

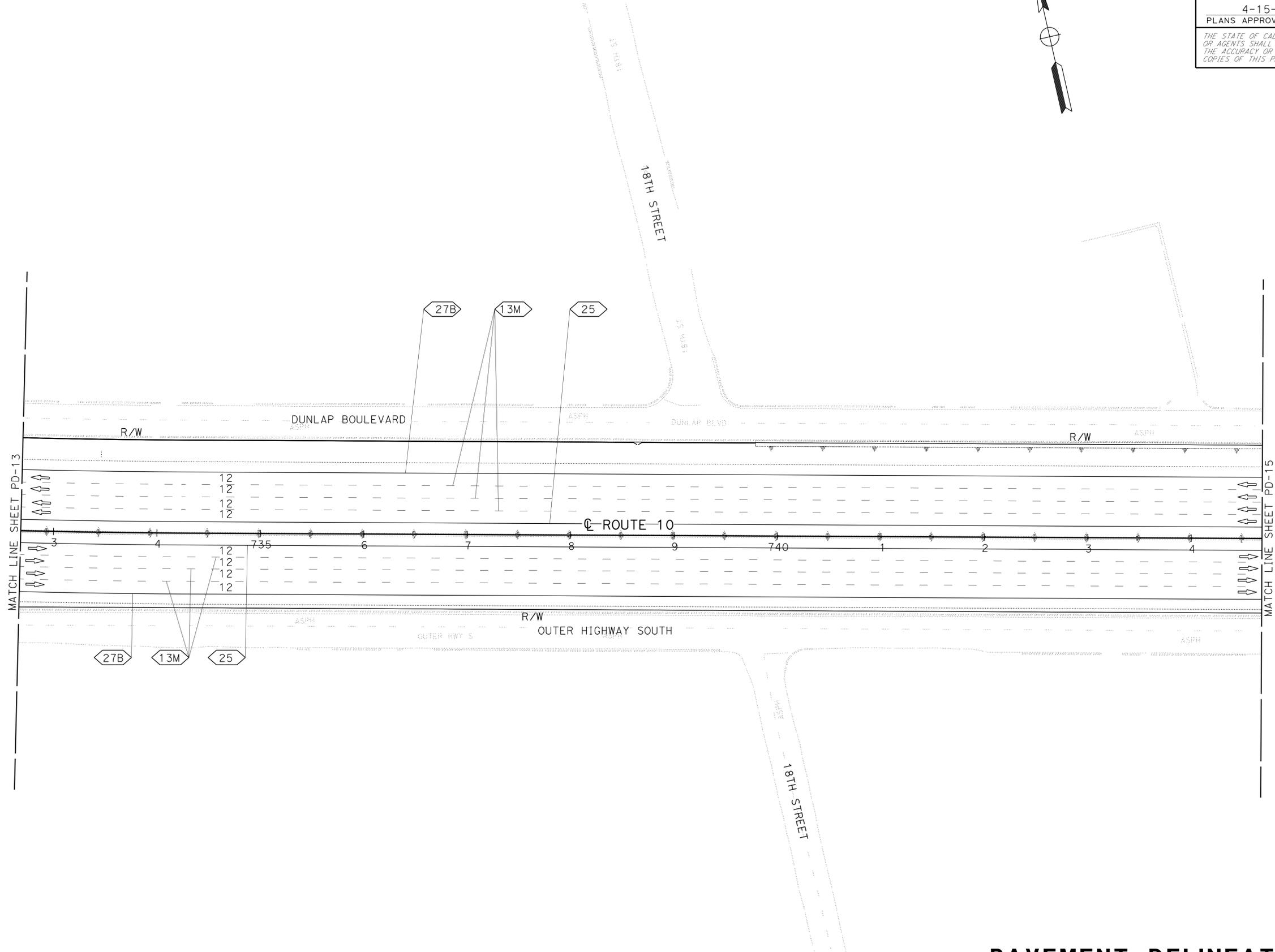
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	101	155

Daryush Nami 4-13-15
 REGISTERED CIVIL ENGINEER DATE
 4-15-15
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DARYUSH NAMI
 No. C78890
 Exp. 3-31-16
 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.

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	DARYUSH NAMI	REVISED BY
Caltrans TRAFFIC DESIGN	WILLIAM E. WASSER	CHECKED BY	MEHDI KANGAR	DATE REVISD

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

PAVEMENT DELINEATION PLAN
 SCALE: 1"=50'
PD-14

LAST REVISION | DATE PLOTTED => 15-JUL-2015
 04-13-15 | TIME PLOTTED => 10:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	102	155

<i>Daryush Nami</i>	4-13-15
REGISTERED CIVIL ENGINEER	DATE
4-15-15	
PLANS APPROVAL DATE	

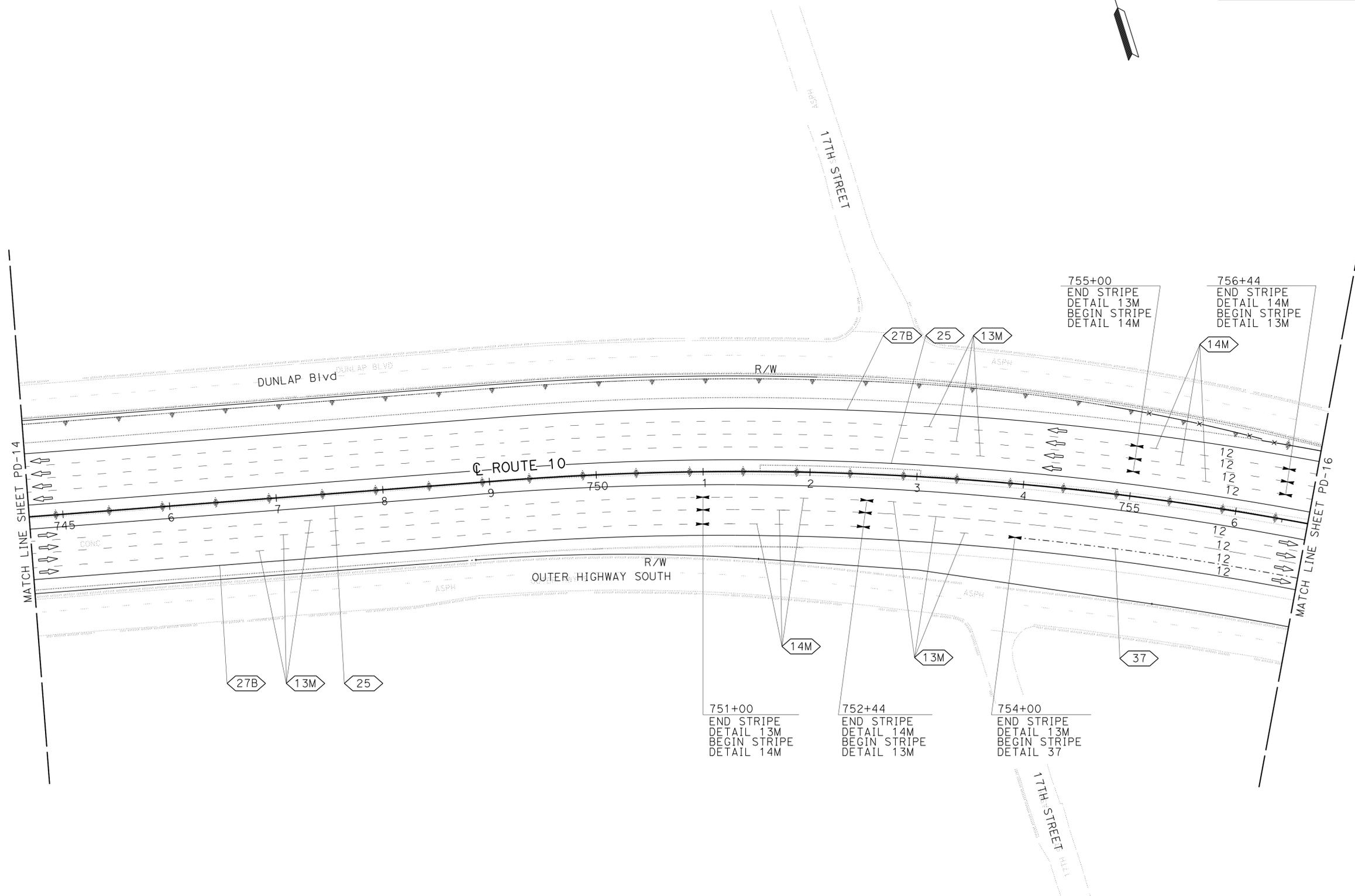
REGISTERED PROFESSIONAL ENGINEER
DARYUSH NAMI
No. C78890
Exp. 3-31-16
CIVIL
STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR WILLIAM E. WASSER
CALCULATED/DESIGNED BY CHECKED BY
DARYUSH NAMI MEHDI KANGAR
REVISOR BY DATE



PAVEMENT DELINEATION PLAN
SCALE: 1"=50'
PD-15

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

LAST REVISION | DATE PLOTTED => 15-JUL-2015
04-13-15 | TIME PLOTTED => 10:25

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR
 WILLIAM E. WASSER

CALCULATED-DESIGNED BY
 CHECKED BY

DARYUSH NAMI
 MEHDI KANGAR

REVISED BY
 DATE REVISED

NOTE:

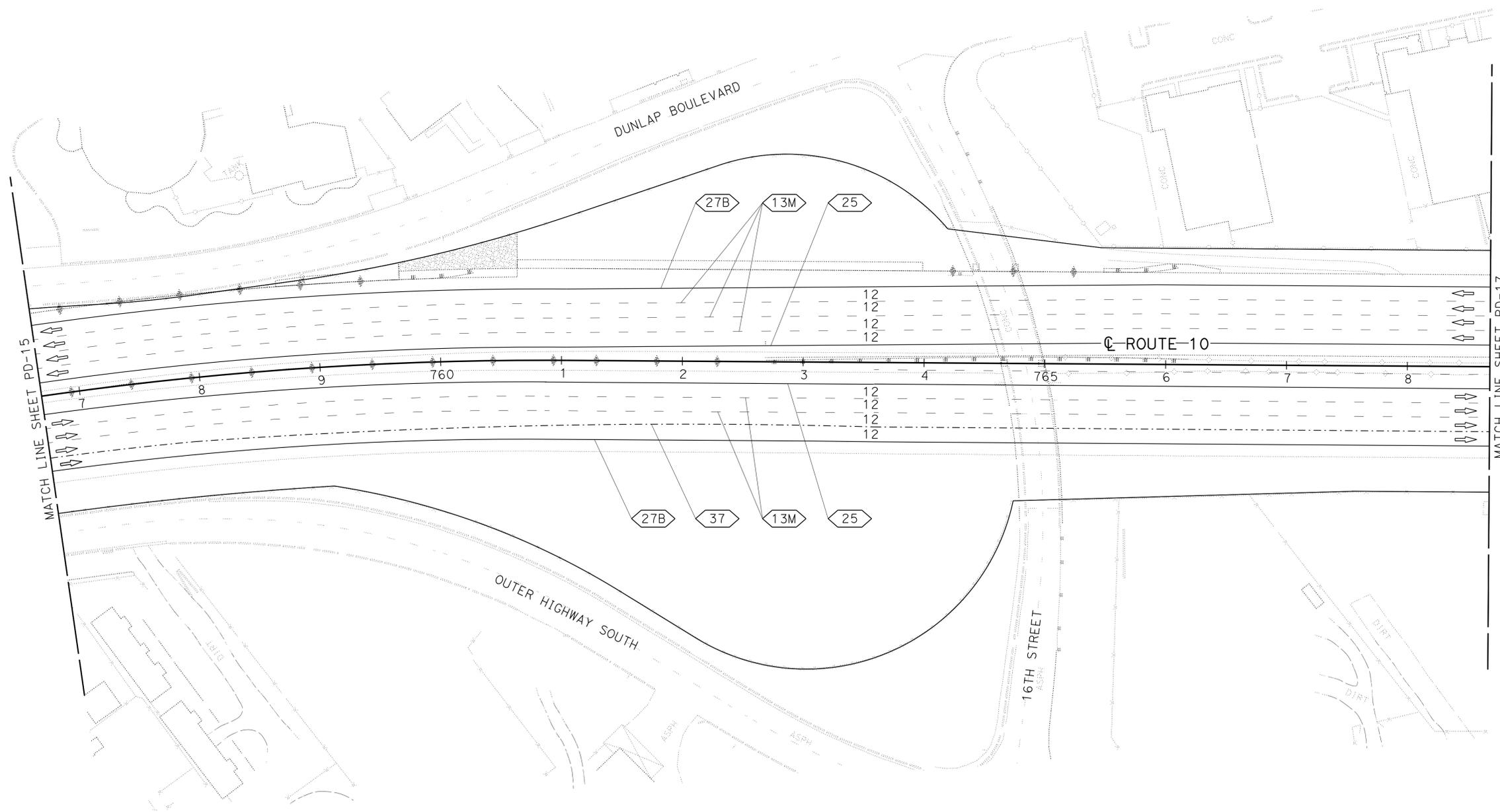
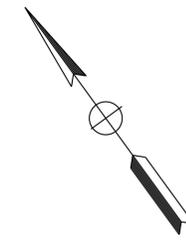
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	103	155

Daryush Nami 4-13-15
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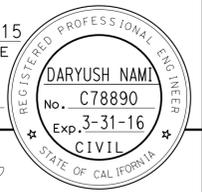
PAVEMENT DELINEATION PLAN
 SCALE: 1"=50'
PD-16

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	104	155

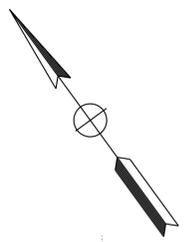
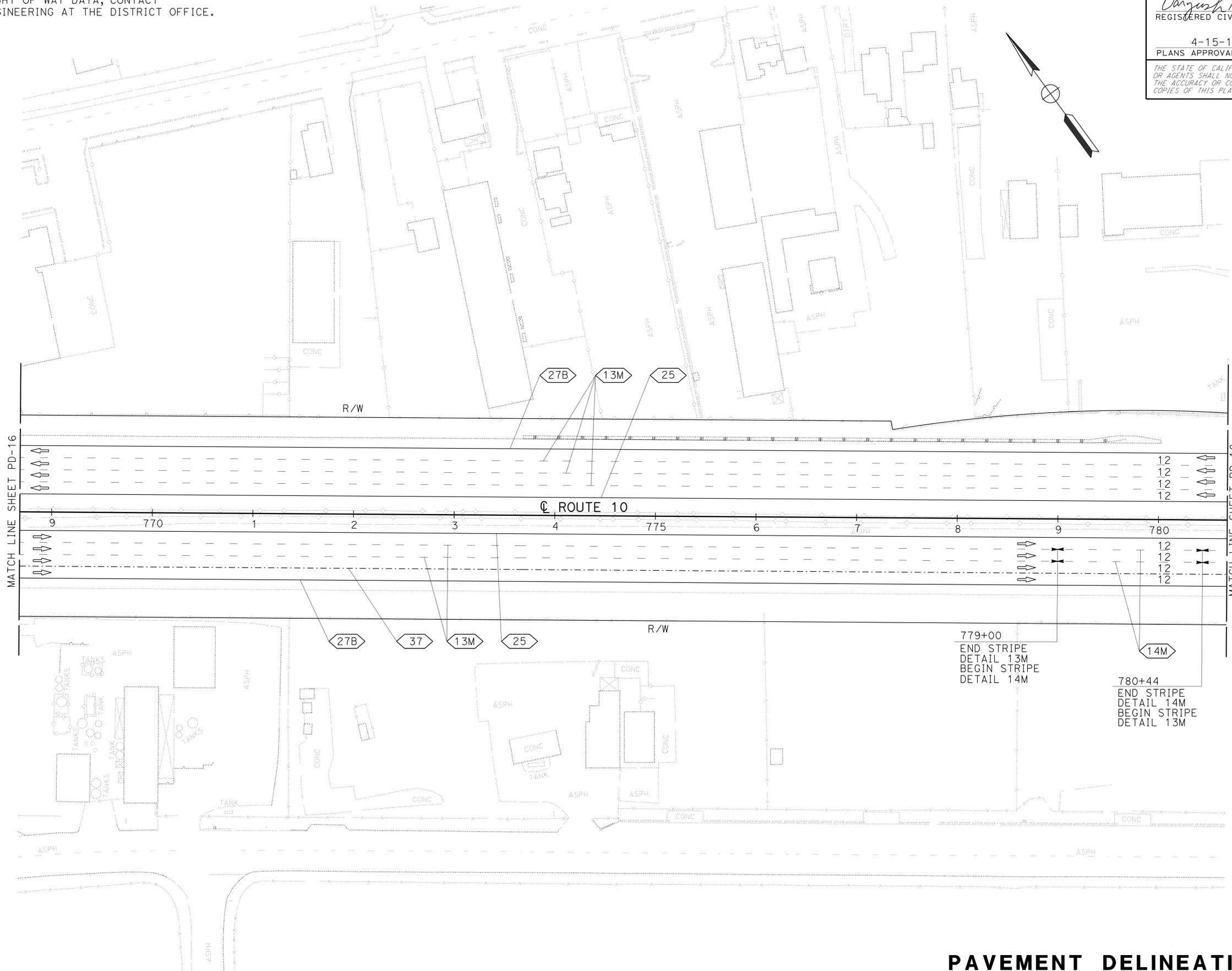
<i>Daryush Nami</i>	4-13-15
REGISTERED CIVIL ENGINEER	DATE
4-15-15	
PLANS APPROVAL DATE	

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NOTE:

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



MATCH LINE SHEET PD-16

MATCH LINE SHEET PD-18

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans TRAFFIC DESIGN	WILLIAM E. WASSER	DARYUSH NAMI	
		MEHDI KAMGAR	
	CHECKED BY	DESIGNED BY	

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

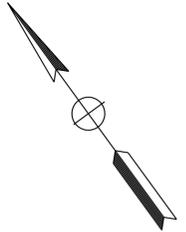
PAVEMENT DELINEATION PLAN
SCALE: 1"=50'
PD-17

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	105	155

<i>Daryush Nami</i>	4-13-15
REGISTERED CIVIL ENGINEER	DATE
4-15-15	
PLANS APPROVAL DATE	

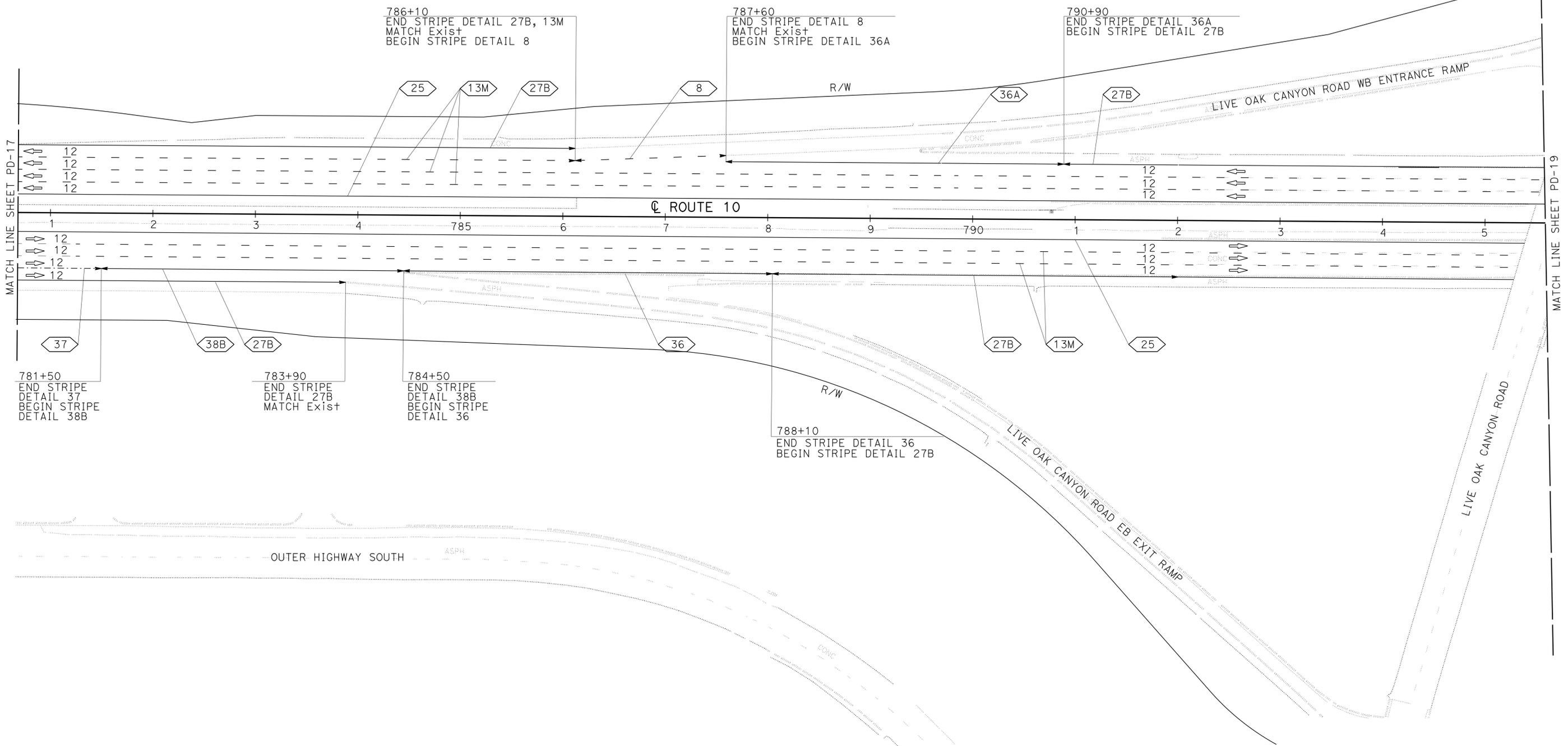
REGISTERED PROFESSIONAL ENGINEER
DARYUSH NAMI
No. C78890
Exp. 3-31-16
CIVIL

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR WILLIAM E. WASSER
CALCULATED/DESIGNED BY CHECKED BY
DARYUSH NAMI MEHDI KANGAR
REVISED BY DATE
REVISED BY DATE



PAVEMENT DELINEATION PLAN
SCALE: 1"=50'
PD-18

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

LAST REVISION | DATE PLOTTED => 15-JUL-2015
04-13-15 | TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	106	155

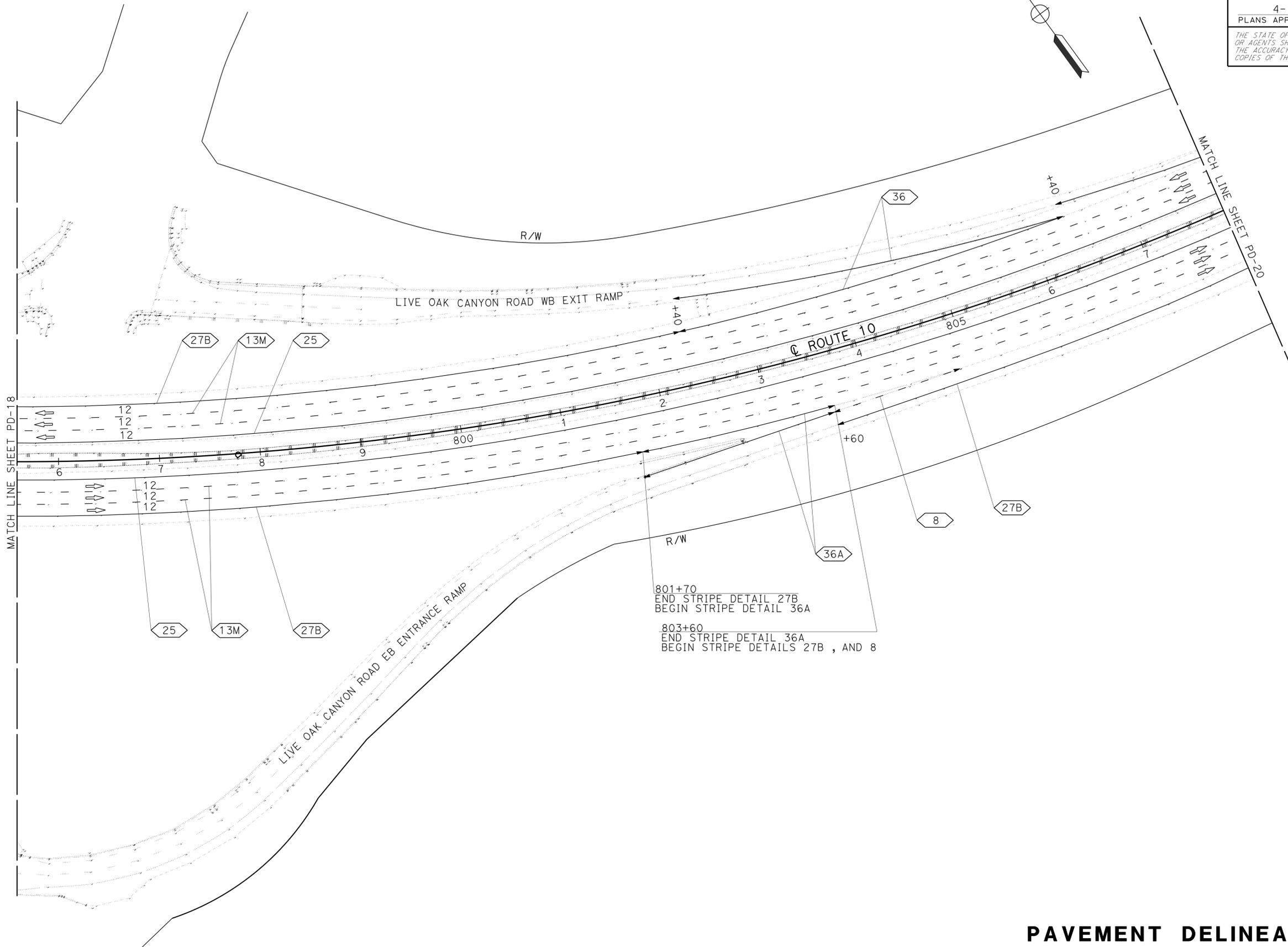
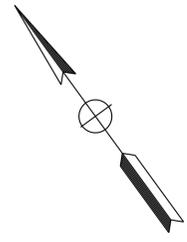
<i>Daryush Nami</i>	4-13-15
REGISTERED CIVIL ENGINEER	DATE
4-15-15	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
DARYUSH NAMI
No. C78890
Exp. 3-31-16
CIVIL
STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR WILLIAM E. WASSER
CALCULATED/DESIGNED BY CHECKED BY
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REVISOR BY DATE
REVISOR BY DATE

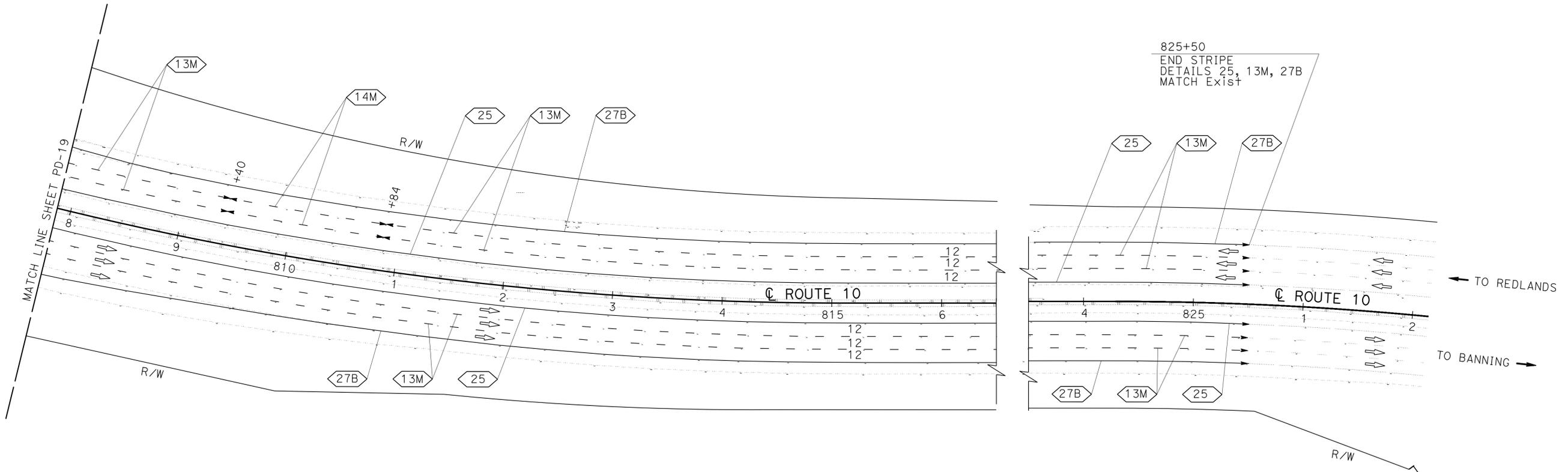
APPROVED FOR PAVEMENT DELINEATION WORK ONLY

PAVEMENT DELINEATION PLAN
SCALE: 1"=50'
PD-19

LAST REVISION | DATE PLOTTED => 15-JUL-2015
04-13-15 | TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	107	155
			<i>Daryush Nami</i> 4-13-15 REGISTERED CIVIL ENGINEER DATE		
			4-15-15 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

NOTE:
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	DARYUSH NAMI	REVISOR	
Caltrans TRAFFIC DESIGN	WILLIAM E. WASSER	CHECKED BY	MEHDI KANGAR	DATE	

PAVEMENT DELINEATION PLAN
 SCALE: 1"=50'
PD-20

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

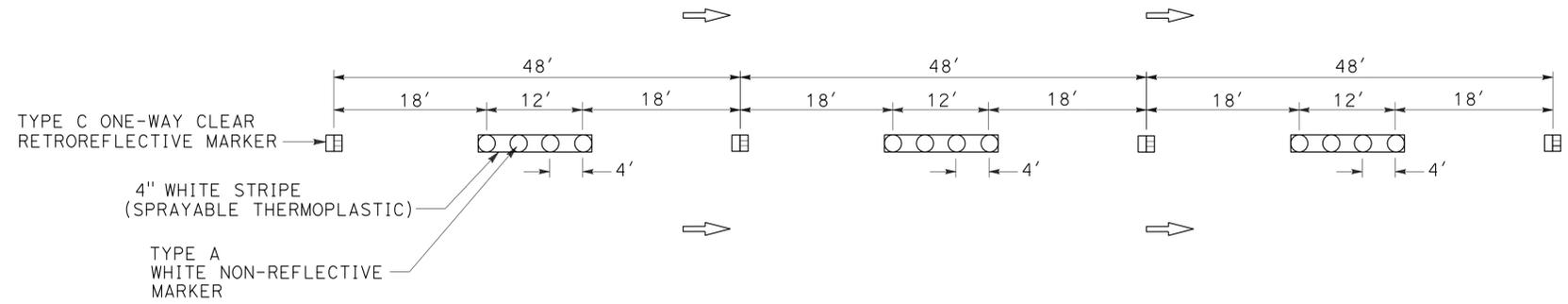
LAST REVISION | DATE PLOTTED => 15-JUL-2015
 04-13-15 | TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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Daryush Nami 4-13-15
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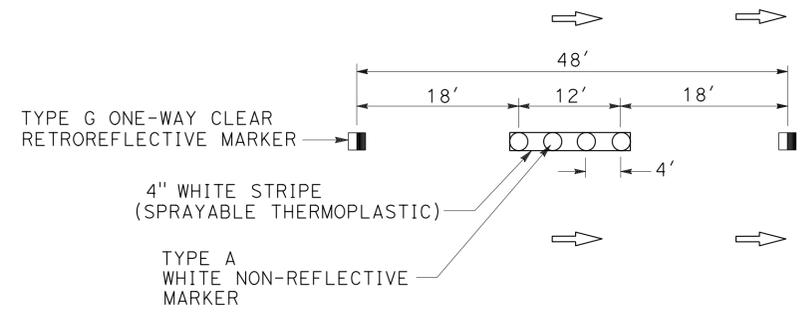
4-15-15
 PLANS APPROVAL DATE

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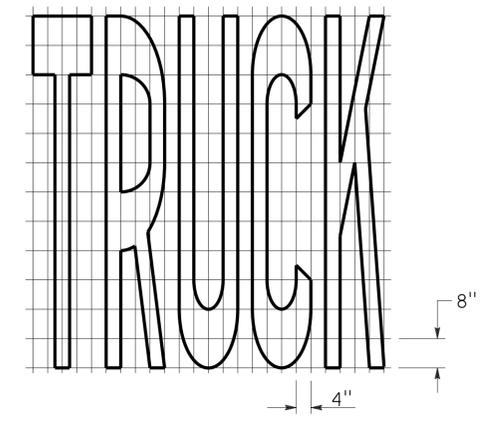
DETAIL 14 MODIFIED (14M)

INSTALL TYPE A NON-REFLECTIVE MARKER WITH STRIPING DETAIL 14M
 INSTALL TYPE A MARKER BEFORE STRIPING TO GET THE PROPER BONDING



DETAIL 13 MODIFIED (13M)

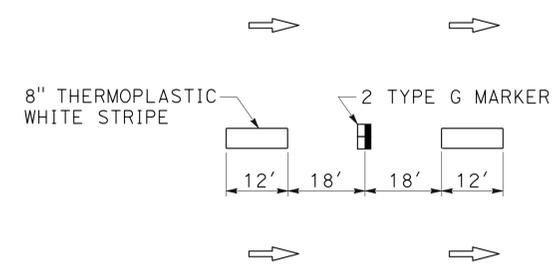
INSTALL TYPE A NON-REFLECTIVE MARKER WITH STRIPING DETAIL 13M
 INSTALL TYPE A MARKER BEFORE STRIPING TO GET THE PROPER BONDING



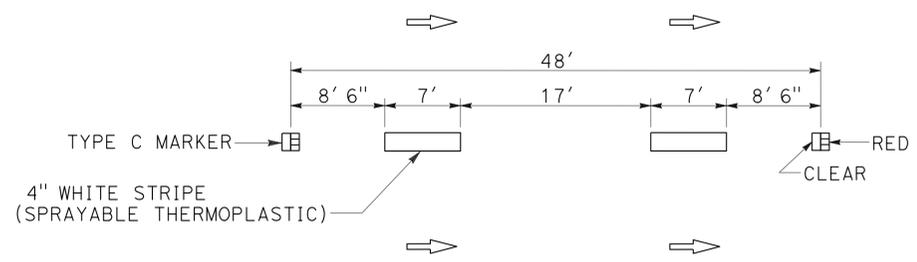
A=28 SQFT

PAVEMENT MARKINGS WORDS

ITEM	SQFT
LANE	24
STOP	22
TRUCK	28
AHEAD	31
SIGNAL	32



DETAIL 42



DETAIL 9 MODIFIED (9M)
 (TO BE USED AT THE EXIT RAMP)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR WILLIAM E. WASSER
 CALCULATED/DESIGNED BY
 CHECKED BY
 DARYUSH NAMI MEHDI KANGAR
 REVISED BY DATE
 REVISIONS: 04-13-15

PAVEMENT DELINEATION DETAILS
 NO SCALE **PDD-1**

LAST REVISION | DATE PLOTTED => 15-JUL-2015
 04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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Daryush Nami 4-13-15
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4-15-15
 PLANS APPROVAL DATE

