

INDEX OF PLANS

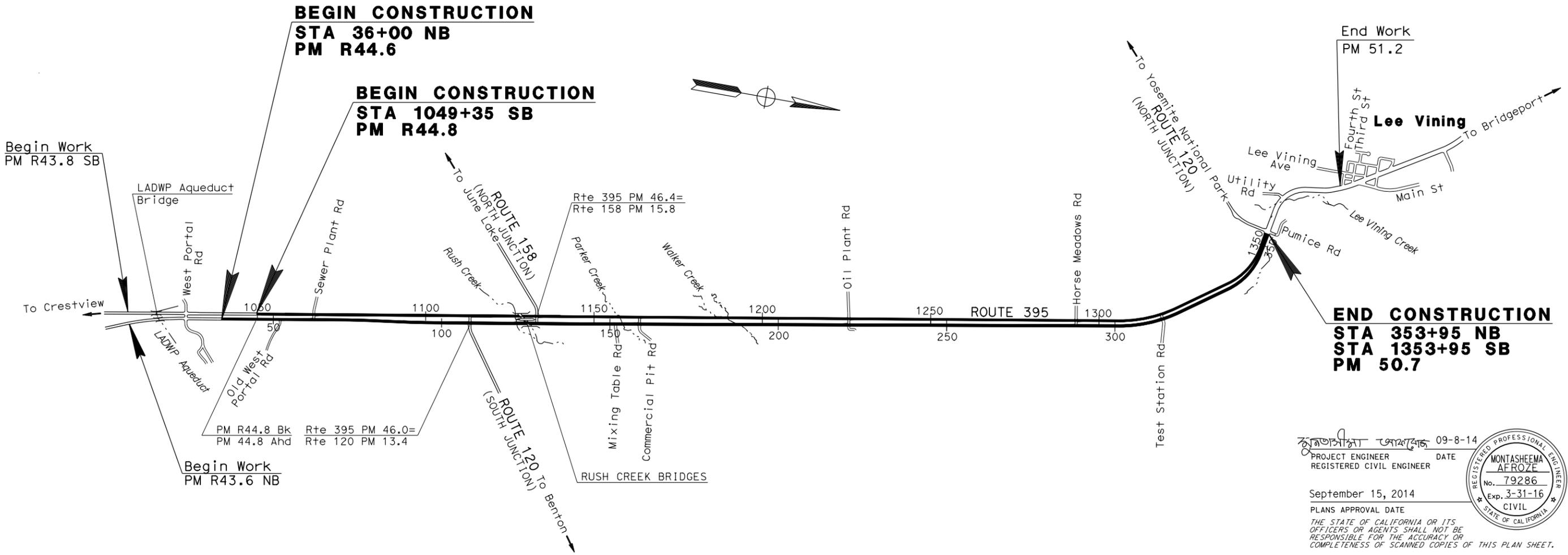
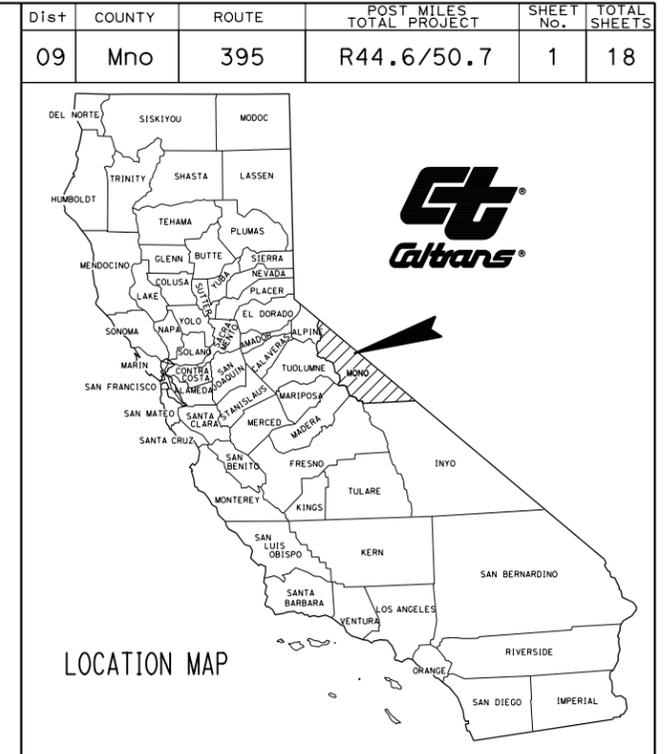
SHEET No	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3-6	CONSTRUCTION DETAILS
7	TEMPORARY WATER POLLUTION CONTROL DETAILS
8	TEMPORARY WATER POLLUTION CONTROL QUANTITIES
9	CONSTRUCTION AREA SIGNS
10	SUMMARY OF QUANTITIES
11-18	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA **ACNHP-P395(248)E**  
 DEPARTMENT OF TRANSPORTATION

**PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY**  
**IN MONO COUNTY**  
**NEAR LEE VINING FROM 0.3 MILE SOUTH OF OLD WEST PORTAL ROAD TO NORTH JUNCTION ROUTE 120**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER  
JOHN FOX  
DESIGN ENGINEER  
JOHN FOX

09-8-14  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
 September 15, 2014  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



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

NO SCALE

DATE PLOTTED => 23-SEP-2014  
 TIME PLOTTED => 10:30  
 LAST REVISION 09-08-14

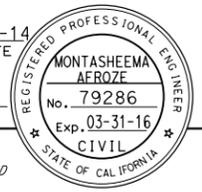
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	2	18

09-08-14	09-08-14
REGISTERED CIVIL ENGINEER	DATE
09-15-14	09-15-14
PLANS APPROVAL DATE	

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**NOTES:**

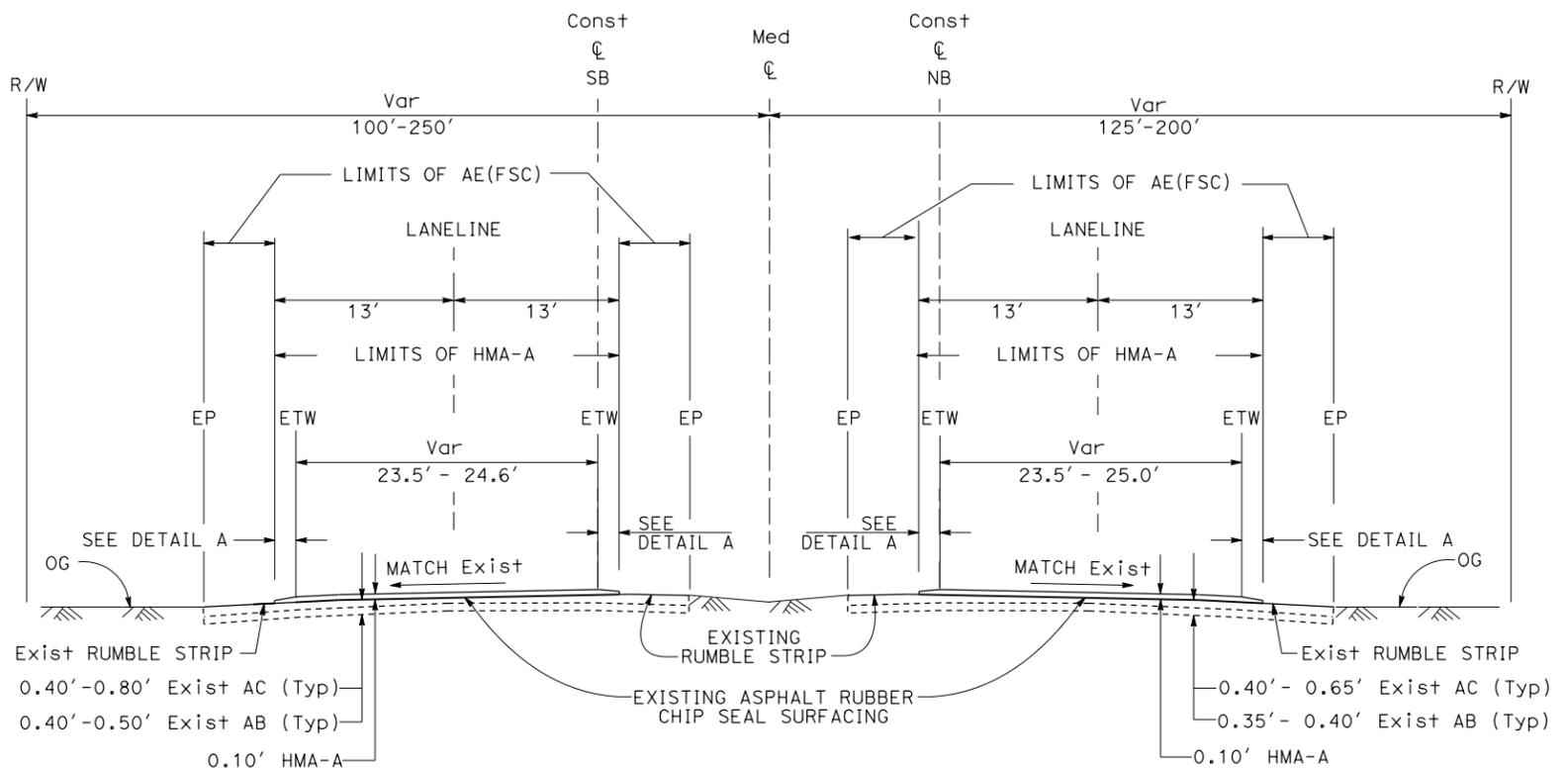
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. STATIONING SHOWN IS FOR CONSTRUCTION PURPOSES ONLY.

**ABBREVIATIONS:**

- AE(FSC) - ASPHALTIC EMULSION (FOG SEAL COAT)
- HMA-A - HOT MIX ASPHALT (TYPE A)

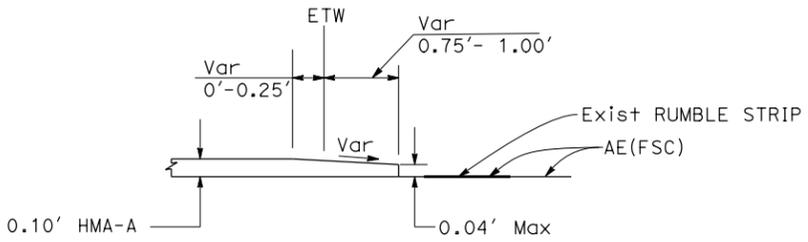
**PAVEMENT CLIMATE REGION**

HIGH DESERT



**ROUTE 395**

PM R 44.60 TO PM 50.70 (NB), STA 36+00 - STA 353+95  
 PM R 44.84 TO PM 50.70 (SB), STA 1049+35 - STA 1353+95



**A Shld CONFORM DETAIL (Typ)**

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

**TYPICAL CROSS SECTIONS**  
NO SCALE X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> MAINTENANCE ENGINEERING	JOHN FOX	MONTASHEEMA AFROZE	09-10-14
		MALISSA REYNOLDS	

LAST REVISION DATE PLOTTED => 16-SEP-2014 09-10-14 TIME PLOTTED => 16:50

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	3	18

09-10-14  
REGISTERED CIVIL ENGINEER DATE

09-15-14  
PLANS APPROVAL DATE

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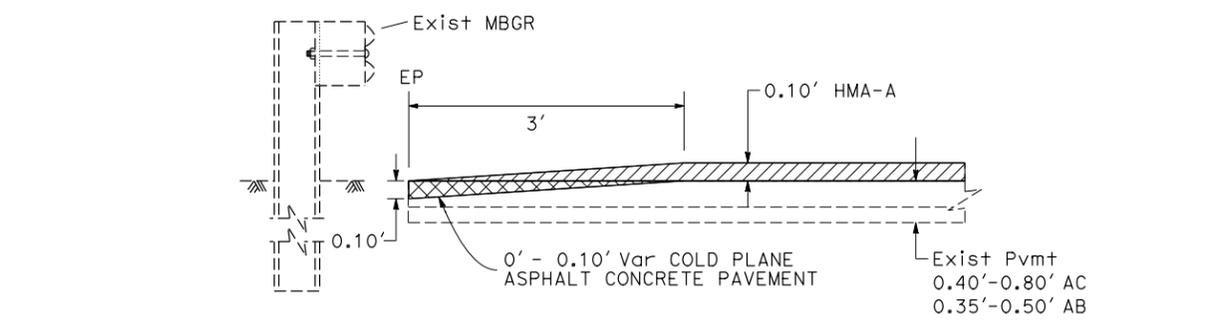
REGISTERED PROFESSIONAL ENGINEER  
MONTASHEEMA AEROZE  
No. 79286  
Exp. 03-31-16  
CIVIL  
STATE OF CALIFORNIA

