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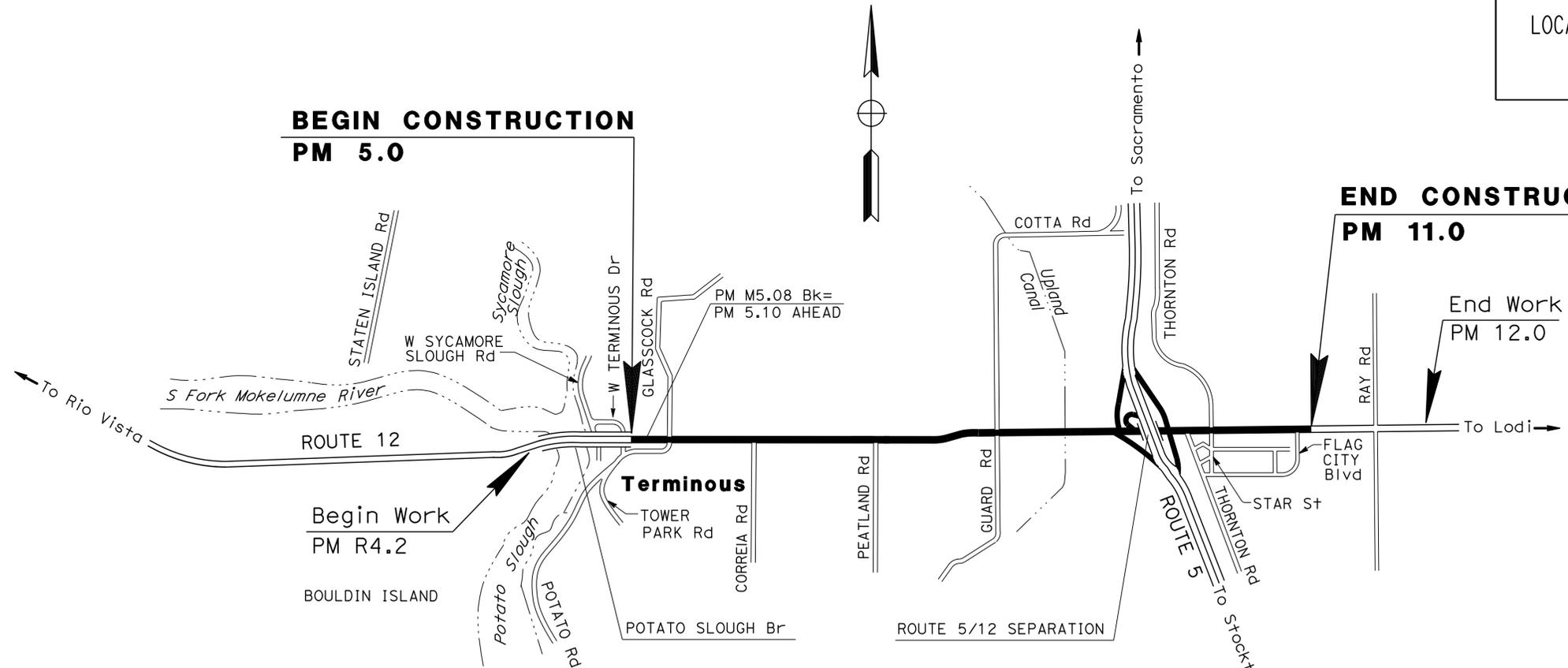
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN SAN JOAQUIN COUNTY
AT AND NEAR TERMINOUS
FROM POTATO SLOUGH BRIDGE
TO 0.2 MILE EAST OF FLAG CITY BOULEVARD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

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

ACNHP-P012(119)E

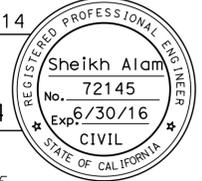
1



PROJECT MANAGER
IORZUA AKUVA

DESIGN ENGINEER
NOMER GUTIERREZ

Sheikh Alam 09-16-14
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
 September 29, 2014
 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.



1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

NO SCALE

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

DATE PLOTTED => 06-JAN-2015 TIME PLOTTED => 1:34:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CDTRANS
 DESIGN

FUNCTIONAL SUPERVISOR
 NOMER GUTIERREZ

CALCULATED/DESIGNED BY
 CHECKED BY

YOON HAHN
 SHEIKH ALAM

REVISOR BY
 DATE REVISED

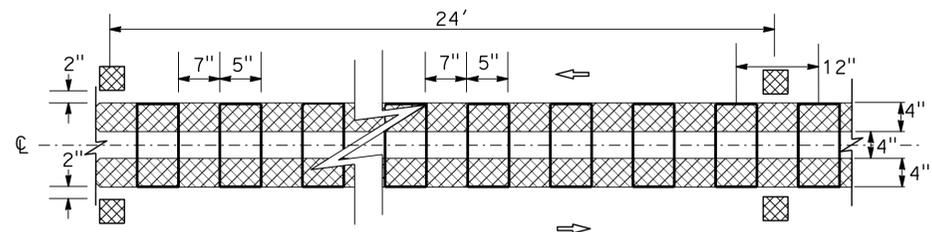
SA
 09/16/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	3	62

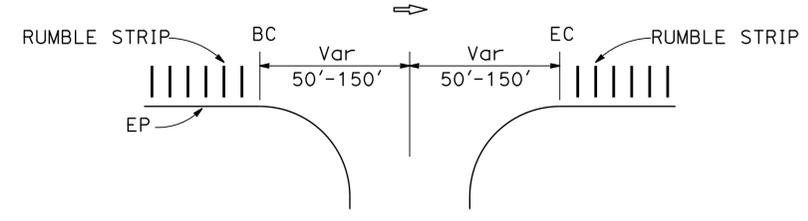
Sheikh Alam 09-16-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Sheikh Alam
 No. 72145
 Exp. 6/30/16
 CIVIL
 STATE OF CALIFORNIA

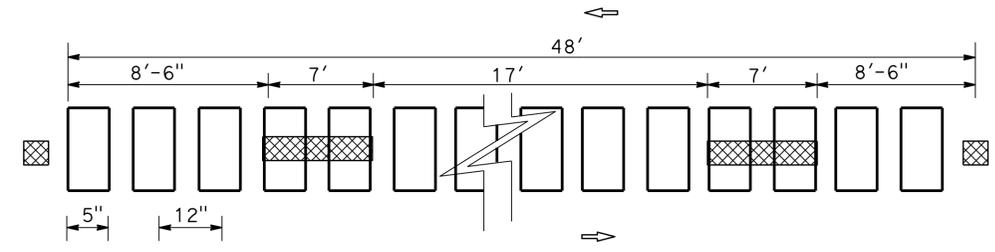
- LEGEND**
- TYPE D TWO-WAY YELLOW REFLECTIVE MARKERS
 - 4" YELLOW STRIPING
 - 4" WHITE STRIPING
 - RUMBLE STRIPS
 - 0.90' JPCP
 - COLD PLANE AC PAVMT
RHMA-G
HMA-A
 - CONCRETE



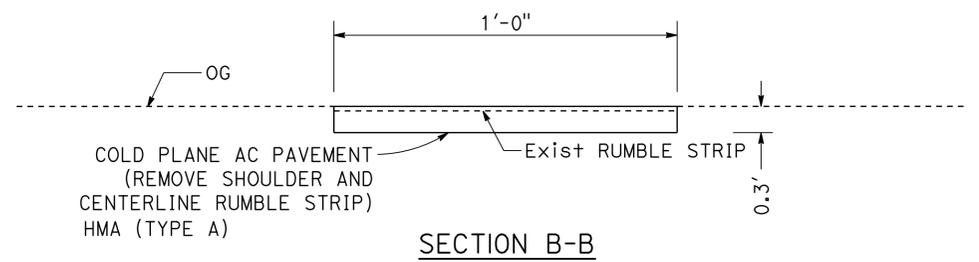
**CENTERLINE RUMBLE STRIP
 (HMA, GROUND-IN INDENTATIONS)
 NO PASSING ZONE - DETAIL 2**



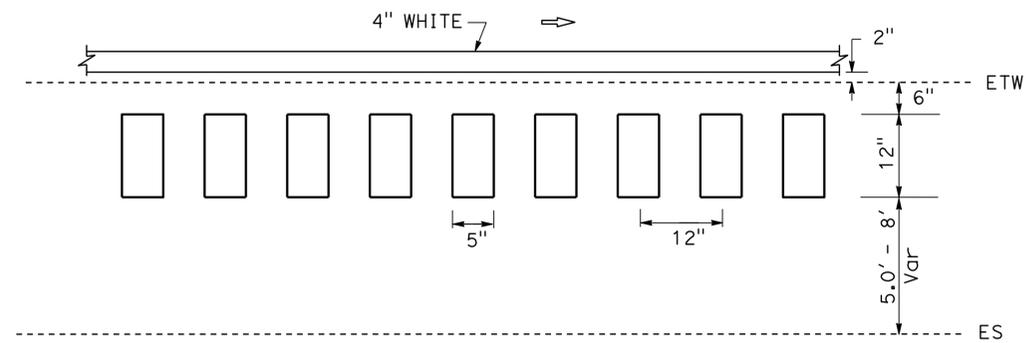
**RUMBLE STRIP GAP
 AT PUBLIC ROAD & DRIVEWAY**



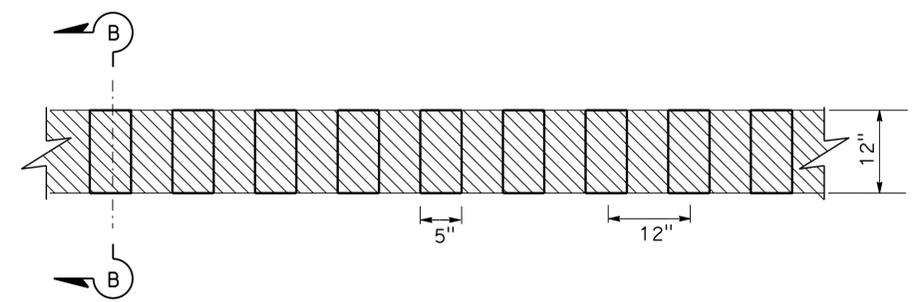
**CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)
 PASSING ZONE - DETAIL 2**



SECTION B-B



**SHOULDER RUMBLE STRIP
 (HMA, GROUND-IN INDENTATIONS)**



**COLD PLANE AC PAVEMENT
 (REMOVE SHOULDER AND
 CENTERLINE RUMBLE STRIP)**

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

CONSTRUCTION DETAILS
 NO SCALE
C-1

LAST REVISION DATE PLOTTED => 06-JAN-2015 TIME PLOTTED => 13:41

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	4	62

Sheikh Alam 09-16-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Sheikh Alam
 No. 72145
 Exp. 6/30/16
 CIVIL
 STATE OF CALIFORNIA

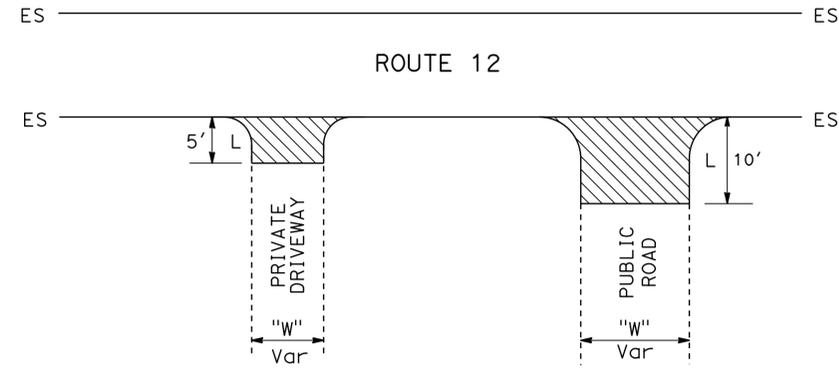
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

PRIVATE DRIVEWAYS

PM*	SIDE	W
6.53	R+	15'
6.54	R+	23'
7.26	R+	20'
7.40	R+	18'
7.53	R+	16'
7.71	R+	15'
7.88	R+	15'
8.11	R+	20'
8.66	R+	24'
6.33	L+	15'
6.51	L+	13'
6.78	L+	14'
7.51	L+	17'
7.77	L+	15'
8.16	L+	13'
8.35	L+	19'

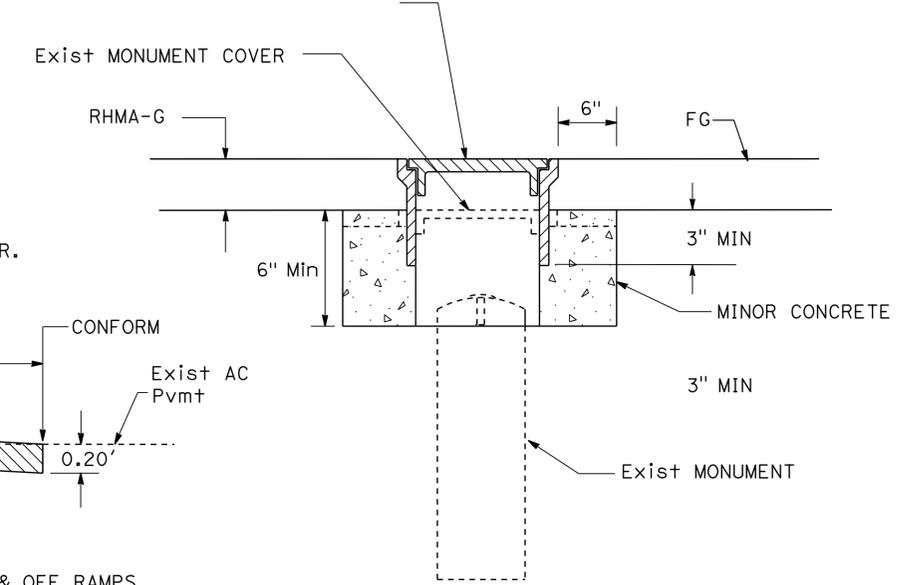
PUBLIC ROAD INTERSECTIONS

PM	SIDE	NAME	W
5.37	L+	GLASSCOCK Rd	120'
5.37	R+	TOWERPARK Rd	110'
6.04	R+	CORREIA Rd	240'
7.00	R+	PEATLAND Rd	180'
8.82	R+/L+	GUARD Rd	40'
10.30	R+/L+	N. THORNTON Rd	120'
10.45	R+	STAR St	80'
10.83	R+	FLAG CITY Blvd	40'



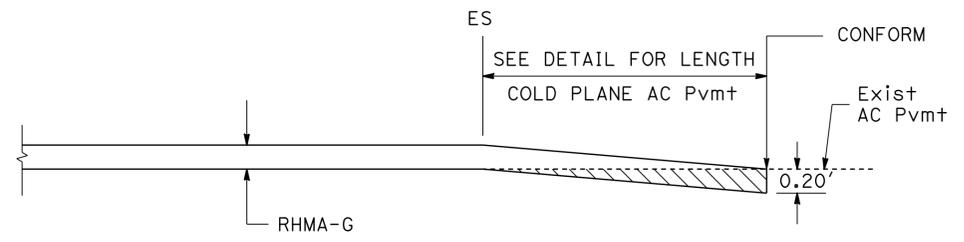
PAVING LIMITS AT PRIVATE DRIVEWAYS AND PUBLIC ROAD INTERSECTIONS

HEIGHT OF MONUMENT COVER TO BE DETERMINED AFTER PLACING RHMA-G

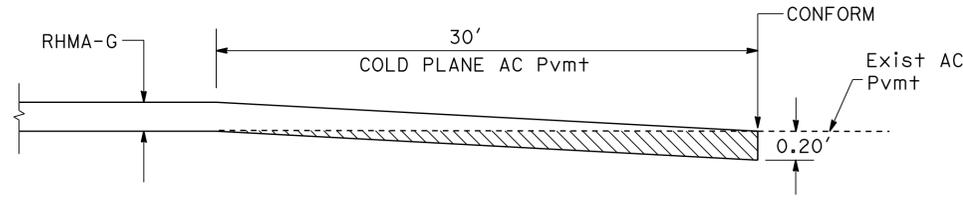


ADJUST MONUMENT TO GRADE

* PM LOCATIONS OF DRIVEWAYS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

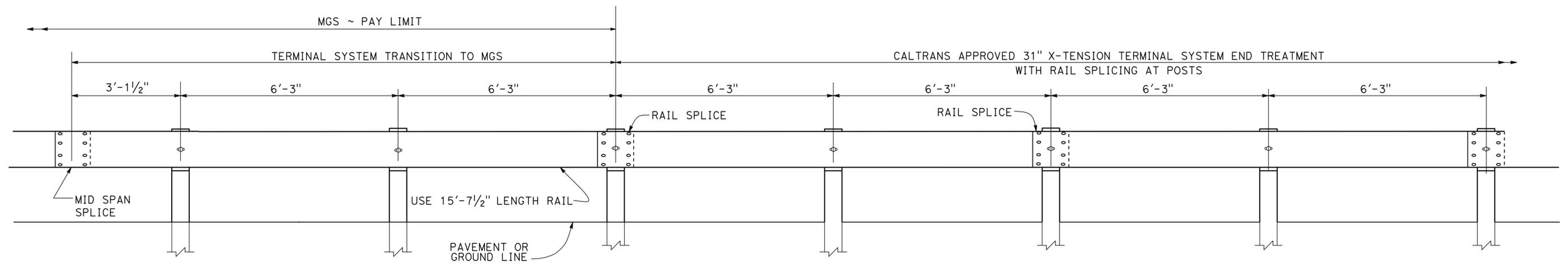


PUBLIC ROAD AND DRIVEWAY CONFORM TAPER



TRANSVERSE CONFORM TAPER

AT PM 5.0, BEGIN CONSTRUCTION AT GORE AREA OF I-5 ON & OFF RAMP
AT PM 11.0, END CONSTRUCTION



TRANSITION DETAIL FOR 31" X-TENSION TERMINAL SYSTEM END TREATMENT WITH RAIL SPLICING AT POSTS TO MIDWEST GUARDRAIL SYSTEM

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

CONSTRUCTION DETAILS
NO SCALE
C-2

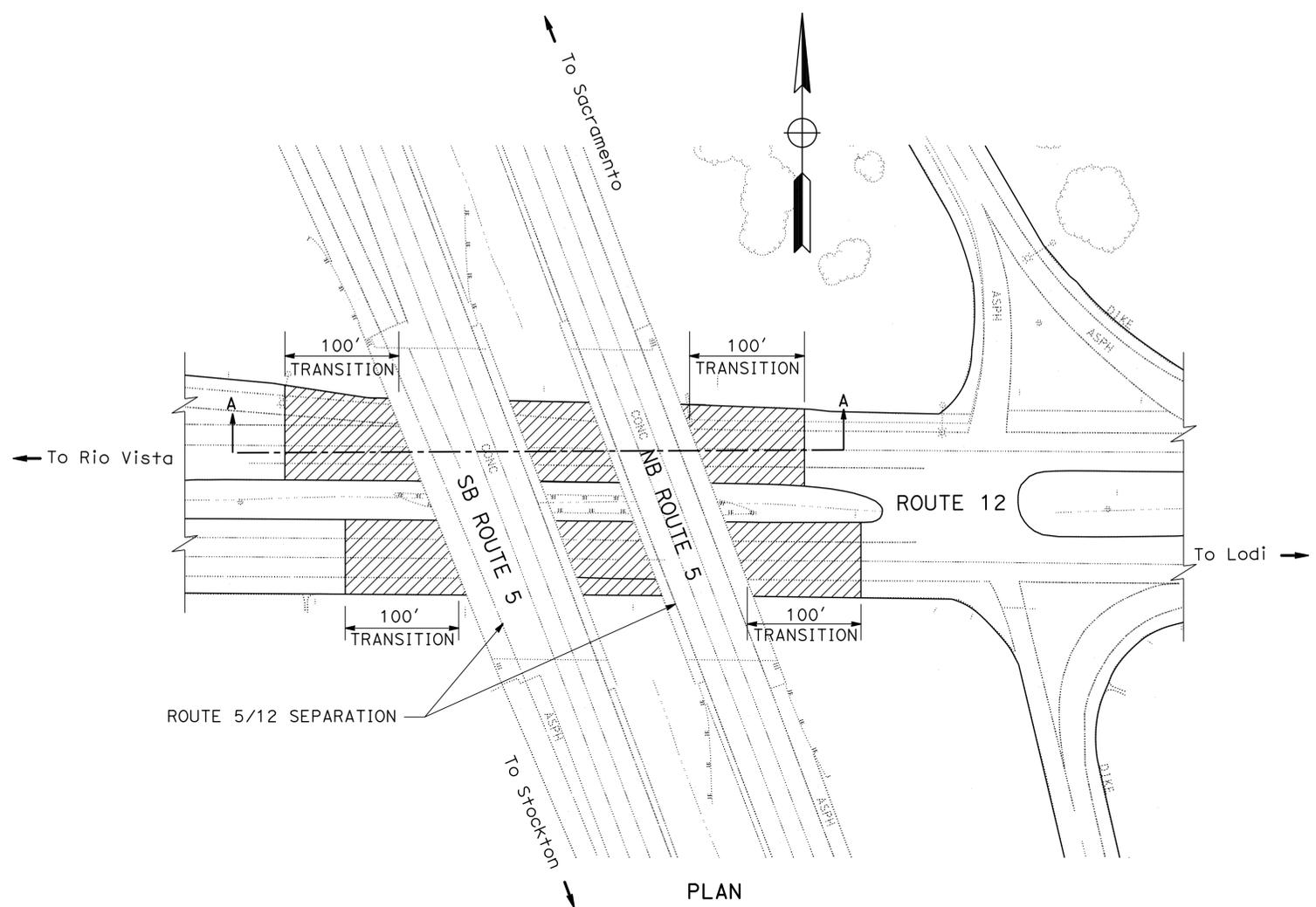
SA 04/03/14
 YOUNG HAHN SHEIKH ALAM
 NOMEY GUTIERREZ
 DESIGN
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 FUNCTIONAL SUPERVISOR: NOMER GUTIERREZ
 CALCULATED/DESIGNED BY: SHEIKH ALAM
 CHECKED BY: SHEIKH ALAM
 REVISIONS: SA 09/16/14
 REVISED BY: YOUNG HAHN
 DATE REVISED: 09/16/14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	5	62

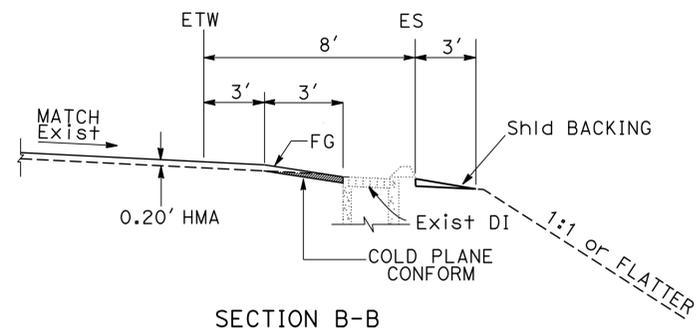
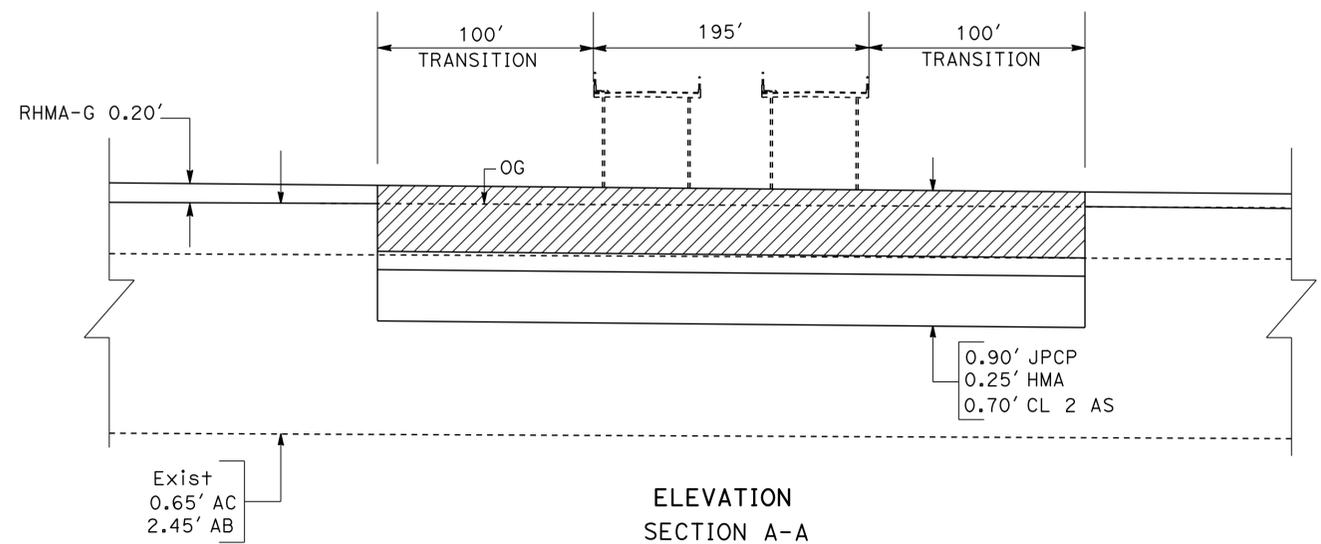
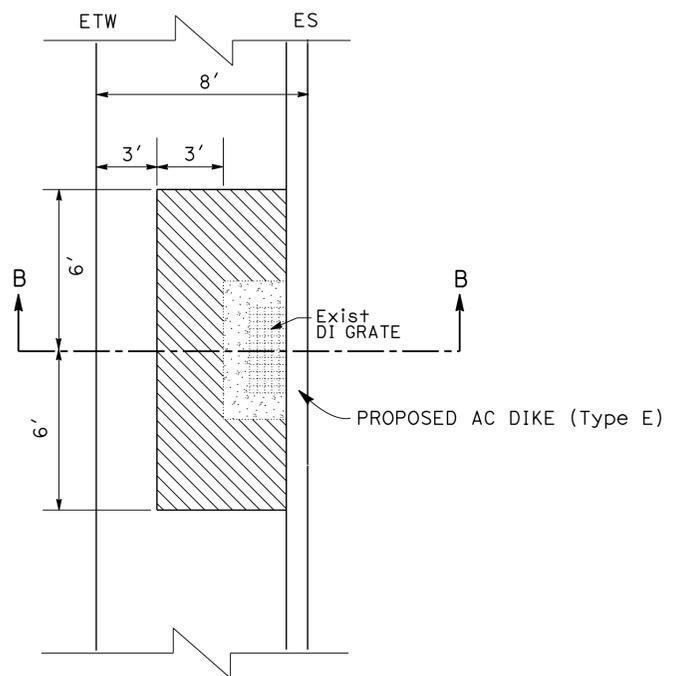
Sheikh Alam 09-16-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Sheikh Alam
 No. 72145
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA



EXIST DI

LOCATION	DI
SB ON-RAMP	1
SB ON LOOP RAMP	2
SB OFF-RAMP	1
NB ON-RAMP	3
NB OFF-RAMP	2
TOTAL	8



CONFORM TAPER AT DI AT Rte-5 ON & OFF-RAMPS

LIMIT OF JOINTED PLAIN CONCRETE PAVEMENT
 ROUTE 12 PM 10.13 - PM 10.20

CONSTRUCTION DETAILS
 NO SCALE
C-3

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

NOTES (THIS SHEET ONLY):

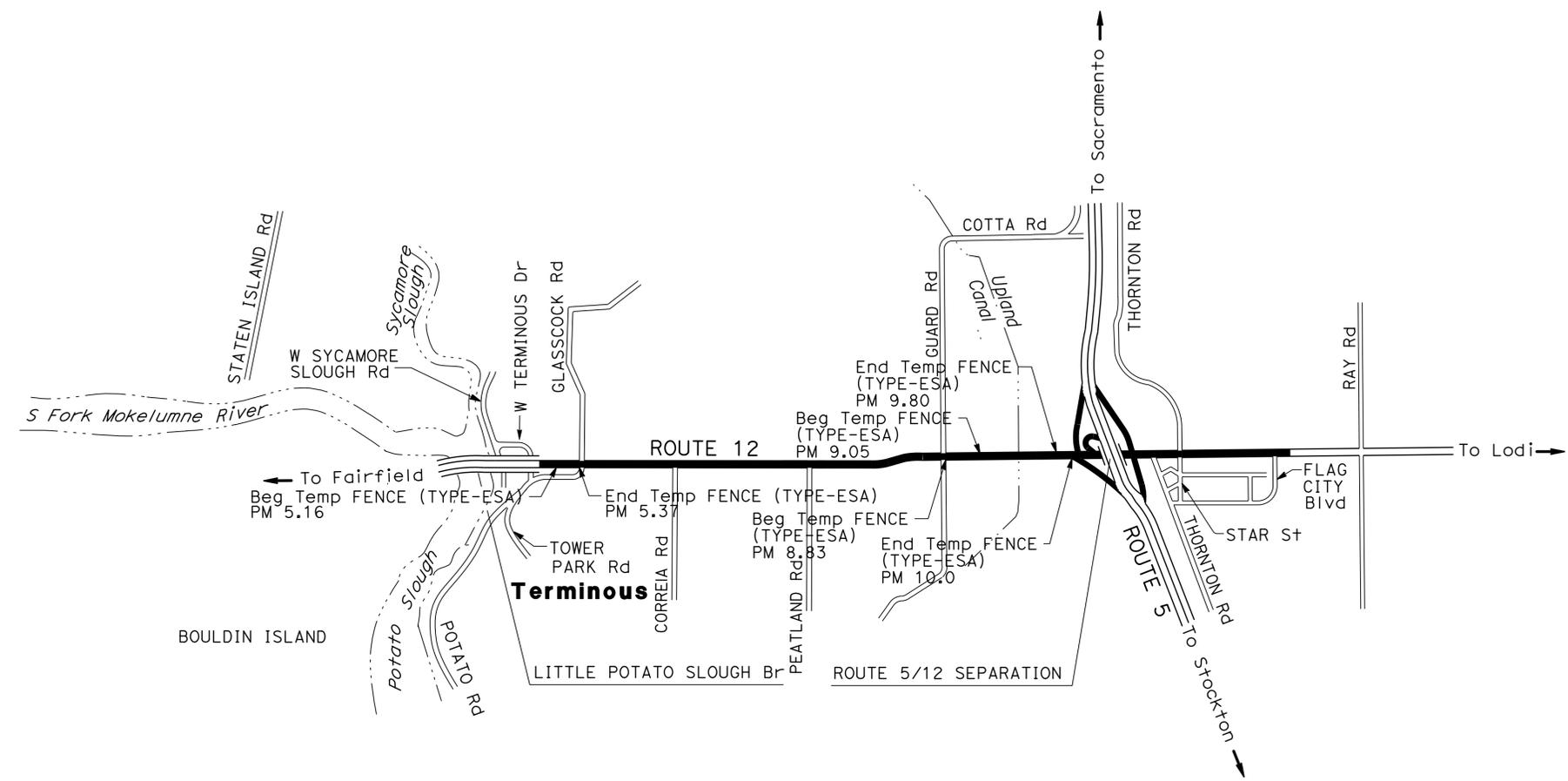
- TEMP FENCE (TYPE ESA) EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- OFFSET FOR Temp FENCE (TYPE-ESA) FROM EXISTING EDGE OF PAVEMENT IS 2 FEET Min.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	7	62

Sheikh Alam 09-16-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Sheikh Alam
 No. 72145
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

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LOCATION OF TEMPORARY FENCE (TYPE - ESA)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 FUNCTIONAL SUPERVISOR: NOMER GUTIERREZ
 CALCULATED/DESIGNED BY: SHEIKH ALAM
 CHECKED BY: SHEIKH ALAM
 YOUNG HAHN
 REVISIONS: SA 09/16/14
 REVISIONS: SA 09/16/14

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

CONSTRUCTION DETAILS
NO SCALE
C-5

LAST REVISION: 00-00-00 DATE PLOTTED => 06-JAN-2015 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: MOHAMMED QATAMI
 CALCULATED/DESIGNED BY: FAWZI YAGHMOUR
 CHECKED BY: DAVID BLACK
 REVISED BY: FAWZI YAGHMOUR
 DATE REVISED: 09/29/14
 FY: 09/29/14

LEGEND:

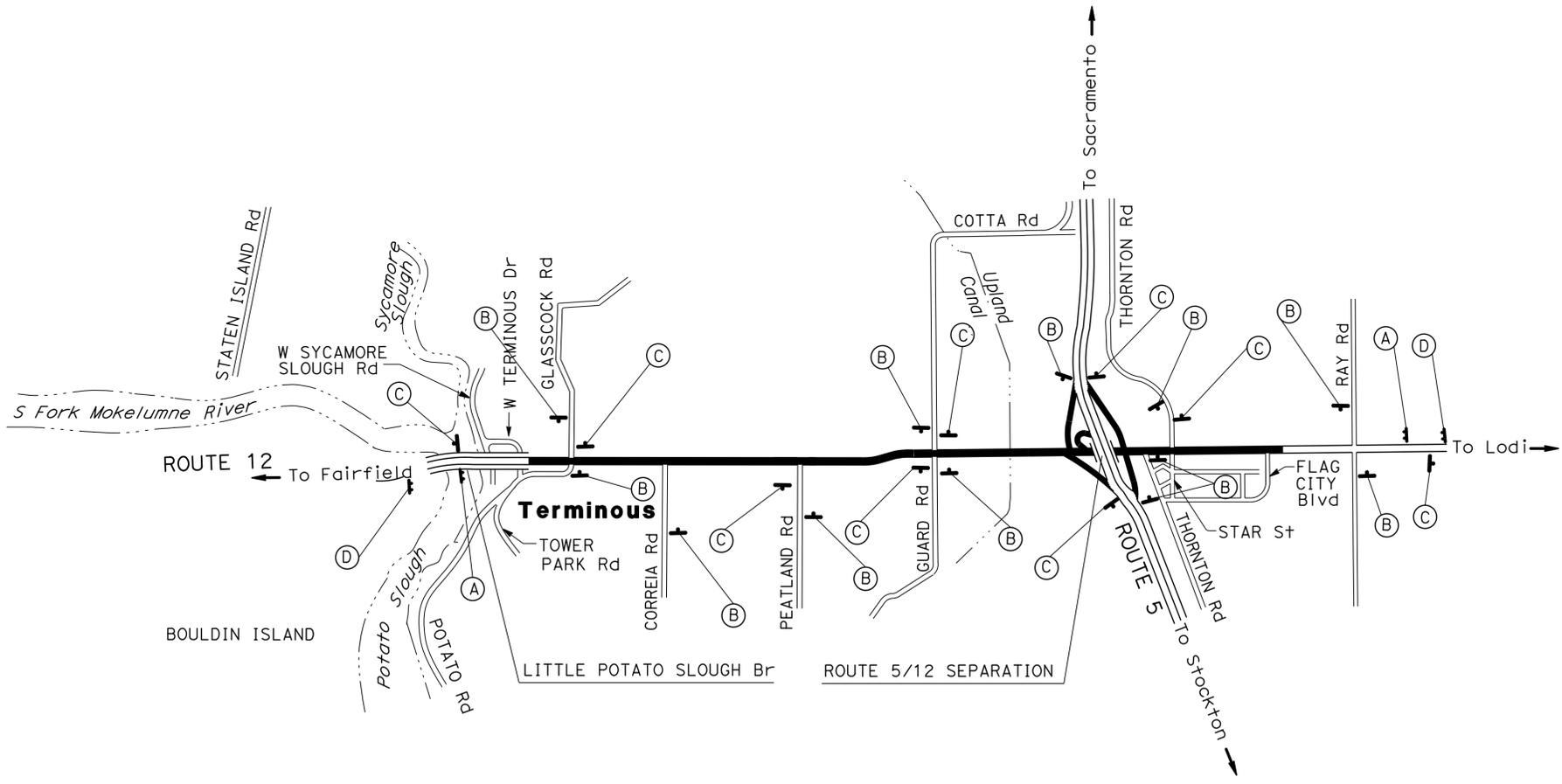
⊗ CONSTRUCTION AREA SIGN NUMBER

NOTES:

1. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. FOR SIGN "C40" (TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES), ALL LETTERS SHALL BE BLACK ON WHITE BACKGROUND.
3. SEE TRAFFIC HANDLING AND MOTORIST INFORMATION PLANS FOR ADDITIONAL CONSTRUCTION AREA SIGNS.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE		PANEL SIZE	SIGN MESSAGE	No. OF SIGN	POST SIZE
	FEDERAL	CALIFORNIA				
(A)	W20-1		60" x 60"	ROAD WORK AHEAD	2	2 - 6" x 6"
(B)	W20-1		48" x 48"	ROAD WORK AHEAD	11	1 - 6" x 6"
(C)		G20-2	24" x 18"	END ROAD WORK	9	1 - 4" x 4"
(D)		C40	102" x 42"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2	1 - 6" x 6"



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	8	62

09-26-14
 REGISTERED CIVIL ENGINEER DATE

09-29-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 FAWZI YAGHMOUR
 No. 54750
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

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1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

CONSTRUCTION AREA SIGNS

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

NO SCALE

LAST REVISION DATE PLOTTED => 06-JAN-2015 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	GURMIT GILL	REVISED BY	GG
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	FAWZI YAGHMOUR	DATE REVISED	09/29/14

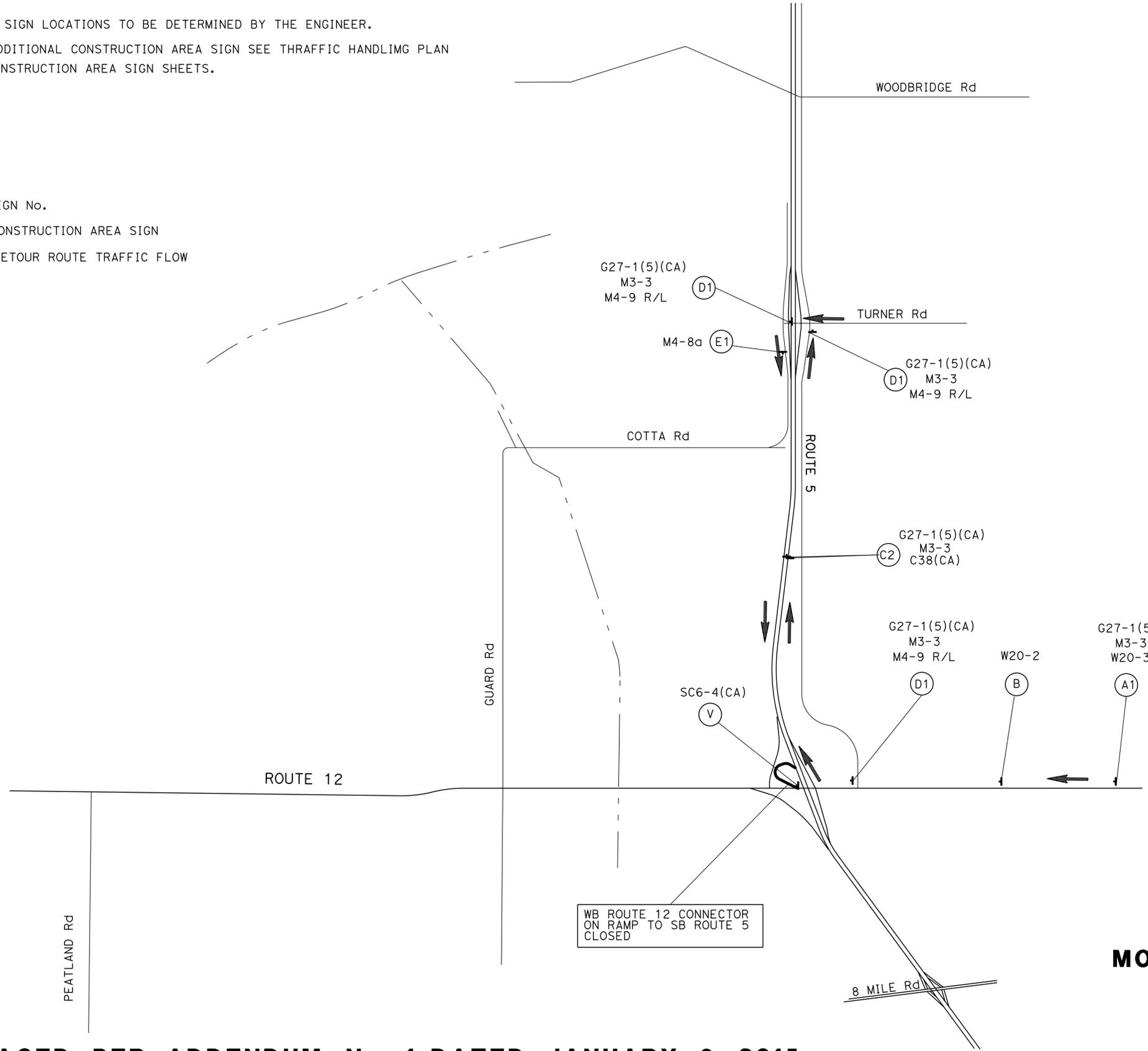
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	9	62
			09-26-14		
REGISTERED CIVIL ENGINEER			DATE		
			09-29-14		
PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

- EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- FOR ADDITIONAL CONSTRUCTION AREA SIGN SEE THRAFFIC HANDLING PLAN AND CONSTRUCTION AREA SIGN SHEETS.