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PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION AND FROM STATION TO STATION		DIRECTION	DETAIL No. AND QUANTITY OF PAVEMENT MARKINGS		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKER	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			8" THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER			
										WHITE SOLID	WHITE BROKEN	YELLOW SOLID			NON REFLECTIVE		RETRO-REFLECTIVE	
	FROM	TO		DETAIL	LF	SQFT	LF	EA	LF	LF	LF	LF	SQFT	EA	EA	EA	EA	
PD-1	563+30	ROUTE 10 581+35	WB	27B				1805		1805								
PD-1	581+35	ROUTE 10 583+00	WB	36A				672	15			336			9			
PD-1	583+00	ROUTE 10 586+00	WB	27B				300		300					145			
PD-1	563+30	ROUTE 10 586+00	WB	13M				1703	725		6810			580				
PD-1	563+30	ROUTE 10 586+00	WB	25		2270			50			2270				50		
PD-1	580+20	ROUTE 10 581+35	WB	8				44			115							
PD-1	563+30	ROUTE 10 586+00	EB	25		2270			50			2270			74	50		
PD-1	563+30	ROUTE 10 574+56	EB	13M				845	370		3378			296				
PD-1	574+56	ROUTE 10 576+00	EB	14M				108	48		432			36	12	66		
PD-1	576+00	ROUTE 10 586+00	EB	13M				750	330		3000			264				
PD-1	563+30	ROUTE 10 580+90	EB	27B				1760		1760					35			
PD-1	580+90	ROUTE 10 584+90	EB	36				1600	35			800						
PD-1	584+90	ROUTE 10 586+00	EB	27B				110		110					169			
PD-2	586+00	ROUTE 10 599+00	EB/WB	27B				2600		2600								
PD-2	586+00	ROUTE 10 599+00	EB/WB	13M				1950	845		7800			676				
PD-2	586+00	ROUTE 10 599+00	EB/WB	25		2600			56			2600				56		
PD-2		FORD ST EXIT	WB	LIMIT LINE(44')			44						44					
PD-2		FORD ST EXIT	WB	TYPE V ARROW			456						132					
PD-2		FORD ST EXIT	WB	TYPE IV(R) ARROW			96						30					
PD-2		FORD ST EXIT	WB	SIGNAL AHEAD			266						126					
PD-2		FORD ST EXIT	WB	25A		743			32			743				32		
PD-2		FORD ST EXIT	WB	27B				750		750					6			
PD-2		FORD ST EXIT	WB	9M				218	17		746			17				
PD-2		FORD ST EXIT	WB	38				240	6			120						
PD-2		FORD ST ENTRANCE	EB	TYPE I(24') ARROW			168						62		16			
PD-2		FORD ST ENTRANCE	EB	25A		703			31			703				31		
PD-2		FORD ST ENTRANCE	EB	9				198	16		680							
PD-2		FORD ST ENTRANCE	EB	27B				678		678								
PD-3		FORD ST EXIT	WB	27B				1390		1390								
PD-3		FORD ST EXIT	WB	9M				274	21		940			21	5			
PD-3		FORD ST EXIT	WB	25A		1310			56			1310				56		
PD-3	611+80	FORD ST EXIT 612+70	WB	36				180	5			90						
PD-3		FORD ST EXIT	WB	TYPE V ARROW			798						231		9			
PD-3		FORD ST ENTRANCE	EB	25A		530			24			530				24		
PD-3		FORD ST ENTRANCE	EB	9				106	9		365							
PD-3		FORD ST ENTRANCE	EB	27B				1420		1420					18			
PD-3		FORD ST ENTRANCE	EB	TYPE VI ARROW			297						126					
PD-3		FORD ST ENTRANCE	EB	36B				2400	51			1200						
PD-3		FORD ST ENTRANCE	EB	8				76			200				5			
PD-3	599+00	ROUTE 10 611+80	WB	27B				1280		1280					89			
PD-3	611+80	ROUTE 10 612+70	WB	36				180	5			90						
PD-3	599+00	ROUTE 10 612+70	WB	13M				1028	445		4110			356				
PD-3	599+00	ROUTE 10 612+70	WB	25		1370			30			1370			60	30		
PD-3	599+00	ROUTE 10 604+00	EB	27B				500		500								
PD-3	599+00	ROUTE 10 612+70	EB	13M				685	300		2740			240				
SUB TOTAL PDQ-1						11796	2125	25850	3572	12593	31316	11796	2636	751	2448	50	706	329

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: WILLIAM E. WASSER
 CALCULATED/DESIGNED BY: MEHDI KAMGAR
 CHECKED BY: DARYUSH NAMI
 REVISIONS: DARYUSH NAMI, MEHDI KAMGAR
 REVISED BY: DATE REVISION

PAVEMENT DELINEATION QUANTITIES PDQ-1

LAST REVISION DATE PLOTTED => 15-JUL-2015 10:26
 04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	110	155

Daryush Nami 4-13-15
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4-15-15
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PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION AND FROM STATION TO STATION		DIRECTION	DETAIL No. AND QUANTITY OF PAVEMENT MARKINGS		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKER	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			8" THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER			
										WHITE SOLID	WHITE BROKEN	YELLOW SOLID			NON REFLECTIVE	RETRO-REFLECTIVE		
	FROM	TO		DETAIL	LF	SQFT	LF	EA	LF	LF	LF	LF	SQFT	EA	EA	EA	EA	
PD-3	599+00	ROUTE 10 612+70	EB	25		1370			30							30		
PD-3	599+00	ROUTE 10 612+70	EB	42				1096	60			1370				60		
PD-3	610+00	ROUTE 10 612+70	EB	37				108	20			270				20		
PD-3	599+00	ROUTE 10 600+00	FEBT	TRUCK			59						27					
PD-3	599+00	ROUTE 10 600+00	FEBT	LANE			51						24					
PD-4	612+70	FORD ST EXIT 615+10	WB	36				480	11			240				11		
PD-4	612+70	FORD ST EXIT 616+00	WB	27B				330		330								
PD-4	616+00	ROUTE 10 624+70	WB	27B				870		870								
PD-4	612+70	ROUTE 10 615+10	WB	36				480	11			240				11		
PD-4	612+70	ROUTE 10 619+00	WB	13M				473	210	1890					168	42		
PD-4	619+00	ROUTE 10 620+44	WB	14M				108	48	432					36	12		
PD-4	620+44	ROUTE 10 624+70	WB	13M				320	150	1278					120	30		
PD-4	612+70	ROUTE 10 624+70	WB	25		1200			26									
PD-4	612+70	ROUTE 10 624+70	EB	27B				1200		1200								
PD-4	612+70	ROUTE 10 624+70	EB	37				480	82			1200				82		
PD-4	612+70	ROUTE 10 624+70	EB	42				960	52			1200				52		
PD-4	612+70	ROUTE 10 618+76	EB	13M				303	135	1212					108	27		
PD-4	618+76	ROUTE 10 620+20	EB	14M				72	44	288					36	8		
PD-4	620+20	ROUTE 10 624+70	EB	13M				225	105	900					84	21		
PD-4	612+70	ROUTE 10 624+70	EB	25		1200			26			1200				26		
PD-4	613+00	ROUTE 10 615+00	FEBT	TRUCK			59						27					
PD-4	613+00	ROUTE 10 615+00	FEBT	LANE			51						24					
PD-5	624+70	ROUTE 10 636+70	EB/WB	27B				2400		2400								
PD-5	624+70	ROUTE 10 636+70	EB/WB	13M				1500	650		6000				520	130		
PD-5	624+70	ROUTE 10 636+70	EB/WB	25		2400			51			2400				51		
PD-5	624+70	ROUTE 10 636+70	EB	37				480	82			1200				82		
PD-5	624+70	ROUTE 10 636+70	EB	42				960	52			1200				52		
PD-5	626+50	ROUTE 10 627+50	FEBT	TRUCK			59						27					
PD-5	626+50	ROUTE 10 627+50	FEBT	LANE			51						24					
PD-6	636+70	ROUTE 10 648+70	EB/WB	27B				2400		2400								
PD-6	636+70	ROUTE 10 645+40	WB	13M				653	285	2610					228	57		
PD-6	645+40	ROUTE 10 647+84	WB	14M				183	55	732					36	19		
PD-6	647+84	ROUTE 10 648+70	WB	13M				65	45	258					36	9		
PD-6	624+70	ROUTE 10 636+70	EB/WB	25		2400			51			2400				51		
PD-6	636+70	ROUTE 10 648+70	EB	37				480	82			1200				82		
PD-6	636+70	ROUTE 10 648+70	EB	42				960	52			1200				52		
PD-6	636+70	ROUTE 10 645+16	EB	13M				423	190	1692					152	38		
PD-6	645+16	ROUTE 10 646+60	EB	14M				72	44	288					36	8		
PD-6	646+60	ROUTE 10 648+70	EB	13M				105	55	420					44	11		
PD-6	639+50	ROUTE 10 640+50	FEBT	TRUCK			59						27					
PD-6	639+50	ROUTE 10 640+50	FEBT	LANE			51						24					
PD-7	WABASH Ave	EXIT	WB	LIMIT LINE(44')			44						44					
PD-7	WABASH Ave	EXIT	WB	TYPE V ARROW			342						99					
SUB TOTAL PDQ-2						8570	826	18186	2704	7200	18000	8570	9320	347	1604	47	869	184

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: WILLIAM E. WASSER
 CALCULATED/DESIGNED BY: CHECKED BY:
 DARYUSH NAMI MEHDI KAMGAR
 REVISED BY: DATE REVISED:

PAVEMENT DELINEATION QUANTITIES PDQ-2

LAST REVISION DATE PLOTTED => 15-JUL-2015
 04-13-15 TIME PLOTTED => 10:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	111	155

Daryush Nami 4-13-15
 REGISTERED CIVIL ENGINEER DATE

4-15-15
 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.

PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION AND FROM STATION TO STATION		DIRECTION	DETAIL No. AND QUANTITY OF PAVEMENT MARKINGS		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKER	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			8" THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER				
										WHITE SOLID	WHITE BROKEN	YELLOW SOLID			NON REFLECTIVE		RETRO-REFLECTIVE		
															EA	EA	EA	EA	
FROM	TO	DETAIL	LF	SQFT	LF	EA	LF	LF	LF	LF	SQFT	EA	EA	EA	EA				
PD-7	WABASH Ave	EXIT	FWBT	STOP			51						22						
PD-7	WABASH Ave	EXIT	FWBT	STOP AHEAD			115						53						
PD-7	WABASH Ave	EXIT	WB	25A	720			31				720				31			
PD-7	WABASH Ave	EXIT	WB	27B				1650		1650									
PD-7	648+70	ROUTE 10 656+00	WB	27B				730		730									
PD-7	656+00	ROUTE 10 659+00	WB	36				1200	26			600			26				
PD-7	648+70	ROUTE 10 660+70	EB/WB	13M				1500	650	6000				520	130				
PD-7	648+70	ROUTE 10 660+70	EB/WB	25	2400			51			2400					51			
PD-7	648+70	ROUTE 10 660+70	EB	42				960	52			1200			52				
PD-7	648+70	ROUTE 10 660+70	EB	37				480	82			1200			82				
PD-7	648+70	ROUTE 10 657+50	EB	27B				880		880									
PD-7	653+50	ROUTE 10 654+50	FEBT	TRUCK			59						27						
PD-7	653+50	ROUTE 10 654+50	FEBT	LANE			51						24						
PD-7	WABASH Ave	ENTRANCE	EB	27B				850		850									
PD-7	WABASH Ave	ENTRANCE	EB	25A	560			25				560				25			
PD-7	WABASH Ave	ENTRANCE	FEBT	TYPE I(24') ARROW			84						31						
PD-7	657+50	WABASH Ave ENTRANCE 660+70	EB	36A				1280	14			640			14				
PD-8	660+70	ROUTE 10 672+70	EB/WB	27B				2400		2400									
PD-8	660+70	ROUTE 10 665+00	WB	13M				323	150	1290				120	30				
PD-8	665+00	ROUTE 10 666+44	WB	14M				108	48	432				36	12				
PD-8	666+44	ROUTE 10 672+70	WB	13M				470	210	1878				168	42				
PD-8	660+70	ROUTE 10 672+70	EB/WB	25	2400			51			2400					51			
PD-8	660+70	ROUTE 10 672+70	EB	37				480	82			1200			82				
PD-8	660+70	ROUTE 10 672+70	EB	42				960	52			1200			52				
PD-8	660+70	ROUTE 10 670+60	EB	13M				495	220	1980				176	44				
PD-8	670+60	ROUTE 10 672+04	EB	14M				72	44	288				36	8				
PD-8	672+04	ROUTE 10 672+70	EB	13M				33	25	132				20	5				
PD-8	666+00	ROUTE 10 667+00	FEBT	TRUCK			59						27						
PD-8	666+00	ROUTE 10 667+00	FEBT	LANE			51						24						
PD-8	WABASH Ave	ENTRANCE	EB	8				115		300									
PD-9	672+70	ROUTE 10 684+70	EB/WB	27B				2400		2400									
PD-9	672+70	ROUTE 10 684+70	EB/WB	13M				1500	650	6000				520	130				
PD-9	672+70	ROUTE 10 684+70	EB/WB	25	2400			51			2400					51			
PD-9	672+70	ROUTE 10 684+70	EB	37				480	82			1200			82				
PD-9	672+70	ROUTE 10 684+70	EB	42				960	52			1200			52				
PD-9	679+10	ROUTE 10 680+10	FEBT	TRUCK			59						27						
PD-9	679+10	ROUTE 10 680+10	FEBT	LANE			51						24						
PD-10	684+70	ROUTE 10 696+70	EB/WB	27B				1200		1200									
PD-10	684+70	ROUTE 10 691+40	WB	13M				503	225	2010				180	45				
PD-10	691+40	ROUTE 10 692+84	WB	14M				108	48	432				36	12				
PD-10	692+84	ROUTE 10 696+70	WB	13M				290	140	1158				112	28				
PD-10	684+70	ROUTE 10 696+70	EB/WB	25	2400			51			2400					51			
PD-10	684+70	ROUTE 10 696+70	EB	37				480	82			1200			82				
SUB TOTAL PDQ-3							10880	580	22907	3194	10110	21900	10880	9640	259	1924	32	978	260

PAVEMENT DELINEATION QUANTITIES PDQ-3



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	113	155

Daryush Nami 4-13-15
 REGISTERED CIVIL ENGINEER DATE

4-15-15
 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.

PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION AND FROM STATION TO STATION			DIRECTION	DETAIL No. AND QUANTITY OF PAVEMENT MARKINGS	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKER	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			8" THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER				
										WHITE SOLID	WHITE BROKEN	YELLOW SOLID			NON REFLECTIVE	RETRO-REFLECTIVE			
	EA	EA	EA													EA	EA	EA	
PD-15	744+70	RTE 10	756+70	EB/WB	25	2400			51										51
PD-15	744+70	RTE 10	751+00	EB	13M			473	210		1890				168			42	
PD-15	751+00	RTE 10	752+44	EB	14M			108	48		432				36	12			
PD-15	752+44	RTE 10	756+70	EB	13M			213	100		852				80			20	
PD-15	752+44	RTE 10	754+00	EB	13M			39	25		156				20			5	
PD-15	754+00	RTE 10	756+70	EB	37			108	20			270						20	
PD-16	756+70	RTE 10	768+70	EB/WB	27B			2400		2400									
PD-16	756+70	RTE 10	768+70	EB/WB	13M			1500	650		6000				520			130	
PD-16	756+70	RTE 10	768+70	EB/WB	25	2400		51				2400							51
PD-16	756+70	RTE 10	768+70	EB	37			480	82			1200						82	
PD-17	768+70	RTE 10	780+70	EB/WB	27B			2400		2400									
PD-17	768+70	RTE 10	780+70	WB	13M			900	390		3600				312			78	
PD-17	768+70	RTE 10	780+70	EB/WB	25	2400		51				2400							51
PD-17	768+70	RTE 10	779+00	EB	13M			515	225		2060				180			45	
PD-17	779+00	RTE 10	780+44	EB	14M			72	44		288				36	8			
PD-17	768+70	RTE 10	780+70	EB	37			480	82			1200						82	
PD-17	780+44	RTE 10	780+70	EB	13M			13	155		52				124			31	
PD-18	780+70	RTE 10	786+10	WB	27B			540		540									
PD-18	787+60	RTE 10	790+90	WB	36A			330	15			330						15	
PD-18	790+90	RTE 10	795+50	WB	27B			460		460									
PD-18	780+70	RTE 10	786+10	WB	13M			405	185		1620				148			37	
PD-18	756+10	RTE 10	792+00	WB	13M			1795	760		7180				608			152	
PD-18	LIVE OAK CANYON RD ENTRANCE			WB	8			57			150								
PD-18	780+70	RTE 10	795+50	EB/WB	25	2960		63				2960							63
PD-18	780+70	RTE 10	795+50	EB	13M			740	320		2960				256			64	
PD-18	780+70	RTE 10	781+20	EB	37			20	14			50				8		6	
PD-18	781+50	RTE 10	784+50	EB	38B			600	27			300						27	
PD-18	780+70	RTE 10	783+90	EB	27B			320		320									
PD-18	784+50	RTE 10	788+10	EB	36			720	16			360						16	
PD-18	788+10	RTE 10	795+50	EB	27B			740		740									
PD-19	795+50	RTE 10	802+40	WB	27B			690		690									
PD-19	802+40	RTE 10	806+40	WB	36			1600	35			800						35	
PD-19	806+40	RTE 10	808+00	WB	27B			160		160									
PD-19	795+50	RTE 10	808+00	EB/WB	13M			1250	545		5000				436			109	
PD-19	795+50	RTE 10	801+70	EB	27B			620		620									
PD-19	795+50	RTE 10	808+00	EB/WB	25	2500		53				2500							53
PD-19	801+70	RTE 10	803+60	EB	36			800	20			400						20	
PD-19	803+60	RTE 10	805+00	EB	8			63			155								
PD-19	803+60	RTE 10	808+00	EB	27B			440		440									
PD-20	808+00	RTE 10	825+50	EB/WB	27B			3500		3500									
PD-20	808+00	RTE 10	809+40	WB	13M			70	40		280				32	8		8	
PD-20	809+40	RTE 10	810+84	WB	14M			72	44		288				36	8			
PD-20	810+84	RTE 10	825+50	WB	13M			733	320		2932				256			64	
PD-20	810+84	RTE 10	825+50	EB/WB	25	2932		63				2932							63
PD-20	808+00	RTE 10	825+50	EB	13M			875	375		3500				300			75	
SUB TOTAL PDQ-5						15592		27301	5079	12270	39395	15592	4910		3548	44	1163	332	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: WILLIAM E. WASSER
 CALCULATED/DESIGNED BY: MEHDI KAMGAR
 CHECKED BY: MEHDI KAMGAR
 DARYUSH NAMI
 REVISED BY: DATE REVISOR

PAVEMENT DELINEATION QUANTITIES PDQ-5

LAST REVISION DATE PLOTTED => 15-JUL-2015
 04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	114	155

Daryush Nami 4-13-15
REGISTERED CIVIL ENGINEER DATE

4-15-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DARYUSH NAMI
No. C78890
Exp. 3-31-16
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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: WILLIAM E. WASSER
 CALCULATED/DESIGNED BY: DARYUSH NAMI
 CHECKED BY: MEHDI KANGAR
 REVISED BY: DATE
 REVISED DATE

PAVEMENT DELINEATION QUANTITIES

SHEET No.	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKER	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			8" THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER			
		WHITE			WHITE SOLID	WHITE BROKEN	YELLOW SOLID			NON REFLECTIVE	RETRO-REFLECTIVE		
											TYPE A	TYPE C	TYPE G
	LF	SQFT	LF	EA	LF	LF	LF	LF	SQFT	EA	EA	EA	EA
SUB TOTAL PDQ-1	11796	2125	25850	3572	12593	31316	11796	2636	751	2448	50	706	329
SUB TOTAL PDQ-2	8570	826	18186	2704	7200	18000	8570	9320	347	1604	47	869	184
SUB TOTAL PDQ-3	10880	580	22907	3194	10110	21900	10880	9640	259	1924	32	978	260
SUB TOTAL PDQ-4	9600	220	25144	4220	10780	34390	9600	4224	102	3028	52	936	204
SUB TOTAL PDQ-5	15592		27301	5079	12270	39395	15592	4910		3548	44	1163	332
SUB TOTAL	56438	3751	119388	18769	52953	145001	56438	30730	1459	12552	225	4652	1309
TOTAL	56438	3751	119388	18769	254392			30730	1459	12552	6186		

PAVEMENT DELINEATION QUANTITIES PDQ-6

LAST REVISION | DATE PLOTTED => 15-JUL-2015 04-13-15 | TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	116	155

Michael M. Babich
 LICENSED LANDSCAPE ARCHITECT

4-15-15
 PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 STEVEN MAGALLANES
 CALCULATED/DESIGNED BY
 CHECKED BY
 MARY-ANN JOHNS
 MIKE BABICH
 REVISED BY
 DATE REVISED

EROSION CONTROL (TYPE 1 - SLOPES 4:1 OR FLATTER)

SEQUENCE	ITEM	MATERIALS		APPLICATION RATE	NOTES
		DESCRIPTION	TYPE		
STEP 1	FIBER ROLLS	NATURAL FIBER MATERIALS	TYPE B	SPECIFIED	INSTALL FIBER ROLLS AT THE TOE OF SLOPE
STEP 2	EROSION CONTROL (BFM)	SEED	MIX	30 LB PURE LIVE SEEDS/ACRE	TO BE APPLIED TO NON-PAVED AREAS DISTURBED BY CONTRACTORS OPERATIONS
		FIBER	WOOD	3000 LB/AC	
		TACKIFIER	ORGANIC		

EROSION CONTROL QUANTITIES

SHEET	STATION	LOCATION	BFM	FIBER ROLLS
			ACRE	LF
L16, L17, L18	762+16 to 789+27.82	R+	0.52	2659
L18	786+1334 TO 789+37.73	L+	0.06	324
L18, L19, L20	790+43.00 TO 815+00.00	R+	0.48	2457
L18, L19, L20	790+52.76 +815+00.00	L+	0.48	2447
TOTAL			1.54	7,887

SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
Bromus carinatus "Cucamonga" (California Broom)	40	5.0
Encelia Farinosa (Brittle Bush)	30	3.0
Eriogonum fasciculatum polifolium (California Buckwheat)	40	5.0
Eschscholzia californica (California Poppy)	40	2.0
Lotus Purshianus (Purshing Lotus)	33	4.0
Phacelia campanularia (California Blubell)	40	2.0
Festuca (vulpia) microstachys (Small Fescue)	40	5.0
Melica imperfecta (Small Flower Melica)	40	4.0
TOTAL		30

EROSION CONTROL LEGEND ECL-1

LAST REVISION DATE PLOTTED => 15-JUL-2015 10:26
 04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	117	155

Ferdinand De La Cruz 4-13-15
REGISTERED ELECTRICAL ENGINEER DATE

4-15-15
PLANS APPROVAL DATE

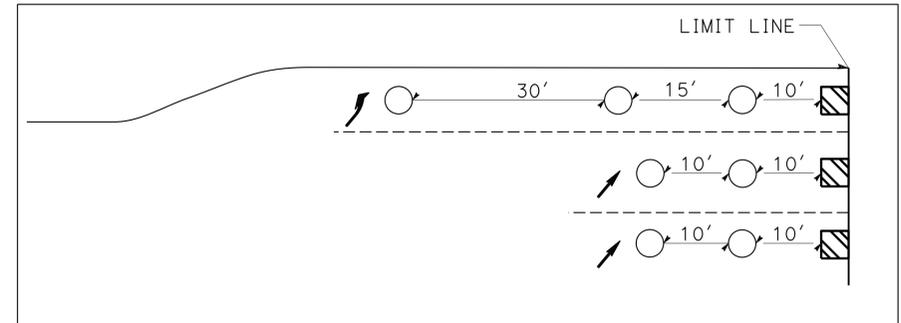
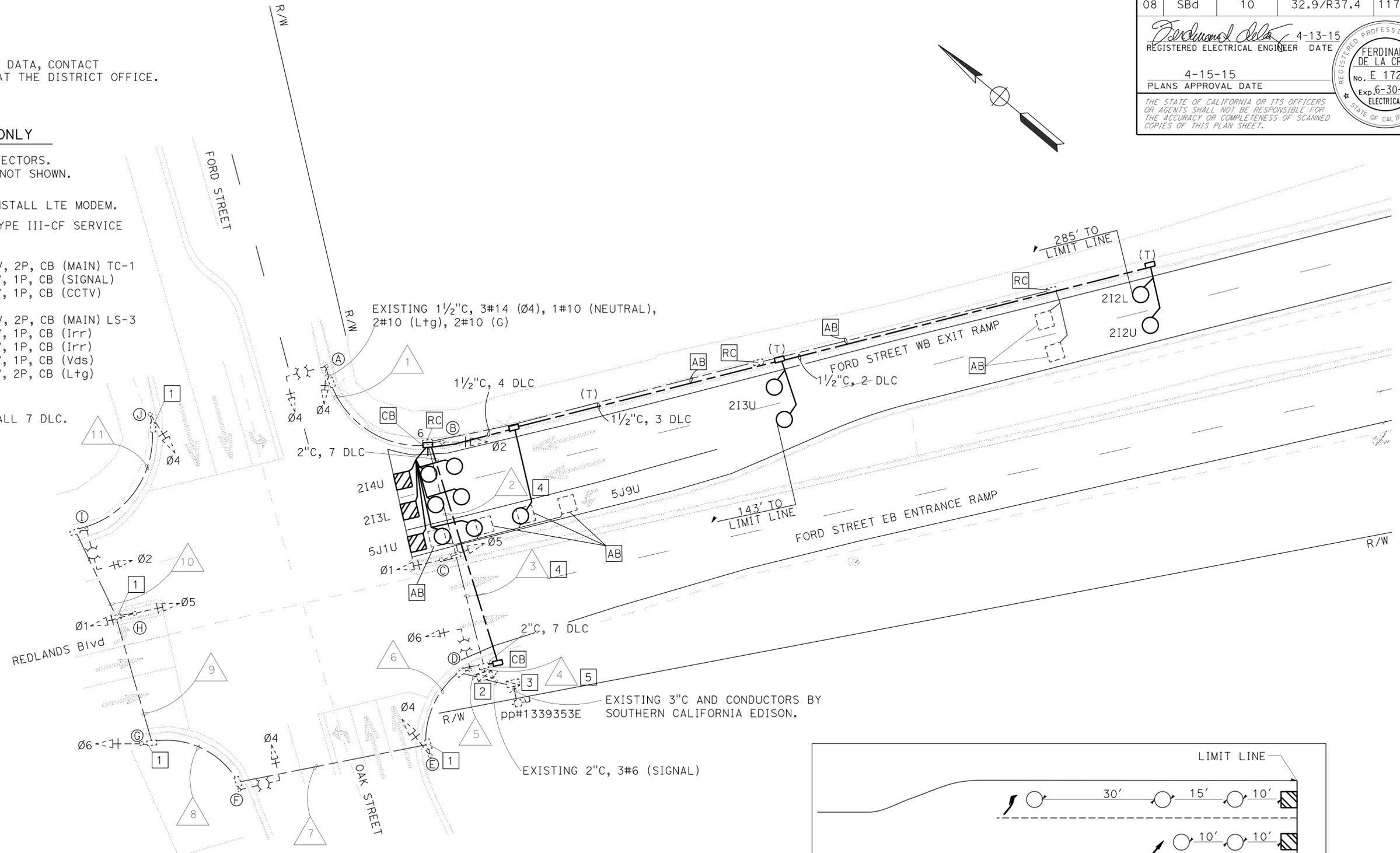
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

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

LEGEND: THIS SHEET ONLY

- 1 TO INDUCTIVE LOOP DETECTORS. REMAINDER OF CIRCUIT NOT SHOWN.
 - 2 RS EXISTING MODEM. INSTALL LTE MODEM.
 - 3 EXISTING 120/240 V, TYPE III-CF SERVICE EQUIPMENT ENCLOSURE
- METER A: 100 A, 240 V, 2P, CB (MAIN) TC-1
40 A, 120 V, 1P, CB (SIGNAL)
30 A, 120 V, 1P, CB (CCTV)
- METER B: 100 A, 240 V, 2P, CB (MAIN) LS-3
20 A, 120 V, 1P, CB (Irr)
20 A, 120 V, 1P, CB (Irr)
30 A, 120 V, 1P, CB (Vds)
20 A, 240 V, 2P, CB (Ltg)
- 4 RC EXISTING DLC
 - 5 RC EXISTING DLC. INSTALL 7 DLC.



TYPICAL LOOP DETECTOR SETBACKS

MODIFY SIGNAL

NO SCALE

E-1

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN B

USERNAME => s125726
DGN FILE => 0812000099u001.dgn



UNIT 2292

PROJECT NUMBER & PHASE

08120000991

LAST REVISION DATE PLOTTED => 15-JUL-2015
04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	118	155

Ferdinand De La Cruz 4-13-15
 REGISTERED ELECTRICAL ENGINEER DATE

4-15-15
 PLANS APPROVAL DATE

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 COPIES OF THIS PLAN SHEET.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN B
 FUNCTIONAL SUPERVISOR: FERDINAND DE LA CRUZ
 CALCULATED/DESIGNED BY: CHECKED BY:
 LUIS PENALOZA FERDINAND DE LA CRUZ
 REVISED BY: DATE REVISED:

EXISTING CONDUIT AND CONDUCTOR SCHEDULE

CABLE, AWG, AND DLC SCHEDULE		CONDUIT RUN NUMBER										
CABLE TYPE	S + PHASE	1	2	3	4	5	6	7	8	9	10	11
		VEH-PED #14 AWG	(A) Ø4	3	3	3	3					
	(B) Ø2		3	3	3							
	(C) Ø1, Ø2			6	6							
	(D) Ø6					3						
	(E) Ø4					3	3					
	(F) Ø4					3	3	3				
	(G) Ø6					3	3	3	3			
	(H) Ø1, Ø5					6	6	6	6	6		
	(I) Ø2					3	3	3	3	3	3	
	(J) Ø4					3	3	3	3	3	3	3
	TOTAL	3	6	12	12	24	21	18	15	12	6	3
AWG	CIRCUIT											
#12	LIGHTING	2	2	2			2	2	2	2	2	
#10	NEUTRAL	1	1	1			1	1	1	1	1	
#10	GROUND	1	1	1			1	1	1	1	1	
DLC	Ø1					1	1	1	1	1		
	Ø2		1	1	1							
	Ø4					6	4	4	4	4	4	4
	Ø5			1	1							
	Ø6					1	1	1	1			
	TOTAL DLC	0	1	2	2	8	6	6	6	5	4	4
CONDUIT SIZE		1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2"	2"	1 1/2"

EXISTING POLE AND EQUIPMENT SCHEDULE

POLE	STANDARD			VEH SIG MTG		HPS LUMINAIRE
	Type	SMA	LMA	Mast Arm	Pole	
(A)	III	15'	15'	I-MAS	SV-I-T	200 W
(B)	I-C				TV-I-T	
(C)	I-C				SV-I-T TV-I-T	
(D)	III	15'	15'	I-MAS	SV-I-T	200 W
(E)	I-C				TV-I-T	
(F)	III	15'	15'	I-MAS	SV-I-T	200 W
(G)	I-C				TV-I-T	
(H)	I-C				SV-I-T TV-I-T	
(I)	III	15'	15'	I-MAS	TV-I-T	200 W
(J)	I-C					

APPROVED FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL E-2

LAST REVISION | DATE PLOTTED => 15-JUL-2015
 04-13-15 | TIME PLOTTED => 10:26

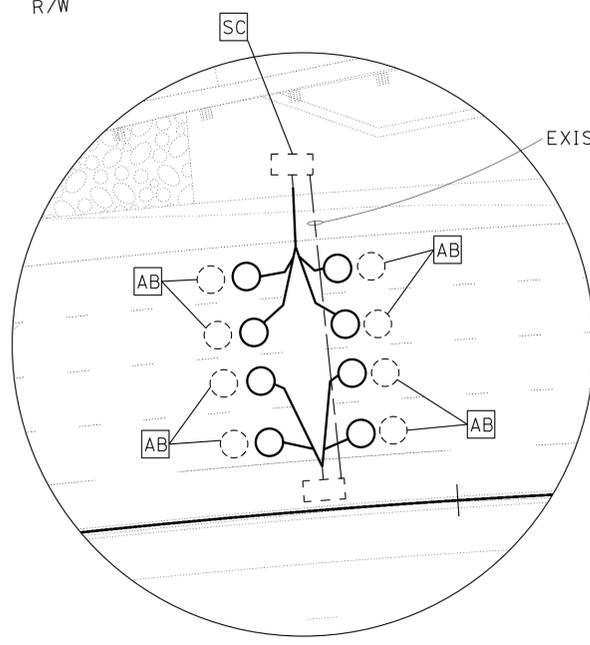
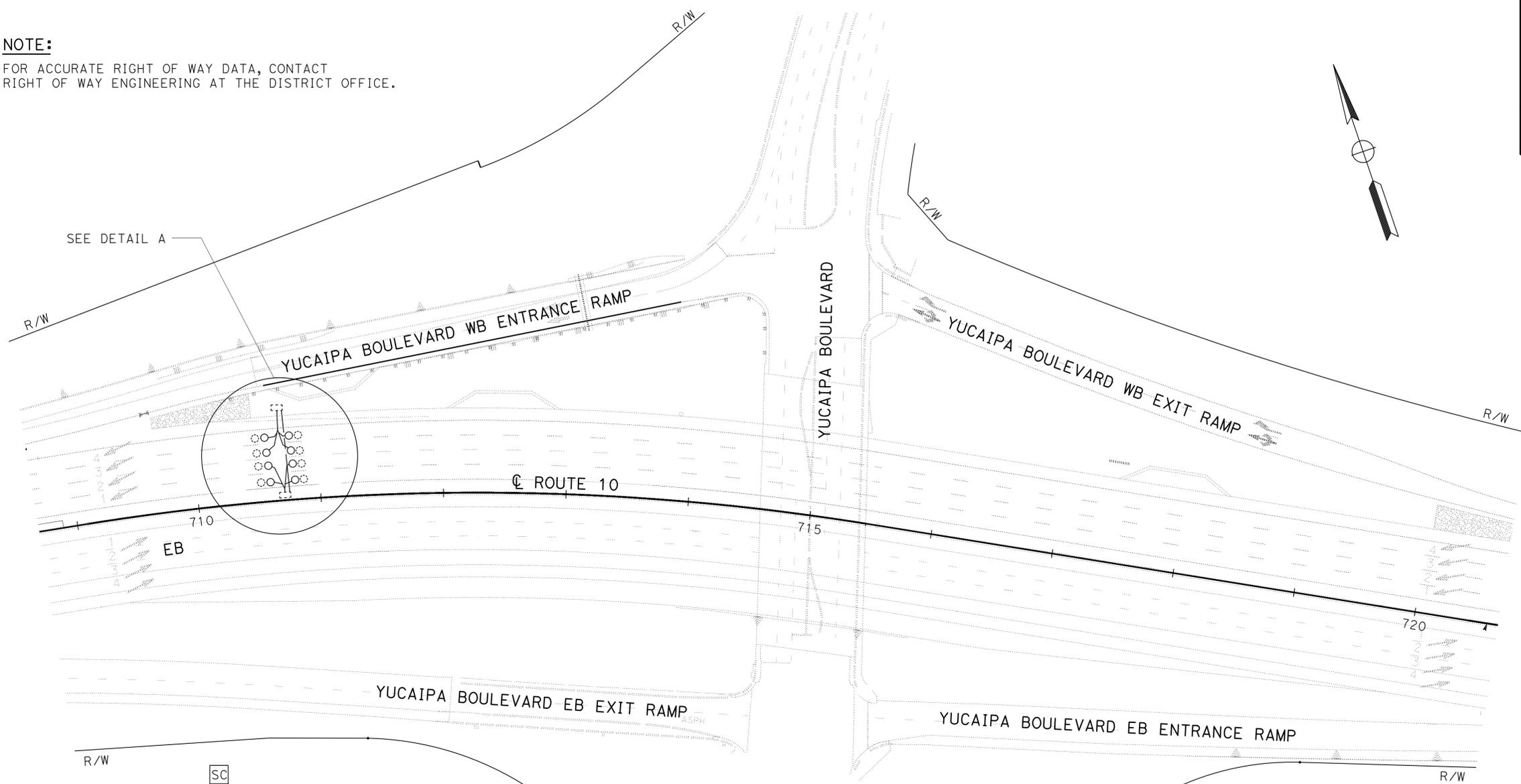
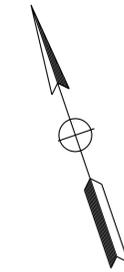
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	119	155

Ferdinand De la Cruz 4-13-15
REGISTERED ELECTRICAL ENGINEER DATE

4-15-15
PLANS APPROVAL DATE

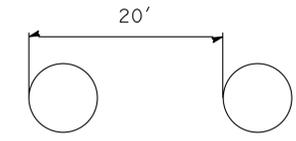
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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



(RMS YUCAIPA BOULEVARD)

LOOP DETECTOR LAYOUT



INDUCTIVE LOOP DETECTOR (EA)

NO SCALE

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans ELECTRICAL DESIGN B	FERDINAND DE LA CRUZ	CHECKED BY	LUIS PENALOZA
			FERDINAND DE LA CRUZ
			DATE REVISED



LAST REVISION DATE PLOTTED => 15-JUL-2015
04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	120	155

4-13-15
 REGISTERED ELECTRICAL ENGINEER DATE
 4-15-15
 PLANS APPROVAL DATE

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



NOTES: (THIS SHEET ONLY)

1. LOCATIONS ARE APPROXIMATE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL VEHICLE SENSOR NODE LOCATIONS.

ABBREVIATIONS:

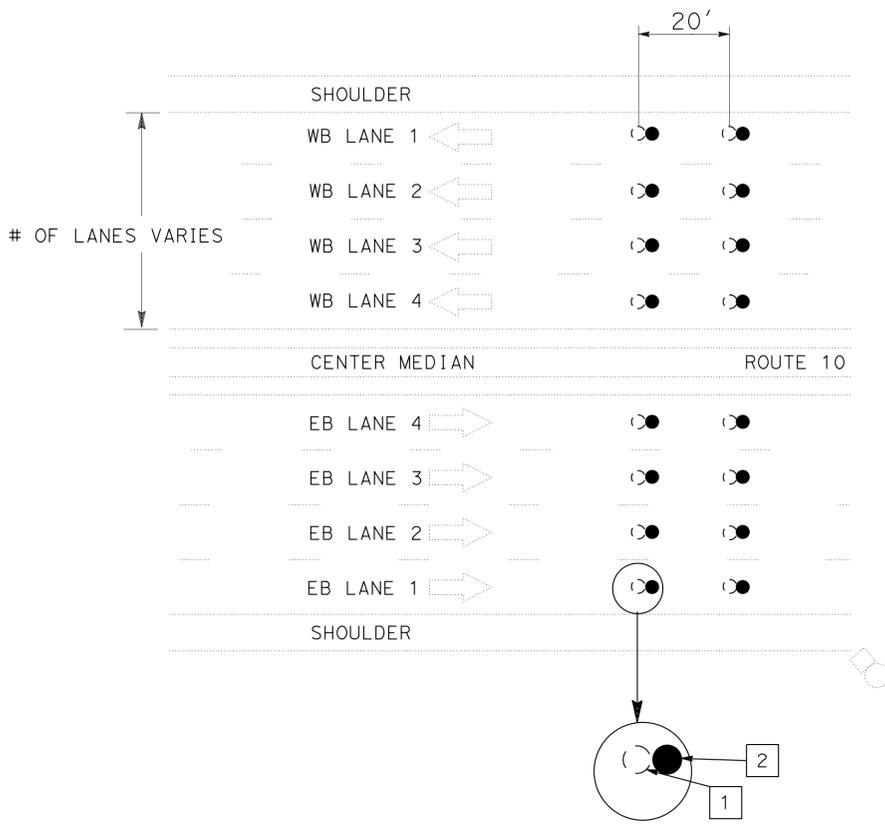
WVDS- WIRELESS VIDEO DETECTION SYSTEM
 VSN- VEHICLE SENSOR NODE

LEGEND: (THIS SHEET ONLY)

- 1 REMOVE EXISTING VEHICLE SENSOR NODE SHOWN AS PER MANUFACTURER'S INSTRUCTION. VEHICLE SENSOR NODE TO BE RC.
- 2 SEE E-7 FOR INSTALLATION DETAILS.

