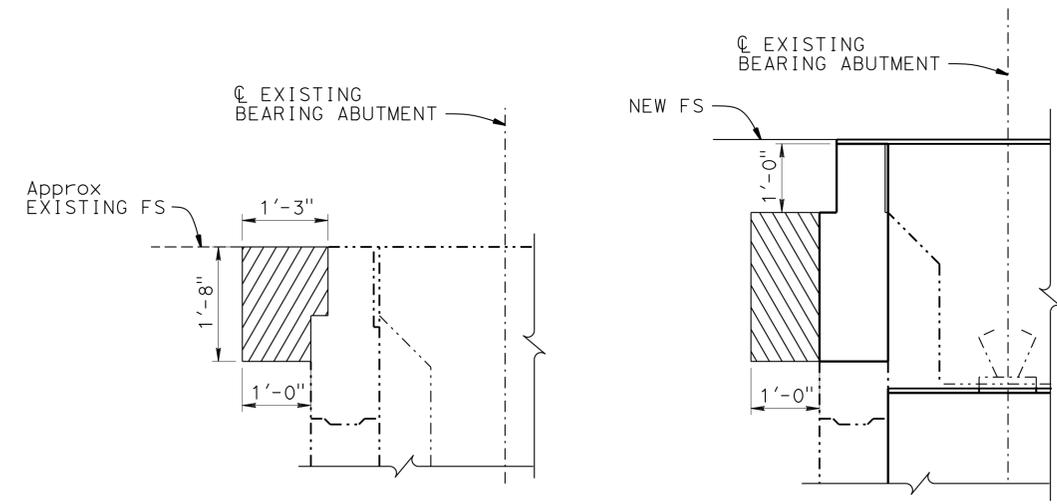
STANDARD PLANS Dated 2010

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)
BO-1	BRIDGE DETAILS
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B11-54	CONCRETE BARRIER TYPE 26
B11-55	CONCRETE BARRIER TYPE 732



SITE SPECIFIC ARS CURVE

NO SCALE



- INDICATES STRUCTURE EXCAVATION
 - INDICATES STRUCTURE BACKFILL

NOTE:
For Wingwall backfill limits, see "ROAD PLANS"

LIMITS OF EXCAVATION AND BACKFILL

NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE) INDEX TO PLANS NO. 1

TIME PLOTTED => 12:47
DATE PLOTTED => 28-JUN-2013
USER NAME => s124496

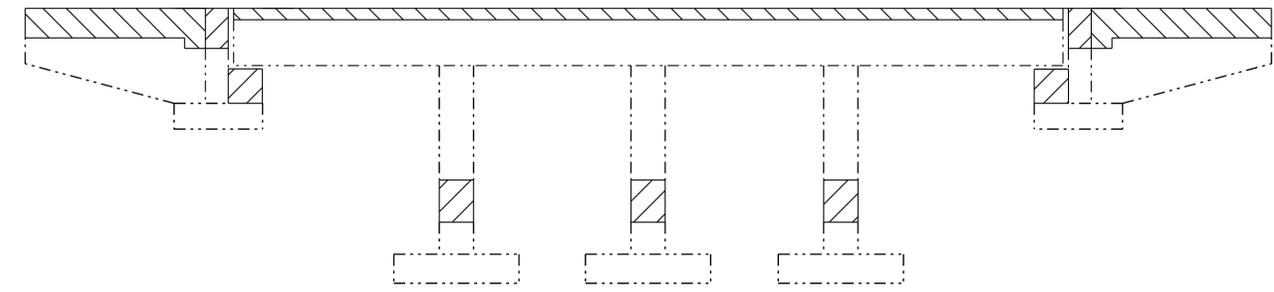
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	374	437

Ali Asmaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

ALI ASMAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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- STRUCTURAL CONCRETE, BRIDGE
- STRUCTURAL CONCRETE, BRIDGE (3,600 psi PRIOR TO TEMPORARY SUPPORT RELEASE)

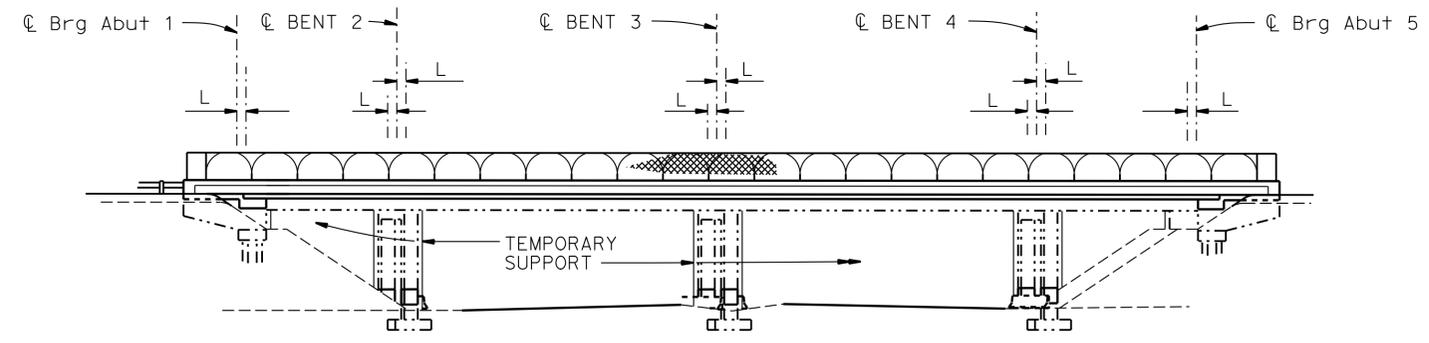
CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

TEMPORARY SUPPORT LOADING

Required capacity of Temporary support

LOCATION	DEAD LOAD
Abutment 1	115 kips
Bent 2	670 kips
Bent 3	805 kips
Bent 4	680 kips
Abutment 5	115 kips

Temporary support loads do not include loads the Contractor places on the bridge



NOTE:
Maximum jack location eccentricity on Bent Caps or at Abutments
L = 6"

SUPPORT LOCATION
NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

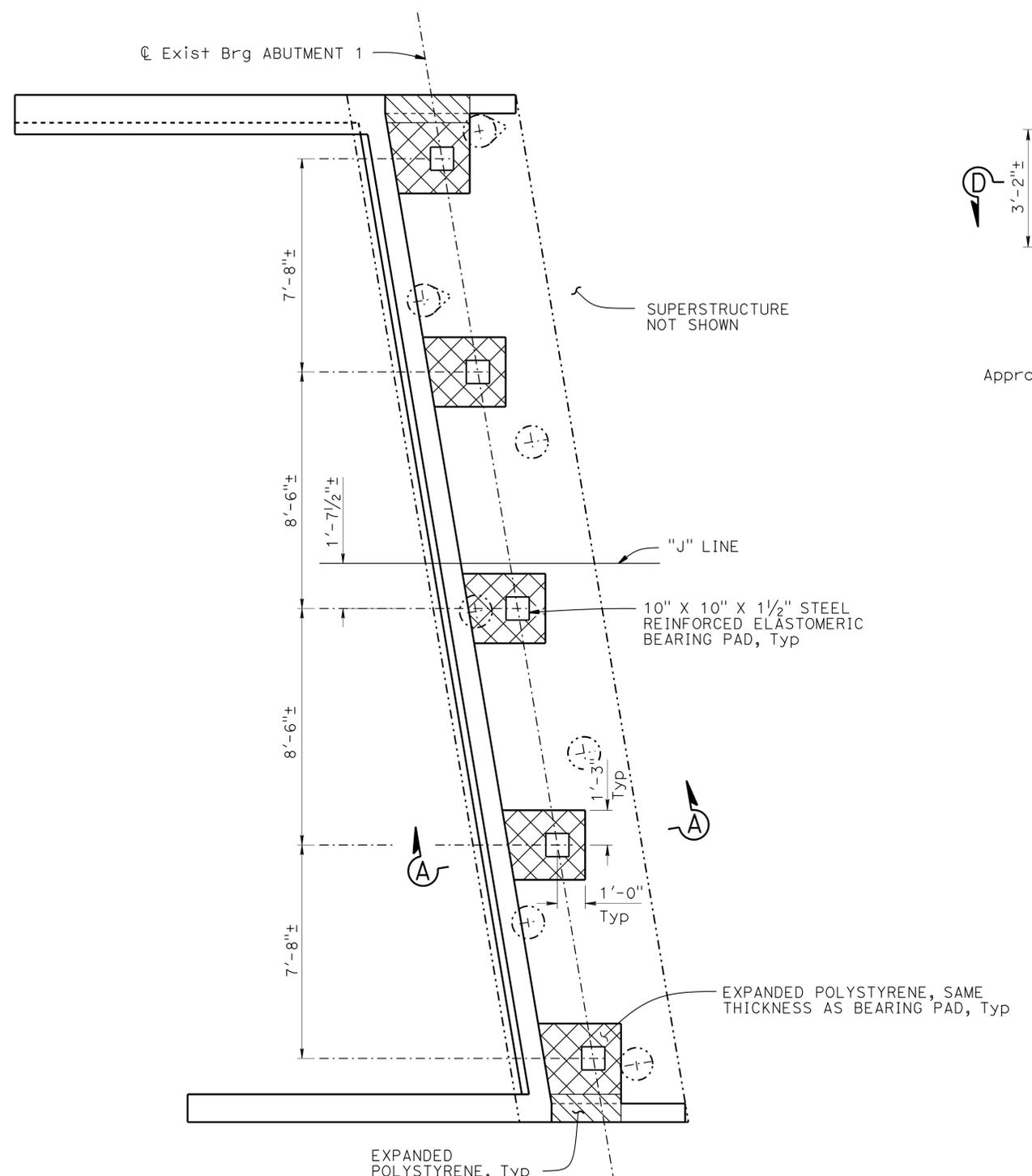
BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE)
INDEX TO PLANS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	375	437

10-22-12 DATE
 REGISTERED CIVIL ENGINEER
 ALI ASMAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

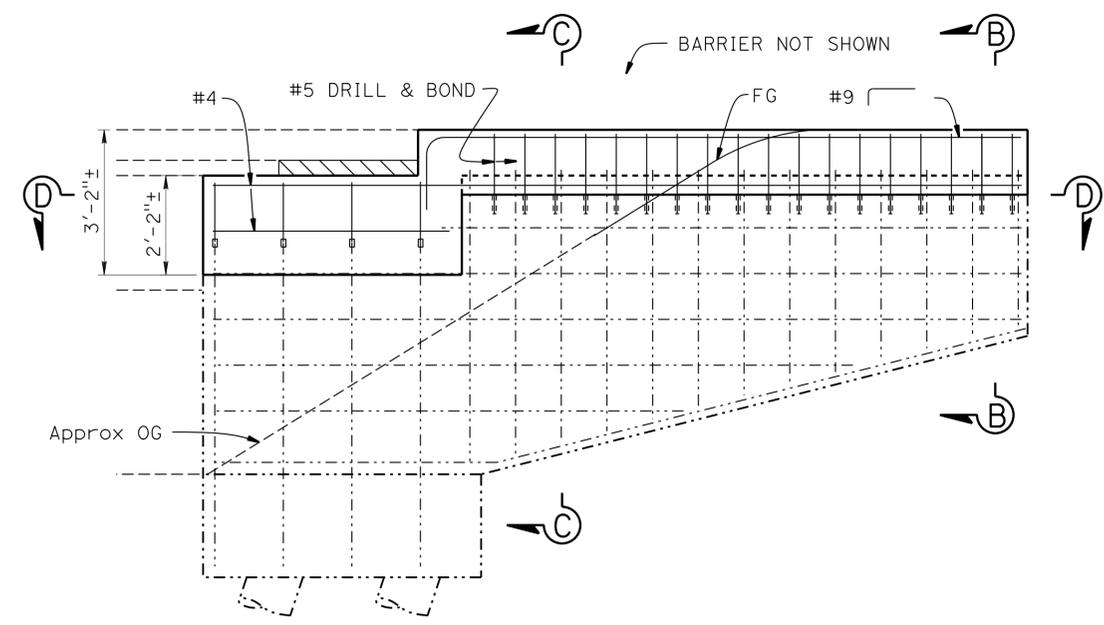
6-24-13
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



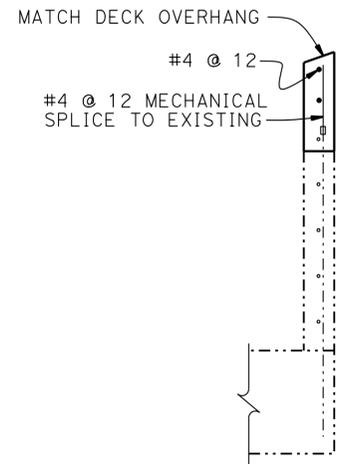
PLAN
3/8" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

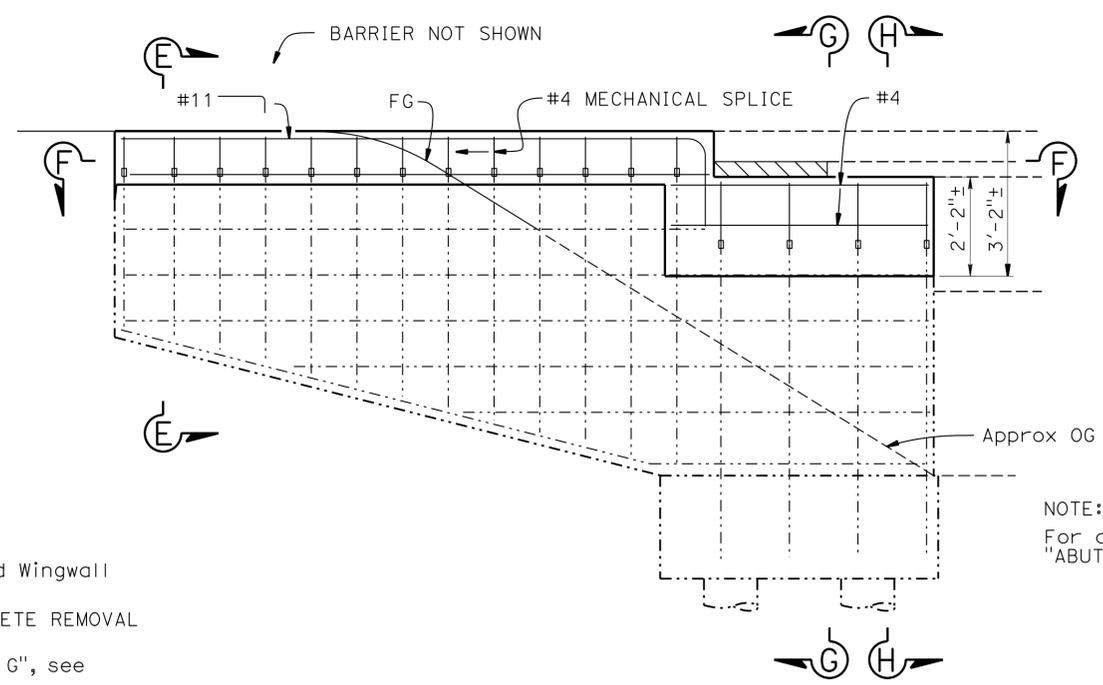
- NOTES:
1. New Abutment Pedestal dimensions and Wingwall length matches existing dimensions
 2. For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 1" sheet
 3. For "SECTION A - A" and "SECTION G - G", see "ABUTMENT DETAILS NO. 2" sheet
 4. For "SECTION B - B", "SECTION C - C", SECTION D - D", "SECTION E - E" and "SECTION F - F", see "ABUTMENT DETAILS NO. 3" sheet
 5. Abutment 1 shown, Abutment 5 similar



LEFT SIDE WINGWALL ELEVATION
1/2" = 1'-0"



SECTION H - H
1/2" = 1'-0"



RIGHT SIDE WINGWALL ELEVATION
1/2" = 1'-0"

NOTE:
For details not shown, see "ABUTMENT DETAILS NO. 3" sheet

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE)
ABUTMENT DETAILS NO. 1

REVISION DATES	SHEET	OF
10-26-11 12-09-11	4	14

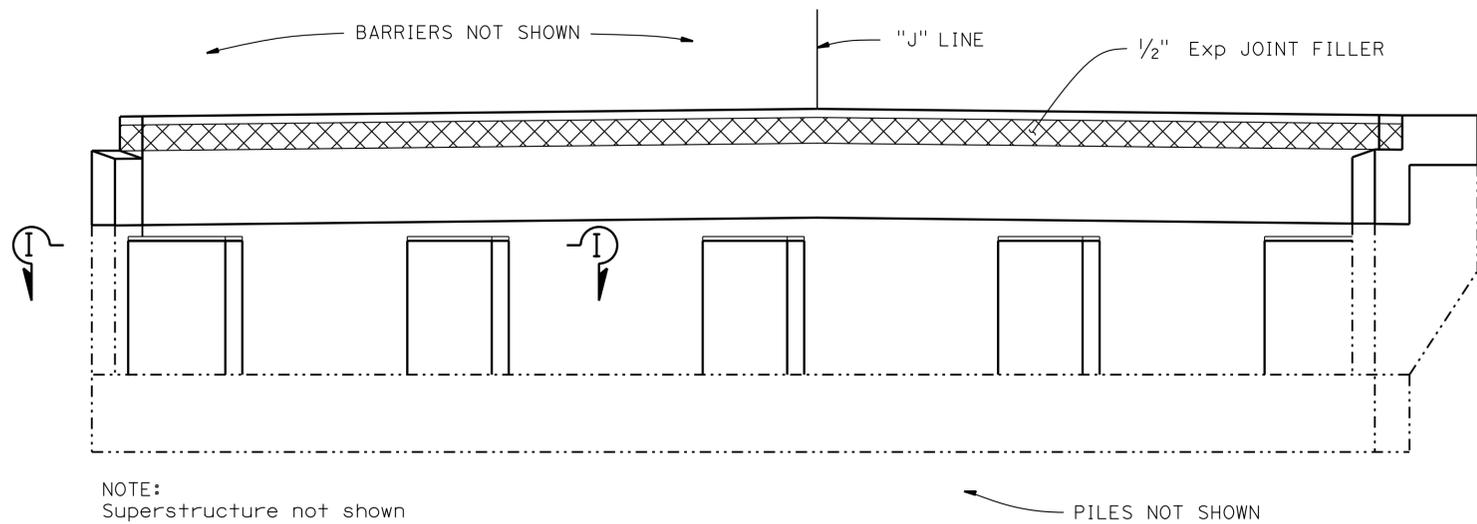
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	376	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

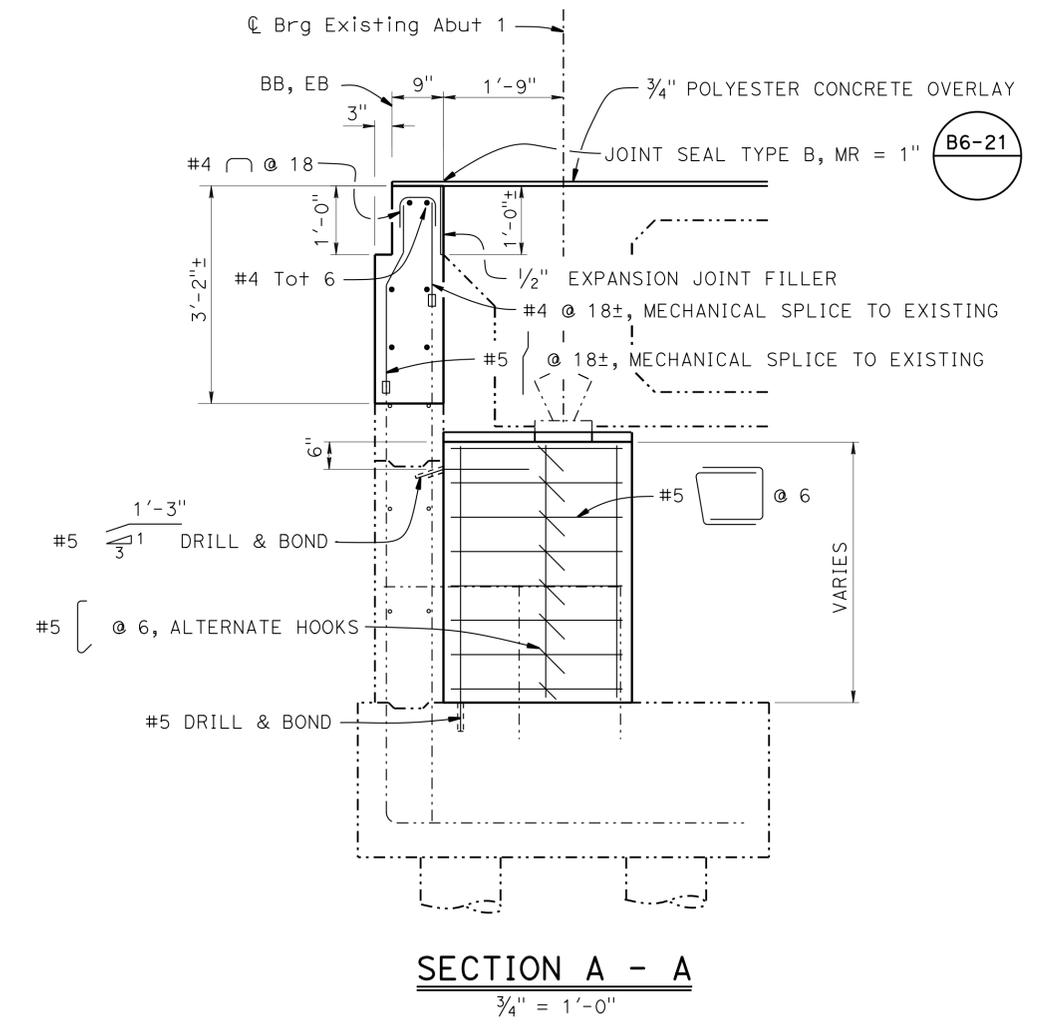
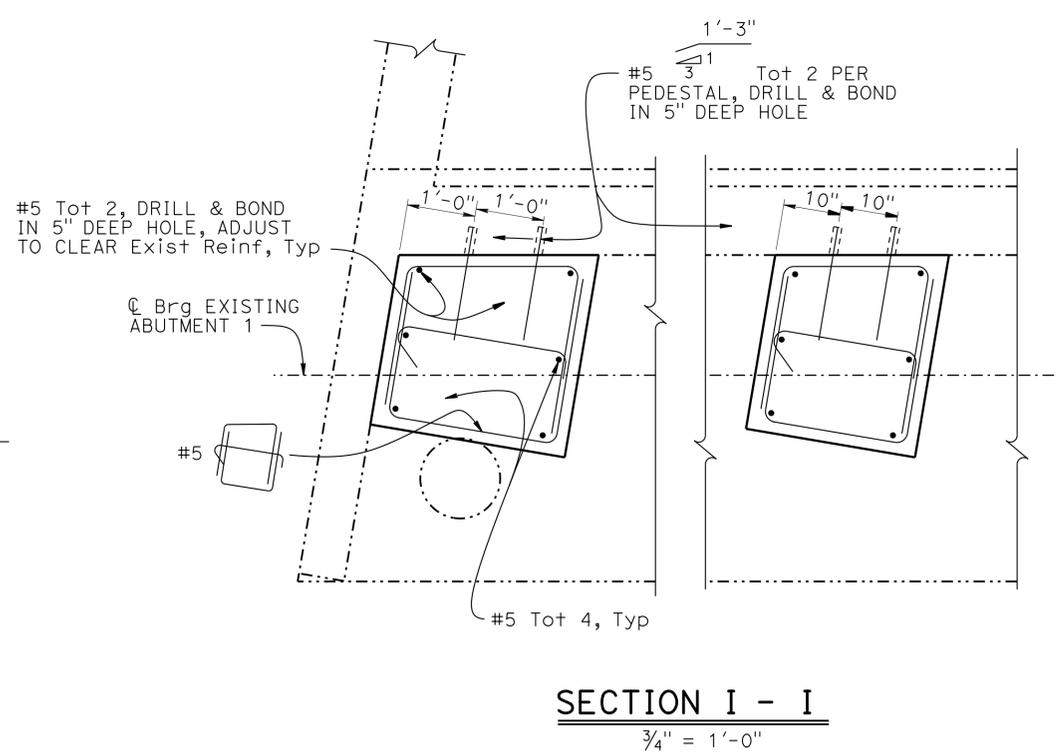
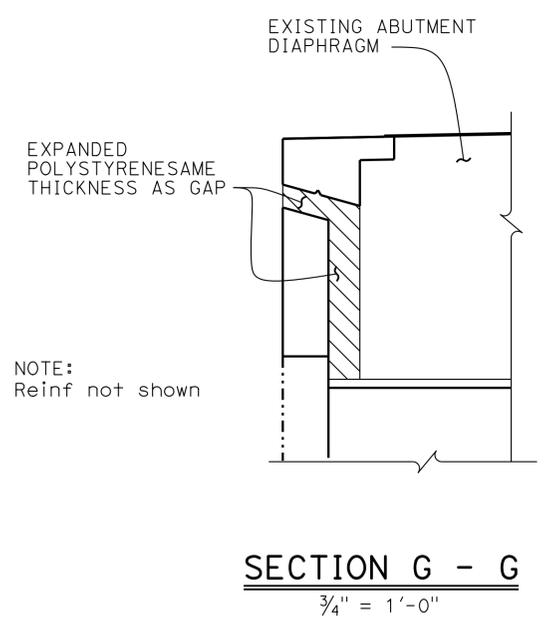
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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ELEVATION
3/8" = 1'-0"