LEGEND

- SIGN No.
- CONSTRUCTION AREA SIGN
- DETOUR ROUTE TRAFFIC FLOW



MOTORIST INFORMATION PLAN

(FROM WB ROUTE 12 SB ON RAMP TO ROUTE 5 CLOSED)

MI-1

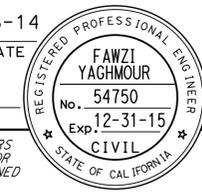
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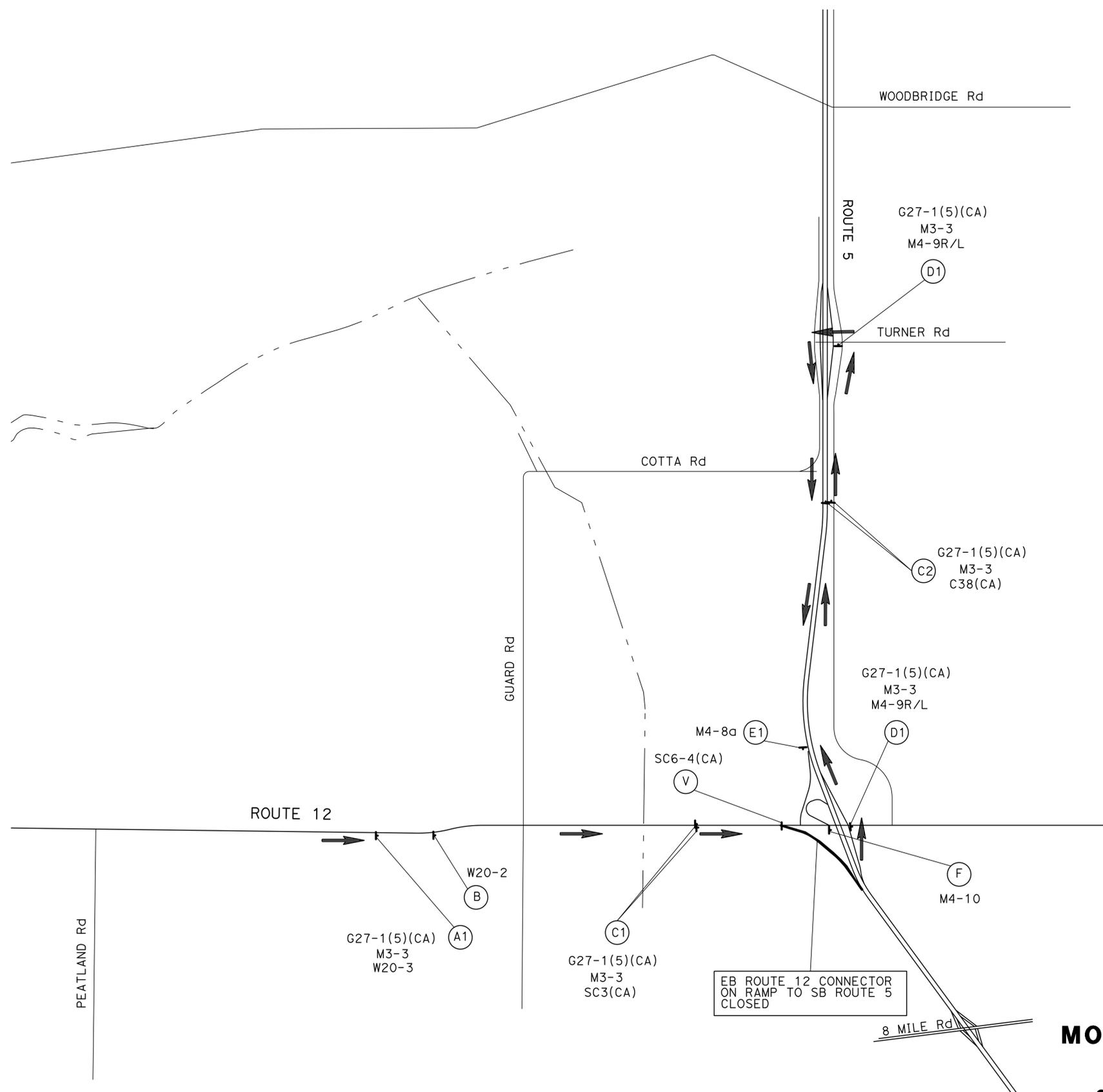
1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

APPROVED FOR MOTORIST INFORMATION WORK ONLY

LAST REVISION DATE PLOTTED => 06-JAN-2015 09-26-14 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: MOHAMMED QATAMI
 GURMIT GILL
 REVISED BY: GG
 DATE REVISED: 09/29/14
 CALCULATED/DESIGNED BY: FAWZI YAGHMOUR
 CHECKED BY:

1	Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
	10	SJ	12	5.0/11.0	10	62
				09-26-14		
		REGISTERED CIVIL ENGINEER		DATE		
		09-29-14		PLANS APPROVAL DATE		
						
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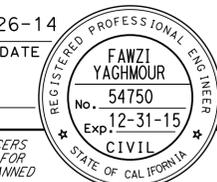
APPROVED FOR MOTORIST INFORMATION WORK ONLY

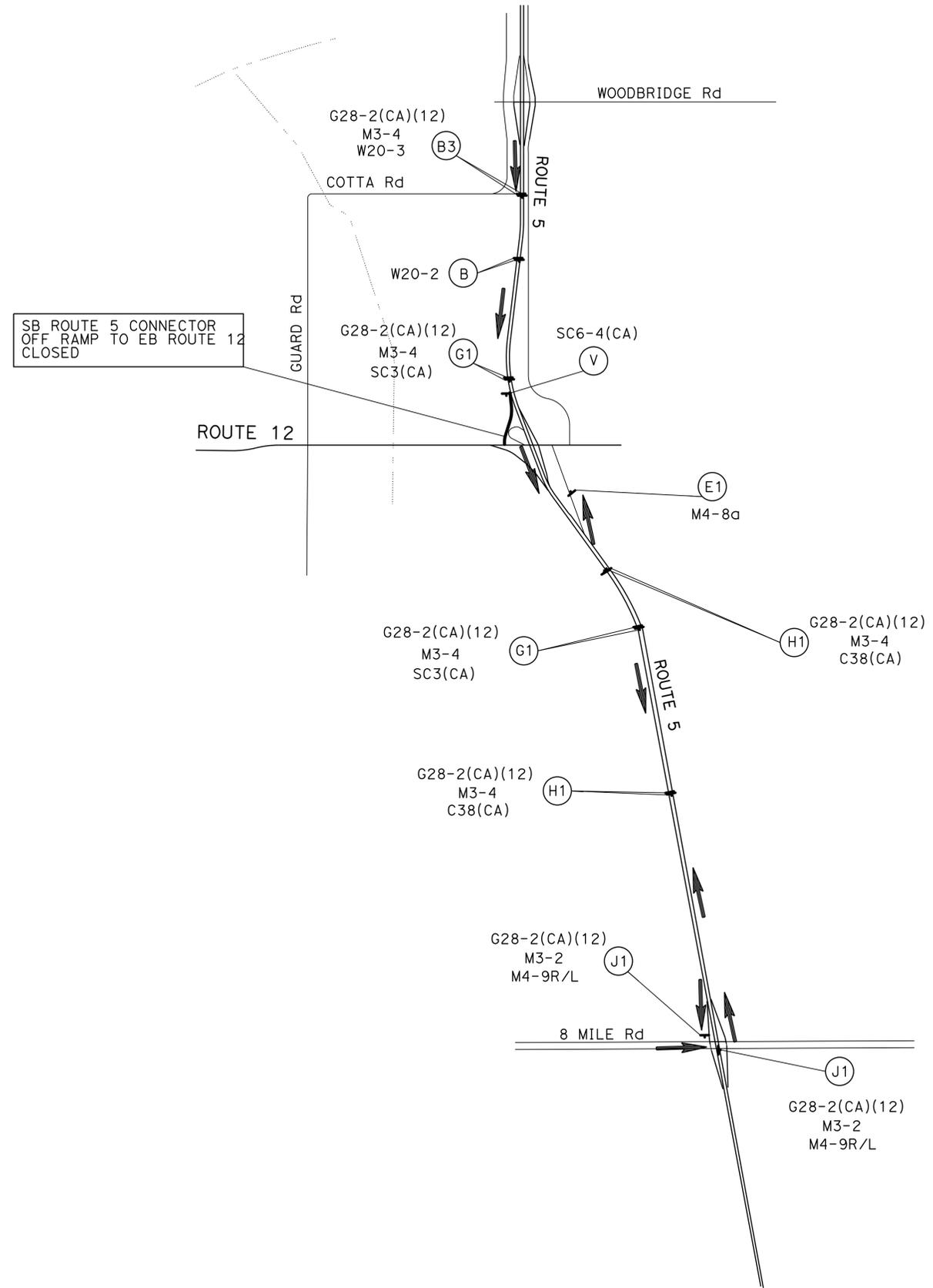
MOTORIST INFORMATION PLAN
 (FROM EB ROUTE 12
 SB ON RAMP TO ROUTE 5 CLOSED)

NO SCALE **MI-2**

LAST REVISION DATE PLOTTED => 06-JAN-2015 09-16-14 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	GURMIT GILL	REVISED BY	GG
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	FAWZI YAGHMOUR	DATE REVISED	09/29/14

1	Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
	10	SJ	12	5.0/11.0	11	62
				09-26-14		
		REGISTERED CIVIL ENGINEER		DATE		
		09-29-14		PLANS APPROVAL DATE		
						
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1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

MOTORIST INFORMATION PLAN
(FROM ROUTE 5 SB OFF RAMP TO ROUTE 12 CLOSED)

APPROVED FOR MOTORIST INFORMATION WORK ONLY

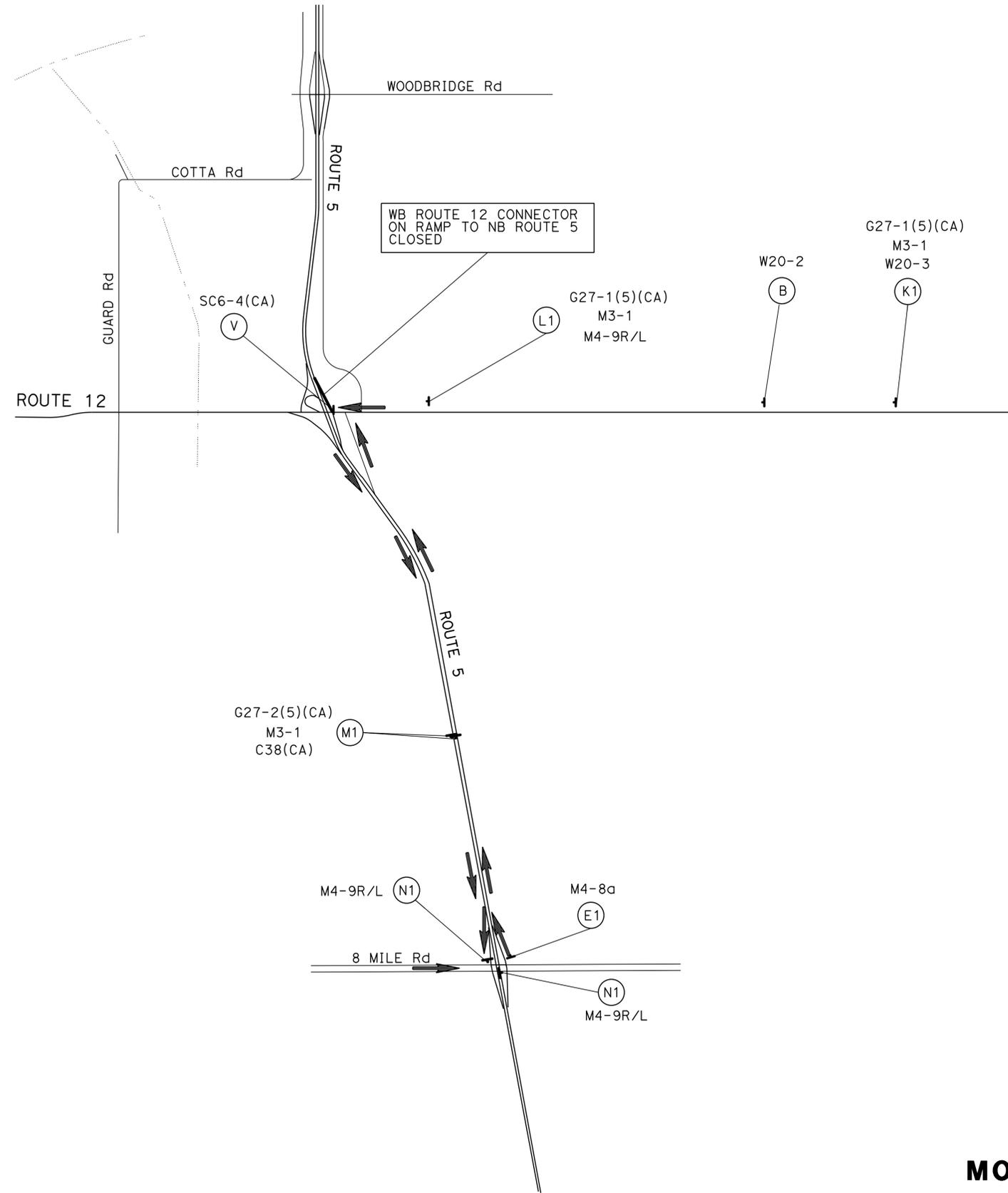
NO SCALE

MI-3

LAST REVISION DATE PLOTTED => 06-JAN-2015
09-16-14 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	GURMIT GILL	REVISED BY	GG
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	FAWZI YAGHMOUR	DATE REVISED	09/29/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	12	62
			09-26-14	DATE	
REGISTERED CIVIL ENGINEER			DATE		
09-29-14			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>					



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MOTORIST INFORMATION PLAN
 (FROM WB ROUTE 12 TO NB
 ON RAMP TO ROUTE 5 CLOSED)

APPROVED FOR MOTORIST INFORMATION WORK ONLY

NO SCALE

MI-4

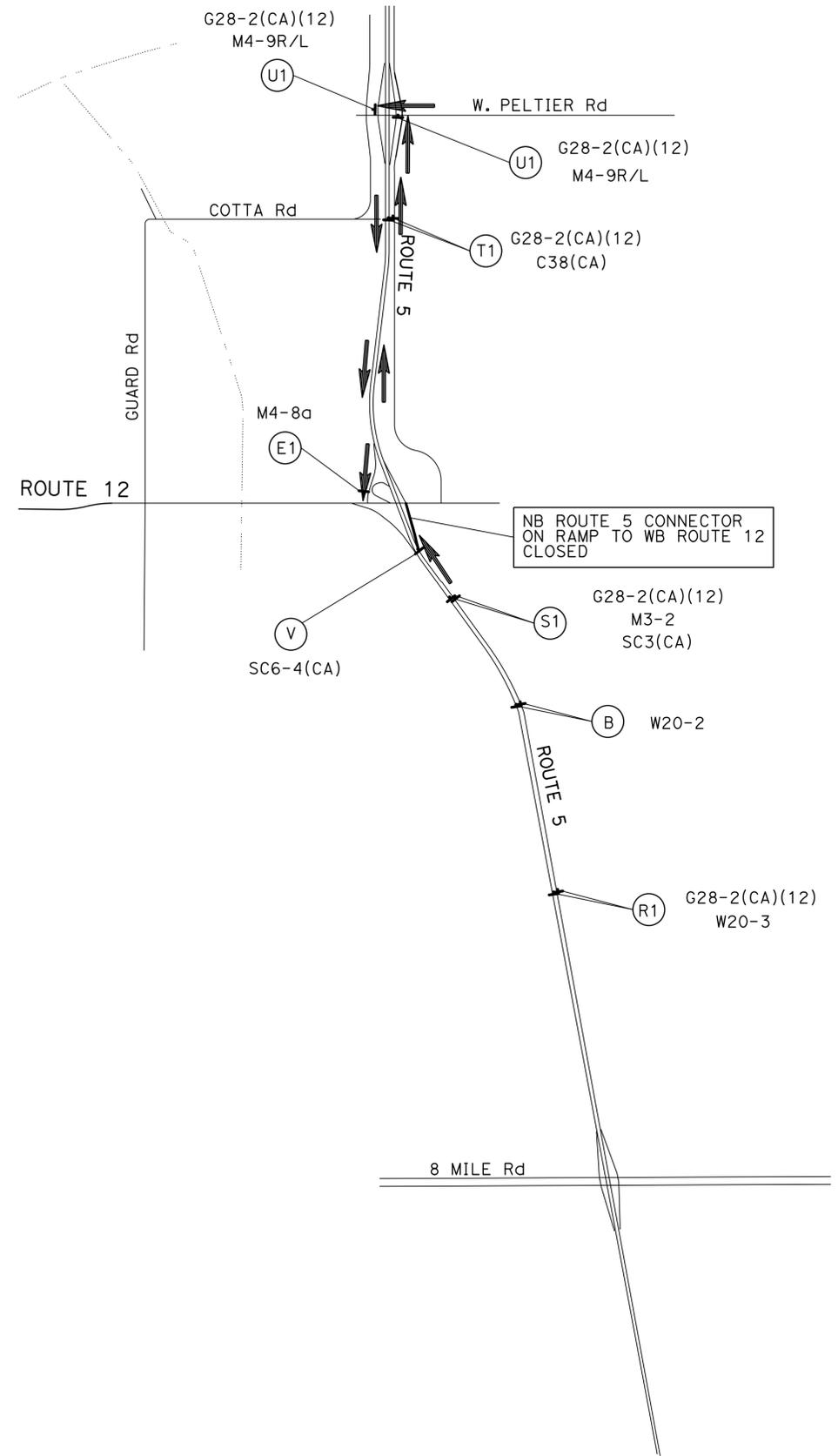
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	GURMIT GILL	REVISED BY	GG
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	FAWZI YAGHMOUR	DATE REVISED	09/29/14

1	DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
	10	SJ	12	5.0/11.0	13	62

09-26-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
FAWZI YAGHMOUR
 No. 54750
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

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MOTORIST INFORMATION PLAN
 (FROM ROUTE 5 NB OFF RAMP TO ROUTE 12 CLOSED)

APPROVED FOR MOTORIST INFORMATION WORK ONLY

NO SCALE

MI-5



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	14	62
			09-26-14		
REGISTERED CIVIL ENGINEER			DATE		
09-29-14			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>					

CONSTRUCTION AREA SIGNS (PORTABLE) (TRAFFIC HANDLING)

SIGN No.	SIGN CODE		PANEL SIZE	SIGN MESSAGE	No. OF SIGN
	FEDERAL	CALIFORNIA			
(B)	W20-2		48" x 48"	DETOUR AHEAD	5
(E1)	M4-8a		24" x 18"	END DETOUR	5
(F)	M4-10		48" x 18"	DETOUR/ARROW	1
(A1)		G27-1(5)(CA)	24" x 24"	SHIELD (5)	2
	M3-3		26" x 12"	SOUTH	
	W20-3		48" x 48"	RAMP CLOSED AHEAD	
(D1)		G27-1(5)(CA)	24" x 24"	SHIELD (5)	5
	M3-3		26" x 12"	SOUTH	
	M4-9R/L		30" x 24"	DETOUR ARROW (R/L)	
(C1)		G27-1(5)(CA)	24" x 24"	SHIELD (5)	2
	M3-3		26" x 12"	SOUTH	
		SC3(CA)	36" x 12"	DETOUR UP ARROW	
(C2)		G27-1(5)(CA)	24" x 24"	SHIELD (5)	4
	M3-3		26" x 12"	SOUTH	
		C38(CA)	36" x 48"	USE NEXT EXIT	
(G1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	4
	M3-4		26" x 12"	WEST	
		SC3(CA)	36" x 12"	DETOUR UP ARROW	
(H1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	4
	M3-4		26" x 12"	WEST	
		C38(CA)	36" x 48"	USE NEXT EXIT	
(B3)		G28-2(CA)(12)	28" x 25"	MARKER(12)	2
	M3-4		26" x 12"	WEST	
	W20-3		48" x 48"	RAMP CLOSED AHEAD	
(J1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	2
	M3-2		26" x 12"	EAST	
	M4-9R/L		30" x 24"	DETOUR ARROW (R/L)	
(K1)		G27-1(5)(CA)	24" x 24"	SHIELD (5)	1
	M3-1		26" x 12"	NORTH	
	W20-3		48" x 48"	RAMP CLOSED AHEAD	
(L1)		G27-1(5)(CA)	24" x 24"	SHIELD (5)	1
	M3-1		26" x 12"	SOUTH	
	M4-9R/L		30" x 24"	DETOUR ARROW (R/L)	

CONSTRUCTION AREA SIGNS (PORTABLE) (TRAFFIC HANDLING)

SIGN No.	SIGN CODE		PANEL SIZE	SIGN MESSAGE	No. OF SIGN
	FEDERAL	CALIFORNIA			
(M1)		G27-2(5)(CA)	24" x 24"	SHIELD (5)	2
	M3-1		26" x 12"	NORTH	
		C38(CA)	36" x 48"	USE NEXT EXIT	
(N1)	M4-9R/L		30" x 24"	DETOUR ARROW (R/L)	2
(R1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	2
	W20-3		48" x 48"	RAMP CLOSED AHEAD	
(S1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	2
	M3-2		26" x 12"	EAST	
		SC3(CA)	36" x 12"	DETOUR UP ARROW	
(T1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	2
		C38(CA)	36" x 48"	USE NEXT EXIT	
(U1)		G28-2(CA)(12)	28" x 25"	MARKER(12)	2
	M4-9R/L		30" x 24"	DETOUR ARROW (R/L)	
(V)		SC6-4(CA)	48" x 60"	RAMP CLOSED XX-XX THRU XX-XX	5

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

**MOTORIST INFORMATION QUANTITIES
MIQ-1**



1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	15	62
REGISTERED CIVIL ENGINEER		DATE		No.	
Sheikh Alam		09-16-14		72145	
PLANS APPROVAL DATE		09-29-14		Exp. 6/30/16	
<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>					

LEGEND

-  CONSTRUCTION COMPLETED IN PREVIOUS STAGES
-  CONSTRUCT THIS STAGE

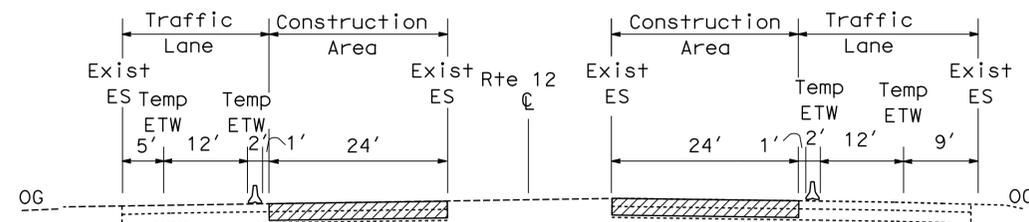
STAGE 1: WORK SEQUENCE

- 1) INSTALL TEMPORARY RAILING (TYPE K) PER TRAFFIC HANDLING PLANS.
- 2) CONSTRUCT PAVEMENT STRUCTURE.
- 3) REMOVE TEMPORARY RAILING (TYPE K).

STAGE 2: WORK SEQUENCE

- 1) INSTALL TEMPORARY RAILING (TYPE K) PER TRAFFIC HANDLING PLANS.
- 2) CONSTRUCT PAVEMENT STRUCTURE.
- 3) REMOVE TEMPORARY RAILING (TYPE K).

NOTE: SEE TRAFFIC HANDLING PLAN SHEETS FOR MORE INFORMATION.

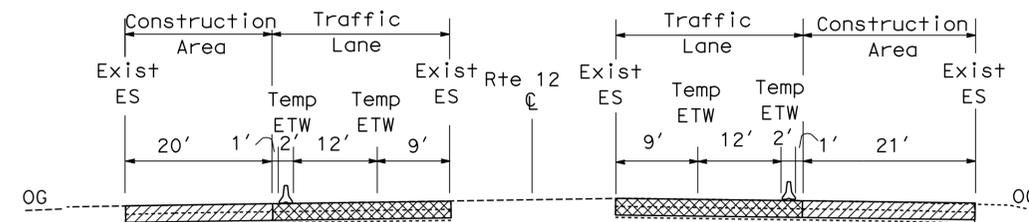


SECTION A-A

PM 10.13 - PM 10.20

STAGE 1

NO SCALE

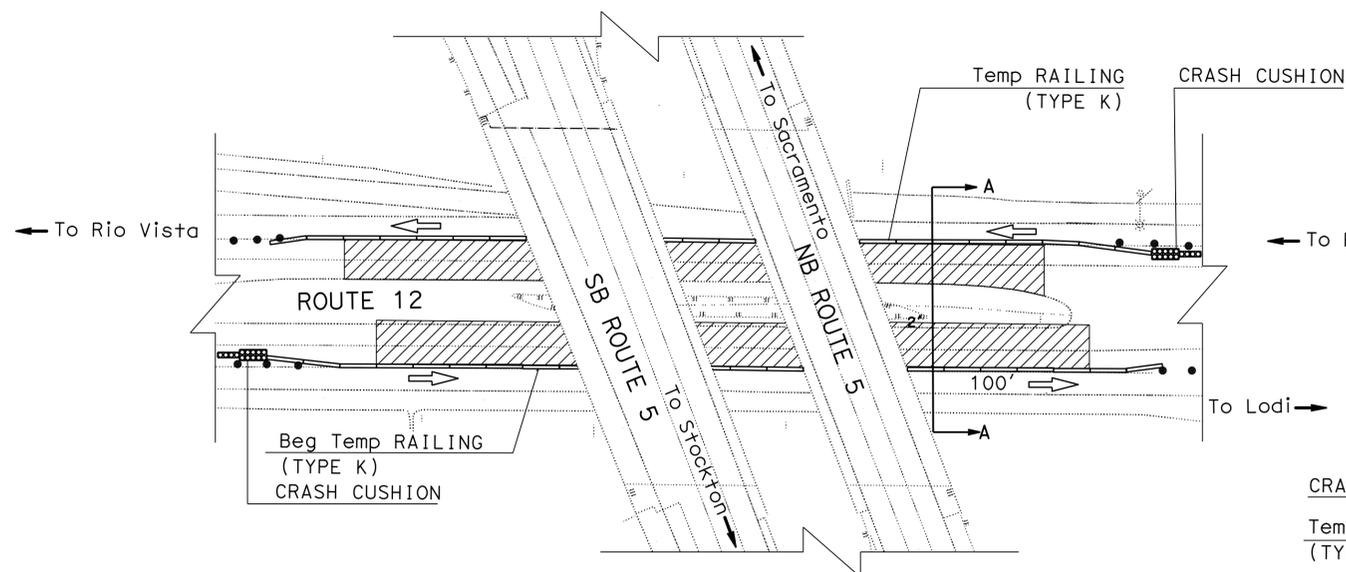


SECTION B-B

PM 10.13 - PM 10.20

STAGE 2

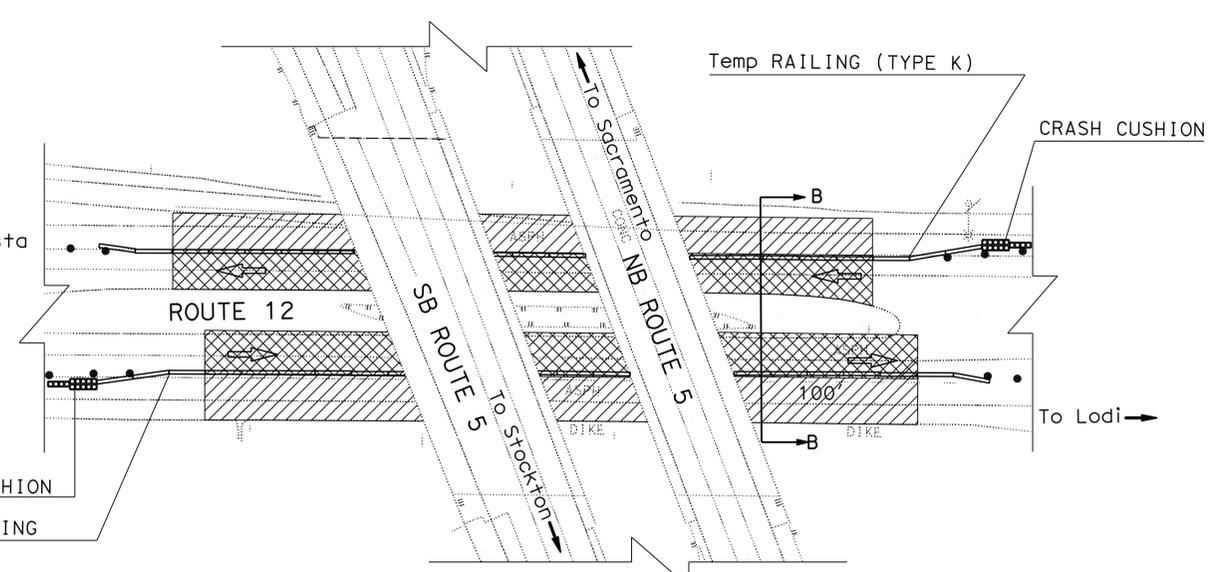
NO SCALE



STAGE 1

PLAN

PM 10.13 - PM 10.20



STAGE 2

PLAN

PM 10.13 - PM 10.20

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN

STAGE CONSTRUCTION

NO SCALE

SC-1

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

APPROVED FOR STAGE CONSTRUCTION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - **Caltrans** TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: MOHAMMED QATAMI

REVISOR: CECILE NGUYEN, FAWZI YAGHMOUR

DATE: 09/29/14

REVISIONS: (None listed)

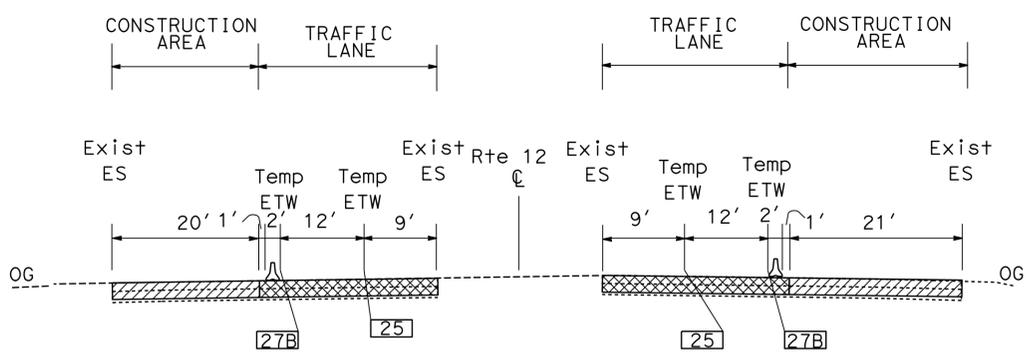
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	17	62

REGISTERED CIVIL ENGINEER: FAWZI YAGHMOUR, No. 54750, Exp. 12-31-15

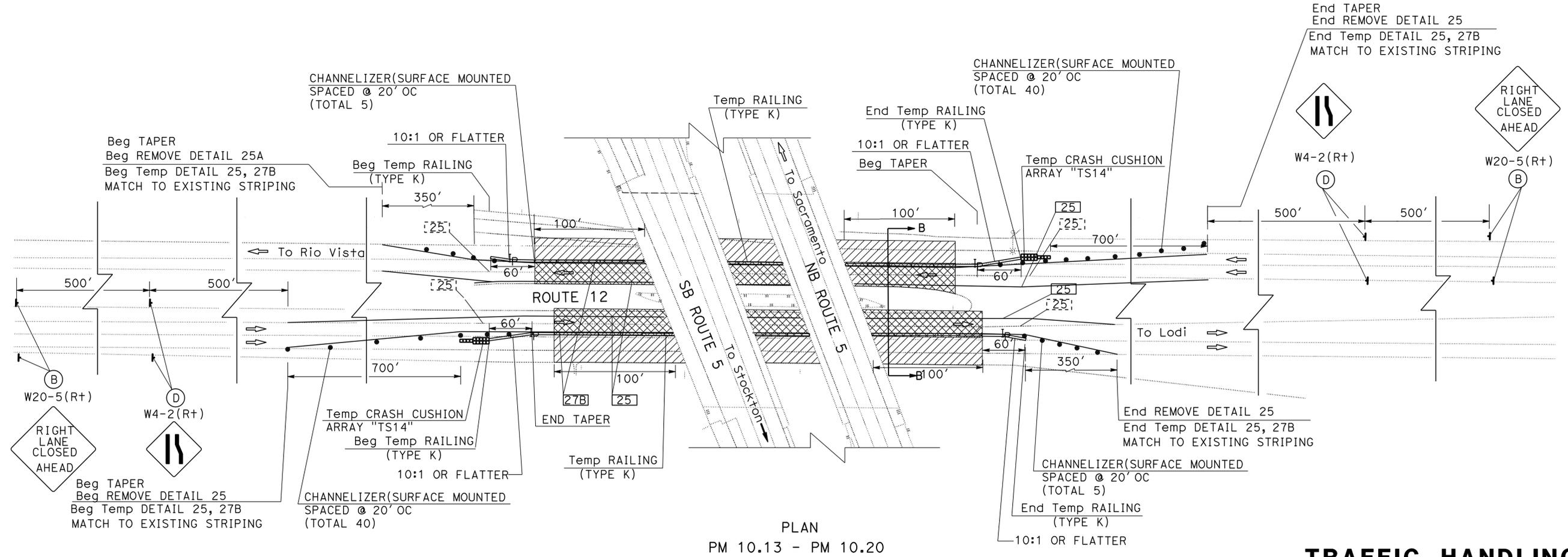
DATE: 09-26-14

PLANS APPROVAL DATE: 09-29-14

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.



SECTION B-B
STAGE 2
 NO SCALE



PLAN
 PM 10.13 - PM 10.20

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

TRAFFIC HANDLING PLAN
 (STAGE 2)
 NO SCALE
TH-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - **Caltrans** TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: MOHAMMED QATAMI

CALCULATED/DESIGNED BY: CECILE NGUYEN

CHECKED BY: FAWZI YAGHMOUR

REVISOR: FY

DATE REVISED: 09/29/14

NOTE:

- FOR ADDITIONAL CONSTRUCTION AREA SIGNS REFER TO SHEET CS-1.
- (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	18	62

09-26-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

FAWZI YAGHMOUR
 No. 54750
 Exp. 12-31-15
 CIVIL

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.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

STAGE	SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE	No. OF POST AND SIZE	No. OF SIGNS	
						EA	
1&2	B	W20-5	RIGHT LANE CLOSED 1000'	48" x 48"	1 - 6" x 6"	4	
	C	W4-2 Lt	LEFT LANE END SYMBOL	48" x 48"	1 - 6" x 6"	4	
	D	W4-2 Rt	RIGHT LANE END SYMBOL	48" x 48"	1 - 6" x 6"	4	
	E	W20-5	LEFT LANE CLOSED 1000'	48" x 48"	1 - 6" x 6"	4	
	F	R3-2	NO LEFT TURN SYMBOL	36" x 36"	1 - 4" x 6"	1	

TEMPORARY RAILING (TYPE K)

STAGE	DIRECTION	LOCATION POST MILE	LF	OBJECT MARKER (TYPE P)	
				(N)	EA
1	WB	10.13 To 10.20	540	2	
	EB		540	2	
2	WB		540	2	
	EB		540	2	
TOTAL			2,160		

TEMPORARY CRASH CUSHION MODULE

STAGE	TYPE "TS14"	
	EA	
1	28	
2	28	
TOTAL	56	

CHANNELIZER (SURFACE MOUNTED)

STAGE	EA
1	90
2	90
TOTAL	180

TEMPORARY PAVEMENT DELINEATION QUANTITIES

STAGE	DIRECTION	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MAKER	TEMPORARY TRAFFIC STRIPE (PAINT)				TEMPORARY PAVEMENT MARKER	
					4" WHITE	8" WHITE		4" YELLOW	TYPE	
					DETAIL 27B	DETAIL 36	DETAIL 38	DETAIL 25	G	H
		LF	LF	EA	LF				EA	
1	WB		1,900	39	1,520	100		1,520	6	33
	EB		1,520	33	1,520			1,520		33
2	WB	1,520		39	1,520	100		1,520	6	33
	EB	1,520		53	1,520		470	1,520	20	33
SUBTOTAL		3,040	3,420	164	6,080	200	470	6,080	32	132
TOTAL		3,040 *	3,420 *	164 *	12,830				164	

* SEE PDQ-1 FOR TOTAL QUANTITIES

TRAFFIC HANDLING QUANTITIES THQ-1

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	19	62

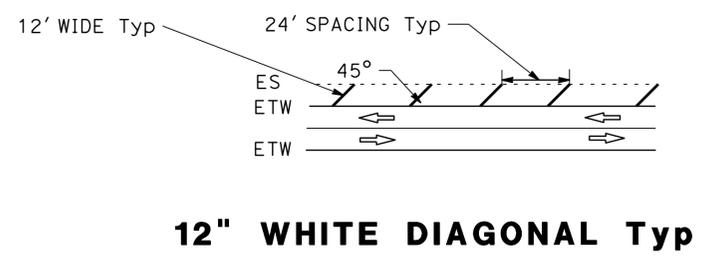
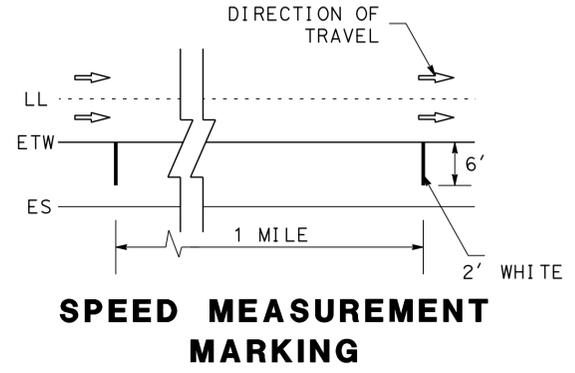
09-26-14
 REGISTERED CIVIL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

FAWZI YAGHMOUR
 No. 54750
 Exp. 12-31-15
 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.

PAVEMENT DELINEATION QUANTITIES (PAVEMENT MARKING)

LOCATION	REMOVE THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC PAVEMENT MARKING												
		TYPE III ARROW	TYPE V ARROW	TYPE VI ARROW	CROSS WALK	STOP	CHP PM MARKING	LIMIT LINE	TYPE II ARROW	SIGNAL	AHEAD	DIAGONAL MARKING		
PM	EB/WB	SQFT	SQFT											
PM 5-5.262 TO -5.512	EB	257	168					44		45				
	WB	146	84					22		40				
PM 6.012 TO -6.10	EB	65						22		43				
PM 6.8 TO -7.012	EB	65						22		43				
PM 8.672 TO -8.80	EB	146	84					22		40				
	WB	127	84					22		21				
PM 9.262 TO -9.762	EB	99		99										
	WB													
PM 9.762-10.012	EB	66		66										
	WB	132		132										
PM 10.0-10.26	EB	244						22		173			49	
	WB	445								445				
PM 10.26-11.0	EB	1452	462		126	419				445				
	WB	232	210							22				
PM 5.0		12							12					
PM 5.47		12							12					
PM 5.97		12							12					
PM 16.46		12							12					
PM 6.96		12							12					
PM 7.46		12							12					
PM 7.96		12							12					
PM 8.44		12							12					
PM 9.94		12							12					
PM 9.42		12							12					
PM 10.0		12							12					
PM 11.0		12							12					
NE ON RAMP		159	126	33										
NW OFF RAMP		370	168						76		64	62		
SE OFF RAMP		535	252						100	135			48	
SUB-TOTAL		4,684	1,638	330	126	419		176	144	1,493	135	64	62	97
TOTAL		4,684	4,684											



PAVEMENT DELINEATION DETAILS AND QUANTITIES

PDD-1

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans® TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR MOHAMMED QATAMI
 DAVE BLACK
 FAWZI YAGHMOUR
 REVISOR DATE
 09/29/14
 FY
 09/29/14

LAST REVISION DATE PLOTTED => 06-JAN-2015
 09-26-14 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN
 FUNCTIONAL SUPERVISOR
 NOMER GUTIERREZ
 CALCULATED/DESIGNED BY
 CHECKED BY
 YOUNG HAHN
 SHEIKH ALAM
 REVISOR BY
 DATE REVISED
 SA
 09/16/14

1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	21	62

REGISTERED CIVIL ENGINEER *Sheikh Alam* No. 72145
 DATE 09-16-14
 PLANS APPROVAL DATE 09-29-14
 Exp. 6/30/16
 CIVIL
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.

ROADWAY QUANTITIES

LOCATION	TACK COAT	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	HOT MIX ASPHALT (TYPE A)	SHOULDER BACKING	COLD PLANE AC PAVEMENT	PLACE HMA (MISC AREA)	ROADWAY EXCAVATION	JPCP (RSC)	CL 2 AS
	TON	TON	TON	TON	SQYD	SQYD	CY	CY	CY
PM 5.0 TO PM 10.13 PM 10.2 TO PM 11.0	103	21,798	15,831(1)	2200	79,154 (1)		2480	1203	940
PM 10.13 TO PM 10.20			1,160						
I-5 ON & OFF RAMP			3,103		100				
DIKE (TYPE E + F)			1,994						
SAFETY EDGE			644						
HMA OVERSIDE DRAIN			32			188.8			
PUBLIC ROADS	3				360	25			
PRIVATE DRIVEWAYS	1				1,700	10			
REMOVE RUMBLE STRIP			2,112		10,560				
TOTAL	107	21,798	24,876	2200	91,874	223.8	2480	1203	940

ADJUST MONUMENT TO GRADE

LOCATION (PM)	EA
8.9 WB	1
8.6 EB	1
8.8 EB	1
9.2 EB	1
TOTAL	4

RUMBLE STRIP

LOCATION PM - PM	CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)	SHOULDER RUMBLE STRIP (CONC PVT, GROUND-IN INDENTATIONS)	COLD PLANE AC PAVEMENT	HOT MIX ASPHALT (TYPE A)
	Sta	Sta	Sta	SQYD	TON
5.0 - 11.0		617		10,560	2,112
5.0 - 9.65	246				
10.13-10.20			18		
TOTAL	246	617	18	10,560*	2,112*

* SEE ROADWAY QUANTITIES TABLE FOR PROJECT TOTAL

METAL BEAM GUARD RAILING

LOCATION (PM-PM)	REMOVE GUARDRAIL	REMOVE FLARED TERMINAL SYSTEM (N)	MGS (STEEL POST) TYPE 11E LAYOUT	ALTERNATIVE FLARED TERMINAL SYSTEM	TREATED WOOD WASTE
WB	LF	EA	LF	EA	LB
10.007-10.019	66	2	66	2	1,056
10.017 SB OFF-RAMP	92	2	92	2	1,472
10.037-10.057	101	2	101	2	1,632
10.160-10.203 MEDIAN	223	2	223	2	3,568
10.213-10.224	62	2	62	2	992
10.236-10.249	66	2	66	2	1,056
10.483-10.497	75	2	75	2	1,200
10.567-10.580	66	2	66	2	1,056
EB					
9.868-9.882	75	2	75	2	1,200
10.013-10.044	166	2	166	2	2,656
10.209-10.222	65	2	65	2	1,040
10.241-10.255 MEDIAN	70	2	70	2	1,120
NB OFF RAMP	140	2	140	2	2,240
10.441-10.454	66	2	66	2	1,056
TOTAL	1333		1333	28	21,344

(N) NOT A SEPERATE PAY ITEM, FOR INFORMATION ONLY

(1) QUANTITES FROM DIGOUT TABLE

SAFETY EDGE

LOCATION	LENGTH (N)	HMA (TYPE A)
WB	LF	TON
5.0 TO 9.0	21,120	156.4
10.1 To 10.16	317	2.3
10.2 To 10.21	53	0.4
10.22 TO 10.24	106	0.8
10.25 TO 10.48	1,215	9.0
10.5 TO 10.57	370	2.7
10.58 TO 11	2,218	16.4
WB & EB INSIDE SHOULDER		
9.59 TO 10.66	11,300	83.7
EB		
5.0 TO 9.0	21,120	156.4
10.04 TO 10.21	898	6.7
10.22 TO 10.24	106	0.8
10.26 TO 10.44	951	7.0
10.45 TO 11	2,904	21.5
ON & OFF I-5 RAMP IN AND OUTSIDE SHOULDER		
SB ON RAMP	6,638	49.2
SB ON LOOP RAMP	4,230	31.3
SB OFF RAMP	4,152	30.8
NB ON RAMP	5,444	40.3
NB OFF RAMP	3,822	28.3
TOTAL		644.0*

(N) NOT A SEPERATE PAY ITEM, FOR INFORMATION ONLY
 * SEE ROADWAY QUANTITIES TABLE FOR PROJECT TOTAL

DIKE QUANTITIES

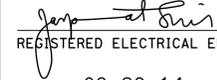
LOCATION (PM-PM)	PLACE HMA DIKE		HMA (TYPE A) TONS	Remove AC Dike LF
	TYPE E	TYPE F		
WB	LF	LF	TONS	LF
9.00-10.00	5,280		137.3	5,280
10.01-10.02		66	0.9	66
10.02 SB OFF-RAMP		92	1.2	92
10.00-10.10	525		13.7	525
10.04-10.06		102	1.3	102
10.16-10.20 MEDIAN		223	2.9	223
10.11-10.15	78		2.0	78
10.21-10.03	469		12.2	469
10.21-10.22		62	0.8	62
10.24-10.25		66	0.9	66
10.48-10.50		75	1.0	75
10.57-10.58		66	0.9	66
EB				
9.00-9.70	3,361		87.4	3,361
9.95-10.00	1,955		50.8	1,955
9.87-9.88		75	1.0	75
10.00-10.04	1,630		42.4	1,630
10.01-10.04		166	2.2	166
10.21-10.22		65	0.9	65
10.24-10.26 MEDIAN		70	0.9	70
NB OFF-RAMP		140	1.8	140
10.44-10.45		66	0.9	66
ON & OFF-RAMP	7,560		1630	7,560
TOTAL	20,858	1334	1993.4*	22,192

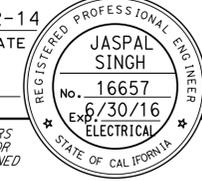
* SEE ROADWAY QUANTITIES TABLE FOR PROJECT TOTAL

SUMMARY OF QUANTITIES Q-1

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	23	62

 09-22-14
 REGISTERED ELECTRICAL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE



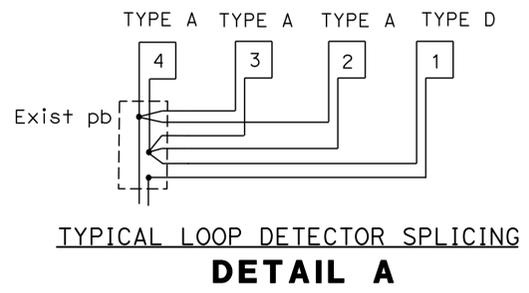
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND: (FOR SHEET E-2 THRU E-6)

- 1 Exist MODEL 2070E CONTROLLER ASSEMBLY .
- 2 Exist TYPE III-CF SERVICE EQUIPMENT ENCLOSURE.
- 3 Exist MODEL 334L CONTROLLER CABINET WITH AUTOMATED TRAFFIC COUNTER FOR VCS.
- 4 Exist VCS.
- 5 Exist RWIS.
- 6 PAS AND LOOP DETECTORS. SEE IDENTIFICATION AND PLACEMENT DETAILS ON SHEET E-7.
- 7 Exist 2-3"C, 12 DLC, 2#6, 6 STC, **RC** 6 STC ADD 6 STC.
- 8 Exist 3"C, 12 DLC, 6 STC, **RC** 6 STC ADD 6 STC.
- 9 Exist 3"C, 6 DLC, 3 STC, **RC** 3 STC ADD 3 STC.
- 10 Exist 3"C, 8 DLC, 4 STC, **RC** 4 STC ADD 4 STC.
- 11 Exist 3"C, 2 DLC, 1 STC, **RC** 1 STC ADD 1 STC.
- 12 Exist 3"C, 4 DLC, 2 STC, **RC** 2 STC ADD 2 STC.
- 13 Exist 2"C, 4 DLC, 2 STC, **RC** 2 STC ADD 2 STC.
- 14 INTERCEPT Exist CONDUIT FOR LOOP WIRE TERMINATION.
- 15 Exist TRAFFIC SIGNAL SYSTEM NOT SHOWN.
- 16 Exist MODEL 334L CONTROLLER CABINET FOR TRAFFIC MONITORING STATION.
- 17 Exist MODEL 334L CONTROLLER CABINET WITH AUTOMATED TRAFFIC COUNTER FOR VCS AND CCTV.
- 18 Exist 3"C, 2#8, 8 DLC, 4 STC, **RC** 4 STC ADD 4 STC.
- 19 Exist 3"C, 4#6, 8 DLC, 4 STC, **RC** 4 STC ADD 4 STC.
- 20 Exist 2-3"C, 2#6, 8 DLC, 4 STC, **RC** 4 STC ADD 4 STC.
- 21 Exist 2-3"C, 2#6, 8 DLC, 4 STC, 1-CAMERA CABLE, **RC** 4 STC ADD 4 STC.
- 22 Exist 3"C, 8 DLC, 3 STC, **RC** 3 STC ADD 3 STC.
- 23 Exist 2"C, 6 DLC, 2 STC, 1-CAMERA CABLE, **RC** 2 STC ADD 2 STC.
- 24 Exist 2-3"C, 2#6, 6 DLC, 2 STC, 1-CAMERA CABLE, **RC** 2 STC ADD 2 STC.
- 25 Exist 2-3"C, 2#6, 8 DLC, 3 STC, **RC** 3 STC ADD 3 STC.
- 26 Exist 2"C, 6 DLC, 2 STC, **RC** STC ADD 2 STC.
- 27 SPLICE LOOP DETECTORS IN PB AS SHOWN IN DETAIL A.
- 28 **AB** Exist LOOP DETECTORS AND INSTALL AS SHOWN.
- 29 RAISE DETECTOR HANDHOLE TO NEW GRADE.