MVDS EQUIPMENT:

- EXISTING VEHICLE SENSOR NODE
- NEW VEHICLE SENSOR NODE



TYPICAL LAYOUT FOR LOCATIONS ① - ⑦

SAN BERNARDINO COUNTY ROUTE 10

LOCATION	COUNTY	ROUTE	POSTMILE	APPROXIMATE LOCATION	ACCESS POINT LOCATION	DIRECTION AND LANE NUMBER	QUANTITY OF VEHICLE SENSOR NODES TO BE RC
①	SBd	10	33.4	REDLANDS Blvd UNDERCROSSING	EASTBOUND	EB LANES 3-4; WB LANES 3-4	8
②			34.0	WEST OF FORD STREET	EASTBOUND	EB LANES 3-4; WB LANES 3-4	8
③			34.4	WEST OF WABASH AVENUE	EASTBOUND	EB LANES 3-5; WB LANES 3-4	10
④			34.8	EAST OF YUCAIPA BOULEVARD	EASTBOUND	EB LANES 3-4; WB LANES 3-4	8
⑤			35.5	WEST OF YUCAIPA Blvd	WESTBOUND	EB LANE 3; WB LANES 2-3	6
⑥			35.6	WEST OF YUCAIPA Blvd	EASTBOUND	EB LANE 3; WB LANES 2-3	6
⑦			36.3	WEST OF 16TH STREET	WESTBOUND	EB LANE 3; WB LANES 2-3	6
TOTAL							52

VEHICLE SENSOR NODE REPLACEMENT

NO SCALE

E-4

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 ELECTRIC DESIGN B
 LUIS PENALOZA
 FERDINAND DE LA CRUZ
 FERDINAND DE LA CRUZ
 FERDINAND DE LA CRUZ
 FERDINAND DE LA CRUZ

NOTES: (THIS SHEET ONLY)

1. LOCATIONS ARE APPROXIMATE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL VEHICLE SENSOR NODE LOCATIONS.

ABBREVIATIONS:

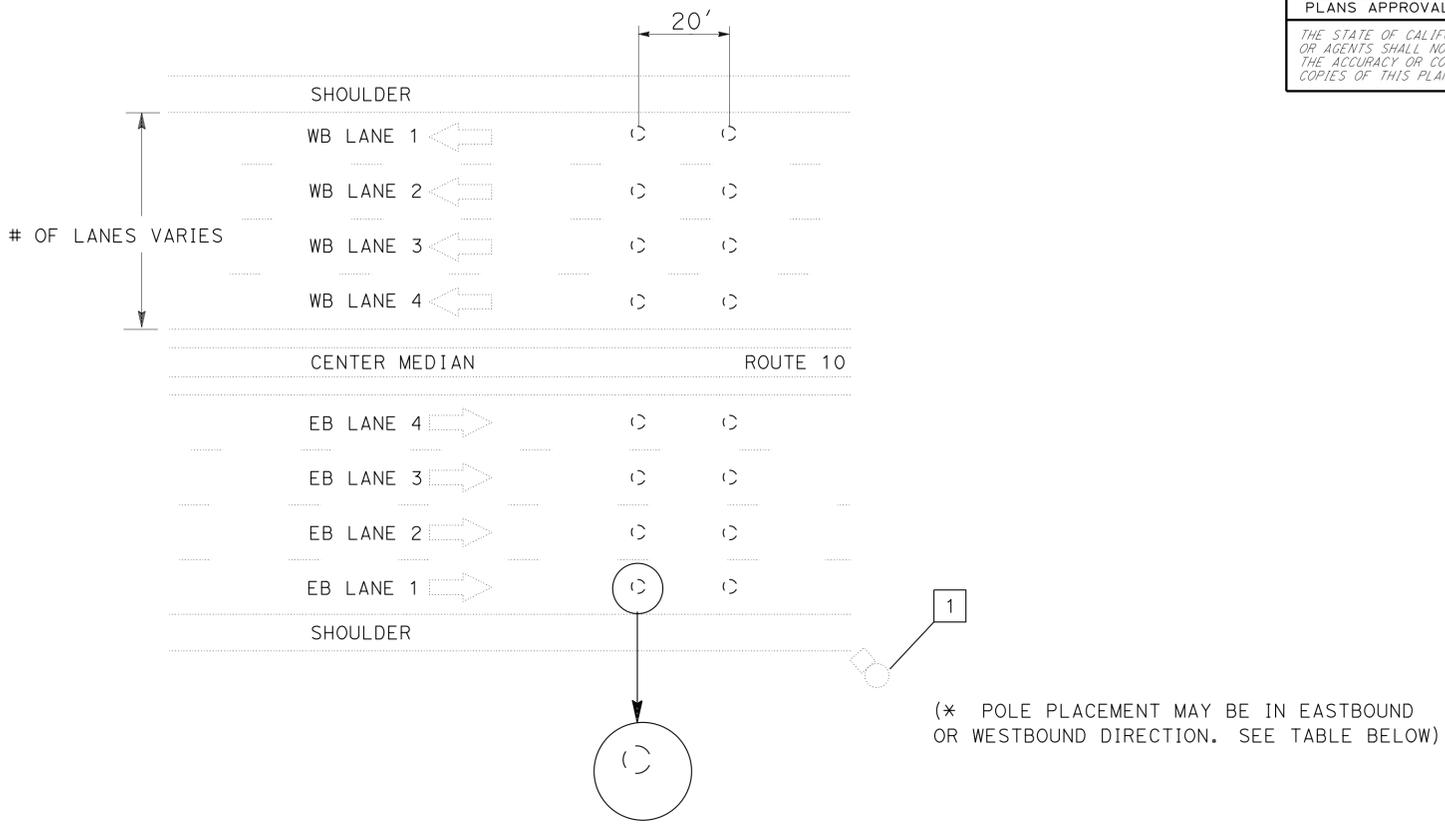
WVDS- WIRELESS VIDEO DETECTION SYSTEM
 VSN- VEHICLE SENSOR NODE

LEGEND: (THIS SHEET ONLY)

1 INSTALL TEMPORARY MVDS ON EXISTING VDS POLE DURING STAGE CONSTRUCTION. SEE E-6 FOR DETAILS.

MVDS EQUIPMENT:

⊙ EXISTING VEHICLE SENSOR NODE



TYPICAL LAYOUT FOR LOCATIONS ① - ⑦

SAN BERNARDINO COUNTY ROUTE 10

LOCATION	COUNTY	ROUTE	POSTMILE	APPROXIMATE LOCATION	ACCESS POINT LOCATION	DIRECTION AND LANE NUMBER	* MVDS LOCATIONS
①	SBd	10	33.4	REDLANDS Blvd UNDERCROSSING	EASTBOUND	EB LANES 3-4; WB LANES 3-4	1
②			34.0	WEST OF FORD STREET	EASTBOUND	EB LANES 3-4; WB LANES 3-4	1
③			34.4	WEST OF WABASH AVENUE	EASTBOUND	EB LANES 3-5; WB LANES 3-4	1
④			34.8	EAST OF YUCAIPA BOULEVARD	EASTBOUND	EB LANES 3-4; WB LANES 3-4	1
⑤			35.5	WEST OF YUCAIPA Blvd	WESTBOUND	EB LANE 3; WB LANES 2-3	1
⑥			35.6	WEST OF YUCAIPA Blvd	EASTBOUND	EB LANE 3; WB LANES 2-3	1
⑦			36.3	WEST OF 16TH STREET	WESTBOUND	EB LANE 3; WB LANES 2-3	1
TOTAL							7

STAGE CONSTRUCTION (STAGES 1 - 7)

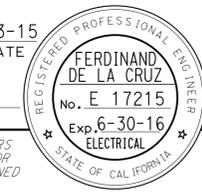
MICROWAVE VIDEO DETECTION SYSTEM

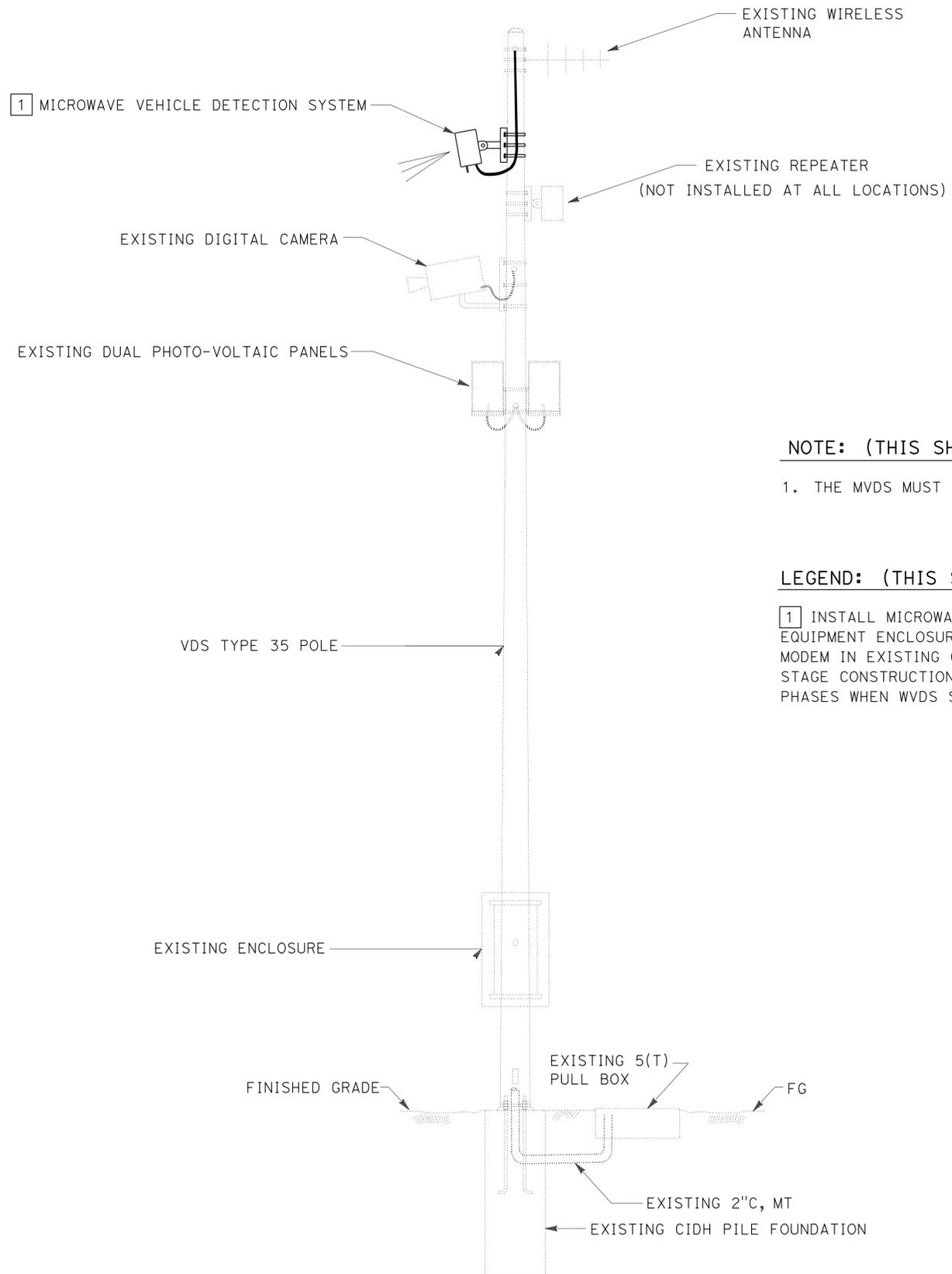
NO SCALE

E-5

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN B
 LUIS PENALOZA
 FERDINAND DE LA CRUZ
 FERDINAND DE LA CRUZ
 REVISIONS: REVISED BY DATE REVISED
 CALCULATED-DESIGNED BY CHECKED BY
 FUNCTIONAL SUPERVISOR
 FERDINAND DE LA CRUZ

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	122	155
			4-13-15	DATE	
REGISTERED ELECTRICAL ENGINEER					
4-15-15 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>					



NOTE: (THIS SHEET ONLY)

1. THE MVDS MUST BE OPERATIONAL THROUGHOUT THE STAGE CONSTRUCTION PHASES.

LEGEND: (THIS SHEET ONLY)

- 1 INSTALL MICROWAVE VEHICLE DETECTION SYSTEM AND ROUTE CABLES INTO EXISTING EQUIPMENT ENCLOSURE PANEL. REMOVE WVDS CABLES AND CONNECT MVDS CABLES TO GPRS MODEM IN EXISTING CABINET. ADJUST VEHICLE DETECTION ZONE AS NECESSARY FOR EACH STAGE CONSTRUCTION PHASE. **RS** TEMPORARY MVDS AT THE END OF THE STAGE CONSTRUCTION PHASES WHEN WVDS SYSTEMS ARE FULLY OPERATIONAL.

**MICROWAVE VEHICLE
DETECTION SYSTEM**
(STAGE CONSTRUCTION)

DETAIL 'A'

VDS INSTALLED ON VDS TYPE 35 POLE
LOCATIONS 1 THROUGH 7

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
Caltrans ELECTRICAL DESIGN B	FERDINAND DE LA CRUZ	CHECKED BY	LUIS PENALOZA	FERDINAND DE LA CRUZ
			REVISOR	DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	123	155

<i>Ferdinand De La Cruz</i>	4-13-15
REGISTERED ELECTRICAL ENGINEER	DATE
4-15-15	
PLANS APPROVAL DATE	

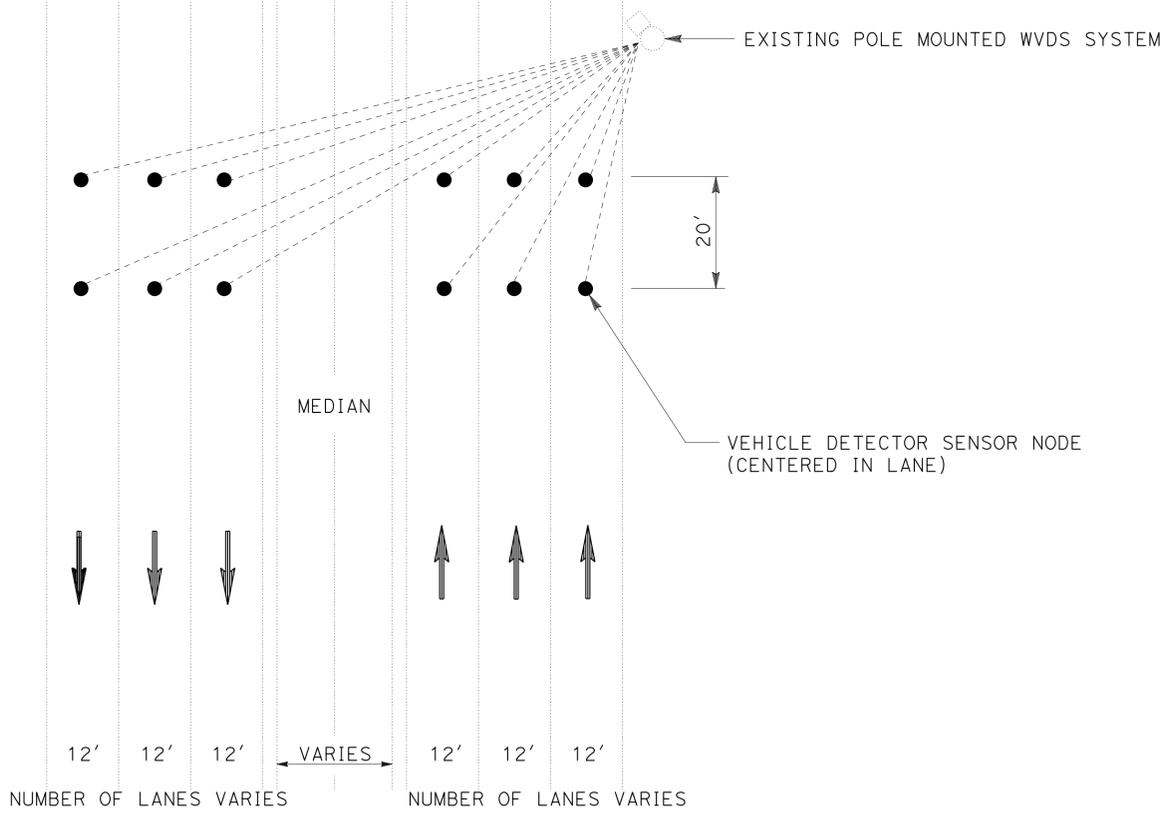
REGISTERED PROFESSIONAL ENGINEER	FERDINAND DE LA CRUZ
No. E 17215	
Exp. 6-30-16	
ELECTRICAL	STATE OF CALIFORNIA

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

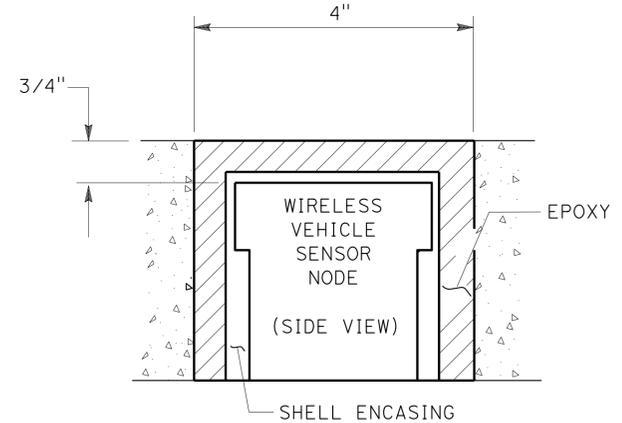
WIRELESS VEHICLE DETECTOR SENSOR INSTALLATION PROCEDURE

1. PRIOR TO INSTALLATION, IDENTIFY SENSOR'S ID, LANE NUMBER, AND LOCATION IN LANE.
2. DEPENDING ON AMBIENT TEMPERATURE AND HUMIDITY, ADHESIVE DRYING TIME WILL VARY FROM 5 MINUTES TO 15 MINUTES. VERIFY HARDNESS OF EPOXY BEFORE REOPENING THE LANE FOR TRAFFIC.
3. RECORD THE DISTANCES BETWEEN EACH SENSOR PAIR.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Electrans ELECTRICAL DESIGN B
 FUNCTIONAL SUPERVISOR: FERDINAND DE LA CRUZ
 CALCULATED/DESIGNED BY: LUIS PENALOZA
 CHECKED BY: FERDINAND DE LA CRUZ
 REVISED BY: LUIS PENALOZA
 DATE REVISED: FERDINAND DE LA CRUZ



DETAIL 'B'
 VEHICLE SENSOR NODE PLACEMENT DETAIL



DETAIL 'C'
 VEHICLE SENSOR NODE INSTALLED IN ROADWAY

(VEHICLE SENSOR NODE INSTALLATION)

LAST REVISION DATE PLOTTED => 15-JUL-2015 04-13-15 TIME PLOTTED => 10:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	124	155

Ferdinand De La Cruz 4-13-15
 REGISTERED ELECTRICAL ENGINEER DATE

4-15-15
 PLANS APPROVAL DATE

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

NOTES:

1. THE QUANTITIES ON THIS SHEET ARE APPROXIMATE MEASUREMENTS.
2. FOR COMPLETE ELECTRICAL WORK, SEE ELECTRICAL PLANS.

MODIFY SIGNAL

SHEET No.	(N) TYPE D LOOP	(N) TYPE E LOOP	(N) TYPE 5 PULLBOX	(N) TYPE 6 PULLBOX	(N) 1 1/2" C, TYPE 3 SCHEDULE 80	(N) 2" C, TYPE 3 SCHEDULE 80	(N) DETECTOR LEAD-IN CABLE (DLC)
	EA	EA	EA	EA	LF	LF	LF
E-1	3	11	4	1	300	100	2,240

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

**INDUCTIVE LOOP DETECTOR
(EA)**

SHEET No.	(N) TYPE E LOOP
	EA
E-3	8

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

**VEHICLE SENSOR NODE
REPLACEMENT**

SHEET No.	(N) VSN
	EA
E-4	72

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

**MICROWAVE VEHICLE
DETECTION SYSTEM**

SHEET No.	(N) MICROWAVE VEHICLE DETECTION SYSTEM
	EA
E-5	7

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

ELECTRICAL QUANTITIES

E-8

APPROVED FOR ELECTRICAL WORK ONLY

	M	
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	
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	
	O	
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	
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	

	P continued	
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	
	Q	
Qty	QUANTITY	
	R	
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	

	S	
S	SOUTH, SUPPLEMENT	
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	
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	

	T continued	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	
	U	
UC	UNDERCROSSING	
UD	UNDERDRAIN	
UG	UNDERGROUND	
UON	UNLESS OTHERWISE NOTED	
UP	UNDERPASS	
	V	
V	VALVE, DESIGN SPEED	
Var	VARIABLE, VARIES	
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	
	W	
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	
X Sec	CROSS SECTION	
Xing	CROSSING	
	Y	
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	125	155

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
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THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 4-15-15

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

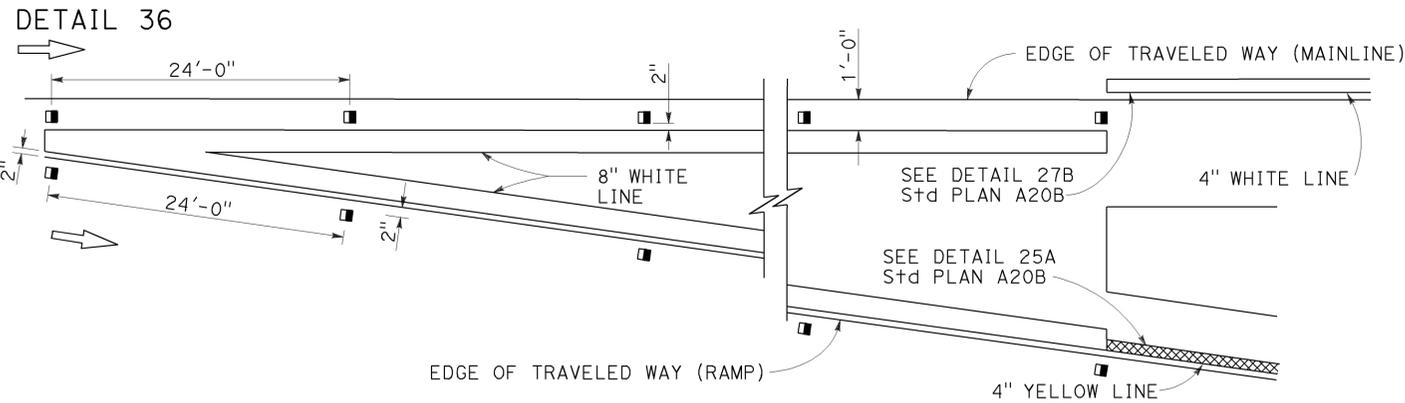
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

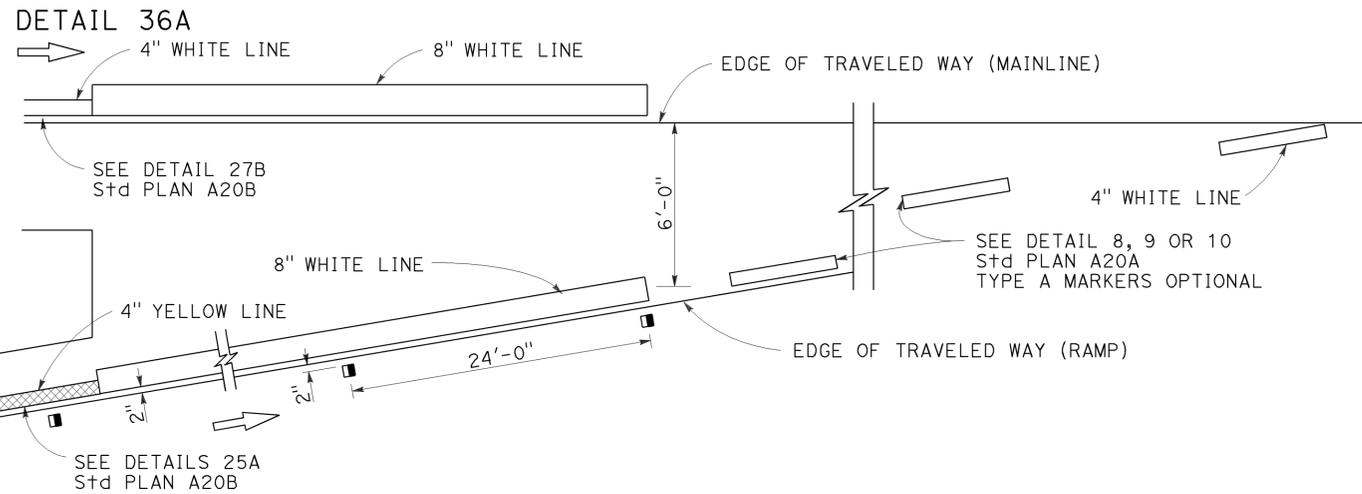
NO SCALE

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

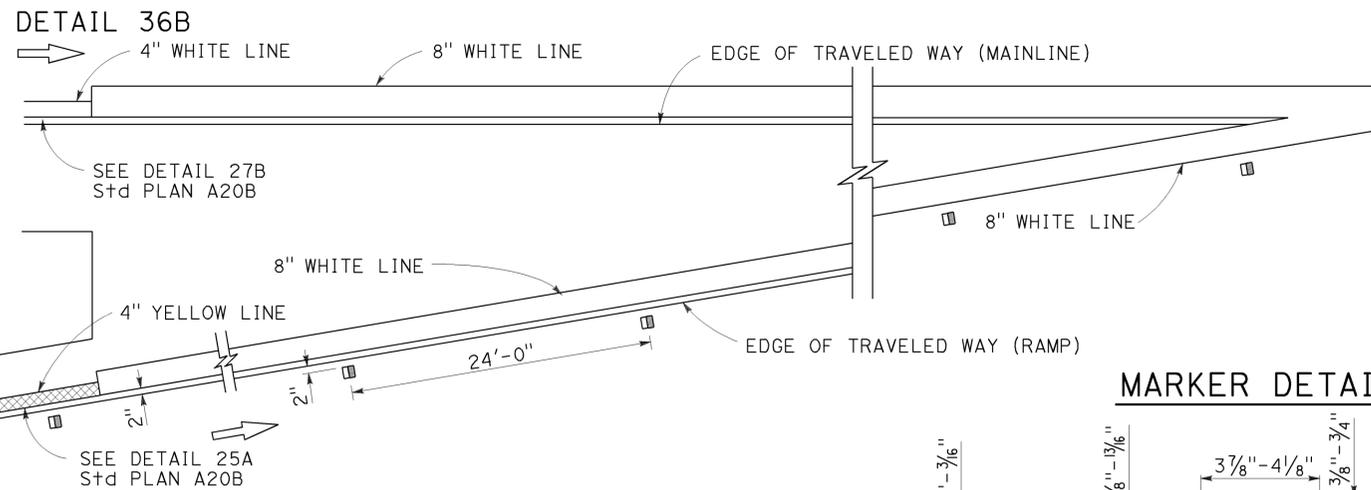
EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

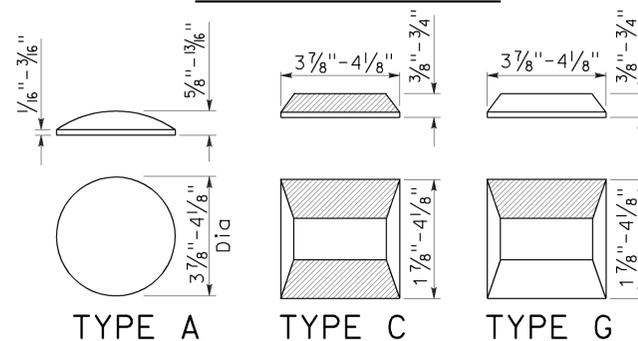


MARKER DETAILS

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
08	SBd	10	32.9/R37.4	126	155

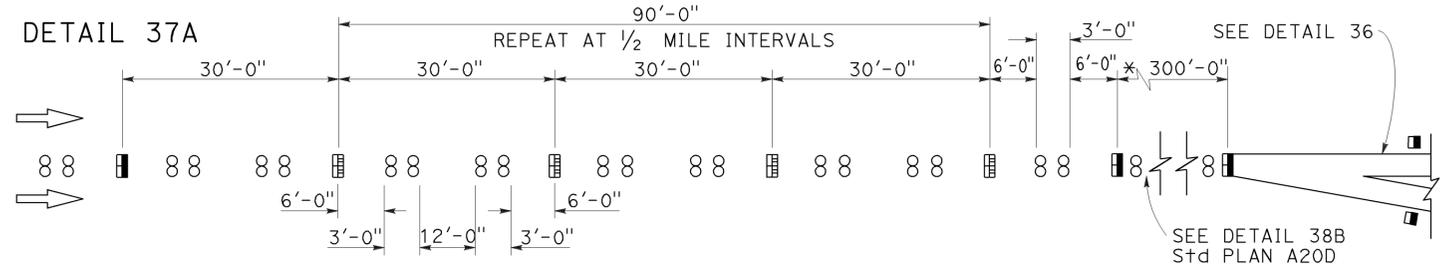
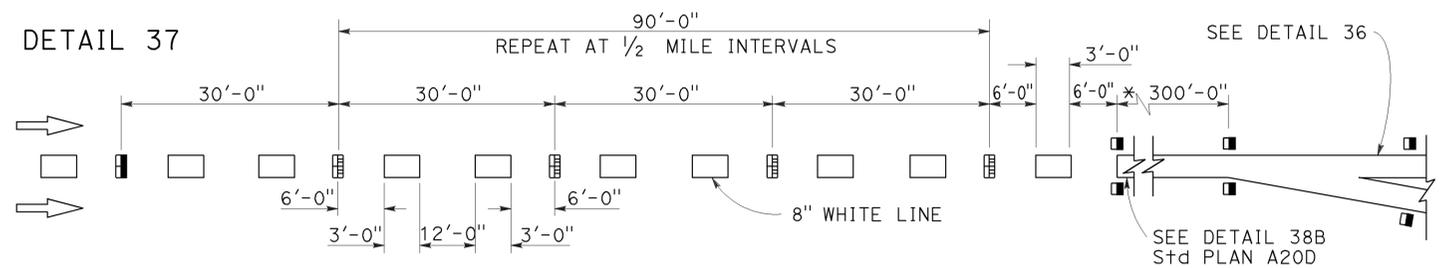
Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 No. C40375
 Exp. 3-31-15
 CIVIL
 STATE OF CALIFORNIA

July 19, 2013
 PLANS APPROVAL DATE

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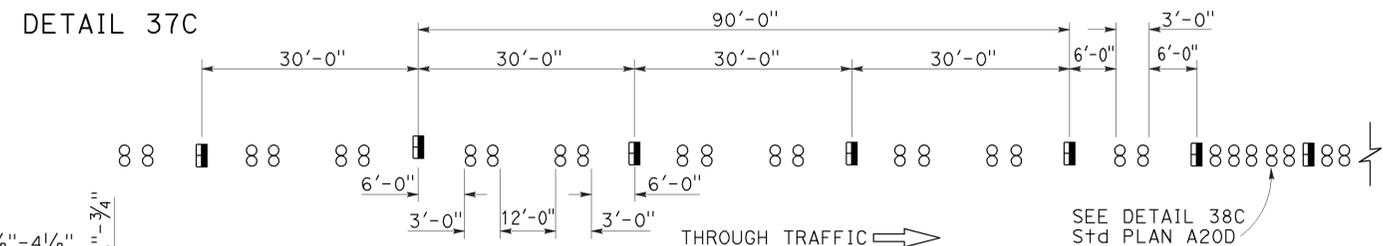
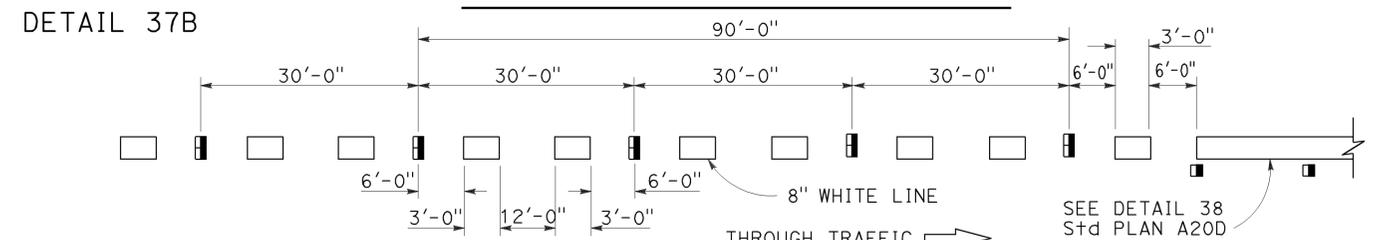
TO ACCOMPANY PLANS DATED 4-15-15

