

INDEX OF PLANS  
SHEET No. DESCRIPTION

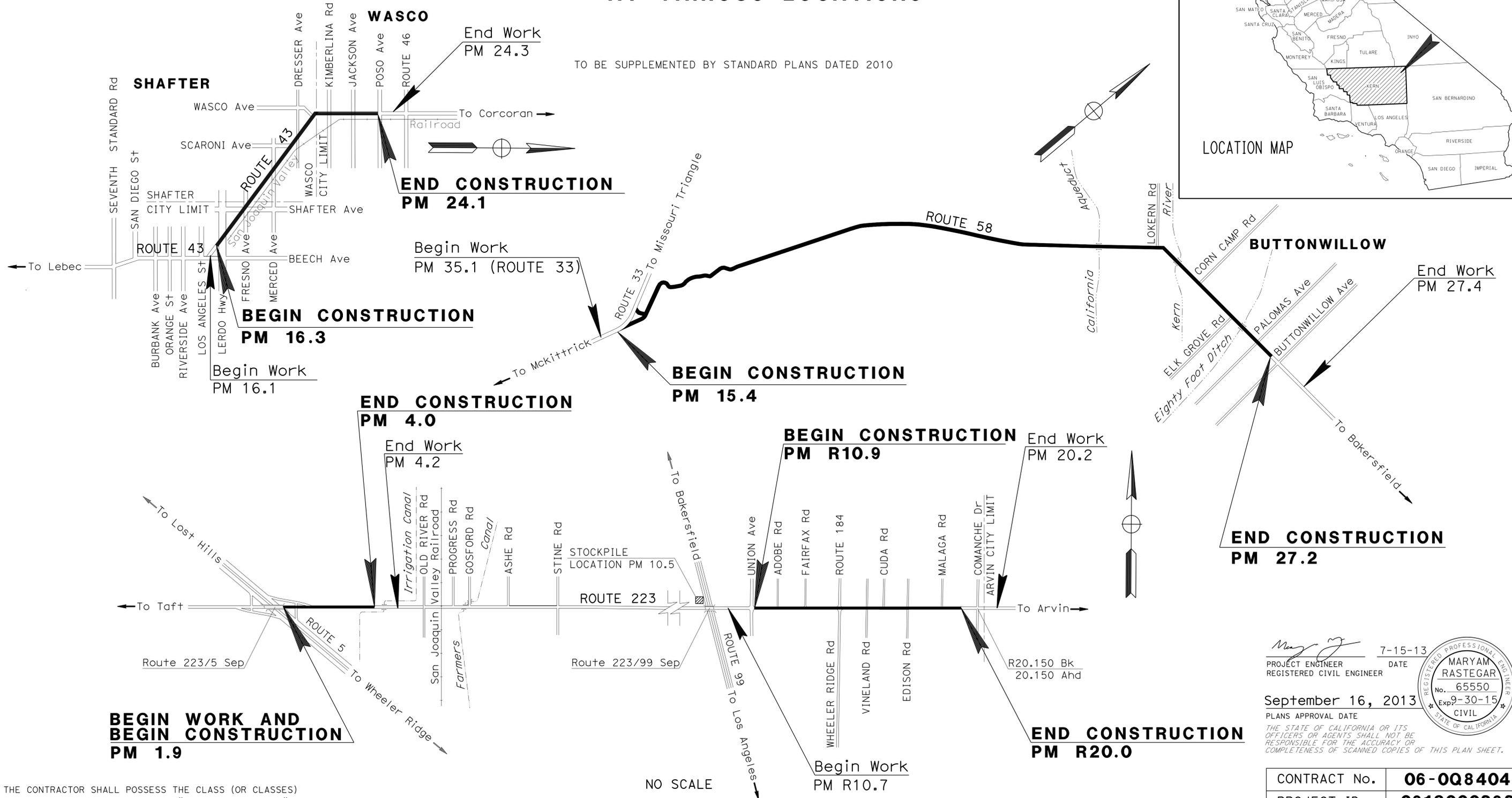
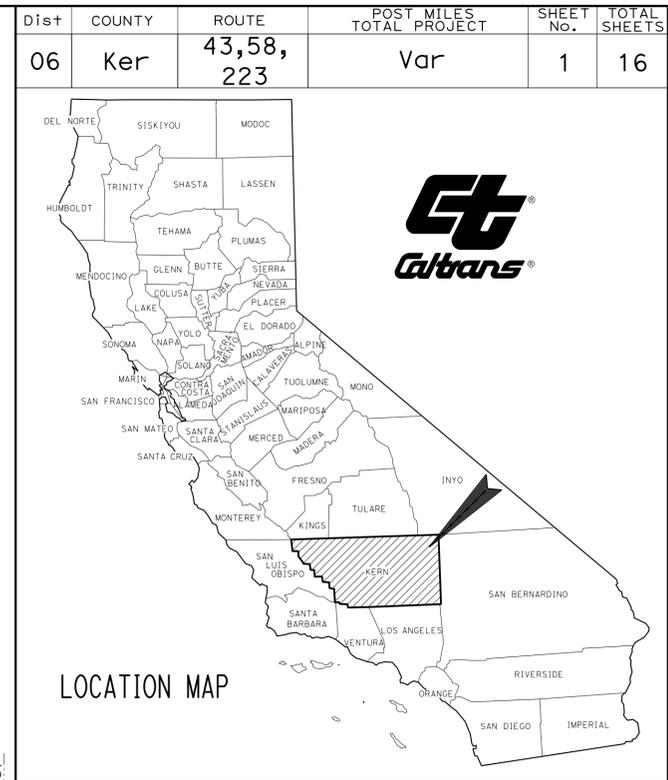
- 1 TITLE AND LOCATION MAP
- 2 TYPICAL CROSS SECTIONS
- 3 CONSTRUCTION DETAILS
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- 8-16 REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACSTP-X029(111)E  
DEPARTMENT OF TRANSPORTATION  
**PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY**

**IN KERN COUNTY  
AT VARIOUS LOCATIONS**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER  
**VICTOR SHAW**

DESIGN ENGINEER  
**RENE SANCHEZ**

*Maryam Rastegar* 7-15-13  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER

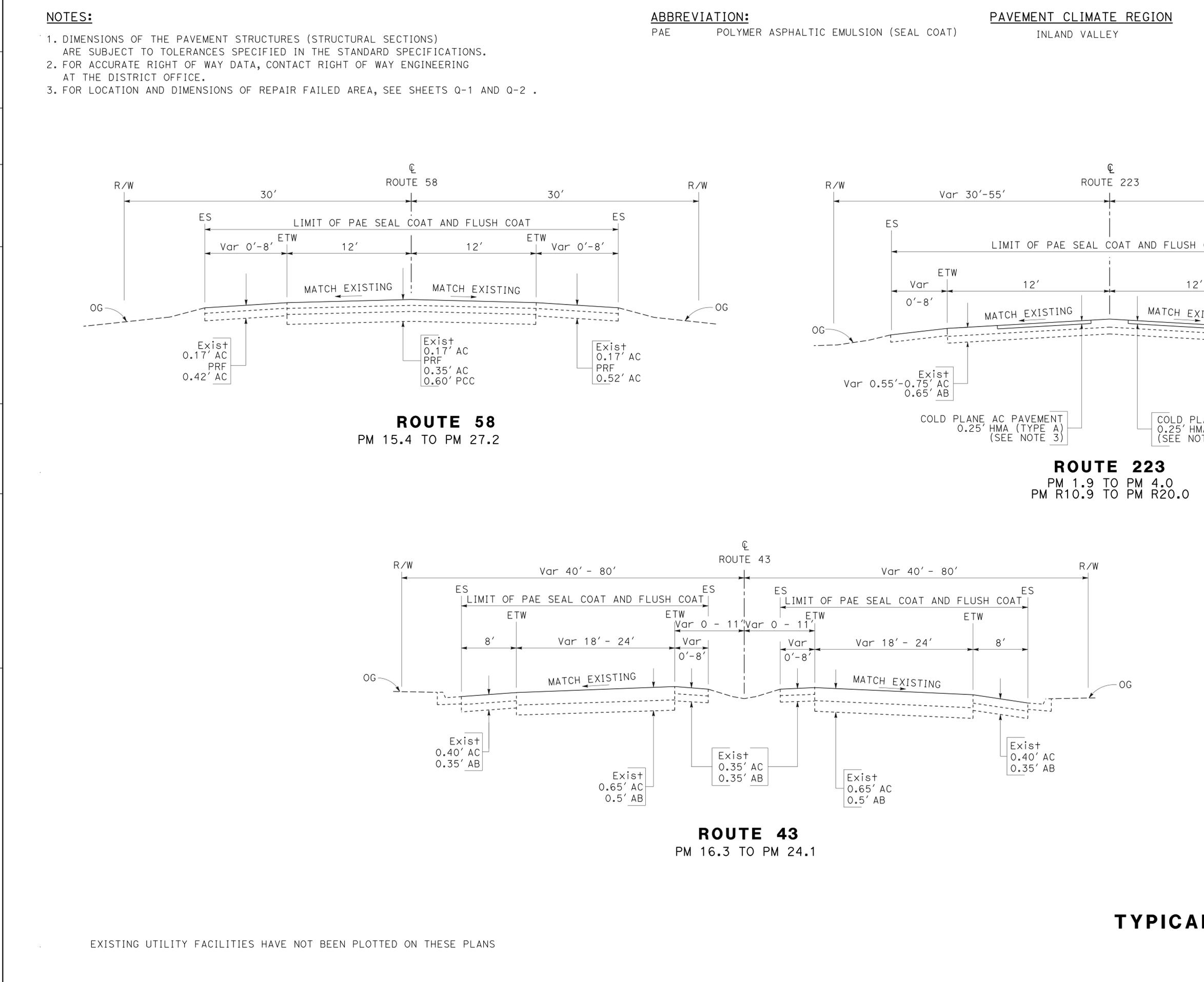
September 16, 2013  
PLANS APPROVAL DATE

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.



CONTRACT No. **06-0Q8404**  
PROJECT ID **0613000262**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 PAVEMENT PRESERVATION



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	2	16

REGISTERED CIVIL ENGINEER DATE 7-15-13  
 MARYAM RASTEGAR  
 No. 65550  
 Exp. 9-30-15  
 CIVIL

PLANS APPROVAL DATE 9-16-13

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. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. FOR LOCATION AND DIMENSIONS OF REPAIR FAILED AREA, SEE SHEETS Q-1 AND Q-2 .