ABBREVIATIONS:

- PAS - PIEZO AXLE SENSOR
- STC - SCREENED TRANSMISSION CABLE
- VCS - VEHICLE CLASSIFICATION STATION



1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

LEGEND AND ABBREVIATIONS

LAST REVISION DATE PLOTTED => 06-JAN-2015
 00-00-00 TIME PLOTTED => 13:41

1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	24	62

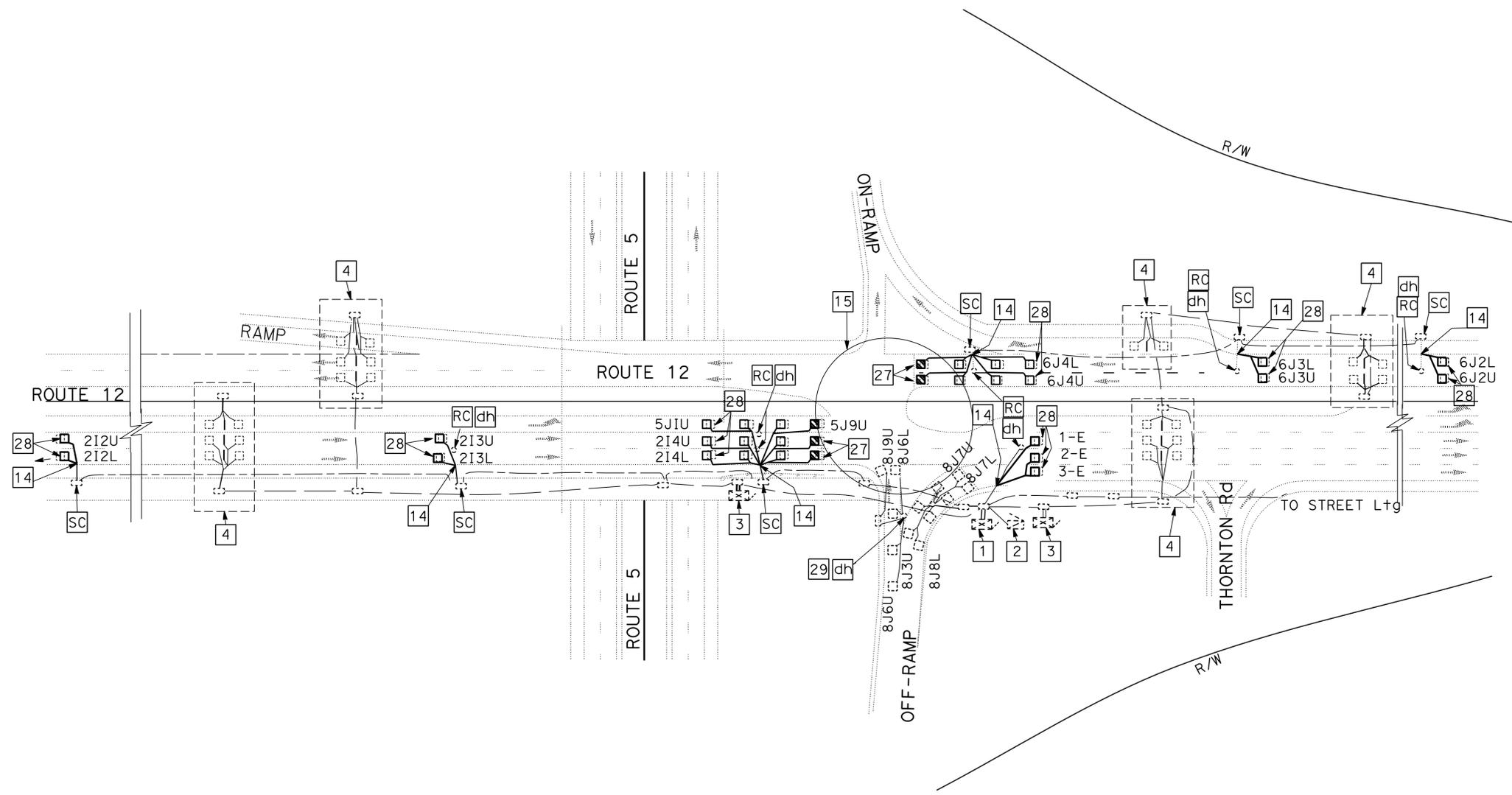
<i>Jaspal Singh</i>	09-22-14
REGISTERED ELECTRICAL ENGINEER	DATE
09-29-14	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	JASPAL SINGH
No.	16657
Exp.	6/30/16
ELECTRICAL	

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NOTES:

- FOR LEGEND SEE SHEET E-1.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: ALT BAKHDOUD

CALCULATED/DESIGNED BY: JASPAL SINGH

CHECKED BY: JASPAL SINGH

REVISOR: JS

DATE REVISED: 09/11/14

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

MODIFY SIGNAL

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50' **E-2**

NOTES:

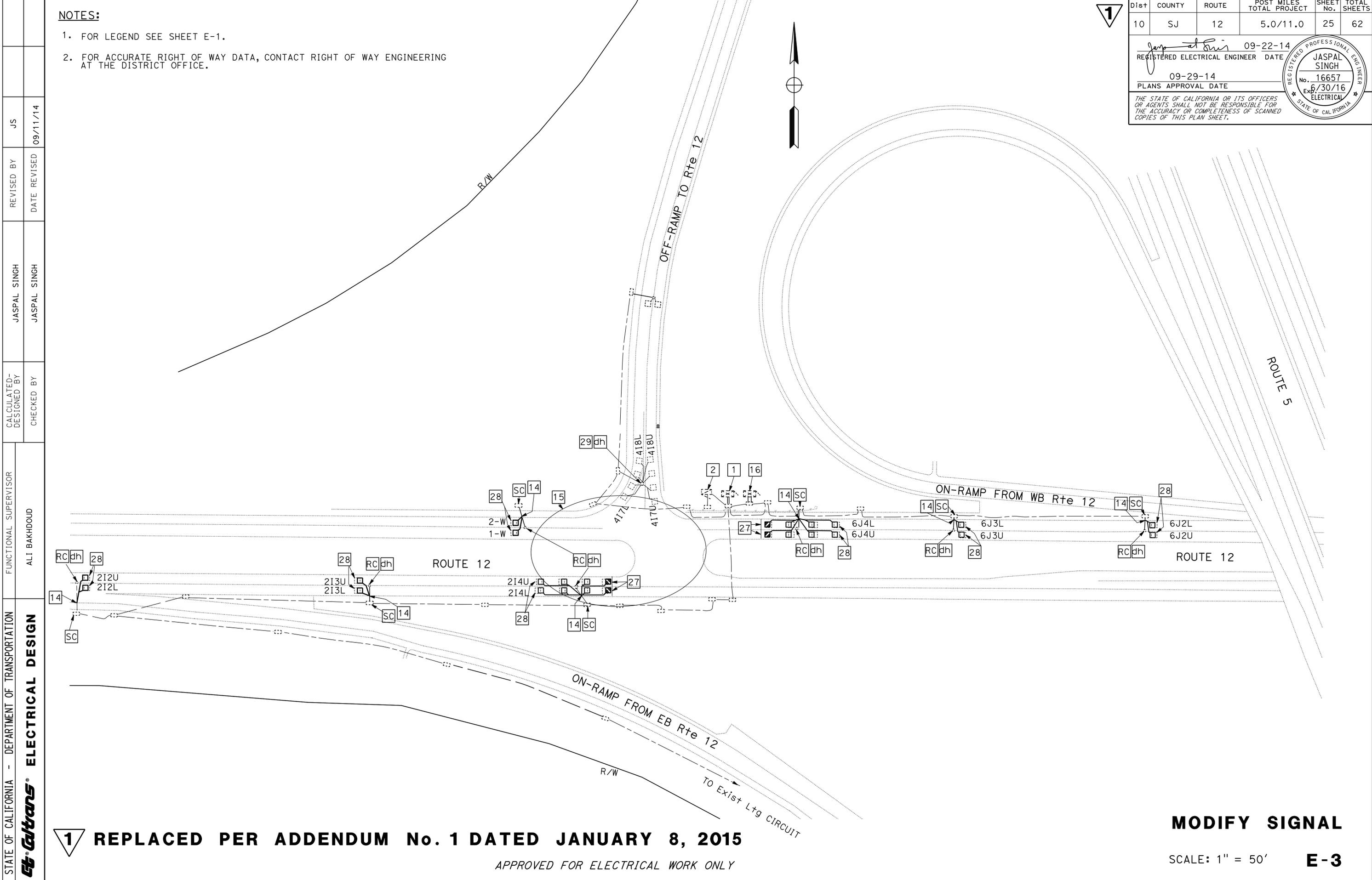
- FOR LEGEND SEE SHEET E-1.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	25	62

09-22-14
 REGISTERED ELECTRICAL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

JASPAL SINGH
 No. 16657
 Exp. 6/30/16
 ELECTRICAL
 STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: ALI BAKHDOD
 CALCULATED/DESIGNED BY: JASPAL SINGH
 CHECKED BY: JASPAL SINGH
 REVISED BY: JS
 DATE REVISED: 09/11/14

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

APPROVED FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL

SCALE: 1" = 50' **E-3**

LAST REVISION: 00-00-00 DATE PLOTTED => 06-JAN-2015 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 ALT BAKHDODD

CALCULATED-DESIGNED BY
 CHECKED BY

JASPAL SINGH
 JASPAL SINGH

REVISED BY
 DATE REVISED

JS
 09/11/14

NOTES:

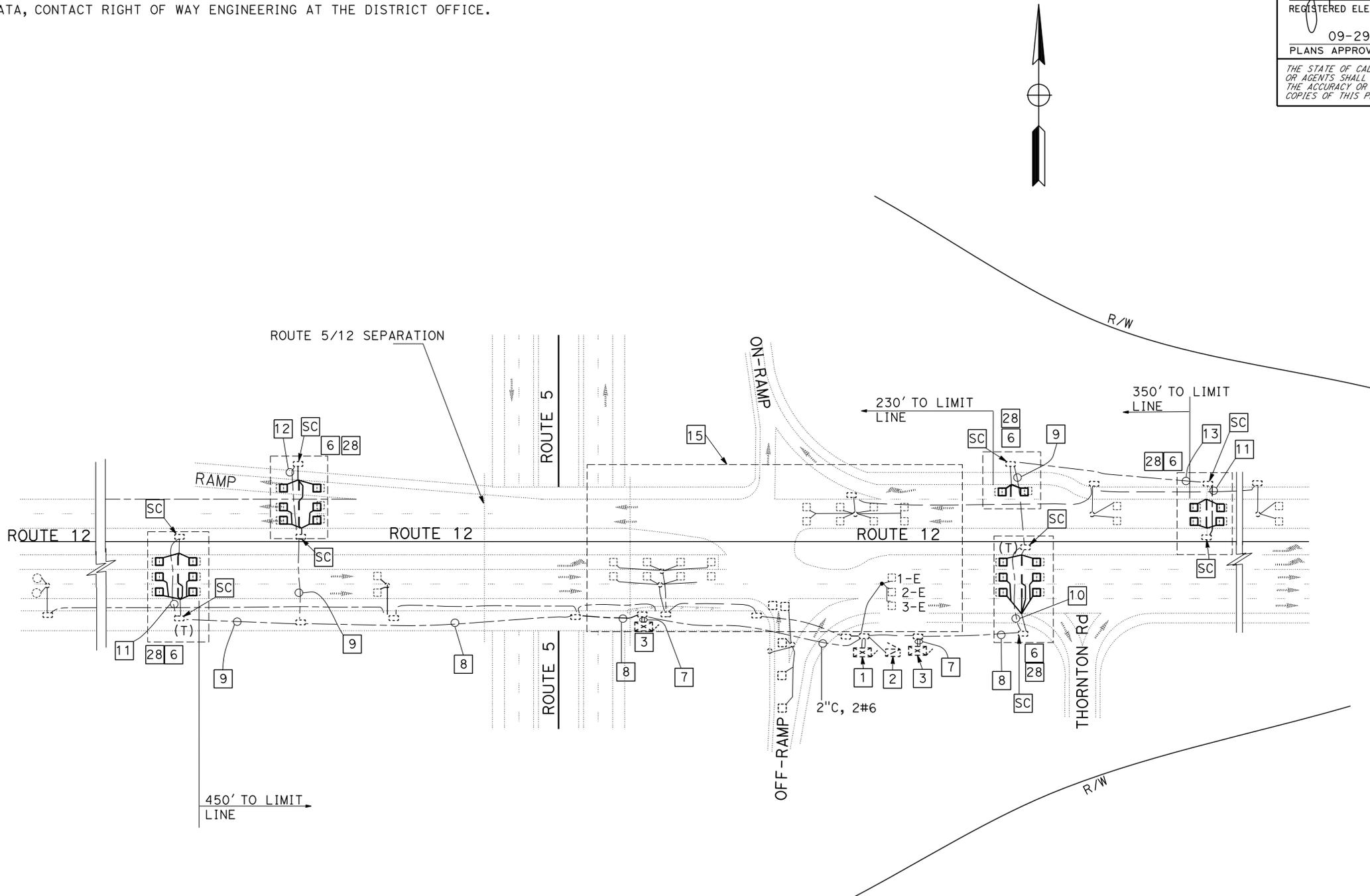
- FOR LEGEND SEE SHEET E-1.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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09-22-14
 REGISTERED ELECTRICAL ENGINEER DATE
 09-29-14
 PLANS APPROVAL DATE

JASPAL SINGH
 No. 16657
 Exp. 6/30/16
 ELECTRICAL
 STATE OF CALIFORNIA

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1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

MODIFY VEHICLE CLASSIFICATION STATION

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 ALT BAKHDOD

CALCULATED-DESIGNED BY
 CHECKED BY

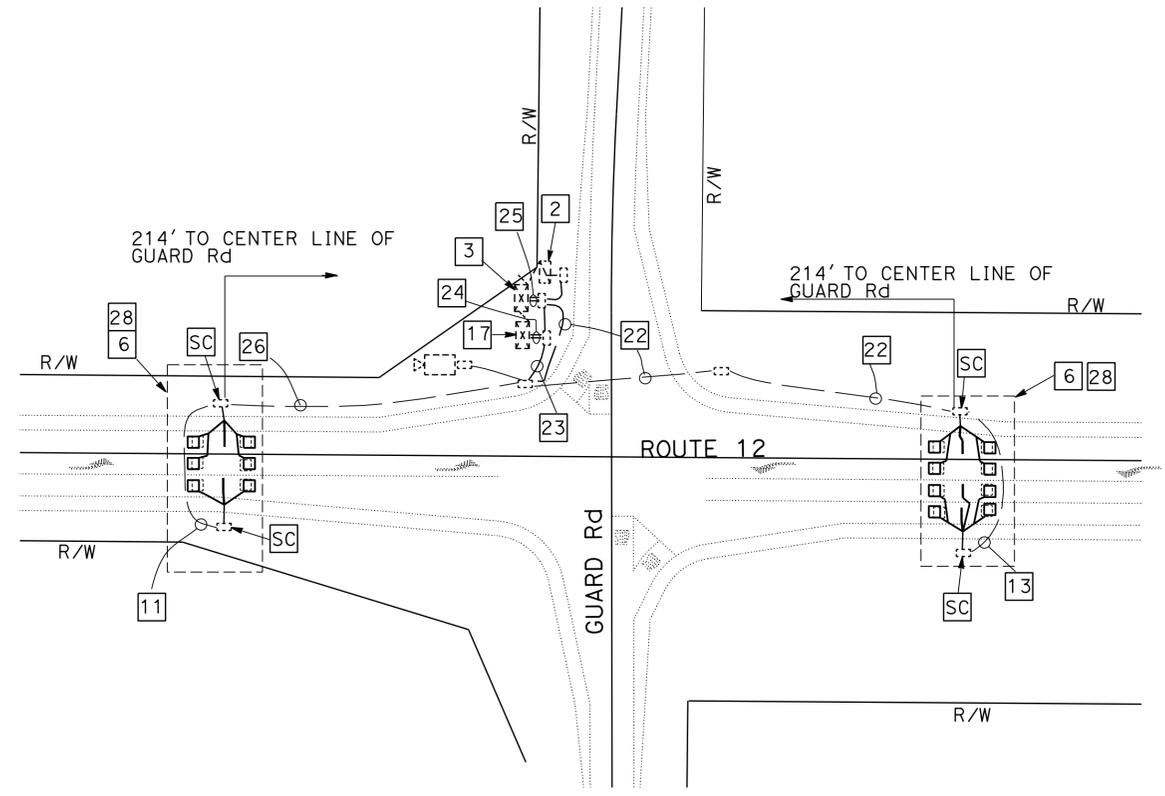
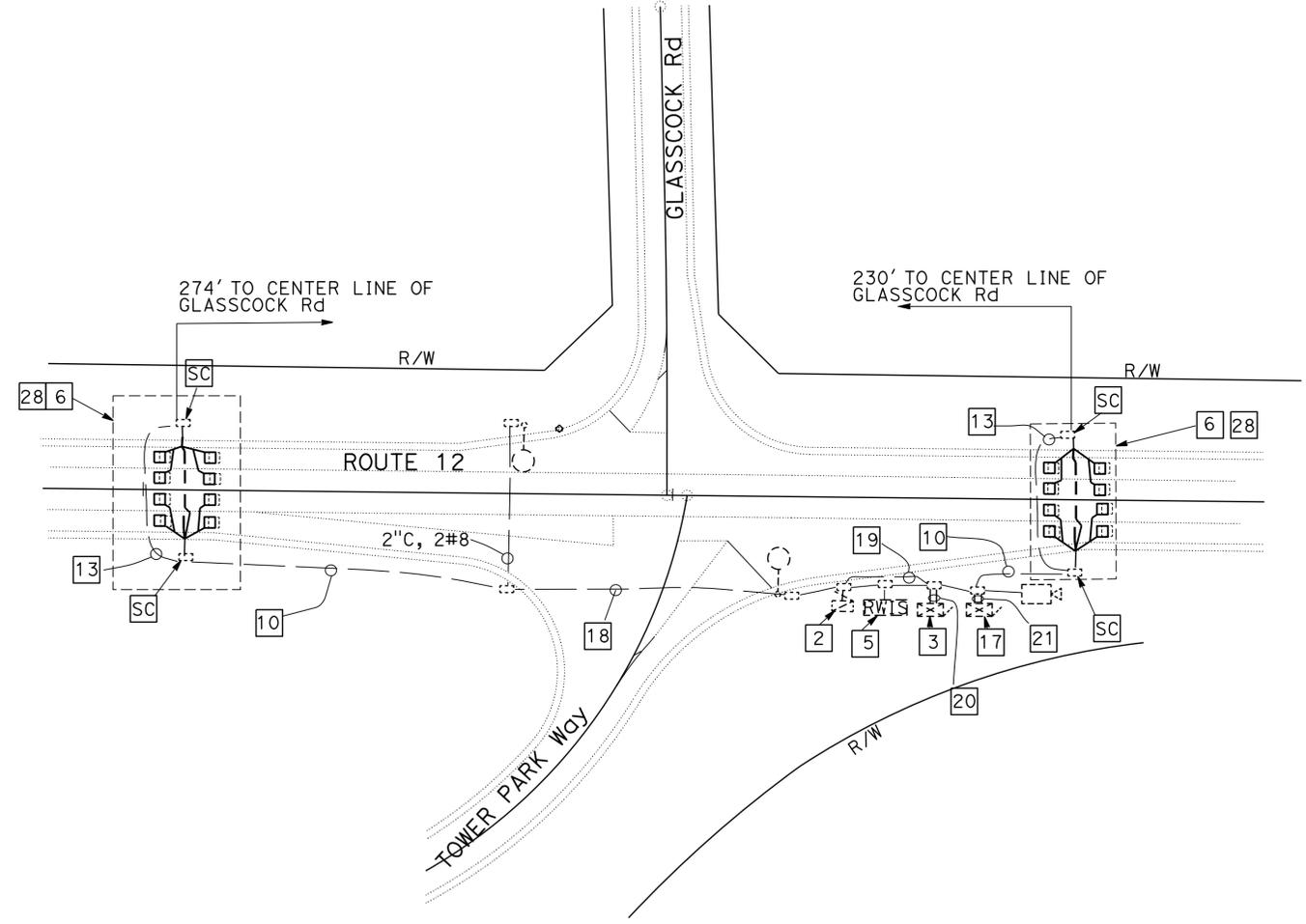
JASPAL SINGH
 JASPAL SINGH

REVISED BY
 DATE REVISED

JS
 09/11/14

NOTES:

1. FRO LEGEND SEE SHEET E-1.
3. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	28	62

JASPAL SINGH
 REGISTERED ELECTRICAL ENGINEER
 DATE 09-22-14
 PLANS APPROVAL DATE 09-29-14

REGISTERED PROFESSIONAL ENGINEER
 JASPAL SINGH
 No. 16657
 Exp. 6/30/16
 ELECTRICAL
 STATE OF CALIFORNIA

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1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

MODIFY VEHICLE CLASSIFICATION STATION

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

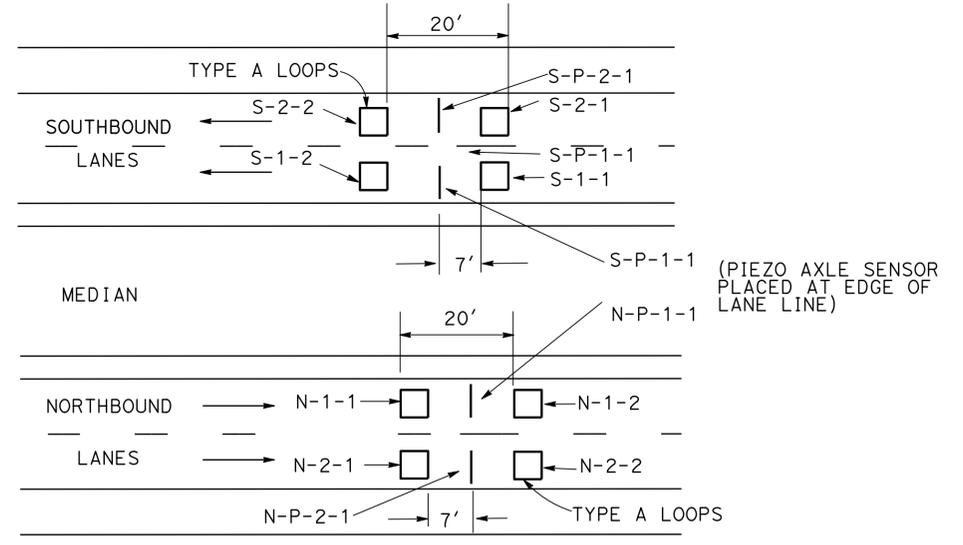
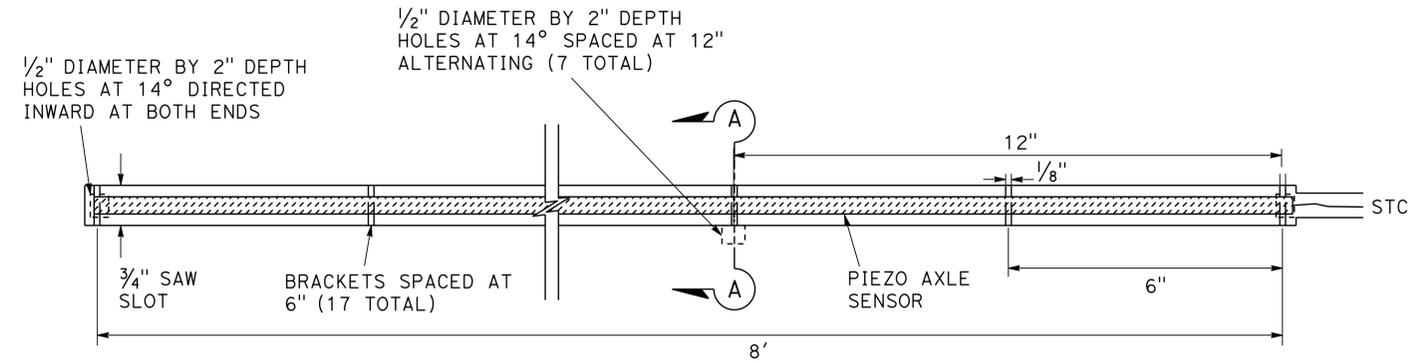
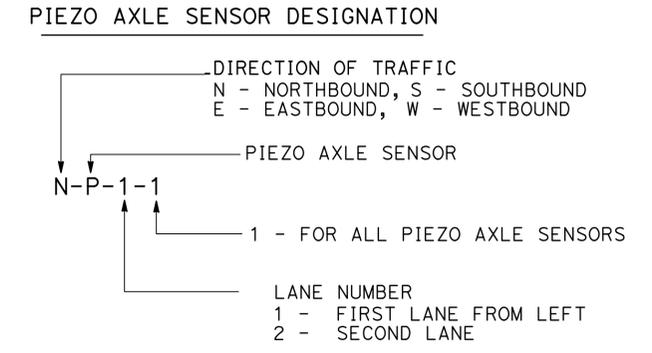
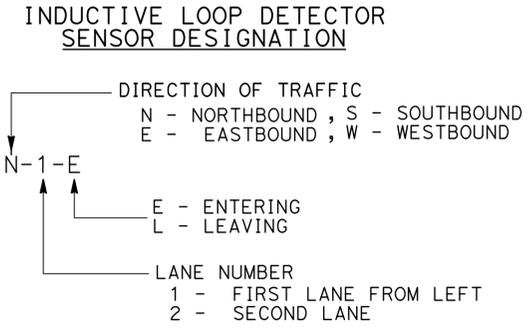
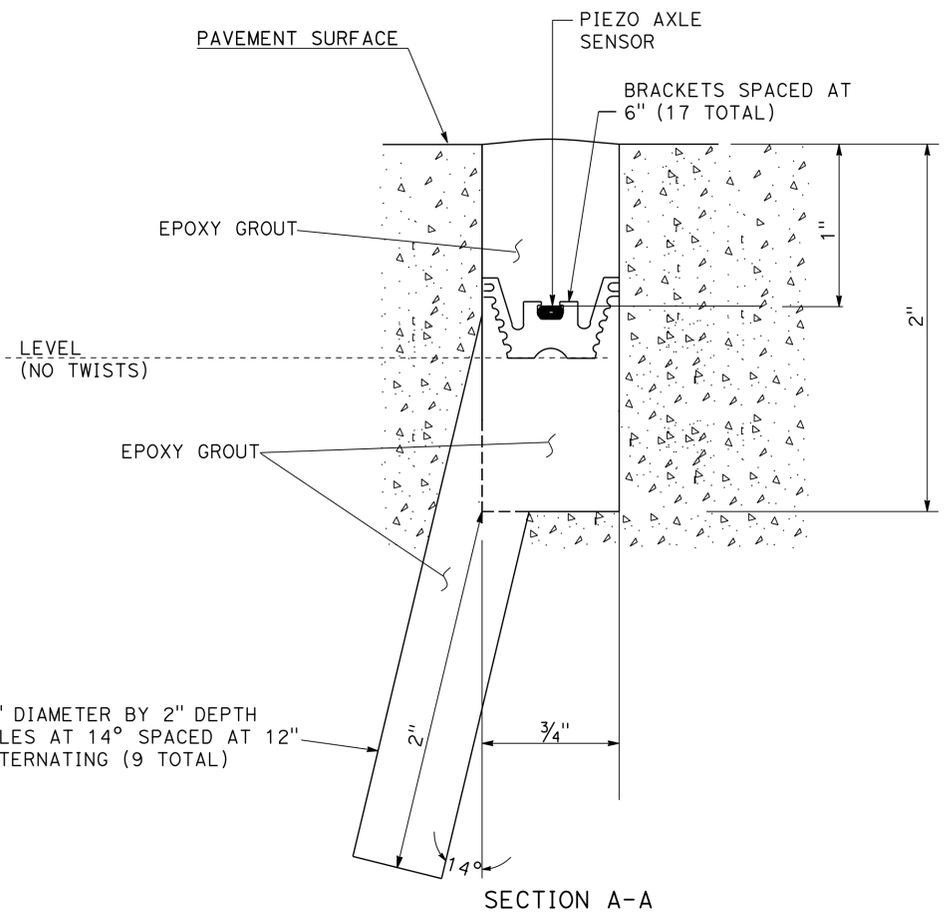
E-6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	29	62

09-22-14
 REGISTERED ELECTRICAL ENGINEER DATE
 09/29/14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JASPAL SINGH
 No. E16657
 Exp. 06/30/16
 ELECTRICAL
 STATE OF CALIFORNIA

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PIEZO AXLE SENSOR INSTALLATION

TOP VIEW
DETAIL A

LOOP DETECTOR AND PIEZO AXLE SENSOR PLACEMENT AND DESIGNATION

DETAIL B

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

ELECTRICAL DETAILS E-7

NO SCALE

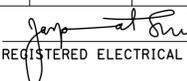
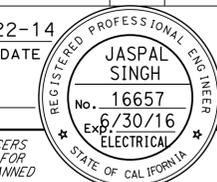
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 ELECTRICAL DESIGN
 JASPAL SINGH
 JASPAL SINGH
 ALT BAKHDOUD
 JS
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 00-00-00 DATE PLOTTED => 06-JAN-2015 TIME PLOTTED => 13:41

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN

NOTE:

ITEMS SHOWN IN THE TABLES ARE NOT SEPARATE
 PAY ITEMS, FOR INFORMATION ONLY.

1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	30	62
			09-22-14		
REGISTERED ELECTRICAL ENGINEER			DATE		
PLANS APPROVAL DATE			09-29-14		
					
<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>					

MODIFY SIGNAL

SHEET No.	TYPE A LOOP DETECTOR	TYPE D LOOP DETECTOR
	EA	
E-2	26	5
E-3	22	4
E-4	53	19

MODIFY VEHICLE CLASSIFICATION STATION

SHEET No.	PIEZO AXLE SENSOR WITH STC	TYPE A LOOP DETECTOR
	EA	
E-5	12	24
E-6	13	30

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

ELECTRICAL QUANTITIES
E-8

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	31	62

Grace M. Tsushima
 REGISTERED CIVIL ENGINEER
 No. C49814
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

July 19, 2013
PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 9-29-14

UNIT OF MEASUREMENT SYMBOLS:

Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

TABLE A

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

TABLE B

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft ³ , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A10B

Maint	MAINTENANCE
Max	MAXIMUM
MB	METAL BEAM
MBB	METAL BEAM BARRIER
MBGR	METAL BEAM GUARD RAILING
Med	MEDIAN
MGS	MIDWEST GUARDRAIL SYSTEM
MH	MANHOLE
Min	MINIMUM
Misc	MISCELLANEOUS
Misc I & S	MISCELLANEOUS IRON AND STEEL
Mkr	MARKER
Mod	MODIFIED, MODIFY
Mon	MONUMENT
MP	METAL PLATE
MPGR	METAL PLATE GUARD RAILING
MR	MOVEMENT RATING
MSE	MECHANICALLY STABILIZED EMBANKMENT
Mt	MOUNTAIN, MOUNT
MtI	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT
N	NORTH
NB	NORTHBOUND
No.	NUMBER (MUST HAVE PERIOD)
Nos.	NUMBERS (MUST HAVE PERIOD)
NPS	NOMINAL PIPE SIZE
NS	NEAR SIDE
NSP	NEW STANDARD PLAN
NTS	NOT TO SCALE
Obir	OBLITERATE
OC	OVERCROSSING
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OG	ORIGINAL GROUND
OGAC	OPEN GRADED ASPHALT CONCRETE
OGFC	OPEN GRADED FRICTION COURSE
OH	OVERHEAD
OHWM	ORDINARY HIGH WATER MARK
O-O	OUT TO OUT
Opp	OPPOSITE
OSD	OVERSIDE DRAIN
p	PAGE
PAP	PERFORATED ALUMINUM PIPE
PB	PULL BOX
PC	POINT OF CURVATURE, PRECAST
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
Pkwy	PARKWAY
PL, PL	PLATE
P/L	PROPERTY LINE
PM	POST MILE, TIME FROM NOON TO MIDNIGHT
PN	PAVING NOTCH
POC	POINT OF HORIZONTAL CURVE
POT	POINT OF TANGENT
POVC	POINT OF VERTICAL CURVE
PP	PIPE PILE, PLASTIC PIPE, POWER POLE
PPL	PREFORMED PERMEABLE LINER
PPP	PERFORATED PLASTIC PIPE
PRC	POINT OF REVERSE CURVE
PRF	PAVEMENT REINFORCING FABRIC
PRVC	POINT OF REVERSE VERTICAL CURVE
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES
PS, P/S	PRESTRESSED
PSP	PERFORATED STEEL PIPE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
Pvmt	PAVEMENT
Qty	QUANTITY
R	RADIUS
R & D	REMOVE AND DISPOSE
R & S	REMOVE AND SALVAGE
R/C	RATE OF CHANGE
RCA	REINFORCED CONCRETE ARCH
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
Rd	ROAD
Reinf	REINFORCED, REINFORCEMENT, REINFORCING
Rel	RELOCATE
Repl	REPLACEMENT
Ret	RETAINING
Rev	REVISED, REVISION
Rdwy	ROADWAY
RHMA	RUBBERIZED HOT MIX ASPHALT
Riv	RIVER
RM	ROAD-MIXED
RP	RADIUS POINT, REFERENCE POINT
RR	RAILROAD
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN
Rt	RIGHT
Rte	ROUTE
RW	REDWOOD, RETAINING WALL
R/W	RIGHT OF WAY
Rwy	RAILWAY

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

S	SOUTH,
SAE	STRUCTURE APPROACH EMBANKMENT
Salv	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SAND CUSHION
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
Sec	SECOND, SECTION
Sep	SEPARATION
SG	SUBGRADE
Shld	SHOULDER
Sht	SHEET
Sim	SIMILAR
SL	STATION LINE
SM	SELECTED MATERIAL
Spec	SPECIAL, SPECIFICATIONS
SPP	SLOTTED PLASTIC PIPE
SS	SLOPE STAKE
SSBM	STRAP AND SADDLE BRACKET METHOD
SSD	STRUCTURAL SECTION DRAIN
SSPA	STRUCTURAL STEEL PLATE ARCH
SSPP	STRUCTURAL STEEL PLATE PIPE
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH
SSRP	STEEL SPIRAL RIB PIPE
St	STREET
Sta	STATION
STBB	SINGLE THRIE BEAM BARRIER
Std	STANDARD
Str	STRUCTURE
Surf	SURFACING
SW	SIDEWALK, SOUND WALL
Swr	SEWER
Sym	SYMMETRICAL
S4S	SURFACE 4 SIDES
T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
TeI	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL
UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME
W	WEST, WIDTH
WB	WESTBOUND
WH	WEEP HOLE
WM	WIRE MESH
WS	WATER SURFACE
WSP	WELDED STEEL PIPE
Wt	WEIGHT
WV	WATER VALVE
WW	WINGWALL
WWLOL	WINGWALL LAYOUT LINE
X Sec	CROSS SECTION
Xing	CROSSING
Yr	YEAR
Yrs	YEARS

P continued

S

T continued



U

V

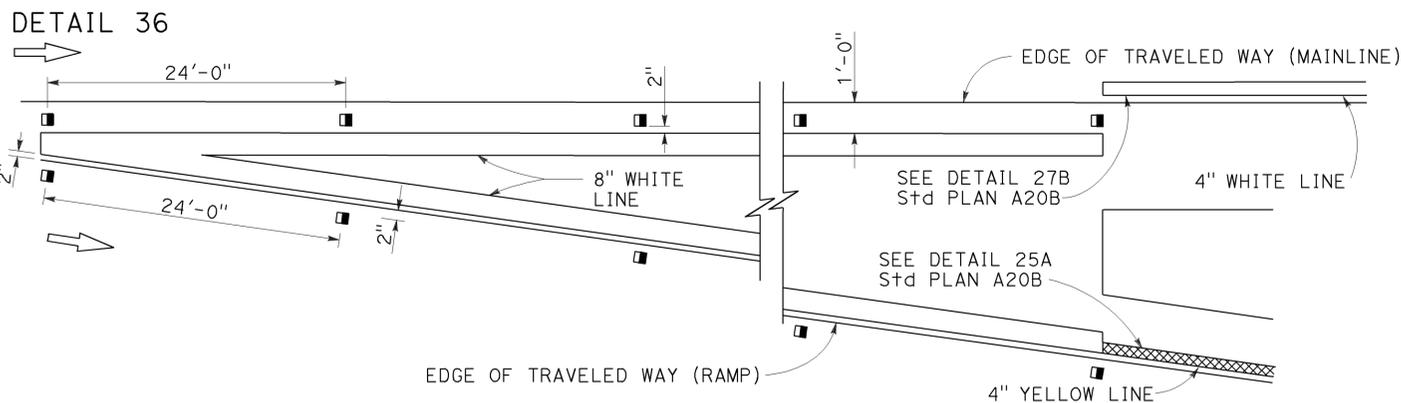
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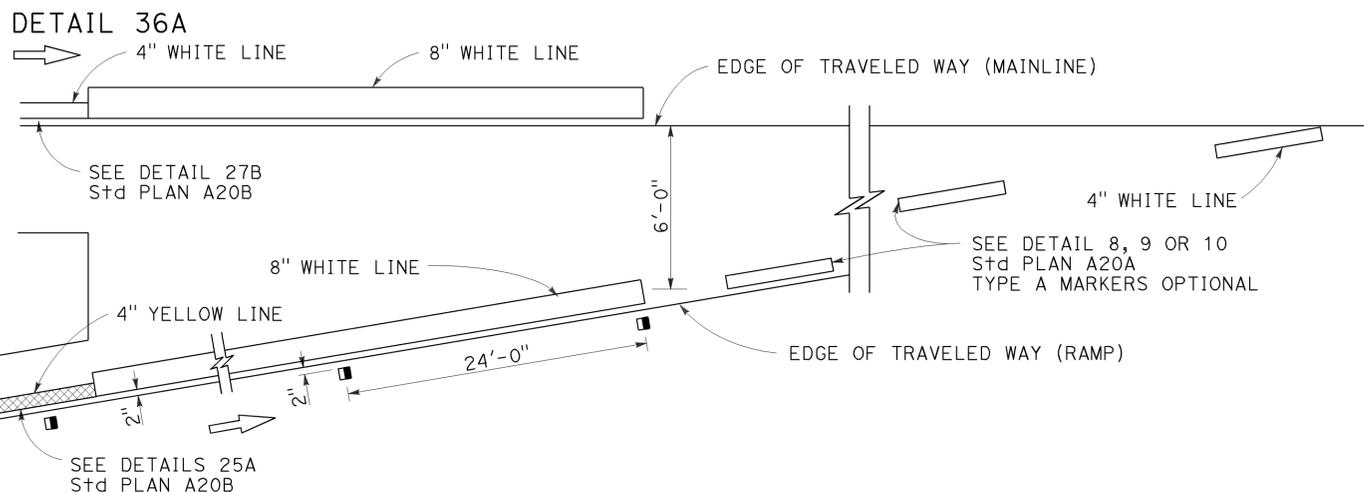
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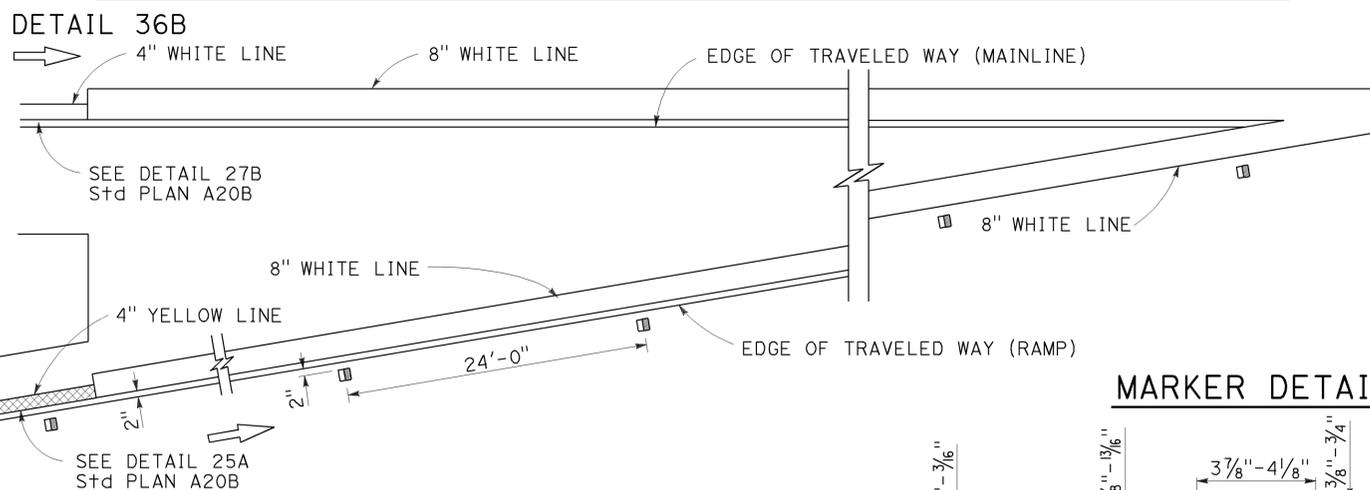
EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



