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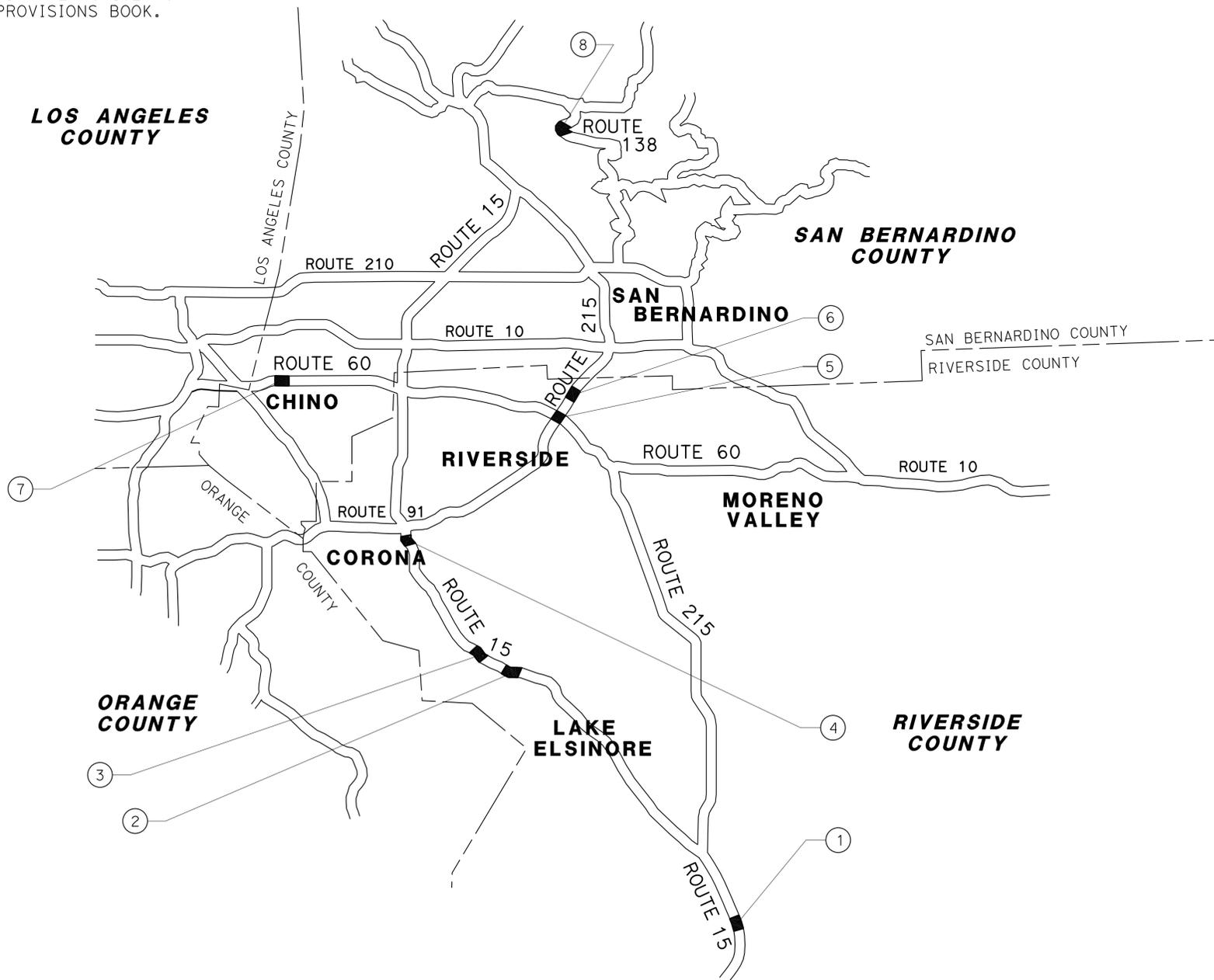
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA **ACBRNHP-X065(099)E**  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN RIVERSIDE AND SAN BERNARDINO COUNTIES**  
**ON ROUTES 15, 60, 138, AND 215**  
**AT VARIOUS LOCATIONS**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60 138, 215	Var	1	25

LOCATION MAP

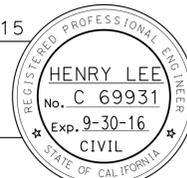


**LOCATIONS OF CONSTRUCTION**

Loc	COUNTY	ROUTE	PM	NAME OF BRIDGE	BRIDGE No.
1	Riv	15	R2.96	TEMECULA RIVER	56-0047L
2	Riv	15	27.78	TEMESCAL CANYON ROAD UC	56-0681L
3	Riv	15	30.40	INDIAN TRUCK TRAIL UC	56-0676L
4	Riv	15	40.96	SIXTH STREET UC	56-0494R
5	Riv	215	43.25	ROUTE 60, 215/91, 215 SEPERATION	56-0402
6	Riv	215	45.01	CENTER STREET OC	56-0436
7	SBd	60	R1.87	MONTE VISTA AVENUE OC	54-0746
8	SBd	138	R26.48	WEST FORK MOJAVE RIVER	54-0846

PROJECT MANAGER  
**CATALINO PINING**  
 DESIGN ENGINEER  
**HENRY LEE**

*Henry Lee* 1-6-15  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
**January 12, 2015**  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CONTRACT No.	<b>08-1C9004</b>
PROJECT ID	<b>0813000074</b>

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
08	Riv, Sbd	15, 60 138, 215	Var	2	25

Henry Lee		1-6-15
REGISTERED CIVIL ENGINEER	DATE	
1-12-15		
PLANS APPROVAL DATE		

Henry Lee
No. C69931
Exp. 9/30/16
CIVIL

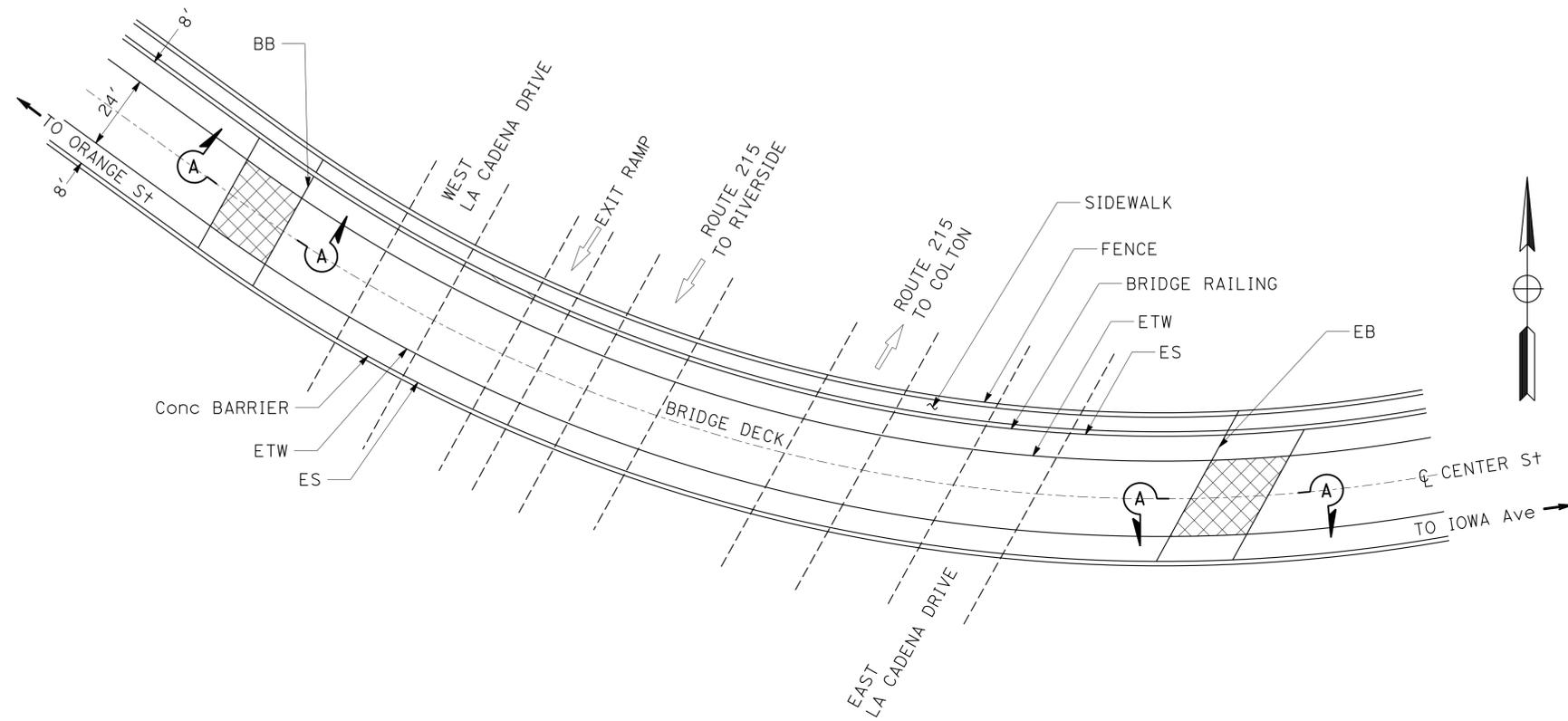
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**NOTES:**

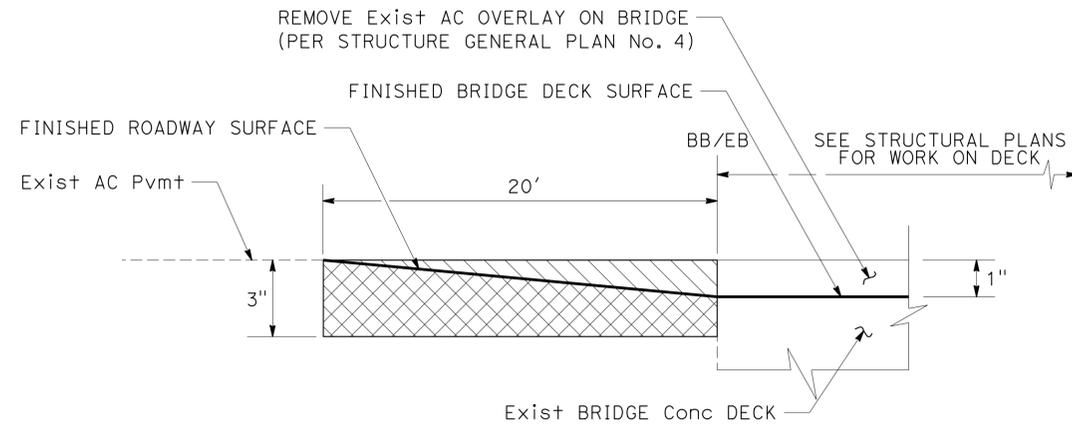
1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
4. ALL WORK WITHIN STATE RIGHT OF WAY.
5. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.

**LEGEND:**

-  COLD PLANE
-  COLD PLANE & HMA (TYPE A)



**PAVING CONFORM AT BEGIN AND END OF BRIDGE DECK  
FOR CENTER STREET OVERCROSSING**  
Br No. 56-0436, Riv, ROUTE 215, PM 45.01



**SECTION A-A**

**CONSTRUCTION DETAILS**  
NO SCALE

**C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
<b>Caltrans</b> MAINTENANCE DESIGN	KUANG CHEN	HENRY LEE	HENRY LEE
		KUANG CHEN	KUANG CHEN
		CHECKED BY	DATE REVISED



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, Sbd	15, 60 138, 215	Var	4	25
<i>W.E. Wasser</i> REGISTERED CIVIL ENGINEER		1-6-15	DATE		
		1-12-15	PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

