

INDEX OF PLANS

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

STATE OF CALIFORNIA  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN RIVERSIDE COUNTY**  
**NEAR DESERT BEACH AND NORTH SHORE**  
**FROM 0.3 MILE NORTH OF PARKSIDE DRIVE**  
**TO 1.6 MILES SOUTH OF CLEVELAND STREET**

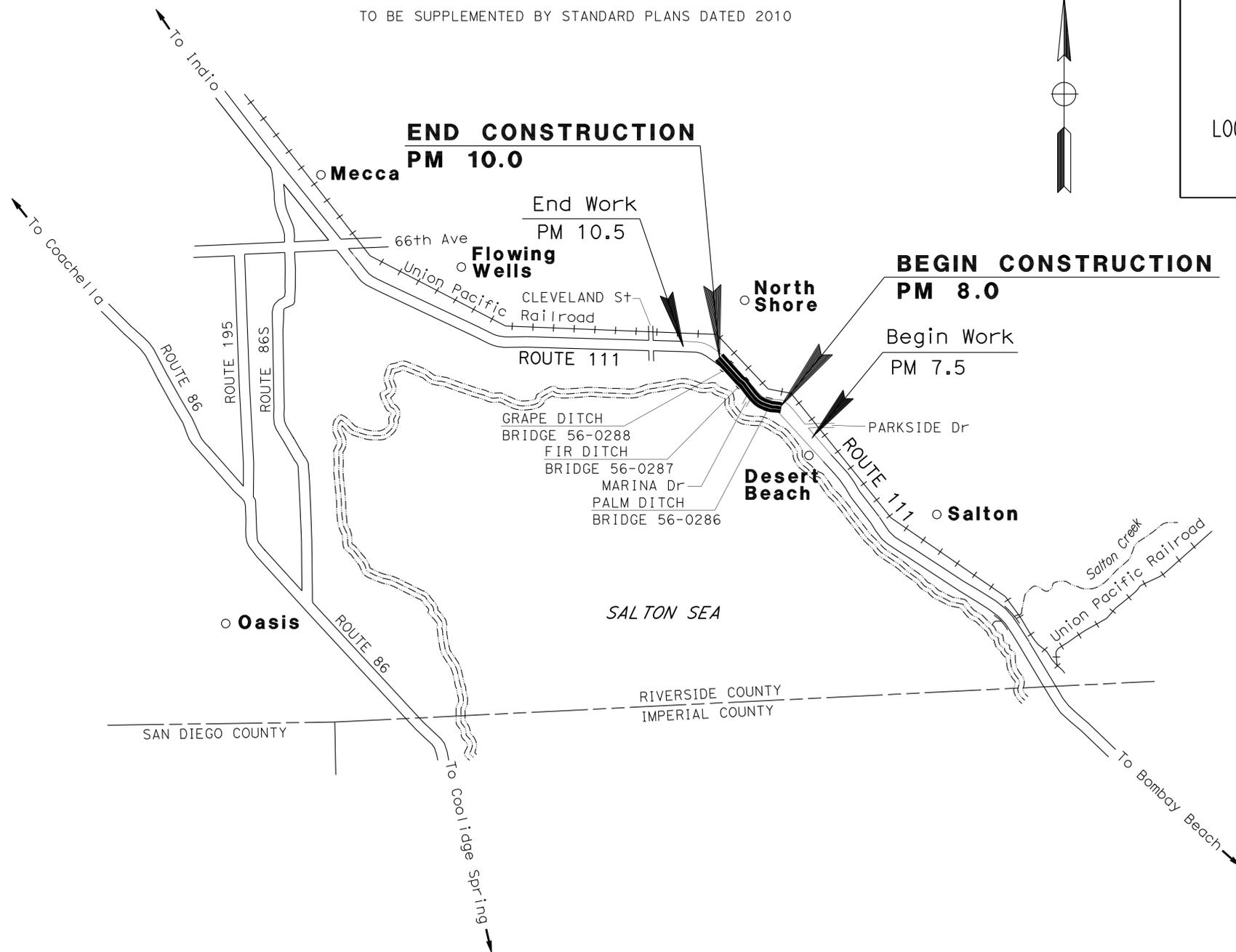
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	1	10





LOCATION MAP



PROJECT MANAGER CATALINO PINING III	DESIGN ENGINEER KEVIN H. CHEN
--	----------------------------------

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

NO SCALE

 3-4-13  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
**March 4, 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  
 KEVIN H. CHEN  
 No. 70017  
 Exp. 9/30/14  
 CIVIL  
 STATE OF CALIFORNIA

CONTRACT No.	<b>08-1C8304</b>
PROJECT ID	<b>0813000038</b>

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	2	10

REGISTERED CIVIL ENGINEER	DATE	3-4-13
PLANS APPROVAL DATE		3-4-13

REGISTERED PROFESSIONAL ENGINEER	No.	70017
CIVIL	Exp.	9/30/14

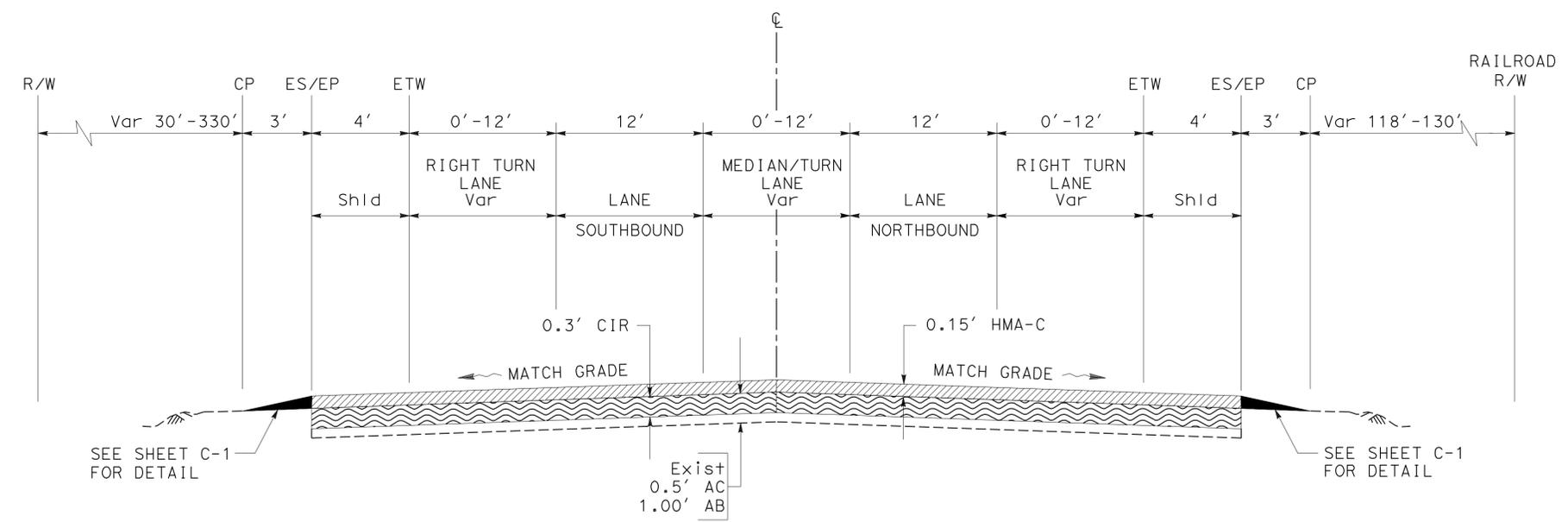
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. ALL WORK WITHIN STATE RIGHT OF WAY.

