

INDEX OF PLANS

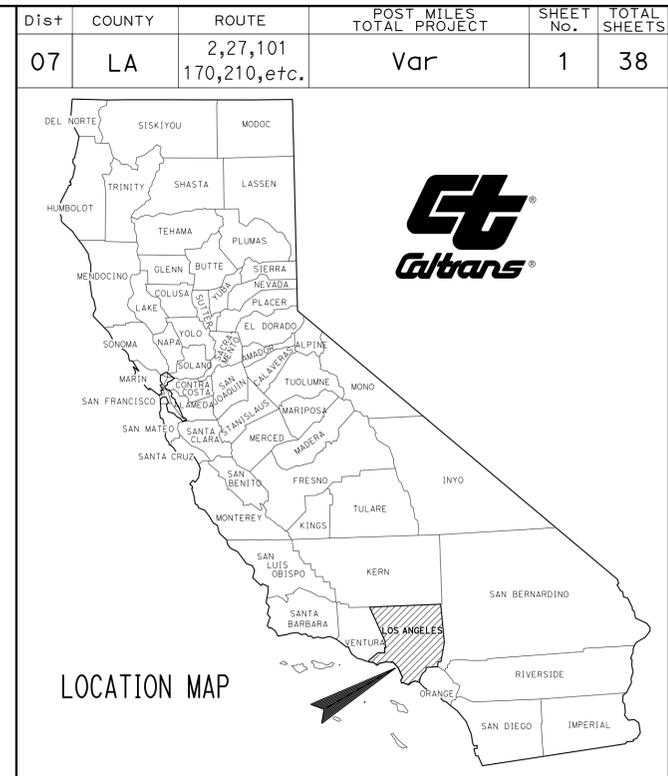
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
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5-15	TRAFFIC HANDLING DETAILS
16	PAVEMENT DELINEATION QUANTITIES
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STRUCTURE PLANS
27-38 ROUTES 2, 27, 101, 170, 210, 405, 710 BRIDGES

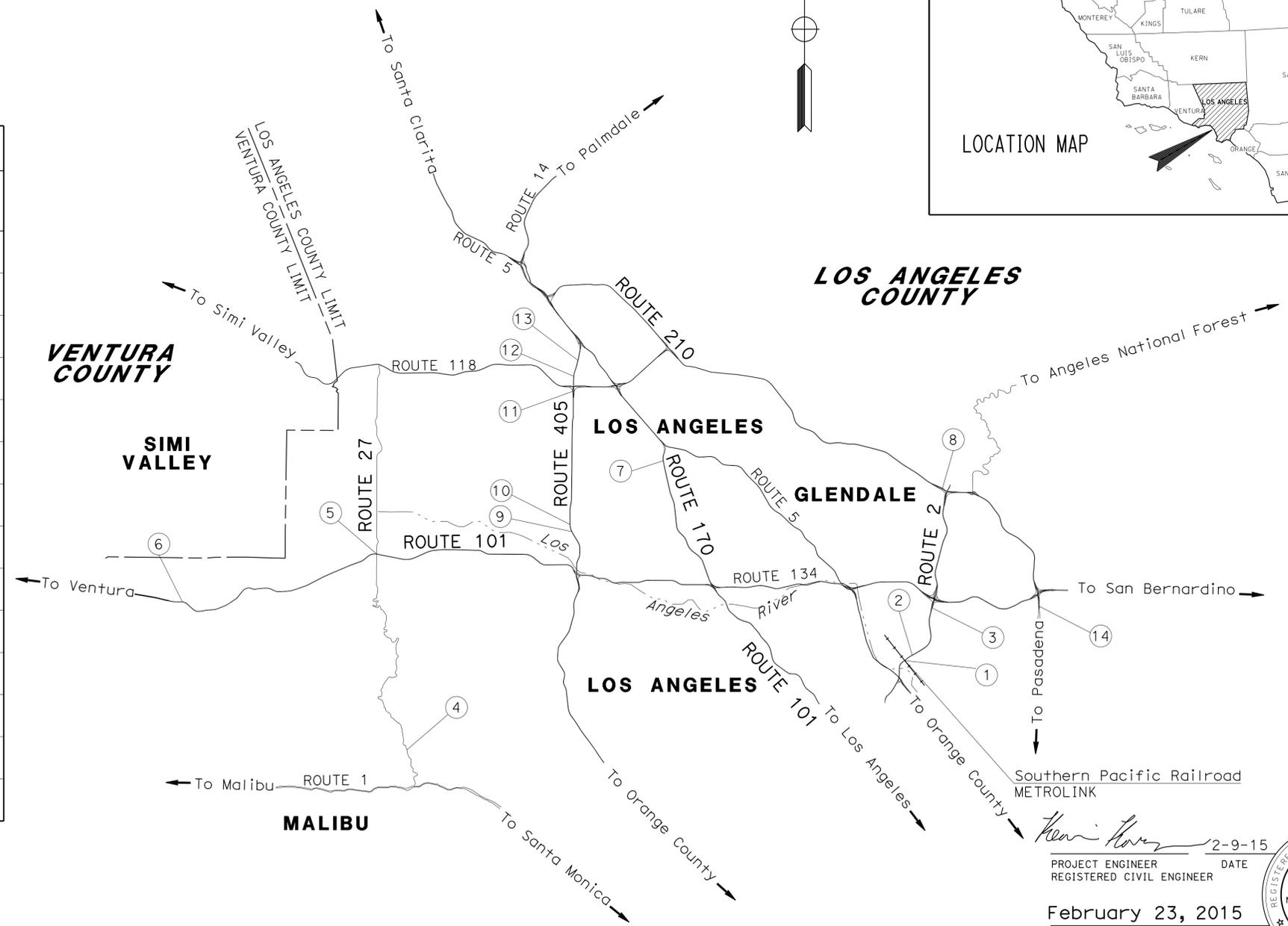
THE STANDARD PLANS LIST APPLICABLE TO THE CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISION BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN LOS ANGELES COUNTY
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATIONS OF CONSTRUCTION				
Loc No. #	ROUTE	PM	BRIDGE NAME	BRIDGE No.
1	2	15.81	TAYLOR YARD OH	53-1039
2	2	16.12	DELAY DRIVE OH	53-1040
3	2	R18.52	COLORADO Blvd UC	53-1915
4	27	2.02	TOPANGA CREEK	53-0143
5	101	25.34	ROUTE 101/27 SEPARATION	53-1064
6	101	33.69	PALO COMADO OC	53-1678
7	170	R19.72	ROSCOE Blvd UC	53-1675
8	210	R18.77	W210-W2 CONNECTOR OC	53-2220F
9	405	41.27	WEST VAN NUYS OH	53-1362
10	405	41.36	VICTORY Blvd UC	53-1449
11	405	46.74	CHATSWORTH STREET UC	53-1501
12	405	47.24	SAN FERNANDO MISSION Blvd	53-1507
13	405	47.75	RINALDI STREET UC	53-1506
14	710	R32.63	N710-W134 CONNECTOR OC	53-2266G



PROJECT MANAGER
CHRISTIAN SAM

DESIGN ENGINEER
HAMID SAADATNEJADI

Kevin Kwan 2-9-15
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

February 23, 2015
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.	07-2W7804
PROJECT ID	0713000447

DATE PLOTTED => 26-FEB-2015 TIME PLOTTED => 10:31

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	2	38

2-9-15
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE

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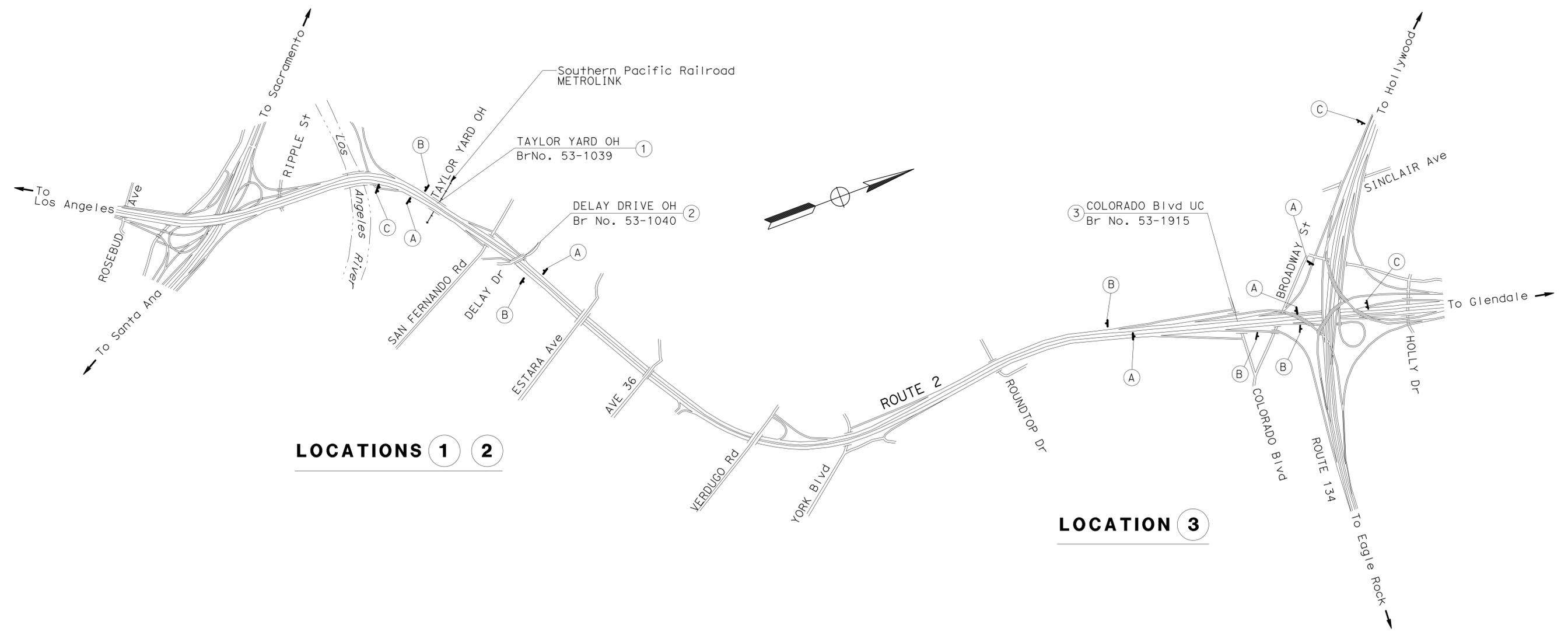
REGISTERED PROFESSIONAL ENGINEER
 KEVIN KWAN
 No. C68219
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA

NOTES:

- EXACT LOCATION AND POSITION OF SIGNS WILL BE DETERMINED BY THE ENGINEER.
- C40 SIGNS MUST BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF W20-1 SIGNS OR AS DETERMINED BY THE ENGINEER.
- FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE SHEETS CS-2 AND CS-3.

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
A	W20-1		48" X 48"	ROAD WORK AHEAD	1 - 6" X 8"	23
B	G20-2		48" X 24"	END CONSTRUCTION	1 - 4" X 6"	19
C		C40 (CA)	144" X 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" X 8"	5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: HAMID SAADATNEJADI
 CALCULATED/DESIGNED BY: KEVIN KWAN
 REVISED BY: AMBACHEW YIRGU
 DATE REVISED:



CONSTRUCTION AREA SIGNS
NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR
 HAMID SAADATNEJADI

CALCULATED/DESIGNED BY
 CHECKED BY

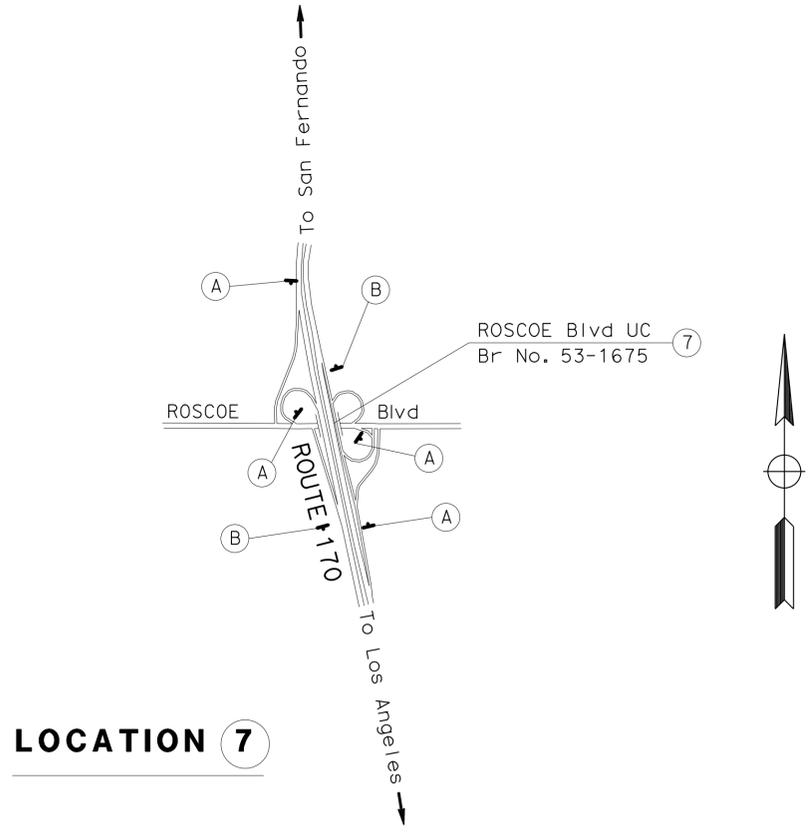
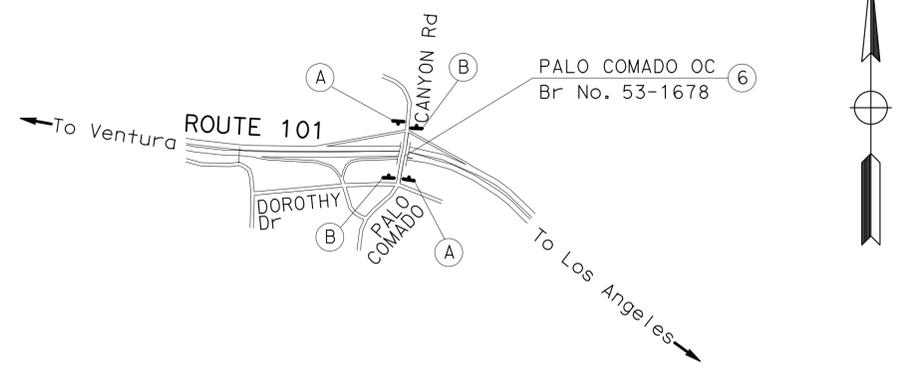
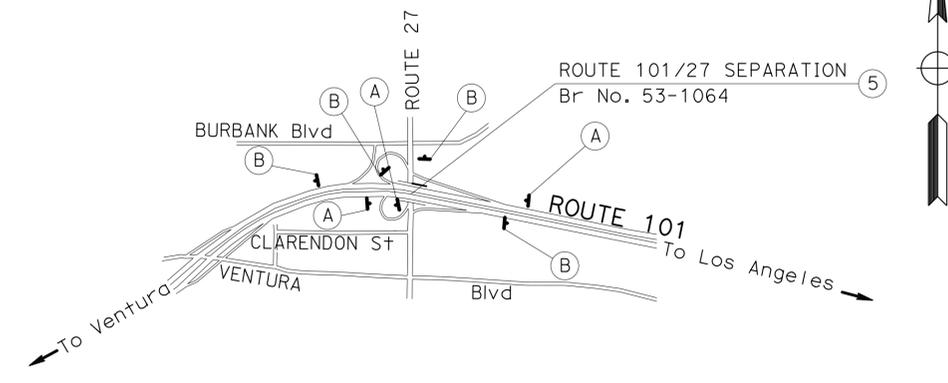
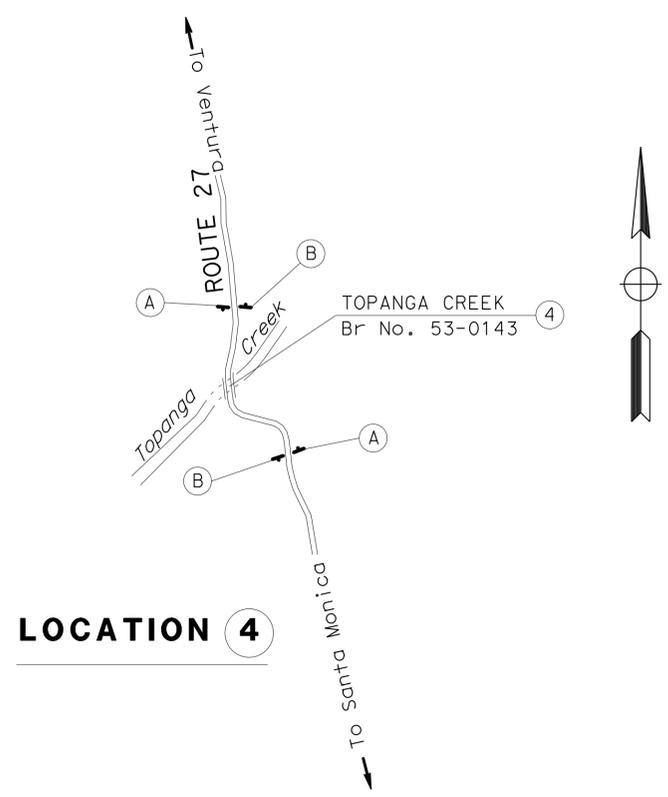
AMBACHEW YIRGU
 KEVIN KWAN

REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	3	38

Kevin Kwan 2-9-15
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
KEVIN KWAN
 No. C68219
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA



CONSTRUCTION AREA SIGNS
 NO SCALE

CS-2

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR
 HAMID SAADATNEJADI

CALCULATED-DESIGNED BY
 CHECKED BY

AMBACHEW YIRGU
 KEVIN KWAN

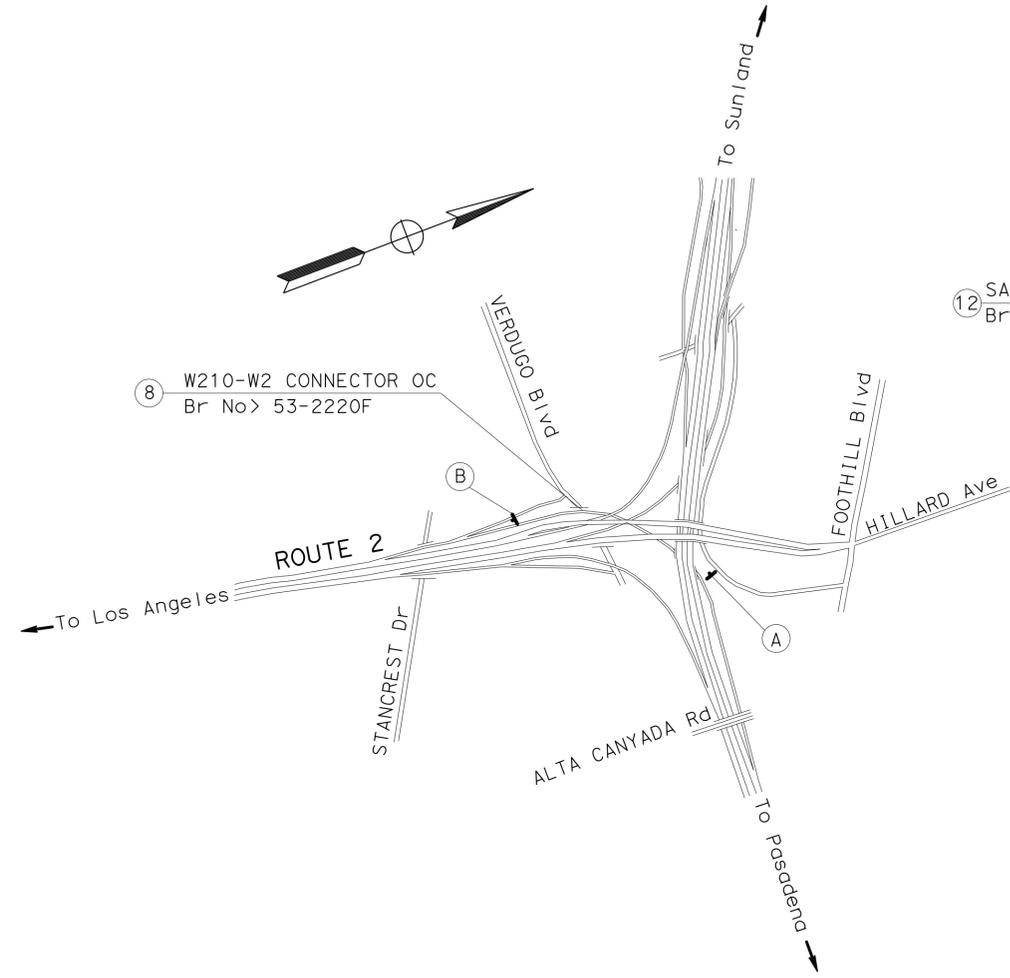
REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	4	38

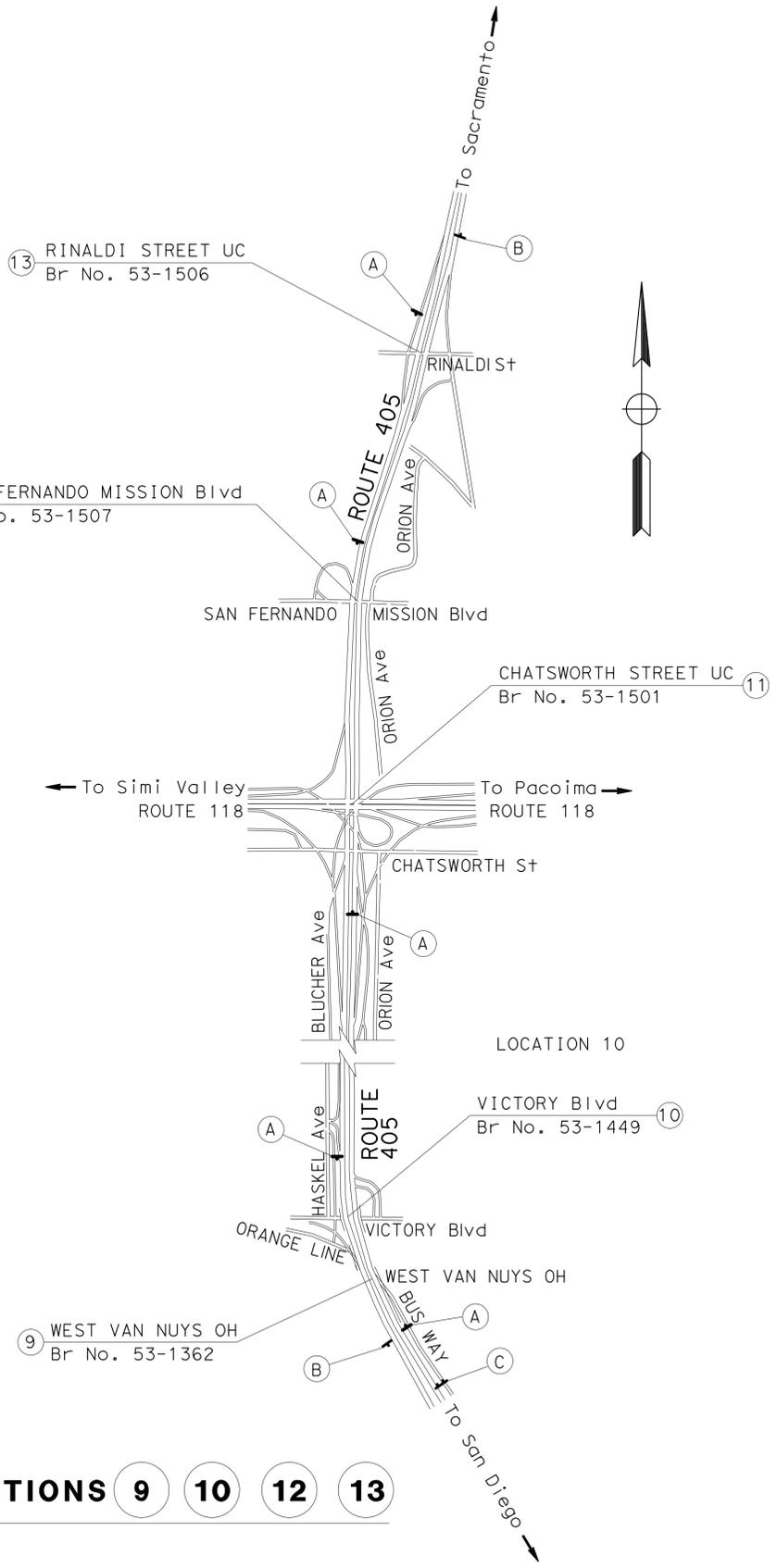
REGISTERED CIVIL ENGINEER DATE 2-9-15
 2-23-15
 PLANS APPROVAL DATE

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

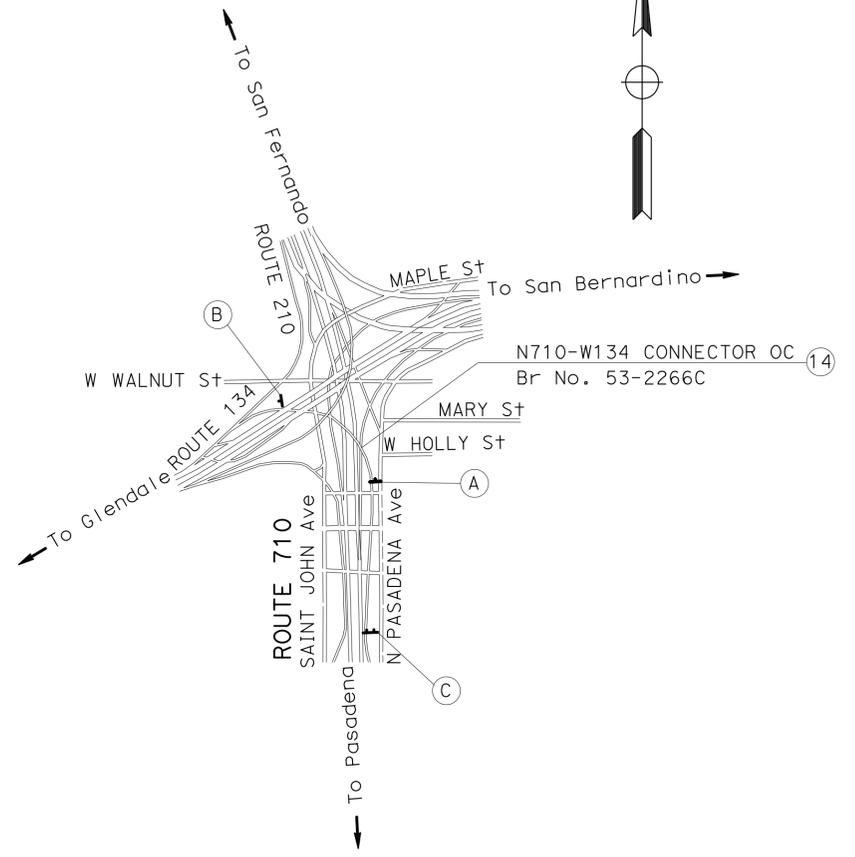
REGISTERED PROFESSIONAL ENGINEER
 KEVIN KWAN
 No. C68219
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA



LOCATION 8



LOCATIONS 9 10 12 13



LOCATION 14

CONSTRUCTION AREA SIGNS
 NO SCALE

CS-3

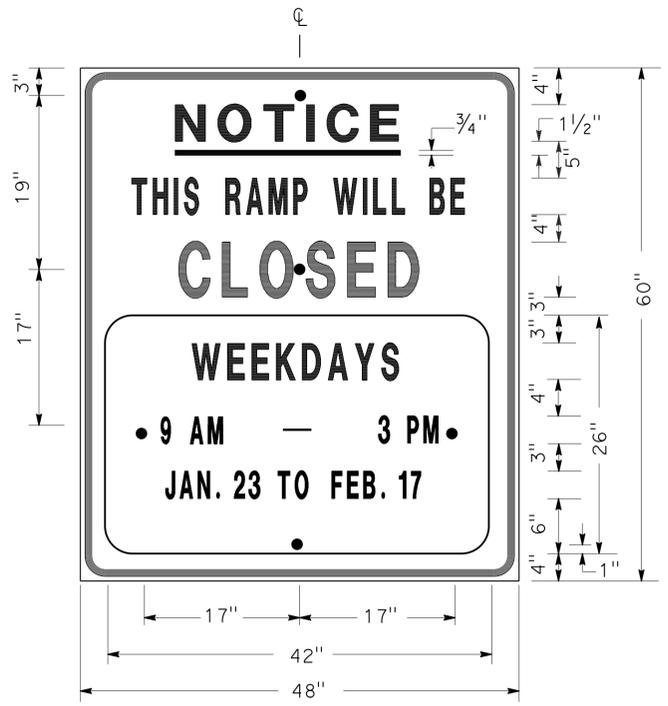
APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	5	38

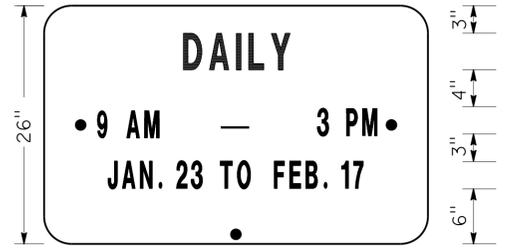
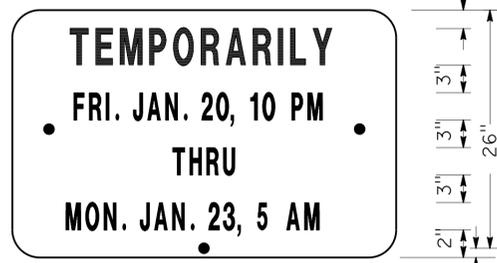
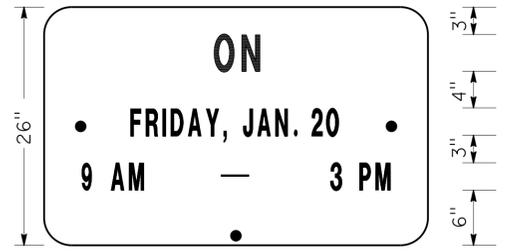
Ali R. Bamshad 12-30-14
 REGISTERED CIVIL ENGINEER DATE

2-23-15
 PLANS APPROVAL DATE

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



SIGN SP-1



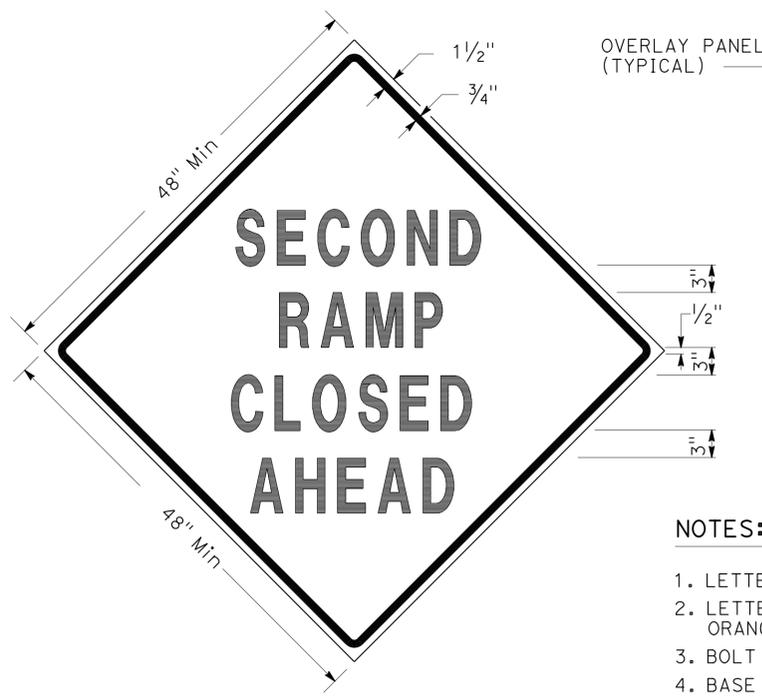
ALTERNATE OVERLAY PANELS (TYPICAL)

- NOTES: SIGN SP-1
- LETTERS AND BORDER MUST BE BLACK ON REFLECTORIZED ORANGE BACKGROUND.
 - BOLT HOLES MUST BE 3/8" DIAMETER.
 - BASE MATERIAL MUST BE ALUMINUM (MINIMUM 0.06").
 - SIGNS MUST BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND.