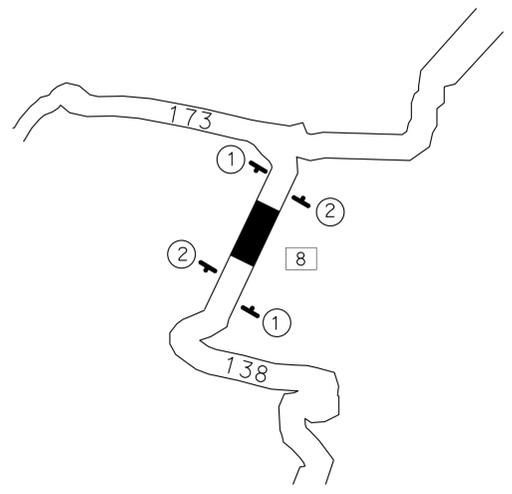
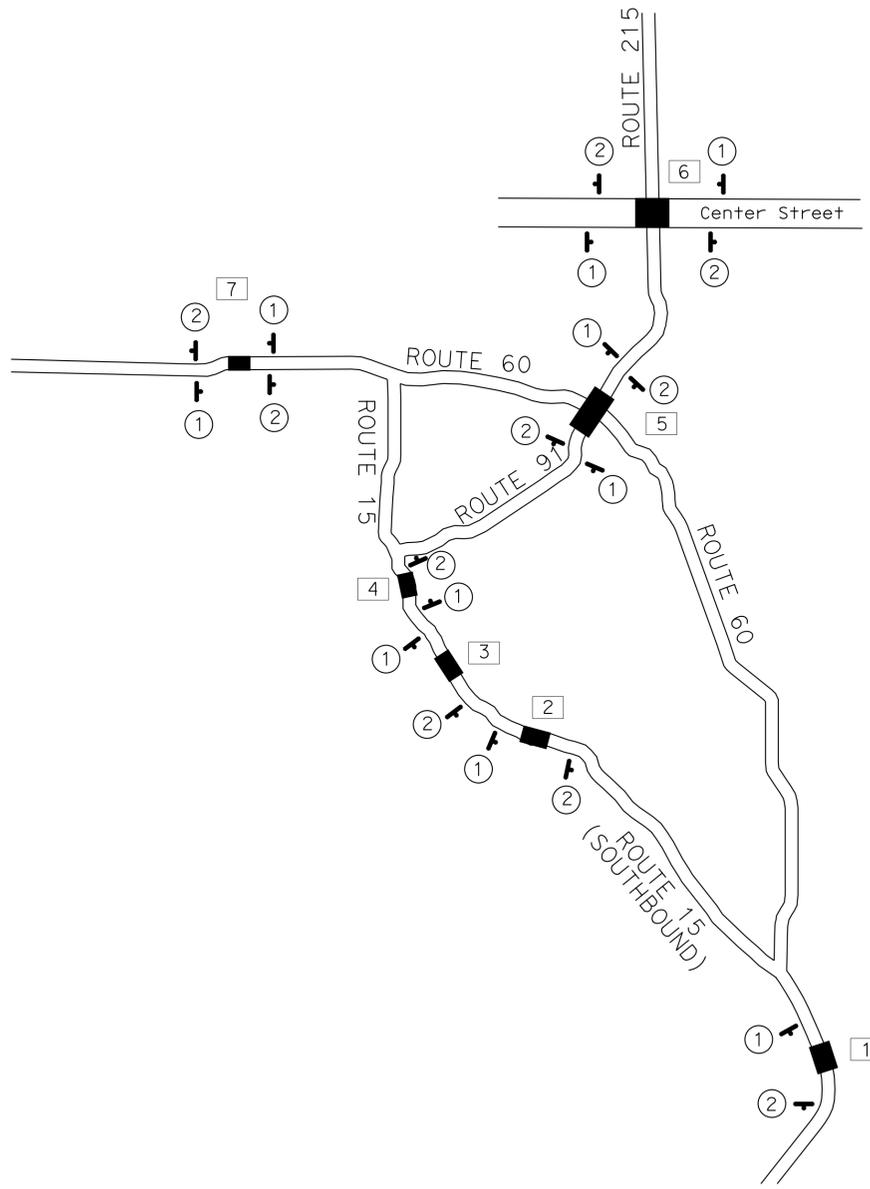


**NOTES:**

1. THE LOCATION OF CONSTRUCTION AREA SIGNS ON THE PLAN IS APPROXIMATE, THE EXACT LOCATION SHALL BE DETERMINED BY THE ENGINEER.
2. ALL CONSTRUCTION AREA SIGNS MUST BE ACCORDING TO CALIFORNIA MUTCD.

**LEGEND:**

- WORK AREA
- ⊗ BRIDGE LOCATION



**LOCATION 8**

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE	No. OF POST AND SIZE	No. OF SIGNS
	FEDERAL				
①	W20-1	ROAD WORK AHEAD	48" x 48"	1 - 6" x 6"	12
②	G20-2	END ROAD WORK	36" x 18"	1 - 4" x 4"	12

(N) - NOT A SEPERATE PAY ITEM; FOR INFORMATION ONLY (N)

**PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)**

EACH
2

LOCATION TO BE DETERMINED BY ENGINEER

**LOCATION 1 THROUGH 7**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: W.E. WASSER  
 CALCULATED/DESIGNED BY: W.E. WASSER  
 SHAHRAM MOKHTARI  
 REVISOR: W.E. WASSER  
 REVISIONS:

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

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

LAST REVISION: 01-06-12   
 DATE PLOTTED => 13-JAN-2015   
 TIME PLOTTED => 15:46

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, Sbd	15, 60 138, 215	Var	5	25
<i>W.E. Wasser</i> REGISTERED CIVIL ENGINEER			1-6-15 DATE		
			1-12-15 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

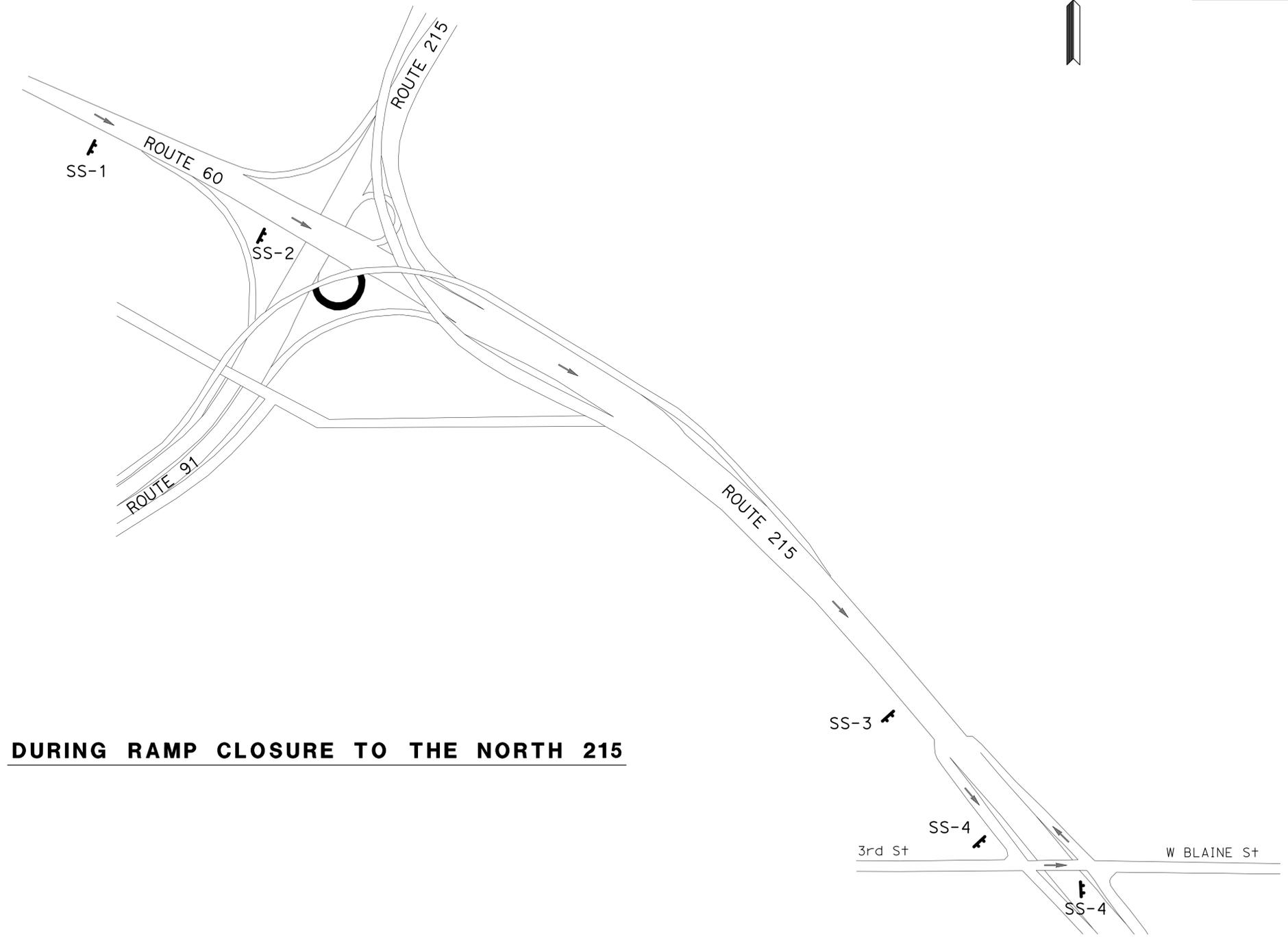
**NOTES:**

1. ALL CONSTRUCTION AREA SIGNS MUST BE ACCORDING TO CALIFORNIA MUTCD.
2. SIGNS MUST BE COVERED IF NOT IN USE.

**LEGEND:**

- CLOSED RAMP
- DIRECTION OF TRAFFIC

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN	W.E. WASSER	W.E. WASSER	SHAHRAM MOKHTARI	
	W.E. WASSER	CHECKED BY	W.E. WASSER	



**DURING RAMP CLOSURE TO THE NORTH 215**

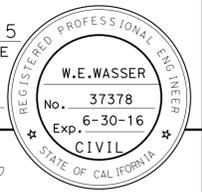
**TRAFFIC HANDLING PLAN**

NO SCALE

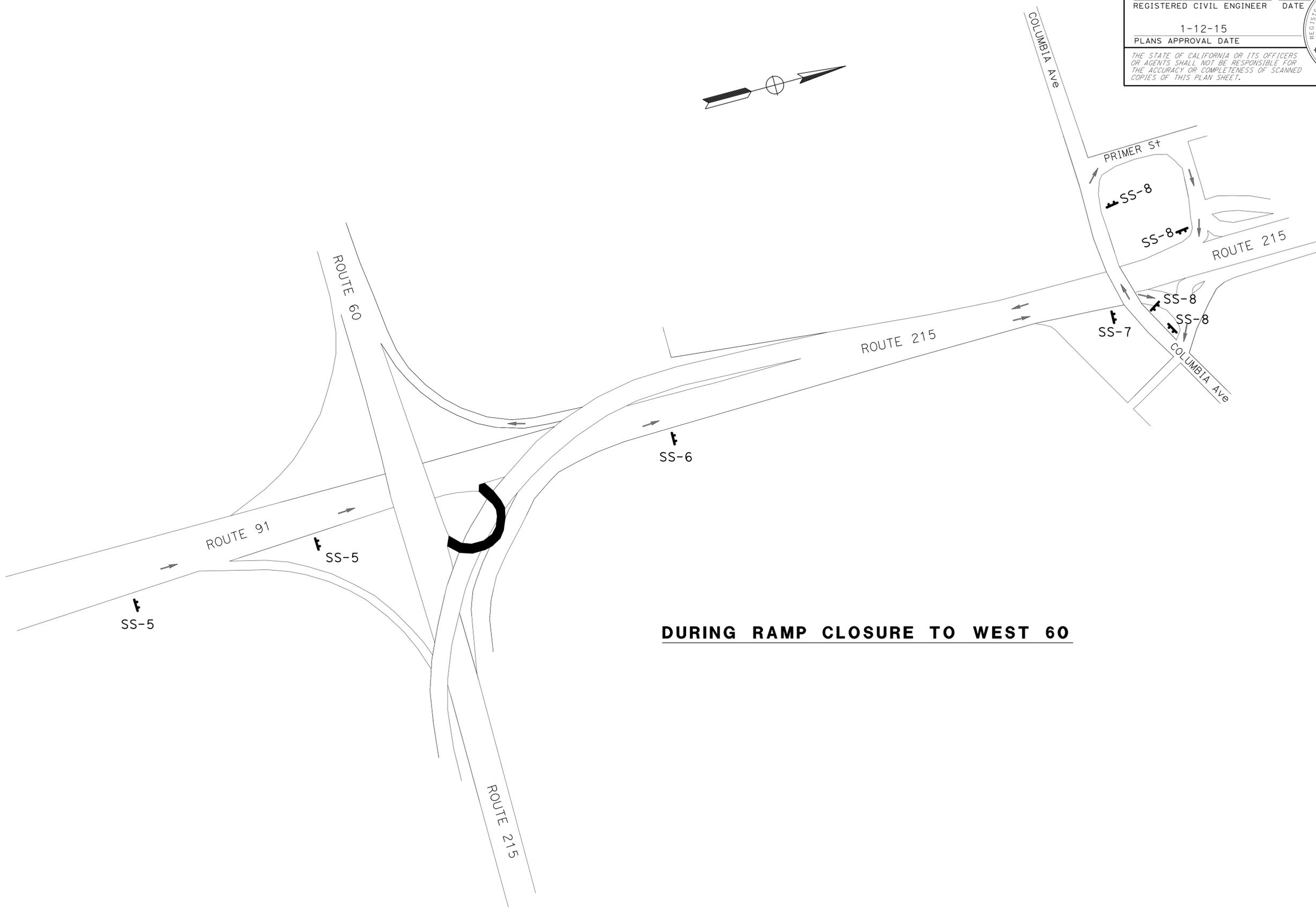
**TH-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, Sbd	15, 60 138, 215	Var	6	25
W.E. Wasser		1-6-15	REGISTERED CIVIL ENGINEER DATE		
1-12-15		PLANS APPROVAL DATE			
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