**ABBREVIATION:**

PAE POLYMER ASPHALTIC EMULSION (SEAL COAT)

**PAVEMENT CLIMATE REGION**

INLAND VALLEY

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

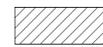
**TYPICAL CROSS SECTIONS**

NO SCALE

**X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 PAVEMENT PRESERVATION  
 FUNCTIONAL SUPERVISOR: RENE SANCHEZ  
 CALCULATED-DESIGNED BY: TRINIDAD ANGUIANO  
 CHECKED BY: MARYAM RASTEGAR  
 REVISED BY: DATE REVISION  
 DATE REVISION

**LEGEND:**

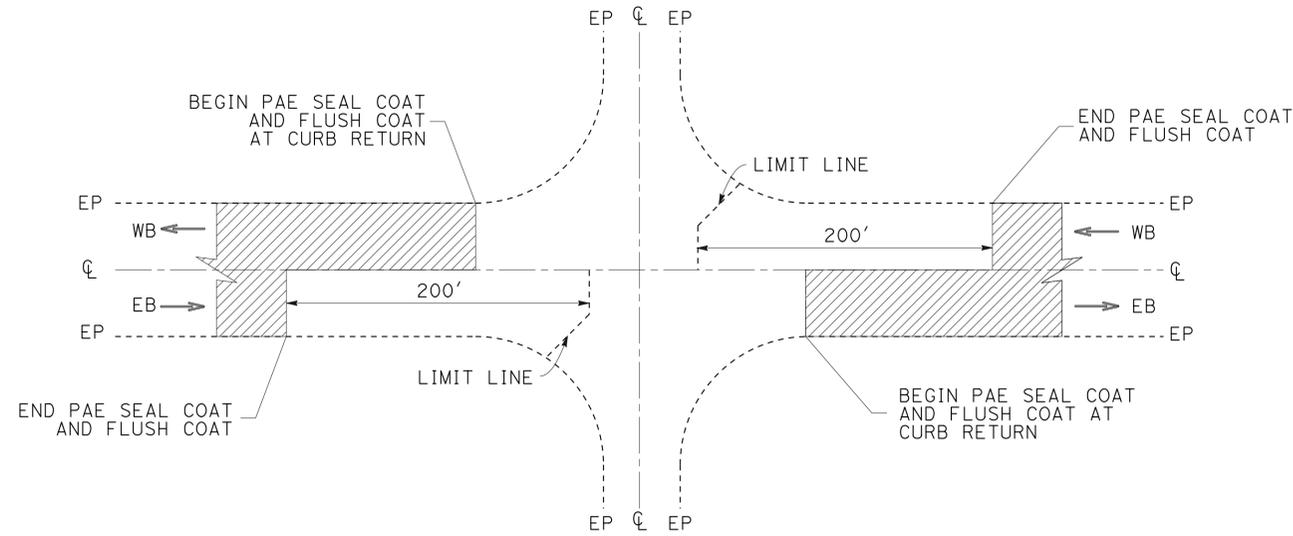
 PAE SEAL COAT AND FLUSH COAT

**ABBREVIATION:**

PAE POLYMER ASPHALTIC EMULSION (SEAL COAT)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	3	16

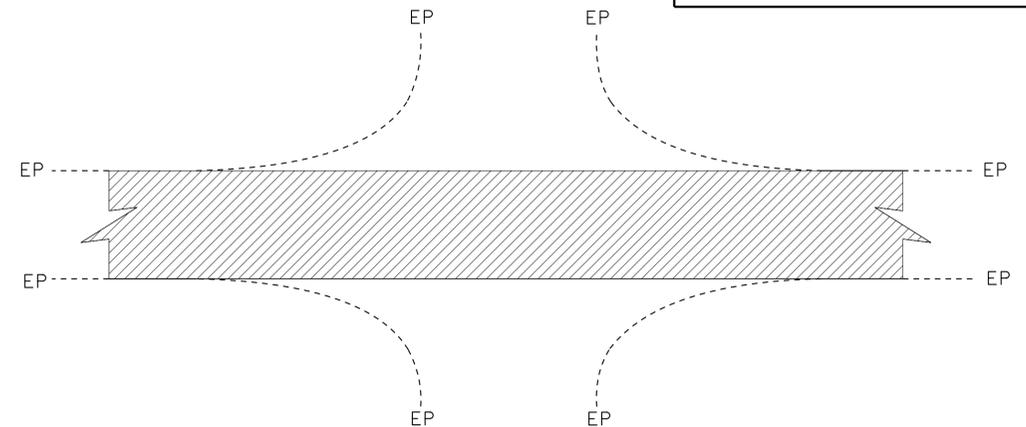
REGISTERED CIVIL ENGINEER DATE 7-15-13  
 MARYAM RASTEGAR  
 No. 65550  
 Exp. 9-30-15  
 CIVIL  
 PLANS APPROVAL DATE 9-16-13  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



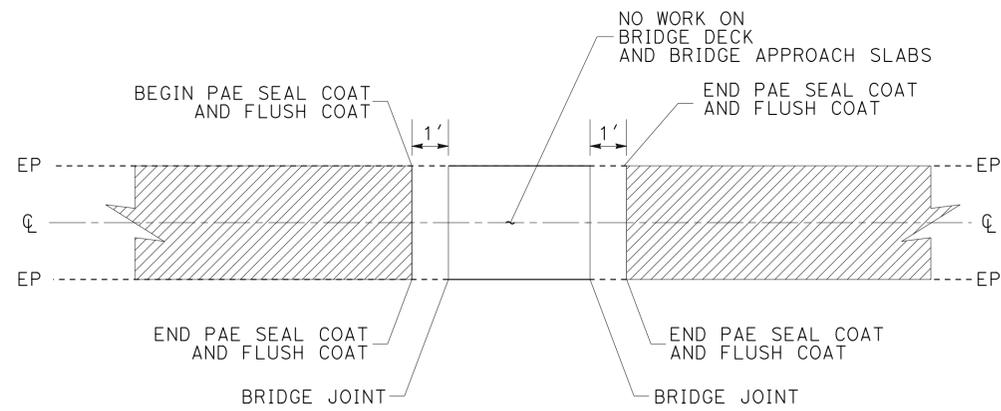
**LIMIT OF PAE SEAL COAT AND FLUSH COAT AT ALL WAY STOP CONTROLLED INTERSECTIONS**

Ker 223

PM R10.94  
 PM R12.98  
 PM R16.01



**LIMIT OF PAE SEAL COAT AND FLUSH COAT AT LOCAL ROAD INTERSECTIONS**



**LIMIT OF PAE SEAL COAT AND FLUSH COAT AT BRIDGE DECK**

**CONSTRUCTION DETAILS**

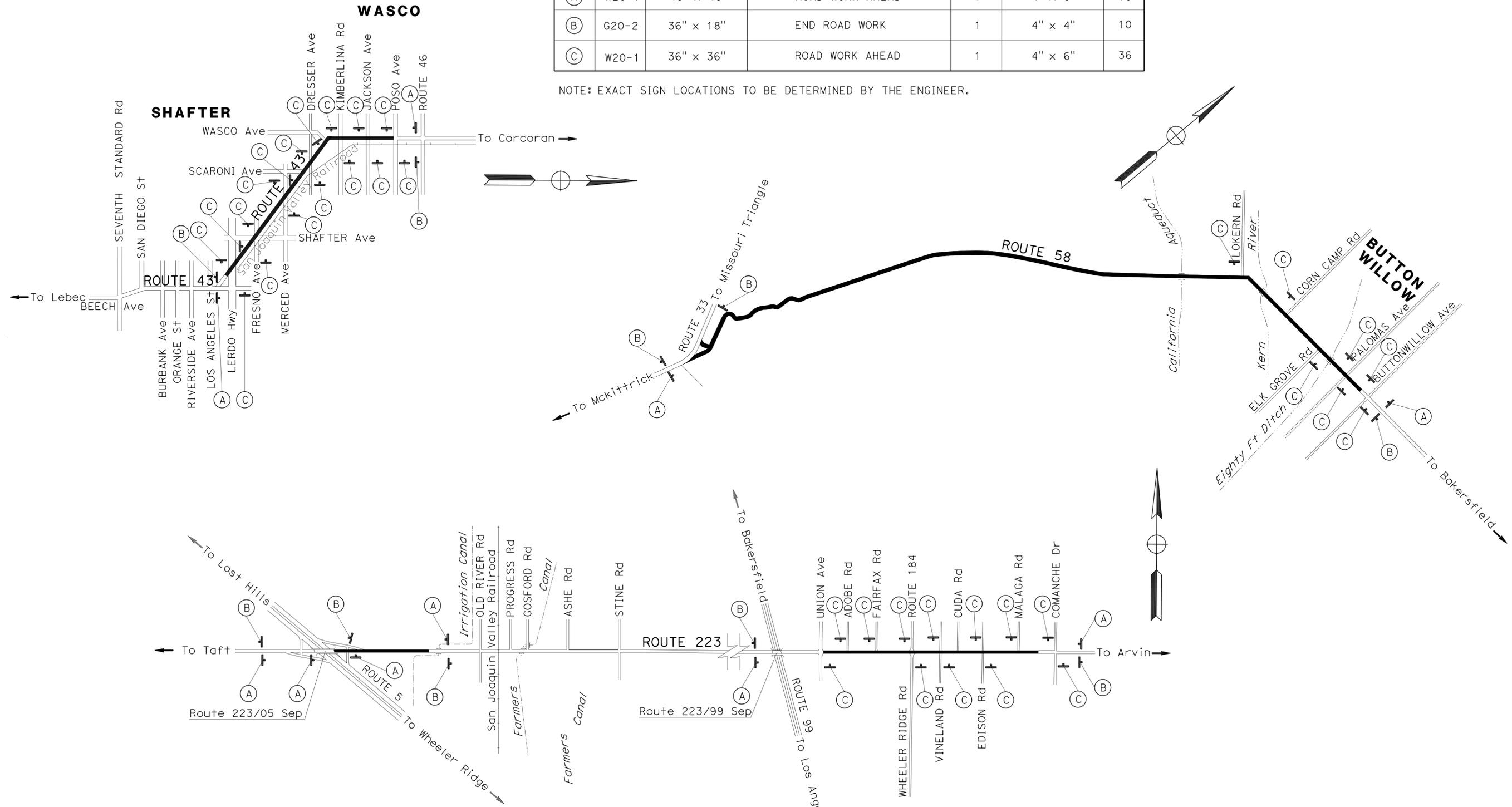
NO SCALE

**C-1**

### STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POST	POST SIZE	No. OF SIGNS
(A)	W20-1	48" x 48"	ROAD WORK AHEAD	1	4" x 6"	10
(B)	G20-2	36" x 18"	END ROAD WORK	1	4" x 4"	10
(C)	W20-1	36" x 36"	ROAD WORK AHEAD	1	4" x 6"	36

NOTE: EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.



EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**PAVEMENT PRESERVATION**  
*Caltrans*

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**PAVEMENT PRESERVATION**  
 Et Galtans®  
 FUNCTIONAL SUPERVISOR: RENE SANCHEZ  
 CALCULATED-DESIGNED BY: CHECKED BY:  
 TRINIDAD ANGUIANO MARYAM RASTEGAR  
 REVISED BY: DATE REVISED:

### REPAIR FAILED AREA

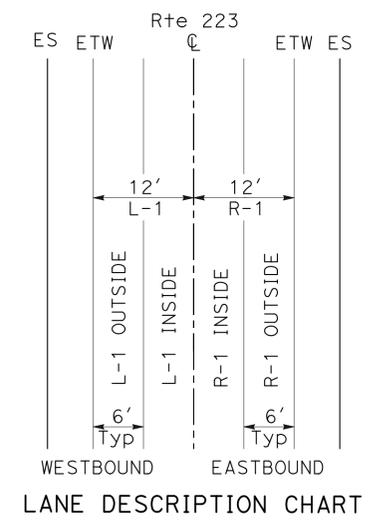
BEGIN POST MILE (Ker 223)	END POST MILE (Ker 223)	LOCATION	LENGTH	WIDTH	COLD PLANE AC PAVEMENT	HMA (TYPE A)
			LF	LF	SQYD	TON
R11.112	R11.114	R-1 OUTSIDE	11	6	7	1
R11.490	R11.492	R-1 FULL WIDTH	11	12	14	2
R11.492	R11.497	R-1 OUTSIDE	26	6	18	3
R11.508	R11.513	R-1 OUTSIDE	26	6	18	3
R11.813	R11.817	R-1 FULL WIDTH	21	12	28	5
R11.839	R11.842	R-1 OUTSIDE	16	6	11	2
R11.897	R11.904	R-1 FULL WIDTH	37	12	49	9
R11.926	R11.931	R-1 FULL WIDTH	26	12	35	6
R12.491	R12.495	R-1 OUTSIDE	21	6	14	2
R12.504	R12.509	R-1 INSIDE	26	6	18	3
R12.602	R12.609	R-1 FULL WIDTH	37	12	49	9
R12.705	R12.708	R-1 OUTSIDE	16	6	11	2
R12.818	R12.822	R-1 OUTSIDE	21	6	14	2
R12.841	R12.845	R-1 INSIDE	21	6	14	2
R13.429	R13.434	R-1 OUTSIDE	26	6	18	3
R14.211	R14.213	R-1 FULL WIDTH	11	12	14	2
R14.217	R14.219	R-1 FULL WIDTH	11	12	14	2
R14.246	R14.254	R-1 FULL WIDTH	42	12	56	10
R14.263	R14.274	R-1 OUTSIDE	58	6	39	7
R14.353	R14.355	R-1 INSIDE	11	6	7	1
R14.417	R14.421	R-1 OUTSIDE	21	6	14	2
R14.421	R14.423	R-1 INSIDE	11	6	7	1
R14.538	R14.541	R-1 FULL WIDTH	16	12	21	4
R15.317	R15.321	R-1 FULL WIDTH	21	12	28	5
R15.335	R15.337	R-1 OUTSIDE	11	6	7	1
R16.404	R16.407	R-1 OUTSIDE	16	6	11	2
R16.425	R16.429	R-1 OUTSIDE	21	6	14	2
R16.534	R16.536	R-1 OUTSIDE	11	6	7	1
R16.605	R16.609	R-1 OUTSIDE	21	6	14	2
R16.628	R16.632	R-1 OUTSIDE	21	6	14	2
R16.643	R16.648	R-1 FULL WIDTH	26	12	35	6
R16.648	R16.654	R-1 OUTSIDE	32	6	21	4
R16.662	R16.666	R-1 OUTSIDE	21	6	14	2
R16.781	R16.786	R-1 OUTSIDE	26	6	18	3
R16.862	R16.864	R-1 OUTSIDE	11	6	7	1
R16.921	R16.934	R-1 FULL WIDTH	69	12	92	16
R16.952	R16.960	R-1 OUTSIDE	42	6	28	5
R17.797	R17.804	R-1 INSIDE	37	6	25	4
R17.927	R17.929	R-1 FULL WIDTH	11	12	14	2
R17.933	R17.936	R-1 FULL WIDTH	16	12	21	4
R18.031	R18.033	R-1 OUTSIDE	11	6	7	1
R18.033	R18.040	R-1 FULL WIDTH	37	12	49	9
R18.040	R18.043	R-1 INSIDE	16	6	11	2
R18.727	R18.729	R-1 FULL WIDTH	11	12	14	2
R18.836	R18.839	R-1 OUTSIDE	16	6	11	2
R18.839	R18.841	R-1 INSIDE	11	6	7	1
EB SUBTOTAL (TABLE 1 OF 1)					959	162

### REPAIR FAILED AREA

BEGIN POST MILE (Ker 223)	END POST MILE (Ker 223)	LOCATION	LENGTH	WIDTH	COLD PLANE AC PAVEMENT	HMA (TYPE A)
			LF	LF	SQYD	TON
R11.054	R11.058	L-1 INSIDE	21	6	14	2
R11.072	R11.076	L-1 FULL WIDTH	21	12	28	5
R11.084	R11.087	L-1 OUTSIDE	16	6	11	2
R11.107	R11.114	L-1 OUTSIDE	37	6	25	4
R11.448	R11.455	L-1 INSIDE	37	6	25	4
R11.525	R11.537	L-1 INSIDE	63	6	42	7
R11.557	R11.562	L-1 INSIDE	26	6	18	3
R11.631	R11.635	L-1 INSIDE	21	6	14	2
R11.660	R11.669	L-1 OUTSIDE	48	6	32	6
R11.699	R11.704	L-1 FULL WIDTH	26	12	35	6
R11.704	R11.709	L-1 INSIDE	26	6	18	3
R11.715	R11.719	L-1 INSIDE	21	6	14	2
R11.725	R11.728	L-1 INSIDE	16	6	11	2
R11.747	R11.749	L-1 OUTSIDE	11	6	7	1
R11.753	R11.755	L-1 INSIDE	11	6	7	1
R11.759	R11.767	L-1 INSIDE	42	6	28	5
R11.792	R11.794	L-1 INSIDE	11	6	7	1
R11.809	R11.815	L-1 FULL WIDTH	32	12	42	7
R11.832	R11.836	L-1 INSIDE	21	6	14	2
R11.836	R11.840	L-1 FULL WIDTH	21	12	28	5
R11.885	R11.889	L-1 OUTSIDE	21	6	14	2
R12.158	R12.159	L-1 INSIDE	5	6	4	1
R12.378	R12.380	L-1 INSIDE	11	6	7	1
R12.502	R12.507	L-1 OUTSIDE	26	6	18	3
R12.515	R12.518	L-1 INSIDE	16	6	11	2
R12.521	R12.523	L-1 OUTSIDE	11	6	7	1
R12.551	R12.554	L-1 OUTSIDE	16	6	11	2
R12.592	R12.594	L-1 FULL WIDTH	11	12	14	2
R12.597	R12.601	L-1 FULL WIDTH	21	12	28	5
R12.601	R12.604	L-1 INSIDE	16	6	11	2
R12.618	R12.628	L-1 FULL WIDTH	53	12	70	12
R12.685	R12.689	L-1 OUTSIDE	21	6	14	2
R13.004	R13.007	L-1 FULL WIDTH	16	12	21	4
R13.050	R13.054	L-1 FULL WIDTH	21	12	28	5
R13.446	R13.447	L-1 OUTSIDE	5	6	4	1
R13.465	R13.466	L-1 INSIDE	5	6	4	1
R13.469	R13.471	L-1 INSIDE	11	6	7	1
R13.493	R13.496	L-1 FULL WIDTH	16	12	21	4
R13.506	R13.510	L-1 INSIDE	21	6	14	2
R13.542	R13.548	L-1 FULL WIDTH	32	12	42	7
R13.548	R13.554	L-1 OUTSIDE	32	6	21	4
R13.625	R13.626	L-1 OUTSIDE	5	6	4	1
R13.629	R13.636	L-1 INSIDE	37	6	25	4
R13.708	R13.711	L-1 FULL WIDTH	16	12	21	4
R13.770	R13.772	L-1 INSIDE	11	6	7	1
R13.806	R13.808	L-1 OUTSIDE	11	6	7	1
WB SUBTOTAL (TABLE 1 OF 3)					855	145

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	5	16

REGISTERED CIVIL ENGINEER DATE: 7-15-13  
 MARYAM RASTEGAR No. 65550 Exp. 9-30-15  
 PLANS APPROVAL DATE: 9-16-13  
 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.



## SUMMARY OF QUANTITIES

### Q-1

**REPAIR FAILED AREA**

BEGIN POST MILE (Ker 223)	END POST MILE (Ker 223)	LOCATION	LENGTH	WIDTH	COLD PLANE AC PAVEMENT	HMA (TYPE A)
			LF	LF	SQYD	TON
R13.894	R13.897	L-1 INSIDE	16	6	11	2
R13.952	R13.960	L-1 INSIDE	42	6	28	5
R14.007	R14.010	L-1 OUTSIDE	16	6	11	2
R14.032	R14.034	L-1 OUTSIDE	11	6	7	1
R14.046	R14.051	L-1 OUTSIDE	26	6	18	3
R14.177	R14.182	L-1 FULL WIDTH	26	12	35	6
R14.237	R14.240	L-1 INSIDE	16	6	11	2
R14.292	R14.295	L-1 INSIDE	16	6	11	2
R14.369	R14.372	L-1 INSIDE	16	6	11	2
R14.434	R14.438	L-1 INSIDE	21	6	14	2
R14.495	R14.497	L-1 FULL WIDTH	11	12	14	2
R14.525	R14.527	L-1 INSIDE	11	6	7	1
R14.540	R14.541	L-1 INSIDE	5	6	4	1
R14.557	R14.561	L-1 INSIDE	21	6	14	2
R14.572	R14.576	L-1 INSIDE	21	6	14	2
R14.598	R14.601	L-1 INSIDE	16	6	11	2
R14.620	R14.622	L-1 INSIDE	11	6	7	1
R14.657	R14.665	L-1 INSIDE	42	6	28	5
R14.708	R14.710	L-1 FULL WIDTH	11	12	14	2
R14.796	R14.799	L-1 INSIDE	16	6	11	2
R14.844	R14.848	L-1 INSIDE	21	6	14	2
R14.848	R14.856	L-1 FULL WIDTH	42	12	56	10
R14.861	R14.864	L-1 OUTSIDE	16	6	11	2
R14.901	R14.903	L-1 OUTSIDE	11	6	7	1
R14.992	R14.996	L-1 OUTSIDE	21	6	14	2
R15.040	R15.044	L-1 INSIDE	21	6	14	2
R15.066	R15.075	L-1 INSIDE	48	6	32	6
R15.241	R15.242	L-1 OUTSIDE	5	6	4	1
R15.301	R15.303	L-1 FULL WIDTH	11	12	14	2
R15.321	R15.325	L-1 INSIDE	21	6	14	2
R15.346	R15.349	L-1 INSIDE	16	6	11	2
R15.425	R15.428	L-1 INSIDE	16	6	11	2
R15.468	R15.471	L-1 INSIDE	16	6	11	2
R15.504	R15.507	L-1 INSIDE	16	6	11	2
R15.583	R15.585	L-1 FULL WIDTH	11	12	14	2
R16.323	R16.328	L-1 INSIDE	26	6	18	3
R16.345	R16.348	L-1 INSIDE	16	6	11	2
R16.519	R16.522	L-1 OUTSIDE	16	6	11	2
R16.547	R16.549	L-1 OUTSIDE	11	6	7	1
R16.567	R16.570	L-1 INSIDE	16	6	11	2
R16.603	R16.605	L-1 FULL WIDTH	11	12	14	2
R16.777	R16.783	L-1 FULL WIDTH	32	12	42	7
R16.825	R16.828	L-1 OUTSIDE	16	6	11	2
R16.835	R16.836	L-1 OUTSIDE	5	6	4	1
R17.507	R17.508	L-1 OUTSIDE	5	6	4	1
R17.937	R17.938	L-1 INSIDE	5	6	4	1
WB SUBTOTAL (TABLE 2 OF 3)					656	111

