

INDEX OF PLANS

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10-16	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACSTP-P078(115)E  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**

**IN IMPERIAL COUNTY NEAR GLAMIS**  
**FROM 2.3 MILES WEST OF OGILBY ROAD**  
**TO RIVERSIDE COUNTY LINE**

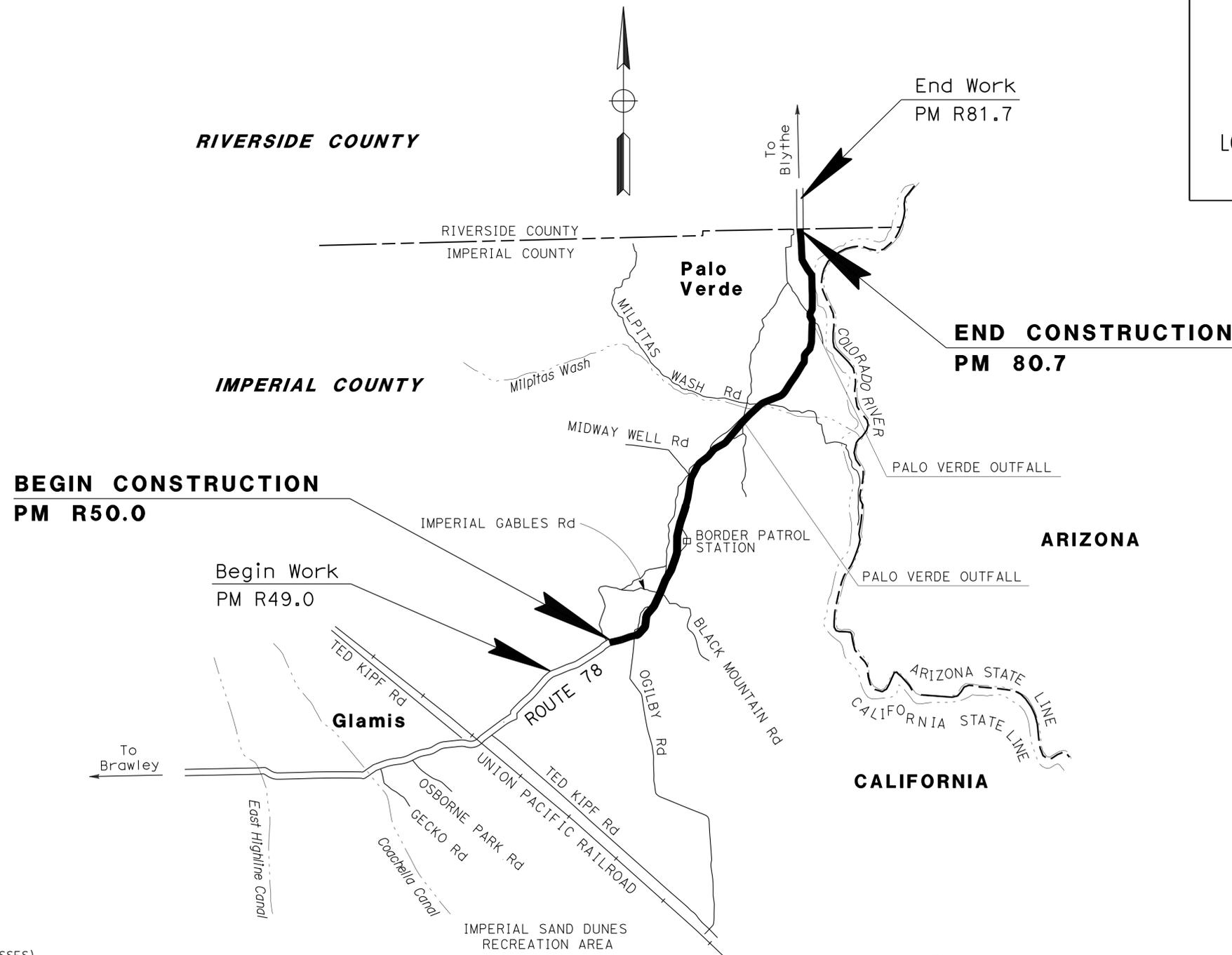
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0 / 80.7	1	16



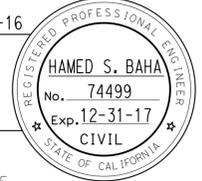


LOCATION MAP



PROJECT MANAGER  
 LAURA ESPINOZA  
 DESIGN MANAGER  
 HAMED BAHA

*Hamed S. Baha* 01-15-16  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
 January 25, 2016  
 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.



CONTRACT No.	<b>11-2M8604</b>
PROJECT ID	<b>1115000129</b>

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	2	16

Hamed S. Baha 01-15-16  
 REGISTERED CIVIL ENGINEER DATE  
 01-25-16  
 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  
**HAMED S. BAHA**  
 No. 74499  
 Exp. 12-31-17  
 CIVIL  
 STATE OF CALIFORNIA

**NOTES:**

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- FOG SEAL AC DIKES, OVERSIDE DRAINS, MISCELLANEOUS AREAS, RUMBLE STRIPS, AND SPECIFIED SHOULDER LOCATIONS.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

**PAVEMENT CLIMATE REGION**

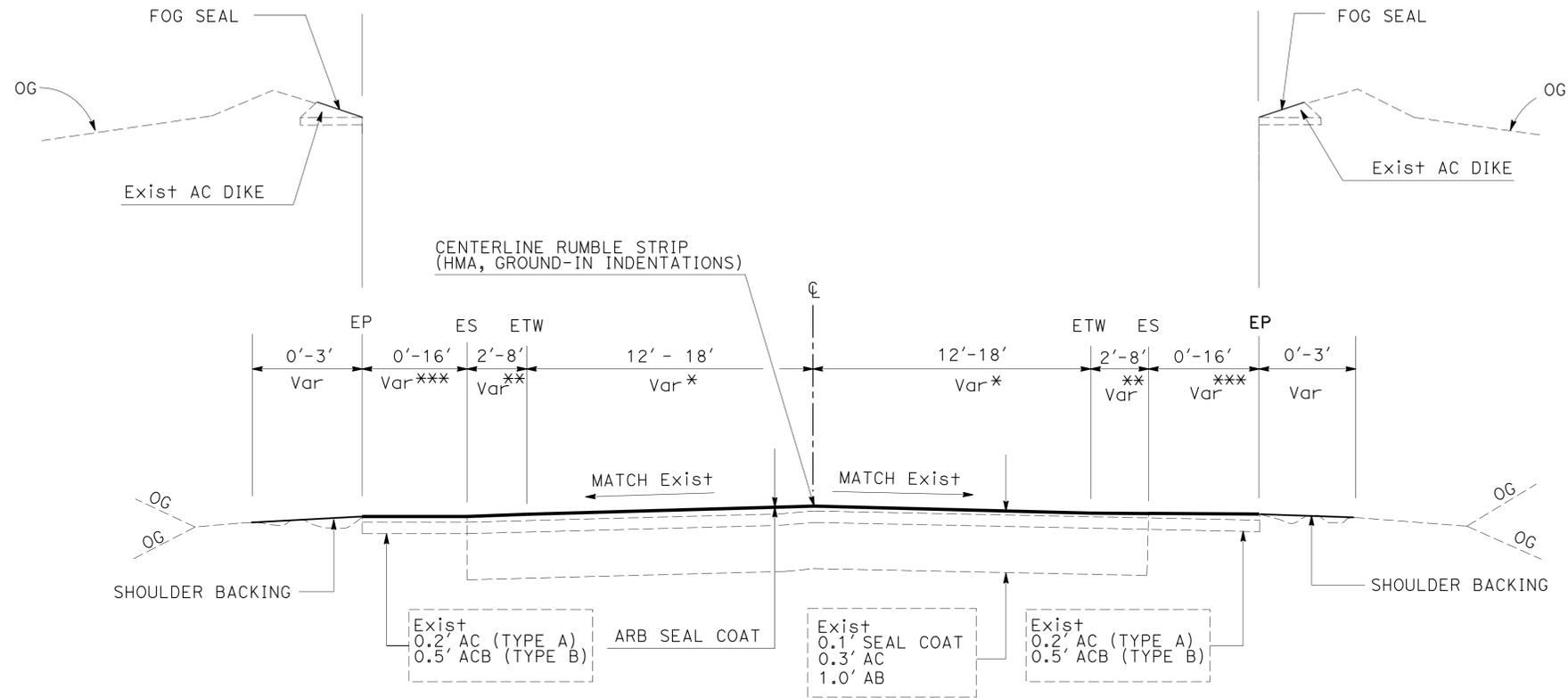
DESERT

**ABBREVIATIONS:**

ARB = ASPHALT-RUBBER BINDER

**ROUTE 78 DESIGN DESIGNATION**

Exist EB ADT - 2014	=	899
Exist WB ADT - 2014	=	1,051
Exist EB PEAK HOUR	=	79
Exist WB PEAK HOUR	=	86
FORECASTED EB ADT (2035)	=	1,522
FORECASTED WB ADT (2035)	=	1,377
FORECASTED EB PEAK HOUR	=	102
FORECASTED WB PEAK HOUR	=	107
T %	=	12.9
D %	=	52.2



**\* MAIN LANE WIDTHS:**

PM	R50.0 - 80.1	ETW TO ETW	=	24'
PM	80.1 - 80.6	ETW TO ETW	=	36'
PM	80.6 - 80.7	ETW TO ETW	=	24'

**\*\* SHOULDER WIDTHS:**

PM	R50.0 - 80.1	ETW TO ES	=	8'
PM	80.1 - 80.6	ETW TO ES	=	2'
PM	80.6 - 80.7	ETW TO ES	=	4'
PM	80.7 - 80.7	ETW TO ES	=	6'

**\*\*\* TURN-OUT LANE WIDTHS:**

PM	56.2 - 56.4	ETW TO EP	=	16'
PM	59.8 - 60.0	ETW TO EP	=	16'
PM	63.8 - 64.0	ETW TO EP	=	16'