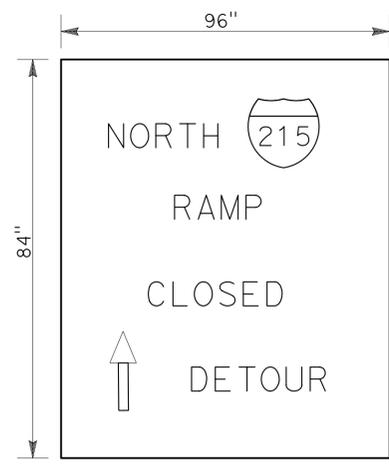
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
<b>Caltrans</b> TRAFFIC DESIGN	W.E. WASSER	W.E. WASSER	SHAHRAM MOKHTARI	
		CHECKED BY	W.E. WASSER	
		REVISOR		
		DATE		



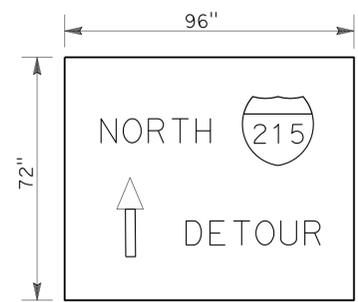
**DURING RAMP CLOSURE TO WEST 60**

**TRAFFIC HANDLING PLAN**  
NO SCALE  
**TH-2**

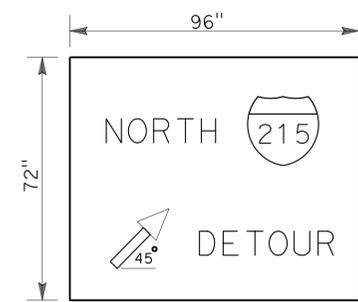
APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY



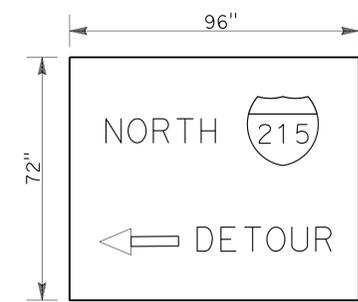
SS-1



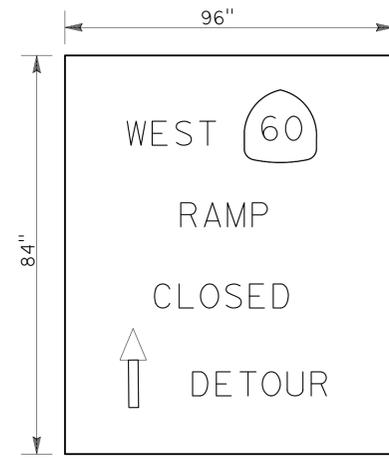
SS-2



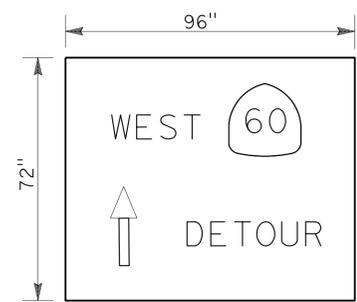
SS-3



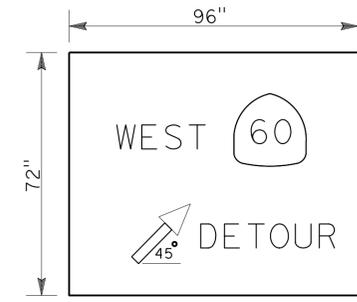
SS-4



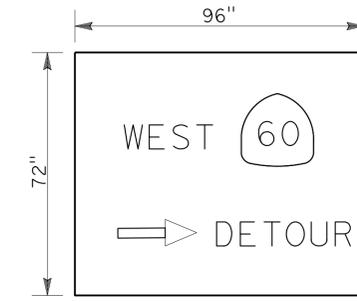
SS-5



SS-6



SS-7



SS-8

**CONSTRUCTION AREA SIGNS  
(TRAFFIC HANDLING)**

SIGN CODE	SIGN MESSAGE	PANEL SIZE	No. OF POST AND SIZE	No. OF SIGNS
SS-1	SEE DETAIL	96" x 84"	2 - 6" x 8"	1
SS-2		96" x 72"	2 - 6" x 8"	1
SS-3		96" x 72"	2 - 6" x 8"	1
SS-4		96" x 72"	2 - 6" x 8"	2
SS-5		96" x 84"	2 - 6" x 8"	2
SS-6		96" x 72"	2 - 6" x 8"	1
SS-7		96" x 72"	2 - 6" x 8"	1
SS-8		96" x 72"	2 - 6" x 8"	4
TOTAL				13

LETTER SIZE - 8 INCH CAPITAL  
COLORS  
 MESSAGE, BORDER - BLACK  
 BACKGROUND - ORANGE (REFLECTIVE)  
 STANDARD ARROW 15" x 9"

**DETAIL FOR DETOUR SIGNS**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: W.E. WASSER  
 CHECKED BY: W.E. WASSER  
 DESIGNED BY: W.E. WASSER  
 SHAHRAM MOKHTARI  
 REVISOR: W.E. WASSER  
 DATE: 1-12-15

**TRAFFIC HANDLING DETAILS**

NO SCALE

**THD-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv. Sbd	15, 60 138, 215	Var	8	25

*W.E. Wasser* 1-6-15  
 REGISTERED CIVIL ENGINEER DATE

1-12-15  
 PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR  
 W.E. WASSER  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 W.E. WASSER  
 SHAHRAM MOKHTARI  
 W.E. WASSER  
 REVISED BY  
 DATE REVISED

### PAVEMENT DELINEATION QUANTITIES

BRIDGE LOCATION	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE) (FT)				PAVEMENT MARKER (RETRO-REFLECTIVE)		
	DETAIL No.				TYPE D	TYPE G	TYPE H
	27B	25A	13	22	(EA)	(EA)	(EA)
2	190	190	380			10	10
3	215	215	430			10	10
4	290	290	870			20	16
6	680			680	32		
8	420			420	26		
SUB-TOTAL	1795	695	1680	1100	56	40	36
TOTAL	5270				132		

**NOTE:**  
 EXTEND TRAFFIC STRIPPING 20' BEYOND THE BRIDGE ON BOTH ENDS.

## PAVEMENT DELINEATION QUANTITIES PDQ-1

LAST REVISION DATE PLOTTED => 13-JAN-2015  
 01-06-12 TIME PLOTTED => 15:46

**NOTE:**

1. SEE CONSTRUCTION DETAIL SHEETS FOR COLDPLANE AND HMA DESIGN.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, Sbd	15, 60 138, 215	Var	9	25

Henry Lee 1-6-15  
REGISTERED CIVIL ENGINEER DATE

1-12-15  
PLANS APPROVAL DATE

Henry Lee  
No. C69931  
Exp. 9/30/16  
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.

**COLD PLANE AND HMA-A**

LOCATION			COLD PLANE	TACK COAT	HMA-A
BRIDGE	ROUTE	POSTMILE	SQYD	TON	TON
CENTER STREET OC (56-0436)	215	45.01	106.7	0.018	24.0
WEST FORK MOJAVE RIVER (54-0846)	138	R26.48	133.3	0.022	33.8
TOTAL			240.0	0.040	57.8

**SUMMARY OF QUANTITIES**  
**Q-1**

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

REVISOR BY  
HENRY LEE  
DATE  
KUANG CHEN

FUNCTIONAL SUPERVISOR  
KUANG CHEN

CALCULATED/DESIGNED BY  
CHECKED BY

BORDER LAST REVISED 7/2/2010

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

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

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, Sbd	15, 60 138, 215	Var	10	25

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

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

July 19, 2013  
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 1-12-15

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

**TABLE A**

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

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

**TABLE B**

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

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

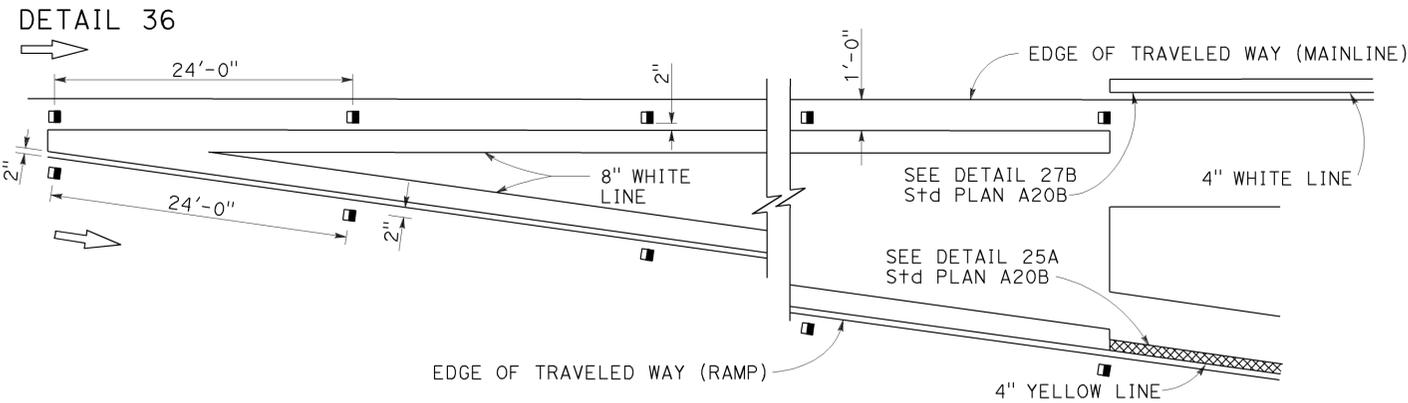
**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

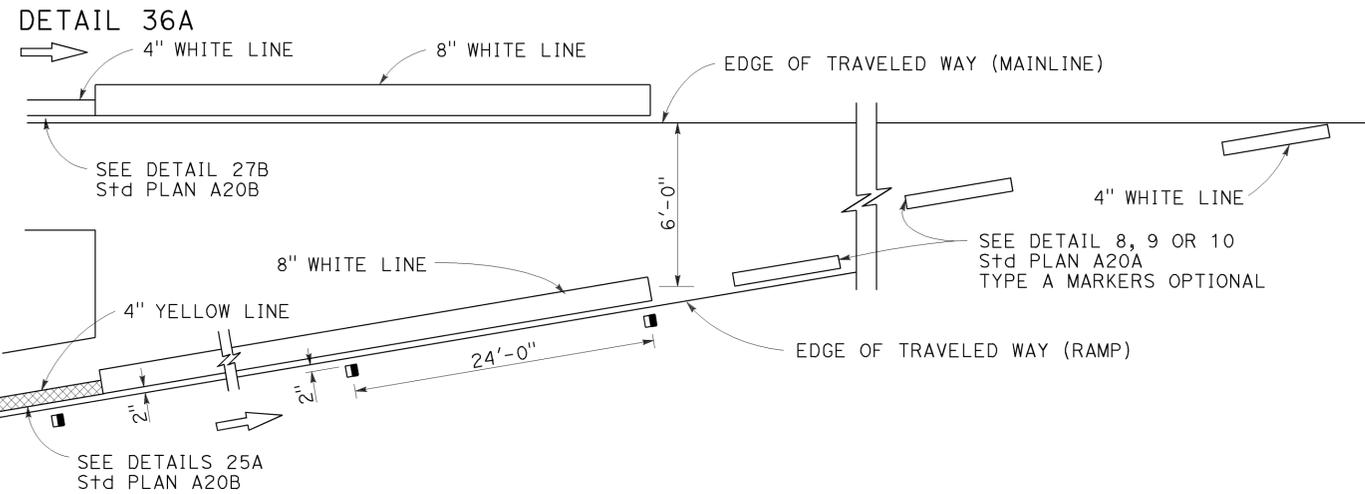
RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B  
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A10B