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTES:
1. Abutment 1 shown, Abutment 5 similar
2. For details not shown, see "CONCRETE REMOVAL DETAILS NO. 1" and "CONCRETE REMOVAL DETAILS NO. 2" sheets

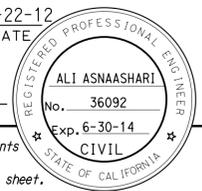
DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

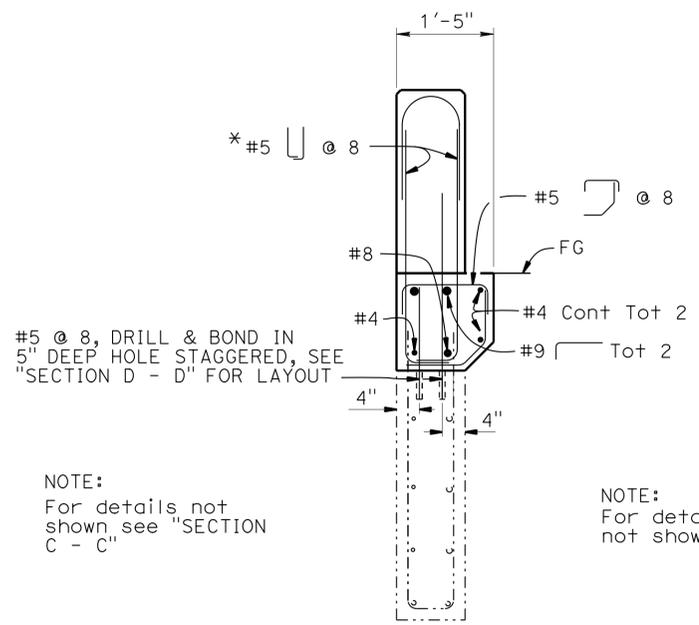
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

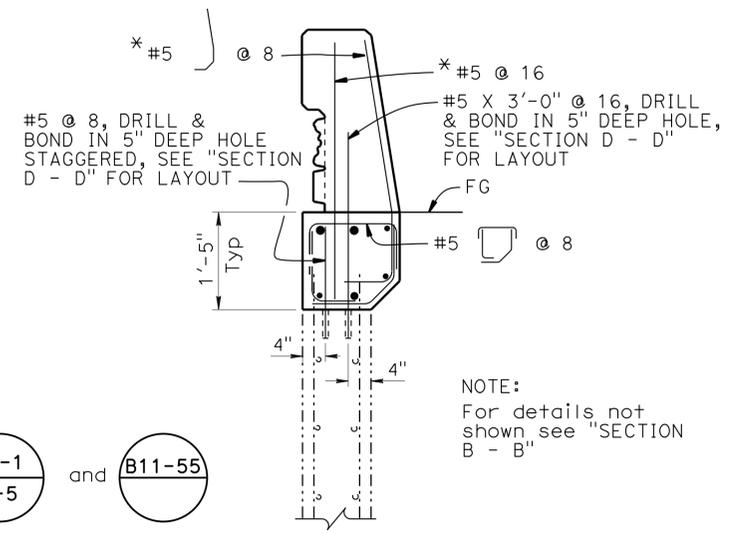
BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE)
ABUTMENT DETAILS NO. 2

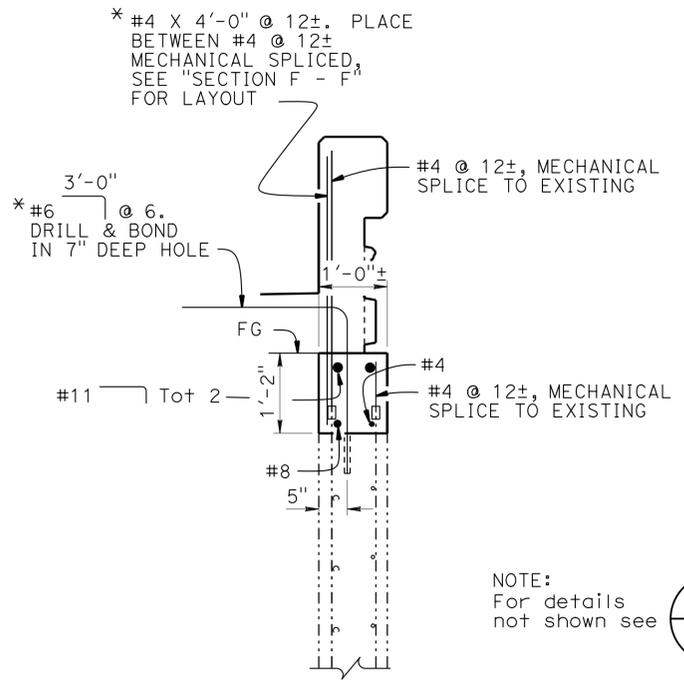
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	377	437
 REGISTERED CIVIL ENGINEER				10-22-12	DATE
6-24-13				PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



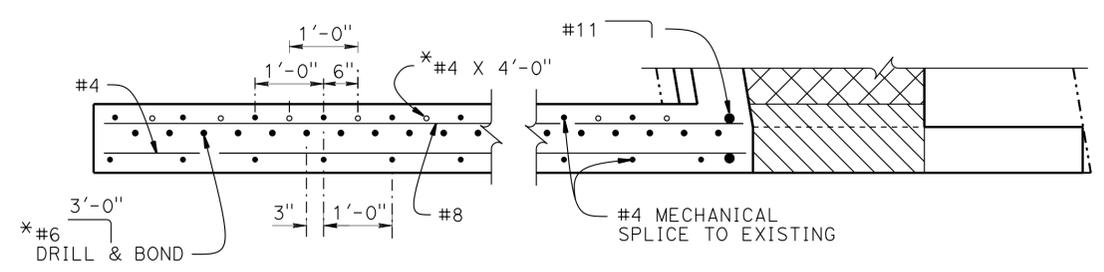
SECTION B - B
3/4" = 1'-0"



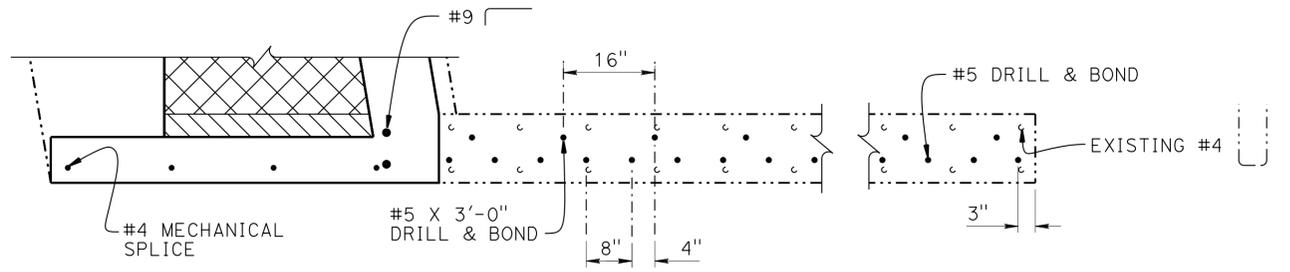
SECTION C - C
3/4" = 1'-0"



SECTION E - E
3/4" = 1'-0"



SECTION F - F
3/4" = 1'-0"



SECTION D - D
3/4" = 1'-0"

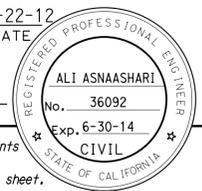
LEGEND:
* Barrier Reinforcement

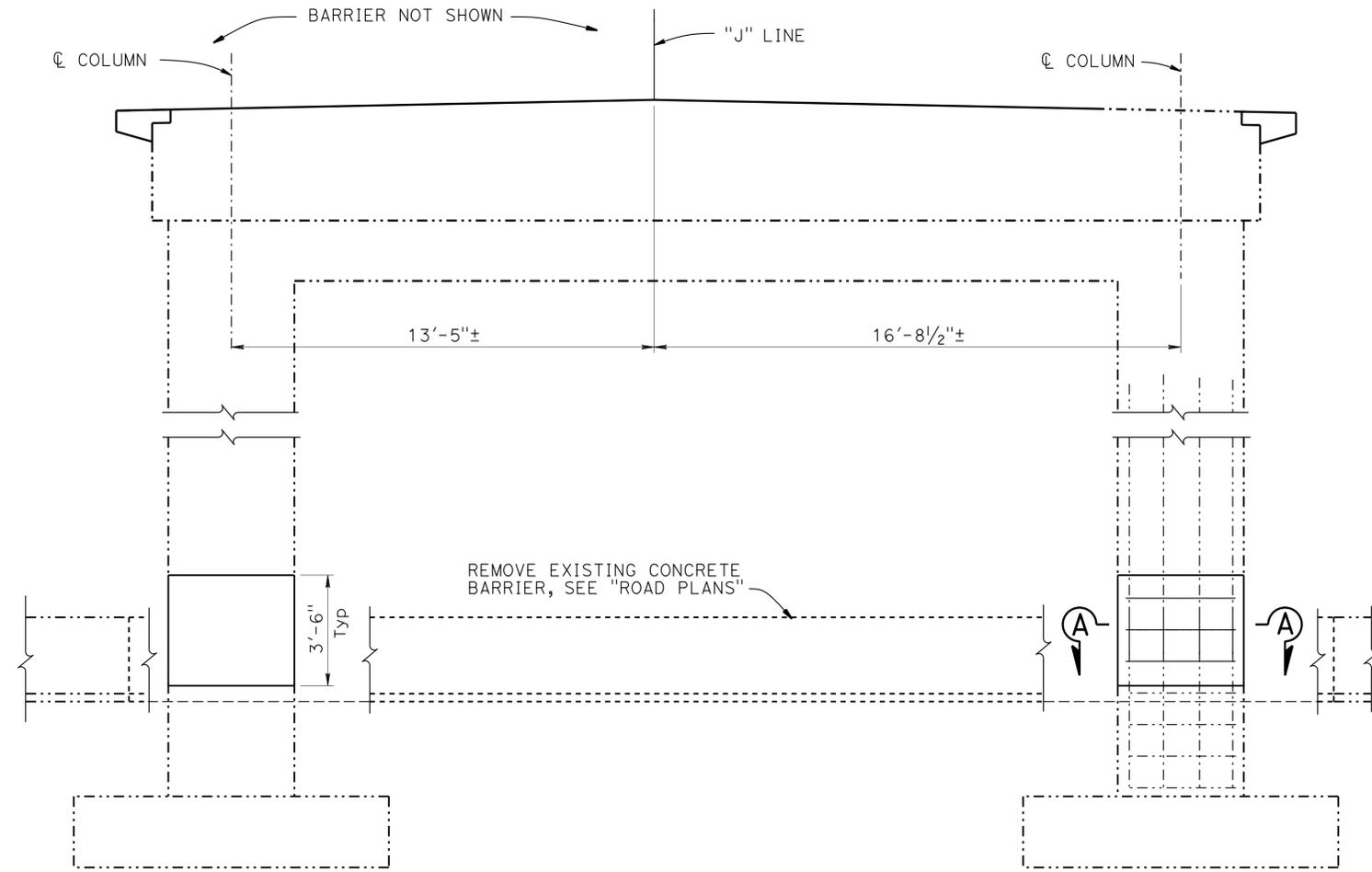
- NOTES:
- For location of "SECTION B - B", "SECTION C - C", "SECTION D - D", "SECTION E - E" AND "SECTION F - F", see "ABUTMENT DETAILS NO. 1" sheet
 - For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 1" sheet
 - Chain Link Railing not shown

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

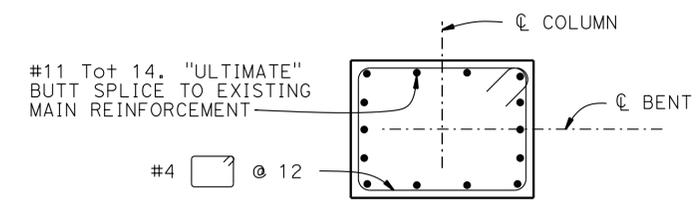
DESIGN	BY	Michael K Bergman	CHECKED	Sharon Yen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0097	HORSESHOE BAR OC (RAISE) ABUTMENT DETAILS NO. 3	
	DETAILS	BY	Nancy C Gwynn	CHECKED			Sharon Yen	POST MILE		8.7
QUANTITIES	BY	Sharon Yen	CHECKED	Lewis L Shen	UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 6 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	378	437

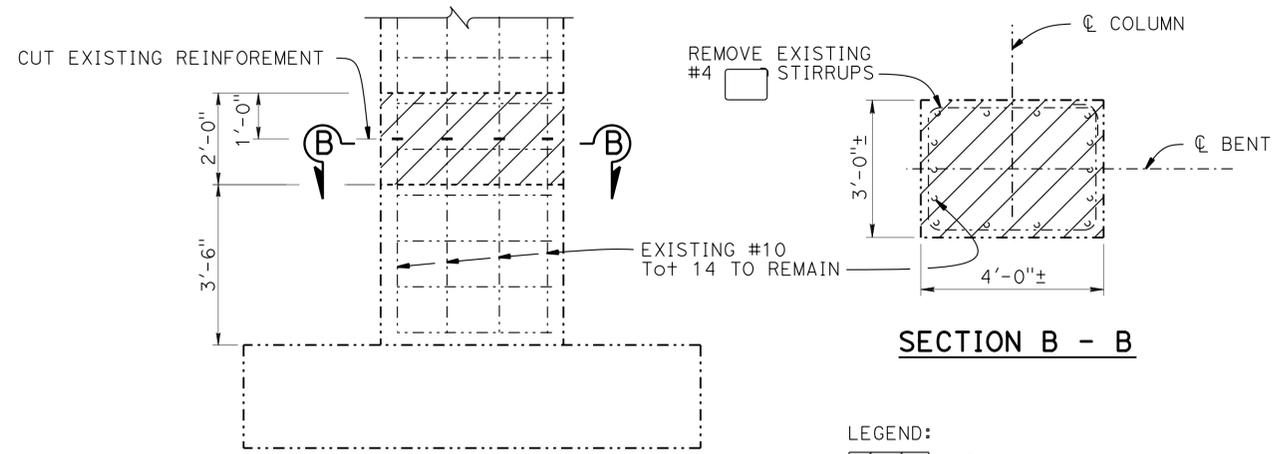

 REGISTERED CIVIL ENGINEER DATE 10-22-12
 PLANS APPROVAL DATE 6-24-13
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



ELEVATION
3/8" = 1'-0"



SECTION A - A
3/8" = 1'-0"
NOTE: For details not shown, see "SECTION B - B"



PART ELEVATION

SECTION B - B

LEGEND:
 - Indicates bridge removal (portion)

CONCRETE REMOVAL AT COLUMNS
1/2" = 1'-0"

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
 Details are typical for all columns

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE)
BENT DETAILS

TIME PLOTTED => 12:47
 DATE PLOTTED => 28-JUN-2013
 USERNAME => s124496

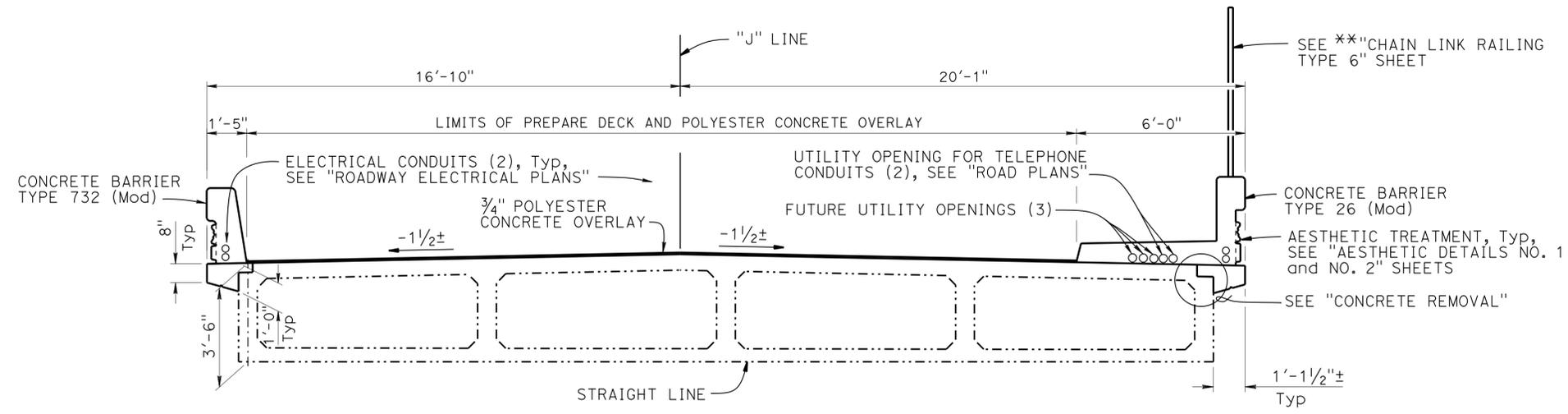
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plg	80	8.1/37.8	379	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

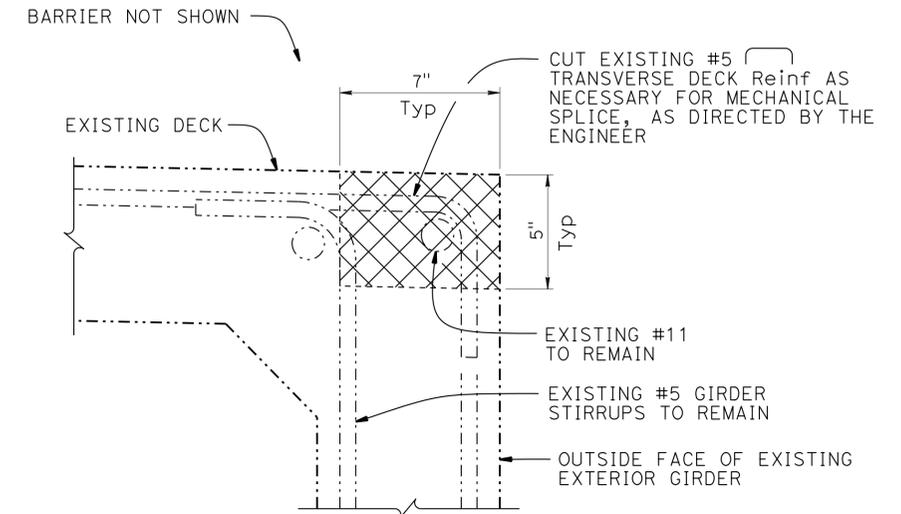
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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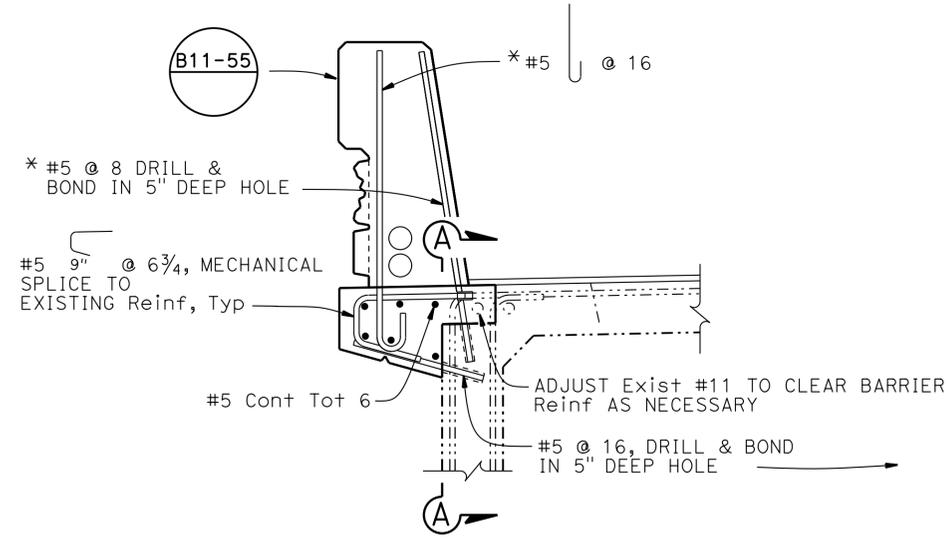
TYPICAL SECTION
3/8" = 1'-0"



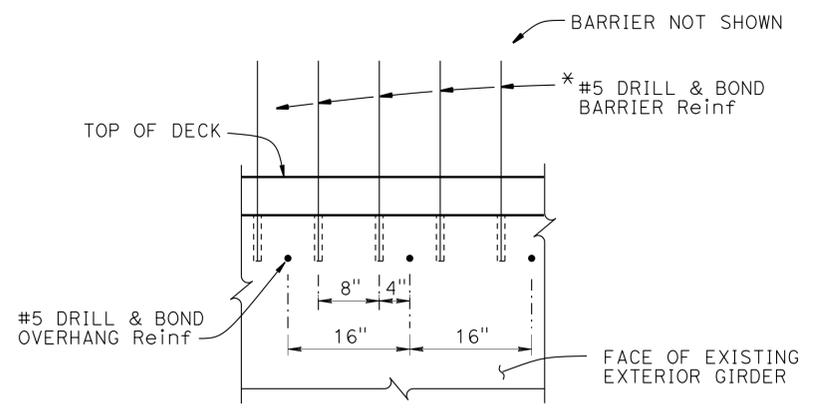
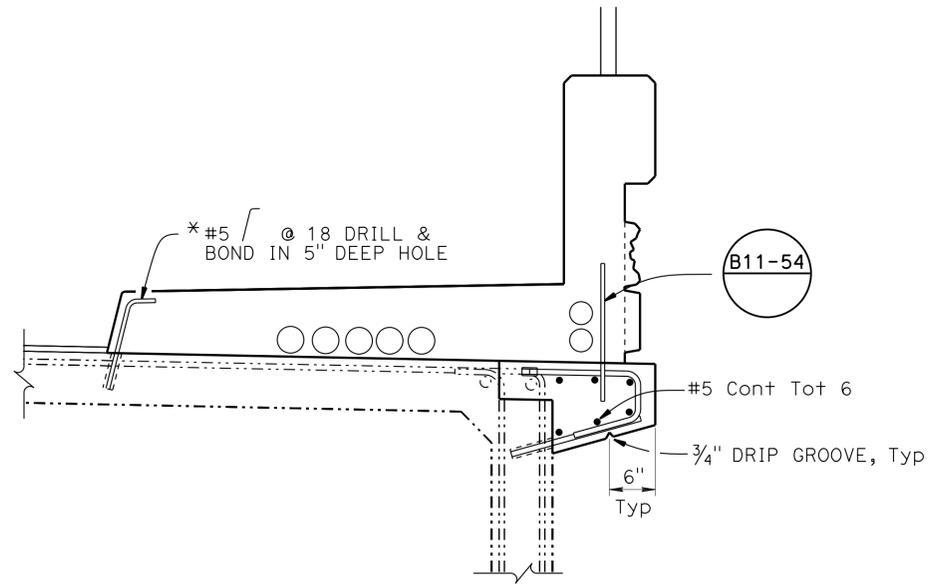
LEGEND:
 - Indicates concrete removal (portion), Low Impact Hammer

NOTE:
Right edge of deck shown, left edge of deck similar

CONCRETE REMOVAL
3" = 1'-0"



PART TYPICAL SECTION
1" = 1'-0"