**ROUTE 78**

PM R50.0 TO PM 80.7



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	3	16

<i>Hamed S. Baha</i>	01-15-16
REGISTERED CIVIL ENGINEER	DATE
01-25-16	
PLANS APPROVAL DATE	

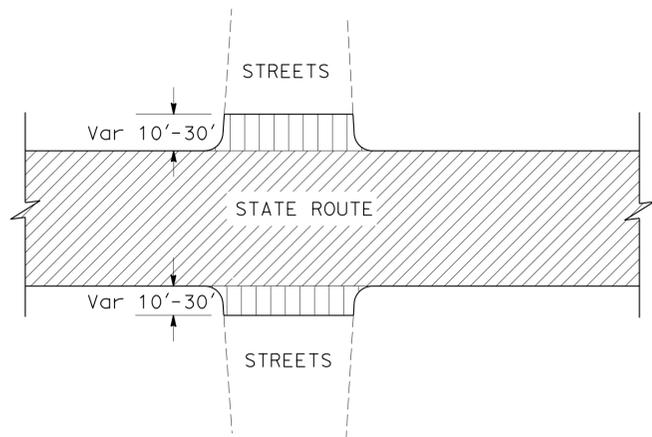
  

REGISTERED PROFESSIONAL ENGINEER
HAMED S. BAHA
No. 74499
Exp. 12-31-17
CIVIL

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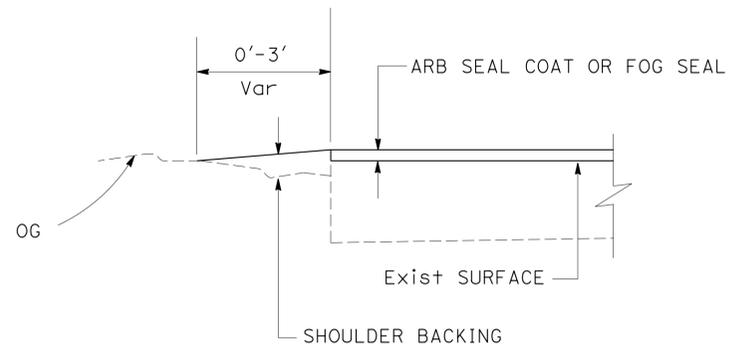
**LEGEND:**

-  ASPHALT RUBBER BINDER (ARB) SEAL COAT
-  FOG SEAL COAT



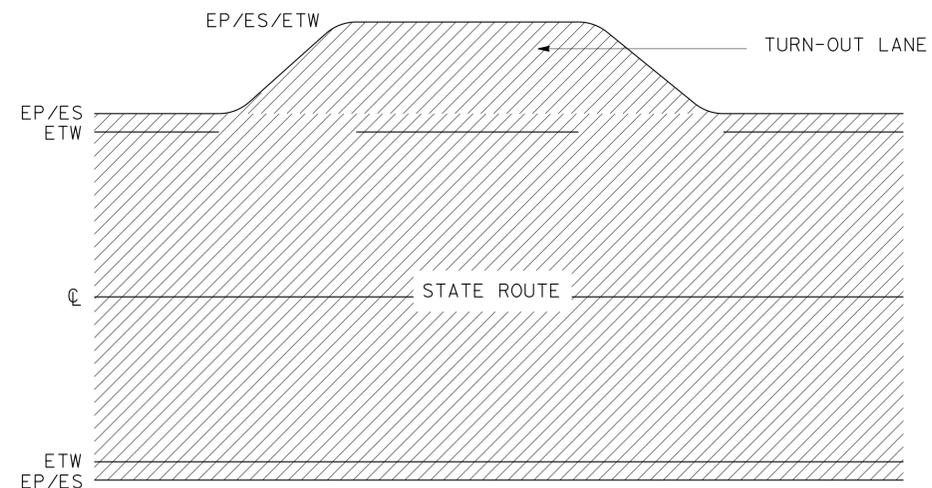
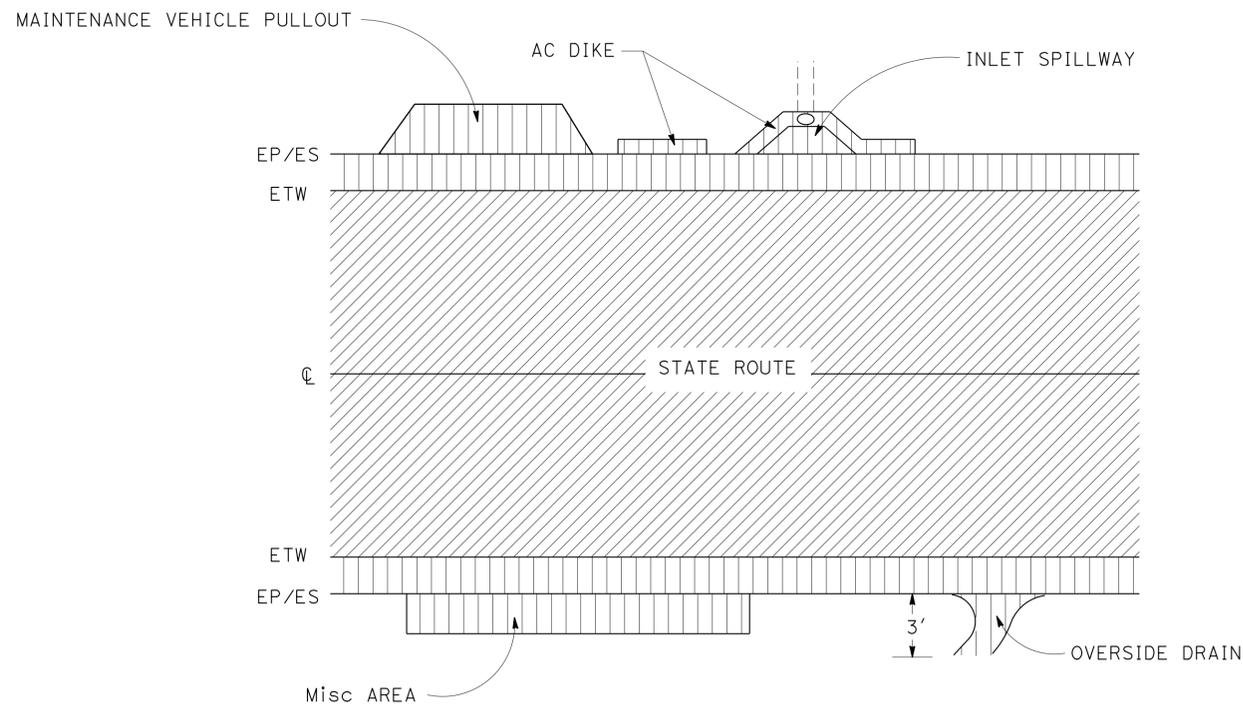
**TYPICAL WORK LIMIT AT CROSS STREETS AND DRIVEWAYS**

NOTE: APPLY FOG SEAL (ONLY) AT Exist PAVED SECTIONS AT CROSS STREETS UP TO STOP LIMIT.



**SHOULDER BACKING DETAIL**

NOTE: THE EXACT LOCATIONS OF SHOULDER BACKING TO BE DETERMINED BY THE ENGINEER.



**TYPICAL ARB SEAL COAT AND FOG SEAL LIMITS**

- NOTES:
- LIMIT ARB SEAL COAT APPLICATION FROM ETW TO ETW FOR SHOULDERS GREATER THAN 2' WIDE.
  - FOG SEAL (ONLY) SHOULDERS GREATER THAN 2' WIDE.
  - APPLY FOG SEAL (ONLY) AT Exist Misc AREAS, AC DIKE, OVERSIDE DRAINS AND INLET SPILLWAYS.

**CONSTRUCTION DETAILS**

NO SCALE

**C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
FUNCTIONAL SUPERVISOR	LAURA ESPINOZA
CALCULATED/DESIGNED BY	CHECKED BY
HAMED BAHA	REBECCA IGNACIO
REVISOR	DATE
REVISOR	DATE

**NOTES:**

- 1). EXACT LOCATION OF CONSTRUCTION AREA SIGNS TO BE DETERMINED BY THE ENGINEER.
- 2). FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
- 3). EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND AVOID IMPACTING THESE EXISTING UTILITIES BY ADJUSTING THE FIELD LOCATION OF THE SIGN POST IN CONSULTATION WITH THE ENGINEER.

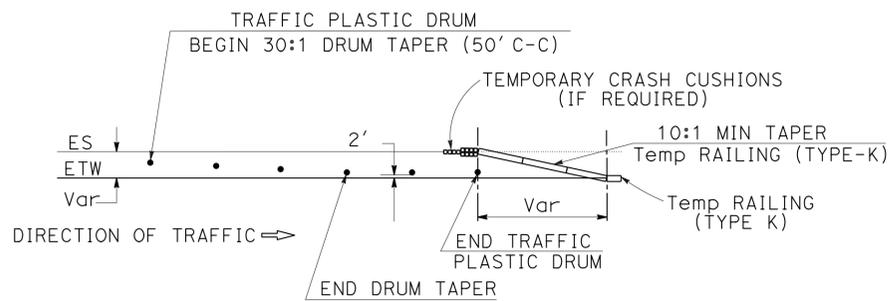
**LEGEND:**

X = CONSTRUCTION AREA SIGN

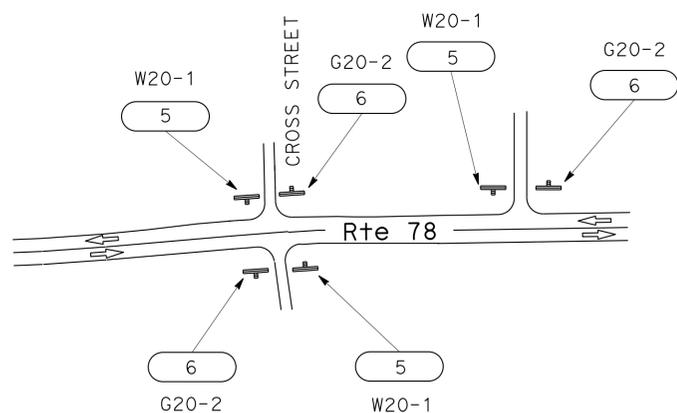
**CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE	PANEL SIZE	No. OF POSTS AND SIZE	No. OF SIGNS
1	C40 (CA)	108" x 42"	2 - 4" X 6" (s)	2
2	W20-1	48" x 48"	1 - 4" X 6" (s)	2
3	C11 (CA) (31)	60" x 36"	2 - 4" x 6" (s)	2
4	G20-2	36" x 18"	1 - 4" x 4" (s)	2
5	W20-1	48" x 48"	PORTABLE	16
6	G20-2	36" x 18"	PORTABLE	12