**LEGEND:**

-  HMA-C HOT MIX ASPHALT (TYPE C)
-  CIR COLD IN-PLACE RECYCLING
-  SHOULDER BACKING



**ROUTE 111**  
\* FROM PM 8.0 TO PM 10.0

\* SEE SHEET C-1 FOR BRIDGE CONFORM DETAIL.

**TYPICAL CROSS SECTIONS**

NO SCALE **X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE DESIGN  
 FUNCTIONAL SUPERVISOR: KUANG H. CHEN  
 CALCULATED/DESIGNED BY: KEVIN H. CHEN  
 CHECKED BY: KUANG H. CHEN  
 REVISED BY: KEVIN H. CHEN  
 DATE: KEVIN H. CHEN  
 REVISIONS:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	3	10

REGISTERED CIVIL ENGINEER	DATE	3-4-13
PLANS APPROVAL DATE		3-4-13

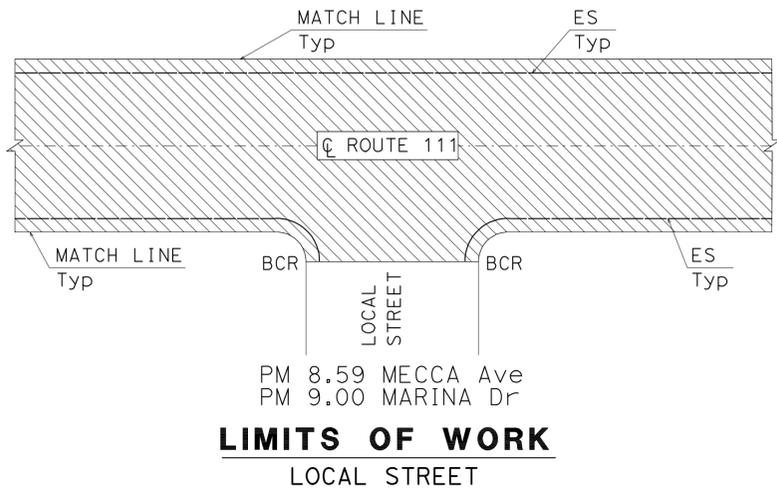
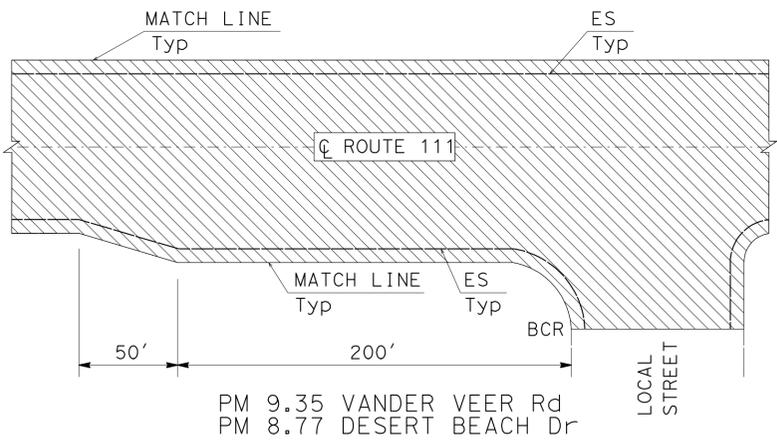
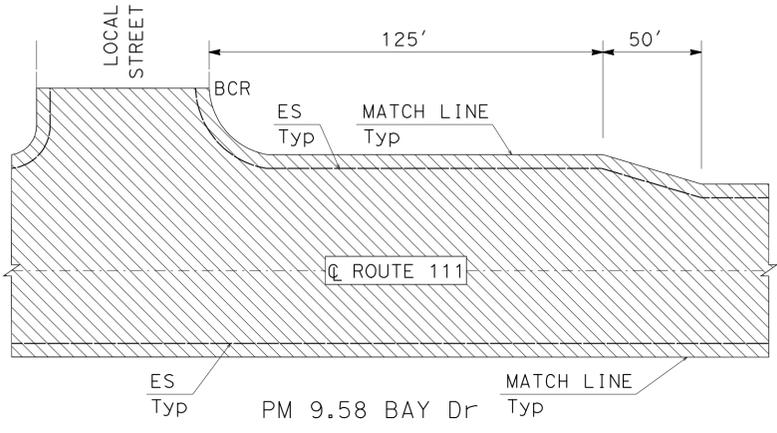
REGISTERED PROFESSIONAL ENGINEER	No.	70017
	Exp.	9/30/14
CIVIL		

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

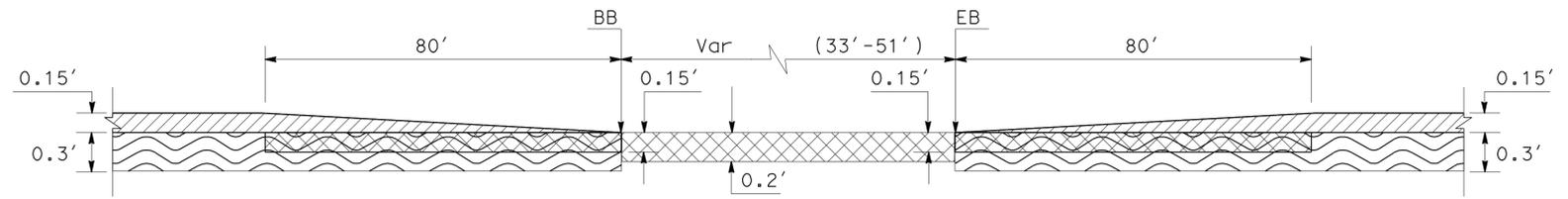
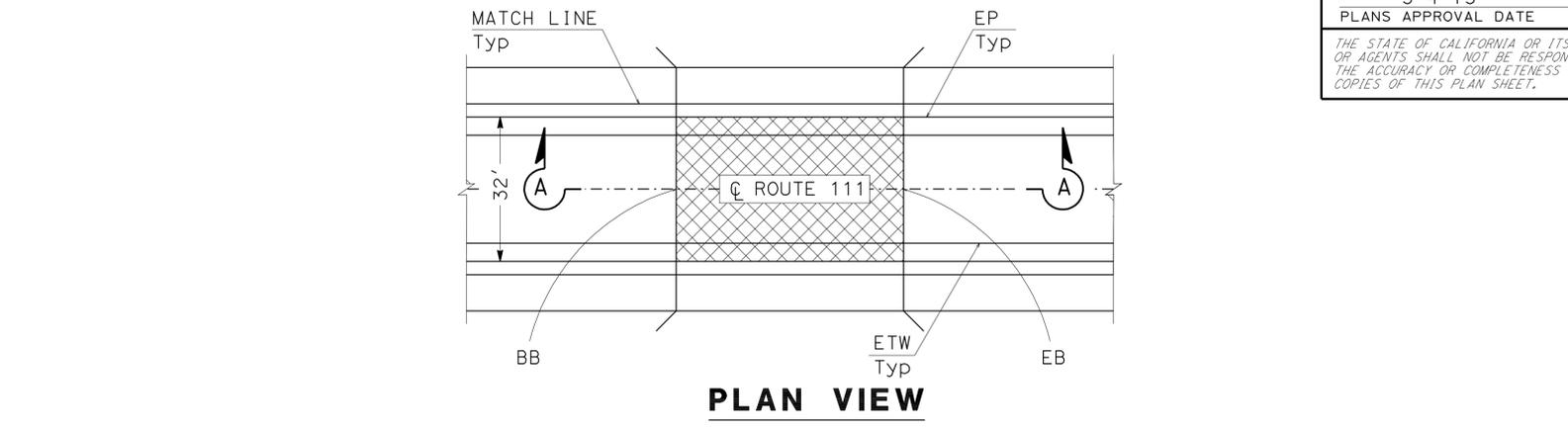
- LEGEND:**
- LIMITS OF WORK
  - CIR COLD IN-PLACE RECYCLING
  - HMA-C HOT MIX ASPHALT (TYPE C)
  - SHOULDER BACKING
  - COLD PLANE ASPHALT CONCRETE PAVEMENT, AND PLACE HOT MIX ASPHALT (TYPE C)