NOTE:
All reinf not shown

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

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

LEGEND:
* Barrier Reinforcement
** Fence fabric to be black vinyl coated mesh

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

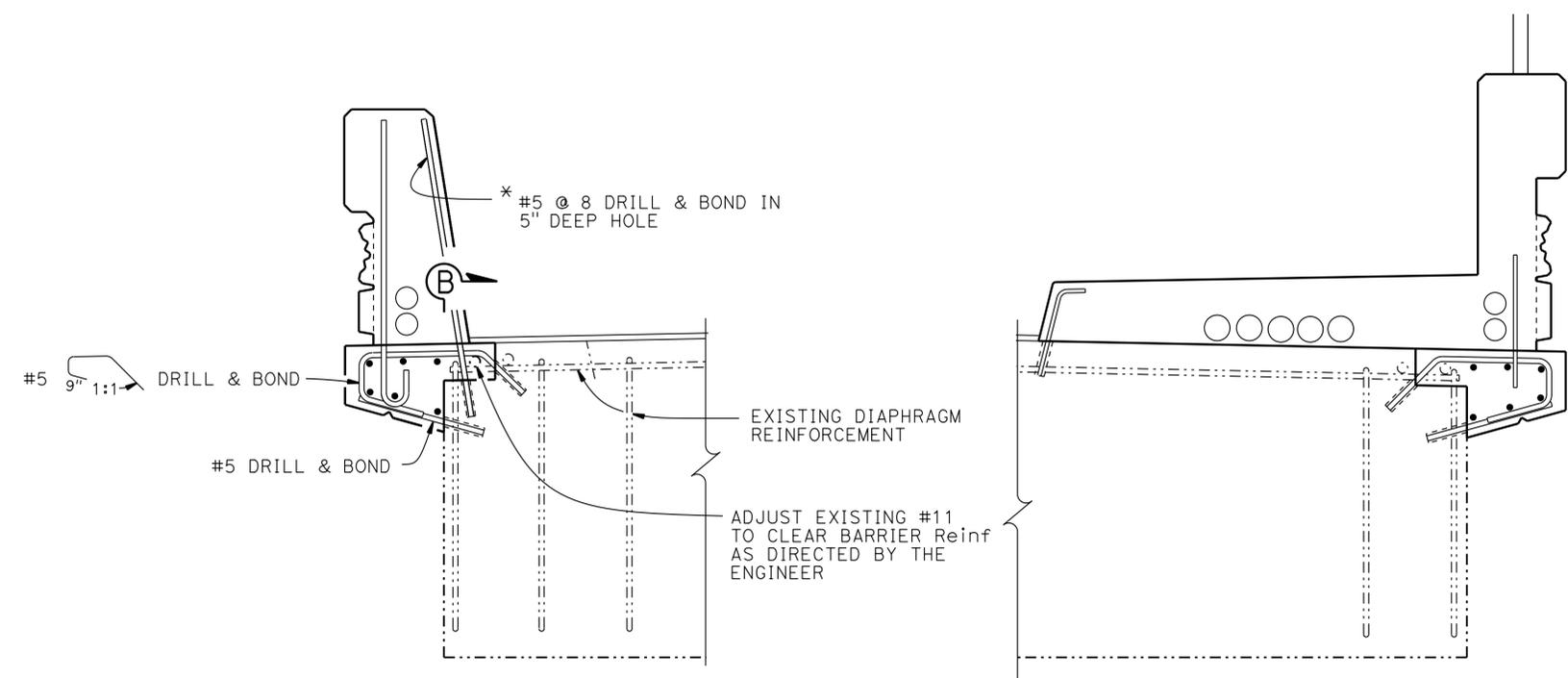
BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE)
TYPICAL SECTION NO. 1

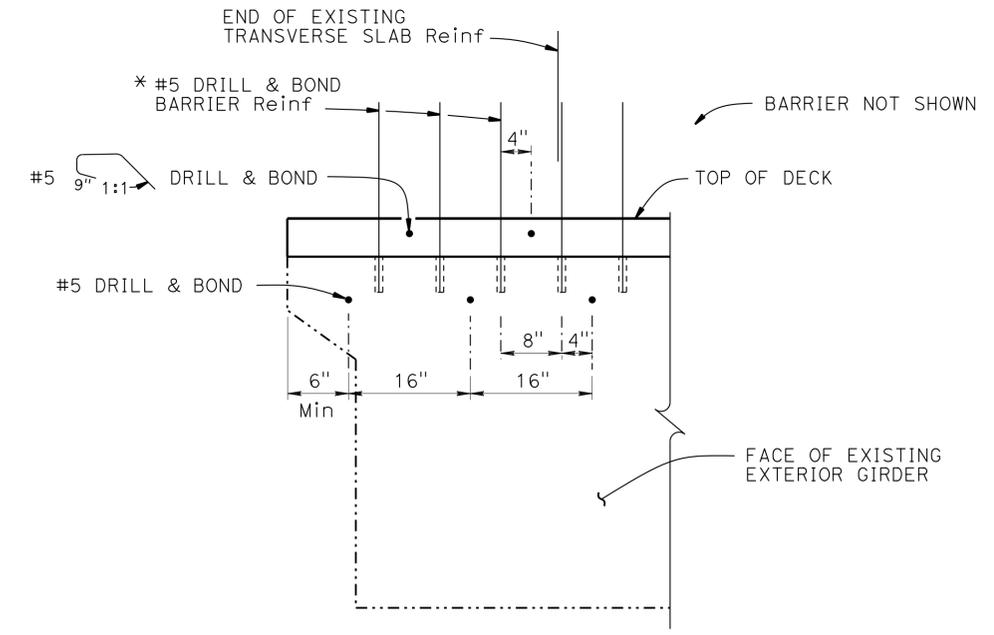
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	380	437


 REGISTERED CIVIL ENGINEER DATE 10-22-12
 6-24-13
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA



PART TYPICAL SECTION @ ABUTMENT DIAPHRAGM
1" = 1'-0"



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

LEGEND:
* Barrier Reinforcement

- NOTES:
 1. For details not shown, see "TYPICAL SECTION NO. 1" sheet
 2. All diaphragm reinforcement not shown

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen

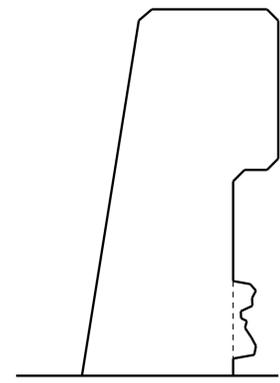
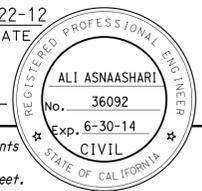
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0097
POST MILE	8.7

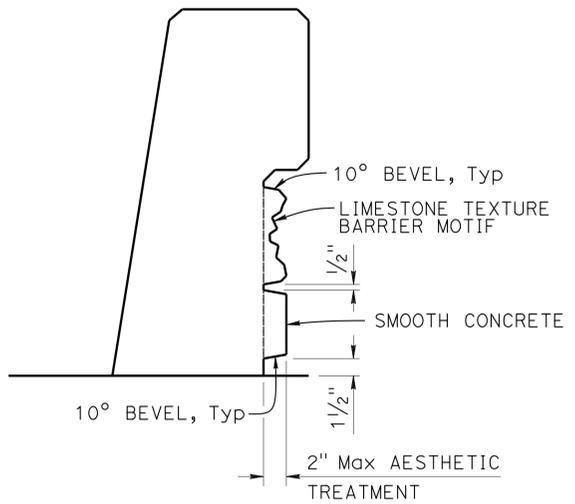
HORSESHOE BAR OC (RAISE)
TYPICAL SECTION NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	381	437
			10-22-12		
			REGISTERED CIVIL ENGINEER	DATE	
			6-24-13	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.		

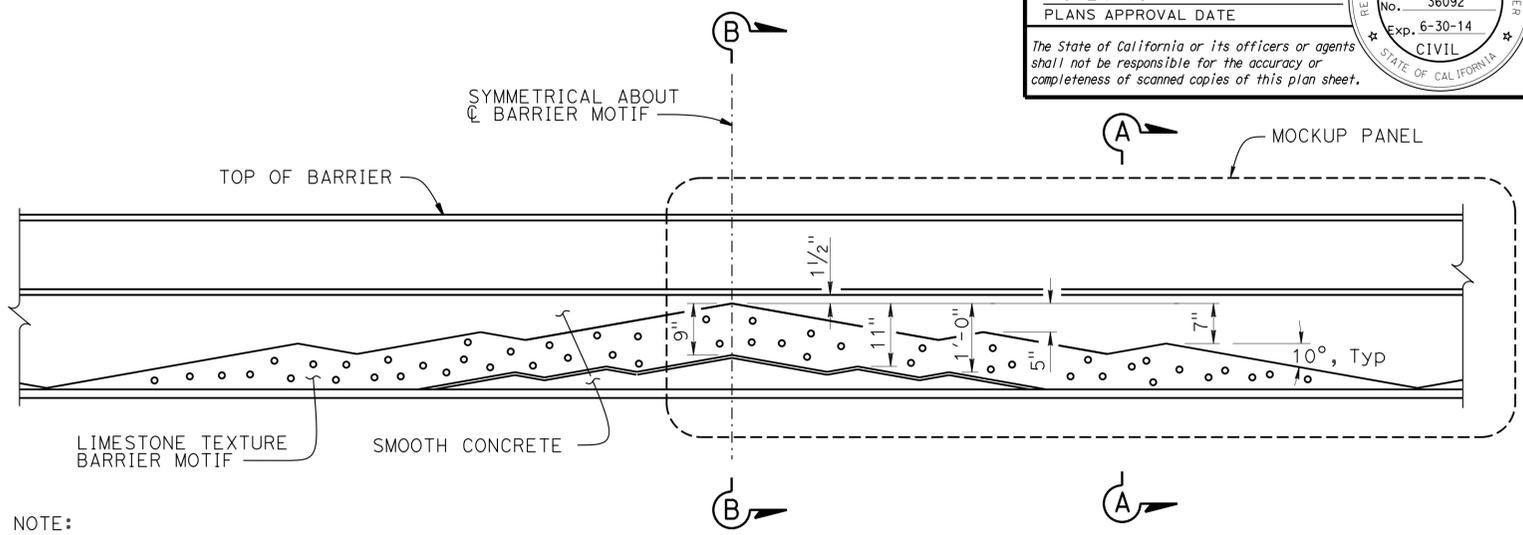


NOTE:
For details not shown, see "SECTION B - B"

SECTION A - A
1/2" = 1'-0"

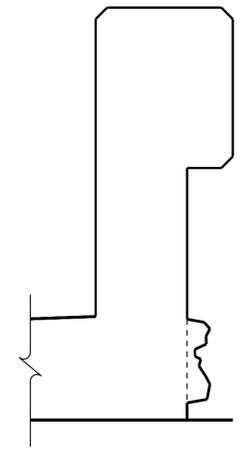


SECTION B - B
1/2" = 1'-0"



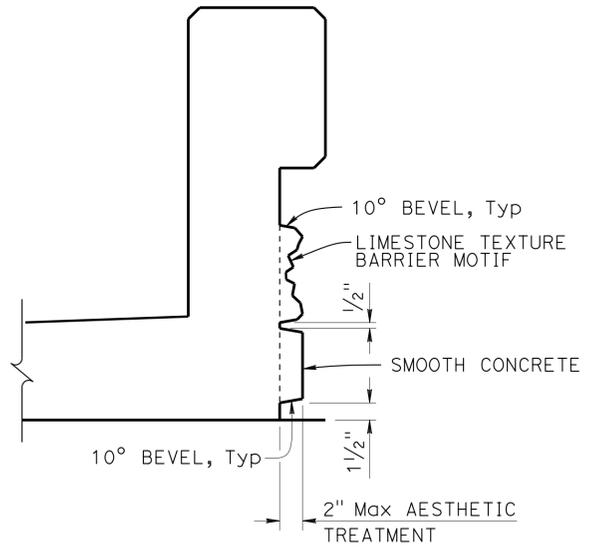
NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 26"

PART ELEVATION - CONCRETE BARRIER TYPE 732
3/4" = 1'-0"

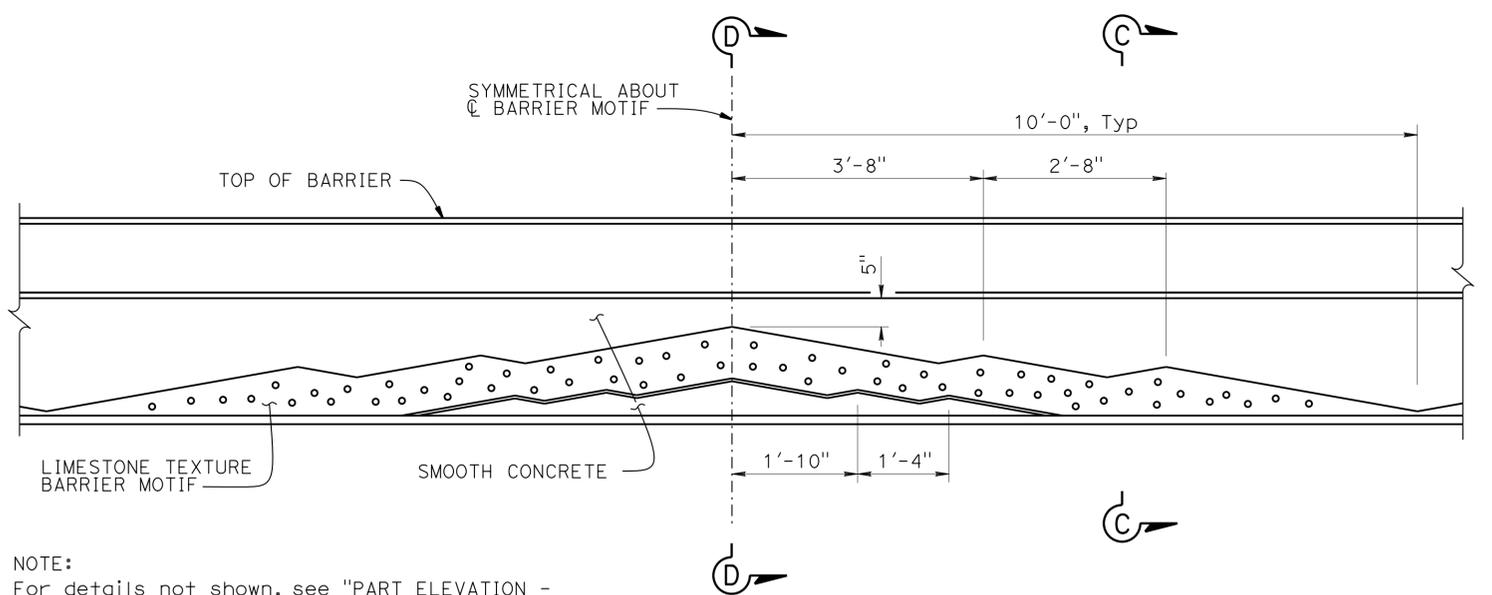


NOTE:
For details not shown, see "SECTION D - D"

SECTION C - C
1/2" = 1'-0"



SECTION D - D
1/2" = 1'-0"



NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 732"

PART ELEVATION - CONCRETE BARRIER TYPE 26
3/4" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY	David Fowkes	CHECKED	Sharon Yen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0097	HORSESHOE BAR ROAD OC (RAISE) AESTHETIC DETAILS NO. 1	
	DETAILS	BY	Nancy C Gwynn	CHECKED			Sharon Yen	POST MILE		8.7
QUANTITIES	BY	Sharon Yen	CHECKED	Louis L Shen	UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 10 OF 14

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



FILE => 19-0097-1-arch01_detail.dgn

DATE PLOTTED => 12/4/17 USERNAME => s124496

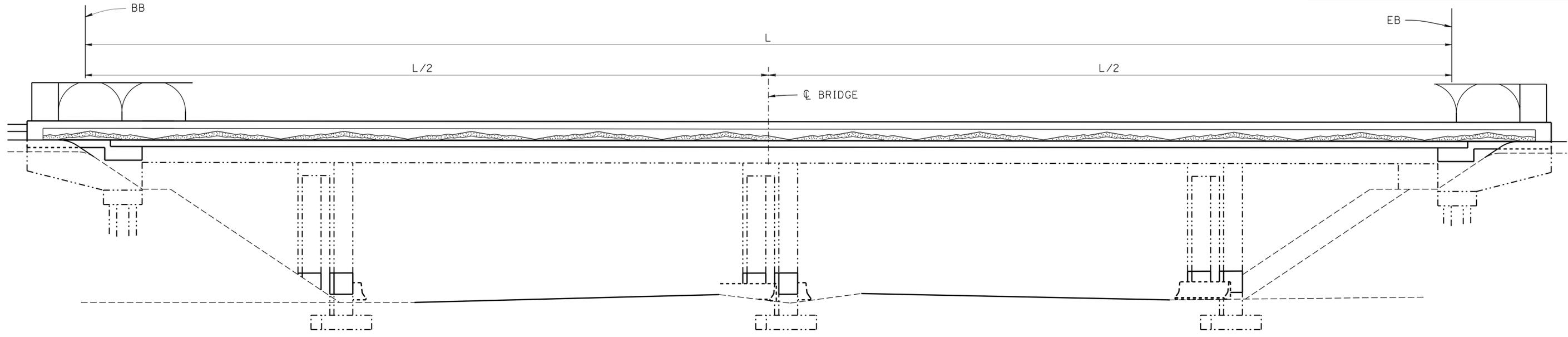
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	382	437

Ali Asmaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

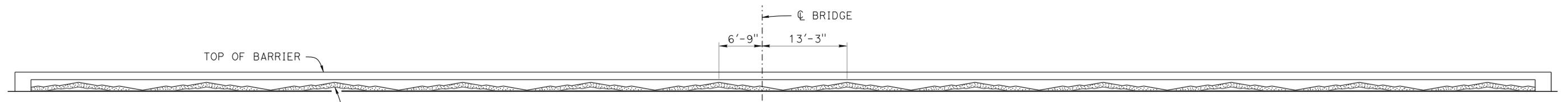
6-24-13
PLANS APPROVAL DATE

ALI ASMAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

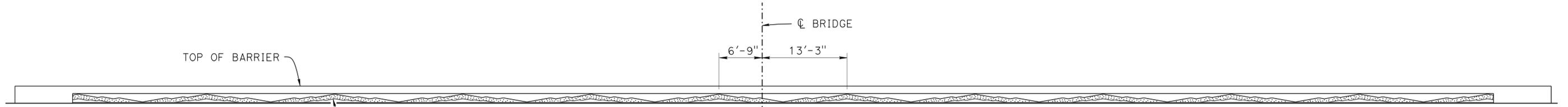
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



ELEVATION
1/8" = 1'-0"



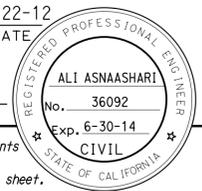
BARRIER TYPE 26 AESTHETIC TREATMENT
1/8" = 1'-0"

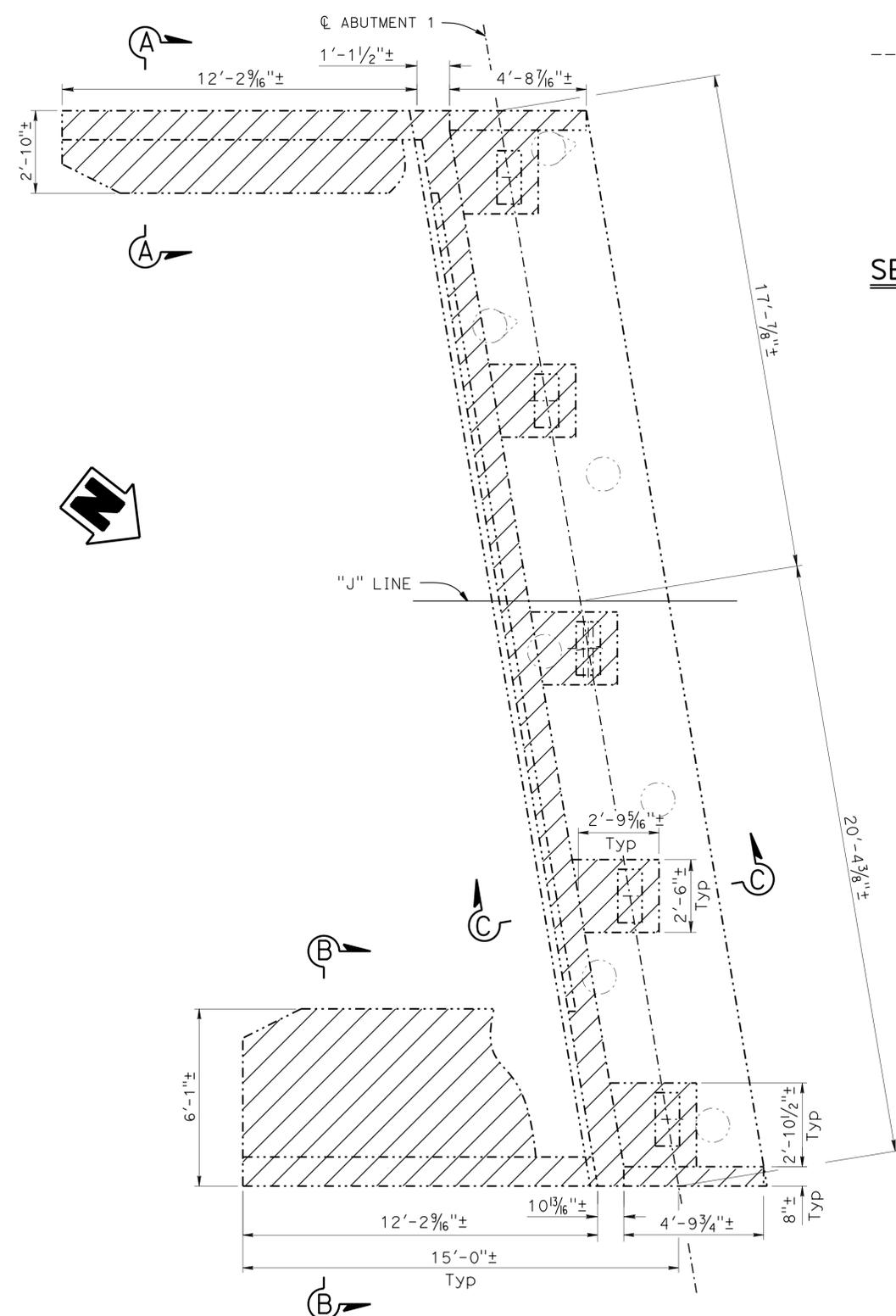


BARRIER TYPE 732 AESTHETIC TREATMENT
1/8" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

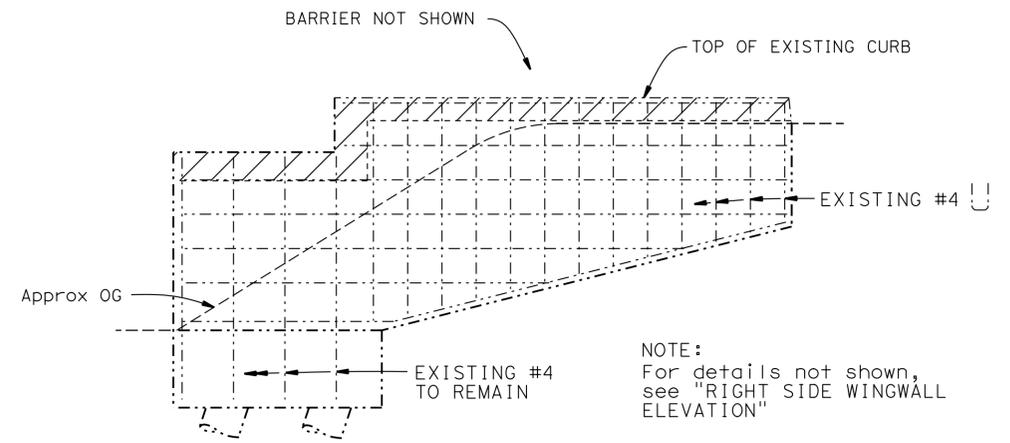
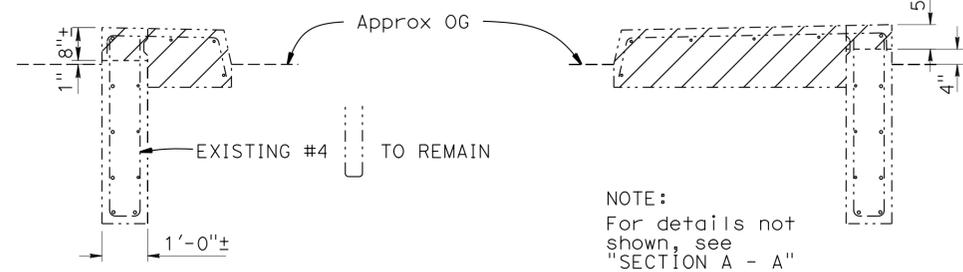
DESIGN	BY	David Fowkes	CHECKED	Sharon Yen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0097	HORSESHOE BAR OC (RAISE)		
	DETAILS	BY	Nancy C Gwynn	CHECKED			Sharon Yen	POST MILE		8.7	INDEX TO PLANS NO. 2
	QUANTITIES	BY	Sharon Yen	CHECKED			Lewis L Shen				
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)					ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3578 PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 11 OF 14	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	383	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

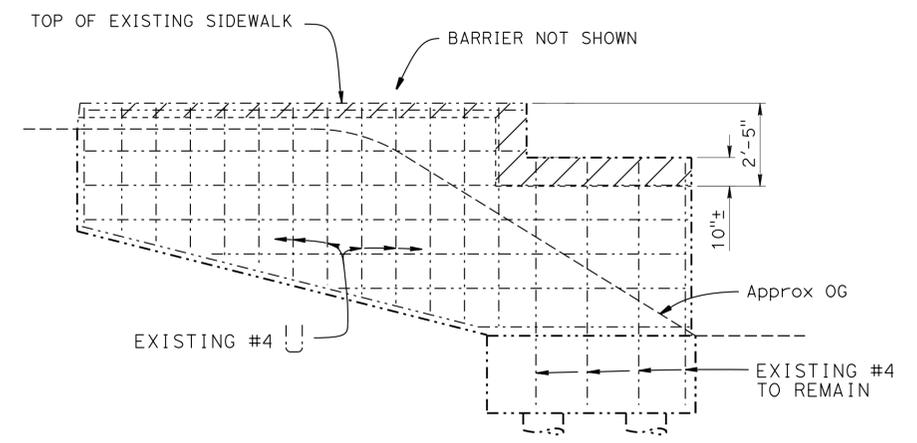


SECTION A - A
1/2" = 1'-0"