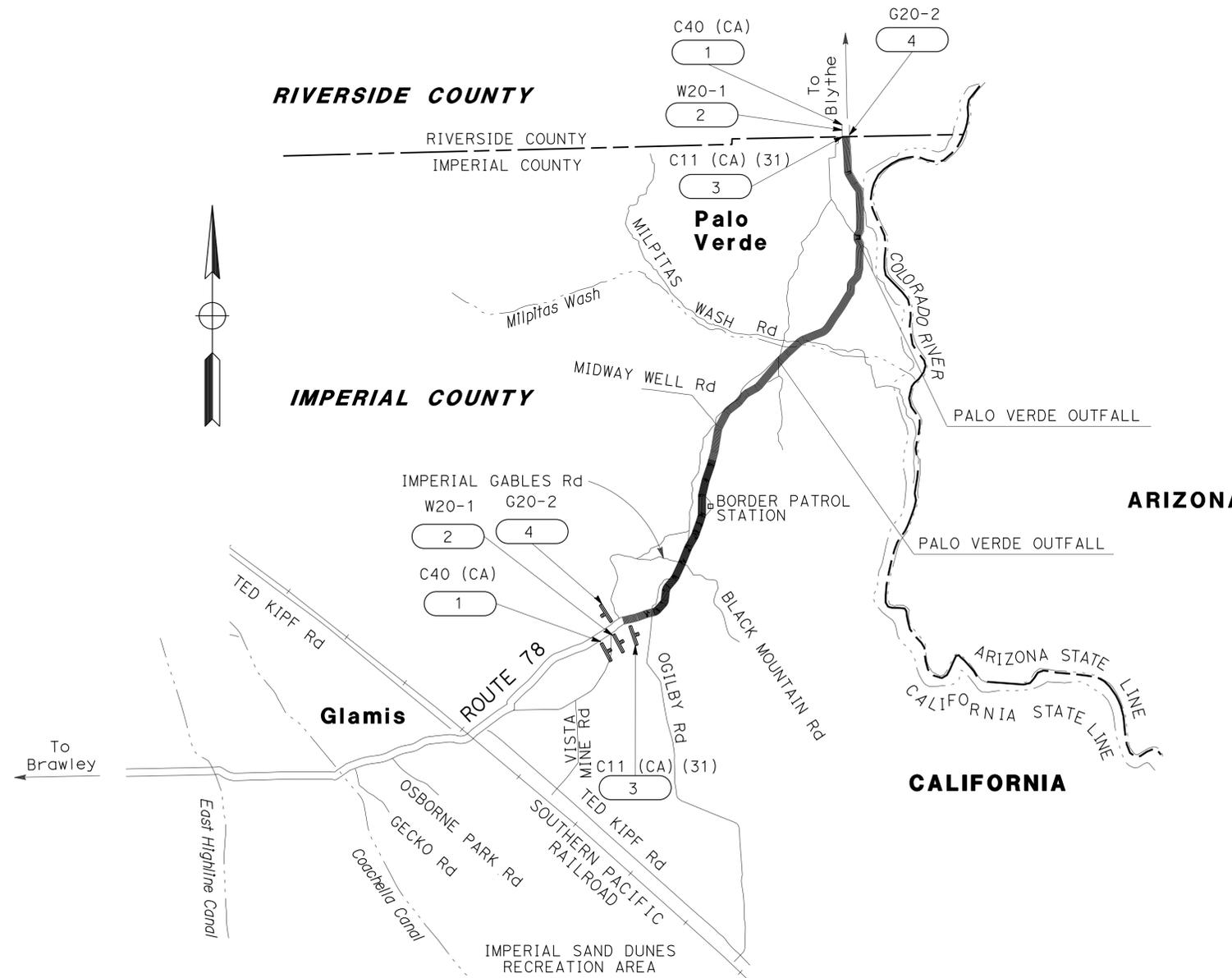
(s) DENOTES STATIONARY MOUNTED SIGN



**TYPICAL- PLACEMENT OF TRAFFIC PLASTIC DRUM**



**TYPICAL- PLACEMENT OF W20-1 & G20-2 CONSTRUCTION AREA SIGNS AT CROSS STREETS NOT SHOWN ON MAP**



**CONSTRUCTION AREA SIGNS CS-1**  
NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

REVISIONS:  
 REVISION NO. DATE BY  
 1 01-15-16 HAMED BAHA  
 2 01-25-16 REBECCA IGNACIO  
 3 01-25-16 LAURA ESPINOZA  
 4 01-25-16 MAINTENANCE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	5	16

Hamed S. Baha 01-15-16  
 REGISTERED CIVIL ENGINEER DATE  
 01-25-16  
 PLANS APPROVAL DATE  
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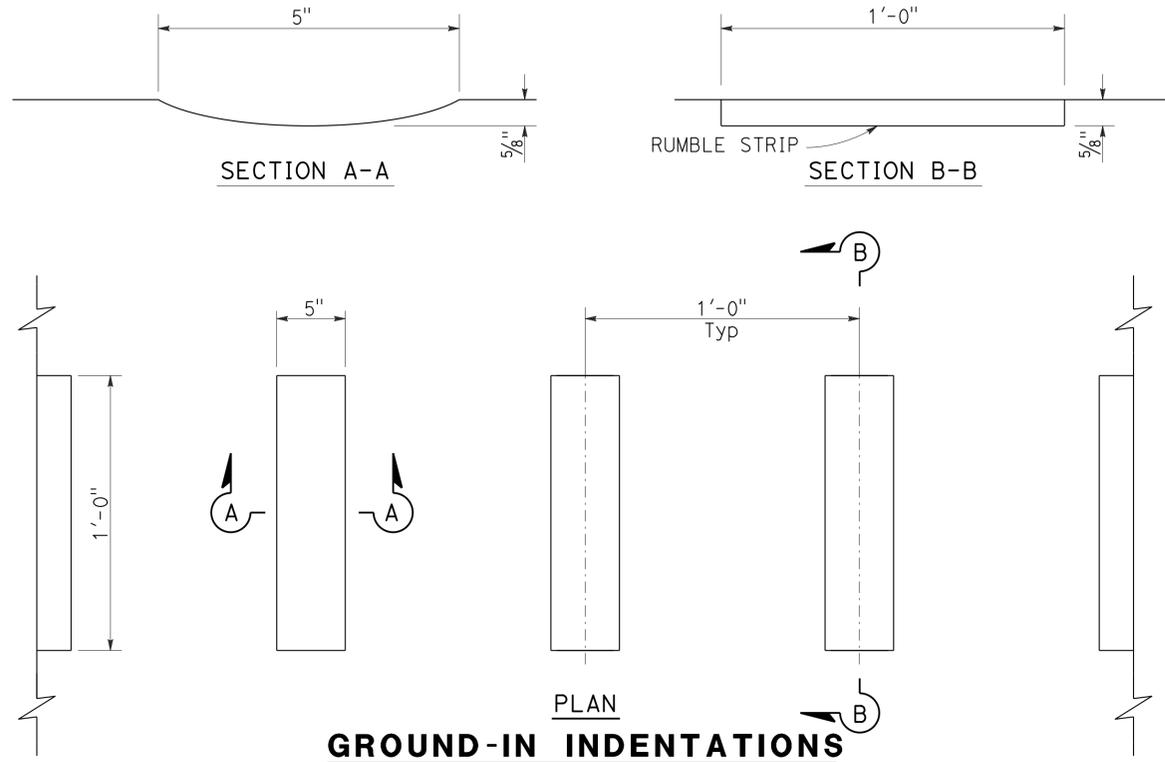
REGISTERED PROFESSIONAL ENGINEER  
 HAMED S. BAHA  
 No. 74499  
 Exp. 12-31-17  
 CIVIL  
 STATE OF CALIFORNIA

**NOTES:**

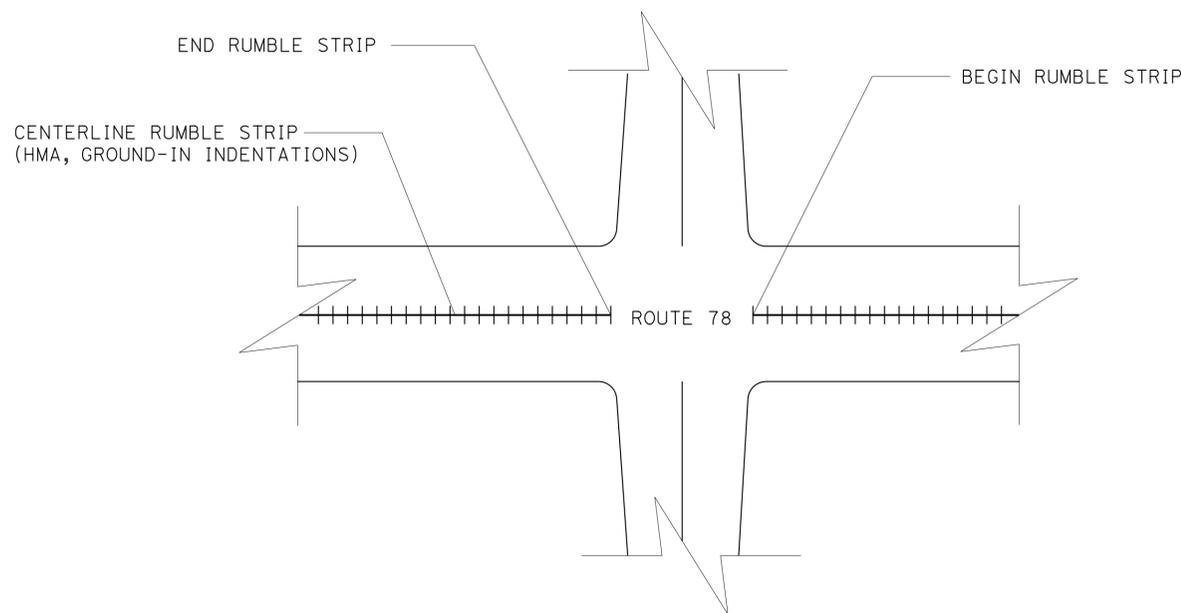
1. THERMOPLASTIC STRIPE SHALL BE PLACED OVER CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS).
2. SEE STANDARD PLAN A40B FOR RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS).
3. RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS) SHALL NOT BE PLACED AT INTERSECTIONS, TURN LOCATIONS AND BRIDGES.
4. ALL PAVEMENT DELINEATION SHALL BE REPLACED IN KIND AT ORIGINAL LOCATIONS, UNLESS OTHERWISE INDICATED.
5. SEE QUANTITIES SHEET FOR LOCATIONS AND TYPES OF TRAFFIC LINE DETAILS.
6. PLACE A DEEP 5/8" RUMBLE STRIP ON EXIST SURFACE PRIOR TO ARB SEAL COAT PLACEMENT.