SIZE	BORDER WIDTH	MARGIN WIDTH	LETTER SIZE					CORNER RADIUS
			LINE 1	LINE 2*	LINE 3	LINE 4	LINE 5, 6, & 7*	
48"x60"	1 1/4"	3/4"	4E	4D	6E	4D		3"
42"x26"	OVERLAY						3D	1 1/2"

* CONDENSED SPACING IF NECESSARY

SPECIAL ADVANCE NOTICE PUBLICITY SIGN



SIGN SP-3



SIGN SP-5

- NOTES: SIGNS SP-3 & SP-5
- LETTERS - 6" SERIES D.
 - LETTERS AND BORDER MUST BE BLACK ON REFLECTORIZED ORANGE BACKGROUND.
 - BOLT HOLES MUST BE 3/8" DIAMETER.
 - BASE MATERIAL MUST BE ALUMINUM (MINIMUM 0.06").
 - SIGNS MUST BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND.
 - SIGN SP-5 MUST BE USED IF THE OFF-RAMP TO BE CLOSED FOLLOWS A FREEWAY OFF-CONNECTOR.

SPECIAL SIGNS FOR EXIT RAMP CLOSURES



SIGN SP-4

- NOTES: SIGN SP-4
- LETTERS - 6" SERIES C.
 - LETTERS AND BORDER MUST BE BLACK ON REFLECTORIZED WHITE BACKGROUND.
 - BOLT HOLES MUST BE 3/8" DIAMETER.
 - BASE MATERIAL MUST BE ALUMINUM (MINIMUM 0.06").
 - SIGNS MUST BE PLACED AT RAMP ENTRANCES IN ADDITION TO SIGNS POSTED IN ACCORDANCE WITH REVISED STANDARD PLAN RSP T14.

SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

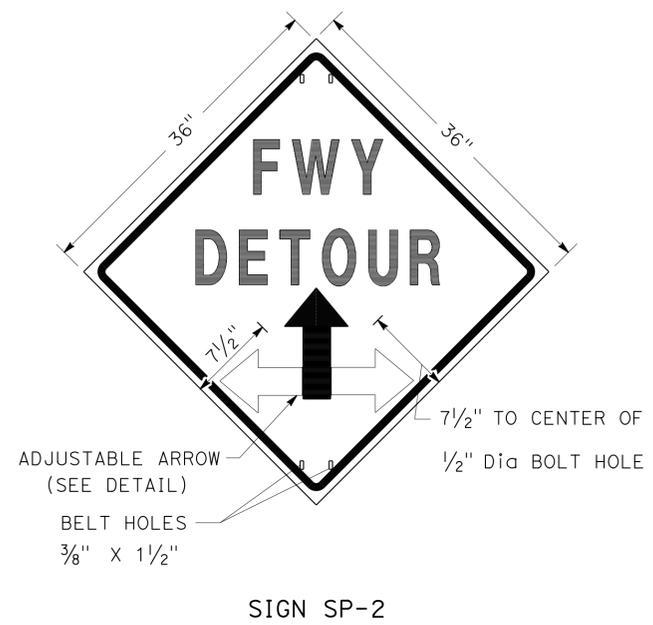
**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURES, DETOUR SIGNS,
 AND MISCELLANEOUS DETAILS
 SHEET 1 OF 2**

NO SCALE

THD-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	6	38
<i>Ali Bamshad</i> 12-30-14 REGISTERED CIVIL ENGINEER DATE			ALI R. BAMSHAD No. C48134 Exp. 6-30-16 CIVIL STATE OF CALIFORNIA		
2-23-15 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

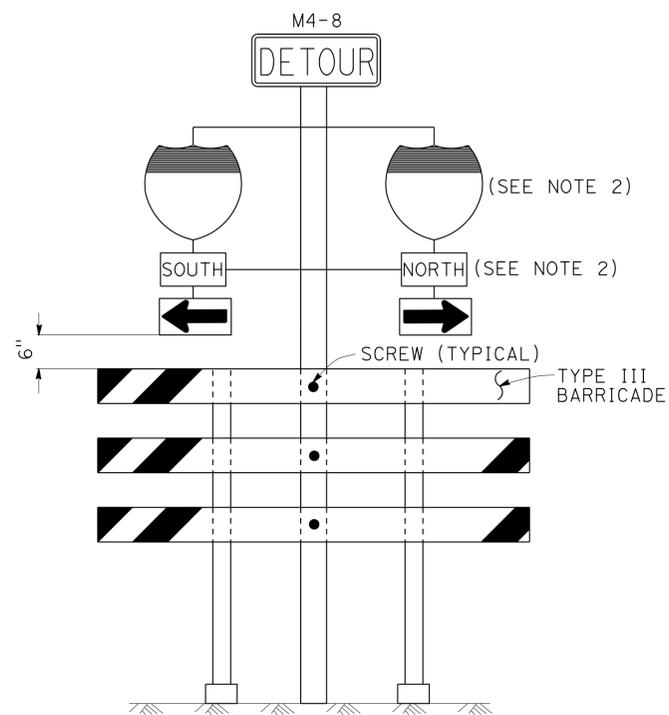
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTM
 FUNCTIONAL SUPERVISOR
 MARTIN OREGEL
 CHECKED BY
 JOCELYN C CHIANG
 REVISIONS BY
 DATE
 REVISED BY
 DATE
 JC
 2/14



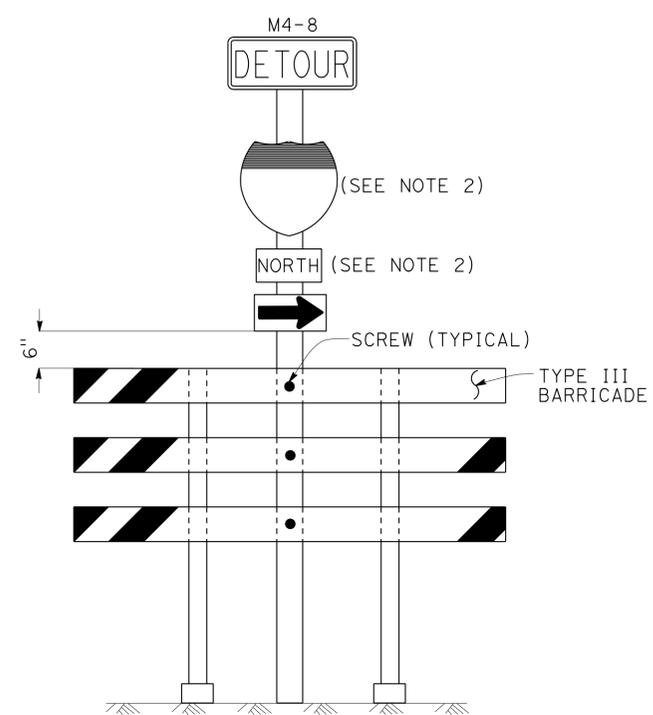
SIGN SP-2

- NOTES:** SIGN SP-2
- LETTERS - 6" SERIES E.
 - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL FOR SIGNS AND ARROWS MUST BE ALUMINUM (MINIMUM 0.06").
 - BELTS (LUGGAGE STRAPS) MUST BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
 - SIGNS MUST BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 7' ABOVE GROUND EXCEPT AS OTHERWISE SHOWN ON OTHER TRAFFIC HANDLING DETAILS PLANS.

ABBREVIATION
(CA) CALIFORNIA CODE



SIGN SP-6 (SEE NOTE 1)

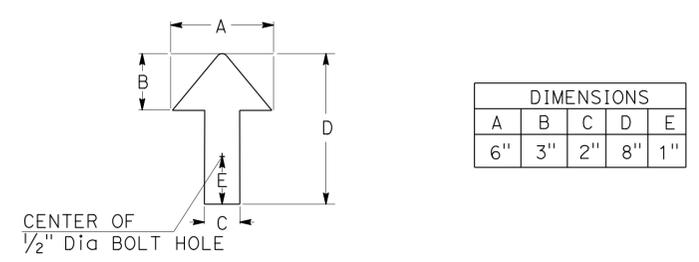


SIGN SP-7 (SEE NOTE 1)

NOTES: SIGNS SP-6 & SP-7

- IN LIEU OF PLACING SIGNS ON TYPE III BARRICADES, SIGNS, INCLUDING POSTS, MAY BE PLACED INTO THE GROUND OR FASTENED ONTO ELECTROLIERS.
- USE APPROPRIATE ROUTE MARKER [G26-2(CA), G27-2(CA), G28-2(CA)] AND CARDINAL DIRECTION [NORTH (M3-1), SOUTH (M3-3), EAST (M3-2), WEST (M3-4)].

SPECIAL PORTABLE FREEWAY DETOUR SIGNS



ADJUSTABLE ARROW DETAIL

TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR RAMP CLOSURES, DETOUR SIGNS,
AND MISCELLANEOUS DETAILS
SHEET 2 OF 2
 NO SCALE

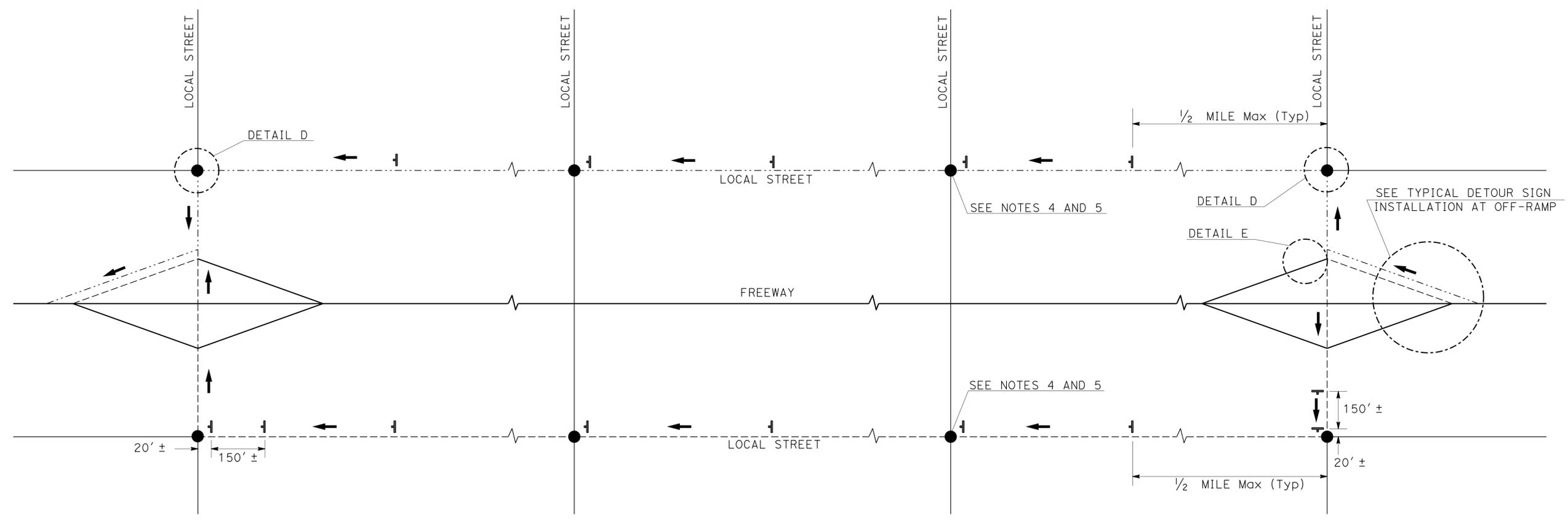
THD-2

LAST REVISION | DATE PLOTTED => 25-FEB-2015
 02-23-15 TIME PLOTTED => 1:31:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	7	38
Ali Bamshad 12-30-14 REGISTERED CIVIL ENGINEER DATE					
2-23-15			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

- LEGEND**
- SIGN SP-2
 - AND/OR DESIGNATED DETOUR ROUTE
 - DETOUR DIRECTION
 - CONTROLLED INTERSECTION

- NOTES:**
- SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
 - SP-2 SIGNS MUST NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
 - SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
 - SP-2 SIGNS MUST BE POSTED AT EACH CONTROLLED INTERSECTION (EXCEPT AT COMMERCIAL PROPERTY, RESIDENTIAL COMPLEX OR T-INTERSECTION FROM ONE-WAY STREET) ALONG THE DESIGNATED DETOUR ROUTE.
 - UNLESS OTHERWISE SHOWN ON OTHER THD PLANS, WHEN CONTROLLED INTERSECTIONS ALONG THE DESIGNATED DETOUR ROUTE ARE CLOSELY SPACED, PLACE SP-2 SIGNS AT CONTROLLED INTERSECTIONS AT A DISTANCE NOT TO EXCEED 1/4 MILE FROM THE PRECEDING DETOUR SIGN.
 - EXCEPT AS OTHERWISE SHOWN ON OTHER PLANS OR SPECIFIED IN THE SPECIAL PROVISIONS, SP-2 SIGNS MUST BE PLACED AS SHOWN ON THIS PLAN.



TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 1 OF 3**

NO SCALE

THD-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CALCULATED/DESIGNED BY: ALBERT K YU
 CHECKED BY: JOCELYN C CHIANG
 REVISED BY: JC
 DATE REVISED: 2/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	8	38

Ali Bamshad 12-30-14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

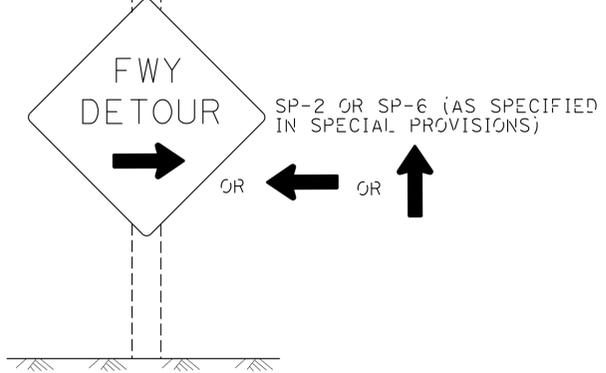
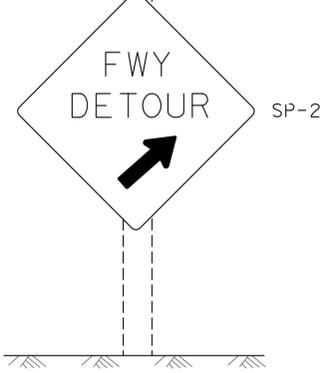
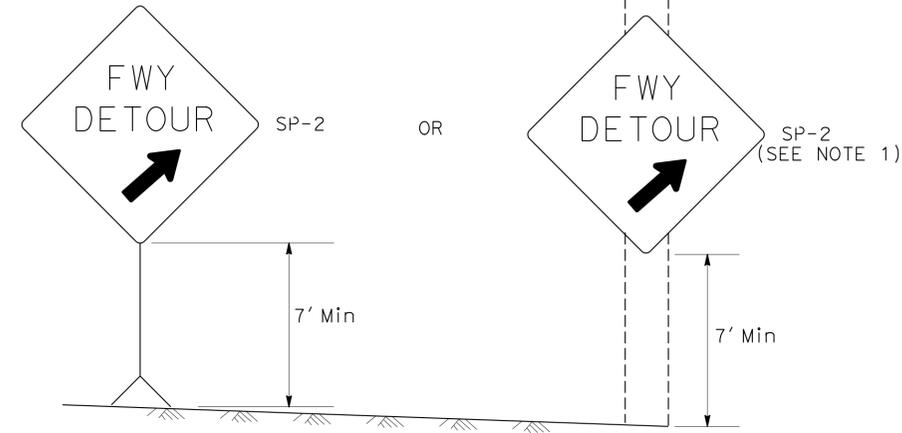
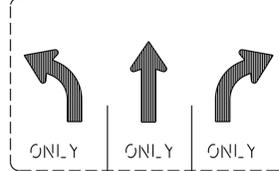
REGISTERED PROFESSIONAL ENGINEER
 ALI R. BAMSHAD
 No. C48134
 Exp. 6-30-16
 CIVIL
 STATE OF CALIFORNIA



Exist E5-1, G84-2 (CA) OR G84-3 (CA)



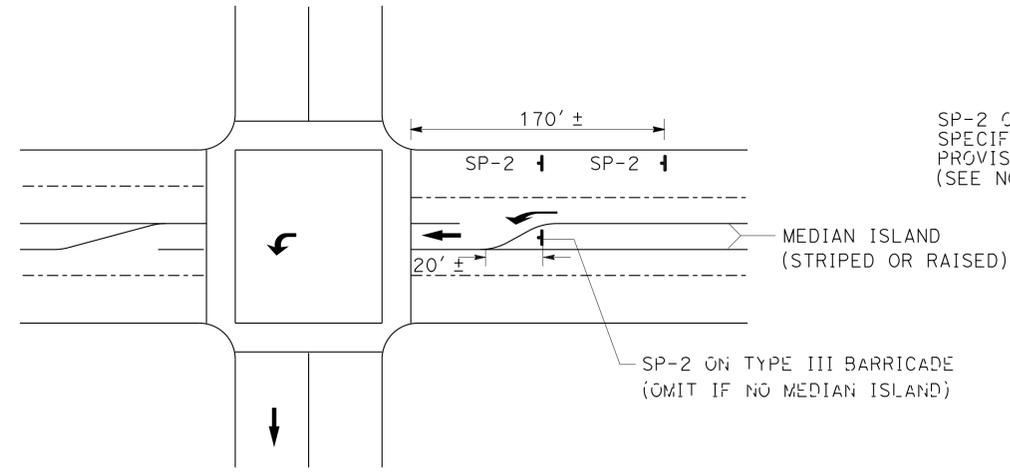
Exist R3-8 SERIES



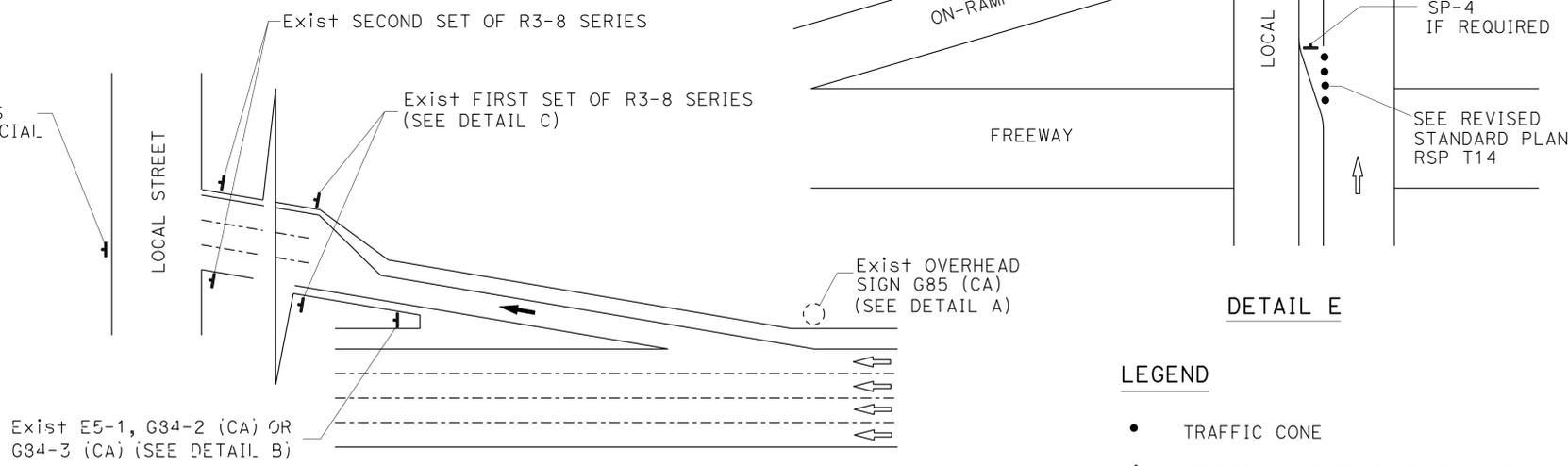
DETAIL A (SEE NOTE 3)

DETAIL B (SEE NOTE 3)

DETAIL C (SEE NOTES 4, 5, AND 6)



DETAIL D



DETAIL E

- LEGEND**
- TRAFFIC CONE
 - ↑ TEMPORARY TRAFFIC CONTROL SIGN
 - ➔ DETOUR DIRECTION
 - EXISTING OVERHEAD SIGN

TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP

SIGN CODE LEGEND

XXYY-Y: FEDERAL SIGN CODE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
 XXYY-Y (CA): CALIFORNIA SIGN CODE PER CALIFORNIA MUTCD

**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR DETOUR SIGN INSTALLATION
 ALONG DESIGNATED DETOUR ROUTE
 SHEET 2 OF 3**

NO SCALE

THD-4

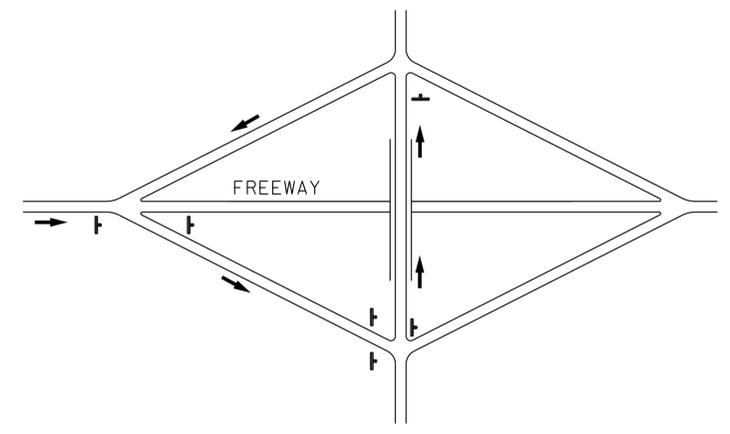
NOTES: SIGN SP-2

1. SP-2 SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
2. SP-2 SIGNS MUST NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
3. OMIT DETAILS A AND B FOR FULL FREEWAY CLOSURES.
4. SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND MISCELLANEOUS DETAILS PLAN SHEET 2 OF 2 FOR SP-6 SIGN DETAILS.
5. IF R3-8 SERIES SIGNS ARE NOT PRESENT AT THE OFF-RAMP, SP-2 OR SP-6 SIGNS MUST BE FASTENED ONTO EXISTING ELECTROLIER, SIGNAL POST OR SIGN POST.
6. EXCEPT FOR DETAILS A & B, OMIT SP-2 SIGNS IF RAMP HAS MANDATORY SINGLE MOVE.

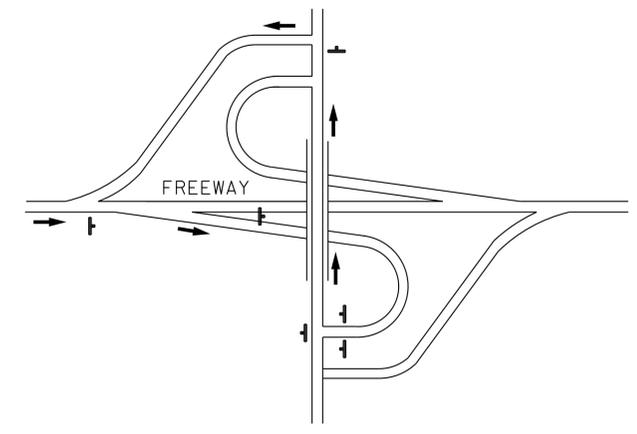
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DTIC
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 DESIGNED BY: ALBERT K YU
 DATE REVISION: 2/14
 REVISION BY: JC



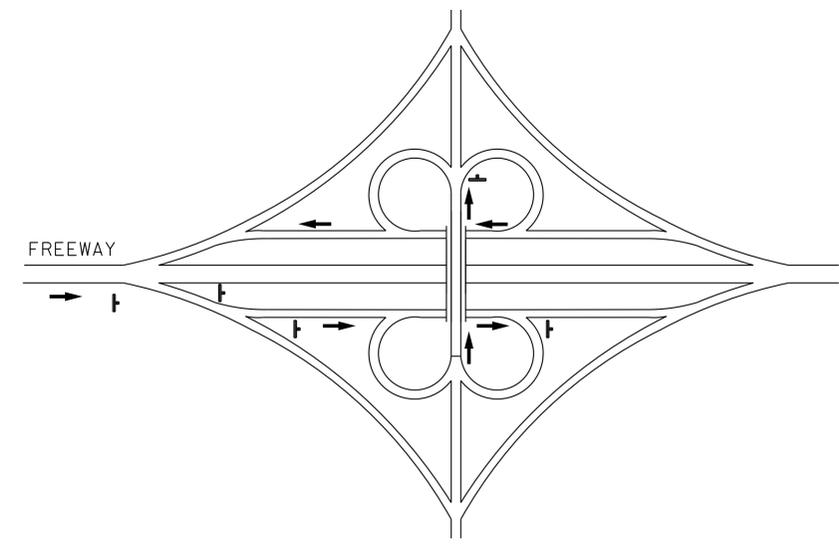
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTMM
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 REVISIONS: JC 2/14
 REVISOR: ALBERT K YU
 CHECKER: JOCELYN C CHIANG
 CALCULATED/DESIGNED BY: [Blank]
 CHECKED BY: [Blank]



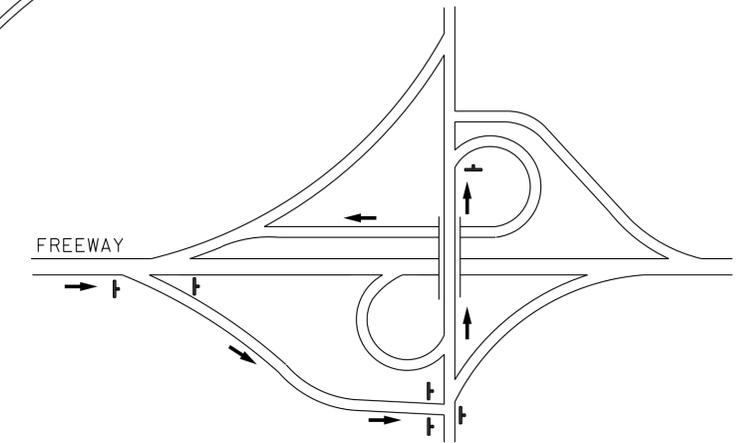
TYPE I



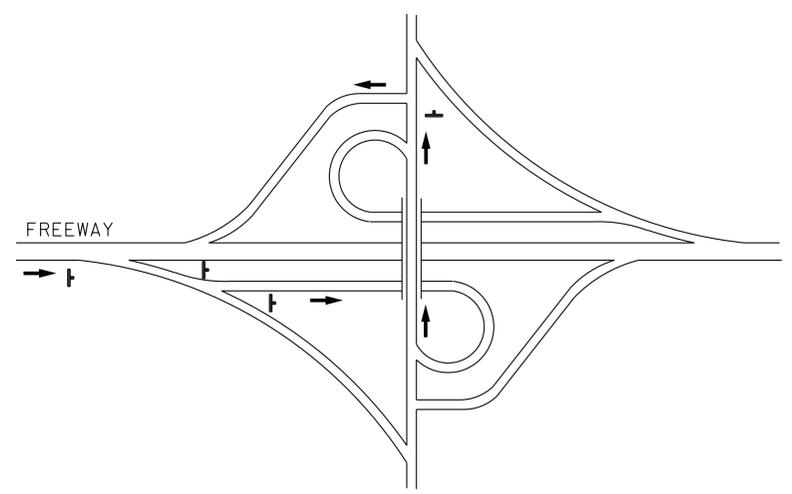
TYPE II



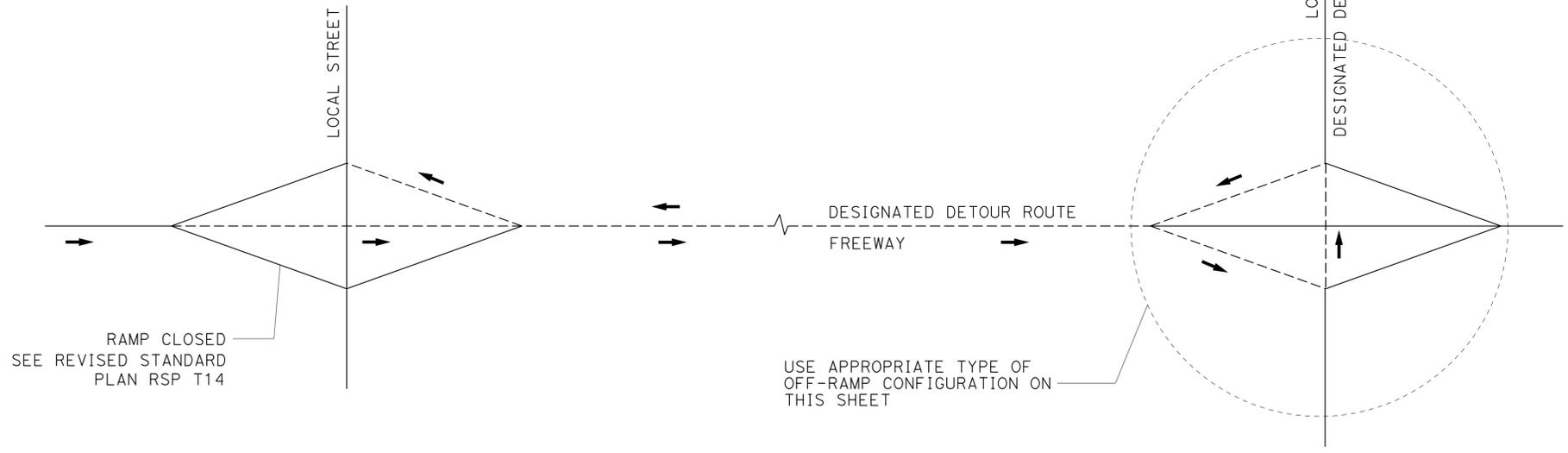
TYPE III



TYPE IV



TYPE V



TYPE OF OFF-RAMP CONFIGURATION	MINIMUM No. OF SP-2
TYPE I	6
TYPE II	6
TYPE III	5
TYPE IV	6
TYPE V	4

TYPICAL DETOUR SIGN INSTALLATION FOR OFF-RAMP CLOSURE

NOTES:

- FOR RAMP CONFIGURATIONS NOT SHOWN, THE EXACT LOCATIONS AND MINIMUM NUMBER OF SP-2 SIGNS MUST BE DETERMINED BY THE ENGINEER.
- SEE TRAFFIC HANDLING DETAILS-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS, AND MISCELLANEOUS DETAILS PLAN SHEET 2 OF 2 FOR SP-2 SIGN DETAILS.