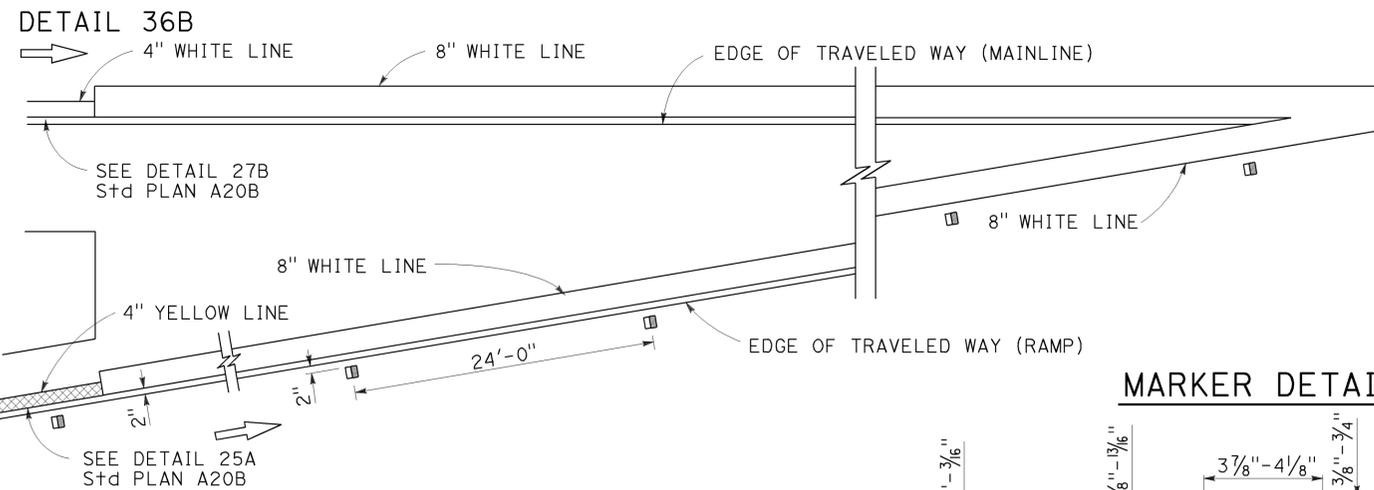
# EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



# ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



# ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

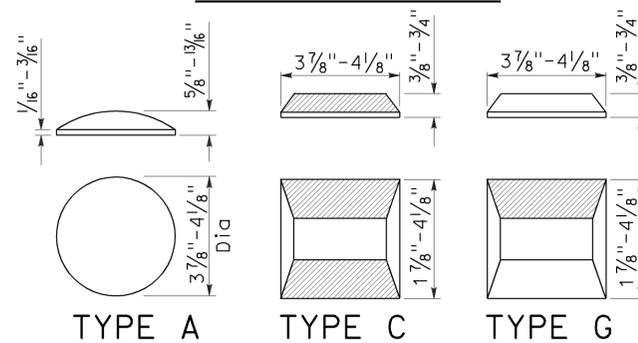


## MARKER DETAILS

### LEGEND:

#### MARKERS

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



RETROREFLECTIVE FACE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15,60 138,215	Var	11	25

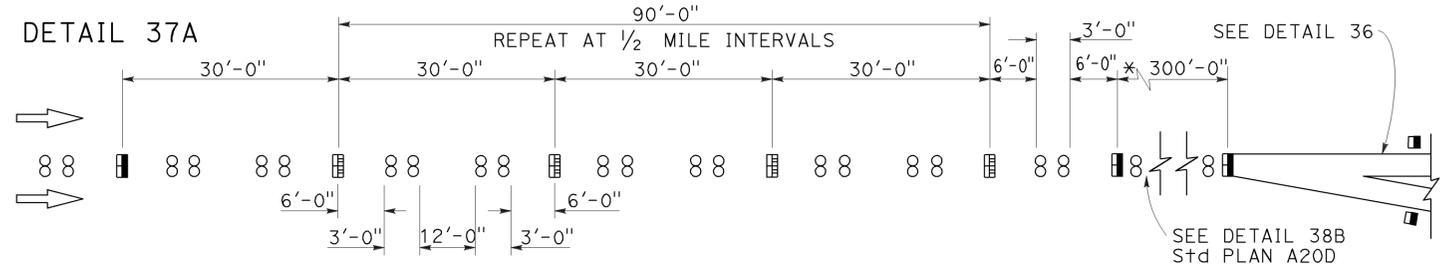
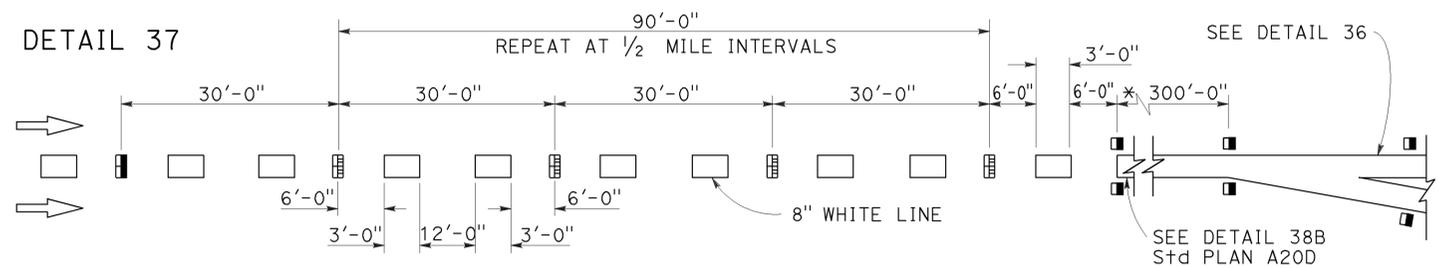
*Roberta L. McLaughlin*  
 REGISTERED CIVIL ENGINEER  
 No. C40375  
 Exp. 3-31-15  
 CIVIL  
 STATE OF CALIFORNIA

July 19, 2013  
 PLANS APPROVAL DATE

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

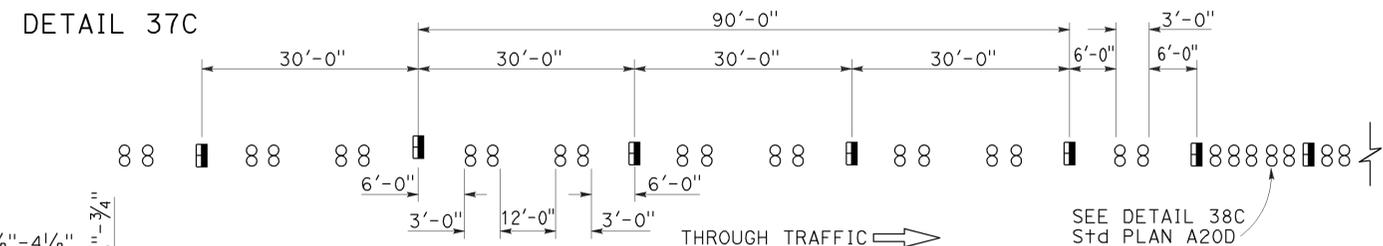
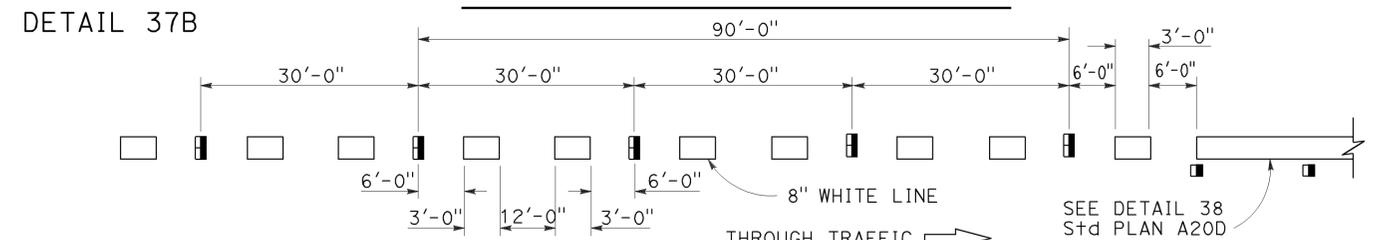
TO ACCOMPANY PLANS DATED 1-12-15

## LANE DROP AT EXIT RAMP



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

## LANE DROP AT INTERSECTIONS



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

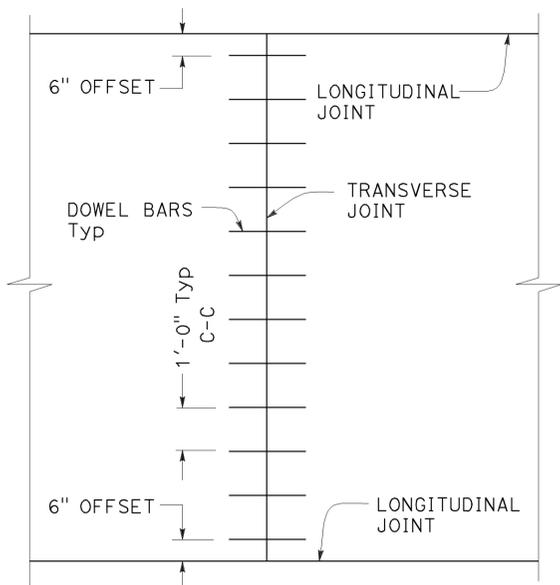
RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

## REVISED STANDARD PLAN RSP A20C

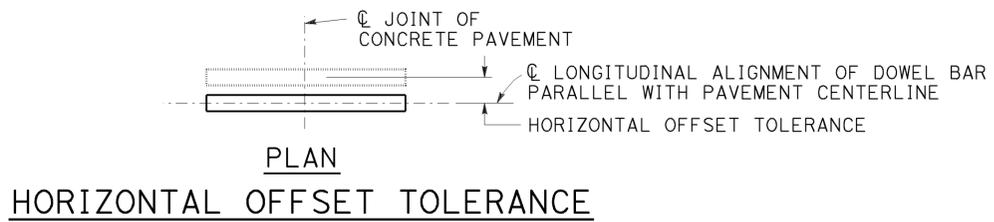
2010 REVISED STANDARD PLAN RSP A20C

TO ACCOMPANY PLANS DATED 1-12-15

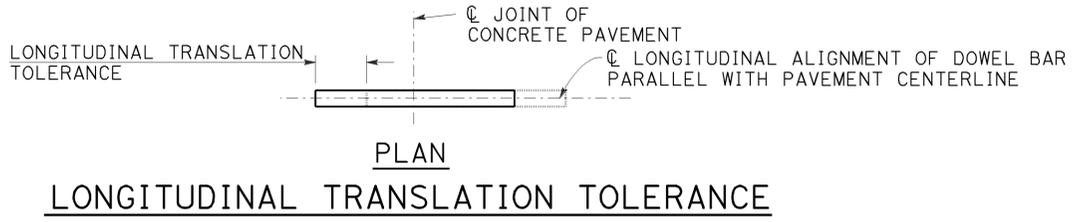
- NOTES:**
- See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
  - Where fresh concrete pavement is placed against new concrete or existing concrete pavement, rounding the corner of the existing concrete pavement is not required.
  - May also use 3/4" Dia dowel bars 2'-4" ± 1/4" in length. Center the length of dowel bars at the centerline of longitudinal joint.



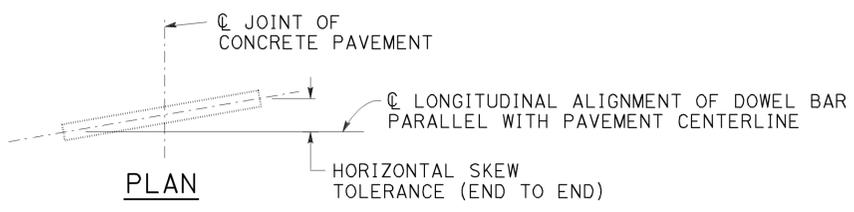
**TRANSVERSE JOINT  
DOWEL BAR LAYOUT**



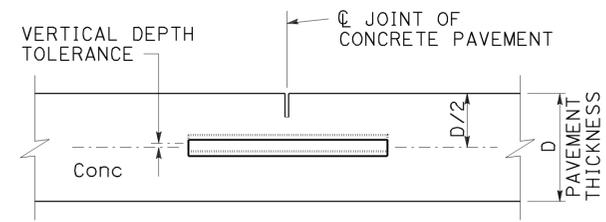
**PLAN  
HORIZONTAL OFFSET TOLERANCE**



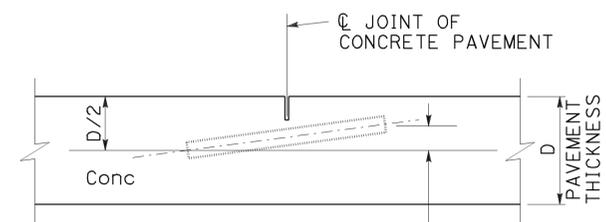
**PLAN  
LONGITUDINAL TRANSLATION TOLERANCE**



