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STRUCTURE PLANS

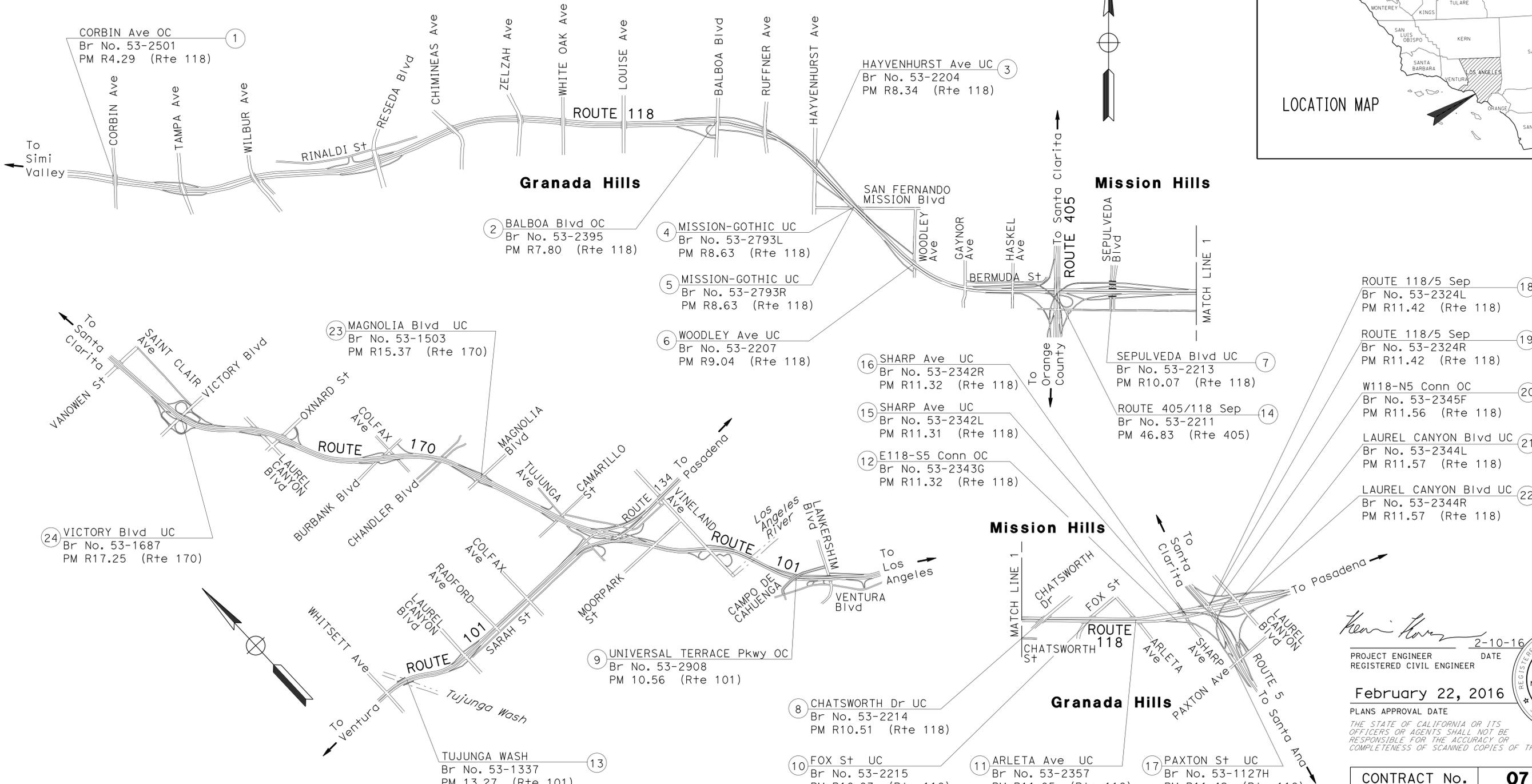
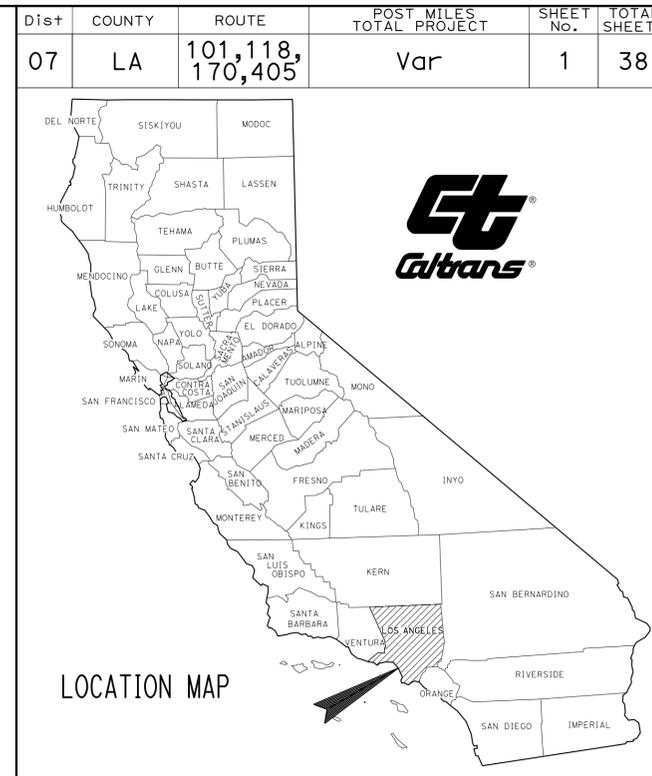
24-38	ROUTES 101, 118, 170 AND 405 BRIDGES
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THE STANDARD PLANS LIST APPLICABLE TO THE CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISION BOOK.

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



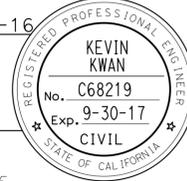
PROJECT MANAGER
CHRISTIAN SAM

DESIGN MANAGER
HAMID SAADATNEJADI

Kevin Kwan
PROJECT ENGINEER
REGISTERED CIVIL ENGINEER
DATE 2-10-16

February 22, 2016
PLANS APPROVAL DATE

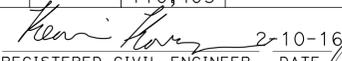
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CONTRACT No.	07-3W0604
PROJECT ID	0715000039

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

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	2	38
 REGISTERED CIVIL ENGINEER DATE 2-10-16					
2-22-16 PLANS APPROVAL DATE					
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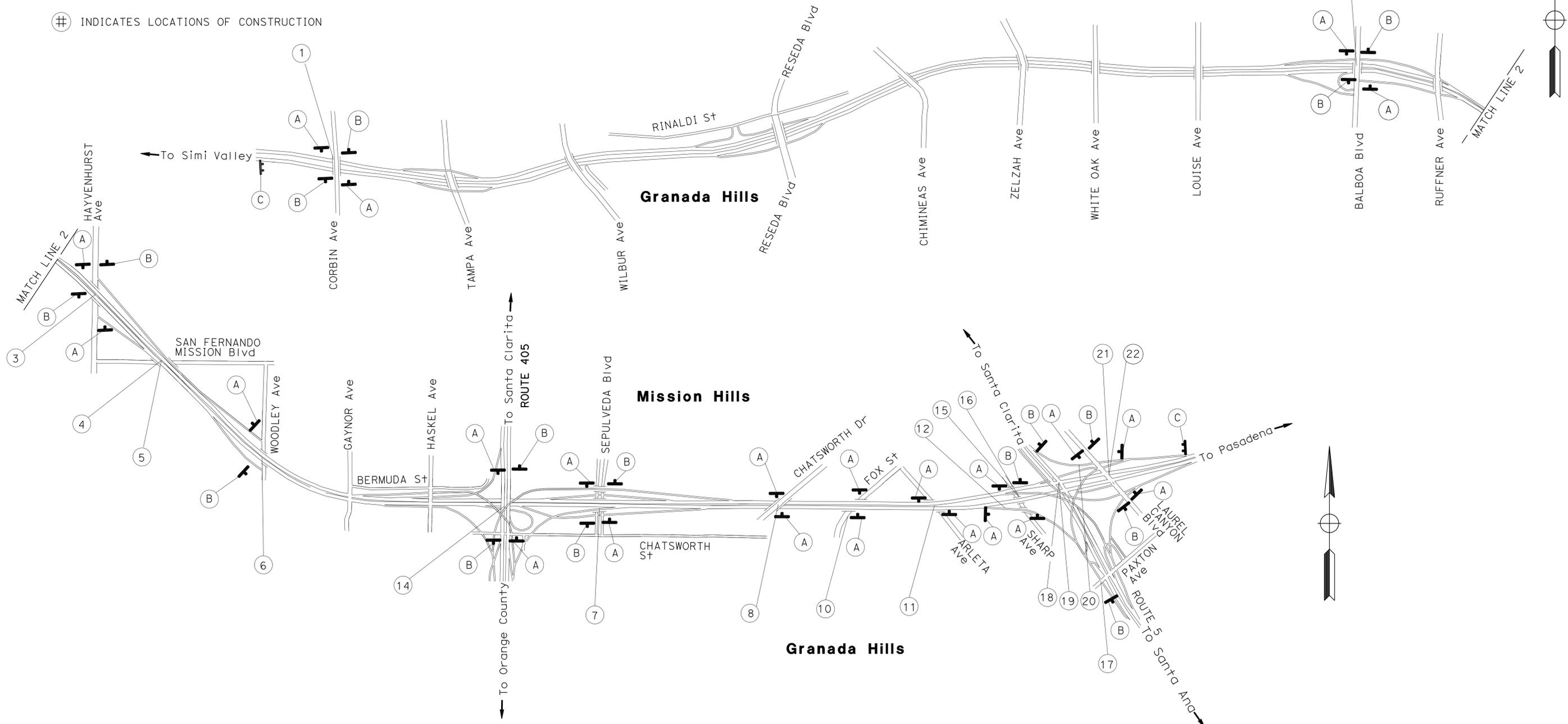
NOTES:

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

SIGN No.	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 6"	31
(B)	G20-2		48" X 24"	END CONSTRUCTION	1 - 4" X 6"	24
(C)		C40	144" X 60"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	2 - 6" X 8"	6

LEGEND:

⊕ INDICATES LOCATIONS OF CONSTRUCTION

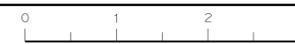


CONSTRUCTION AREA SIGNS
NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR KEVIN KWAN
 CALCULATED/DESIGNED BY KEVIN KWAN
 REVISED BY DATE
 AMBACHEW YIRGU KEVIN KWAN
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22



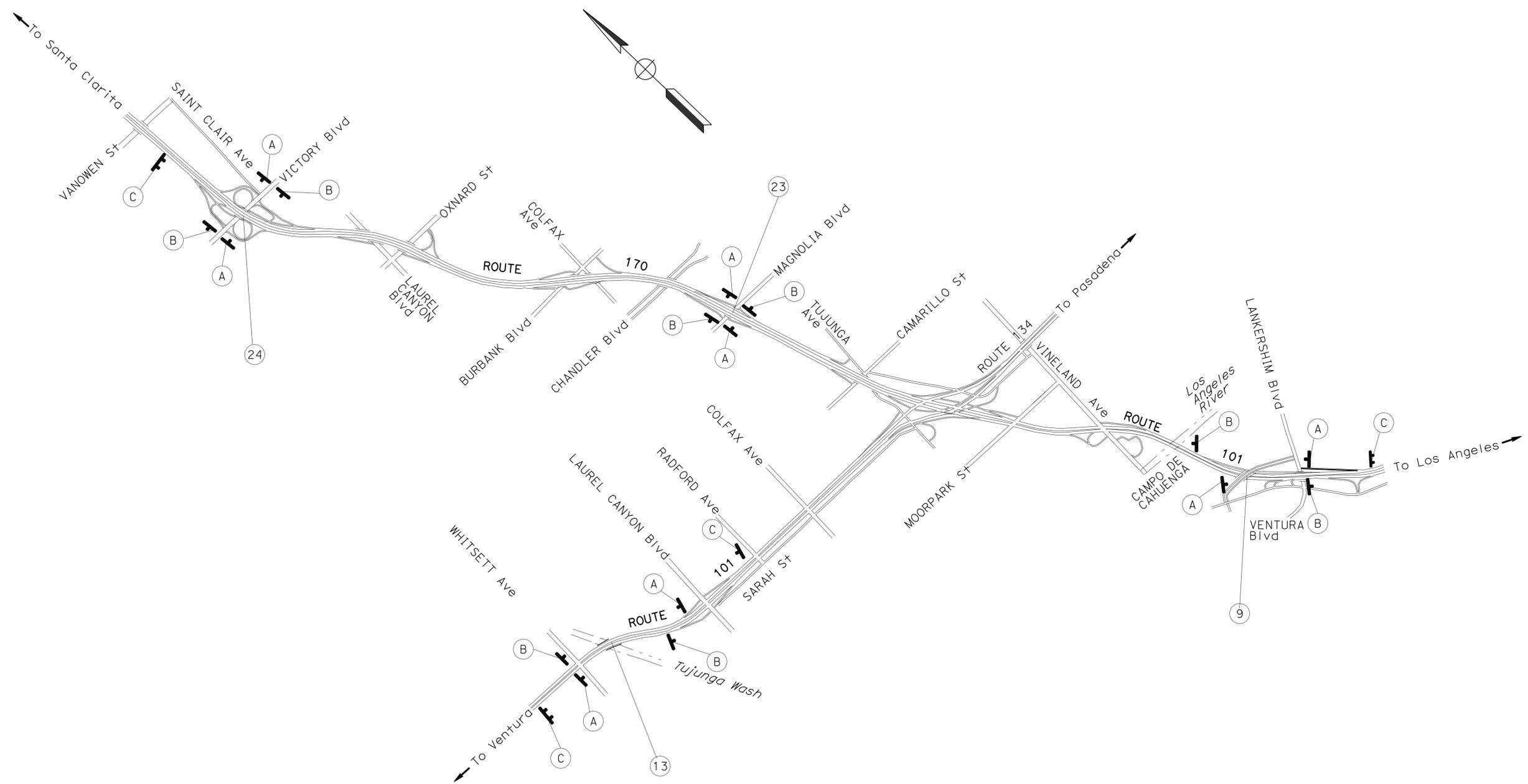
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118,170,405	Var	3	38

REGISTERED CIVIL ENGINEER DATE 2-10-16
 2-22-16
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
 KEVIN KWAN
 No. C68219
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

NOTE:
 1. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE SHEET CS-1.



CONSTRUCTION AREA SIGNS
 NO SCALE

CS-2

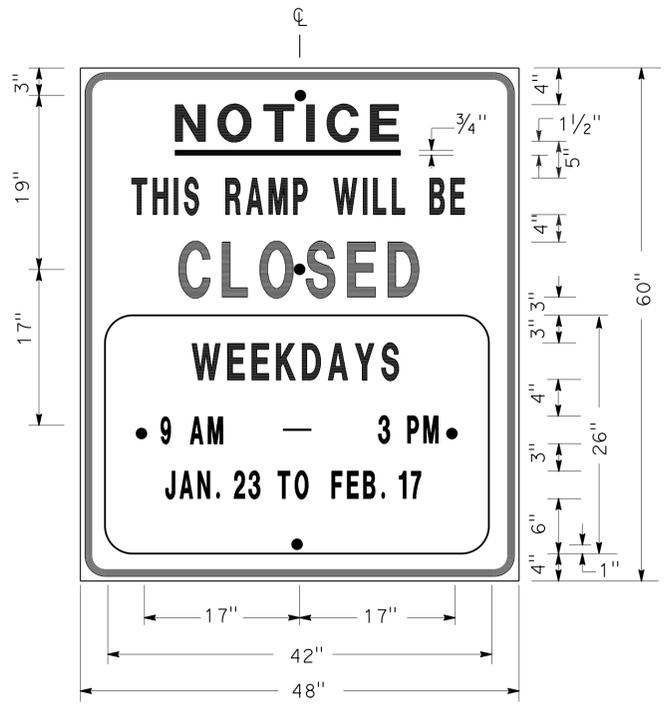
APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans MAINTENANCE ENGINEERING	AMBACHEW YIRGU	2-10-16
FUNCTIONAL SUPERVISOR	KEVIN KWAN	2-22-16
CALCULATED/DESIGNED BY	KEVIN KWAN	
CHECKED BY		

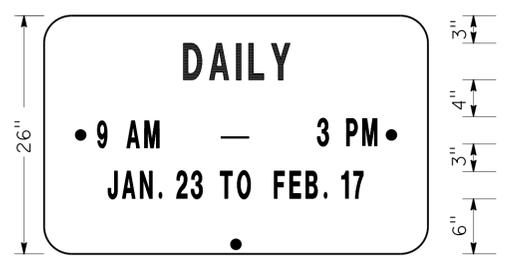
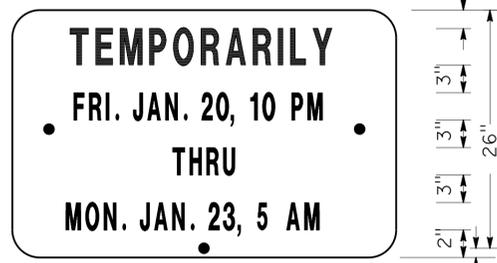
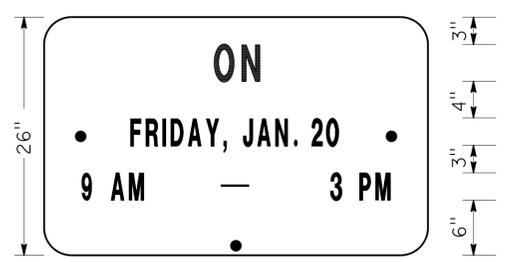
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	4	38

REGISTERED CIVIL ENGINEER: JOCELYN C. CHIANG
 No. 62742
 Exp. 6-30-16
 DATE: 2-3-16
 PLANS APPROVAL DATE: 2-22-16

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



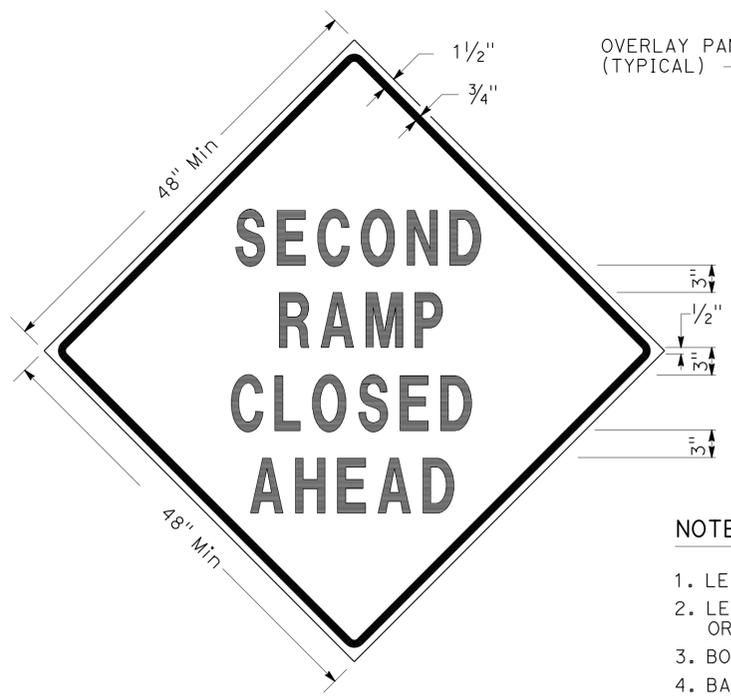
ALTERNATE OVERLAY PANELS (TYPICAL)

- 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

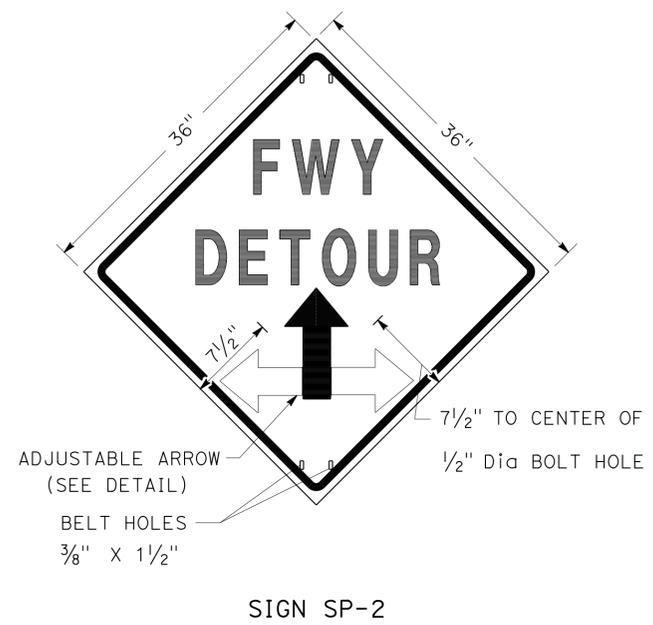
**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURES, DETOUR SIGNS,
 AND MISCELLANEOUS DETAILS**

SHEET 1 OF 2

NO SCALE

THD-1

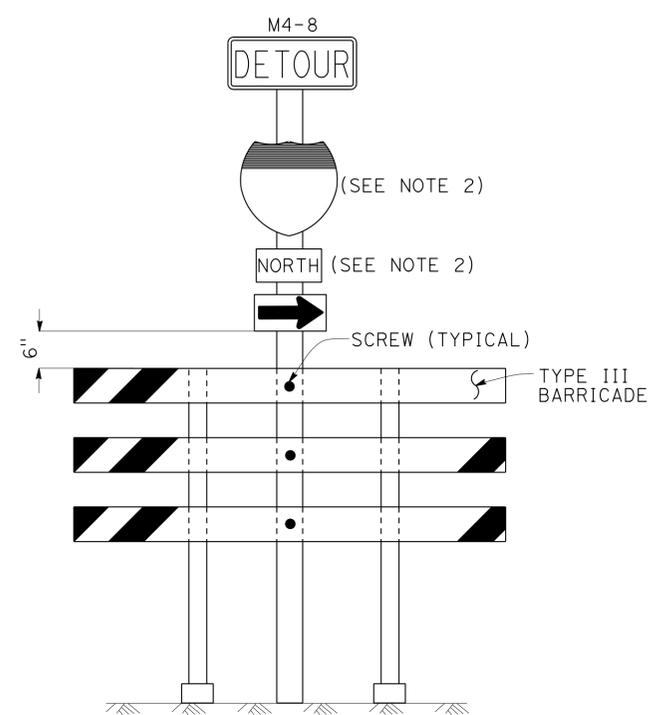
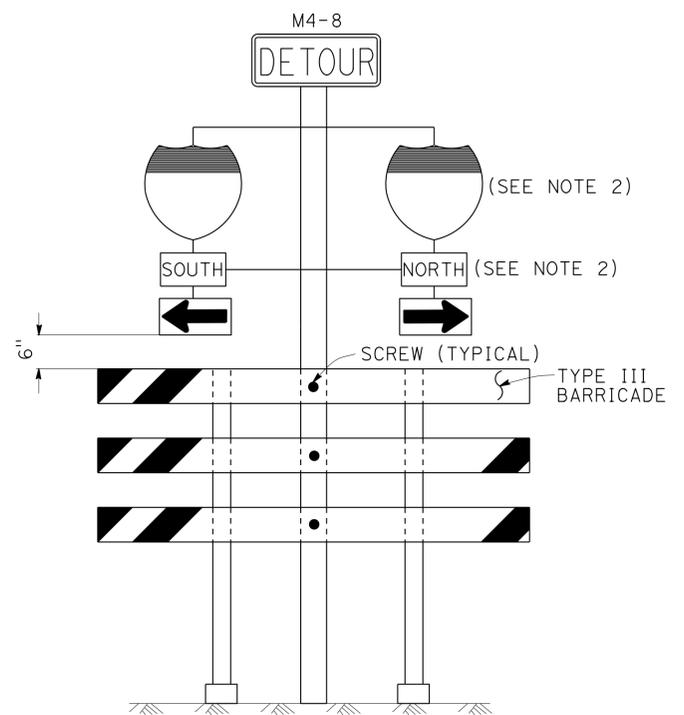
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTM
 FUNCTIONAL SUPERVISOR ALBERT K. YU
 CHECKED BY JOCELYN C. CHIANG
 REVISIONS: JC 2/14
 REVISIONS: DATE REVISION



- 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

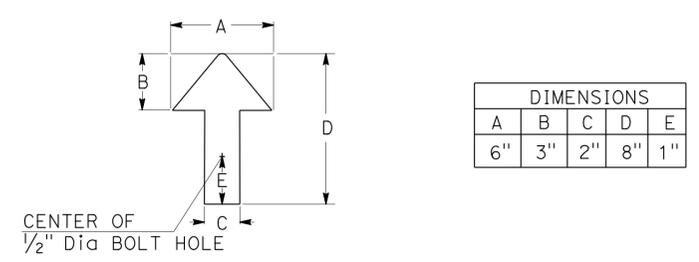
(CA) CALIFORNIA CODE



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

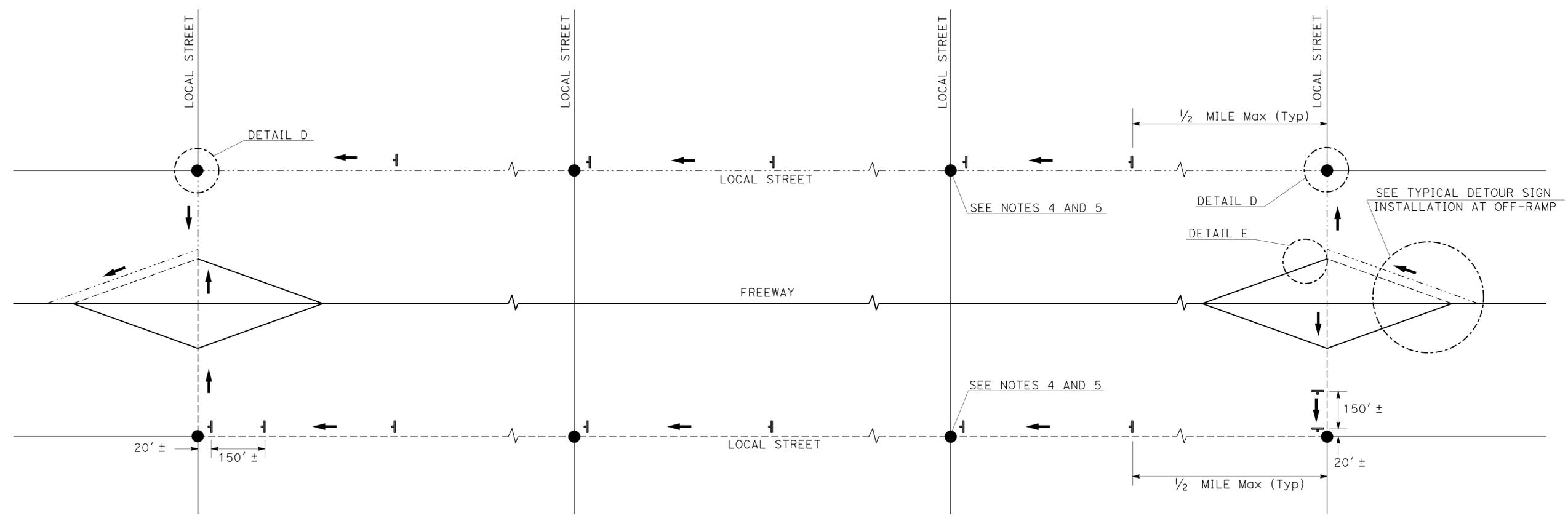
THD-2

LAST REVISION DATE PLOTTED => 23-FEB-2016 02-22-16 TIME PLOTTED => 09:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	6	38
REGISTERED CIVIL ENGINEER			DATE	2-3-16	
PLANS APPROVAL DATE			2-22-16		
<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 2**