LEGEND

- SIGN SP-2
- DETOUR DIRECTION
- DESIGNATED DETOUR ROUTE

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 3 OF 3**

NO SCALE

THD-5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	10	38

Ali Bamshad 12-30-14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ALI R. BAMSHAD
 No. C48134
 Exp. 6-30-16
 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.

NOTES:

- LANE CLOSURES MUST NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PCMS MUST BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE LANE.
- A MINIMUM SIGHT DISTANCE OF 1500' MUST BE PROVIDED IN ADVANCE OF PCMS.
- VEHICLE-MOUNTED SIGN PANELS MUST BE TYPE III OR IV RETROREFLECTORIZED SHEETING, BLACK ON WHITE OR BLACK ON ORANGE WITH 8" MINIMUM SERIES D LETTERS PER CALTRANS SIGN SPECIFICATIONS.

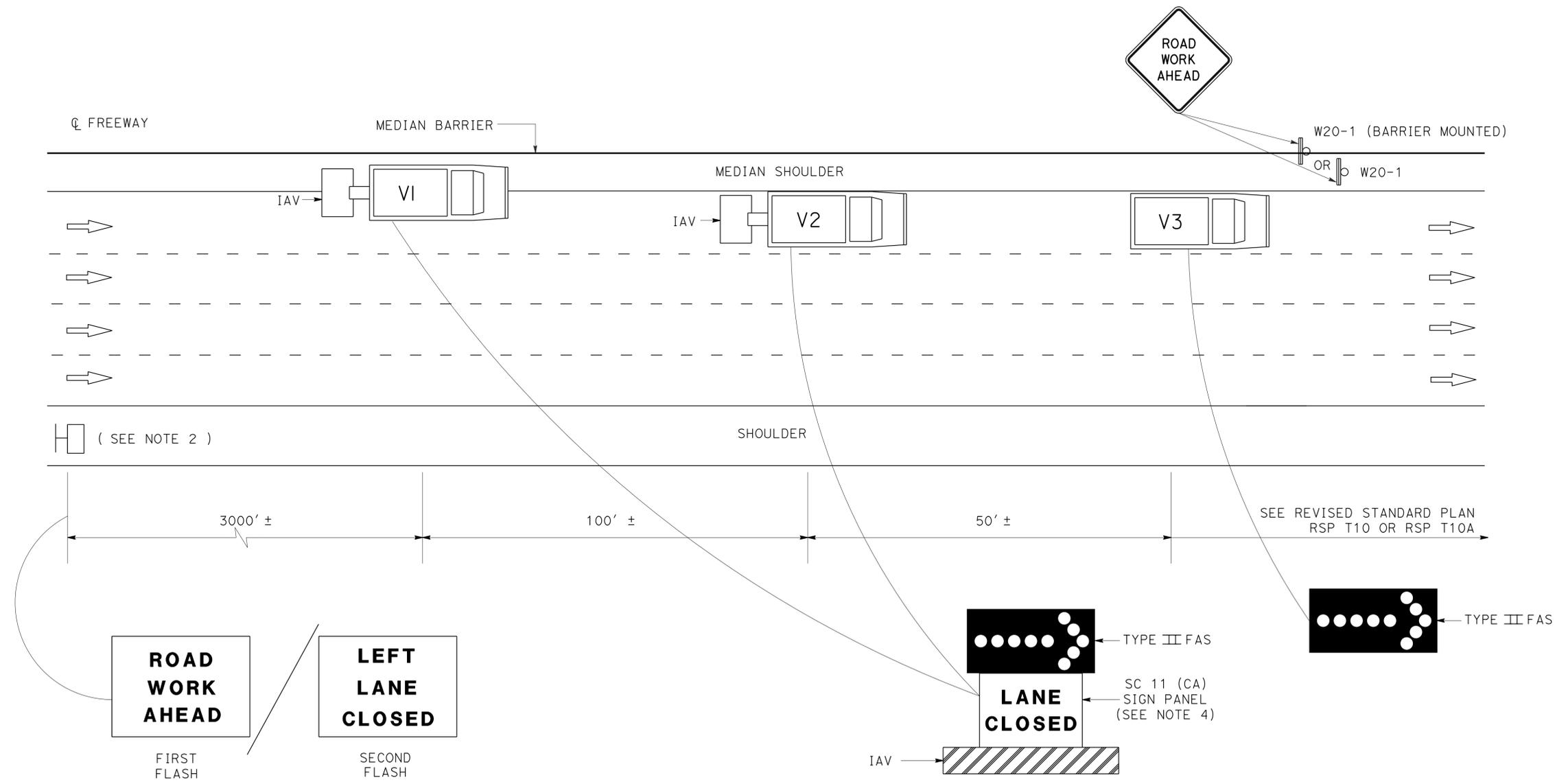
LEGEND

- V1, V2 SHADOW VEHICLES
- V3 WORK/APPLICATION VEHICLE
- PCMS
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)

ABBREVIATIONS

- IAV IMPACT ATTENUATOR VEHICLE
- (CA) CALIFORNIA CODE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DTIC
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 DESIGNED BY: ALBERT K YU
 REVISIONS: 2/14
 REVISIONS: 2/14



PCMS OR TRUCK MOUNTED CMS MESSAGE

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR MEDIAN SHOULDERS LESS THAN 8 FEET**

NO SCALE

THD-6

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	11	38
Ali Bamshad REGISTERED CIVIL ENGINEER			12-30-14 DATE		
2-23-15 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

- LANE CLOSURES MUST NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PCMS MUST BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE HOV LANE.
- A MINIMUM SIGHT DISTANCE OF 1500' MUST BE PROVIDED IN ADVANCE OF PCMS.
- VEHICLE-MOUNTED SIGN PANELS MUST BE TYPE III OR IV RETROREFLECTORIZED SHEETING, BLACK ON WHITE OR BLACK ON ORANGE WITH 8" MINIMUM SERIES D LETTERS PER CALTRANS SIGN SPECIFICATIONS.
- PLACE PCMS ON THE MEDIAN SHOULDER WHERE SUFFICIENT ROOM (SUCH AS CHP ENFORCEMENT AREAS) EXISTS.
- ADVANCE WARNING SIGN INSTALLATIONS MUST BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS MUST BE USED ON SP-16 SIGN DURING NIGHT LANE CLOSURES. FLAGS AND WARNING LIGHTS MUST BE ATTACHED TO SIGNS AS APPROVED BY THE ENGINEER.

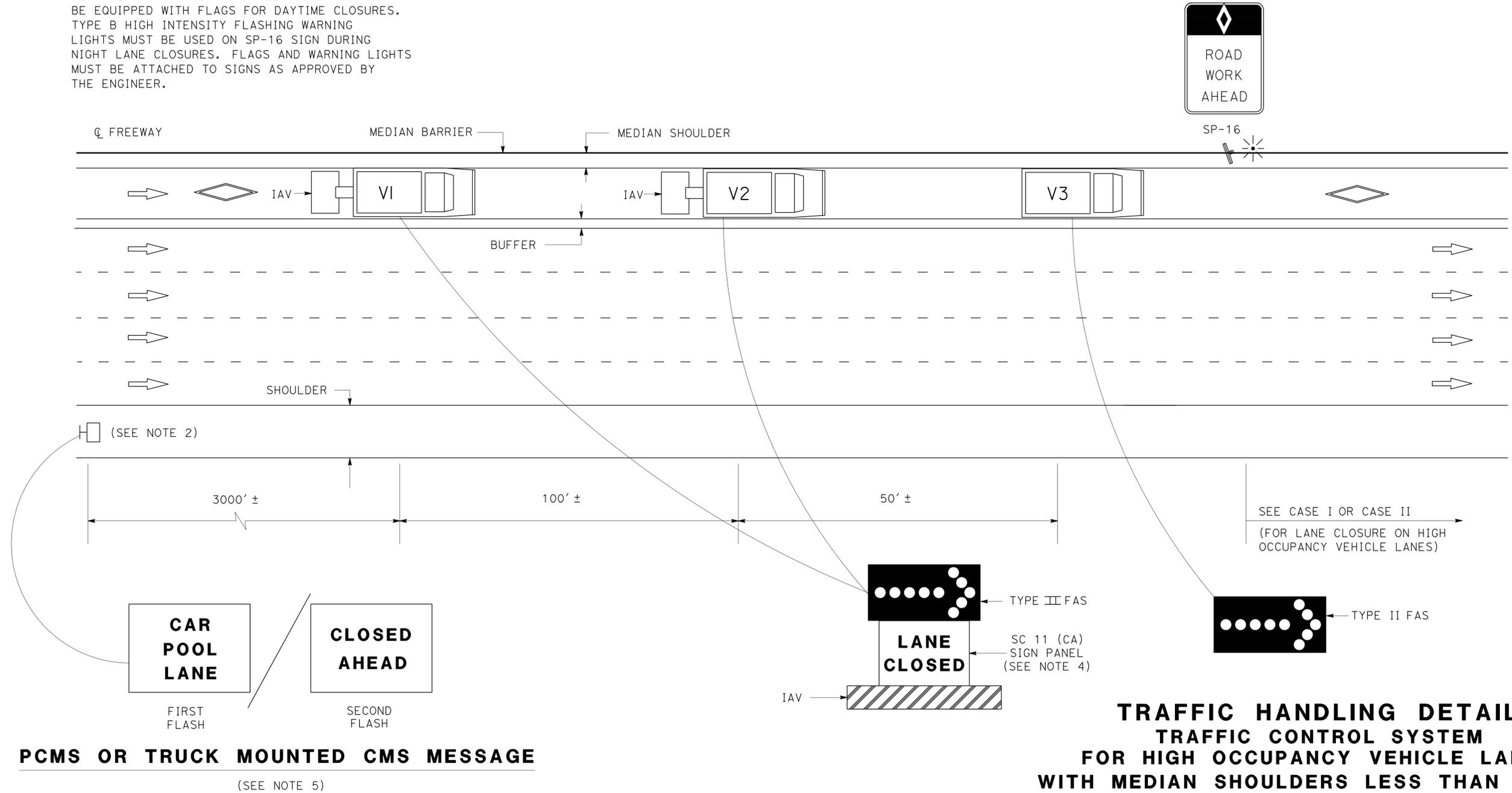
LEGEND

- V1, V2 SHADOW VEHICLES
- V3 WORK/APPLICATION VEHICLE
- PCMS
- PORTABLE FLASHING BEACON
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)

ABBREVIATIONS

- IAV IMPACT ATTENUATOR VEHICLE
- (CA) CALIFORNIA CODE
- CHP CALIFORNIA HIGHWAY PATROL

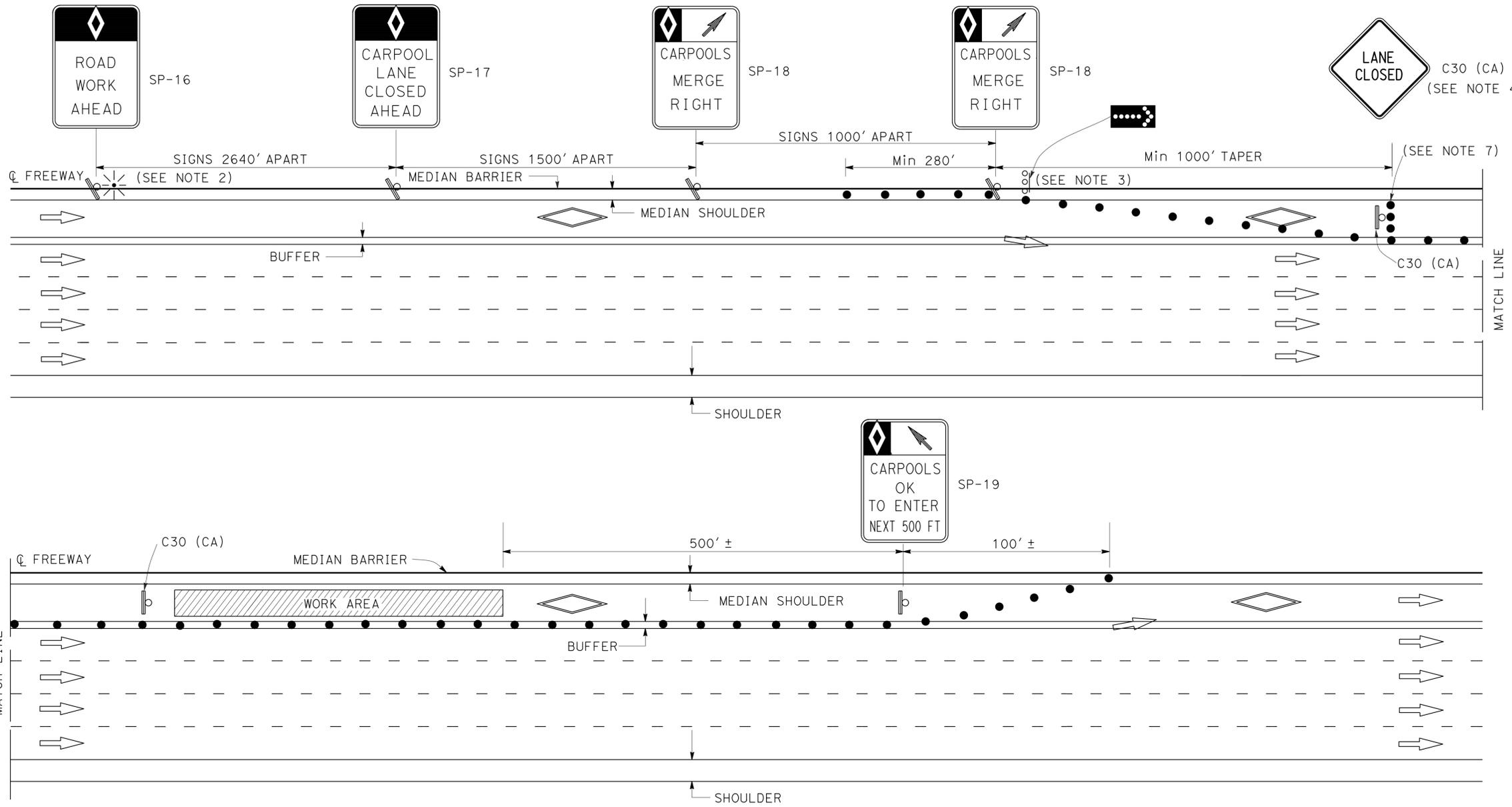
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DT M
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 REVISED BY: ALBERT K YU, JOCELYN C CHIANG
 DATE REVISED: 2/14
 JC



TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR HIGH OCCUPANCY VEHICLE LANES
WITH MEDIAN SHOULDERS LESS THAN 8 FEET
 NO SCALE

THD-7

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	12	38
Ali R. Bamshad REGISTERED CIVIL ENGINEER			12-30-14 DATE		
2-23-15 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



- LEGEND**
- TRAFFIC CONE
 - ☼ PORTABLE FLASHING BEACON
 - ⏏ TEMPORARY TRAFFIC CONTROL SIGN
 - ⦿ FLASHING ARROW SIGN (FAS)
 - ⦿ FAS SUPPORT OR TRAILER

ABBREVIATIONS

(CA) CALIFORNIA CODE

SIGN PANEL

SIZE (MIN)

SP-16	36" X 54"
SP-17	36" X 54"
SP-18	36" X 48"
SP-19	36" X 60"
C30 (CA)	30" X 30"
G20-2	48" X 24"

NOTES: FOR CASE I AND CASE II

1. AT LEAST ONE PERSON MUST BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON NIGHT LANE CLOSURES OR DAY-TIME CLOSURES EXCEEDING 1 MILE LENGTH, INCLUDING TAPERS.
2. ADVANCE WARNING SIGN INSTALLATIONS MUST BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES. TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS MUST BE USED ON SP-16 SIGN DURING NIGHT LANE CLOSURES. FLAGS AND WARNING LIGHTS MUST BE ATTACHED TO SIGNS AS APPROVED BY THE ENGINEER.
3. THE FLASHING ARROW SIGN MUST BE TYPE I.
4. PLACE C30 (CA) SIGNS EVERY 2000' THROUGHOUT THE LENGTH OF LANE CLOSURE.
5. A MINIMUM 1500' OF SIGHT DISTANCE MUST BE PROVIDED WHERE POSSIBLE FOR VEHICLES APPROACHING THE FLASHING ARROW SIGN. LANE CLOSURES MUST NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
6. PORTABLE DELINEATORS PLACED AT ONE-HALF THE SPACING INDICATED FOR TRAFFIC CONES MAY BE USED INSTEAD OF CONES FOR DAYTIME CLOSURES.
7. A MINIMUM OF 3 CONES MUST BE PLACED TRANSVERSELY ACROSS CLOSED LANES WHERE TAPERS END AND EVERY 2000'. TWO TYPE II BARRICADES MAY BE USED INSTEAD OF 3 CONES. THE ALIGNMENT OF CONES OR BARRICADES MAY BE SHIFTED FROM THE TRANSVERSE ALIGNMENT TO PROVIDE ACCESS TO WORK.
8. IF AN INGRESS/EGRESS AREA IS WITHIN 5250' UPSTREAM OR DOWNSTREAM OF THE WORK AREA, LANE CLOSURES MUST BE EXTENDED TO THAT AREA AS SHOWN IN CASE II.
9. SIGNS SP-16, 17, 18, AND 19 MAY BE OVERLAID ON EXISTING CARPOOL SIGNS IN MEDIANS AS APPROVED BY THE ENGINEER.
10. SIGNS SP-16, 17, 18, AND C30 (CA) MUST BE BLACK ON ORANGE BACKGROUND. SIGN SP-19 MUST BE BLACK ON WHITE BACKGROUND. DIAMONDS ON SIGNS MUST BE WHITE.
11. FOR CLOSURE OF LANE(S) ADJACENT TO HOV LANES, SEE CASE II.
12. THE MAXIMUM SPACING BETWEEN CONES MUST BE APPROXIMATELY 50' IN TAPERS AND 100' ON TANGENTS.

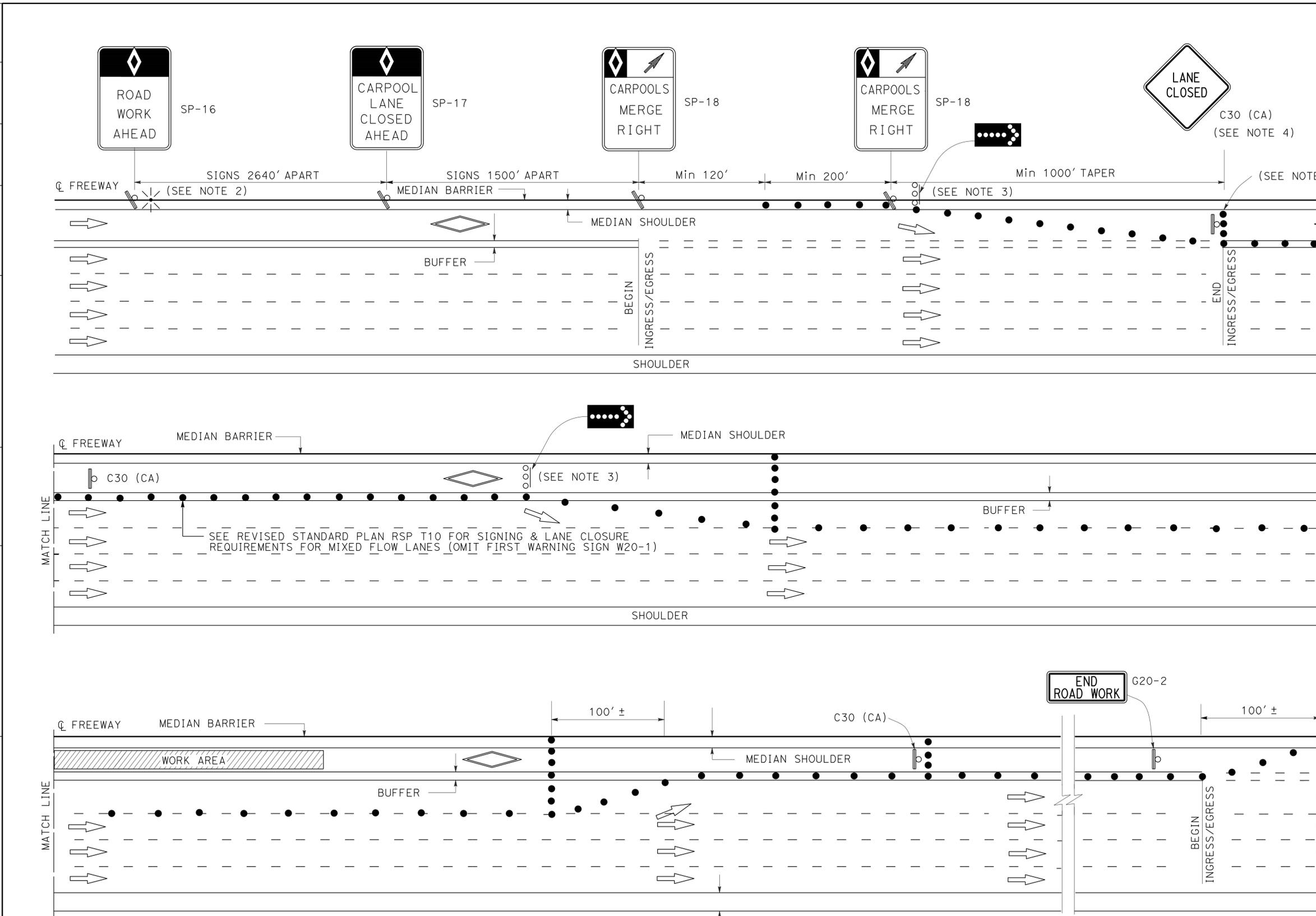
**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR HIGH OCCUPANCY VEHICLE LANES
AT NON-INGRESS/EGRESS AREAS
CASE I
NO SCALE**

THD-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DT M
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: 2/14
 DESIGNED BY: ALBERT K YU
 DATE: 2/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	13	38
Ali Bamshad			12-30-14	DATE	
REGISTERED CIVIL ENGINEER					
2-23-15			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTM



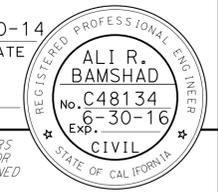
- NOTES:**
- SEE CASE I FOR NOTES, LEGEND, SIGN PANEL, AND ABBREVIATIONS FOR THIS SHEET.
 - CLOSURES OF ONE MIXED FLOW TRAFFIC LANE ADJACENT TO HOV LANE SHOWN ON THIS SHEET. MULTIPLE MIXED FLOW LANE CLOSURES ARE SIMILAR.

**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR HIGH OCCUPANCY
 VEHICLE LANES AND ADJACENT FREEWAY LANES
 BETWEEN INGRESS/EGRESS AREAS
 CASE II
 NO SCALE**

THD-9

LAST REVISION | DATE PLOTTED => 25-FEB-2015
 02-23-15 | TIME PLOTTED => 1:31:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	14	38
Ali Bamshad			12-30-14	DATE	
REGISTERED CIVIL ENGINEER			No. C48134		
2-23-15			6-30-16		
PLANS APPROVAL DATE			EXP.		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES:

- EXACT LOCATION OF PCMS WILL BE DETERMINED BY THE ENGINEER TO PROVIDE ADEQUATE VISIBILITY.
- PCMS MESSAGE DISPLAYED WILL BE APPROVED BY THE ENGINEER.
- PCMS MESSAGE MUST BE CHANGED AT THE BEGINNING OF CURE PERIOD TO REFLECT NUMBER OF CLOSED LANES.

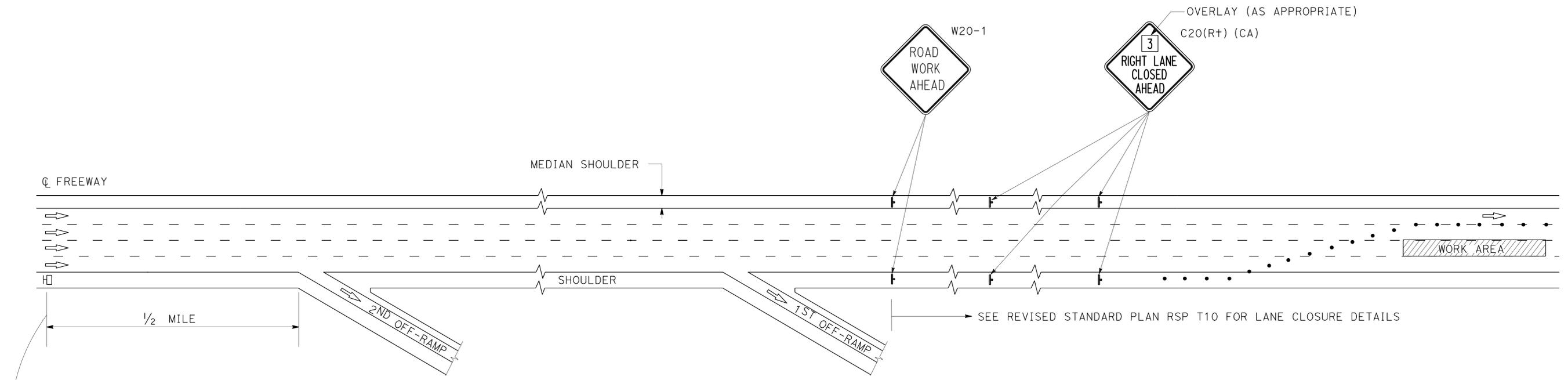
ABBREVIATIONS

(CA) CALIFORNIA CODE

LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- PCMS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DT M
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: JC 2/14
 REVISIONS: ALBERT K YU
 CALCULATED/DESIGNED BY: ALBERT K YU
 CHECKED BY: JOCELYN C CHIANG



FIRST FLASH	X (NO OF LANES) RIGHT / LEFT	← 1ST LINE (TYPICAL)
	LANES	← 2ND LINE (TYPICAL)
	CLOSED	← 3RD LINE (TYPICAL)
SECOND FLASH	A ST	← LIMIT OF CLOSURE (TYPICAL)
	TO B DR	← LIMIT OF CLOSURE (TYPICAL)

WORDING FORMAT FOR PCMS MESSAGE

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR CONCRETE PAVEMENT AND
APPROACH SLAB REPLACEMENT**

NO SCALE

THD-10

LEGEND:

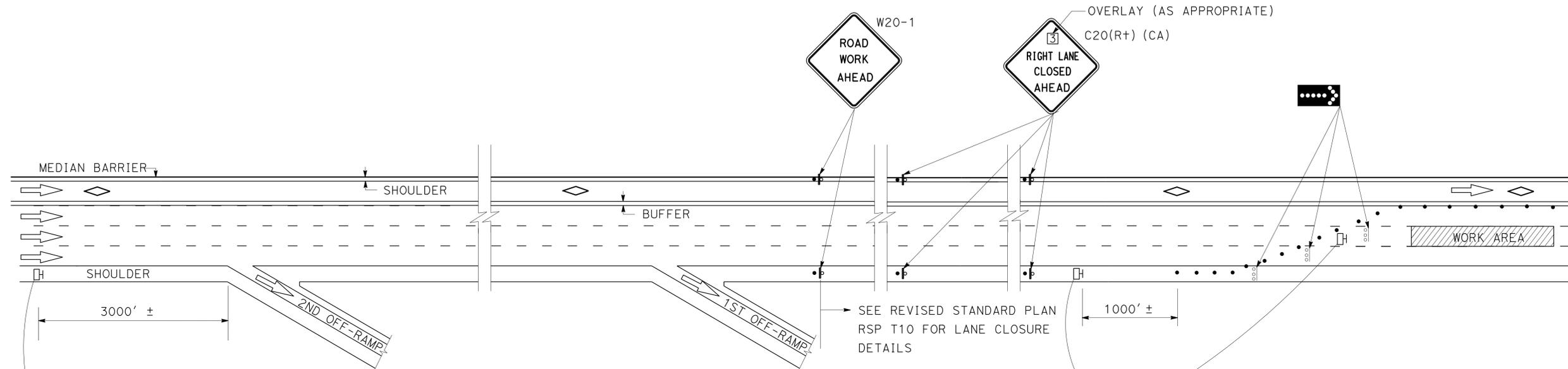
- TRAFFIC CONE
- ◻ TEMPORARY TRAFFIC CONTROL SIGN
- ◻ PCMS
- ◻ HOV LANE
- ◻ FLASHING ARROW SIGN (FAS)
- ◻ FAS SUPPORT OR TRAILER

NOTES:

1. WORDING DISPLAYED ON PCMS WILL BE APPROVED BY THE ENGINEER.
2. EXACT LOCATIONS OF PCMS WILL BE DETERMINED BY THE ENGINEER.
3. CHANGE PCMS MESSAGE AT THE BEGINNING OF CURE PERIOD TO REFLECT NUMBER OF CLOSED LANES.