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

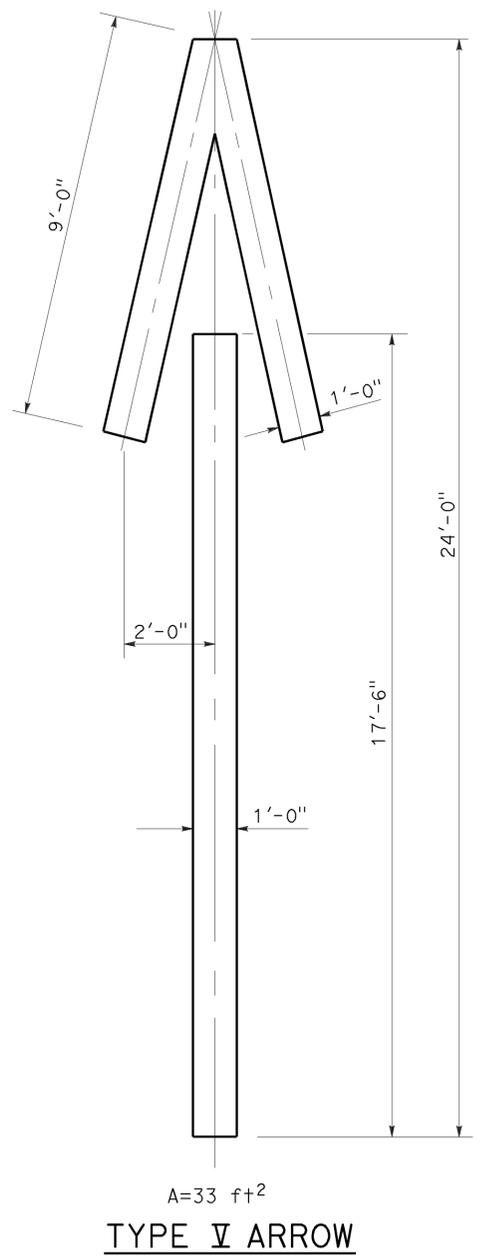
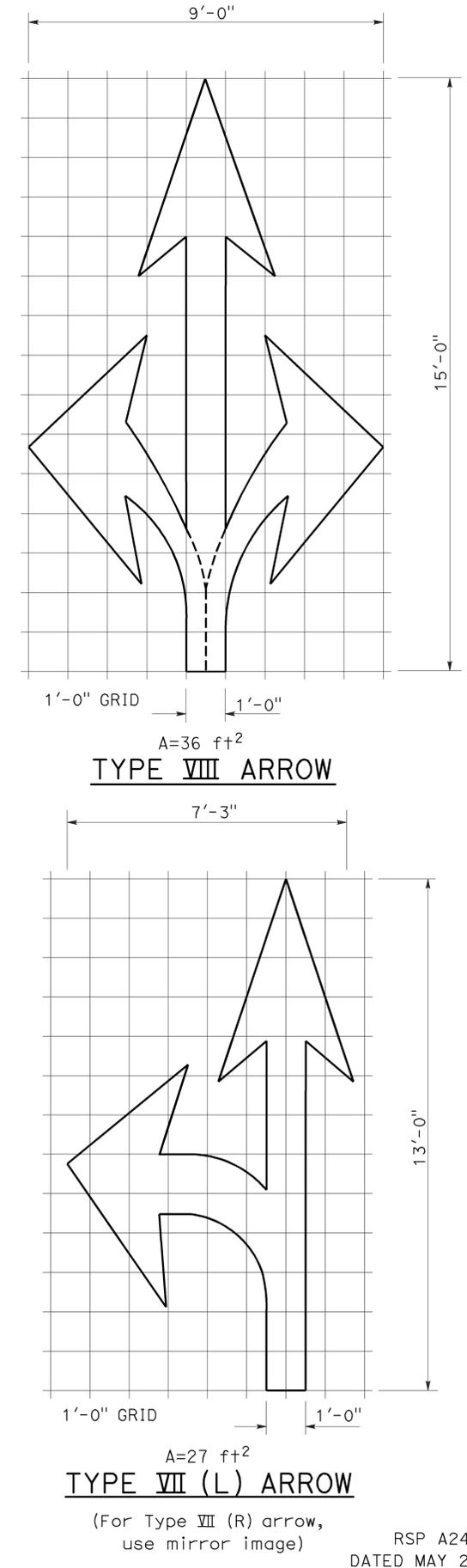
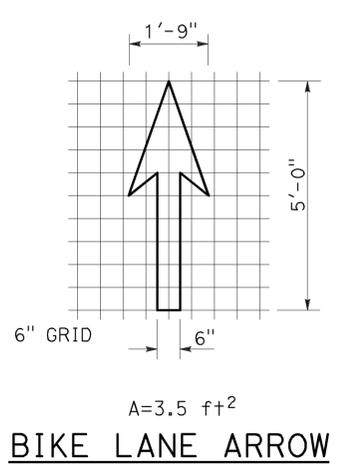
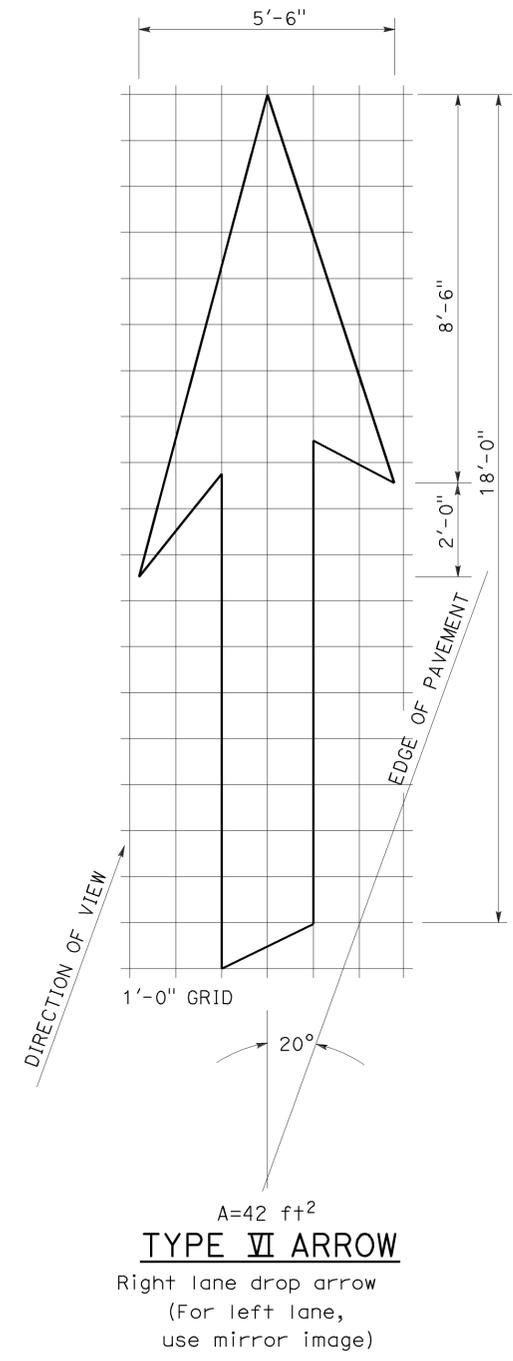
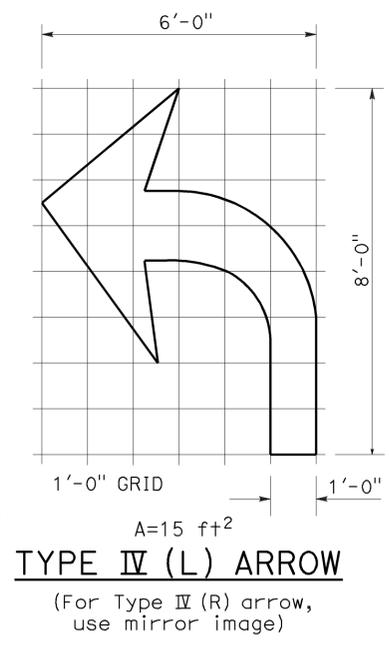
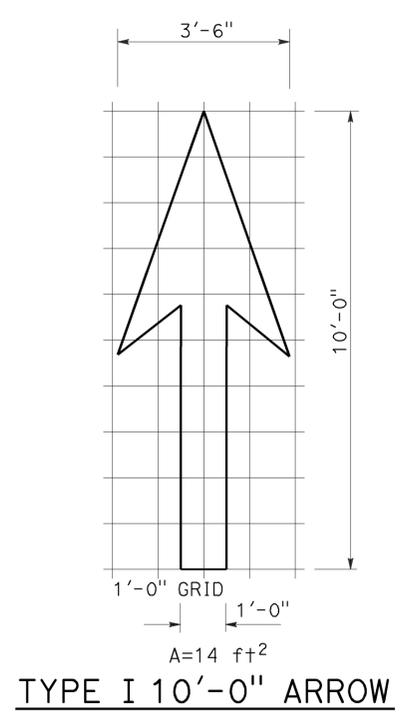
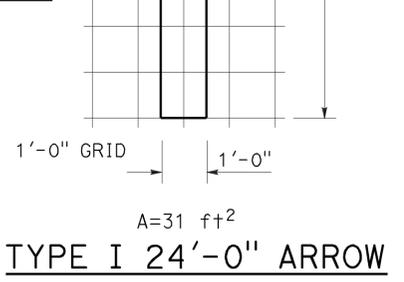
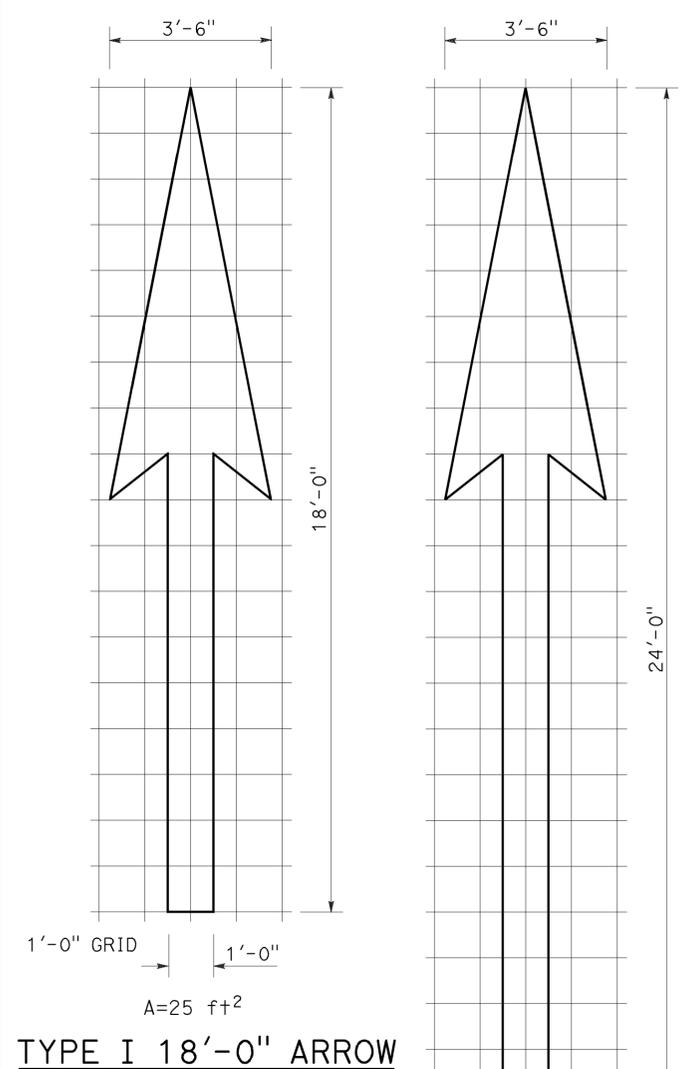
2010 REVISED STANDARD PLAN RSP A20C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	127	155

Robert L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 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 4-15-15



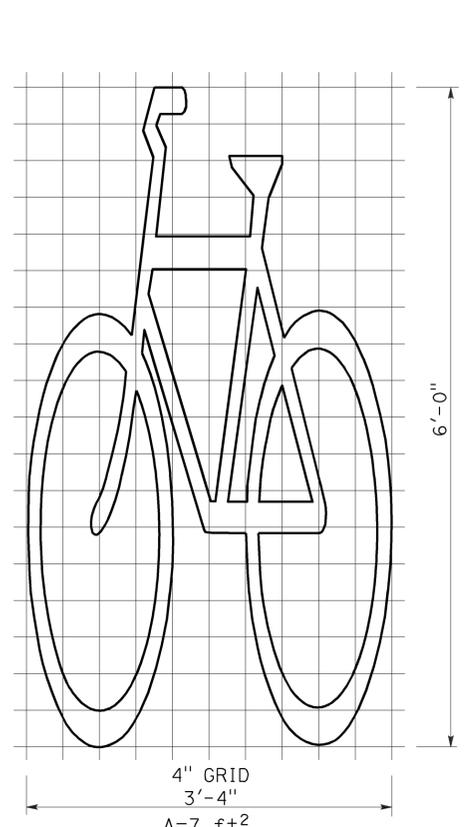
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

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

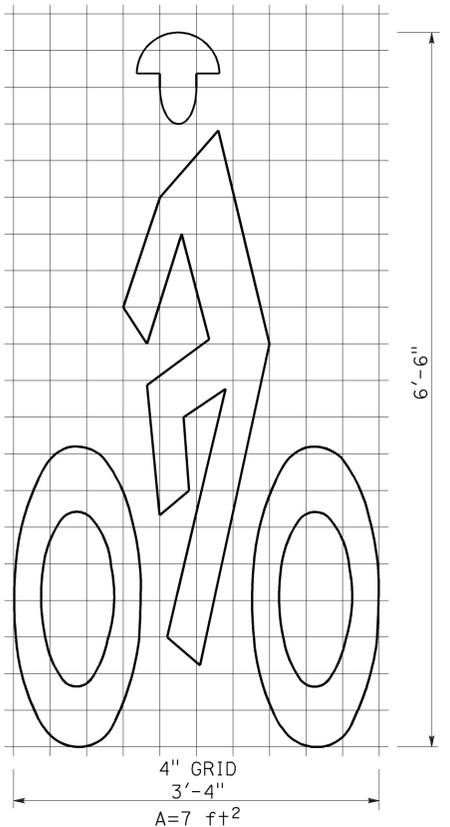
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	128	155

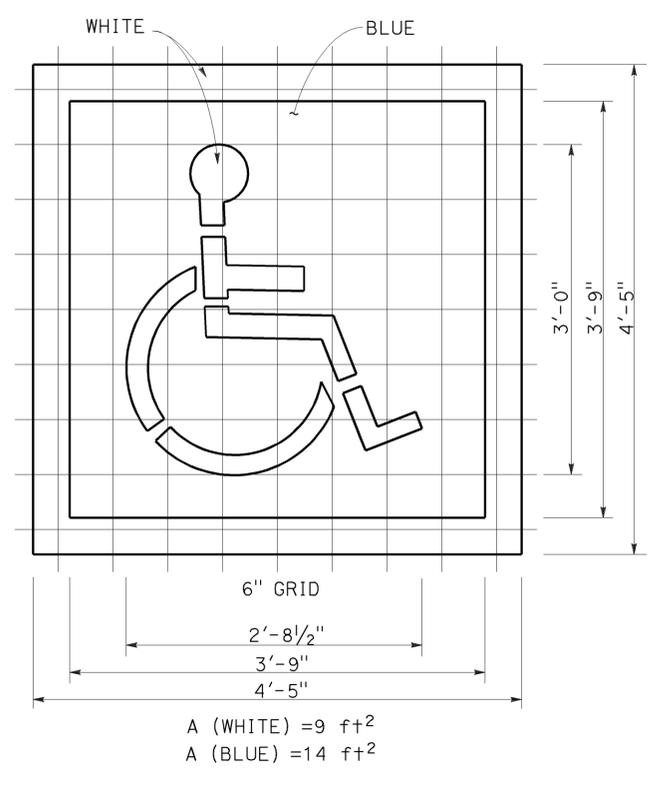
Robert L. McLaughlin
 REGISTERED CIVIL ENGINEER
 October 19, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



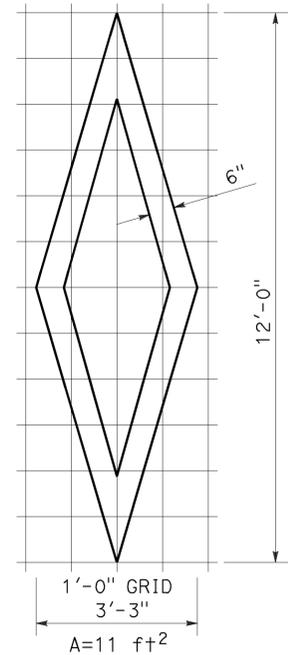
**BIKE LANE SYMBOL
WITHOUT PERSON**



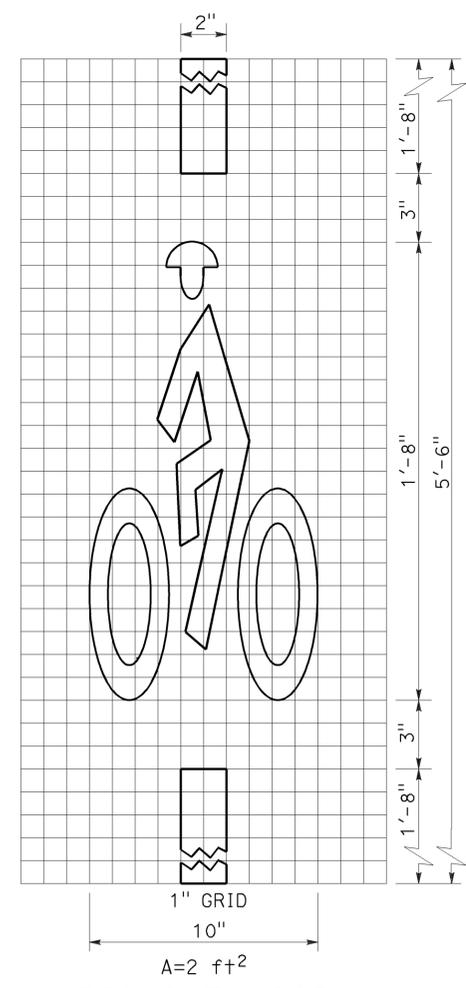
**BIKE LANE SYMBOL
WITH PERSON**



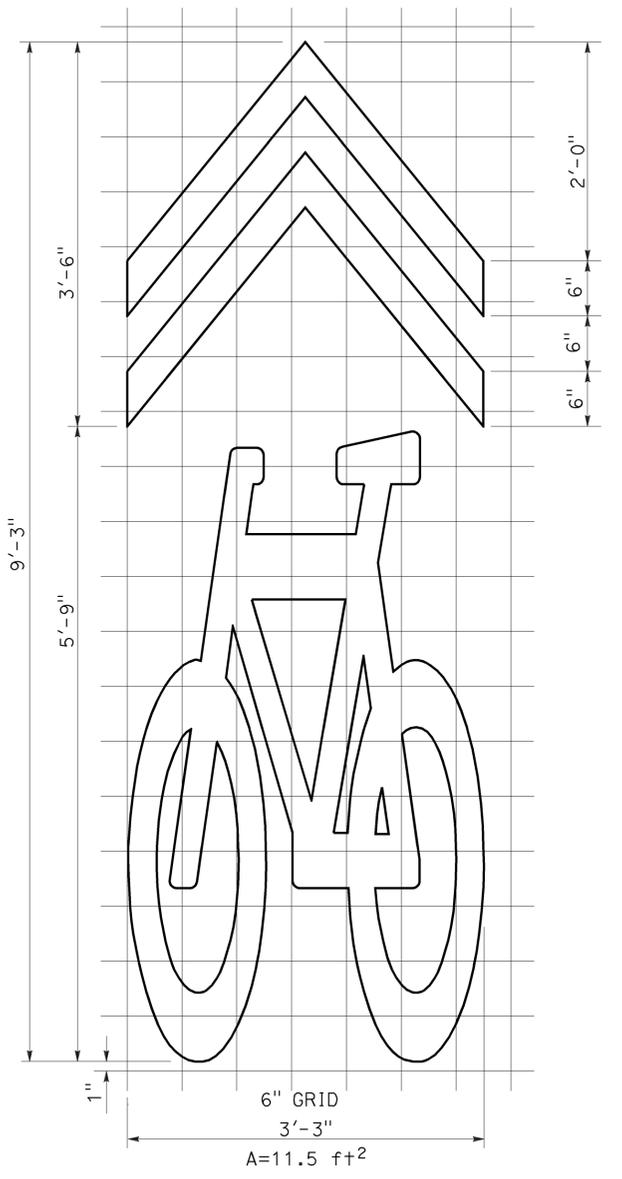
**INTERNATIONAL SYMBOL
OF ACCESSIBILITY (ISA) MARKING**



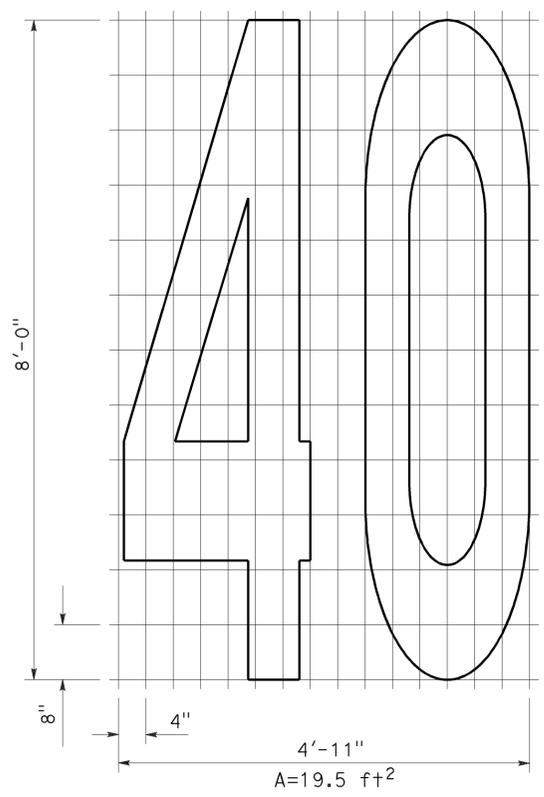
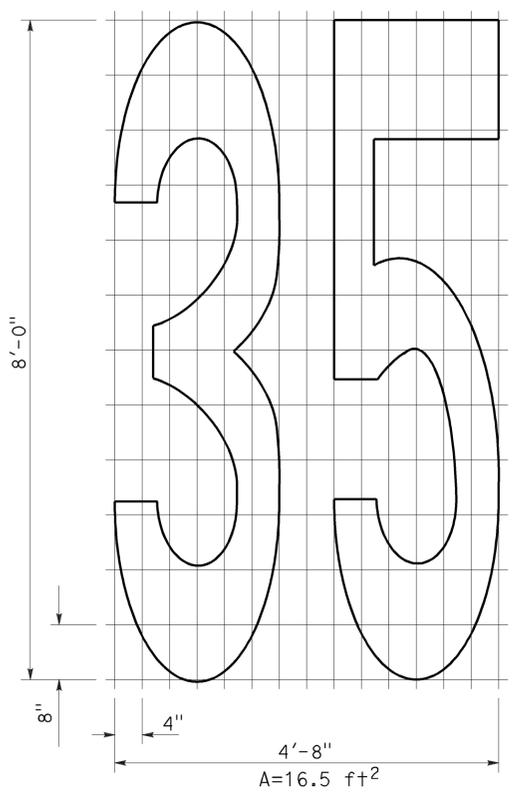
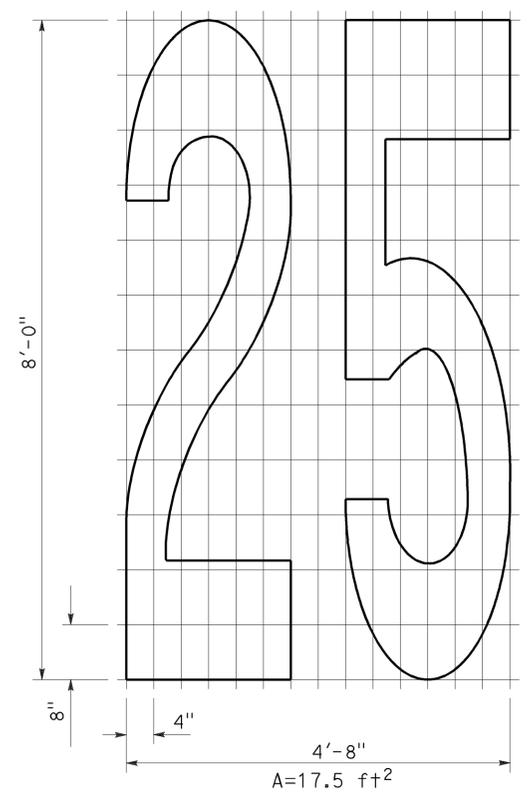
DIAMOND SYMBOL



**BICYCLE LOOP
DETECTOR SYMBOL**



SHARED ROADWAY BICYCLE MARKING



NUMERALS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
 SYMBOLS AND NUMERALS**
 NO SCALE

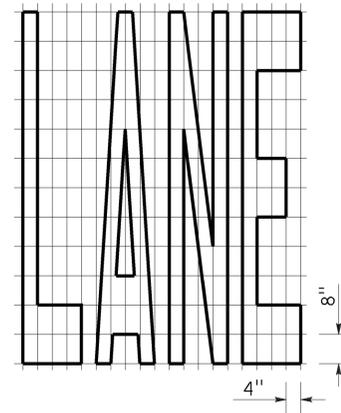
RSP A24C DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A24C DATED MAY 20, 2011 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24C

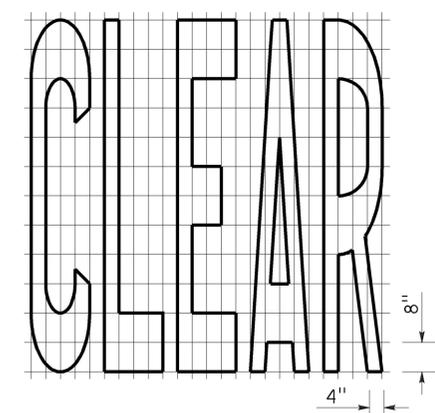
2010 REVISED STANDARD PLAN RSP A24C

TO ACCOMPANY PLANS DATED 4-15-15

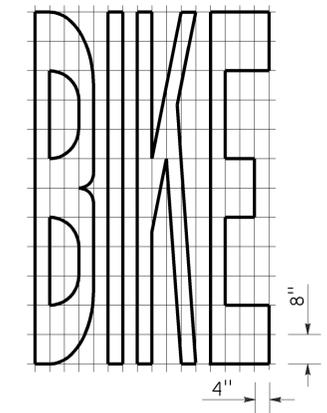
2010 REVISED STANDARD PLAN RSP A24E



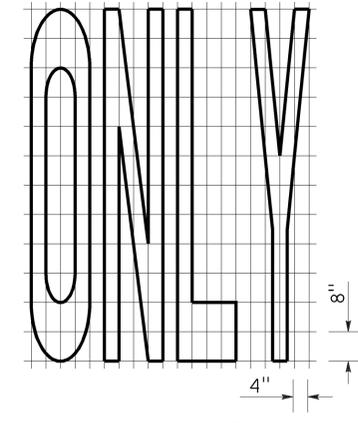
A=24 ft²



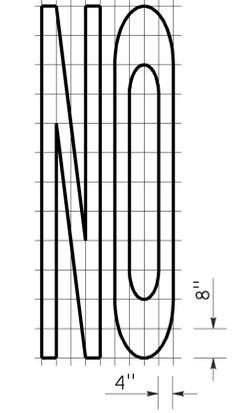
A=27 ft²



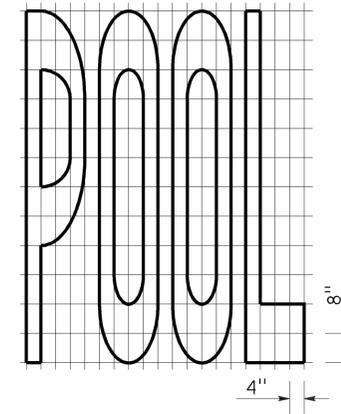
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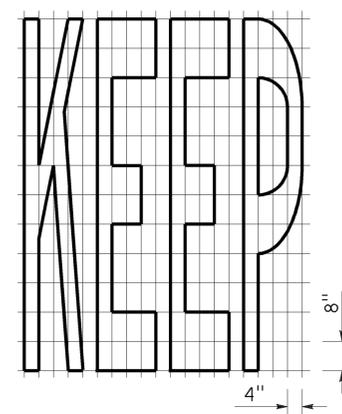
A=22 ft²



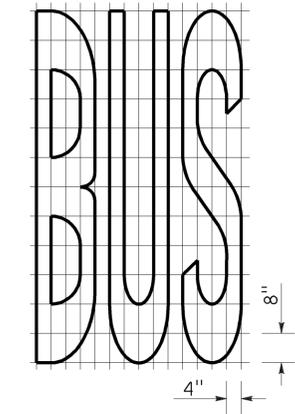
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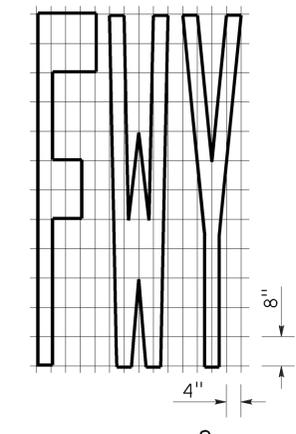
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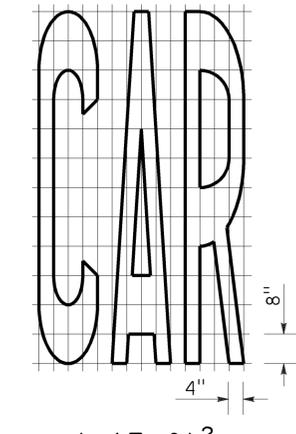
A=24 ft²



A=20 ft²

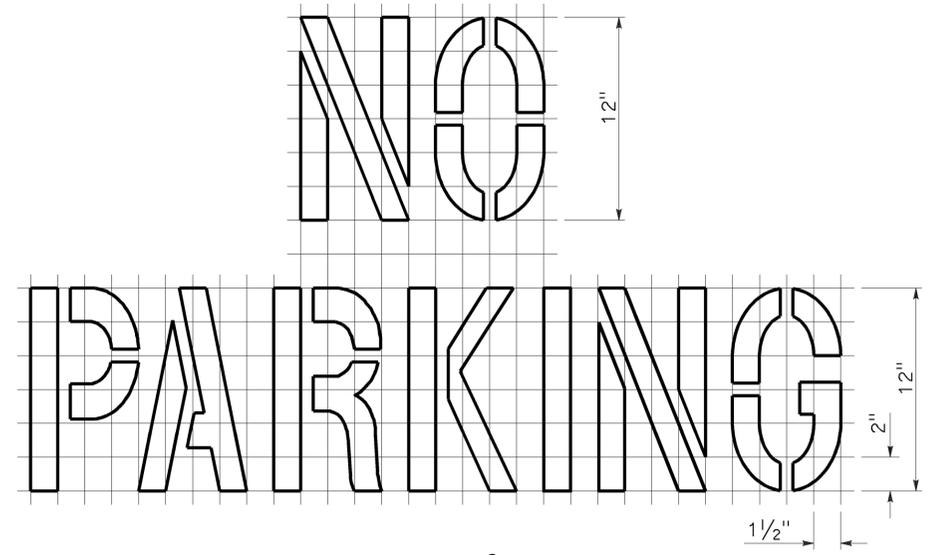


A=16 ft²

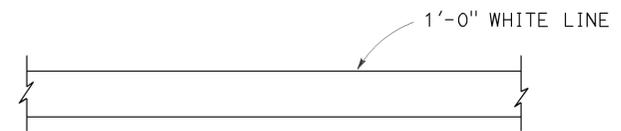


A=17 ft²

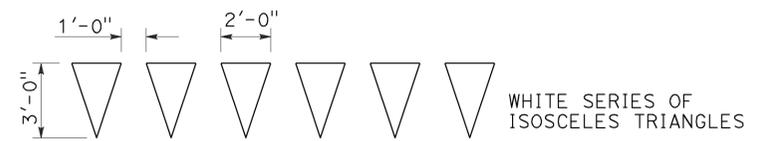
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



DIRECTION OF TRAVEL
YIELD LINE

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**

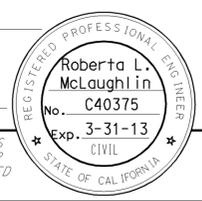
NO SCALE

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

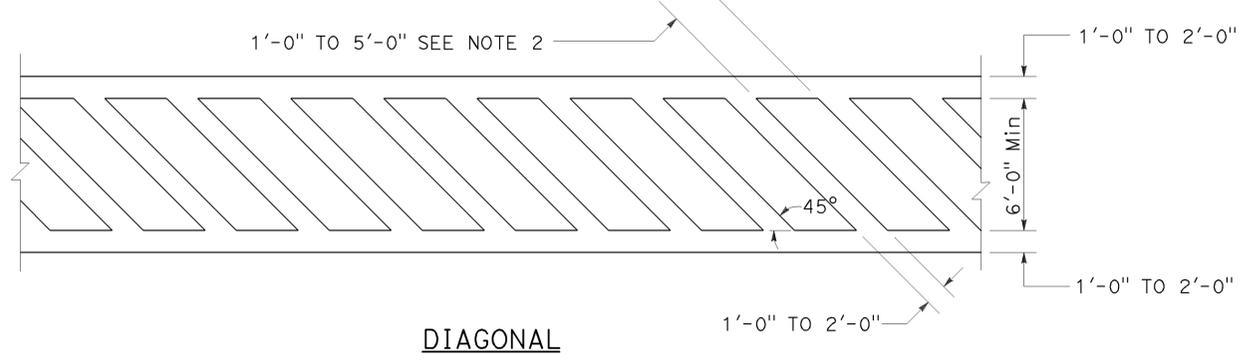
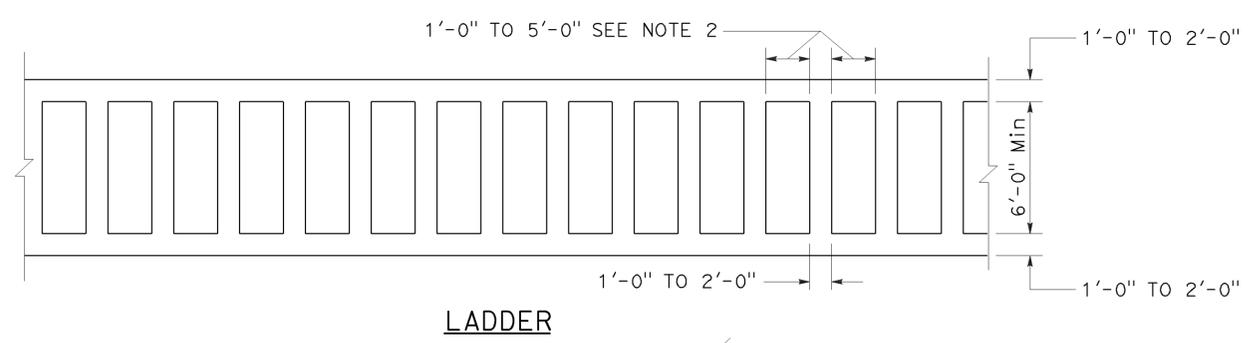
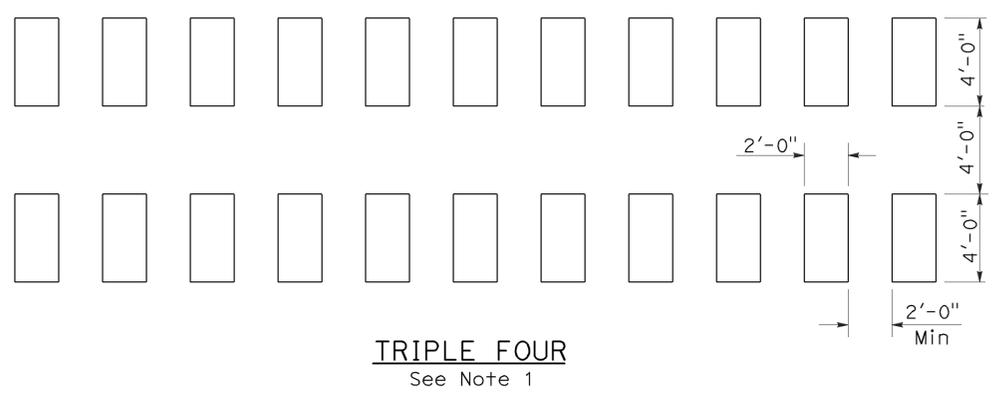
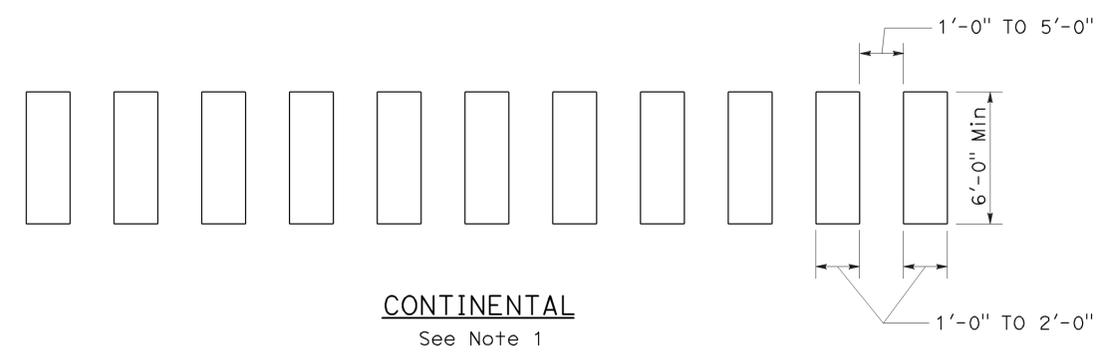
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	130	155

Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE

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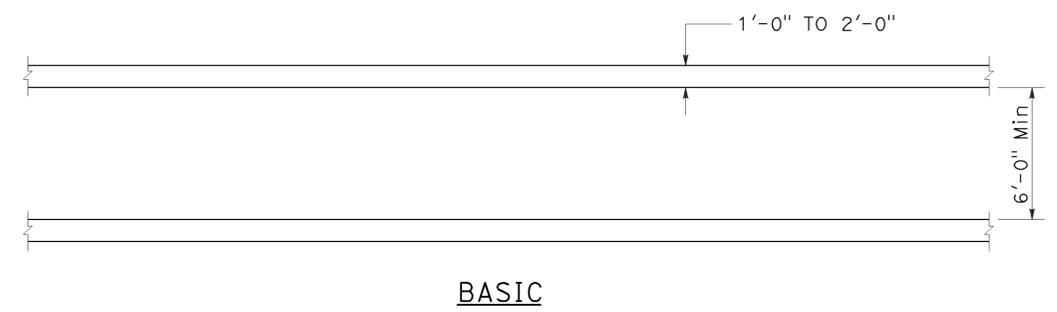
TO ACCOMPANY PLANS DATED 4-15-15



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.