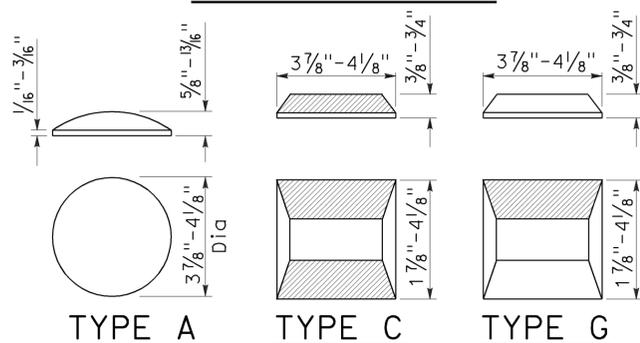
ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT



MARKER DETAILS



LEGEND:

MARKERS

- TYPE A WHITE NON-REFLECTIVE
- ◻ TYPE C RED-CLEAR RETROREFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE

RETROREFLECTIVE FACE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	32	62

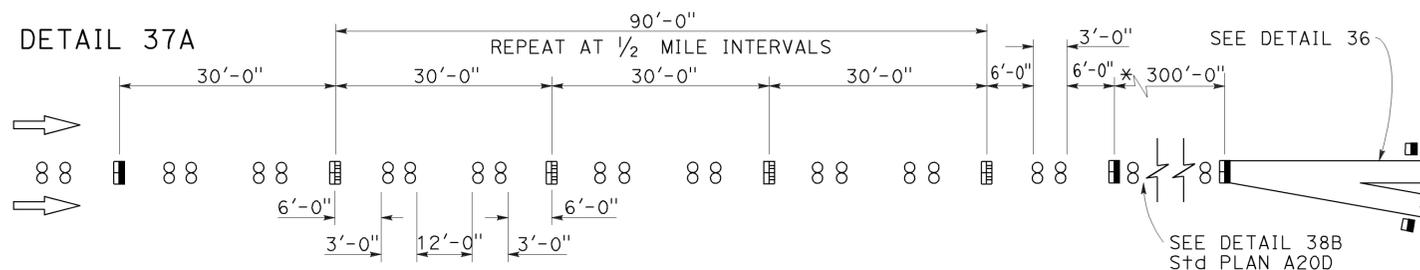
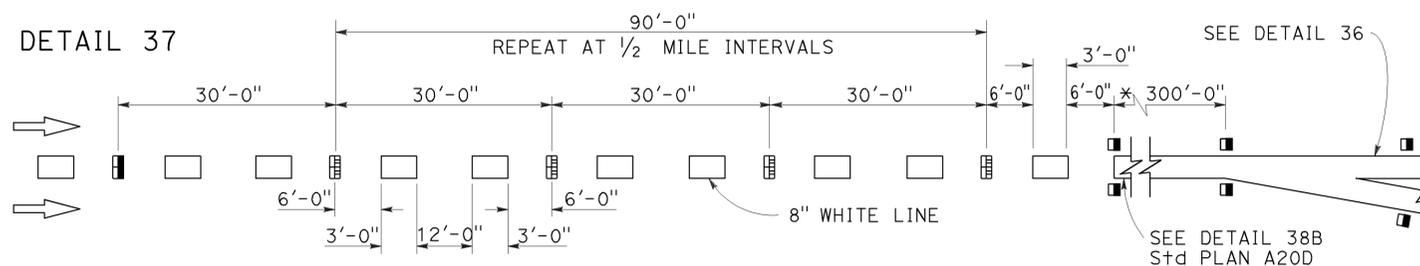
Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 No. C40375
 Exp. 3-31-15
 CIVIL
 STATE OF CALIFORNIA

July 19, 2013
 PLANS APPROVAL DATE

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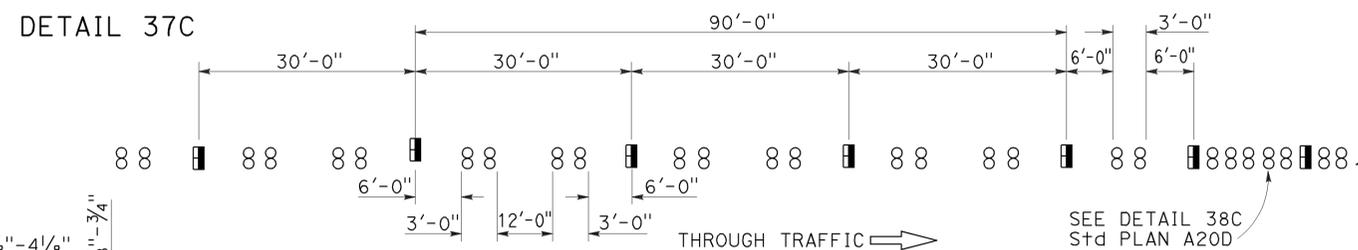
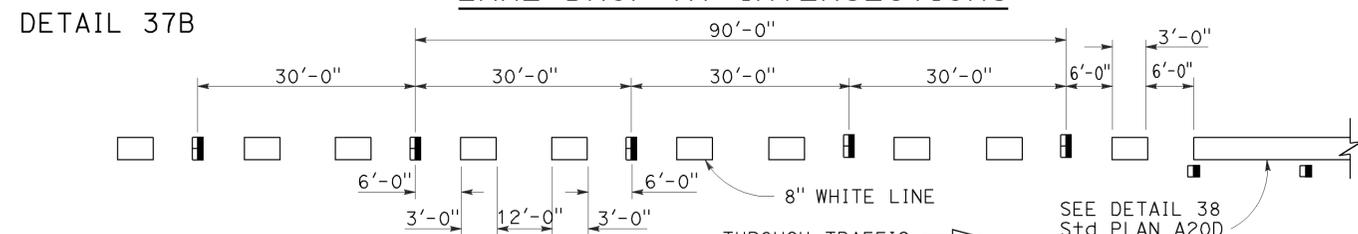
TO ACCOMPANY PLANS DATED 9-29-14

LANE DROP AT EXIT RAMP



* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

LANE DROP AT INTERSECTIONS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS
 NO SCALE

RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A20C

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP A20C

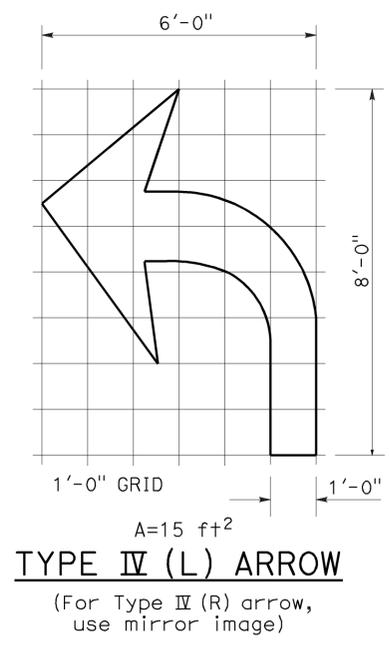
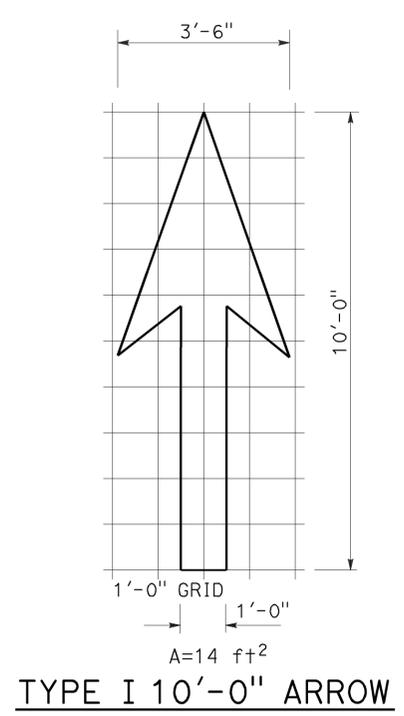
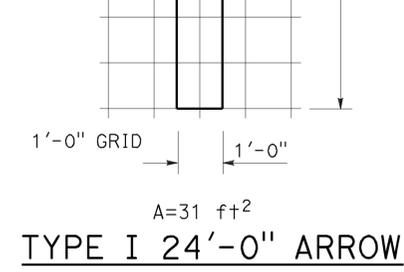
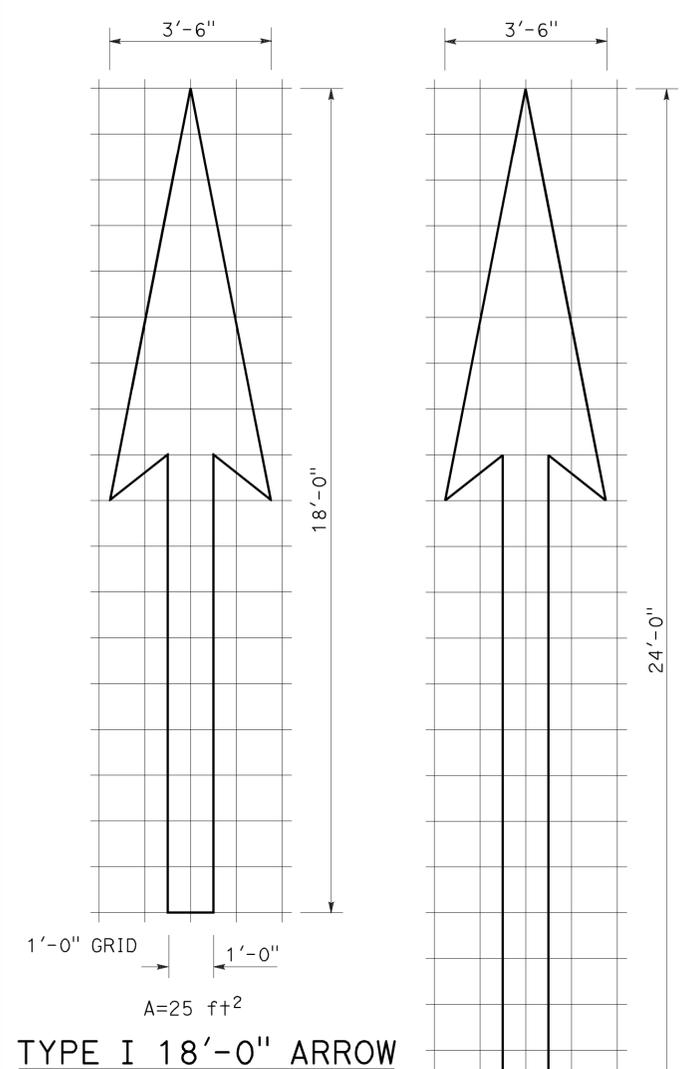
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	33	62

Registered Professional Engineer
 Roberta L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

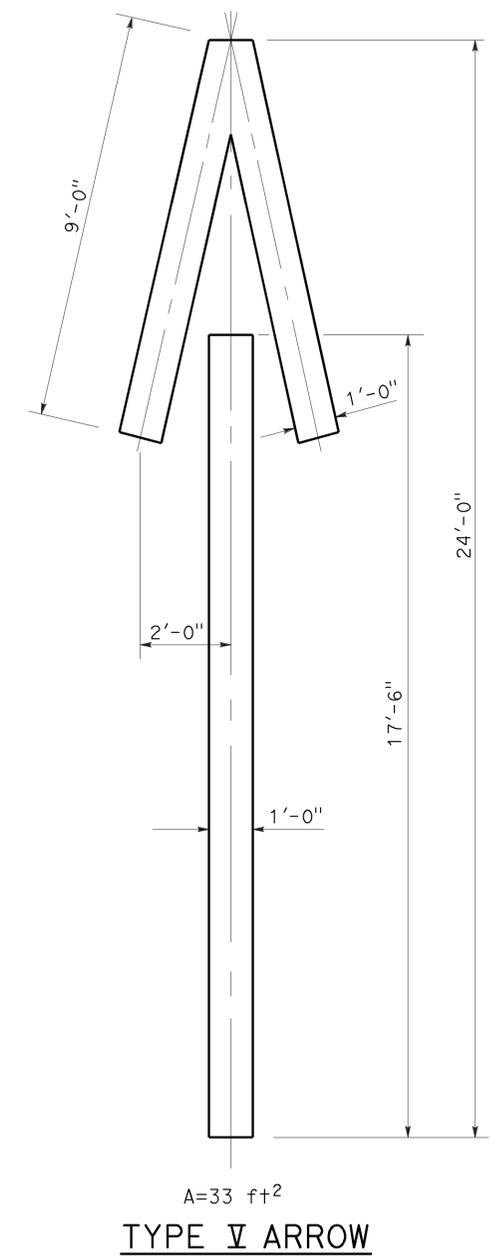
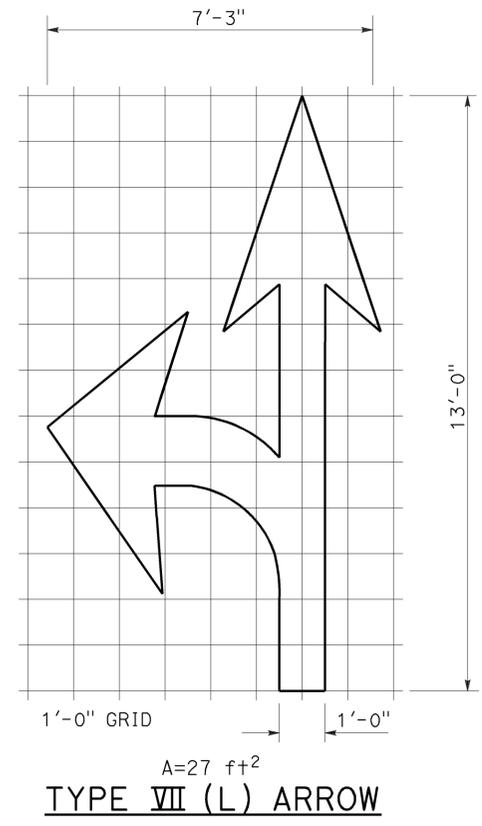
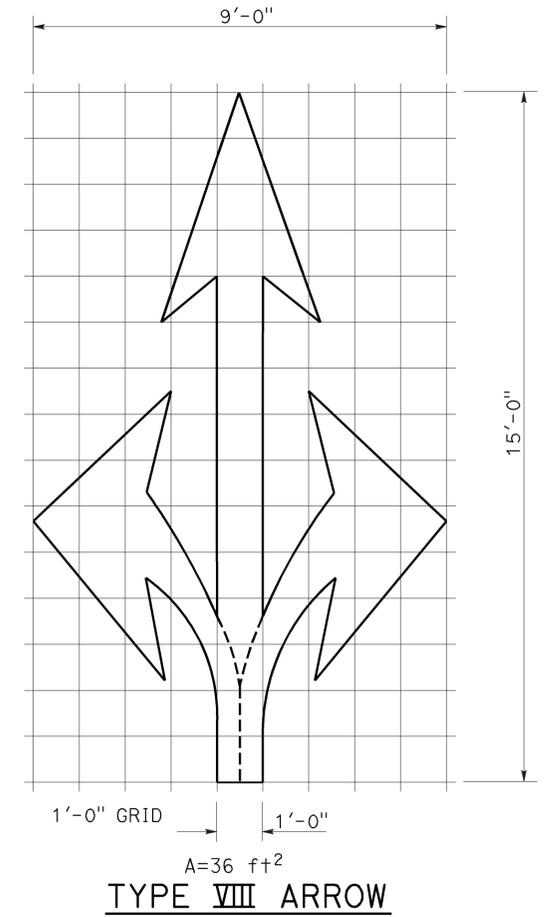
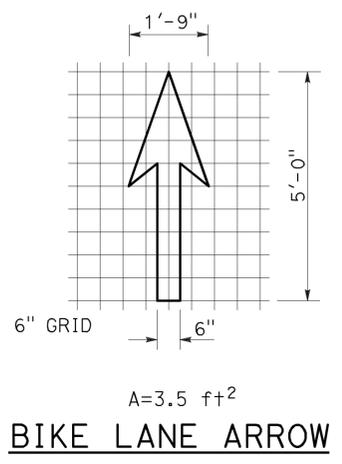
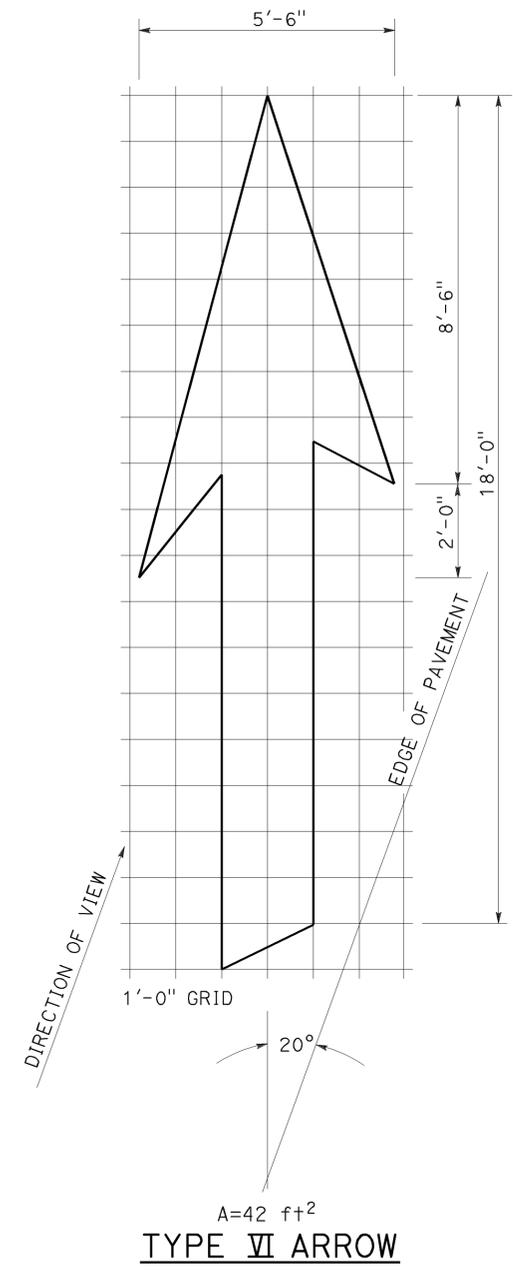
April 20, 2012
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 9-29-14



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.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	34	62


 REGISTERED CIVIL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER

Roberta L. McLaughlin

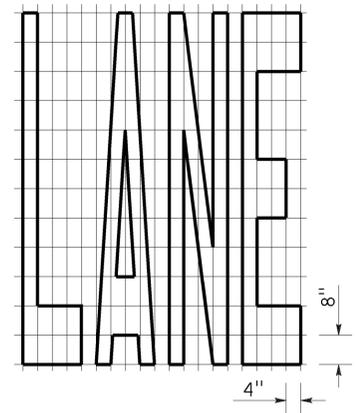
No. C40375

Exp. 3-31-13

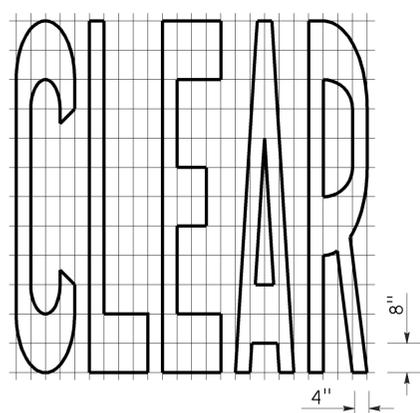
CIVIL

STATE OF CALIFORNIA

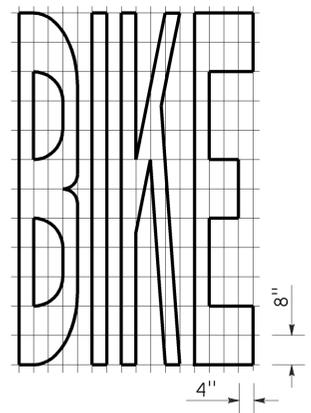
TO ACCOMPANY PLANS DATED 9-29-14



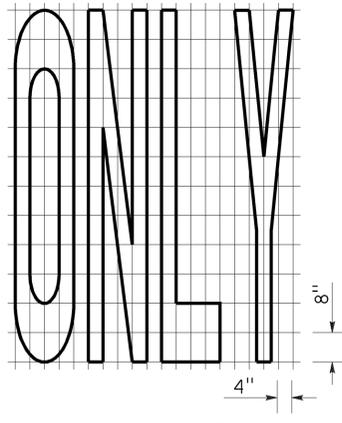
A=24 ft²



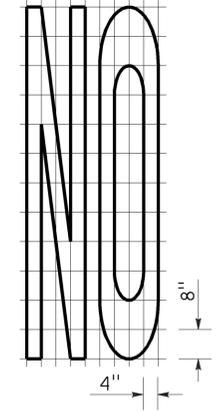
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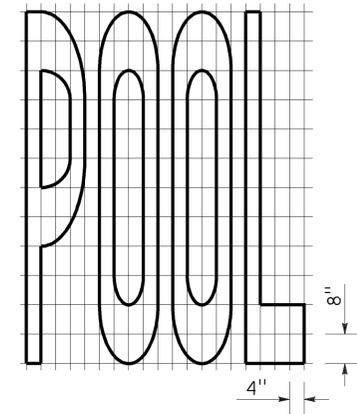
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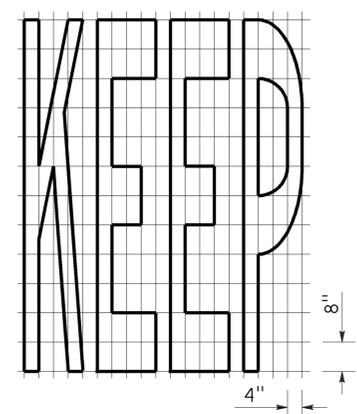
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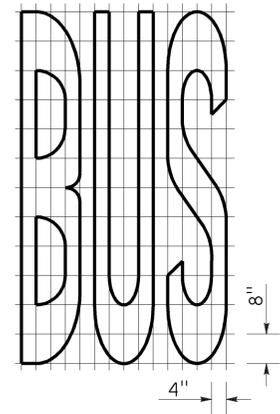
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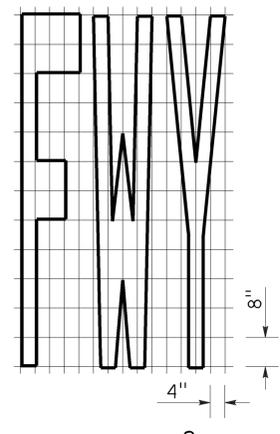
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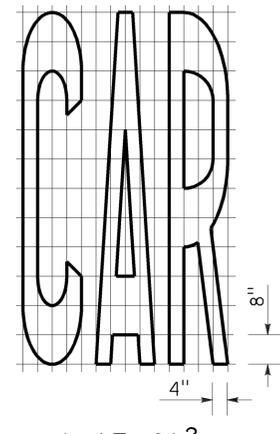
A=24 ft²



A=20 ft²

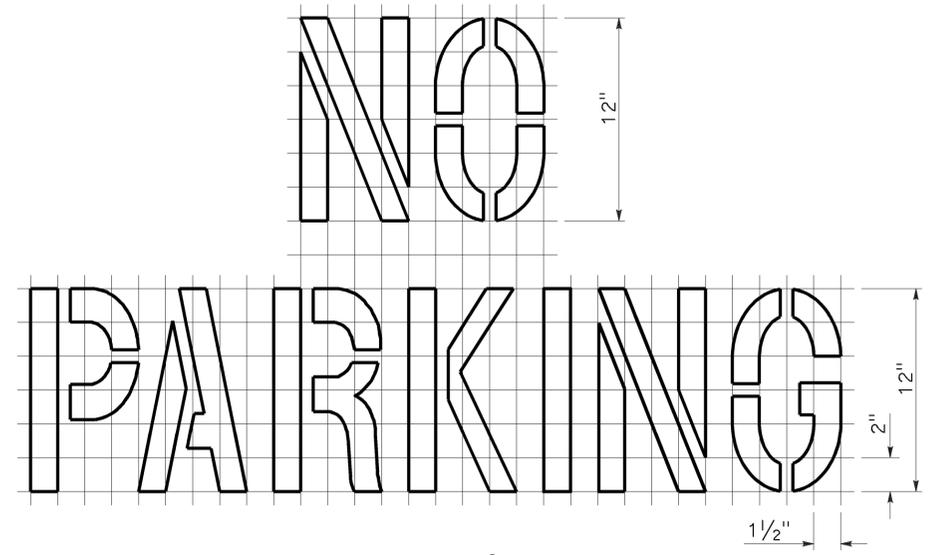


A=16 ft²

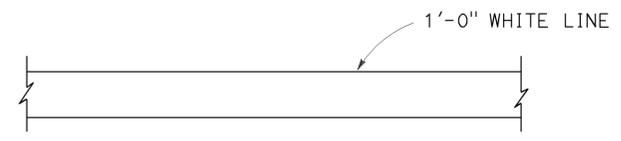


A=17 ft²

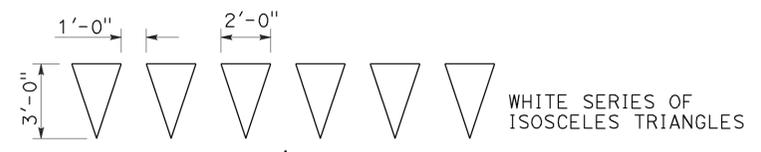
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



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

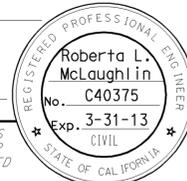
RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP A24E

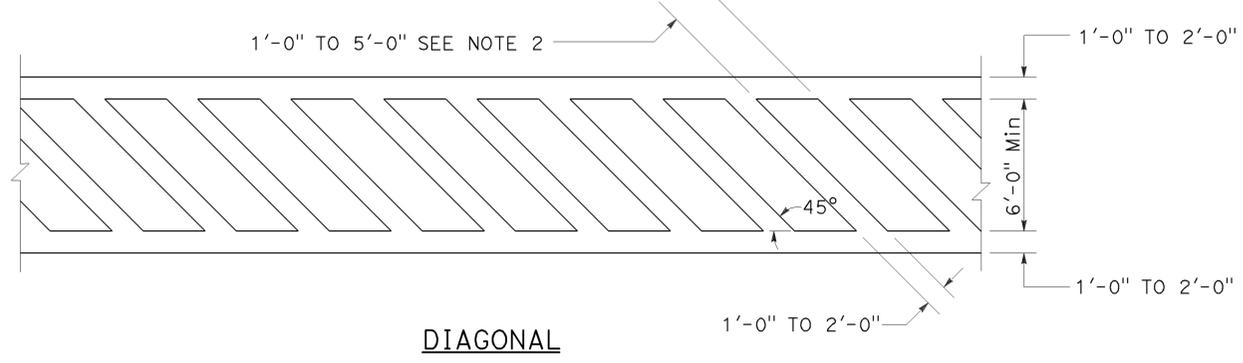
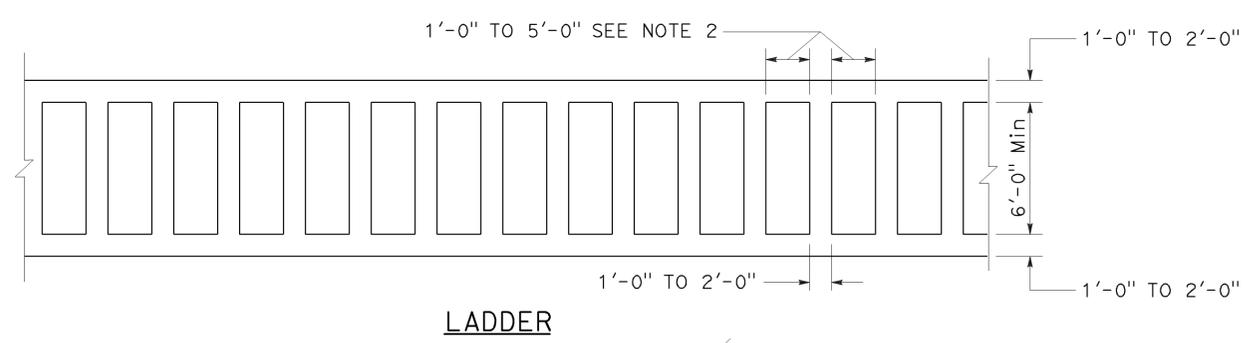
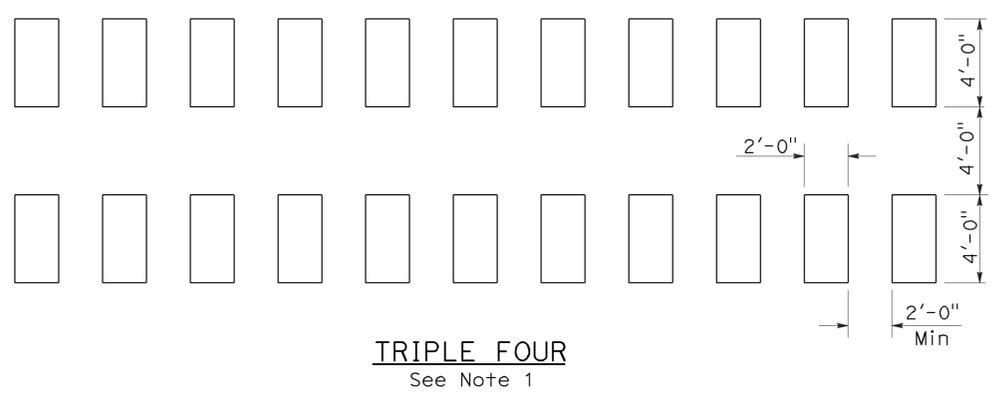
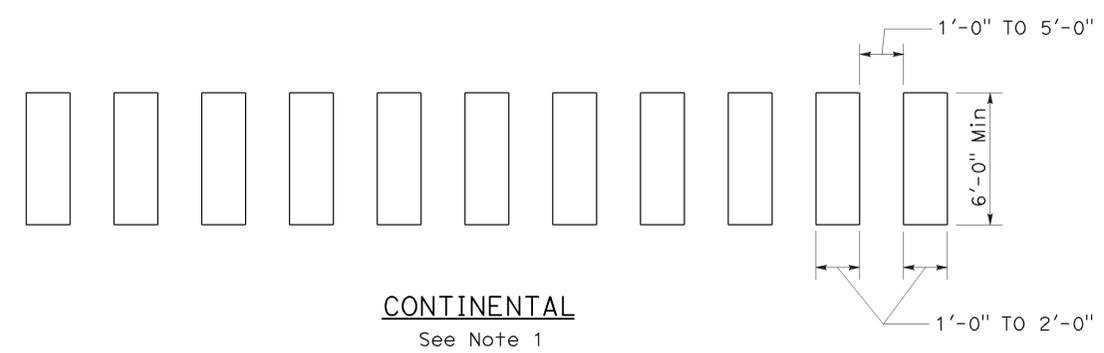
2010 REVISED STANDARD PLAN RSP A24E

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	35	62

 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 9-29-14

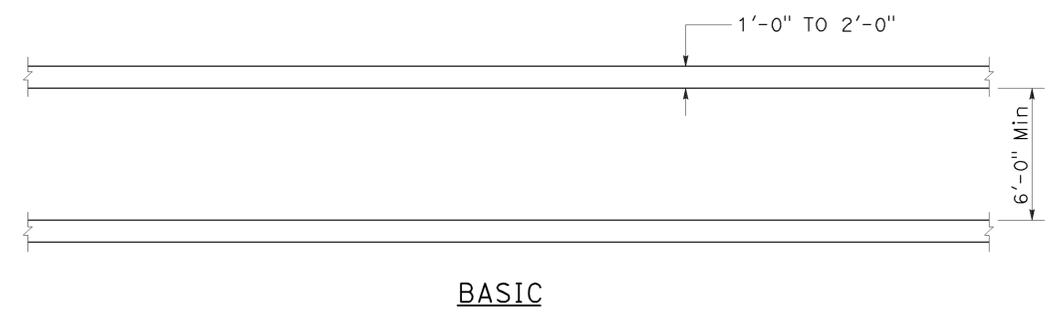
2010 REVISED STANDARD PLAN RSP A24F



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.



BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
CROSSWALKS
NO SCALE

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

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP A24F

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	36	62

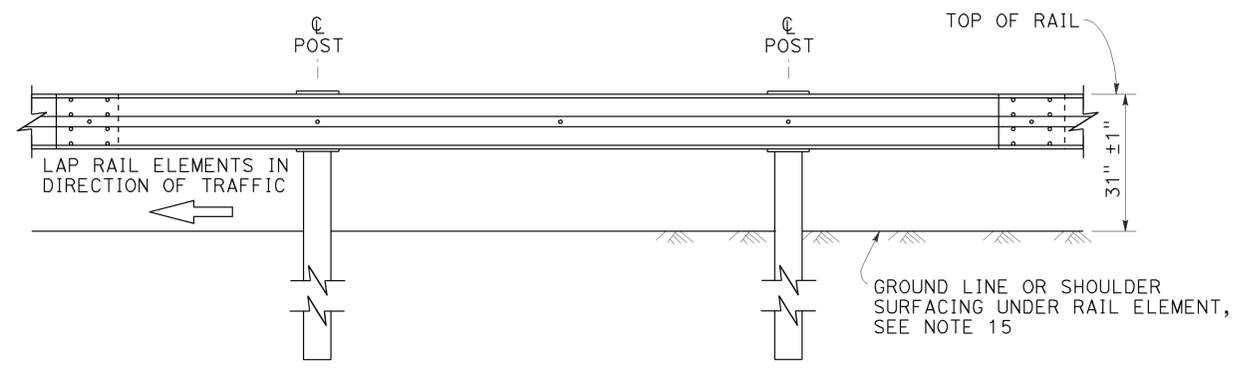
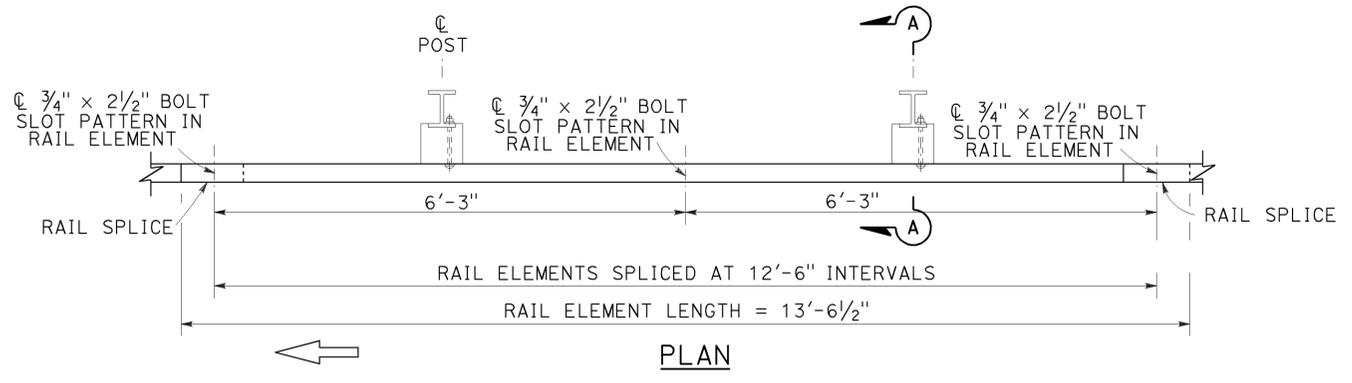
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

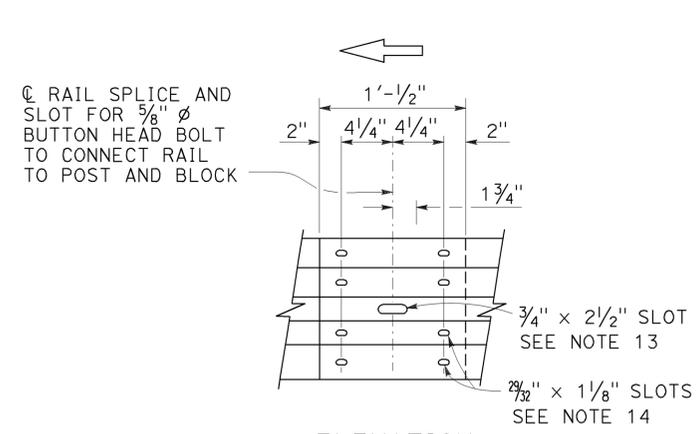
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REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

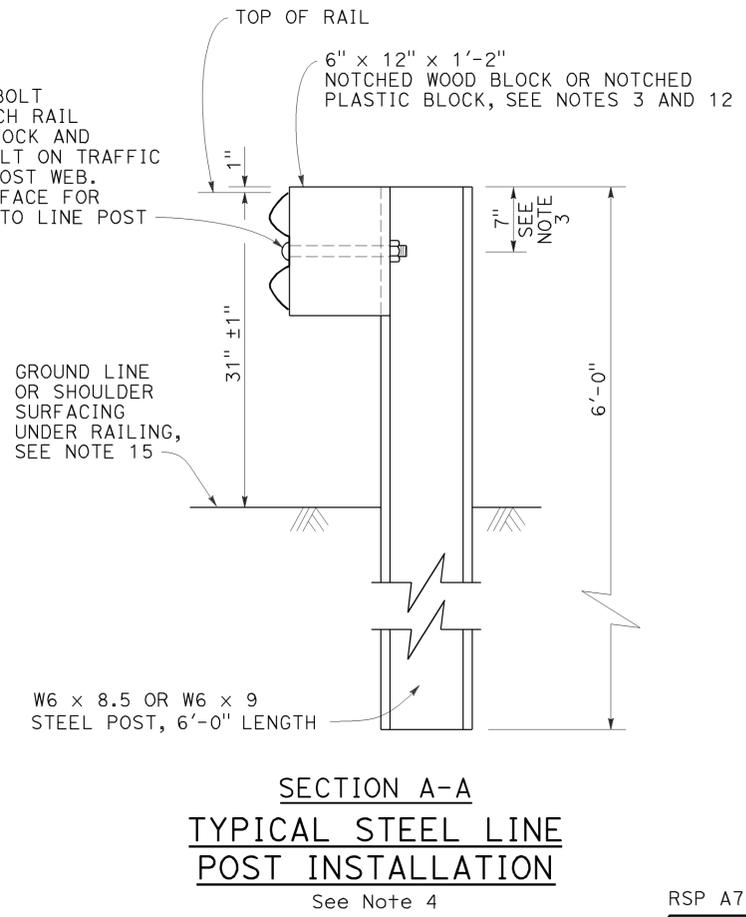
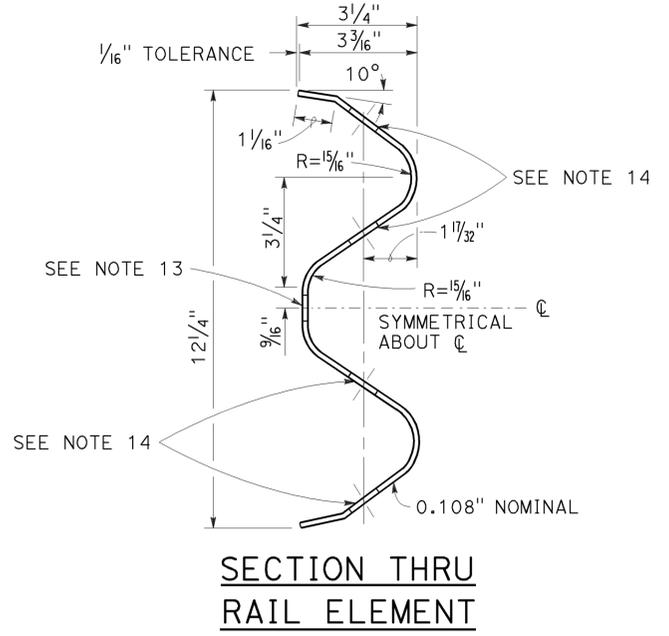
TO ACCOMPANY PLANS DATED 9-29-14



MIDWEST GUARDRAIL SYSTEM WITH STEEL POSTS AND NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCKS



- Connect the overlapped end of the rail elements with 5/8" ϕ x 1 3/8" button head oval shoulder splice bolts inserted into the 7/32" x 1 1/8" slots and bolted together with 5/8" ϕ recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 bolts and nuts are to be used at each rail splice connection.
- The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used.