ABBREVIATIONS:

(CA) CALIFORNIA CODE



FIRST FLASH MESSAGE	X (NO OF LANES) RIGHT/LEFT LANES CLOSED	1ST LINE (TYPICAL)
		2ND LINE (TYPICAL)
		3RD LINE (TYPICAL)
SECOND FLASH MESSAGE	A ST TO B DR	LIMIT OF CLOSURE (TYPICAL)
		LIMIT OF CLOSURE (TYPICAL)

FIRST FLASH MESSAGE	ALL TRAFFIC	1ST LINE (TYPICAL)
		2ND LINE (TYPICAL)
SECOND FLASH MESSAGE	OK USE CARPOOL LANE	1ST LINE (TYPICAL)
		2ND LINE (TYPICAL)
		3RD LINE (TYPICAL)

TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
WITH HIGH OCCUPANCY VEHICLE LANES
FOR PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS
FOR CONCRETE PAVEMENT AND APPROACH SLAB REPLACEMENT

NO SCALE

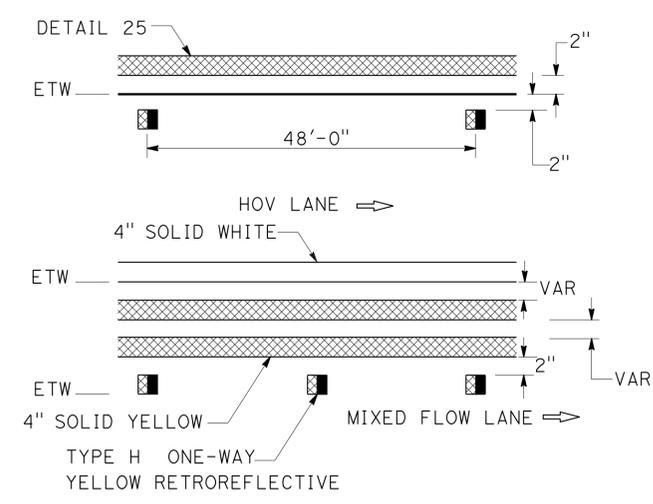
THD-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: MARTIN OREGEL
 REVISIONS: A HEDAYATI, 3/12
 REVISIONS: MARTIN OREGEL

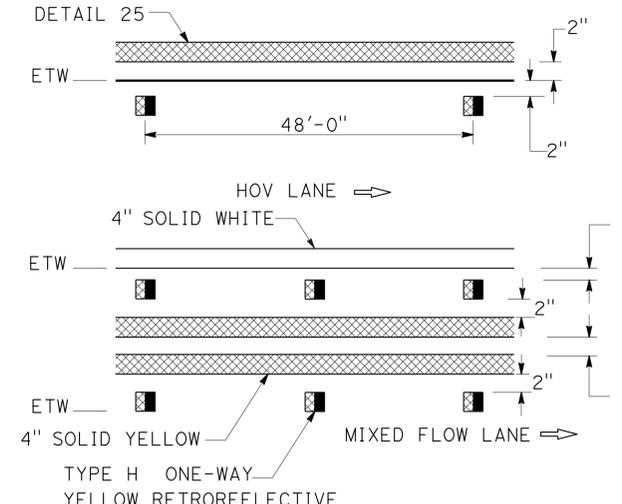
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101 170,210,etc.	Var	16	38

2-9-15
 REGISTERED CIVIL ENGINEER DATE
 KEVIN KWAN
 No. C68219
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA

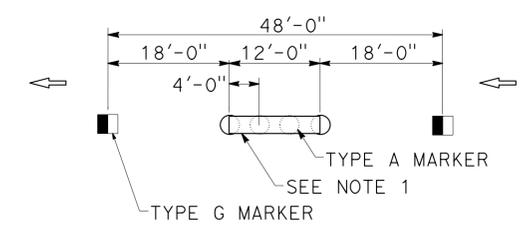
2-23-15
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



HOV BUFFER STRIPING DETAIL
LOCATIONS 7 AND 8



HOV BUFFER STRIPING DETAIL
LOCATION 12



DETAIL 13/14 (MODIFIED)

NOTE:
1. PLACE 4" WIDE WHITE THERMOPLASTIC TRAFFIC STRIPE ON TOP OF TYPE A NON-REFLECTIVE MARKERS.

PAVEMENT DELINEATION QUANTITIES

LOCATION	THERMOPLASTIC TRAFFIC STRIPE										PAINTED TRAFFIC STRIPE (2-COAT)	THERMOPLASTIC PAVEMENT MARKING			PAVEMENT MARKER				REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER	REMOVE PAINTED TRAFFIC STRIPE				
	DETAIL 9	DETAIL 13/14 (Mod)	DETAIL 25/25A	HOV DETAIL		DETAIL 27B	DETAIL 22	DETAIL 36	DETAIL 36A/B	DETAIL 37		WORDS (CAR, POOL, ONLY)	TYPE VI ARROW	DIAGONAL/CHEVRON	RETROREFLECTIVE												
				4" SOLID YELLOW	4" SOLID WHITE										TYPE H	TYPE G	TYPE D	NON-REFLECTIVE TYPE A									
Loc No. (#)	NAME	ROUTE	PM	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	EA	EA	EA	EA	LF	LF	SQFT	EA	LF	
1	TAYLOR YARD OH	2	15.81		2,772	924			924						22		207	22	129		231	3,065	924	229	694		
2	DELAY DRIVE OH	2	16.12	120	600	198			198								40	6	32		50	959	198	40	170		
3	COLORADO Blvd UC	2	R18.52		168	56			56									5	2		14	98	56		41		
4	TOPANGA CREEK	27	2.02						250	250										12		250	250		24		
5	ROUTE 101/27 SEPARATION	101	25.34		840	280			280									8	31		70	1,050	280		204		
6	PALO COMADO OC	101	33.69						234													234					
7	ROSCOE Blvd UC	170	R19.72	118	632	474	316	158	514		40			168	23		84	24	17		53	1,102	790	107	366	168	
10	VICTORY Blvd UC	405	41.36		504	168	336	168	176					168				13	12		42	470	504		138	168	
12	SAN FERNANDO MISSION Blvd	405	47.24		740	386	296	148	444						62	42		17	30		62	1,295	682	104	244		
14	N710-W134 CONNECTOR OC	710	R32.63		848	848			848									38	20		72	1,908	848		291		
SUB TOTAL				238	7,104	3,334	948	474	3,924	250	714	501	200	336	107	42	331	133	273	12	594	10,431	4,532	480	2,172	336	
TOTAL				238	7,104		8,930					1,215	200	336		480				418		594	10,431	4,532	480	2,172	336

PAVEMENT DELINEATION QUANTITIES

PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: HAMID SAADATNEJADI
 CALCULATED/DESIGNED BY: KEVIN KWAN
 CHECKED BY: AMBACHEW YIRGU
 REVISOR: KEVIN KWAN
 DATE: 2-23-15

LAST REVISION DATE PLOTTED => 25-FEB-2015
 02-23-15 TIME PLOTTED => 13:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	17	38

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 2-23-15

UNIT OF MEASUREMENT SYMBOLS:

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

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

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

TABLE B	
SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft ³ , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

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

REVISED STANDARD PLAN RSP A10B

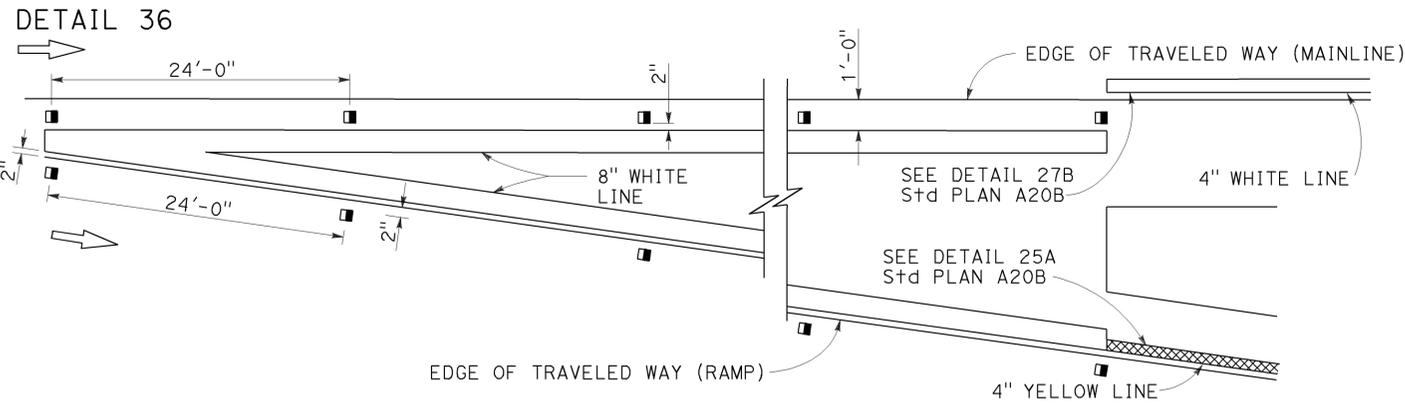
	M
Maint	MAINTENANCE
Max	MAXIMUM
MB	METAL BEAM
MBB	METAL BEAM BARRIER
MBGR	METAL BEAM GUARD RAILING
Med	MEDIAN
MGS	MIDWEST GUARDRAIL SYSTEM
MH	MANHOLE
Min	MINIMUM
Misc	MISCELLANEOUS
Misc I & S	MISCELLANEOUS IRON AND STEEL
Mkr	MARKER
Mod	MODIFIED, MODIFY
Mon	MONUMENT
MP	METAL PLATE
MPGR	METAL PLATE GUARD RAILING
MR	MOVEMENT RATING
MSE	MECHANICALLY STABILIZED EMBANKMENT
Mt	MOUNTAIN, MOUNT
MtI	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT
	N
N	NORTH
NB	NORTHBOUND
No.	NUMBER (MUST HAVE PERIOD)
Nos.	NUMBERS (MUST HAVE PERIOD)
NPS	NOMINAL PIPE SIZE
NS	NEAR SIDE
NSP	NEW STANDARD PLAN
NTS	NOT TO SCALE
	O
Obir	OBLITERATE
OC	OVERCROSSING
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OG	ORIGINAL GROUND
OGAC	OPEN GRADED ASPHALT CONCRETE
OGFC	OPEN GRADED FRICTION COURSE
OH	OVERHEAD
OHWM	ORDINARY HIGH WATER MARK
O-O	OUT TO OUT
Opp	OPPOSITE
OSD	OVERSIDE DRAIN
	P
p	PAGE
PAP	PERFORATED ALUMINUM PIPE
PB	PULL BOX
PC	POINT OF CURVATURE, PRECAST
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

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

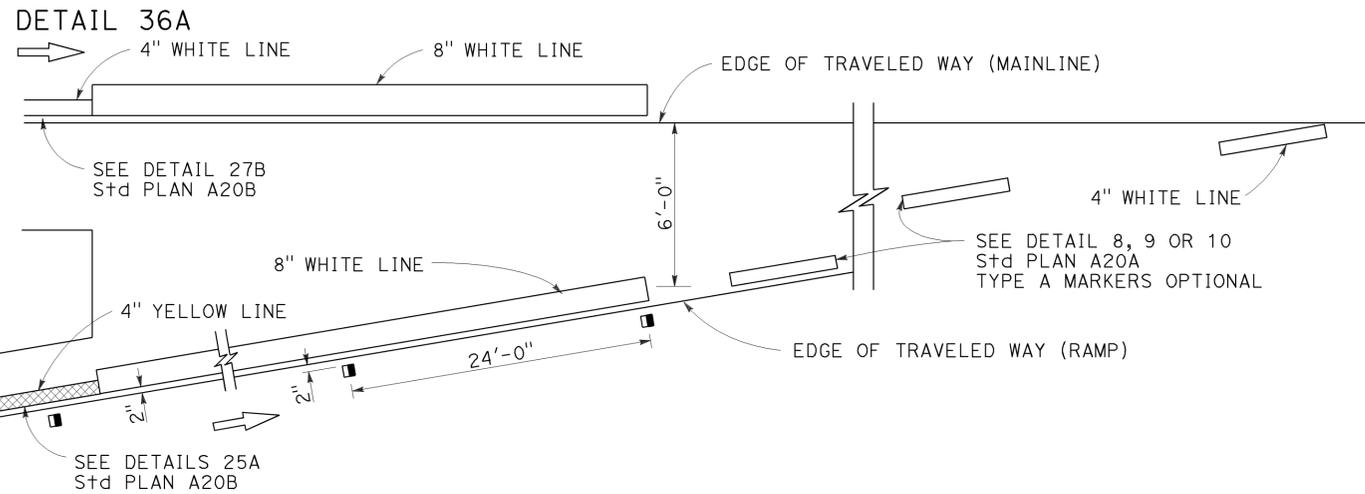
	S
S	SOUTH, SUPPLEMENT
SAE	STRUCTURE APPROACH EMBANKMENT
Salv	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SAND CUSHION
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
Sec	SECOND, SECTION
Sep	SEPARATION
SG	SUBGRADE
Shld	SHOULDER
Sht	SHEET
Sim	SIMILAR
⊥	STATION LINE
SM	SELECTED MATERIAL
Spec	SPECIAL, SPECIFICATIONS
SPP	SLOTTED PLASTIC PIPE
SS	SLOPE STAKE
SSBM	STRAP AND SADDLE BRACKET METHOD
SSD	STRUCTURAL SECTION DRAIN
SSPA	STRUCTURAL STEEL PLATE ARCH
SSPP	STRUCTURAL STEEL PLATE PIPE
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH
SSRP	STEEL SPIRAL RIB PIPE
St	STREET
Sta	STATION
STBB	SINGLE THRIE BEAM BARRIER
Std	STANDARD
Str	STRUCTURE
Surf	SURFACING
SW	SIDEWALK, SOUND WALL
Swr	SEWER
Sym	SYMMETRICAL
S4S	SURFACE 4 SIDES
	T
T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
TeI	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

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

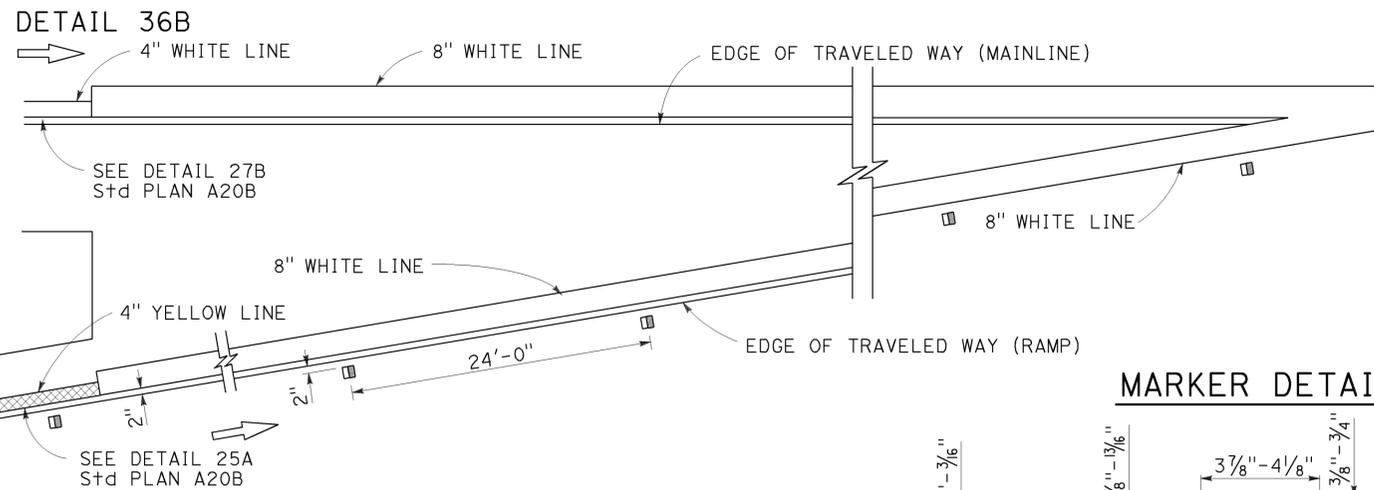
EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

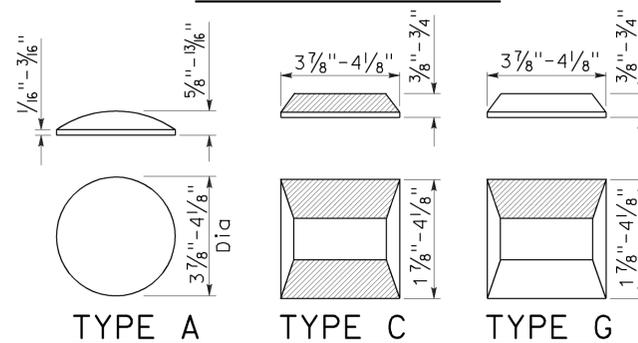


MARKER DETAILS

LEGEND:

MARKERS

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



RETROREFLECTIVE FACE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	18	38

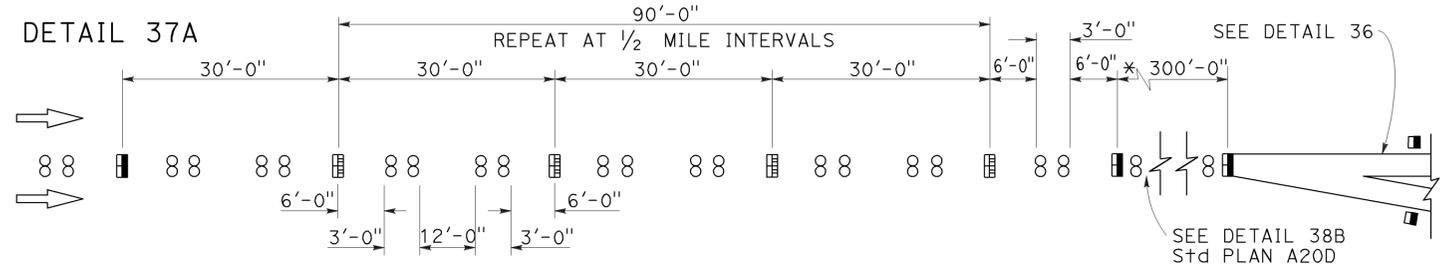
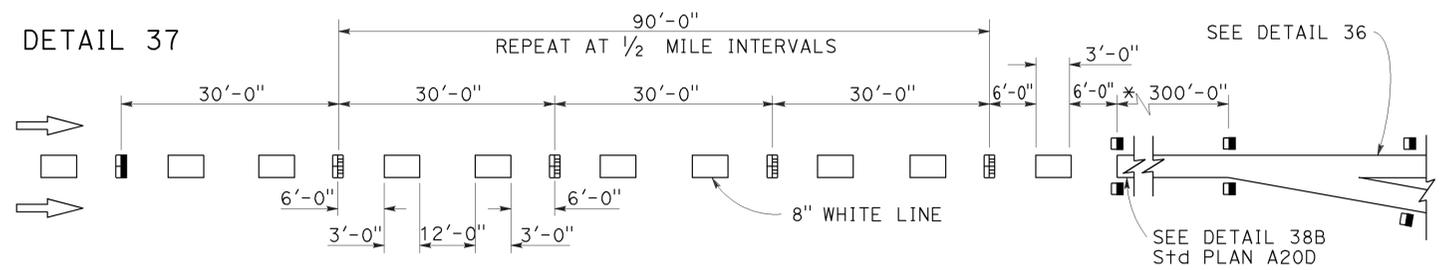
Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 No. C40375
 Exp. 3-31-15
 CIVIL
 STATE OF CALIFORNIA

July 19, 2013
 PLANS APPROVAL DATE

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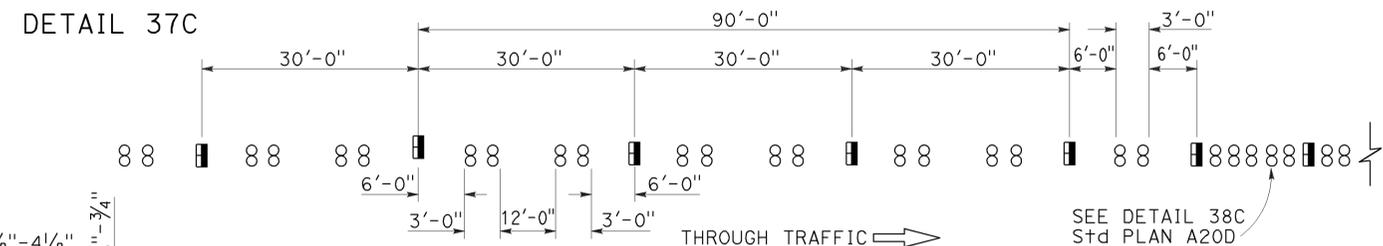
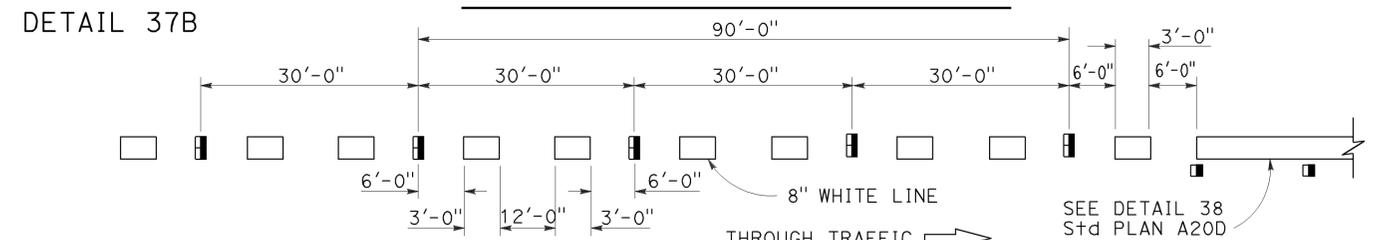
TO ACCOMPANY PLANS DATED 2-23-15

LANE DROP AT EXIT RAMP



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

LANE DROP AT INTERSECTIONS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A20C

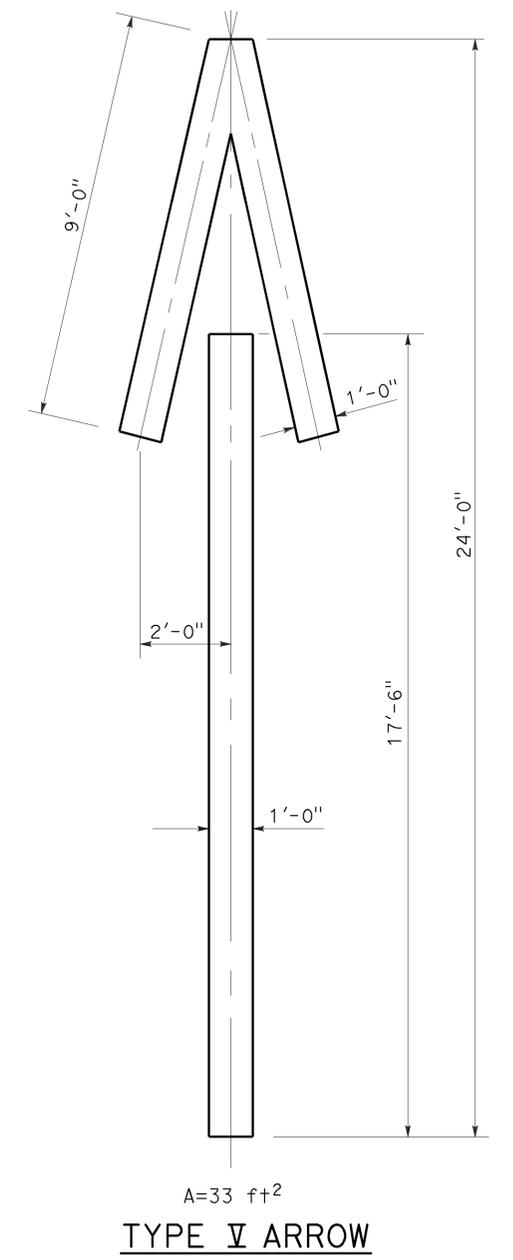
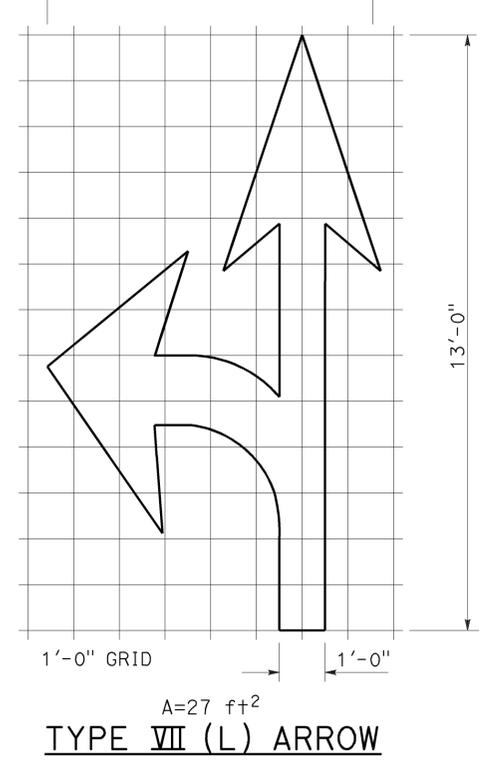
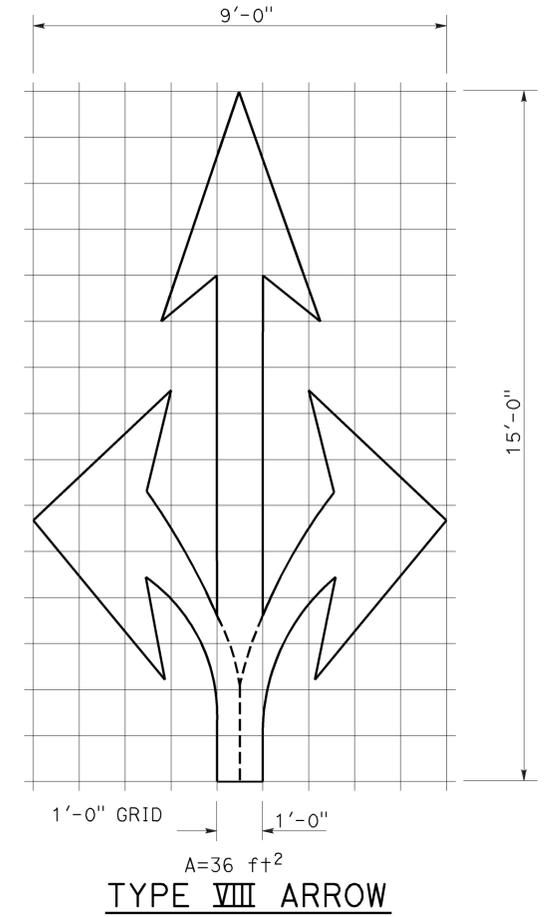
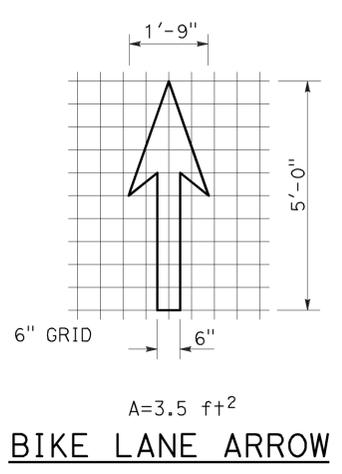
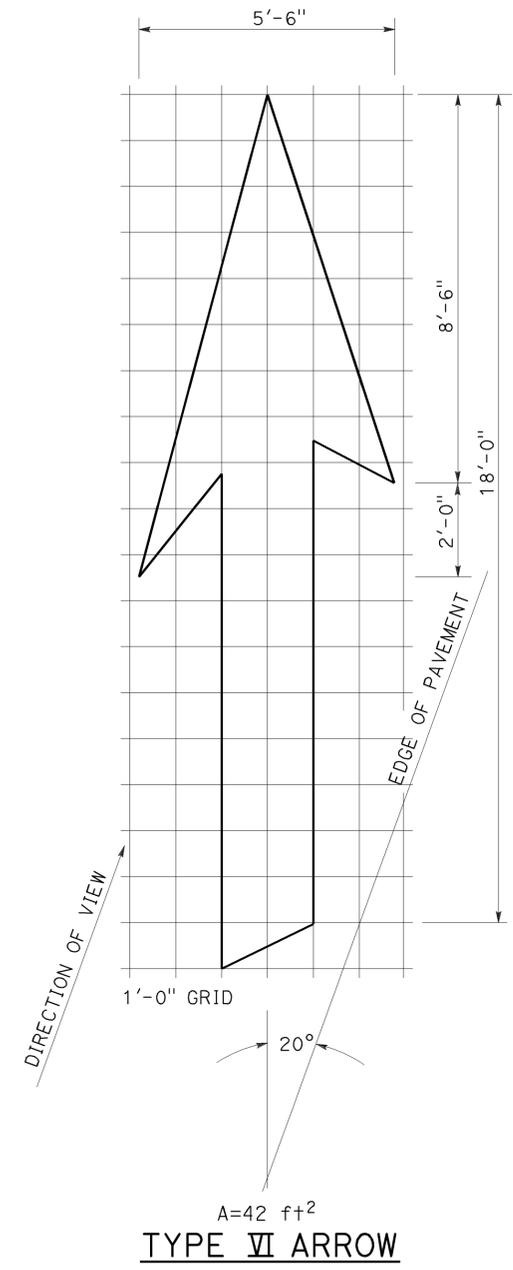
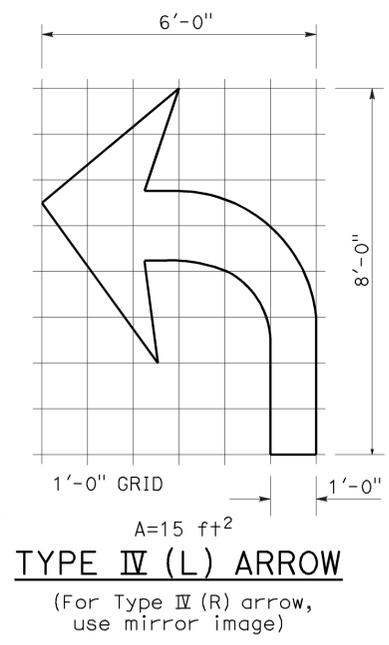
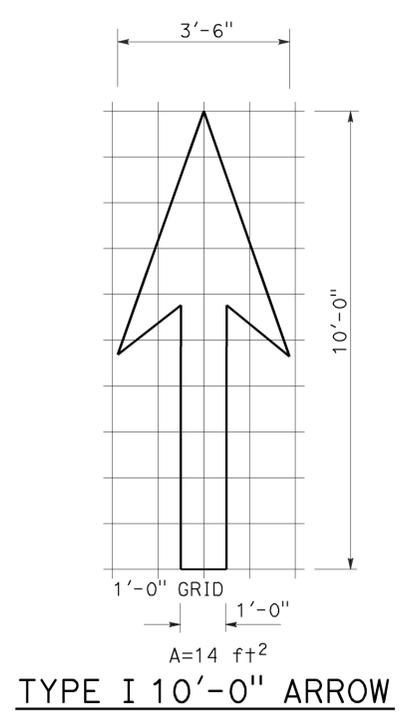
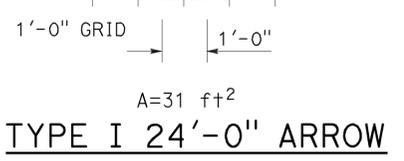
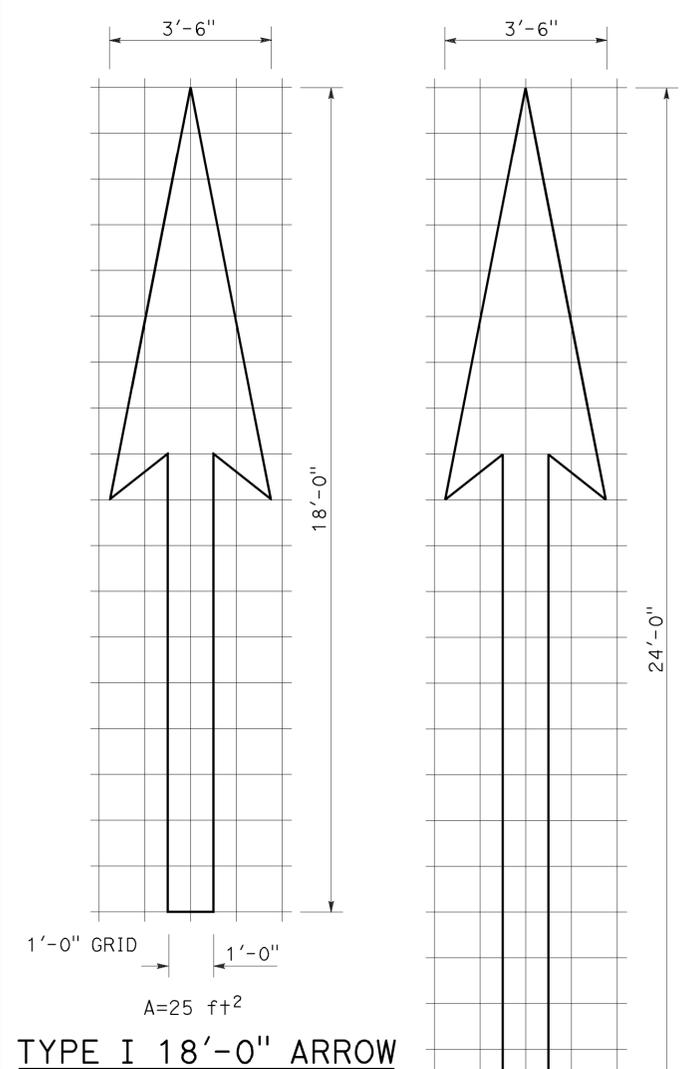
2010 REVISED STANDARD PLAN RSP A20C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	19	38

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 2-23-15



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.