**LEGEND:**

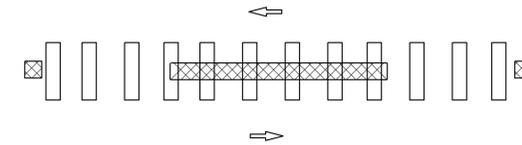
 = CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)



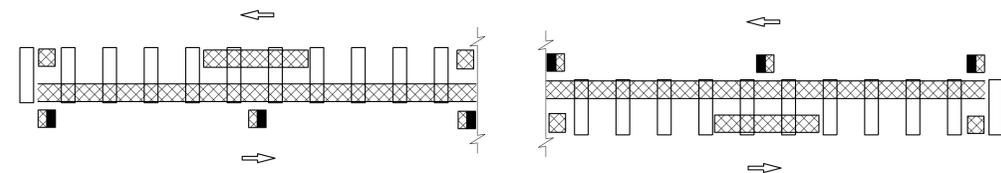
**GROUND-IN INDENTATIONS**



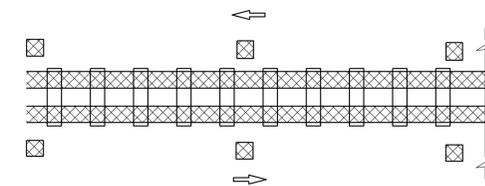
**TYPICAL CENTERLINE RUMBLE STRIP PLACEMENT AT INTERSECTIONS**



**DETAIL 6 WITH CENTERLINE RUMBLE STRIP**



**DETAIL 19 (Mod) WITH CENTERLINE RUMBLE STRIP**



**DETAIL 22 (Mod) WITH CENTERLINE RUMBLE STRIP**

**PAVEMENT DELINEATION DETAILS**

NO SCALE

**PDD-1**

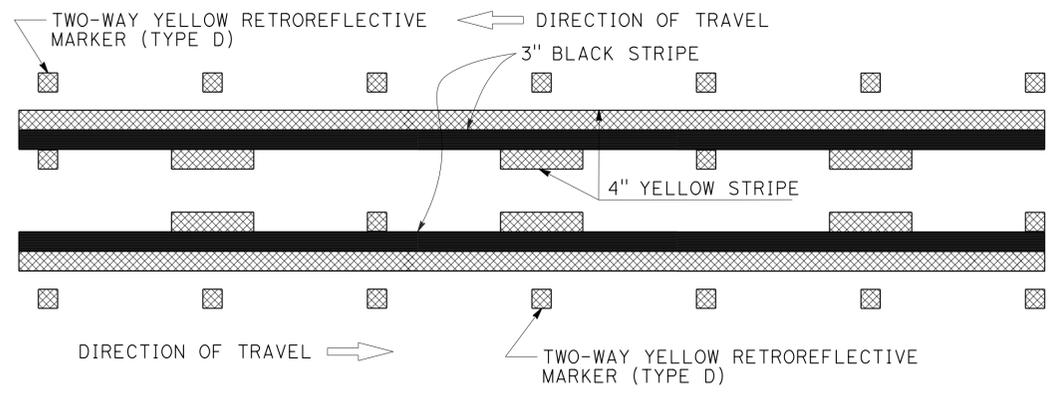
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	6	16

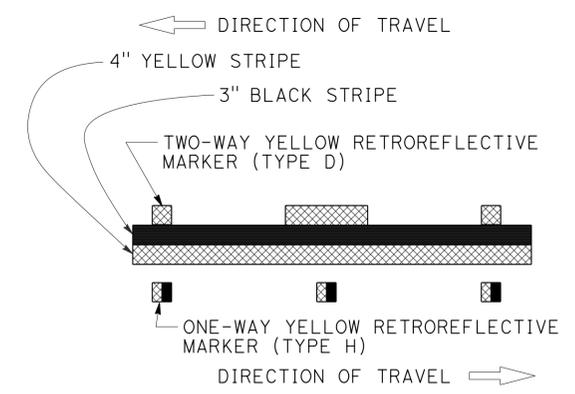
<i>Hamed S. Baha</i>	01-15-16
REGISTERED CIVIL ENGINEER	DATE
01-25-16	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER  
 HAMED S. BAHA  
 No. 74499  
 Exp. 12-31-17  
 CIVIL  
 STATE OF CALIFORNIA

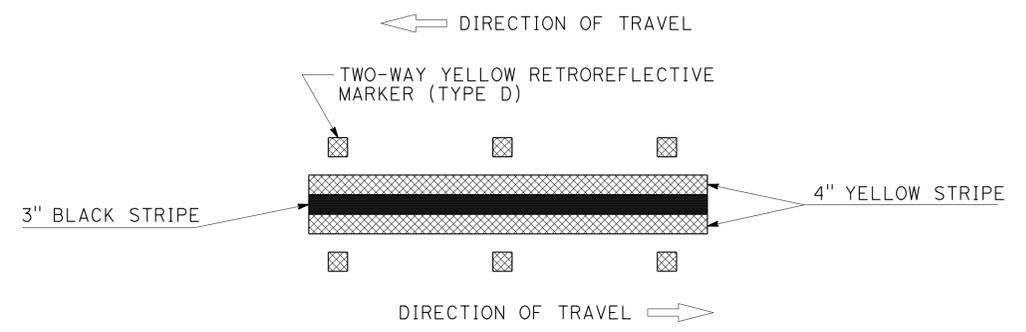
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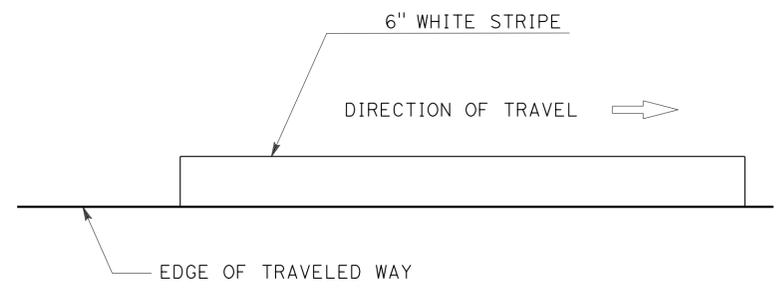
**DETAIL 32 (Mod)**



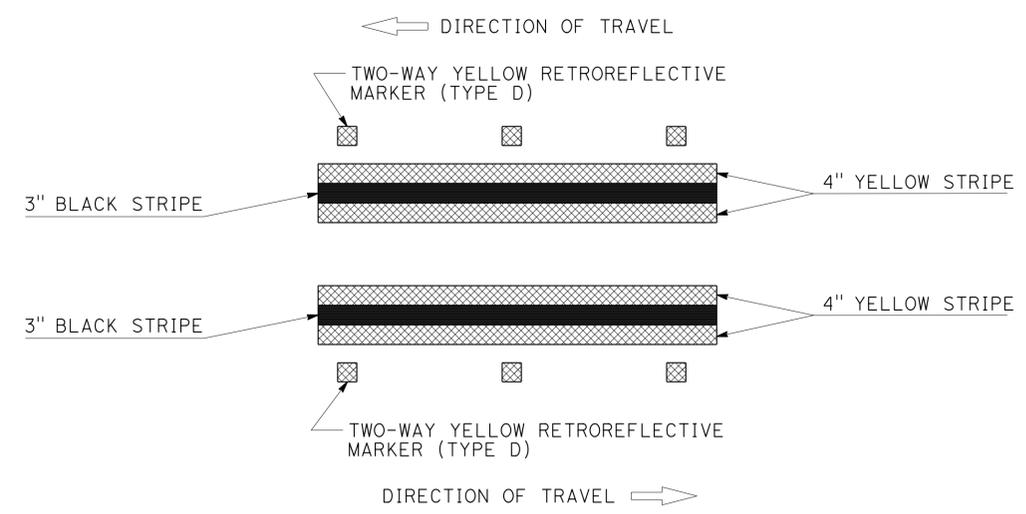
**DETAIL 19 (Mod)**



**DETAIL 22 (Mod)**



**DETAIL 27B (6Mod)**



**DETAIL 29 (Mod)**

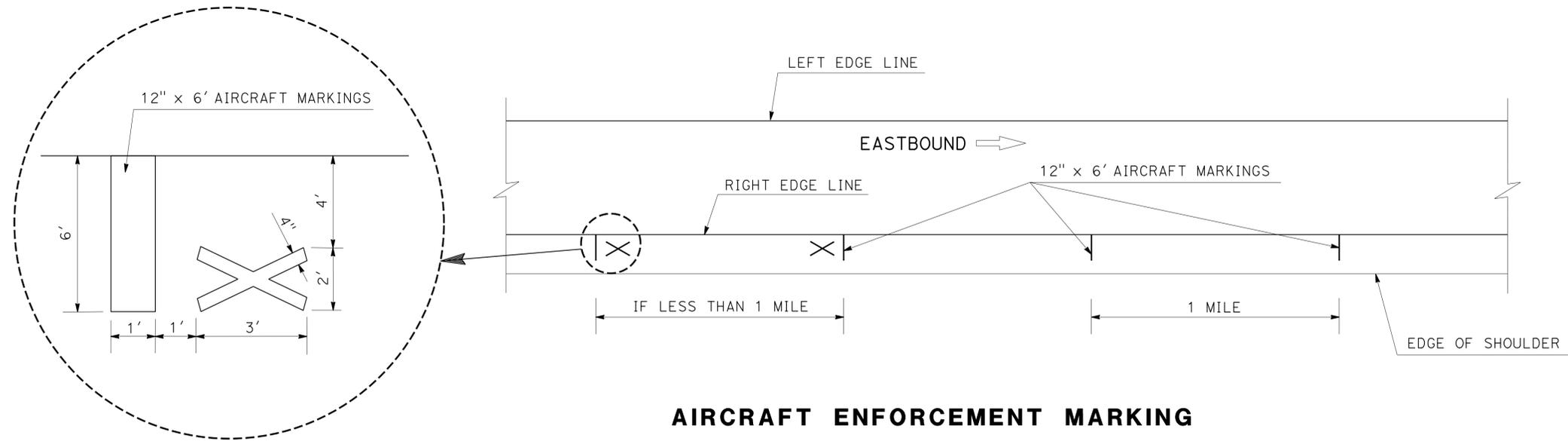
**PAVEMENT DELINEATION DETAILS**

NO SCALE

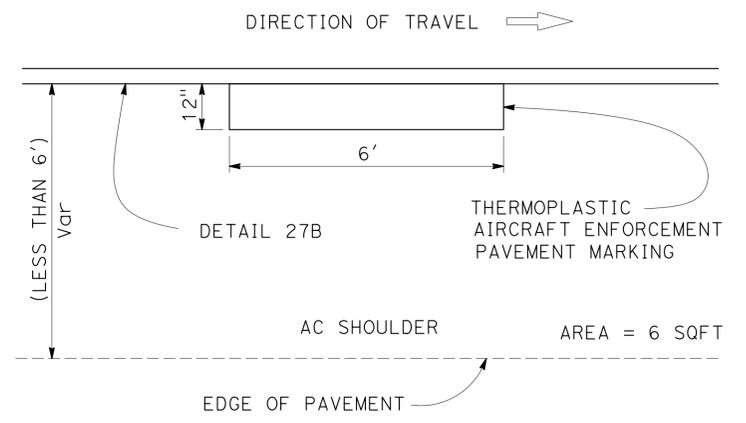
**PDD-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE  
 Caltrans®  
 FUNCTIONAL SUPERVISOR: LAURA ESPINOZA  
 CALCULATED/DESIGNED BY: HAMED BAHA  
 CHECKED BY: LAURA ESPINOZA  
 REVISED BY: HAMED BAHA  
 DATE REVISED: LAURA ESPINOZA