NOTES:

- For details of wood post installations, see Revised Standard Plan RSP A77L1.
- For details of standard hardware used to construct MGS, see Revised Standard Plan RSP A77M1.
- For details of steel posts and notched wood blocks used to construct MGS, see Revised Standard Plan RSP A77N2.
- For additional installation details, see Revised Standard Plan RSP A77N3.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- For MGS typical layouts, see the A77P, A77Q and A77R Series of Standard Plans.
- If railing is connected to terminal system end treatment, use 31" height terminal system end treatment.
- For MGS end anchor details, see Revised Standard Plans RSP A77S1 and RSP A77T2.
- For details of MGS transition to bridge railing, see Revised Standard Plan RSP A77U4.
- For additional details of MGS connection to bridge railings, see Revised Standard Plans RSP A77U1, RSP A77U2 and RSP A77V1.
- For dike positioning and MGS delineation details, see Revised Standard Plan RSP A77N4.
- Notched face of block faces steel post.
- Slotted hole for bolted connection of rail element to block and post. See "Section Thru Rail Element".
- Slotted holes for splice bolts to overlap ends of rail element. See "Section Thru Rail Element".
- Install posts in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM STANDARD RAILING SECTION (STEEL POST WITH NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCK)

NO SCALE

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP A77L2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L2

2010 REVISED STANDARD PLAN RSP A77L2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	37	62

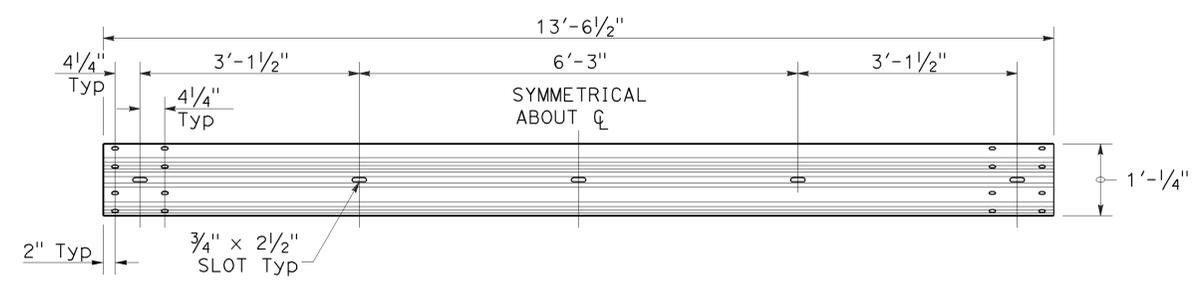
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
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STATE OF CALIFORNIA

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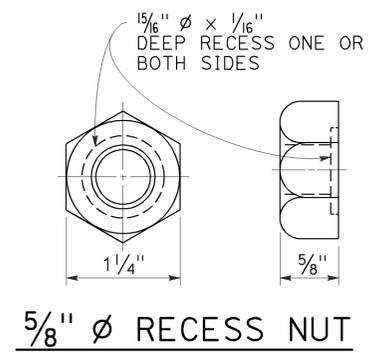
TO ACCOMPANY PLANS DATED 9-29-14



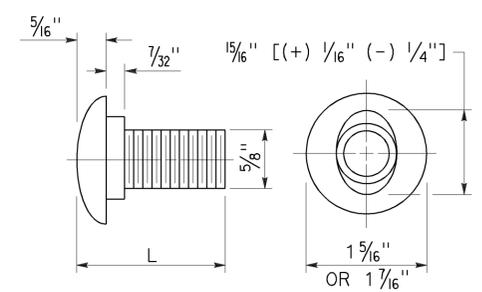
TYPICAL RAIL ELEMENT

NOTE:

1. Slotted holes for splice bolts to overlap ends of rail element.



5/8" Ø RECESS NUT

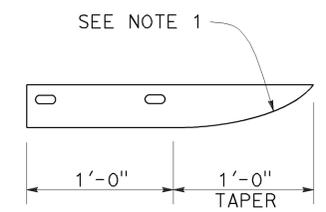


5/8" Ø BUTTON HEAD BOLT

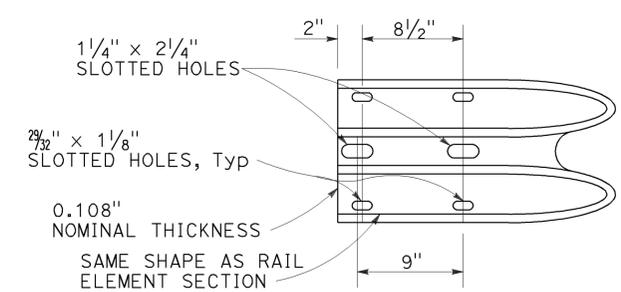
BUTTON HEAD BOLT

L	THREAD LENGTH
1 3/8"	FULL THREAD LENGTH
2"	FULL THREAD LENGTH
10"	4" Min THREAD LENGTH
18"	4" Min THREAD LENGTH
20"	4" Min THREAD LENGTH
22"	4" Min THREAD LENGTH
26"	4" Min THREAD LENGTH
36"	4" Min THREAD LENGTH
** 2 3/4"	2" Min THREAD LENGTH
** 19"	4" Min THREAD LENGTH

** For nested rail applications.



PLAN



**ELEVATION
END CAP
(TYPE A)**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STANDARD HARDWARE**

NO SCALE

RSP A77M1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77M1

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP A77M1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	38	62

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

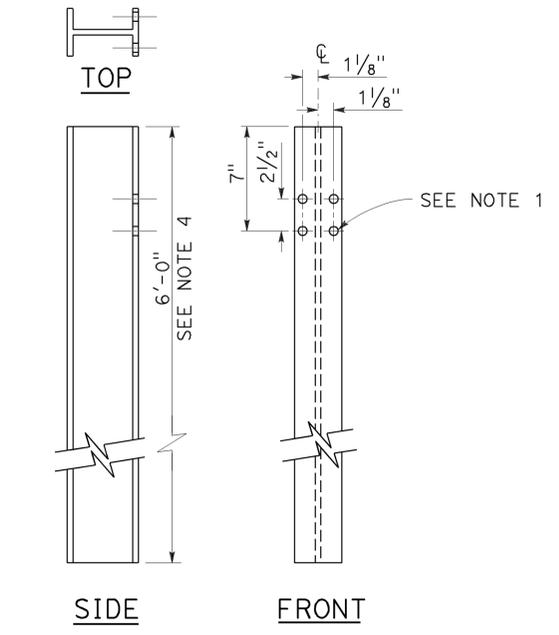
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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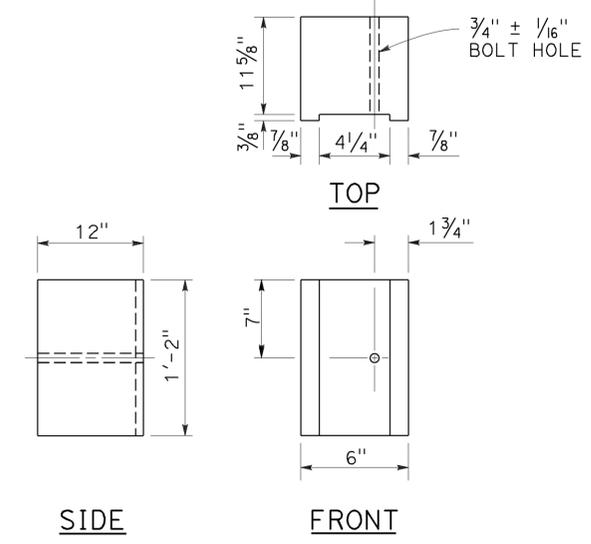
TO ACCOMPANY PLANS DATED 9-29-14

NOTES:

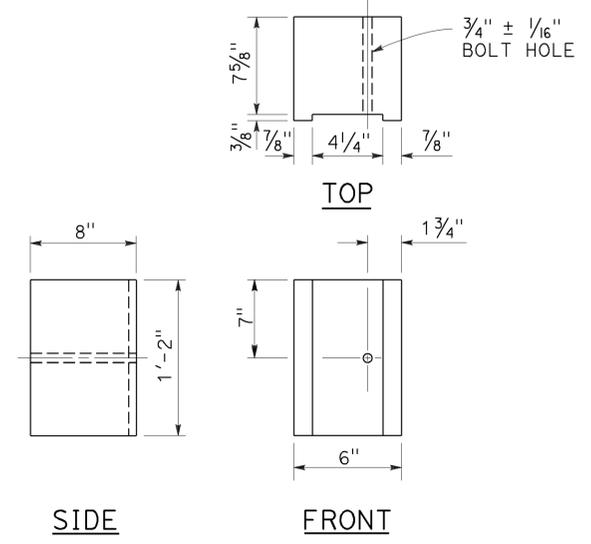
1. All holes in steel post shall be $\frac{13}{16}$ " Dia maximum.
2. Dimensions shown for wood block are nominal.
3. Notched face of block faces steel post.
4. 6'-0" length posts to be used for typical roadway installation. See Revised Standard Plan RSP A77N3.
5. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" notched wood blocks.
6. This post and 8" x 12" block combination to be used for line post sections of MGS on narrow roadways and where strengthened line post sections of MGS are warranted to shield fixed objects.



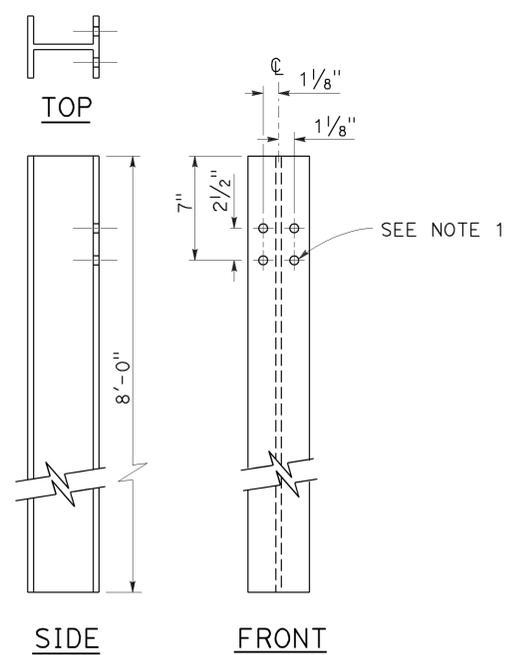
W6 x 9 OR W6 x 8.5
STEEL POST
See Note 4



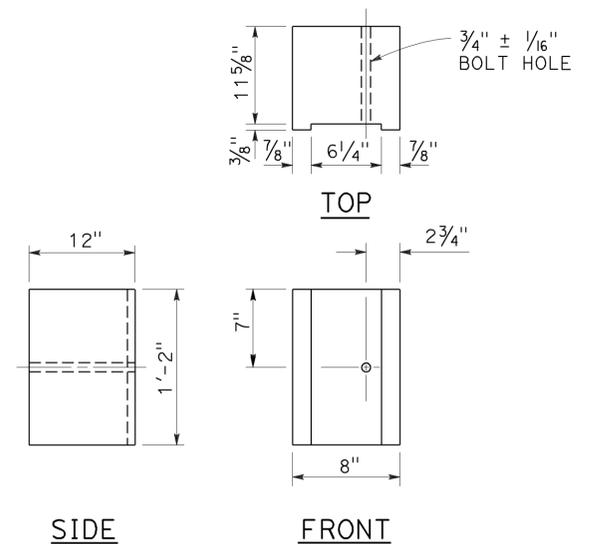
6" x 12"
NOTCHED WOOD BLOCK
See Notes 2 and 3



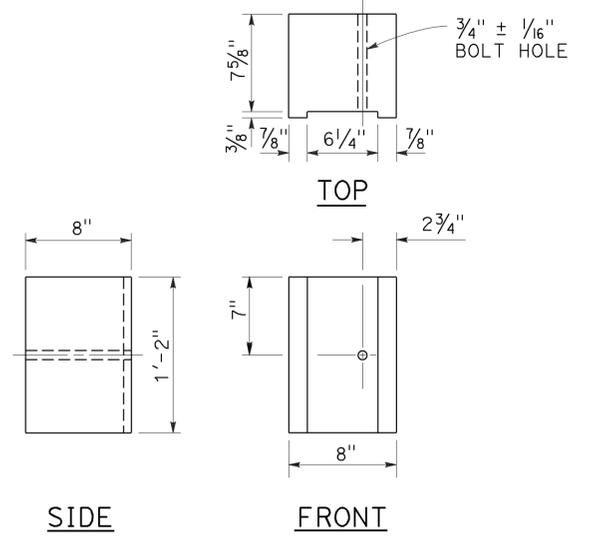
6" x 8"
NOTCHED WOOD BLOCK
Only for use with metal beam guard railing. See Note 5



W6 x 15
STEEL POST
See Note 6



8" x 12"
NOTCHED WOOD BLOCK
See Notes 2 and 3



8" x 8"
NOTCHED WOOD BLOCK
Only for use with metal beam guard railing. See Note 5

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM
STEEL POST AND
NOTCHED WOOD BLOCK DETAILS

NO SCALE

RSP A77N2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N2
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP A77N2

2010 REVISED STANDARD PLAN RSP A77N2

10	COUNTY SJ	ROUTE 12	POST MILES	SHEET	TOTAL
			TOTAL PROJECT 5.0/11.0	No. 39	SHEETS 62

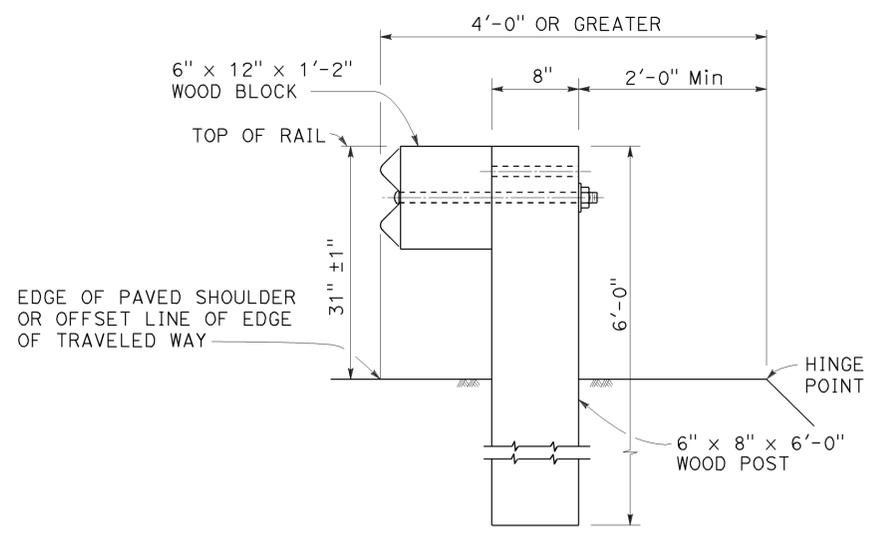
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

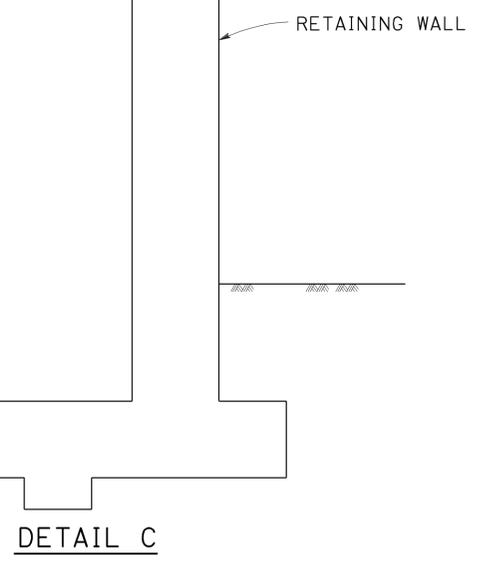
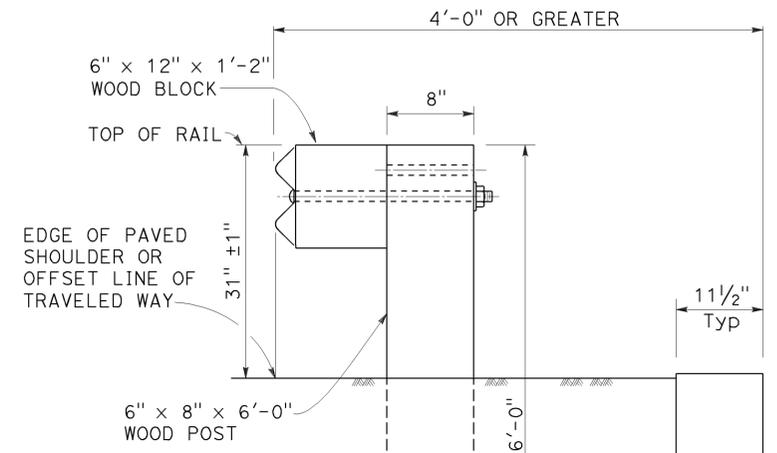
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
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STATE OF CALIFORNIA

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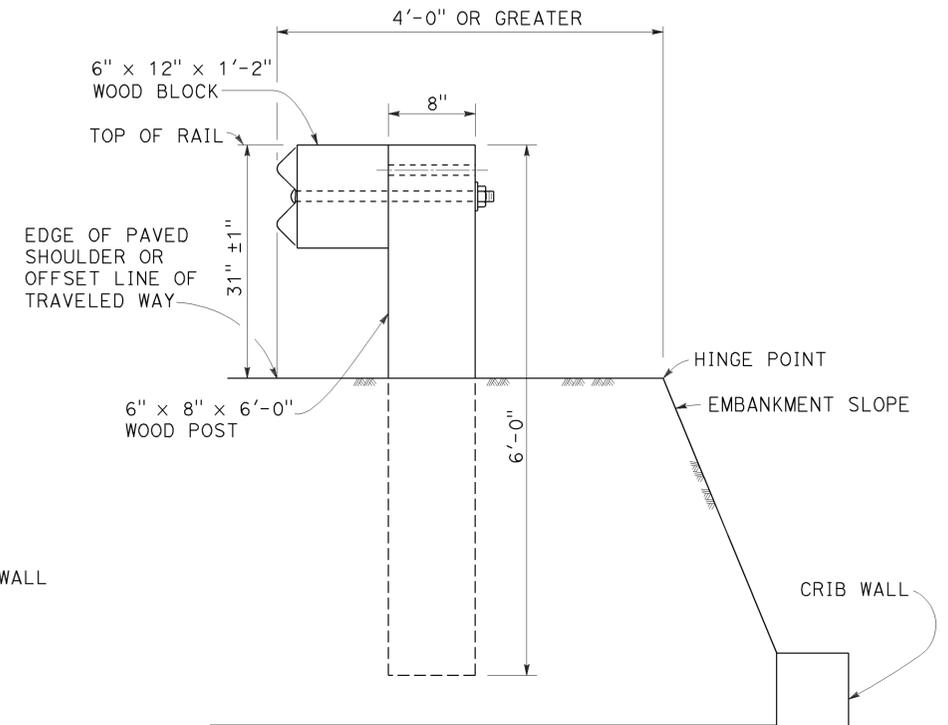
TO ACCOMPANY PLANS DATED 9-29-14



DETAIL A
TYPICAL ROADWAY
INSTALLATION
See Note 1



DETAIL B
NARROW ROADWAY
INSTALLATION
See Note 1



DETAIL D

POST EMBEDMENT

INSTALLATION AT EARTH RETAINING WALLS

NOTES:

1. These installation details also applicable to steel line post installations. For Detail A, C, and D, where steel line post installations are constructed, W6 x 8.5 or W6 x 9 steel post, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For Detail B, where steel line post installations are constructed, W6 x 15 steel post, 8'-0" in length, with 8" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For additional installation details, see Revised Standard Plan RSP A77L1 and RSP A77L2.
2. Where the distance between the face of the rail and the hinge point is less than 2'-6", see the Project Plans for special details.
3. For dike positioning with MGS installations, see Revised Standard Plan RSP A77N4.

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

RSP A77N3 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N3
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N3

2010 REVISED STANDARD PLAN RSP A77N3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	40	62

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

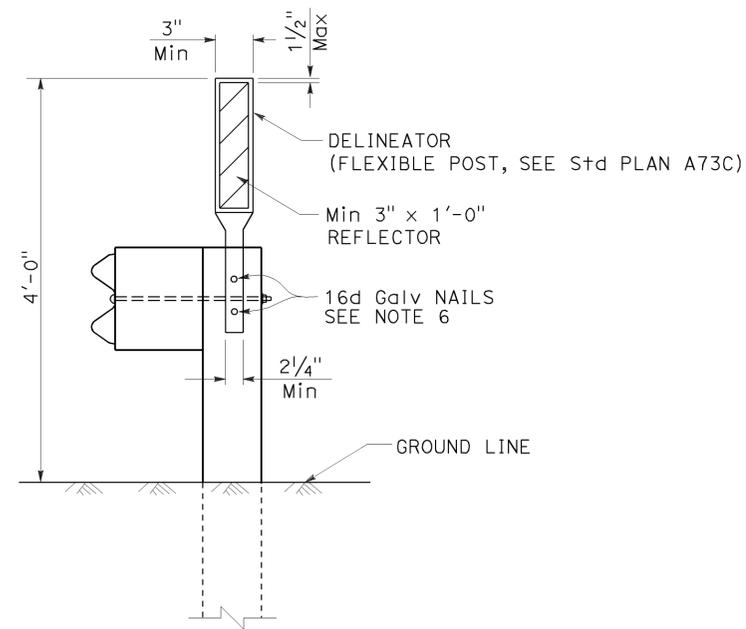
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Exp. 6-30-15
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STATE OF CALIFORNIA

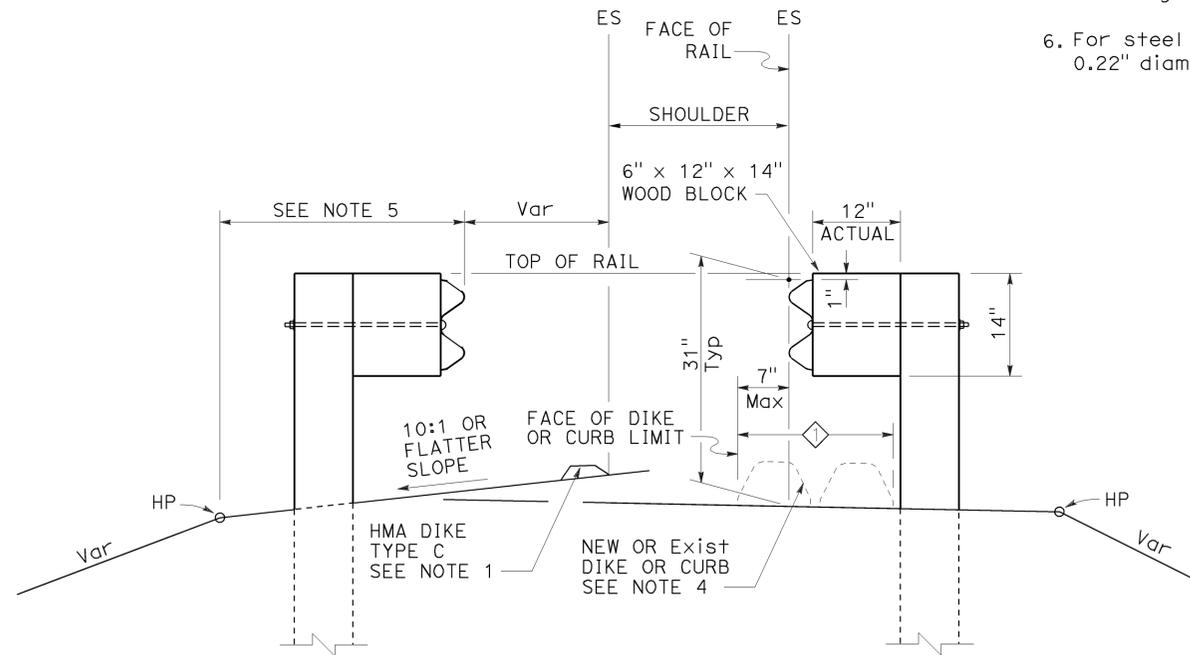
TO ACCOMPANY PLANS DATED 9-29-14

NOTES:

1. When necessary to place dike more than 7" in front of face of MGS, only Type C dike may be used. For dike details, see Revised Standard Plan RSP A87B.
2. For standard railing post embedment, see Revised Standard Plan RSP A77N3.
3. MGS delineation to be used where shown on the Project Plans.
4. When dike or curb is placed under MGS, the maximum height of the dike or curb shall be 6". Mountable dike should not be used. For dike and curb details, see Revised Standard Plans RSP A87A and RSP A87B.
5. For details of typical distance between the face of rail and hinge point, see Revised Standard Plan RSP A77N3.
6. For steel line posts, use 1/4" - 20 self-tapping screws in 0.22" diameter holes or 1/4" bolts in 3/32" diameter holes.



MGS DELINEATION
See Note 3



DIKE POSITIONING
See Note 1

◇ PERMISSIBLE DIKE OR CURB PLACEMENT AREA

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL RAILING DELINEATION
AND DIKE POSITIONING DETAILS**

NO SCALE

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP A77N4 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N4

2010 REVISED STANDARD PLAN RSP A77N4

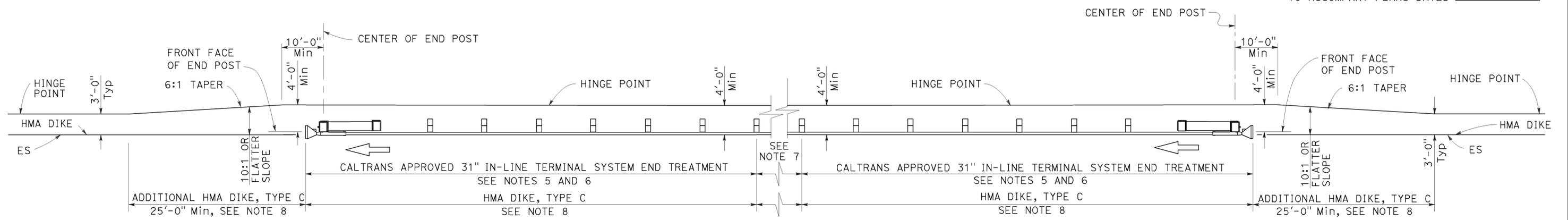
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	41	62

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

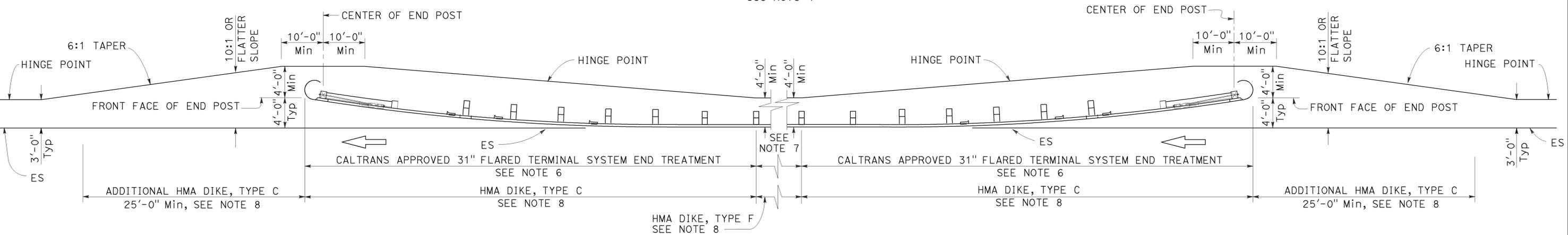
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TO ACCOMPANY PLANS DATED 9-29-14



TYPE 11D LAYOUT

(Embankment MGS installation with 31" in-line end treatment at each end of railing)
See Note 4



TYPE 11E LAYOUT

(Embankment MGS installation with 31" flared end treatment at each end of railing)
See Note 4

NOTES:

1. Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
2. MGS post spacing to be 6'-3" center to center, except as otherwise noted.
3. Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
4. Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
5. 31" in-line terminal system end treatments are used where site conditions will not accommodate a flared end treatment.
6. The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
7. Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
8. Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

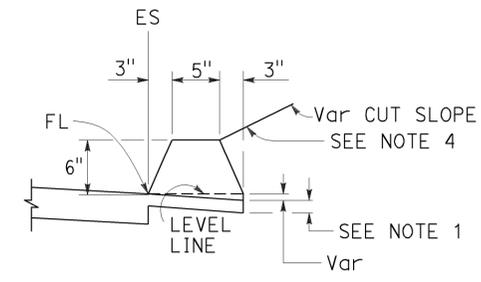
RSP A77P2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P2

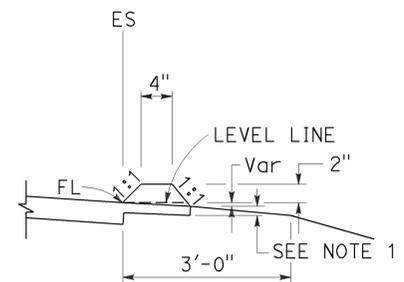
2010 REVISED STANDARD PLAN RSP A77P2



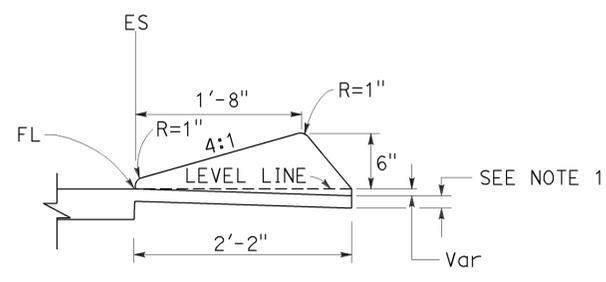
TO ACCOMPANY PLANS DATED 9-29-14



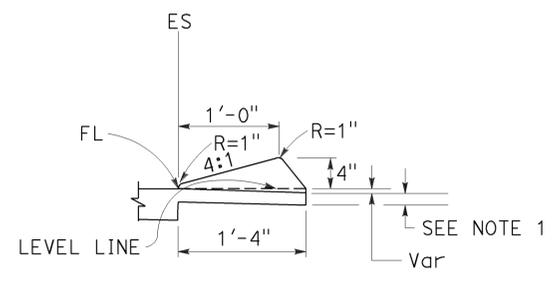
TYPE A
See Note 3



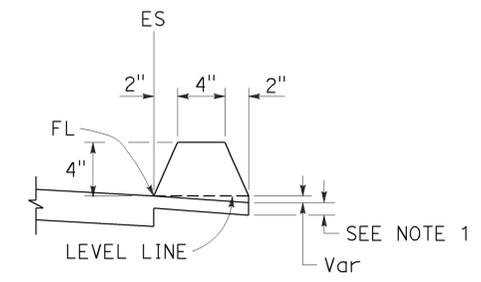
TYPE C



TYPE D

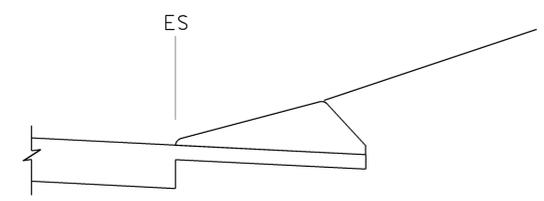


TYPE E

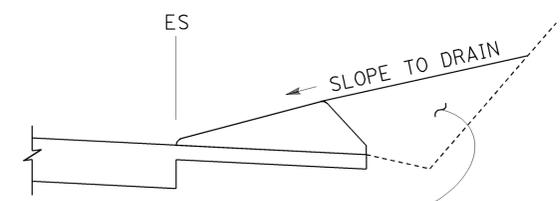


TYPE F
See Note 5

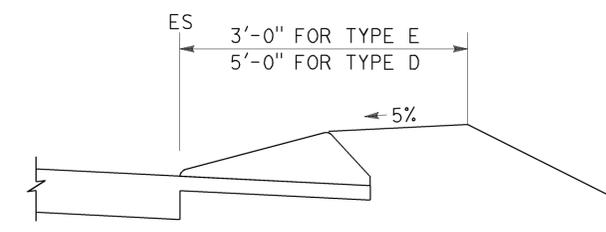
DIKES



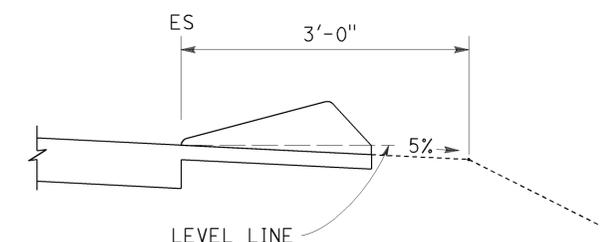
CASE C-1
Cut Slope



CASE C-2
Cut Slope



CASE F



CASE R
See Note 2

TYPE D AND E BACKFILL DETAILS

NOTES:

- For HMA shoulders only, extend top layer of HMA placed on the shoulder under dike with no joint at the ES. For projects with OGFC shoulders, do not extend OGFC under dike. See project plans for modified dike detail.
- Case R applies to retrofit only projects where restrictive conditions do not provide enough width for Case F backfill.
- Type A dike only to be used where restrictive slope conditions do not provide enough width to use Type D or Type E dike.
- Fill and compact with excavated material to top of dike.
- Use Type F dike, where dike is required with guard railing installations. See Revised Standard Plan RSP A77N4 for dike positioning details.

DIKE QUANTITIES

TYPE	CUBIC YARDS PER LINEAR FOOT
A	0.0135
C	0.0038
D	0.0293
E	0.0130
F	0.0066

Quantities based on 5% cross slope.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

HOT MIX ASPHALT DIKES

NO SCALE

RSP A87B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A87B
DATED MAY 20, 2011 - PAGE 120 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A87B

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP A87B

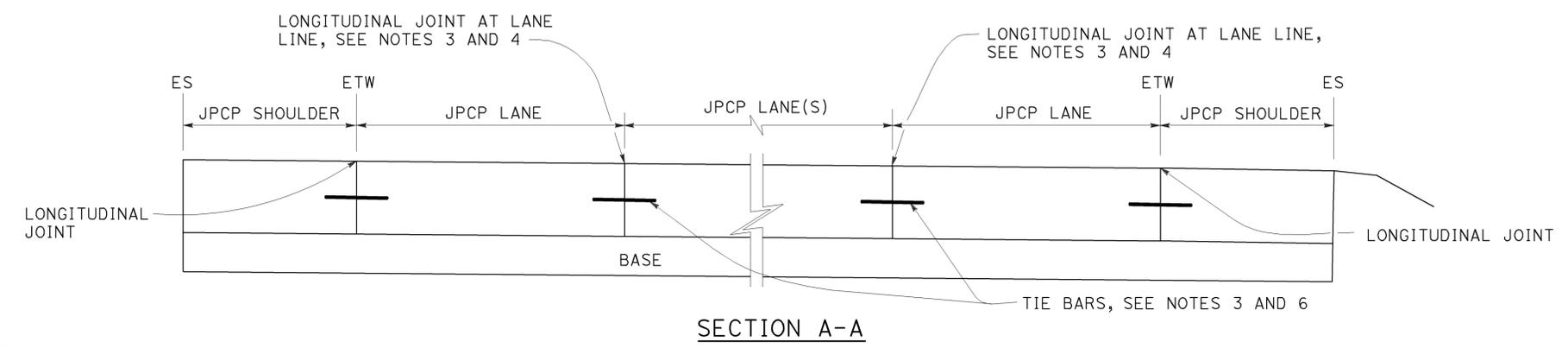
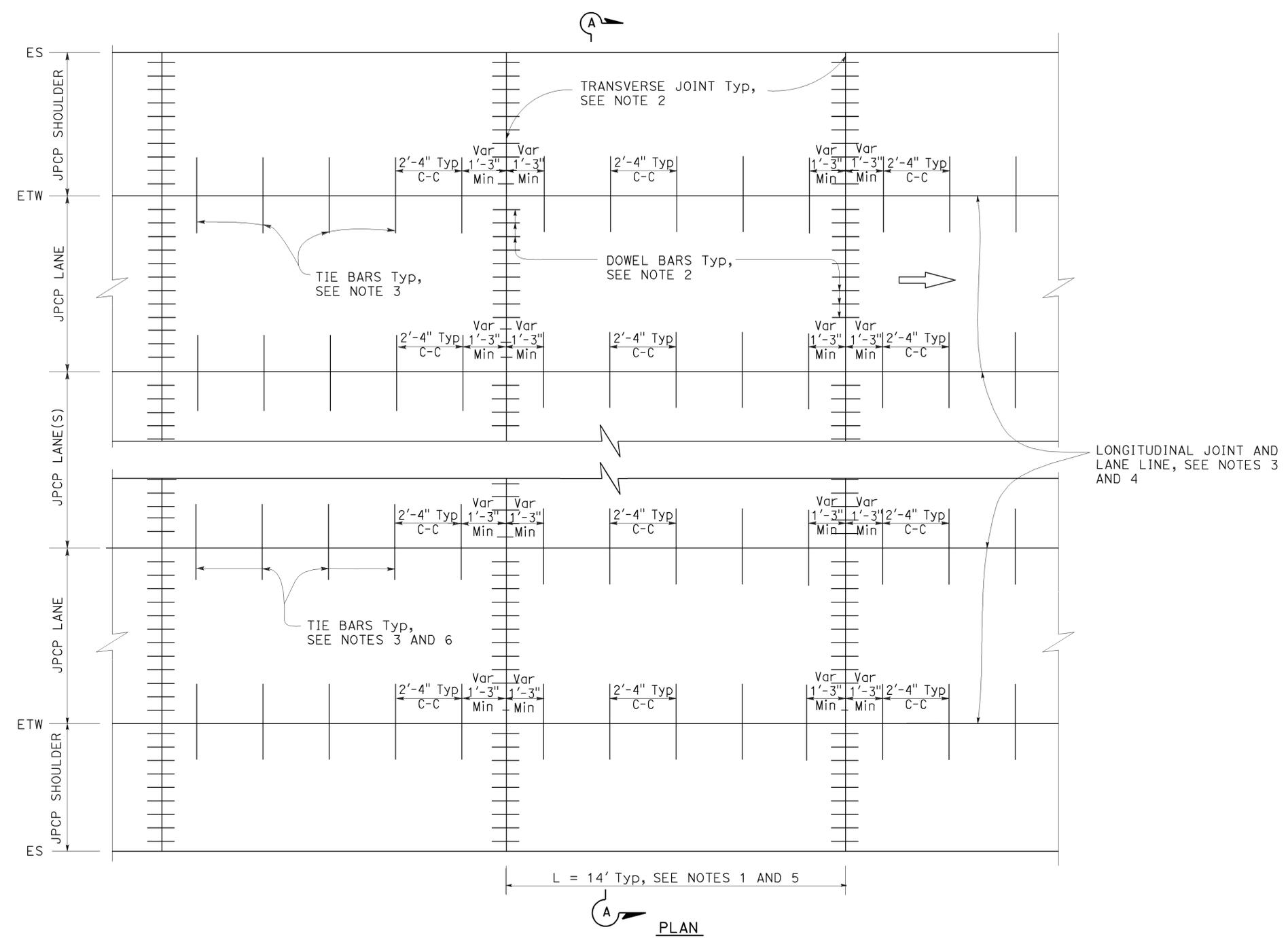
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	43	62

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 9-29-14



NOTES:

1. Transverse joint spacing may be adjusted to no less than 10' and no more than 14' to conform to bridges, change in pavement type, and hardened concrete pavement.
2. For transverse joint and dowel bar details not shown, see Revised Standard Plan RSP P10.
3. For longitudinal joint and tie bar details not shown, see Revised Standard Plan RSP P15.
4. For additional longitudinal joint layout details, see Revised Standard Plan RSP P18.
5. For joint layout at intersections, see Project Plans.
6. For dowel bars at longitudinal joint, see Revised Standard Plan RSP P18.

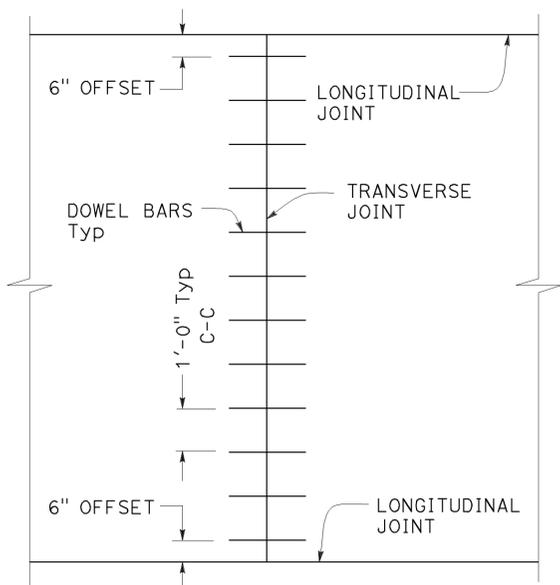
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**JOINTED PLAIN
 CONCRETE PAVEMENT
 NEW CONSTRUCTION**
 NO SCALE

RSP P1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P1
 DATED MAY 20, 2011 - PAGE 125 OF THE STANDARD PLANS BOOK DATED 2010.

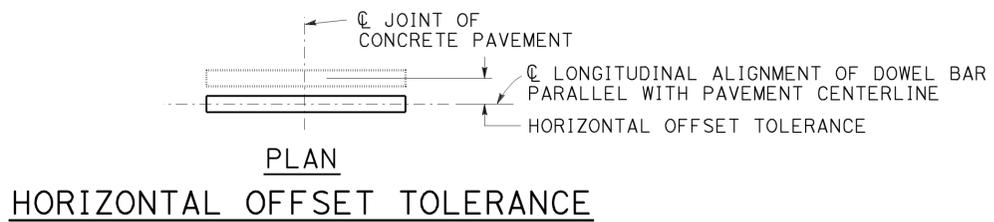
1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP P1

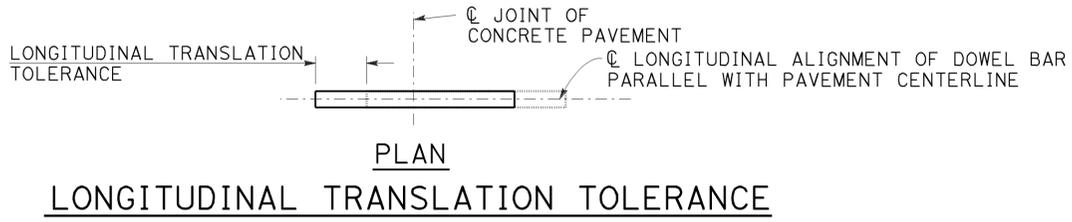
2010 REVISED STANDARD PLAN RSP P1



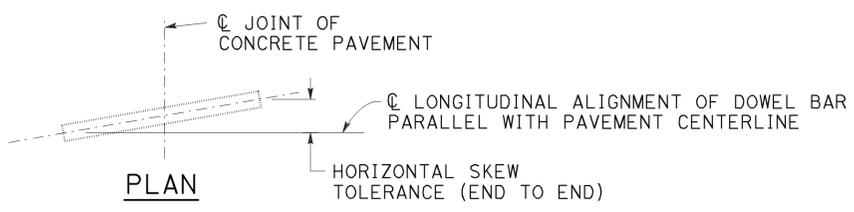
**TRANSVERSE JOINT
DOWEL BAR LAYOUT**



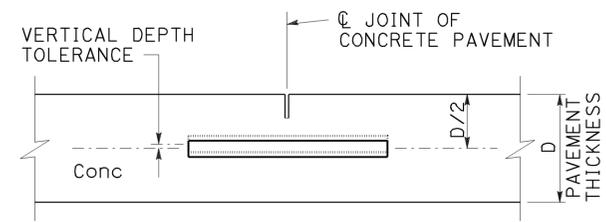
HORIZONTAL OFFSET TOLERANCE



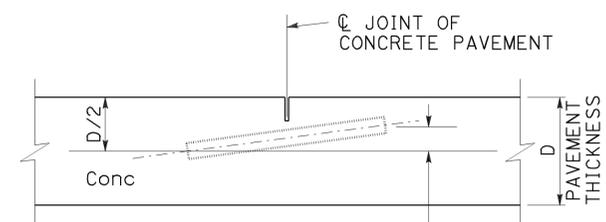
LONGITUDINAL TRANSLATION TOLERANCE



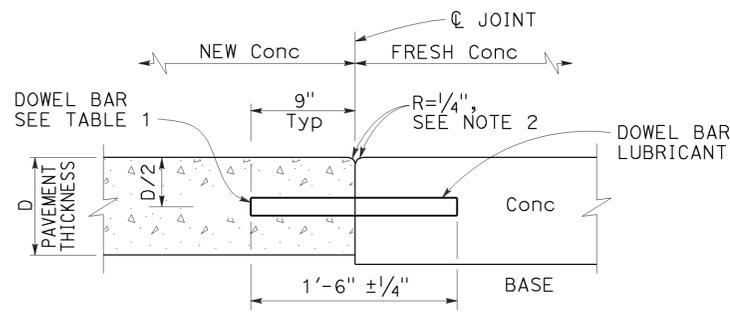
HORIZONTAL SKEW TOLERANCE



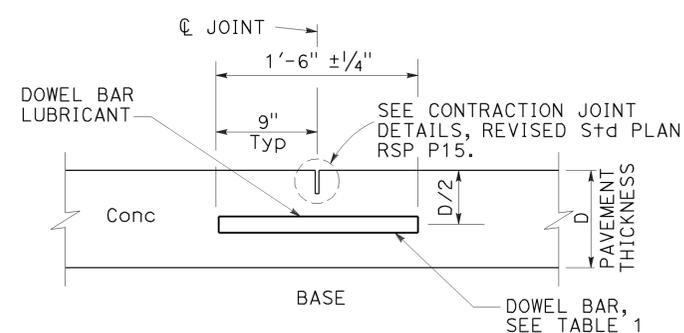
**ELEVATION
VERTICAL DEPTH TOLERANCE**



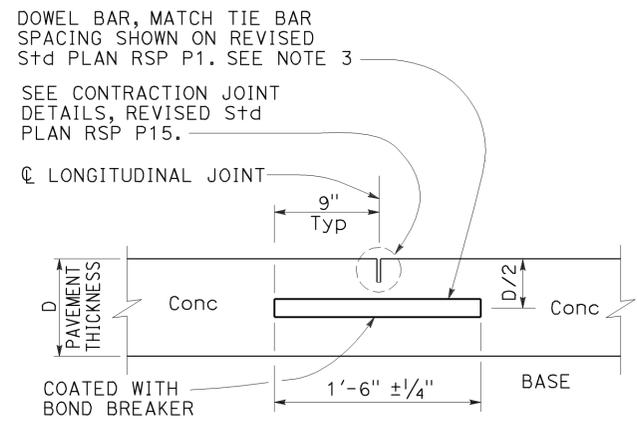
**ELEVATION
VERTICAL SKEW TOLERANCE**



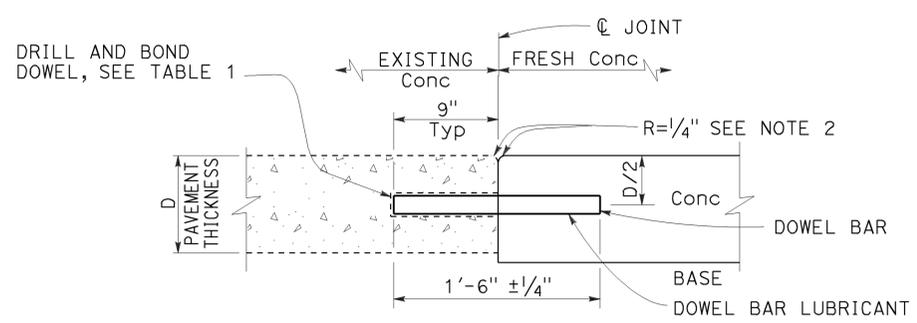
**TRANSVERSE
CONSTRUCTION JOINT DETAIL**



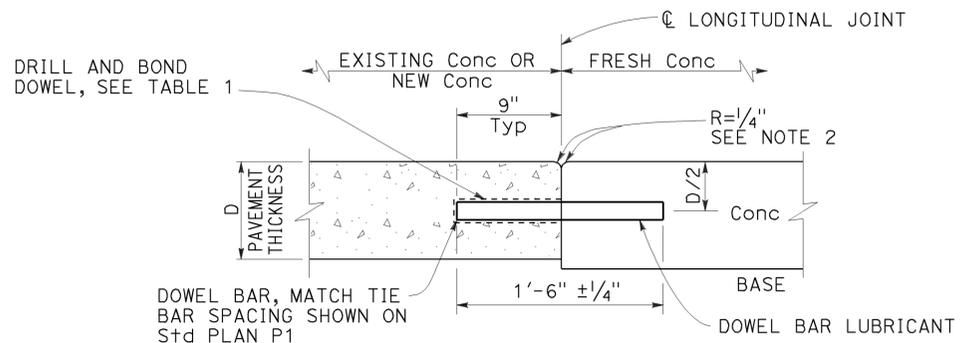
TRANSVERSE CONTRACTION JOINT



**LONGITUDINAL CONTRACTION
JOINT WITH DOWEL BARS**
See Revised Std Plan RSP P18



**TRANSVERSE CONSTRUCTION JOINT
FOR EXISTING CONCRETE PAVEMENT**



**LONGITUDINAL CONSTRUCTION JOINT
WITH DOWEL BARS**
See Revised Std Plan RSP P18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	44	62

William K. Farnbach
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
William K. Farnbach
No. C49042
Exp. 9-30-14
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 9-29-14

- NOTES:**
1. See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
 2. Where fresh concrete pavement is placed against new concrete or existing concrete pavement, rounding the corner of the existing concrete pavement is not required.
 3. May also use 3/4" Dia dowel bars 2'-4" ± 1/4" in length. Center the length of dowel bars at the centerline of longitudinal joint.