2010 REVISED STANDARD PLAN RSP A24F

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	132	155

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

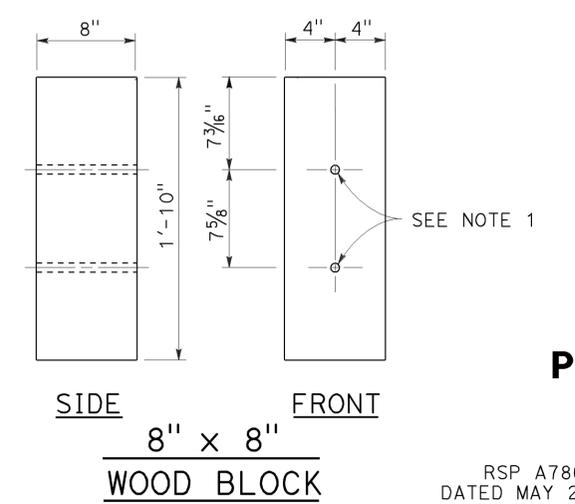
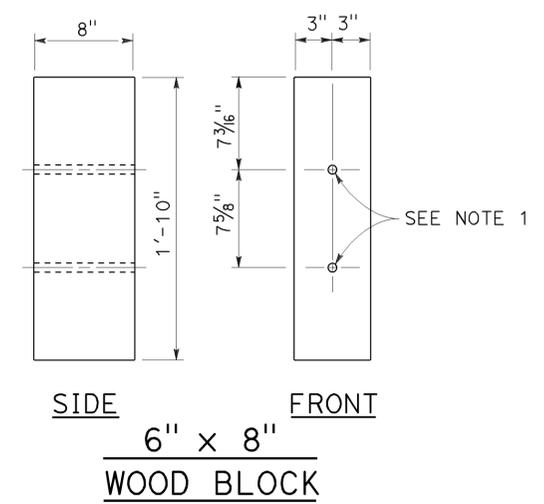
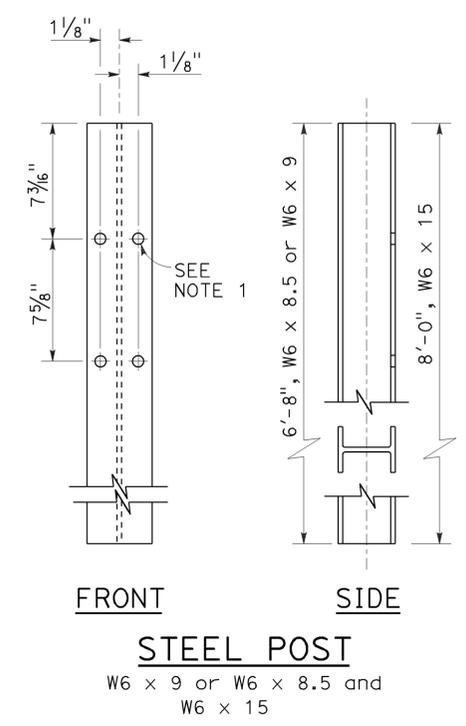
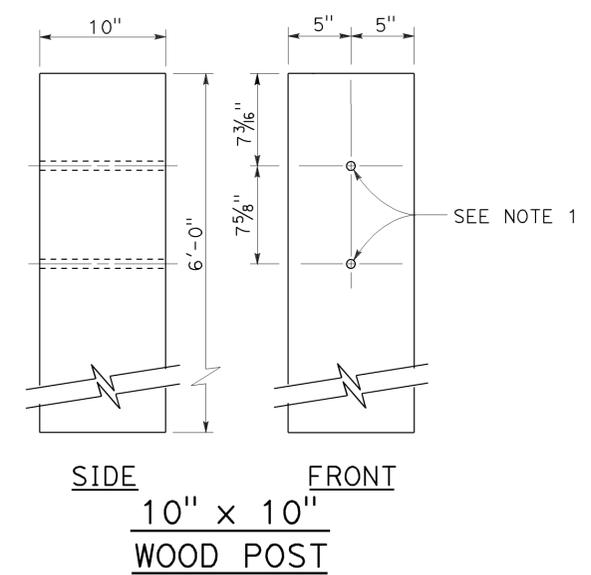
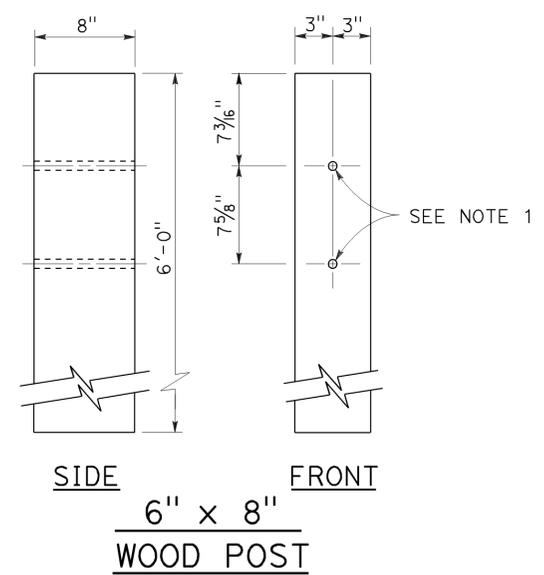
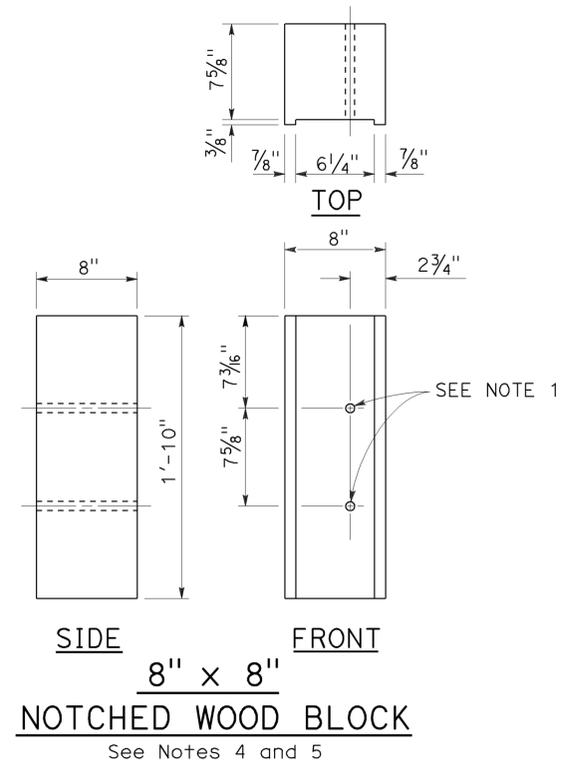
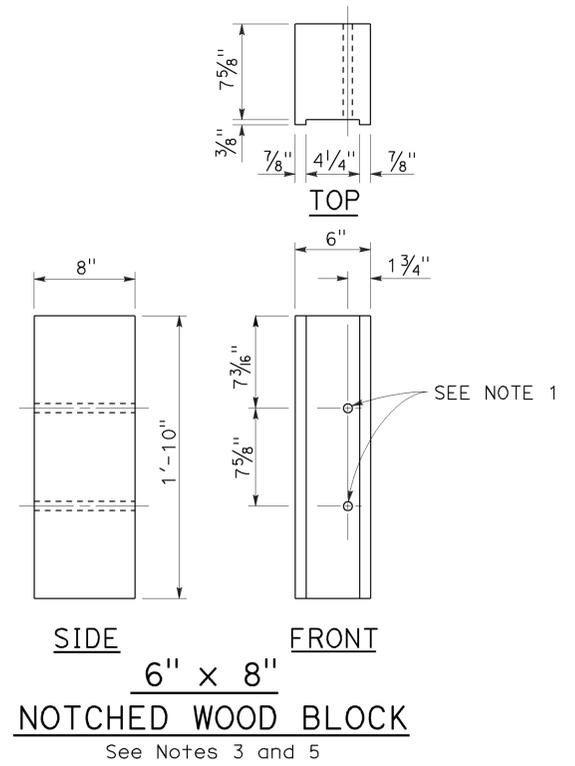
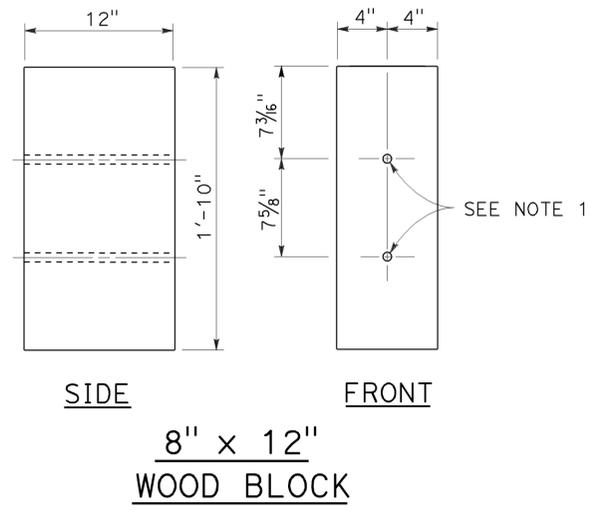
July 19, 2013
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 4-15-15

- NOTES:**
- All holes in steel post to be $\frac{13}{16}$ " Dia maximum. Holes in wood posts and wood blocks to be $\frac{3}{4}$ " Dia $\pm \frac{1}{16}$ ".
 - Dimensions shown for wood post are nominal.
 - For use with W6 x 8.5 or W6 x 9 steel post.
 - For use with W6 x 15 steel post.
 - Notched face of block faces steel post.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**THRIE BEAM BARRIER
POST AND BLOCK DETAILS**

NO SCALE

RSP A78C2 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A78C2
DATED MAY 20, 2011 - PAGE 92 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A78C2

2010 REVISED STANDARD PLAN RSP A78C2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	133	155

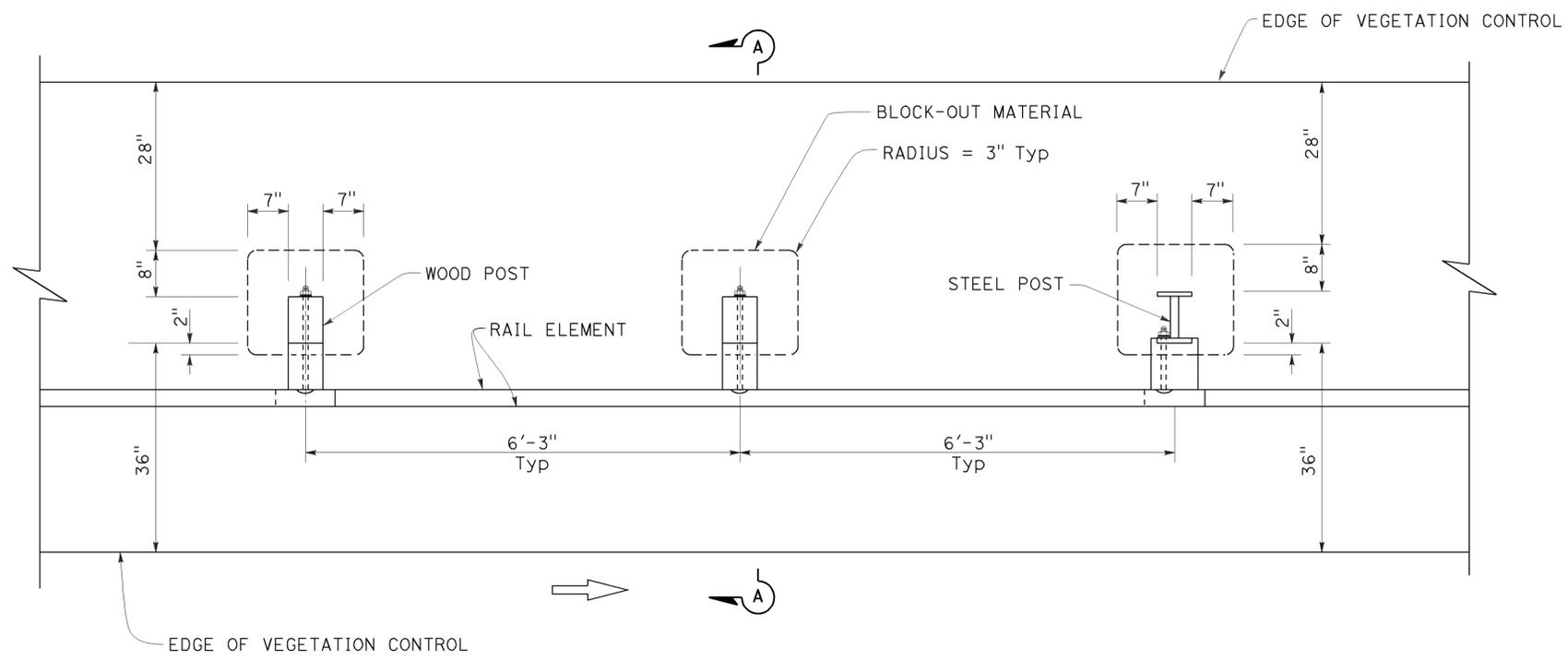
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

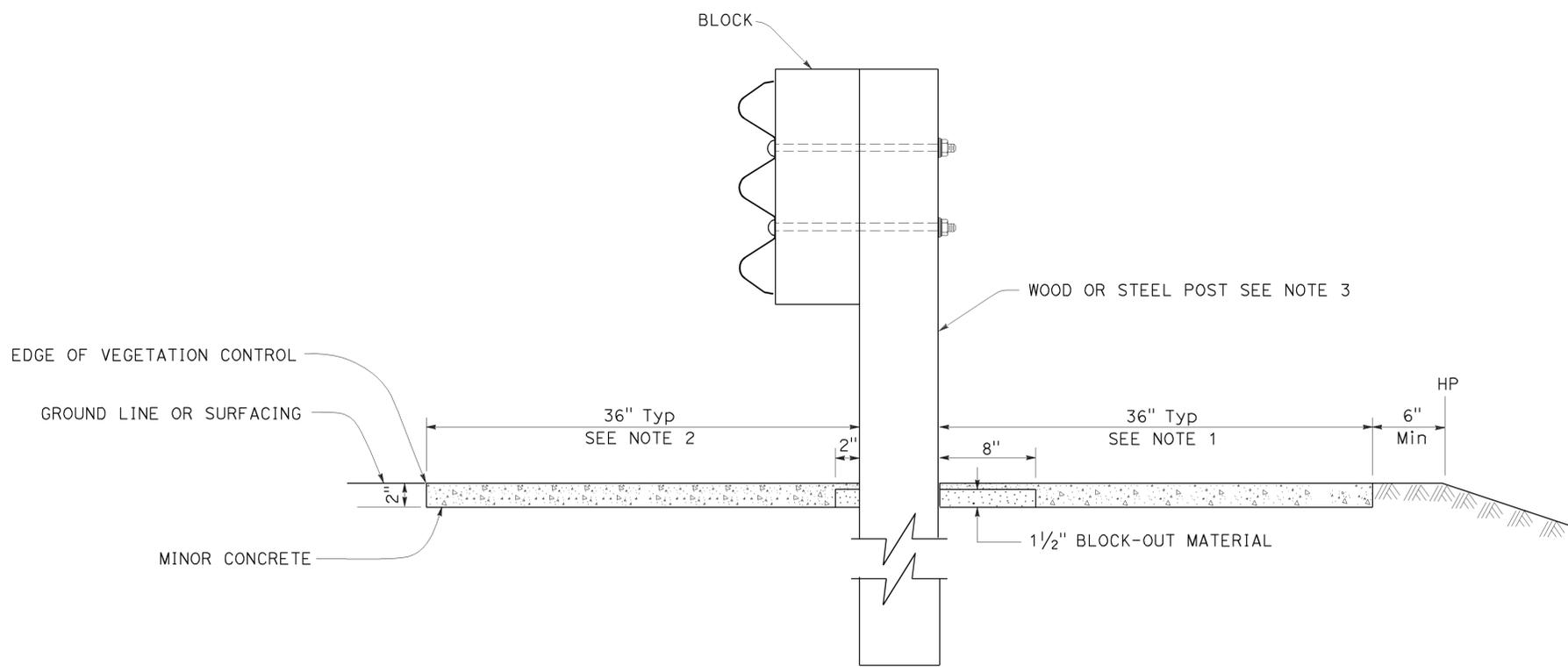
TO ACCOMPANY PLANS DATED 4-15-15



PLAN

NOTES:

1. Where the distance between back of post and hinge point is less than 42", construct vegetation control to 6" from hinge point while maintaining the 8" block-out at back of post. If the 8" block-out at back of post can not be maintained, construct vegetation control flush with the back edge of post.
2. Where dike is constructed under barrier, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 36" in front of the post, construct vegetation control to the edge of paved shoulder.
3. For wood and steel post sizes, see Revised Standard Plan RSP A77N2.
4. For details not shown, see Standard Plan A78B and Revised Standard Plan RSP A78A.



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**SINGLE THRIE BEAM BARRIER
TYPICAL VEGETATION CONTROL
STANDARD BARRIER RAILING SECTION**

NO SCALE

RSP A78C3 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A78C3
DATED MAY 20, 2011 - PAGE 93 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A78C3

2010 REVISED STANDARD PLAN RSP A78C3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	134	155

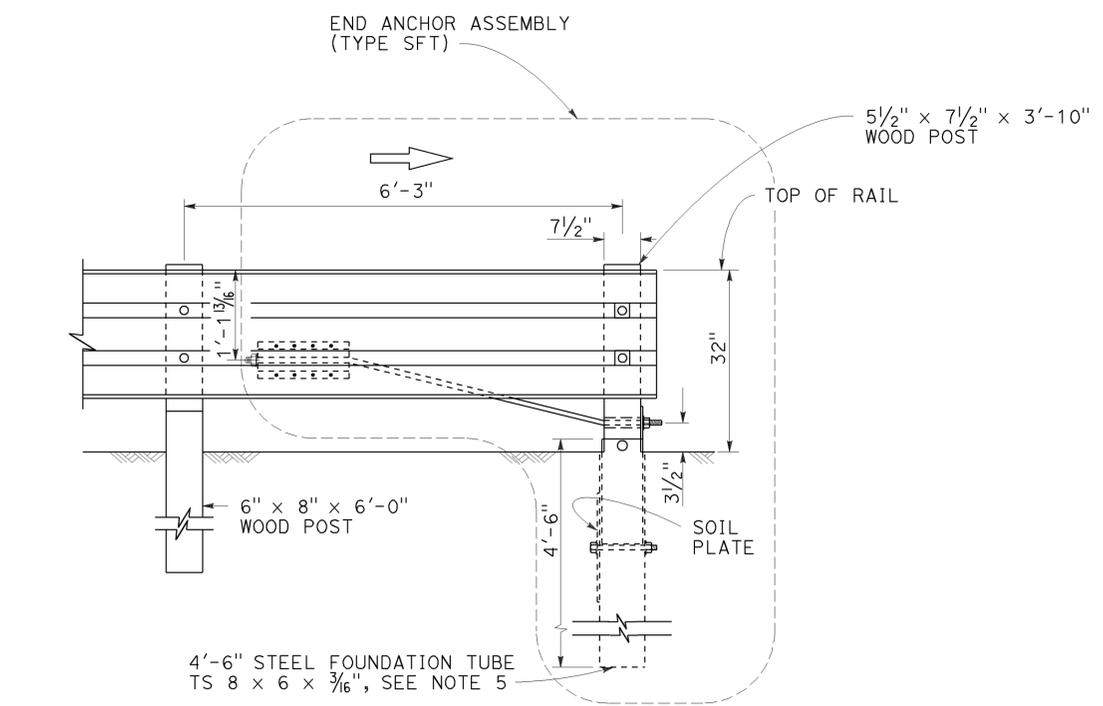
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

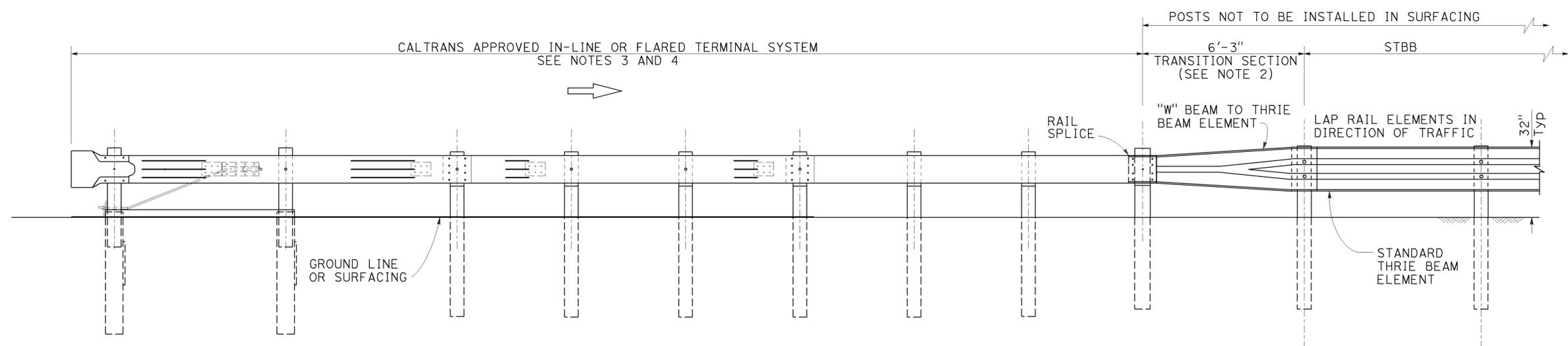
TO ACCOMPANY PLANS DATED 4-15-15



END ANCHOR FOR TRAFFIC DEPARTURE END OF SINGLE THRIE BEAM BARRIER
(For one-way roadways)
See Note 1

NOTES:

- For additional details of End Anchor Assembly (Type SFT), see Revised Standard Plan RSP A77S1.
- The "W" beam to thrie beam section is only required where the terminal system connection to the thrie beam barrier is a "W" beam rail.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment. The type of terminal system to be used will be shown on the Project Plans. Do not use a Caltrans approved 31" end treatment.
- A Caltrans approved crash cushion should be used in place of a terminal system end treatment where the backside of the railing would be exposed to traffic.
- A 6'-0" length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" ø hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.



ELEVATION
END TREATMENT FOR TRAFFIC APPROACH END OF SINGLE THRIE BEAM BARRIER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**SINGLE THRIE BEAM BARRIER
END ANCHOR ASSEMBLY AND
TERMINAL SYSTEM
END TREATMENT**

NO SCALE

RSP A78E1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A78E1 DATED MAY 20, 2011 - PAGE 99 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A78E1

2010 REVISED STANDARD PLAN RSP A78E1

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
08	SBd	10	32.9/R37.4	135	155

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 4-15-15

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

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

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

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	136	155

Theresa Gabriel
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 July 19, 2013
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REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 4-15-15

CONDUIT

SIGNAL EQUIPMENT

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

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)

SIGNAL EQUIPMENT Cont

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

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

		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

NOTES:

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

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

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

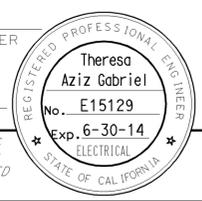
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

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

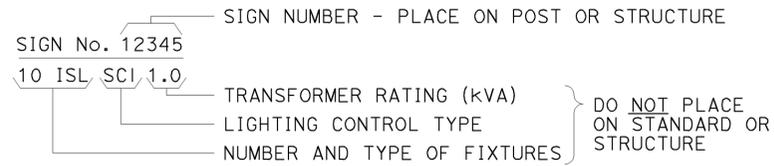
2010 REVISED STANDARD PLAN RSP ES-1B



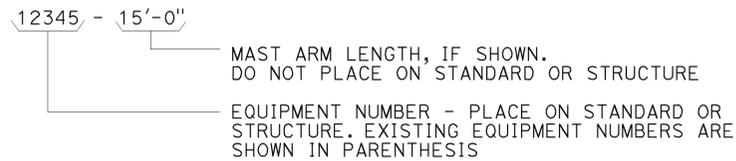
TO ACCOMPANY PLANS DATED 4-15-15

EQUIPMENT IDENTIFICATION

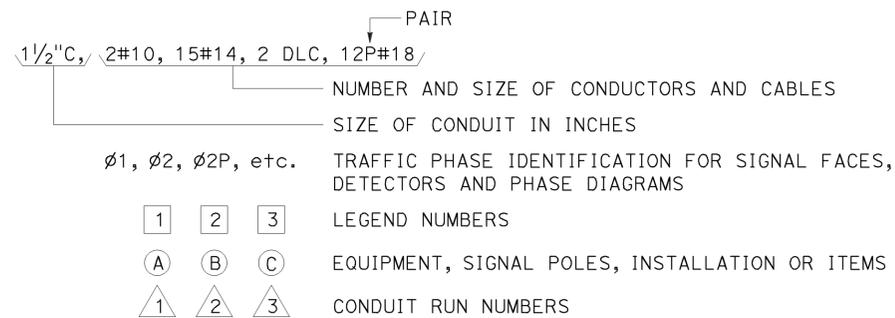
ILLUMINATED SIGN IDENTIFICATION NUMBER:



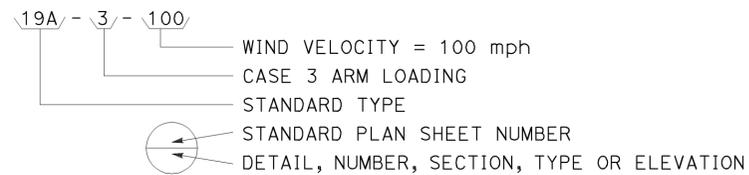
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



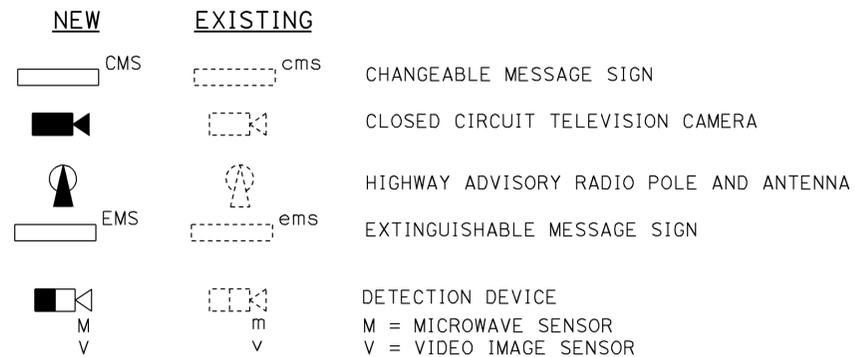
CONDUIT AND CONDUCTOR IDENTIFICATION:



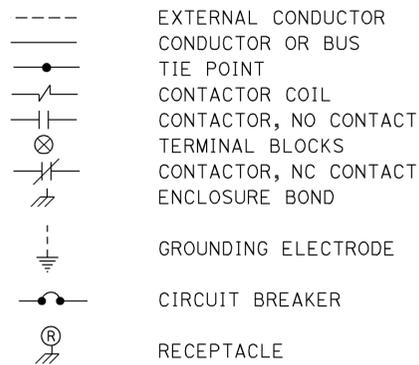
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



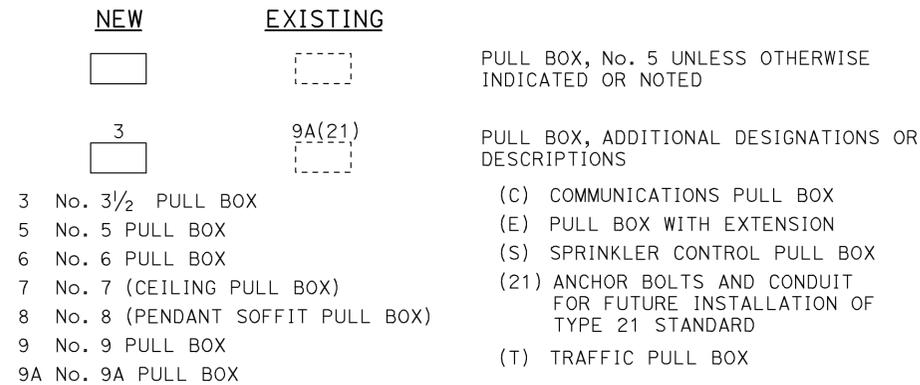
MISCELLANEOUS EQUIPMENT



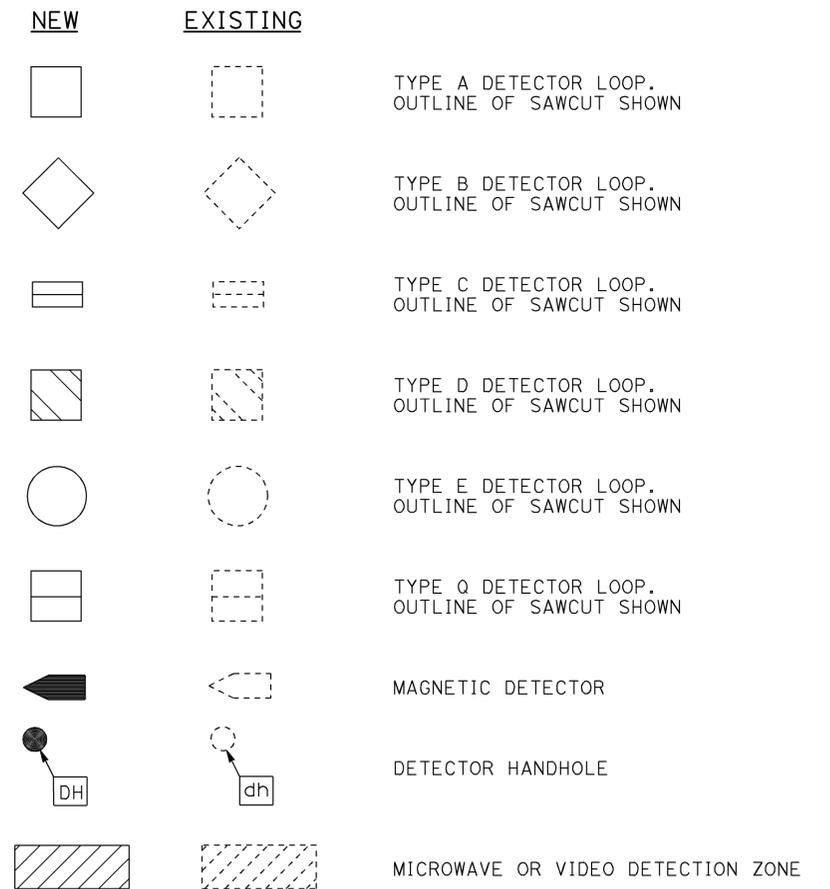
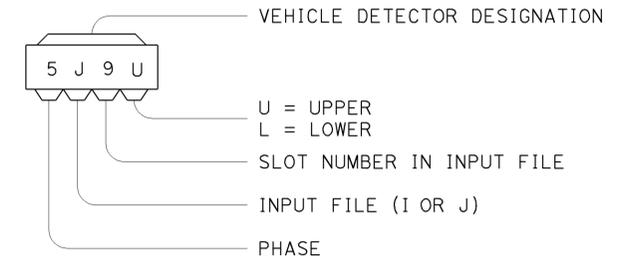
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

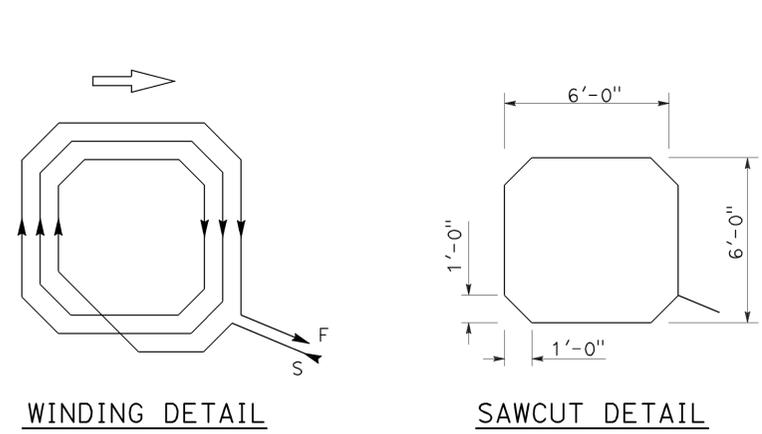
NO SCALE

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.