**NOTES:**

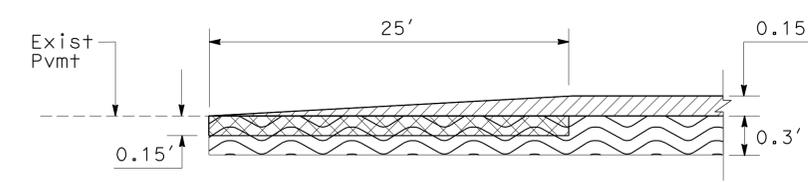
- EXACT LIMITS SHALL BE DETERMINED BY THE ENGINEER.



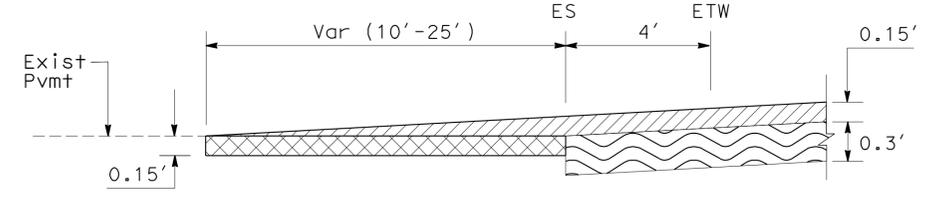
**LIMITS OF WORK**  
LOCAL STREET



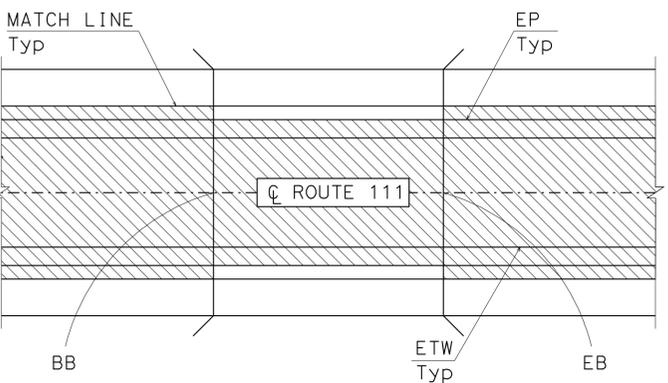
**SECTION A-A**  
BRIDGE # 56-0286 PM 8.65  
BRIDGE # 56-0287 PM 9.54  
BRIDGE # 56-0288 PM 9.87  
**BRIDGE CONFORM DETAIL**



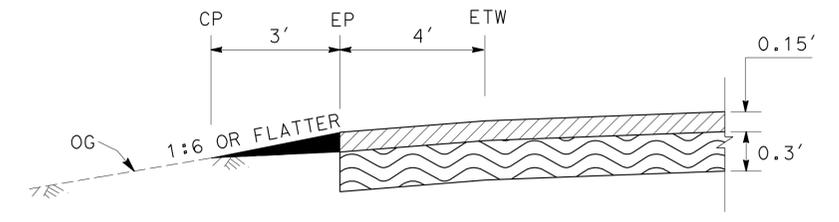
**TRANSVERSE PAVEMENT CONFORM**  
(TYPICAL)



**EDGE OF PAVEMENT CONFORM DETAIL FOR LOCAL STREET INTERSECTION**  
(TYPICAL)



**LIMITS OF WORK**  
(TYPICAL)



**SHOULDER BACKING DETAIL**  
(TYPICAL)

**CONSTRUCTION DETAILS**  
NO SCALE  
**C-1**

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

REVISOR: KEVIN H. CHEN, KUANG H. CHEN  
CALCULATED/DESIGNED BY: KEVIN H. CHEN, KUANG H. CHEN  
CHECKED BY:

FUNCTIONAL SUPERVISOR: KUANG H. CHEN

DATE PLOTTED => 04-MAR-2013 13:25  
TIME PLOTTED => 13:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	4	10