**LEGEND:**

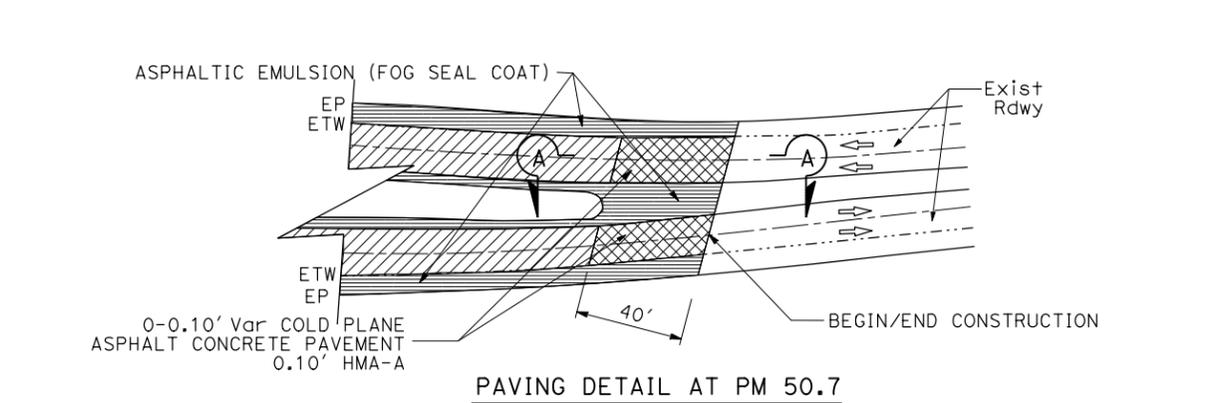
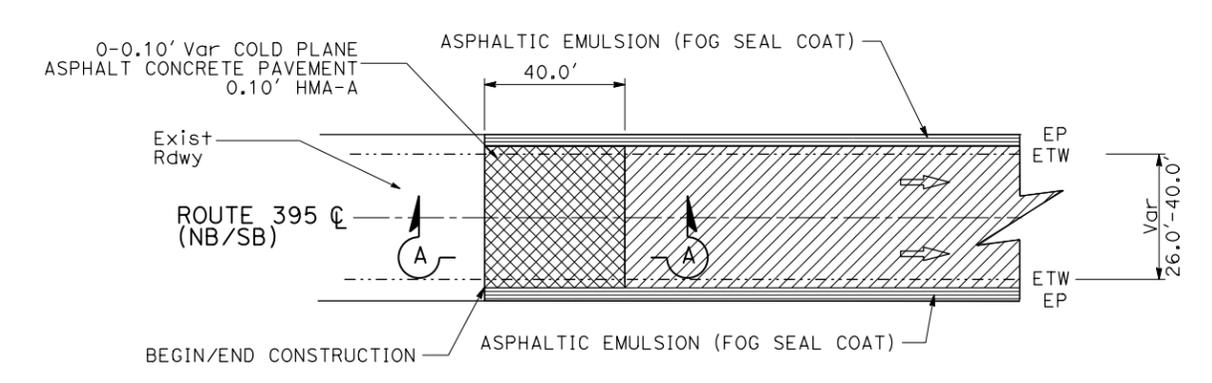
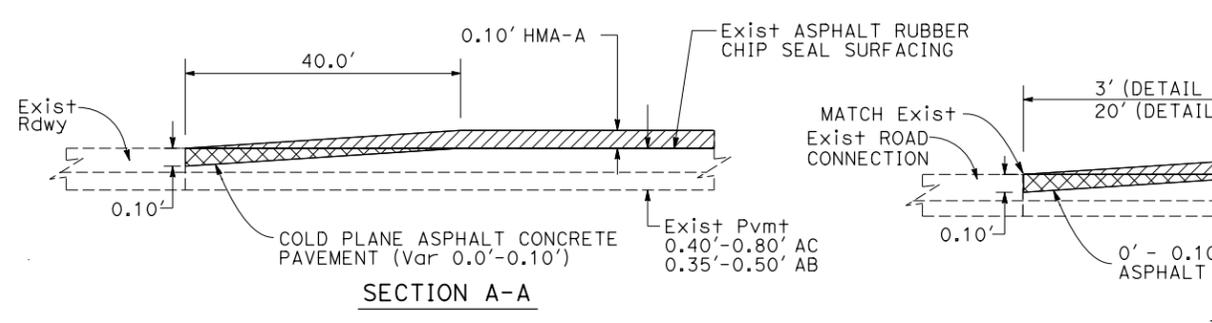
- [Hatched Box] - LIMITS OF HMA-A (TYPICAL)
- [Cross-hatched Box] - LIMITS OF COLD PLANE AC PAVEMENT AND HMA-A
- [Horizontal Lines Box] - LIMITS OF ASPHALTIC EMULSION (FOG SEAL COAT)
- [Arrow] - DIRECTION OF TRAFFIC

**ABBREVIATIONS:**

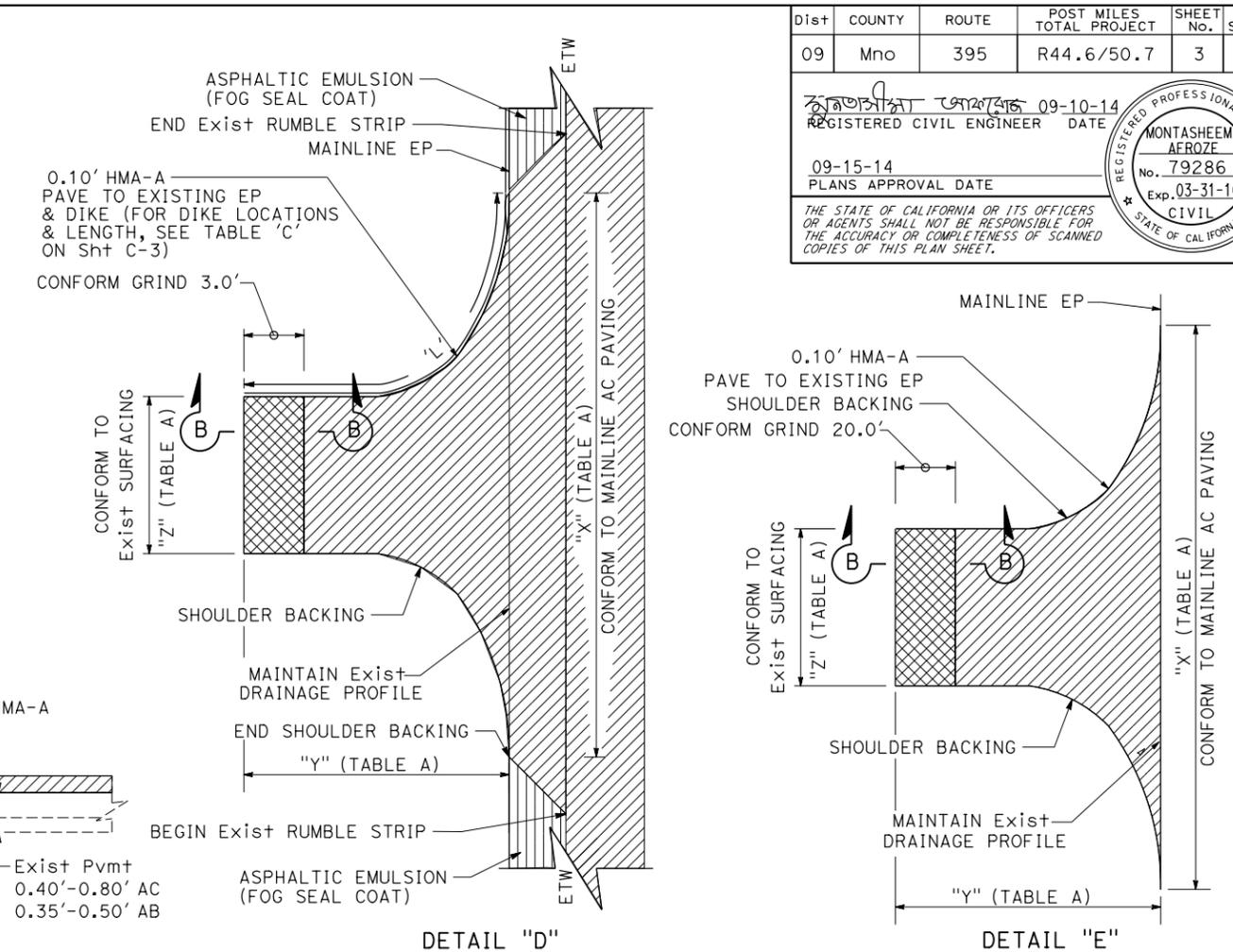
HMA-A - HOT MIX ASPHALT (TYPE A)



**1 COLD PLANE ASPHALT CONCRETE PAVEMENT AT MBGR**



**2 COLD PLANE ASPHALT CONCRETE PAVEMENT AND HMA PAVING LIMITS (Typ)**  
EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS



**TYPICAL ROAD CONNECTION COLD PLANE AND HMA PAVING LIMITS**

**TABLE A  
COLD PLANE ASPHALT CONCRETE PAVEMENT**

STA	DESCRIPTION	"X"	"Y"	"Z"	DEPTH	SEE DETAIL	NOTES
36+00	CONFORM GRIND	40'	26'	-	0.10'	2	BEGIN CONSTRUCTION, 395 NB
54+90	CONFORM GRIND	87'	27'	31.50'	0.10'	"D"	Rd CONNECTION WITH OLD WEST PORTAL Rd, Rt, 395 NB
110+80	CONFORM GRIND	127'	150'	36.50'	0.10'	"E"	SOUTH Jct WITH Rte 120, Rt, 395 NB,
123+82	CONFORM TAPER	305'	3'	-	0.10'	1	METAL BEAM GUARD RAILING, Lt, RUSH CREEK BRIDGE-Rt
126+87	CONFORM GRIND	82.87'	40'	50'	0.10'	3, Sh+ C-4	RUSH CREEK BRIDGE-Rt, SOUTH END
129+14	CONFORM GRIND	50'	40'	86.02'	0.10'	3, Sh+ C-4	RUSH CREEK BRIDGE-Rt, NORTH END
129+97	CONFORM TAPER	56'	3'	-	0.10'	1	METAL BEAM GUARD RAILING, Lt, RUSH CREEK BRIDGE-Rt
155+05	CONFORM GRIND	161'	37'	32.50'	0.10'	"D"	Rd CONNECTION WITH MIXING TABLE Rd, Rt, 395 NB
161+48	CONFORM GRIND	153'	29'	39'	0.10'	"D"	Rd CONNECTION WITH COMMERCIAL PIT Rd, Rt, 395 NB
224+35	CONFORM GRIND	83'	34'	27'	0.10'	"D"	Rd CONNECTION WITH OIL PLANT Rd, Rt, 395 NB
317+98	CONFORM GRIND	119'	28.50'	22.50'	0.10'	"D"	Rd CONNECTION WITH TEST STATION Rd, Rt, 395 NB
353+95	CONFORM GRIND	40'	26'	-	0.10'	2	END CONSTRUCTION, 395 NB
1353+95	CONFORM GRIND	40'	26'	-	0.10'	2	BEGIN CONSTRUCTION, 395 SB
1292+00	CONFORM GRIND	92'	40'	25'	0.10'	"D"	Rd CONNECTION WITH HORSE MEADOWS Rd, Lt, 395 SB
1224+05	CONFORM GRIND	105'	35.50'	26.5'	0.10'	"D"	Rd CONNECTION WITH OIL PLANT Rd, Rt, 395 SB
1130+08	CONFORM GRIND	132'	75'	45'	0.10'	"E"	NORTH Jct WITH Rte 158, Lt, 395 SB,
1127+58	CONFORM GRIND	73.50'	26'	50'	0.10'	3, Sh+ C-4	RUSH CREEK BRIDGE-Lt, NORTH END
1125+63	CONFORM GRIND	50'	26'	73.50'	0.10'	3, Sh+ C-4	RUSH CREEK BRIDGE-Lt, SOUTH END
1064+12	CONFORM GRIND	85'	33.50'	18.50'	0.10'	"D"	Rd CONNECTION WITH SEWER PLANT Rd, Lt, Rte 395 SB
1049+35	CONFORM GRIND	40'	27'	-	0.10'	2	END CONSTRUCTION, 395 SB

**CONSTRUCTION DETAILS  
NO SCALE  
C-1**

MA 09-10-14  
REVISOR BY DATE  
MONTASHEEMA AFROZE NICK SPRAGUE  
CALCULATED/DESIGNED BY CHECKED BY  
FUNCTIONAL SUPERVISOR JOHN FOX  
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION  
Caltrans MAINTENANCE ENGINEERING

DATE PLOTTED => 16-SEP-2014  
TIME PLOTTED => 16:56  
LAST REVISION 09-10-14

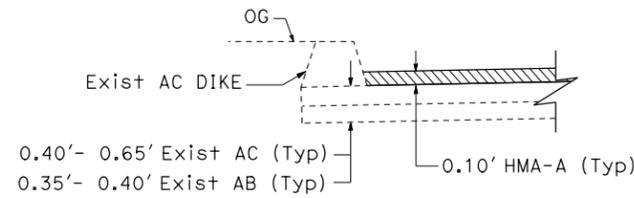


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	5	18

09-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 09-15-14  
 PLANS APPROVAL DATE