NO SCALE

THD-3

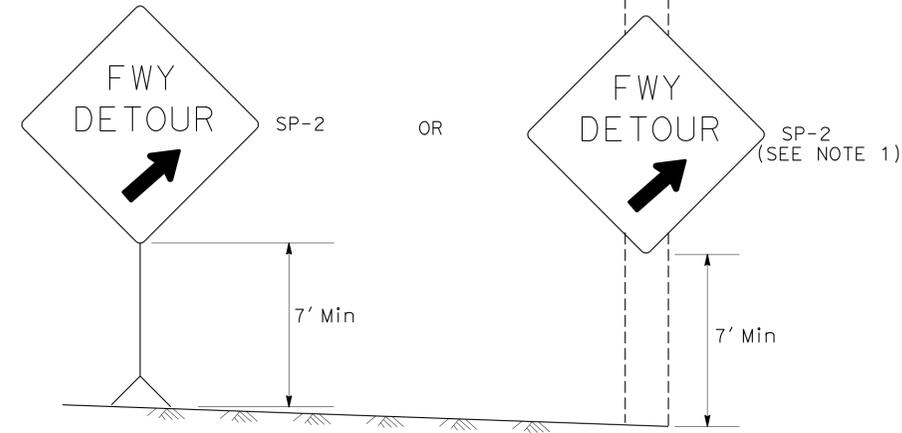
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTM
 FUNCTIONAL SUPERVISOR: ALBERT K. YU
 CALCULATED/DESIGNED BY: ALBERT K. YU
 CHECKED BY: JOCELYN C. CHIANG
 REVISED BY: JOCELYN C. CHIANG
 DATE REVISED: 2/14
 JC

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	7	38

REGISTERED CIVIL ENGINEER	DATE	2-3-16
2-22-16	PLANS APPROVAL DATE	

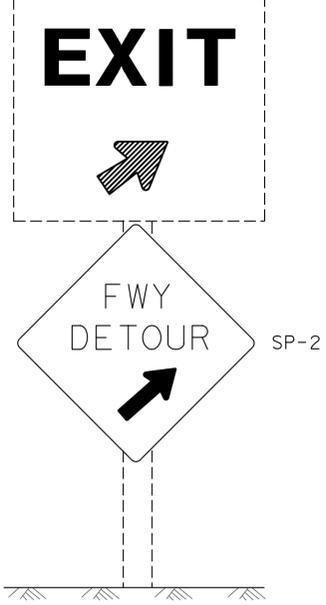
REGISTERED PROFESSIONAL ENGINEER	JOCELYN C. CHIANG
No. 62742	Exp. 6-30-16
CIVIL	STATE OF CALIFORNIA

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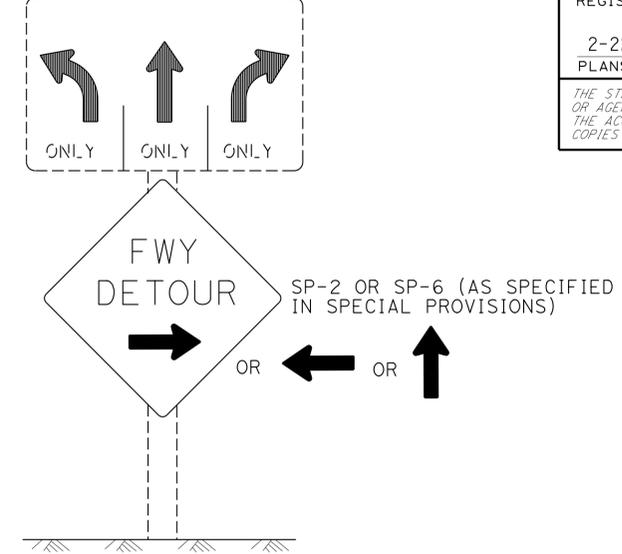
DETAIL A (SEE NOTE 3)

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

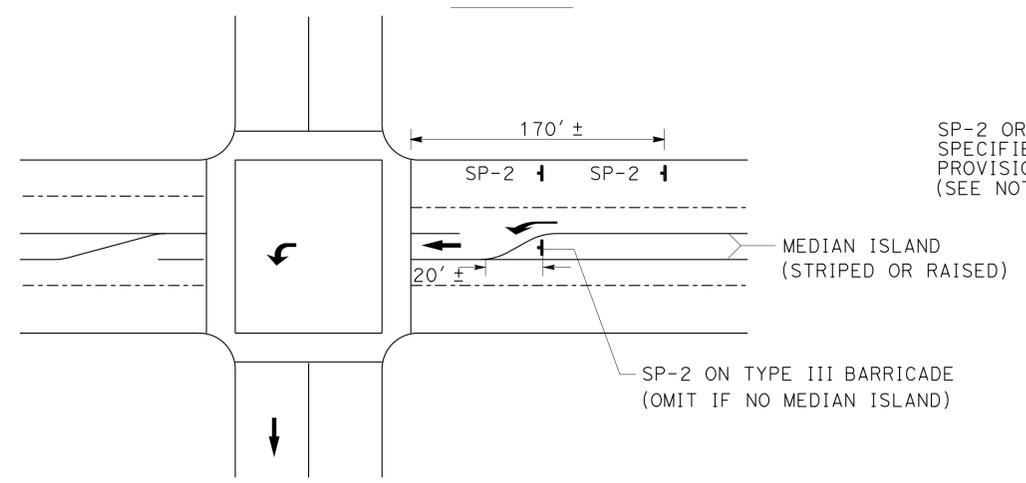


DETAIL B (SEE NOTE 3)

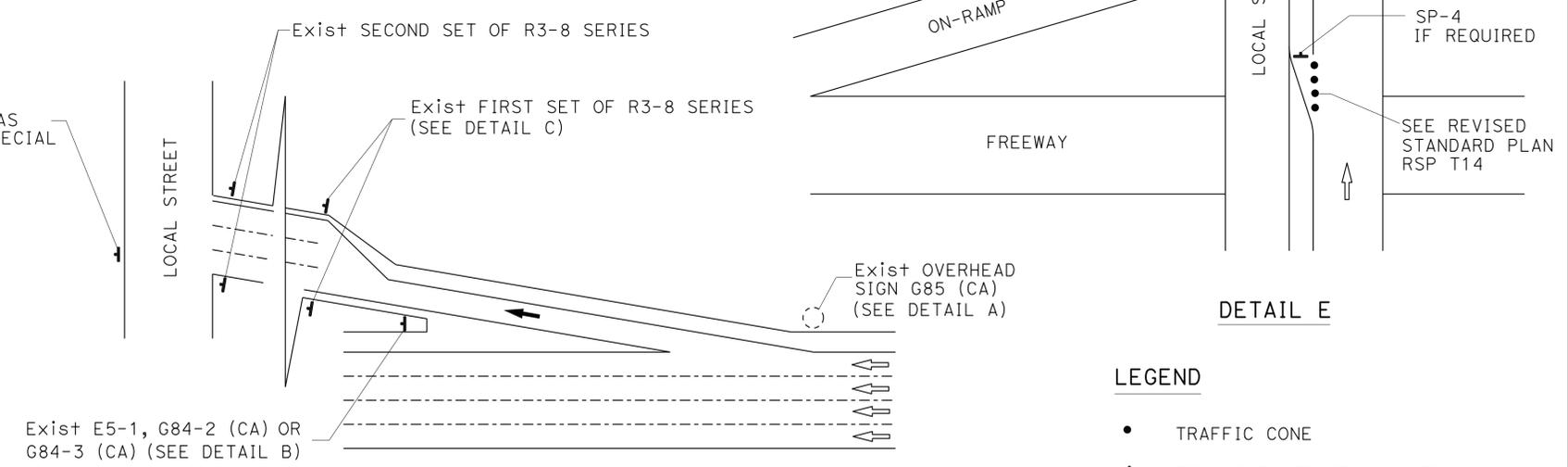
Exist R3-8 SERIES



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

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.

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

NO SCALE

THD-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DTIC
 DTIC

LAST REVISION DATE PLOTTED => 23-FEB-2016
 02-22-16 TIME PLOTTED => 09:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	8	38

REGISTERED CIVIL ENGINEER	DATE
2-22-16	2-3-16
PLANS APPROVAL DATE	

JOCELYN C. CHIANG
No. 62742
Exp. 6-30-16
CIVIL

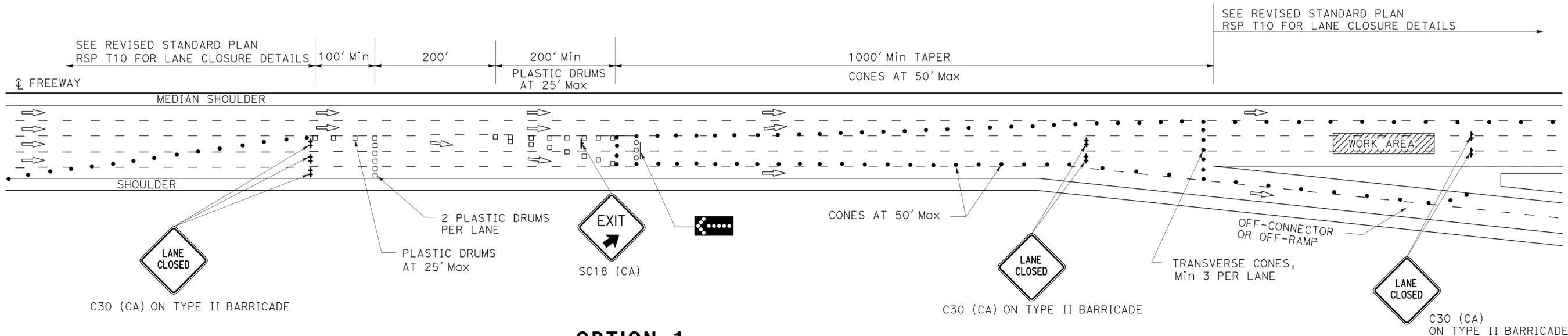
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LEGEND

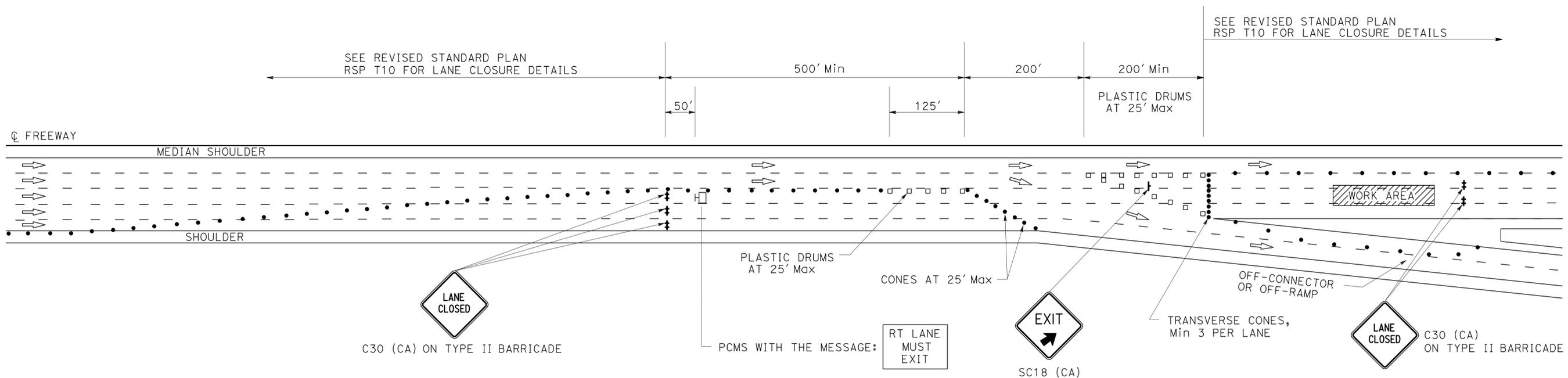
- TRAFFIC CONE
- TRAFFIC PLASTIC DRUM
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ BARRICADES
- ⊠ PCMS
- ⬇ FLASHING ARROW SIGN (FAS)
- ⊖ FAS SUPPORT OR TRAILER

ABBREVIATIONS

(CA) CALIFORNIA CODE



OPTION 1



OPTION 2

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR SLIP-RAMP AT
OFF-CONNECTOR OR OFF-RAMP**

NO SCALE

THD-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FUNCTIONAL SUPERVISOR: ALBERT K. YU

DESIGNED BY: ALBERT K. YU

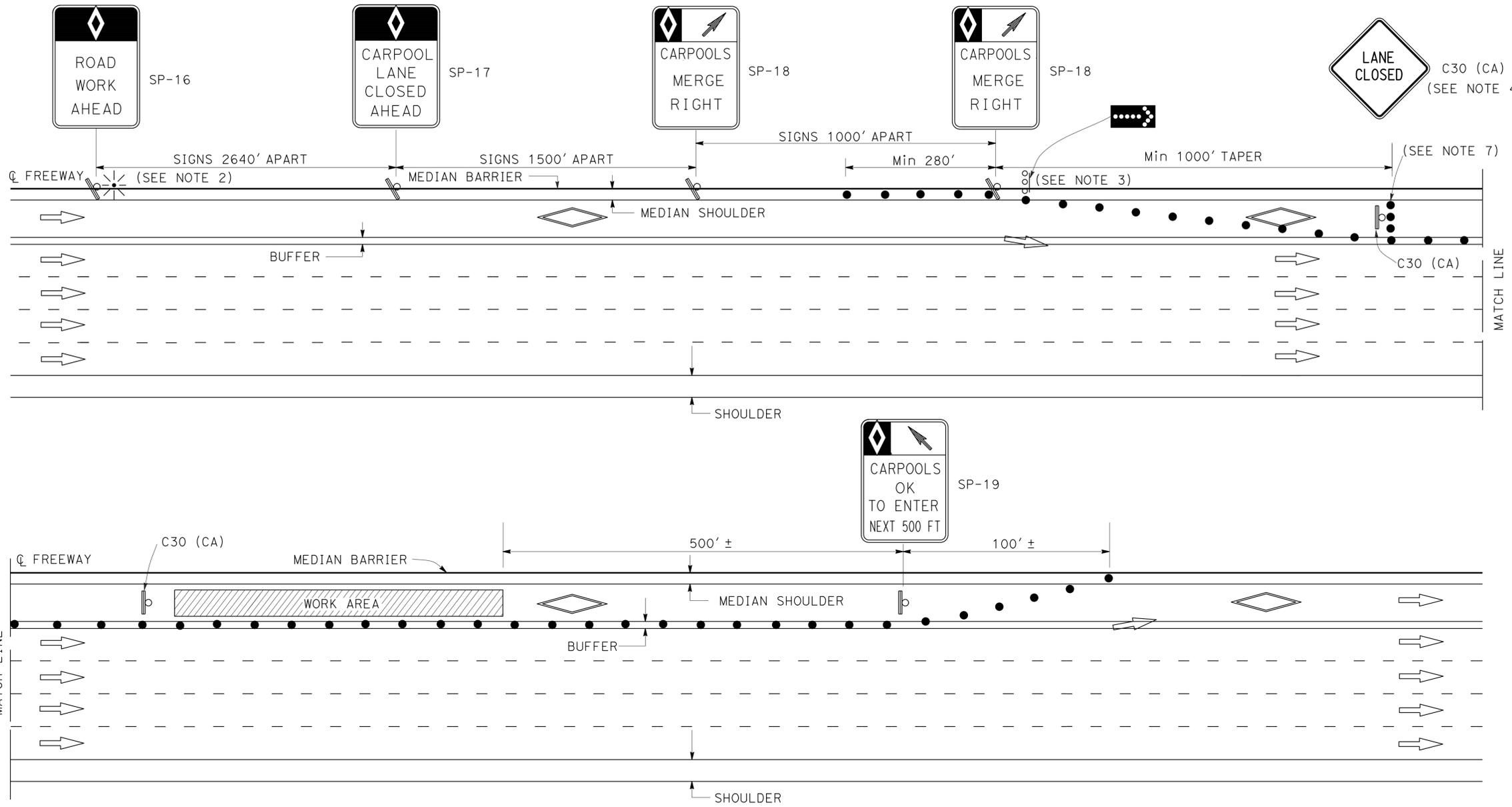
CHECKED BY: JOCELYN C. CHIANG

REVISOR: JC

DATE: 2/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	11	38

REGISTERED CIVIL ENGINEER DATE 2-3-16
 2-22-16 PLANS APPROVAL DATE
 JOCELYN C CHIANG No. 62742 Exp. 6-30-16 CIVIL
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



- LEGEND**
- 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**

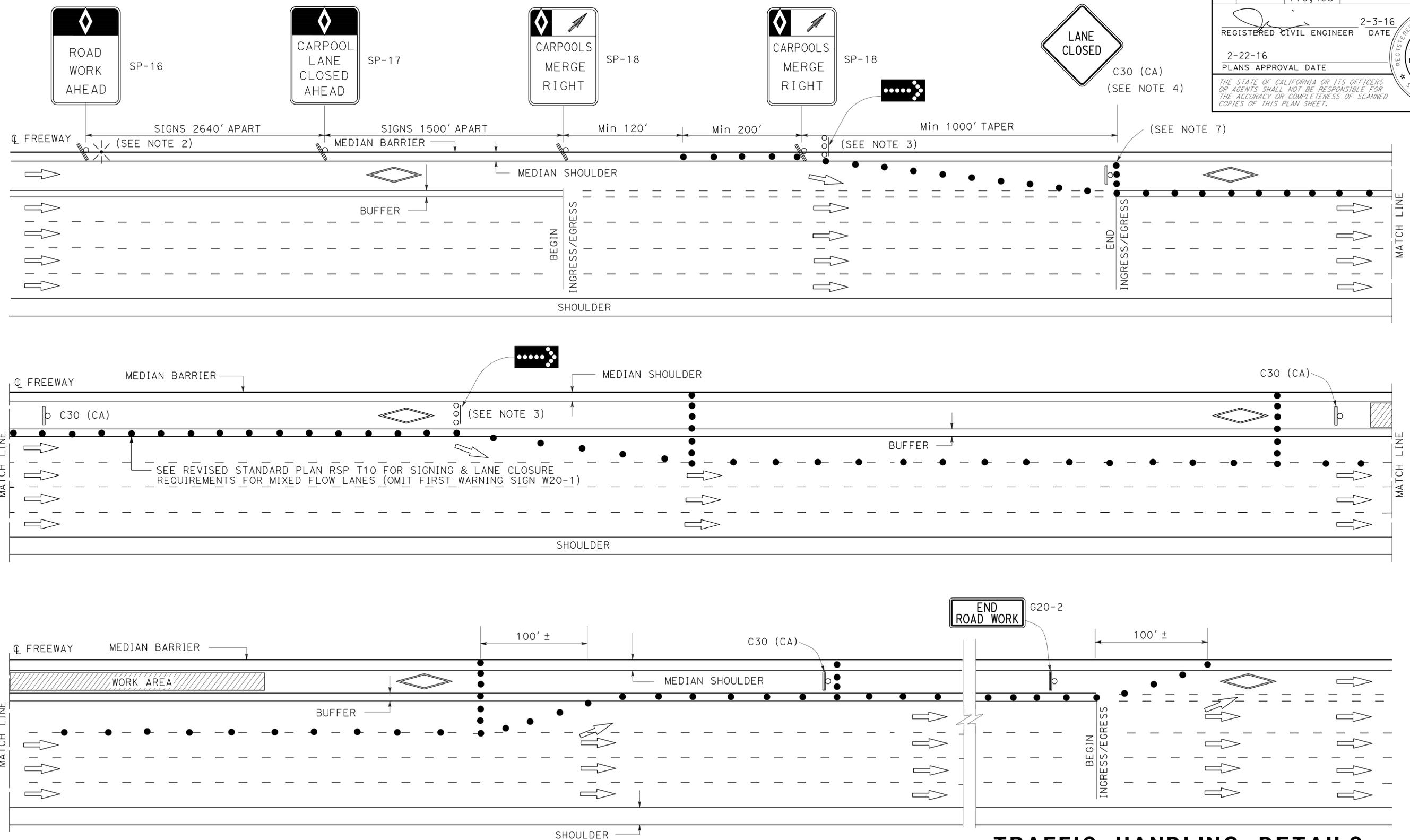
THD-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 FUNCTIONAL SUPERVISOR: ALBERT K. YU
 CHECKED BY: JOCELYN C. CHIANG
 REVISIONS: 2/14
 DATE REVISED: 2/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	12	38

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 2-22-16 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 JOCELYN C. CHIANG
 No. 62742
 Exp. 6-30-16
 CIVIL
 STATE OF CALIFORNIA



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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DTIC
 FUNCTIONAL SUPERVISOR: ALBERT K. YU
 CHECKED BY: JOCELYN C. CHIANG
 REVISIONS: 2/14
 REVISIONS: JC

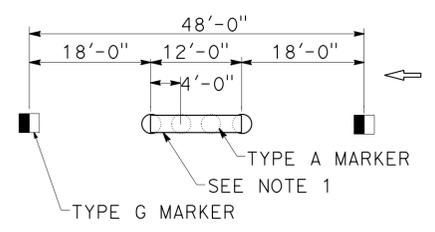
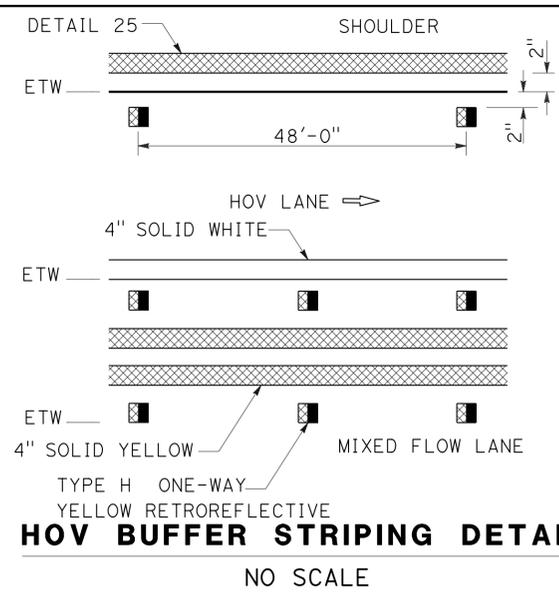
LAST REVISION | DATE PLOTTED => 23-FEB-2016
 02-22-16 | TIME PLOTTED => 09:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118,170,405	Var	13	38

REGISTERED CIVIL ENGINEER DATE 2-10-16
 KEVIN KWAN
 No. C68219
 Exp. 9-30-17
 CIVIL
 STATE OF CALIFORNIA

2-22-16
 PLANS APPROVAL DATE

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



DETAIL 13/14 (MODIFIED)

NOTE: NO SCALE
 1. PLACE 4" WIDE WHITE THERMOPLASTIC TRAFFIC STRIPE ON TOP OF TYPE A NON-REFLECTIVE MARKERS.

PAVEMENT DELINEATION QUANTITIES

LOCATION	THERMOPLASTIC TRAFFIC STRIPE											THERMOPLASTIC PAVEMENT MARKING					PAVEMENT MARKER				REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER								
	DETAIL					HOV BUFFER STRIPING DETAIL	DETAIL					RETROREFLECTIVE																				
	9	13 (Mod)	25/25A	27	27B		21	28	36	36A	37	LIMIT LINE	DIAMOND SIGN	WORDS	TYPE IV, V, VI, ARROWS	DIAGONAL WHITE	TYPE H	TYPE G	TYPE C	NON-REFLECTIVE TYPE A												
	4" BROKEN WHITE (17-7)	4" BROKEN WHITE (36-12)	4" SOLID YELLOW	4" SOLID YELLOW	4" SOLID WHITE	4" SOLID YELLOW	4" SOLID WHITE	4" SOLID WHITE	4" SOLID WHITE	8" BROKEN WHITE (12-3)	HOV BUFFER														8" BROKEN WHITE	SQFT	SQFT	SQFT	SQFT	SQFT	EA	EA
Br No.	BRIDGE NAME	Rte	PM	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	SQFT	SQFT	EA	EA	EA	EA	LF	LF	SQFT	EA		
53 2501	CORBIN AVENUE OC	118	R4.29	474					624													30					762	1,280	30			
53 2395	BALBOA BLVD OC	118	R7.80	1,132					566		200							60	135	75				52		1,096		270	52			
53 2204	HAYVENHURST AVENUE UC	118	R8.34		1,792	512			512	1,024	512												22	80	21	149	960	1,536	44	272		
53 2793L	MISSION-GOTHIC UC	118	R8.63		3,272	818			818	1,636	818												35	141	59	273	1,636	2,454		508		
53 2793R	MISSION-GOTHIC UC	118	R8.63		2,704	676			676	1,352	676										11			29	118	49	225	1,352	2,028	11	421	
53 2207	WOODLEY AVENUE UC	118	R9.04		1,351	386			386	772	386										11			17	61	17	113	724	1,158	11	208	
53 2213	SEPULVEDA BLVD UC	118	R10.07		1,295	370			660												22			16	59		108	984	370	22	183	
53 2214	CHATSWORTH DRIVE UC	118	R10.51		1,746	388			388														17	78	30	146	825	388		270		
53 2215	FOX STREET UC	118	R10.83		1,764	392			392														17	79	17	147	833	392		260		
53 2357	ARLETA AVENUE UC	118	R11.05		1,557	346			346														15	97		130	1,681	346	42	242		
SUBTOTAL				1,606	15,481	3,888			5,368	4,784	2,392	200			1,280	173	300	2,527	1,104	60	179	117	44	30	168	765	193	1,291	10,853	9,952	430	2,416
SHEET TOTAL				1,606	15,481				17,912								473	2,527	1,104			430				1,126		1,291	10,853	9,952	430	2,416

PAVEMENT DELINEATION QUANTITIES

PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Maintenance Engineering
 KEVIN KWAN
 KEVIN KWAN
 REVISOR: AMBACHEW YIRGU
 DATE: 7/2/2010
 DESIGNED BY: KEVIN KWAN
 CHECKED BY:

LAST REVISION DATE PLOTTED => 23-FEB-2016
 02-22-16 TIME PLOTTED => 09:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	14	38

REGISTERED CIVIL ENGINEER DATE *2-10-16*
 2-22-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 KEVIN KWAN
 No. C68219
 Exp. 9-30-17
 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.