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	7	16
<i>Hamed S. Baha</i> REGISTERED CIVIL ENGINEER		01-15-16	DATE		
01-25-16		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>					



**AIRCRAFT ENFORCEMENT MARKING**



**AIRCRAFT ENFORCEMENT MARKING**  
 TYPE 2  
 (FOR NARROW SHld APPLICATIONS)

**PAVEMENT DELINEATION DETAILS**

NO SCALE

**PDD-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
<b>Caltrans</b>	
FUNCTIONAL SUPERVISOR	LAURA ESPINOZA
CALCULATED/DESIGNED BY	CHECKED BY
HAMED BAHA	LAURA ESPINOZA
REVISOR BY	DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	8	16

Hamed S. Baha 01-15-16  
 REGISTERED CIVIL ENGINEER DATE

01-25-16  
 PLANS APPROVAL DATE

HAMED S. BAHHA  
 No. 74499  
 Exp. 12-31-17  
 CIVIL

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- NOTES:
- ALL PAVEMENT DELINEATION TO MATCH EXISTING, UNLESS OTHERWISE NOTED.
  - (N) = NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

**PAVEMENT DELINEATION QUANTITIES**

ROUTE	DIRECTION	POSTMILE	LOCATION DETAIL	PAVEMENT MARKER (RETROREFLECTIVE)			PAINT TRAFFIC STRIPE (1-COAT) 3" LF	PAINT TRAFFIC STRIPE (2-COAT)		THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) 8" LF	REMARKS
				TYPE D	TYPE G	TYPE H		4"	6"		
				EA	EA	EA		LF	LF		
Imp 78	EB/WB	R50.0 to PM 80.7	6	702				32,842			
			19 (Mod)	794		1,554	36,485	36,485			
			22 (Mod)	8,026			95,763	191,527			
			27B (6Mod)				400		334,932		3" BLACK SOLID STRIPE WITH DETAIL 27B (6MOD) AT STRUCTURES
			29 (Mod)	72			1,584	3,168			
			32 (Mod)	234			4,435	4,435			
			38			16				370	
SUBTOTAL				9,828	16	1,554	138,667	268,457	334,932	370	
TOTAL					11,398		138,667	603,389		370	

**REMOVE TRAFFIC STRIPE AND PAVEMENT MARKING**

ROUTE	DIRECTION	POSTMILE	DETAIL/TYPE	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE THERMOPLASTIC PAVEMENT MARKING
				LF	SQFT
Imp 78	EB/WB	PM R50.0 to PM 80.7	38 TYPE III (L) ARROW, TYPE IV (R) ARROW, TYPE IV (L) ARROW, 1'-0" LIMIT LINE, "STOP", AIRCRAFT MARKING	370	691
TOTAL				370	691

**THERMOPLASTIC PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)**

ROUTE	DIRECTION	POSTMILE	DETAIL/TYPE	THERMOPLASTIC PAVEMENT MARKING
				SQFT
Imp 78	EB/WB	PM R50.0 to PM 80.7	TYPE III (L) ARROW, TYPE IV (R) ARROW, TYPE IV (L) ARROW, 1'-0" LIMIT LINE, "STOP", AIRCRAFT MARKING	691
TOTAL				691

**REMOVE PAVEMENT MARKER**

ROUTE	POSTMILE	TYPE (EA) (N)		
		D	G	H
Imp 78	PM R50.0 to PM 80.7	9,828	16	1,554

**PAVEMENT DELINEATION QUANTITIES PDQ-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION MAINTENANCE  
 HAMED BAHHA  
 LAURA ESPINOZA  
 LAURA ESPINOZA  
 HAMED S. BAHHA  
 LAURA ESPINOZA

LAST REVISION DATE PLOTTED => 25-JAN-2016 13:11  
 01-21-16 TIME PLOTTED => 13:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	9	16

Hamed S. Baha 01-15-16  
 REGISTERED CIVIL ENGINEER DATE  
 01-25-16  
 PLANS APPROVAL DATE

HAMED S. BAH  
 No. 74499  
 Exp. 12-31-17  
 CIVIL

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**NOTES:**

- [N] - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.
- THE EXACT LOCATIONS OF SHOULDER BACKING TO BE DETERMINED BY THE ENGINEER.
- LIMIT ARB FROM ETW TO ETW FOR SHOULDERS WIDER THAN 2', AND APPLY FOG SEAL ONLY AT THE SHOULDERS.
- APPLY ARB FROM EP TO EP FOR SHOULDERS 2' AND NARROWER.

**ABBREVIATIONS:**

ARB = ASPHALT-RUBBER BINDER

**ROADWAY QUANTITIES**

LOCATION			LENGTH	TRAVELED WAY WIDTH	SHOULDER WIDTH (L+/R+)	TRAVELED WAY AREA	SHOULDER AREA	TRAVELED WAY AREA	SHOULDER AREA	ASPHALT-RUBBER BINDER		PRECOATED SCREENINGS	ASPHALTIC EMULSION (FOG SEAL COAT)	SAND COVER (SEAL)	REMARKS
DIRECTION	FROM PM	TO PM								TRAVELED WAY	SHOULDER				
			LF [N]	LF [N]	LF [N]	SQFT [N]	SQFT [N]	SQYD [N]	SQYD [N]			TON	TON	TON	
EB/WB Imp 78	R50.00	R51.20	6336	24	16	152,064	101,376	16,896	11,264	40.07		337.92	5.87	33.79	SEE NOTES FOR ARB LIMIT
	50.18	56.20	31,786	24	4	762,854	127,142	84,762	14,127	201.02	33.50	1,977.77	20.60	197.78	PM Eq: PM R51.20=50.18
	56.20	56.40	1,056	40	4	42,240	4,224	4,693	469	11.13	1.11	11.73	1.08	10.33	16' TURN OUT POCKET LANE
	56.40	59.80	17,952	24	4	430,848	71,808	47,872	7,979	113.53	18.92	1,117.01	11.64	111.70	
	59.80	60.00	1,056	40	4	42,240	4,224	4,693	469	11.13	1.11	11.73	1.08	10.33	16' TURN OUT POCKET LANE
	60.00	63.80	20,064	24	4	481,536	80,256	53,504	8,917	126.89	21.15	1,248.43	13.00	124.84	
	63.80	64.00	1,056	40	4	42,240	4,224	4,693	469	11.13	1.11	11.73	1.08	10.33	16' TURN OUT POCKET LANE
	64.00	75.57	61,090	24	4	1,466,150	244,358	162,906	27,151	386.34	64.39	3,801.13	39.60	380.11	
	75.57	75.60													
	75.60	79.19	18,955	24	8	454,925	151,642	50,547	16,849	119.87		1,347.93	14.04	101.09	PALO VERDE OUTFALL BRIDGE
	79.19	79.23													
	79.23	80.60	7,234	36	12	260,410	86,803	28,934	9,645	68.62		771.58	8.04	57.87	PALO VERDE OUTFALL BRIDGE
	80.60	80.74	739	24	12	17,741	8,870	1,971	986	4.67		20.70	0.62	3.94	12' MEDIAN LEFT TURN LANE
															IMPERIAL/RIVERSIDE COUNTY LINE
SUBTOTAL										1,094.36	141.29	10,657.66		1,042.11	
TOTAL										1,235.65		10,657.66	* 116.65	1,042.11	

**RUMBLE STRIP**

LOCATION				CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)
ROUTE	DIRECTION	BEGIN PM	END PM	Sta
Imp 78	EB/WB	R50.0	R51.2	63
Imp 78	EB/WB	50.2	80.2	1,584
TOTAL				1,647

**ASPHALTIC EMULSION (FOG SEAL COAT)**

ROUTE	DIRECTION	POSTMILE	DESCRIPTION	TON
Imp 78	EB/WB	PM R50.0 to PM 80.7	MAINTENANCE VEHICLE PULLOUTS	0.65
			INLET SPILLWAYS/OVERSIGHT DRAINS	0.04
			MISCELLANEOUS AREAS	0.97
			AC DIKE	4.50
			CROSS SREETS/DRIVEWAYS	5.63
SUBTOTAL				11.79
* TOTAL FROM ROADWAY QUANTITIES TABLE				* 116.65
TOTAL				128.44

**SHOULDER BACKING**

LOCATION				WIDTH	DEPTH	SHOULDER BACKING
ROUTE	DIRECTION	FROM PM	TO PM	LF [N]	LF [N]	TON
Imp 78	EB	R50.0	80.7	3	0.1	704
Imp 78	WB	R50.0	80.7	3	0.1	704
TOTAL						1,408

**SUMMARY OF QUANTITIES**

**Q-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	10	16

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

July 19, 2013  
PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 01-25-16

**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 <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

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

**REVISED STANDARD PLAN RSP A10B**

	<b>M</b>
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
	<b>N</b>
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
	<b>O</b>
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
	<b>P</b>
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

	<b>P continued</b>
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
	<b>Q</b>
Qty	QUANTITY
	<b>R</b>
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

	<b>S</b>
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
±	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
	<b>T</b>
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

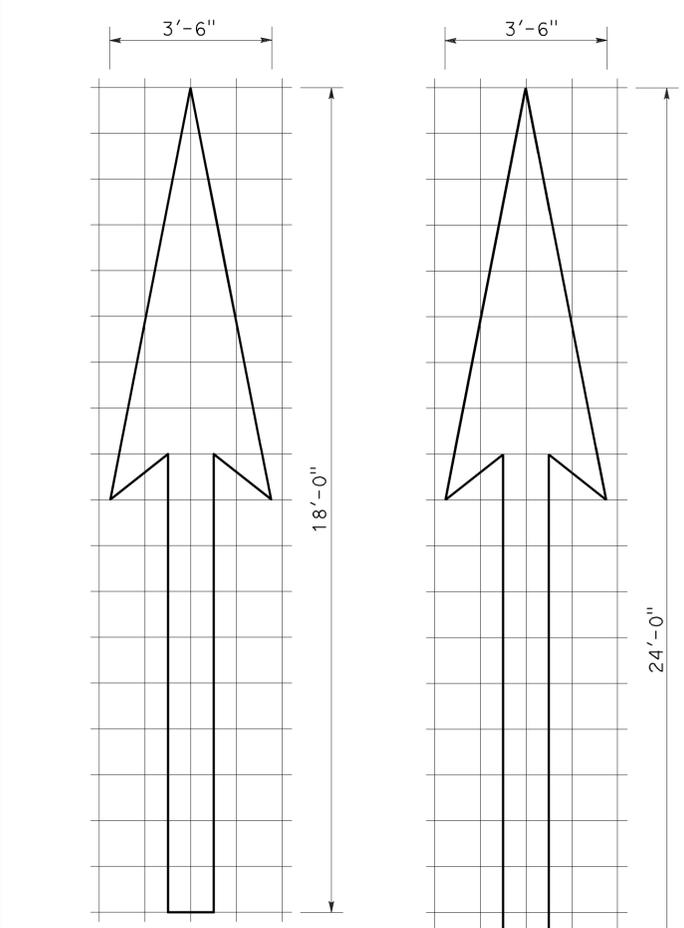
	<b>T continued</b>
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL
	<b>U</b>
UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
	<b>V</b>
V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	11	16