SECTION B - B
1/2" = 1'-0"



LEFT SIDE WINGWALL ELEVATION
3/8" = 1'-0"



RIGHT SIDE WINGWALL ELEVATION
3/8" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PLAN
3/8" = 1'-0"

- LEGEND:
 - Indicates existing bridge removal (portion)
- NOTES:
 1. Abutment 1 shown, Abutment 5 similar
 2. For "SECTION C - C", see "CONCRETE REMOVAL DETAILS NO. 2" sheet

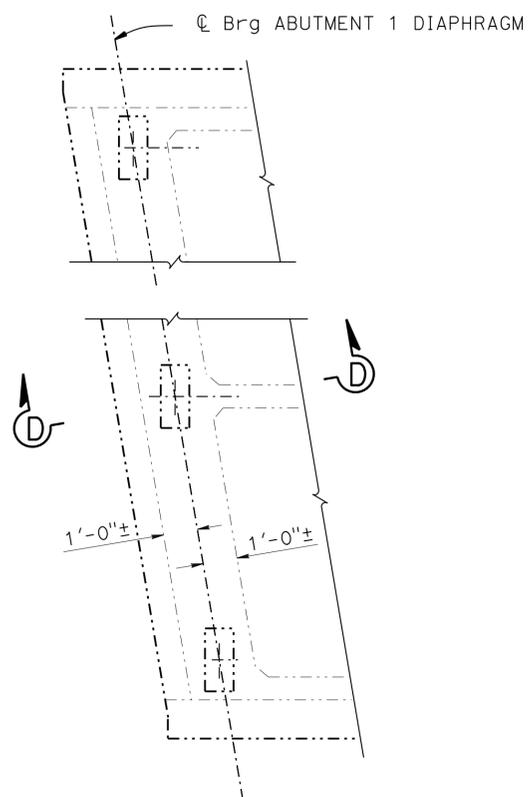
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Michael K Bergman	CHECKED Sharon Yen	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0097	HORSESHOE BAR OC (RAISE) CONCRETE REMOVAL DETAILS NO. 1	
	DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen			POST MILE	8.7		
	QUANTITIES	BY Sharon Yen	CHECKED Lewis L Shen						
				UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 9-2-11 10-12-11 11-1-12 10-18-12	SHEET 12 OF 14

USERNAME => s124486 DATE PLOTTED => 28-JUN-2013 TIME PLOTTED => 12:47

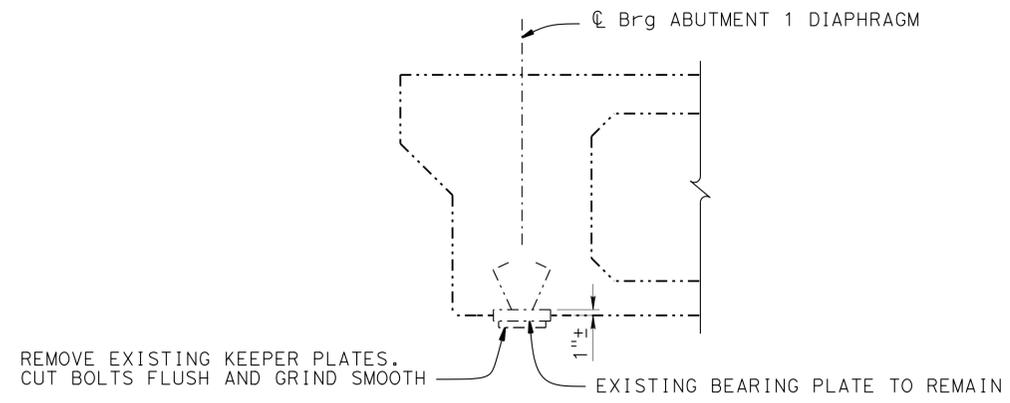
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	384	437


 REGISTERED CIVIL ENGINEER DATE 10-22-12
 PLANS APPROVAL DATE 6-24-13
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

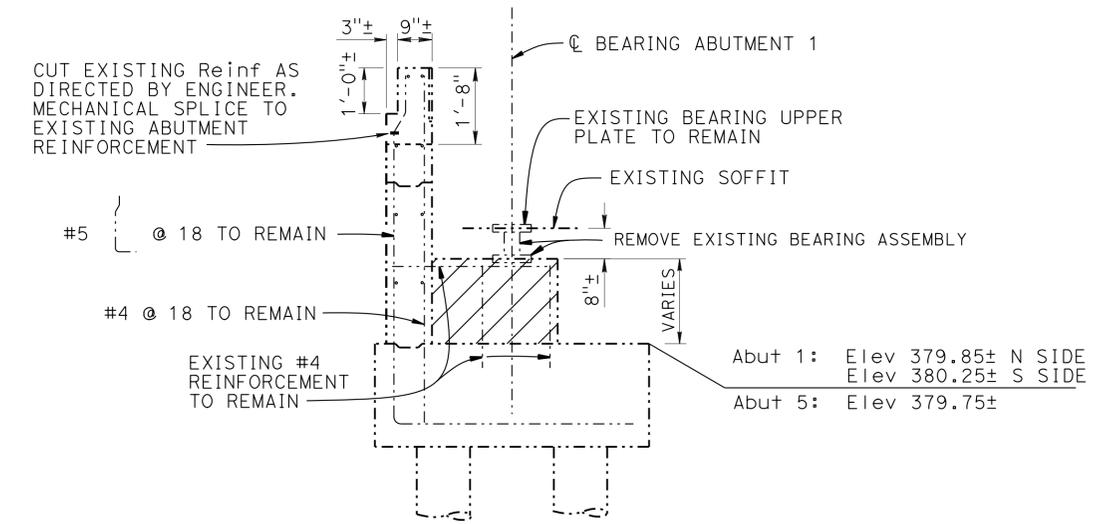
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



PART PLAN
3/8" = 1'-0"



SECTION D - D
3/4" = 1'-0"



SECTION C - C
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Abutment 1 diaphragm shown, Abutment 5 similar

DESIGN	BY Michael K Bergman	CHECKED Sharon Yen
DETAILS	BY Nancy C Gwynn	CHECKED Sharon Yen
QUANTITIES	BY Sharon Yen	CHECKED Quang H Nguyen

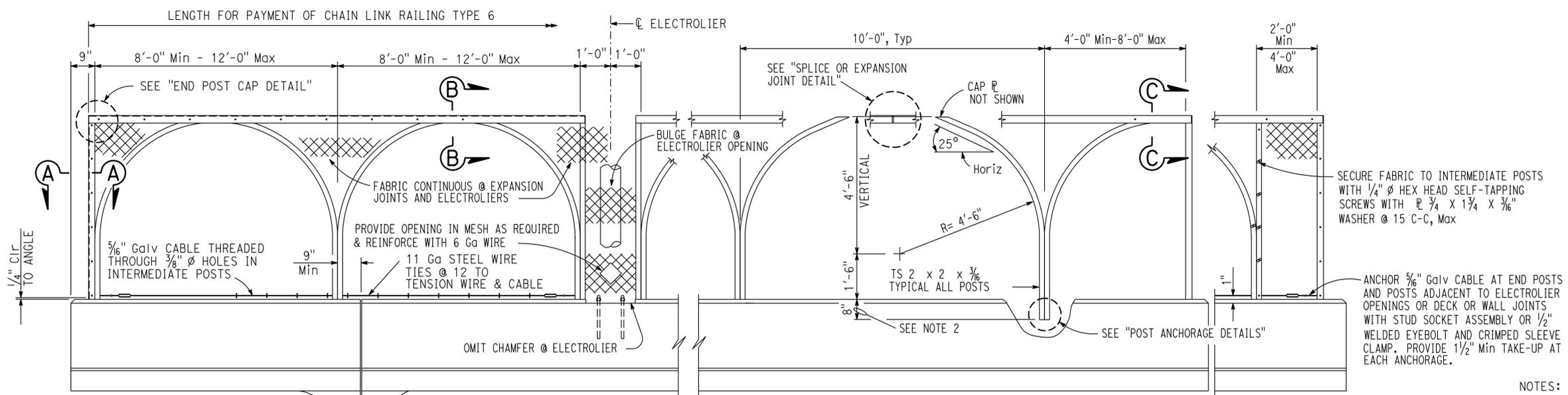
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

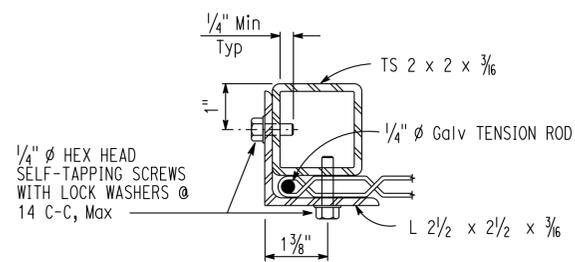
BRIDGE NO.	19-0097
POST MILE	8.7

HORSESHOE BAR OC (RAISE)
CONCRETE REMOVAL DETAILS NO. 2

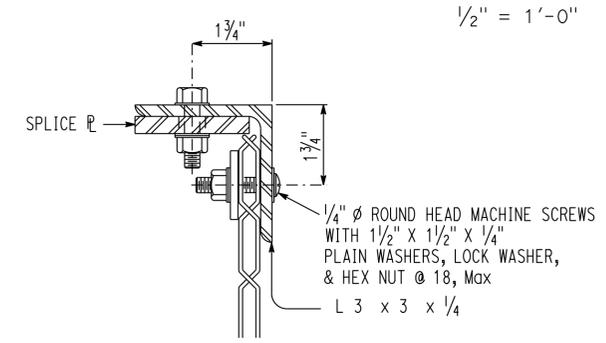
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	385	437
			10/01/12	REGISTERED CIVIL ENGINEER DATE	
			6-24-13	PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



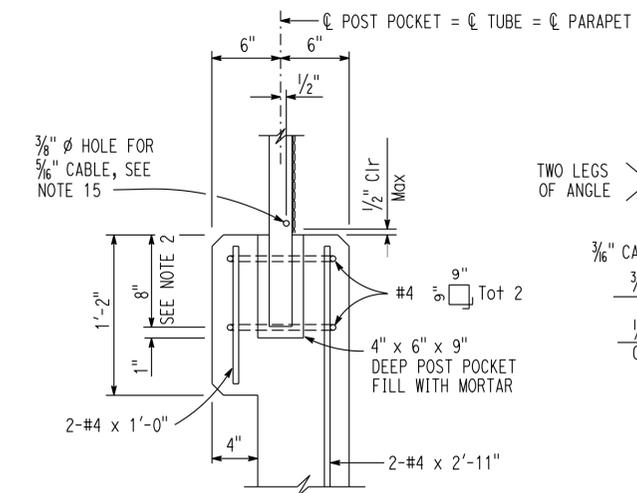
END PANEL 8'-0" - 12'-0" EXPANSION PANEL AT ELECTROLIER TYPICAL INTERIOR PANEL 10'-0", Typ END PANEL 4'-0" - 8'-0" END PANEL 2'-0" - 4'-0"



SECTION A-A
6" = 1'-0"



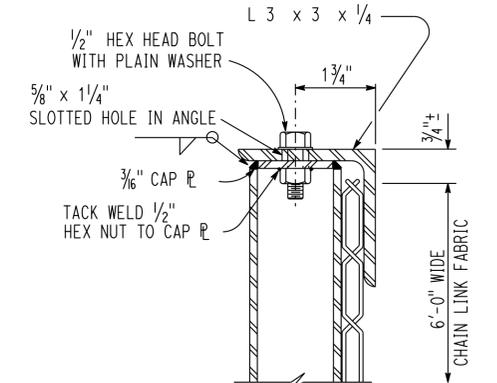
SECTION B-B
6" = 1'-0"



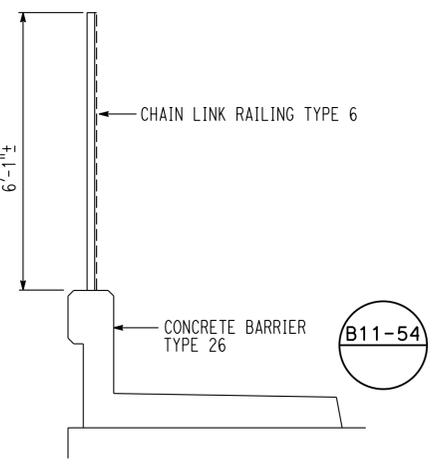
POST ANCHORAGE DETAIL
1 1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

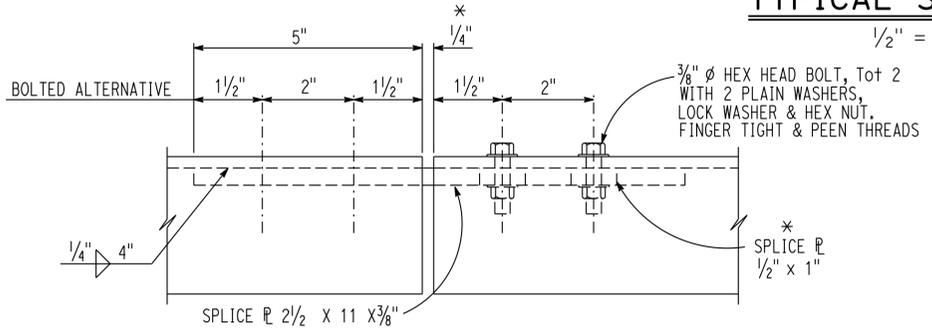
ELEVATION
1/2" = 1'-0"



SECTION C-C
6" = 1'-0"



TYPICAL SECTION
1/2" = 1'-0"



SPLICE OR EXPANSION JOINT DETAIL
6" = 1'-0"

* Expansion joint same dimension as expansion joint in deck or wall. Increase slotted hole length and splice plate length correspondingly.

- NOTES:
- Horizontal angle shall be continuous over not less than two intermediate posts except that a shorter length is permitted at expansion joints, electroliers and other rail discontinuities.
 - One post may be embedded 6" minimum to accommodate grade changes, otherwise fabricate post lengths as required.
 - Curved posts may be rotated in plan within its post pocket to accommodate curved horizontal alignment.
 - Straight posts and straight portions of curved posts shall be installed normal to bridge profile grade.
 - Top horizontal angle shall be parallel to bridge profile grade and shall be shop bent to fit horizontal curves.
 - When railing is on slope, fabric shall be placed parallel to slope.
 - Alternative details may be submitted by Contractor for Engineer's approval.
 - For details and reinforcement not shown, see "CONCRETE BARRIER TYPE 26" sheet. (B11-54)
 - See Bridge Plans for limits of Chain Link Railing Type 6.
 - Provide thimbles at all cable loops.
 - Chain link fabric to be 6'-0" wide with 1" mesh and with knuckled selvage top and bottom.
 - When railing is placed on a horizontal alignment with a radius of 150'-0" or less, thread 5/16" cable through 3/8" diameter welded eye rods embedded 4" into the top of the concrete parapet and equally spaced to limit the middle ordinate distance between 5/16" cable and the curve to 1" maximum.
 - Splices and expansion joints shall be located at center panel.
 - Holes in posts for 5/16" cable and its anchorage may be field drilled and painted with zinc rich paint.

STANDARD DRAWING	FILE NO. xs16-200	APPROVAL DATE July 2011
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STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 19-0097 POST MILE 8.7
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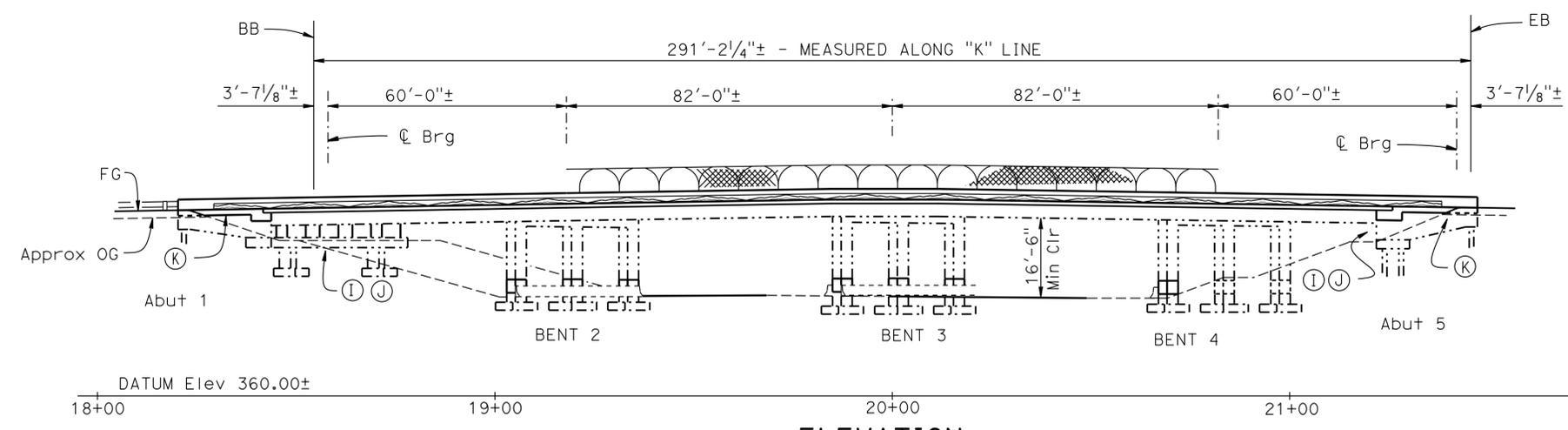
HORSESHOE BAR OC (RAISE)	
CHAIN LINK RAILING TYPE 6	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	386	437

10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE

ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

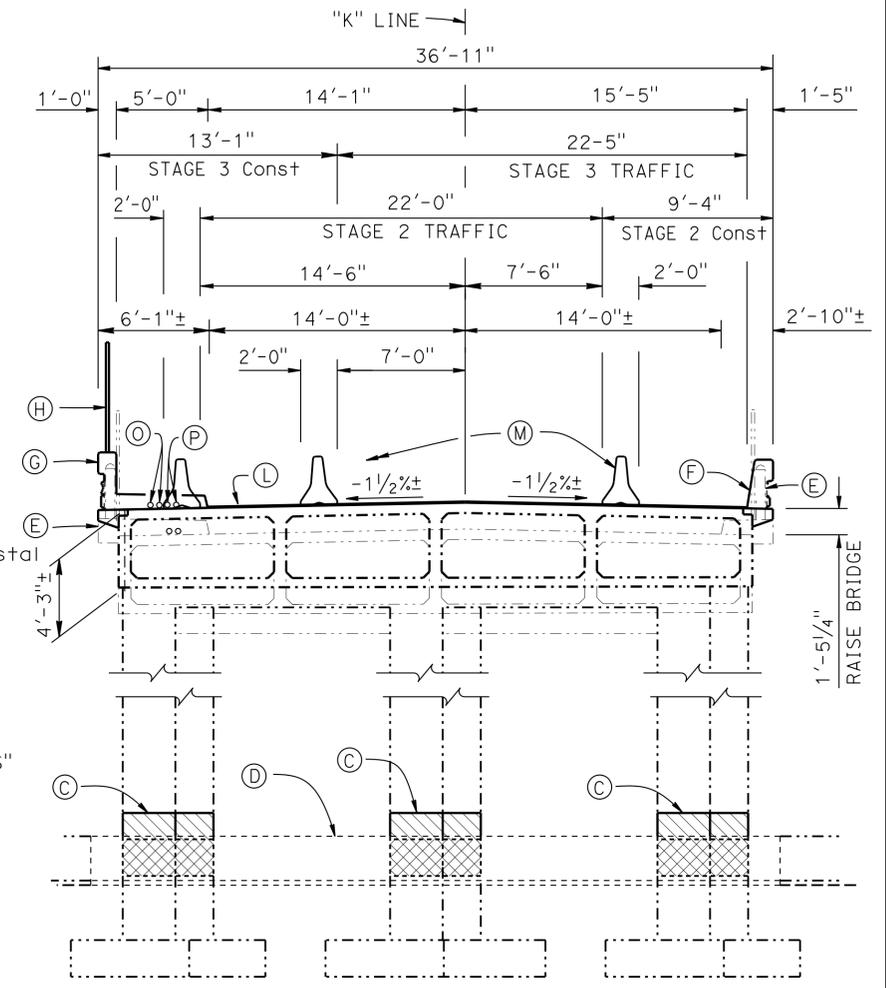
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



ELEVATION
1" = 20'

- NOTES:**
- Stage 1 Construction: Detour traffic, raise bridge, construct columns, abutment backwall, wingwalls and abutment pedestal
 - (A) Paint "Bridge No. 19-0098"
 - (B) Paint "KING ROAD OVERCROSSING"
 - (C) Remove portion of bridge & raise bridge
 - (D) Existing Barrier to be removed, see "ROAD PLANS"
 - (E) Remove existing Barrier Railing
 - (F) Concrete Barrier Type 732 (Mod) w/Aesthetic Treatment
 - (G) Concrete Barrier Type 26 (Mod) w/Aesthetic Treatment
 - (H) Chain Link Railing Type 6
 - (I) Remove part of existing expansion bearing assembly & pedestal
 - (J) Rebuild the existing pedestal & install new Elastomeric Bearing Pad
 - (K) Remove portion of existing wingwall & construct wingwall to match new bridge height
 - (L) Place 3/4" Polyester Concrete Overlay
 - (M) Temporary Railing (Type K), see "ROAD PLANS"
 - (N) Install new Joint Seal
 - (O) Utility Opening for Telephone Conduits (2), see "ROAD PLANS"
 - (P) Future Utility Opening (2)

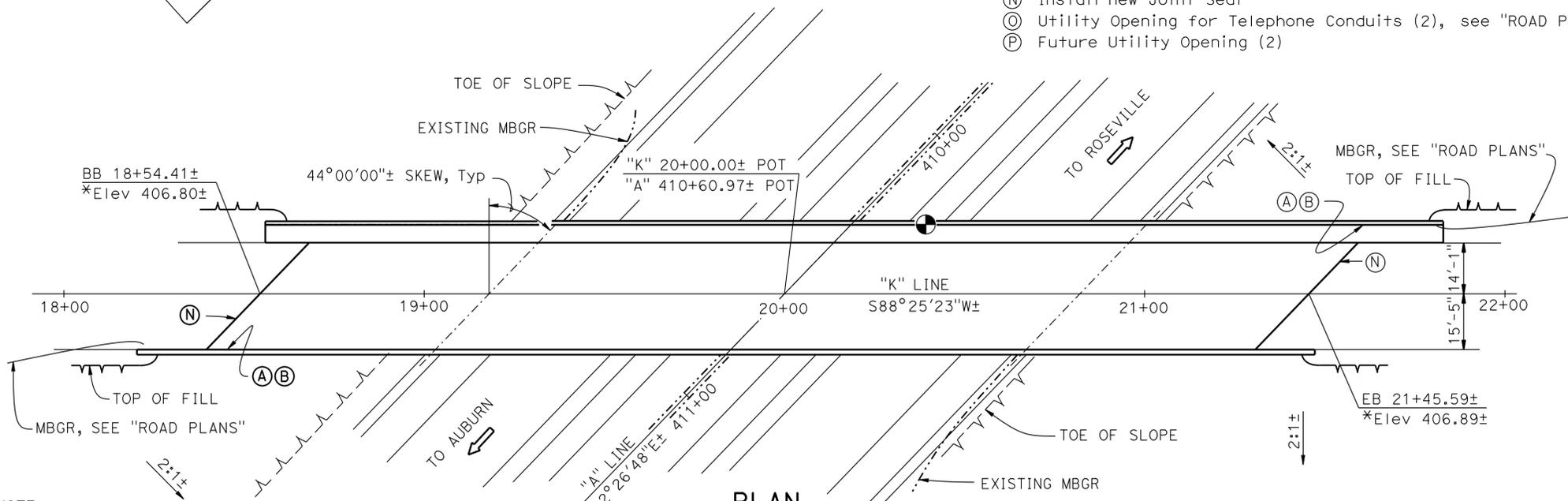
- LEGEND:**
- * The BB and EB elevations shown are after bridge raising, plus 3/4" Polyester Concrete Overlay
 - Indicates bridge removal (portion)
 - Indicates new concrete
 - Indicates existing structure
 - Indicates new construction
 - Indicates point of minimum vertical clearance



TYPICAL SECTION
1" = 5'

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	8,590	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	644	CF
PLACE POLYESTER CONCRETE OVERLAY	8,590	SQFT
BRIDGE REMOVAL (PORTION), LOCATION C	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	7	CY
STRUCTURE BACKFILL (BRIDGE)	7	CY
RAISE BRIDGE (LOCATION C)	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	70	CY
DRILL AND BOND DOWEL	242	LF
JOINT SEAL (MR 1")	105	LF
BAR REINFORCING STEEL (BRIDGE)	12,050	LB
CHAIN LINK RAILING (TYPE 6)	327	LF
CONCRETE BARRIER (TYPE 26 MODIFIED)	327	LF
CONCRETE BARRIER (TYPE 732 MODIFIED)	327	LF