REGISTERED CIVIL ENGINEER DATE 3-4-13  
 REGISTERED CIVIL ENGINEER DATE 3-4-13  
 PLANS APPROVAL DATE 3-4-13

No. 66092  
 Exp. 6/30/14  
 CIVIL

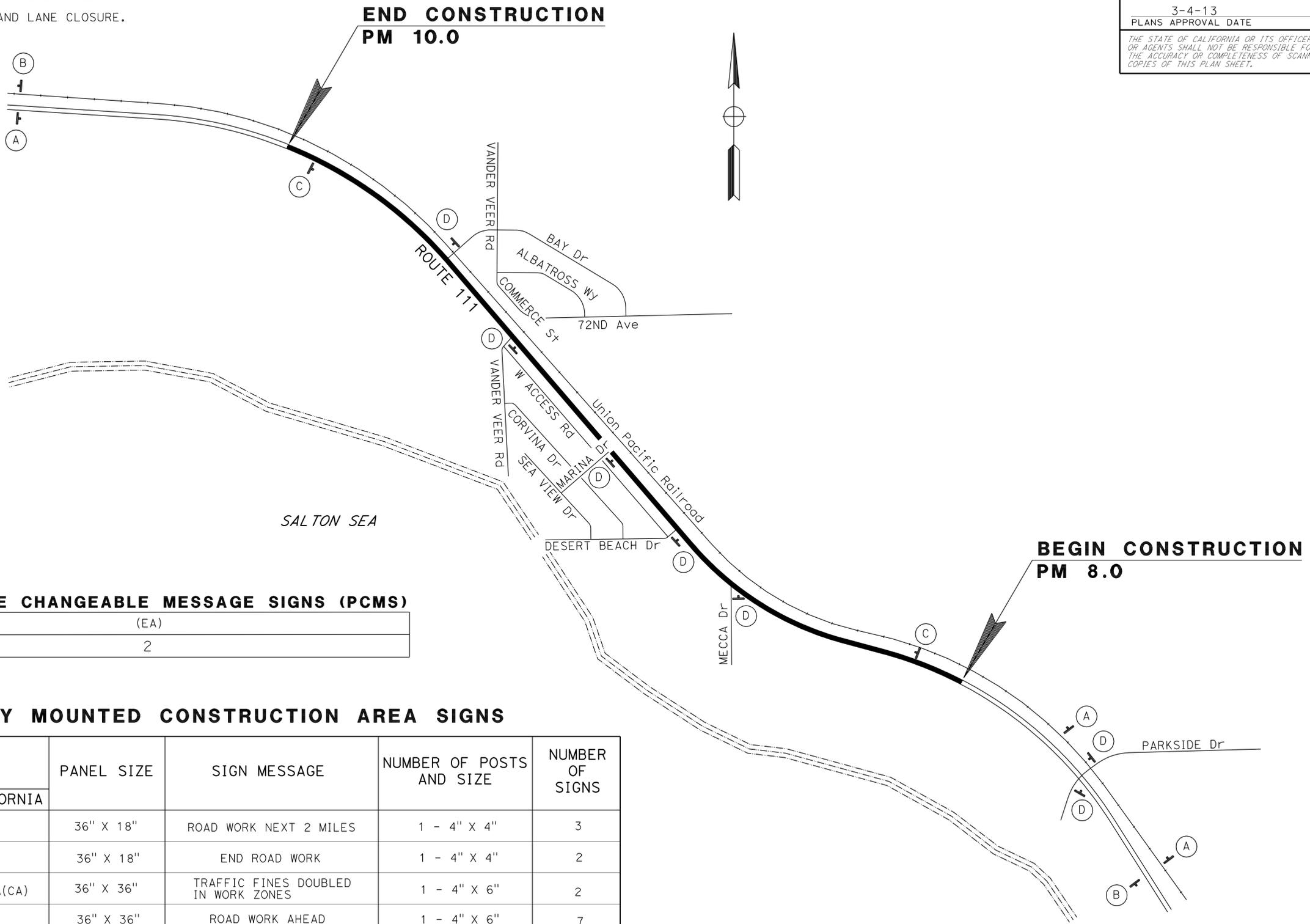
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

1. LOCATIONS OF THE CONSTRUCTION AREA SIGNS ARE APPROXIMATE. THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. SEE SHEET TCS-1 FOR SHOULDER AND LANE CLOSURE.

**LEGEND:**

— WORK AREA



**PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)**

(EA)
2

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN LETTER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
(X)						
(A)	G20-1		36" X 18"	ROAD WORK NEXT 2 MILES	1 - 4" X 4"	3
(B)	G20-2		36" X 18"	END ROAD WORK	1 - 4" X 4"	2
(C)		C40A(CA)	36" X 36"	TRAFFIC FINES DOUBLED IN WORK ZONES	1 - 4" X 6"	2
(D)	W20-1		36" X 36"	ROAD WORK AHEAD	1 - 4" X 6"	7

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 Caltrans®  
 TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR  
 BILL WASSER  
 CHECKED BY  
 BILL WASSER  
 DESIGNED BY  
 CHRIS HARDIMON  
 BILL WASSER  
 REVISIONS  
 DATE  
 REVISIONS  
 DATE

LAST REVISION DATE PLOTTED => 04-MAR-2013  
 03-04-13 TIME PLOTTED => 1:3:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	5	10

 3-4-13  
 REGISTERED CIVIL ENGINEER DATE

3-4-13  
 PLANS APPROVAL DATE

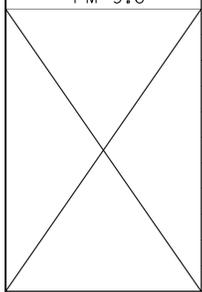
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**NOTES:**

1. POST MILES FOR REFERENCE ONLY (NOT EXACT). THE CONTRACTOR SHALL MARK EXISTING PAVEMENT DELINEATION BEFORE REMOVAL.
2. THE CONTRACTOR SHALL REPLACE EXISTING PAVEMENT DELINEATION BACK TO ITS ORIGINAL STATE, EXCEPT FROM PM 9.6 TO PM 10.0
3. RELOCATE DETAIL 6 STRIPING MARKER FROM PM 9.6 TO PM 10.0

**PAVEMENT DELINEATION QUANTITIES**

POSTMILE	LOCATION	DETAIL No. OR PAVEMENT MARKING	REMOVE PAVEMENT MARKERS	PAVEMENT MARKERS NON REFLECTIVE	PAVEMENT MARKERS RETROREFLECTIVE			THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			THERMOPLASTIC PAVEMENT MARKING (WHITE)	RELOCATE OBJECT MARKER	LOCATION DESCRIPTION				
					TYPE D	TYPE G	TYPE H	4 INCH YELLOW	4 INCH WHITE	8 INCH WHITE							
FROM	TO		EA	EA	EA			LF			SQFT	EA					
8.0	10.0	RTE-111 (NB/SB)															
8.0	8.1	RTE-111 (NB/SB)					20		919								
8.1	9.2	RTE-111 (NB/SB)	508		10				12,112							NO PASSING IN NORTHBOUND DIRECTION	
9.2	9.3	RTE-111 (NB/SB)	24		24				1,035								
9.3	9.4	RTE-111 (NB/SB)	20		20				401								
9.4	9.5	RTE-111 (NB/SB)	35		35				1,246								
9.5	9.6	RTE-111 (NB/SB)	96		96				2,218								
9.6	10.0	RTE-111 (NB/SB)			176				4,224								
9.6	10.0	RTE-111 (NB/SB)	44													REPLACE EXISTING DETAIL 6 WITH DETAIL 22 FROM PM 9.6 TO PM 10.0	
PM 8.5		RTE-111 (SB)									84					2-ARROW TYPE III (R) PAVEMENT MARKINGS	
PM 8.5		RTE-111 (SB)	7			7				160						INSTALL PAVEMENT MARKERS ON THROUGH TRAFFIC SIDE OF STRIPE	
PM 9.1		RTE-111 (SB)									84					2-ARROW TYPE III (R) PAVEMENT MARKINGS	
PM 9.1		RTE-111 (SB)	7			7				160						INSTALL PAVEMENT MARKERS ON THROUGH TRAFFIC SIDE OF STRIPE	
PM 9.3		RTE-111 (NB)									30					2-ARROW TYPE IV (R) PAVEMENT MARKINGS	
PM 9.3		RTE-111 (NB)	4			4				90						INSTALL PAVEMENT MARKERS ON THROUGH TRAFFIC SIDE OF STRIPE	
PM 9.3		RTE-111 (SB)									42					1-ARROW TYPE III (L) PAVEMENT MARKING	
PM 9.3		RTE-111 (SB)	5			5				120						INSTALL PAVEMENT MARKERS ON THROUGH TRAFFIC SIDE OF STRIPE	
PM 9.4		RTE-111 (NB/SB)									30					2-ARROW TYPE IV (L) PAVEMENT MARKINGS	
PM 9.6		RTE-111 (NB)										1				RELOCATE DETAIL 6 STRIPING MARKER FROM PM 9.6 TO PM 10.0	
		MECCA AVENUE									50						
		MECCA AVENUE									44						2-"STOP" PAVEMENT MARKINGS
		DESERT BEACH DRIVE									40						
		DESERT BEACH DRIVE									44						2-"STOP" PAVEMENT MARKINGS
		MARINA DRIVE									40						
		MARINA DRIVE									22						1-"STOP" PAVEMENT MARKING
		VENDER VEER ROAD									40						
		VENDER VEER ROAD									44						2-"STOP" PAVEMENT MARKINGS
		BAY DRIVE									30						
		BAY DRIVE									22						1-"STOP" PAVEMENT MARKING
		BAY DRIVE									70						
	<b>SUBTOTAL</b>					869	23	20	22,155	21,120	530						
<b>GRAND TOTAL</b>			780			912			43,805		716	1					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: BILL WASSER  
 CHECKED BY: BILL WASSER  
 CALCULATED/DESIGNED BY: CHRIS HARDIMON  
 REVISOR: CHRIS HARDIMON  
 DATE REVISOR: BILL WASSER