MONTASHEEMA AFROZE  
 No. 79286  
 Exp. 03-31-16  
 CIVIL  
 STATE OF CALIFORNIA

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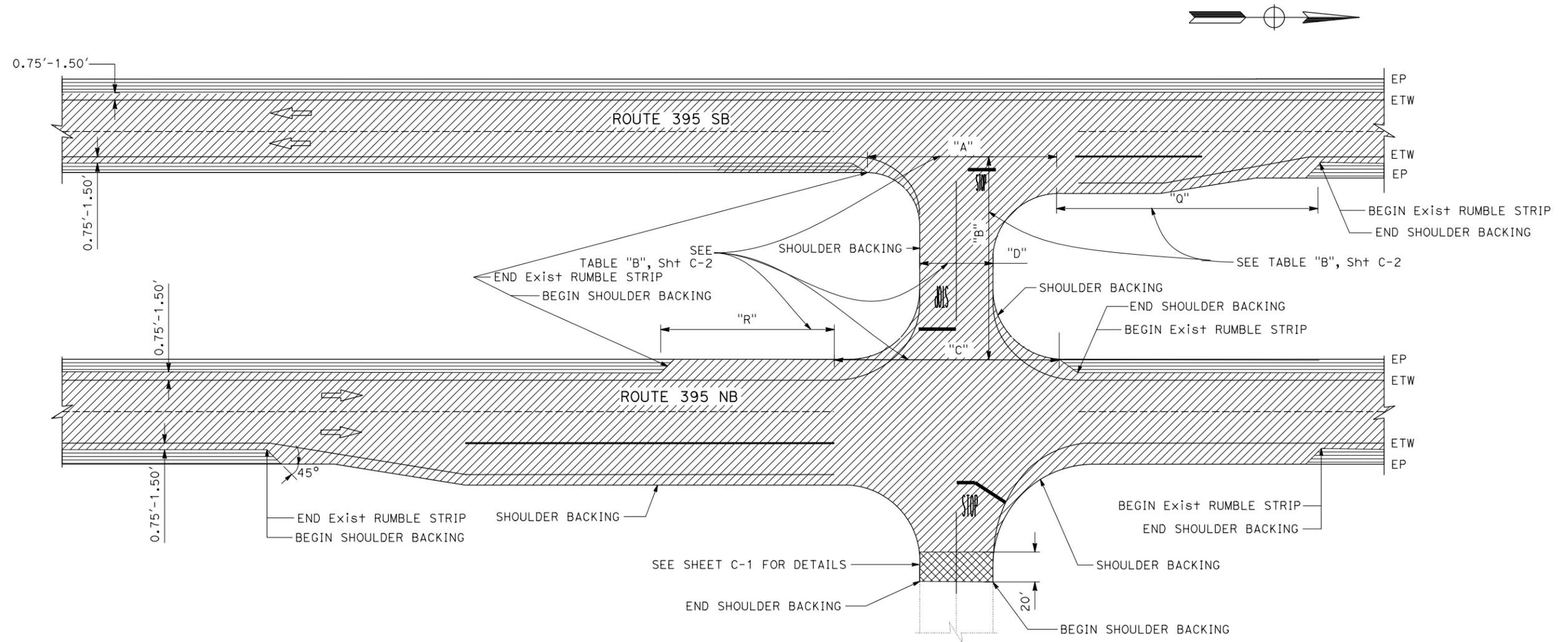


**TABLE C**

ROUTE	DIRECTION		PM	STATION	Rd CONNECTION	'L' LF
	NB	SB				
395	X		46.83	155+05	MIXING TABLE Rd	98
395	X		48.15	224+35	OIL PLANT Rd	41

NOTE: NO REMOVAL OF EXISTING DIKE

**PAVE INTO EXISTING AC DIKE  
DETAIL (TYPICAL)**



**PAVING DETAIL AT ROAD CONNECTION & MEDIAN CROSSOVER  
AT SOUTH Jct WITH ROUTE 120**

PM 46.01, STA 110+80 (NB),  
STA 1110+80 (SB)

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

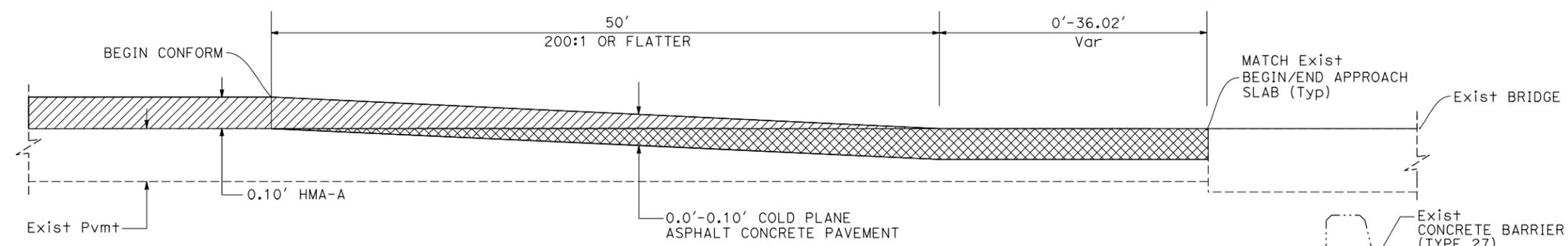
**CONSTRUCTION DETAILS  
NO SCALE  
C-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE ENGINEERING  
 FUNCTIONAL SUPERVISOR: JOHN FOX  
 CALCULATED/DESIGNED BY: MONTASHEEMA AFROZE  
 CHECKED BY: NICK SPRAGUE  
 REVISOR: MA  
 DATE REVISED: 09-10-14

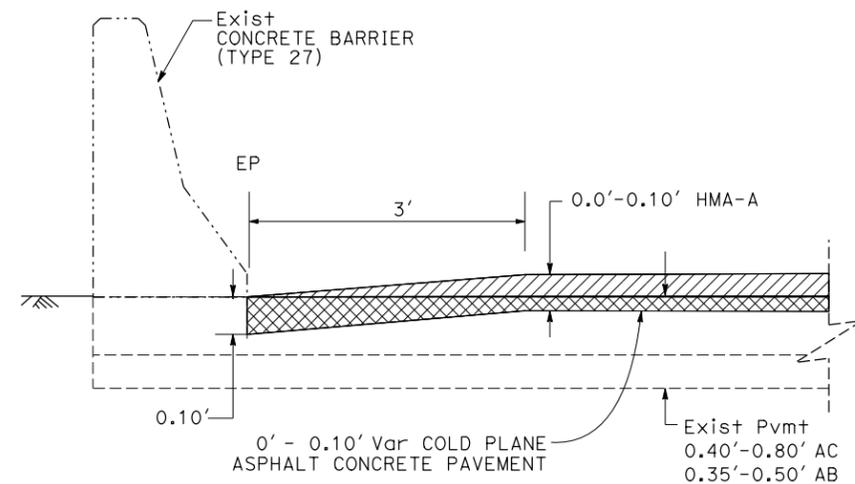
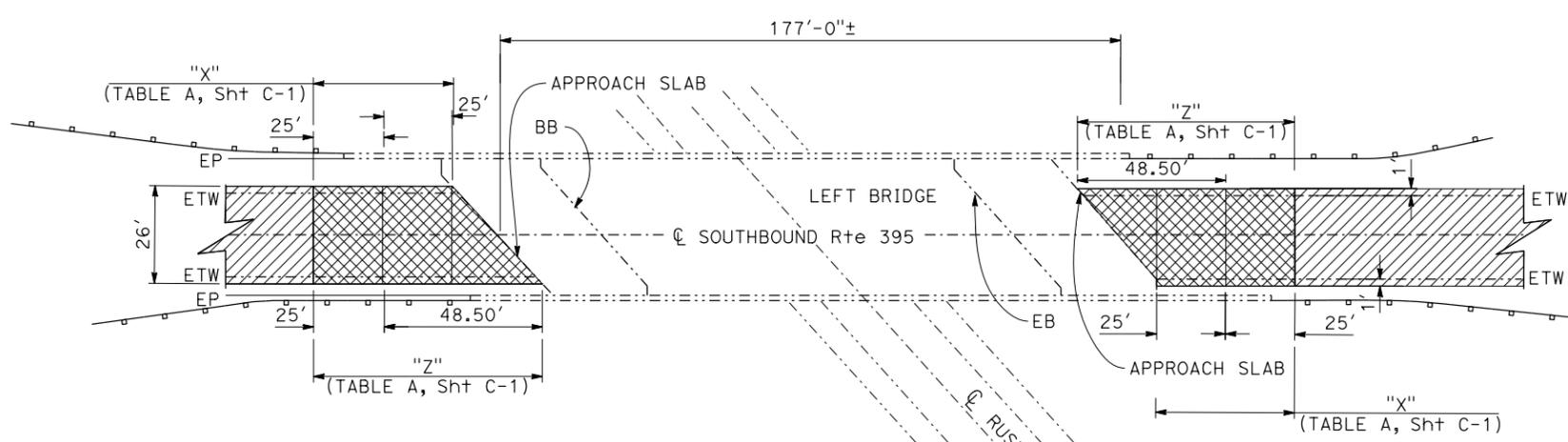
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	6	18

09-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 09-15-14  
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REGISTERED PROFESSIONAL ENGINEER  
 MONTASHEEMA AFROZE  
 No. 79286  
 Exp. 03-31-16  
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 STATE OF CALIFORNIA

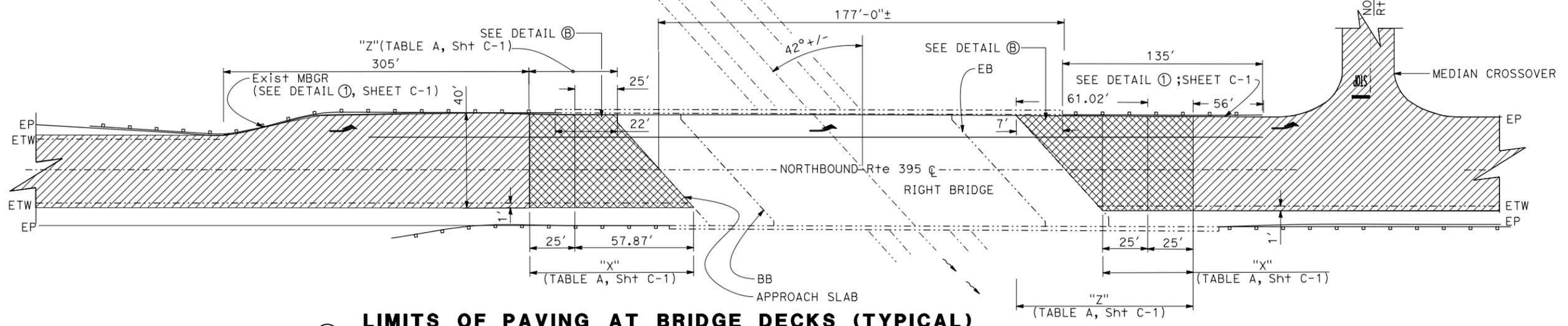


**TRANSITION TAPER TO BRIDGE DECK (Typ, LONGITUDINAL)**



STA 127+52 - STA 127+74 (L+) (395 NB)  
 STA 129+50 - STA 129+57 (L+) (395 NB)

**TRANSITION TAPER TO CONCRETE BARRIER**



**LIMITS OF PAVING AT BRIDGE DECKS (TYPICAL)**

RUSH CREEK BRIDGE-L+, PM 46.29  
 RUSH CREEK BRIDGE-R+, PM 46.32

**CONSTRUCTION DETAILS**  
**C-4**  
 NO SCALE

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 MAINTENANCE ENGINEERING  
 MONTASHEEMA AFROZE  
 NICK SPRAGUE  
 JOHN FOX  
 MA  
 REVISOR  
 DATE  
 09-10-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	7	18

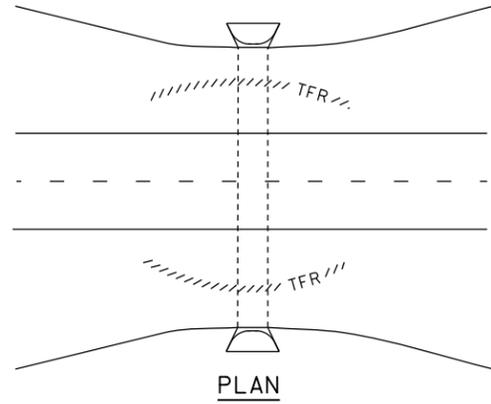
  

09-10-14 REGISTERED CIVIL ENGINEER DATE	
09-15-14 PLANS APPROVAL DATE	

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**NOTE:**

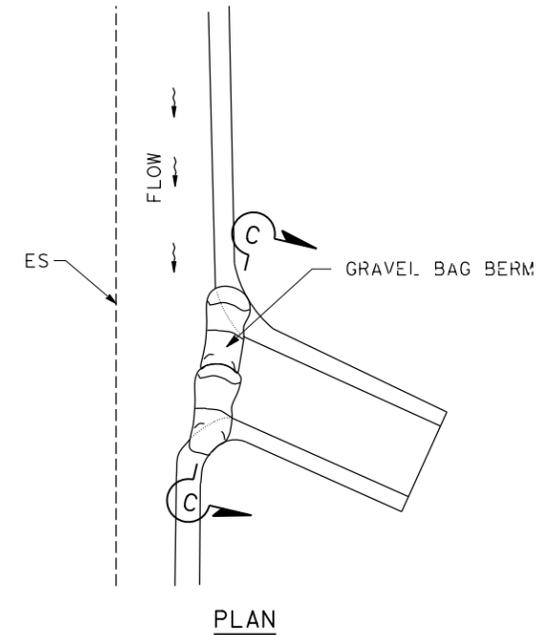
1. EXACT LOCATION AND POSITION OF TEMPORARY DRAINAGE PROTECTION AS APPROVED BY THE ENGINEER.