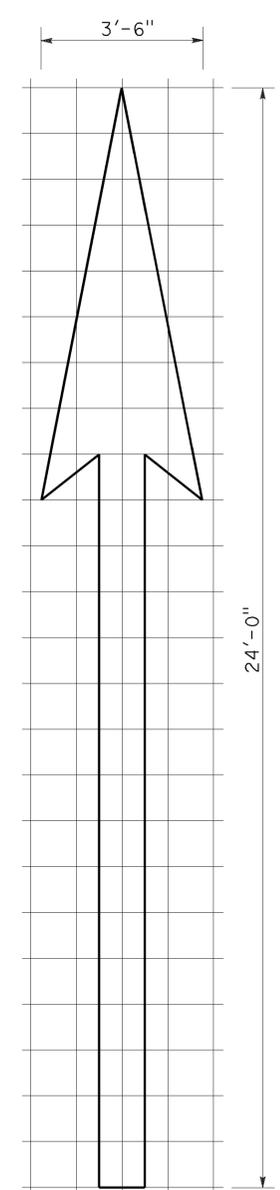
*Roberta L. McLaughlin*  
 REGISTERED CIVIL ENGINEER  
 April 20, 2012  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

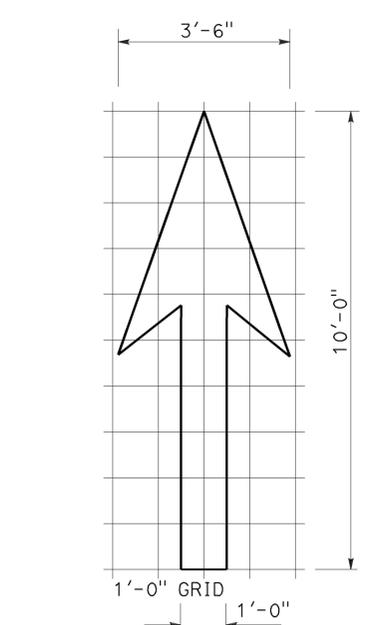
TO ACCOMPANY PLANS DATED 01-25-16



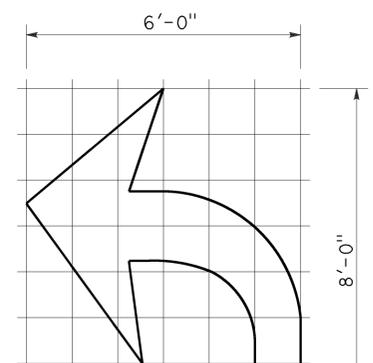
A=25 ft<sup>2</sup>  
**TYPE I 18'-0" ARROW**



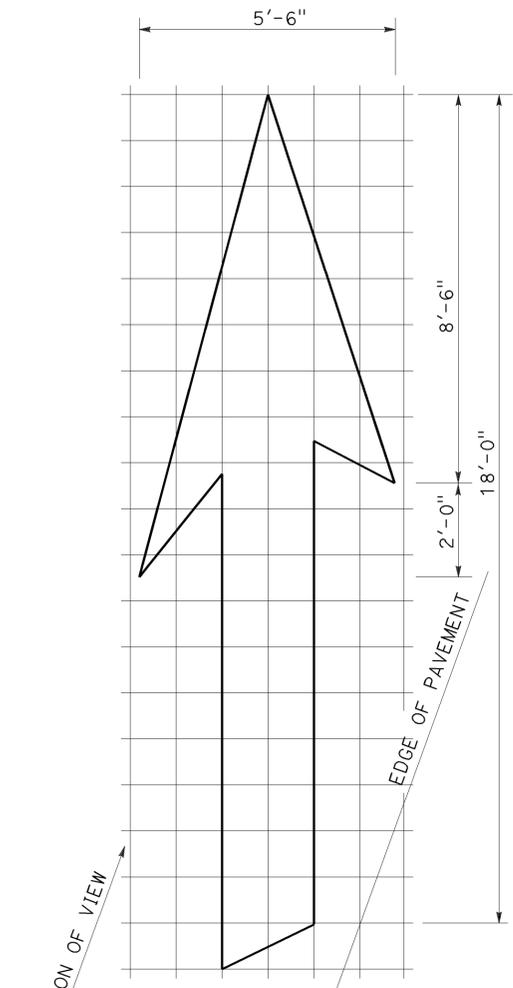
A=31 ft<sup>2</sup>  
**TYPE I 24'-0" ARROW**



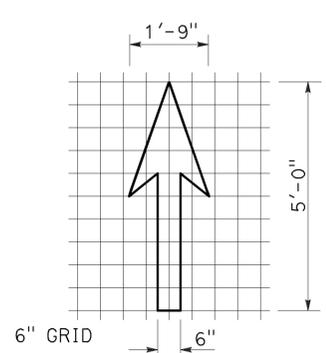
A=14 ft<sup>2</sup>  
**TYPE I 10'-0" ARROW**



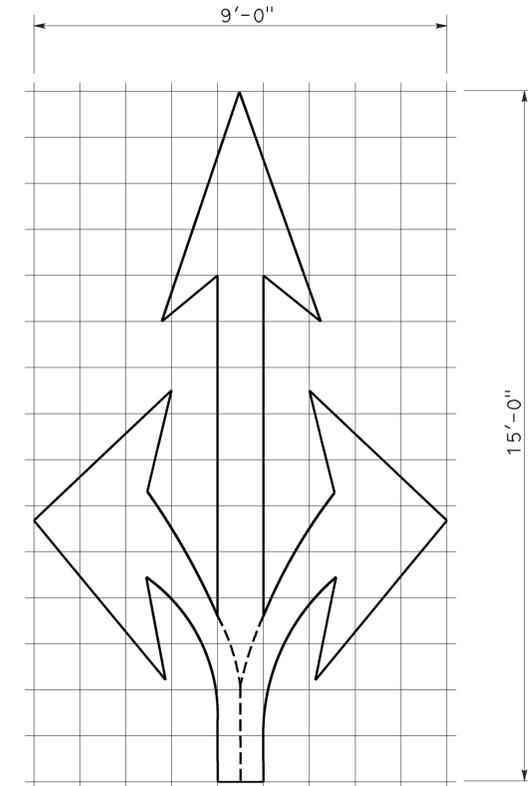
A=15 ft<sup>2</sup>  
**TYPE IV (L) ARROW**  
 (For Type IV (R) arrow, use mirror image)



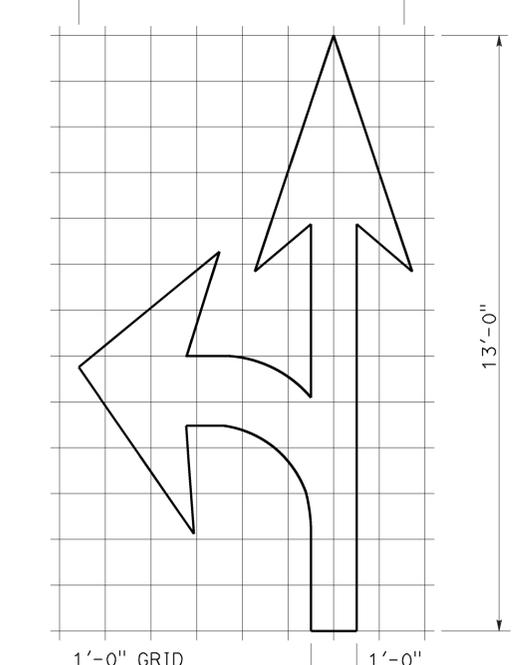
A=42 ft<sup>2</sup>  
**TYPE VI ARROW**  
 Right lane drop arrow  
 (For left lane, use mirror image)



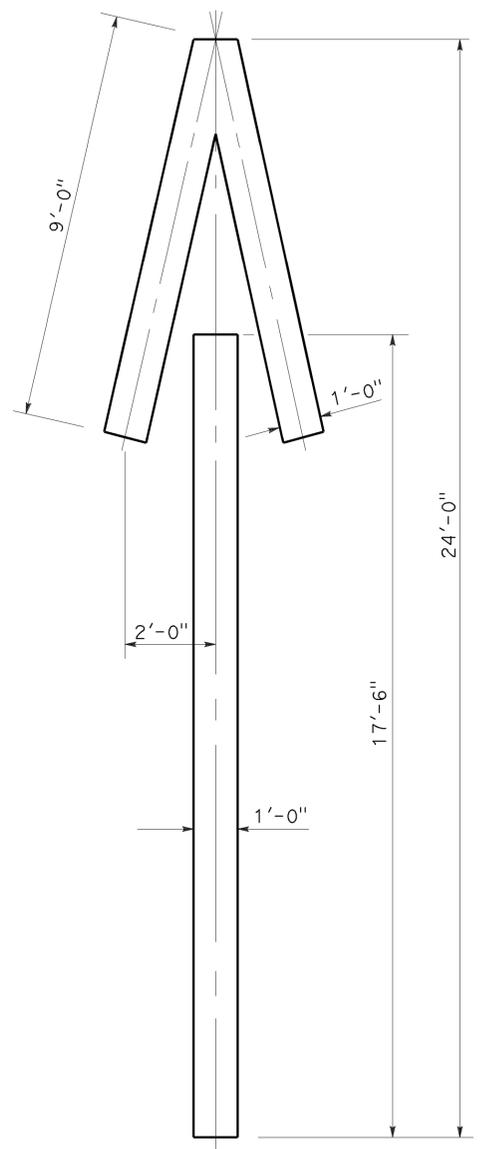
A=3.5 ft<sup>2</sup>  
**BIKE LANE ARROW**



A=36 ft<sup>2</sup>  
**TYPE VIII ARROW**



A=27 ft<sup>2</sup>  
**TYPE VII (L) ARROW**  
 (For Type VII (R) arrow, use mirror image)



A=33 ft<sup>2</sup>  
**TYPE V ARROW**

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

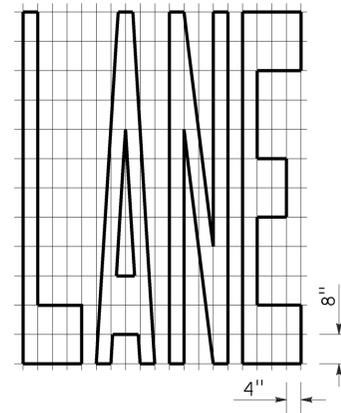
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
 ARROWS**  
 NO SCALE