**PAVEMENT DELINEATION QUANTITIES PDQ-1**

LAST REVISION DATE PLOTTED => 04-MAR-2013 13:25  
 03-04-13 TIME PLOTTED => 13:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	6	10


 3-4-13  
 REGISTERED CIVIL ENGINEER DATE

3-4-13  
 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.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** MAINTENANCE DESIGN  
 FUNCTIONAL SUPERVISOR  
 KUANG H. CHEN  
 CALCULATED/DESIGNED BY  
 KEVIN H. CHEN  
 CHECKED BY  
 KUANG H. CHEN  
 REVISED BY  
 DATE REVISED

**PAVEMENT QUANTITIES**

PM	COLD PLANE	SHOULDER BACKING	HOT MIX ASPHALT (TYPE C)	COLD IN-PLACE RECYCLING	EMULSIFIED RECYCLING AGENT	ASPHATIC EMULSION (FLUSH COAT)	SAND COVER SEAL	TACK COAT	CEMENT (COLD IN-PLACE RECYCLING)
	(SQYD)	(TON)	(TON)	(SQYD)	(TON)	(TON)	(TON)	(TON)	(TON)
8.0/10.0	2,152	374	4,156	41,067	290	11	83	22	21
8.65	181	-	25	-	-	-	-	-	-
9.54	135	-	19	-	-	-	-	-	-
9.87	114	-	16	-	-	-	-	-	-
<b>TOTAL</b>	<b>2,582</b>	<b>374</b>	<b>4,216</b>	<b>41,067</b>	<b>290</b>	<b>11</b>	<b>83</b>	<b>22</b>	<b>21</b>

**SUMMARY OF QUANTITIES  
Q-1**

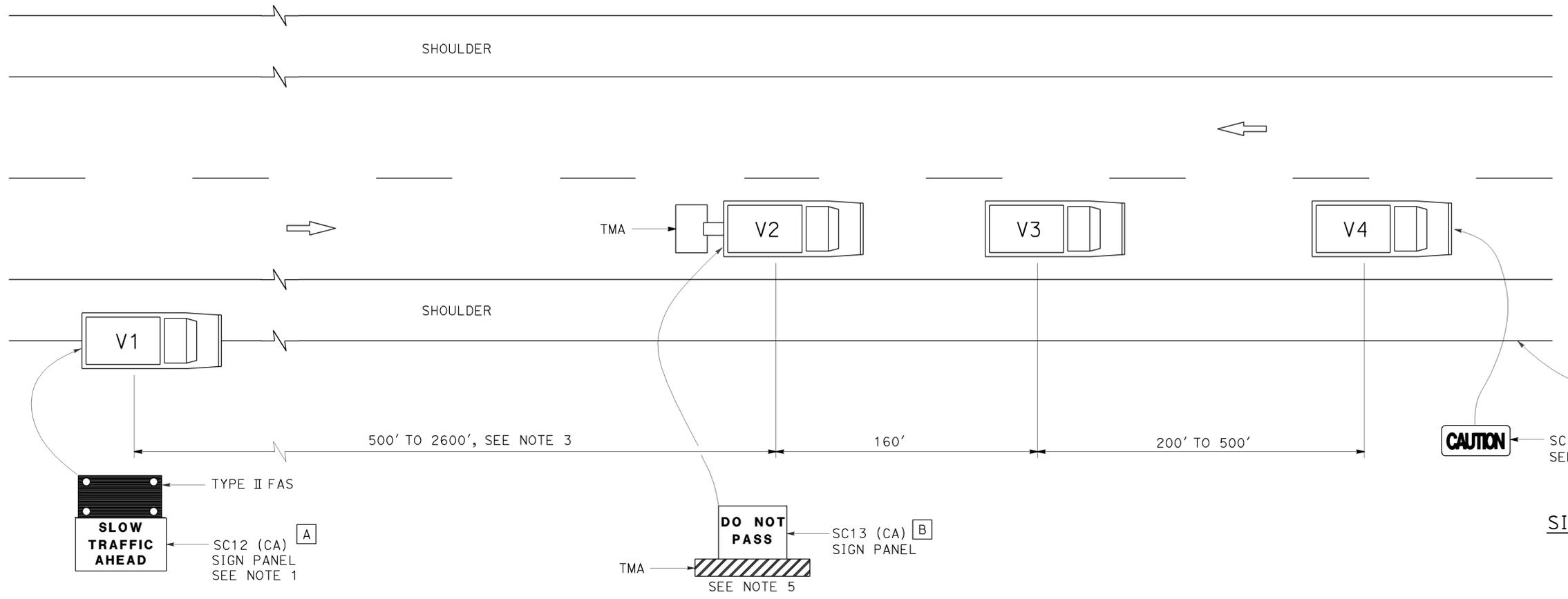
LAST REVISION | DATE PLOTTED => 04-MAR-2013  
 03-04-13 | TIME PLOTTED => 1:3:25



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	8	10

REGISTERED CIVIL ENGINEER: *Gurinderpal Bhullar* DATE: 12-7-12  
 PLANS APPROVAL DATE: 3-4-13  
 No. C48815  
 Exp. 9-30-14  
 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.