PAVEMENT DELINEATION QUANTITIES

Br No.	BRIDGE NAME	Rte	PM	THERMOPLASTIC TRAFFIC STRIPE													THERMOPLASTIC PAVEMENT MARKING					PAVEMENT MARKER									
				DETAIL					HOV BUFFER STRIPING DETAIL		DETAIL						RETROREFLECTIVE					REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER						
				9	13 (Mod)	25/25A	27	27B	HOV BUFFER STRIPING DETAIL		21	28	36	36A	37	LIMIT LINE	DIAMOND SIGN	WORDS	TYPE IV, V, ARROWS	DIAGONAL WHITE	H					G	C	NON-REFLECTIVE TYPE A			
				4" BROKEN WHITE (17-7)	4" BROKEN WHITE (36-12)	4" SOLID YELLOW	4" SOLID YELLOW	4" SOLID WHITE	4" SOLID YELLOW	4" SOLID WHITE	4" SOLID WHITE	4" SOLID YELLOW	4" SOLID YELLOW	8" SOLID WHITE	8" SOLID WHITE						8" BROKEN WHITE (12-3)	HOV BUFFER	8" BROKEN WHITE	EA	EA	EA	EA	LF	LF	SQFT	EA
53 2908	UNIVERSAL TERRACE PARKWAY OC	101	10.56	1,225		488		488			479	588							271			224	75	22	56		1,324	488	570	78	
53 2343G	E118-S5 CONNECTOR OC	118	R11.32			260		260	130															7	16		22	195	260		45
53 2342L	SHARP AVENUE UC	118	R11.31			220	110		110															7	14		18	165	110		39
53 2342R	SHARP AVENUE UC	118	R11.31			472	118		118															7	25		39	236	118		71
53 1127H	PAXTON STREET UC	118	R11.42			302		302	151															8	18		25	227	302		51
53 2324L	ROUTE 118/5 SEPARATION	118	R11.42			442	221		221															11	23			332	221		35
53 2324R	ROUTE 118/5 SEPARATION	118	R11.42			684	228		228															12	34			399	228		45
53 2345F	W118-N5 CONNECTOR OC	118	R11.56				185		215															10	5			215	185		15
53 2344L	LAUREL CANYON BLVD UC	118	R11.57			350	175		175															9	20			263	175		29
53 2344R	LAUREL CANYON BLVD UC	118	R11.57			540	180		180															10	28			315	180		37
53 2211	ROUTE 405/118 SEPARATION	405	46.83			1,644	548	1,096	548	1,096	548													48	74			959	2,740		121
SUBTOTAL				1,225	4,914	2,253	1,658	2,564	1,096	548	479	588							271			224	75	151	313		104	4,630	5,007	570	566
SHEET TOTAL				1,225	4,914	9,186														570					464	104	4,630	5,007	570	566	
SHEET TOTAL (FROM PDQ-1)				1,606	15,481	17,912										473	2,527	1,104			430					1,126	1,291	10,853	9,952	430	2,416
GRAND TOTAL				2,831	20,395	27,098										473	2,801	1,104			1,000					1,590	1,395	15,483	14,959	1,000	2,982

PAVEMENT DELINEATION QUANTITIES

PDQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 ENGINEERING MAINTENANCE
 FUNCTIONAL SUPERVISOR: KEVIN KWAN
 CALCULATED/DESIGNED BY: KEVIN KWAN
 CHECKED BY: KEVIN KWAN
 REVISED BY: KEVIN KWAN
 DATE REVISED:

USERNAME => s125624
 DGN FILE => 73w060nc002.dgn



UNIT 1964

PROJECT NUMBER & PHASE 07150004391

LAST REVISION DATE PLOTTED => 23-FEB-2016
 02-22-16 TIME PLOTTED => 09:19

	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	
SL	STATION LINE	
SM	SELECTED MATERIAL	
Spec	SPECIAL, SPECIFICATIONS	
SPP	SLOTTED PLASTIC PIPE	
SS	SLOPE STAKE	
SSBM	STRAP AND SADDLE BRACKET METHOD	
SSD	STRUCTURAL SECTION DRAIN	
SSPA	STRUCTURAL STEEL PLATE ARCH	
SSPP	STRUCTURAL STEEL PLATE PIPE	
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH	
SSRP	STEEL SPIRAL RIB PIPE	
St	STREET	
Sta	STATION	
STBB	SINGLE THRIE BEAM BARRIER	
Std	STANDARD	
Str	STRUCTURE	
Surf	SURFACING	
SW	SIDEWALK, SOUND WALL	
Swr	SEWER	
Sym	SYMMETRICAL	
S4S	SURFACE 4 SIDES	
	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	W
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	
W	WEST, WIDTH	
WB	WESTBOUND	
WH	WEEP HOLE	
WM	WIRE MESH	
WS	WATER SURFACE	
WSP	WELDED STEEL PIPE	
Wt	WEIGHT	
WV	WATER VALVE	
WW	WINGWALL	
WWL	WINGWALL LAYOUT LINE	X
X Sec	CROSS SECTION	
Xing	CROSSING	Y
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	15	38

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Grace M. Tsushima
 No. C49814
 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.

TO ACCOMPANY PLANS DATED 2-22-16

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

TABLE A

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

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

TABLE B

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

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

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

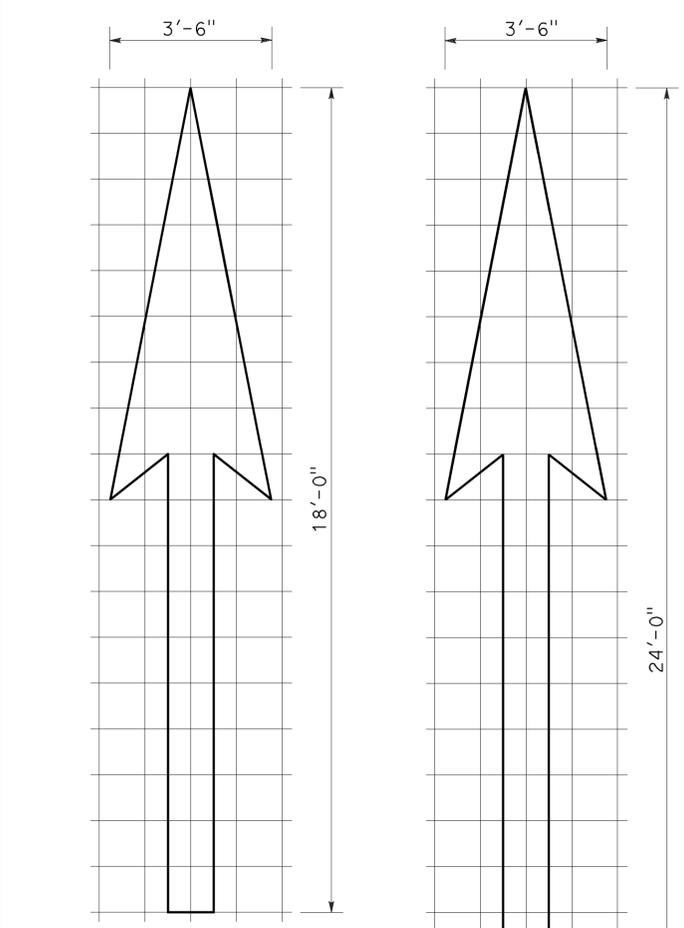
2010 REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	16	38

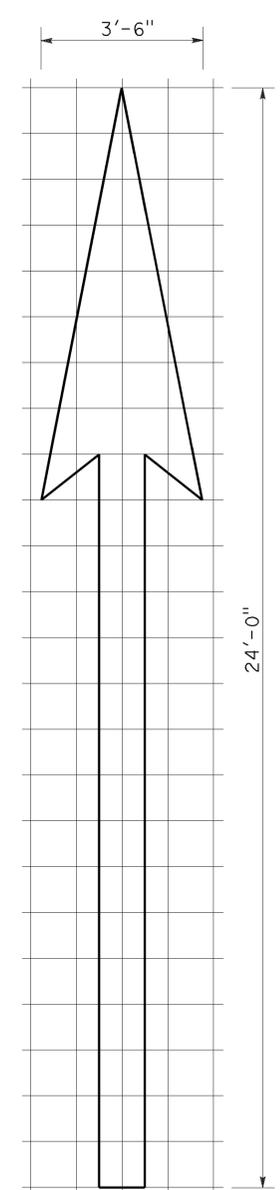
Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

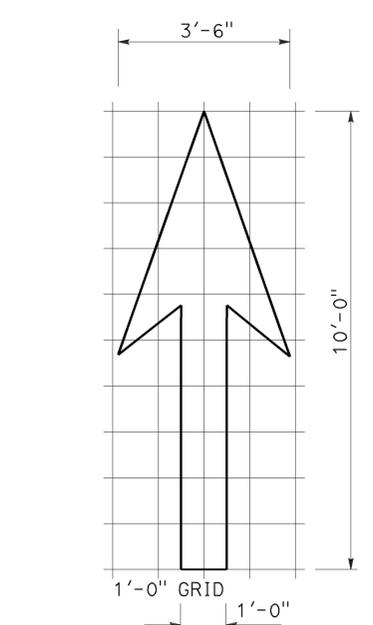
TO ACCOMPANY PLANS DATED 2-22-16



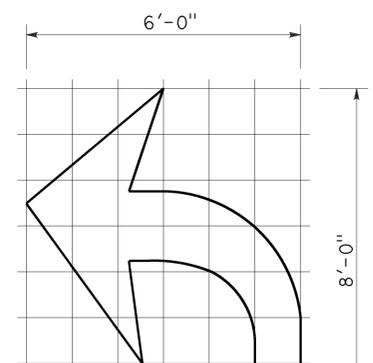
TYPE I 18'-0" ARROW
A=25 ft²



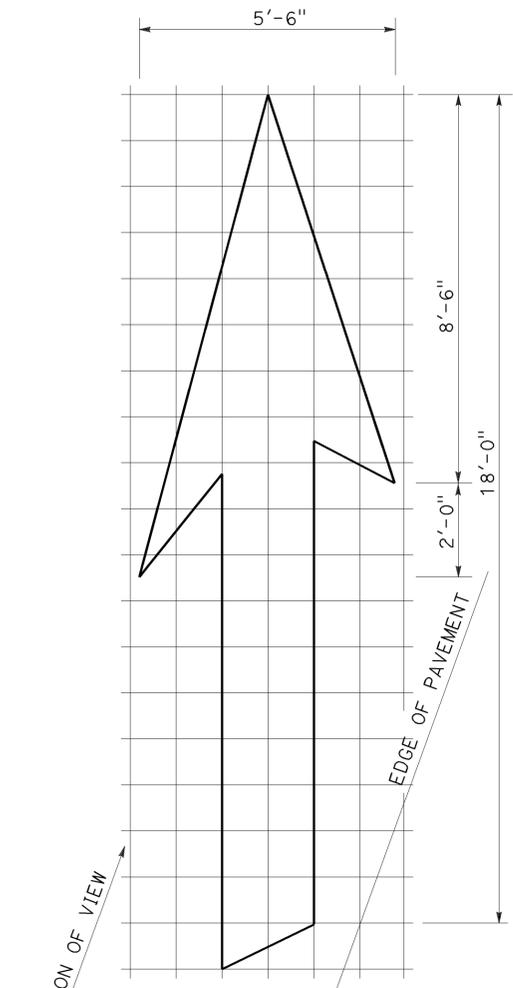
TYPE I 24'-0" ARROW
A=31 ft²



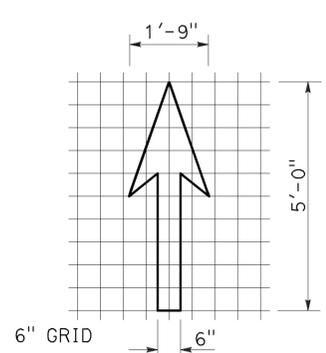
TYPE I 10'-0" ARROW
A=14 ft²



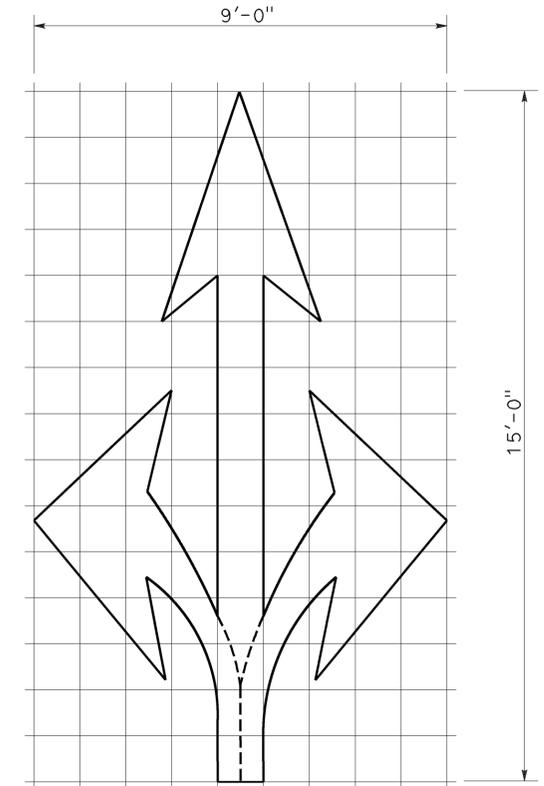
TYPE IV (L) ARROW
A=15 ft²
(For Type IV (R) arrow, use mirror image)



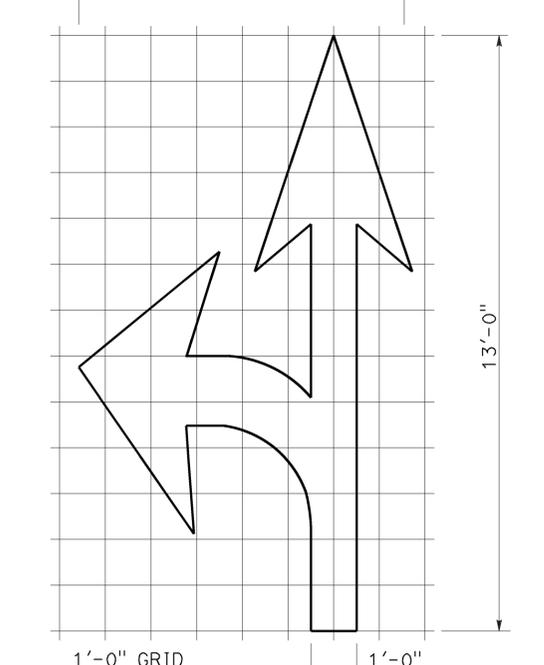
TYPE VI ARROW
A=42 ft²
Right lane drop arrow
(For left lane, use mirror image)



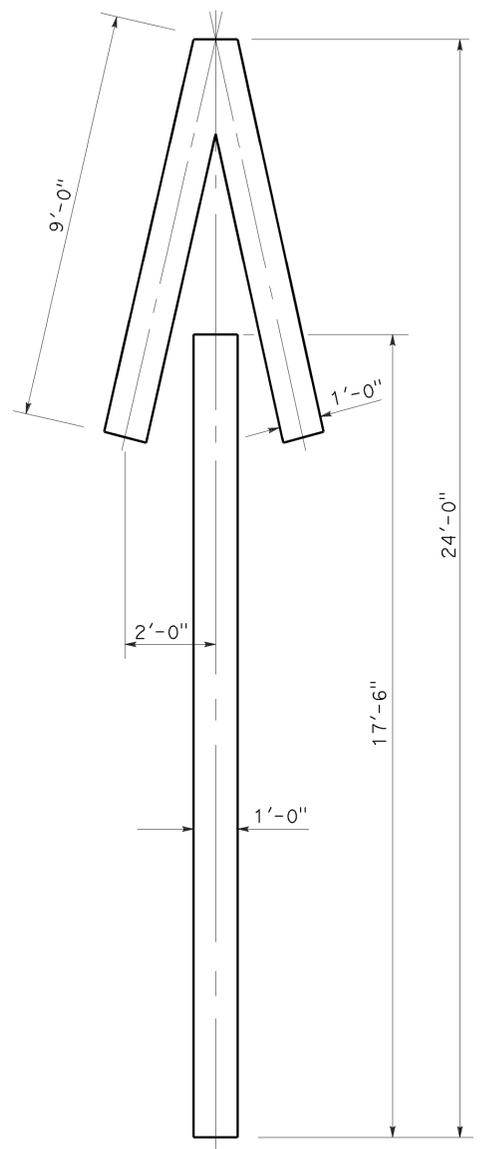
BIKE LANE ARROW
A=3.5 ft²



TYPE VIII ARROW
A=36 ft²



TYPE VII (L) ARROW
A=27 ft²
(For Type VII (R) arrow, use mirror image)



TYPE V ARROW
A=33 ft²

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

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

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

REVISED STANDARD PLAN RSP A24A

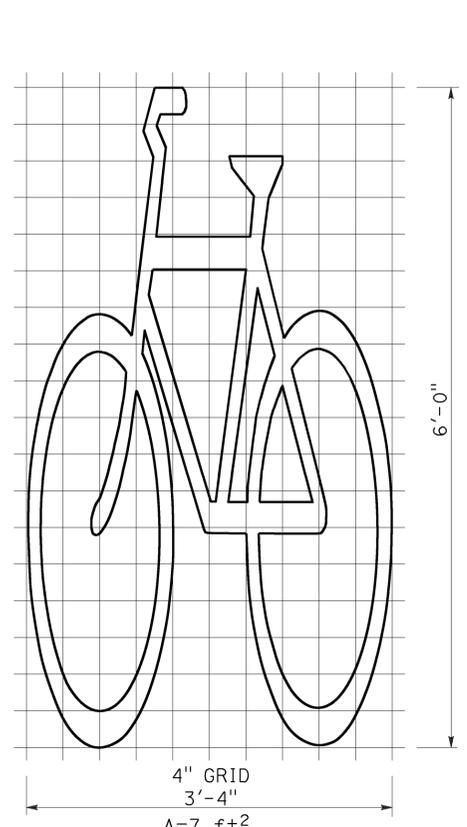
2010 REVISED STANDARD PLAN RSP A24A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	17	38

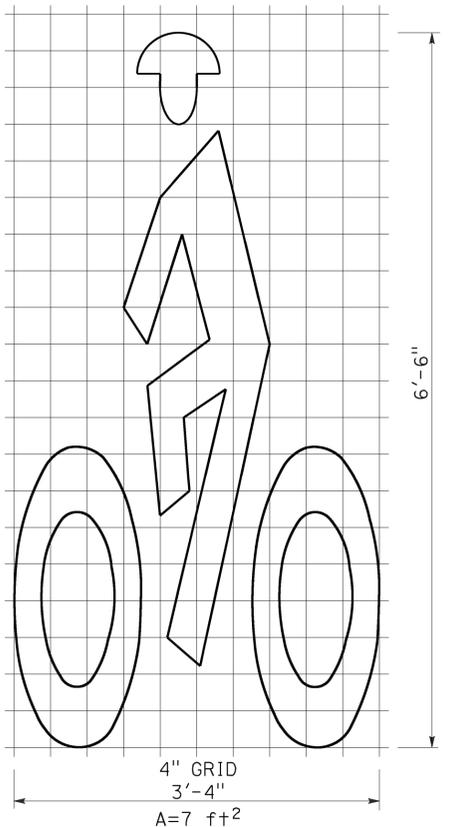
Registered Professional Engineer
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

October 19, 2012
 PLANS APPROVAL DATE

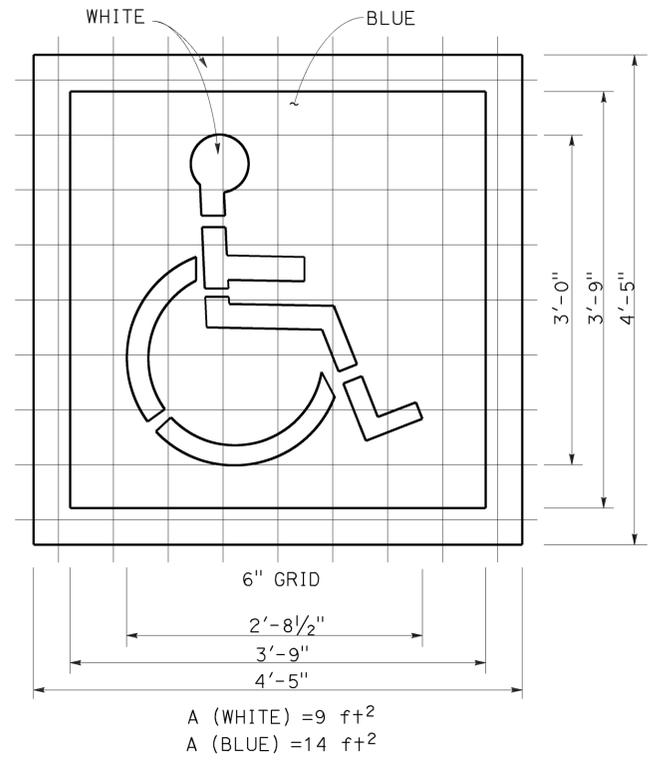
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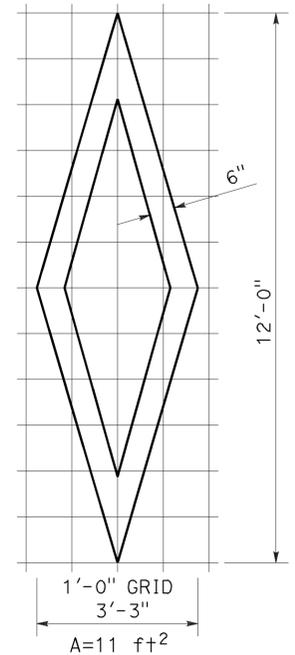
BIKE LANE SYMBOL WITHOUT PERSON



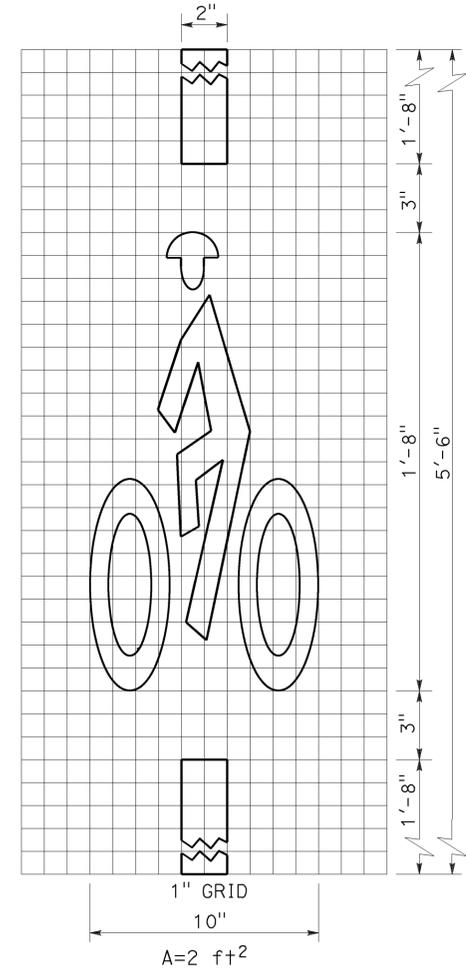
BIKE LANE SYMBOL WITH PERSON



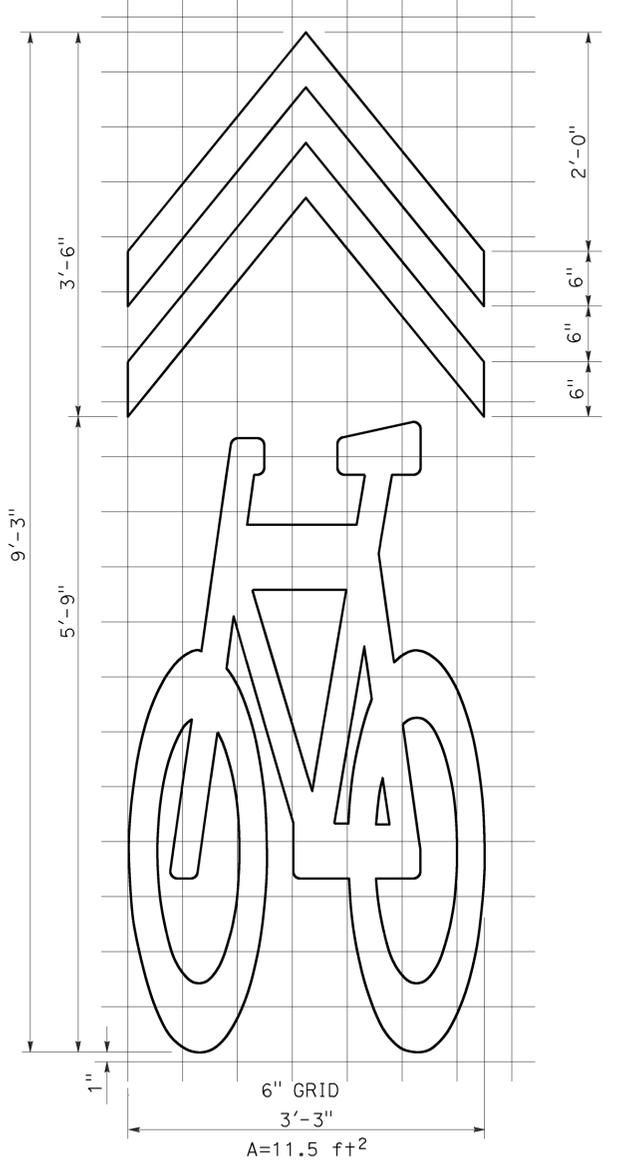
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING



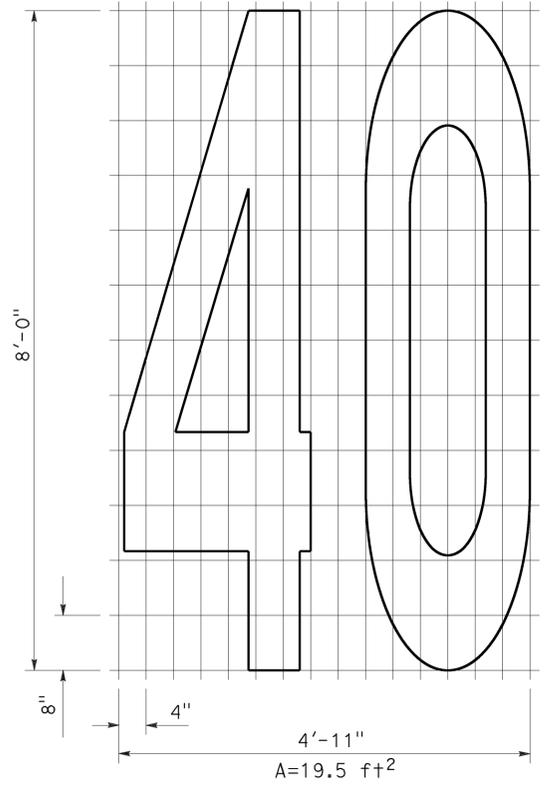
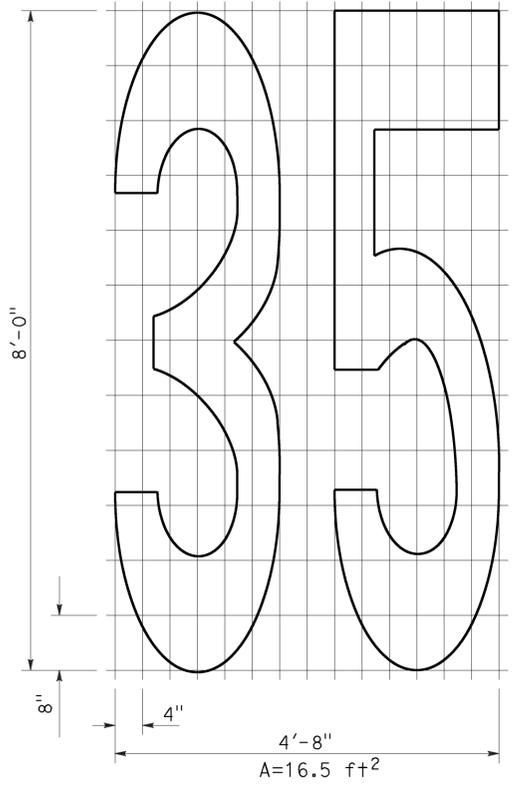
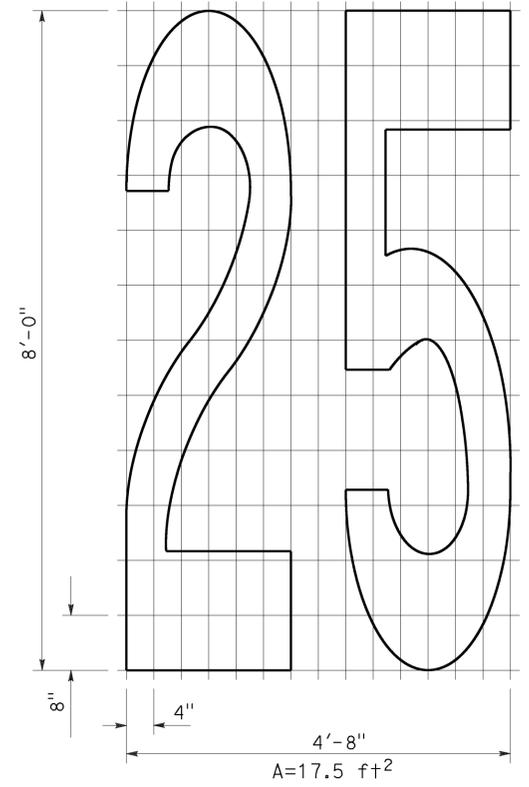
DIAMOND SYMBOL