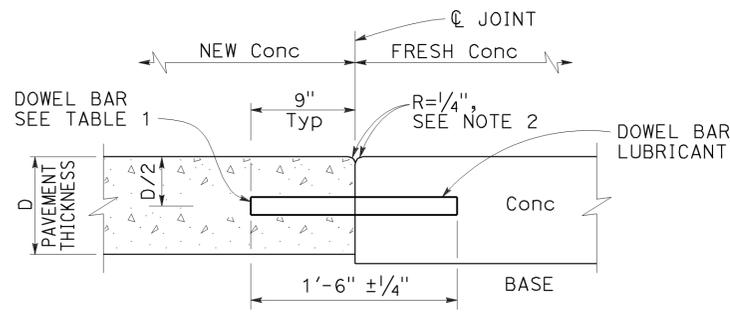
**PLAN  
HORIZONTAL SKEW TOLERANCE**



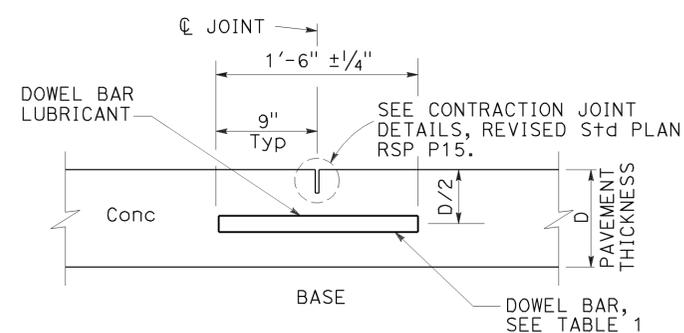
**ELEVATION  
VERTICAL DEPTH TOLERANCE**



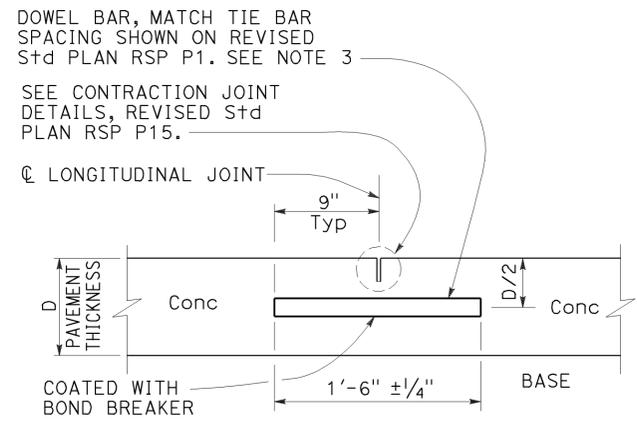
**ELEVATION  
VERTICAL SKEW TOLERANCE**



**TRANSVERSE  
CONSTRUCTION JOINT DETAIL**



**TRANSVERSE CONTRACTION JOINT**



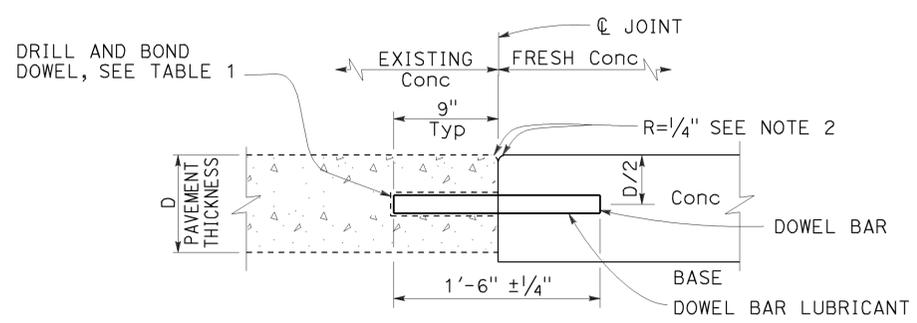
**LONGITUDINAL CONTRACTION  
JOINT WITH DOWEL BARS**  
See Revised Std Plan RSP P18

**TABLE 1**

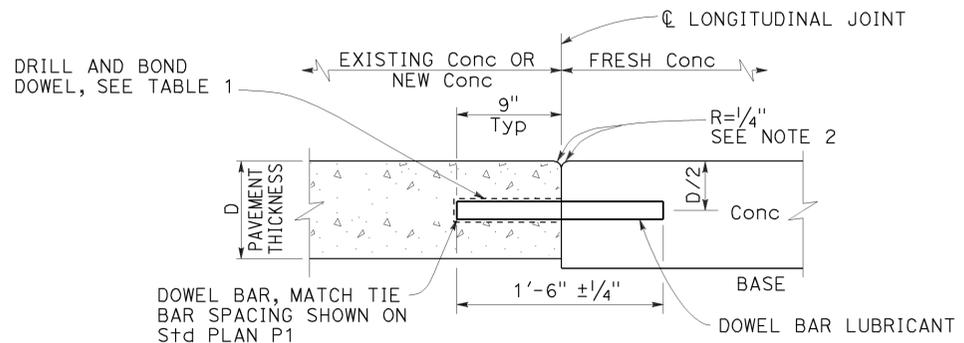
**DOWEL BAR DIAMETER TABLE**

PAVEMENT THICKNESS	0.65'	> 0.65' - 0.85'	> 0.85'
MINIMUM DOWEL * BAR DIAMETER	1"	1 1/4"	1 1/2"

\* The drilled hole diameter must be 1/8" to 3/16" larger than the bar diameter.



**TRANSVERSE CONSTRUCTION JOINT  
FOR EXISTING CONCRETE PAVEMENT**



**LONGITUDINAL CONSTRUCTION JOINT  
WITH DOWEL BARS**  
See Revised Std Plan RSP P18

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT  
DOWEL BAR  
DETAILS**  
NO SCALE

RSP P10 DATED JULY 19, 2013 SUPERSEDES RSP P10 DATED APRIL 20, 2012 AND STANDARD PLAN P10 DATED MAY 20, 2011 - PAGE 131 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP P10**

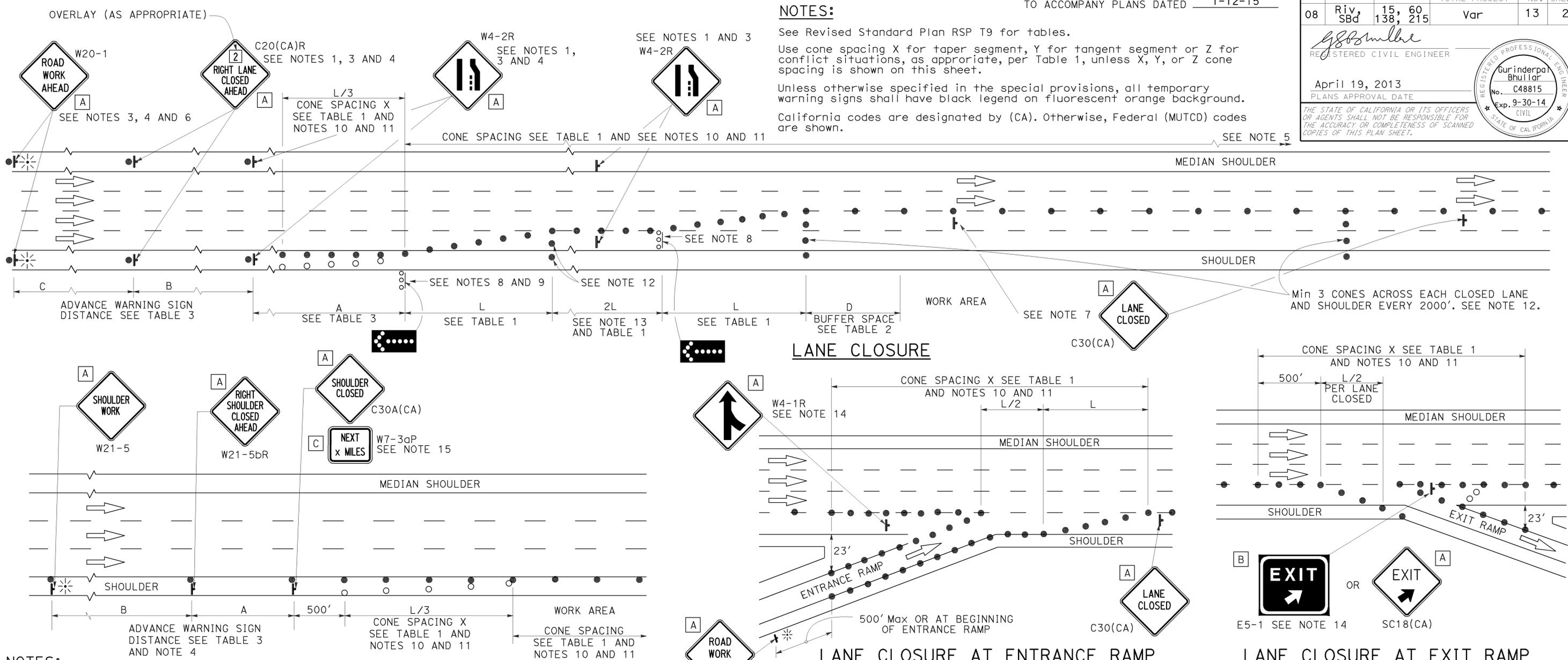
2010 REVISED STANDARD PLAN RSP P10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, Sbd	15, 60 138, 215	Var	13	25

REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE

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

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



**NOTES:**

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

**NOTES:**

- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Duplicate sign installations are not required:
  - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
  - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
- 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.

**SHOULDER CLOSURE**

- 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) "NEXT x MILES" 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 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.

**LANE CLOSURE AT ENTRANCE RAMP**

- 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.
- 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.
- Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
- 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"

**TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS**

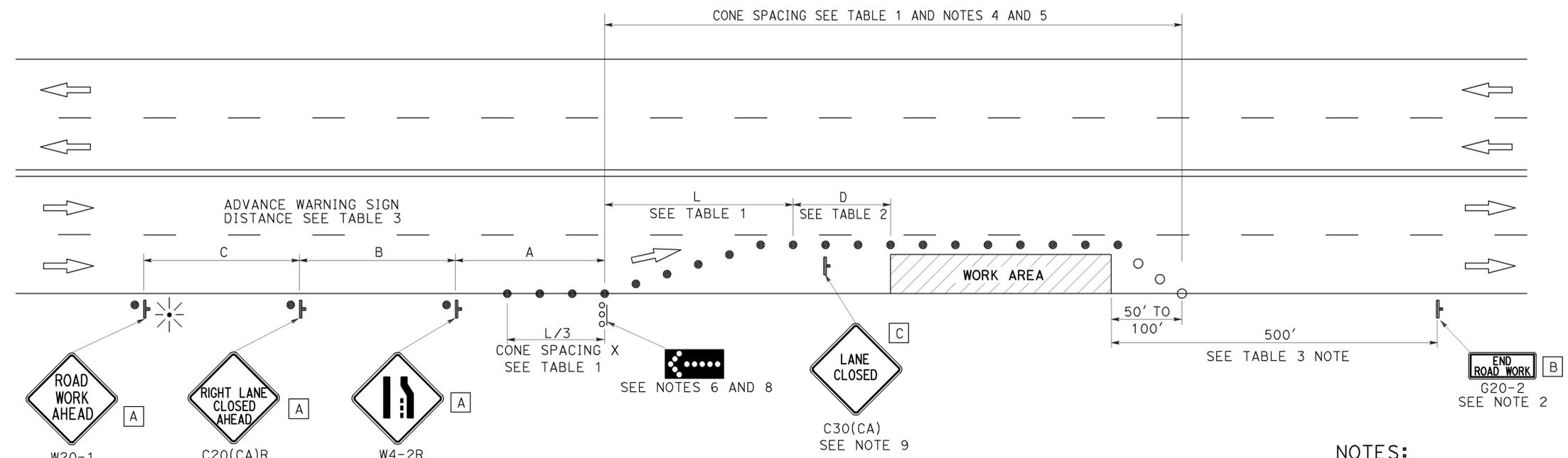
NO SCALE  
 RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T10**

2010 REVISED STANDARD PLAN RSP T10

TO ACCOMPANY PLANS DATED 1-12-15

2010 REVISED STANDARD PLAN RSP T11



TYPICAL LANE CLOSURE

**NOTES:**

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

**NOTES:**

- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a C20(CA) sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.