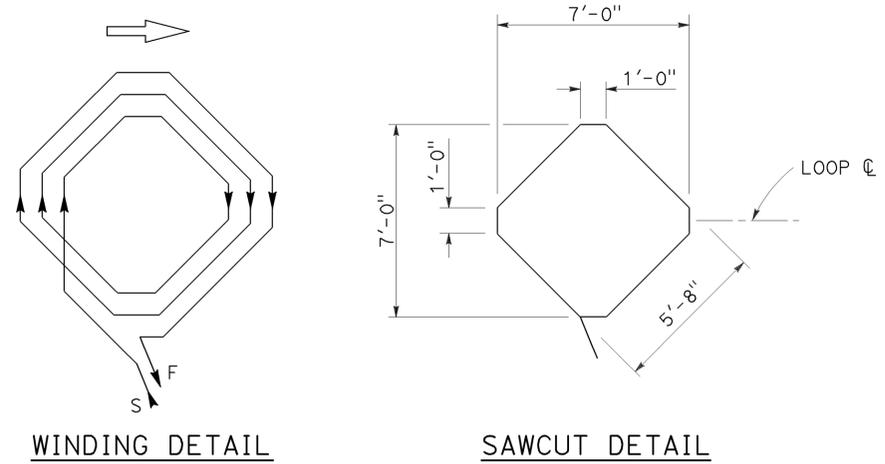
REVISED STANDARD PLAN RSP ES-1C

2010 REVISED STANDARD PLAN RSP ES-1C

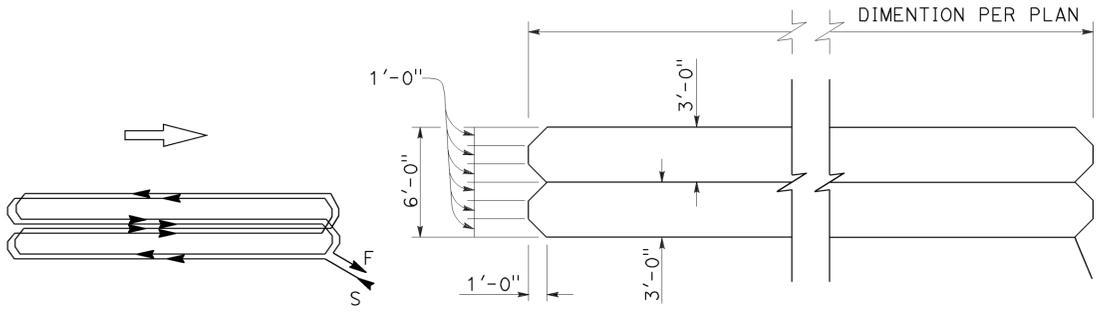
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	138	155
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER July 19, 2013 PLANS APPROVAL DATE <small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
TO ACCOMPANY PLANS DATED 4-15-15					



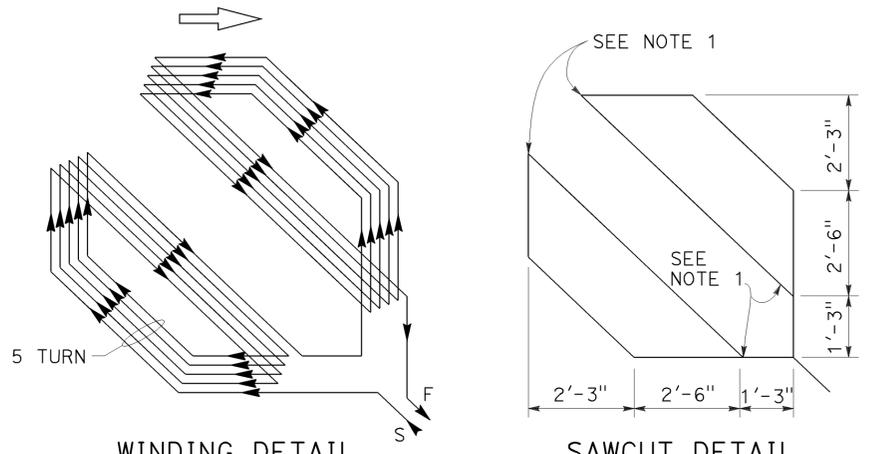
WINDING DETAIL
SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



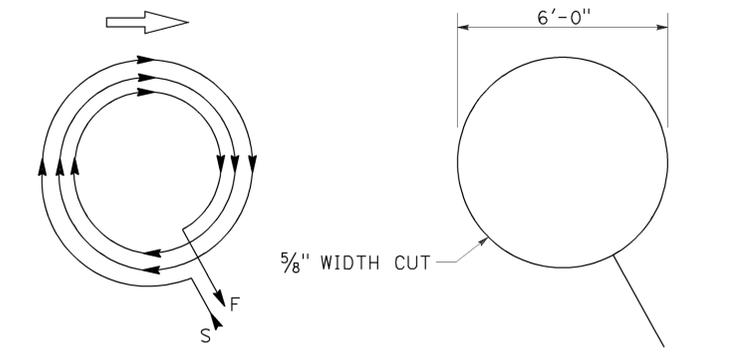
WINDING DETAIL
SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



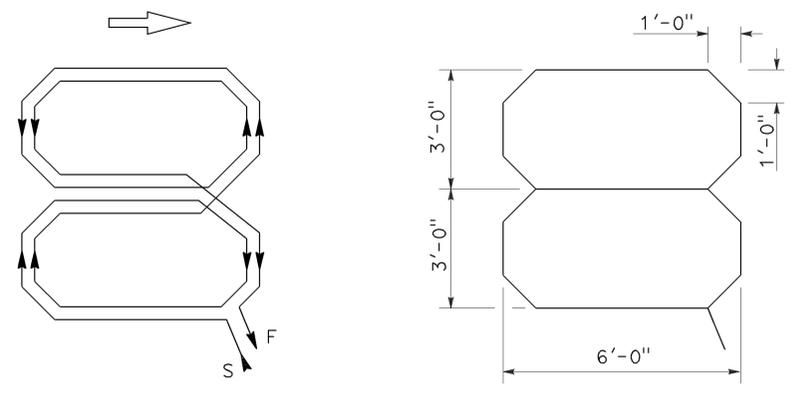
WINDING DETAIL
SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



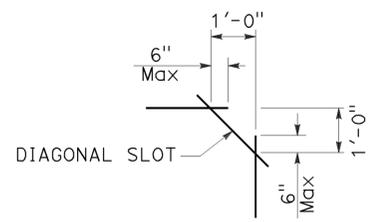
WINDING DETAIL
SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



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.

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.

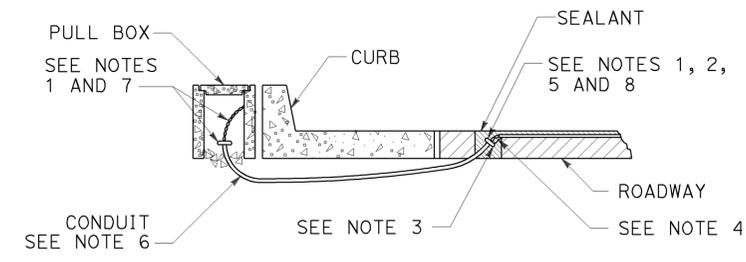
2010 REVISED STANDARD PLAN RSP ES-5B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	139	155

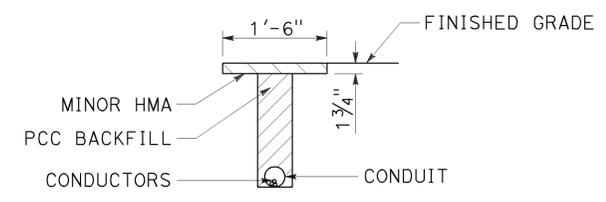
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 4-15-15

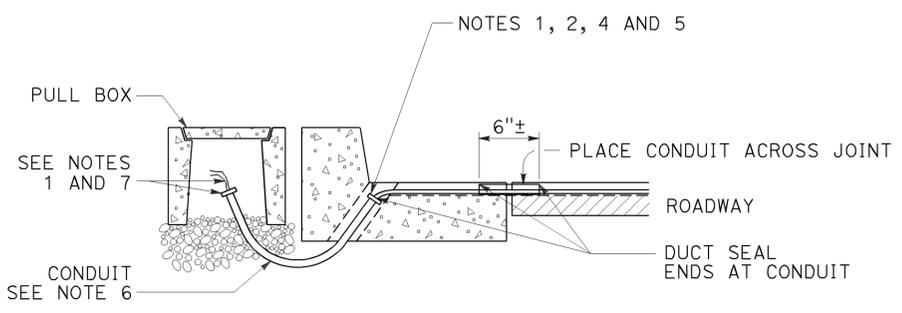
2010 REVISED STANDARD PLAN RSP ES-5D



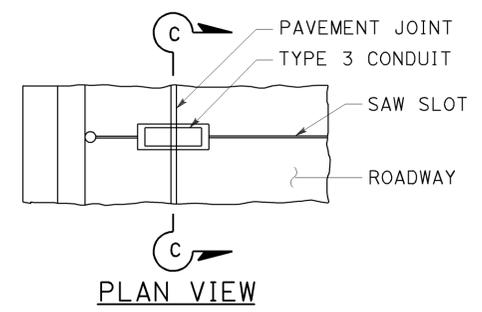
**TYPE A
CURB TERMINATION DETAIL**



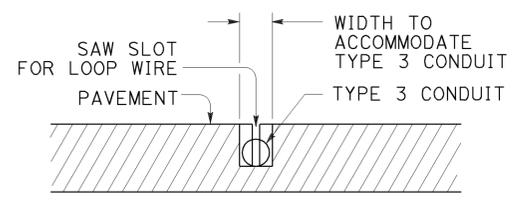
**"T" TRENCH
DETAIL T**



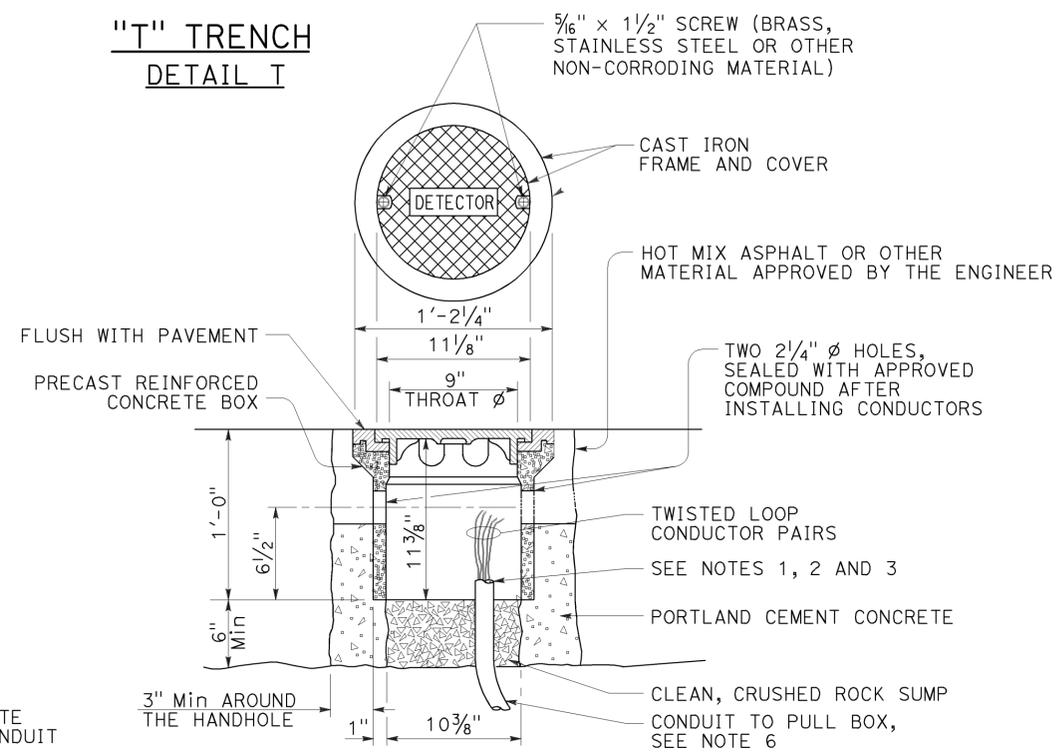
CROSS SECTION



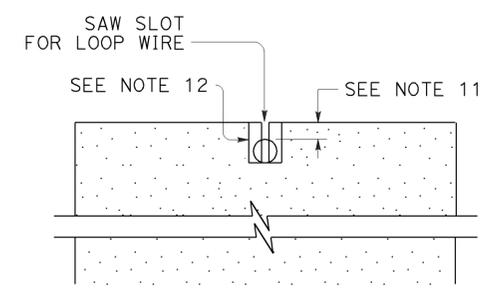
PLAN VIEW



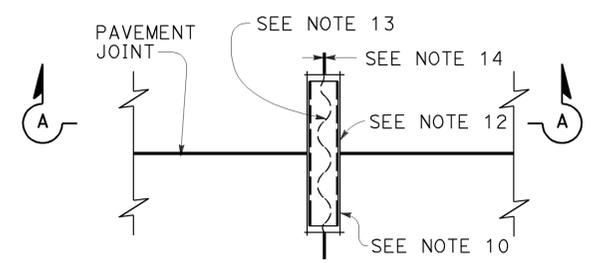
SECTION C-C



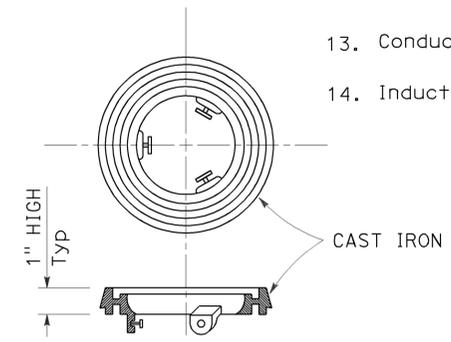
DETECTOR HANDHOLE DETAIL



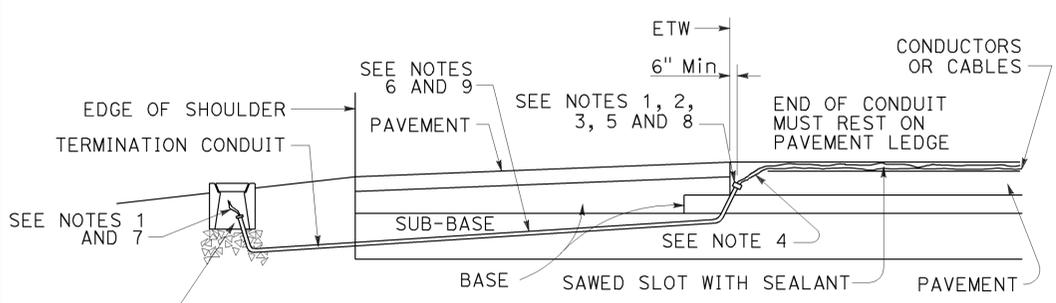
SECTION A-A



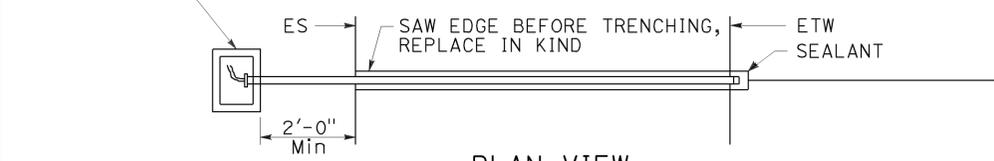
**PLAN VIEW
TYPICAL LOOP LEAD-IN DETAIL
AT PAVEMENT JOINT**



LOCKING GRADE RING



CROSS SECTION



**PLAN VIEW
SHOULDER TERMINATION DETAILS**

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	140	155

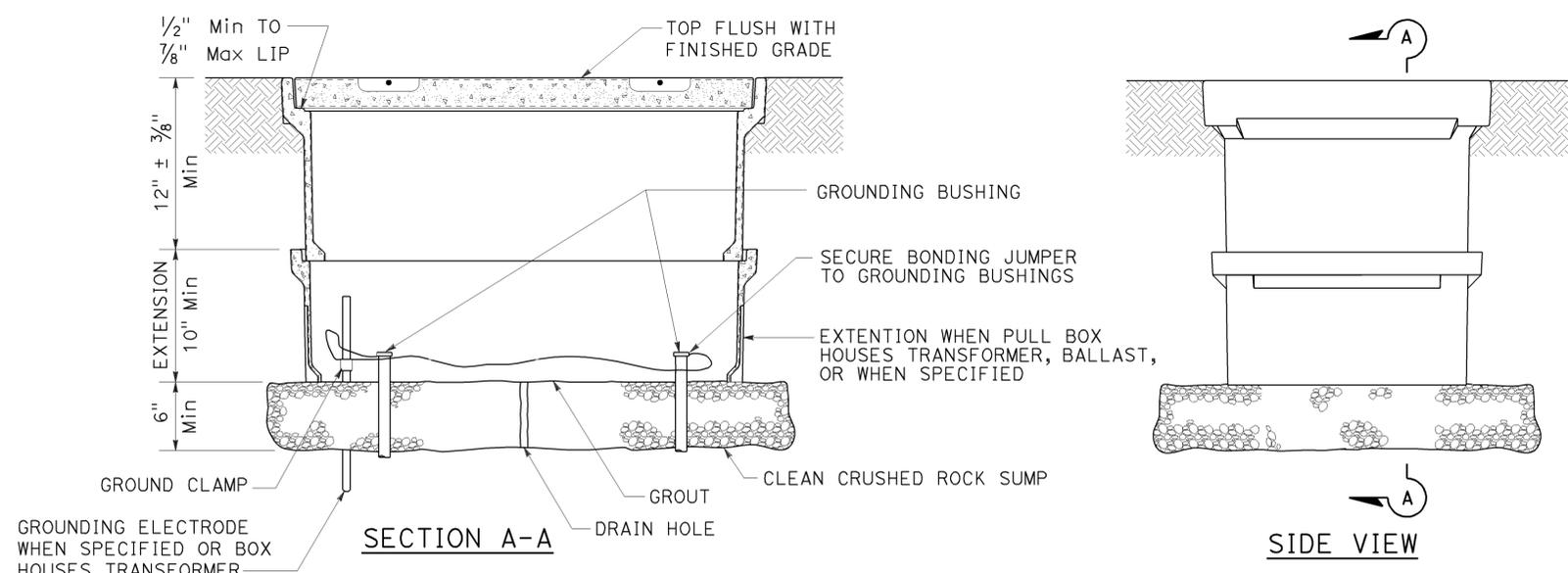
Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

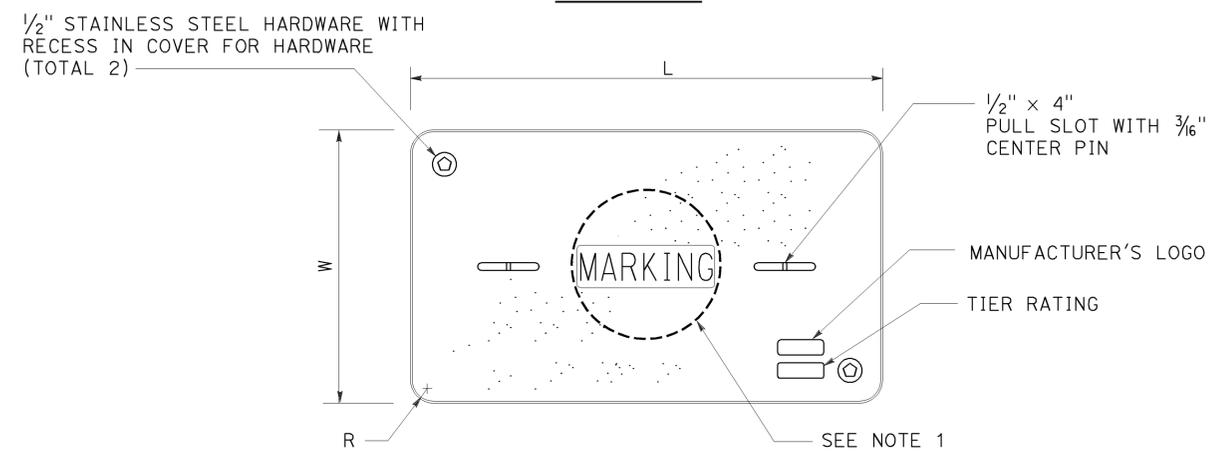
Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
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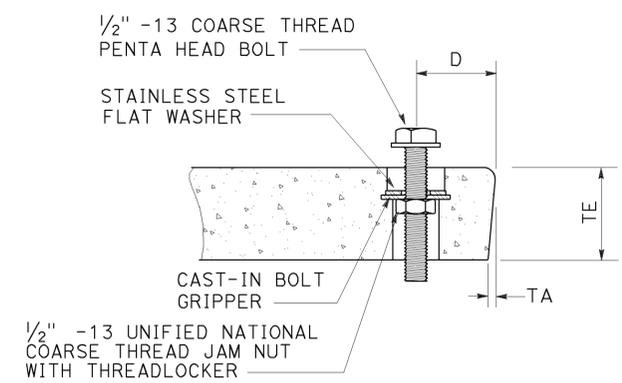
TO ACCOMPANY PLANS DATED 4-15-15



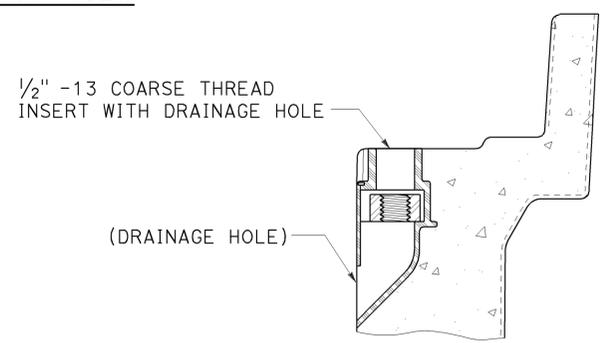
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES:

- Pull box covers shall be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - No. 3 1/2 pull box.
 - "SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - No. 5, 6, 9 or 9A pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - "LIGHTING-HIGH VOLTAGE" - Lighting or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATIONS" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communication line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
 - "BOOSTER PUMP" - Booster pump circuit.
- The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
- Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within 1/8". Top outside radius of covers and pull boxes shall have a 1/8" radius.
- Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.
- All dimensions for the cover for non-traffic pull box are nominal values.

DIMENSION TABLE

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

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

RSP ES-8A DATED JULY 19, 2013 SUPERSEDES RSP ES-8A DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8A

2010 REVISED STANDARD PLAN RSP ES-8A

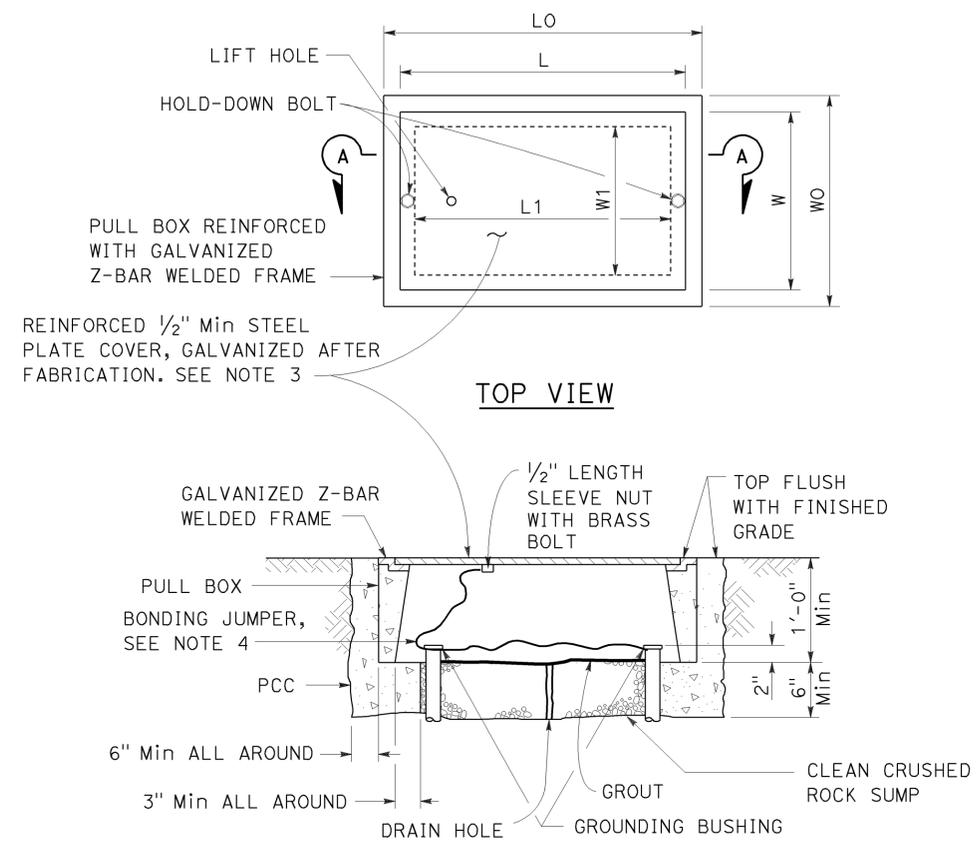
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	141	155

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE

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

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TO ACCOMPANY PLANS DATED 4-15-15



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

NOTES:

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

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

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

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

RSP ES-8B DATED JULY 19, 2013 SUPERSEDES RSP ES-8B DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8B

2010 REVISED STANDARD PLAN RSP ES-8B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	142	155

Gregory A. Balzer
LICENSED LANDSCAPE ARCHITECT

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 4-15-15

2010 REVISED STANDARD PLAN RSP H1

A

AB AGGREGATE BASE
 ABS ACRYLONITRILE-BUTADIENE-STYRENE
 AC ASPHALT CONCRETE
 ACC ARMOR-CLAD CONDUCTORS
 Adj ADJACENT/ADJUSTABLE
 AIC AUXILIARY IRRIGATION CONTROLLER
 Alt ALTERNATIVE
 AMEND AMENDMENT
 ARV AIR RELEASE VALVE
 AUTO AUTOMATIC
 AUX AUXILIARY
 AVB ATMOSPHERIC VACUUM BREAKER

B

B&B BALLED AND BURLAPPED
 B/B BRASS/BRONZE
 B/B/PL BRASS/BRONZE/PLASTIC
 B/PL BRASS/PLASTIC
 BFM BONDED FIBER MATRIX
 Bit Ctd BITUMINOUS COATED
 BP BOOSTER PUMP
 BPA BACKFLOW PREVENTER ASSEMBLY
 BPE BACKFLOW PREVENTER ENCLOSURE
 BV BALL VALVE

C

C CONDUIT
 CAP CORRUGATED ALUMINUM PIPE
 CARV COMBINATION AIR RELEASE VALVE
 CB COUPLING BAND
 CCA CAM COUPLER ASSEMBLY
 CEC CONTROLLER ENCLOSURE CABINET
 CHDPE CORRUGATED HIGH DENSITY POLYETHYLENE
 CL CHAIN LINK
 CNC CONTROL AND NEUTRAL CONDUCTORS
 Conc CONCRETE
 CP COPPER PIPE
 CS COMPOST SOCK
 CSP CORRUGATED STEEL PIPE
 CST CENTER STRIP
 CV CHECK VALVE

D

Dia DIAMETER
 DIP DUCTILE IRON PIPE
 DIT DRIP IRRIGATION TUBING
 DG DECOMPOSED GRANITE
 DN DIAMETER NOMINAL
 DVA DRIP VALVE ASSEMBLY

E

EC EROSION CONTROL
 ECTC EROSION CONTROL TECHNOLOGY COUNCIL
 ElecT ELECTRIC/ELECTRICAL
 Elev ELEVATION
 ELL ELBOW
 ENCL ENCLOSURE
 EP EDGE OF PAVEMENT
 ES EDGE OF SHOULDER
 EST END STRIP
 ESTB ESTABLISHMENT
 ETW EDGE OF TRAVELED WAY

F

F FULL CIRCLE
 F/P FULL/PART CIRCLE
 FCV FLOW CONTROL VALVE
 FERT FERTILIZER
 FG FINISHED GRADE
 FH FLEXIBLE HOSE
 FIPT FEMALE IRON PIPE THREAD
 FIS FERTILIZER INJECTOR SYSTEM
 FL FLOW LINE
 FR FIBER ROLL
 FS FLOW SENSOR
 FSC FLOW SENSOR CABLE
 FV FLUSH VALVE

G

Galv GALVANIZED
 GARV GARDEN VALVE
 GARVA GARDEN VALVE ASSEMBLY
 GM GRAVEL MULCH
 GPH GALLONS PER HOUR
 GPM GALLONS PER MINUTE
 GSP GALVANIZED STEEL PIPE
 GV GATE VALVE

H

H HALF CIRCLE
 HDPE HIGH DENSITY POLYETHYLENE
 HP HORSEPOWER/HINGE POINT
 HPL HIGH PRESSURE LINE
 Hwy HIGHWAY

I

IC IRRIGATION CONTROLLER
 ICC IRRIGATION CONTROLLER(S)
 IN CONTROLLER ENCLOSURE CABINET
 ID INSIDE DIAMETER
 IFS IRRIGATION FILTRATION SYSTEM
 IPS IRON PIPE SIZE
 IPT IRON PIPE THREAD
 Irr IRRIGATION

L

L LENGTH

M

Max MAXIMUM
 MBGR METAL BEAM GUARD RAILING
 MCV MANUAL CONTROL VALVE
 MIC MASTER IRRIGATION CONTROLLER
 Min MINIMUM
 MIPT MALE IRON PIPE THREAD
 Misc MISCELLANEOUS
 MtI MATERIAL
 MVP MAINTENANCE VEHICLE PULLOUT

N

NCN NO COMMON NAME
 NL NOZZLE LINE
 No. NUMBER
 NPT NATIONAL PIPE THREAD

O

O/C ON CENTER
 OD OUTSIDE DIAMETER
 OL OVERLAP

P

P PART CIRCLE
 PB PULL BOX
 PCC PORTLAND CEMENT CONCRETE
 PE POLYETHYLENE
 Pkt+ PACKET
 PL PLASTIC
 PLS PURE LIVE SEED
 PLT PLANT/PLANTING
 PLT ESTB PLANT ESTABLISHMENT
 PM POST MILE
 PR PRESSURE RATED
 PRLV PRESSURE RELIEF VALVE
 PRV PRESSURE REGULATING VALVE
 PVC POLYVINYL CHLORIDE
 Pvm+ PAVEMENT

Q

Q QUARTER CIRCLE
 QCV QUICK COUPLING VALVE

R

R RADIUS
 RCP REINFORCED CONCRETE PIPE
 RCV REMOTE CONTROL VALVE
 RCVM REMOTE CONTROL VALVE (MASTER)
 RCVMF REMOTE CONTROL VALVE (MASTER) W/FLOW SENSOR
 RCVP REMOTE CONTROL VALVE W/PRESSURE REGULATOR
 RCW RECYCLED WATER
 RECP ROLLED EROSION CONTROL PRODUCT
 REQ REQUIRED
 RICS REMOTE IRRIGATION CONTROL SYSTEM
 R/W RIGHT OF WAY

S

S SLIP
 SCH SCHEDULE
 SF STATE-FURNISHED
 Shld SHOULDER
 Sq SQUARE
 SST SIDE STRIP
 Sta STATION
 Std STANDARD
 SW SIDEWALK/SOUND WALL

T

T THIRD CIRCLE/THREAD
 TLS TRUCK LOADING STANDPIPE
 TQ THREE QUARTER CIRCLE
 TRM TURF REINFORCEMENT MAT
 TT TWO-THIRDS CIRCLE
 TWSA TREE WELL SPRINKLER ASSEMBLY
 Typ TYPICAL

U

UG UNDERGROUND

W

W WIDTH
 W/ WITH
 WM WATER METER
 WS WYE STRAINER
 WSA WYE STRAINER ASSEMBLY
 WSP WELDED STEEL PIPE
 WWM WELDED WIRE MESH

NOTE:
 For additional abbreviations,
 see Standard Plans A10A and A10B.

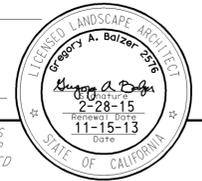
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**LANDSCAPE AND
 EROSION CONTROL ABBREVIATIONS**
 NO SCALE

RSP H1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H1
 DATED MAY 20, 2011 - PAGE 218 OF THE STANDARD PLANS BOOK DATED 2010.

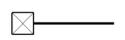
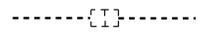
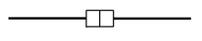
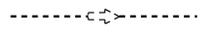
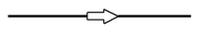
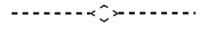
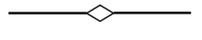
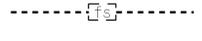
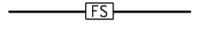
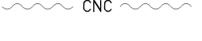
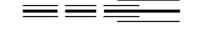
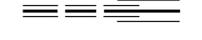
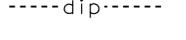
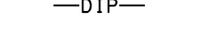
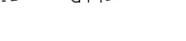
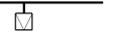
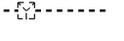
REVISED STANDARD PLAN RSP H1

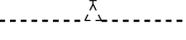
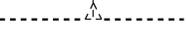
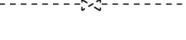
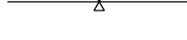
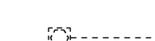
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	143	155

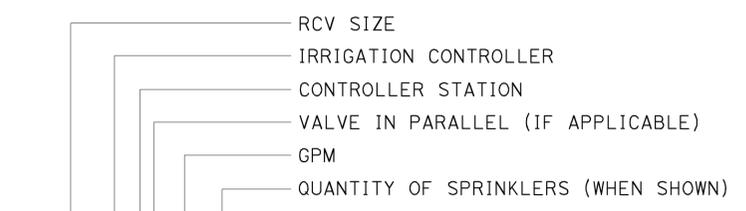

 LICENSED LANDSCAPE ARCHITECT
 November 15, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



TO ACCOMPANY PLANS DATED 4-15-15

EXISTING	NEW	ITEM DESCRIPTION
		WATER METER (WM)
		BACKFLOW PREVENTER ASSEMBLY (BPA)
		BACKFLOW PREVENTER ENCLOSURE (BPE)
		BOOSTER PUMP (BP)
		TRUCK LOADING STANDPIPE (TLS)
		FLOW SENSOR (FS)
		MASTER IRRIGATION CONTROLLER (MIC)
		AUXILIARY IRRIGATION CONTROLLER (AIC)
		IRRIGATION CONTROLLER (IC) IRRIGATION CONTROLLER (IC) (BATTERY) IRRIGATION CONTROLLER (IC) (SOLAR) IRRIGATION CONTROLLER (IC) (TWO WIRE) IRRIGATION CONTROLLER(S) IN CONTROLLER ENCLOSURE CABINET (ICC)
		ARMOR-CLAD CONDUCTORS (ACC)
		CONTROL AND NEUTRAL CONDUCTORS (CNC)
		IRRIGATION CONDUIT
		EXTEND IRRIGATION CONDUIT
		DUCTILE IRON PIPE (SUPPLY LINE) (MAIN) (DIP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (MAIN) (GSP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (LATERAL) (GSP)
		PLASTIC PIPE (SUPPLY LINE) (MAIN)
		PLASTIC PIPE (SUPPLY LINE) (LATERAL)
		COPPER PIPE (SUPPLY LINE)
		DRIP IRRIGATION TUBING
		REMOTE CONTROL VALVE (RCV) REMOTE CONTROL VALVE (MASTER) (RCVM) REMOTE CONTROL VALVE (MASTER) W/FLOW METER (RCVMF)
		REMOTE CONTROL VALVE W/PRESSURE REGULATOR (RCVP)
		EXISTING MANUAL CONTROL VALVE (MCV)
		DRIP VALVE ASSEMBLY (DVA)
		WYE STRAINER ASSEMBLY (WSA)

EXISTING	NEW	ITEM DESCRIPTION
		GATE VALVE (GV)
		BALL VALVE (BV)
		QUICK COUPLING VALVE (QCV)
		CAM COUPLER ASSEMBLY (CCA)
		GARDEN VALVE ASSEMBLY (GARVA)
		PRESSURE REGULATING VALVE (PRV)
		PRESSURE RELIEF VALVE (PRLV)
		FLOW CONTROL VALVE (FCV)
		COMBINATION AIR RELEASE VALVE (CARV)
		CHECK VALVE (CV)
		FLUSH VALVE (FV)
		EXISTING NOZZLE LINE W/TURNING UNION
		EXISTING IRRIGATION SYSTEM
		EXISTING IRRIGATION SYSTEM TO BE REMOVED
		CHAIN LINK GATE
		QUICK COUPLING VALVE W/SPRINKLER PROTECTOR
		SPRINKLER W/SPRINKLER PROTECTOR
		CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING
		FIBER ROLL
		COMPOST SOCK



* 2 1/2" - A - 2b - 40 - 60

VALVE CODE

* VALVE CODES FOR EXISTING VALVES ARE SHOWN IN A DASHED ENCLOSURE.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
LANDSCAPE AND EROSION CONTROL SYMBOLS
NO SCALE

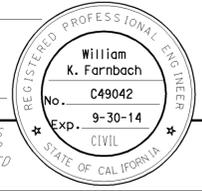
RSP H2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP H2 DATED JULY 19, 2013 AND STANDARD PLAN H2 DATED MAY 20, 2011 - PAGE 219 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H2

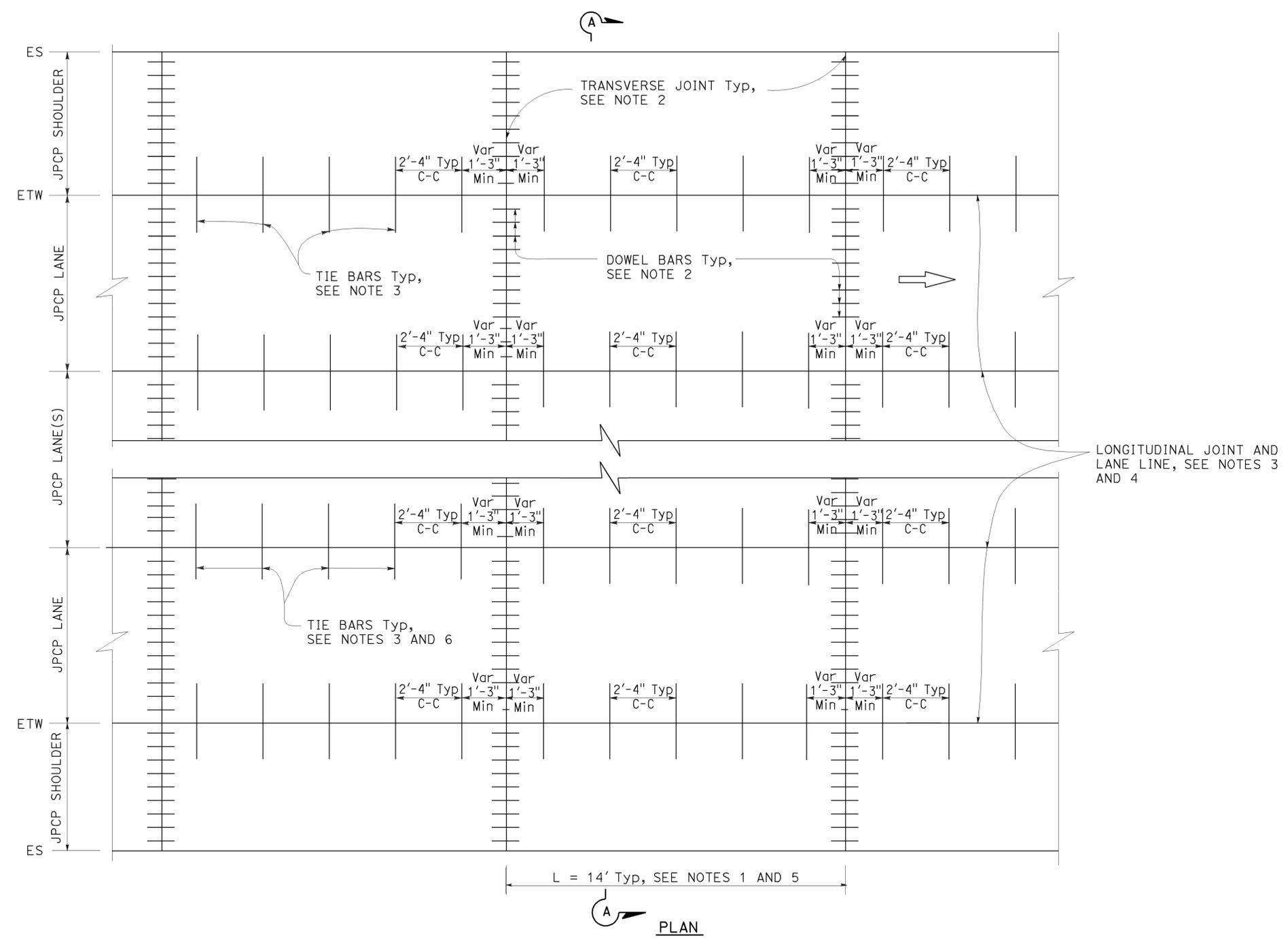
2010 REVISED STANDARD PLAN RSP H2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	144	155

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.