PLAN
1" = 20'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE: For "GENERAL NOTES" and "INDEX TO PLANS", see "INDEX TO PLANS NO. 1" sheet

DESIGN ENGINEER Joseph E Downing	DESIGN	BY Ye Yang	CHECKED Ali Asnaashari	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0098	KING ROAD OVERCROSSING (RAISE) GENERAL PLAN
	DETAILS	BY N Gwynn/M J Chlubna	CHECKED Ali Asnaashari	LAYOUT	BY Ye Yang			CHECKED Ali Asnaashari	POST MILE	
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera	SPECIFICATIONS	BY Dave Klein	CHECKED Dave Klein	PLANS AND SPECS COMPARED	PROJECT NUMBER & PHASE:	03000004731	CONTRACT NO.:	03-3E1001

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 0 1 2 3
 UNIT: 3578
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 5-13-09, 10-18-12, 12-28-11
 SHEET 1 OF 17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plg	80	8.1/37.8	387	437

Ali Asnaashari 10-22-12
 REGISTERED CIVIL ENGINEER DATE

6-24-13
 PLANS APPROVAL DATE

ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

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GENERAL NOTES

EXISTING STRUCTURE

SPECIFICATIONS:

DESIGN:

AASHTO dated 1953 with subsequent revisions, and Bridge Department Supplement dated 1953

CONSTRUCTION:

Standard Specifications, Division of Highways, dated August 1954 and the Special Provisions

LIVE LOADING:

H20-S16-44

UNIT STRESSES:

Reinforced Concrete:

$f_s = 20,000$ psi
 $n = 10$
 $f_c = 1,200$ psi (Except as noted)
 $f_c = 1,000$ psi (Roadway slab on girders)

Structural Steel:

$f_s = 18,000$ psi

FOOTING PRESSURE:

7 tons per square foot (+sf)

PILE LOADING:

45 tons Type: Concrete

NEW CONSTRUCTION

DESIGN:

Bridge Design Specifications-April 2000 (LFD) (1996 AASHTO with Interims and Revisions by CALTRANS)

DEAD LOAD:

Include 9 psf for 3/4" polyester concrete overlay. No future additional deck overlay allowed

LIVE LOADING:

HS20-44 Permit load not considered

SEISMIC DESIGN:

See "SITE SPECIFIC ARS CURVE"

REINFORCED CONCRETE:

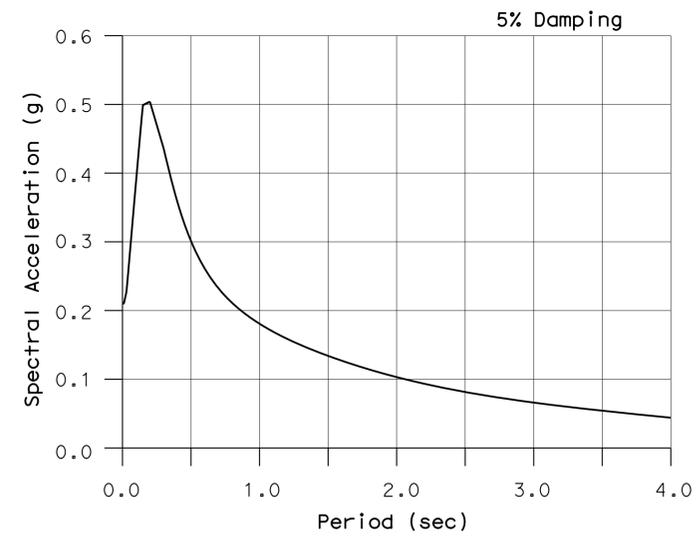
$f_y = 60$ ksi
 $f'_c = 3600$ psi
 $n = 8$

FOOTING ALLOWABLE PRESSURE:

7 tsf

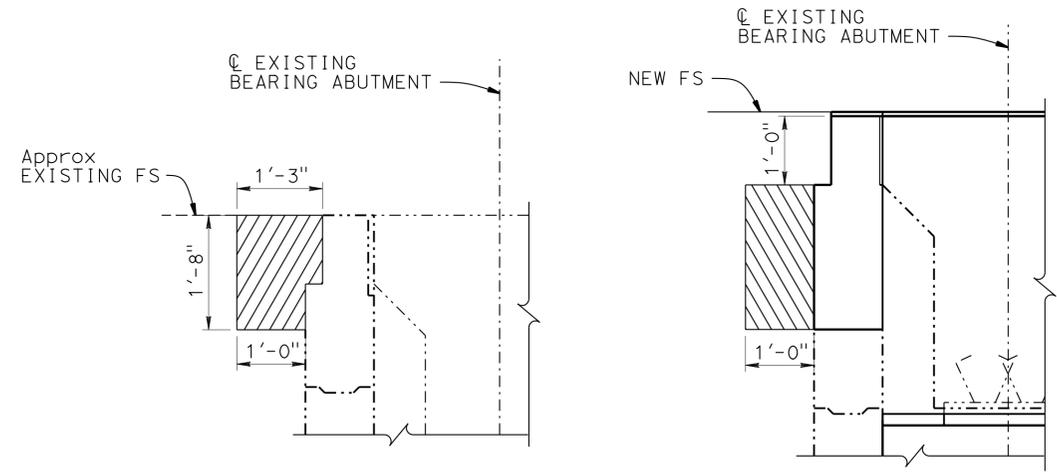
PILE LOADING:

49 Tons Type Concrete



SITE SPECIFIC ARS CURVE

NO SCALE



- INDICATES STRUCTURE EXCAVATION
- INDICATES STRUCTURE BACKFILL

NOTE:
For Wingwall backfill limits, see "ROAD PLANS"

LIMITS OF EXCAVATION AND BACKFILL

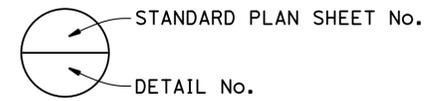
NO SCALE

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS NO. 1
3	INDEX TO PLANS NO. 2
4	ABUTMENT DETAILS NO. 1
5	ABUTMENT DETAILS NO. 2
6	ABUTMENT DETAILS NO. 3
7	ABUTMENT DETAILS NO. 4
8	ABUTMENT DETAILS NO. 5
9	BENT DETAILS
10	TYPICAL SECTION NO. 1
11	TYPICAL SECTION NO. 2
12	AESTHETIC DETAILS NO. 1
13	AESTHETIC DETAILS NO. 2
14	CONCRETE REMOVAL DETAILS NO. 1
15	CONCRETE REMOVAL DETAILS NO. 2
16	CONCRETE REMOVAL DETAILS NO. 3
17	CHAIN LINK RAILING TYPE 6

STANDARD PLANS Dated 2010

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)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B11-54	CONCRETE BARRIER TYPE 26
B11-55	CONCRETE BARRIER TYPE 732



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
INDEX TO PLANS NO. 1

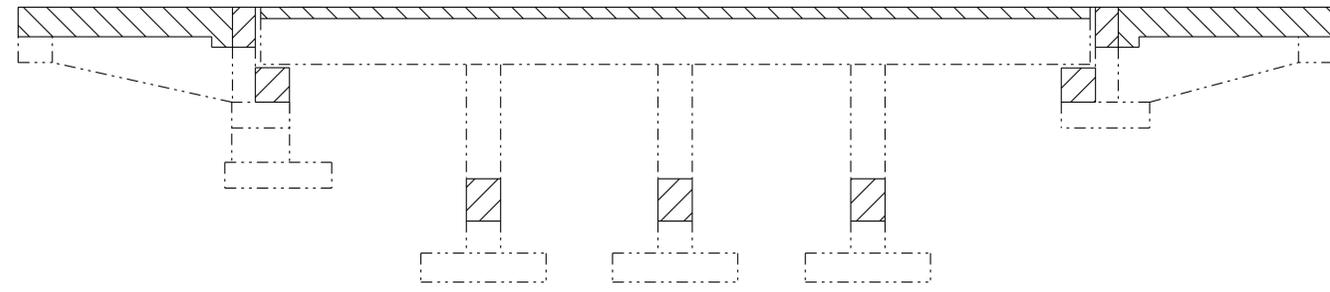
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	388	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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STRUCTURAL CONCRETE, BRIDGE

STRUCTURAL CONCRETE, BRIDGE (3,600 psi PRIOR TO TEMPORARY SUPPORT RELEASE)

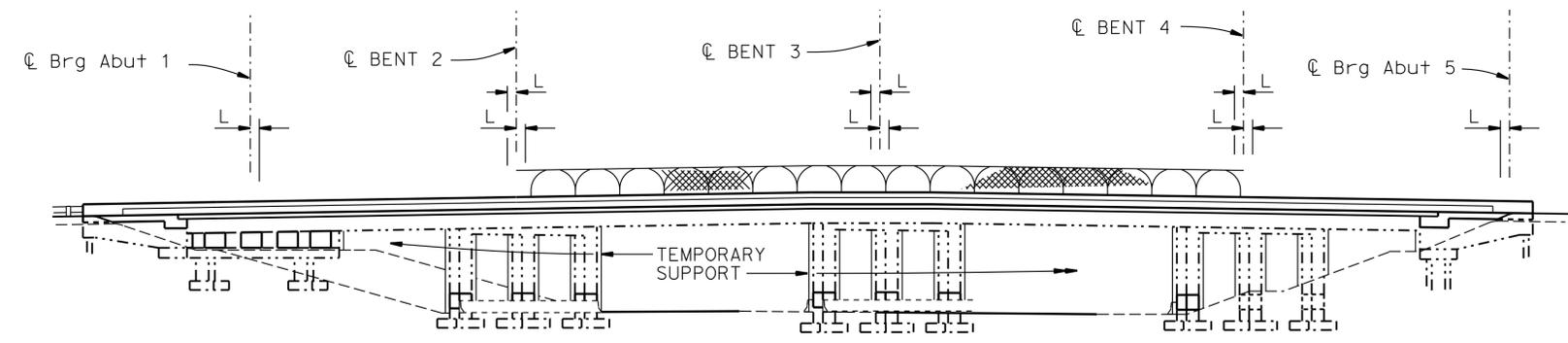
CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE

TEMPORARY SUPPORT LOADING

Required capacity of Temporary support

LOCATION	DEAD LOAD
Abutment 1	250 kips
Bent 2	995 kips
Bent 3	1050 kips
Bent 4	995 kips
Abutment 5	250 kips

Temporary support loads do not include loads the contractor places on the bridge



NOTE:
Maximum jack location eccentricity on Bent Caps or at Abutments
L = 6"

SUPPORT LOCATION
NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
INDEX TO PLANS NO. 2

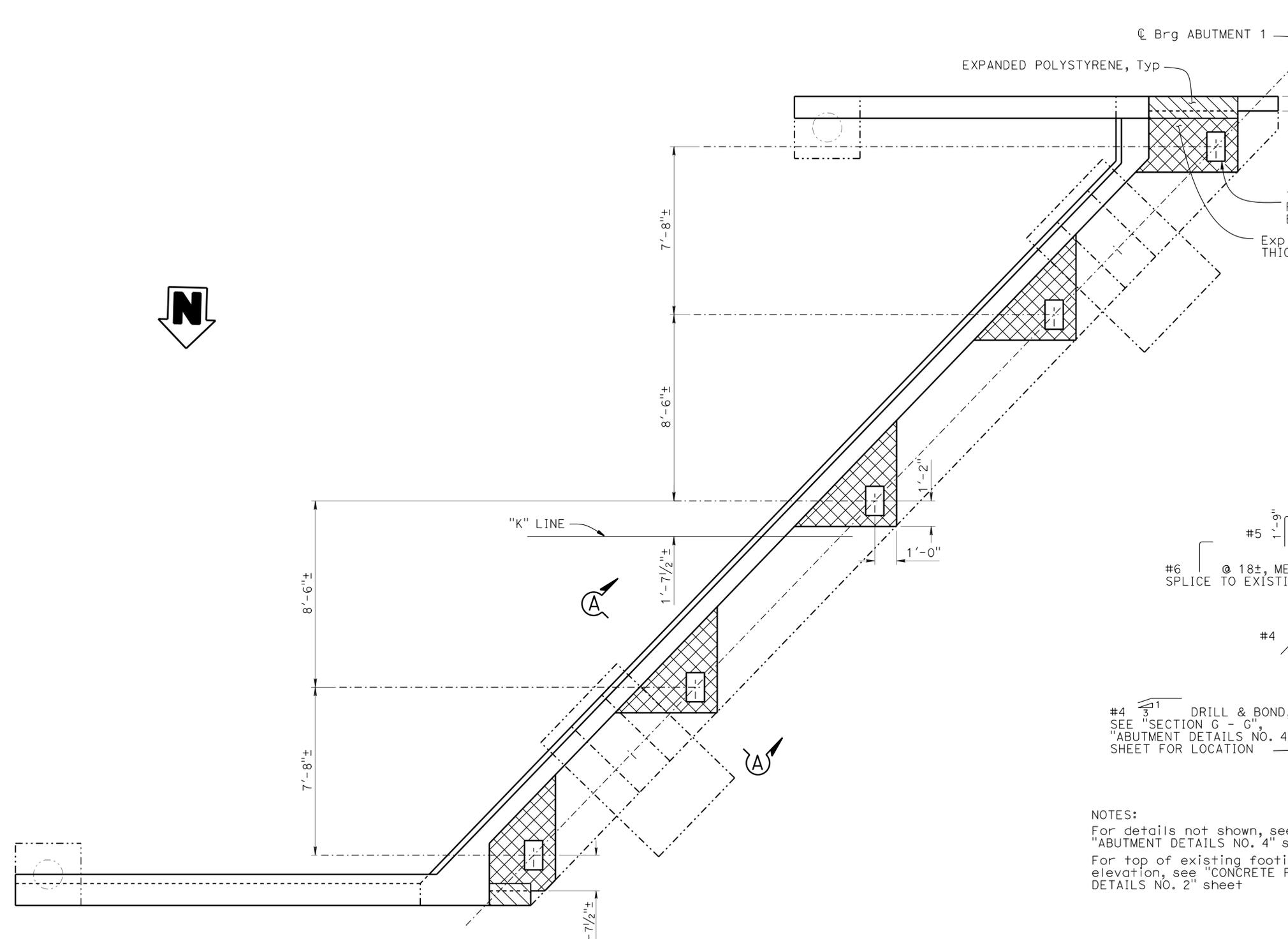
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	389	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



PLAN
3/8" = 1'-0"

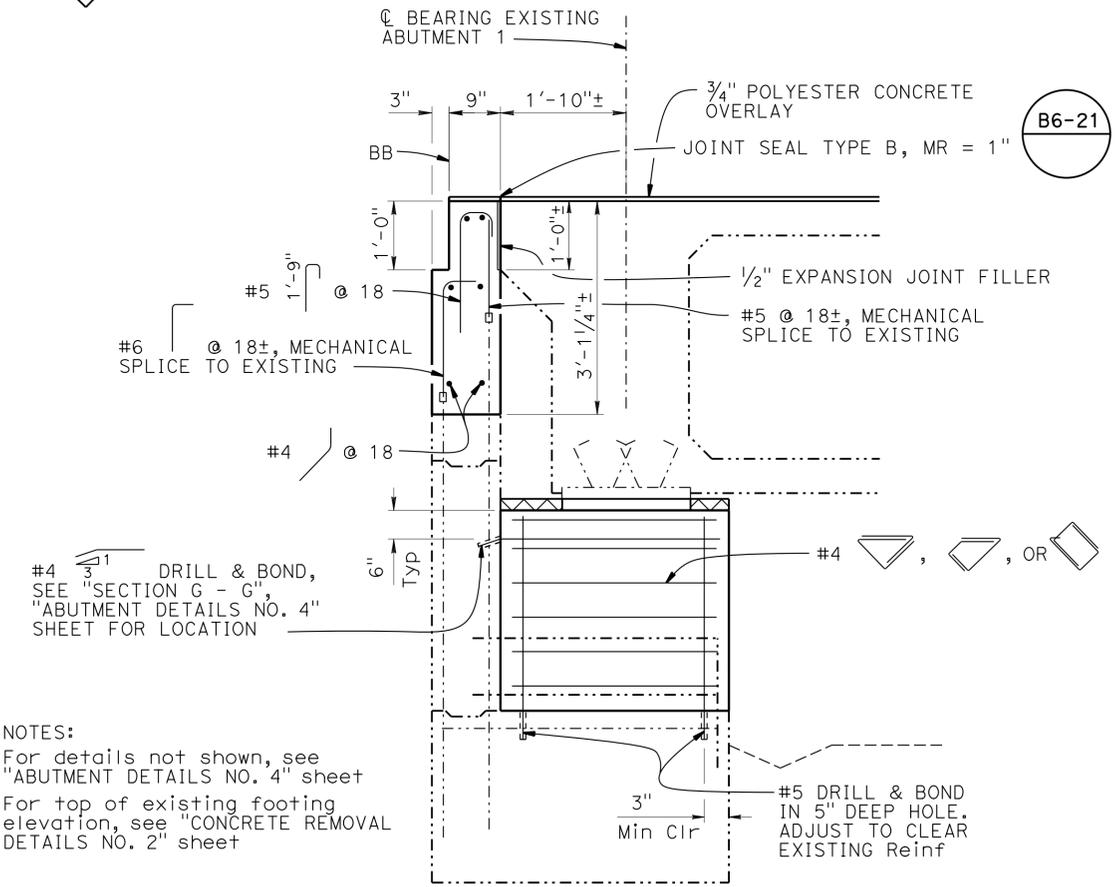
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTES:
1. New Abutment Pedestal dimensions and Wingwall length matches existing dimensions
2. For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 1" sheet

EXPANDED POLYSTYRENE, Typ

10" X 1'-4" X 2" STEEL REINFORCED ELASTOMERIC BEARING PAD, Typ

Exp POLYSTYRENE, SAME THICKNESS OF BEARING PAD



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

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 1

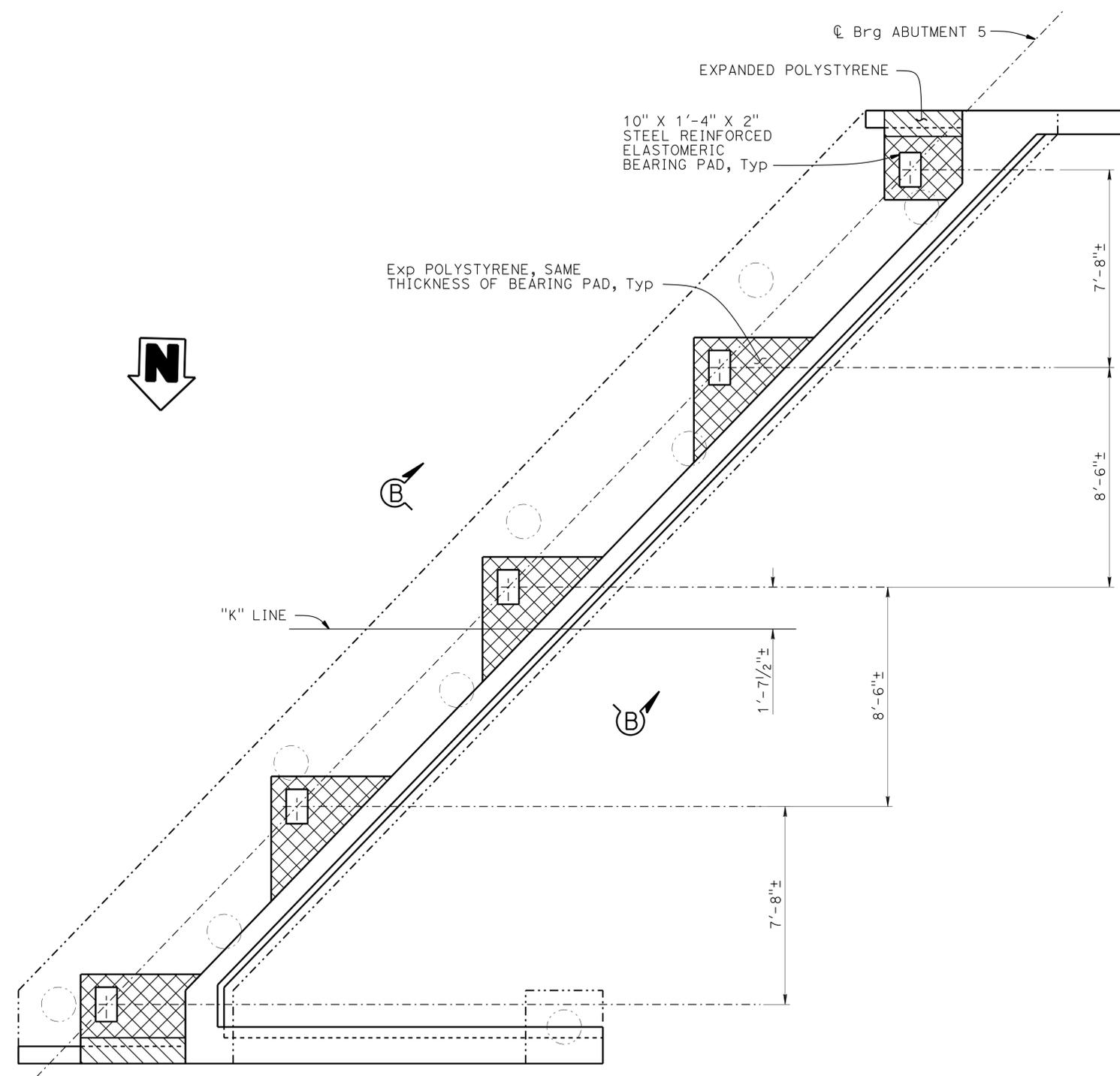
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	390	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

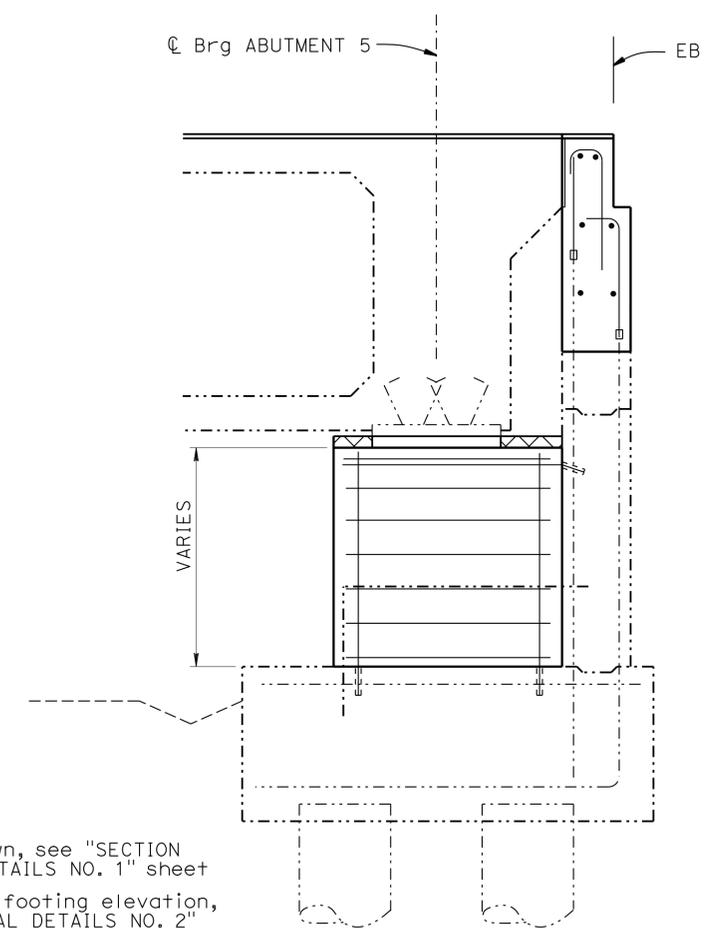
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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PLAN
 $\frac{3}{8}'' = 1'-0''$



SECTION B - B
 $\frac{3}{4}'' = 1'-0''$

NOTES:
For details not shown, see "SECTION A - A", "ABUTMENT DETAILS NO. 1" sheet
For top of existing footing elevation, see "CONCRETE REMOVAL DETAILS NO. 2" sheet

NOTE:
For details not shown, see "CONCRETE REMOVAL DETAILS NO. 2" sheet

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 2



REVISION DATES	SHEET	OF
10-23-11 12-28-11 1-24-12 2-2-12	5	17

DATE PLOTTED => 13400
28-JUN-2013
8124486

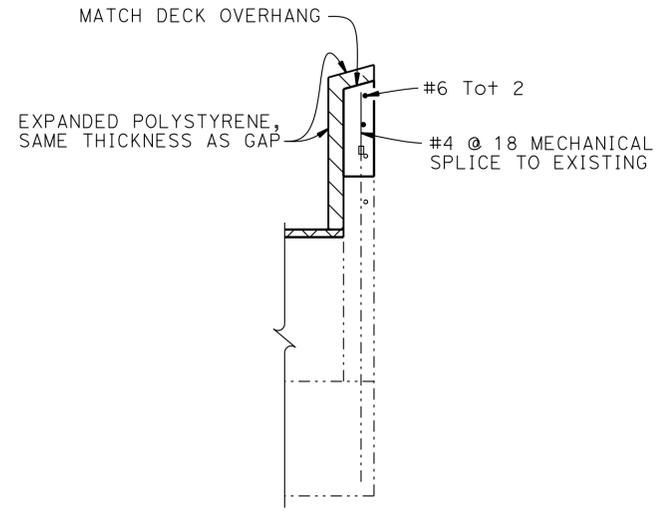
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	391	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