**LEGEND**

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

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T11**

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

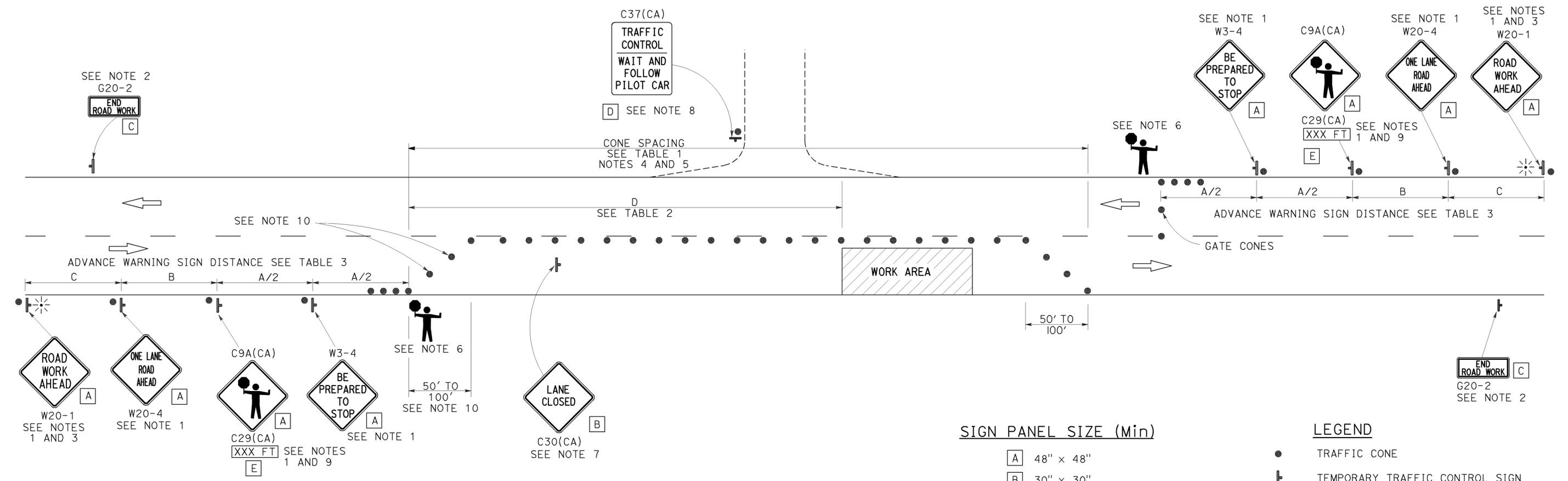
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 1-12-15



**NOTES:**

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

**SIGN PANEL SIZE (Min)**

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

**LEGEND**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

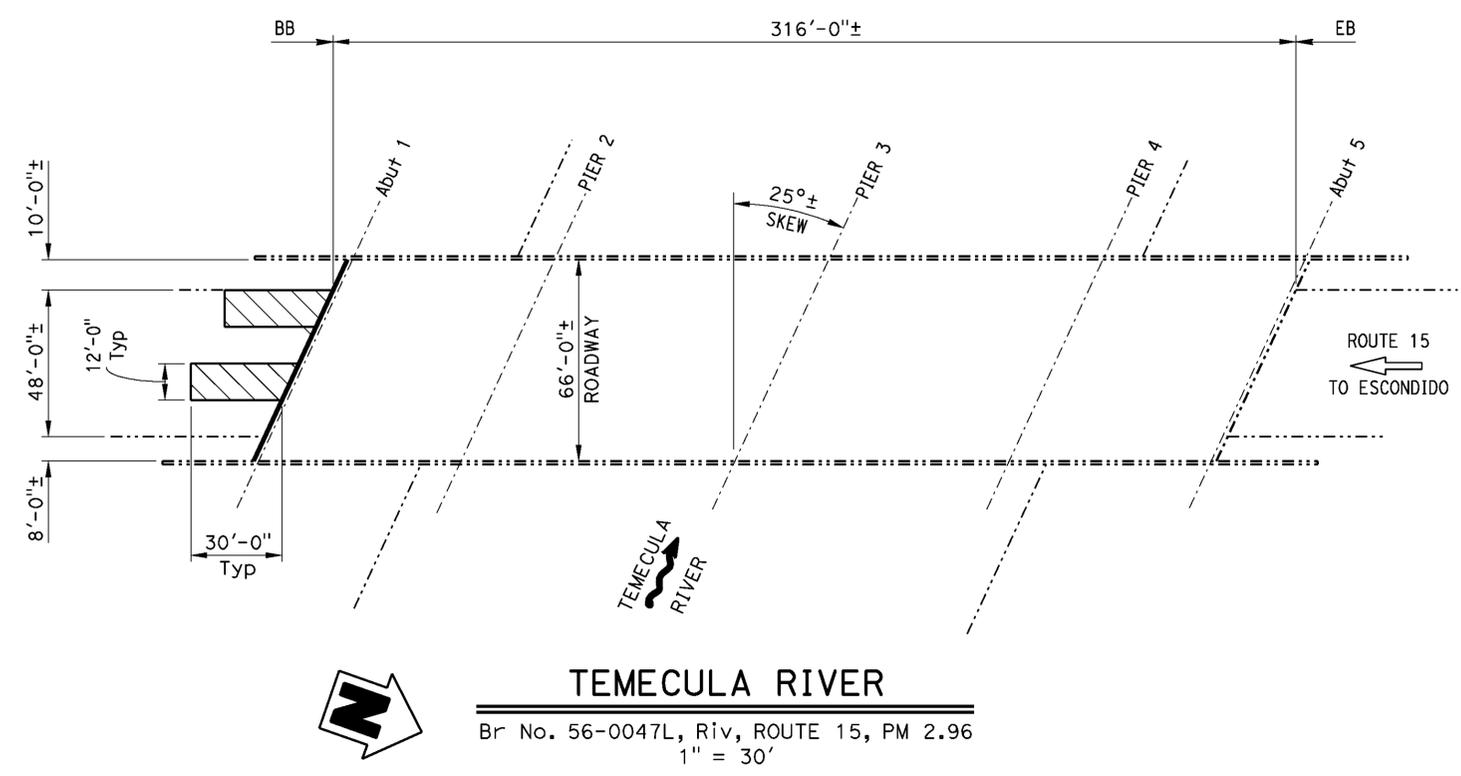
RSP T13 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T13  
DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T13**

2010 REVISED STANDARD PLAN RSP T13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	16	25

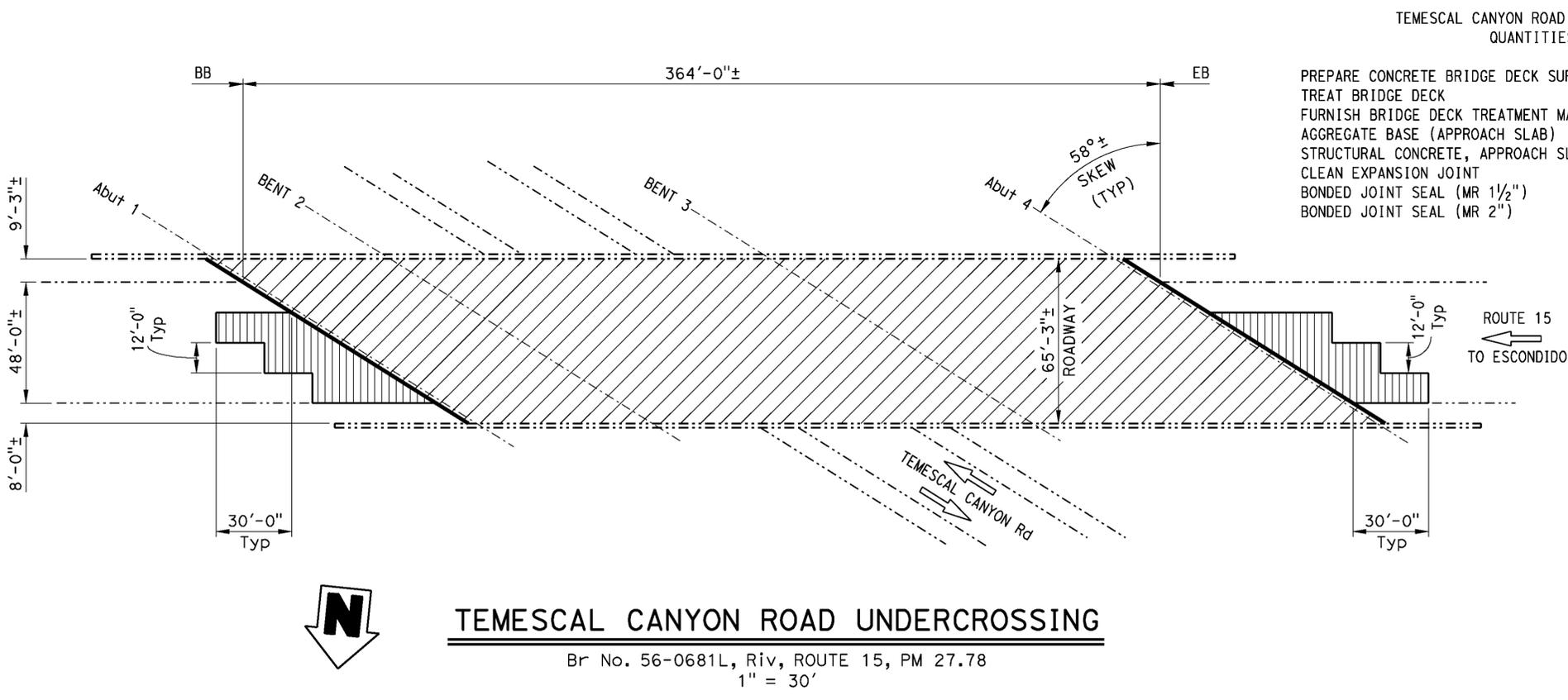
Thomas J. Bolla 1-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 1-12-15  
 PLANS APPROVAL DATE  
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TEMECULA RIVER (56-0047L)  
QUANTITIES

AGGREGATE BASE (APPROACH SLAB)	3	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	30	CY
PAVING NOTCH EXTENSION	20	CF
CLEAN EXPANSION JOINT	47	LF
BONDED JOINT SEAL (MR 1 1/2")	73	LF

- NOTES:** (APPLY TO ALL SHEETS)
- Indicates existing.
  - THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
  - STANDARD PLAN SHEET NUMBER
  - DETAIL NUMBER
- NOTES:** (APPLY TO THIS SHEET ONLY)
- ▨ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
  - ▨ Indicates limits of remove existing approach pavement and place new paving notch extension and Structure Approach Type R(30D). For details see "STRUCTURE APPROACH TYPE R(30D)" sheet.
  - ▨ Indicates limits of remove existing approach pavement and place new Structure Approach Type R(30S). For details see "STRUCTURE APPROACH TYPE R(30S)" sheet.
  - ▨ Indicates limits of remove existing joint seal and place new joint seal. For details see "JOINT SEAL DETAILS" sheet.



TEMESCAL CANYON ROAD UC (56-0681L)  
QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	23,750	SQFT
TREAT BRIDGE DECK	23,750	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	270	GAL
AGGREGATE BASE (APPROACH SLAB)	11	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	105	CY
CLEAN EXPANSION JOINT	111	LF
BONDED JOINT SEAL (MR 1 1/2")	124	LF
BONDED JOINT SEAL (MR 2")	124	LF

**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	GIRDER REPAIR DETAILS
7	DECK OPENINGS
8	JOINT SEAL DETAILS
9	STRUCTURE APPROACH TYPE R(30S)
10	STRUCTURE APPROACH TYPE R(30D)

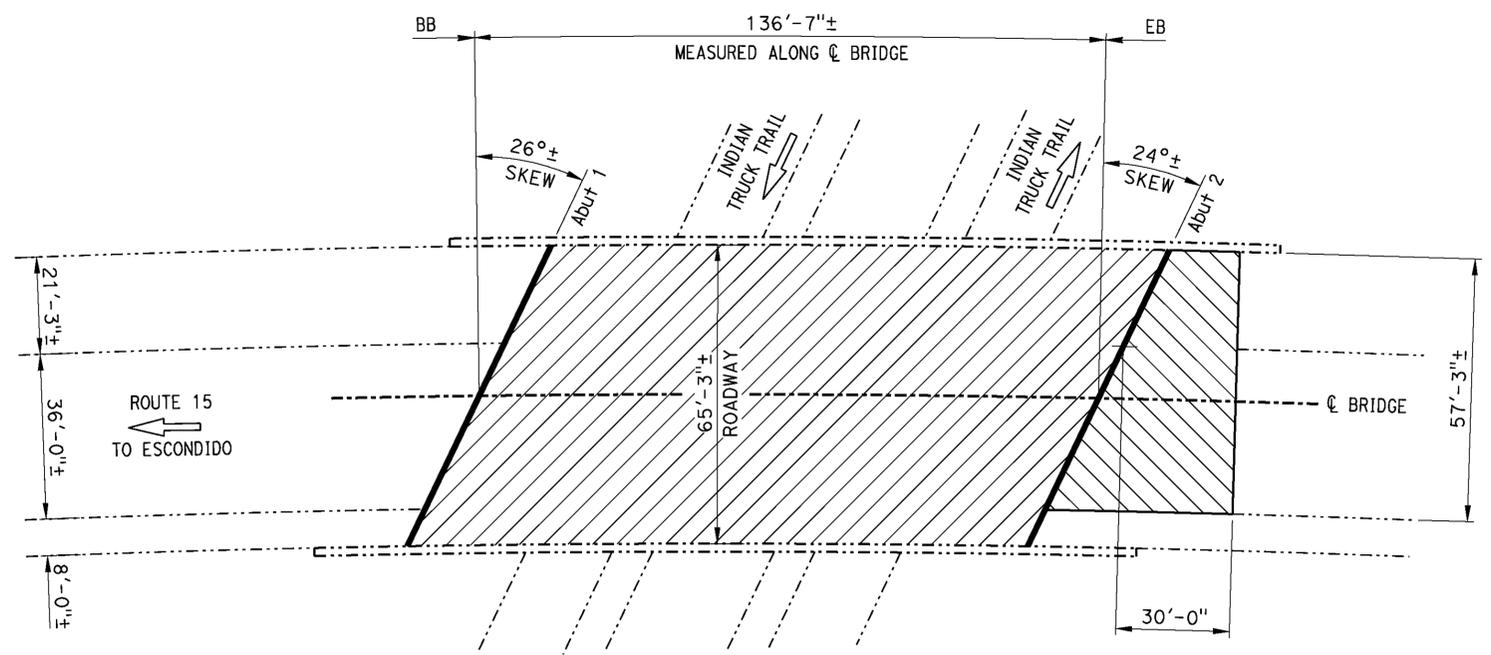
**STANDARD PLANS DATED 2010**

SHEET No.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP P10	CONCRETE PAVEMENT - DOWEL BAR DETAILS