**REPAIR FAILED AREA**

BEGIN POST MILE (Ker 223)	END POST MILE (Ker 223)	LOCATION	LENGTH	WIDTH	COLD PLANE AC PAVEMENT	HMA (TYPE A)
			LF	LF	SQYD	TON
R18.002	R18.005	L-1 OUTSIDE	16	6	11	2
R18.908	R18.910	L-1 INSIDE	11	6	7	1
R19.370	R19.372	L-1 FULL WIDTH	11	12	14	2
WB SUBTOTAL (TABLE 3 OF 3)					32	5
WB SUBTOTAL (TABLE 2 OF 3)					656	111
WB SUBTOTAL (TABLE 1 OF 3)					855	145
EB SUBTOTAL (TABLE 1 OF 1)					959	162
TOTAL					2502 **	423 **

\*\* INCLUDED IN ROADWAY QUANTITIES TABLE.  
EXACT LOCATION AS DIRECTED BY THE ENGINEER.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	6	16

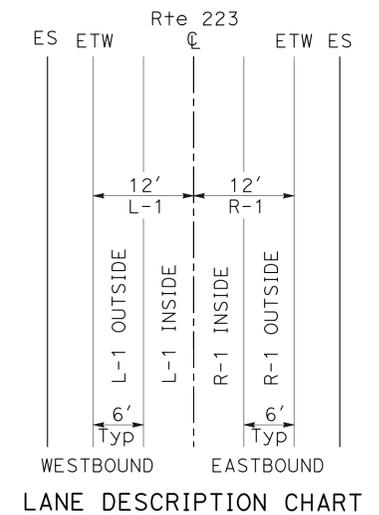
07-15-13  
REGISTERED CIVIL ENGINEER DATE

9-16-13  
PLANS APPROVAL DATE

MARYAM RASTEGAR  
No. 65550  
Exp. 9-30-15  
CIVIL

REGISTERED PROFESSIONAL ENGINEER  
STATE OF CALIFORNIA

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



**SUMMARY OF QUANTITIES**

**Q-2**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58,223	Var	7	16

7-15-13  
 REGISTERED CIVIL ENGINEER DATE  
 9-16-13  
 PLANS APPROVAL DATE

MARYAM RASTEGAR  
 No. 65550  
 Exp. 9-30-15  
 CIVIL  
 STATE OF CALIFORNIA

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

### ROADWAY QUANTITIES

LOCATIONS	SCREENINGS	POLYMER ASPHALTIC EMULSION (SEAL COAT)	ASPHALTIC EMULSION (FLUSH COAT)	SAND COVER (SEAL)	COLD PLANE AC PAVEMENT	HMA (TYPE A)	TACK COAT
	TON	TON	TON	TON	SQYD	TON	TON
ROUTE 43 PM 16.3 TO PM 24.1	5460	607	61	364			
ROUTE 58 PM 15.4 TO PM 27.2	2891	321	32	193			
ROUTE 223 PM 1.9 TO PM 4.0	507	56	6	34			
ROUTE 223 PM R10.9 TO PM R20.0	3294	366	36	220			
ROUTE 223 RAPAIR FAILED AREAS					2502	423	1
<b>TOTAL</b>	<b>12,152</b>	<b>1350</b>	<b>135</b>	<b>811</b>	<b>2502</b>	<b>423</b>	<b>1</b>

### PAVEMENT DELINEATION QUANTITIES

LOCATION	DETAIL No.	PAVEMENT MARKER (RETROREFLECTIVE)			THERMOPLASTIC TRAFFIC STRIPE					THERMOPLASTIC PAVEMENT MARKING		REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE PAVEMENT MARKER (N)
		TYPE D TWO-WAY YELLOW	TYPE G ONE-WAY CLEAR	TYPE H ONE-WAY YELLOW	4"(BROKEN 12-3)	4"(BROKEN 36-12)	4" WHITE	4" YELLOW	8" WHITE	DESCRIPTION	SQFT	SQFT	LF	EA
		EA	EA	EA	LF	LF	LF	LF	LF					
ROUTE 43 PM 16.3 TO PM 24.1	12		1720			82,368				78-TYPE IV ARROW	1,170	1170		1720
	22	196							64-TYPE V ARROW	2,112	2112		196	
	25			1502					8-SIGNAL	256	256		1502	
	27B						82,368		10-AHEAD	310	310			
	27C				5269				CROSSWALK	1,408	1408			
	29	123							LIMIT LINE	1,941	1941		123	
	38		431					8047	17-STOP	374		16,094	431	
ROUTE 58 PM 15.4 TO PM 27.2	6	639				29,246			2-TYPE V ARROW	66	66		639	
	19	424		620		14,119		14,119	LIMIT LINE	127			1044	
	22	1359						32,282	2-SCHOOL	70	70		1359	
	27B						124,608		8-STOP	176				
	27C				718				1-AHEAD	31	31		144	
ROUTE 223 PM 1.9 TO PM 4.0	6	185				8,802							185	
	22	237						5,628	2-TYPE I ARROW (18)	50			237	
	27B							23,232	1-TYPE I ARROW (24)	31				
	36		6						6-TYPE V ARROW	198		190	6	
ROUTE 223 PM R10.9 TO PM R20.0	6	848				39,806			32-STOP	704	264		848	
	19	15		22		486		486	7-AHEAD	217	186		37	
	22	42						961	LIMIT LINE	879	228			
	27B												42	
	27C				2872									
	34	237		348		7962		7,962					585	
<b>SUB TOTAL</b>		4364	2157	2577	8859	184,690	230,208	145,401	8142		10,120	8042	16,284	9098
<b>TOTAL</b>			9098		8859	184,690		375,609	8142		10,120	8042	16,284	9098

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

### SUMMARY OF QUANTITIES Q-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 PAVEMENT PRESERVATION  
 FUNCTIONAL SUPERVISOR: RENE SANCHEZ  
 CALCULATED/DESIGNED BY: TRINIDAD ANGUIANO  
 CHECKED BY: MARYAM RASTEGAR  
 REVISED BY: MARYAM RASTEGAR  
 DATE REVISED:

LAST REVISION DATE PLOTTED => 18-SEP-2013    09-12-13    TIME PLOTTED => 15:13

	<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
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
	<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
WWLOL	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
06	Ker	43,58, 223	Var	8	16

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER



July 19, 2013  
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 9-16-13

**UNIT OF MEASUREMENT SYMBOLS:**

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

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:

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.

2010 REVISED STANDARD PLAN RSP A10B

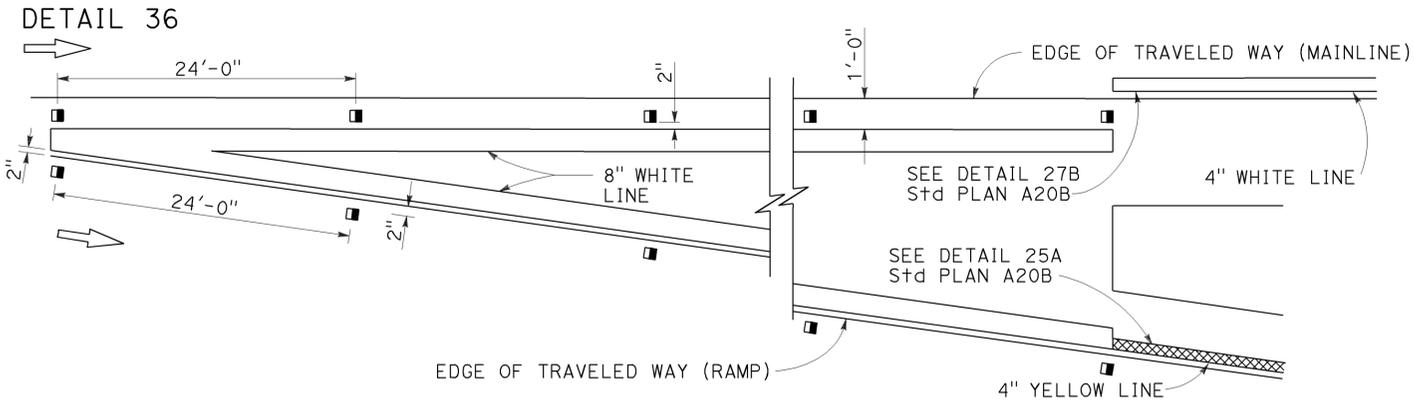
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	9	16

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

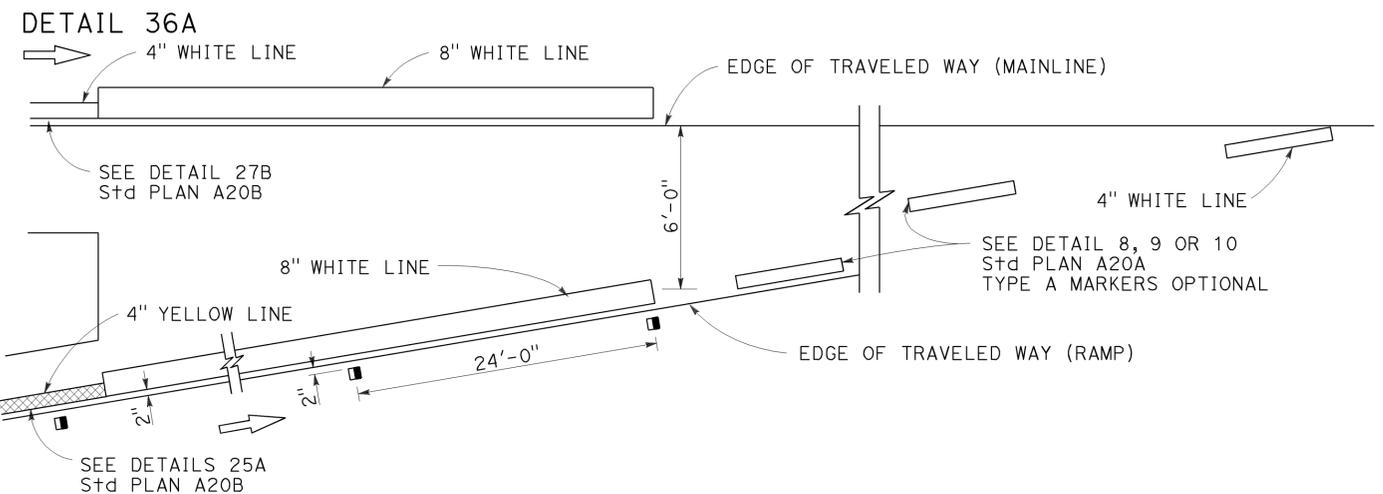
July 19, 2013  
 PLANS APPROVAL DATE

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.