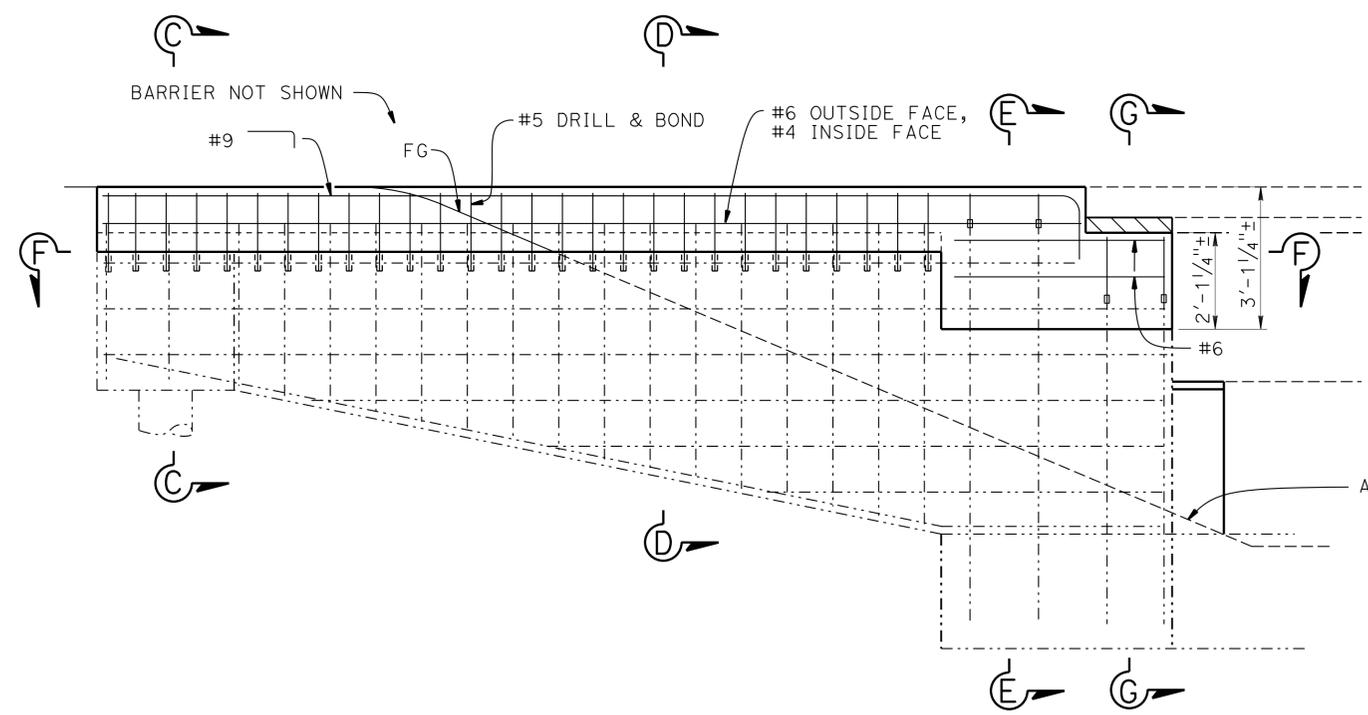
6-24-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

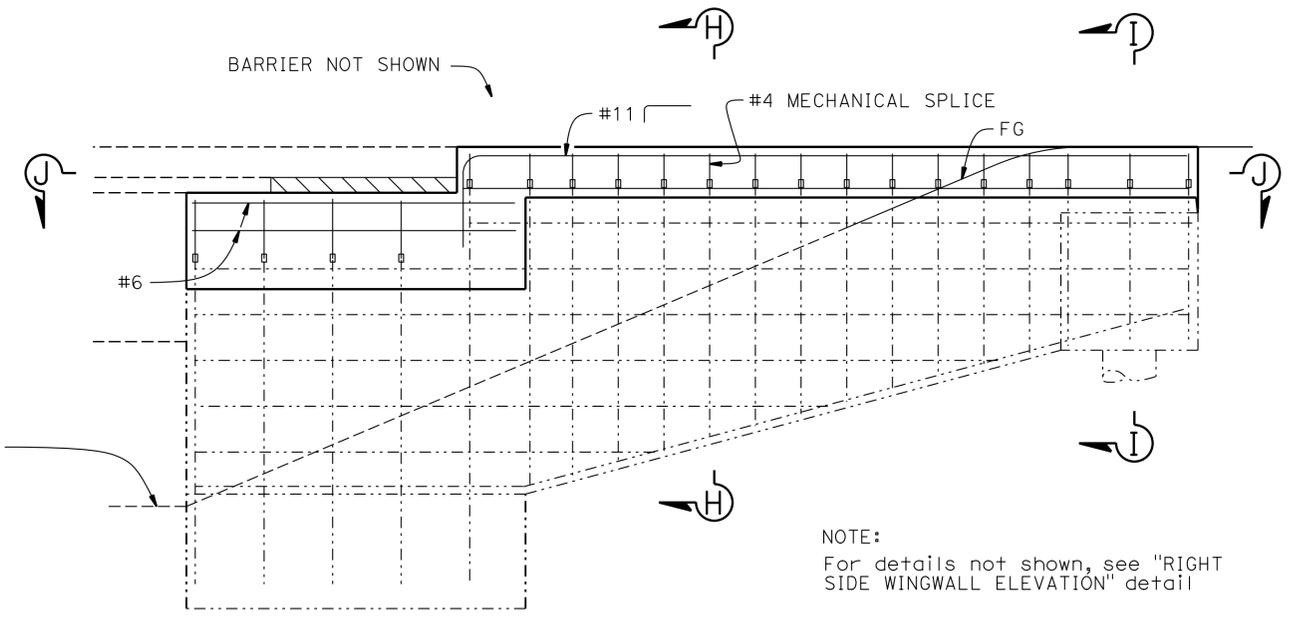
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



SECTION G - G
1/2" = 1'-0"



RIGHT SIDE WINGWALL ELEVATION
1/2" = 1'-0"



LEFT SIDE WINGWALL ELEVATION
1/2" = 1'-0"

NOTE:
For details not shown, see "RIGHT SIDE WINGWALL ELEVATION" detail

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

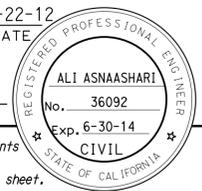
- NOTES:
1. Abutment 1 shown, Abutment 5 similar
 2. For "SECTION C - C", "SECTION D - D", "SECTION E - E", "SECTION F - F", "SECTION H - H", "SECTION I - I" and "SECTION J - J" see "ABUTMENT DETAILS NO. 5" sheet
 3. For details not shown, see "CONCRETE REMOVAL DETAILS NO. 1" and "CONCRETE REMOVAL DETAILS NO. 2" sheets

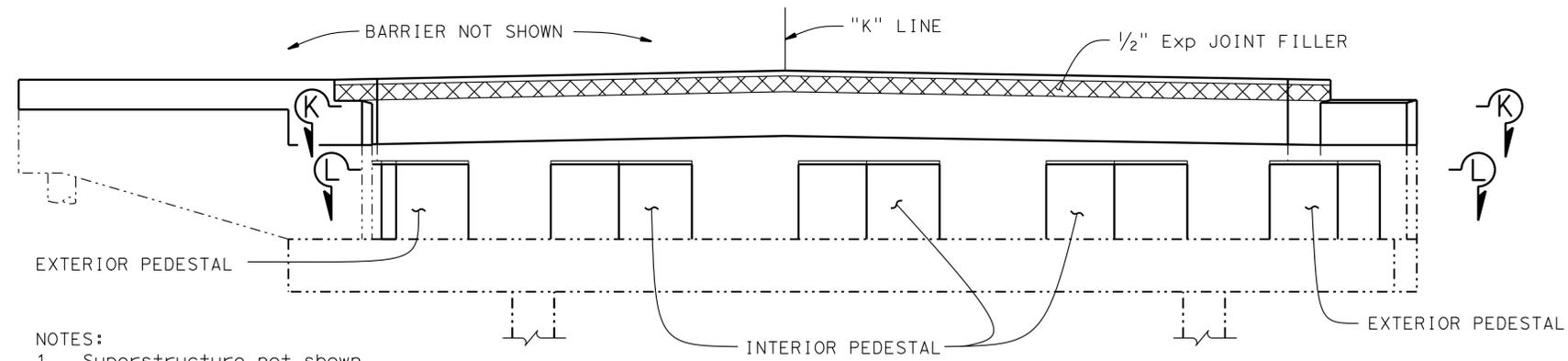
DESIGN	BY	Ye Yang	CHECKED	Ali Asnaashari	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0098	KING ROAD OVERCROSSING (RAISE) ABUTMENT DETAILS NO. 3	
	DETAILS	BY	Nancy C Gwynn	CHECKED			Ali Asnaashari	POST MILE		9.5
QUANTITIES	BY	Quang H Nguyen	CHECKED	Art V Herrera	UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731	CONTRACT NO.: 03-3E1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 6 OF 17

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 19-0098-f-ab03.dgn

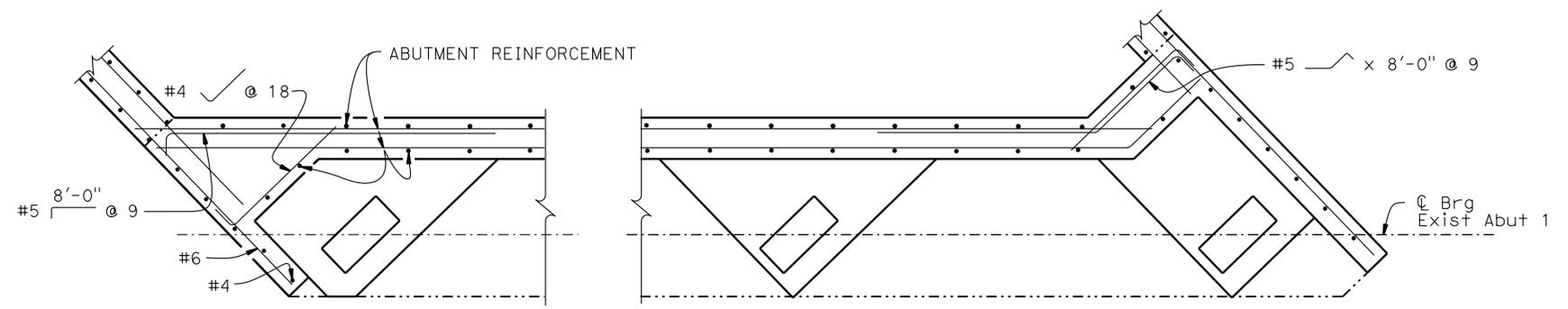
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	392	437


 10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

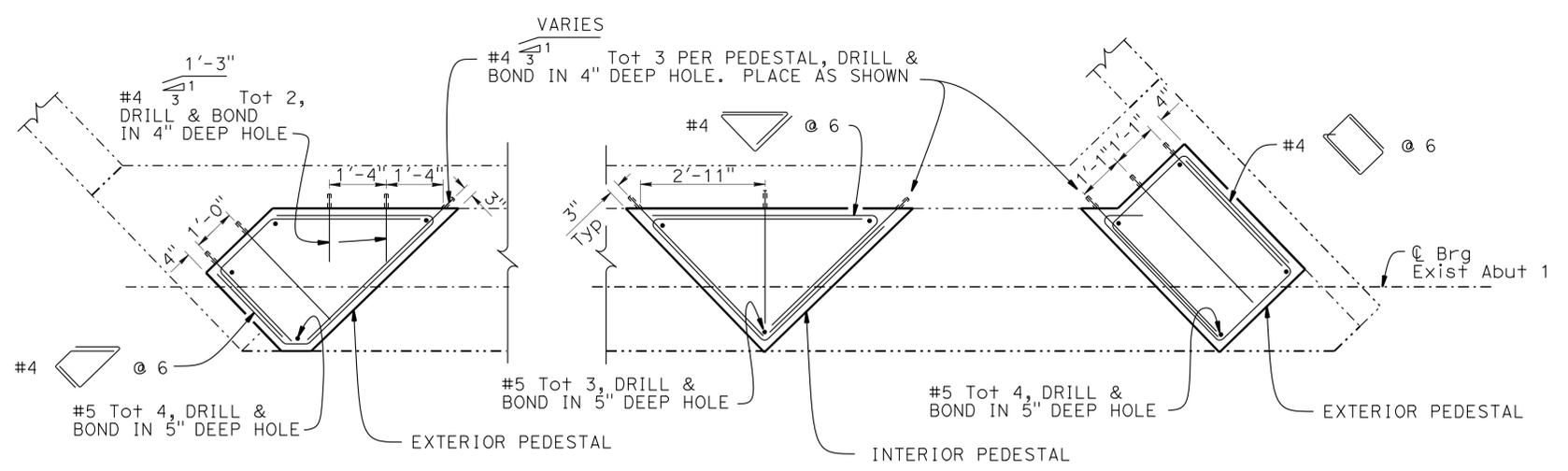


- NOTES:
 1. Superstructure not shown
 2. Abutment 1 shown, Abutment 5 similar

ELEVATION
 1/4" = 1'-0"

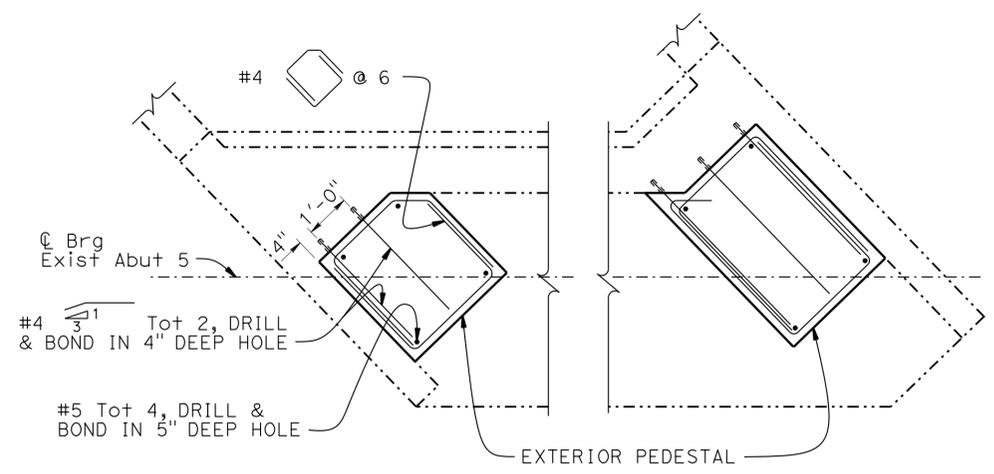


SECTION K - K
 1/2" = 1'-0"



ABUTMENT 1
SECTION L - L
 1/2" = 1'-0"

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



ABUTMENT 5
SECTION L - L
 1/2" = 1'-0"

NOTE:
 For interior pedestal and details not shown, see "ABUTMENT 1"

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

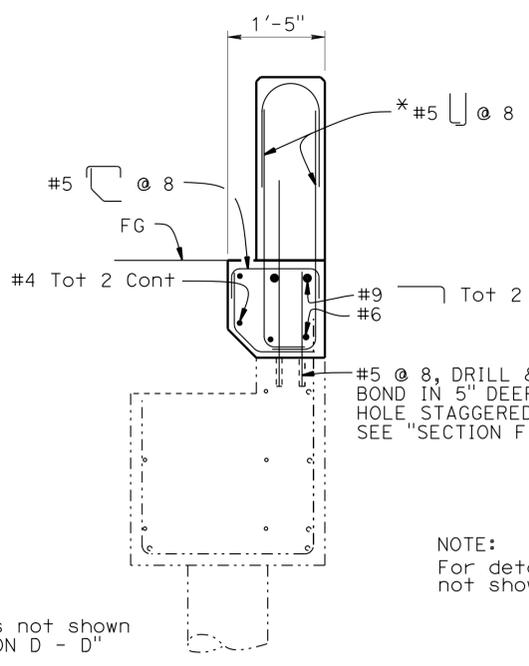
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 4

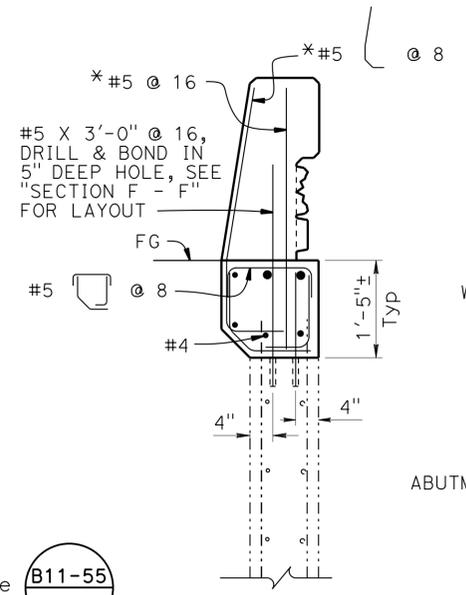
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	393	437
 REGISTERED CIVIL ENGINEER			10-22-12	DATE	
6-24-13			PLANS APPROVAL DATE		
No. 36092 Exp. 6-30-14 CIVIL			REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



SECTION C - C
3/4" = 1'-0"

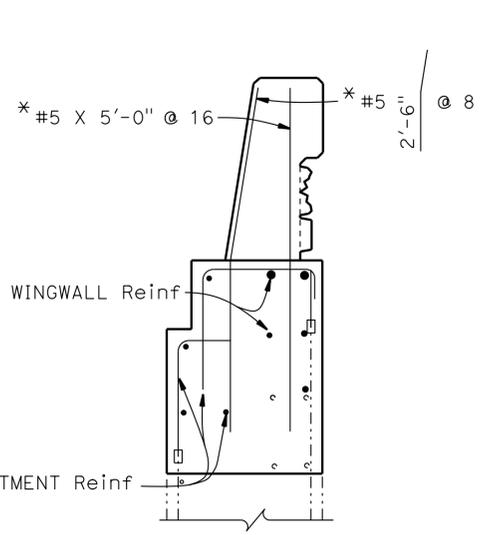
NOTE:
For details not shown see "SECTION D - D"

NOTE:
For details not shown see **B11-55**

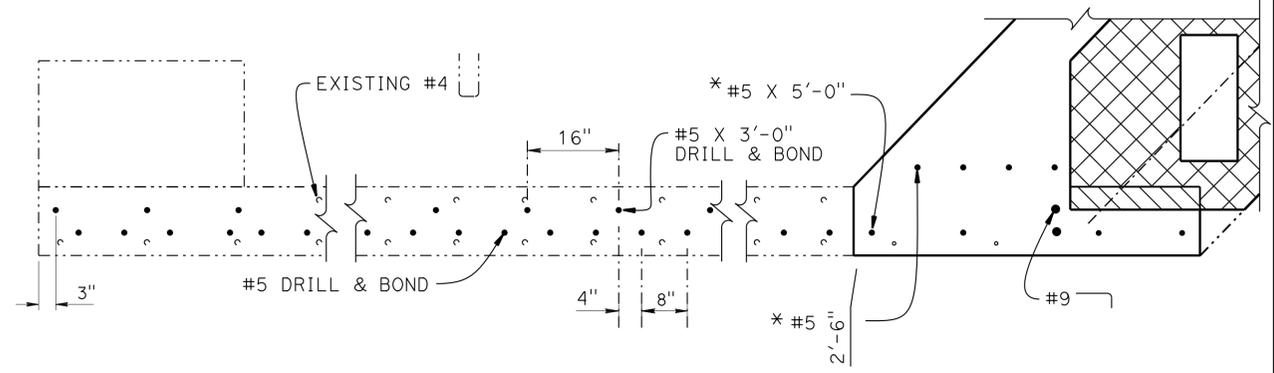


SECTION D - D
3/4" = 1'-0"

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

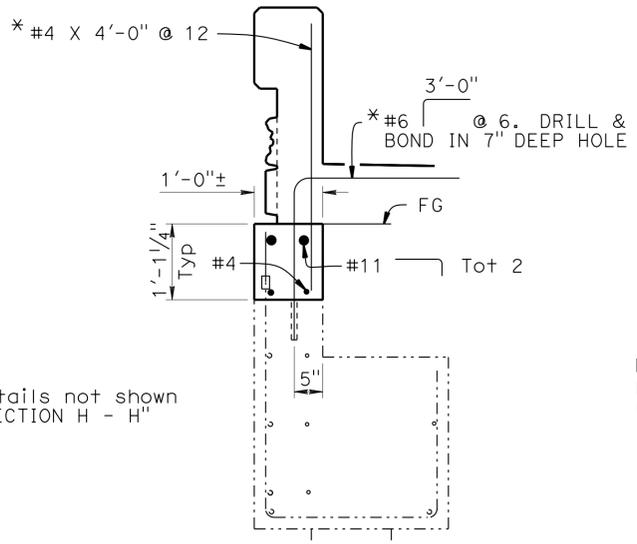


SECTION E - E
3/4" = 1'-0"



SECTION F - F
3/4" = 1'-0"

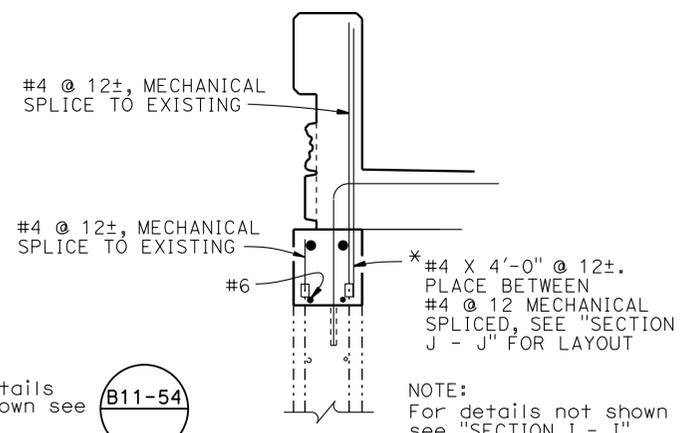
NOTE:
All reinforcement not shown



SECTION I - I
3/4" = 1'-0"

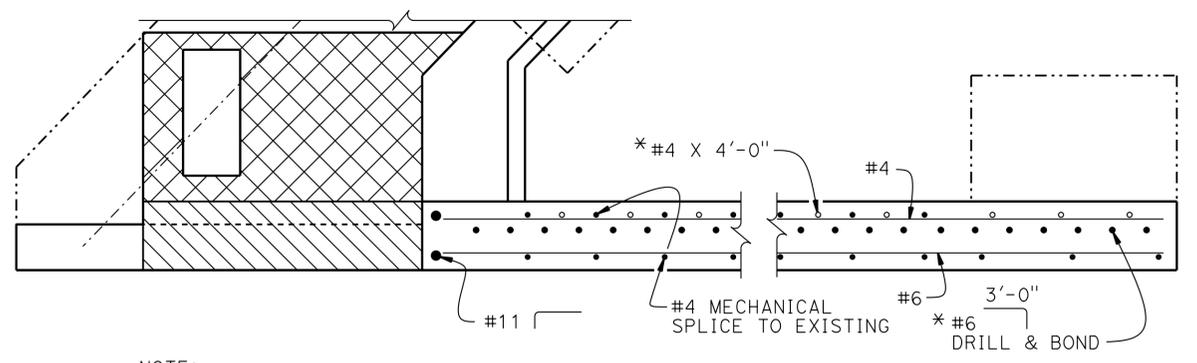
NOTE:
For details not shown see "SECTION H - H"

NOTE:
For details not shown see **B11-54**



SECTION H - H
3/4" = 1'-0"

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



SECTION J - J
3/4" = 1'-0"

NOTE:
All reinforcement not shown

LEGEND:
*Barrier Reinforcement

- NOTES:
1. For location of "SECTION C - C", "SECTION D - D", "SECTION E - E", "SECTION F - F", "SECTION H - H", "SECTION I - I" and "SECTION J - J", see "ABUTMENT DETAILS NO. 3" sheet
 2. For dimensions not shown, see "CONCRETE REMOVAL DETAILS NO. 1" sheet
 3. Chain Link Railing not shown

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

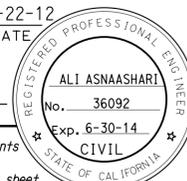
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