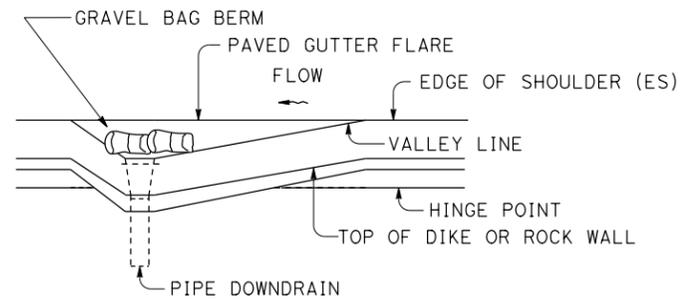
**TEMPORARY FIBER ROLL  
(LIVE WATER PLAN VIEW)**

GRAVEL BAG BERM  
 CROSS SECTION OF SLOPE DITCH MAY BE SEMICIRCULAR, VEE OR TRAPEZOIDAL

**SECTION C-C**



**TEMPORARY GRAVEL BAG BERM  
AT ASPHALT CONCRETE OVERSIDE  
DRAIN (TYPICAL)**



**TEMPORARY GRAVEL BAG BERM  
AT PIPE DOWNRAIN (TYPICAL)**

**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
WPCD-1**  
NO SCALE

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	8	18

09-10-14  
 REGISTERED CIVIL ENGINEER DATE

09-15-14  
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
 MONTASHEEMA AFROZE  
 No. 79286  
 Exp. 03-31-16  
 CIVIL  
 STATE OF CALIFORNIA

**NOTE:**

1. EXACT LOCATION AND POSITION OF TEMPORARY DRAINAGE INLET PROTECTION & TEMPORARY FIBER ROLL AS APPROVED BY THE ENGINEER.

**TEMPORARY GRAVEL BAG BERM**

POST MILE	STATION	DIRECTION	L+	R+	LF	DESCRIPTION
44.73	43+48	NB		X	6	PIPE DOWNDRAIN
44.79	47+06	NB		X	6	AC OVERSIDE DRAIN
46.26	123+95	NB		X	6	AC OVERSIDE DRAIN
46.37	130+07	NB		X	6	PIPE DOWNDRAIN
46.46	134+56	NB		X	6	AC OVERSIDE DRAIN
47.51	190+02	NB		X	6	AC OVERSIDE DRAIN
47.52	190+47	NB	X		6	PIPE DOWNDRAIN
47.52	190+47	NB		X	6	AC OVERSIDE DRAIN
47.53	191+08	NB		X	6	AC OVERSIDE DRAIN
47.99	215+80	NB		X	6	AC OVERSIDE DRAIN
48.23	228+29	NB		X	6	PIPE DOWNDRAIN
48.30	232+02	NB		X	6	PIPE DOWNDRAIN
48.37	235+27	NB		X	6	PIPE DOWNDRAIN
48.43	238+58	NB		X	6	PIPE DOWNDRAIN
48.47	241+15	NB		X	6	PIPE DOWNDRAIN
48.52	243+66	NB	X	X	12	AC OVERSIDE DRAIN
49.23	281+14	NB		X	6	PIPE DOWNDRAIN
49.45	292+93	NB	X		6	AC OVERSIDE DRAIN
49.45	292+93	NB		X	6	PIPE DOWNDRAIN
49.50	295+28	NB		X	6	PIPE DOWNDRAIN
49.52	296+64	NB	X		6	PIPE DOWNDRAIN
49.55	297+73	NB		X	6	PIPE DOWNDRAIN
49.60	300+64	NB	X	X	12	PIPE DOWNDRAIN
49.67	304+07	NB	X		6	PIPE DOWNDRAIN
49.72	306+71	NB	X		6	PIPE DOWNDRAIN
49.77	309+33	NB	X		6	PIPE DOWNDRAIN
49.82	311+98	NB	X		6	PIPE DOWNDRAIN
49.95	318+99	NB	X		6	AC OVERSIDE DRAIN
50.05	324+55	NB	X	X	12	PIPE DOWNDRAIN
50.11	327+73	NB		X	6	PIPE DOWNDRAIN
50.15	329+49	NB	X		6	PIPE DOWNDRAIN
50.18	331+41	NB		X	6	PIPE DOWNDRAIN
50.24	334+39	NB	X		6	PIPE DOWNDRAIN
50.25	334+75	NB		X	6	PIPE DOWNDRAIN
50.33	339+33	NB	X		6	PIPE DOWNDRAIN
46.23	1122+71	SB		X	6	AC OVERSIDE DRAIN
46.35	1128+96	SB	X		6	PIPE DOWNDRAIN
47.53	1191+27	SB	X		6	AC OVERSIDE DRAIN
47.54	1191+61	SB	X		6	AC OVERSIDE DRAIN
47.82	1206+71	SB	X	X	12	AC OVERSIDE DRAIN
47.93	1212+26	SB	X	X	12	PIPE DOWNDRAIN
48.29	1231+32	SB	X		6	PIPE DOWNDRAIN
48.36	1234+95	SB	X		6	PIPE DOWNDRAIN
48.44	1239+19	SB	X		6	AC OVERSIDE DRAIN
48.54	1244+62	SB	X	X	12	AC OVERSIDE DRAIN
49.20	1279+50	SB	X		6	PIPE DOWNDRAIN
50.07	1325+45	SB		X	6	PIPE DOWNDRAIN
SUBTOTAL TABLE 1					318	

**TEMPORARY GRAVEL BAG BERM (Cont)**

POST MILE	STATION	DIRECTION	L+	R+	LF	DESCRIPTION
50.13	1328+70	SB		X	6	PIPE DOWNDRAIN
50.20	1331+99	SB		X	6	PIPE DOWNDRAIN
50.27	1336+17	SB		X	6	PIPE DOWNDRAIN
50.37	1341+41	SB	X		6	AC OVERSIDE DRAIN
SUBTOTAL TABLE 2					24	
SUBTOTAL TABLE 1					318	
TOTAL					342	

**TEMPORARY DRAINAGE INLET PROTECTION**

POST MILE	STATION	DIRECTION	L+	R+	EA	DESCRIPTION
46.33	1128+17	SB	X		1	DRAINAGE INLET ON RUSH CREEK BRIDGE (L+), (TYPE 3B OR TYPE 5)
46.39	1132+30	SB	X		1	DRAINAGE INLET GRATE (36", TYPE GMP) AT NORTH Jct Rte 158, (TYPE 3 B OR TYPE 5)
49.68	1304+81	SB	X		1	DRAINAGE INLET GRATE (36", TYPE GMP), (TYPE 3B OR TYPE 5)
50.19	1331+70	SB	X		1	DRAINAGE INLET GRATE (36", TYPE GMP), (TYPE 3B OR TYPE 5)
TOTAL					4	

**TEMPORARY FIBER ROLL**

POST MILE	STATION	DIRECTION	L+	R+	No.	LF	DESCRIPTION
45.05	60+53-61+03	NB	X	X	2	100	CULVERT INLET (3 x 36" CMP - LIVE STREAM)
46.27	124+65-127+34	NB	X		1	270	MBGR AT RUSH CREEK BRIDGE (R+), LIVE STREAM
46.36	129+44-130+61	NB	X		1	118	MBGR AT RUSH CREEK BRIDGE (R+), LIVE STREAM
46.85	157+75-158+85	NB	X		1	110	CULVERT INLET (10' x 9' BOX CULVERT - LIVE STREAM)
46.85	158+15-159+75	NB		X	1	160	CULVERT INLET (10' x 9' BOX CULVERT - LIVE STREAM)
45.05	1060+53-1061+03	SB	X	X	2	100	CULVERT INLET (3 x 36" CMP - LIVE STREAM)
46.23	1125+15-1126+65	SB	X		1	150	LIVE STREAM
46.28	1125+20-1126+95	SB	X		1	175	MBGR AT RUSH CREEK BRIDGE (L+), LIVE STREAM
46.31	1127+10-1127+50	SB	X		1	40	MBGR AT RUSH CREEK BRIDGE (L+), LIVE STREAM
46.34	1128+70-1130+90	SB		X	1	220	MBGR AT RUSH CREEK BRIDGE (L+), LIVE STREAM
46.85	1155+57-1157+75	SB	X		1	218	CULVERT INLET (10' x 9' BOX CULVERT - LIVE STREAM)
46.85	1157+00-1158+10	SB		X	1	110	CULVERT INLET (10' x 9' BOX CULVERT - LIVE STREAM)
47.47	1188+55-1191+30	SB		X	1	275	CULVERT INLET (10' x 9' BOX CULVERT - LIVE STREAM)
TOTAL						2046	

**TEMPORARY WATER POLLUTION CONTROL QUANTITIES WPCQ-1**

EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: JOHN FOX

MAINTENANCE ENGINEERING

REVISOR: MONTASHEEMA AFROZE  
 DATE: 09-10-14

REVISOR: NICK SPRAGUE  
 DATE: 09-10-14

DESIGNED BY: MONTASHEEMA AFROZE  
 CHECKED BY:

**NOTES:**

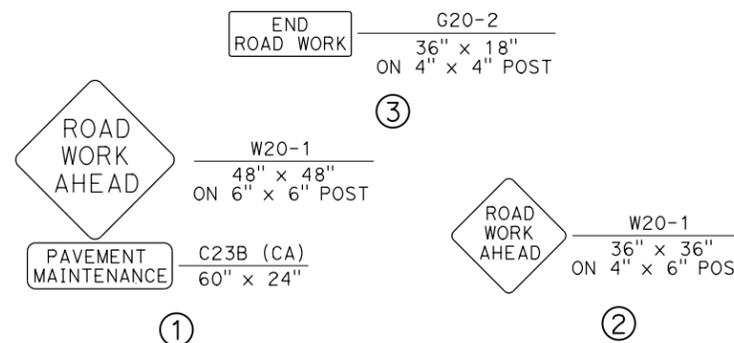
1. FOR SIGN INSTALLATION DETAILS AND DIMENSIONS NOT SHOWN SEE STANDARD PLANS.
2. SEE TABLE FOR PLACEMENT TYPE.
3. THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.
4. SIGNS IN CONFLICT WITH ADJACENT, ON-GOING PROJECTS SHALL BE COVERED UPON INSTALLATION.
5. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	9	18

REGISTERED CIVIL ENGINEER DATE 09-10-13  
 09-15-14 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 MONTASHEEMA AFROZE  
 No. 79286  
 Exp. 03-31-16  
 CIVIL  
 STATE OF CALIFORNIA

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS			
Sta	PM	PLACEMENT	REMARKS
	R43.60 (NB)	A	BEGIN WORK (NB), END WORK (SB)
996+27	R43.84 (SB)		
24+26	R44.37	B	MEDIAN CROSS-OVER-Lt, WEST PORTAL ROAD-Rt & Lt.
54+09	44.94	D	OLD WEST PORTAL ROAD, Rt
110+80	46.01	F	SOUTH Jct Rte 120, Rt
154+36	46.83	D	MIXING TABLE ROAD, Rt
161+48	46.97	C	COMMERCIAL PIT ROAD, Rt
224+05	48.15	B	OIL PLANT ROAD, Rt & Lt
317+98	49.93	C	TEST STATION ROAD, Rt
384+88	51.20	G	END WORK (NB), BEGIN WORK (SB)
1371+79	50.95	C	UTILITY Rd, Lt, ROAD APPROACH, Rt
1360+08	50.74	E	NORTH Jct Rte 120, Lt, PUMICE Rd, Rt
1292+00	49.44	C	HORSE MEADOWS ROAD, Lt
1130+08	46.39	F	NORTH Jct Rte 158, Lt
1064+12	45.13	C	SEWER PLANT ROAD, Lt