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

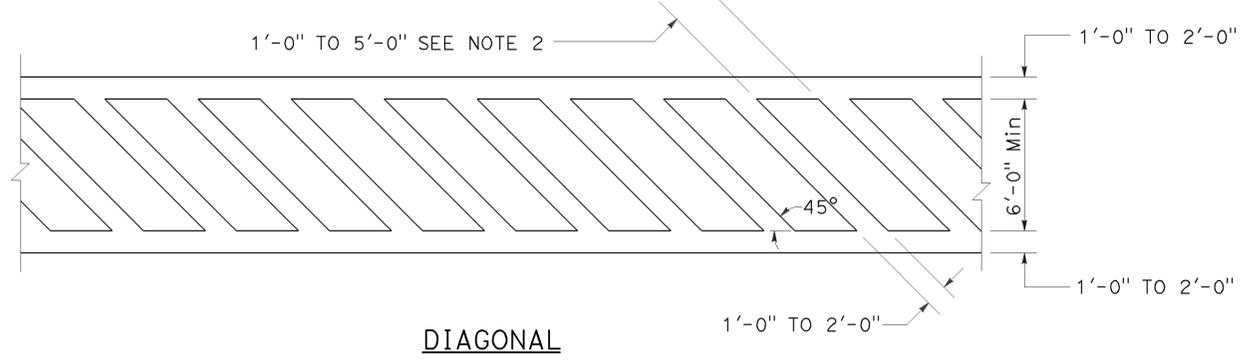
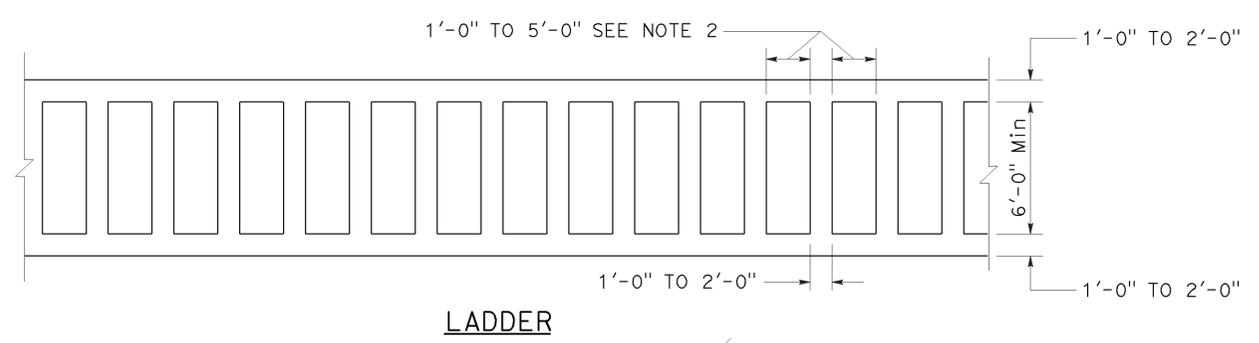
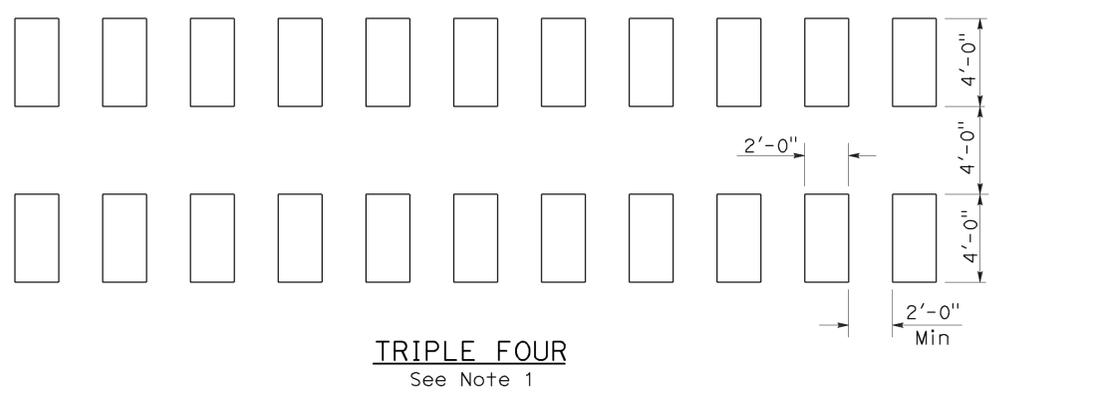
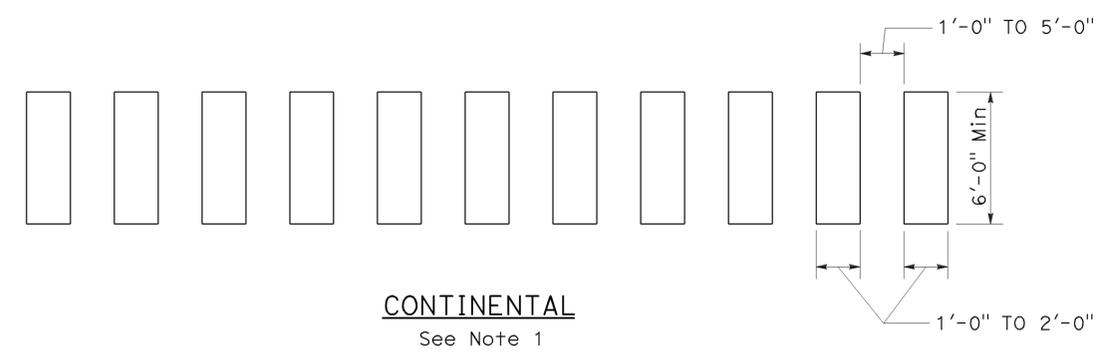
2010 REVISED STANDARD PLAN RSP A24C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	18	38

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

TO ACCOMPANY PLANS DATED 2-22-16

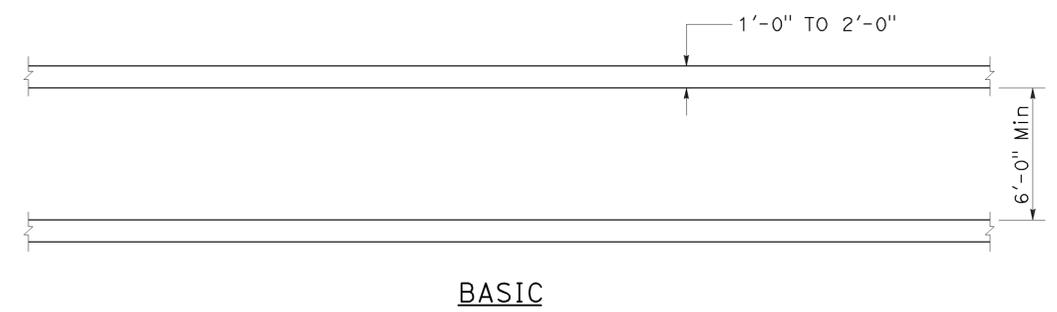
2010 REVISED STANDARD PLAN RSP A24F



HIGHER VISIBILITY CROSSWALKS

NOTES:

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

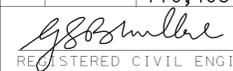


BASIC

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	19	38


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 2-22-16

TABLE 1

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

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

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

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

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
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.

REVISED STANDARD PLAN RSP T9

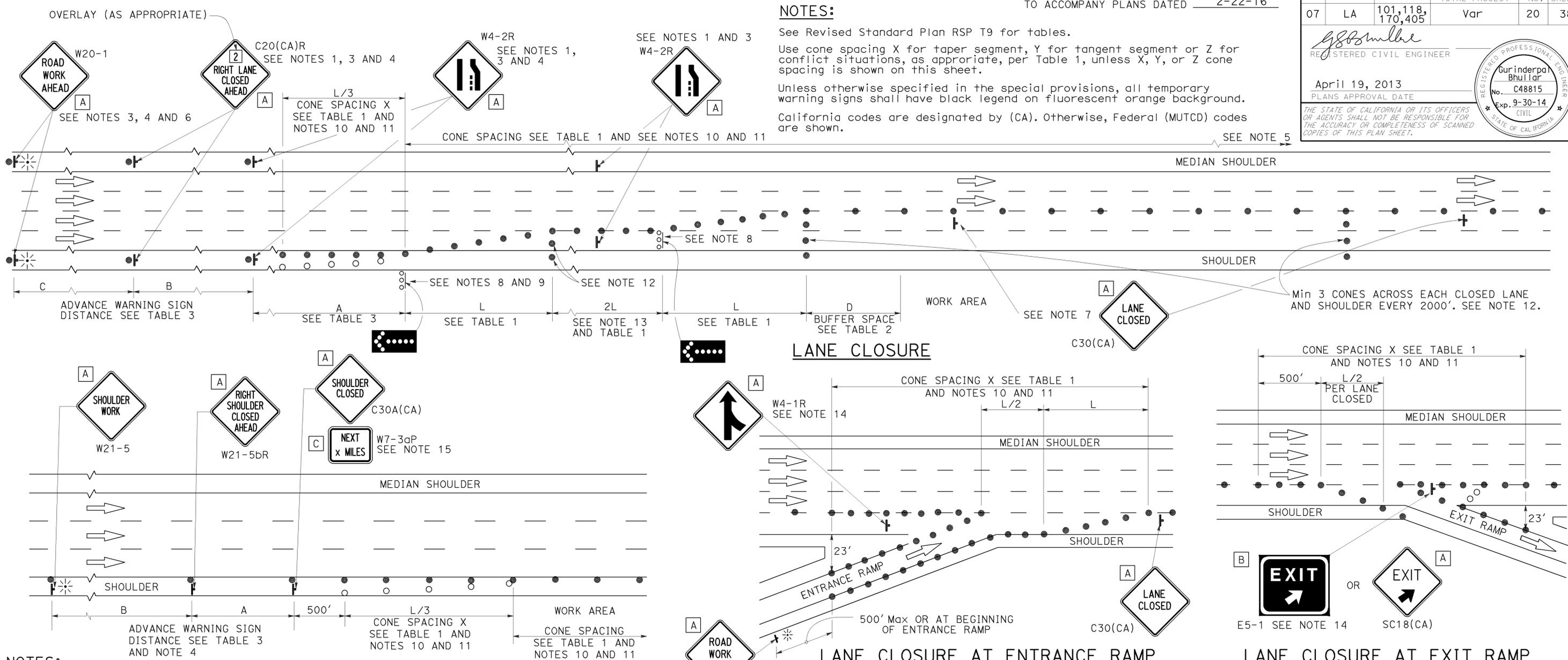
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	20	38

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.

2010 REVISED STANDARD PLAN RSP T10



- 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.

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.

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118, 170,405	Var	21	38

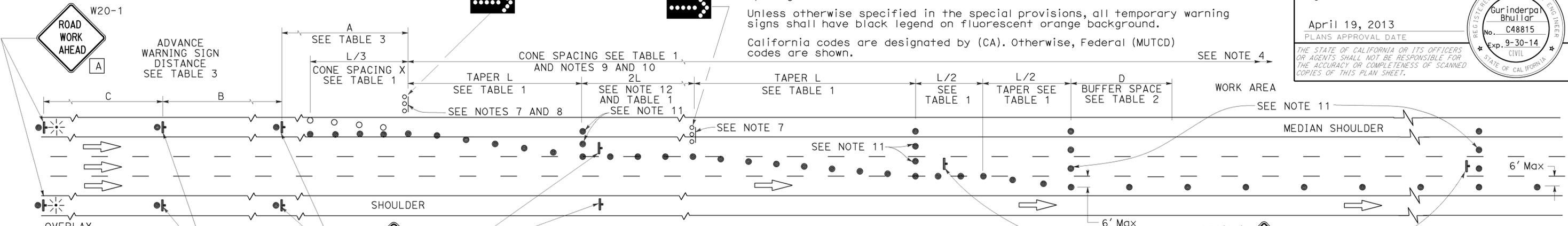
REGISTERED CIVIL ENGINEER
 Gurinderpal Bhullar
 No. C48815
 Exp. 9-30-14
 STATE OF CALIFORNIA

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.

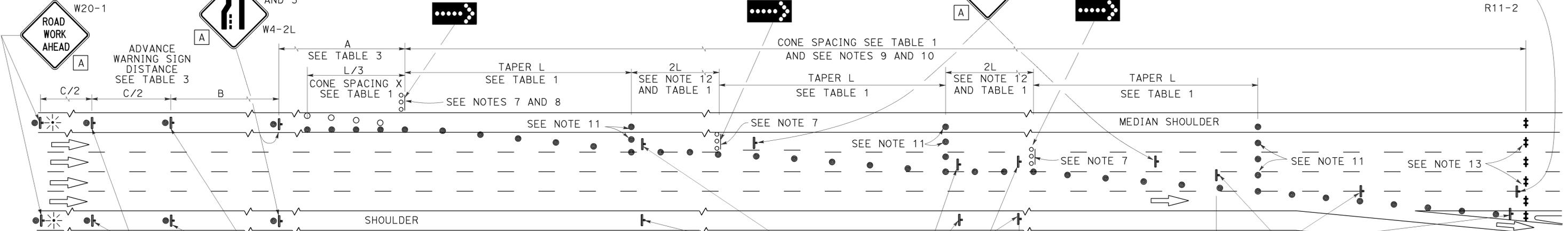
NOTES: See Revised Standard Plan RSP T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Unless otherwise specified in the special provisions, all temporary warning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

SEE NOTES 3 AND 5



LANE CLOSURE WITH PARTIAL SHOULDER USE

SEE NOTES 3 AND 5



COMPLETE CLOSURE

NOTES:

- Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details as shown except that C20(CA)R and W4-2R signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- 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.
- 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.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT ___ MILES", use a C20(CA) sign for the first advance warning sign.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- 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.
- 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 With Partial Shoulder Use" 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.
- 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.
- A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- When specified in the special provisions, a W20-2 "DETOUR AHEAD" sign is to be used in place of the W20-3 "FREEWAY CLOSED AHEAD" sign.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 18"
- C 48" x 30"

LEGEND

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

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

RSP T10A DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10A DATED MAY 20, 2011 - PAGE 238 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10A

2010 REVISED STANDARD PLAN RSP T10A

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	101,118, 170,405	Var	22	38

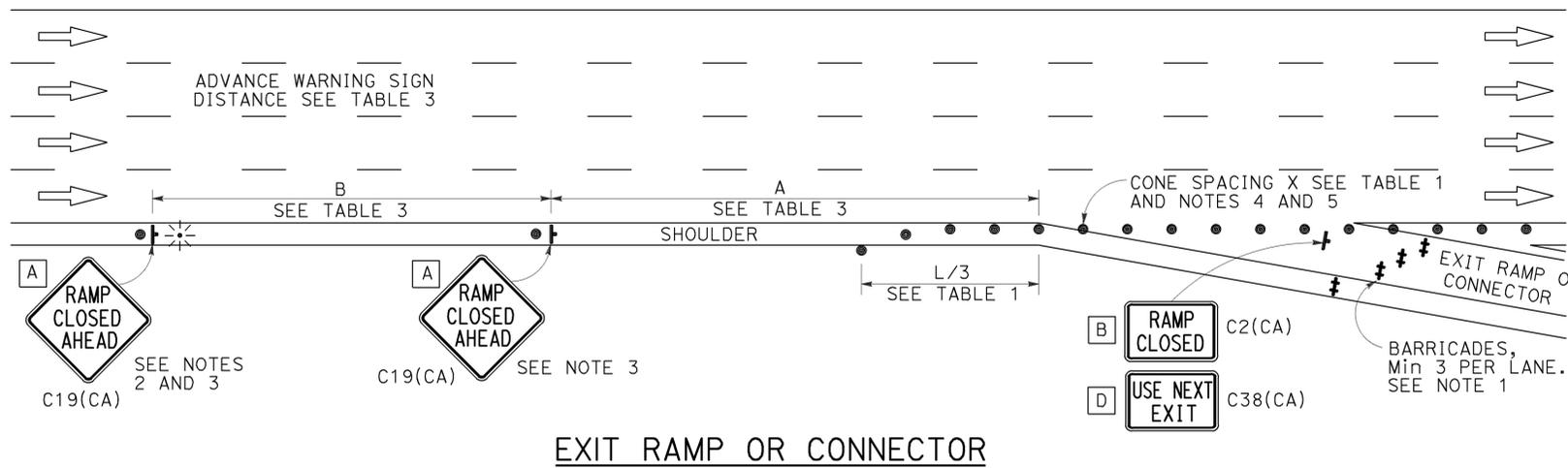
Gurinderpal Bhullar
 REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

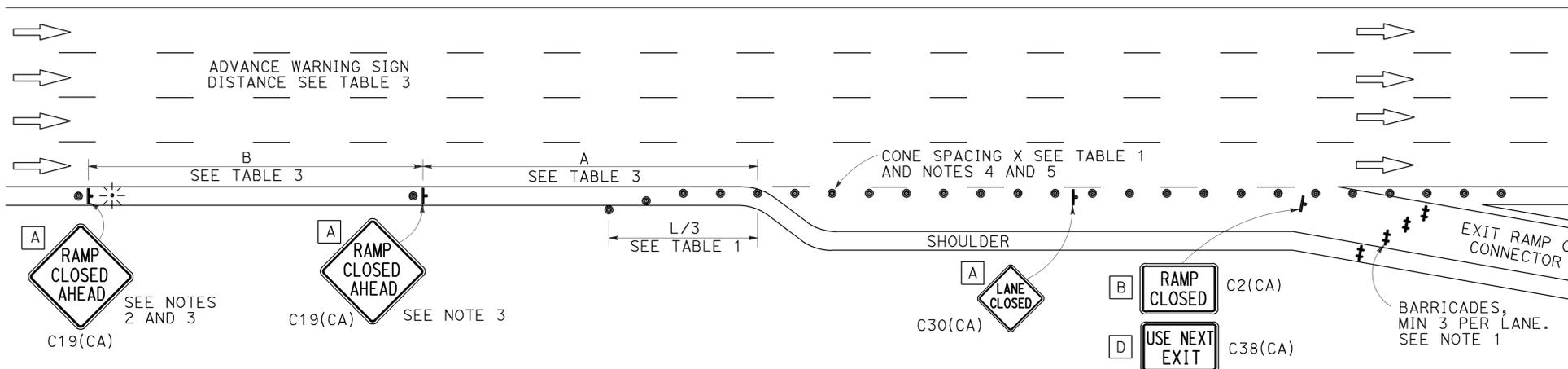
TO ACCOMPANY PLANS DATED 2-22-16

NOTES:

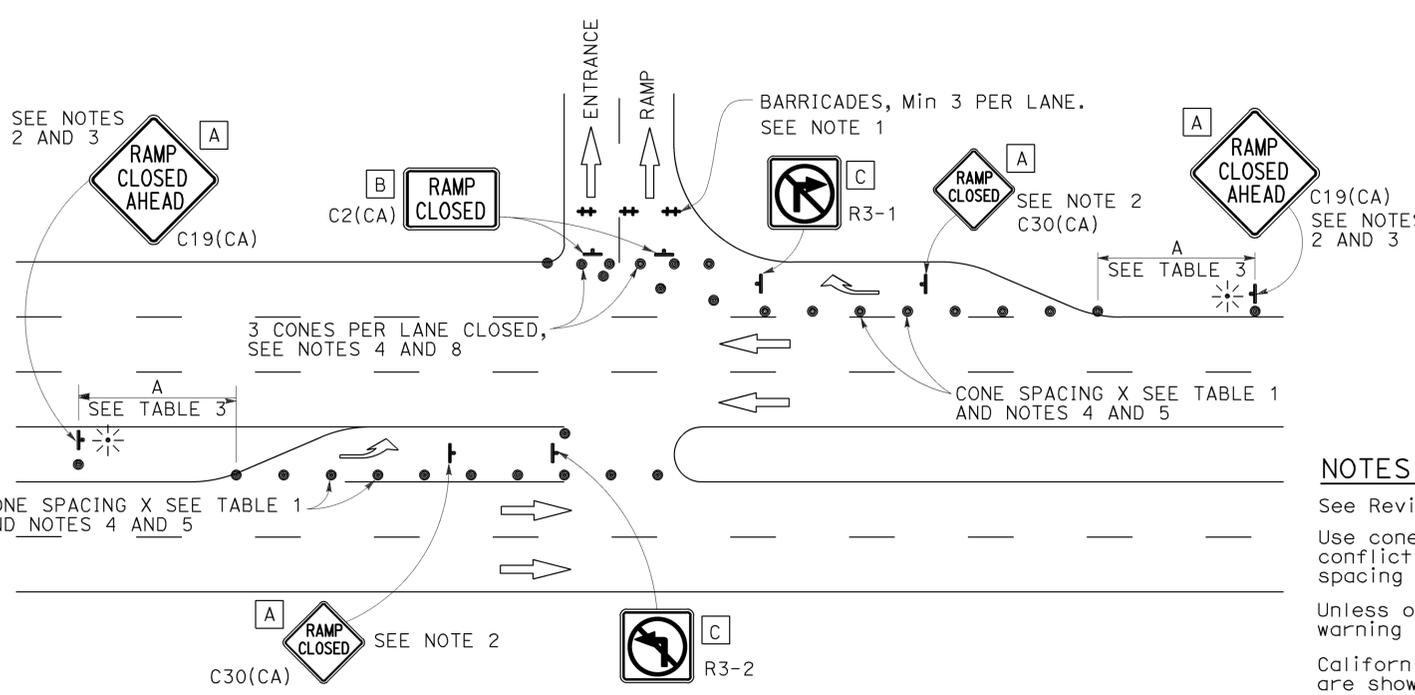
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed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



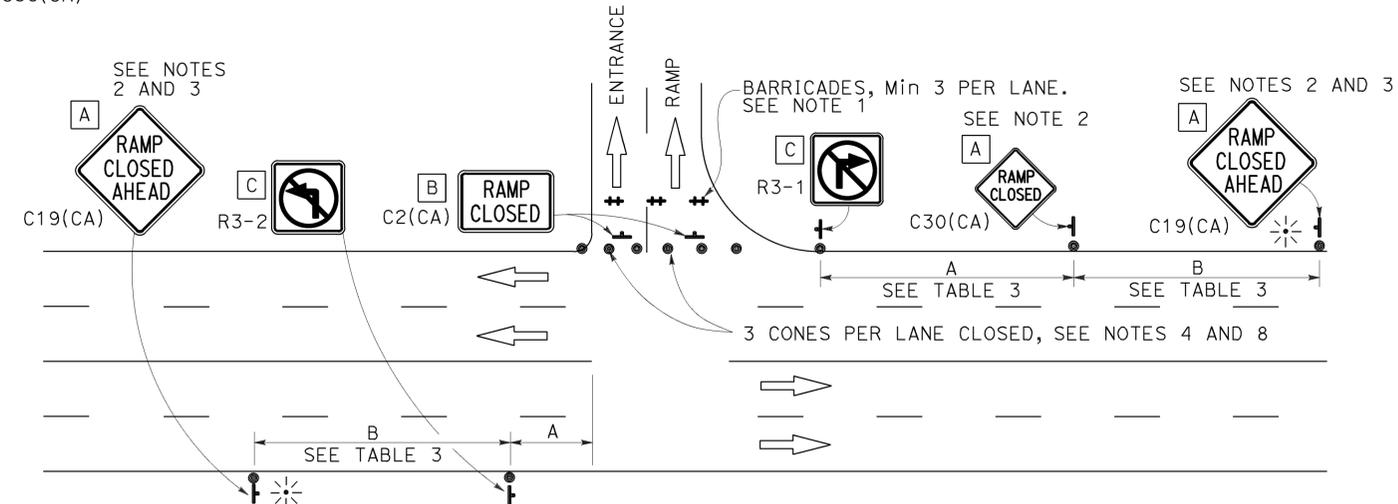
EXIT RAMP OR CONNECTOR



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.

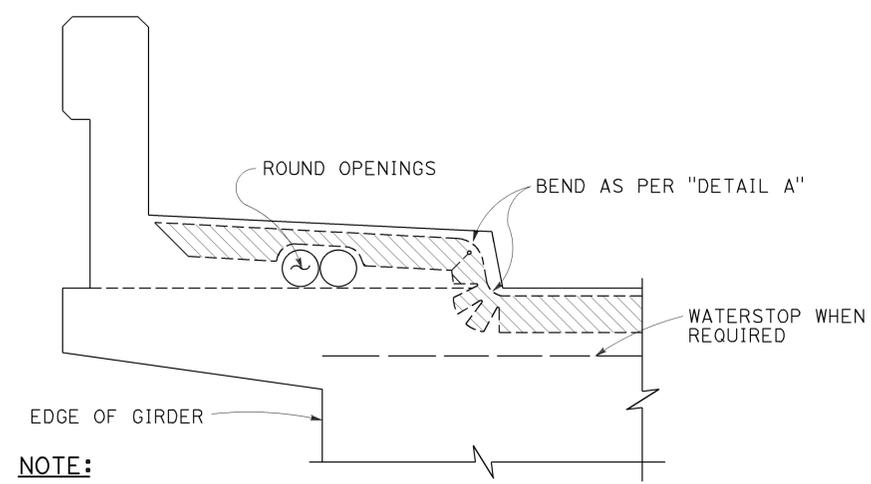
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURE**
 NO SCALE

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

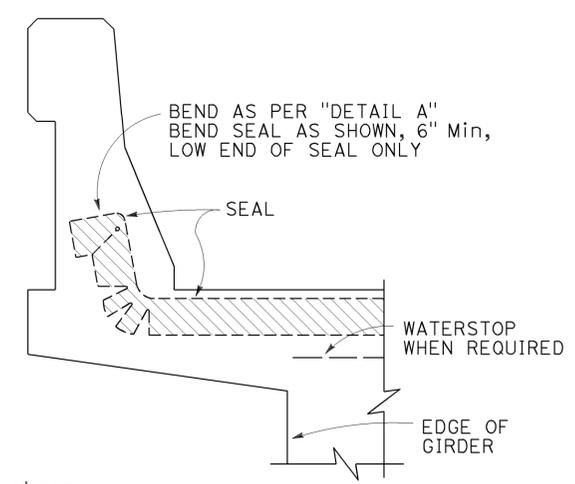
2010 REVISED STANDARD PLAN RSP T14

TO ACCOMPANY PLANS DATED 2-22-16

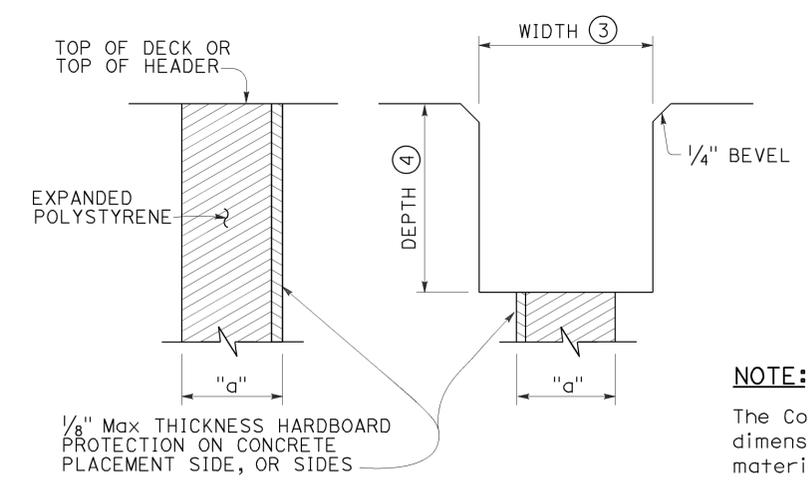


NOTE:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



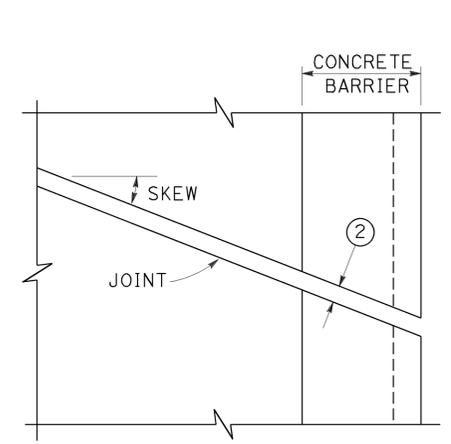
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

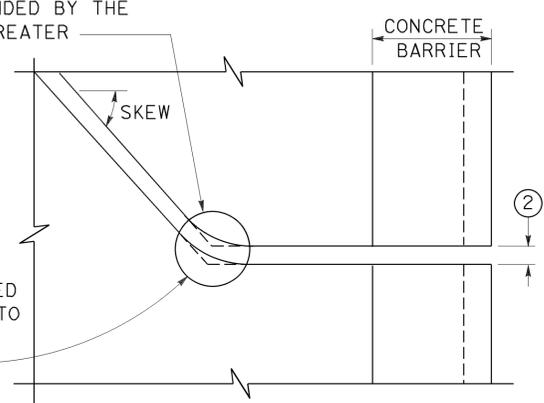
NOTE:
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

JOINT SEALS DETAILS



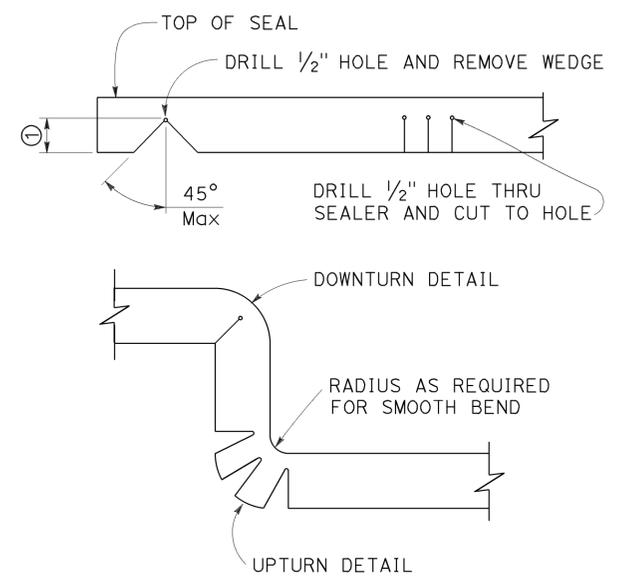
PLAN OF JOINT (SKEW ≤ 20°)

Min ϕ RADIUS TO BE 4 TIMES UNCOMPRESSED WIDTH OF SEAL OR AS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS GREATER



PLAN OF JOINT (SKEW > 20°)

IN LIEU OF SAW CUTTING, THIS AREA MAY BE BLOCKED OUT AND RECONSTRUCTED TO MATCH SAW CUTTING ON BOTH SIDES.