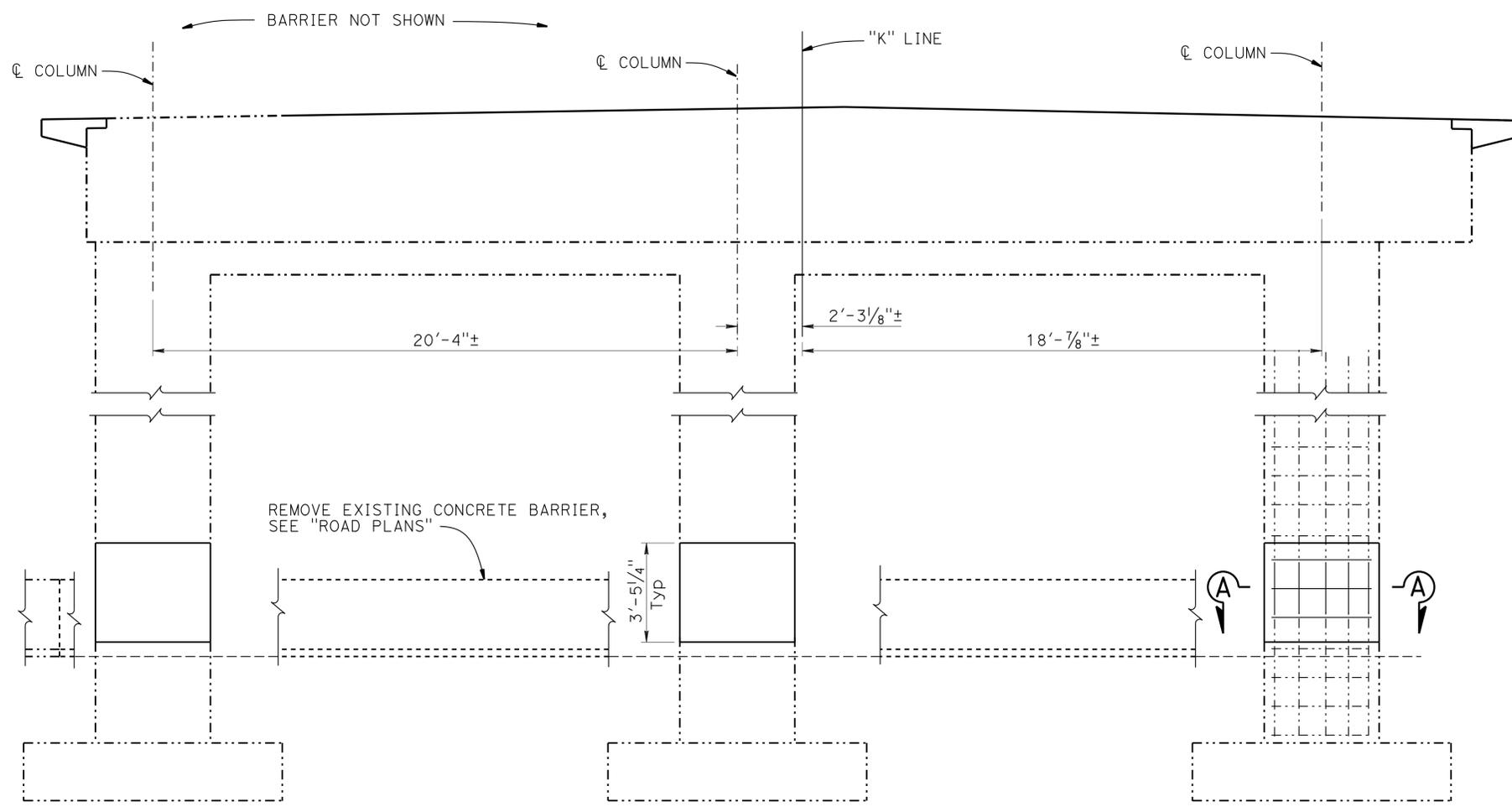
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

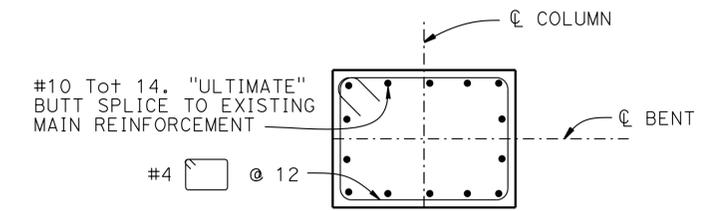
KING ROAD OVERCROSSING (RAISE)
ABUTMENT DETAILS NO. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	394	437


 10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
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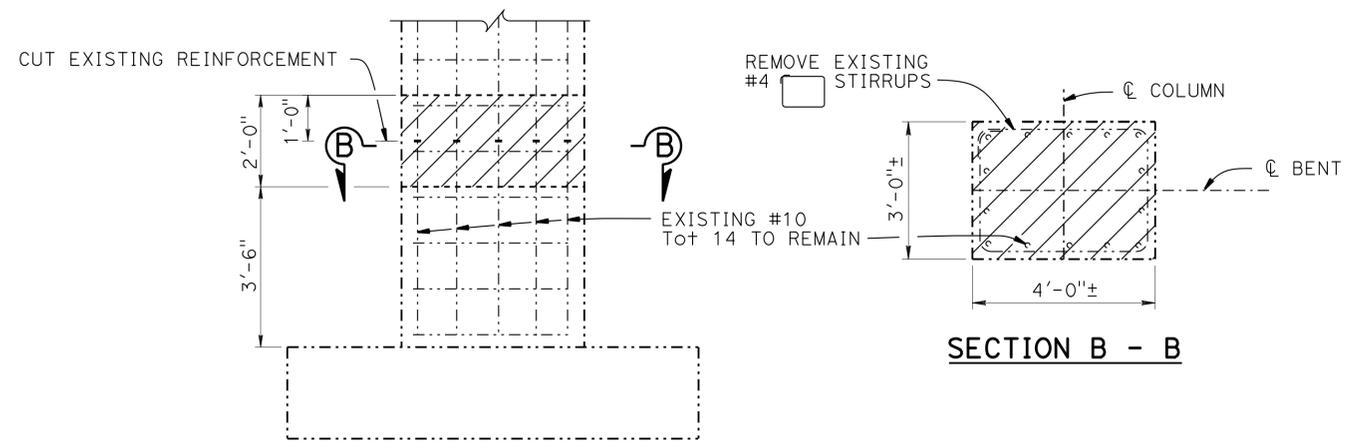


ELEVATION
3/8" = 1'-0"



SECTION A - A
1/2" = 1'-0"

NOTE:
For details not shown, see "SECTION B - B"



PART ELEVATION

SECTION B - B

LEGEND:
 - Indicates bridge removal (portion)

CONCRETE REMOVAL AT COLUMNS
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Details are typical for all columns

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

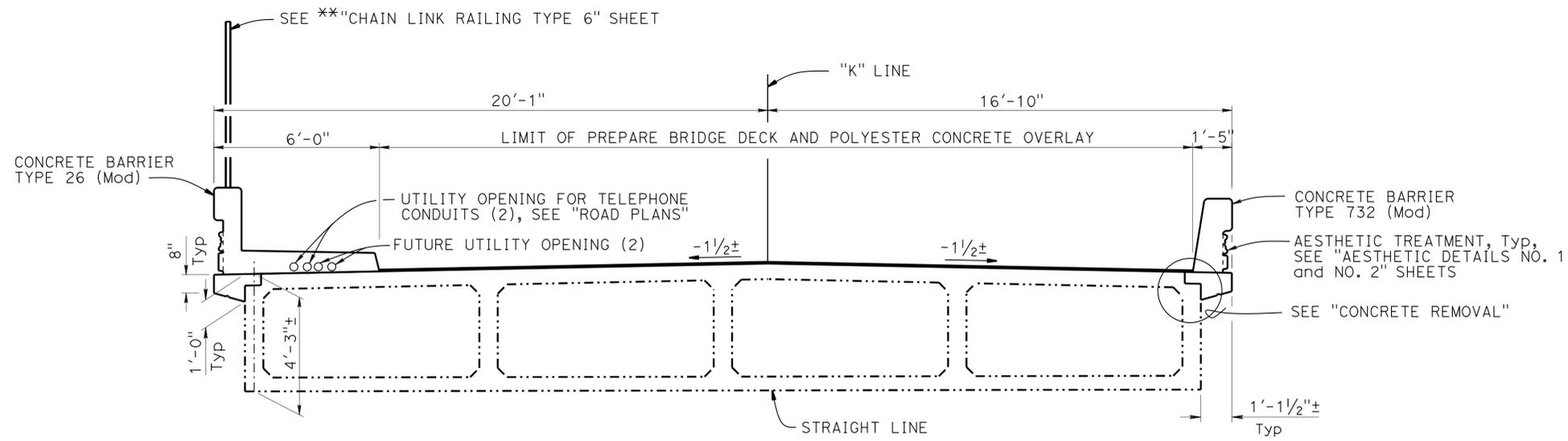
BRIDGE NO.	19-0098
POST MILE	9.5

**KING ROAD OVERCROSSING (RAISE)
BENT DETAILS**

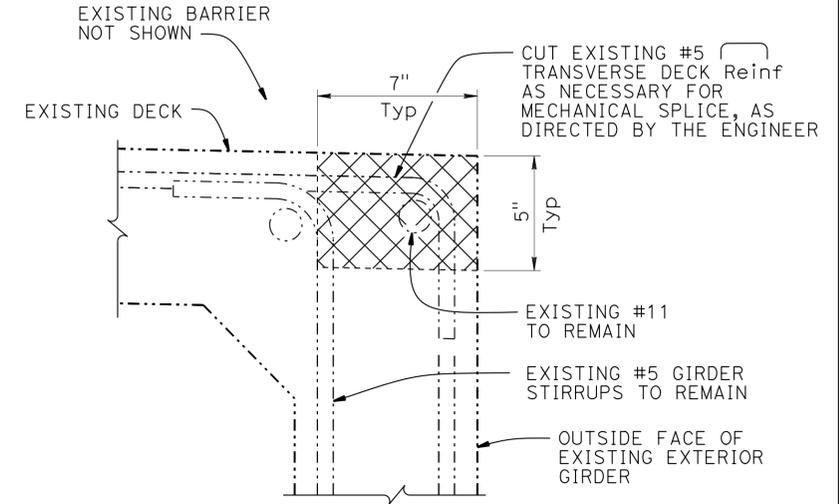
USERNAME => s124496 DATE PLOTTED => 28-JUN-2013 TIME PLOTTED => 1:34:00

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	395	437

10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
 ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA
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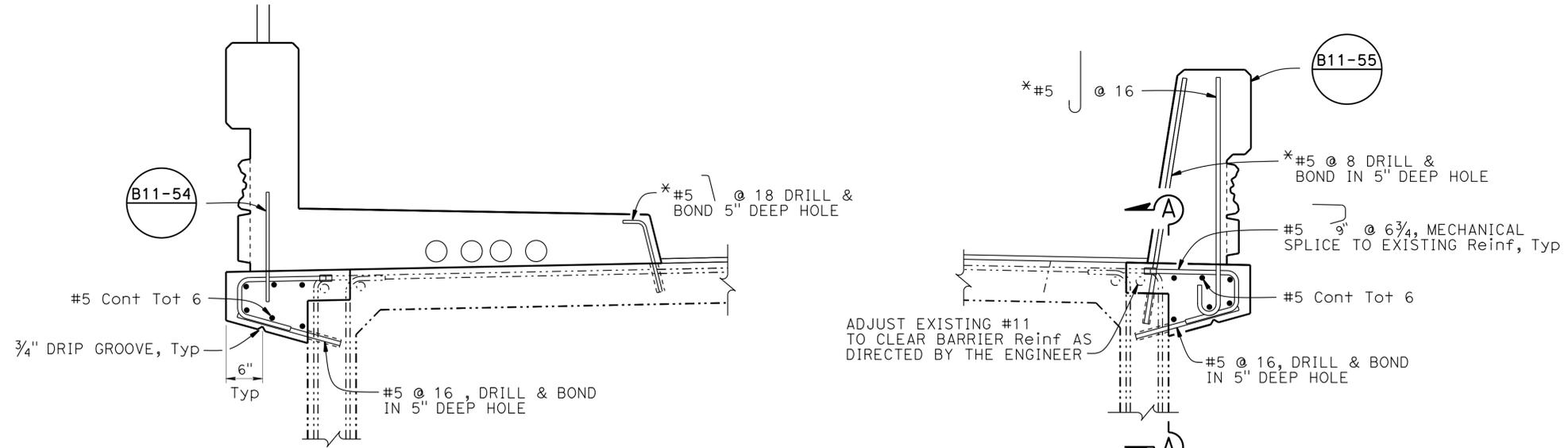


TYPICAL SECTION
 $\frac{3}{8}'' = 1'-0''$

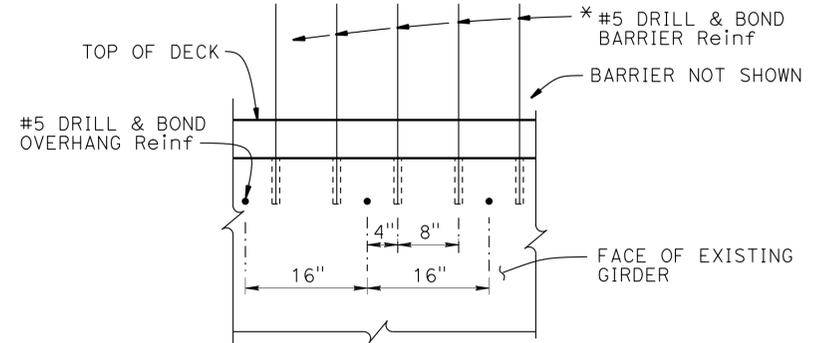


LEGEND:
 - Indicates concrete removal (portion), Low Impact Hammer
NOTE:
 Right edge of deck shown, left edge of deck similar

CONCRETE REMOVAL
 $3'' = 1'-0''$



PART TYPICAL SECTION
 $1'' = 1'-0''$



SECTION A - A
 $1'' = 1'-0''$

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

LEGEND:
 * Barrier Reinforcement
 ** Fence fabric to be black vinyl coated mesh

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Ye Yang	CHECKED Ali Asnaashari	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	19-0098	KING ROAD OVERCROSSING (RAISE)	
	DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari			POST MILE	9.5		TYPICAL SECTION NO. 1
	QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera			UNIT: 3578	PROJECT NUMBER & PHASE: 03000004731		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				FILE => 19-0098-k-ty01.dgn		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 10 OF 17

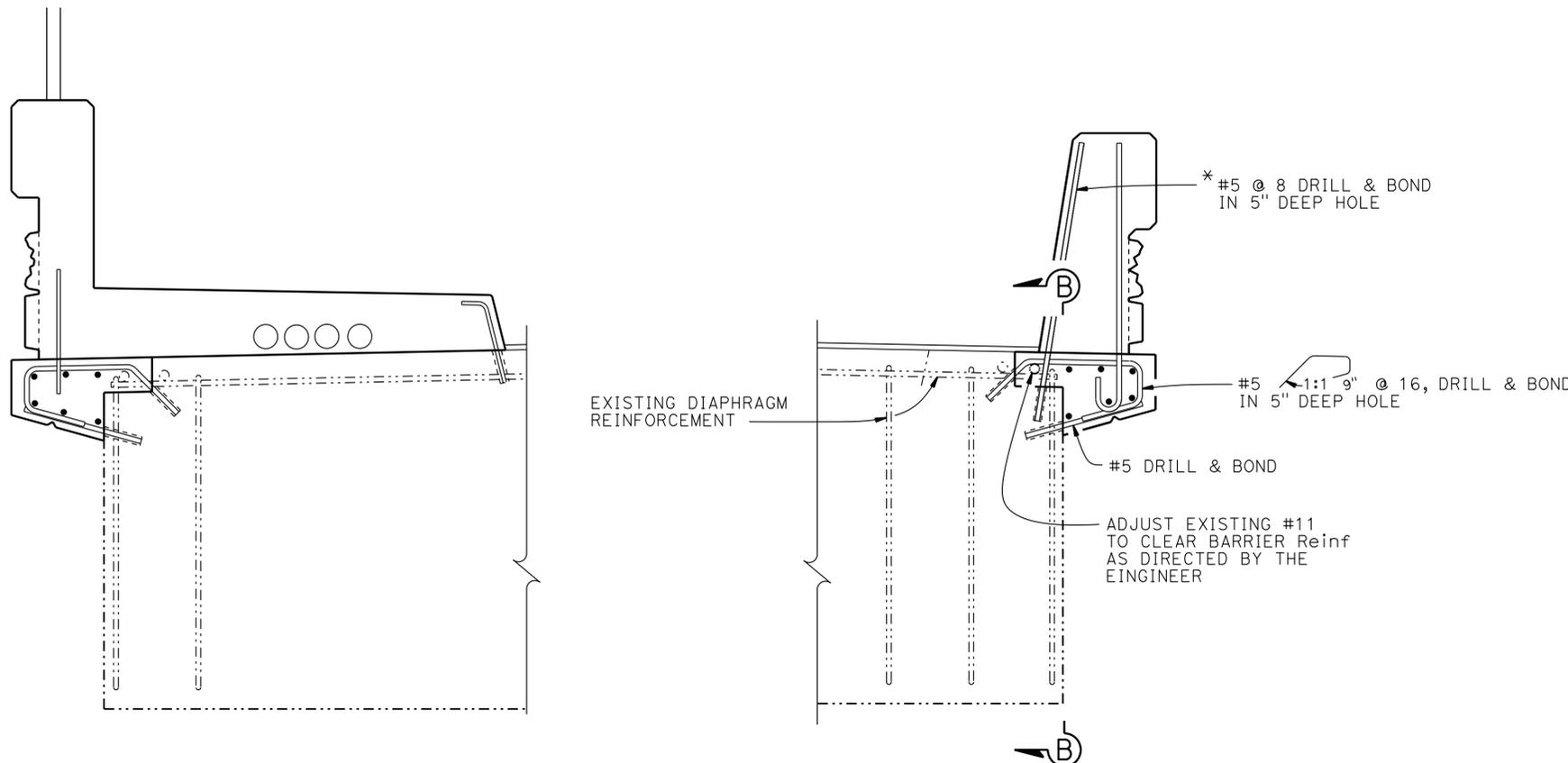
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	396	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

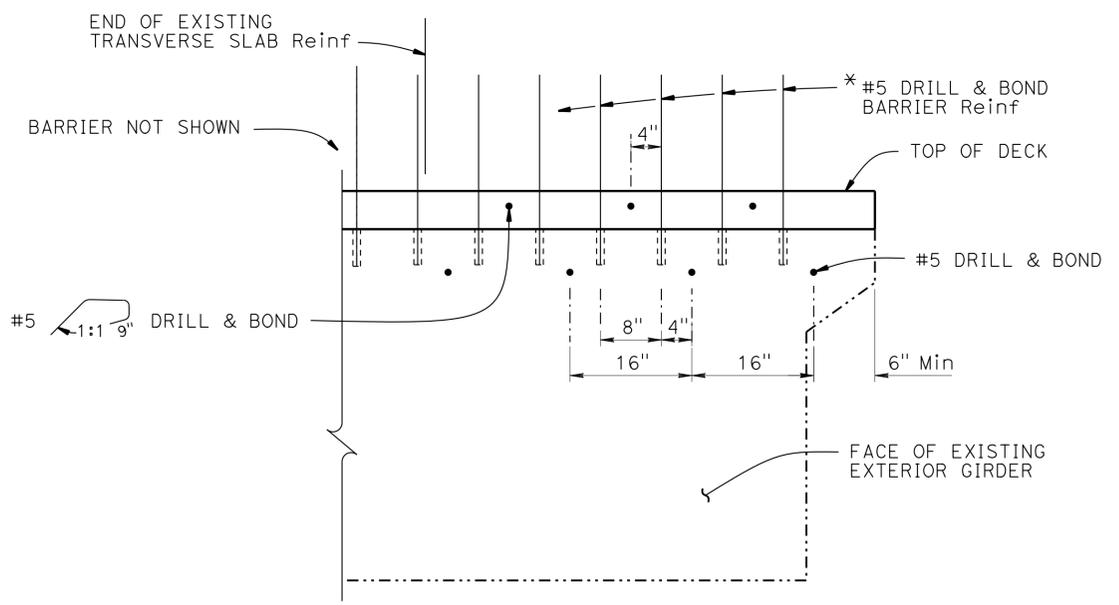
6-24-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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PART TYPICAL SECTION @ DIAPHRAGM
1" = 1'-0"



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

- LEGEND:
*Barrier reinforcement
- NOTES:
1. For details not shown, see "TYPICAL SECTION NO. 1" sheet
2. All diaphragm reinforcement not shown

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

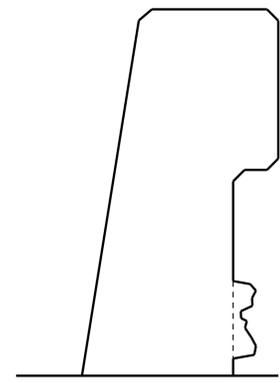
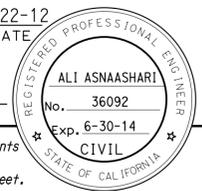
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

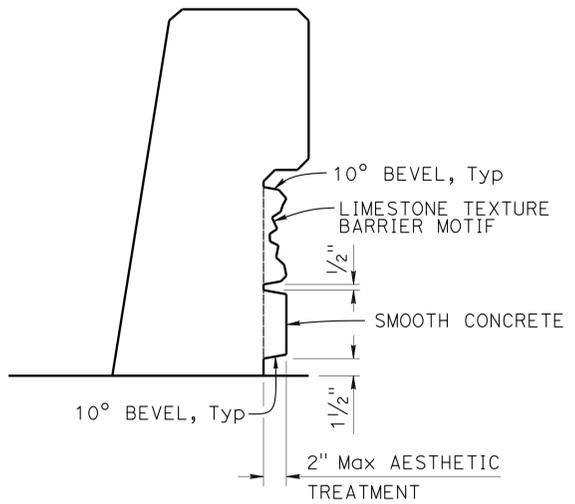
KING ROAD OVERCROSSING (RAISE)
TYPICAL SECTION NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plā	80	8.1/37.8	397	437
			10-22-12		
			REGISTERED CIVIL ENGINEER	DATE	
			6-24-13		
			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.					