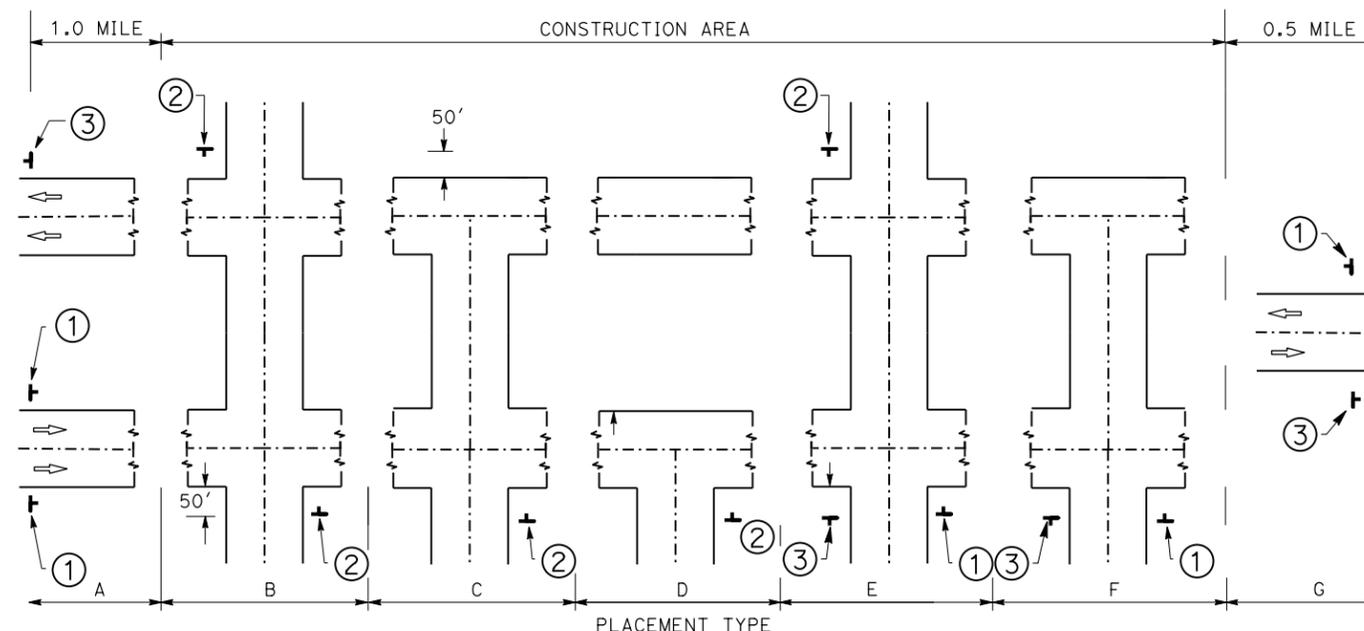
**TYPICAL SIGN LAYOUT**

PORTABLE CHANGEABLE MESSAGE SIGNS		
MESSAGE FOR DIVIDED HIGHWAY		
LANE CLOSED AHEAD	REDUCE SPEED	USE CAUTION

1. PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS TO BE CONFIRMED BY THE ENGINEER BEFORE THE ACTUAL CLOSURE.
2. ALTERNATE MESSAGES MUST BE APPROVED BY THE ENGINEER.
3. MESSAGE MAY BE ALTERED BY THE ENGINEER.
4. WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVELY IN PROGRESS, PORTABLE CHANGEABLE MESSAGE SIGNS SHALL NOT DISPLAY A MESSAGE UNLESS DIRECTED BY THE ENGINEER.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS					
LAYOUT	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF SIGNS	No. OF POST AND SIZE
①	W20-1	48" x 48"	ROAD WORK AHEAD	6	2 - 6" x 6"
	C23B (CA) (SPECIAL)	48" x 30"	PAVEMENT MAINTENANCE	6	
②	W20-1	36" x 36"	ROAD WORK AHEAD	12	16 - 4" x 6"
③	G20-2	36" x 18"	END ROAD WORK	5	2 - 4" x 4"

MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION		
ROUTE	PM	REMARKS
395 NB	48.862	TRAFFIC COUNT Sta
395 SB	48.862	TRAFFIC COUNT Sta
120	13.45	TRAFFIC COUNT Sta
158	15.73	TRAFFIC COUNT Sta



**TYPICAL SIGN PLACEMENT FOR DIVIDED HIGHWAY WITH CONSTRUCTION IN BOTH DIRECTIONS OF TRAVEL**

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

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	10	18

REGISTERED CIVIL ENGINEER DATE 09-10-14  
 09-15-14  
 PLANS APPROVAL DATE

MONTASHEEMA AFROZE  
 No. 79286  
 Exp. 03-31-16  
 CIVIL  
 STATE OF CALIFORNIA

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

ROADWAY QUANTITIES				
STATION	HOT MIX ASPHALT (TYPE A)	COLD PLANE AC PAVEMENT	ASPHALTIC EMULSION (FOG SEAL COAT)	TACK COAT
	TON	SQYD	TON	TON
36+00 - 353+95	6,970	1079	17	25
1049+35 - 1353+95	6,550	716	15	24
TOTAL	13,520	1794	32	49

PAINT TRAFFIC STRIPE (2-COAT)						
STATION	DETAIL NUMBER					
	11	21	24	27B	28	38A
	LF	LF	LF	LF	LF	LF
36+00 - 353+95	31,795	374	31,065*	31,336	26	1125
1049+35 - 1353+95	30,460	384	29,793	29,991	26	1103
SUBTOTAL	62,255	758	60,858*	61,327	52	2228
TOTAL	187,478*					

\* THIS QUANTITY INCLUDES 27' LONG SINGLE YELLOW LINE AT OLD WEST PORTAL ROAD INTERSECTION

REMOVE PAINTED TRAFFIC STRIPE				
STATION	DIRECTION		DETAIL 38A	
	NB	SB	LF(N)	LF
105+91	X		534	1068
125+39	X		591	1182
1113+43		X	13	26
1118+82		X	539	1078
1133+78		X	26	52
1139+03		X	525	1050
TOTAL			4456	

PAINT PAVEMENT MARKING (2-COAT)										
STATION	TYPE V ARROW		TYPE III ARROW (RIGHT)		TYPE III ARROW (LEFT)		LIMIT LINE		"STOP"	
	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	LF(N)	SQFT	EA(N)	SQFT
36+00 - 353+95	32	1056	3	126	3**	126**	340	340	13	286
1049+35 - 1353+95	30	990	3	126	3	126	358	358	13	286
SUBTOTAL	2046		252		252**		698		572	
TOTAL	3820									

\*\* THIS QUANTITY INCLUDES THE TYPE III ARROW ON RUSH CREEK BRIDGE (Rt)

REMOVE PAINTED PAVEMENT MARKING										
STATION	TYPE V ARROW		TYPE III ARROW (RIGHT)		TYPE III ARROW (LEFT)		LIMIT LINE		"STOP"	
	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	LF(N)	SQFT	EA(N)	SQFT
36+00 - 353+95	32	1056	3	126	3**	126**	319	340	12	264
1049+35 - 1353+95	28	924	3	126	3	126	358	358	13	286
SUBTOTAL	1980		252		252**		677		550	
TOTAL	3711***									

\*\*\* THIS QUANTITY EXCLUDES THE "STOP" MARKING AT MIXING TABLE Rd.

SHOULDER BACKING				
STATION	NB	SB	QUANTITY	REMARKS
			TON	
54+90	X		1.8	OLD WEST PORTAL Rd., Rt.
110+80	X		42.3	SOUTH Jct.WITH Rte 120, MEDIAN CROSSOVER
155+05	X		1.7	MIXING TABLE Rd., Rt.
161+43	X		15.7	COMMERCIAL PIT Rd., MEDIAN CROSSOVER
224+35	X		1.4	OIL PLANT Rd.,Rt.
317+93	X		11.8	TEST STATION Rd., Rt., MEDIAN CROSSOVER
1064+12		X	12.6	SEWER PLANT Rd.,Lt.
1130+08		X	37.1	NORTH Jct.WITH Rte 158, MEDIAN CROSSOVER
1224+05		X	13.6	OIL PLANT Rd.,Lt., MEDIAN CROSSOVER
1292+00		X	13.4	HORSE MEADOWS Rd.,Lt., MEDIAN CROSSOVER
TOTAL			151.4	

**SUMMARY OF QUANTITIES Q-1**

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
M+I	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT
N	NORTH
NB	NORTHBOUND
No.	NUMBER (MUST HAVE PERIOD)
Nos.	NUMBERS (MUST HAVE PERIOD)
NPS	NOMINAL PIPE SIZE
NS	NEAR SIDE
NSP	NEW STANDARD PLAN
NTS	NOT TO SCALE
Obir	OBLITERATE
OC	OVERCROSSING
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OG	ORIGINAL GROUND
OGAC	OPEN GRADED ASPHALT CONCRETE
OGFC	OPEN GRADED FRICTION COURSE
OH	OVERHEAD
OHWM	ORDINARY HIGH WATER MARK
O-O	OUT TO OUT
Opp	OPPOSITE
OSD	OVERSIDE DRAIN
P	PAGE
PAP	PERFORATED ALUMINUM PIPE
PB	PULL BOX
PC	POINT OF CURVATURE, PRECAST
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

**M**

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

**P continued**

**Q**

**R**

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
Sh+	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
T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
Tel	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

**S**

**T**

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

**T continued**

**U**

**V**

**W**

**X**

**Y**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	11	18

*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.

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

TO ACCOMPANY PLANS DATED 09-15-14

**UNIT OF MEASUREMENT SYMBOLS:**  
Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

**TABLE A**

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

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

**TABLE B**

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kip	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**