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

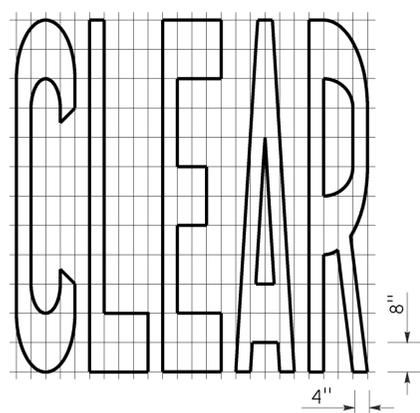
**REVISED STANDARD PLAN RSP A24A**

2010 REVISED STANDARD PLAN RSP A24A

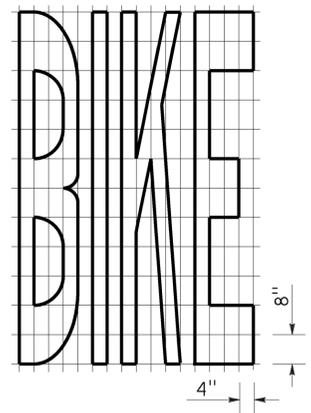
TO ACCOMPANY PLANS DATED 01-25-16



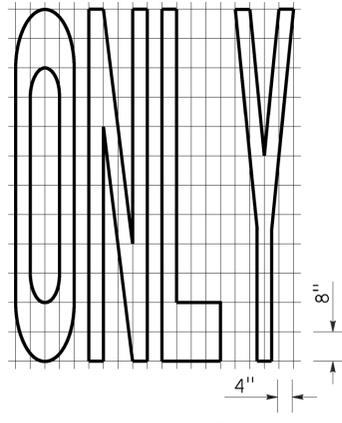
A=24 ft<sup>2</sup>



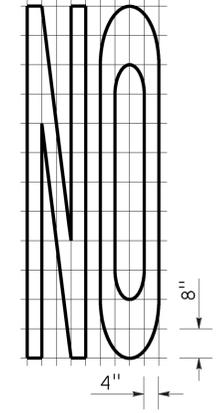
A=27 ft<sup>2</sup>



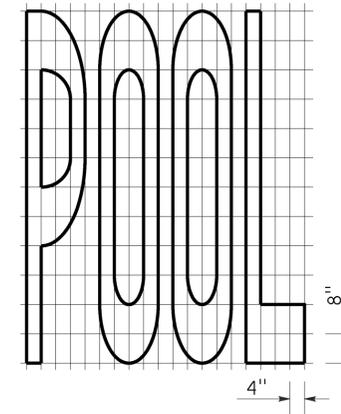
A=21 ft<sup>2</sup>



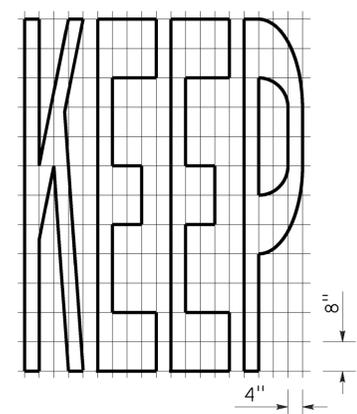
A=22 ft<sup>2</sup>



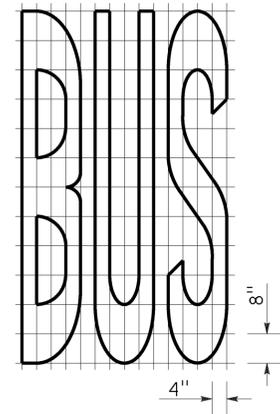
A=14 ft<sup>2</sup>



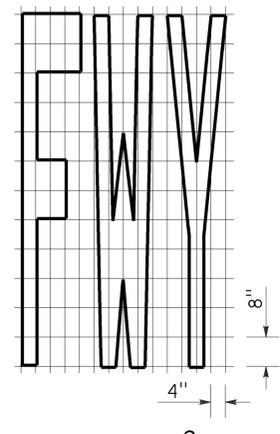
A=23 ft<sup>2</sup>



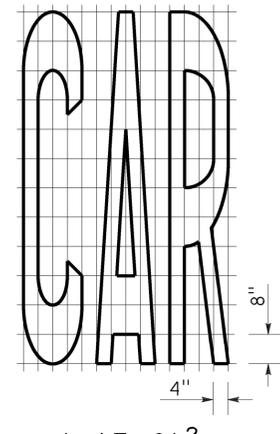
A=24 ft<sup>2</sup>



A=20 ft<sup>2</sup>

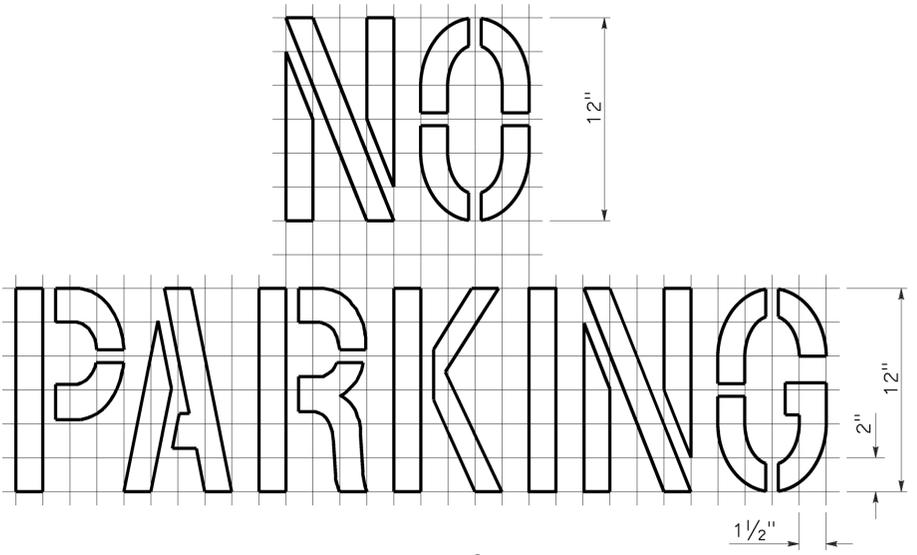


A=16 ft<sup>2</sup>

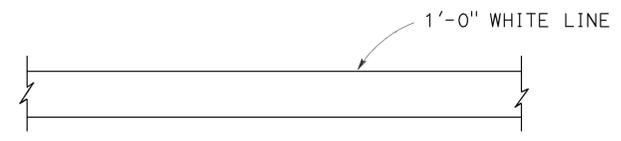


A=17 ft<sup>2</sup>

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



A=2 ft<sup>2</sup>  
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.

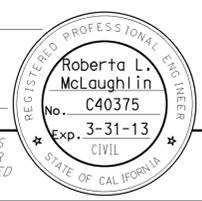
2010 REVISED STANDARD PLAN RSP A24E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	13	16

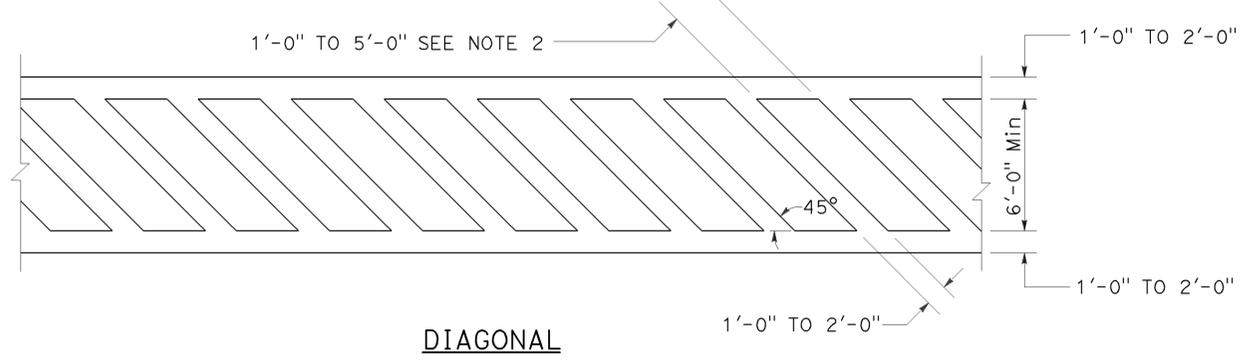
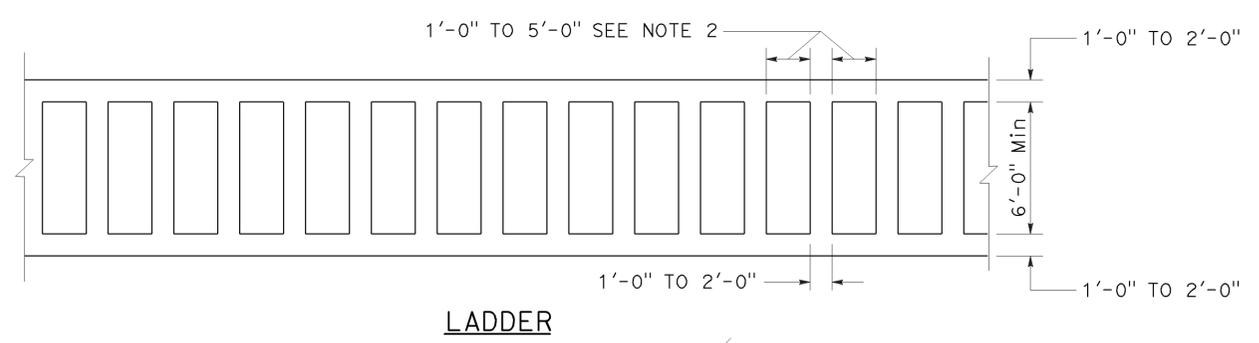
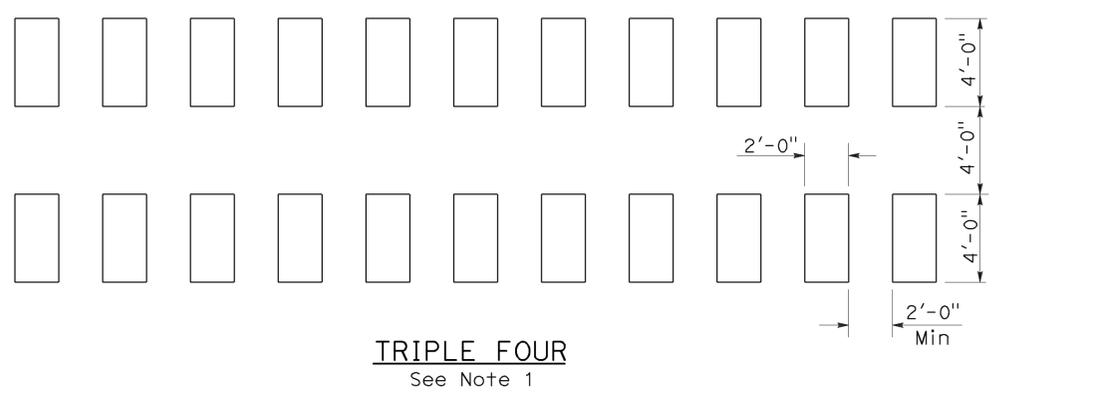
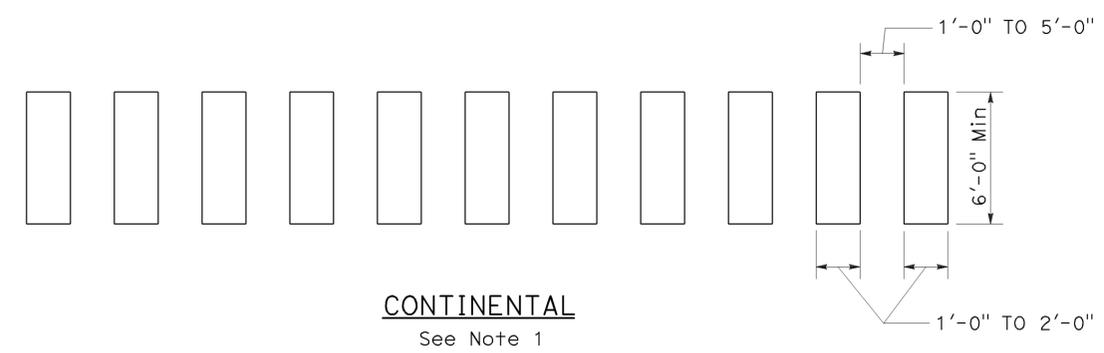
*Roberta L. McLaughlin*  
 REGISTERED CIVIL ENGINEER  
 July 20, 2012  
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 01-25-16