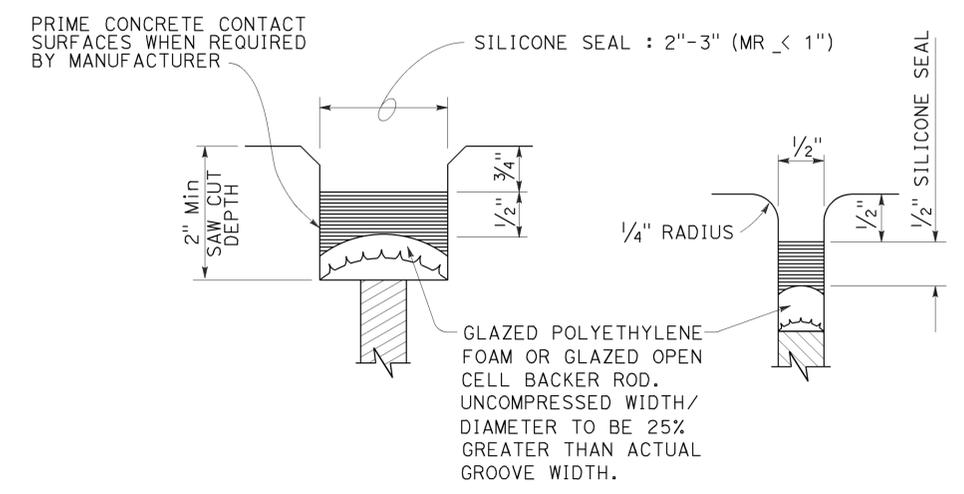
DETAIL A

NOTES:

- Make smooth cuts from the bottom of seal to 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
- Opening in barrier to match width of sawn deck joint.
- Sawcut groove widths shall be as ordered by the Engineer.
- Depth of sawcut: Type A - Depth to be 2" minimum.
 Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W₂) plus dimensions shown.
- MR (movement rating) as shown on other plan sheets.
- Other depths must be approved by the Engineer.
- A sidewalk joint shall be covered by an expansion joint armor.

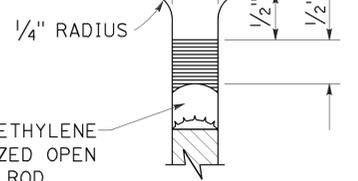
DIMENSIONS "a" OF JOINT REQUIRED

MOVEMENT RATING (MR) (5)	BRIDGE TYPE	"a" DIMENSION		
		DECK CONCRETE PLACED		
		WINTER	FALL-SPRING	SUMMER
2"	ALL EXCEPT CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	ALL EXCEPT CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	ALL EXCEPT CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	ALL EXCEPT CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"



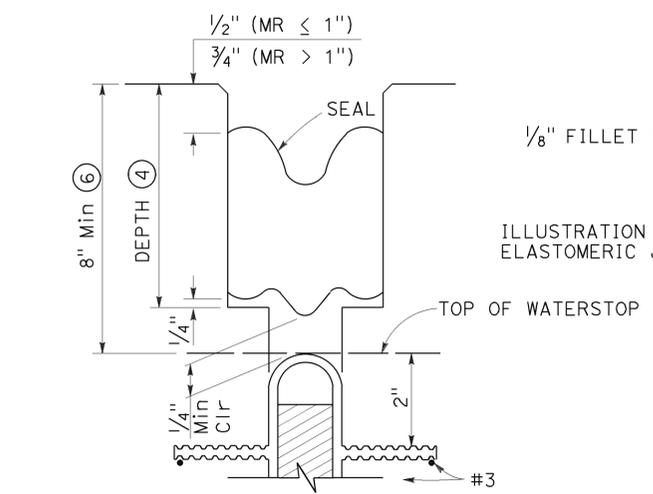
TYPE A SEAL

Movement rating : Silicone = 1" Max

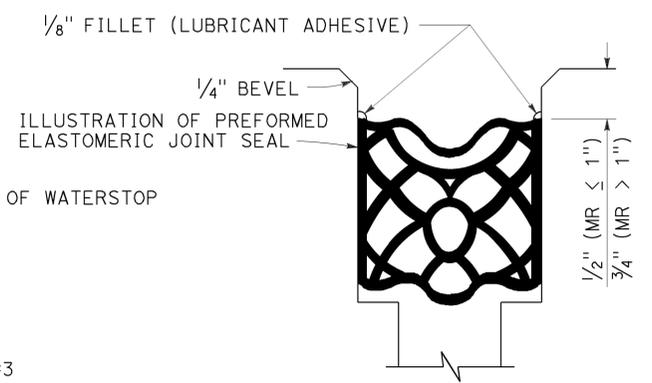


TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W₂)



TYPE B SEAL

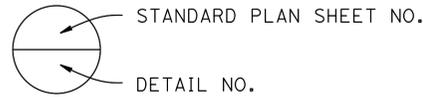
Movement Rating ≤ 2"

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.

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)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



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	GENERAL PLAN NO. 10
11	GENERAL PLAN NO. 11
12	MISCELLANEOUS DETAILS NO. 1
13	MISCELLANEOUS DETAILS NO. 2
14	MISCELLANEOUS DETAILS NO. 3
15	STRUCTURE APPROACH TYPE R(30D)

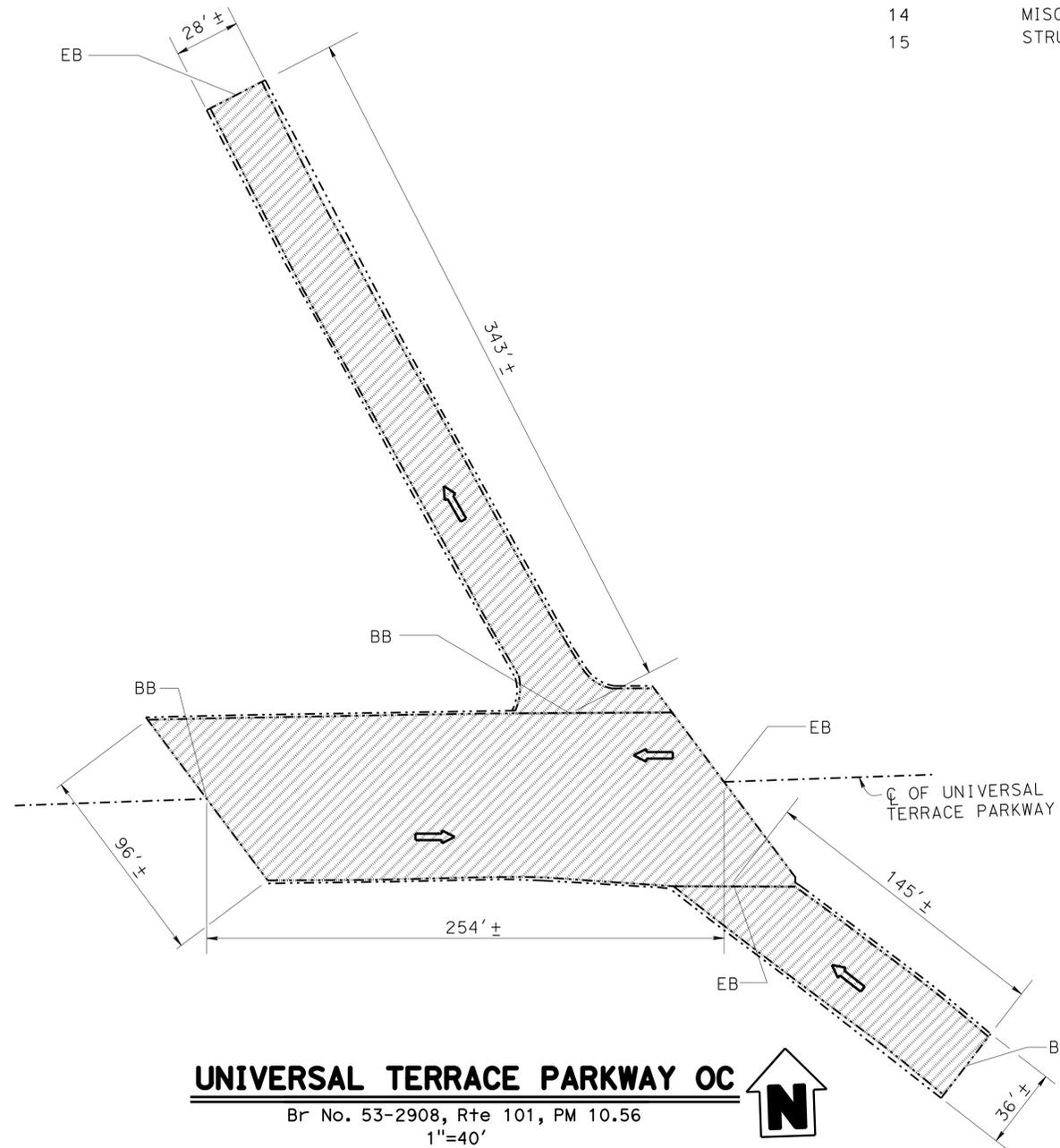
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	24	38

12/23/15
REGISTERED CIVIL ENGINEER DATE

2-22-16
PLANS APPROVAL DATE

No. C69896
Exp. 09/30/16
Mazin Ibrahim
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

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UNIVERSAL TERRACE PARKWAY OC

Br No. 53-2908, Rte 101, PM 10.56
1"=40'

UNIVERSAL TERRACE PARKWAY OC BRIDGE NO. 53-2908
QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	39,400 SQFT
TREAT BRIDGE DECK	39,400 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	492 GAL

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

<p>TONY D. BRAKE DESIGN ENGINEER</p>	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<p>STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION</p>	BRIDGE NO.	<p>ROUTE 101, 118, 170, 405 BRIDGES GENERAL PLAN NO. 1</p>	
	DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi		POST MILE		
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li		PLANS AND SPECS COMPARED Xiahong Li		Varies
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						UNIT: 3489 PROJECT NUMBER : 0715000039-1	07-3W0604	REVISION DATES	SHEET 01 OF 15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	25	38

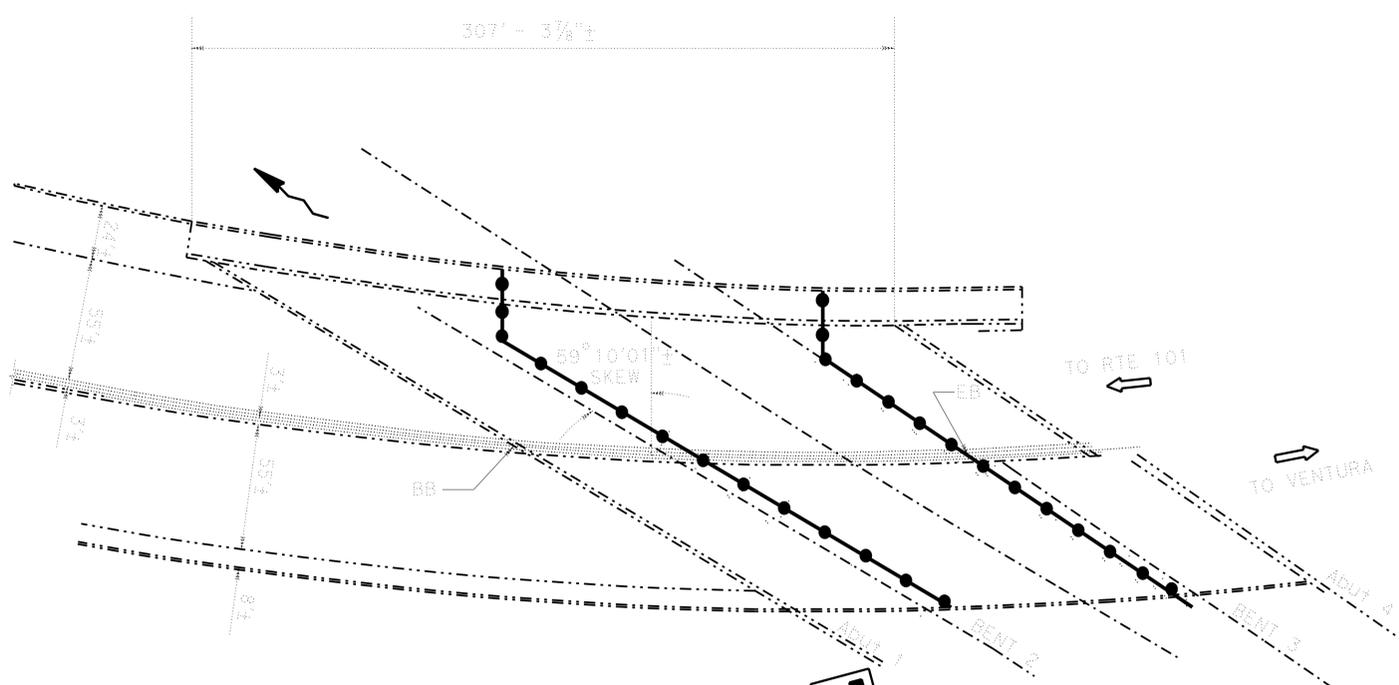
REGISTERED CIVIL ENGINEER DATE 12/23/15
 2-22-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Mazin Ibrahim
 No. C69896
 Exp. 09/30/16
 CIVIL
 STATE OF CALIFORNIA

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LEGEND:

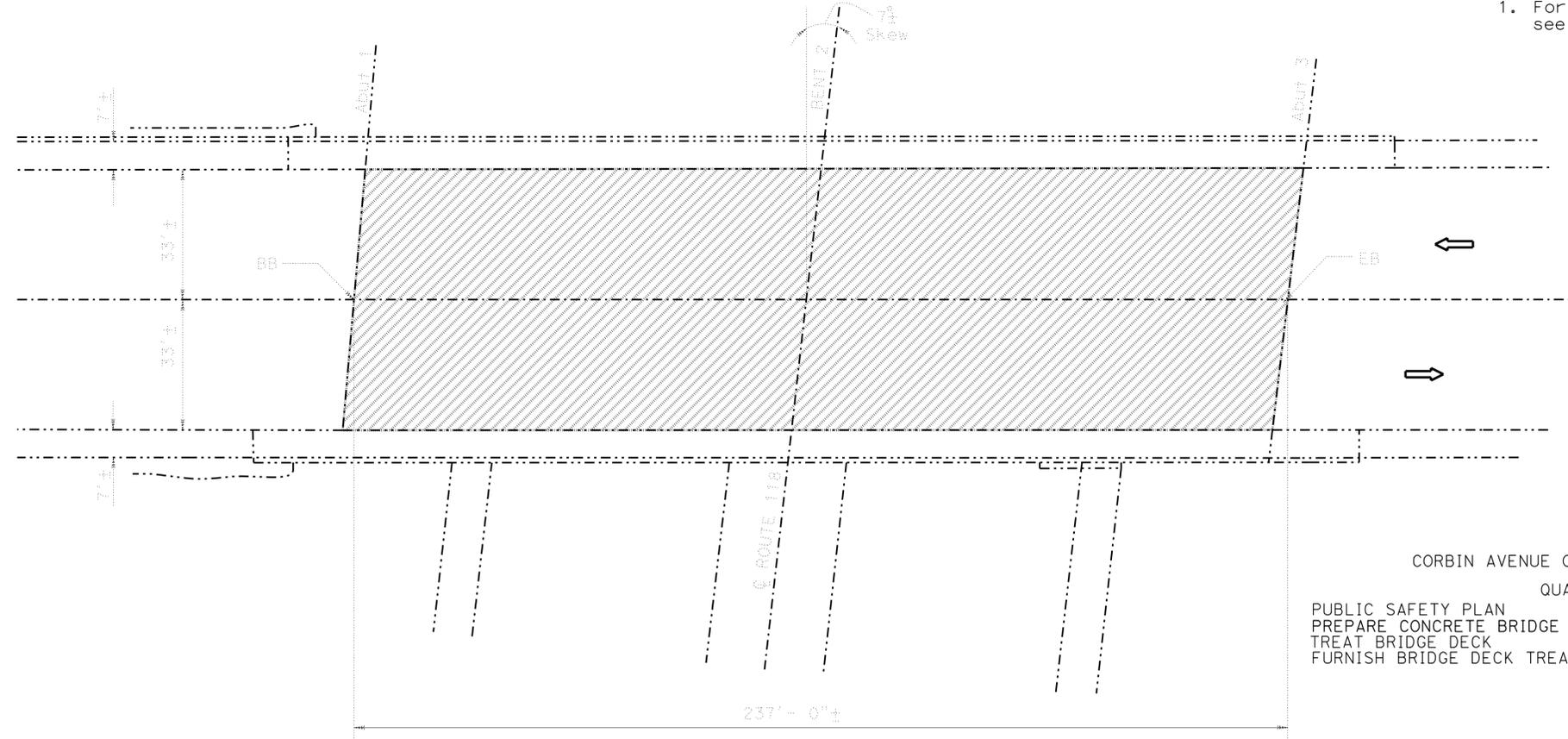
- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
- ▨ INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE AND TREAT EXISTING BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE.
- INDICATES LOCATION OF EXISTING JOINT SEAL RECONSTRUCTION AND PLACEMENT OF NEW JOINT SEAL. SEE NOTE 1.



TUJUNGA WASH BRIDGE QUANTITIES	BRIDGE NO. 53-1337
BRIDGE REMOVAL (PORTION)	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	22 CY
DRILL AND BOND DOWEL	354 LF
BONDED JOINT SEAL (MR 2")	556 LF
BAR REINFORCING STEEL (BRIDGE)	2,270 LB

TUJUNGA WASH
 Br No. 53-1337, Rte 101, PM 13.27
 1"=40'

- NOTES:
- For joint seal reconstruction, see "MISCELLANEOUS DETAILS NO. 3" sheet.



CORBIN AVENUE OC QUANTITIES	BRIDGE NO. 53-2501
PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	15,650 SQFT
TREAT BRIDGE DECK	15,650 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	196 GAL

CORBIN AVENUE OC
 Br No. 53-2501, Rte 118, PM R4.29
 1"=20'

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 101, 118, 170, 405 BRIDGES GENERAL PLAN NO. 2	
	DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi			CHECKED Ramesh Patel		POST MILE
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li			CHECKED Xiahong Li		PLANS AND SPECS COMPARED Xiahong Li

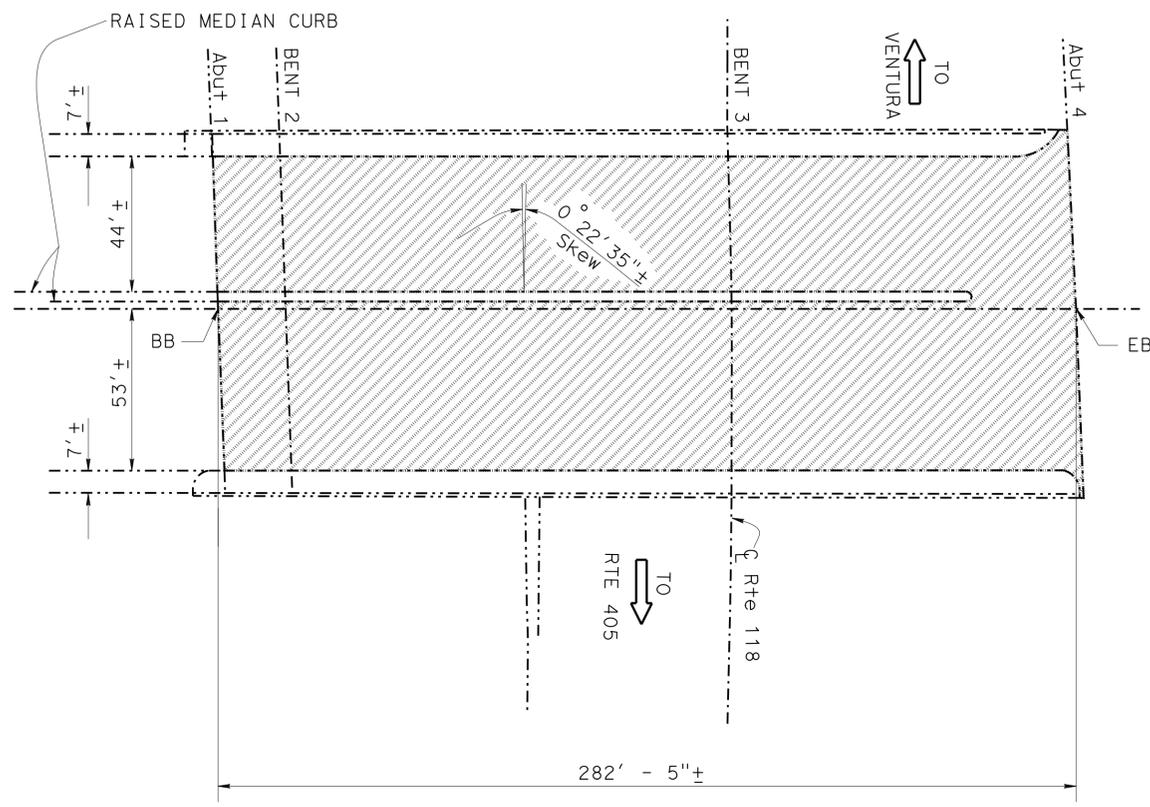
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3489 PROJECT NUMBER : 0715000039-1 CONTRACT NO. 07-3W0604 DISREGARD PRINTS BEARING EARLIER REVISION DATES 12-23-15 SHEET 02 OF 15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	26	38

REGISTERED CIVIL ENGINEER DATE 12/23/15
 PLANS APPROVAL DATE 2-22-16
 No. C69896
 Exp. 09/30/16
 PROFESSIONAL ENGINEER
 Mazin Ibrahim
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

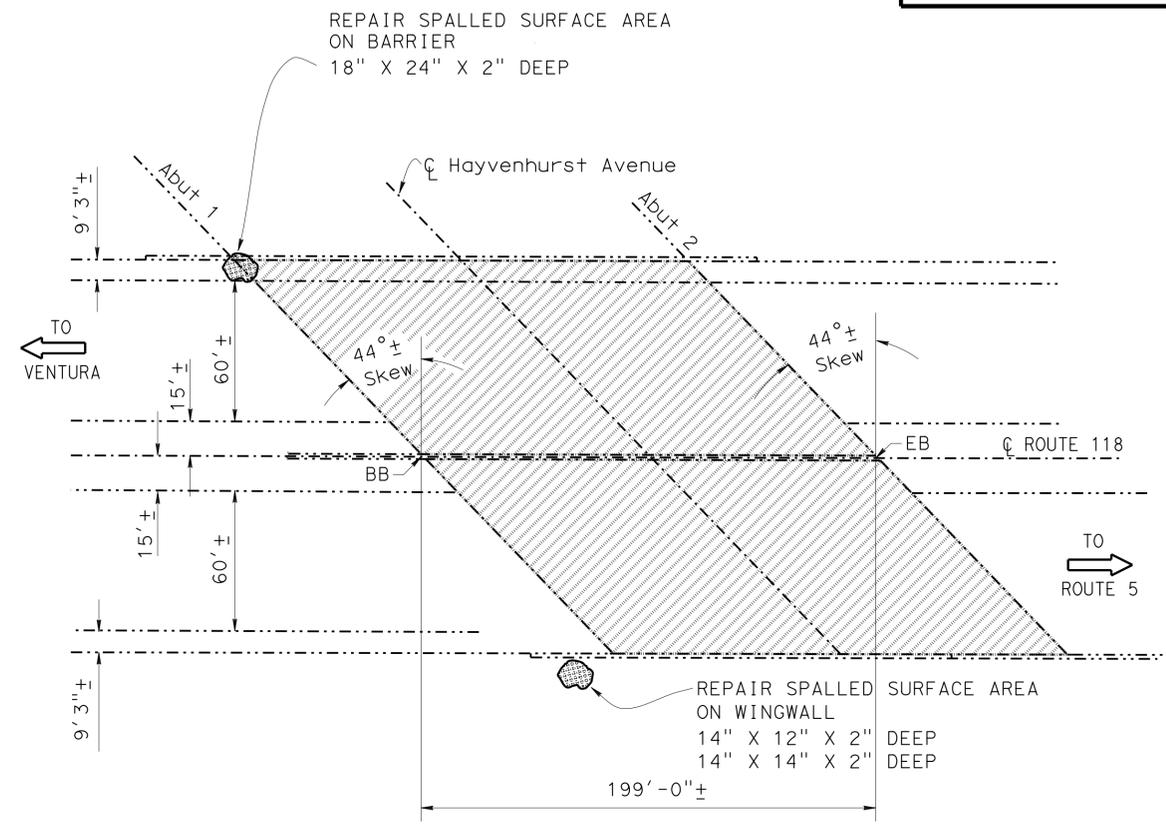
- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
- ▨ INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE AND TREAT EXISTING BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE.