2010 REVISED STANDARD PLAN RSP A10B

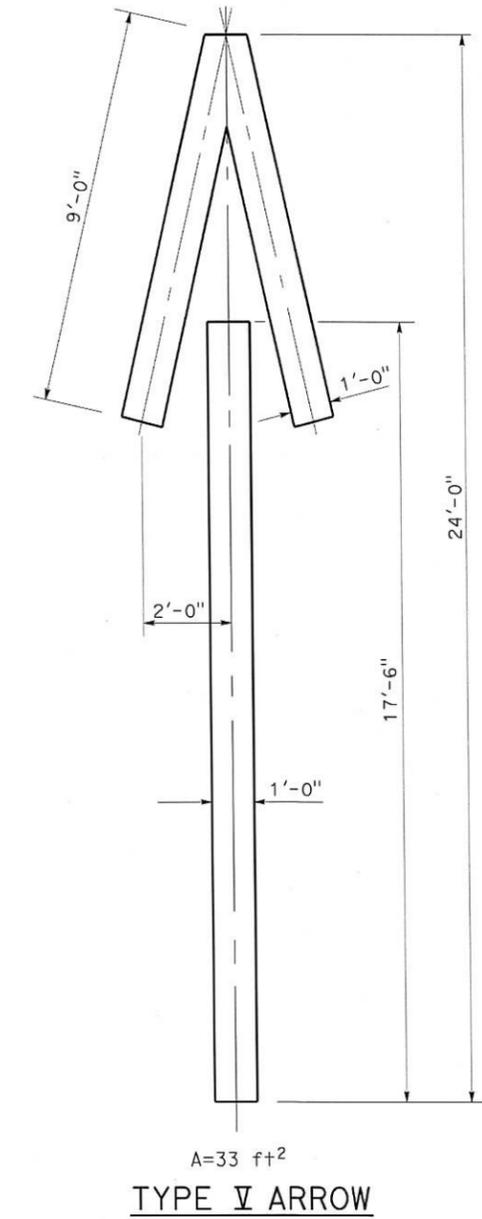
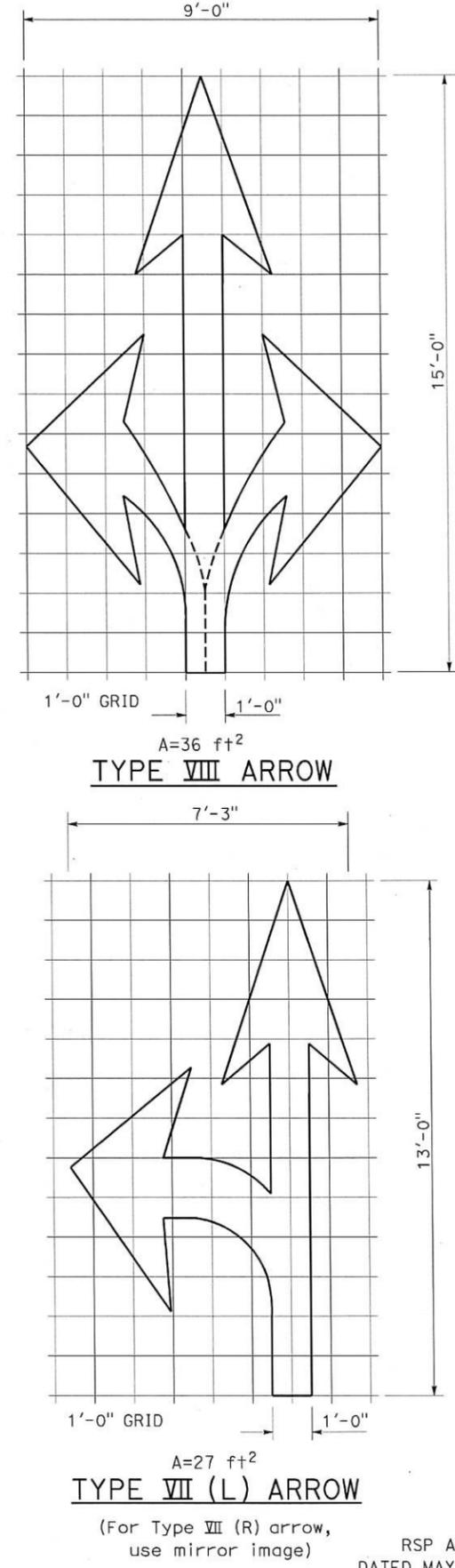
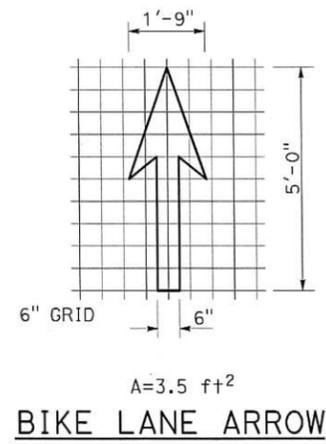
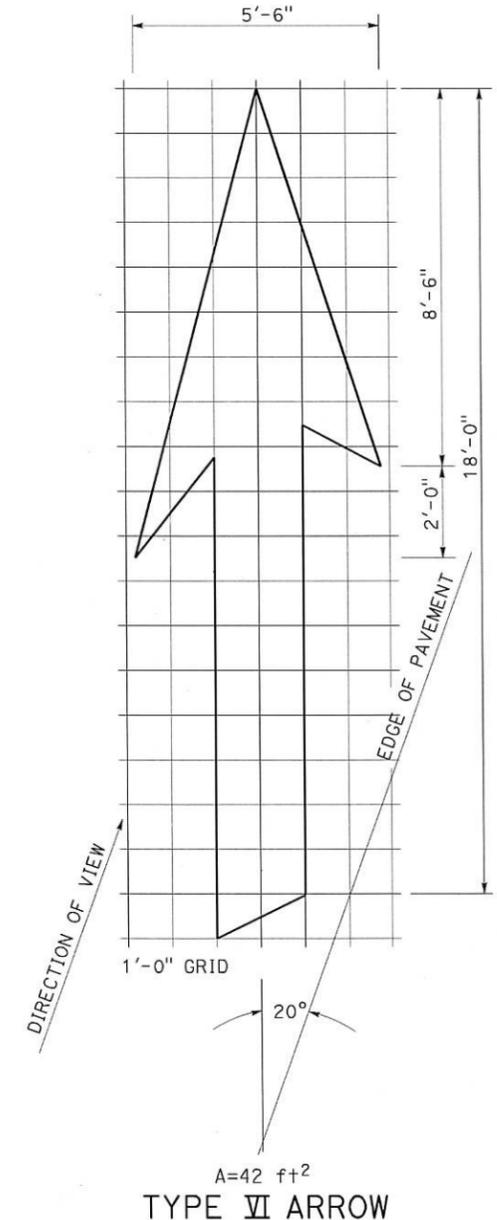
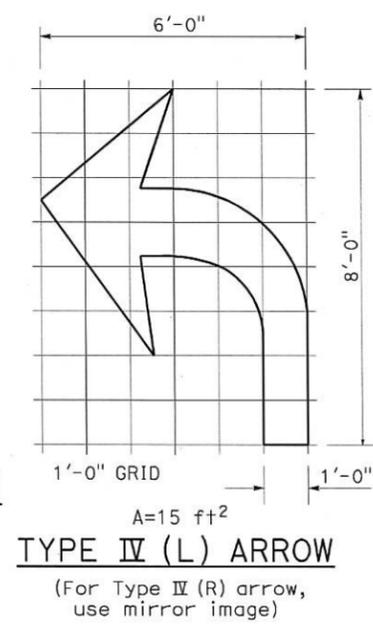
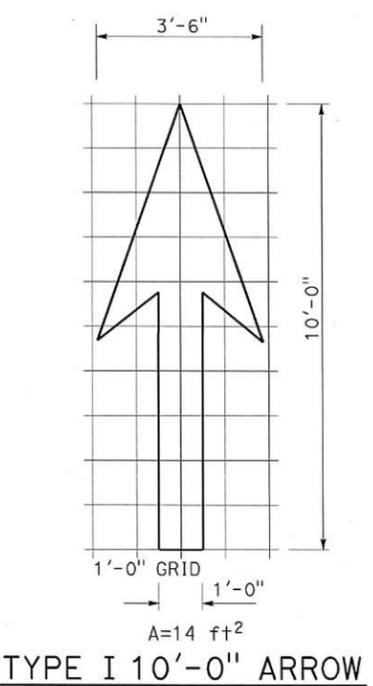
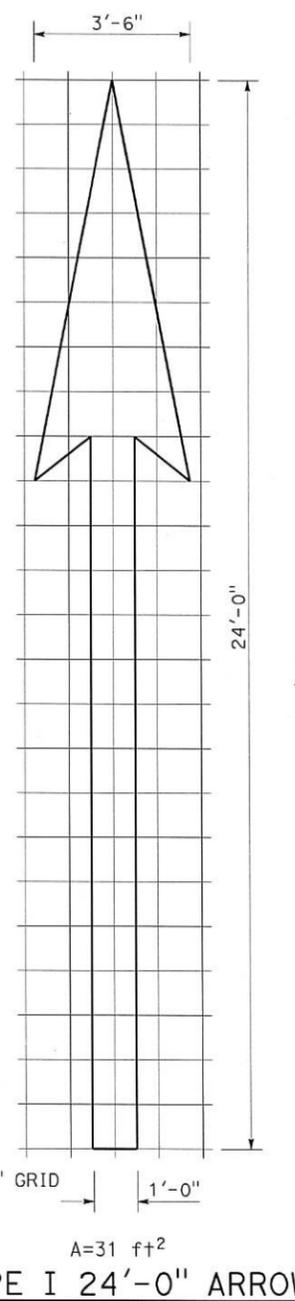
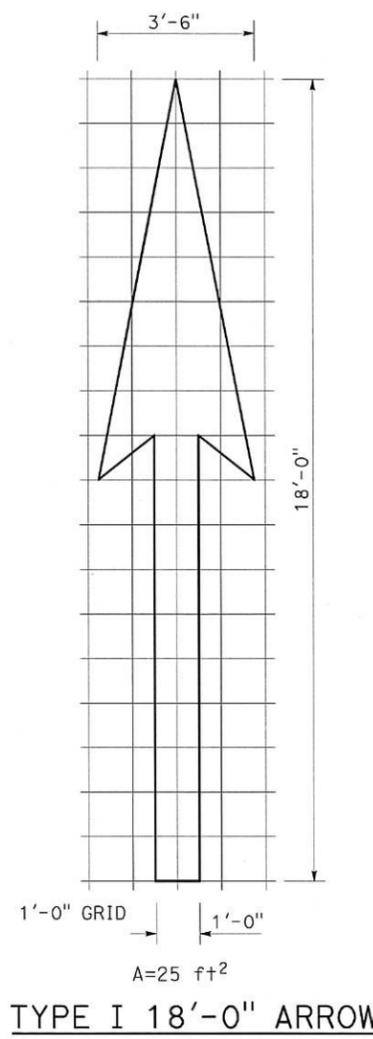
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
09	Mno	395	R44.6/50.7	12 18

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 09-15-14



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.

2010 REVISED STANDARD PLAN RSP A24A

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

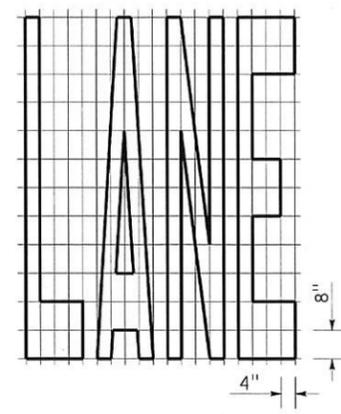
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	13	18

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

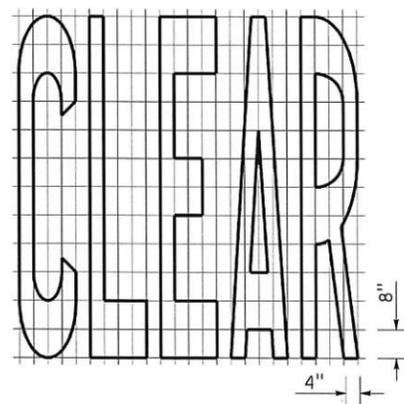
July 20, 2012  
 PLANS APPROVAL DATE

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.

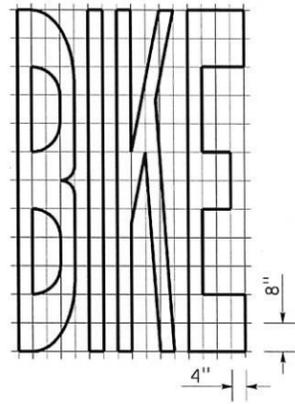
TO ACCOMPANY PLANS DATED 09-15-14



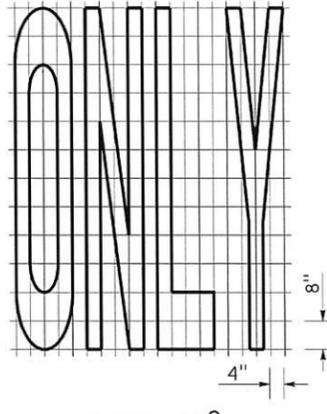
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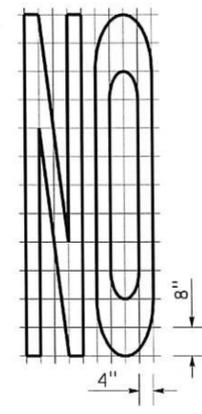
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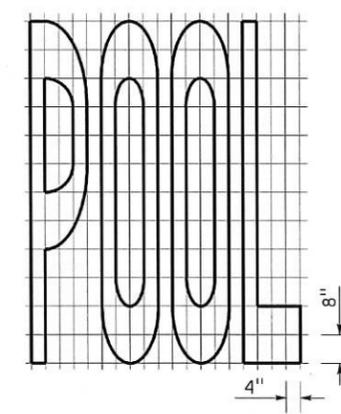
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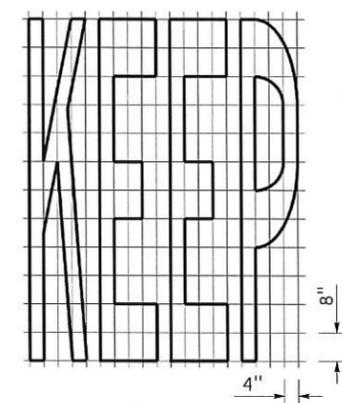
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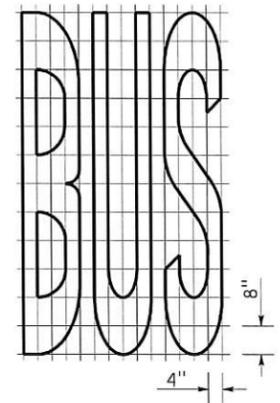
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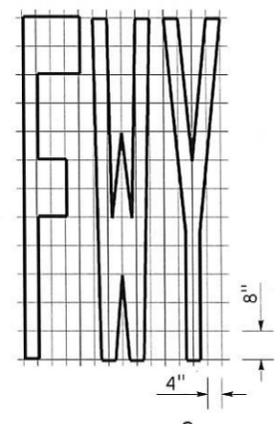
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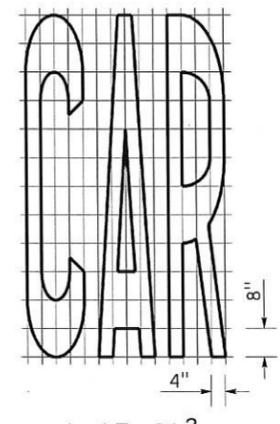
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A=20 ft<sup>2</sup>

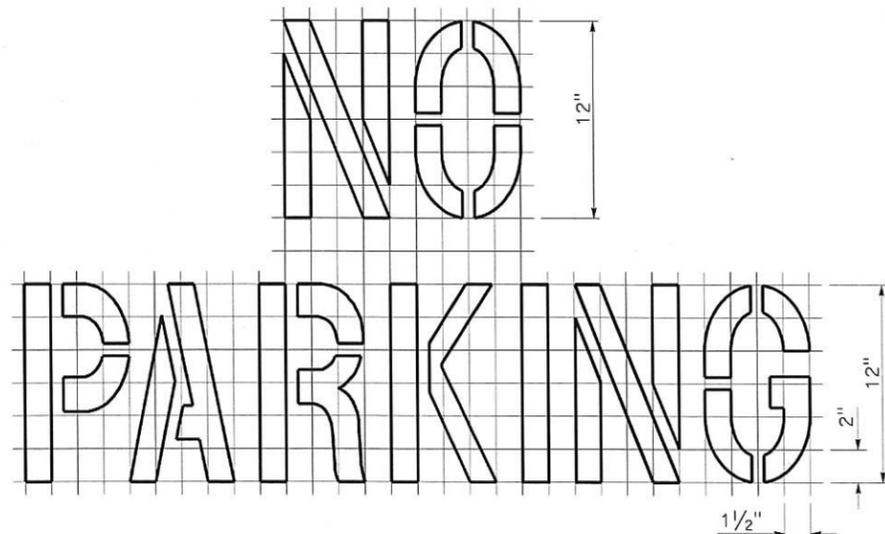


A=16 ft<sup>2</sup>

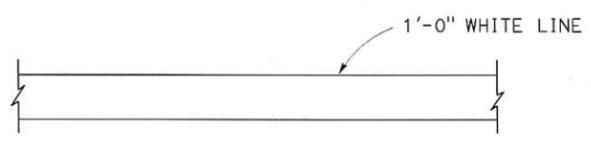


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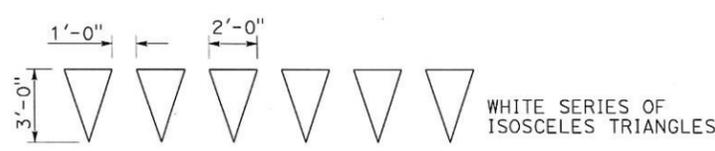
WORD MARKINGS			
ITEM	ft <sup>2</sup>	ITEM	ft <sup>2</sup>
LANE	24	NO	14
POOL	23	BIKE	21
CLEAR	27	BUS	20
KEEP	24	ONLY	22
		FWY	16



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.