	DESIGN BY T. Bolla	CHECKED F. Espinoza	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	BRIDGE No. VARIOUS	<b>ROUTES 15, 60, 138 &amp; 215 BRIDGES</b> <b>GENERAL PLAN No. 1</b>
	DETAILS BY M. Hallstrom	CHECKED F. Espinoza	LAYOUT	BY M. Hallstrom		POST MILE VARIES	
	QUANTITIES BY T. Bolla	CHECKED F. Espinoza	SPECIFICATIONS	BY Xiaodong Chen		PLANS AND SPECS COMPARED Xiaodong Chen	

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3488 PROJECT NUMBER & PHASE: 0813000074 1 CONTRACT NO.: 08-1C9001 DISREGARD PRINTS BEARING EARLIER REVISION DATES

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	17	25
<i>Thomas J. Bolla</i> 1-10-14 REGISTERED CIVIL ENGINEER DATE			1-12-15 PLANS APPROVAL DATE		
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### INDIAN TRUCK TRAIL UNDERCROSSING

Br No. 56-0676L, Riv, ROUTE 15, PM 30.4  
1" = 20'



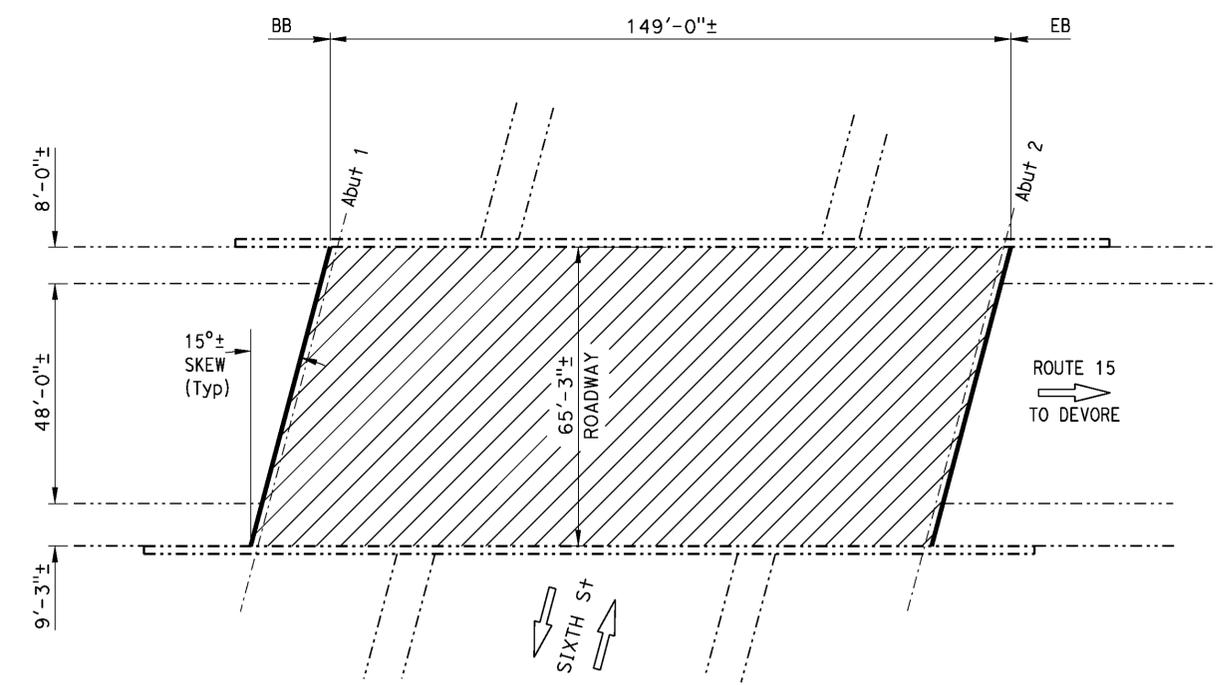
- NOTES:** (APPLY TO THIS SHEET ONLY)
- Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
  - Indicates limits of remove existing approach pavement and place new Structure Approach Type R(30D). For details see "STRUCTURE APPROACH TYPE R(30D)" sheet.
  - Indicates limits of remove existing joint seal and place new joint seal. For details see "JOINT SEAL DETAILS" sheet.

INDIAN TRUCK TRAIL UC (56-0676L)  
QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	8,910	SQFT
TREAT BRIDGE DECK	8,910	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	100	GAL
AGGREGATE BASE (APPROACH SLAB)	7	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	70	CY
CLEAN EXPANSION JOINT	82	LF
JOINT SEAL (MR 1")	145	LF

SIXTH STREET UC (56-0494R)  
QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	9,720	SQFT
TREAT BRIDGE DECK	9,720	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	110	GAL
CLEAN EXPANSION JOINT	136	LF
JOINT SEAL (MR 1/2")	68	LF
JOINT SEAL (MR 1 1/2")	68	LF



### SIXTH STREET UNDERCROSSING

Br No. 56-0494R, Riv, ROUTE 15, PM 40.96  
1" = 20'



*Michael J. Lee* 1-10-14  
DESIGN ENGINEER

DESIGN	BY T. Bolla	CHECKED F. Espinoza	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY M. Hallstrom	CHECKED F. Espinoza	LAYOUT	BY M. Hallstrom
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza	SPECIFICATIONS	BY Xiaodong Chen

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

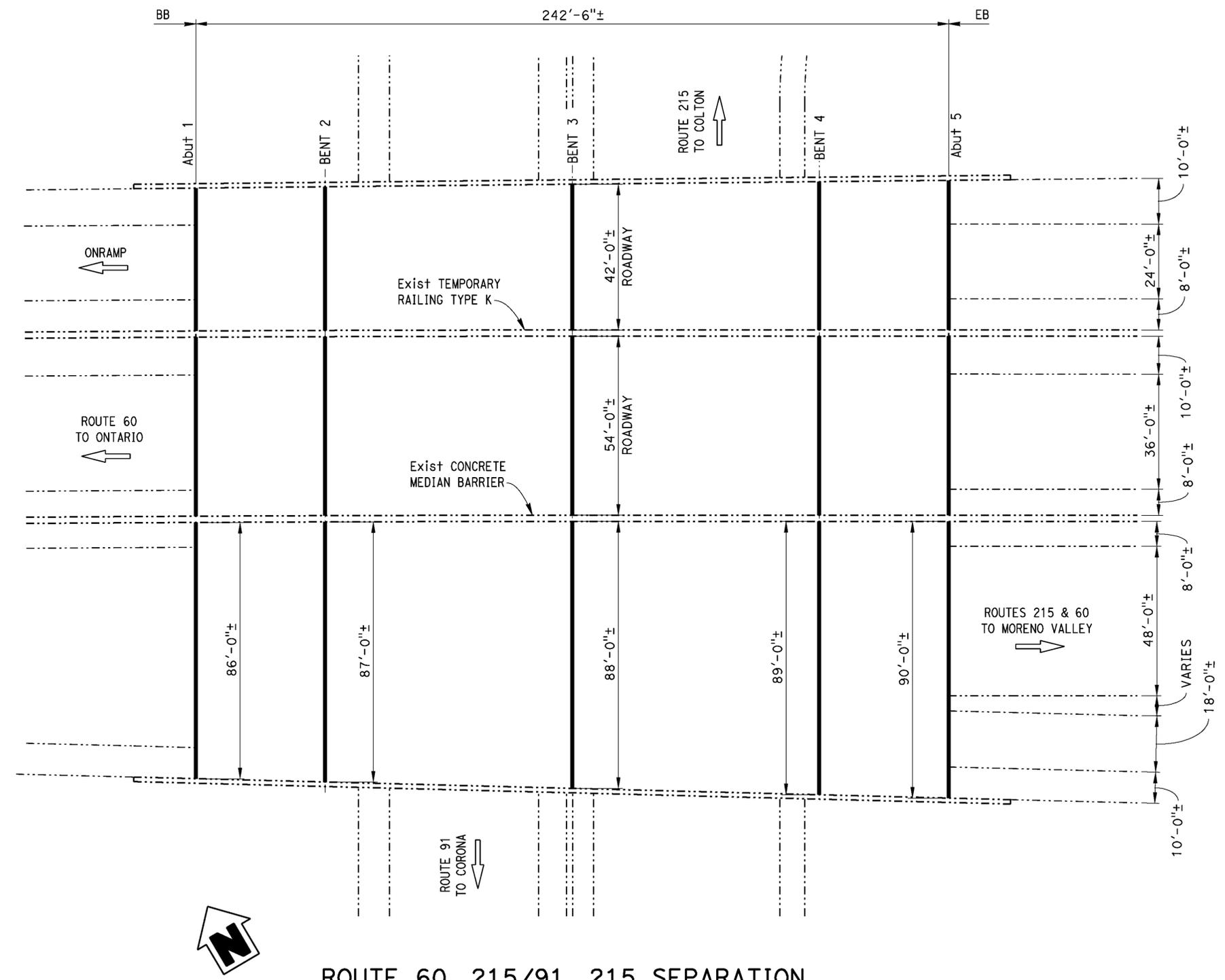
BRIDGE NO. VARIOUS  
POST MILE VARIES

**ROUTES 15, 60, 138 & 215 BRIDGES**  
**GENERAL PLAN No. 2**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15,60, 138,215	Var	18	25

Thomas J. Bolla 1-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 1-12-15  
 PLANS APPROVAL DATE

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**NOTES:** (APPLY TO THIS SHEET ONLY)

— Indicates limits of remove existing joint seal and place new joint seal. For details see "JOINT SEAL DETAILS" sheet.

ROUTE 60,215/91, 215 SEP (56-0402)  
QUANTITIES

CLEAN EXPANSION JOINT	925 LF
JOINT SEAL (MR 1/2")	553 LF
JOINT SEAL (MR 1")	372 LF

**ROUTE 60, 215/91, 215 SEPARATION**

Br No. 56-0402, Riv, ROUTE 215, PM 43.25  
NO SCALE

1-10-14  
 DESIGN ENGINEER

DESIGN	BY T. Bolla	CHECKED F. Espinoza	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY M. Hallstrom	CHECKED F. Espinoza	LAYOUT	BY M. Hallstrom
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza	SPECIFICATIONS	BY Xiaodong Chen