**TABLE 1
DOWEL BAR DIAMETER TABLE**

PAVEMENT THICKNESS	0.65'	> 0.65' - 0.85'	> 0.85'
MINIMUM DOWEL * BAR DIAMETER	1"	1 1/4"	1 1/2"

* The drilled hole diameter must be 1/8" to 3/16" larger than the bar diameter.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT
DOWEL BAR
DETAILS**

NO SCALE

RSP P10 DATED JULY 19, 2013 SUPERSEDES RSP P10 DATED APRIL 20, 2012 AND STANDARD PLAN P10 DATED MAY 20, 2011 - PAGE 131 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P10

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

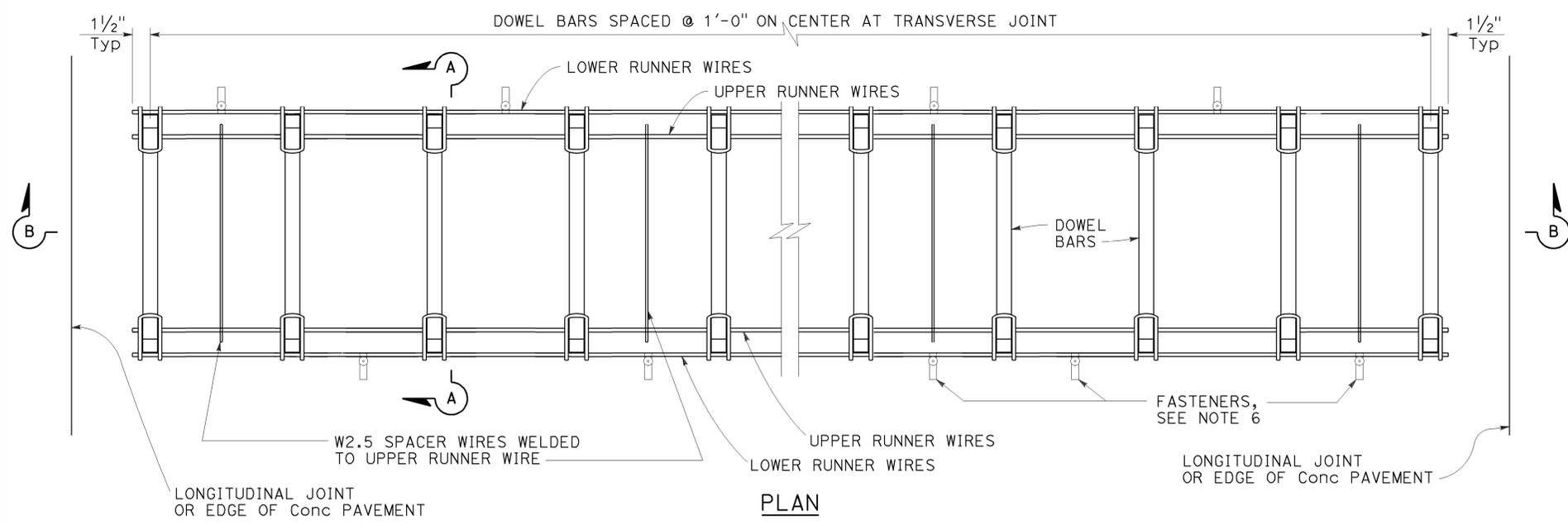
2010 REVISED STANDARD PLAN RSP P10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	45	62

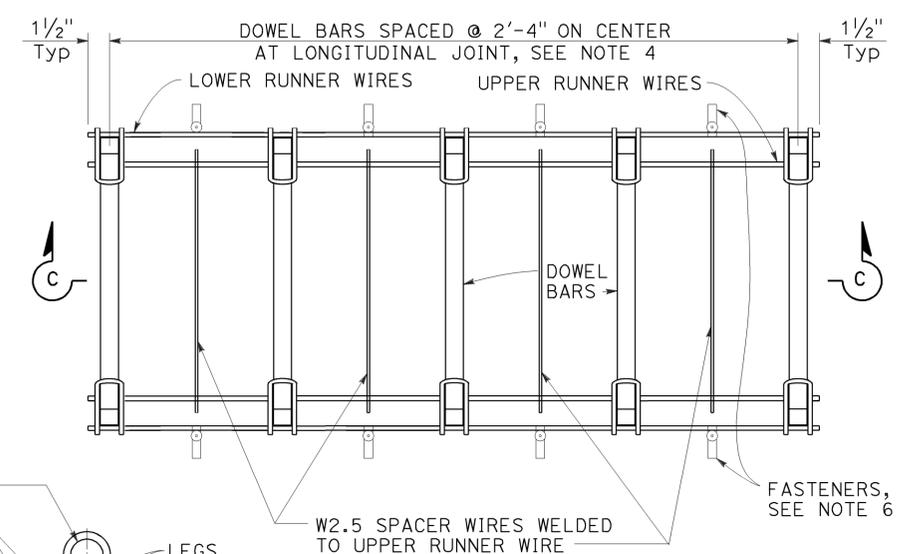
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
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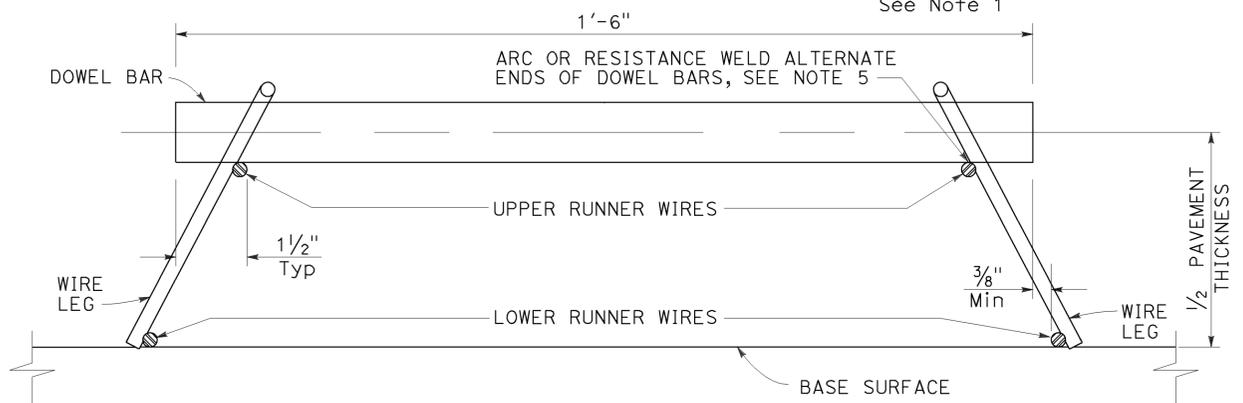
TO ACCOMPANY PLANS DATED 9-29-14



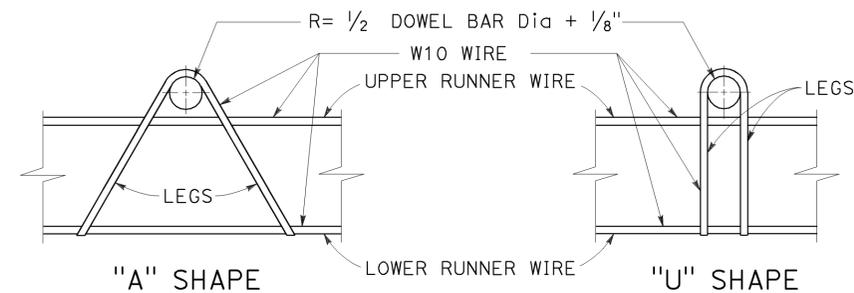
PLAN
DOWEL BAR BASKET
(TRANSVERSE JOINT)
 See Note 1



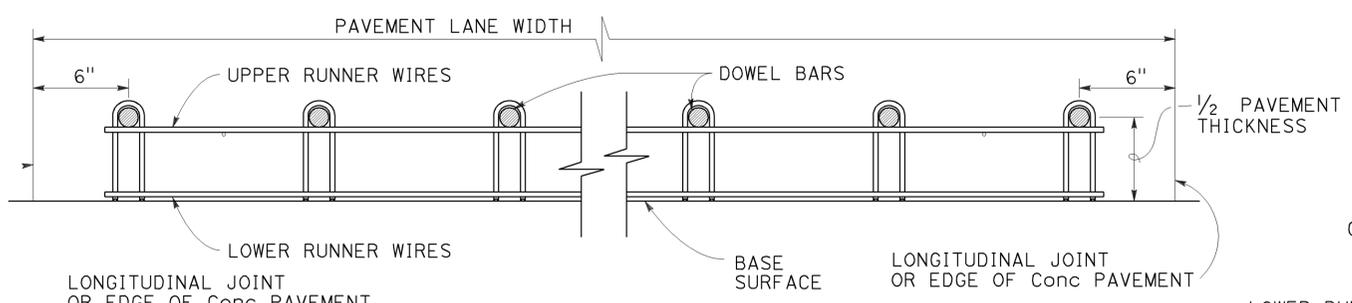
PLAN
DOWEL BAR BASKET
(LONGITUDINAL JOINT)
 See Note 1



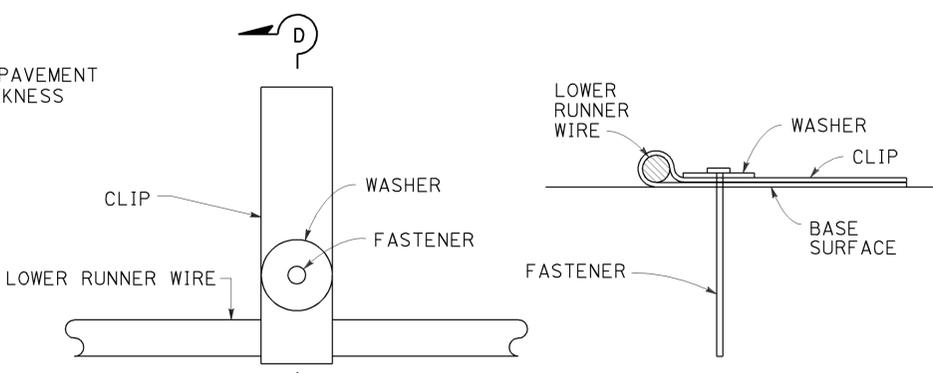
SECTION A-A



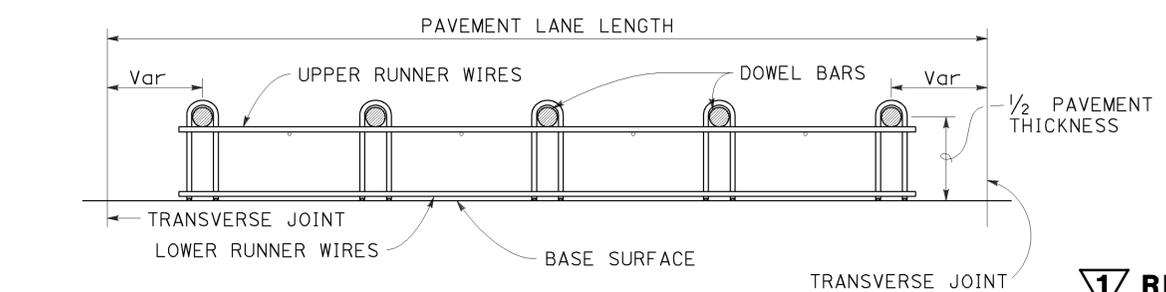
ASSEMBLY FRAME DETAILS



SECTION B-B
 See Note 1



FASTENER DETAIL
 See Note 6



SECTION C-C
 See Notes 1 and 4

NOTES:

- "U" frame shape assembly shown. Use either "U" frame shape or "A" frame shape.
- Wire sizes shown are the minimum required.
- All wire intersections must be resistance welded.
- Use tie bar spacing for longitudinal dowel bar locations. See Revised Standard Plans RSP P1, RSP P2, RSP P3A, and RSP P3B for tie bar requirements.
- Weld may be at the top or bottom of the dowel bar.
- Use anchor pins where soil or granular base is used. See Revised Standard Plan RSP P17 for Anchor Pin Detail.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CONCRETE PAVEMENT
DOWEL BAR BASKET
DETAILS
 NO SCALE

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP P12 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P12 DATED MAY 20, 2011 - PAGE 132 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P12

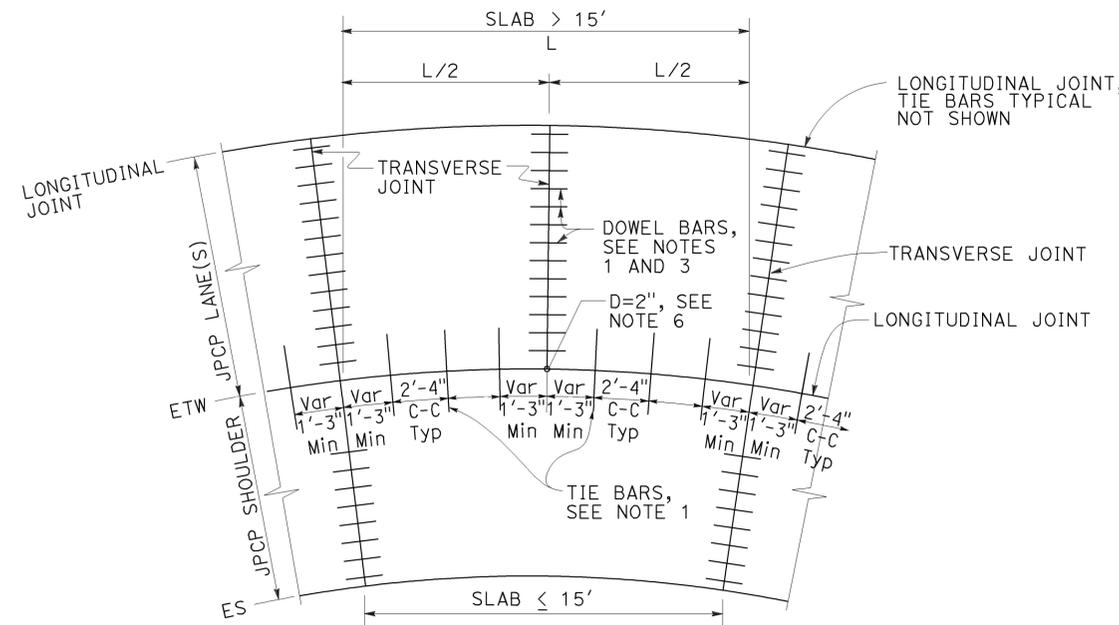
2010 REVISED STANDARD PLAN RSP P12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	46	62

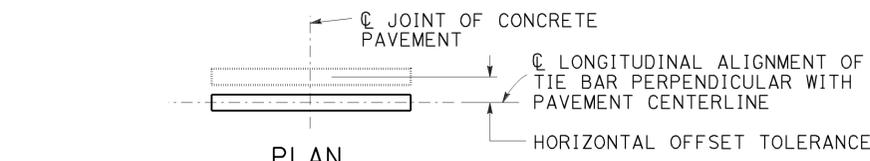
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
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 STATE OF CALIFORNIA

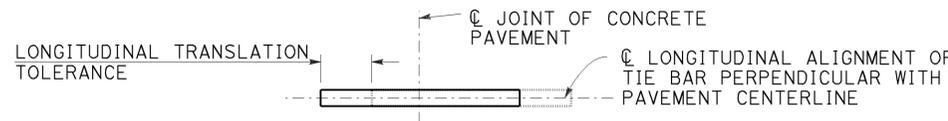
TO ACCOMPANY PLANS DATED 9-29-14



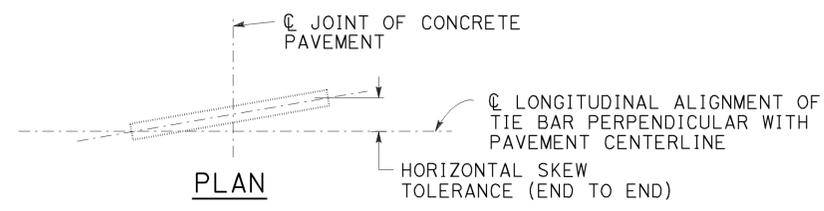
TIE BAR LAYOUT IN CURVED LANES



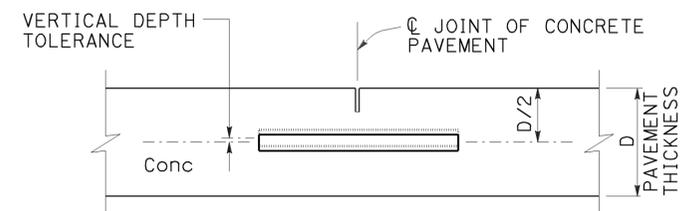
HORIZONTAL OFFSET TOLERANCE



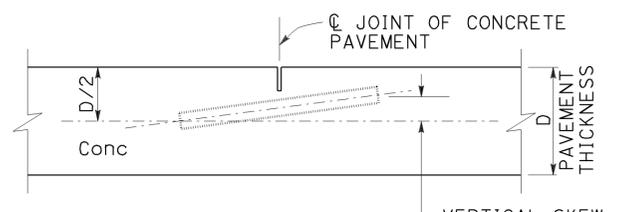
LONGITUDINAL TRANSLATION TOLERANCE



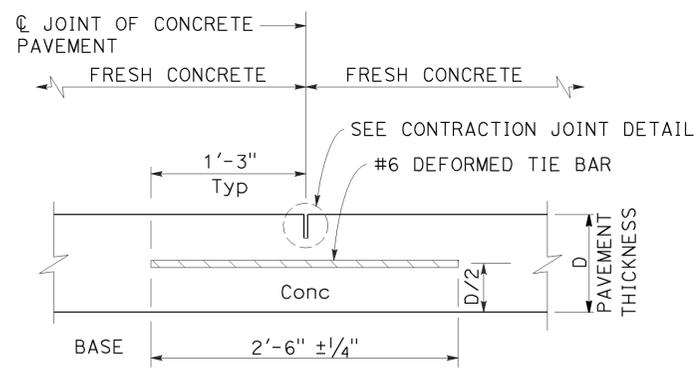
HORIZONTAL SKEW TOLERANCE



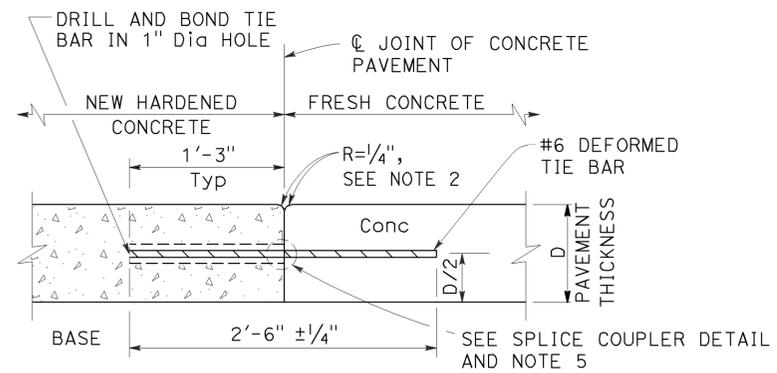
VERTICAL DEPTH TOLERANCE



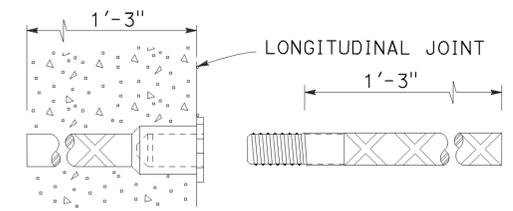
VERTICAL SKEW TOLERANCE



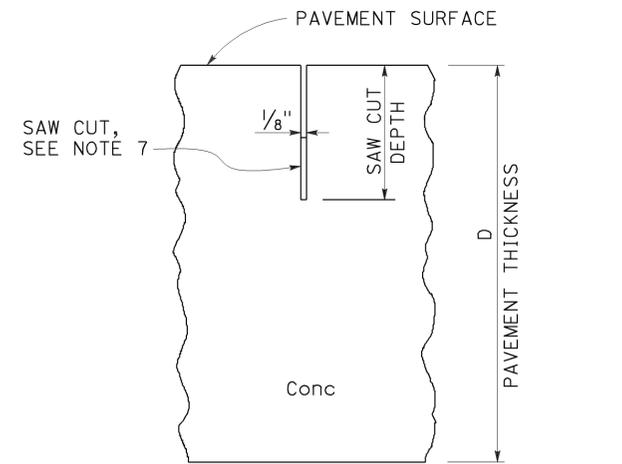
LONGITUDINAL CONTRACTION JOINT



LONGITUDINAL CONSTRUCTION JOINT



ALTERNATIVE SPLICE COUPLER



CONTRACTION JOINT DETAIL

- NOTES:**
1. See Revised Standard Plan RSP P1 for typical dowel bar and tie bar placement and locations.
 2. Where new pavement is placed against existing concrete pavement, rounding the corner is not required.
 3. For dowel bar sizes, See Revised Standard Plan RSP P10.
 4. Tie bar details apply to inside widenings.
 5. Use either drill and bond or splice couplers.
 6. Full depth drilled hole. Fill hole with filler material.
 7. The bottom of the saw cut must be at least 0.5" clear of any dowel bar, tie bar and bar reinforcement.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP P15 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P15

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CONCRETE PAVEMENT-TIE BAR DETAILS
 NO SCALE

2010 REVISED STANDARD PLAN RSP P15

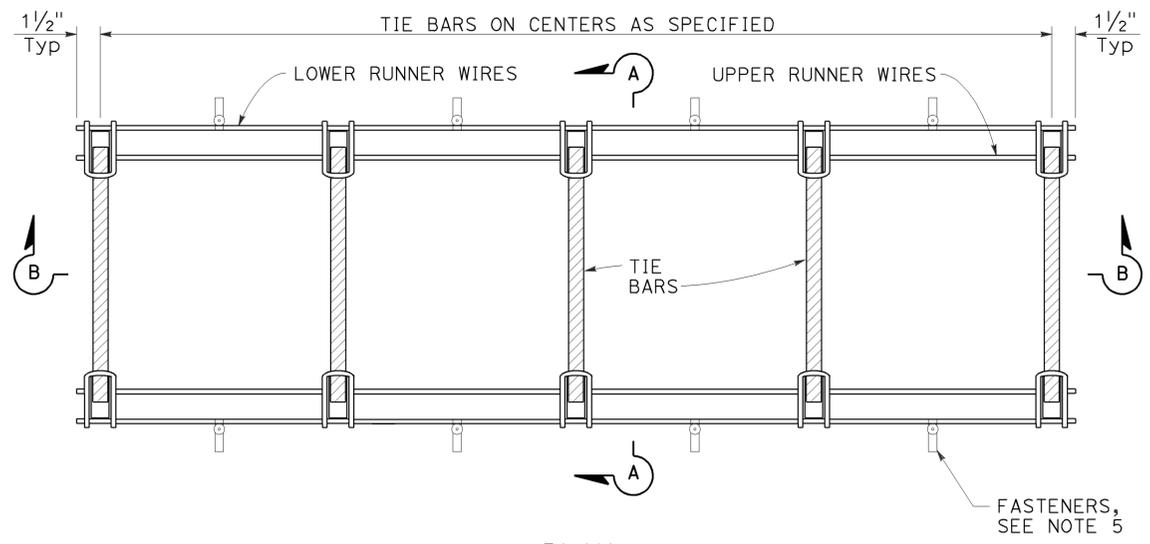
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	47	62

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
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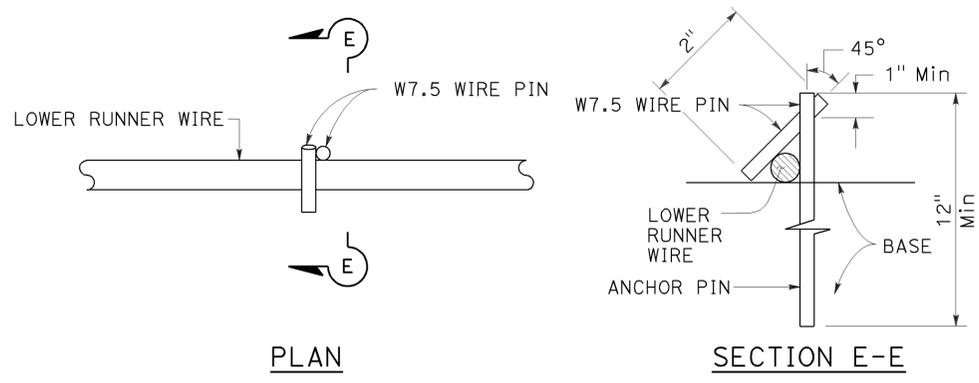
TO ACCOMPANY PLANS DATED 9-29-14

NOTES:

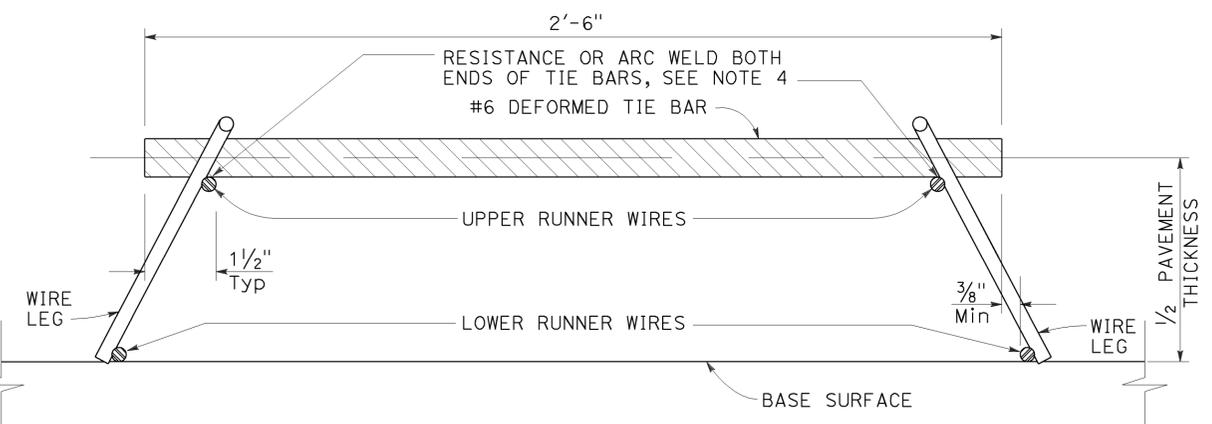
- "U" frame shape assembly shown. Use either "U" frame shape or "A" frame shape.
- Wire sizes shown are the minimum required.
- All wire intersections must be resistance welded.
- Weld may be at top or bottom of tie bars.
- Use anchor pins where soil or granular base is used.



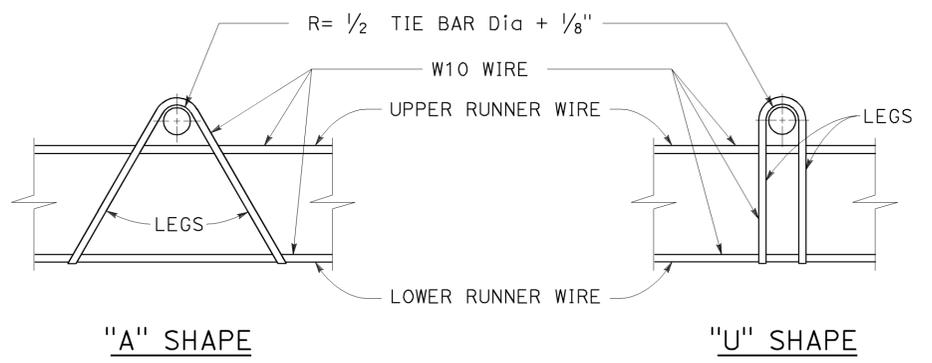
TIE BAR BASKET
 (Tie bars at longitudinal joint)
 See Note 1



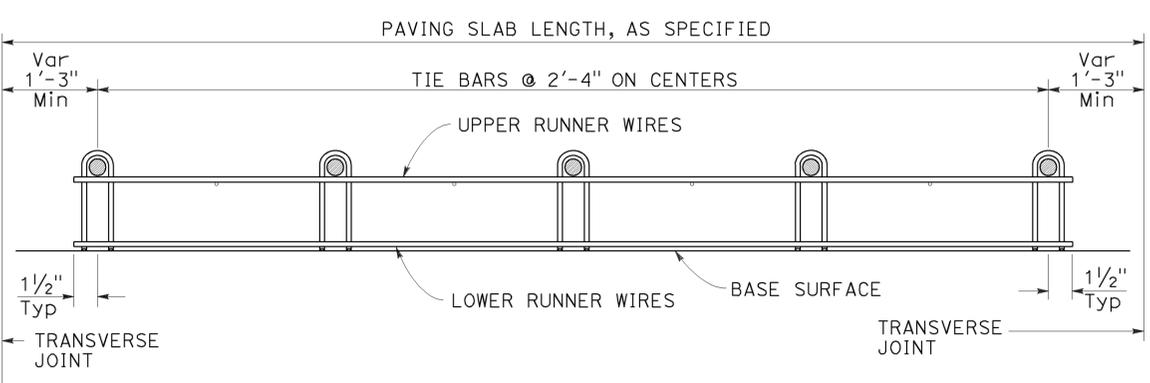
ANCHOR PIN DETAIL
 See Note 5



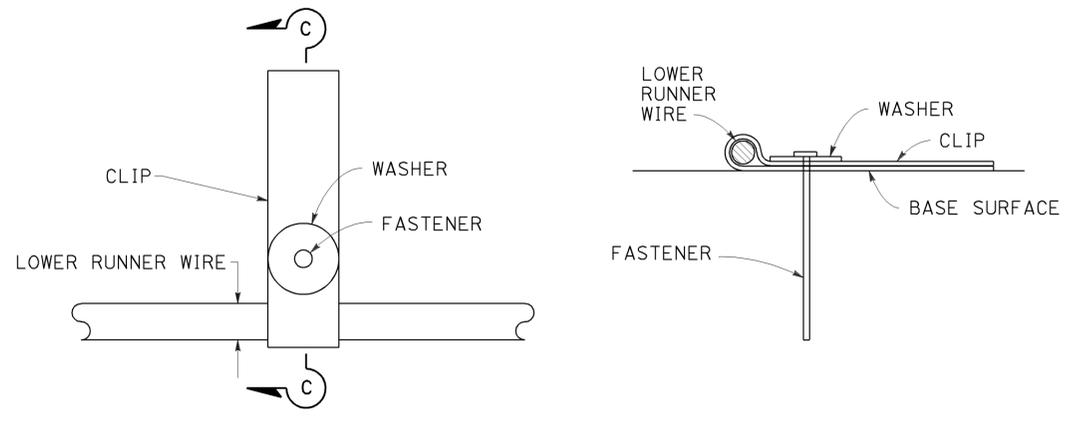
SECTION A-A



ASSEMBLY FRAME DETAILS
 See Note 1



SECTION B-B
 See Note 1



FASTENER DETAIL

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT
 TIE BAR BASKET
 DETAILS**
 NO SCALE

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP P17 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P17
 DATED MAY 20, 2011 - PAGE 134 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P17

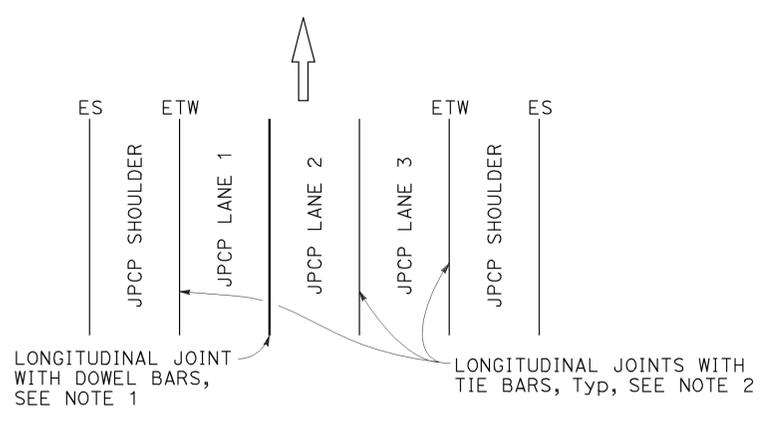
2010 REVISED STANDARD PLAN RSP P17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	48	62

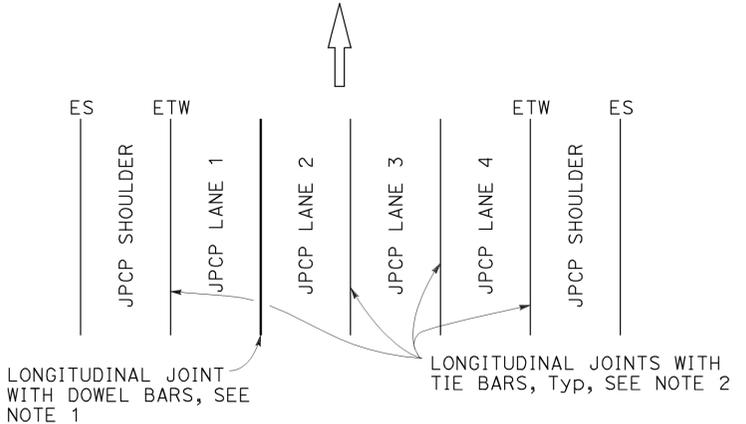
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
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REGISTERED PROFESSIONAL ENGINEER
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 STATE OF CALIFORNIA

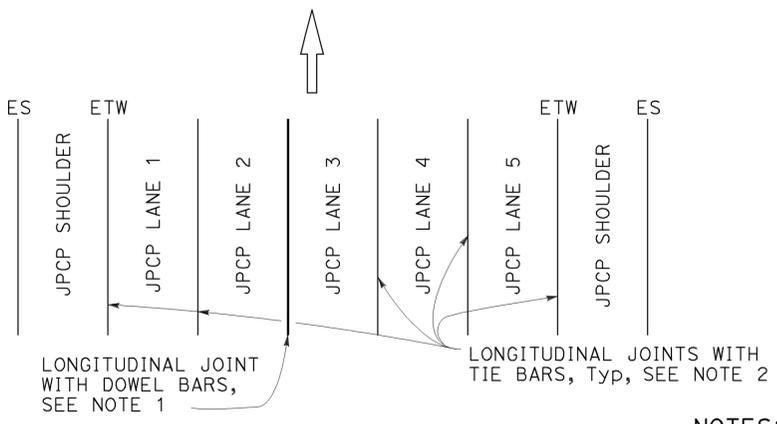
TO ACCOMPANY PLANS DATED 9-29-14



3 LANES WITH CONCRETE SHOULDERS
PLAN



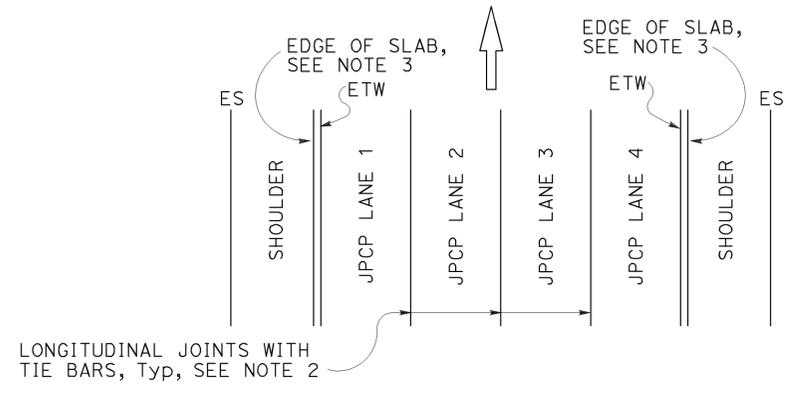
4 LANES WITH CONCRETE SHOULDERS
PLAN



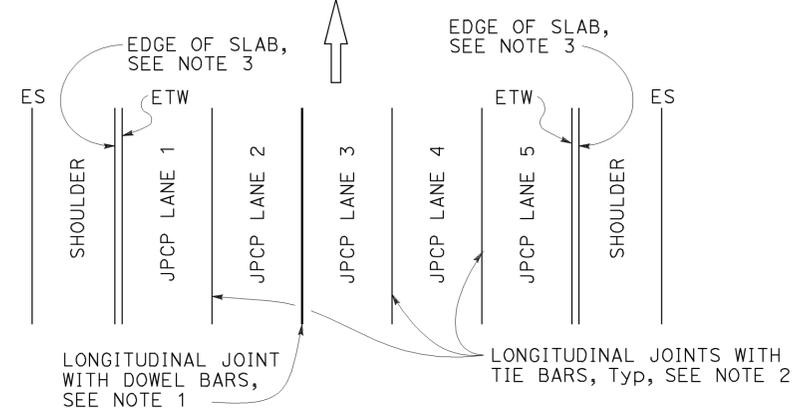
5 LANES WITH CONCRETE SHOULDERS
PLAN

NOTES:

1. See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
2. See Revised Standard Plan RSP P15 for longitudinal joint with tie bars.
3. S = Reservoir depth.
 $S = \frac{7}{8}'' \pm \frac{1}{16}''$ for asphalt rubber seals
 $S = \frac{9}{16}'' \pm \frac{1}{16}''$ for silicone seals
 Preformed compression seals must be $\frac{13}{16}''$ wide and $S = 1\frac{1}{16}'' \pm \frac{1}{16}''$

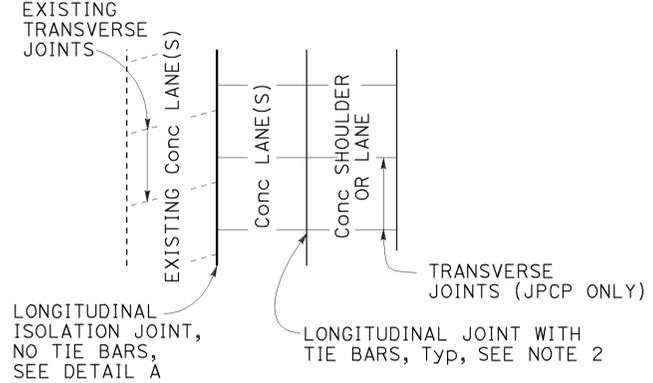


4 LANES OR LESS WITH AC SHOULDERS
PLAN



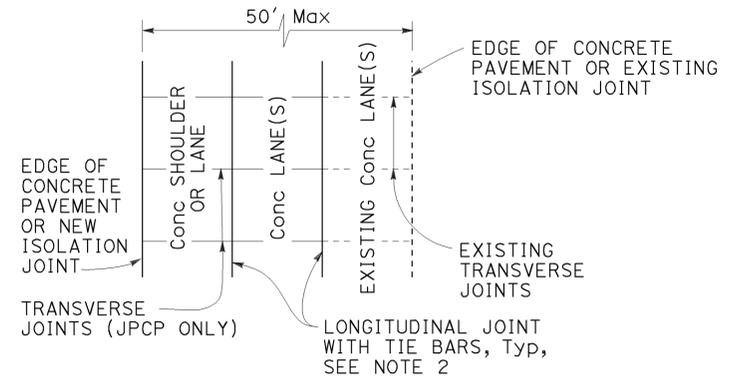
5 LANES WITH AC SHOULDERS
PLAN

NEW CONSTRUCTION
Location of Longitudinal Joints For JPCP



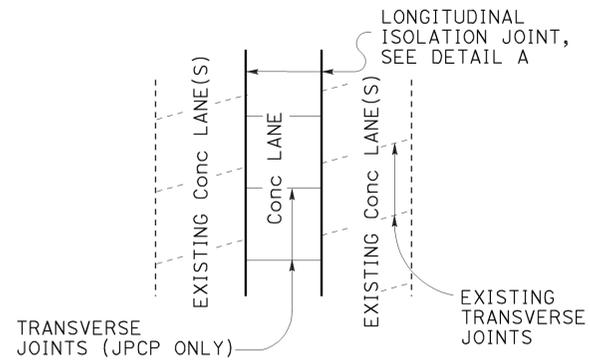
CASE 1
PLAN

Transverse Joints do not align between new and existing.



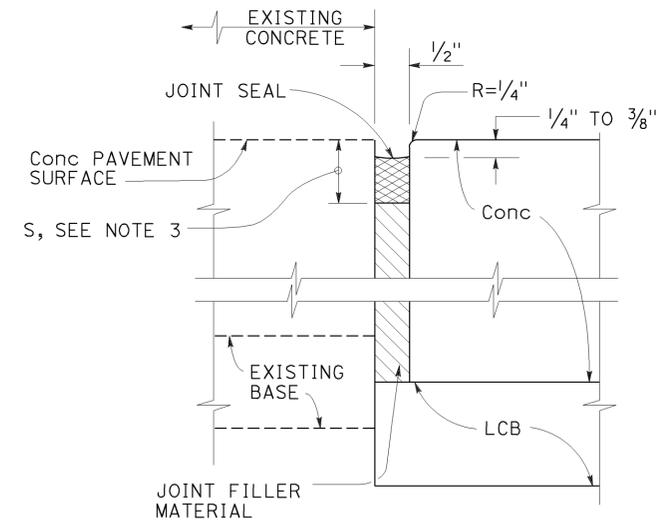
CASE 2
PLAN

Transverse Joints align between new and existing. (For JPCP only)



CASE 3 (INTERIOR LANE REPLACEMENT)
PLAN

Transverse Joints do not align between new and existing.