**REVISED STANDARD PLAN RSP A24E**

2010 REVISED STANDARD PLAN RSP A24E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	14	18

  
 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 09-15-14

TABLE 1

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

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

Where: L = Taper length in feet

W = Width of offset in feet

S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

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

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		mph	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
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

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

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T9**

2010 REVISED STANDARD PLAN RSP T9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	15	18

Registered Civil Engineer  
 Gurinderpal Bhullar  
 No. C48815  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

April 19, 2013  
 PLANS APPROVAL DATE

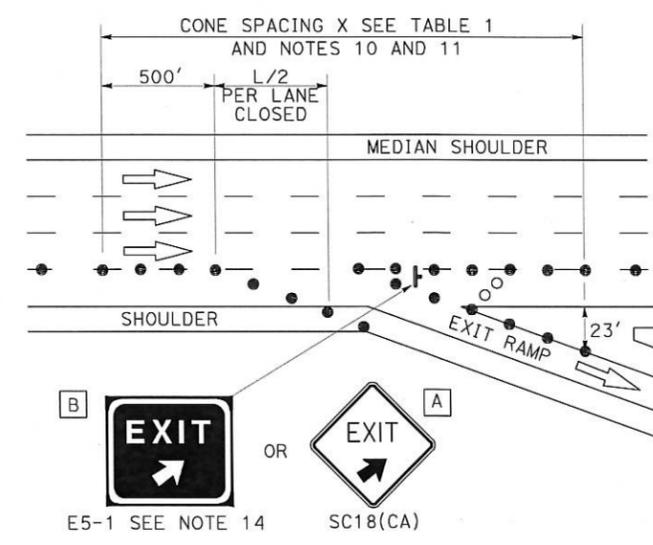
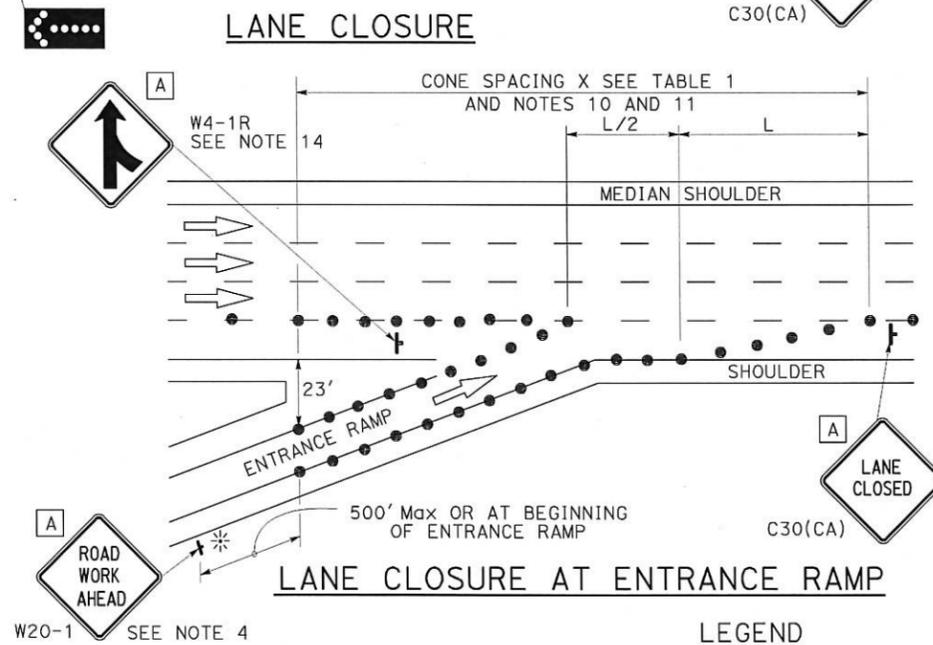
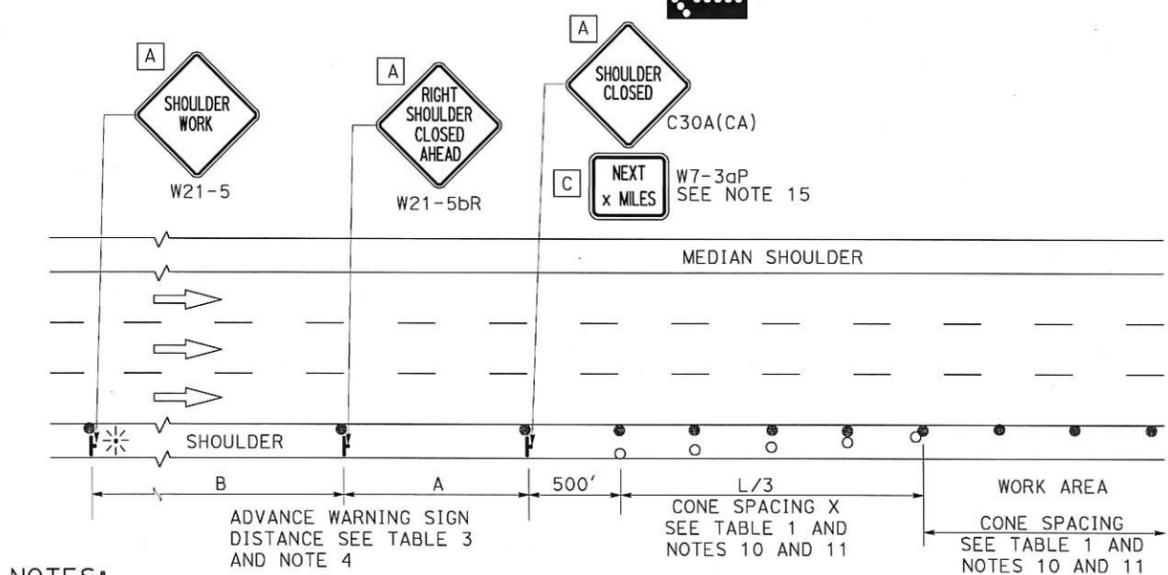
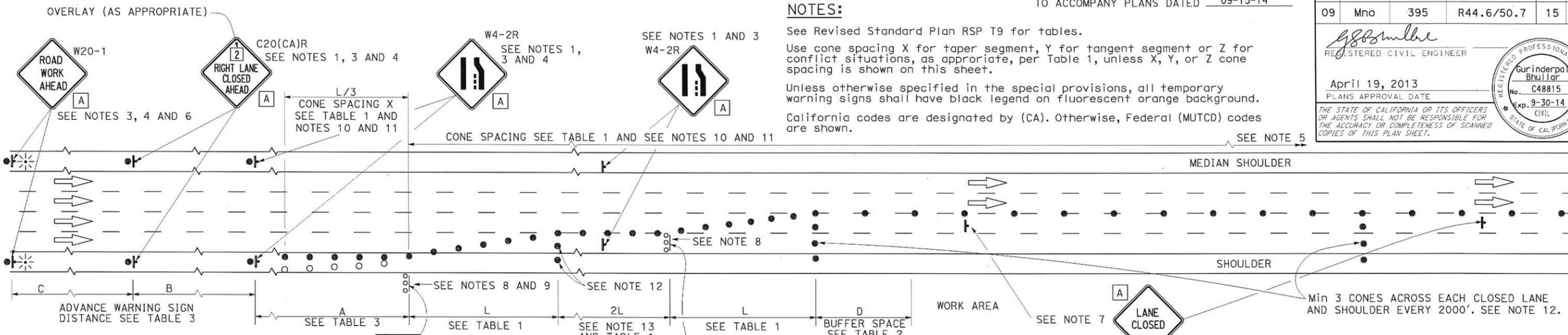
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**NOTES:**

TO ACCOMPANY PLANS DATED 09-15-14

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:**

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

**SHOULDER CLOSURE**

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

W20-1 SEE NOTE 4

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

**LEGEND**

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

**SIGN PANEL SIZE (Min)**

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

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

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

**REVISED STANDARD PLAN RSP T10**

2010 REVISED STANDARD PLAN RSP T10

**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.

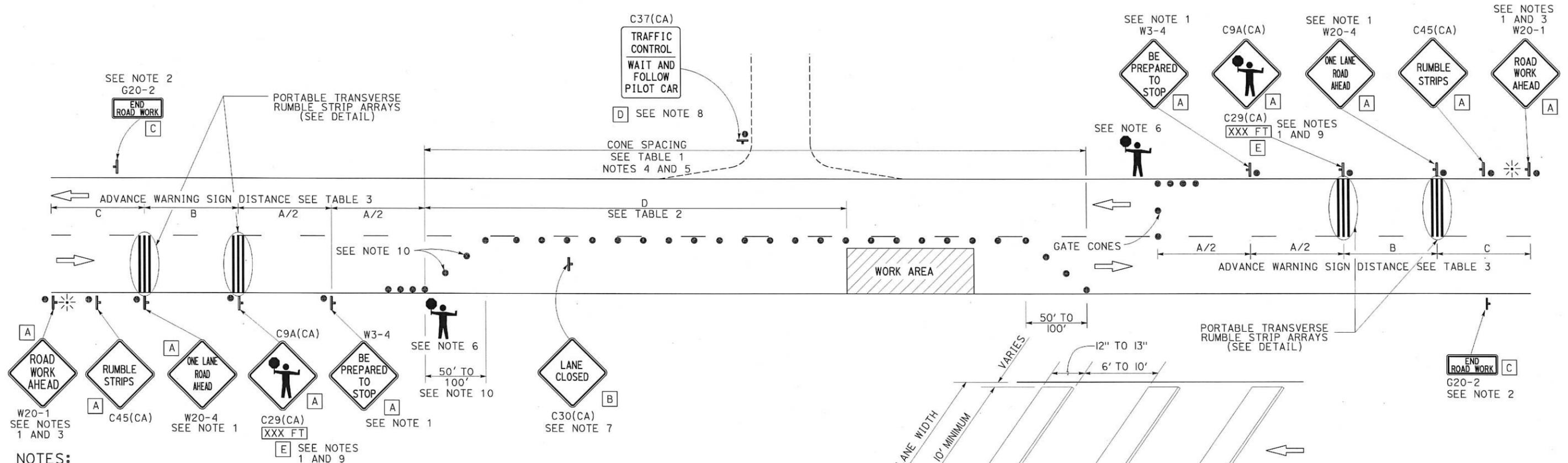
California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	16	18

REGISTERED CIVIL ENGINEER  
 July 18, 2014  
 PLANS APPROVAL DATE  
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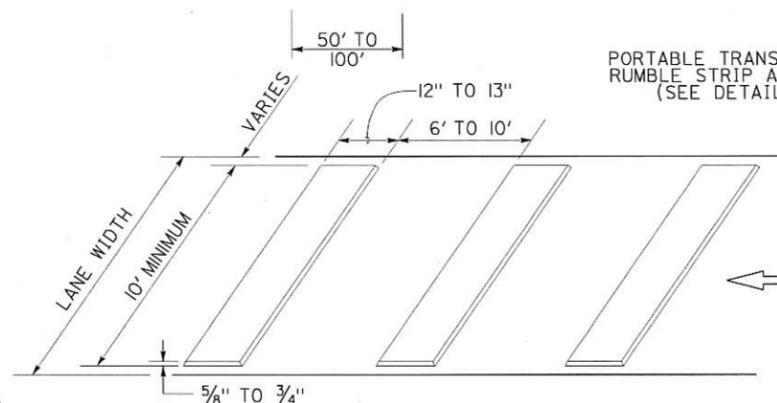
**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 09-15-14