**SIGN PANEL SIZE (Min)**

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

**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

**NOTES:**

- Either a changeable message sign or a SC12 (CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. A Type II flashing arrow sign may be used with the SC12 (CA) sign panel.
- Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
- If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
- Vehicle-mounted sign panels shall be Type III, IV, VII, VIII or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
- Gross Vehicle Weight of shadow vehicle shall be a minimum of 20,000 pounds and 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.
- The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
- All vehicles shall be equipped with flashing or rotating amber lights.
- 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.
- 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.
- When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR MOVING LANE CLOSURE  
 ON TWO LANE HIGHWAYS**

NO SCALE

**TCS-2**

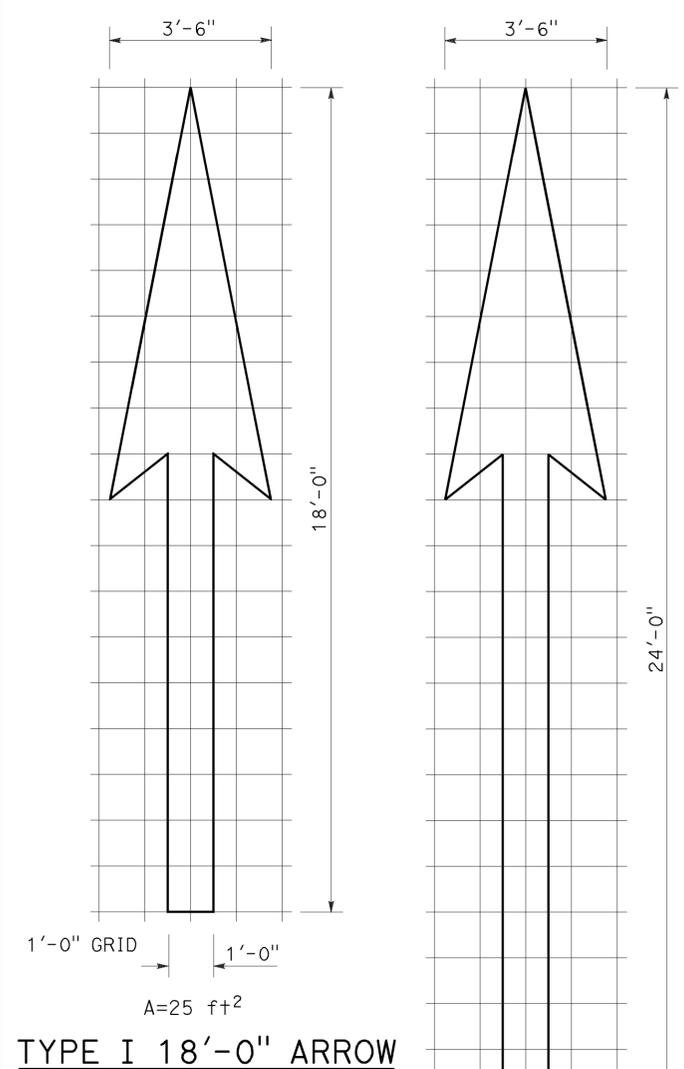
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 Caltrans®

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	111	8.0/10.0	9	10

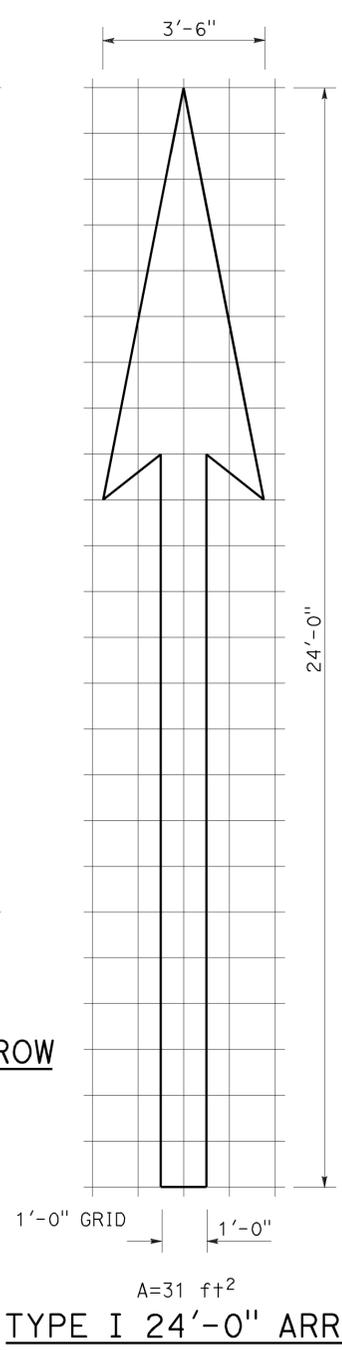
Robert L. McLaughlin  
 REGISTERED CIVIL ENGINEER  
 April 20, 2012  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