DETAIL "A"
ISOLATION JOINT

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT LANE SCHEMATICS AND ISOLATION JOINT DETAIL

NO SCALE

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015
LANE/SHOULDER ADDITION OR RECONSTRUCTION
For JPCP and CRCP

RSP P18 DATED JULY 19, 2013 SUPERSEDES RSP P18 DATED APRIL 20, 2012 AND STANDARD PLAN P18 DATED MAY 20, 2011 - PAGE 135 OF THE STANDARD PLANS BOOK DATED 2010.

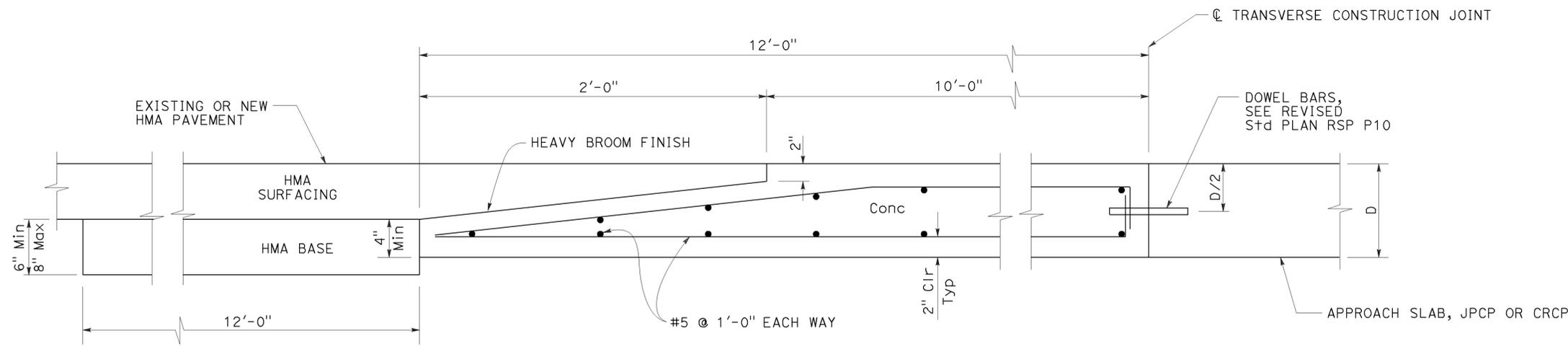
REVISED STANDARD PLAN RSP P18

2010 REVISED STANDARD PLAN RSP P18

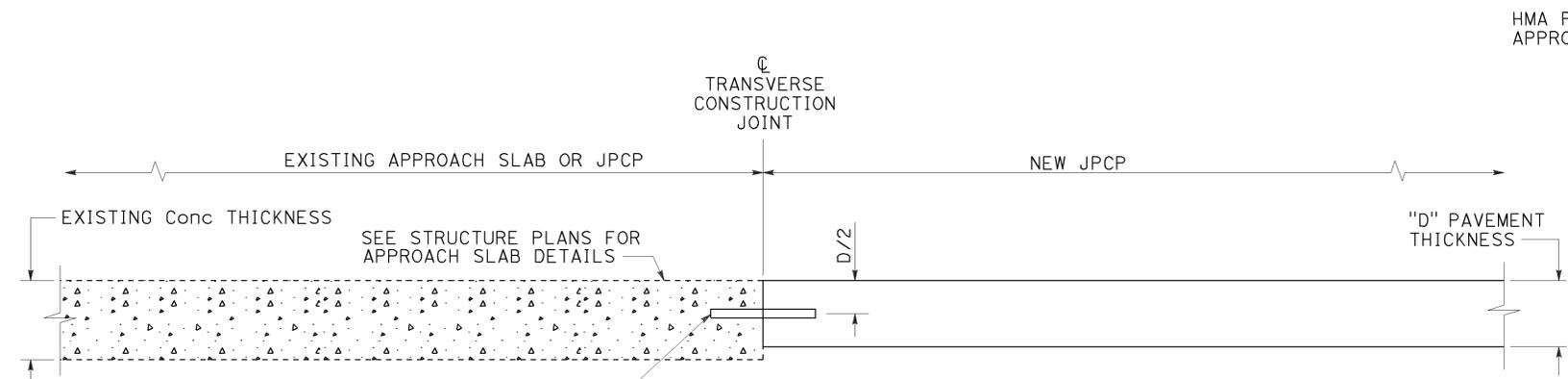
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	49	62

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 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.

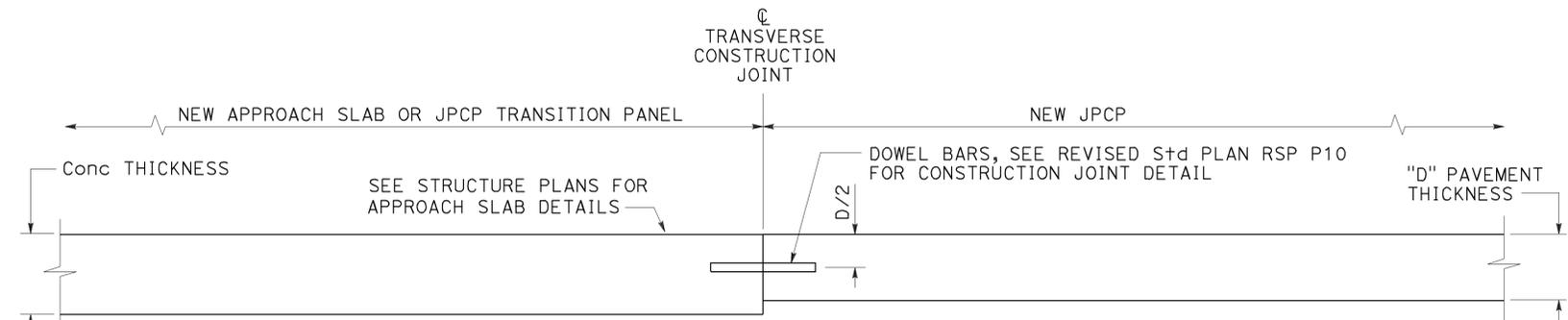
REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA



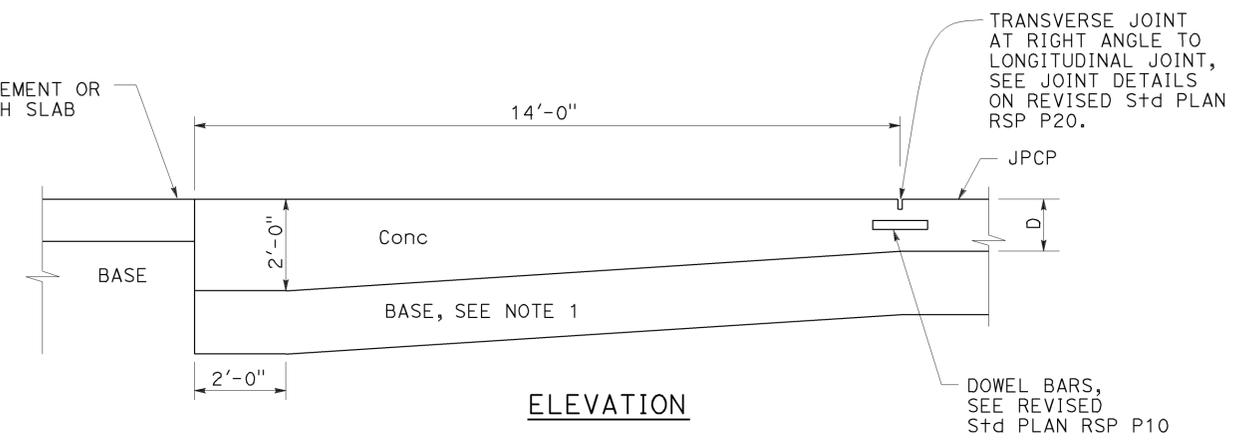
ELEVATION
CONCRETE PAVEMENT
TRANSITION PANEL



ELEVATION
TERMINAL JOINT TYPE 1
 For Exist JPCP or Approach Slab



ELEVATION
TERMINAL JOINT TYPE 2
 For JPCP Transition Panel or Approach Slab



ELEVATION
PAVEMENT END ANCHOR
 For HMA Pvmnt or Approach Slab

NOTE:
 1. Maintain same base thickness as JPCP.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
 END PANEL
 PAVEMENT TRANSITIONS**

NO SCALE

RSP P30 DATED JULY 19, 2013 SUPERSEDES RSP P30 DATED APRIL 20, 2012 AND STANDARD PLAN P30 DATED MAY 20, 2011 - PAGE 137 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P30

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP P30

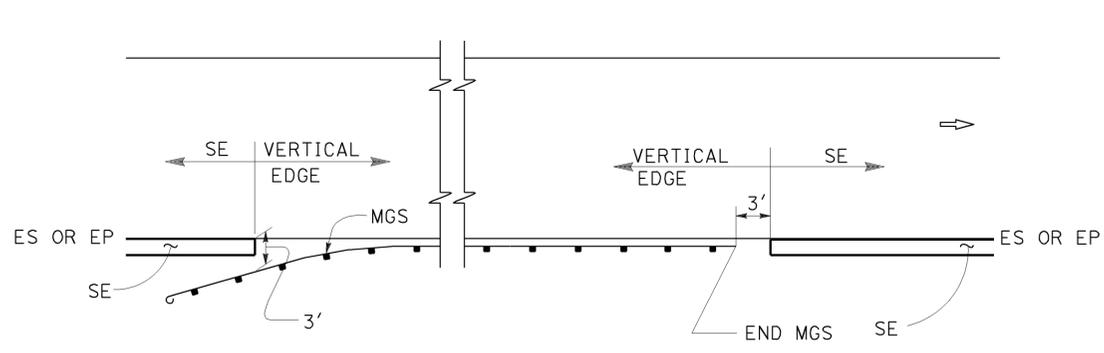
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	50	62

REGISTERED CIVIL ENGINEER
 November 15, 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.

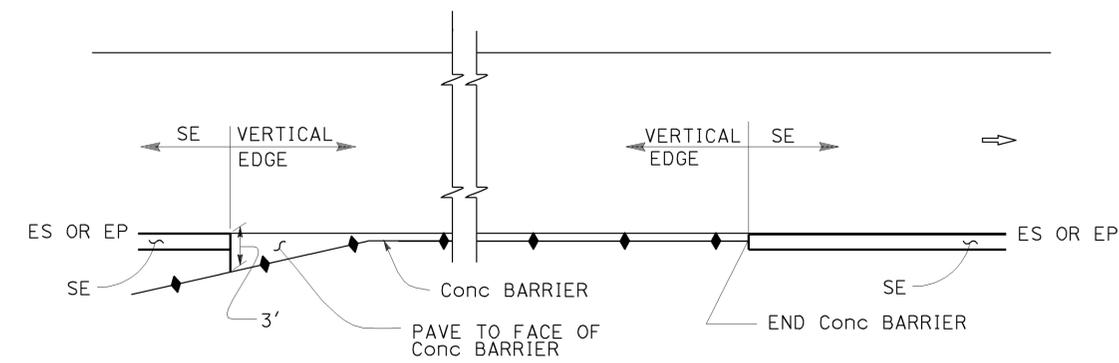
REGISTERED PROFESSIONAL ENGINEER
 Cornelis M. Hakim
 No. C55610
 Exp. 12-31-14
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 9-29-14

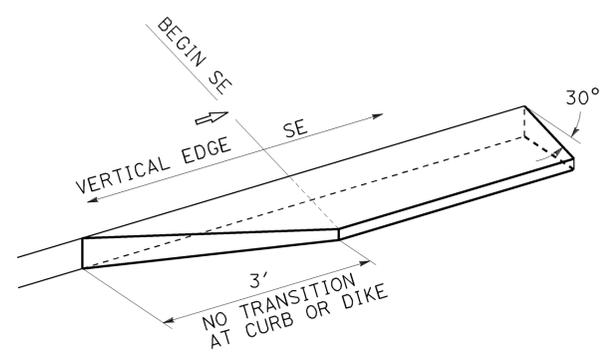
ABBREVIATIONS:
SE SAFETY EDGE



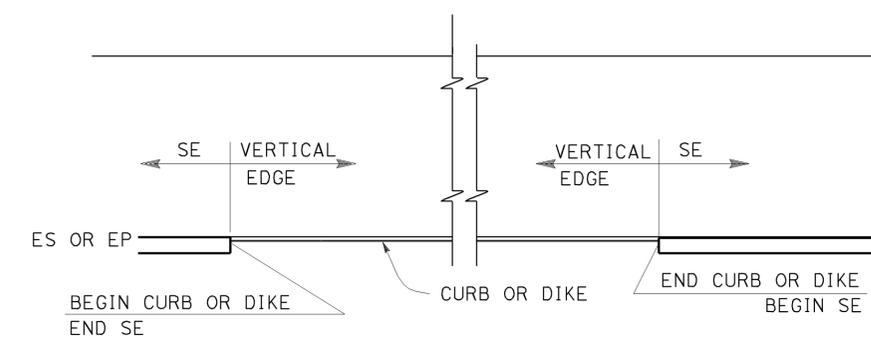
MGS



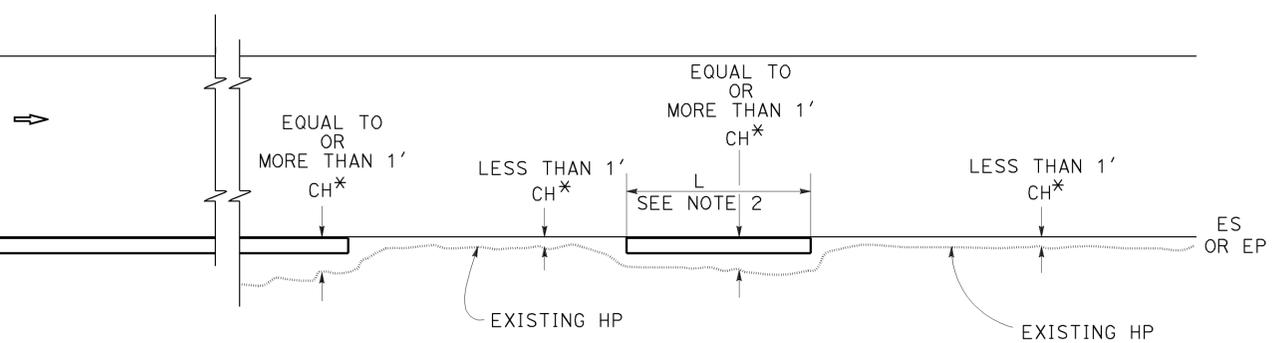
CONCRETE BARRIER



TRANSITION DETAIL FOR CONCRETE ONLY

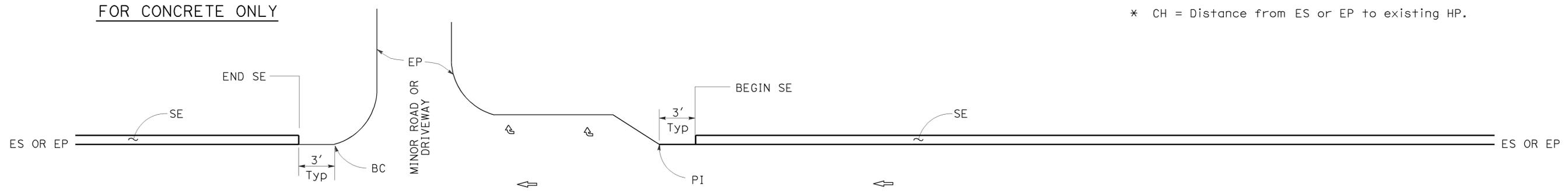


CURB OR DIKE



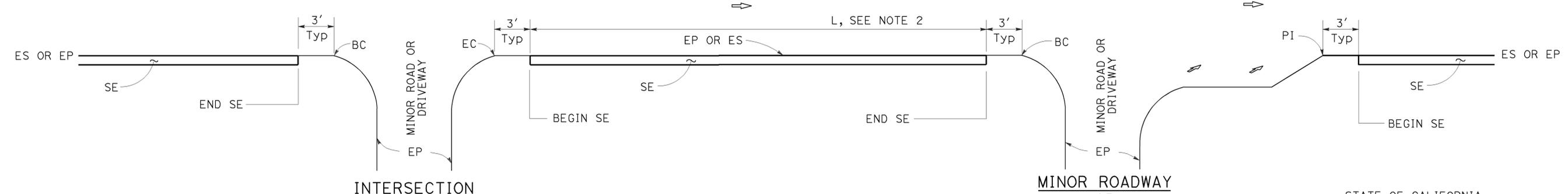
NARROW SIDE SLOPE

* CH = Distance from ES or EP to existing HP.



STATE ROUTE

STATE ROUTE



INTERSECTION

DRIVEWAY AND INTERSECTION

MINOR ROADWAY OR DRIVEWAY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS

NO SCALE

NOTES:

1. For details not shown, see Revised Standard Plans RSP P75 and RSP P76.
2. Safety edge is optional when L is less than 30'.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP P74 DATED NOVEMBER 15, 2013 SUPERSEDES RSP P74 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P74

2010 REVISED STANDARD PLAN RSP P74

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	51	62

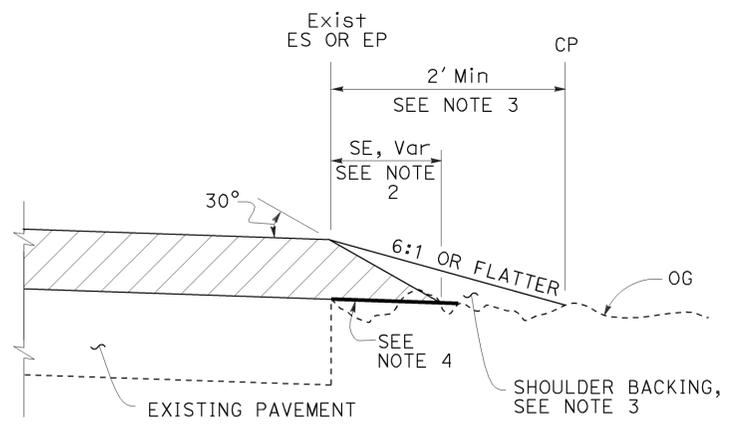
REGISTERED CIVIL ENGINEER
 November 15, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 9-29-14

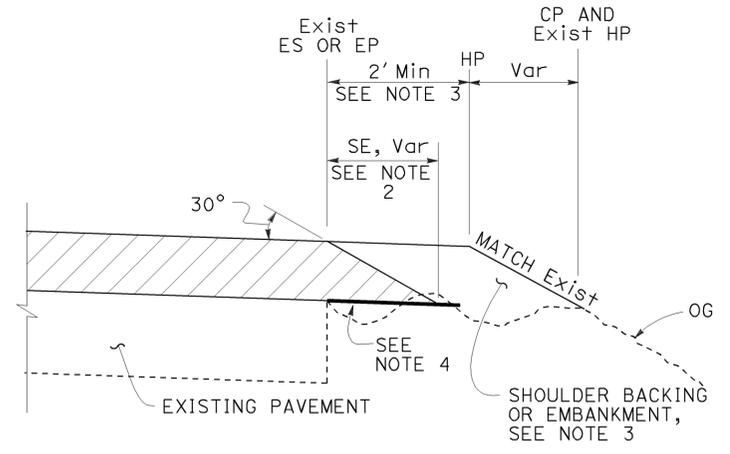
ADDITIONAL HMA OR CONCRETE QUANTITIES FOR SE/SIDE/MILE

TYPICAL CROSS SECTION	TT	TOTAL ADDITIONAL MATERIAL FOR SE/SIDE/MILE		
		HMA (TON)	CONCRETE (CY)*	CONCRETE (CY)**
	0.15'	NA	NA	NA
	0.20'	13.7	NA	NA
	0.30'	30.9	NA	NA
	0.40'	54.9	NA	NA
	0.45'	69.4	NA	NA
	0.50'	84.2	NA	NA
	0.60'	113.9	NA	NA
	0.70'	143.6	70.9	94.2
	0.80'	173.3	85.6	112.2
	0.90'	203.0	100.3	130.2
	1.00'	232.7	114.9	148.2
	1.10'	262.4	129.6	166.2
1.20'	292.1	144.3	184.2	

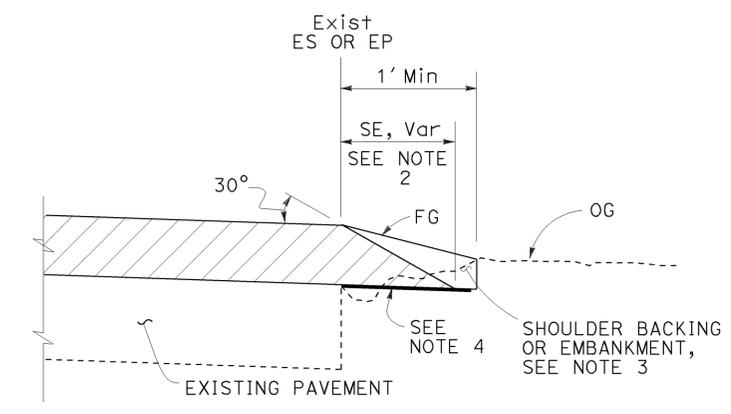
* For Detail "A"
 ** For Optional Detail "A"



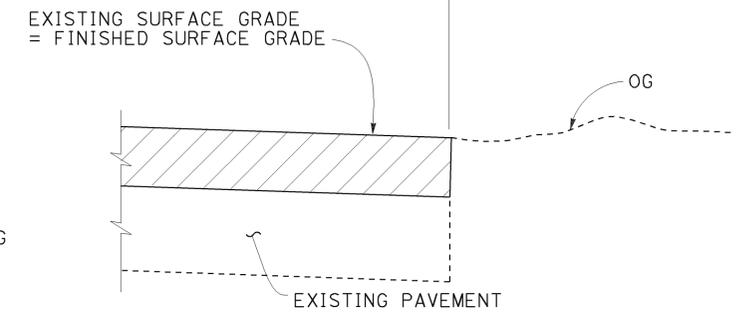
CASE A
Safety Edge



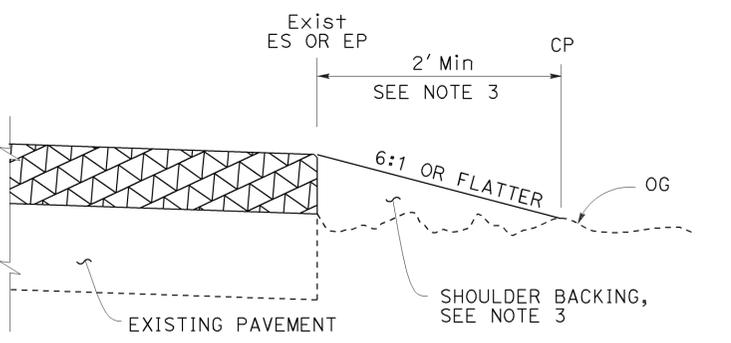
CASE B
Safety Edge



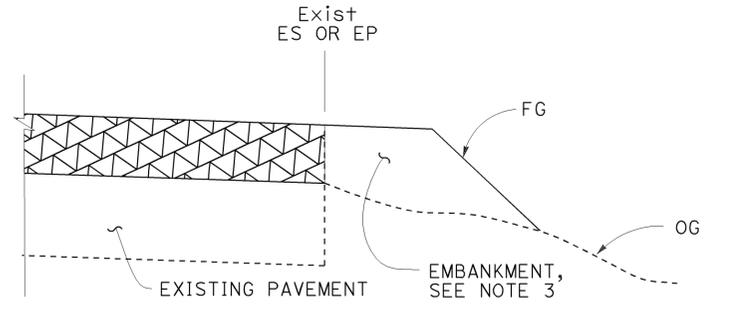
CASE C
Safety Edge



CASE D
Vertical Edge



CASE E
Vertical Edge



CASE F
Vertical Edge
* See Table A and Revised Std Plan RSP P74

- NOTES:**
1. For limits of safety edge and vertical edge treatments, see Revised Standard Plan RSP P74.
 2. Details shown for HMA overlay thickness less than 0.43'. See Detail "A" for HMA overlay thickness more than 0.43' or concrete overlay.
 3. For locations and limits of shoulder backing or embankment see project plans.
 4. Grade existing ground to place safety edge. 1' minimum width
 5. Safety edge transverse joint must match overlay transverse joint. End of #6 longitudinal bar must be 2" ± 1/2" clear from transverse joint.
 6. Safety edge is not needed in the area of MGS, barrier, right turn lane and acceleration lane. See Revised Standard Plan RSP P74.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

LEGEND:

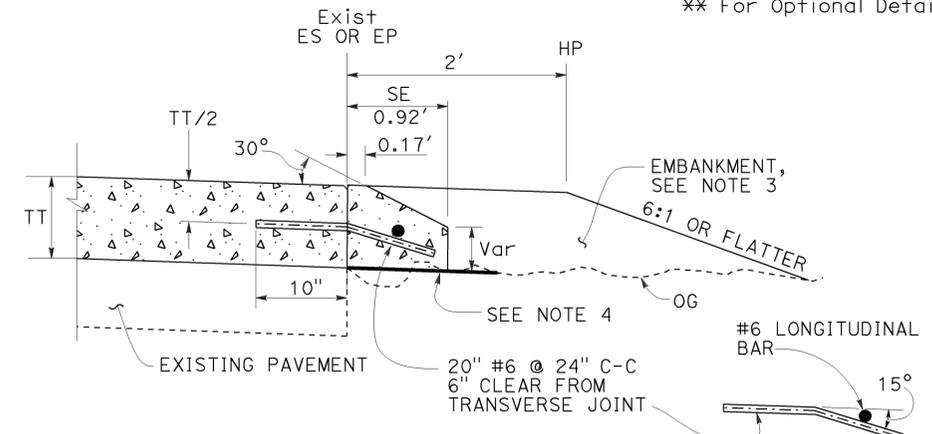
- HMA OVERLAY
- HMA OR CONCRETE OVERLAY
- CONCRETE OVERLAY

ABBREVIATIONS:

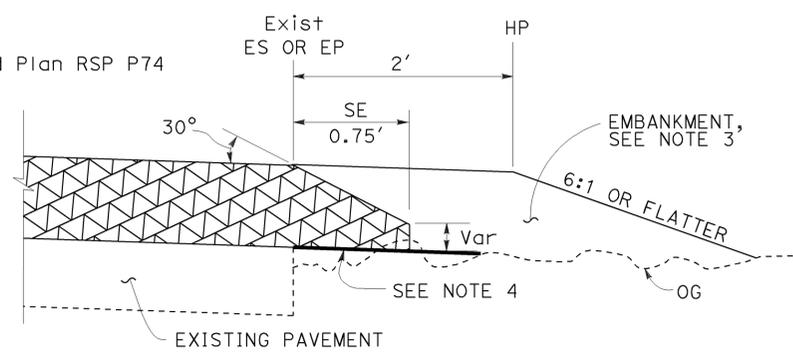
- SE SAFETY EDGE
- TT TOTAL THICKNESS OF SE

TABLE A
EDGE TREATMENT FOR VARIOUS OVERLAY THICKNESS AND CONDITIONS

FIELD CONDITION	OVERLAY THICKNESS	
	LESS THAN 0.15'	0.15' OR MORE
Exist SLOPE 6:1 OR FLATTER	CASE E	CASE A
Exist SLOPE 3:1 TO 6:1	CASE E	CASE B
Exist SLOPE STEEPER THAN 3:1	CASE F	CASE F
CUT SECTION (REPLACE, COLD PLANE, MILL PAVEMENT)	CASE D	CASE C



OPTIONAL DETAIL "A"
For concrete overlay See Note 5



DETAIL "A"
For HMA overlay thickness more than 0.43' or concrete overlay

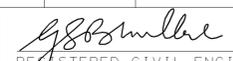
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT EDGE TREATMENTS - OVERLAYS
 NO SCALE

RSP P75 DATED NOVEMBER 15, 2013 SUPERSEDES RSP P75 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P75

2010 REVISED STANDARD PLAN RSP P75

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	52	62


 REGISTERED CIVIL ENGINEER
 July 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.

TO ACCOMPANY PLANS DATED 9-29-14

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

* - For other offsets, use the following merging taper length formula for L:
 For speed of 40 mph or less, $L = WS^2/60$
 For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
 W = Width of offset in feet
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**

NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T9

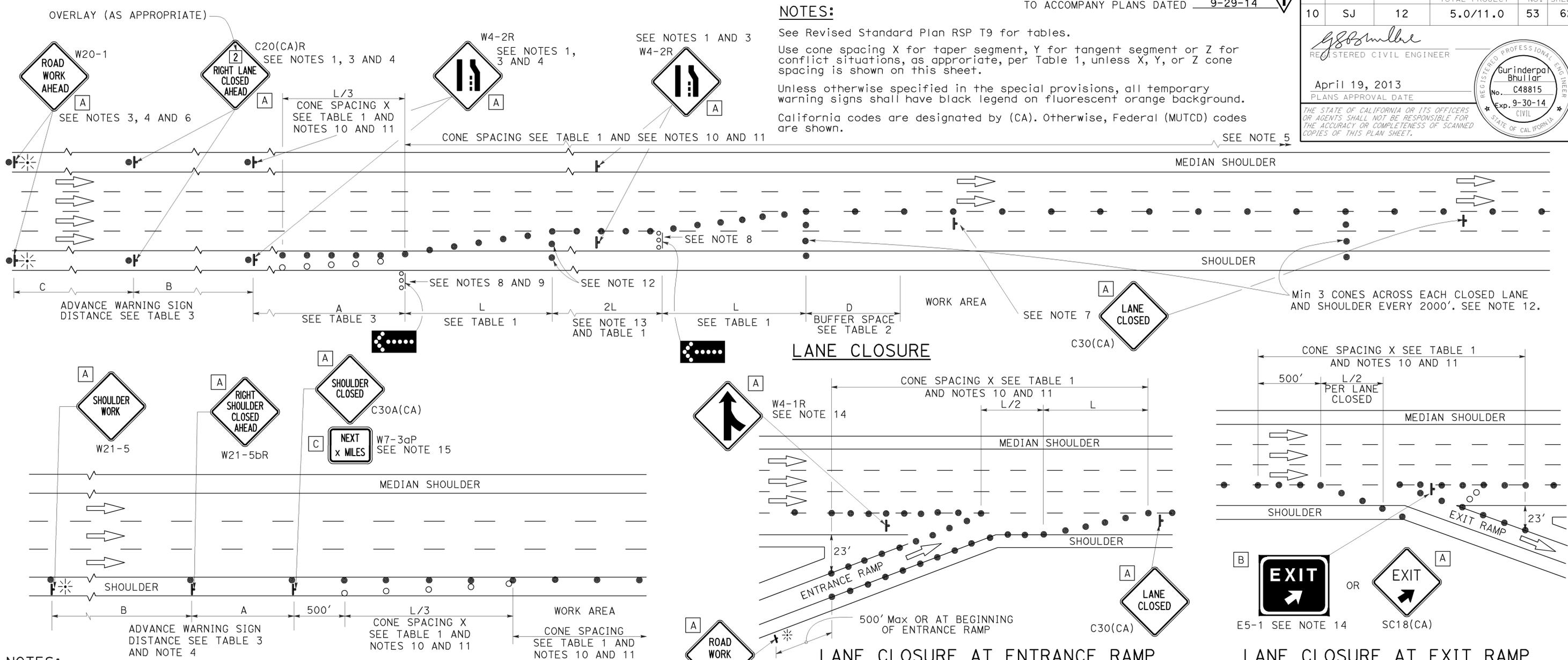
REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	53	62

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



- NOTES:**
- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
 - At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
 - Duplicate sign installations are not required:
 - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
 - 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.

- SHOULDER CLOSURE**
- 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 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.

- LANE CLOSURE AT ENTRANCE RAMP**
- 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.
 - 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.
 - Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) signs shall be used as shown.
 - 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.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP T10

2010 REVISED STANDARD PLAN RSP T10

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.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	54	62

Devinder Singh
REGISTERED CIVIL ENGINEER

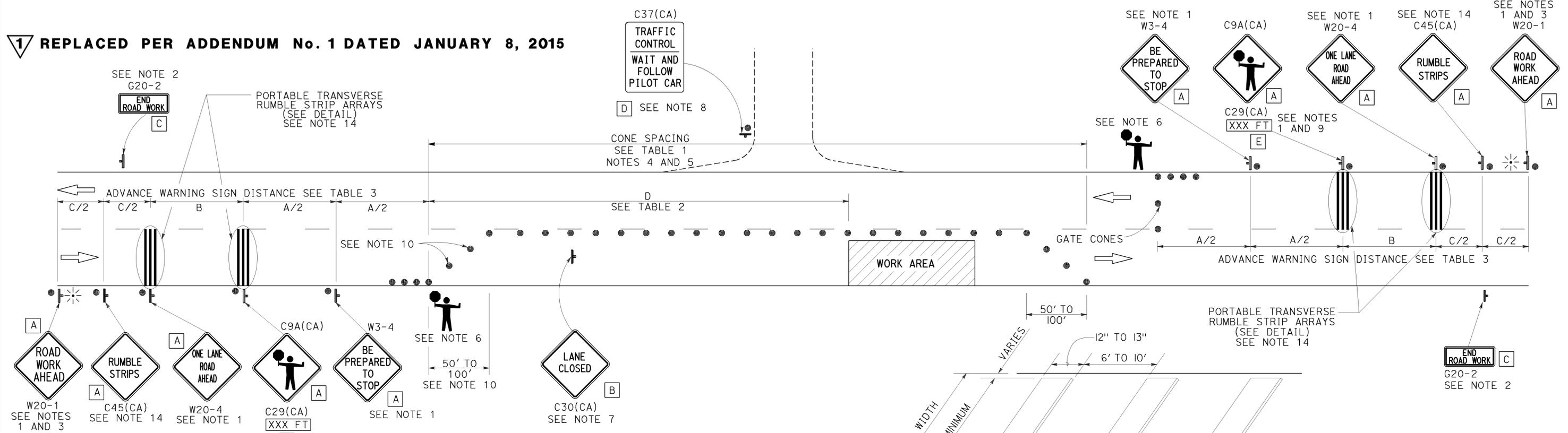
October 17, 2014
PLANS APPROVAL DATE

Devinder Singh
No. C50470
Exp. 6-30-15
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.

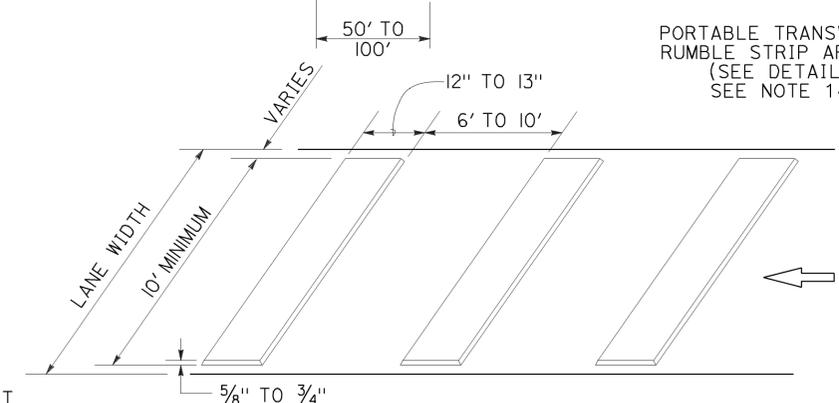
TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015



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.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions



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 OCTOBER 17, 2014 SUPERSEDES RSP T13 DATED JULY 18, 2014
AND RSP T13 DATED APRIL 19, 2013 AND 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

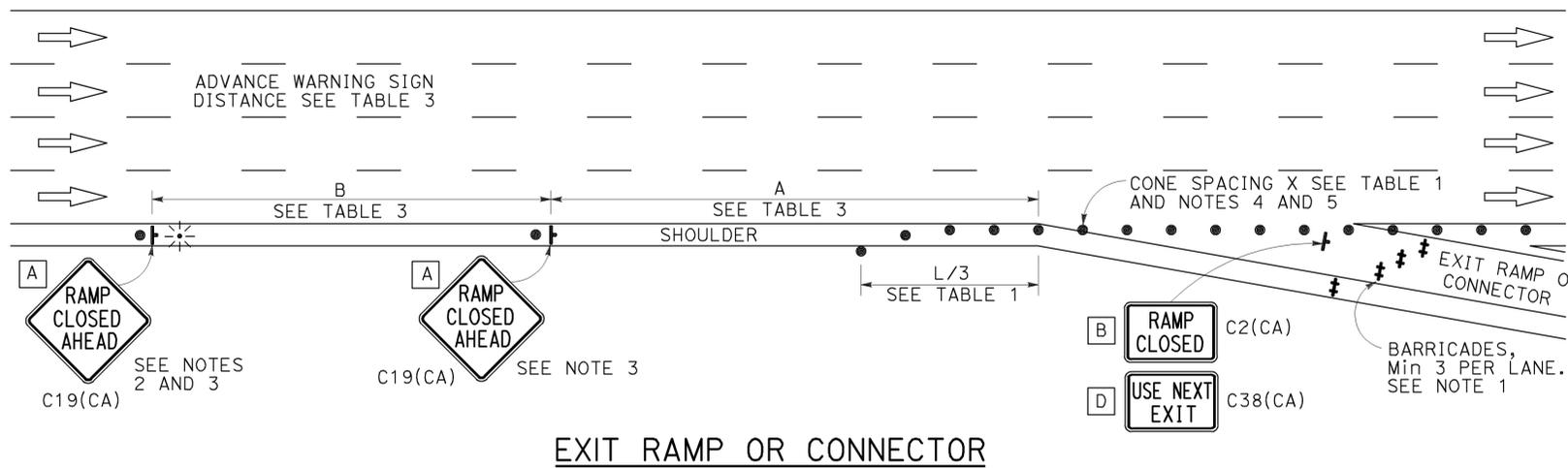
- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ‡ BARRICADES
- ⚡ PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	55	62

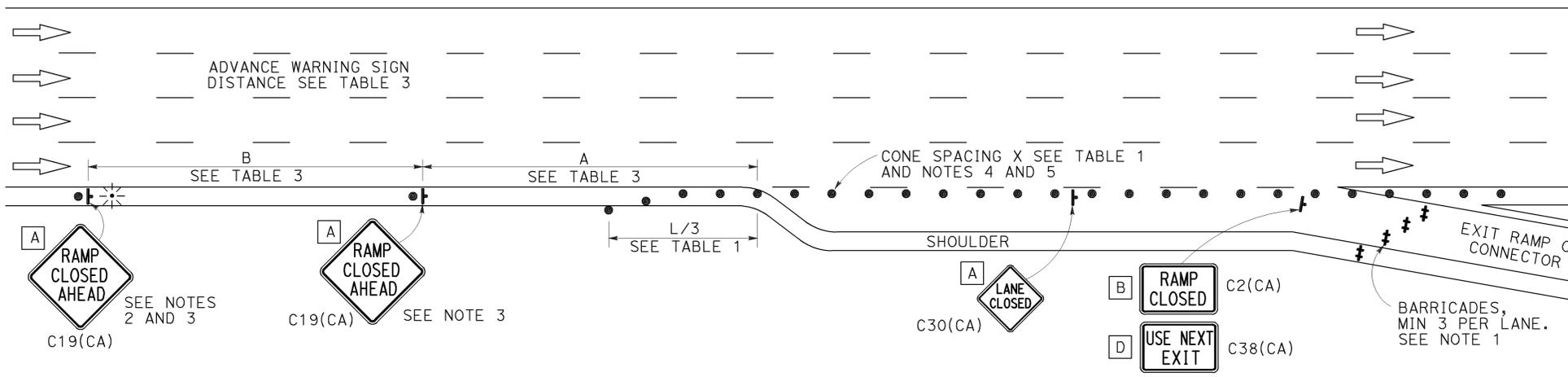
Gurinderpal Bhullar
 REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

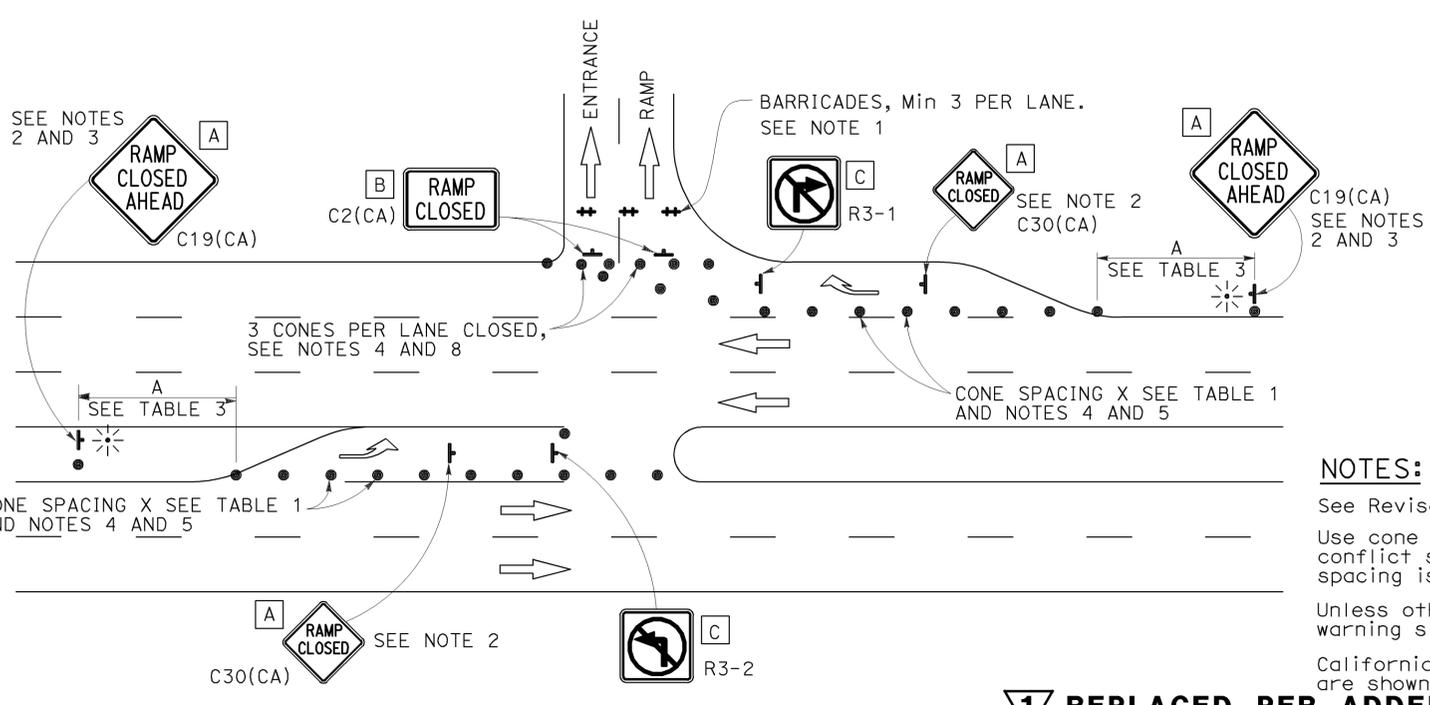
TO ACCOMPANY PLANS DATED 9-29-14



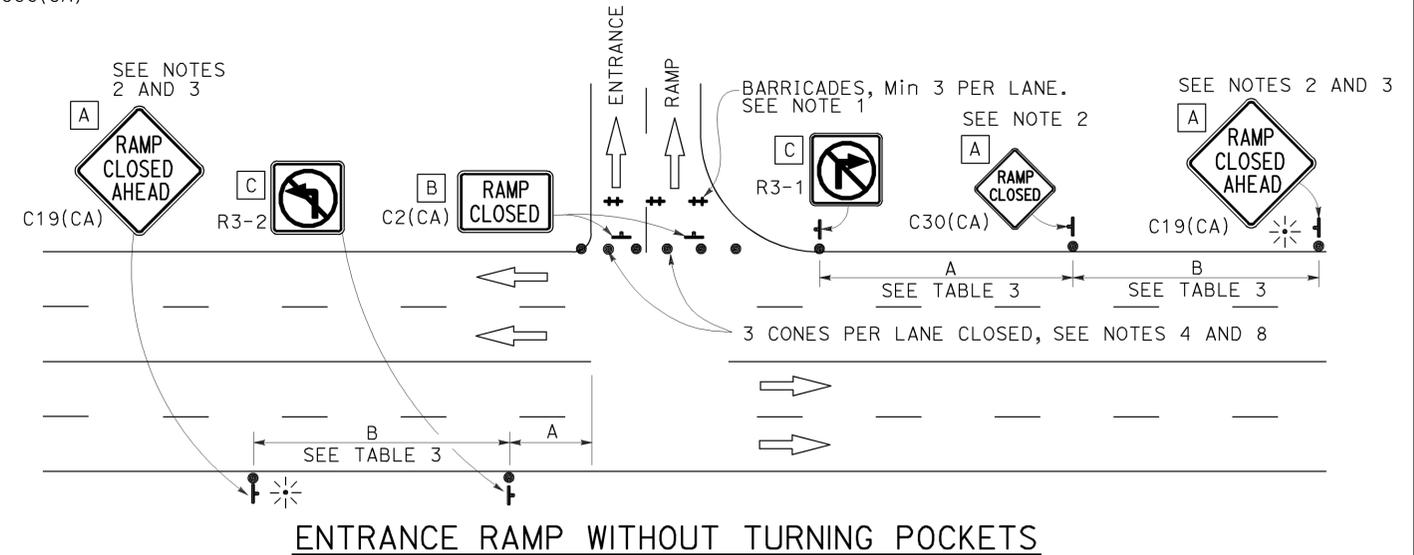
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES:

1. See Revised Standard Plan RSP T9 for tables.
2. 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.
3. Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
4. California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

NOTES:

1. 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.
2. 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.
3. 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.
4. All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
6. At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
7. The existing "EXIT" signs shall be covered during ramp closures.
8. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

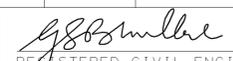
NO SCALE

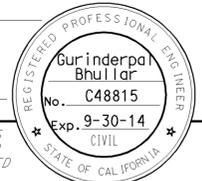
1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015 RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14 DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T14

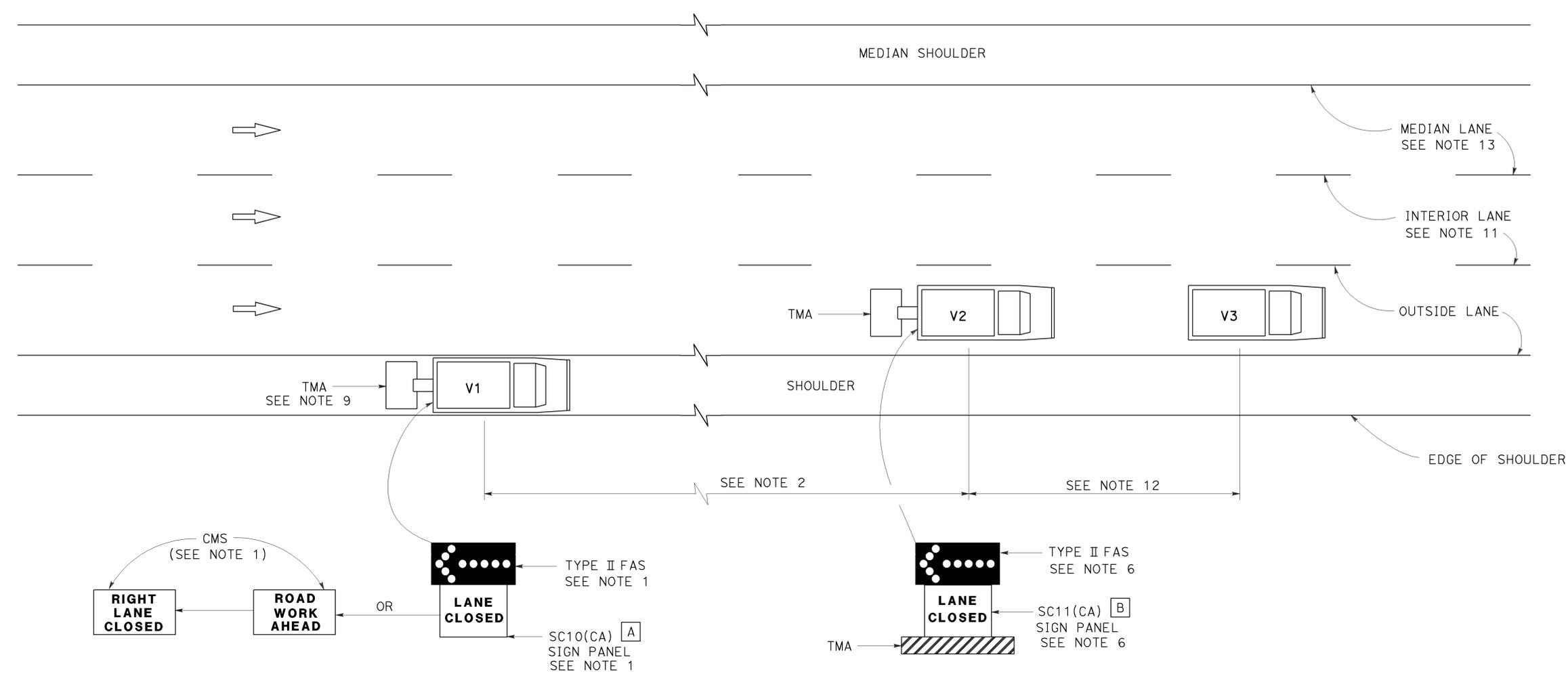
2010 REVISED STANDARD PLAN RSP T14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	56	62


 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.