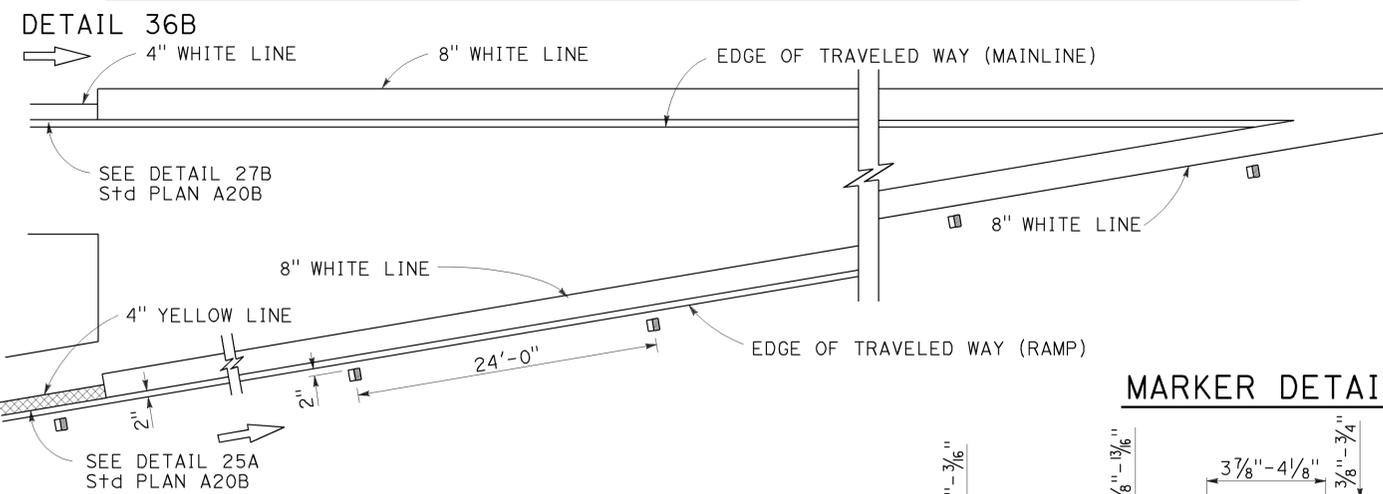
### EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



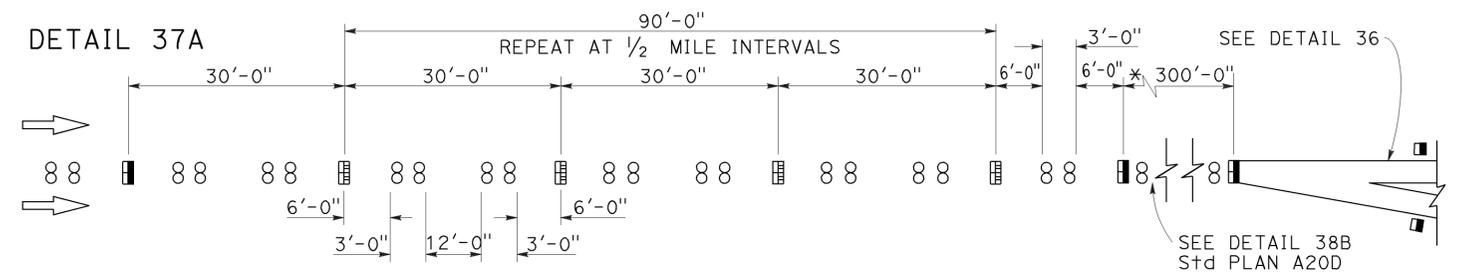
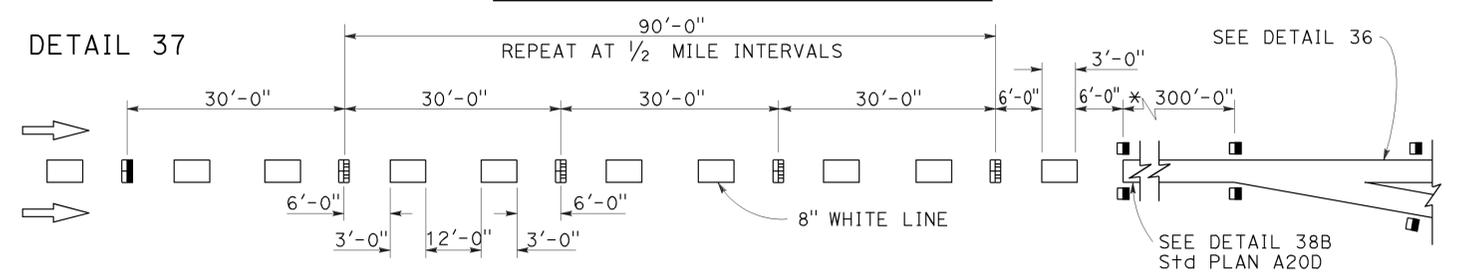
### ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



### ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

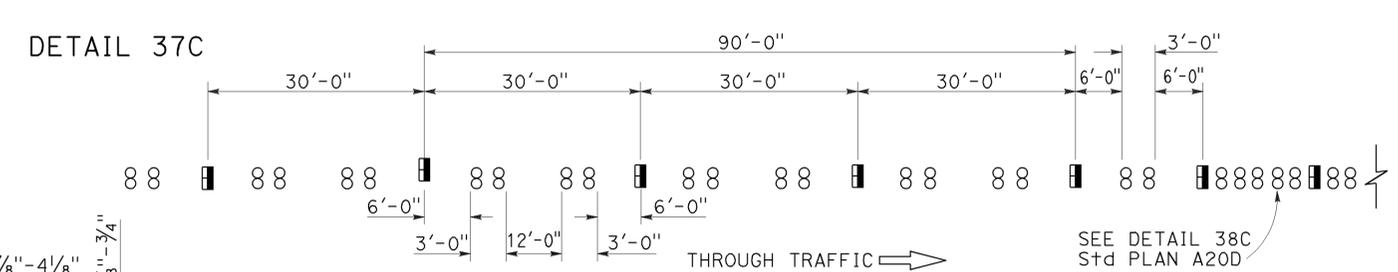
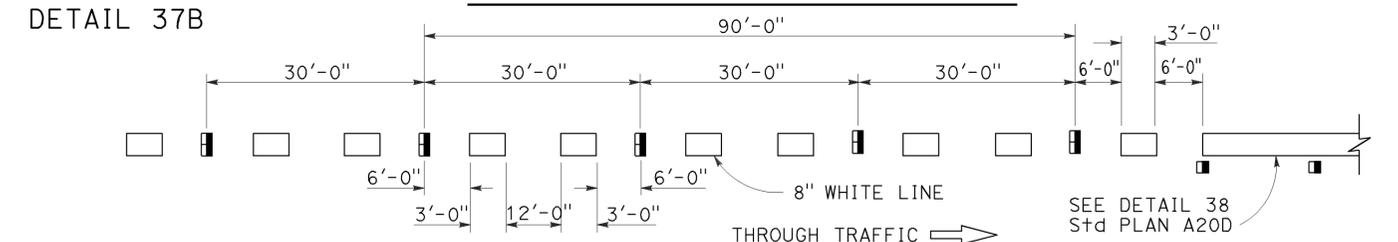


### LANE DROP AT EXIT RAMP

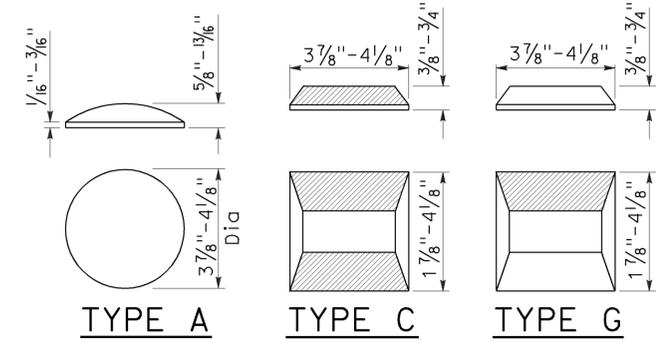


\* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

### LANE DROP AT INTERSECTIONS



### MARKER DETAILS



### LEGEND:

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

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

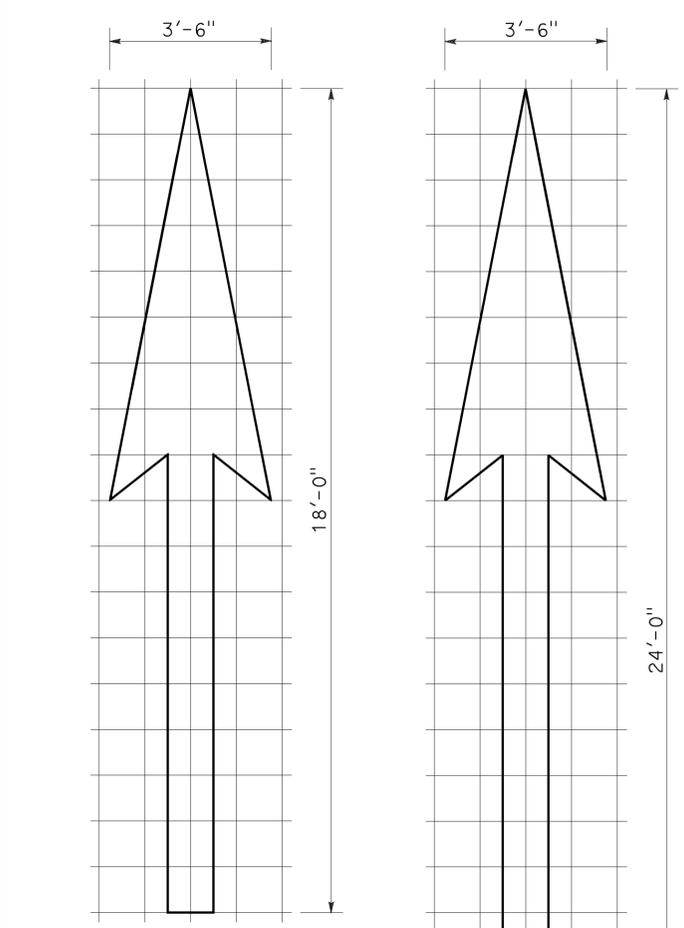
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	10	16

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

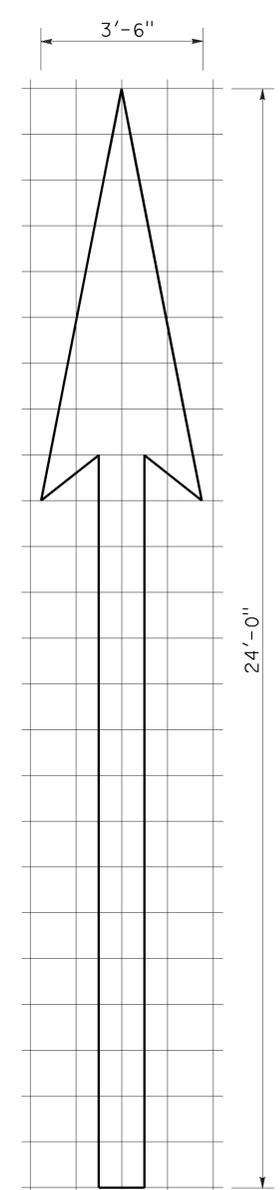
April 20, 2012  
 PLANS APPROVAL DATE

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.