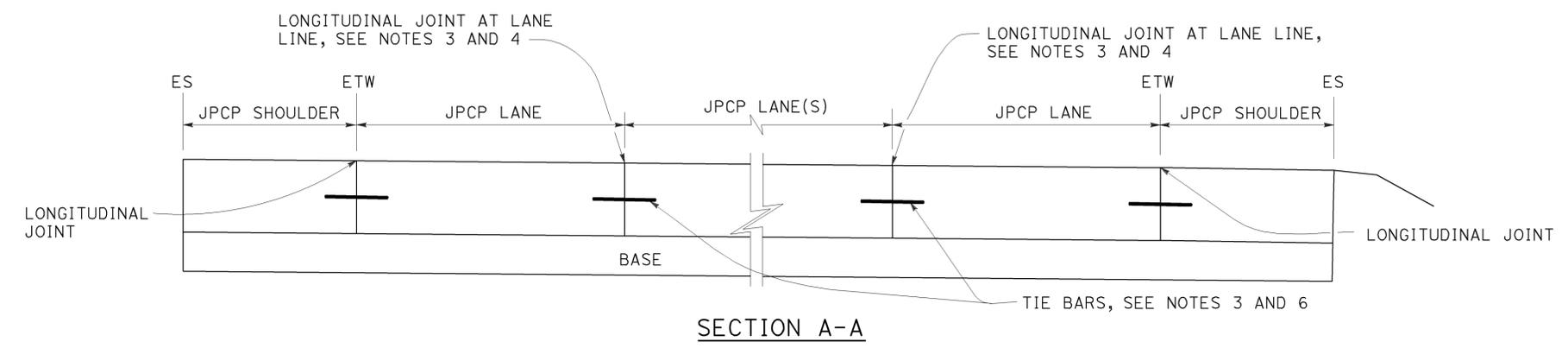


TO ACCOMPANY PLANS DATED 4-15-15



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

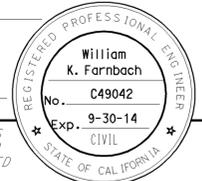
RSP P1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P1
 DATED MAY 20, 2011 - PAGE 125 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P1

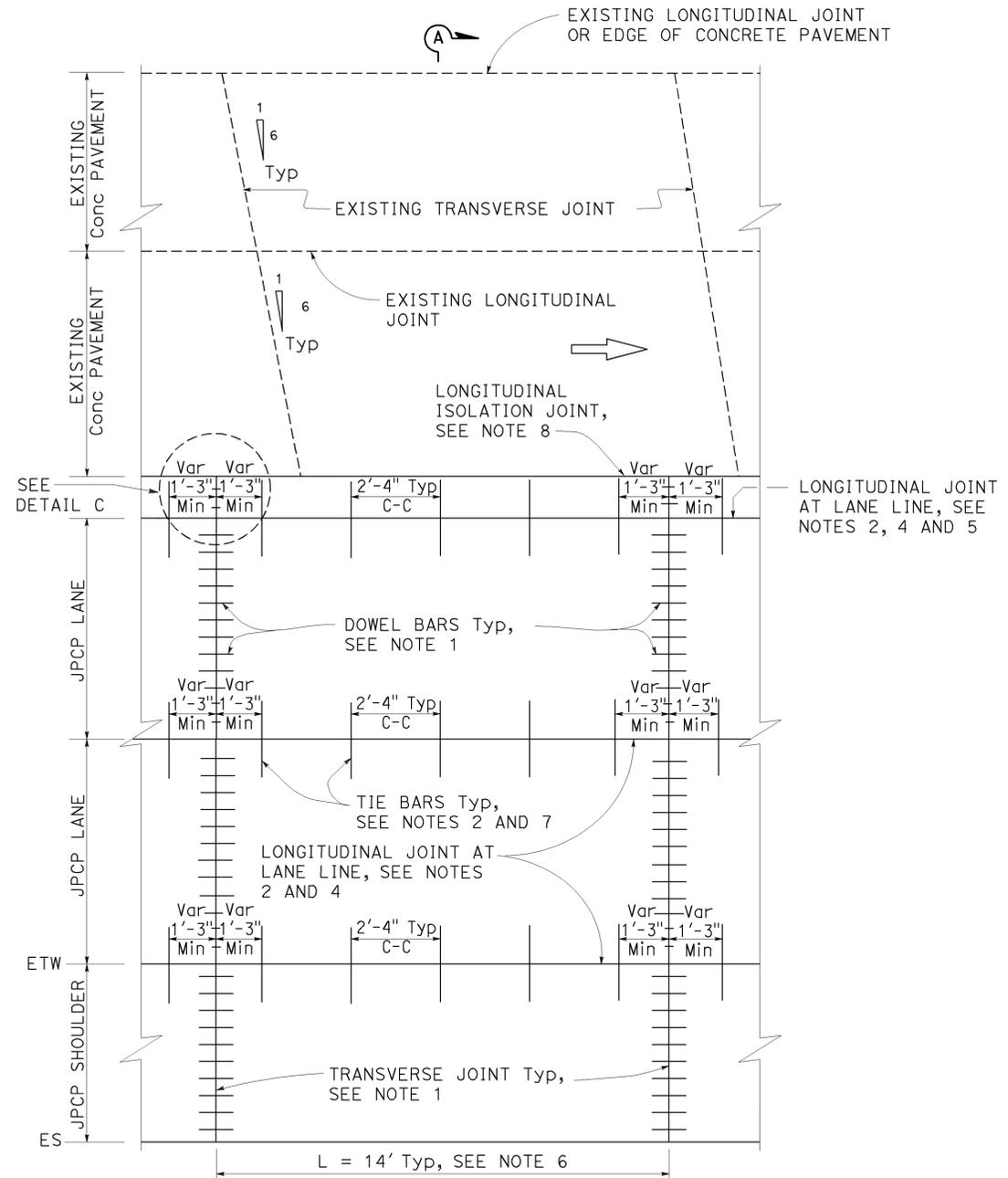
2010 REVISED STANDARD PLAN RSP P1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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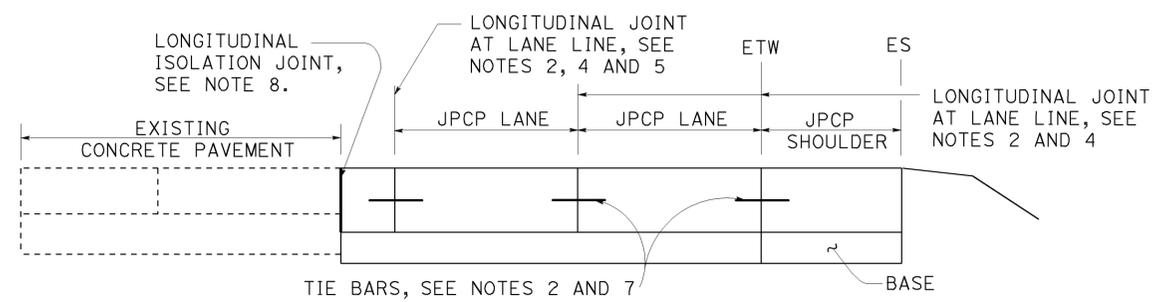
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



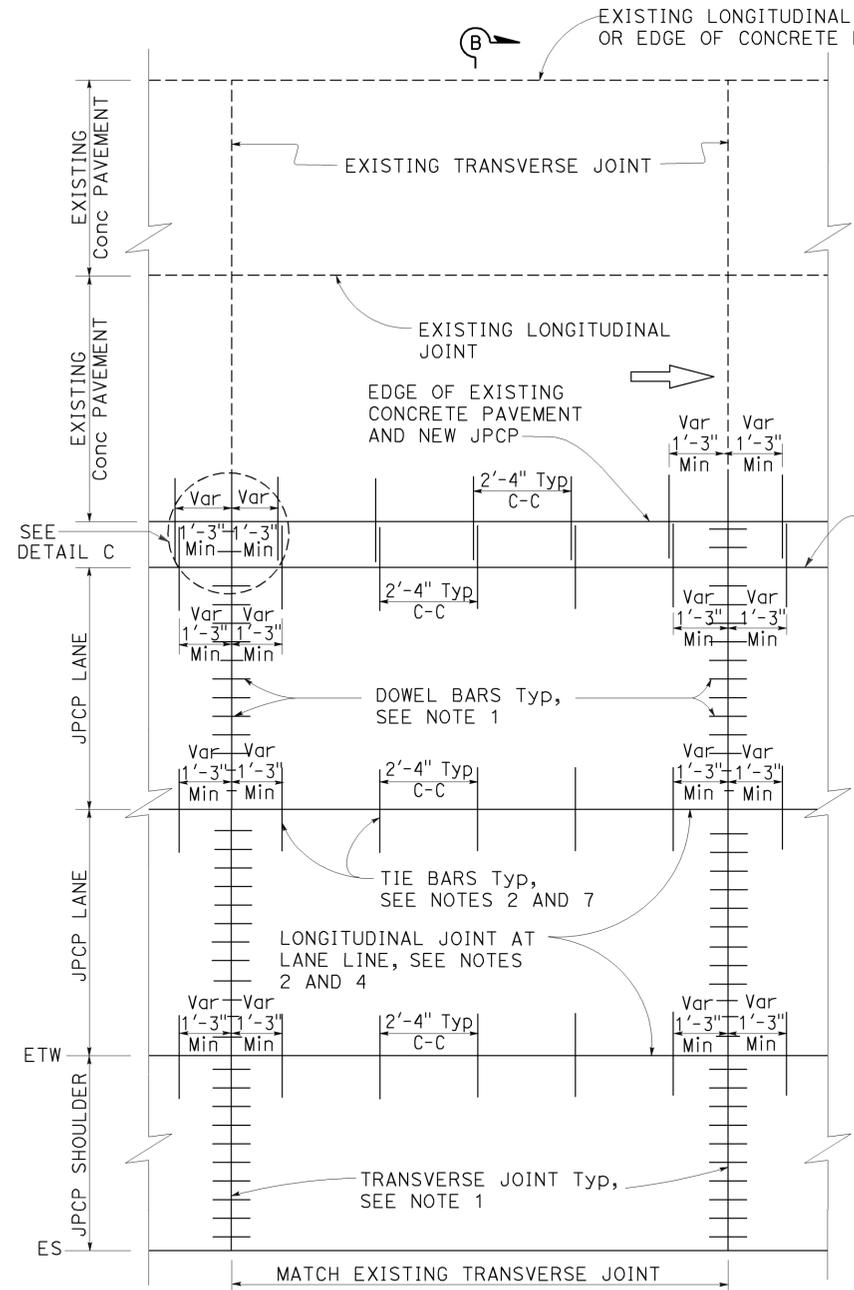
TO ACCOMPANY PLANS DATED 4-15-15



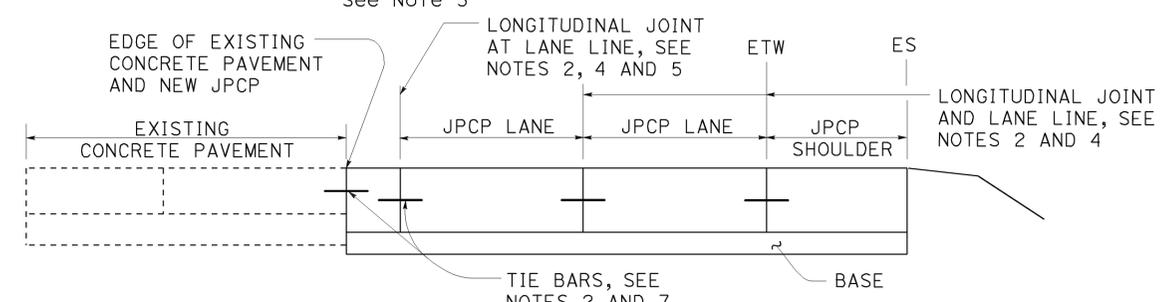
PLAN
ISOLATED
See Note 3



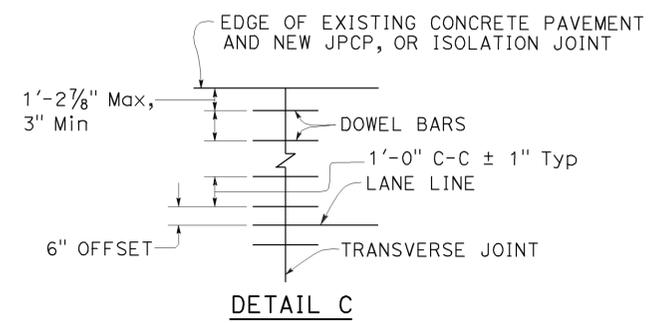
SECTION A-A



PLAN
TIED
See Note 3



SECTION B-B



DETAIL C

NOTES:

1. For transverse joint and dowel bar details not shown, see Revised Standard Plan RSP P10.
2. For longitudinal joint and tie bar details not shown, see Revised Standard Plan RSP P15.
3. For joint layout at intersections, see Project Plans.
4. For additional longitudinal joint details, see Revised Standard Plan RSP P18.
5. Omit longitudinal joint when edge of new concrete pavement is 3'-3" or less from JPCP lane line.
6. Transverse joint spacing may be adjusted to no less than 10' and no more than 15'-6" to conform to bridges, change in pavement type and existing pavement.
7. For dowel bars at longitudinal joint, see Revised Standard Plan RSP P18.
8. For isolation joints, see Detail A on Revised Standard Plan RSP P18.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**JOINTED PLAIN
CONCRETE PAVEMENT
LANE & SHOULDER
ADDITION OR
REPLACEMENT**

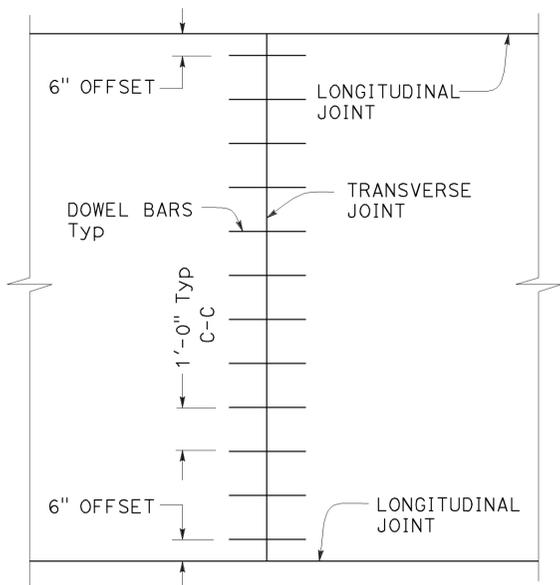
NO SCALE

RSP P3A DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

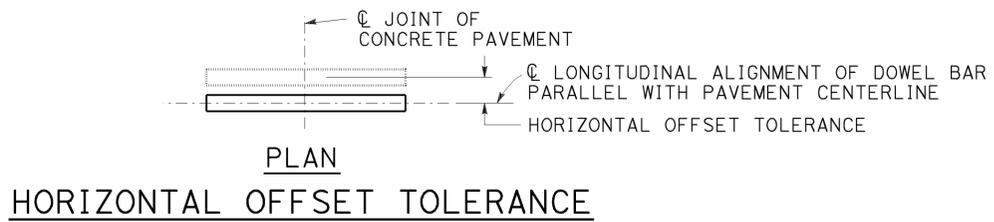
REVISED STANDARD PLAN RSP P3A

2010 REVISED STANDARD PLAN RSP P3A

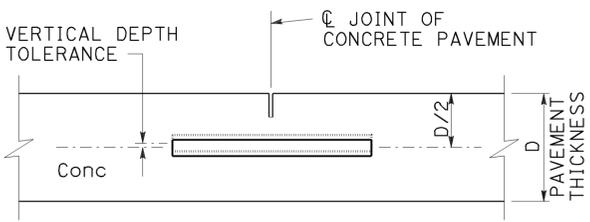
2010 REVISED STANDARD PLAN RSP P10



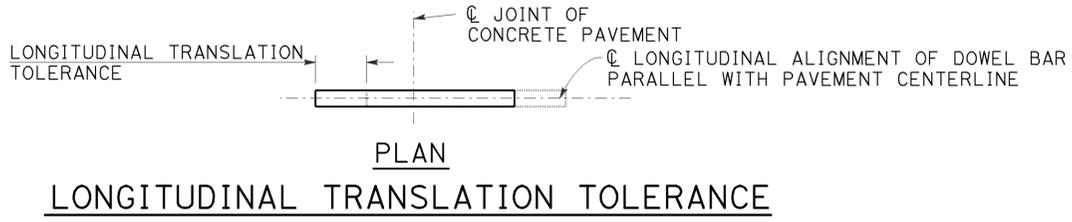
**TRANSVERSE JOINT
DOWEL BAR LAYOUT**



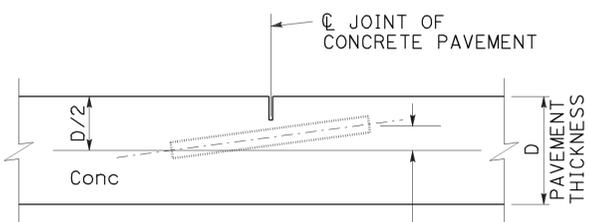
**PLAN
HORIZONTAL OFFSET TOLERANCE**



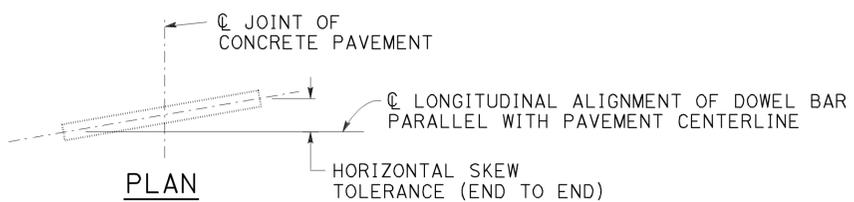
**ELEVATION
VERTICAL DEPTH TOLERANCE**



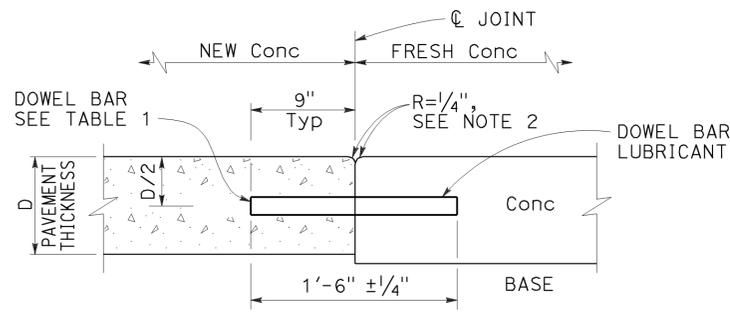
**PLAN
LONGITUDINAL TRANSLATION TOLERANCE**



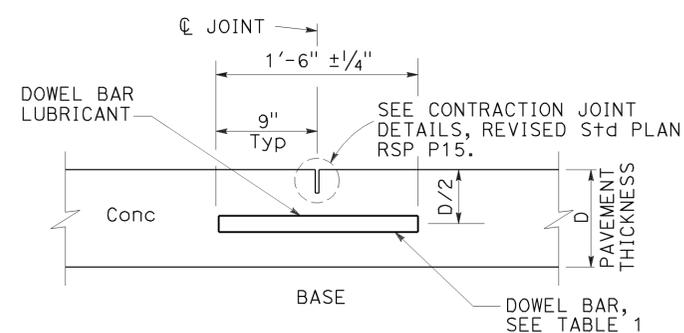
**ELEVATION
VERTICAL SKEW TOLERANCE**



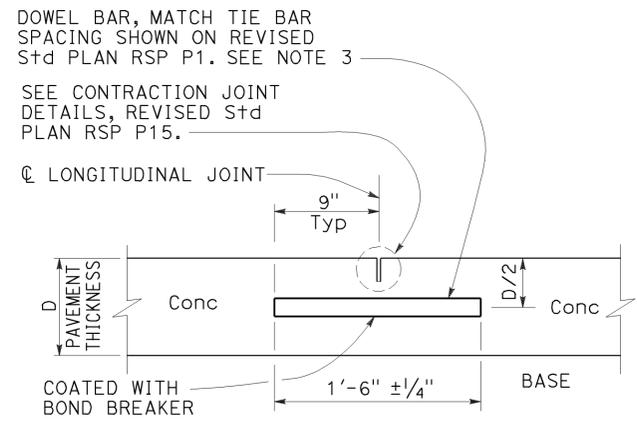
**PLAN
HORIZONTAL SKEW TOLERANCE**



**TRANSVERSE
CONSTRUCTION JOINT DETAIL**



TRANSVERSE CONTRACTION JOINT

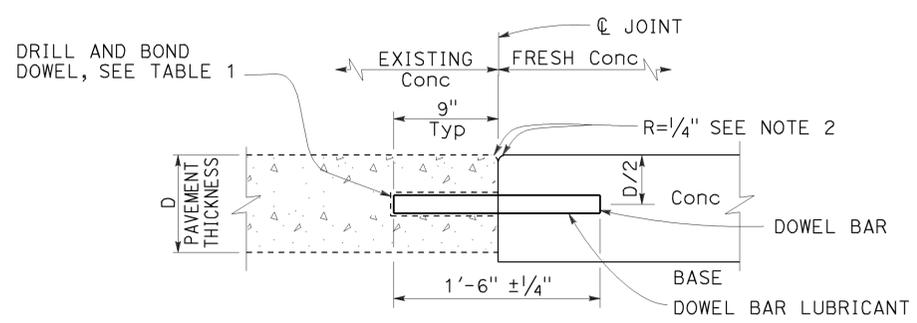


**LONGITUDINAL CONTRACTION
JOINT WITH DOWEL BARS**
See Revised Std Plan RSP P18

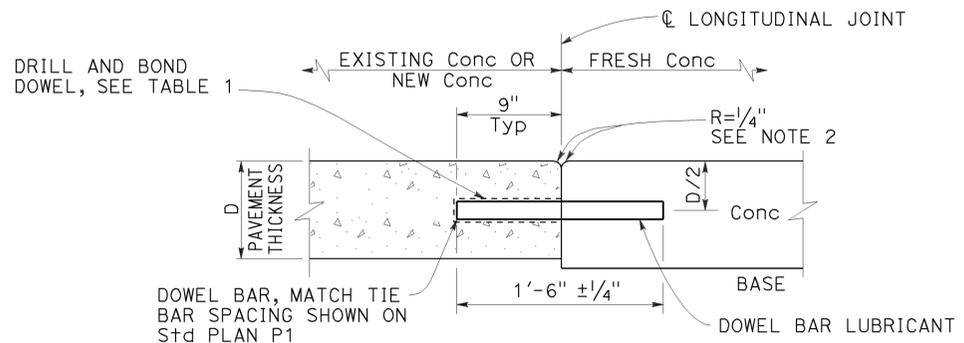
**TABLE 1
DOWEL BAR DIAMETER TABLE**

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.



**TRANSVERSE CONSTRUCTION JOINT
FOR EXISTING CONCRETE PAVEMENT**



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

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.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	148	155

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
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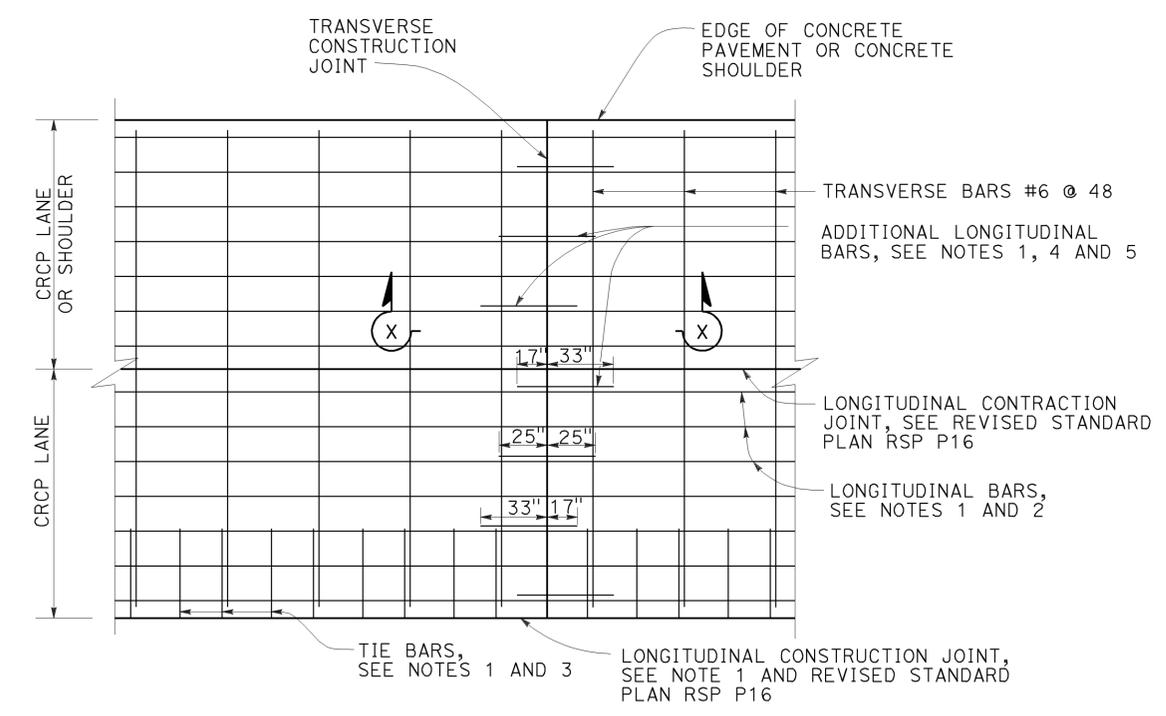
TO ACCOMPANY PLANS DATED 4-15-15

NOTES:

1. For longitudinal bar size, spacing and clearances, see Table 1 on Revised Standard Plan RSP P4.
2. The length of lap splices for bar reinforcement must be at least 25".
3. For tie bars in longitudinal construction joint, see Revised Standard Plan RSP P16.
4. Place additional longitudinal bars parallel to and in the same plane as the longitudinal bars.
5. Place additional longitudinal bars symmetrically about longitudinal construction joint.

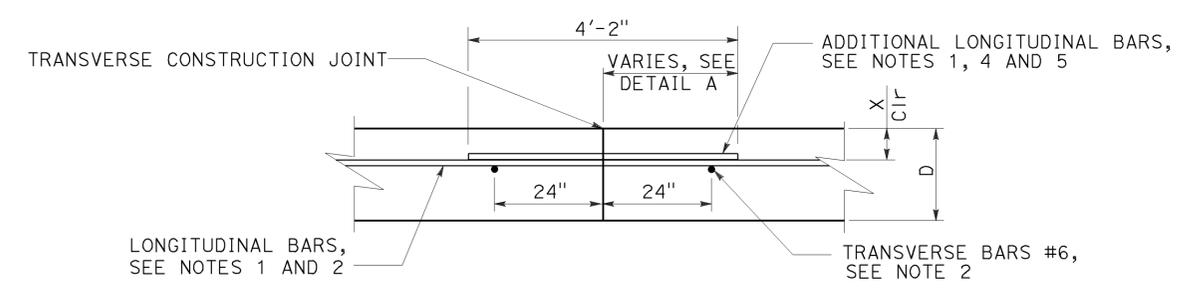
ABBREVIATION

D = Thickness of CRCP



DETAIL A

Additional longitudinal bars at transverse construction joint



**SECTION X-X
TRANSVERSE CONSTRUCTION JOINT**

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONTINUOUSLY REINFORCED
 CONCRETE PAVEMENT
 TRANSVERSE CONSTRUCTION JOINT**

NO SCALE

RSP P14 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P14

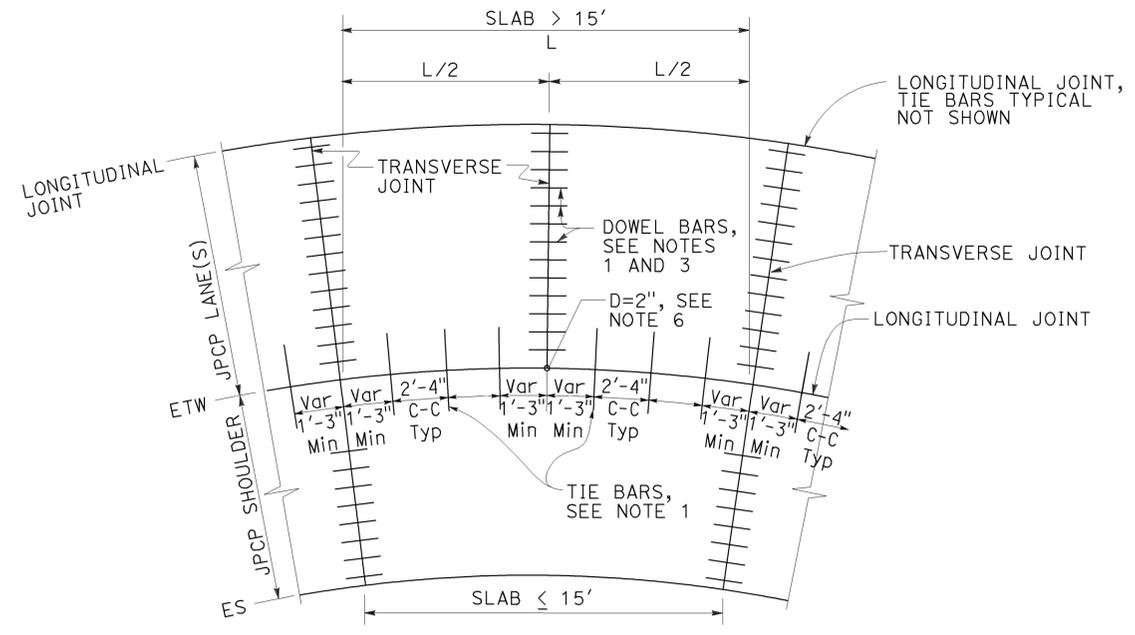
2010 REVISED STANDARD PLAN RSP P14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	149	155

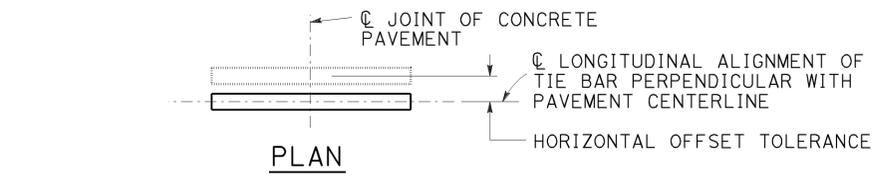
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 July 19, 2013
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REGISTERED PROFESSIONAL ENGINEER
 William K. Farnbach
 No. C49042
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

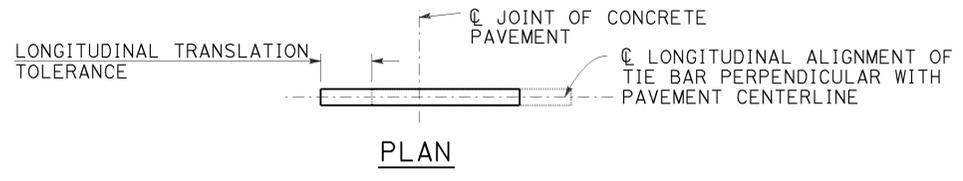
TO ACCOMPANY PLANS DATED 4-15-15



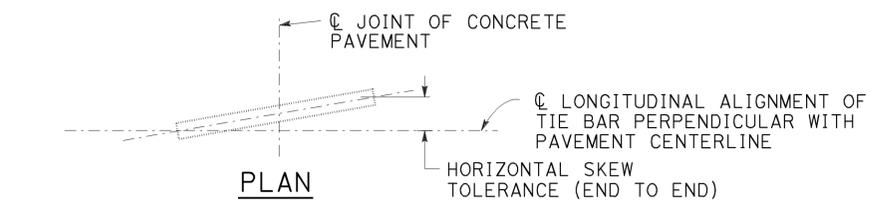
TIE BAR LAYOUT IN CURVED LANES



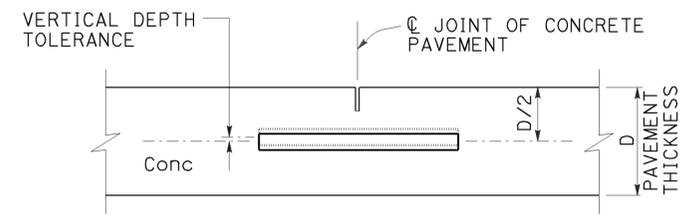
HORIZONTAL OFFSET TOLERANCE



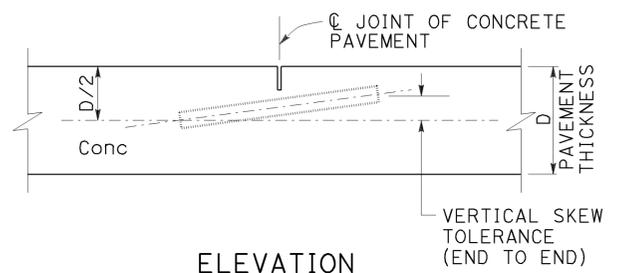
LONGITUDINAL TRANSLATION TOLERANCE



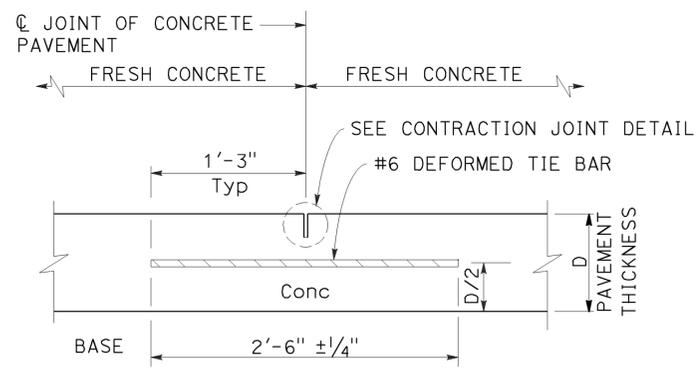
HORIZONTAL SKEW TOLERANCE



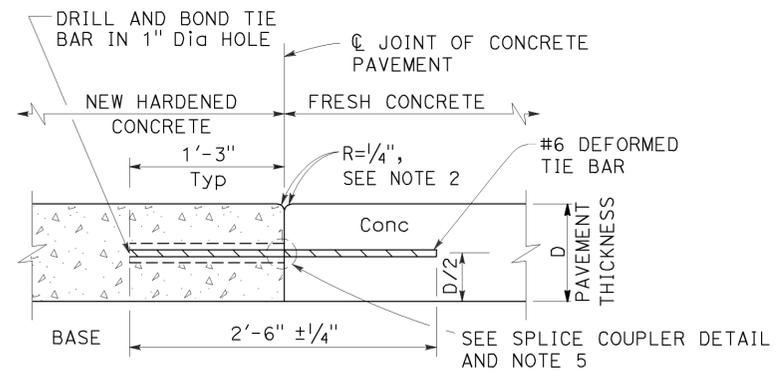
VERTICAL DEPTH TOLERANCE



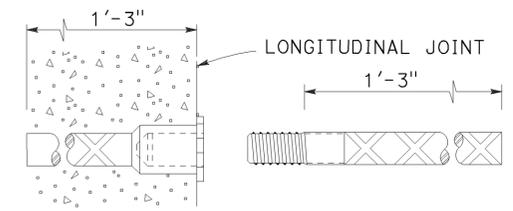
VERTICAL SKEW TOLERANCE



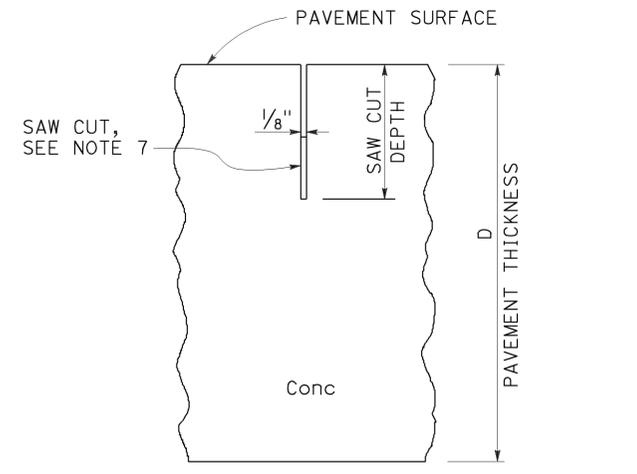
LONGITUDINAL CONTRACTION JOINT



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.