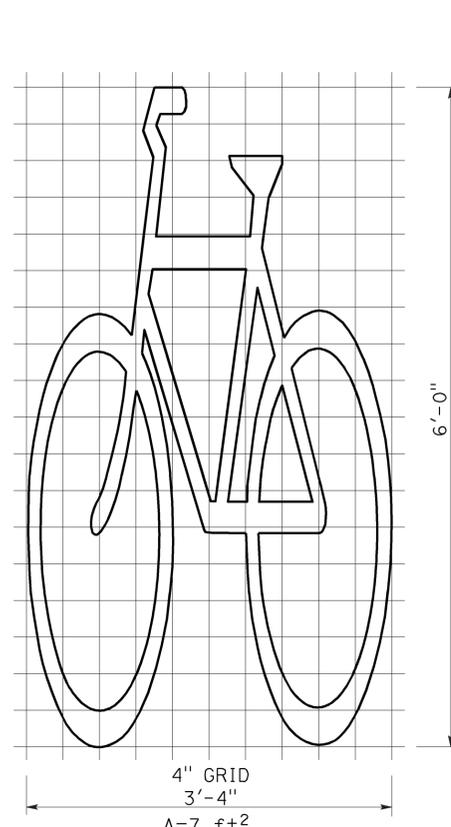
2010 REVISED STANDARD PLAN RSP A24A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	20	38

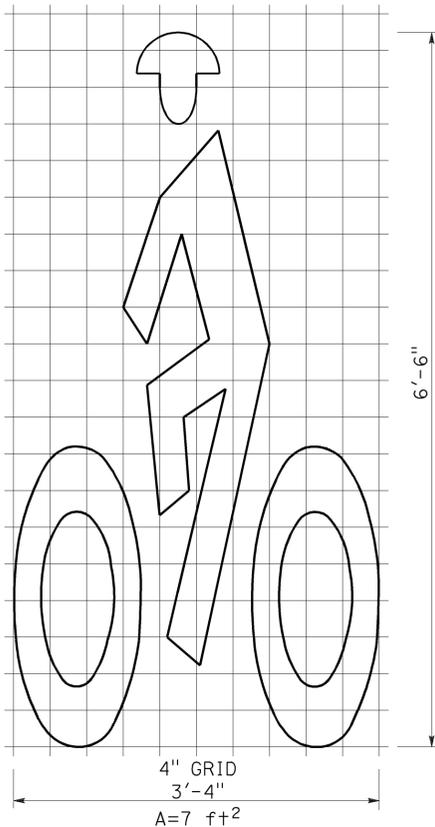
Registered Professional Engineer
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

October 19, 2012
 PLANS APPROVAL DATE

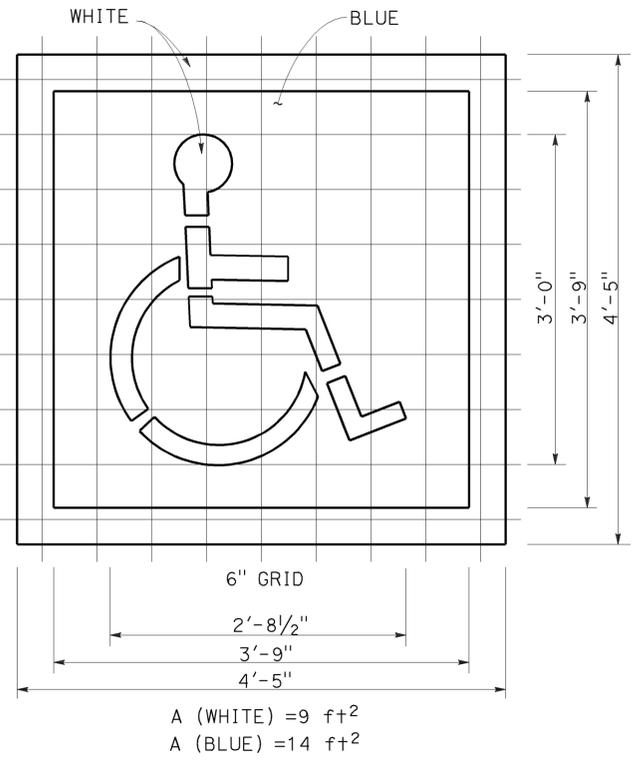
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



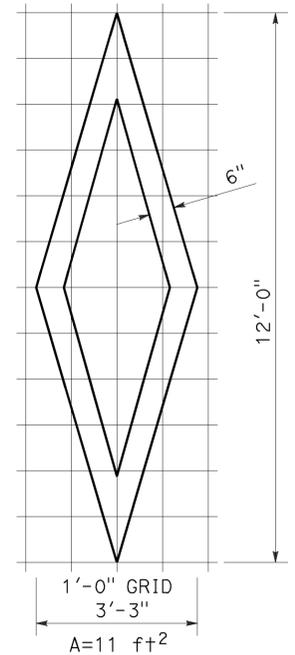
BIKE LANE SYMBOL WITHOUT PERSON



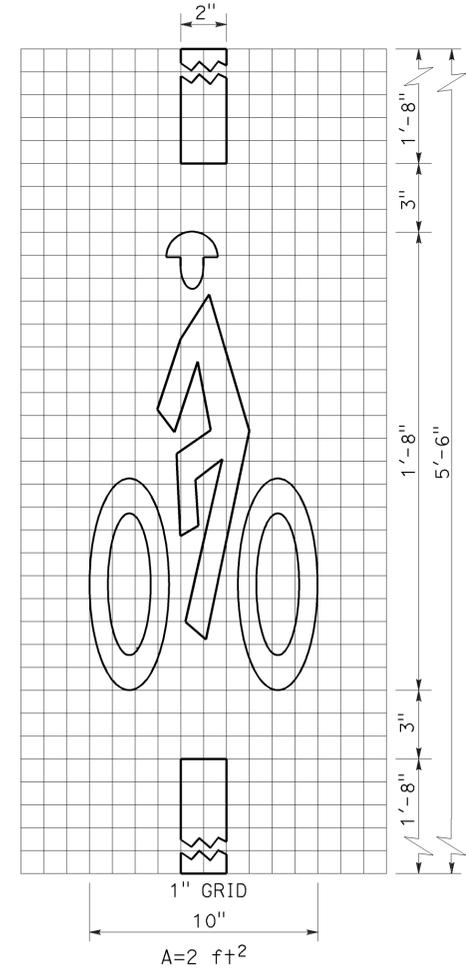
BIKE LANE SYMBOL WITH PERSON



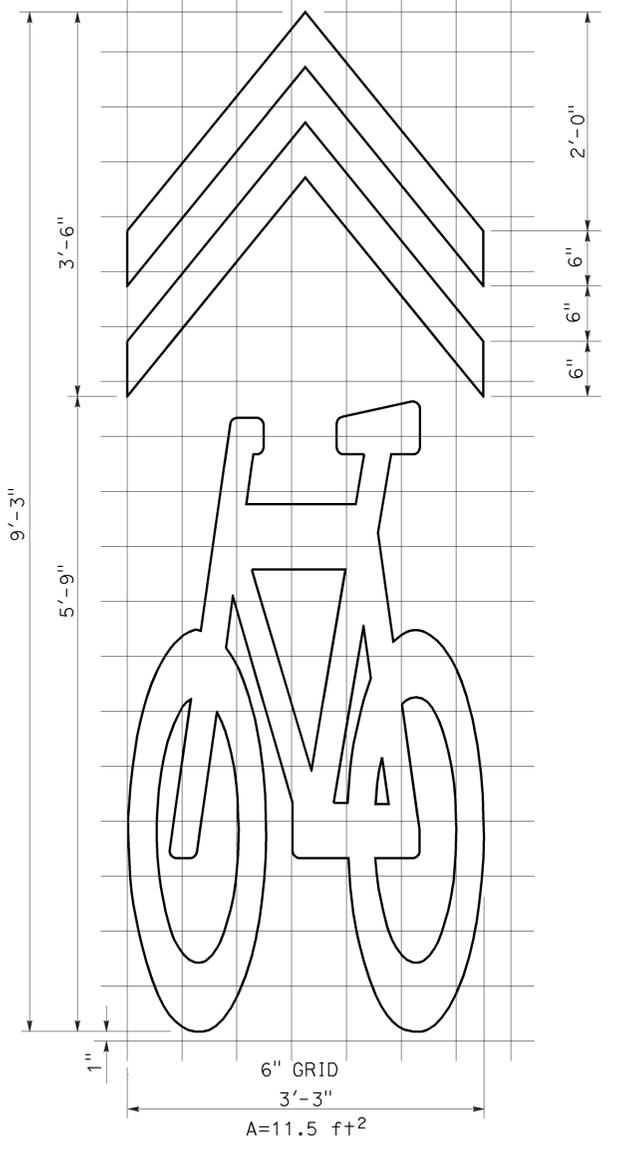
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING



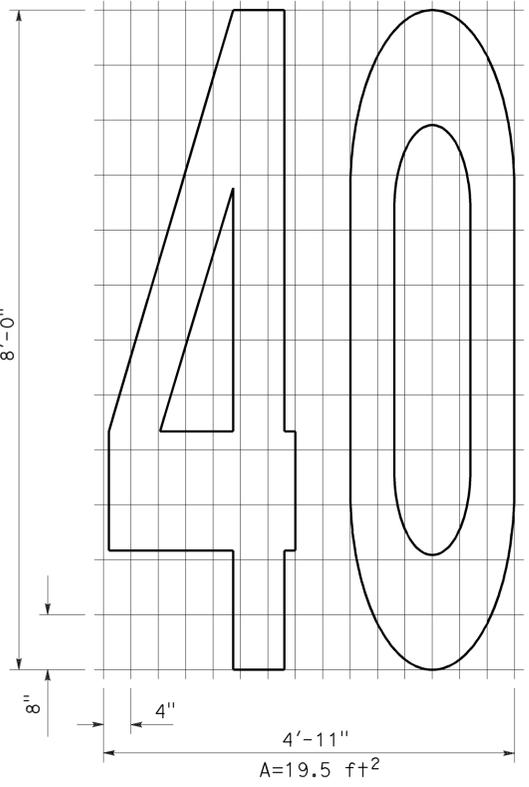
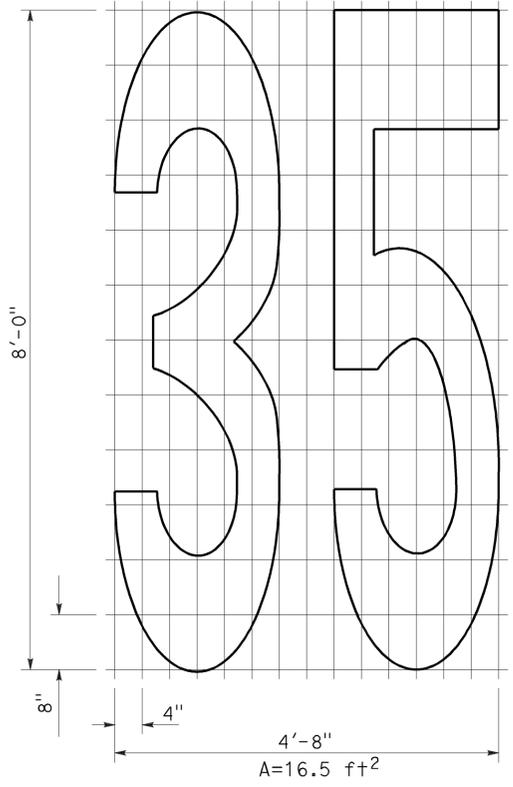
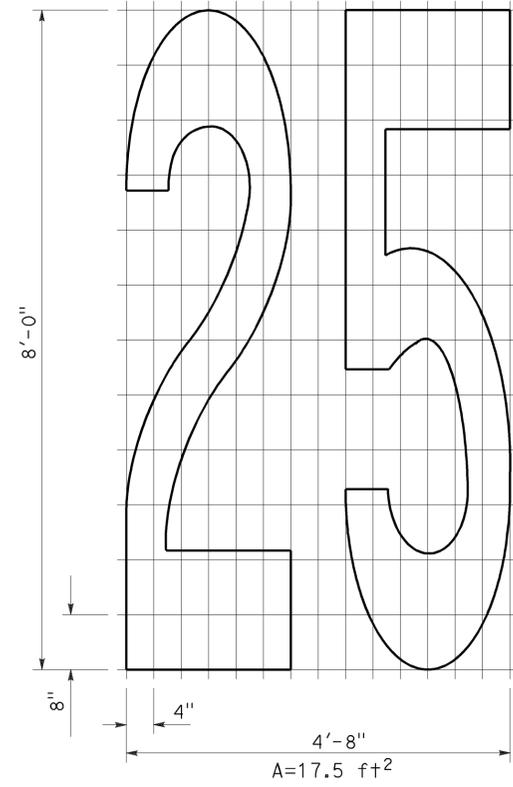
DIAMOND SYMBOL



BICYCLE LOOP DETECTOR SYMBOL



SHARED ROADWAY BICYCLE MARKING



NUMERALS

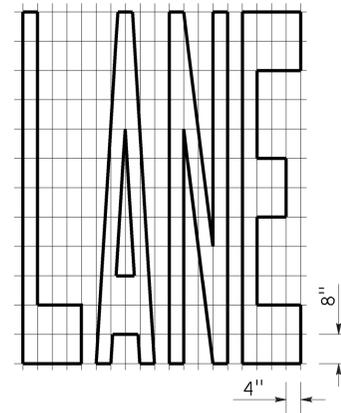
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS SYMBOLS AND NUMERALS
 NO SCALE

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

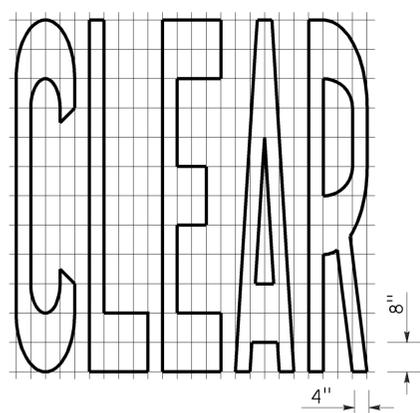
REVISED STANDARD PLAN RSP A24C

2010 REVISED STANDARD PLAN RSP A24C

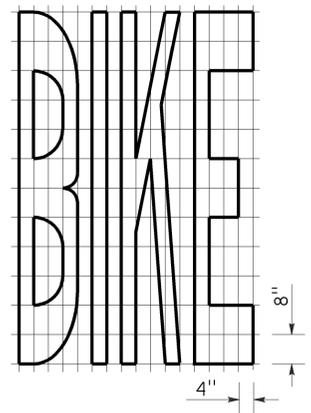
TO ACCOMPANY PLANS DATED 2-23-15



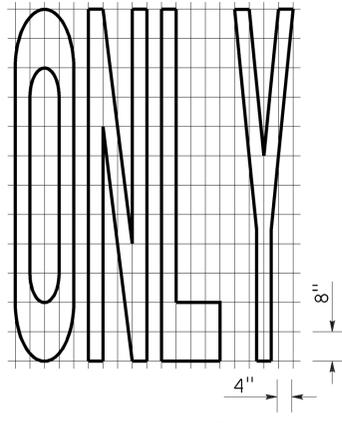
A=24 ft²



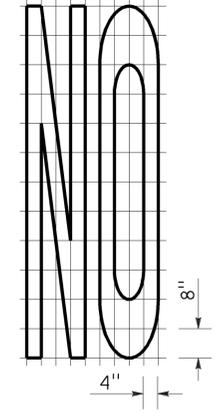
A=27 ft²



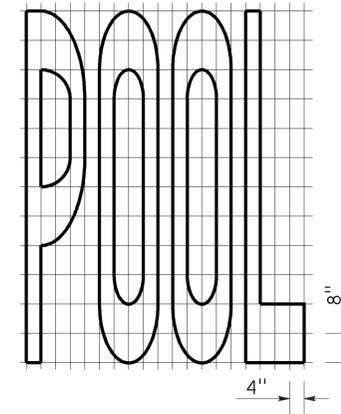
A=21 ft²



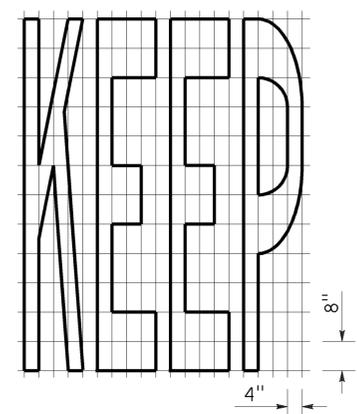
A=22 ft²



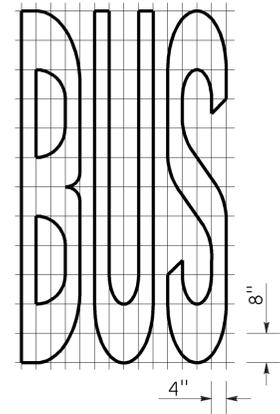
A=14 ft²



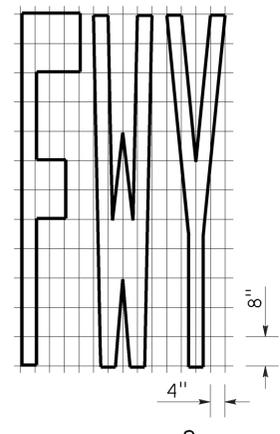
A=23 ft²



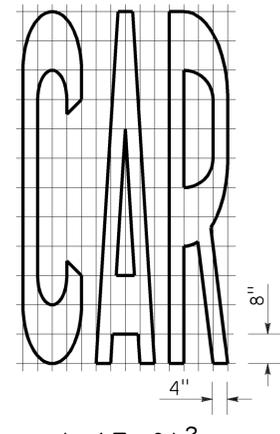
A=24 ft²



A=20 ft²

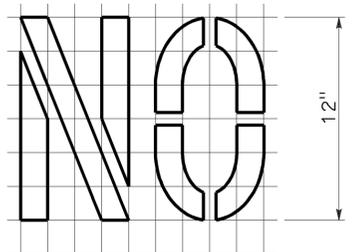


A=16 ft²



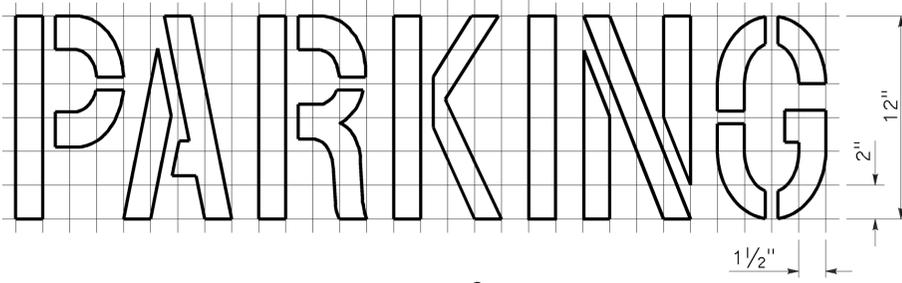
A=17 ft²

WORD MARKINGS			
ITEM	ft²	ITEM	ft²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



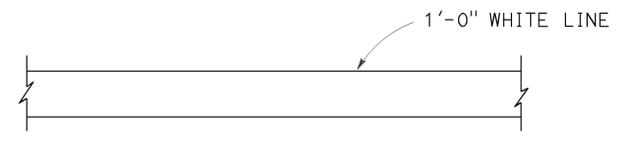
A=2 ft²

See Notes 6 and 7

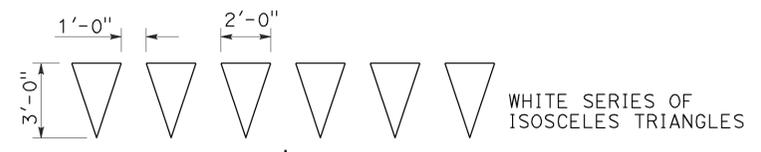


A=2 ft²

See Notes 6 and 7



LIMIT LINE (STOP LINE)



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.

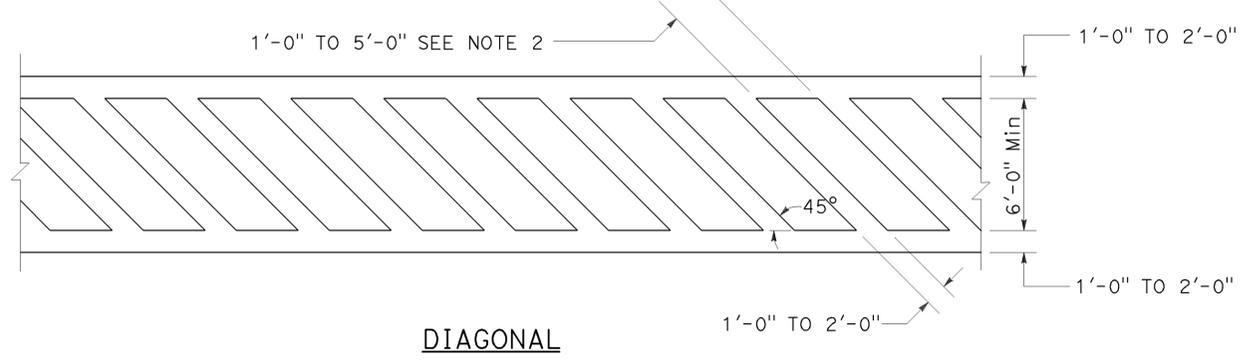
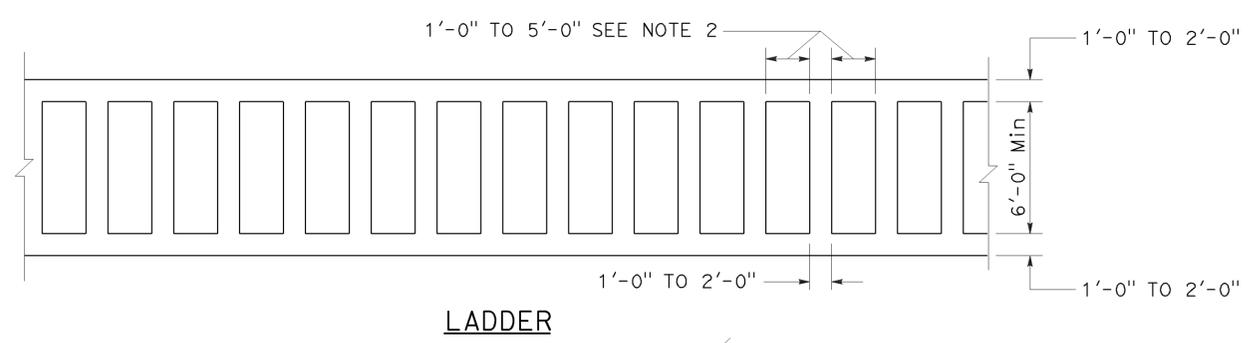
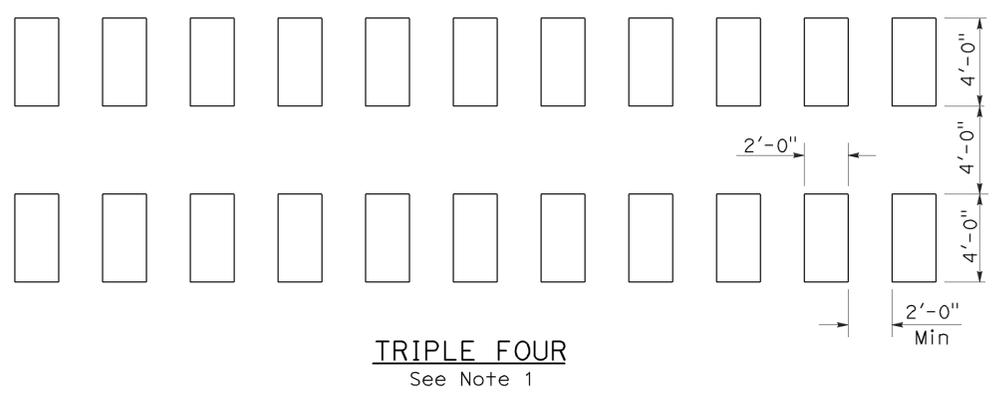
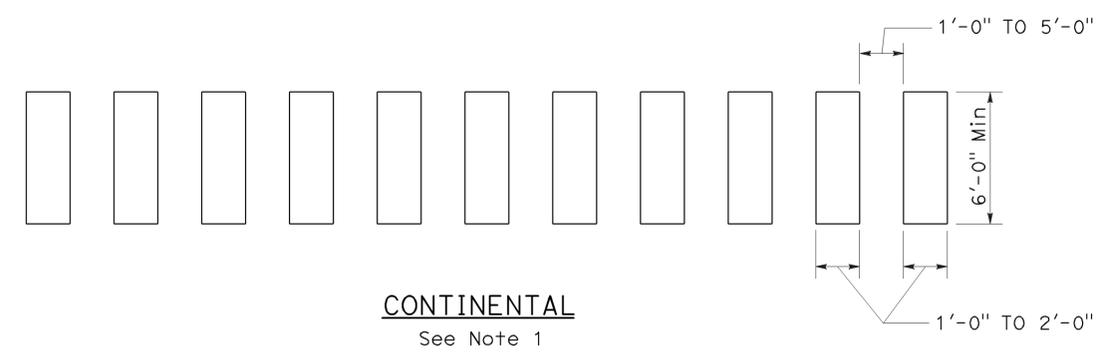
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	22	38

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

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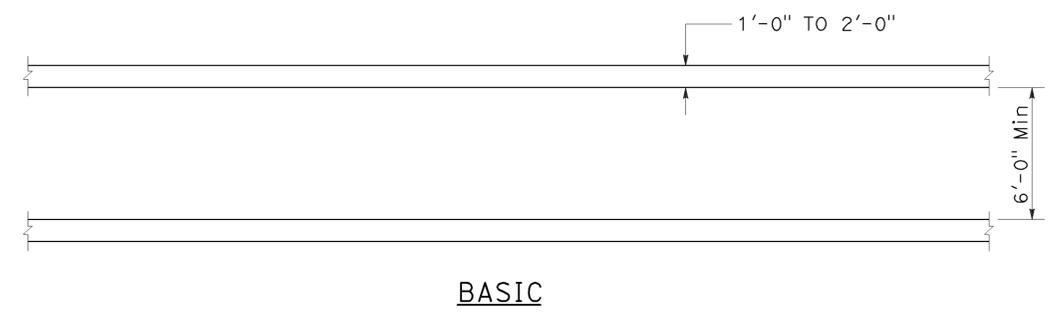
TO ACCOMPANY PLANS DATED 2-23-15



HIGHER VISIBILITY CROSSWALKS

NOTES:

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



BASIC

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	23	38


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 2-23-15

TABLE 1

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

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

Where: L = Taper length in feet
 W = Width of offset in feet
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

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

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
 ** - Longitudinal buffer space or flagger station spacing
 *** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

NO SCALE

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

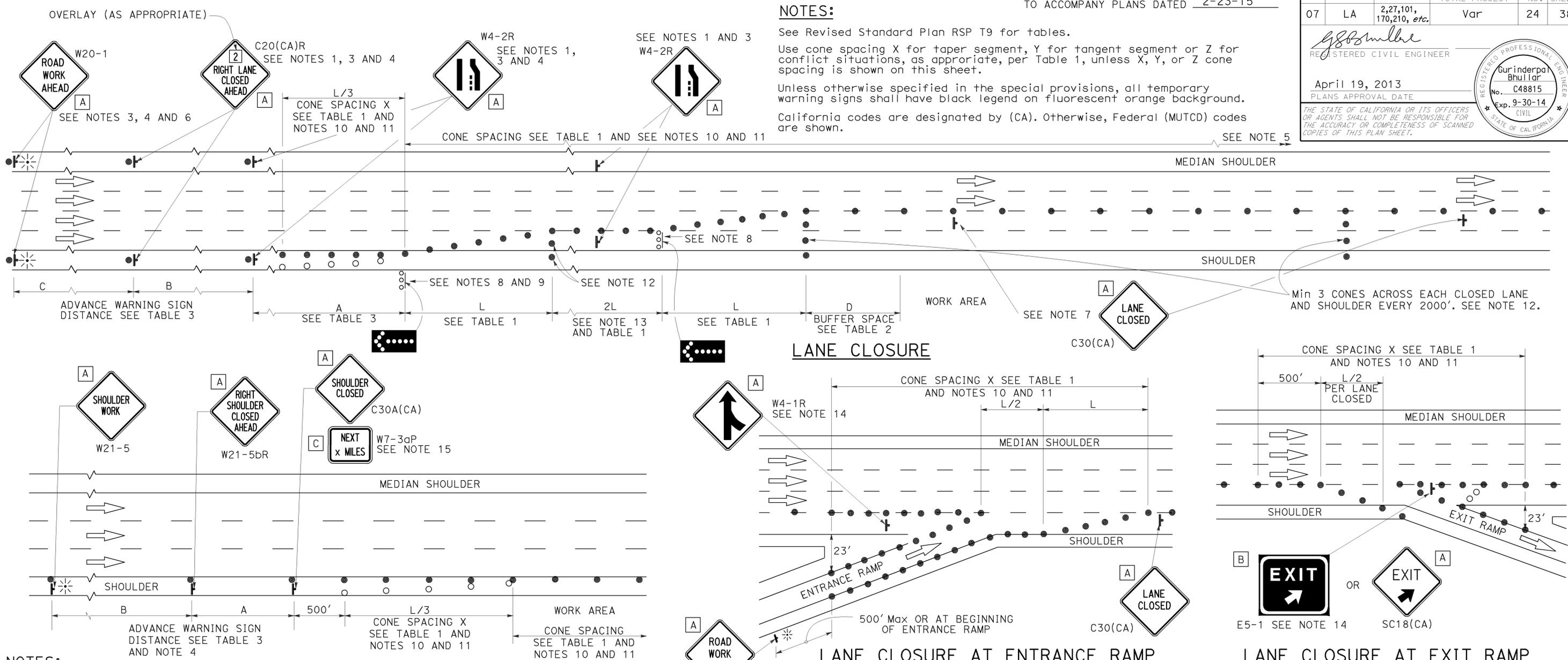
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	24	38

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Gurinderpal Bhullar
 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.



- 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)L and W4-2L signs shall be used.
 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.

- LANE CLOSURE AT ENTRANCE RAMP**
- LANE CLOSURE AT EXIT RAMP**
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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	25	38

Devinder Singh
 REGISTERED CIVIL ENGINEER
 October 17, 2014
 PLANS APPROVAL DATE
 No. C50470
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER

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:

See Revised Standard Plan RSP T9 for tables.