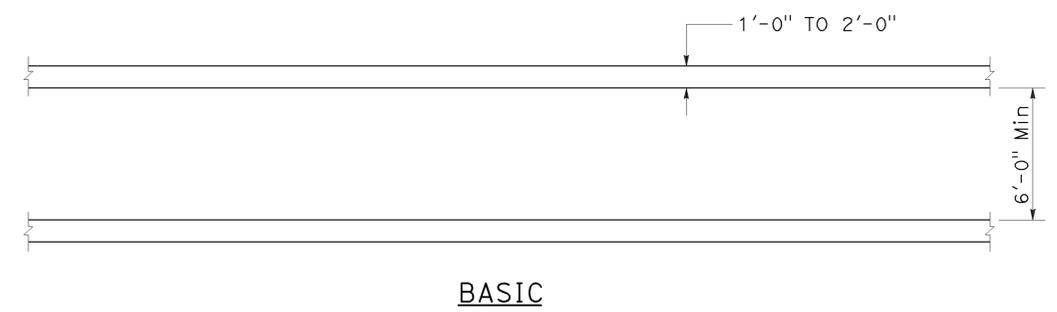
2010 REVISED STANDARD PLAN RSP A24F



**HIGHER VISIBILITY CROSSWALKS**

**NOTES:**

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

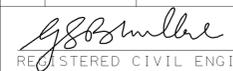


**BASIC**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
CROSSWALKS**

NO SCALE  
RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE  
STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	14	16

  
 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 01-25-16

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.

2010 REVISED STANDARD PLAN RSP T9

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

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

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78	R50.0/80.7	15	16

Devinder Singh  
REGISTERED CIVIL ENGINEER

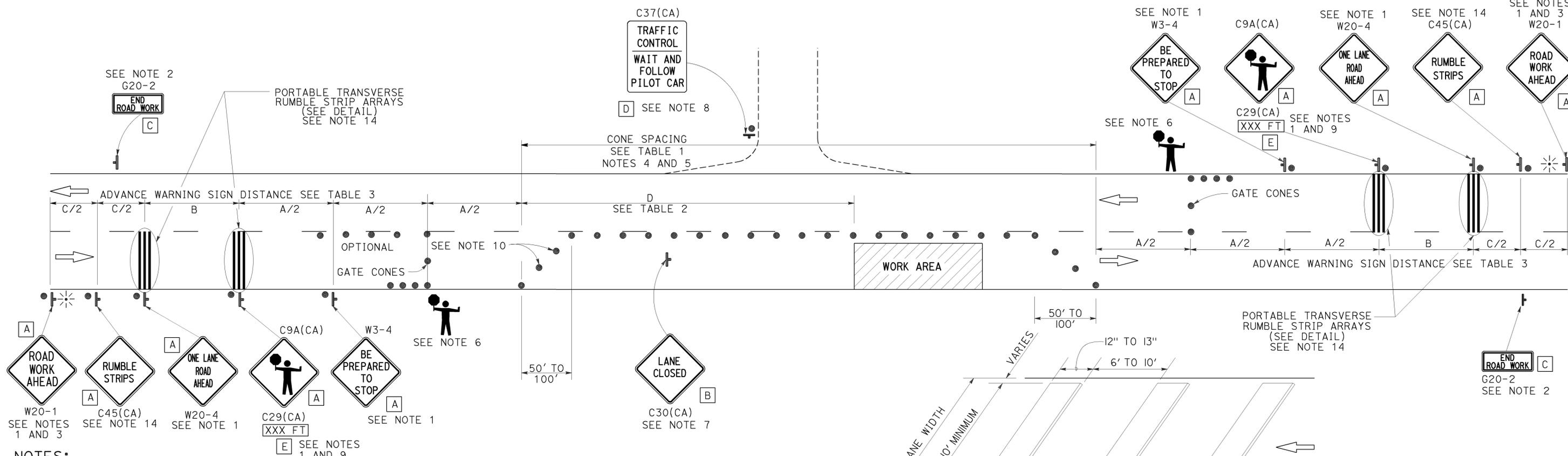
October 30, 2015  
PLANS APPROVAL DATE

Devinder Singh  
REGISTERED PROFESSIONAL ENGINEER  
No. C50470  
Exp. 6-30-17  
CIVIL  
STATE OF CALIFORNIA

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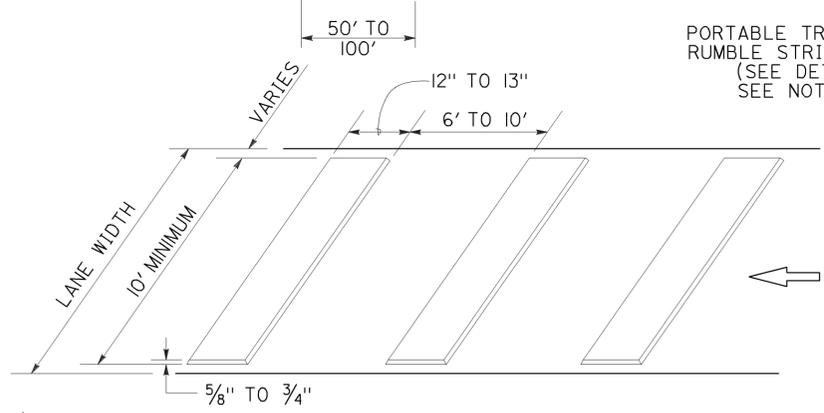
**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 01-25-16



**NOTES:**

- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
  - Work duration occupies a location for four hours or less
  - Posted speed limit is below 45 MPH
  - Work is of emergency nature
  - Work zone is in snow or icy weather conditions



**LEGEND**

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

**SIGN PANEL SIZE (Min)**

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

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

NO SCALE

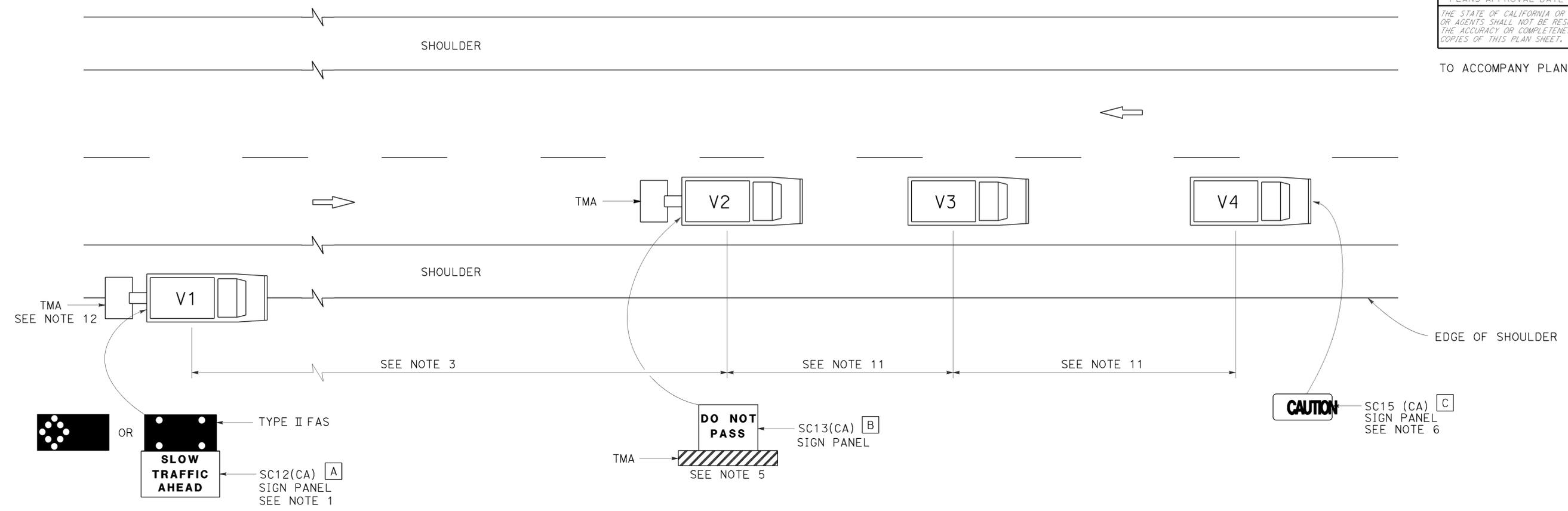
RSP T13 DATED OCTOBER 30, 2015 SUPERSEDES RSP T13 DATED OCTOBER 17, 2014, RSP T13 DATED JULY 18, 2014 AND RSP T13 DATED APRIL 19, 2013 AND STANDARD PLAN T13 DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T13**

2010 REVISED STANDARD PLAN RSP T13



TO ACCOMPANY PLANS DATED 01-25-16



**NOTES:**

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Revised Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.

**LEGEND**

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

**SIGN PANEL SIZE (Min)**

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

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

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

**REVISED STANDARD PLAN RSP T17**

2010 REVISED STANDARD PLAN RSP T17