**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 XXX 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.



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

**REVISED STANDARD PLAN RSP T13**

2010 REVISED STANDARD PLAN RSP T13

# TYPICAL RAMP CLOSURES

## SIGN PANEL SIZE (Min)

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

## LEGEND

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

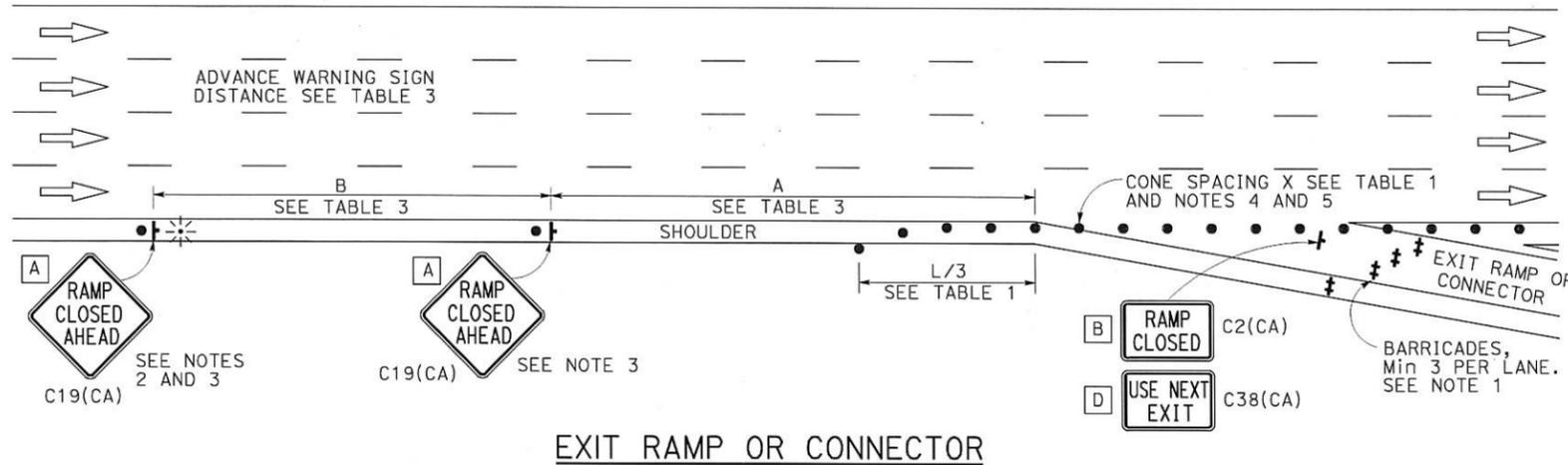
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	17	18

*Gurinderpal Bhullar*  
 REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
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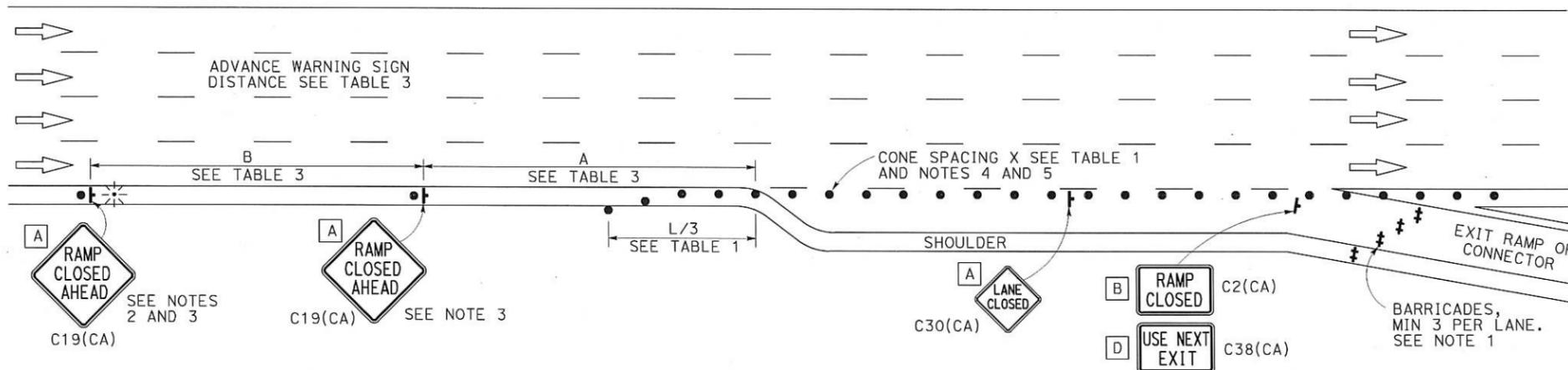
TO ACCOMPANY PLANS DATED 09-15-14

## NOTES:

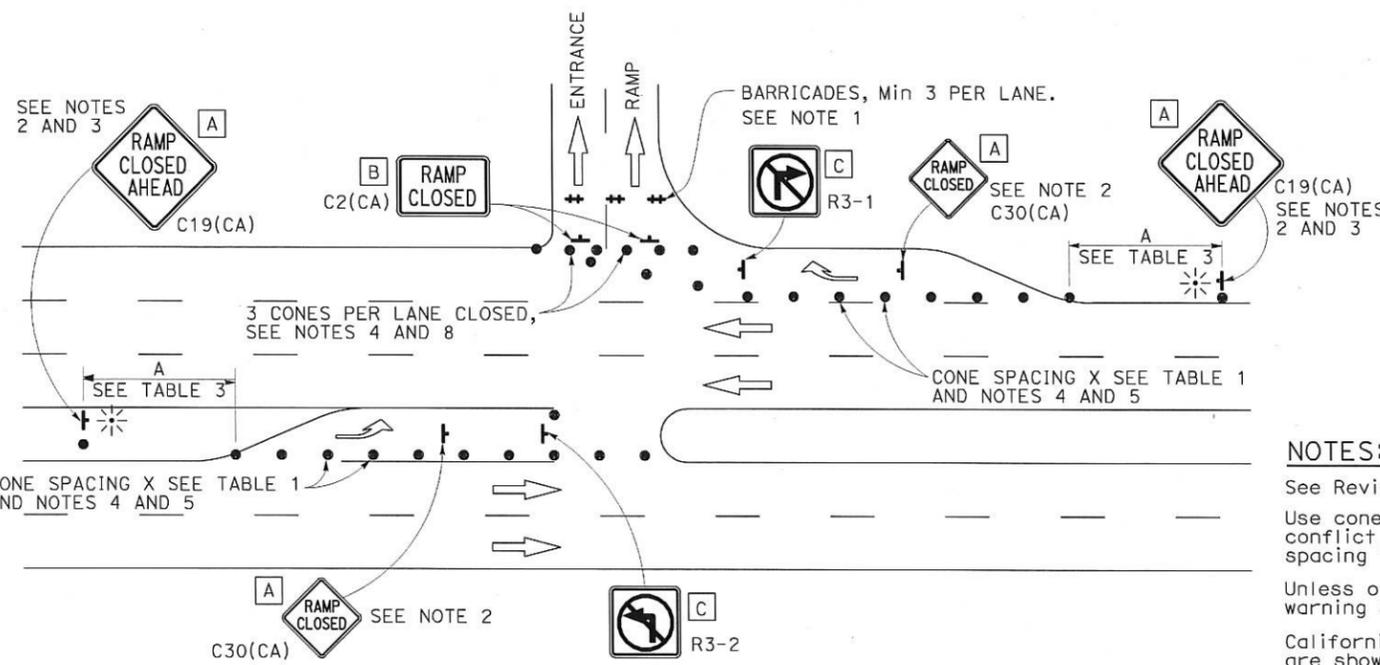
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed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



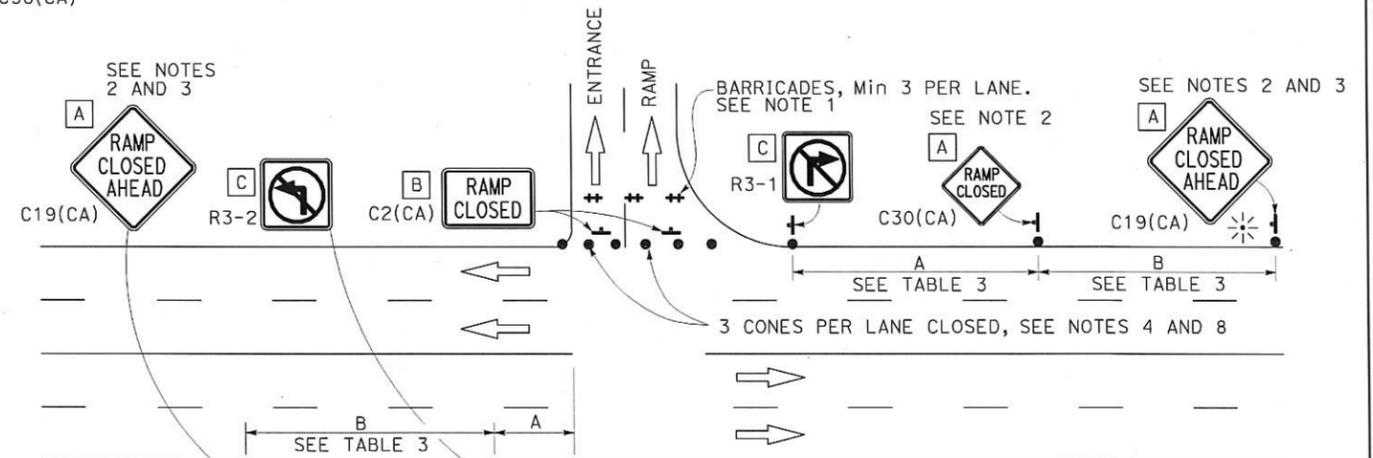
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

## NOTES:

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

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

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

**REVISED STANDARD PLAN RSP T14**

2010 REVISED STANDARD PLAN RSP T14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Mno	395	R44.6/50.7	18	18

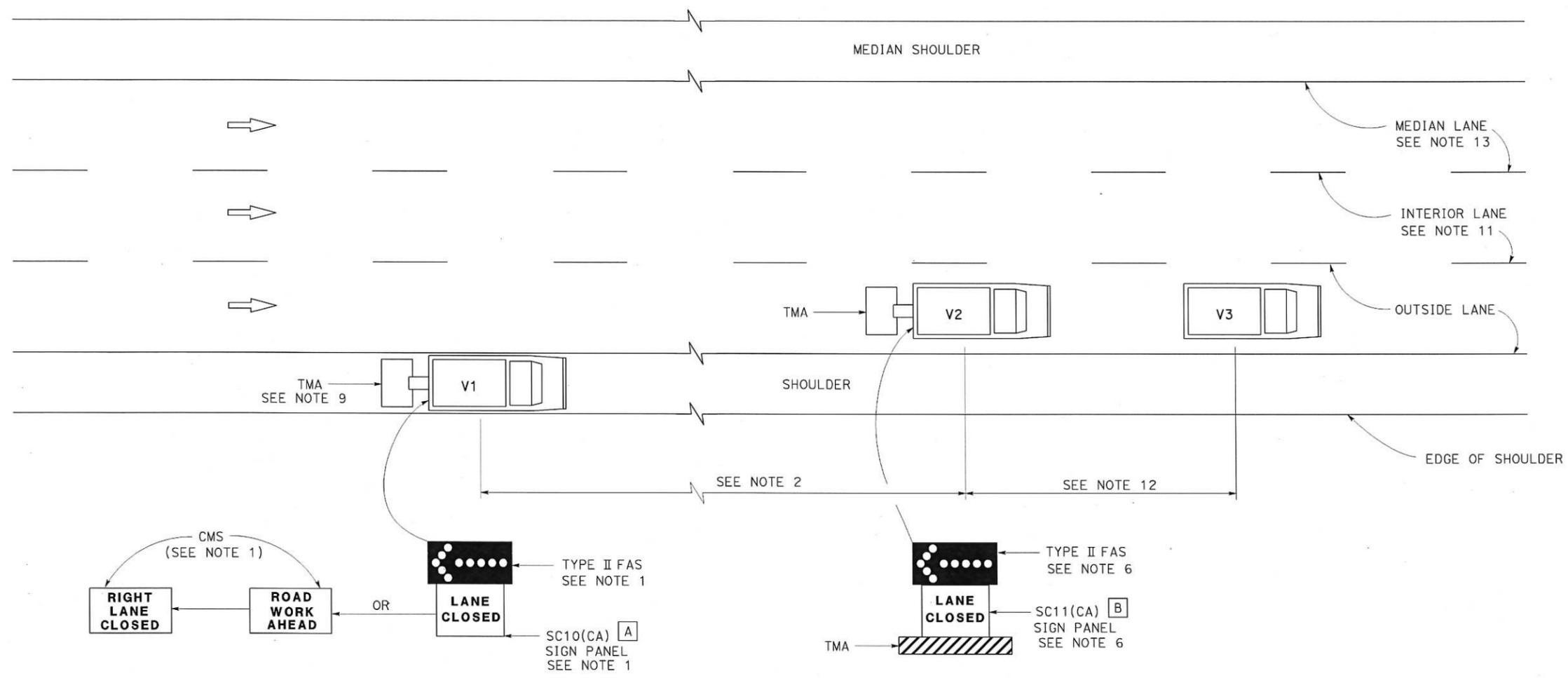
*Gurinderpal Bhullar*  
REGISTERED CIVIL ENGINEER

April 19, 2013  
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 09-15-14



**SIGN PANEL SIZE (Min)**

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

**LEGEND**

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

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

**NOTES:**

- 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".
- 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.
- A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
- 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'.
- 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.
- 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.
- 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.
- All vehicles shall be equipped with flashing or rotating amber lights.
- 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.
- 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.
- For moving lane closure on interior lane of multilane highways, use Revised Standard Plan T16.
- 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.
- 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