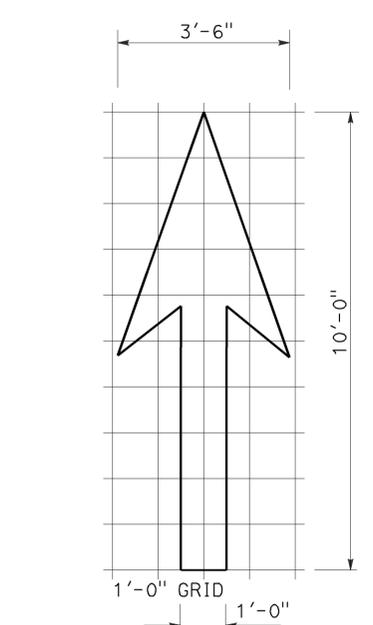
TO ACCOMPANY PLANS DATED 9-16-13



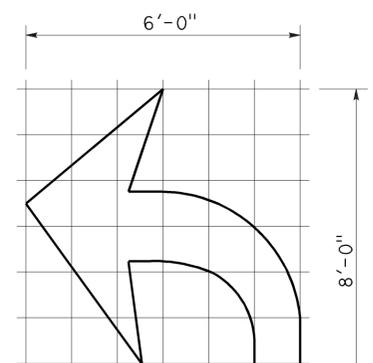
A=25 ft<sup>2</sup>  
**TYPE I 18'-0" ARROW**



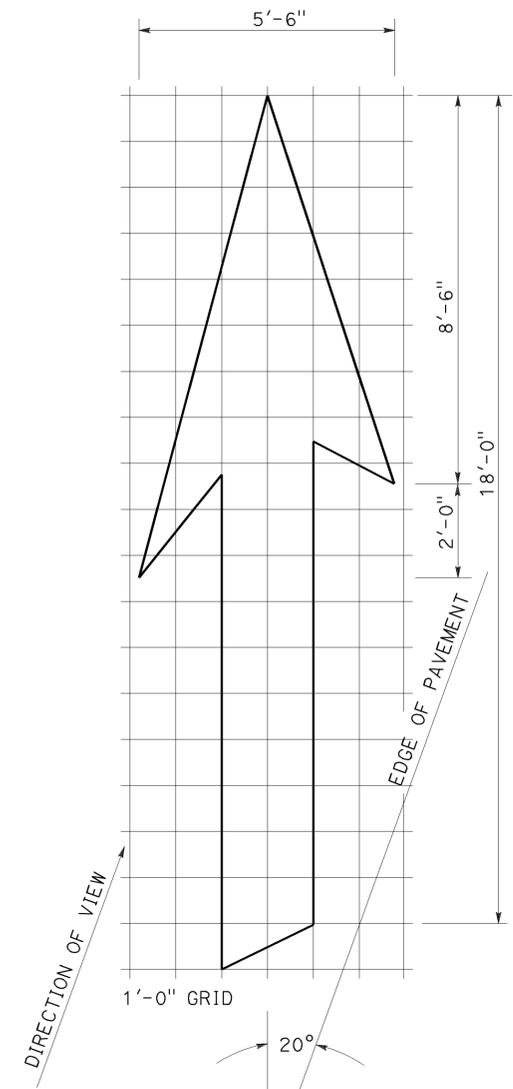
A=31 ft<sup>2</sup>  
**TYPE I 24'-0" ARROW**



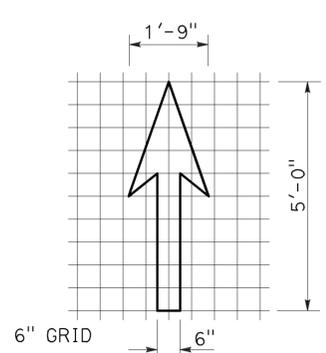
A=14 ft<sup>2</sup>  
**TYPE I 10'-0" ARROW**



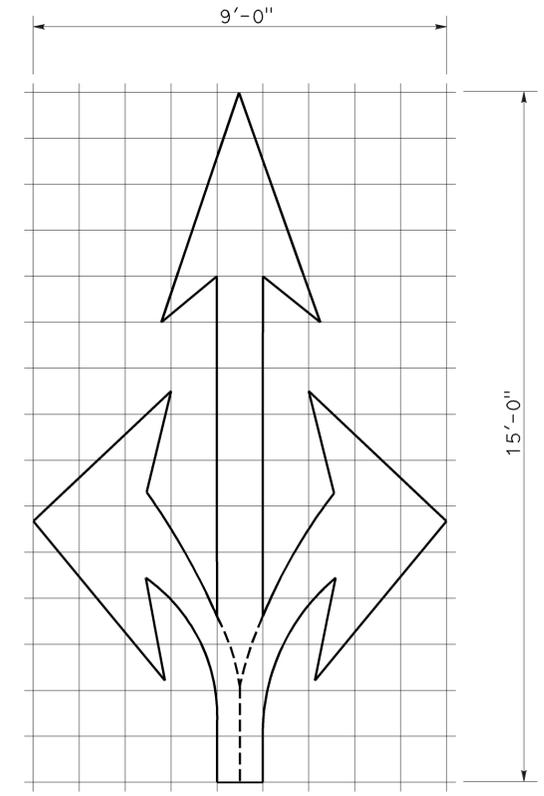
A=15 ft<sup>2</sup>  
**TYPE IV (L) ARROW**  
 (For Type IV (R) arrow, use mirror image)



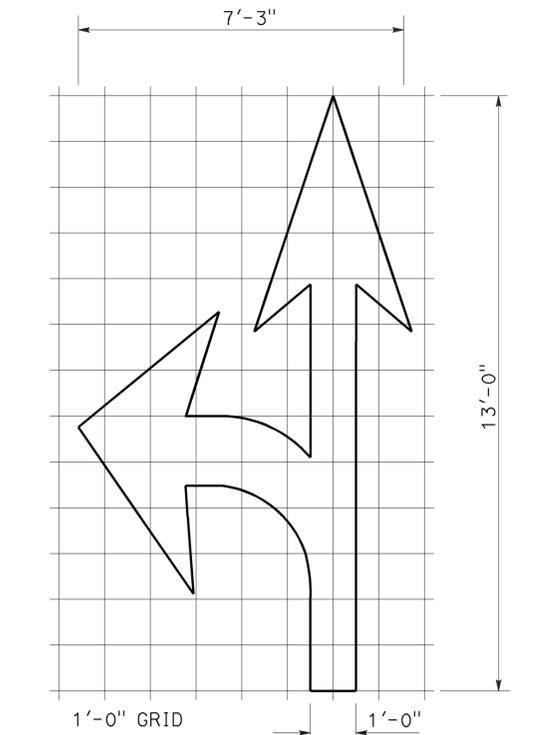
A=42 ft<sup>2</sup>  
**TYPE VI ARROW**  
 Right lane drop arrow  
 (For left lane, use mirror image)



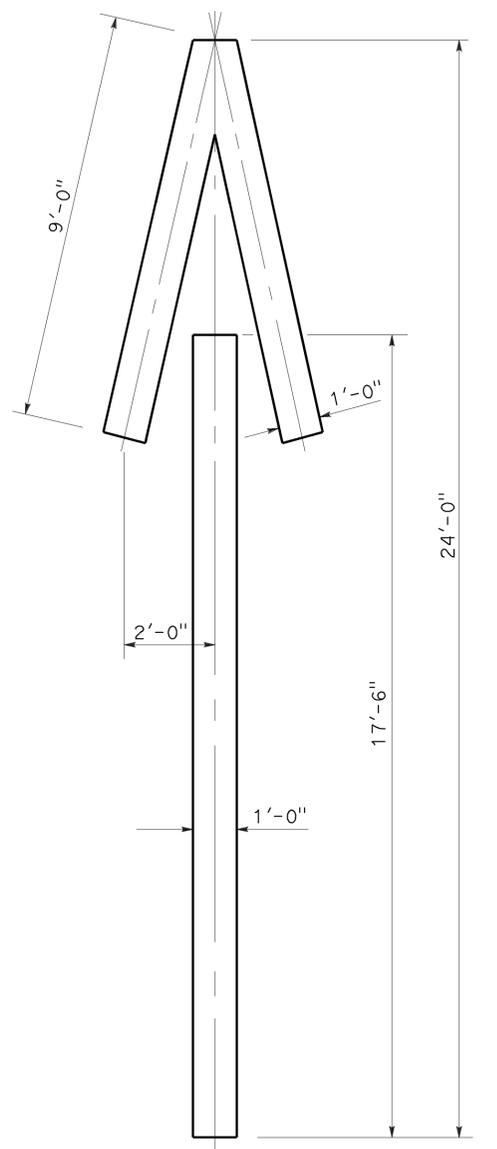
A=3.5 ft<sup>2</sup>  
**BIKE LANE ARROW**



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.

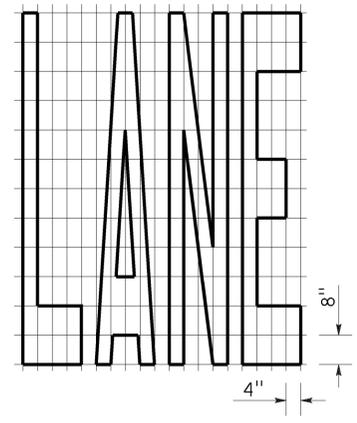
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS  
 ARROWS**  
 NO SCALE