BALBOA BOULEVARD OC

Br No. 53-2395, Rte 118, PM R7.8
1"=30'

BALBOA BOULEVARD OC	BRIDGE NO. 53-2395
QUANTITIES	
PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	27,400 SQFT
TREAT BRIDGE DECK	27,400 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	343 GAL



HAYVENHURST AVENUE UC

Br No. 53-2204, Rte 118, PM R8.34
1"=40'

HAYVENHURST AVENUE UC	BRIDGE NO. 53-2204
QUANTITIES	
PUBLIC SAFETY PLAN	LUMP SUM
REPAIR SPALLED SURFACE AREA	5 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	43,060 SQFT
TREAT BRIDGE DECK	43,060 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	539 GAL

NOTE:
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TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 101, 118, 170, 405 BRIDGES GENERAL PLAN NO. 3			
	DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi		POST MILE				
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li		PLANS AND SPECS COMPARED Xiahong Li		Varies		
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						UNIT: 3489	PROJECT NUMBER : 0715000039-1	CONTRACT NO. 07-3W0604	REVISION DATES	SHEET 03	OF 15

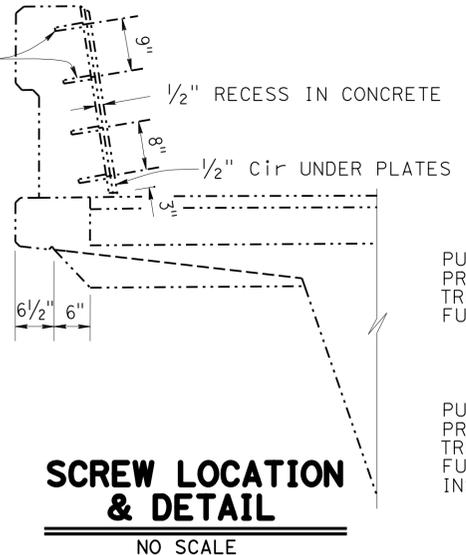
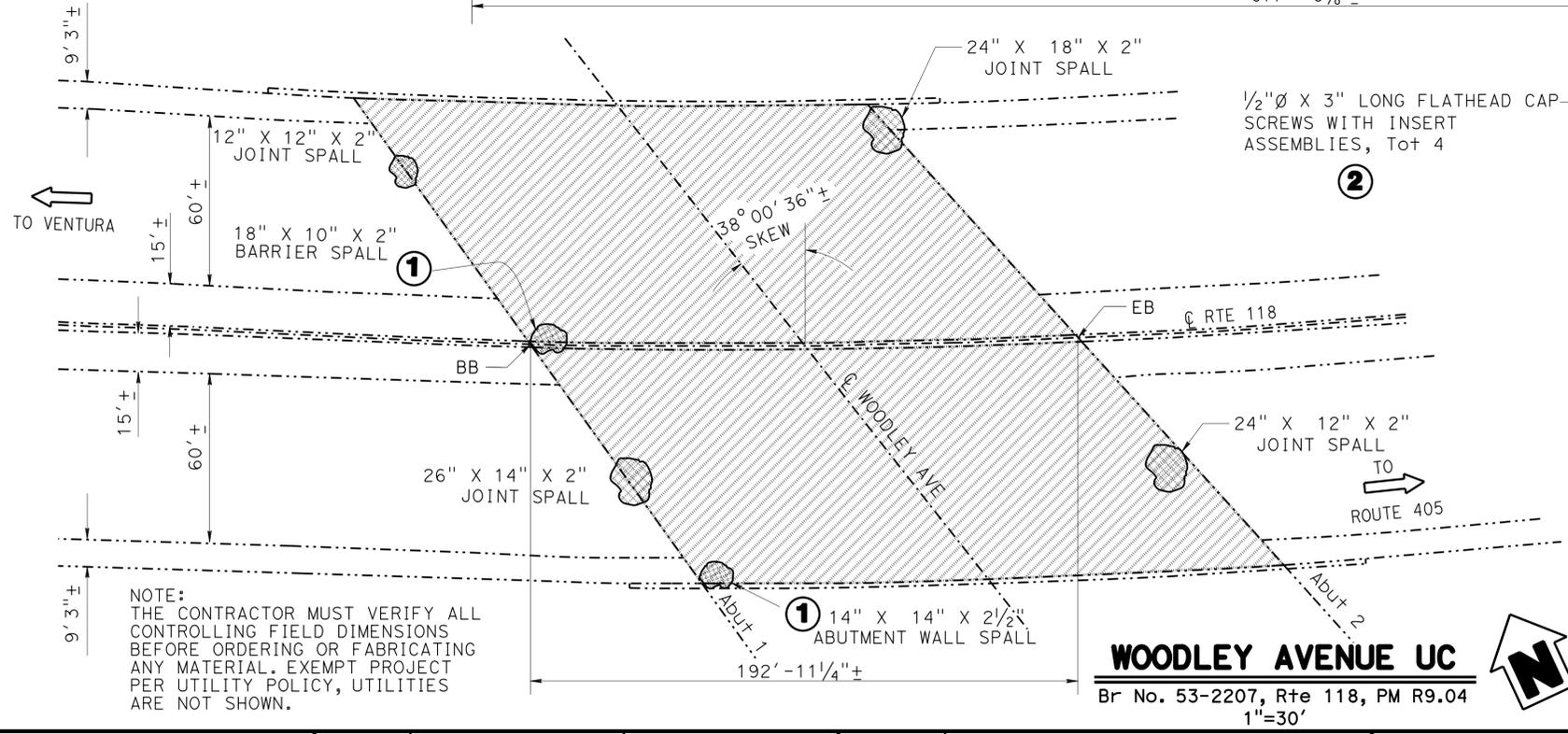
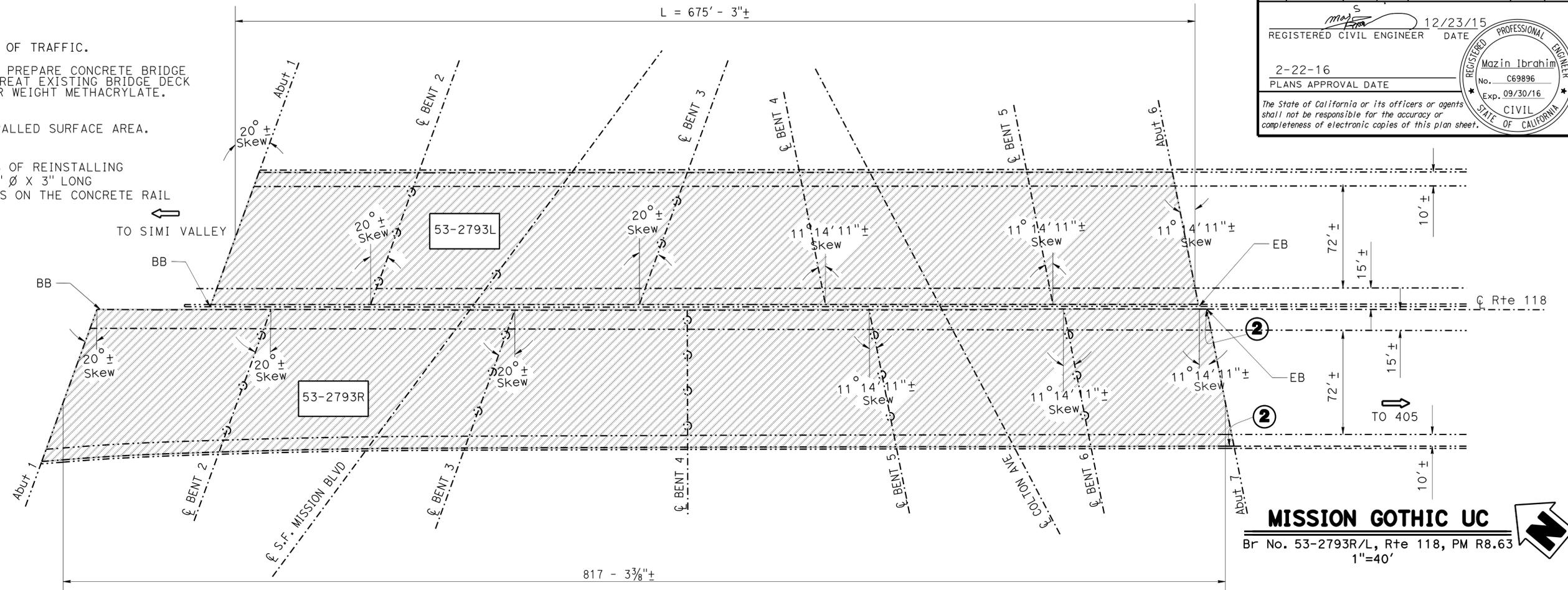
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101, 118, 170, 405	Var	27	38

REGISTERED CIVIL ENGINEER DATE 12/23/15
 REGISTERED CIVIL ENGINEER MAZIN IBRAHIM
 No. C69896
 Exp. 09/30/16
 CIVIL ENGINEER STATE OF CALIFORNIA
 PLANS APPROVAL DATE 2-22-16
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LEGEND:

- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
- [Hatched Box] INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE AND TREAT EXISTING BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE.
- ① [Spalled Area] INDICATES REPAIR SPALLED SURFACE AREA.
- ② [Screw Location] INDICATES LOCATIONS OF REINSTALLING THE 4 FLAT HEAD 1/2" Ø X 3" LONG FLATHEAD CAP SCREWS ON THE CONCRETE RAIL STEEL PLATE.



MISSION GOTHIC UC QUANTITIES		BRIDGE NO. 53-2793L
PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	79,300 SQFT	
TREAT BRIDGE DECK	79,300 SQFT	
FURNISH BRIDGE DECK TREATMENT MATERIAL	991 GAL	
MISSION GOTHIC UC QUANTITIES		BRIDGE NO. 53-2793R
PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	65,500 SQFT	
TREAT BRIDGE DECK	65,500 SQFT	
FURNISH BRIDGE DECK TREATMENT MATERIAL	819 GAL	
INSTALL CAP SCREW	8 EA	
WOODLEY AVENUE UC QUANTITIES		BRIDGE NO. 53-2207
PUBLIC SAFETY PLAN	LUMP SUM	
RAPID SETTING CONCRETE (PATCH)	1 CF	
REPAIR SPALLED SURFACE AREA	4 SQFT	
REMOVE UNSOUND CONCRETE	1 CF	
PREPARE CONCRETE BRIDGE DECK SURFACE	32,520 SQFT	
TREAT BRIDGE DECK	32,520 SQFT	
FURNISH BRIDGE DECK TREATMENT MATERIAL	407 GAL	

NOTE: THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

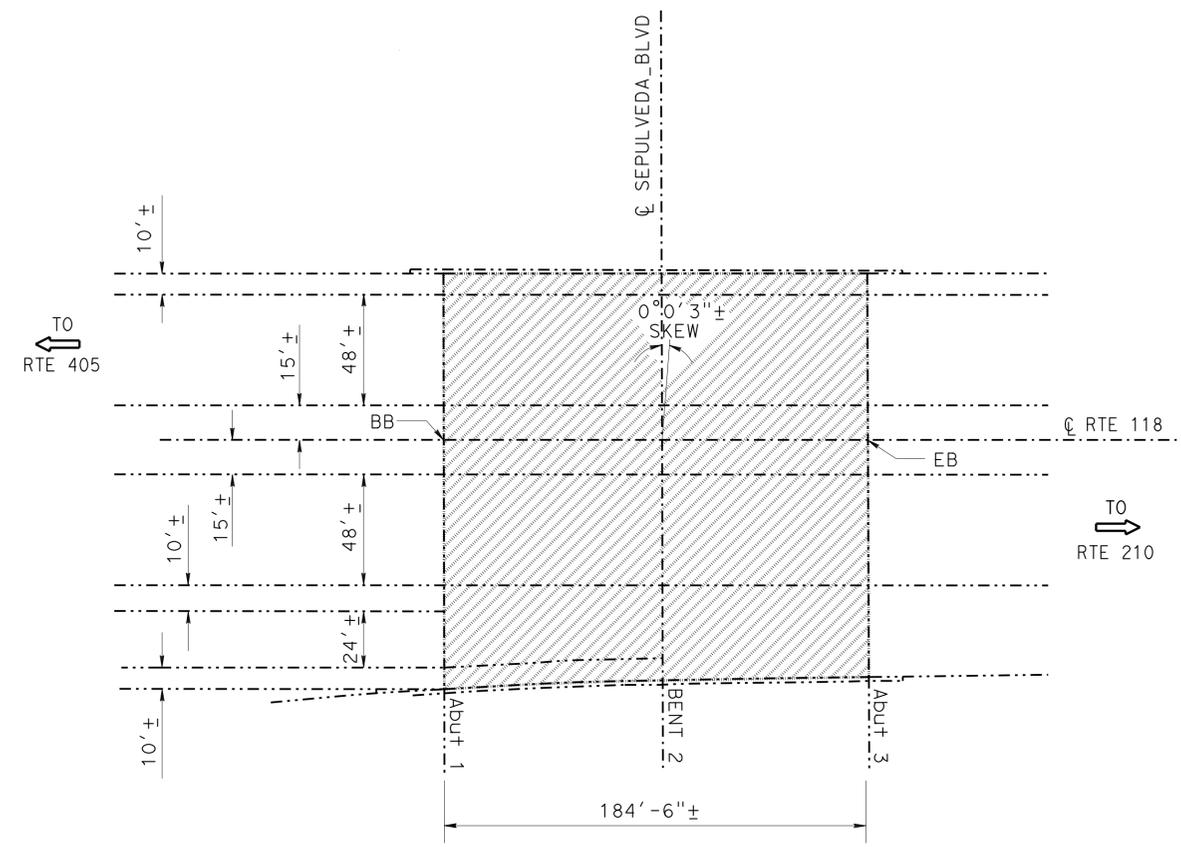
BRIDGE NO. Various
 POST MILE Varies
ROUTE 101, 118, 170, 405 BRIDGES
GENERAL PLAN NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	28	38

12/23/15
 REGISTERED CIVIL ENGINEER DATE
 2-22-16
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 Mazin Ibrahim
 No. C69896
 Exp. 09/30/16
 CIVIL
 STATE OF CALIFORNIA
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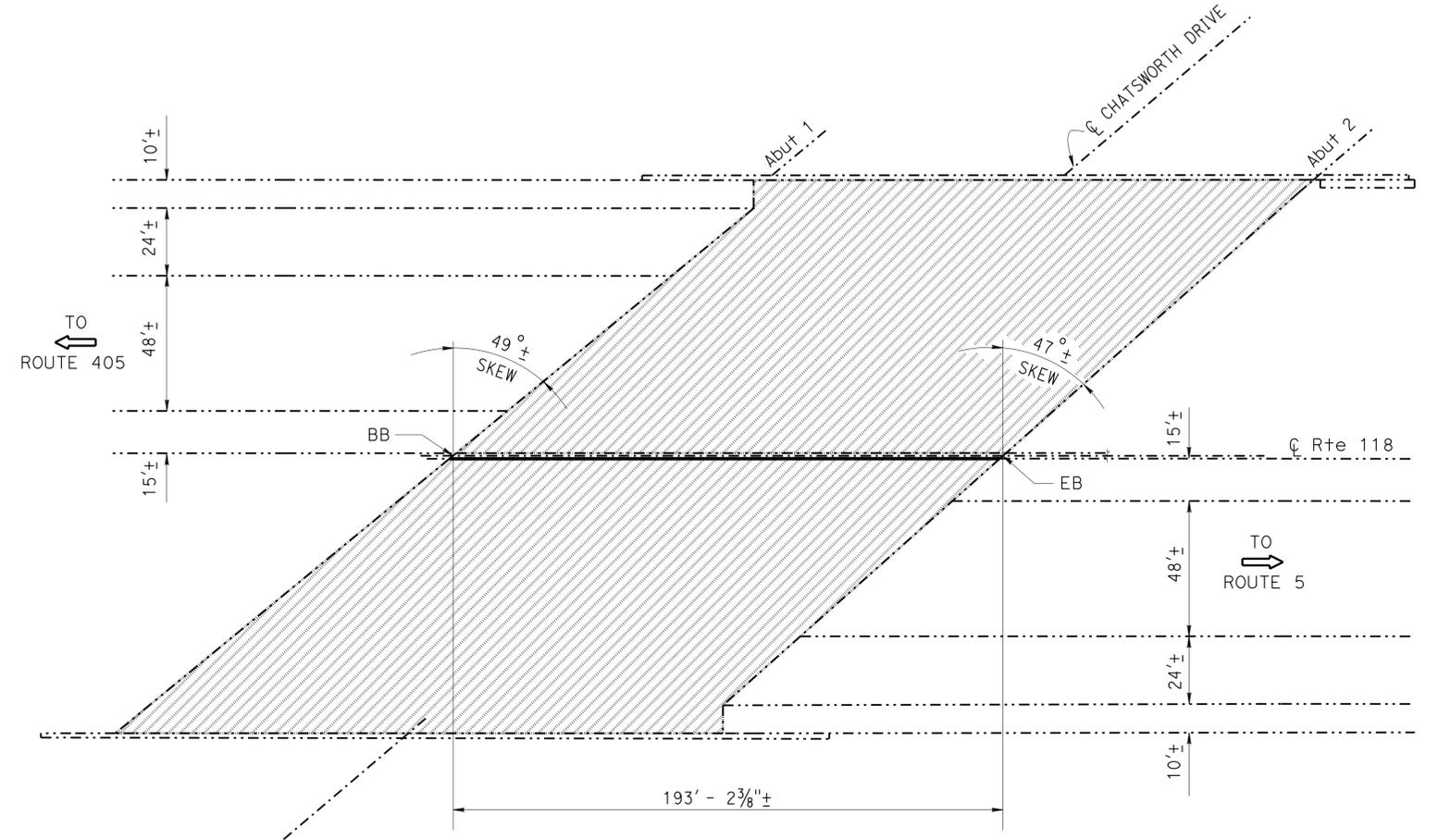
- INDICATES EXISTING.
- ➔ INDICATES DIRECTION OF TRAFFIC.
- ▨ INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE AND TREAT EXISTING BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE.
- INDICATES LOCATION OF CLEAN EXPANSION JOINT AND PLACEMENT OF NEW JOINT SEAL.



SEPULVEDA BLVD UC
 Br No. 53-2213, Rte 118, PM R10.07
 1"=40'

SEPULVEDA BOULEVARD UC BRIDGE NO. 53-2213
 QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	33,210 SQFT
TREAT BRIDGE DECK	33,210 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	416 GAL



CHATSWORTH DRIVE UC
 Br No. 53-2214, Rte 118, PM R10.51
 1"=30'

CHATSWORTH DRIVE UC BRIDGE NO. 53-2214
 QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	37,500 SQFT
TREAT BRIDGE DECK	37,500 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	469 GAL
CLEAN EXPANSION JOINT	193 LF
JOINT SEAL (TYPE AL)	193 LF

NOTE:
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DESIGN ENGINEER TONY D. BRAKE	DESIGN	By Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	By Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	By Eugene Goishi
	QUANTITIES	By Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	By Xiahong Li

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies
ROUTE 101, 118, 170, 405 BRIDGES
GENERAL PLAN NO. 5

USERNAME => s125624 DATE PLOTTED => 23-FEB-2016 TIME PLOTTED => 09:19

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	29	38

12/23/15
REGISTERED CIVIL ENGINEER DATE

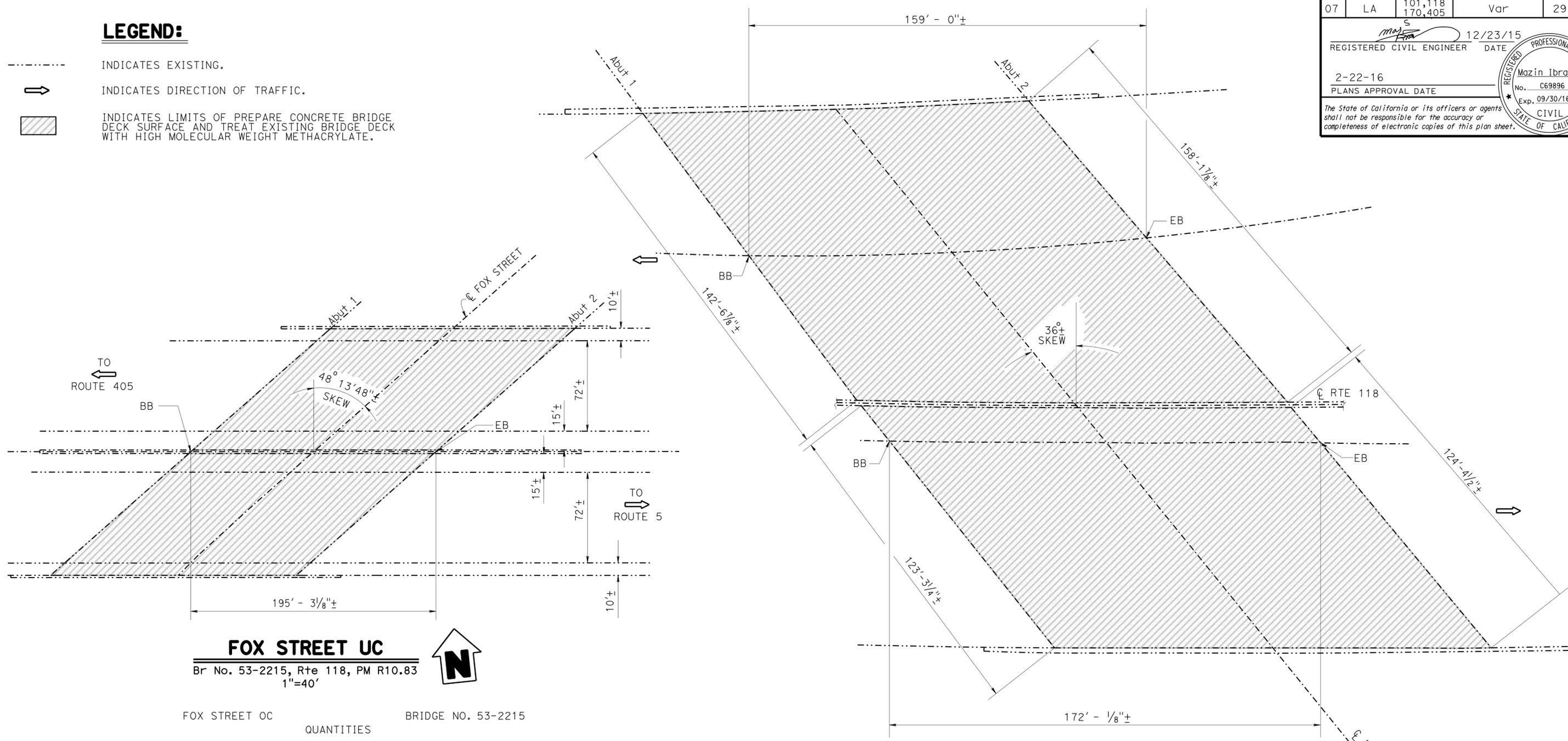
2-22-16
PLANS APPROVAL DATE

PROFESSIONAL ENGINEER
Mazin Ibrahim
No. C69896
Exp. 09/30/16
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.



FOX STREET UC
Br No. 53-2215, Rte 118, PM R10.83
1"=40'

FOX STREET OC	QUANTITIES	BRIDGE NO. 53-2215
PUBLIC SAFETY PLAN		LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE		37,900 SQFT
TREAT BRIDGE DECK		37,900 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL		474 GAL

ARLETA AVENUE UC
Br No. 53-2357, Rte 118, PM R11.05
1"=20'

ARLETA AVENUE UC	QUANTITIES	BRIDGE NO. 53-2357
PUBLIC SAFETY PLAN		LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE		36,770 SQFT
TREAT BRIDGE DECK		36,770 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL		460 GAL

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

ROUTE 101, 118, 170, 405 BRIDGES
GENERAL PLAN NO. 6

TIME PLOTTED => 09:19 USERNAME => s125624 DATE PLOTTED => 23-FEB-2016

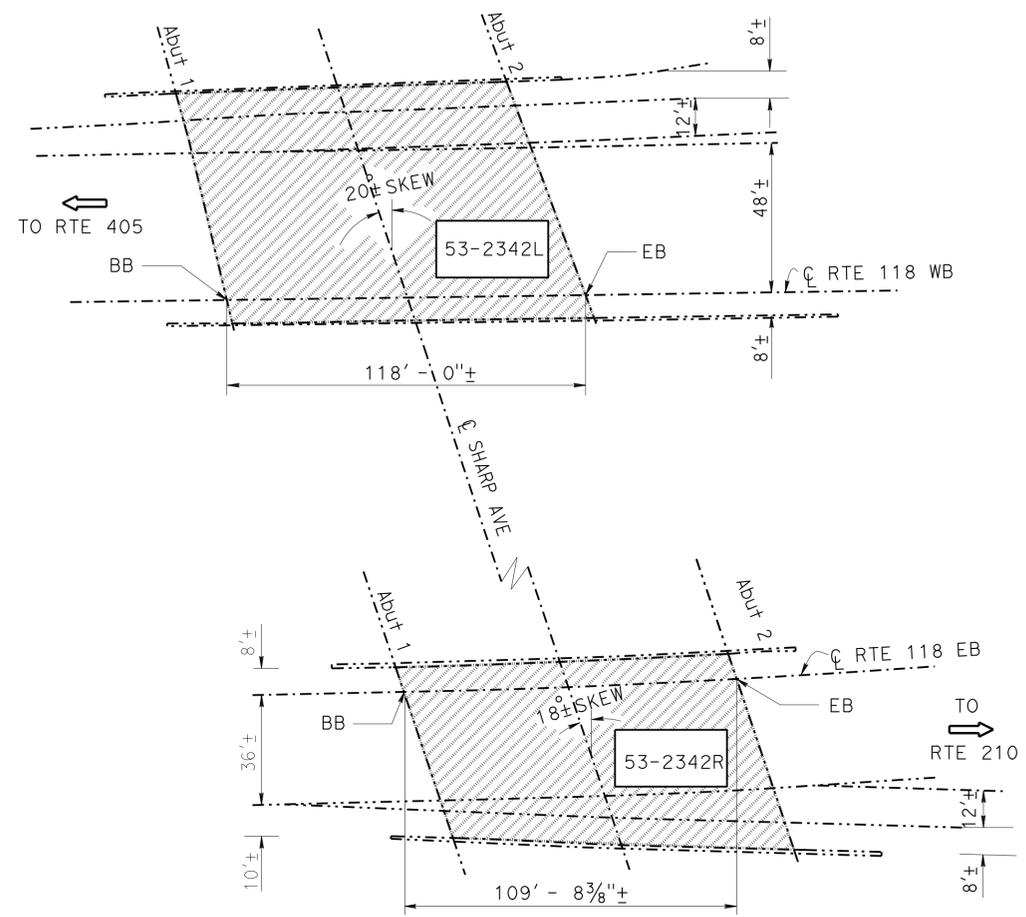
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	30	38

12/23/15
 REGISTERED CIVIL ENGINEER DATE
 2-22-16
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Mazin Ibrahim
 No. C69896
 Exp. 09/30/16
 CIVIL
 STATE OF CALIFORNIA

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.