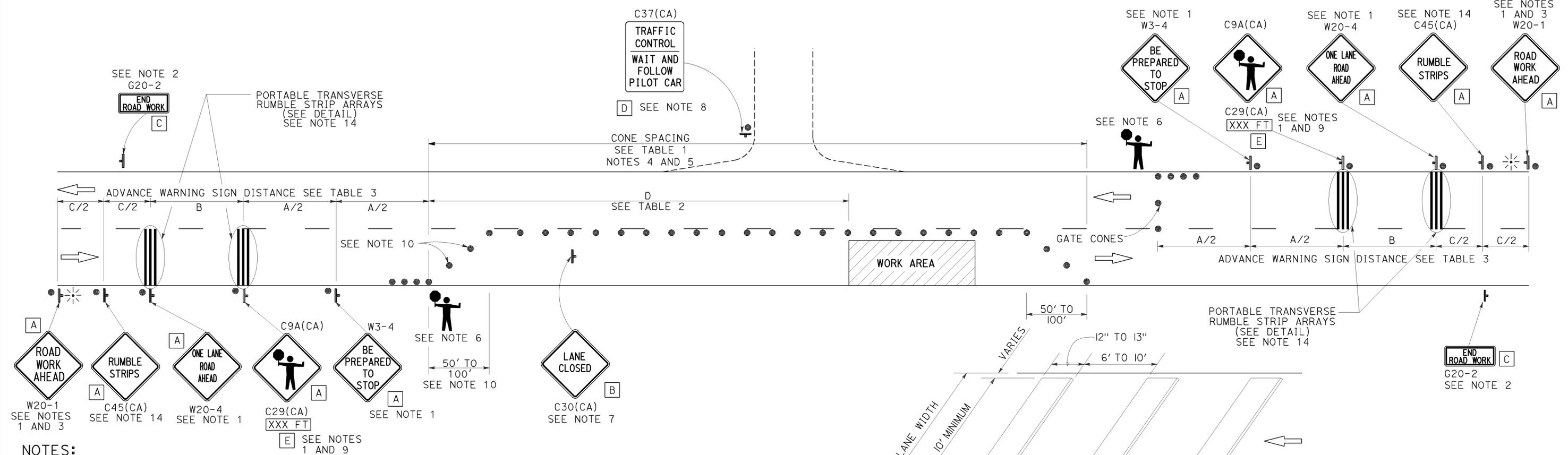
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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.

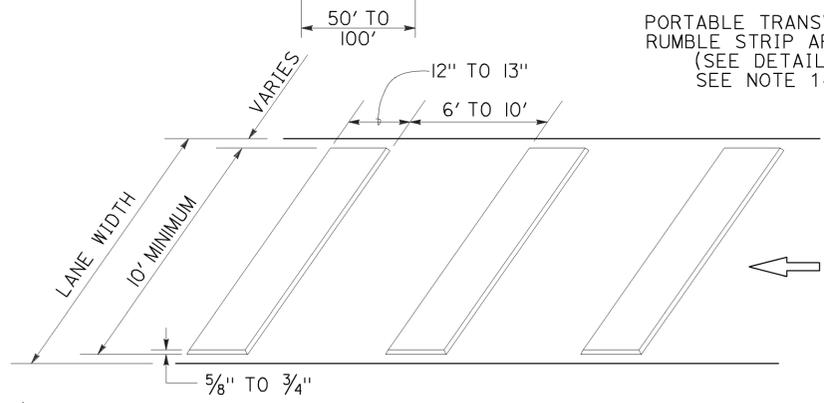
TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 2-23-15



- NOTES:**
- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
 - If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
 - All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
 - Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
 - Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.

- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions



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

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
07	LA	2,27,101, 170,210, etc.	Var	26	38

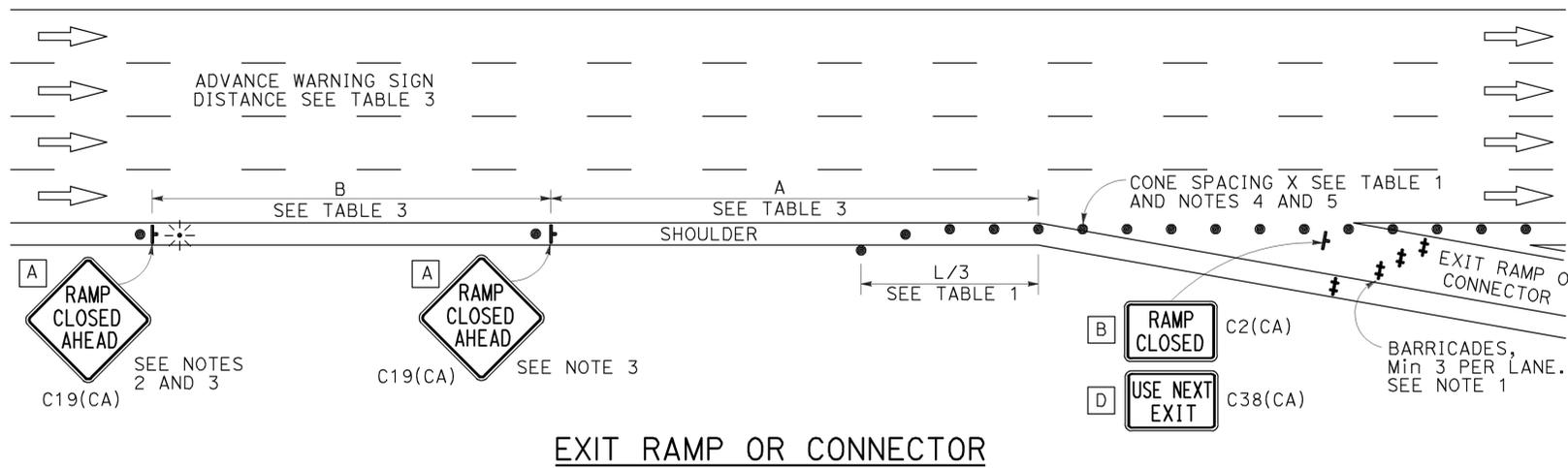
Gurinderpal Bhullar
 REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

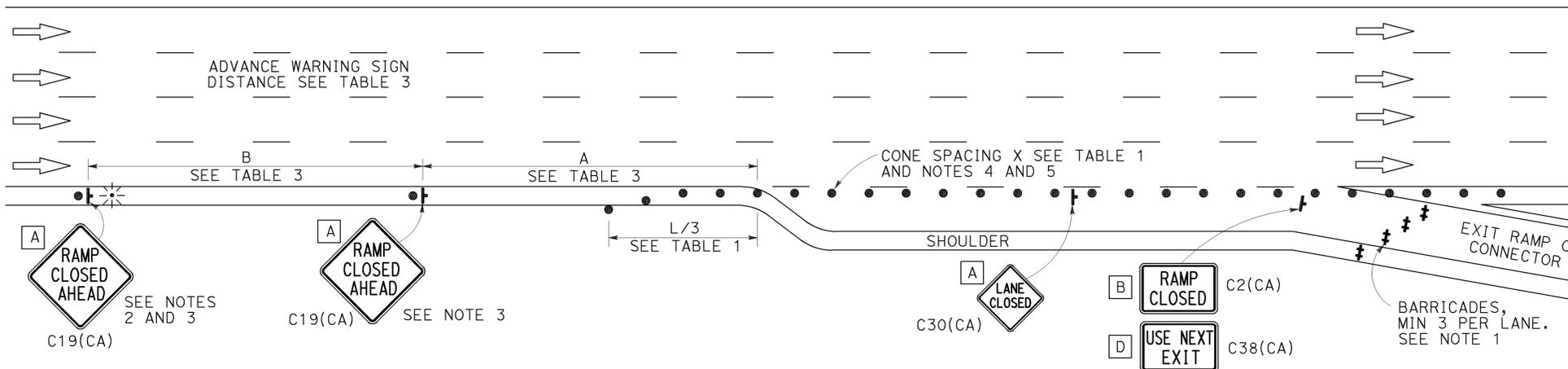
TO ACCOMPANY PLANS DATED 2-23-15

NOTES:

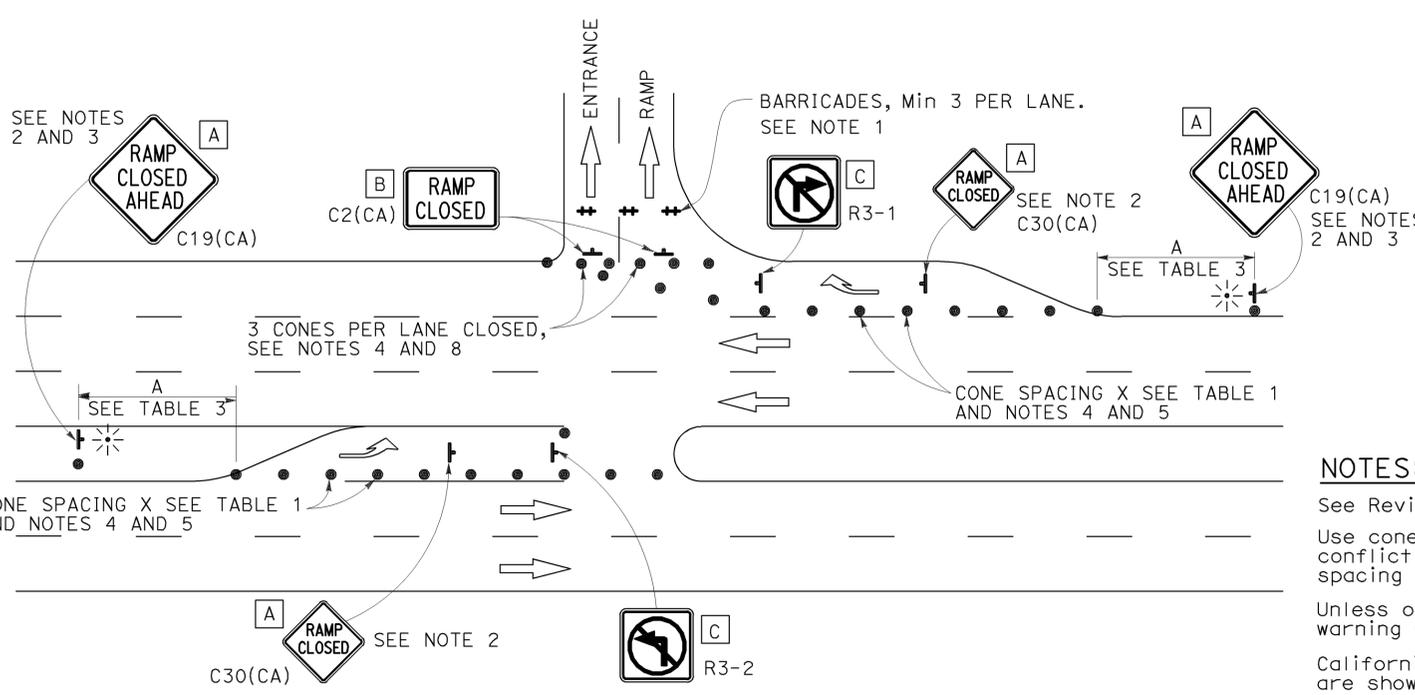
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed 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.



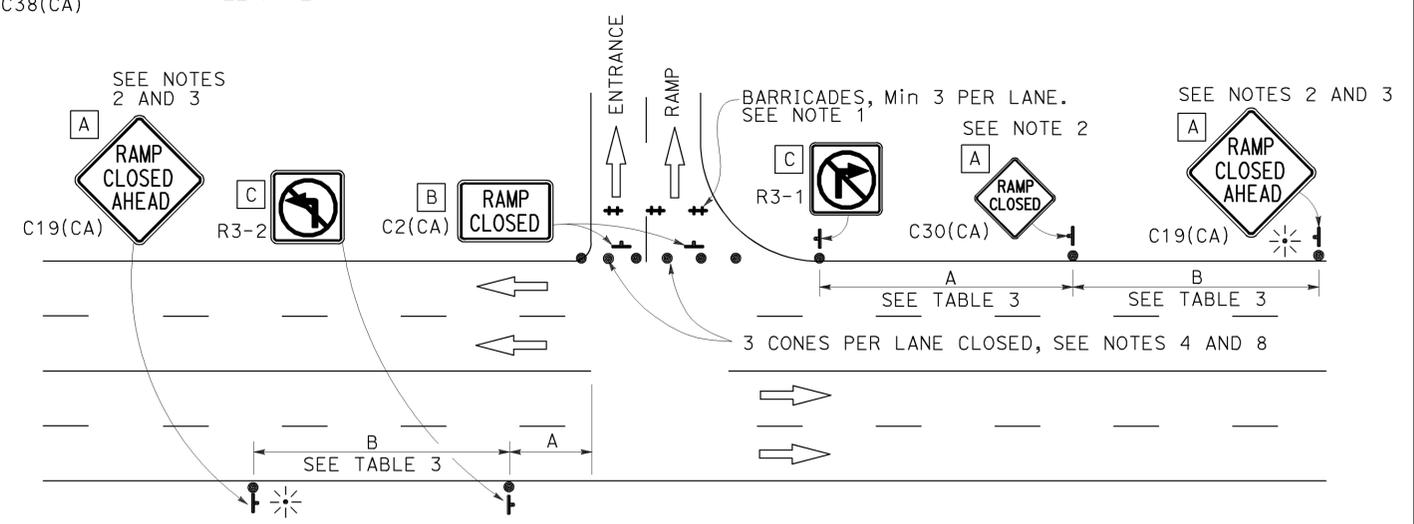
EXIT RAMP OR CONNECTOR



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
07	LA	2,27,101, 170,210, etc.	Var	27	38

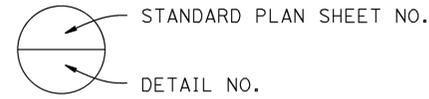
2/08/14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/15
 CIVIL
 STATE OF CALIFORNIA
 GERALD D. JOO
 REGISTERED PROFESSIONAL ENGINEER
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INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	GENERAL PLAN NO. 4
5	GENERAL PLAN NO. 5
6	GENERAL PLAN NO. 6
7	GENERAL PLAN NO. 7
8	GENERAL PLAN NO. 8
9	GENERAL PLAN NO. 9
10	MISCELLANEOUS DETAILS NO. 1
11	MISCELLANEOUS DETAILS NO. 2
12	STRUCTURE APPROACH TYPE R(30D)

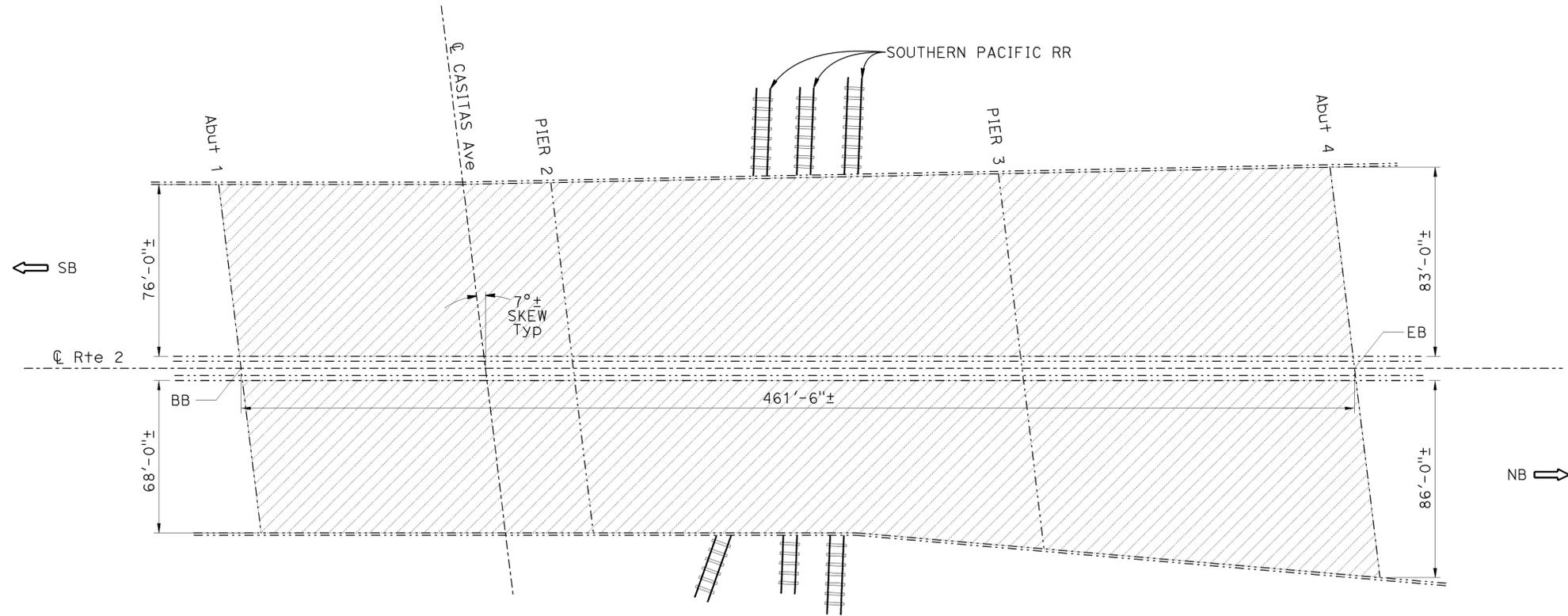
STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.
- Indicates location of clean expansion joint and placement of new joint seal.



TAYLOR YARD OH

Br No. 53-1039, Rte 2, PM 15.81
NO SCALE



TAYLOR YARD OVERHEAD

BRIDGE NO. 53-1039

QUANTITIES

	LUMP SUM
PUBLIC SAFETY PLAN	
PREPARE CONCRETE BRIDGE DECK SURFACE	72,500 SQFT
TREAT BRIDGE DECK	72,500 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	910 GAL

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE	BRIDGE NO.	ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES GENERAL PLAN NO. 1			
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang		CHECKED G. JOO	STRUCTURE MAINTENANCE DESIGN		Various		
	QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts		PLANS AND SPECS COMPARED	T. Geerts		Varies		
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3489	PROJECT NUMBER & PHASE: 0713000447-1	CONTRACT NO.: 07-2W7804	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 01 OF 12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	28	38

Gerald Joo 2/08/14
 REGISTERED CIVIL ENGINEER DATE

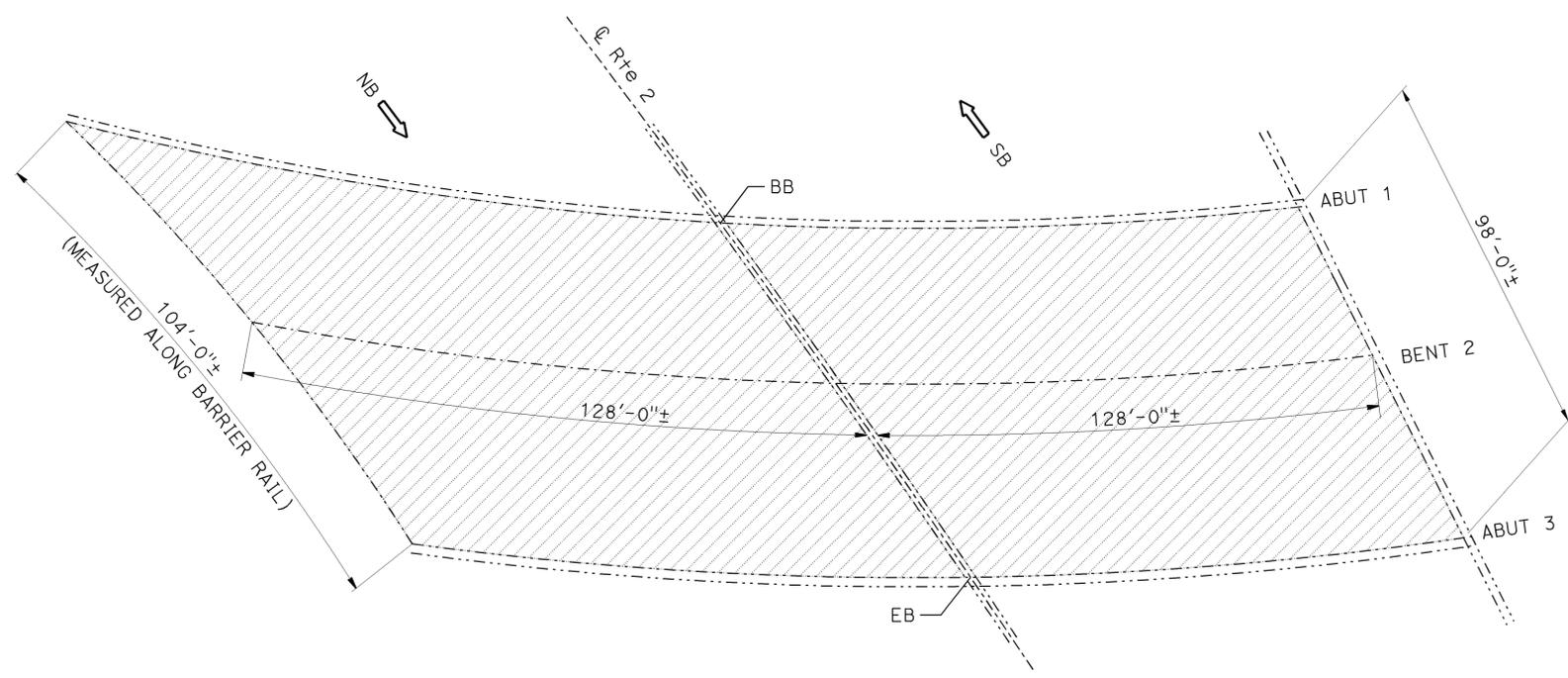
2-23-15
 PLANS APPROVAL DATE

No. C65380
 Exp. 09/30/15
 CIVIL

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LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.



DELAY DRIVE OH
 Br No. 53-1040, Rte 2, PM 16.12
 NO SCALE



DELAY DRIVE OVERHEAD BRIDGE NO. 53-1040

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	26,000 SQFT
TREAT BRIDGE DECK	26,000 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	325 GAL

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang
QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

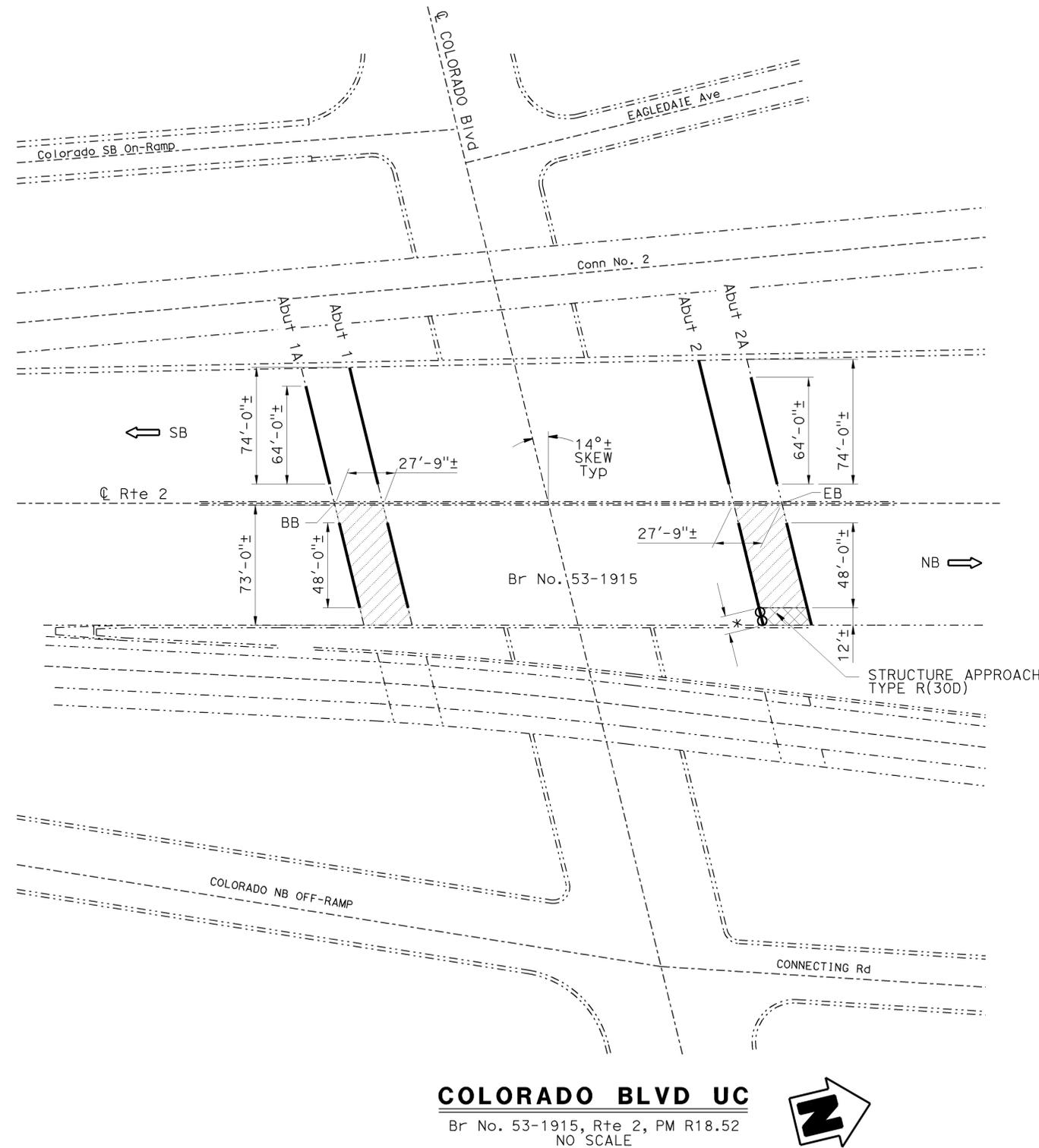
BRIDGE NO.	Various
POST MILE	Varies

ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES
GENERAL PLAN NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	29	38

REGISTERED CIVIL ENGINEER DATE 2/08/14
 PLANS APPROVAL DATE 2-23-15
 No. C65380
 Exp. 09/30/15
 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.



LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.
- ▩ Indicates limits of remove existing PCC and AC approach and place new Structure Approach Type R(30D). For details, see "STRUCTURE APPROACH TYPE R(30D)" sheet.
- Indicates location of clean expansion joint and placement of new joint seal.
- ⊖ Indicates limits of placement of new joint seal.
- ✱ Indicates limits of paving notch extension.

COLORADO BOULEVARD OVERHEAD BRIDGE NO. 53-1915

QUANTITIES

	LUMP SUM
PUBLIC SAFETY PLAN	
PREPARE CONCRETE BRIDGE DECK SURFACE	3,800 SQFT
TREAT BRIDGE DECK	3,800 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	50 GAL
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	16 CY
PAVING NOTCH EXTENSION	10 CF
CLEAN EXPANSION JOINT	486 LF
JOINT SEAL (MR 1/2")	486 LF

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	BY T. Dang	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang	CHECKED G. JOO
QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts	PLANS AND SPECS COMPARED T. Geerts

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies

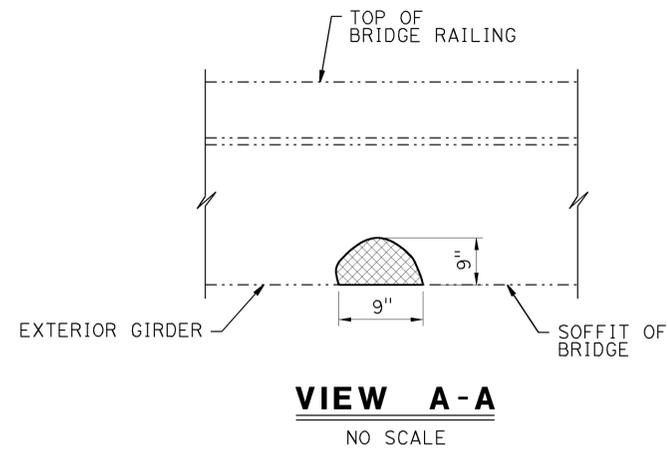
ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES
 GENERAL PLAN NO. 3

USERNAME => s129239 DATE PLOTTED => 08-DEC-2014 TIME PLOTTED => 09:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	30	38

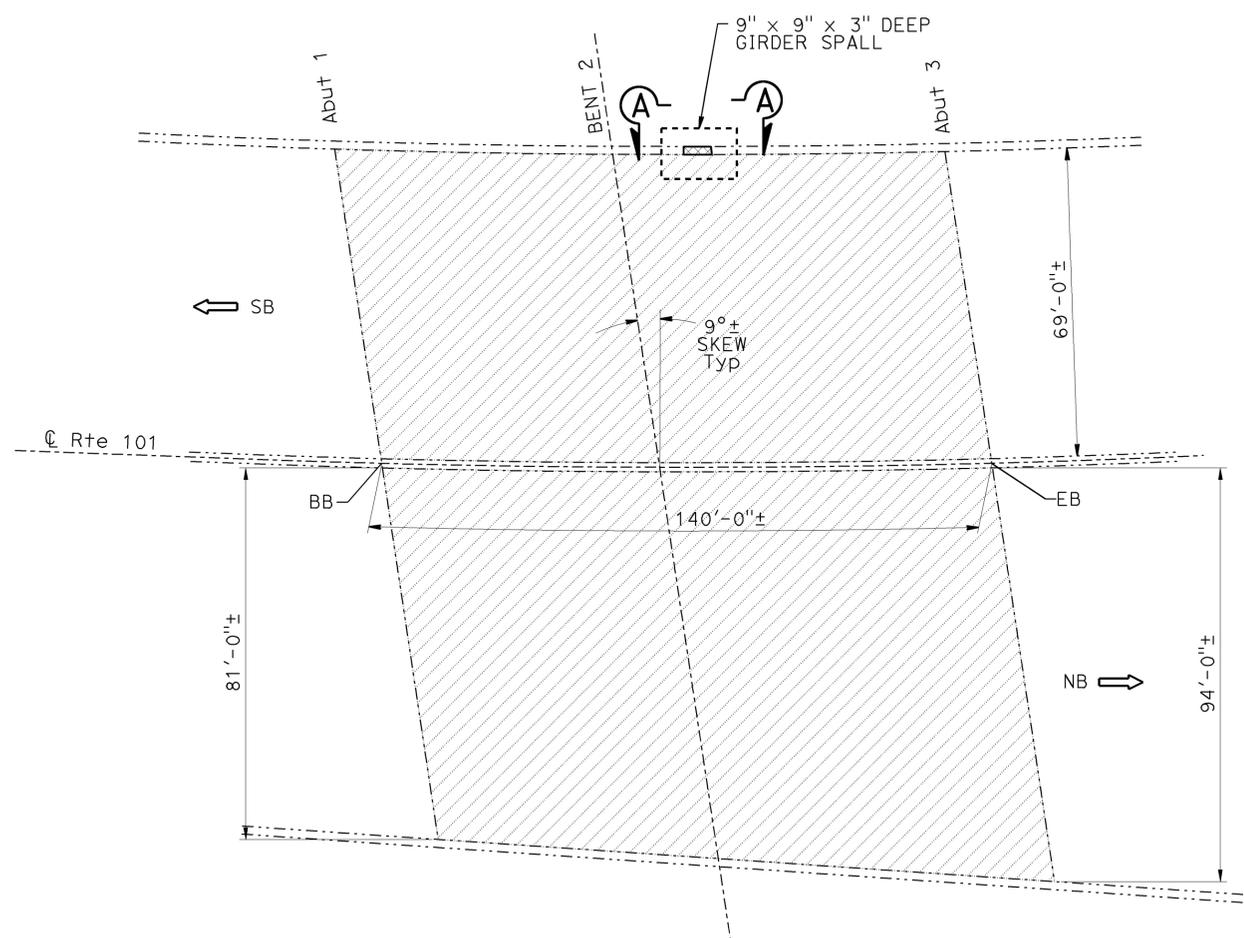
REGISTERED CIVIL ENGINEER DATE 2/08/14
 PLANS APPROVAL DATE 2-23-15
 No. C65380
 Exp. 09/30/15
 CIVIL
 STATE OF CALIFORNIA

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LEGEND:

- Indicates existing.
- ➔ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.
- ▩ Indicates repair spalled surface area. See "SPALLED SURFACE AREA DETAIL" on "MISCELLANEOUS DETAILS NO. 2" sheet.