TO ACCOMPANY PLANS DATED 9-29-14



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

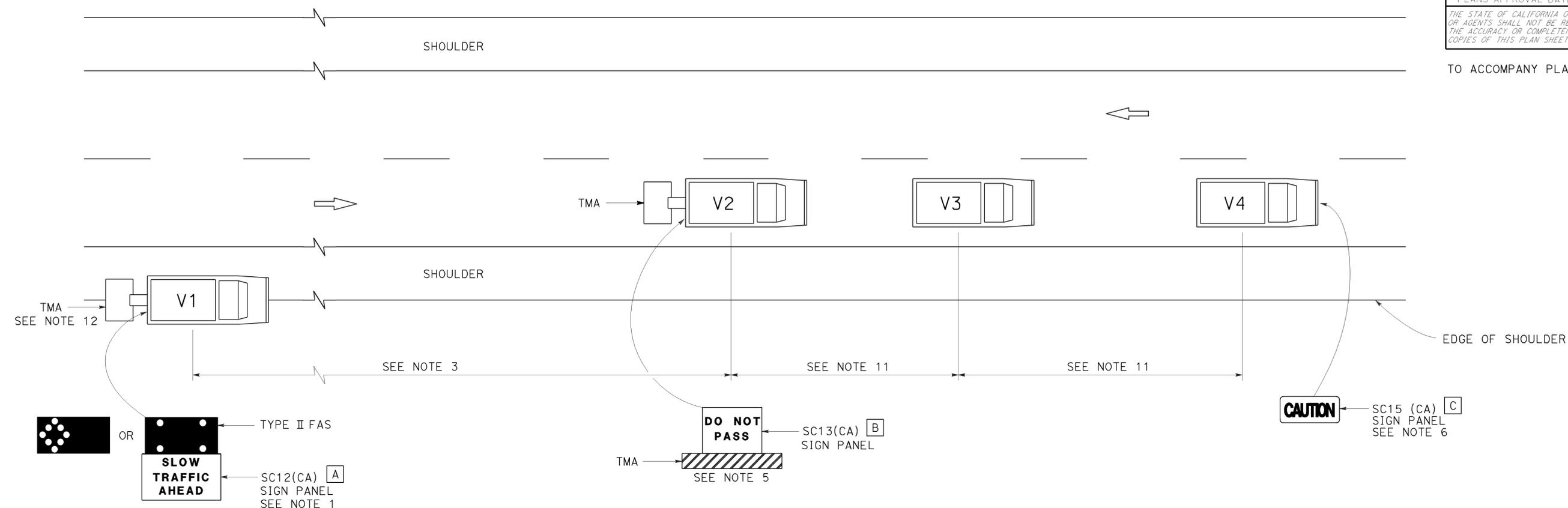
RSP T15 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T15 DATED MAY 20, 2011 - PAGE 243 OF THE STANDARD PLANS BOOK DATED 2010.

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

REVISED STANDARD PLAN RSP T15

2010 REVISED STANDARD PLAN RSP T15

TO ACCOMPANY PLANS DATED 9-29-14



NOTES:

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. 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.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.

7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. 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.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Revised Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. 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.

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- V4 SIGN VEHICLE
- TMA TRUCK-MOUNTED ATTENUATOR
-  FLASHING ARROW SIGN (FAS) IN FLASHING CAUTION MODE
-  FLASHING ARROW SIGN (FAS) IN ALTERNATING DIAMOND CAUTION

SIGN PANEL SIZE (Min)

- A** 72" x 42"
- B** 54" x 42"
- C** 54" x 24"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR MOVING LANE CLOSURE
 ON TWO LANE HIGHWAYS**
 NO SCALE

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

RSP T17 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T17 DATED MAY 20, 2011 - PAGE 245 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17

LEGEND:

AB	ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS
BC	INSTALL PULL BOX IN EXISTING CONDUIT RUN
BP	PEDESTRIAN BARRICADE, TYPE AS INDICATED ON PLAN
CB	INSTALL CONDUIT INTO EXISTING PULL BOX
CC	CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED
CF	CONDUIT TO REMAIN FOR FUTURE USE. REMOVE CONDUCTORS. INSTALL PULL TAPE
DH	DETECTOR HANDHOLE
FA	FOUNDATION TO BE ABANDONED
IS	INSTALL SIGN ON SIGNAL MAST ARM
NS	NO SLIP BASE ON STANDARD
PEC	PHOTOELECTRIC CONTROL
PEU	PHOTOELECTRIC UNIT
RC	EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR
RE	REMOVE ELECTROLIER, FUSES AND BALLAST. TAPE ENDS OF CONDUCTORS
RL	RELOCATE EQUIPMENT
RR	REMOVE AND REUSE EQUIPMENT
RS	REMOVE AND SALVAGE EQUIPMENT
SC	SPLICE NEW TO EXISTING CONDUCTORS
SD	SERVICE DISCONNECT
TSP	TELEPHONE SERVICE POINT

ABBREVIATIONS

APS	ACCESSIBLE PEDESTRIAN SIGNAL	M/M	MULTIPLE TO MULTIPLE TRANSFORMER
BBS	BATTERY BACKUP SYSTEM	Mtg	MOUNTING
BC	BOLT CIRCLE	MV	MERCURY VAPOR LIGHTING FIXTURE
BPB	BICYCLE PUSH BUTTON	MVDS	MICROWAVE VEHICLE DETECTION SYSTEM
C	CONDUIT	N	NEUTRAL (GROUNDED CONDUCTOR)
CB	CIRCUIT BREAKER	NB	NEUTRAL BUS
CCTV	CLOSED CIRCUIT TELEVISION	NC	NORMALLY CLOSE
Ck+	CIRCUIT	NO	NORMALLY OPEN
CMS	CHANGEABLE MESSAGE SIGN	P	CIRCUIT BREAKER'S POLE
Ctid	CALTRANS IDENTIFICATION	PB	PULL BOX
Comm	COMMUNICATION	PBA	PUSH BUTTON ASSEMBLY
DLC	LOOP DETECTOR LEAD-IN CABLE	PEC	PHOTOELECTRIC CONTROL
EMS	EXTINGUISHABLE MESSAGE SIGN	Ped	PEDESTRIAN
EVUC	EMERGENCY VEHICLE UNIT CABLE	PEU	PHOTOELECTRIC UNIT
EVUD	EMERGENCY VEHICLE UNIT DETECTOR	PT	CONDUIT WITH PULL TAPE
FB	FLASHING BEACON	RE	RELOCATED EQUIPMENT
FBCA	FLASHING BEACON CONTROL ASSEMBLY	RM	RAMP METERING
FBS	FLASHING BEACON WITH SLIP BASE	RWIS	ROADSIDE WEATHER INFORMATION SYSTEM
FO	FIBER OPTIC	SB	SLIP BASE
G	EQUIPMENT GROUNDING CONDUCTOR	SIC	SIGNAL INTERCONNECT CABLE
GB	GROUND BUS	Sig	SIGNAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SMA	SIGNAL MAST ARM
HAR	HIGHWAY ADVISORY RADIO	SNS	STREET NAME SIGN
Hex	HEXAGONAL	SP	SERVICE POINT
HPS	HIGH PRESSURE SODIUM	TDC	TELEPHONE DEMARCATION CABINET
IISNS	INTERNALLY ILLUMINATED STREET NAME SIGN	TMS	TRAFFIC MONITORING STATION
ISL	INDUCTION SIGN LIGHTING	TOS	TRAFFIC OPERATIONS SYSTEM
LED	LIGHT EMITTING DIODE	Veh	VEHICLE
LMA	LUMINAIRE MAST ARM	VIVDS	VIDEO IMAGE VEHICLE DETECTION SYSTEM
LPS	LOW PRESSURE SODIUM	WIM	WEIGH-IN-MOTION
Ltg	LIGHTING	Xfmr	TRANSFORMER
Lum	LUMINAIRE		
M	METERED		
MAT	MAST ARM MOUNTING TOP ATTACHMENT		
MAS	MAST ARM MOUNTING SIDE ATTACHMENT		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	58	62

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 9-29-14

SOFFIT AND WALL MOUNTED LUMINAIRES

- PENDANT, 70 W HPS UNLESS OTHERWISE SPECIFIED
- FLUSH, 70 W HPS UNLESS OTHERWISE SPECIFIED
- WALL SURFACE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO REMAIN UNMODIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO BE MODIFIED AS SPECIFIED

NOTE:
Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

SYMBOL USED	DEFINITIONS
Ω	OHMS
min	MINUTE
s	SECOND
bps	BITS PER SECOND
Bps	BYTES PER SECOND
A	AMPERE
V	VOLT
V(dc)	VOLT (DIRECT CURRENT)
V(ac)	VOLT (ALTERNATING CURRENT)
FC	FOOT - CANDLE
W	WATTS
VA	VOLT-AMPERE
M	MEGA
k	KILO
m	MILLI
μ	MICRO
P	PICO
Hz	HERTZ

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 20, 2011 - PAGE 425 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1A

MISCELLANEOUS ELECTROLIERS

NEW	EXISTING	
		LUMINAIRE ON WOOD POLE
		NON-STANDARD ELECTROLIER (SEE PROJECT NOTES OR PROJECT PLANS)
		CITY ELECTROLIER
		ELECTROLIER FOUNDATION (FUTURE INSTALLATION)

NOTES:

- HPS luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. HPS luminaires shall be 200 W when installed on other type standards or poles, unless otherwise specified.
- LED luminaires shall be 235 W when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. LED luminaires shall be 165 W when installed on other type standards or poles, unless otherwise specified.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.

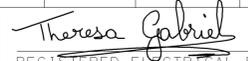
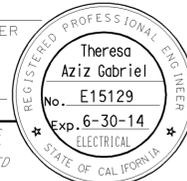
STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
		15 STRUCTURE
		15D STRUCTURE
		21
		21D
		21 STRUCTURE
		21D STRUCTURE
		30
		31
		32

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	59	62


 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 9-29-14

CONDUIT

NEW	EXISTING	
---	---	LIGHTING CONDUIT, UNLESS OTHERWISE INDICATED OR NOTED
---	---	TRAFFIC SIGNAL CONDUIT
---C---	---c---	COMMUNICATION CONDUIT
---T---	---t---	TELEPHONE CONDUIT
---F---	---f---	FIRE ALARM CONDUIT
---FO---	---fo---	FIBER OPTIC CONDUIT
---	---	CONDUIT TERMINATION
		CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

SIGNAL EQUIPMENT

NEW	EXISTING	
		PEDESTRIAN SIGNAL HEAD "C" INDICATES COUNTDOWN PEDESTRIAN HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
		MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)
		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

SERVICE EQUIPMENT

NEW	EXISTING	
---OH---	---oh---	OVERHEAD LINES
		WOOD POLE, "U" INDICATES UTILITY OWNED
		POLE GUY WITH ANCHOR
		UTILITY TRANSFORMER - GROUND MOUNTED
		SERVICE EQUIPMENT ENCLOSURE TYPE. DOOR INDICATES FRONT OF ENCLOSURE
		TELEPHONE DEMARCATION CABINET

POLE-MOUNTED SERVICE DESIGNATION

	TYPE H SERVICE, 28'-10"	TYPE OF INSTALLATION AND POLE HEIGHT ABOVE GRADE
---	-------------------------	--

FLASHING BEACON

NEW	EXISTING	
		FLASHING BEACON (ONE VEHICLE SIGNAL HEAD WITH BACKPLATE AND VISOR) "R" INDICATES RED INDICATION, "Y" INDICATES YELLOW INDICATION
		FLASHING BEACON WITH TYPE 15-FBS STANDARD AND A SIGN.
		FLASHING BEACON WITH TYPES 9, 9A OR 9B SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED

SIGNAL EQUIPMENT Cont

NEW	EXISTING	
		GUARD POST
		TYPE 1 STANDARD WITH RAMP METERING SIGN
		OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION SYSTEM

NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.

ILLUMINATED OVERHEAD SIGN

NEW	EXISTING	
		SINGLE POST, SINGLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, DOUBLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, SINGLE ILLUMINATED SIGN, FULL CANTILEVER
		DOUBLE POST, SINGLE ILLUMINATED SIGN
		SINGLE ILLUMINATED SIGN MOUNTED ON STRUCTURE
		DOUBLE POST, SINGLE ILLUMINATED SIGN WITH ELECTROLIER

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**
NO SCALE

RSP ES-1B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

2010 REVISED STANDARD PLAN RSP ES-1B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	60	62

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

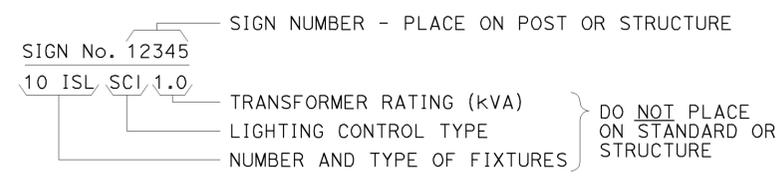
Theresa Aziz Gabriel
REGISTERED PROFESSIONAL ENGINEER
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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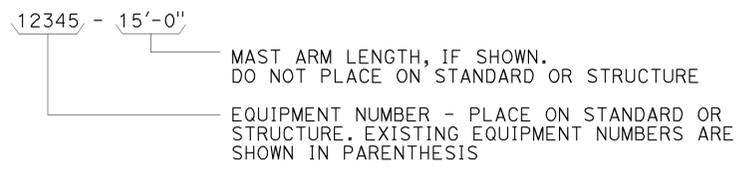
TO ACCOMPANY PLANS DATED 9-29-14

EQUIPMENT IDENTIFICATION

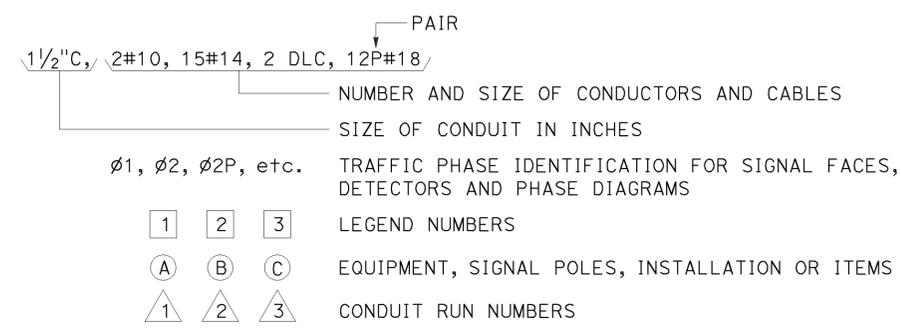
ILLUMINATED SIGN IDENTIFICATION NUMBER:



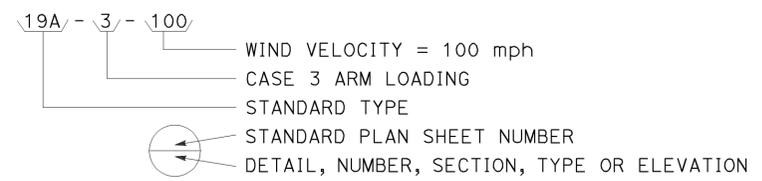
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



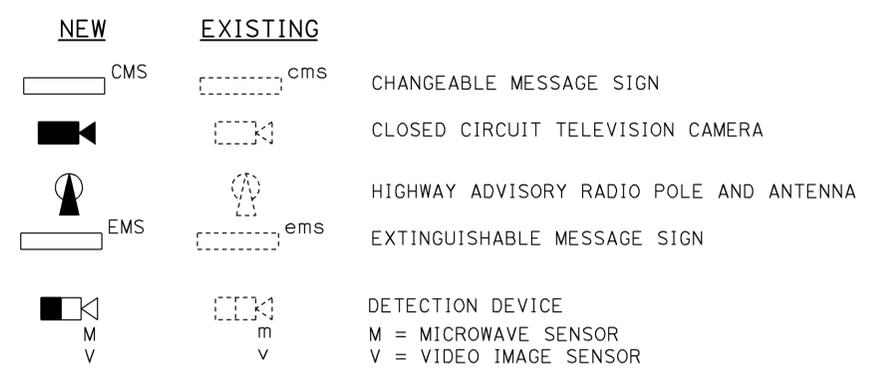
CONDUIT AND CONDUCTOR IDENTIFICATION:



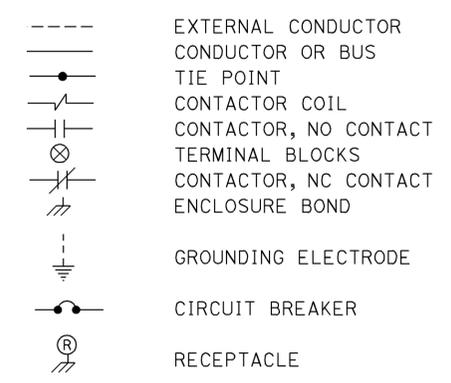
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



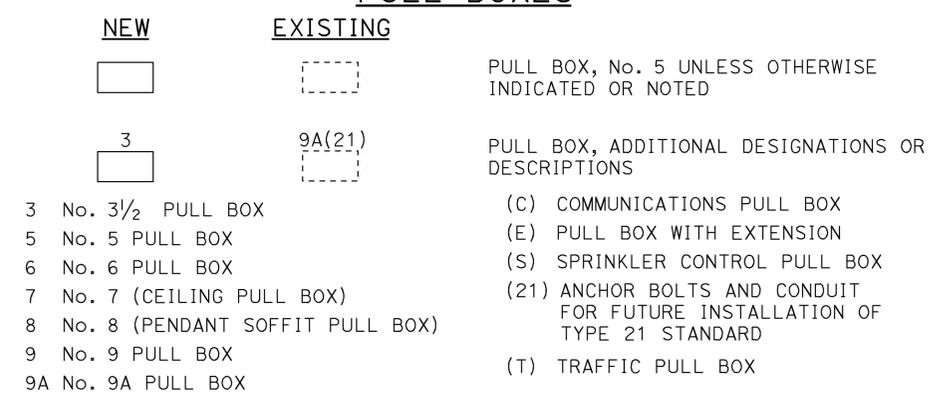
MISCELLANEOUS EQUIPMENT



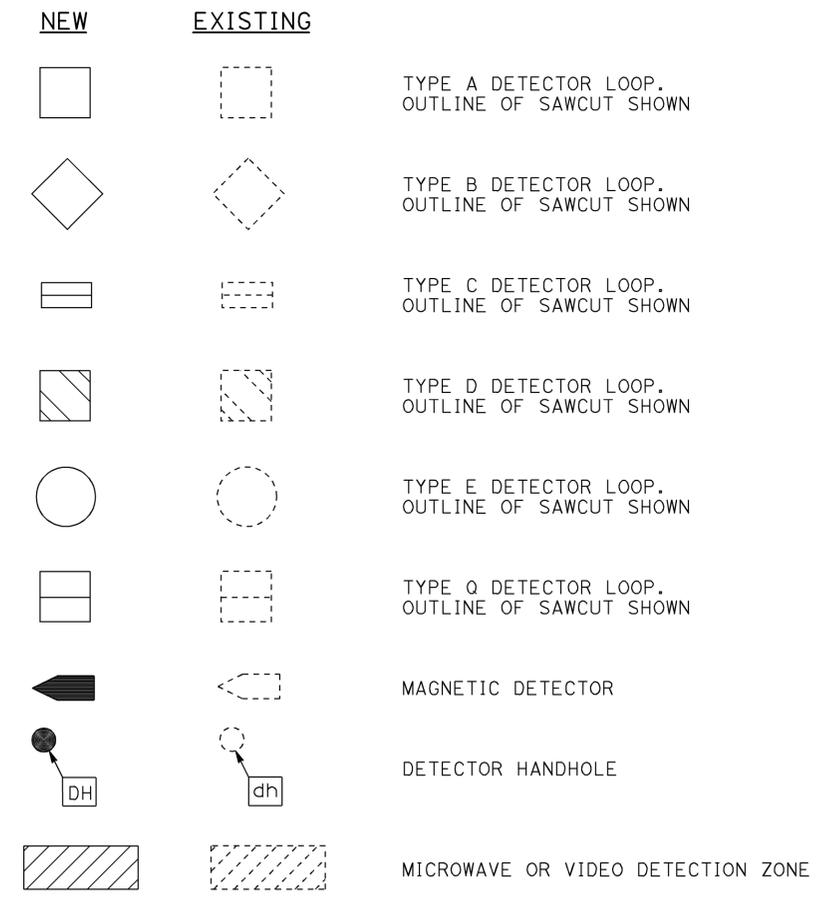
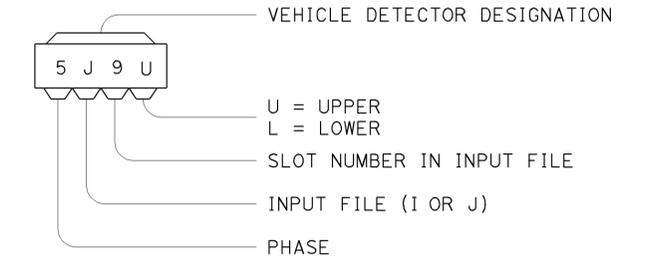
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



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ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

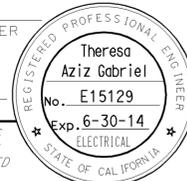
NO SCALE

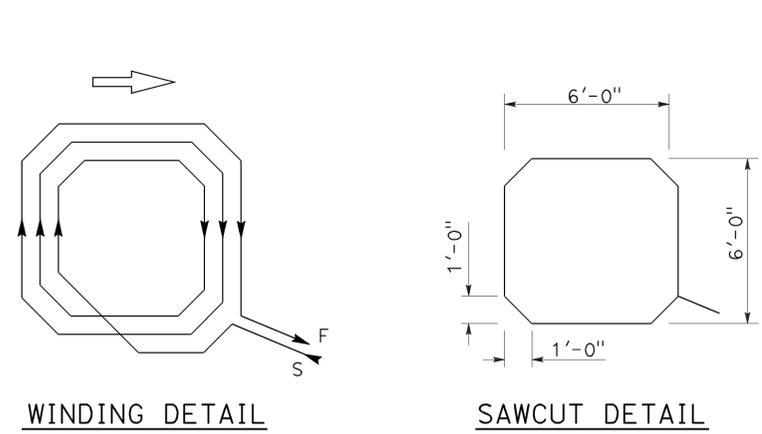
RSP ES-1C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1C

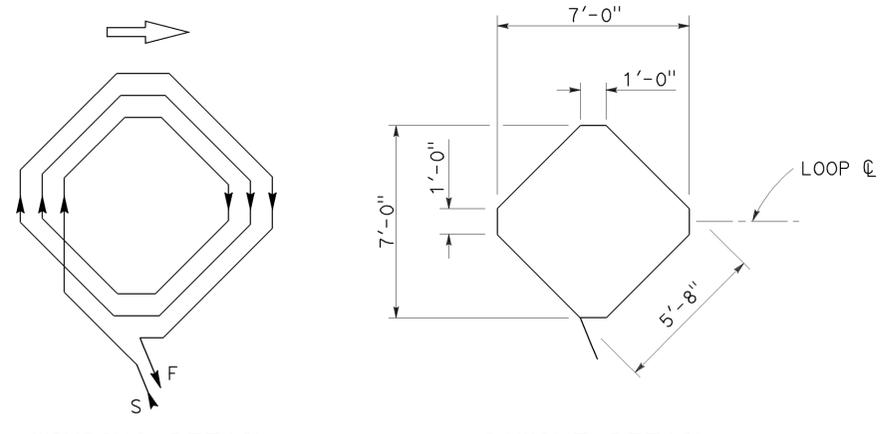
REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP ES-1C

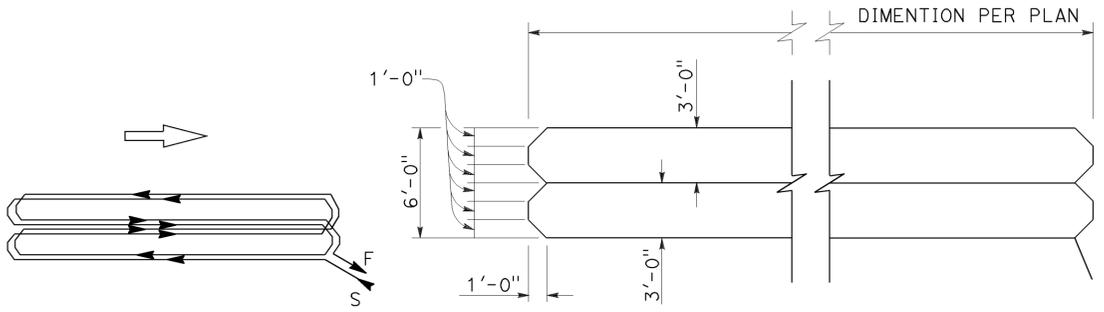
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	61	62
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER July 19, 2013 PLANS APPROVAL DATE <small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
					
TO ACCOMPANY PLANS DATED <u>9-29-14</u>					



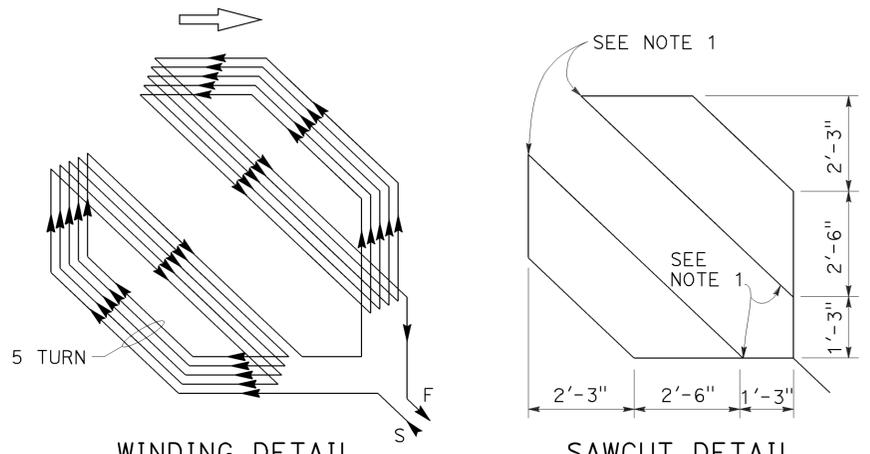
WINDING DETAIL
SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



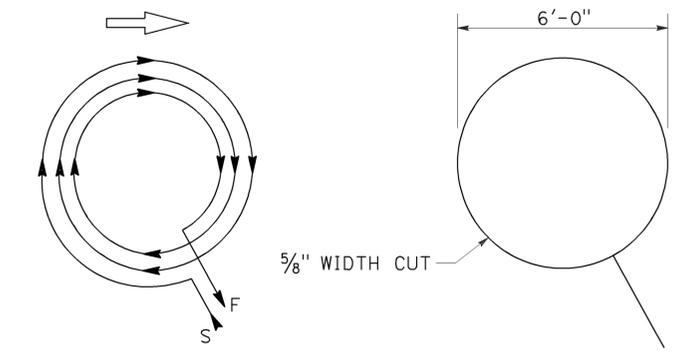
WINDING DETAIL
SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



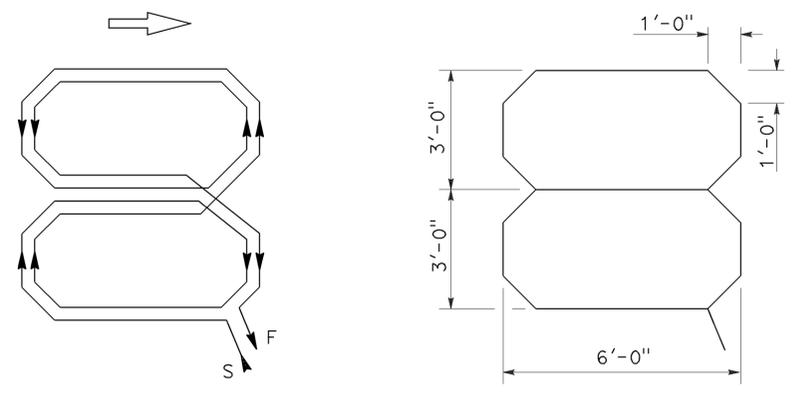
WINDING DETAIL
SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



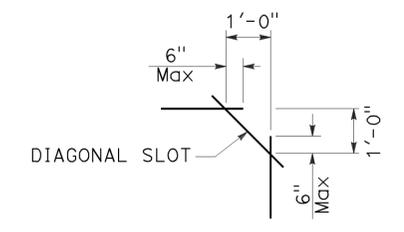
WINDING DETAIL
SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION



PLAN VIEW OF DIAGONAL SLOT AT CORNERS

- NOTES:**
1. Round corners of acute angle sawcuts to prevent damage to conductors.
 2. Typical distance separating loops from edge to edge is 10' for Type A, B, D and E installation in single lane.

1 REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (DETECTORS)
NO SCALE

RSP ES-5B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-5B DATED MAY 20, 2011 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-5B

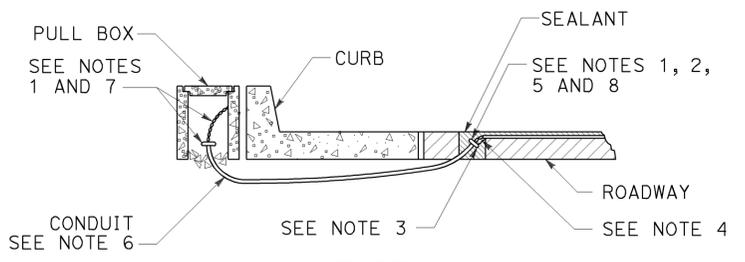
2010 REVISED STANDARD PLAN RSP ES-5B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	12	5.0/11.0	62	62

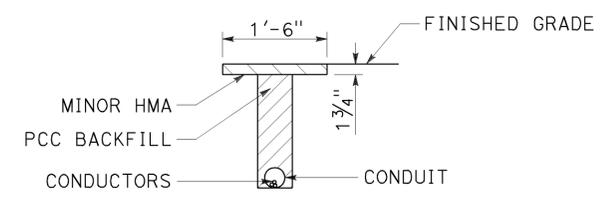
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

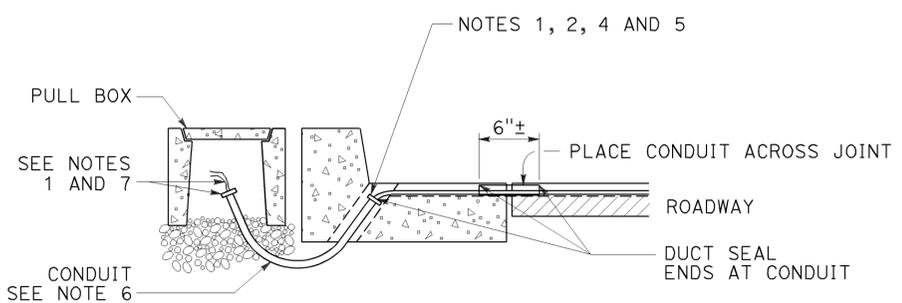
TO ACCOMPANY PLANS DATED 9-29-14



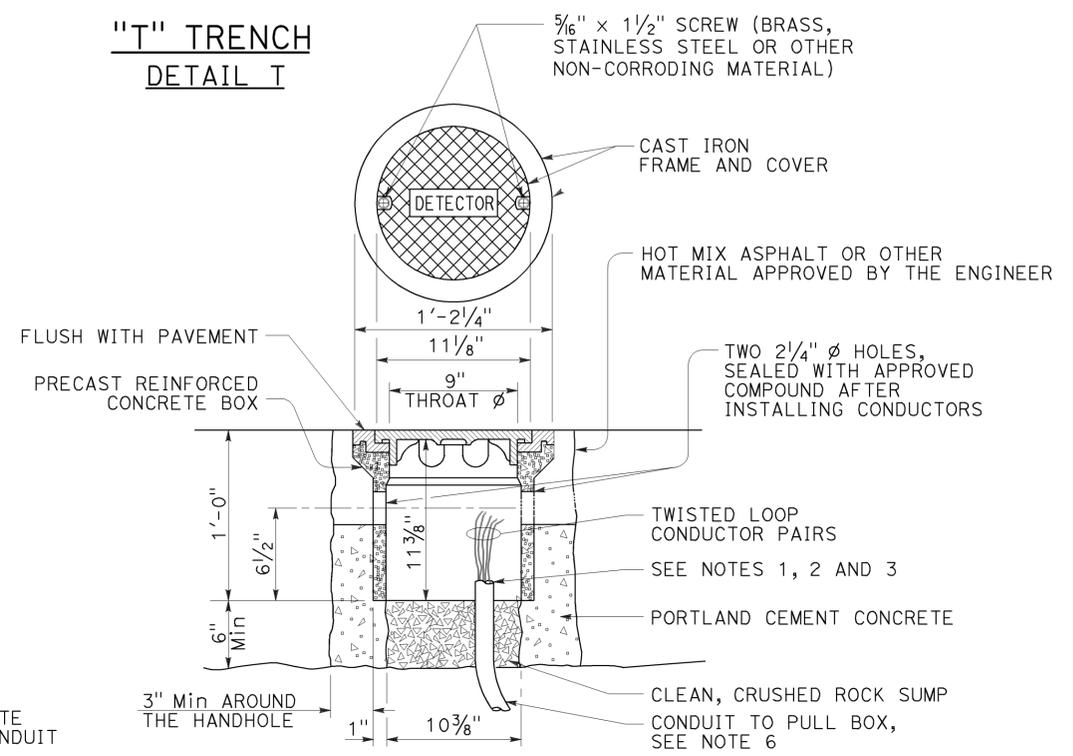
TYPE A
CURB TERMINATION DETAIL



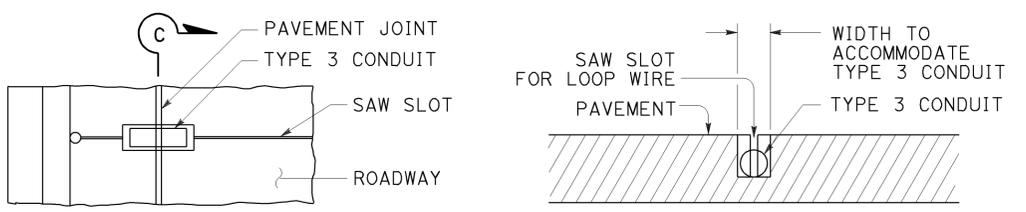
"T" TRENCH
DETAIL 1



CROSS SECTION



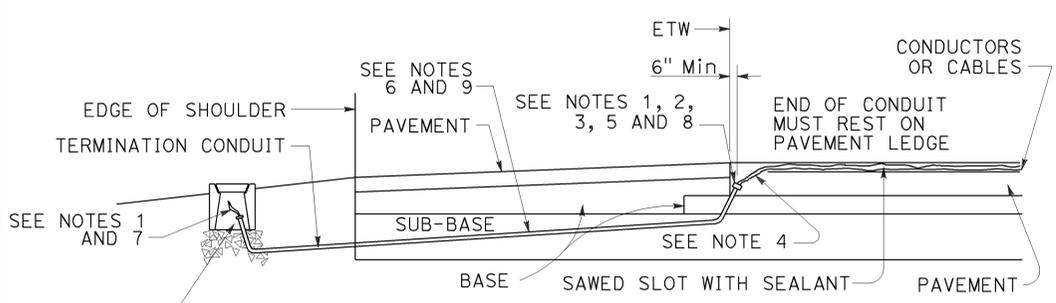
DETECTOR HANDHOLE DETAIL



PLAN VIEW

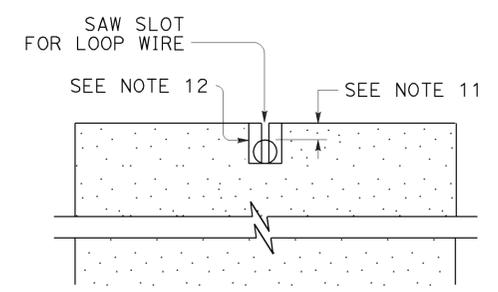
SECTION C-C

TYPE B
CURB TERMINATION DETAIL

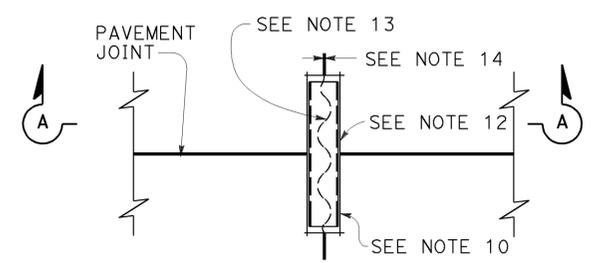


CROSS SECTION

SHOULDER TERMINATION DETAILS

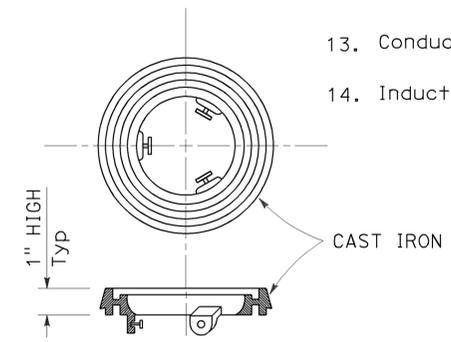


SECTION A-A



PLAN VIEW

TYPICAL LOOP LEAD-IN DETAIL
AT PAVEMENT JOINT



LOCKING GRADE RING

NOTES:

- Bushing shall be used at end of conduit.
- Tape detector conductors or cables 3" each side of bushings.
- Install duct seal compound to each end of termination conduit before installing sealant.
- Round all sharp edges where detector conductors or cables have to pass.
- End of conduit shall be 3/8" below roadway surface.
- Conduit size Loop conductors
 1"C minimum 1 to 2 pairs
 1 1/2"C minimum 3 to 4 pairs
 2"C minimum 5 or more pairs
- Splice detector conductors or cables to detector lead-in-cable.
- Location of detector handhole when shown on plans.
- When the shoulder and traveled way are paved with the same material and there is no joint between them, the conduit shall extend only 2'-0" into the shoulder pavement.
- 3/4"C, Type 3 conduit 6" long minimum, plug both ends with duct compound to keep out sealant.
- 1/2" Minimum between top of conduit and pavement surface.
- Sawcut shall not exceed 1" in width and 1/8" longer than conduit to be installed.
- Conductors with 1/2" minimum slack inside conduit.
- Inductive loop detector saw slot.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(CURB TERMINATION
AND HANDHOLE)
NO SCALE

RSP ES-5D DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-5D
DATED MAY 20, 2011 - PAGE 451 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-5D

REPLACED PER ADDENDUM No. 1 DATED JANUARY 8, 2015

2010 REVISED STANDARD PLAN RSP ES-5D