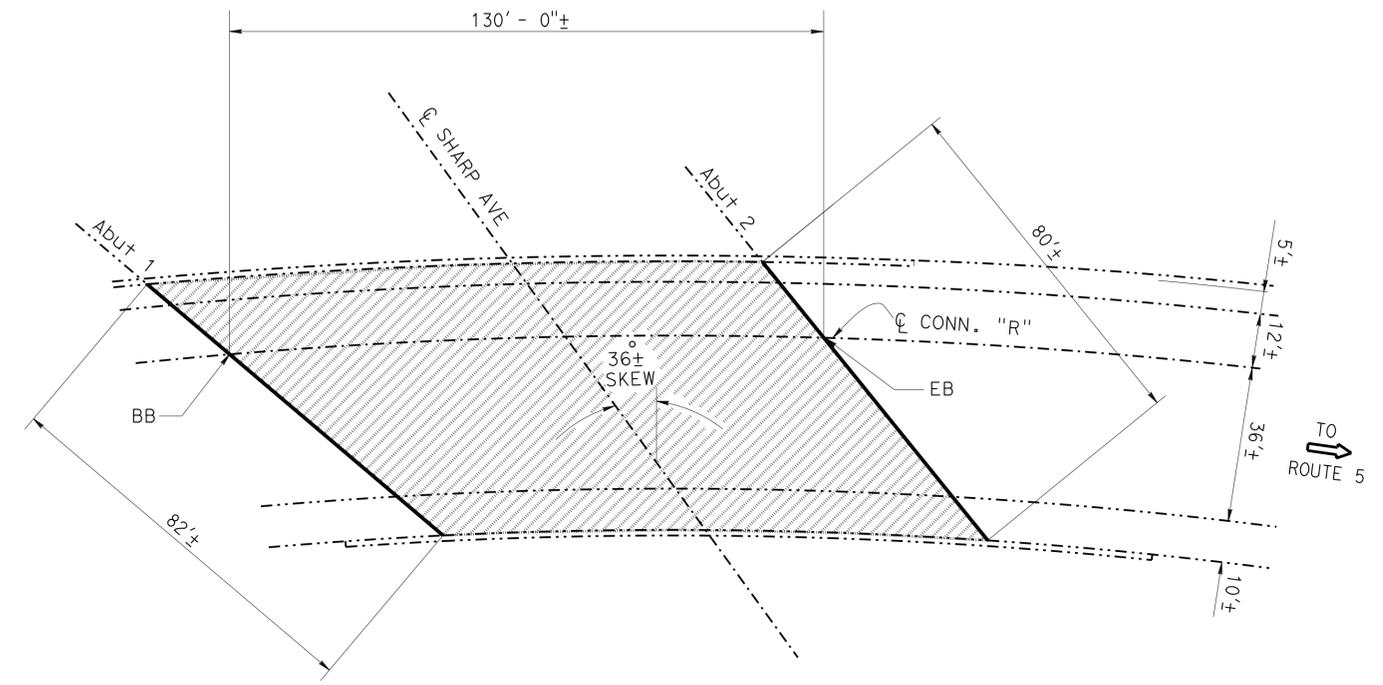


SHARP AVENUE UC
 Br No. 53-2342R/L, Rte 118, PM R11.31
 1"=30'

SHARP AVENUE UC	BRIDGE NO. 53-2342L
QUANTITIES	
PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	8,970 SQFT
TREAT BRIDGE DECK	8,970 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	113 GAL

SHARP AVENUE UC	BRIDGE NO. 53-2342R
QUANTITIES	
PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	6,480 SQFT
TREAT BRIDGE DECK	6,480 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	81 GAL

NOTE:
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E118-S5 CONNECTOR OC
 Br No. 53-2343G, Rte 118, PM R11.32
 1"=20'

E118-S5 CONNECTOR OC	BRIDGE NO. 53-2343G
QUANTITIES	
PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	8,200 SQFT
TREAT BRIDGE DECK	8,200 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	103 GAL
CLEAN EXPANSION JOINT	162 LF
JOINT SEAL (MR 1/2")	162 LF

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

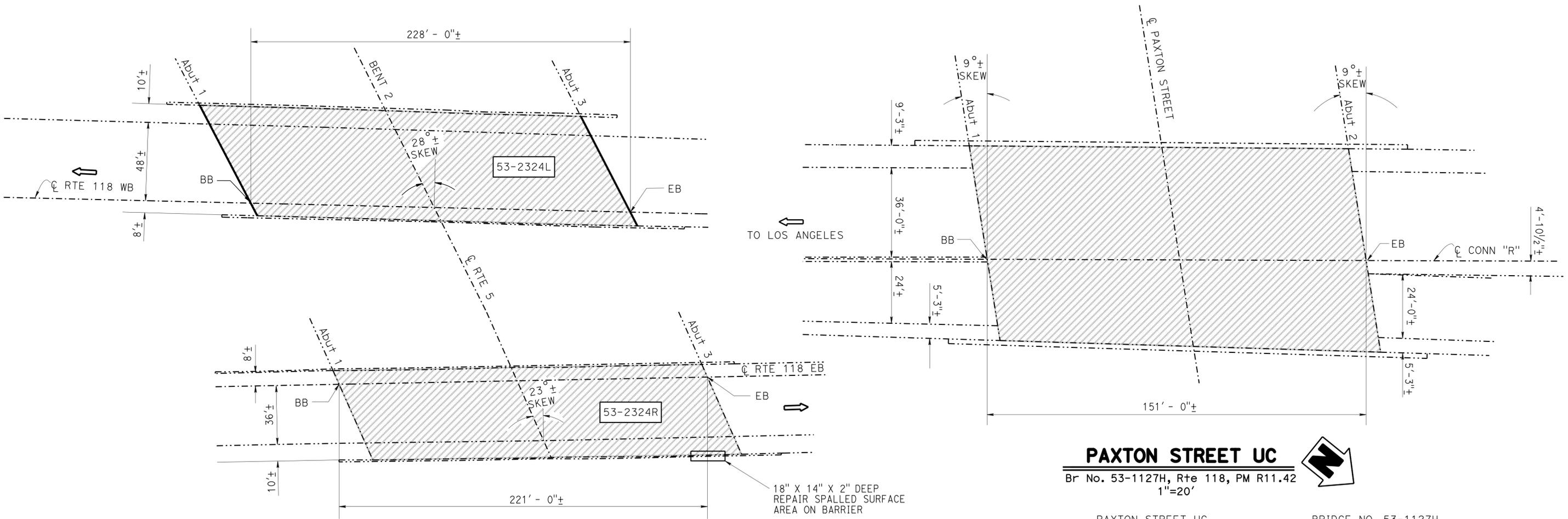
ROUTE 101, 118, 170, 405 BRIDGES
GENERAL PLAN NO. 7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	31	38

REGISTERED CIVIL ENGINEER DATE 12/23/15
 PLANS APPROVAL DATE 2-22-16
 REGISTERED PROFESSIONAL ENGINEER
 No. C69896
 Exp. 09/30/16
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

- INDICATES EXISTING.
- ➔ INDICATES DIRECTION OF TRAFFIC.
- ▨ INDICATES LIMITS OF PREPARE CONCRETE APPROACH SLAB SURFACE AND TREAT EXISTING BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE.
- INDICATES LOCATION OF CLEAN EXPANSION JOINT AND PLACEMENT OF NEW JOINT SEAL.



ROUTE 118/5 SEPARATION
 Br No. 53-2324R/L, Rte 118, PM R11.42
 1"=30'

PAXTON STREET UC
 Br No. 53-1127H, Rte 118, PM R11.42
 1"=20'

ROUTE 118/5 SEPARATION QUANTITIES BRIDGE NO. 53-2324L ROUTE 118/5 SEPARATION QUANTITIES BRIDGE NO. 53-2324R

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECTS PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

PUBLIC SAFETY PLAN
 PREPARE CONCRETE BRIDGE DECK SURFACE
 TREAT BRIDGE DECK
 FURNISH BRIDGE DECK TREATMENT MATERIAL
 CLEAN EXPANSION JOINT
 JOINT SEAL (MR=1 1/2")

LUMP SUM
 15,050 SQFT
 15,050 SQFT
 189 GAL
 150 LF
 150 LF

PUBLIC SAFETY PLAN
 REPAIR SPALLED SURFACE AREA
 PREPARE CONCRETE BRIDGE DECK SURFACE
 TREAT BRIDGE DECK
 FURNISH BRIDGE DECK TREATMENT MATERIAL

LUMP SUM
 2 SQFT
 11,950 SQFT
 11,950 SQFT
 150 GAL

PUBLIC SAFETY PLAN
 PREPARE CONCRETE BRIDGE DECK SURFACE
 TREAT BRIDGE DECK
 FURNISH BRIDGE DECK TREATMENT MATERIAL

LUMP SUM
 11,250 SQFT
 11,250 SQFT
 141 GAL

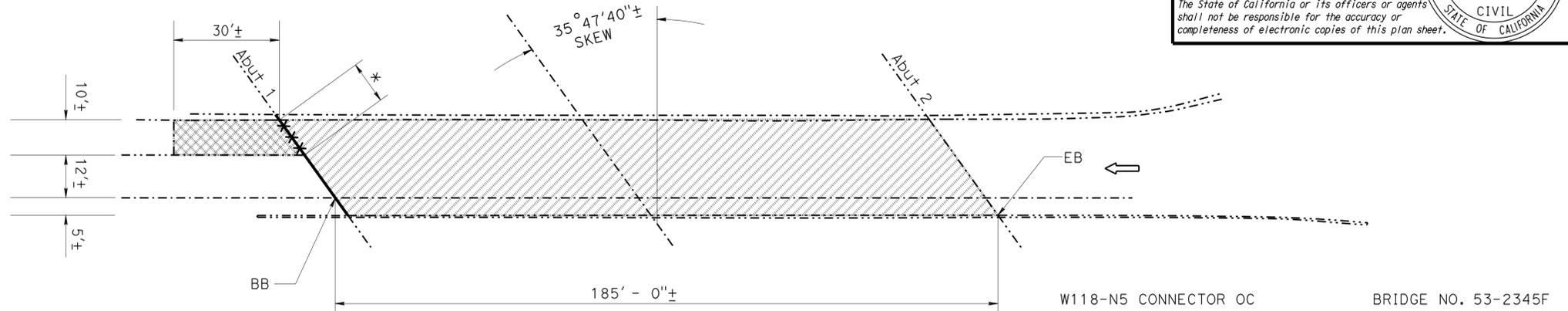
DESIGN ENGINEER TONY D. BRAKE	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 101, 118, 170, 405 BRIDGES GENERAL PLAN NO. 8	
	DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi		CHECKED Ramesh Patel		POST MILE
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li		CHECKED Xiahong Li		PLANS AND SPECS COMPARED

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	32	38

REGISTERED CIVIL ENGINEER DATE 12/23/15
 PLANS APPROVAL DATE 2-22-16
 No. C69896
 Exp. 09/30/16
 PROFESSIONAL ENGINEER
 Mazin Ibrahim
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LEGEND:

- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
- *** INDICATES LOCATION OF NEW JOINT SEAL
- INDICATES LOCATION OF CLEAN EXPANSION JOINT AND PLACEMENT OF NEW JOINT SEAL.
- [Hatched Box] INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE AND TREAT EXISTING BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE.
- [Cross-hatched Box] INDICATES LIMITS OF STRUCTURE CONCRETE, APPROACH SLAB TYPE R(30D).
- ✱ INDICATES LIMITS OF PAVING NOTCH EXTENSION.
- ① INDICATES LIMITS OF REPAIR SPALLED SURFACE AREA ON BARRIER.

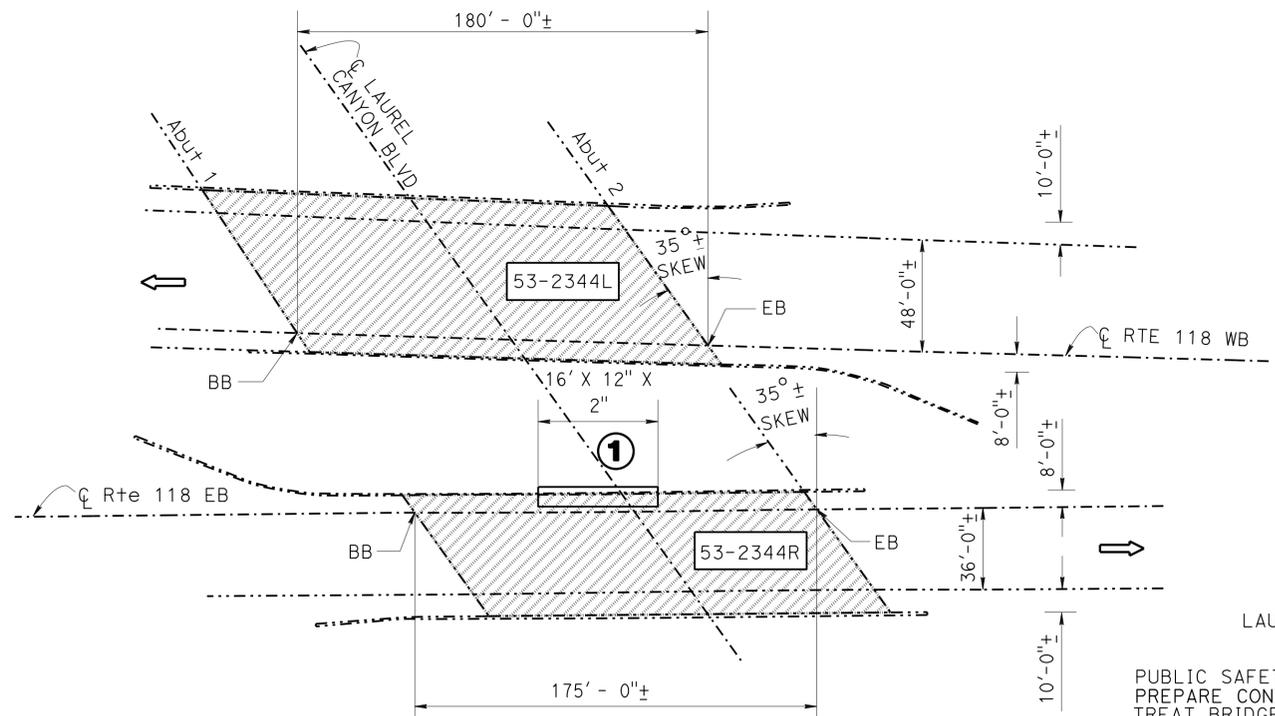


W118-N5 CONNECTOR OC
 Br No. 53-2345F, Rte 118, PM R11.56
 1"=20'



QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	5,000 SQFT
TREAT BRIDGE DECK	5,000 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	63 GAL
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	16 CY
PAVING NOTCH EXTENSION	10 CF
CLEAN EXPANSION JOINT	21 LF
JOINT SEAL (MR 1/2")	34 LF



LAUREL CANYON BOULEVARD UC
 Br No. 53-2344R/L, Rte 118, PM R11.57
 1"=40'



QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	11,900 SQFT
TREAT BRIDGE DECK	11,900 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	149 GAL

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
REPAIR SPALLED SURFACE AREA	16 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	9,450 SQFT
TREAT BRIDGE DECK	9,450 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	119 GAL

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA	DIVISION OF MAINTENANCE	BRIDGE NO. Various	ROUTE 101, 118, 170, 405 BRIDGES	
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi	DEPARTMENT OF TRANSPORTATION	STRUCTURE MAINTENANCE DESIGN	POST MILE		GENERAL PLAN NO. 9
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li	PLANS AND SPECS COMPARED	Xiahong Li	Varies		

USERNAME => s125624 DATE PLOTTED => 23-FEB-2016 TIME PLOTTED => 09:19

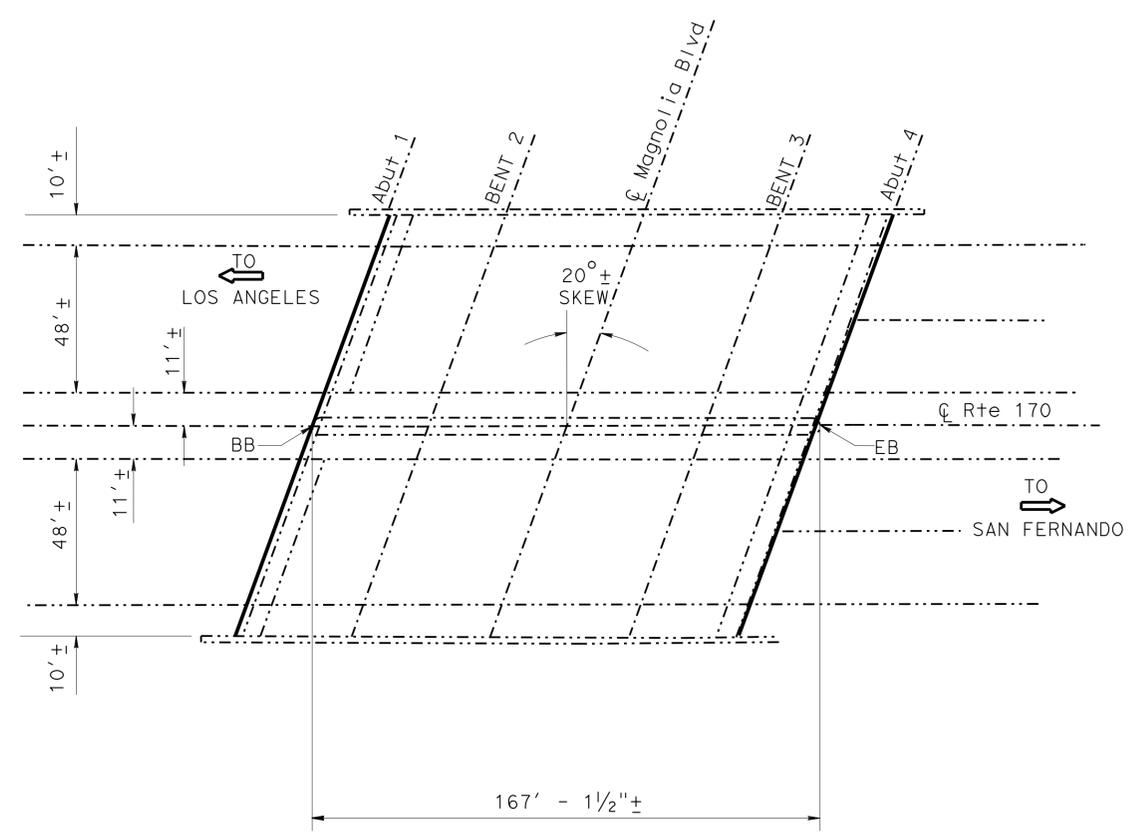
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	33	38

12/23/15
 REGISTERED CIVIL ENGINEER DATE
 2-22-16
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

PROFESSIONAL ENGINEER
 REGISTERED
 Mazin Ibrahim
 No. C69896
 Exp. 09/30/16
 CIVIL
 STATE OF CALIFORNIA

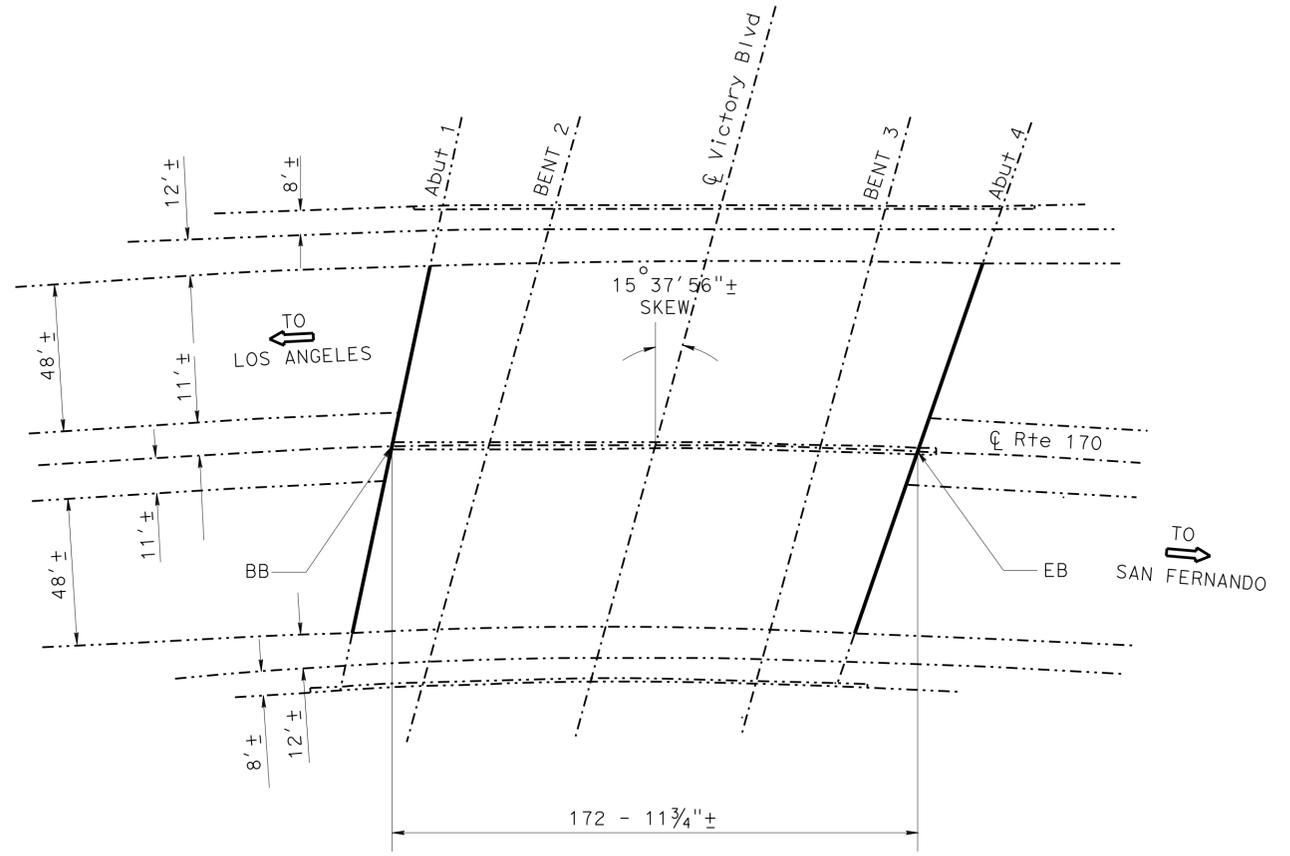
LEGEND:

- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
- INDICATES LOCATION OF CLEAN EXPANSION JOINT AND PLACEMENT OF NEW JOINT SEAL.



MAGNOLIA BLVD UC
 Br No. 53-1503, Rte 170, PM R15.37
 1"=30'

MAGNOLIA BOULEVARD UC	BRIDGE NO. 53-1503
CLEAN EXPANSION JOINT	QUANTITIES 294 LF
JOINT SEAL (MR 1")	QUANTITIES 294 LF



VICTORY BOULEVARD UC
 Br No. 53-1687, Rte 170, PM R17.25
 1"=30'

VICTORY BOULEVARD UC	BRIDGE NO. 53-1687
CLEAN EXPANSION JOINT	QUANTITIES 246 LF
JOINT SEAL (MR 1")	QUANTITIES 246 LF

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies
ROUTE 101, 118, 170, 405 BRIDGES
GENERAL PLAN NO. 10

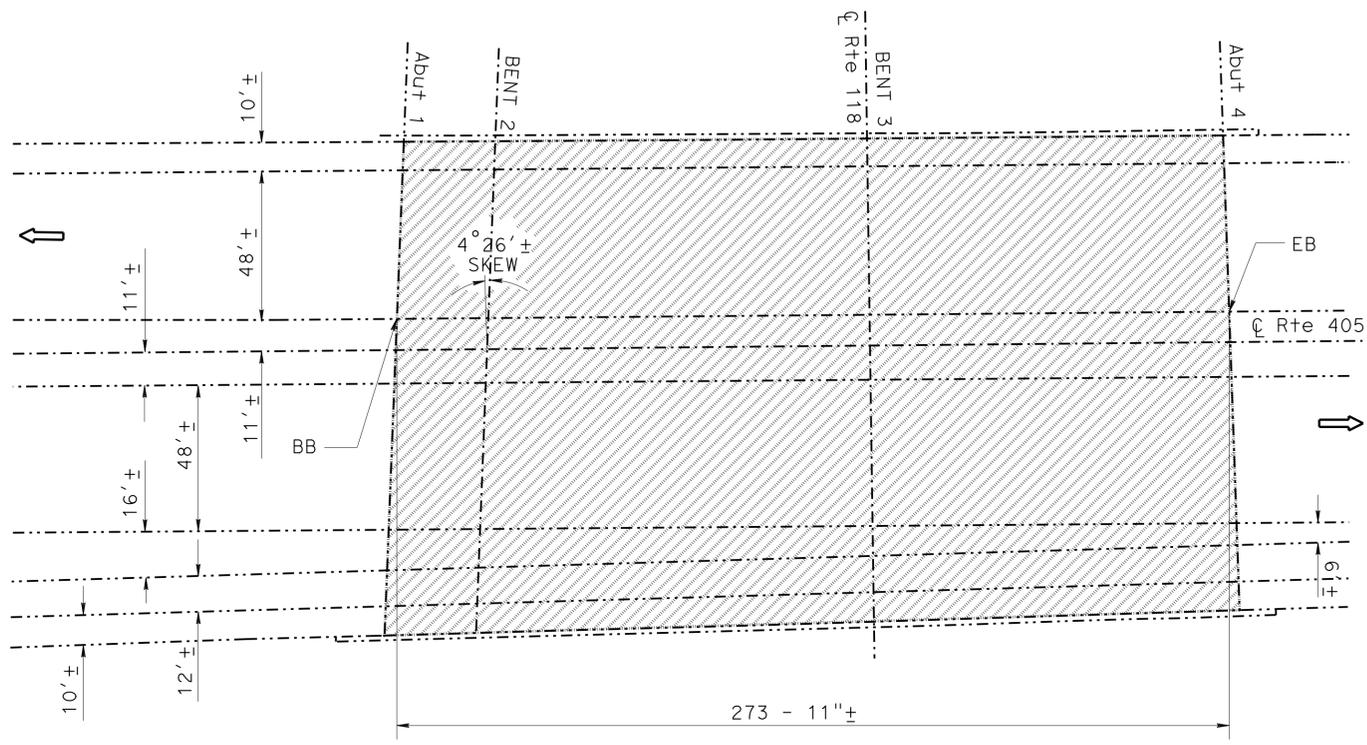
USERNAME => s125624 DATE PLOTTED => 23-FEB-2016 TIME PLOTTED => 09:19

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	34	38

12/23/15
 REGISTERED CIVIL ENGINEER DATE
 2-22-16
 PLANS APPROVAL DATE
 REGISTERED CIVIL ENGINEER
 Mazin Ibrahim
 No. C69896
 Exp. 09/30/16
 CIVIL ENGINEER
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic 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.



ROUTE 405/118 SEPARATION

Br No. 53-2211 Rte 405, PM 46.83
1"=30'



ROUTE 405/118 SEPARATION BRIDGE NO. 53-2211

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	44,100 SQFT
TREAT BRIDGE DECK	44,100 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	552 GAL

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

TONY D. BRAKE
DESIGN ENGINEER

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel	LAYOUT	BY Eugene Goishi
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran	SPECIFICATIONS	BY Xiahong Li

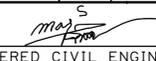
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

**ROUTE 101, 118, 170, 405 BRIDGES
GENERAL PLAN NO. 11**

FILE => 07-3w0601-a-gp11.dgn
TIME PLOTTED => 09:19
DATE PLOTTED => 23-FEB-2016
USERNAME => s125624

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	35	38
			12/23/15	DATE	
REGISTERED CIVIL ENGINEER			PROFESSIONAL ENGINEER		
2-22-16			PLANS APPROVAL DATE		
No. C69896			Exp. 09/30/16		
CIVIL			STATE OF CALIFORNIA		
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	JOINT SEAL LOCATION	MINIMUM "MR" (INCHES)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	APPROX LENGTH OF JOINT SEALS (FEET)	APPROX LENGTH TO CLEAN EXP JOINT (FEET)
TUJUNGA WASH BRIDGE	53-1337	* BENT #2	2	NO	9	278	278
		* BENT #3	2	NO	9	278	278
CHATSWORTH DRIVE UC	53-2214	AL (MEDIAN BARRIER)	1/2	NO	6	193	193
E118-S5 CONNECTOR OC	53-2343G	ABUT #1	1/2	NO	9	82	82
		ABUT #2	1/2	NO	9	80	80
ROUTE 118/5 SEPARATION	53-2324L	ABUT #1	1 1/2	NO	9	75	75
		ABUT #3	1 1/2	NO	9	75	75
W118-N5 CONNECTOR OC	53-2345F	ABUT #1	1 1/2	NO	9	34	21
MAGNOLIA BLVD UC	53-1503	ABUT #1	1	NO	9	147	147
		ABUT #4	1	NO	9	147	147
VICTORY BLVD UC	53-1687	ABUT #1	1	NO	9	123	123
		ABUT #5	1	NO	9	123	123

* BONDED JOINT SEAL

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 RSP B6-21 sheet.

The following notes apply to JOINT SEAL TYPE B:

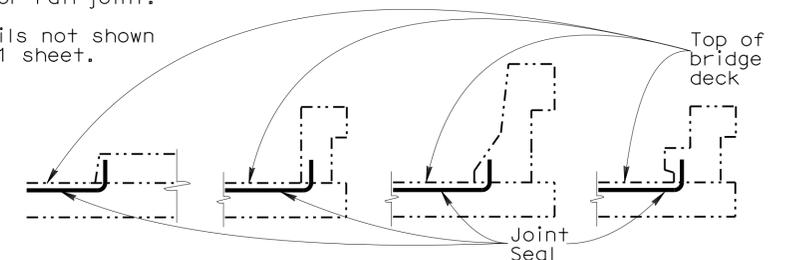
1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.