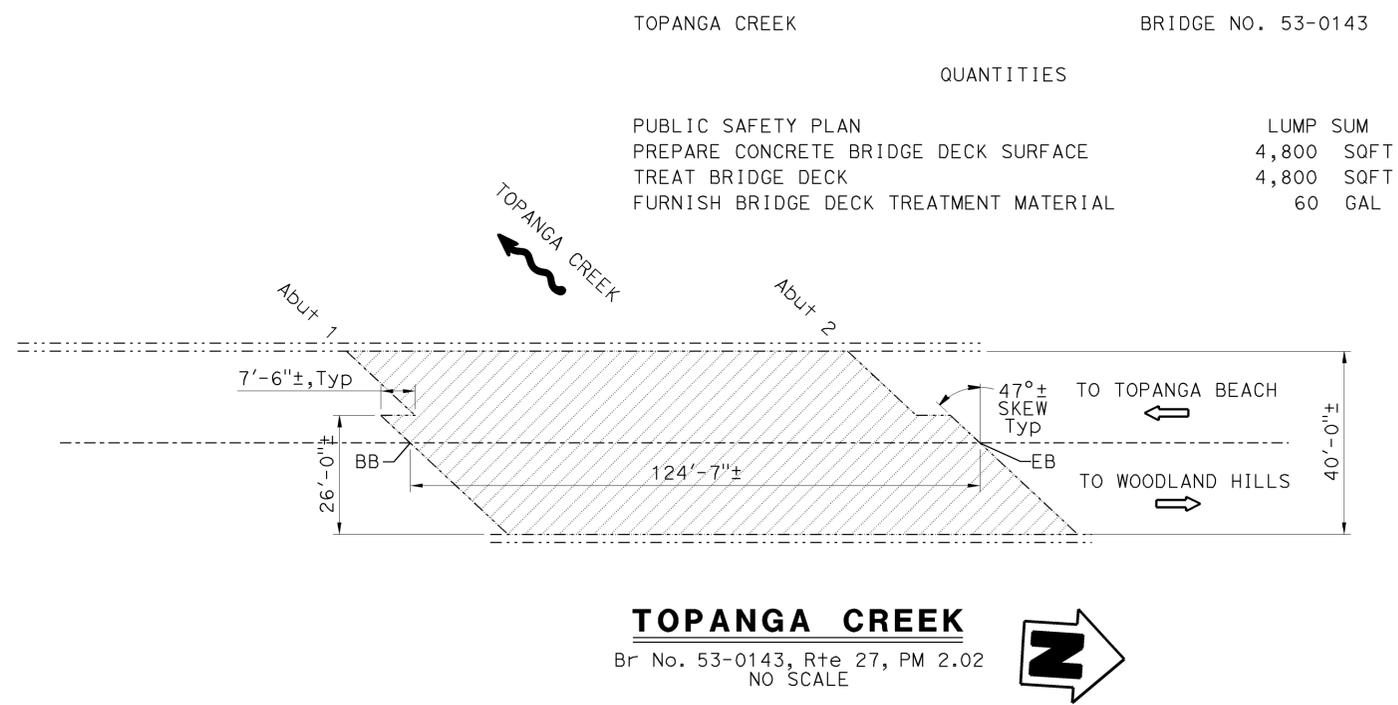


ROUTE 101/27 SEPARATION
 Br No. 53-1064, Rte 101, PM 25.34
 NO SCALE

ROUTE 101/27 SEPARATION BRIDGE NO. 53-1064

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
REPAIR SPALLED SURFACE AREA	1 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	22,000 SQFT
TREAT BRIDGE DECK	22,000 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	275 GAL



TOPANGA CREEK
 Br No. 53-0143, Rte 27, PM 2.02
 NO SCALE

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	4,800 SQFT
TREAT BRIDGE DECK	4,800 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	60 GAL

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	BY T. Dang	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang	CHECKED G. JOO
QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts	PLANS AND SPECS COMPARED T. Geerts

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various

POST MILE Varies

ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES

GENERAL PLAN NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	31	38

2/08/14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/15
 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.

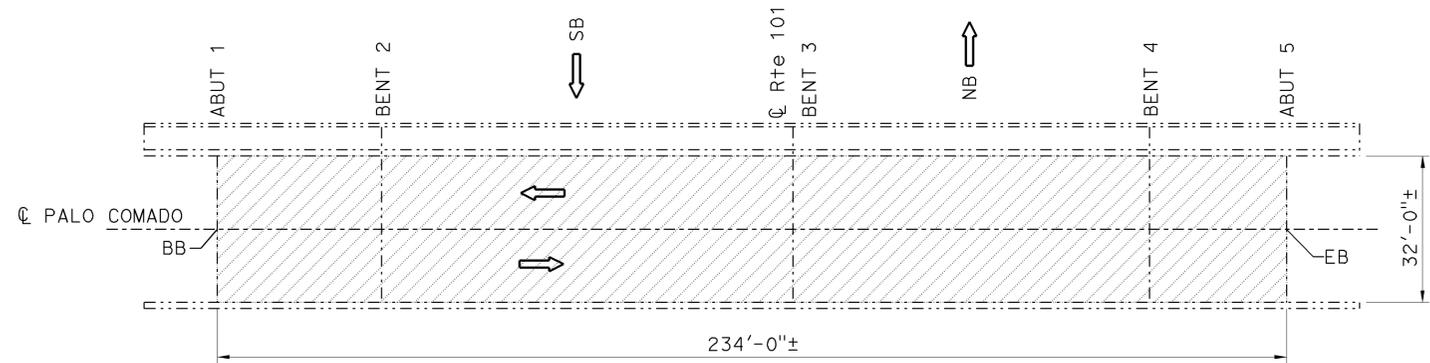
LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.

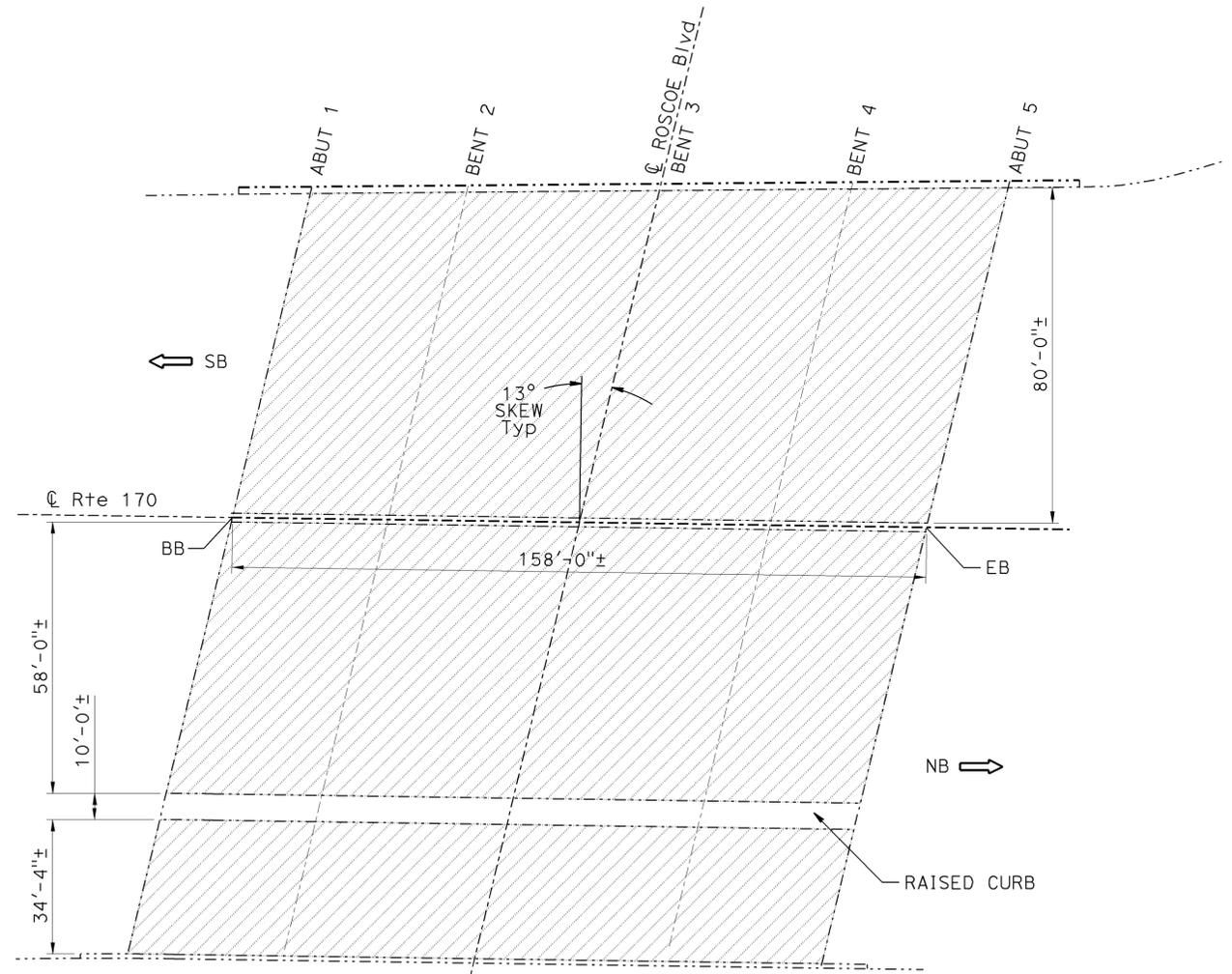
PALO COMADO OVERCROSSING BRIDGE NO. 53-1678

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	7,500 SQFT
TREAT BRIDGE DECK	7,500 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	95 GAL



PALO COMADO OC
 Br No. 53-1678, Rte 101, PM 33.69
 1" = 20'



ROSCOE BLVD UC

Br No. 53-1675, Rte 170, PM R19.72
 NO SCALE



ROSCOE BOULEVARD UNDERCROSSING BRIDGE NO. 53-1675

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	27,500 SQFT
TREAT BRIDGE DECK	27,500 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	345 GAL

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	BY T. Dang	CHECKED G. JOO	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES GENERAL PLAN NO. 5
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang	CHECKED T. Geerts			POST MILE	
	QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts	CHECKED T. Geerts		Varies		

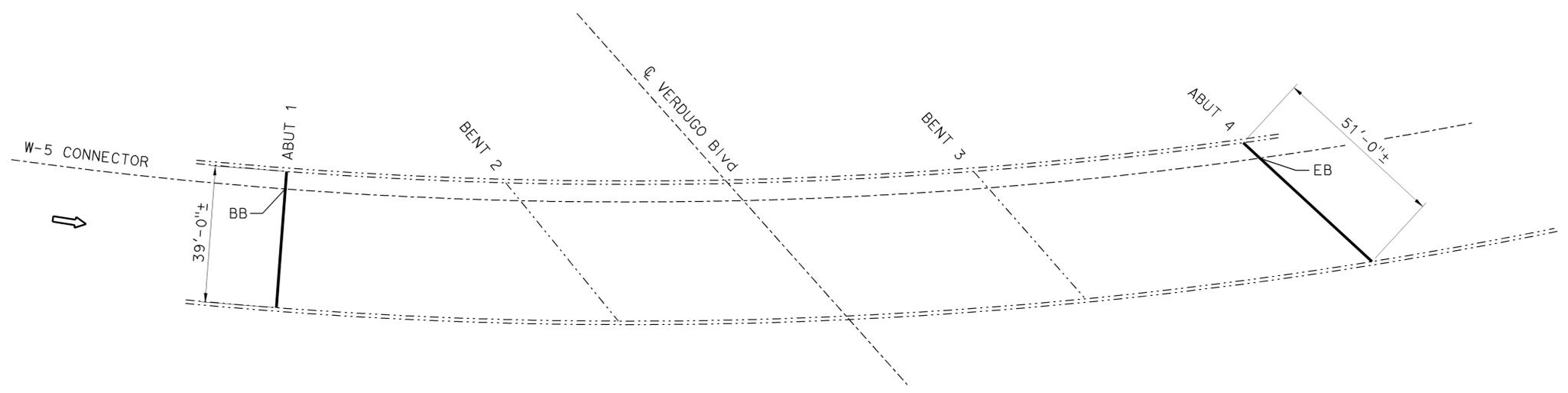
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3489
 PROJECT NUMBER & PHASE: 0713000447-1
 CONTRACT NO.: 07-2W7804
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 4-08-14, 5-14-14, 11-12-14
 SHEET 05 OF 12

USERNAME => s129239 DATE PLOTTED => 08-DEC-2014 TIME PLOTTED => 09:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	32	38
 REGISTERED CIVIL ENGINEER DATE 2/08/14					
PLANS APPROVAL DATE 2-23-15					
No. C65380 Exp. 09/30/15 CIVIL					
<i>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.</i>					

LEGEND:

- Indicates existing.
- ➔ Indicates direction of traffic.
- Indicates location of clean expansion joint and placement of new joint seal.



W210-W2 CONNECTOR OC
 Br No. 53-2220F, Rte 210, PM R18.77
 NO SCALE



W210-W2 CONNECTOR OVERCROSSING BRIDGE NO. 53-2220F

QUANTITIES

CLEAN EXPANSION JOINT	90 LF
JOINT SEAL (MR 1/2")	90 LF

NOTE:
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Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES GENERAL PLAN NO. 6			
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang		CHECKED G. JOO		POST MILE		
	QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts		PLANS AND SPECS COMPARED T. Geerts		Varies		
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3489 PROJECT NUMBER & PHASE: 0713000447-1	CONTRACT NO.: 07-2W7804	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 4-08-14 5-14-14 11-12-14	SHEET 06 OF 12

USERNAME => s129239 DATE PLOTTED => 08-DEC-2014 TIME PLOTTED => 09:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	33	38

REGISTERED CIVIL ENGINEER DATE 2/08/14
 PLANS APPROVAL DATE 2-23-15
 No. C65380
 Exp. 09/30/15
 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.

LEGEND:

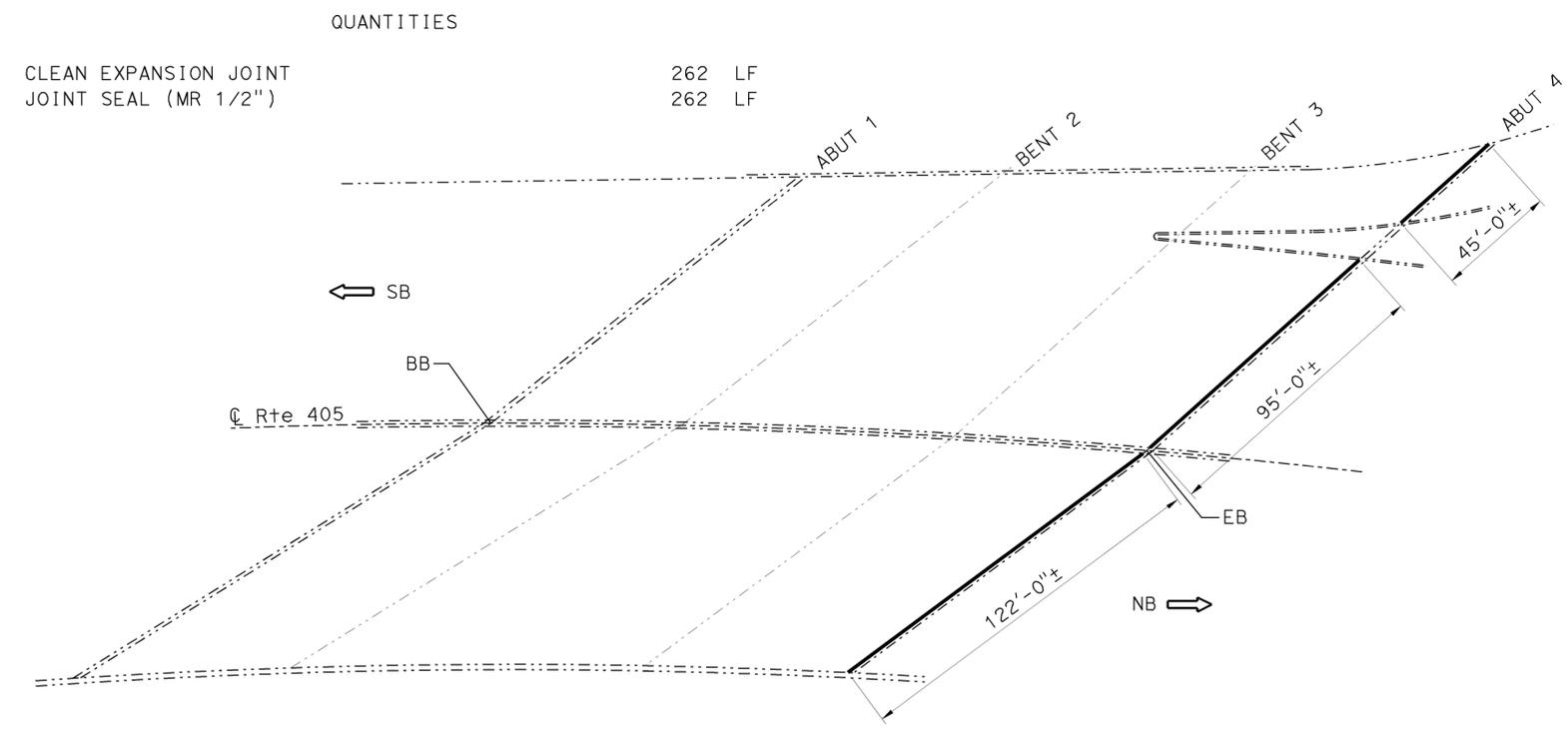
- Indicates existing.
- Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.
- Indicates location of clean expansion joint and placement of new joint seal.
- ▤ Indicates removal of unsound concrete and place rapid setting concrete patch. See "DECK DAMAGE REPAIR DETAIL" on "MISCELLANEOUS DETAILS NO. 2" sheet.

VICTORY BOULEVARD UNDERCROSSING BRIDGE NO. 53-1449

QUANTITIES

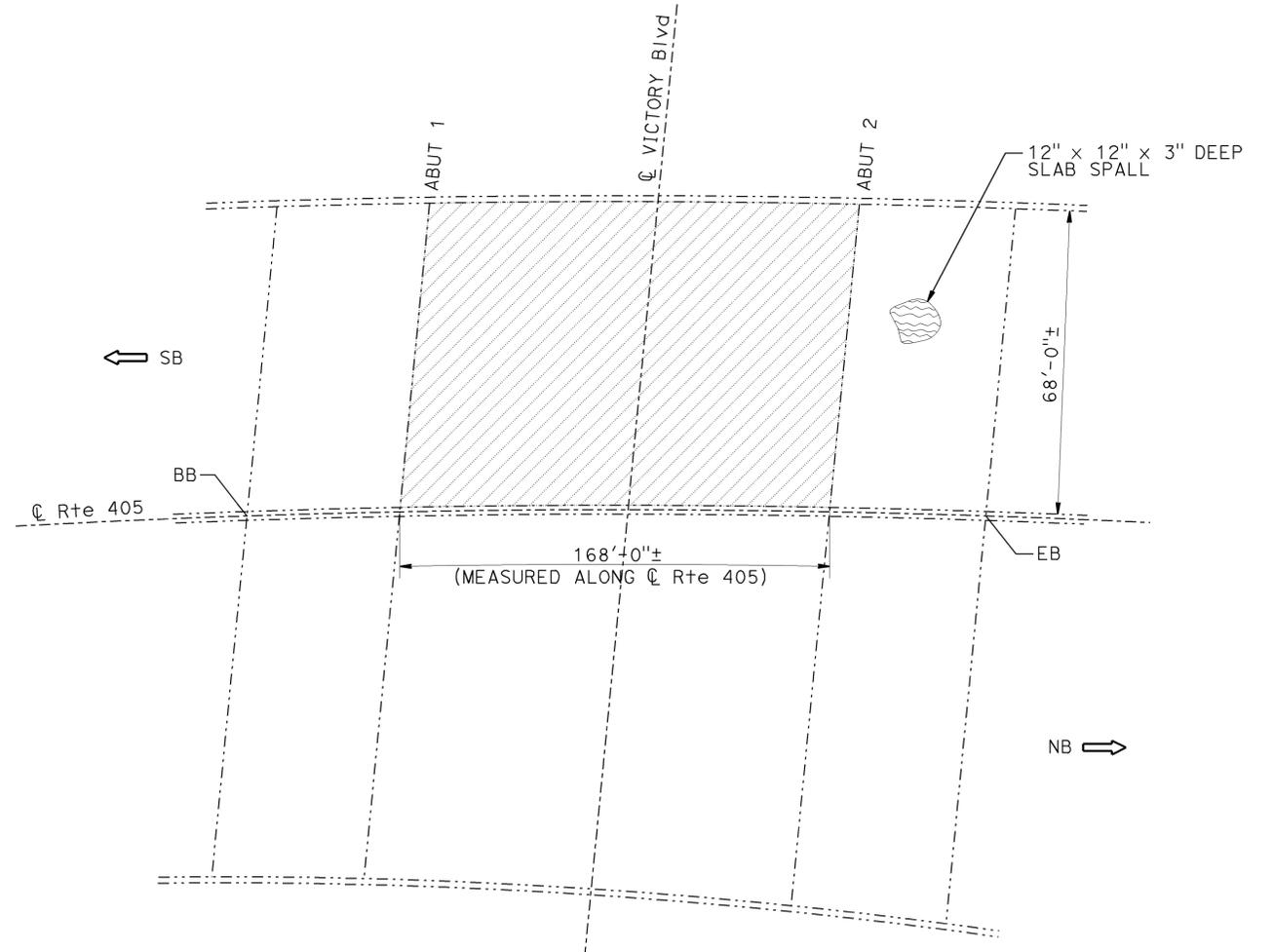
	LUMP SUM
PUBLIC SAFETY PLAN	1 CF
RAPID SETTING CONCRETE (PATCH)	1 CF
REMOVE UNSOUND CONCRETE	11,500 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	11,500 SQFT
TREAT BRIDGE DECK	145 GAL
FURNISH BRIDGE DECK TREATMENT MATERIAL	

WEST VAN NUYS OVERHEAD BRIDGE NO. 53-1362



QUANTITIES

CLEAN EXPANSION JOINT	262 LF
JOINT SEAL (MR 1/2")	262 LF



VICTORY BLVD UC
 Br No. 53-1449, Rte 405, PM 41.36
 1" = 20'

WEST VAN NUYS OH
 Br No. 53-1362, Rte 405, PM 41.27
 1" = 30'

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang
QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies

ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES

GENERAL PLAN NO. 7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	34	38

2/08/14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/15
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- Indicates location of clean expansion joint and placement of new joint seal.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.

CHATSWORTH STREET UNDERCROSSING BRIDGE NO. 53-1501

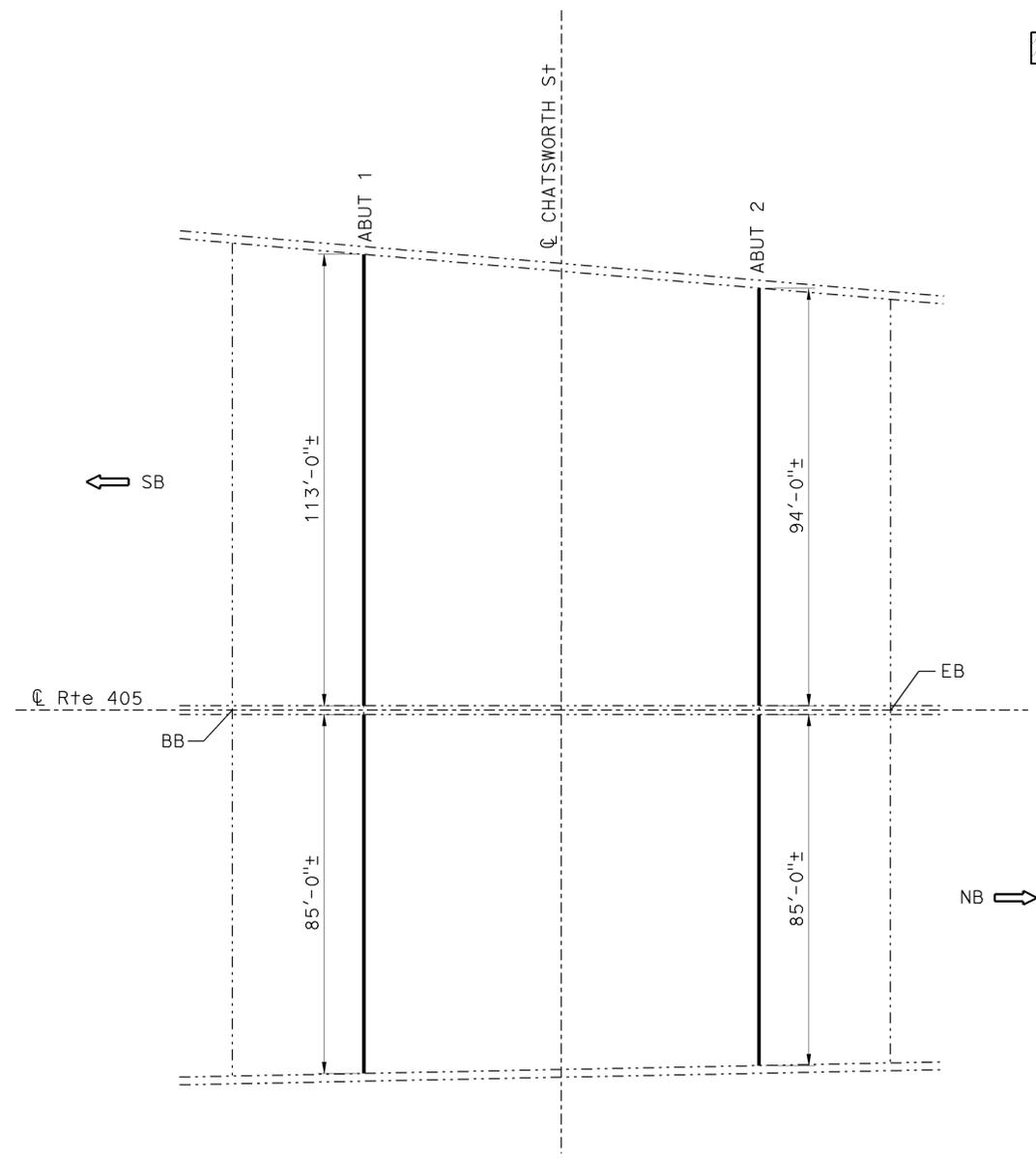
QUANTITIES

CLEAN EXPANSION JOINT	377	LF
JOINT SEAL (MR 1/2")	377	LF

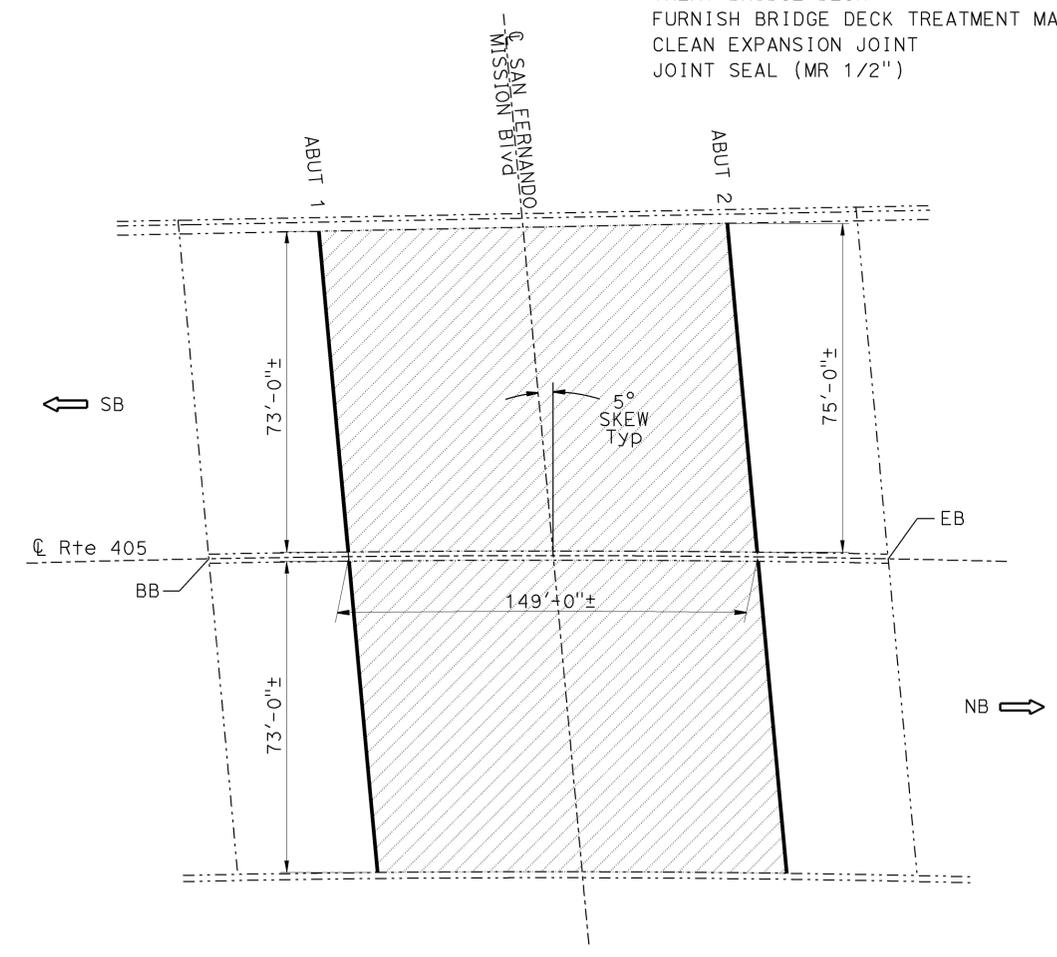
SAN FERNANDO MISSION BOULEVARD BRIDGE NO. 53-1507

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	22,000 SQFT
TREAT BRIDGE DECK	22,000 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	275 GAL
CLEAN EXPANSION JOINT	298 LF
JOINT SEAL (MR 1/2")	298 LF



CHATSWORTH STREET UC
 Br No. 53-1501, Rte 405, PM 46.74
 NO SCALE



SAN FERNANDO MISSION BLVD
 Br No. 53-1507, Rte 405, PM 47.24
 NO SCALE

NOTE:
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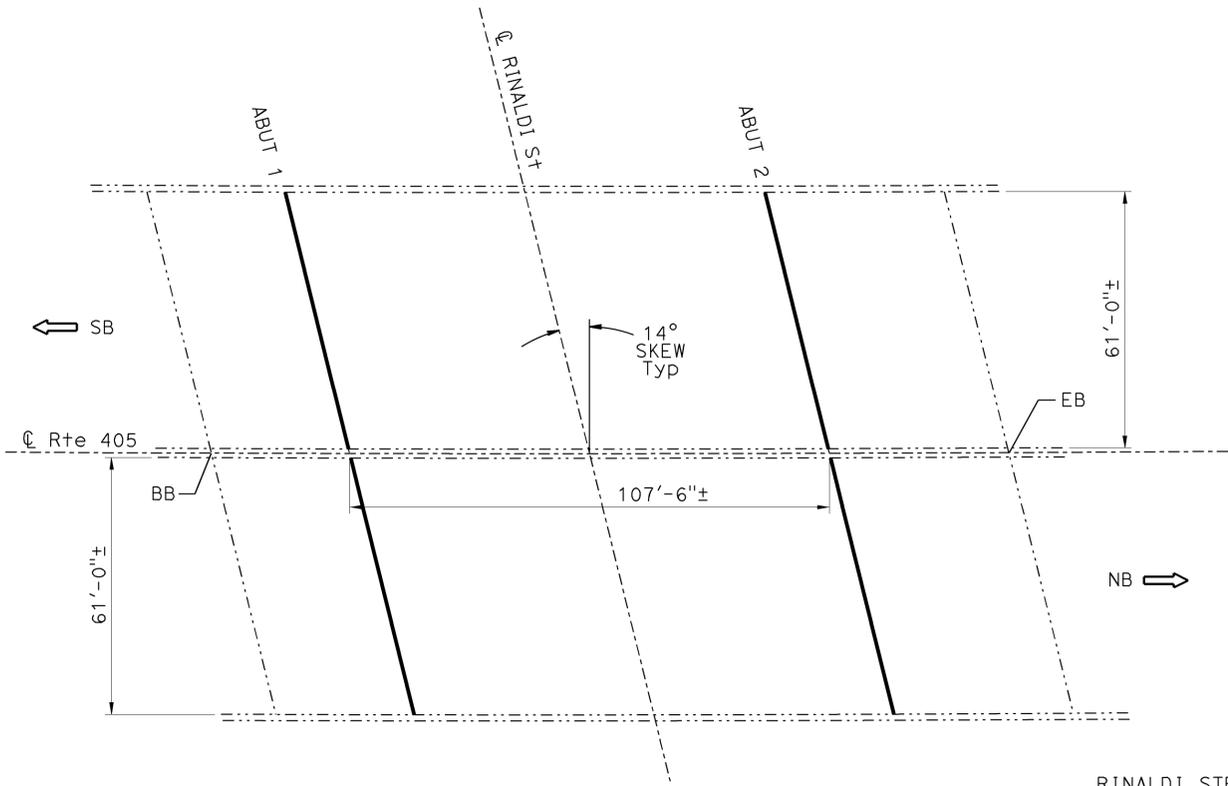
Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES GENERAL PLAN NO. 8
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang		POST MILE	
	QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts		VARIES	

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3489 PROJECT NUMBER & PHASE: 0713000447-1 CONTRACT NO.: 07-2W7804
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
1-14-14	08	12

FILE => 07-2W7804-a-gp08.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	35	38
 REGISTERED CIVIL ENGINEER DATE 2/08/14					
PLANS APPROVAL DATE 2-23-15					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>					



LEGEND:

- Indicates existing.
- ➔ Indicates direction of traffic.
- Indicates location of clean expansion joint and placement of new joint seal.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.