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

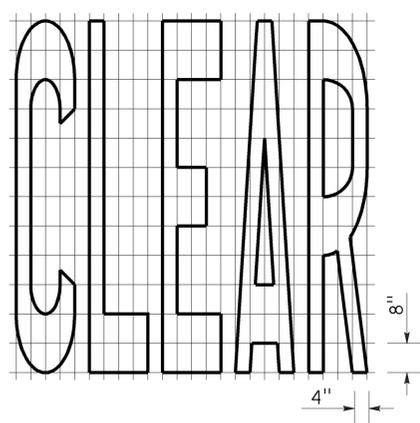
**REVISED STANDARD PLAN RSP A24A**

2010 REVISED STANDARD PLAN RSP A24A

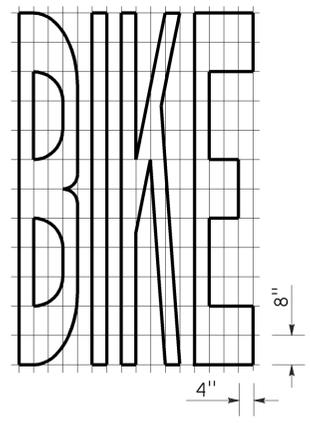
TO ACCOMPANY PLANS DATED 9-16-13



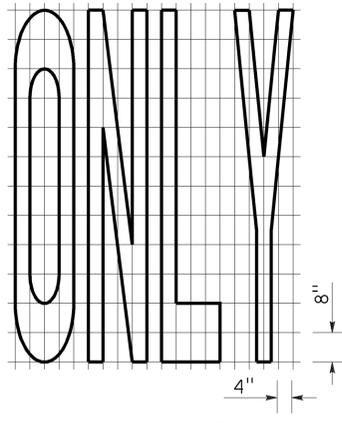
A=24 ft<sup>2</sup>



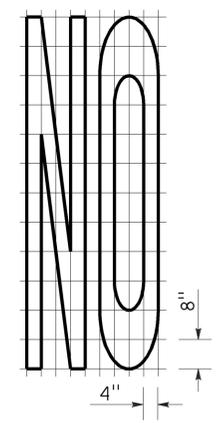
A=27 ft<sup>2</sup>



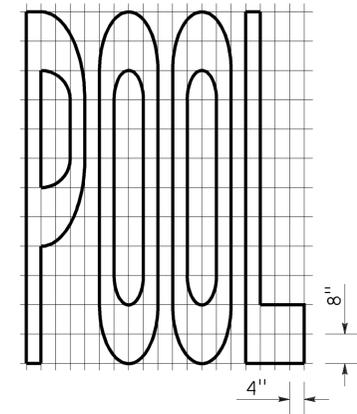
A=21 ft<sup>2</sup>



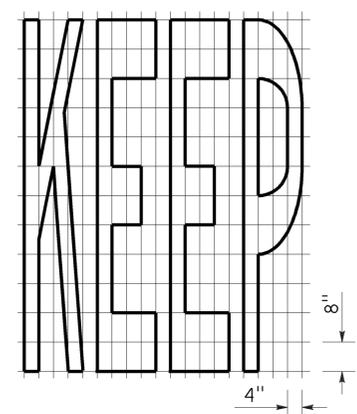
A=22 ft<sup>2</sup>



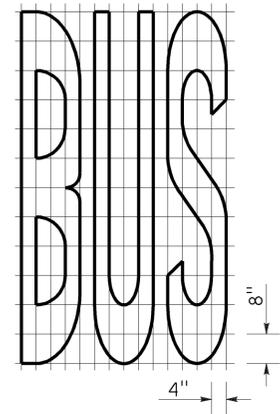
A=14 ft<sup>2</sup>



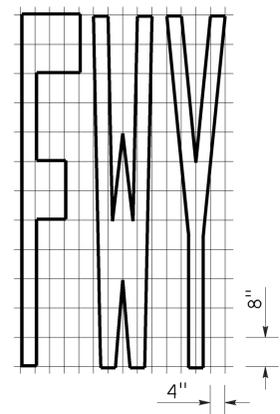
A=23 ft<sup>2</sup>



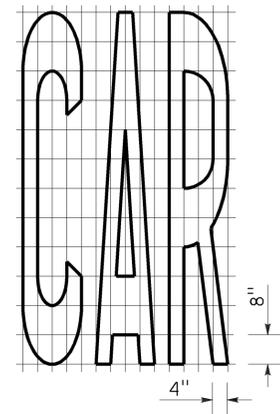
A=24 ft<sup>2</sup>



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

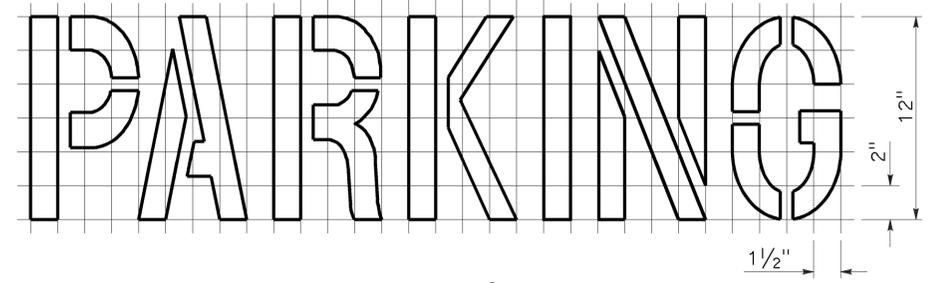
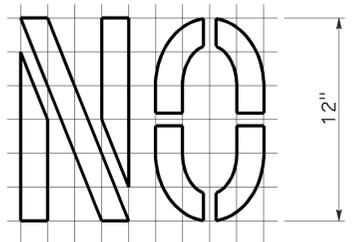


A=16 ft<sup>2</sup>

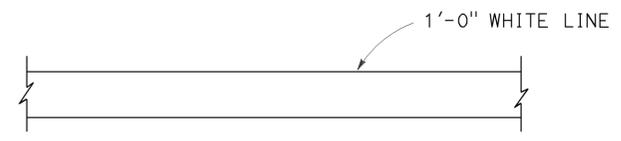


A=17 ft<sup>2</sup>

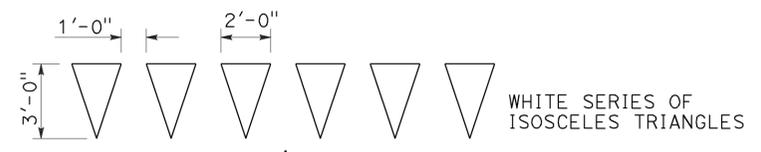
WORD MARKINGS			
ITEM	ft <sup>2</sup>	ITEM	ft <sup>2</sup>
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



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

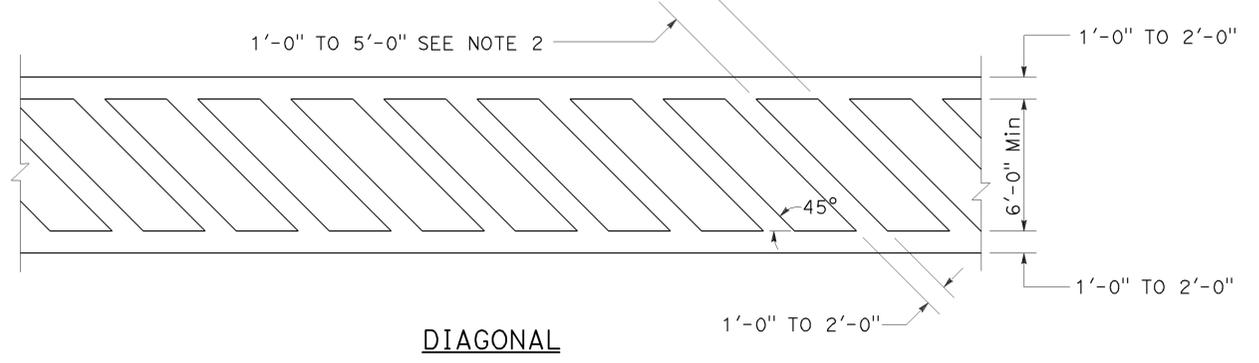
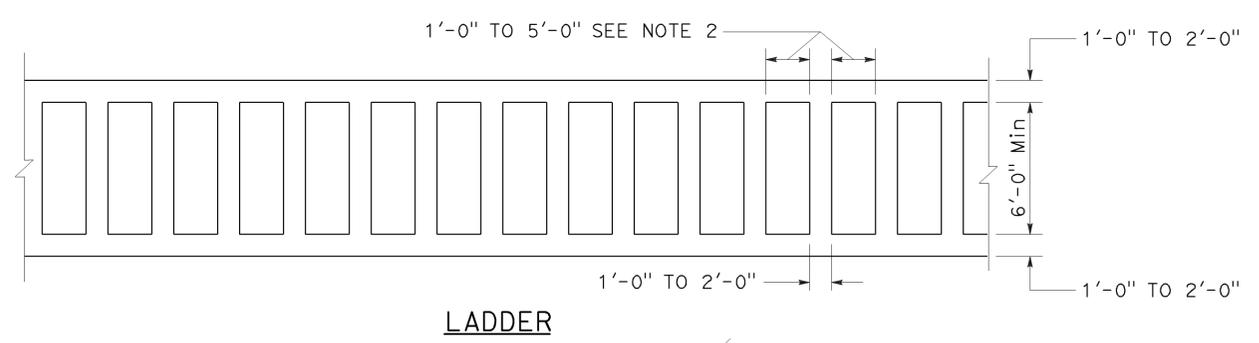
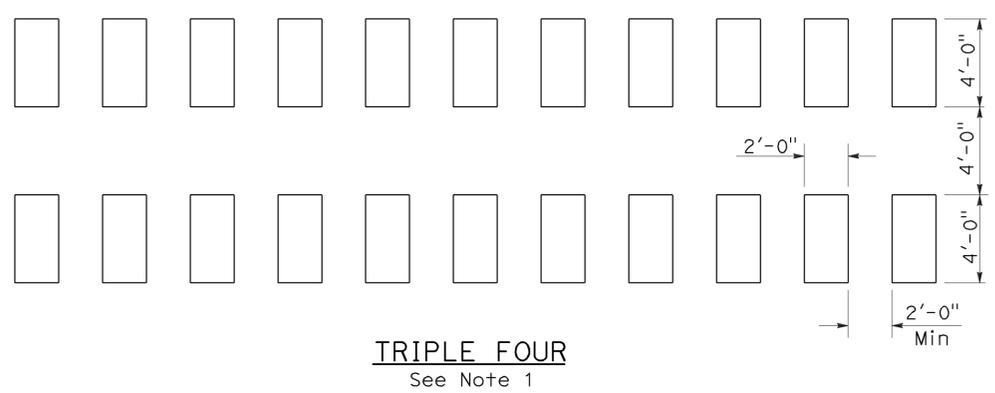
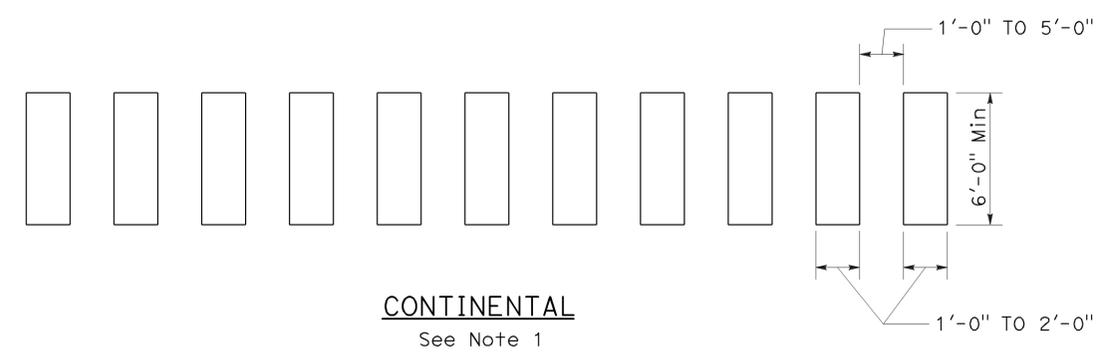
RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E  
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	43,58, 223	Var	12	16

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

TO ACCOMPANY PLANS DATED 9-16-13

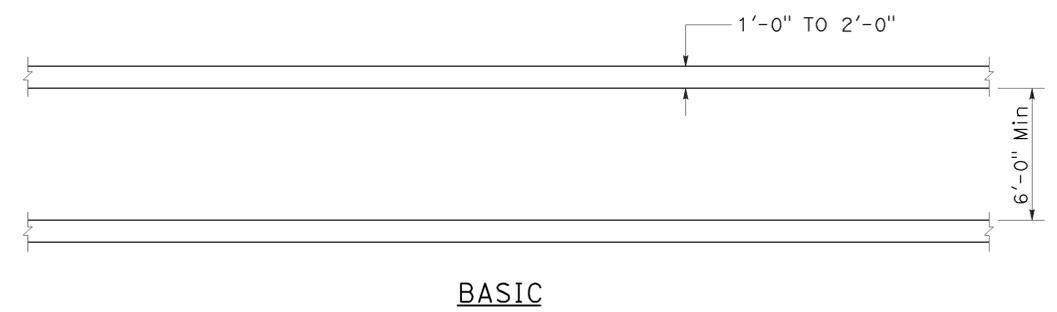
2010 REVISED STANDARD PLAN RSP A24F



**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.

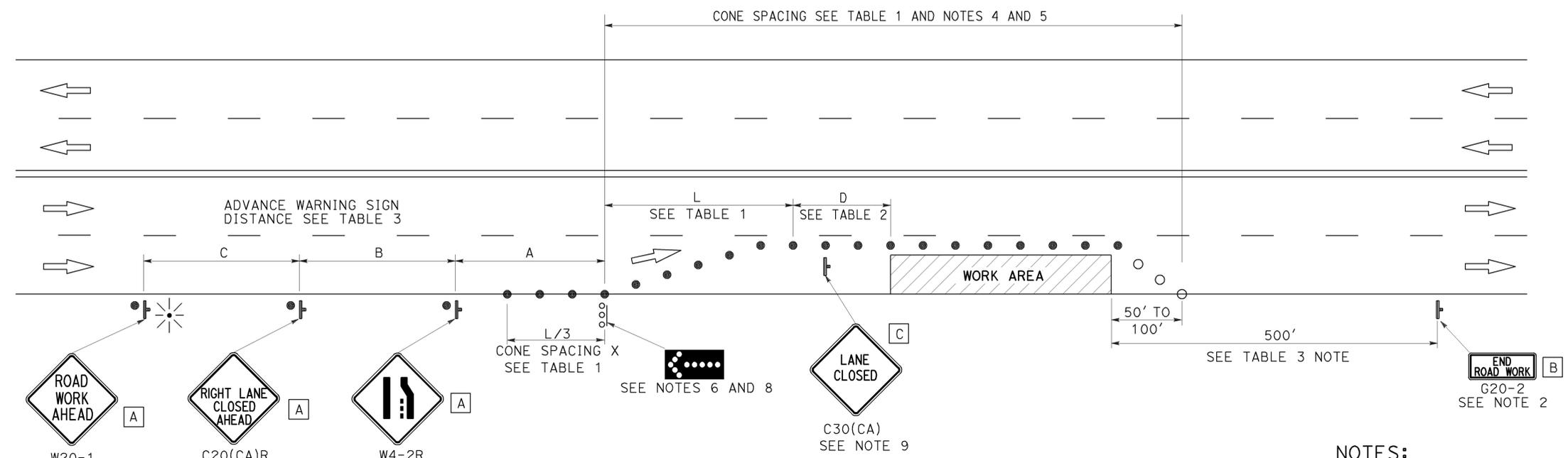


STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS**  
**CROSSWALKS**  
 NO SCALE

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



TO ACCOMPANY PLANS DATED 9-16-13



TYPICAL LANE CLOSURE

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.