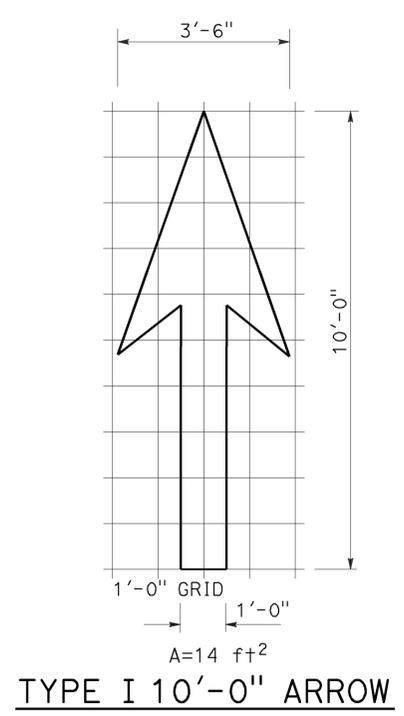
TO ACCOMPANY PLANS DATED 3-4-13



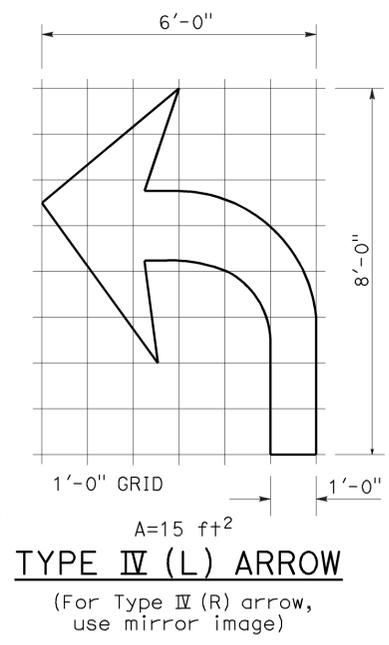
**TYPE I 18'-0" ARROW**



**TYPE I 24'-0" ARROW**

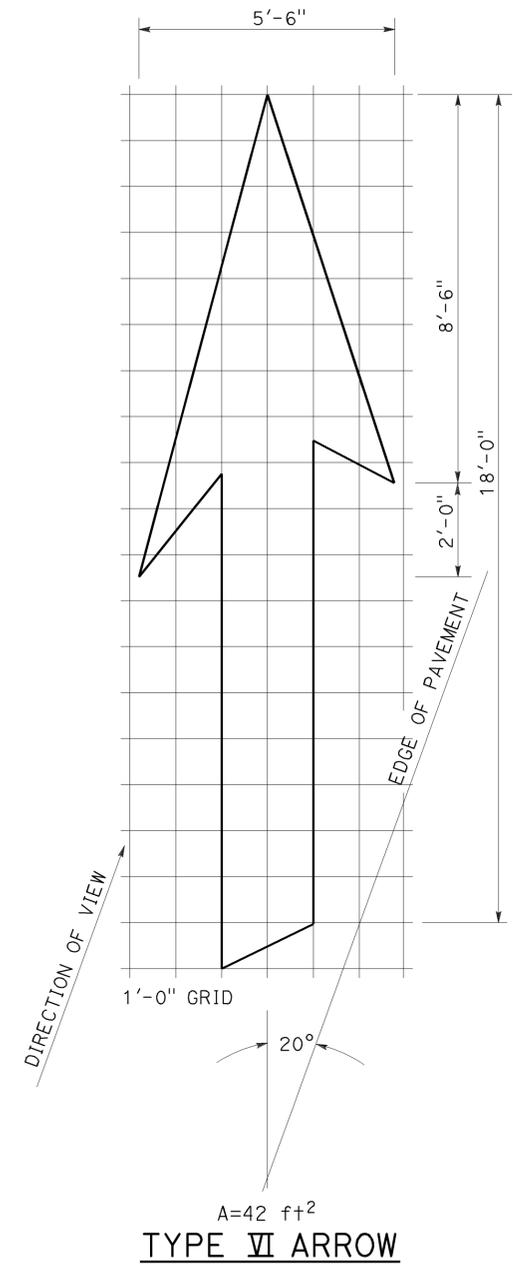


**TYPE I 10'-0" ARROW**



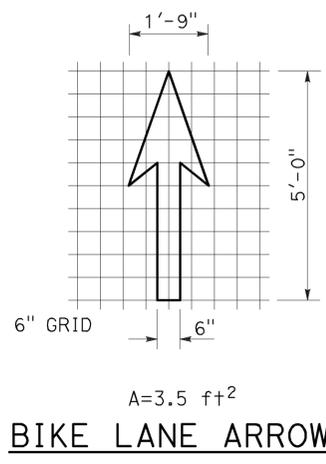
**TYPE IV (L) ARROW**

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

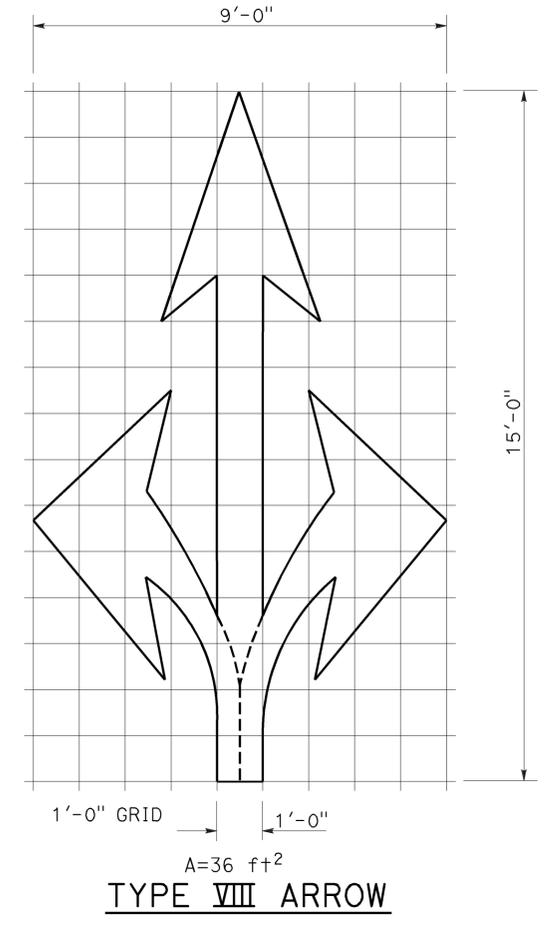


**TYPE VI ARROW**

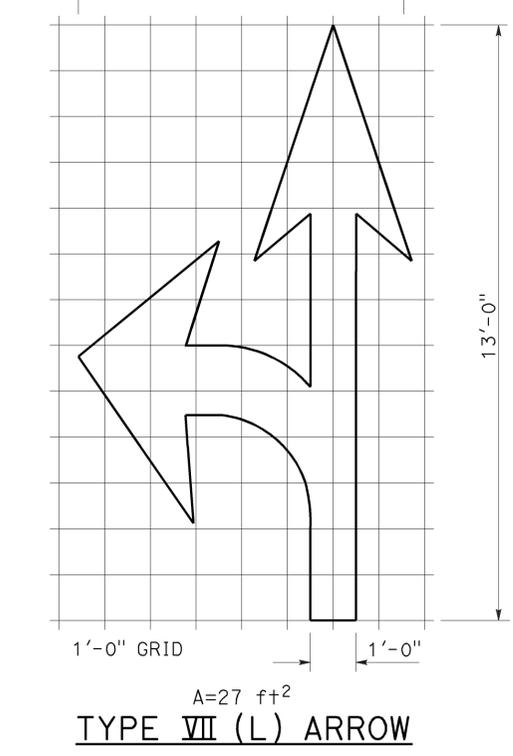
Right lane drop arrow  
(For left lane, use mirror image)



**BIKE LANE ARROW**

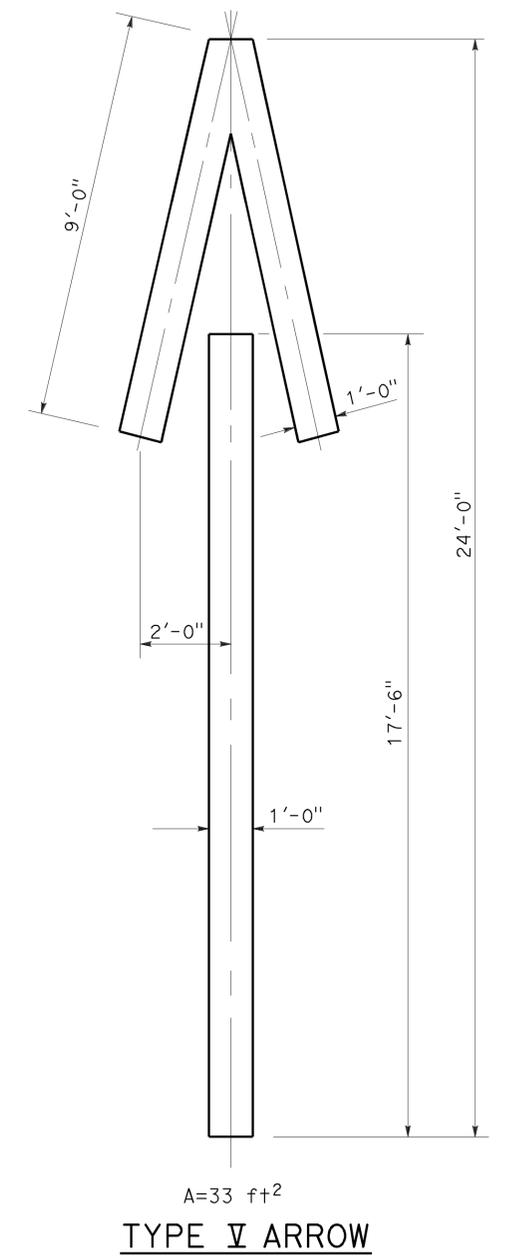


**TYPE VIII ARROW**



**TYPE VII (L) ARROW**

(For Type VII (R) arrow, use mirror image)