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

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

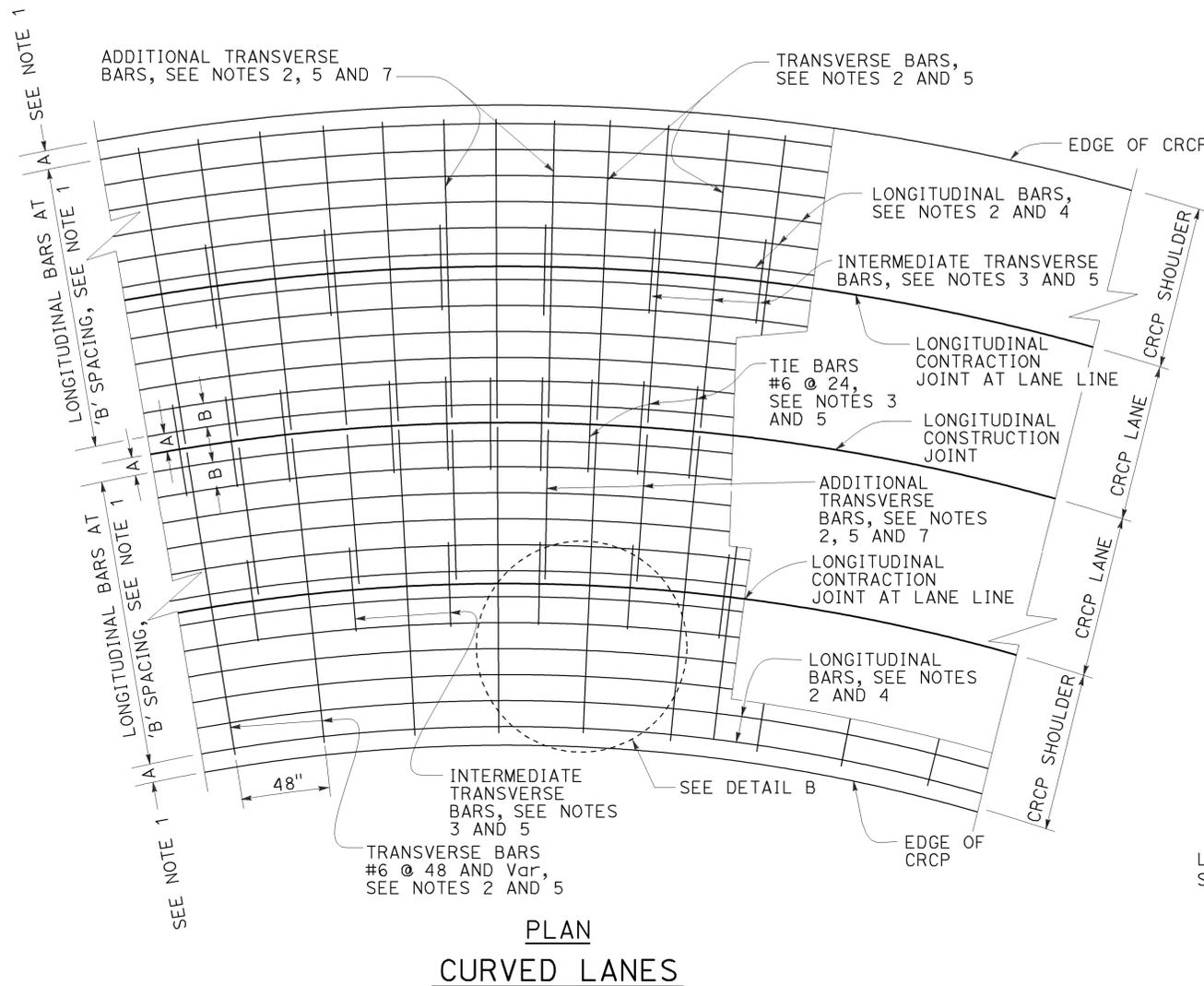
2010 REVISED STANDARD PLAN RSP P15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	150	155

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
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 STATE OF CALIFORNIA

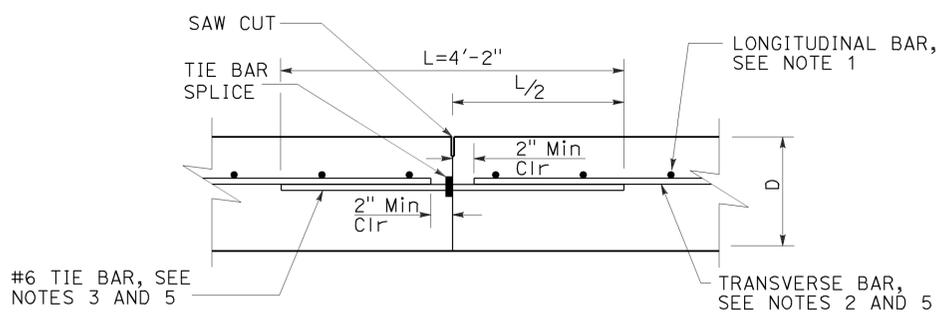
TO ACCOMPANY PLANS DATED 4-15-15



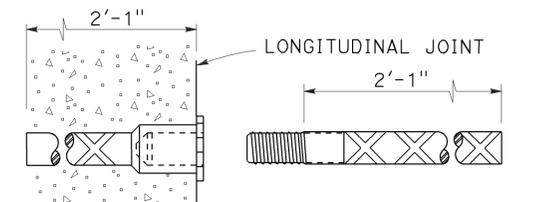
**PLAN
CURVED LANES**

- NOTES:**
1. For longitudinal bar spacing and clearances, see Table 1 on Revised Standard Plan RSP P4.
 2. The length of lap splices for bar reinforcement must be at least 25".
 3. Place tie bars and intermediate transverse bars parallel to and in the same plane as the transverse bars.
 4. Place longitudinal bars parallel to roadway curvature.
 5. Place transverse bars, additional transverse bars, tie bars and intermediate transverse bars perpendicular to the pavement curvature.
 6. For additional longitudinal bars detail, see Detail A on Revised Standard Plans RSP P14.
 7. Place additional transverse bars where required, see Detail B.
 8. The bottom of the saw cut must be at least 0.5" clear of any dowel bar, tie bar and bar reinforcement.

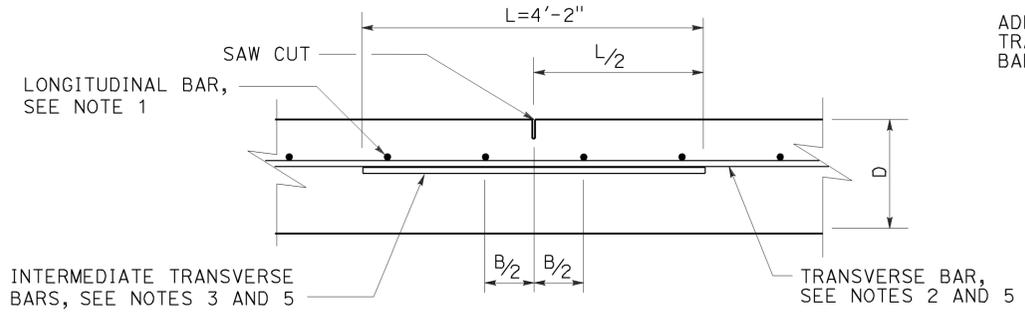
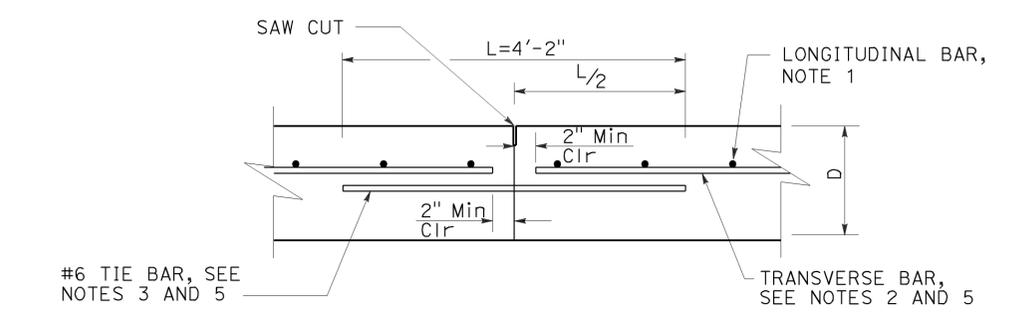
ABBREVIATION:
D = Thickness of CRCP



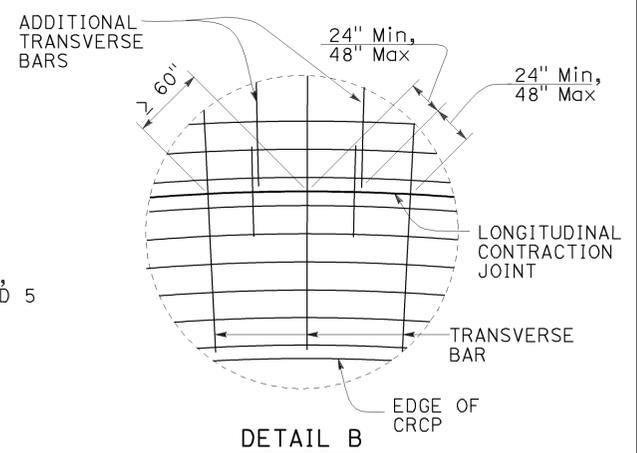
**ALTERNATE
LONGITUDINAL CONSTRUCTION JOINT**



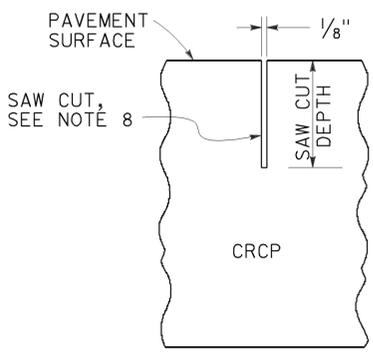
TIE BAR SPLICE COUPLER DETAIL



LONGITUDINAL CONTRACTION JOINT



DETAIL B



CONTRACTION JOINT SAW CUT DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONTINUOUSLY REINFORCED
CONCRETE PAVEMENT
TIE BARS AND JOINT DETAILS**
NO SCALE

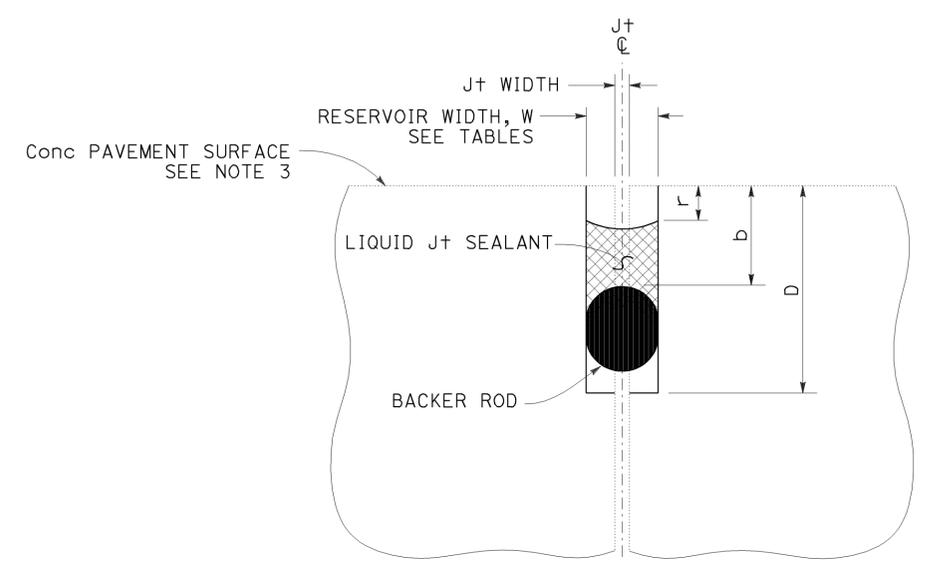
2010 REVISED STANDARD PLAN RSP P16



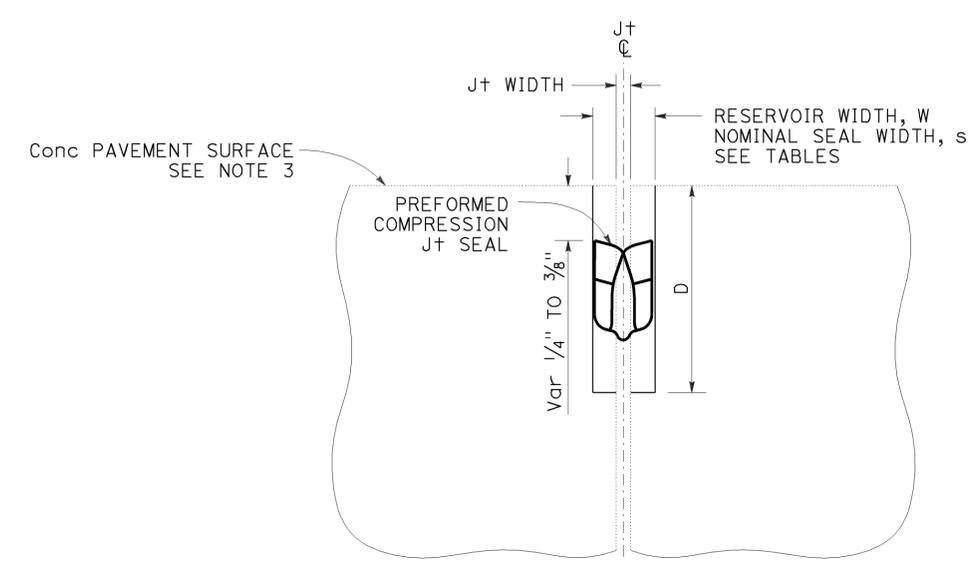
TO ACCOMPANY PLANS DATED 4-15-15

NOTES:

1. Details do not apply to isolation joints and longitudinal construction joints.
2. Tie bars, dowel bars, and bar reinforcement are not shown.
3. Depths are measured from the final concrete pavement surface elevation after any grinding.



LIQUID JOINT SEALANT



PREFORMED COMPRESSION JOINT SEAL

Const SEASON	Min RESERVOIR WIDTH * W ± 1/16"
WINTER	1/4"
SPRING	3/8"
SUMMER	
FALL	

* Minimum reservoir width for replace joint seal = existing joint width + 1/8"

RESERVOIR WIDTH W ± 1/16"	LIQUID JOINT SEALANT DIMENSIONS					
	BACKER ROD NOMINAL Dia *	DEPTHS (ASPHALT RUBBER) **		DEPTHS (SILICONE)		
		RESERVOIR D ± 1/4"	BACKER ROD b ± 1/16"	RESERVOIR D ± 1/4"	BACKER ROD b ± 1/16"	RECESS r ± 1/16"
1/4"	3/8"	1 3/4"	7/8"	1 3/8"	1/2"	1/4"
3/8"	1/2"	1 7/8"	7/8"	1 1/2"	1/2"	1/4"
1/2"	3/4"	2"	7/8"	1 3/4"	9/16"	5/16"
5/8"	7/8"	2 1/4"	1"	2"	5/8"	5/16"
3/4"	1"	2 3/4"	1 1/8"	2 1/4"	3/4"	3/8"
7/8"	1 1/4"	3"	1 1/4"	2 1/2"	13/16"	3/8"
1"	1 1/2"	3 1/4"	1 3/8"	2 5/8"	7/8"	3/8"
1 1/8"	1 1/2"	3 1/2"	1 1/2"	2 13/16"	1"	1/2"

* Larger diameter backer rods may be substituted according to manufacturer recommendations if reservoir depth is increased equivalently.

** Asphalt rubber sealant recess depth "r" varies from 1/4" to 3/8"

RESERVOIR WIDTH W ± 1/16"	PREFORMED COMPRESSION JOINT SEAL DIMENSIONS	
	NOMINAL SEAL WIDTH s	RESERVOIR DEPTH D ± 1/4"
1/4"	7/16"	1 1/4"
3/8"	11/16"	1 1/16"
1/2"	13/16"	1 1/8"
5/8"	1"	1 7/8"
3/4"	1 1/4"	2 1/8"
7/8"	1 5/8"	2 5/8"
1"	1 7/8"	2 3/8"
1 1/8"	2"	2 7/8"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

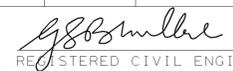
JOINT SEALS

NO SCALE

RSP P20 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN P20
DATED MAY 20, 2011 - PAGE 136 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP P20

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	152	155


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 4-15-15

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

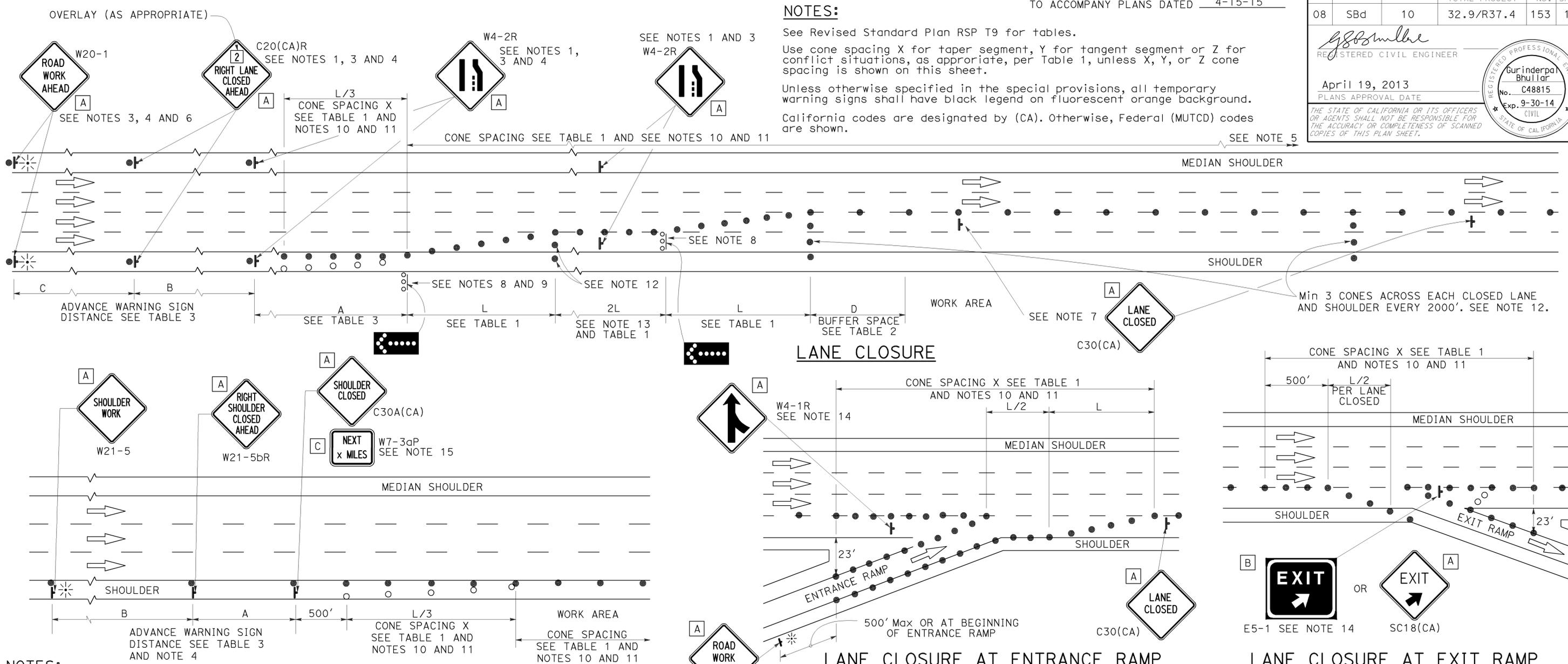
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SbD	10	32.9/R37.4	153	155

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

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

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- 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) "NEXT x MILES" 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.

- 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) and W4-1 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.

REVISED STANDARD PLAN RSP T10

2010 REVISED STANDARD PLAN RSP T10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SbD	10	32.9/R37.4	154	155

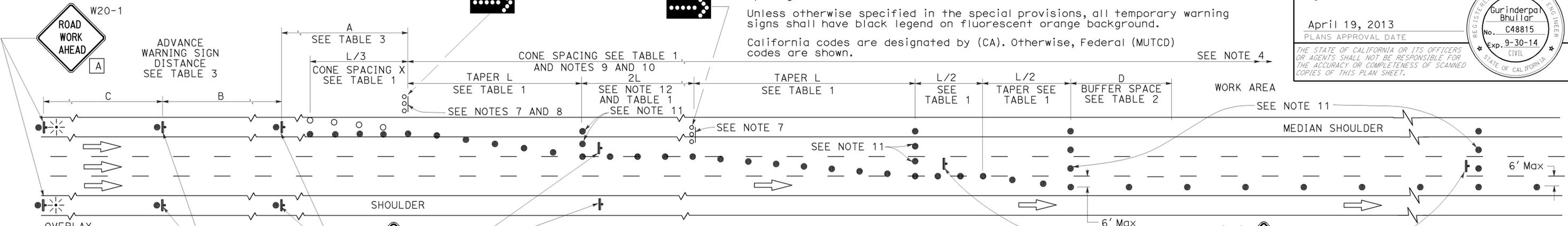
REGISTERED CIVIL ENGINEER
 Gurinderpal Bhullar
 No. C48815
 Exp. 9-30-14
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 STATE OF CALIFORNIA

April 19, 2013
 PLANS APPROVAL DATE

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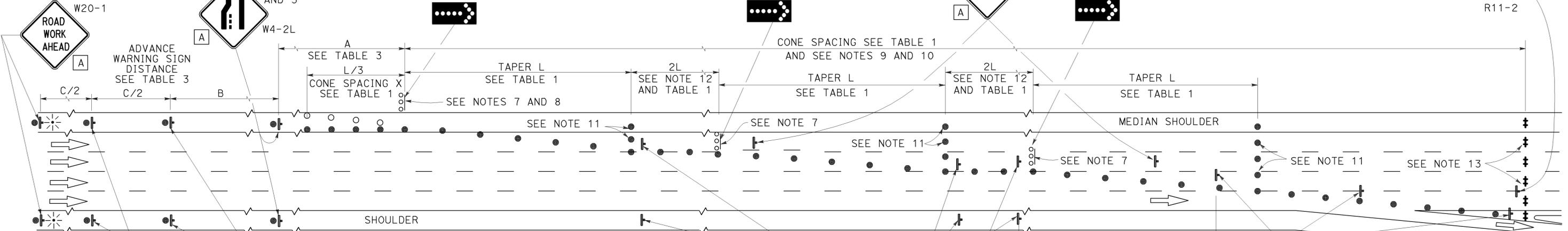
NOTES: See Revised Standard Plan RSP T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Unless otherwise specified in the special provisions, all temporary warning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

SEE NOTES 3 AND 5



LANE CLOSURE WITH PARTIAL SHOULDER USE

SEE NOTES 3 AND 5



COMPLETE CLOSURE

NOTES:

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

SIGN PANEL SIZE (Min)

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

LEGEND

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURES ON
 FREEWAYS AND EXPRESSWAYS**
 NO SCALE

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

REVISED STANDARD PLAN RSP T10A

2010 REVISED STANDARD PLAN RSP T10A

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

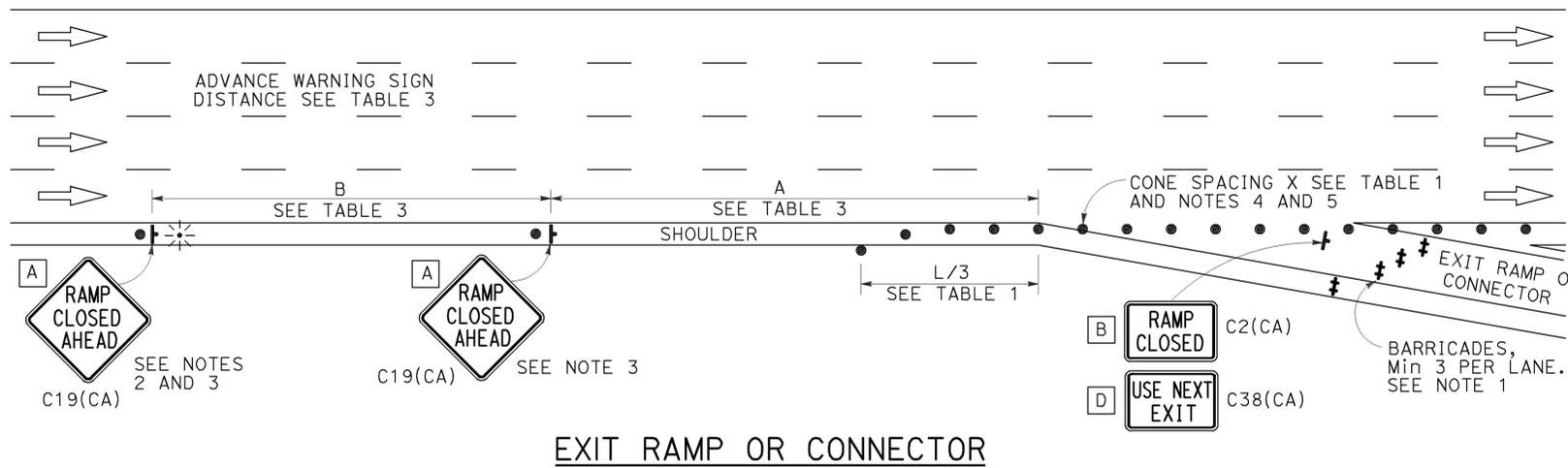
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	10	32.9/R37.4	155	155

Gurinderpal Bhullar
 REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

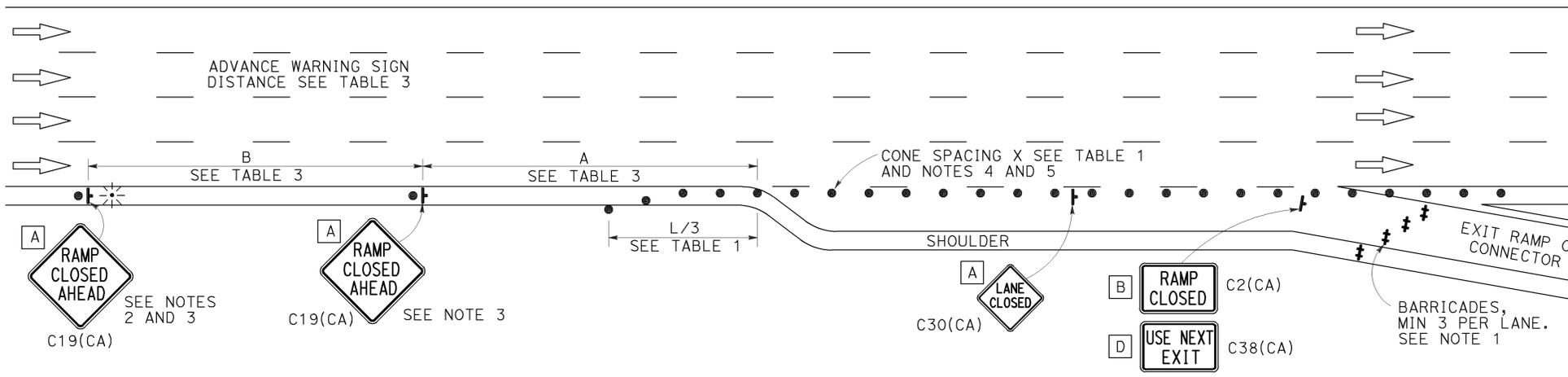
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 4-15-15

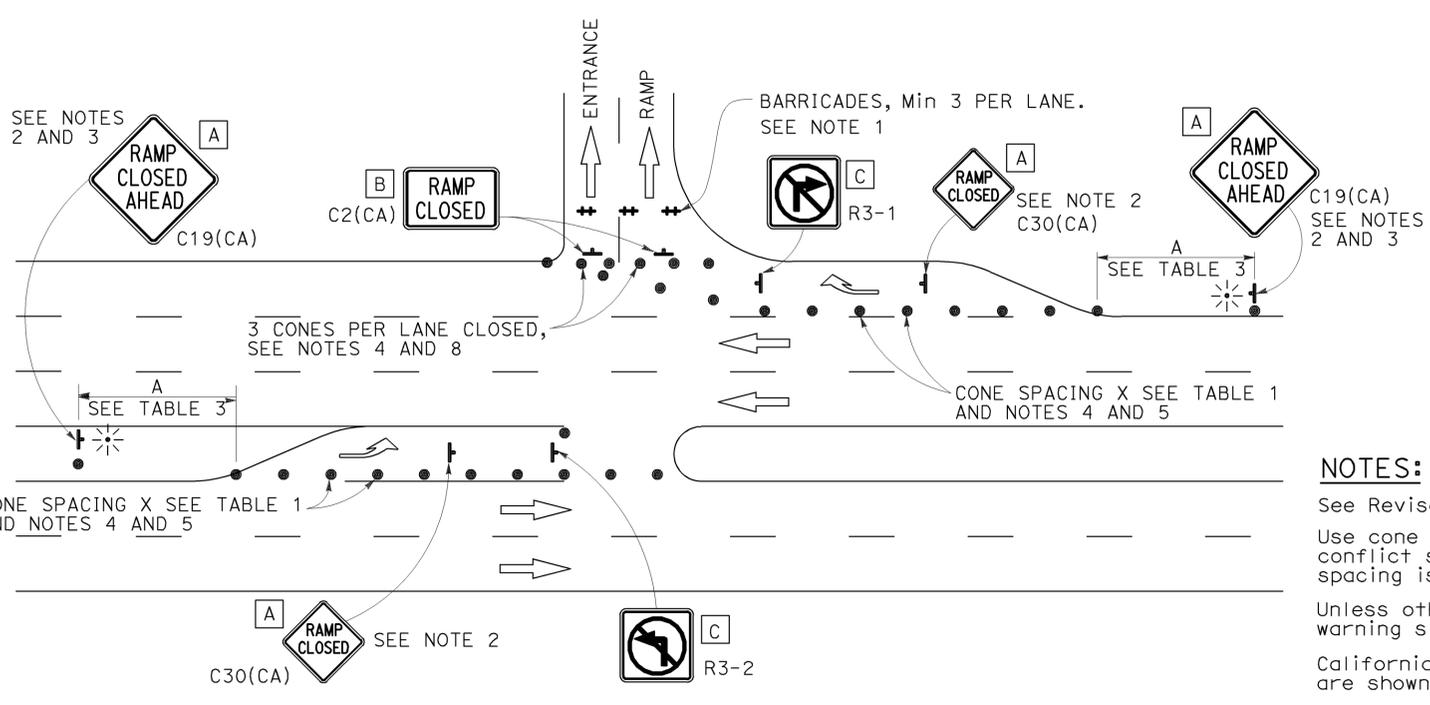
2010 REVISED STANDARD PLAN RSP T14



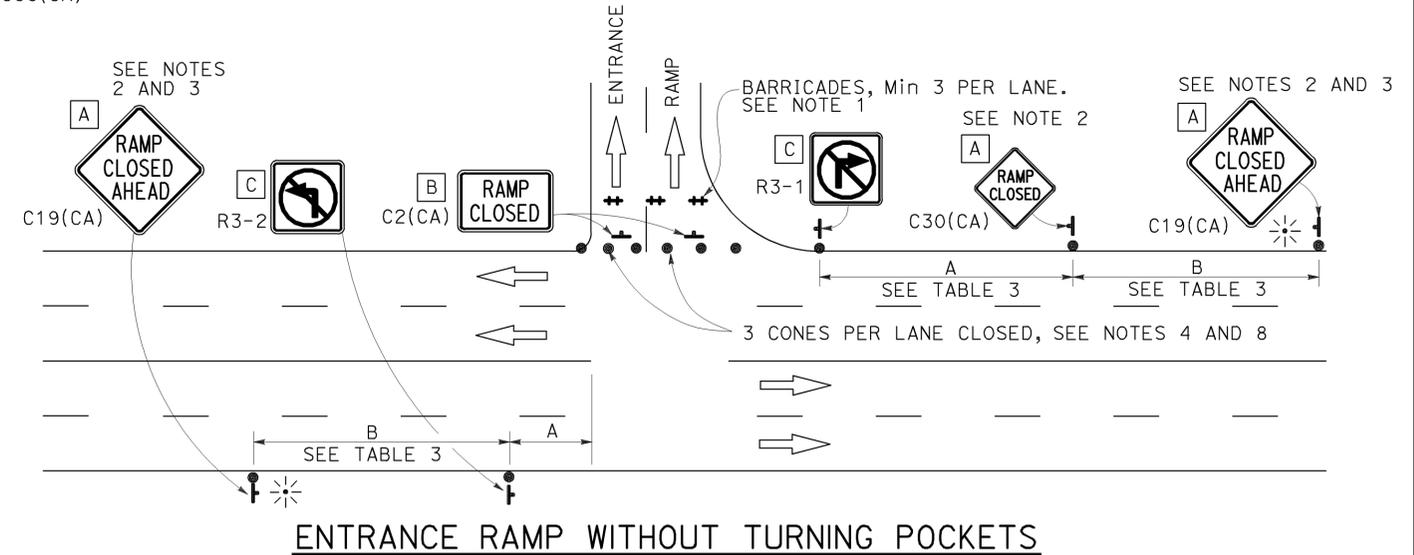
EXIT RAMP OR CONNECTOR



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) "LANE 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
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**TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURE**
 NO SCALE

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