RINALDI STREET UC

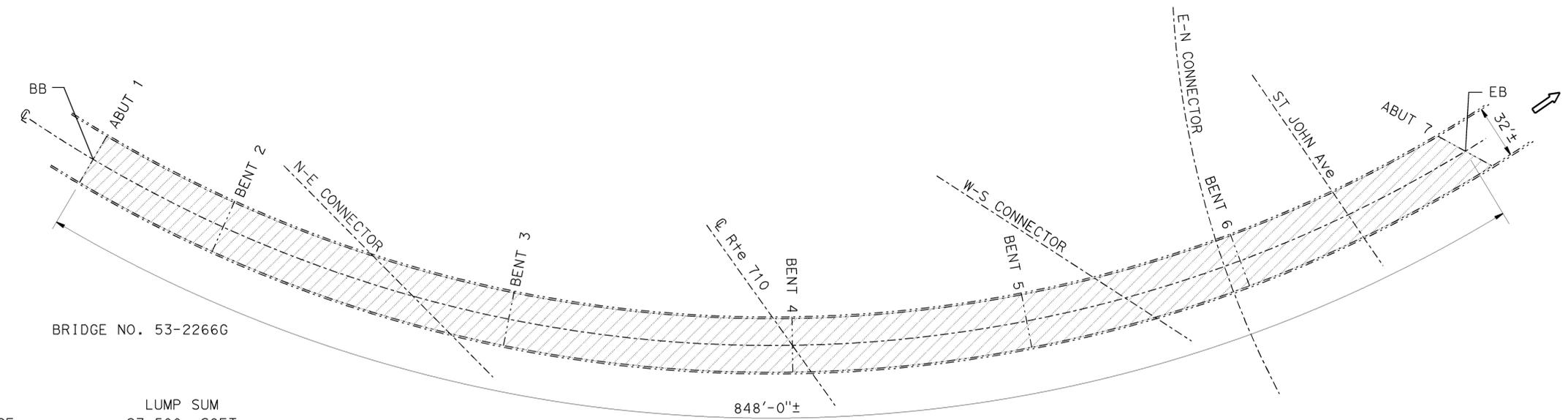
Br No. 53-1506, Rte 405, PM 47.75
1" = 20'



RINALDI STREET UNDERCROSSING BRIDGE NO. 53-1506

QUANTITIES

CLEAN EXPANSION JOINT	252 LF
JOINT SEAL (MR 1/2")	252 LF



N710-W134 CONNECTOR OVERCROSSING BRIDGE NO. 53-2266G

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	27,500 SQFT
TREAT BRIDGE DECK	27,500 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	350 GAL

N710-W134 CONNECTOR OC

Br No. 53-2266G, Rte 710, PM R32.63
NO SCALE



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Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED E. Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang
	QUANTITIES	BY G. Joo	CHECKED E. Li	SPECIFICATIONS	BY T. Geerts

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

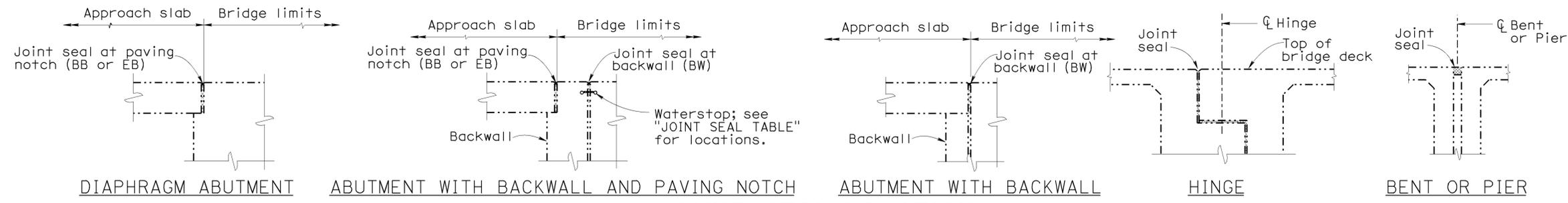
BRIDGE NO. Various
POST MILE Varies

ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES
GENERAL PLAN NO. 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	36	38

2/08/14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/15
 CIVIL
 STATE OF CALIFORNIA

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JOINT SEAL LOCATION

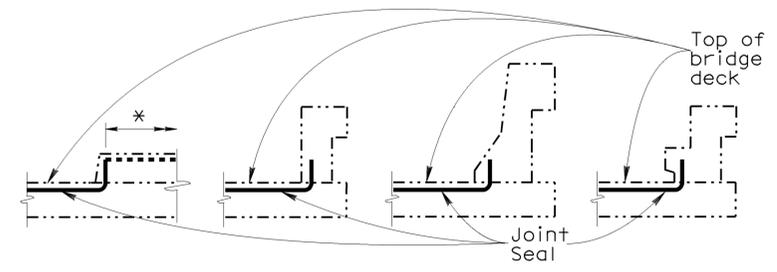
NO SCALE
 Abutment joint seal is not required with AC roadway pavement transverse contact joint.

NOTES:

- The following notes apply to **JOINT SEAL TYPE A:**
- Install Joint Seal (MR = 1/2 ") or Silicone Joint Seal 3" up into curb or barrier rail on the low side of the deck where deck joint aligns with curb or barrier rail joint.
 - For details not shown see B6-21 sheet.
- The following notes apply to **JOINT SEAL TYPE B:**
- Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
 - Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.
 - W1 shall be the smaller of the values determined as follows:
 - A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
 - B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3.0 PSI.
 - Bend Type B joint seal 6 inches up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.
 - For details not shown see B6-21 sheet.

JOINT SEAL TABLE								
BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (INCHES)	APPROX LENGTH (LF)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	LENGTH TO CLEAN EXP JOINT (LF)
		ABUT	PN					
COLORADO BLVD UC	53-1915	ABUT 1	PN	1/2	127	NO	12	127
		ABUT 1A	PN	1/2	116	NO	12	116
		ABUT 2	PN	1/2	127	NO	12	115
		ABUT 2A	PN	1/2	116	NO	12	116
W210-W2 CONNECTOR OC	53-2220F	ABUT 1	PN	1/2	39	NO	12	39
		ABUT 4	PN	1/2	51	NO	12	39
WEST VAN NUYS OH	53-1362	ABUT 4	PN	1/2	262	NO	12	263
		ABUT 1	PN	1/2	198	NO	12	198
CHATSWORTH STREET UC	53-1501	ABUT 2	PN	1/2	179	NO	12	179
		ABUT 1	PN	1/2	148	NO	12	148
SAN FERNANDO MISSION BLVD	53-1507	ABUT 2	PN	1/2	150	NO	12	150
		ABUT 1	PN	1/2	126	NO	12	126
RINALDI STREET UC	53-1506	ABUT 2	PN	1/2	126	NO	12	126
		ABUT 1	PN	1/2	126	NO	12	126

PN = PAVING NOTCH



JOINT SEAL AT LOW SIDE OF DECK

Note: Details shown for illustration purposes only.

For use only where deck joint matches the sidewalk, curb or barrier rail joint.

* Extension of joint seal will be determined by the Engineer if necessary.

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DESIGN	BY G. Joo	CHECKED E. Li
DETAILS	BY T. Dang	CHECKED G. Joo
QUANTITIES	BY G. Joo	CHECKED E. Li

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

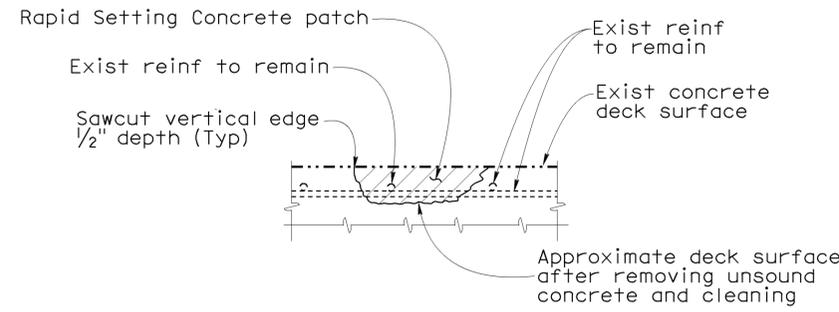
DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies
ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES
MISCELLANEOUS DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,27,101, 170,210, etc.	Var	37	38

2/08/14
 REGISTERED CIVIL ENGINEER DATE
 2-23-15
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/15
 CIVIL
 STATE OF CALIFORNIA

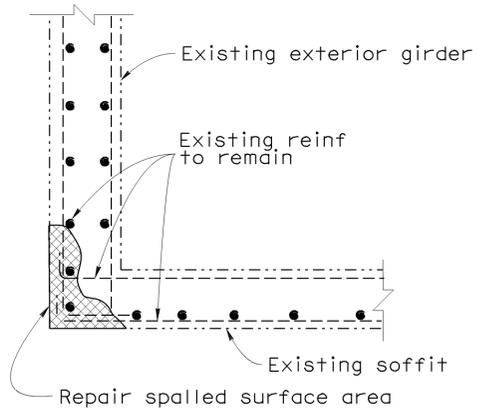
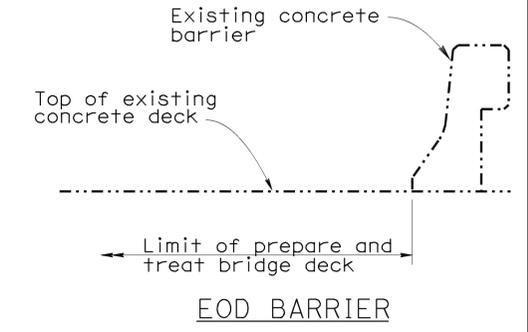
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DECK DAMAGE REPAIR DETAIL

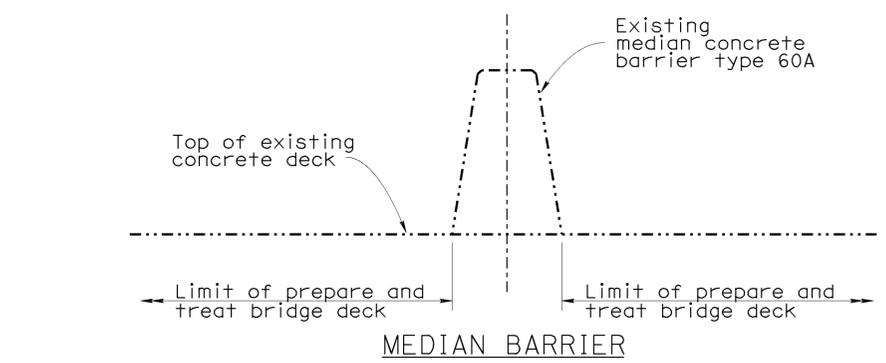
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

- DECK AND SPALL REPAIR NOTES:**
- Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
 - It is responsibility of the Contractor to repair any reinforcement that is accidentally cut by saw cutting operations.
 - When existing transverse reinforcement is exposed in the deck surface, saw cutting may be waived with the approval of the Engineer.
 - The saw cut depth shall not exceed 1/2 inch or the concrete cover over the top steel reinforcing bars, whichever is less.
 - Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original deck surface with rapid setting concrete patch.

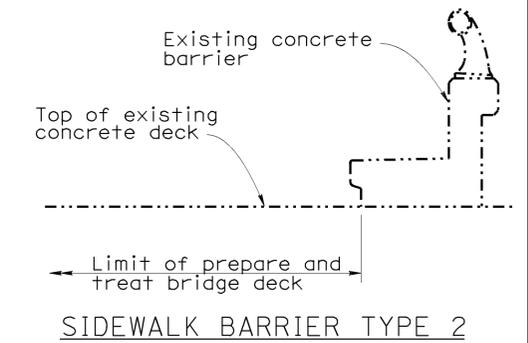


SPALLED SURFACE AREA DETAIL

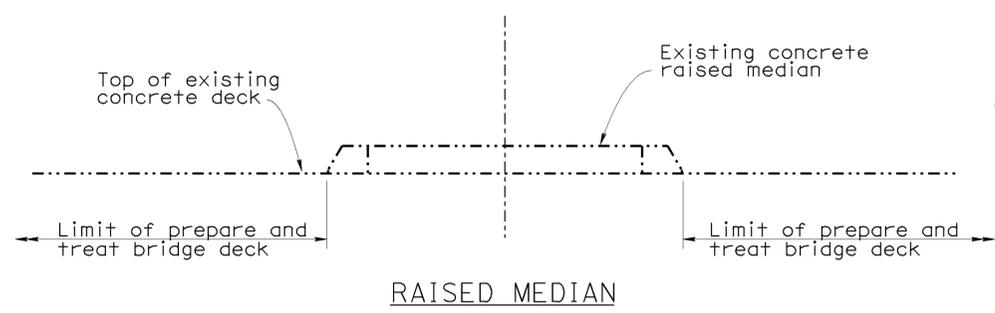
Location will be determined by the Engineer. Reinforcement may be encountered during concrete removal and is to remain undamaged.



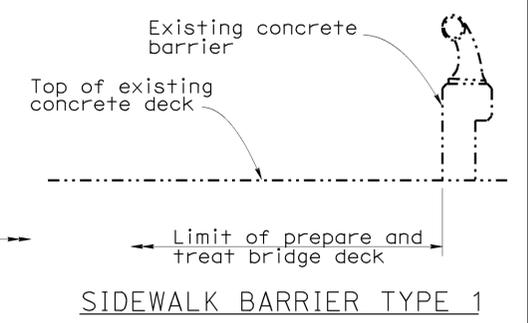
MEDIAN BARRIER



SIDEWALK BARRIER TYPE 2



RAISED MEDIAN



SIDEWALK BARRIER TYPE 1

TYPICAL LIMITS OF DECK WORK

NO SCALE

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DESIGN	BY G. Joo	CHECKED E. Li
DETAILS	BY T. Dang	CHECKED G. Joo
QUANTITIES	BY G. Joo	CHECKED E. Li

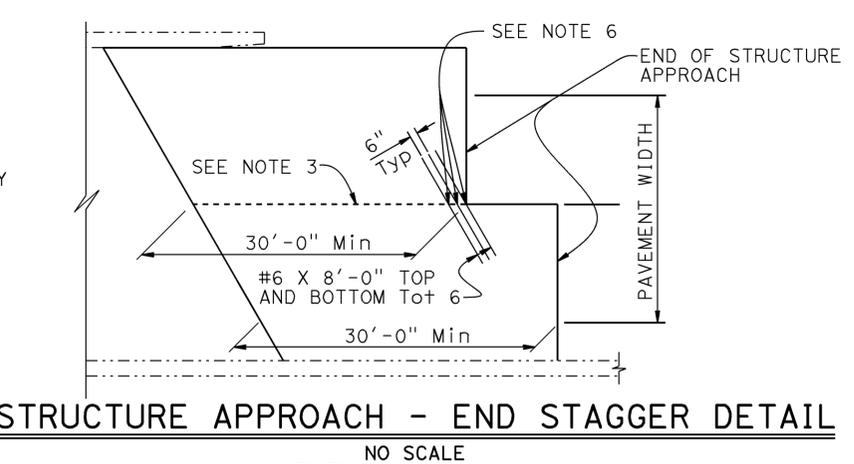
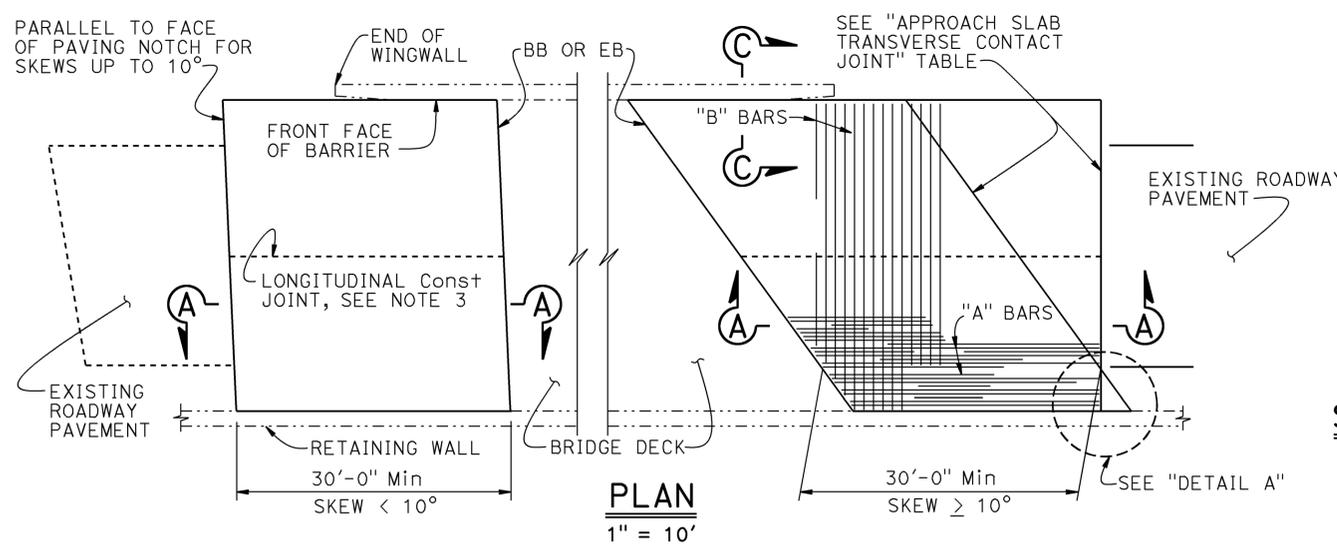
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

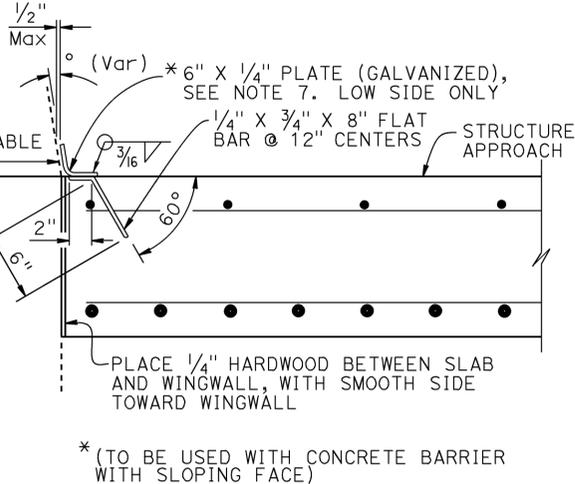
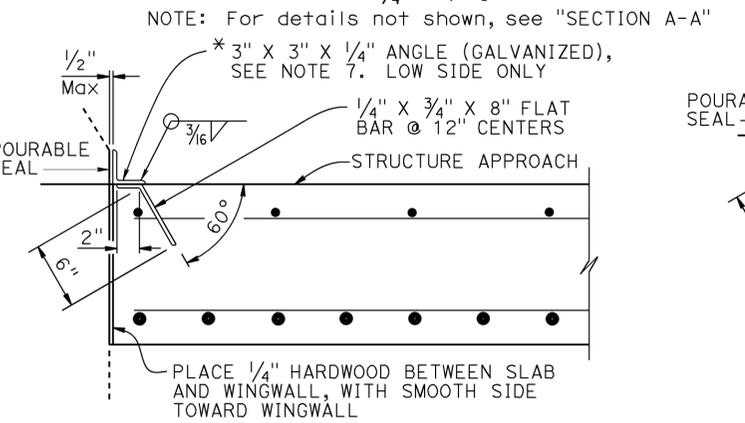
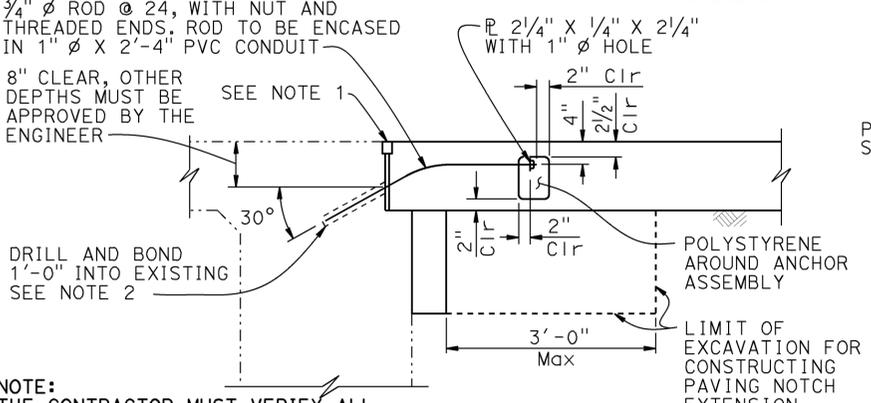
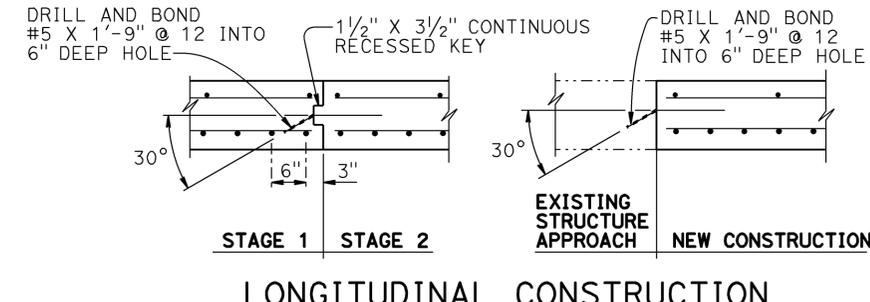
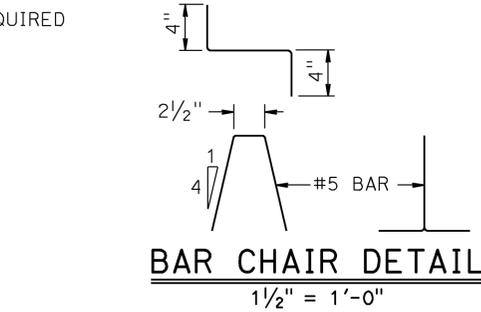
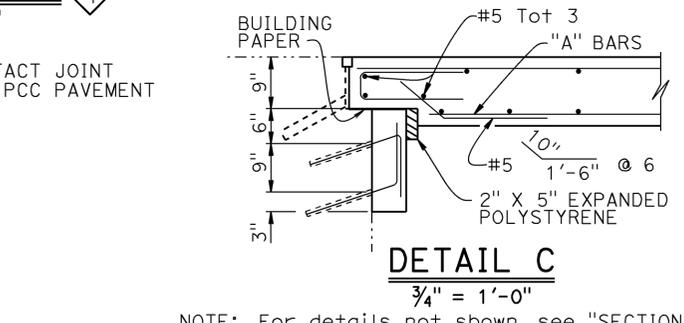
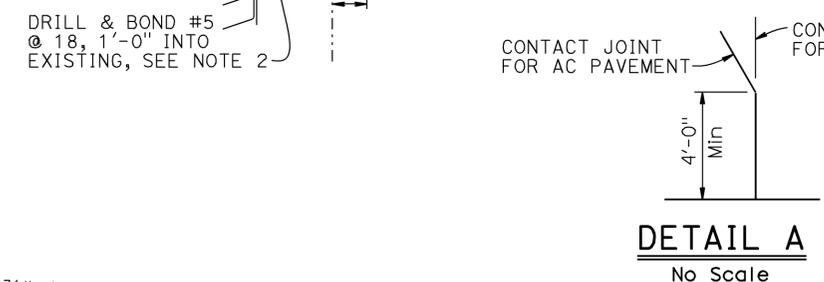
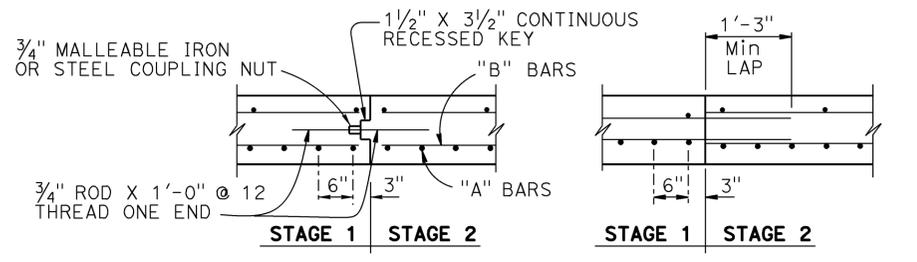
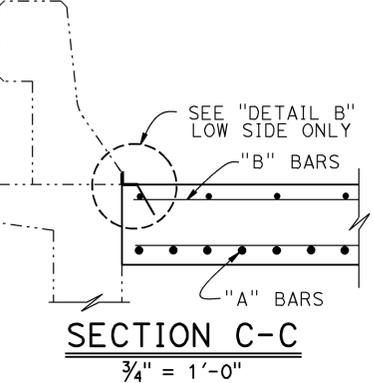
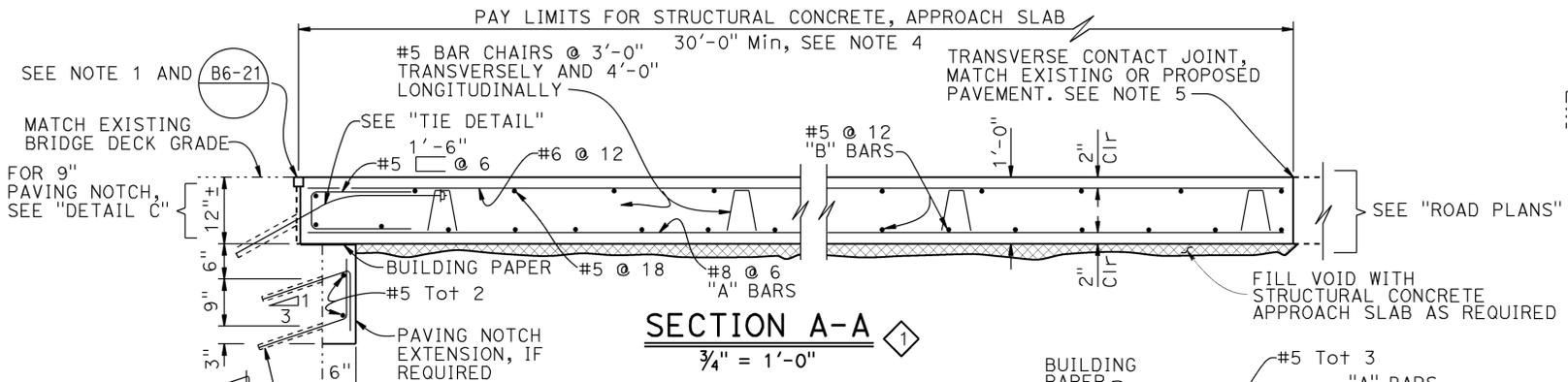
BRIDGE NO.	Various
POST MILE	Varies

ROUTE 2, 27, 101, 170, 210, 405, 710 BRIDGES
MISCELLANEOUS DETAILS NO. 2

TIME PLOTTED => 08-DEC-2014 09:46
 USERNAME => s1292939 DATE PLOTTED => 08-DEC-2014



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

NOTE: THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

REVISED STANDARD DRAWING
 FILE NO. **xs3-150**
 APPROVAL DATE July 2011

REVISION 1

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

SPECIAL DETAILS
 ROUTE 2,27,101,170,210,405,710 BRIDGES
 STRUCTURE APPROACH TYPE R(30D)