NOTES:

- Each advance warning 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. 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 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.
- 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.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- 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.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- 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 closure unless, otherwise directed by the Engineer.

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 36" x 18"
- C 30" x 30"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 MULTILANE CONVENTIONAL  
 HIGHWAYS**

NO SCALE

RSP T11 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T11 DATED MAY 20, 2011 - PAGE 239 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T11**

2010 REVISED STANDARD PLAN RSP T11

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

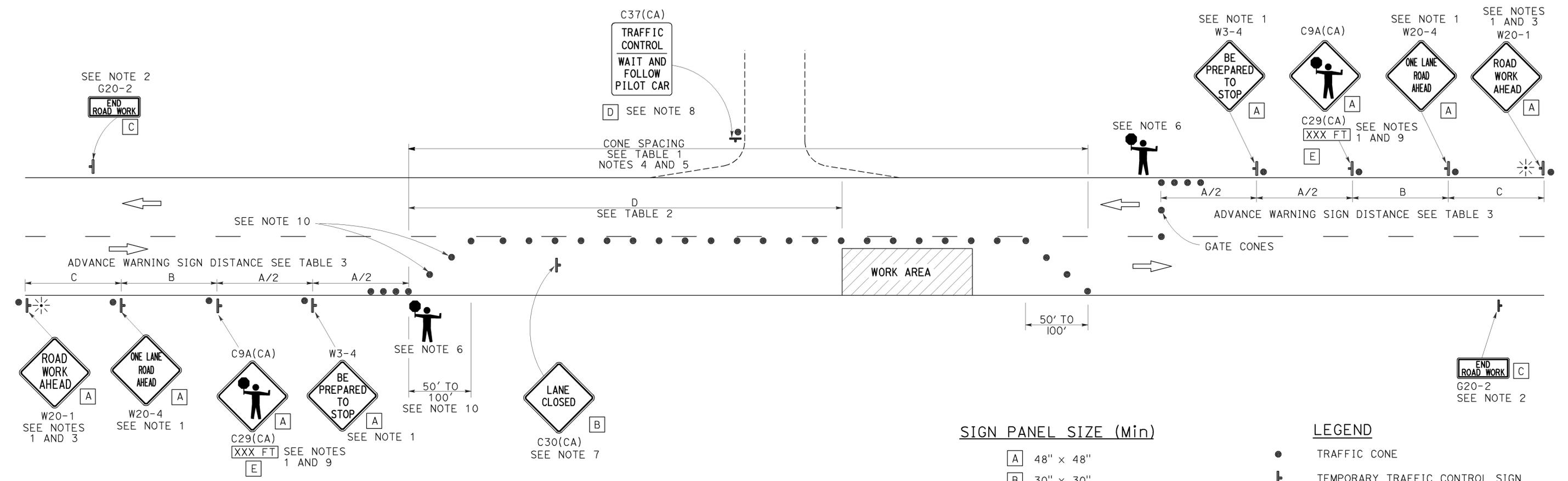
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 9-16-13



**NOTES:**

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

**SIGN PANEL SIZE (Min)**

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

**LEGEND**

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ☼ PORTABLE FLASHING BEACON
- 👤 FLAGGER

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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

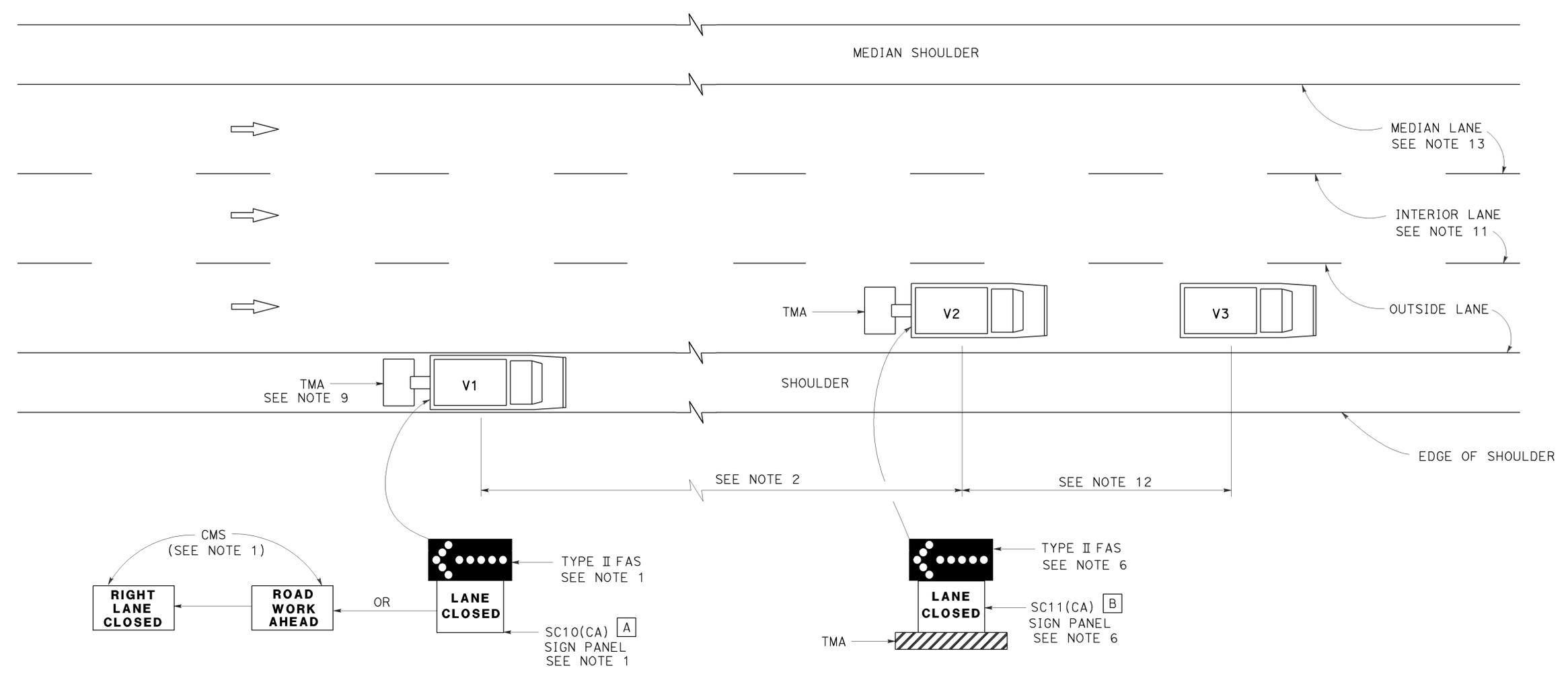
NO SCALE

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

**REVISED STANDARD PLAN RSP T13**

2010 REVISED STANDARD PLAN RSP T13

TO ACCOMPANY PLANS DATED 9-16-13



**SIGN PANEL SIZE (Min)**

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

**LEGEND**

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

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

**NOTES:**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

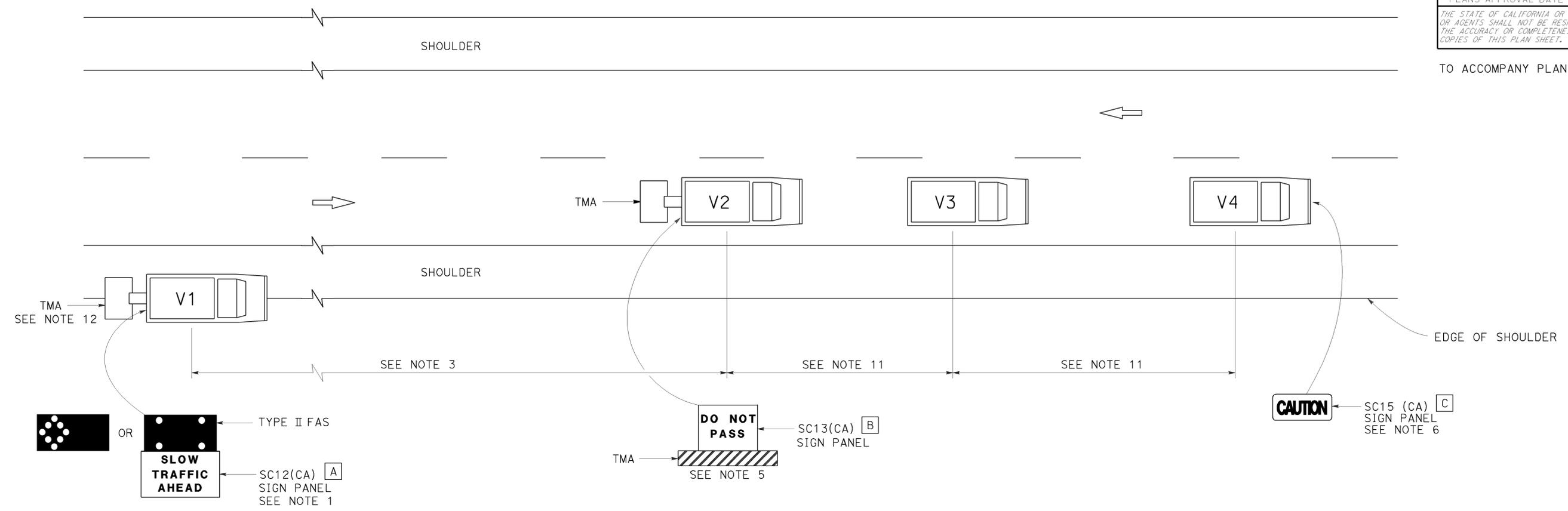
**TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS**  
NO SCALE

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

**REVISED STANDARD PLAN RSP T15**

2010 REVISED STANDARD PLAN RSP T15

TO ACCOMPANY PLANS DATED 9-16-13



**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