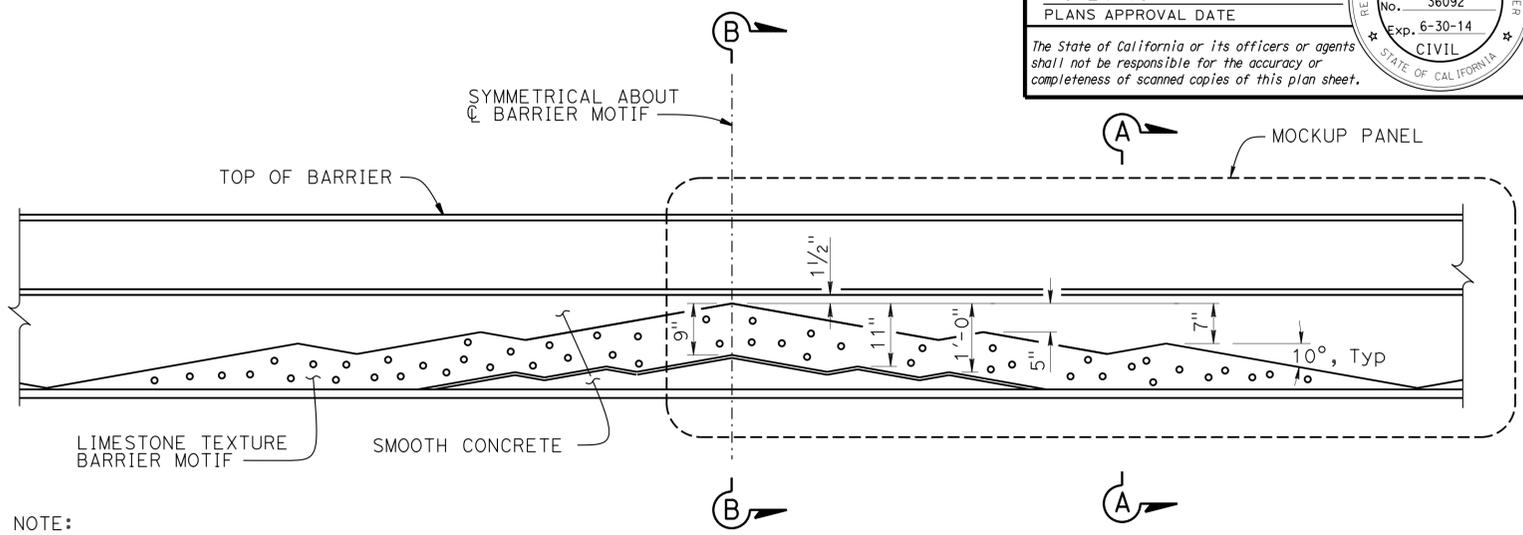


NOTE:
For details not shown, see "SECTION B - B"

SECTION A - A
1/2" = 1'-0"

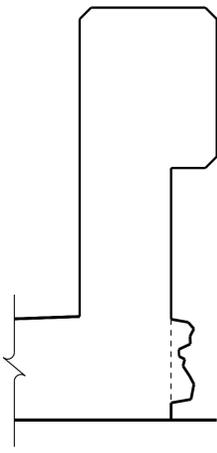


SECTION B - B
1/2" = 1'-0"



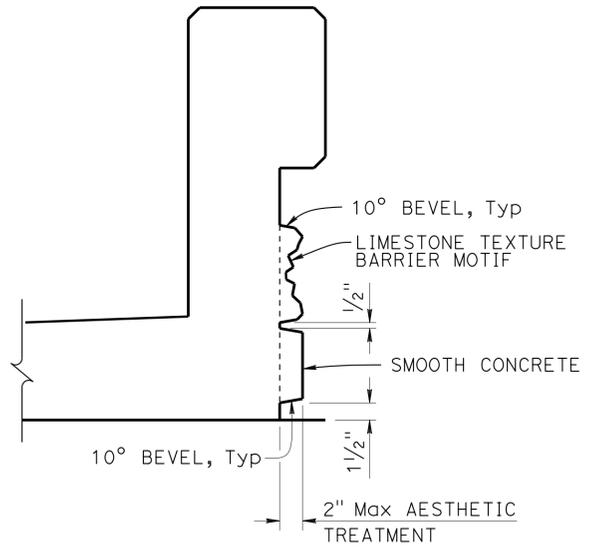
NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 26"

PART ELEVATION - CONCRETE BARRIER TYPE 732
3/4" = 1'-0"

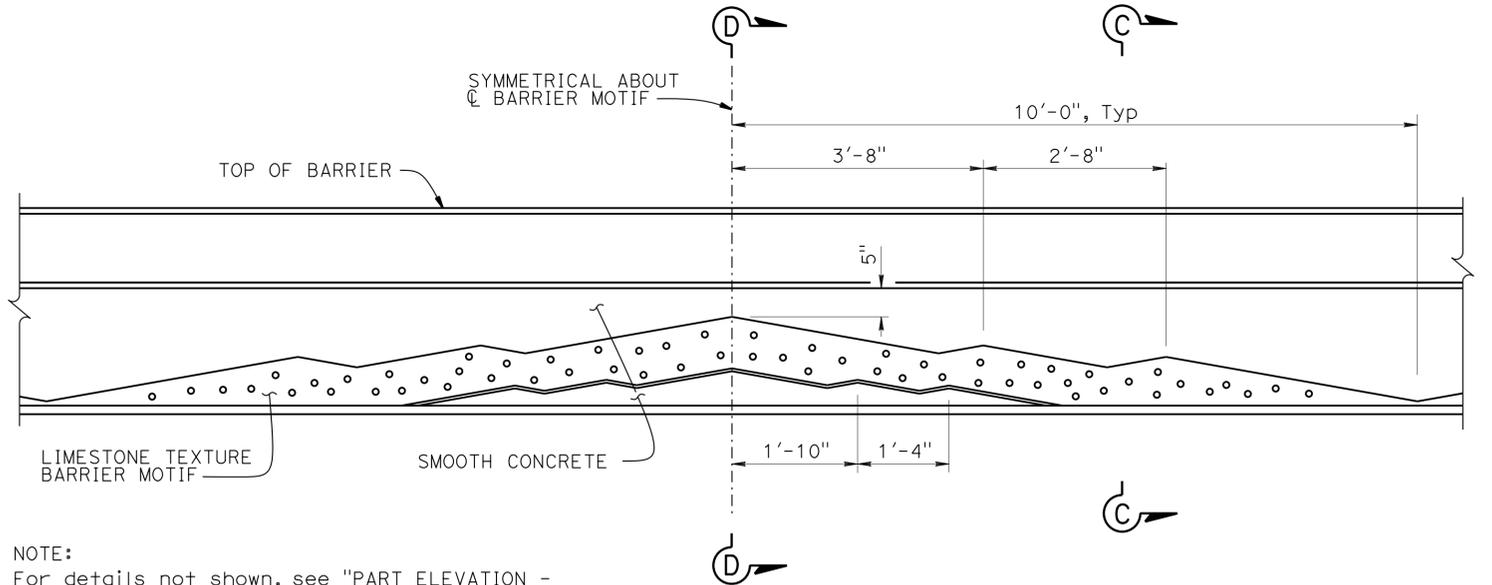


NOTE:
For details not shown, see "SECTION D - D"

SECTION C - C
1/2" = 1'-0"



SECTION D - D
1/2" = 1'-0"



NOTE:
For details not shown, see "PART ELEVATION - CONCRETE BARRIER TYPE 732"

PART ELEVATION - CONCRETE BARRIER TYPE 26
3/4" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY David Fowkes	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
AESTHETIC DETAILS NO. 1

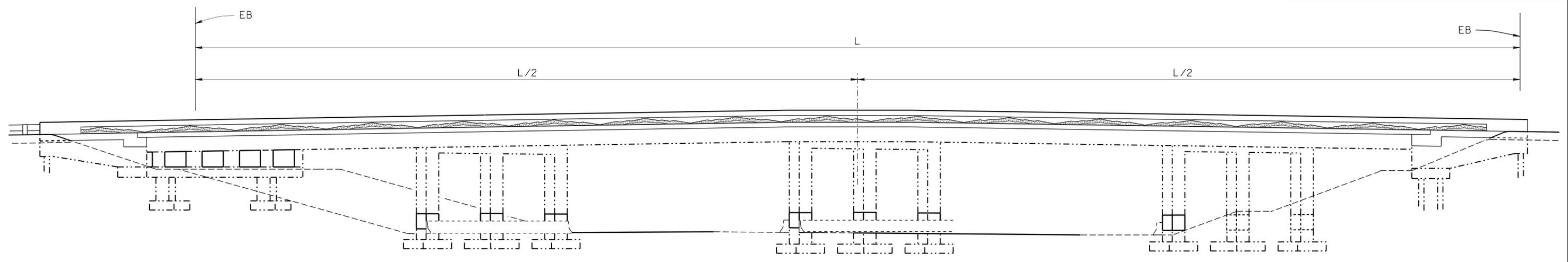
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	8.1/37.8	398	437

Ali Asnaashari 10-22-12
REGISTERED CIVIL ENGINEER DATE

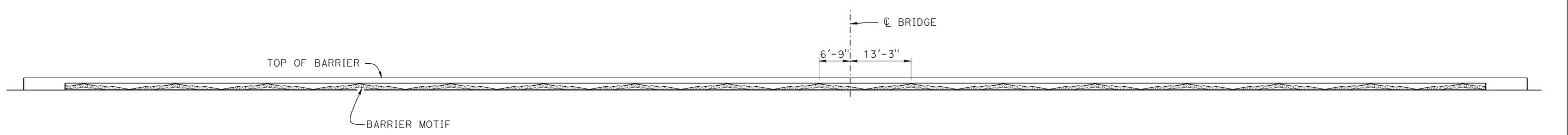
6-24-13
PLANS APPROVAL DATE

ALI ASNAASHARI
No. 36092
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

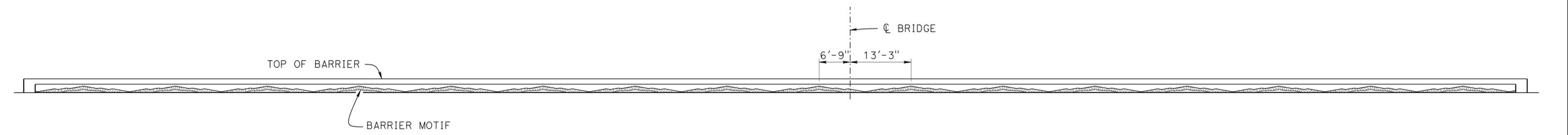
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ELEVATION
 $\frac{3}{32}'' = 1'-0''$



BARRIER TYPE 732 AESTHETIC TREATMENT
 $\frac{3}{32}'' = 1'-0''$



BARRIER TYPE 26 AESTHETIC TREATMENT
 $\frac{3}{32}'' = 1'-0''$

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY David Fowkes	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

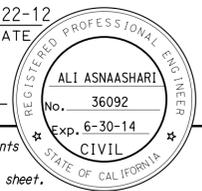
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

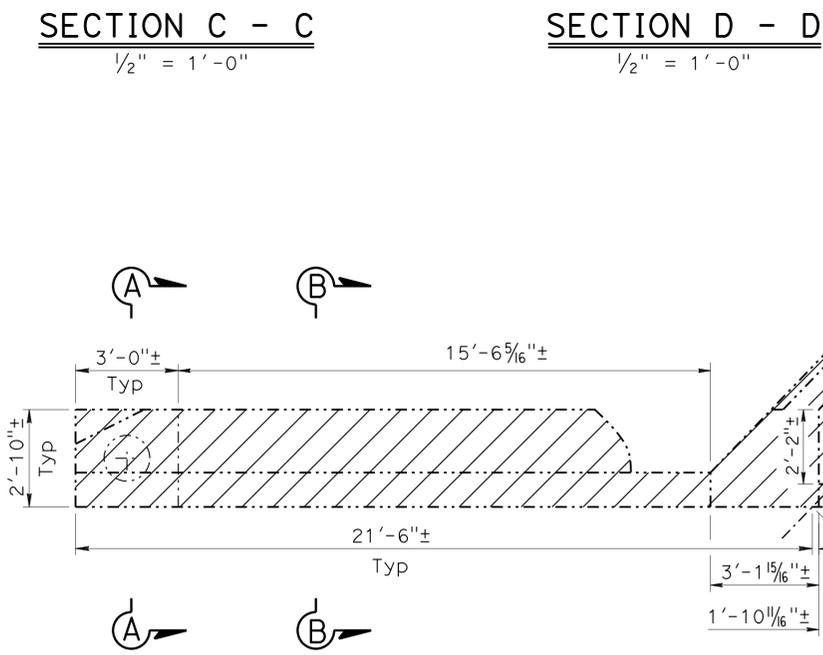
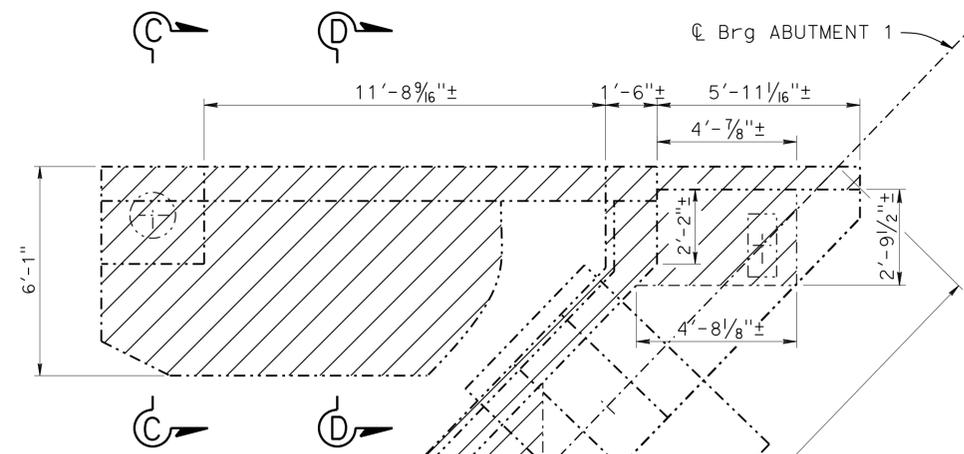
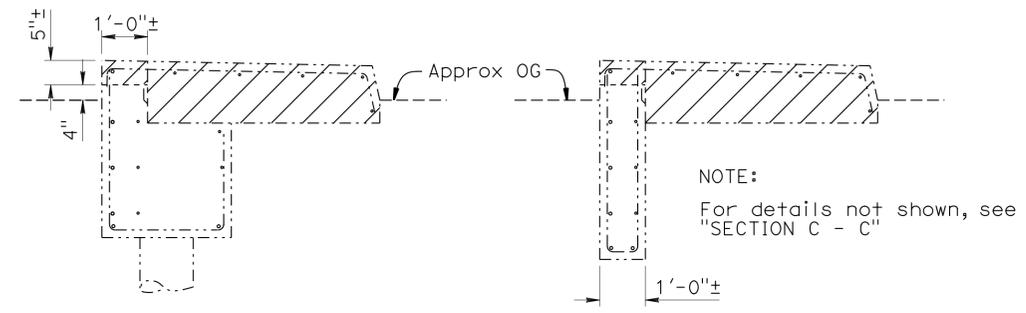
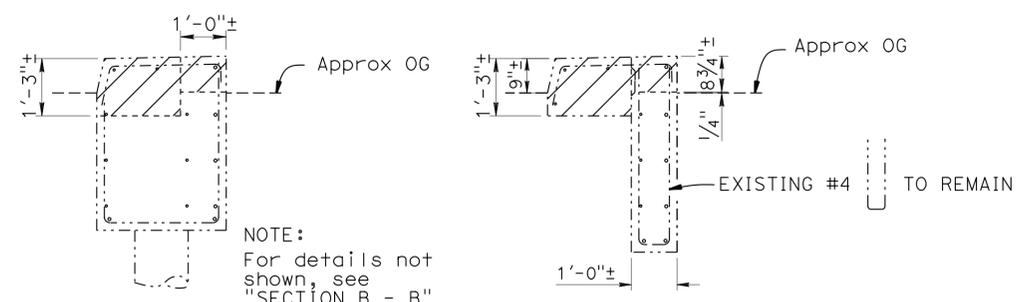
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	19-0098
POST MILE	9.5

KING ROAD OVERCROSSING (RAISE)
AESTHETIC DETAILS NO. 1

TIME PLOTTED => 1:34:01
DATE PLOTTED => 28-JUN-2013
USERNAME => s124496

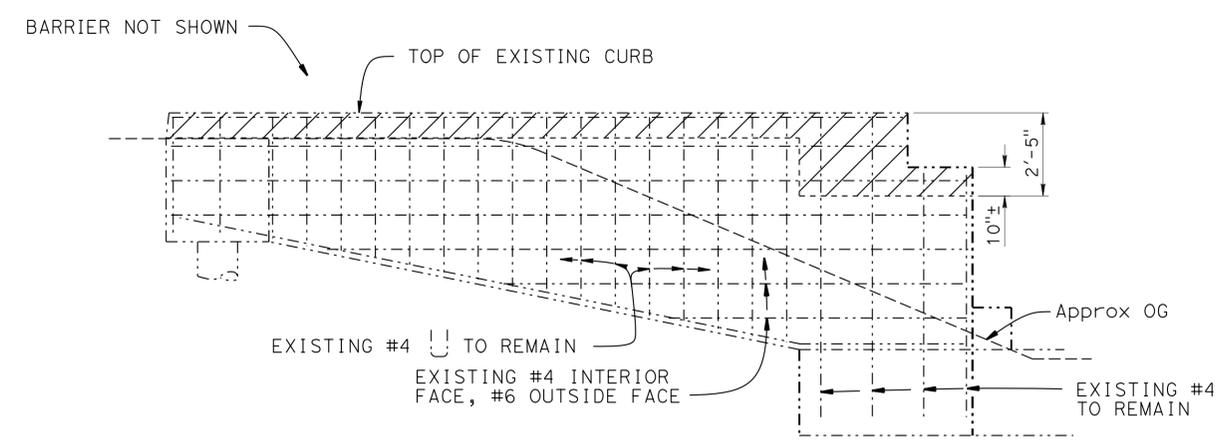
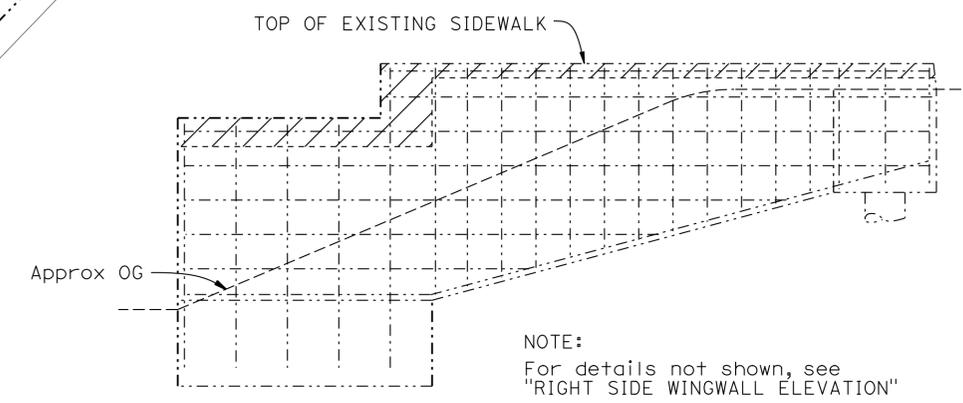
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plca	80	8.1/37.8	399	437
 REGISTERED CIVIL ENGINEER			10-22-12 DATE		
6-24-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



ABUTMENT 1 PLAN
3/8" = 1'-0"



"K" LINE



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- LEGEND:**
 - Indicates existing bridge removal (portion)
- NOTES:**
 1. Abutment 1 shown, Abutment 5 similar
 2. For "SECTION E - E", see "CONCRETE REMOVAL DETAILS NO. 2" sheet

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

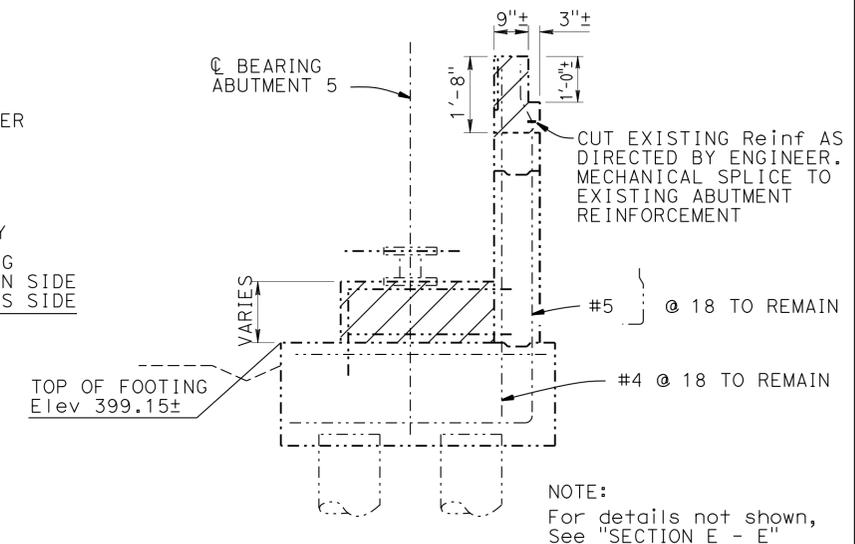
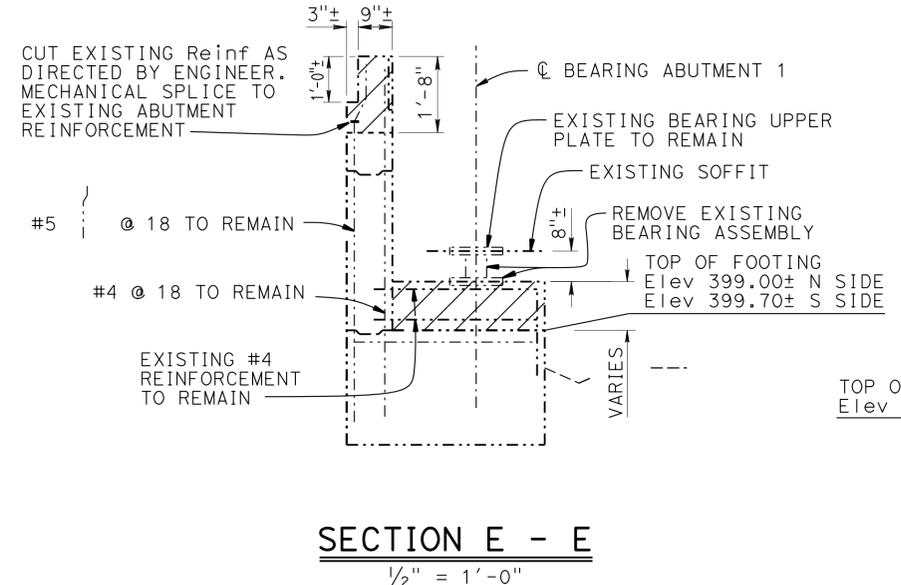
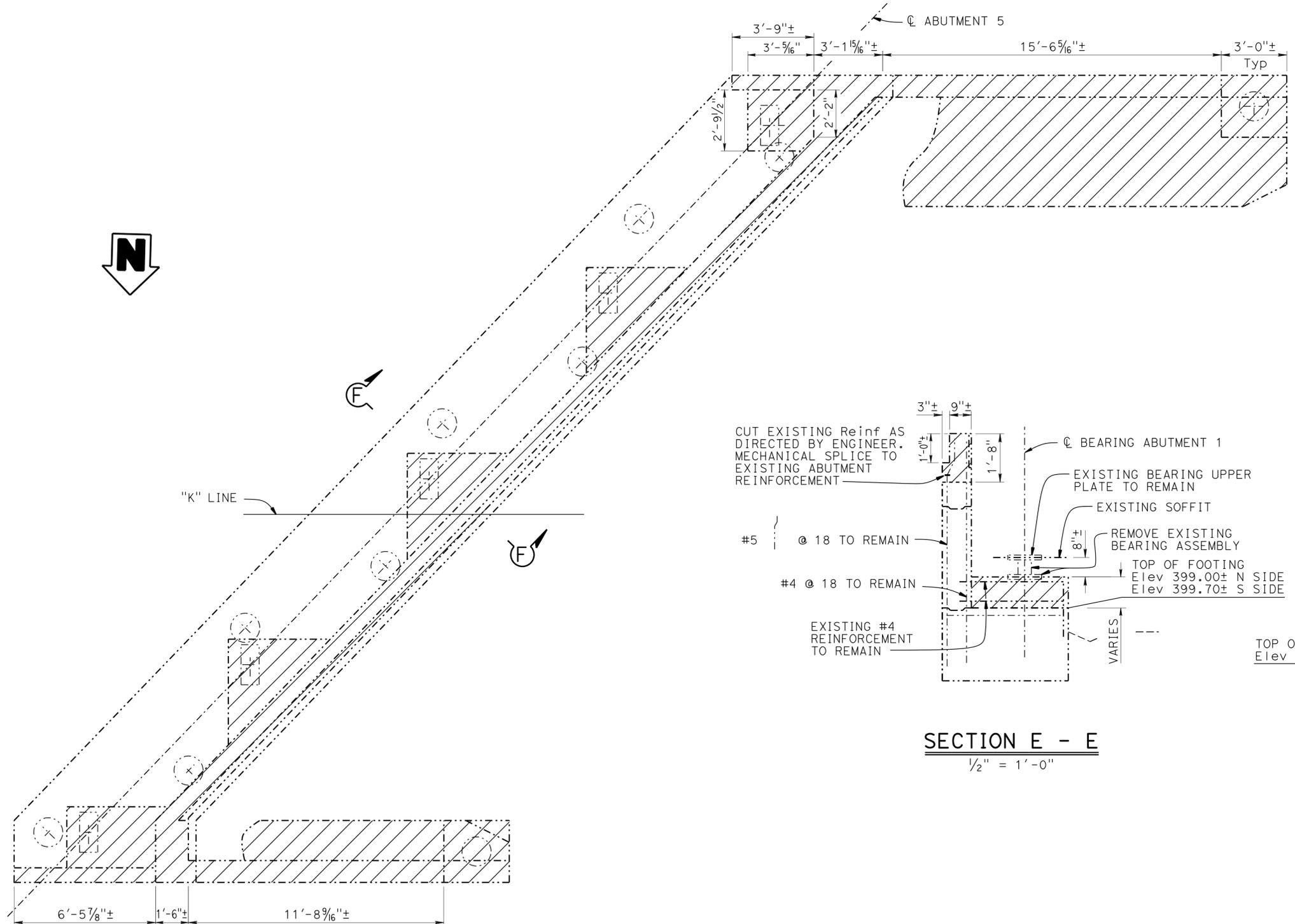
BRIDGE NO. 19-0098
POST MILE 9.5

KING ROAD OVERCROSSING (RAISE)
CONCRETE REMOVAL DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	8.1/37.8	400	437

10-22-12
 REGISTERED CIVIL ENGINEER DATE
 6-24-13
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 ALI ASNAASHARI
 No. 36092
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA



NOTE:
For details not shown,
See "SECTION E - E"

ABUTMENT 5
PLAN
3/8" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

LEGEND:

- Indicates existing bridge removal (portion)

NOTES:

- For location of "SECTION E - E" see "CONCRETE REMOVAL DETAILS NO. 1" sheet
- For details not shown, see "CONCRETE REMOVAL DETAILS NO. 1"

DESIGN	BY Ye Yang	CHECKED Ali Asnaashari
DETAILS	BY Nancy C Gwynn	CHECKED Ali Asnaashari
QUANTITIES	BY Quang H Nguyen	CHECKED Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 19-0098
POST MILE 9.5
KING ROAD OVERCROSSING (RAISE)
CONCRETE REMOVAL DETAILS NO. 2