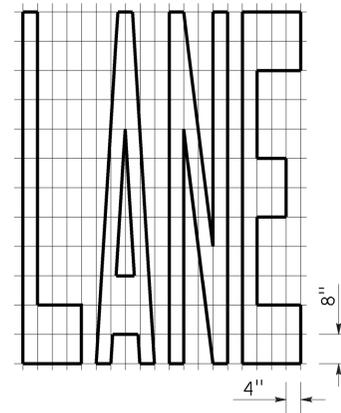
**TYPE V ARROW**

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

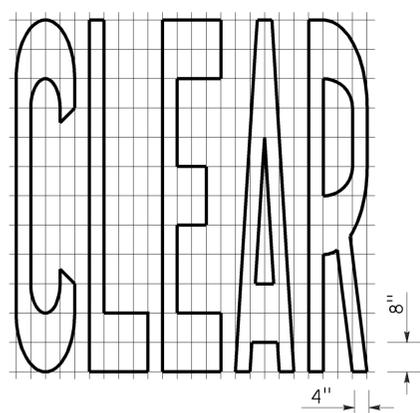
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

TO ACCOMPANY PLANS DATED 3-4-13

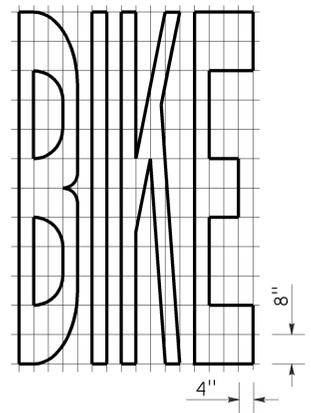
2010 REVISED STANDARD PLAN RSP A24E



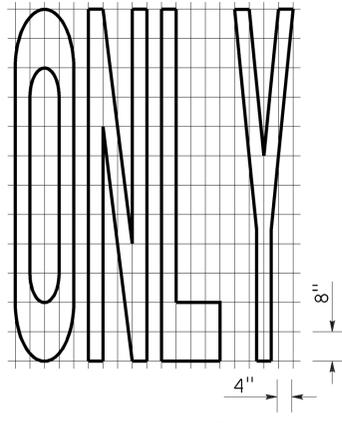
A=24 ft<sup>2</sup>



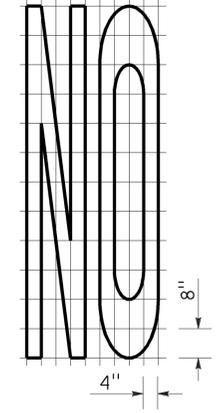
A=27 ft<sup>2</sup>



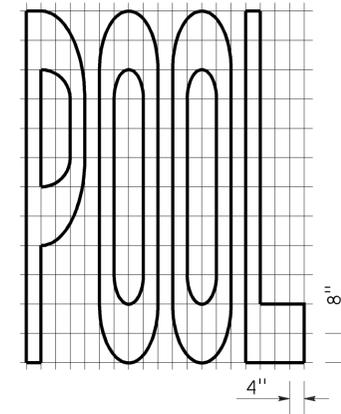
A=21 ft<sup>2</sup>



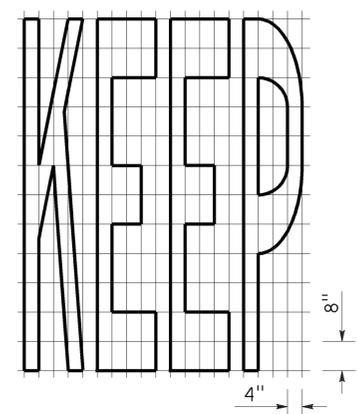
A=22 ft<sup>2</sup>



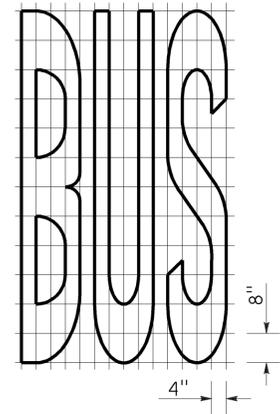
A=14 ft<sup>2</sup>



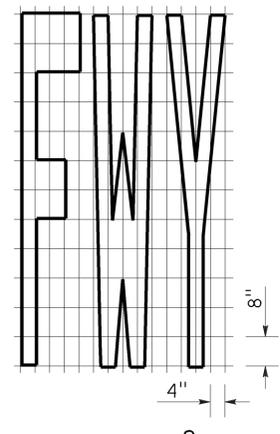
A=23 ft<sup>2</sup>



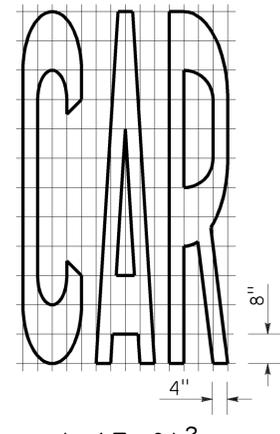
A=24 ft<sup>2</sup>



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

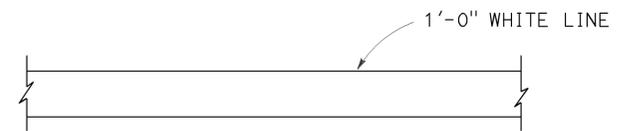
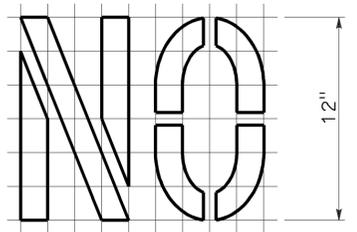


A=16 ft<sup>2</sup>

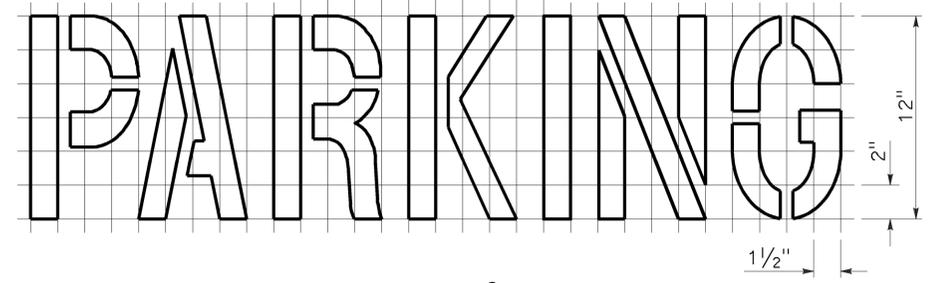


A=17 ft<sup>2</sup>

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



LIMIT LINE (STOP LINE)



A=2 ft<sup>2</sup>  
See Notes 6 and 7



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.