2) 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.

3) 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.

4) 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.

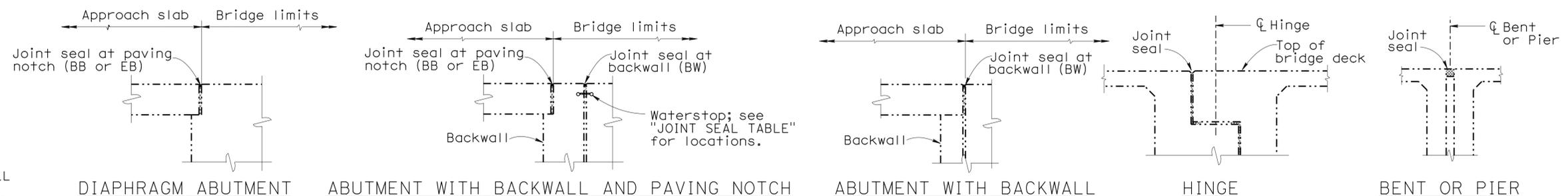


BARRIER RAIL

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.



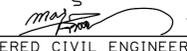
JOINT SEAL LOCATION

NO SCALE

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

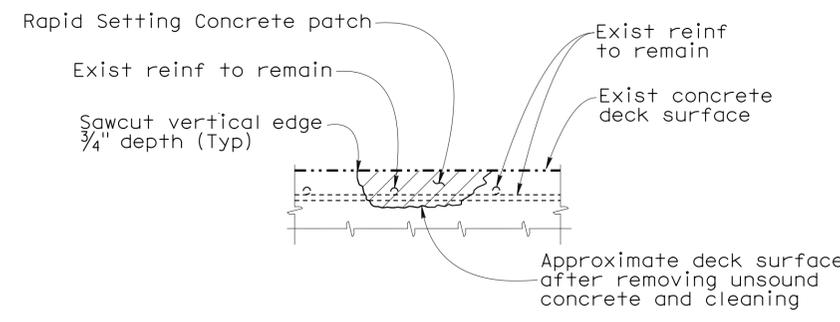
DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 101, 118, 170, 405 BRIDGES
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel			Various	
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran			POST MILE	
MISCELLANEOUS DETAILS NO. 1						

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	36	38

		12/23/15
REGISTERED CIVIL ENGINEER	DATE	
2-22-16		
PLANS APPROVAL DATE		

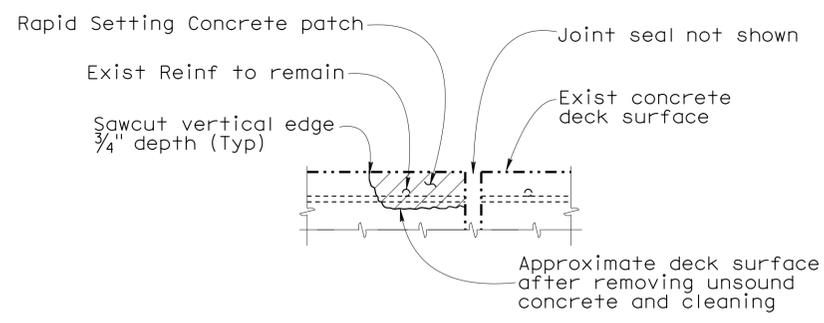
REGISTERED PROFESSIONAL ENGINEER Mazin Ibrahim No. C69896 Exp. 09/30/16 CIVIL STATE OF CALIFORNIA
--

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DECK DAMAGE REPAIR DETAIL

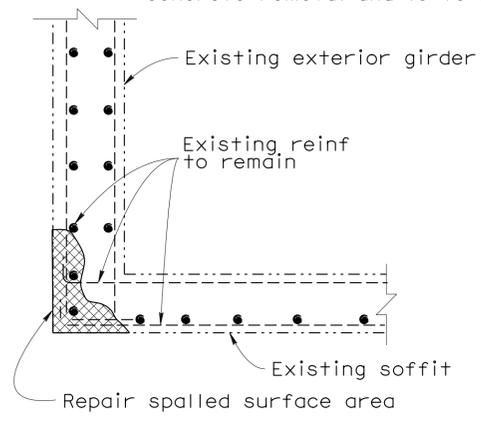
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



JOINT DAMAGE REPAIR DETAIL

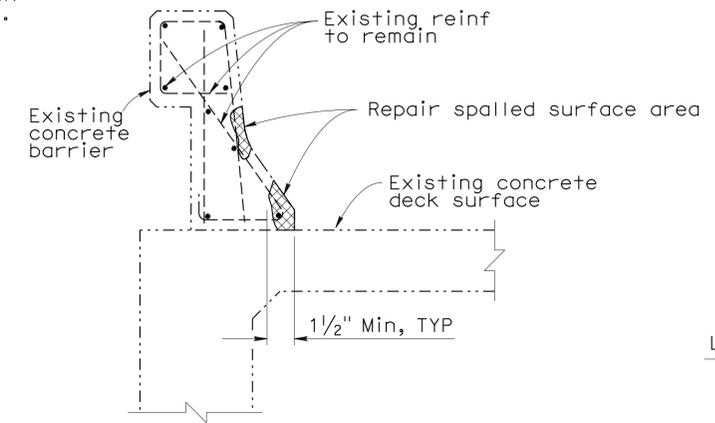
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

- DECK REPAIR NOTES:**
- Existing reinforcement shall be located and 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 3/4 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.



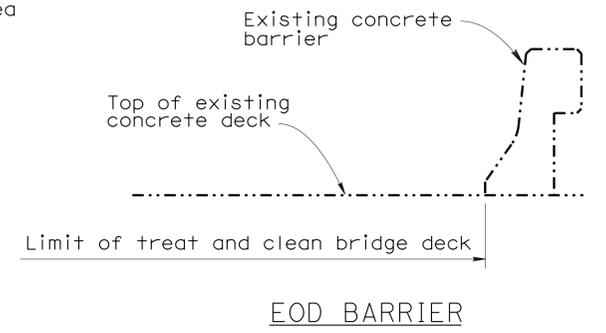
HIGH HIT SPALL REPAIR DETAIL

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

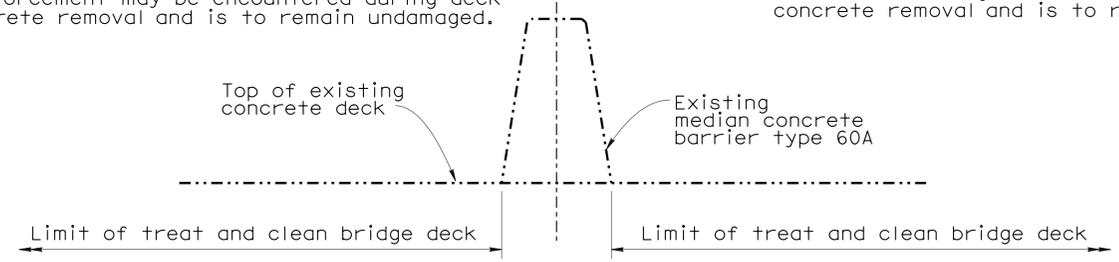


CONCRETE BARRIER SPALL REPAIR DETAIL

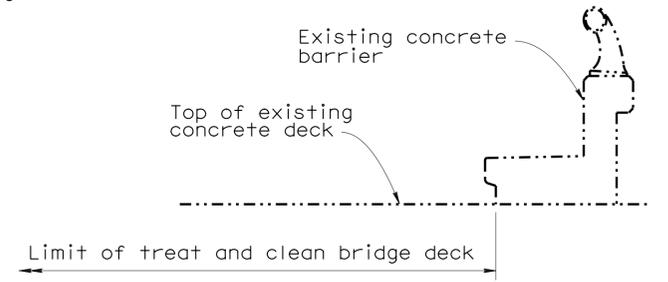
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



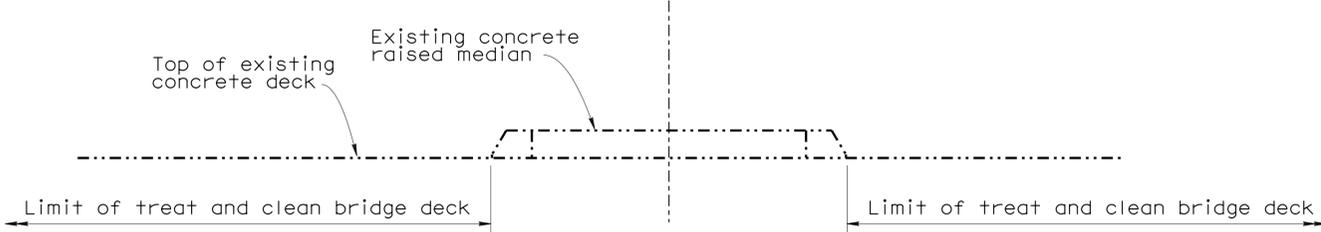
EOD BARRIER



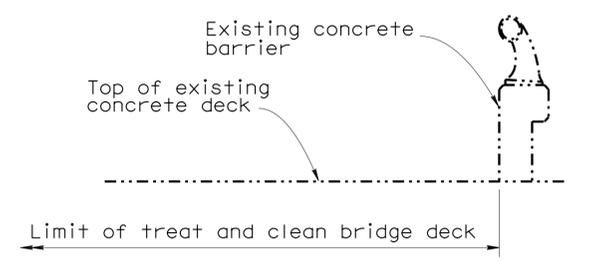
MEDIAN BARRIER



SIDEWALK BARRIER TYPE 2



RAISED MEDIAN



SIDEWALK BARRIER TYPE 1

NOTE:
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TYPICAL LIMITS OF DECK WORK

NO SCALE

DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel
DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel
QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

ROUTE 101, 118, 170, 405 BRIDGES
MISCELLANEOUS DETAILS NO. 2

DATE PLOTTED => 23-FEB-2016 TIME PLOTTED => 09:19

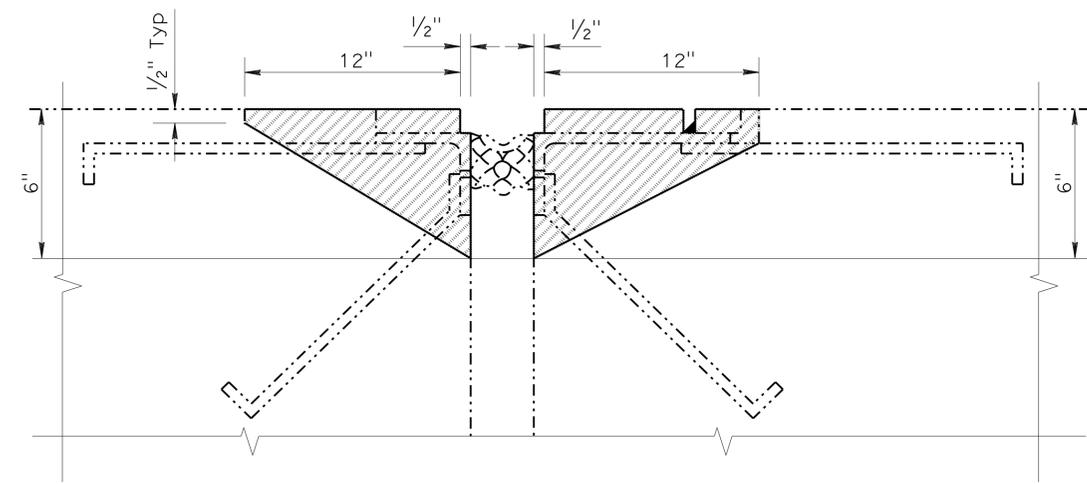
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	101,118 170,405	Var	37	38

REGISTERED CIVIL ENGINEER DATE 12/23/15
 PLANS APPROVAL DATE 2-22-16
 No. C69896
 Exp. 09/30/16
 Mazin Ibrahim
 CIVIL ENGINEER
 STATE OF CALIFORNIA

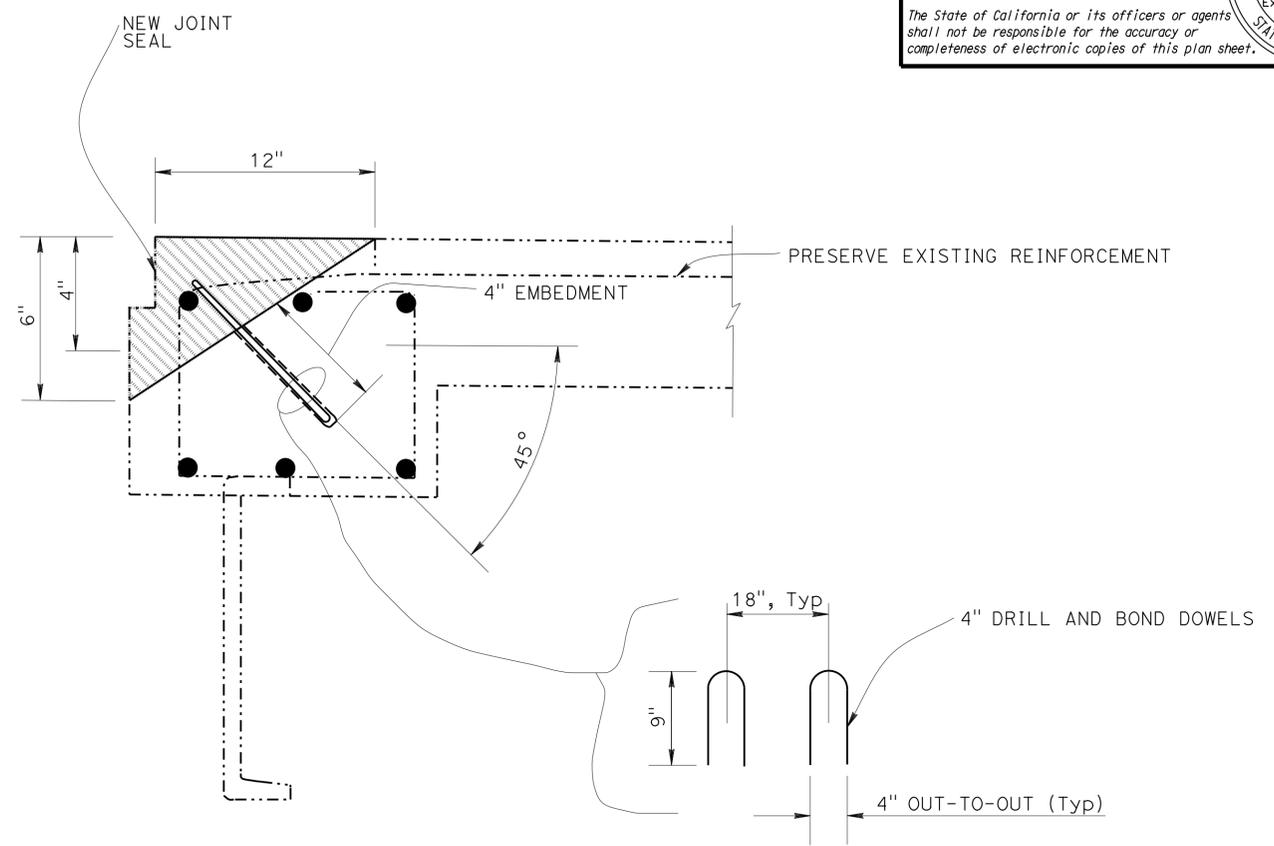
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LEGEND:

- INDICATES EXISTING.
-  INDICATES BRIDGE REMOVAL PORTION PRESERVE EXISTING REINFORCEMENT.
-  INDICATES RAPID STRENGTH CONCRETE.
- INDICATES EXISTING REINFORCEMENT.
- INDICATES NEW STRUCTURE.



EXISTING



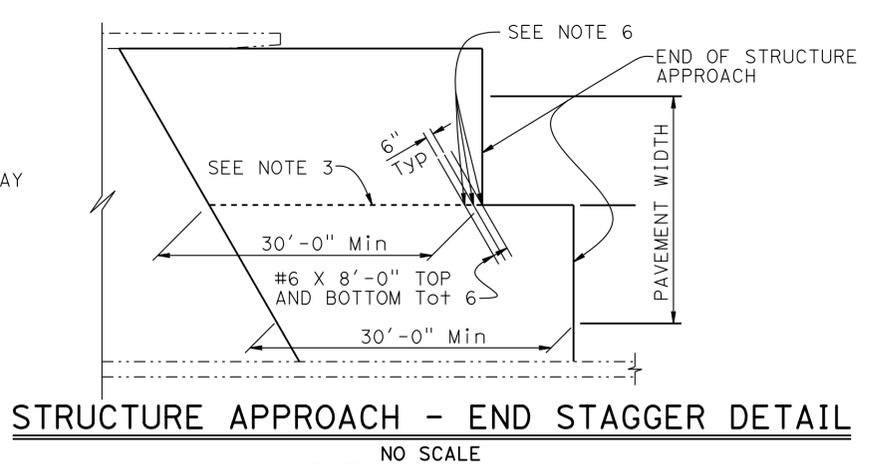
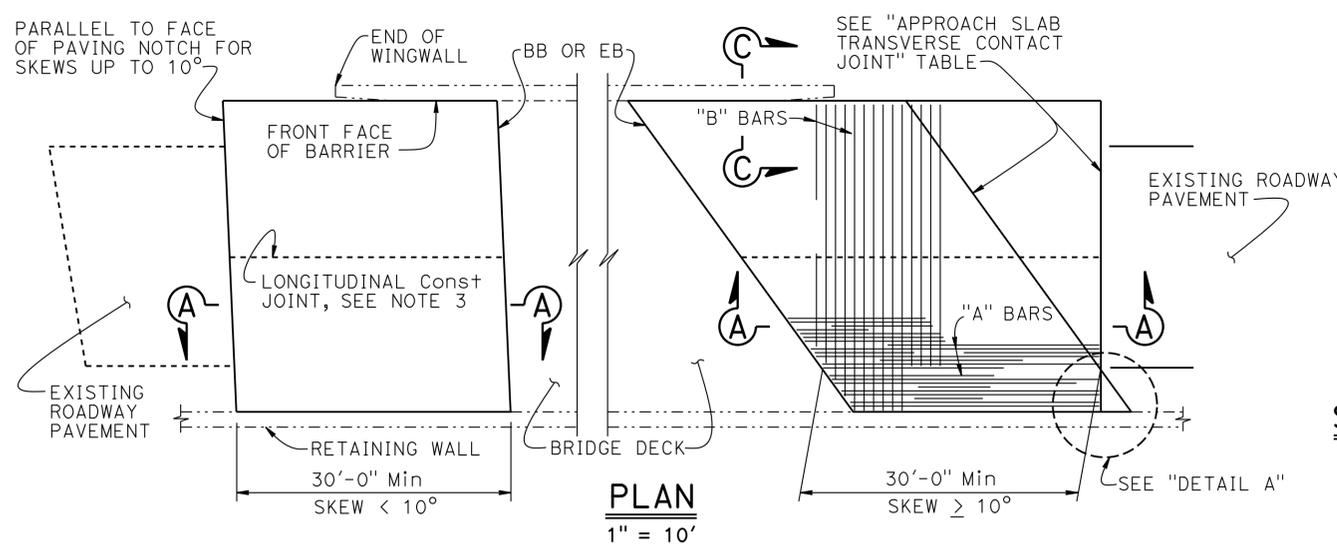
NEW CONSTRUCTION - PART
(RIGHT SIDE SHOWN LEFT SIDE SIMILAR)

**JOINT RECONSTRUCTION
(TUJUNGA WASH BRIDGE/ Br No. 53-1337, PM 13.27)**
NO SCALE

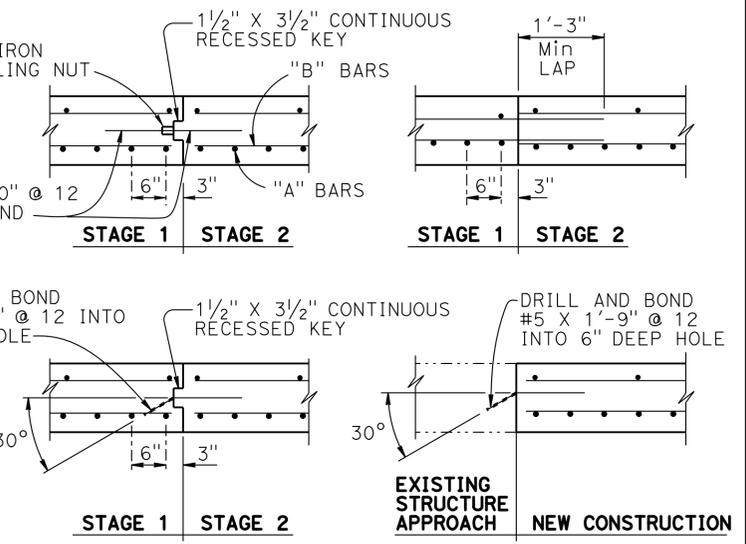
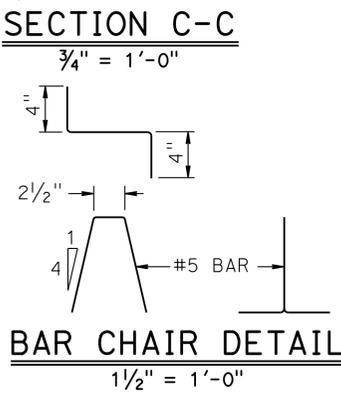
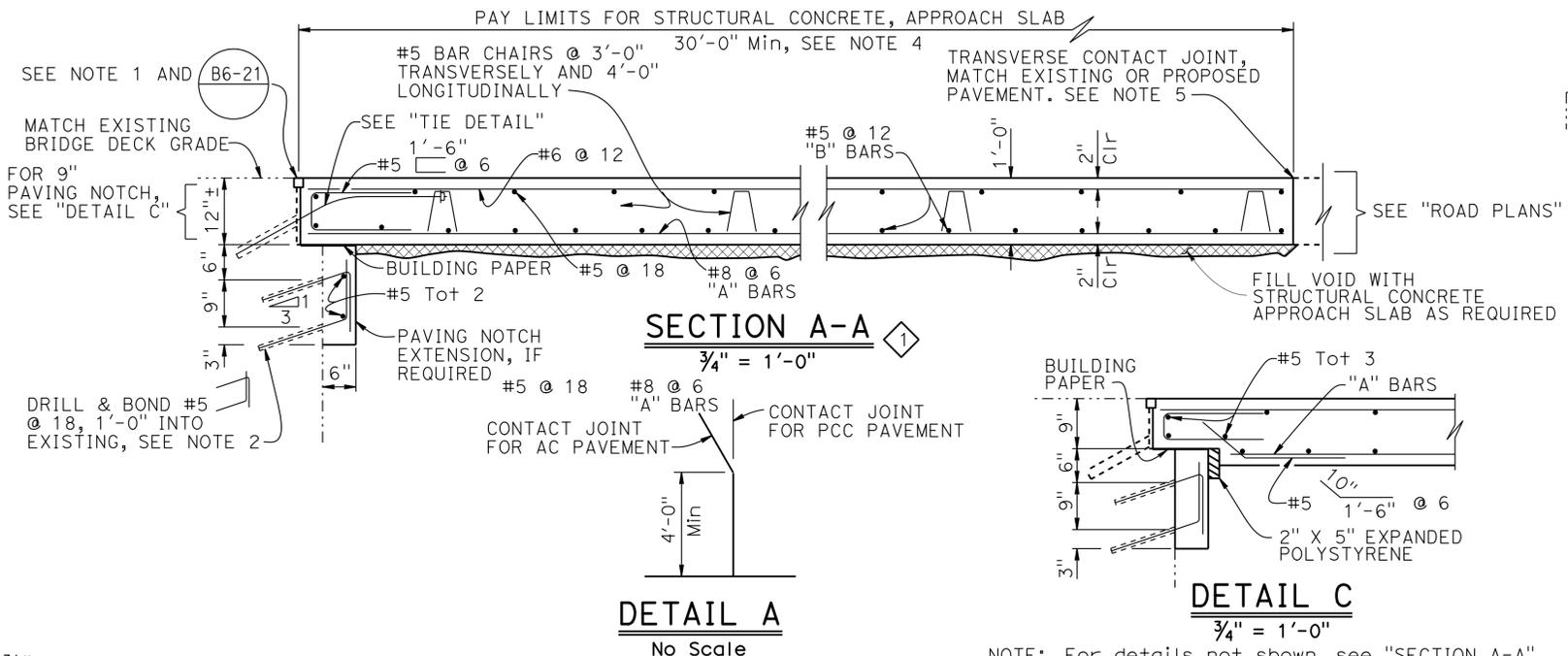
NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXEMPT PROJECT PER UTILITY POLICY, UTILITIES ARE NOT SHOWN.

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Mazin Ibrahim	CHECKED Ramesh Patel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 101, 118, 170, 405 BRIDGES			
	DETAILS	BY Eugene Goishi	CHECKED Ramesh Patel			POST MILE		MISCELLANEOUS DETAILS NO. 3		
	QUANTITIES	BY Mazin Ibrahim	CHECKED Hong-Tien Tran			Varies				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0	1	2	3	UNIT: 3489 PROJECT NUMBER & PHASE: 0715000039-1	CONTRACT NO.: 07-3W0604	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 14	OF 15

USERNAME => s125624 DATE PLOTTED => 23-FEB-2016 TIME PLOTTED => 09:19

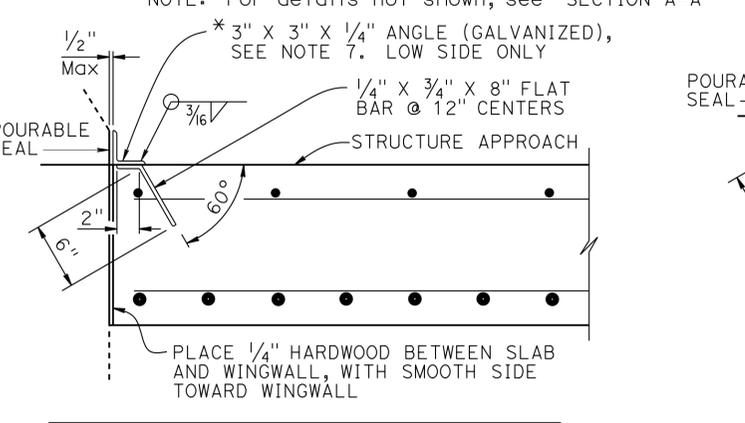
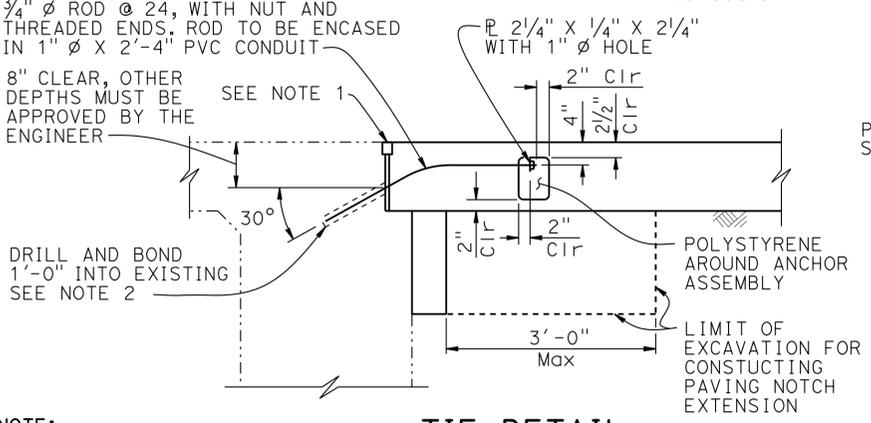


APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT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

SPECIAL DETAILS	
ROUTE 101, 118 170, 405 BRIDGES	STRUCTURE APPROACH TYPE R(30D)



NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

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

STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES
DEPARTMENT OF TRANSPORTATION	

BRIDGE NO. Various	POST MILE Varies
UNIT: 3489	PROJECT NUMBER & PHASE: 0715000039
CONTRACT NO.: 07-3W0604	

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 15 OF 15
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