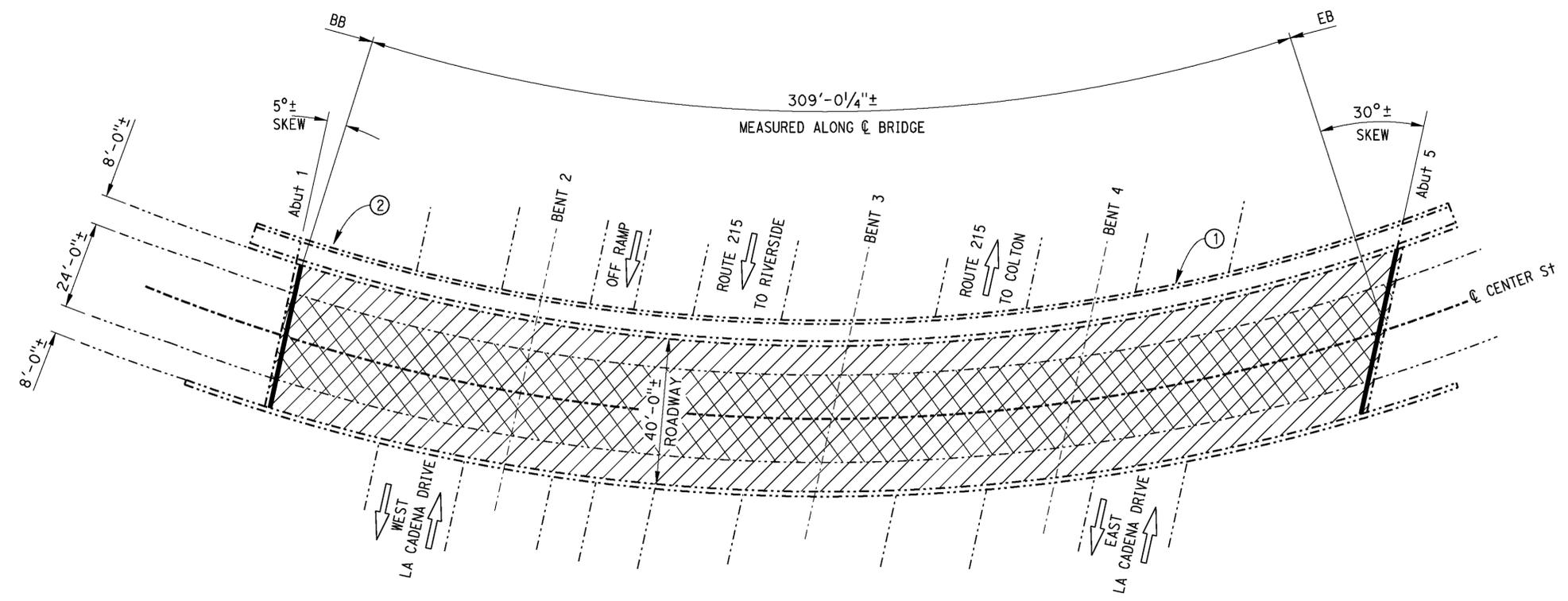
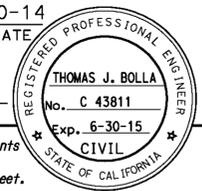
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 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

**ROUTES 15, 60, 138 & 215 BRIDGES**  
**GENERAL PLAN No. 3**

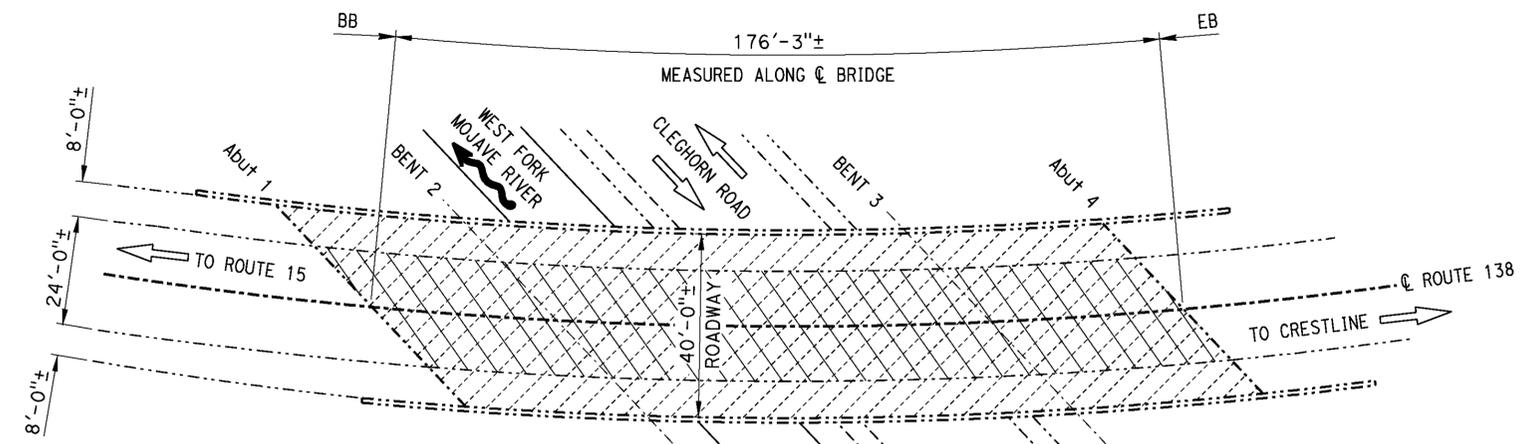
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15,60, 138,215	Var	19	25
Thomas J. Bolla 1-10-14 REGISTERED CIVIL ENGINEER DATE			1-12-15 PLANS APPROVAL DATE		
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### CENTER STREET OVERCROSSING

Br No. 56-0436, Riv, ROUTE 215, PM 45.01  
1" = 20'

- NOTES:** (APPLY TO THIS SHEET ONLY)
- Indicates limits of remove existing AC overlay (1"± depth at Br No. 56-0436, 3/4"± depth at Br No. 54-0846).
  - Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
  - Indicates limits of remove existing 3/4"± depth deck concrete, prepare concrete bridge deck surface, furnish and place new 3/4"± depth polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch as shown on the "JOINT AND DECK REPAIR DETAIL" on "JOINT SEAL DETAILS" sheet.
  - Indicates limits of remove existing joint seal and place new joint seal. For details see "JOINT SEAL DETAILS" sheet.
  - ① Repair spalled surface areas on the bottom of Girders 1, 2 and 3 (10 square feet). Girders are numbered from north to south.
  - ② Remove slope paving unsound concrete and place new PCC (20'-0"± x 5'-0"± x 3"±). Retain existing bar reinforcing steel.



### WEST FORK MOJAVE RIVER

Br No. 54-0846, SBd, ROUTE 138, PM R26.48  
1" = 20'

#### CENTER STREET OC (56-0436) QUANTITIES

	LUMP SUM
PUBLIC SAFETY PLAN	1 CF
RAPID SETTING CONCRETE (PATCH)	10 SQFT
REPAIR SPALLED SURFACE AREA	7,420 SQFT
REMOVE ASPHALT CONCRETE SURFACING	1 CF
REMOVE UNSOUND CONCRETE	12,360 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	140 GAL
TREAT BRIDGE DECK	LUMP SUM
FURNISH BRIDGE DECK TREATMENT MATERIAL	1 CY
BRIDGE REMOVAL (PORTION), LOCATION 1	88 LF
MINOR CONCRETE	47 LF
CLEAN EXPANSION JOINT	41 LF
BONDED JOINT SEAL (MR 1 1/2")	
JOINT SEAL (MR 1 1/2")	

#### WEST FORK MOJAVE RIVER (54-0846) QUANTITIES

RAPID SETTING CONCRETE (PATCH)	18 CF
REMOVE ASPHALT CONCRETE SURFACING	4,230 SQFT
REMOVE CONCRETE DECK SURFACE	7,050 SQFT
REMOVE UNSOUND CONCRETE	18 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	7,050 SQFT
FURNISH POLYESTER CONCRETE OVERLAY	530 CF
PLACE POLYESTER CONCRETE OVERLAY	7,050 SQFT

Michael J. Lee 1-10-14  
DESIGN ENGINEER

DESIGN	BY T. Bolla	CHECKED F. Espinoza	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY M. Hallstrom	CHECKED F. Espinoza	LAYOUT	BY M. Hallstrom
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza	SPECIFICATIONS	BY Xiaodong Chen

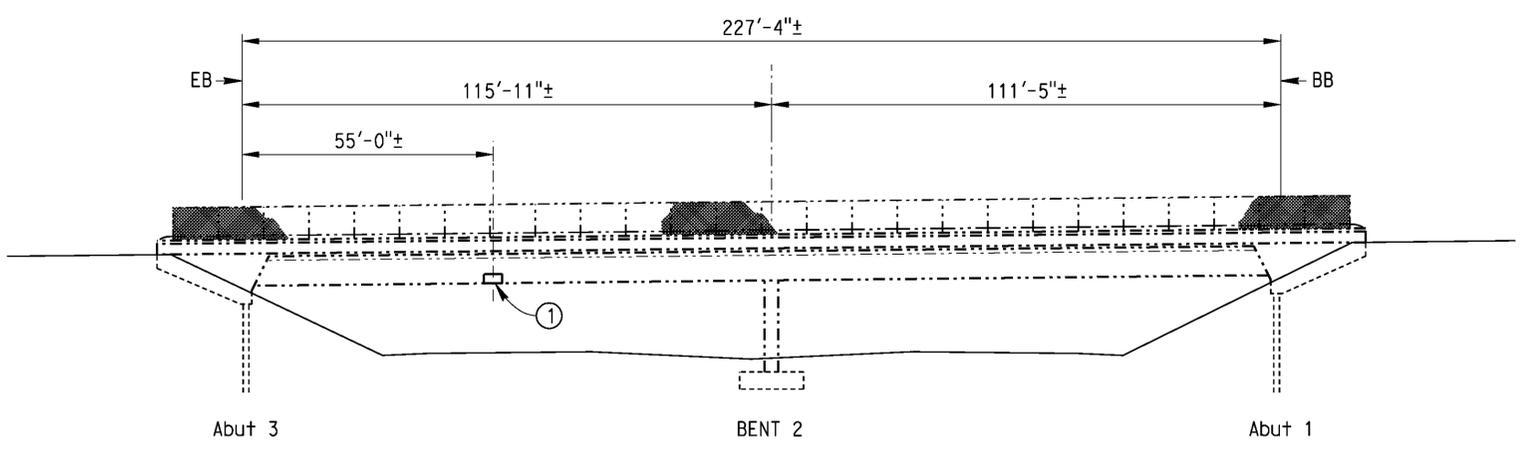
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
POST MILE VARIES  
**ROUTES 15, 60, 138 & 215 BRIDGES**  
**GENERAL PLAN No. 4**

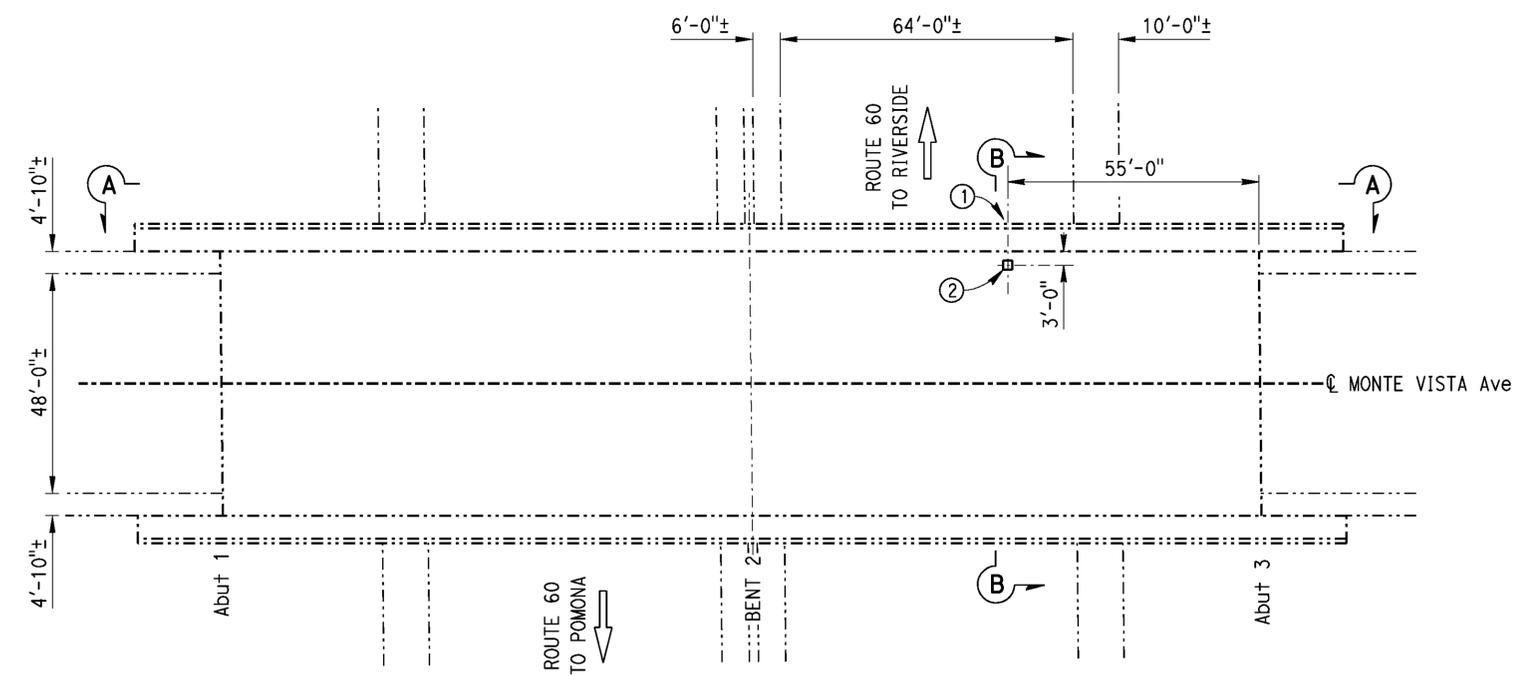
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	20	25

Thomas J. Bolla 1-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 1-12-15  
 PLANS APPROVAL DATE  
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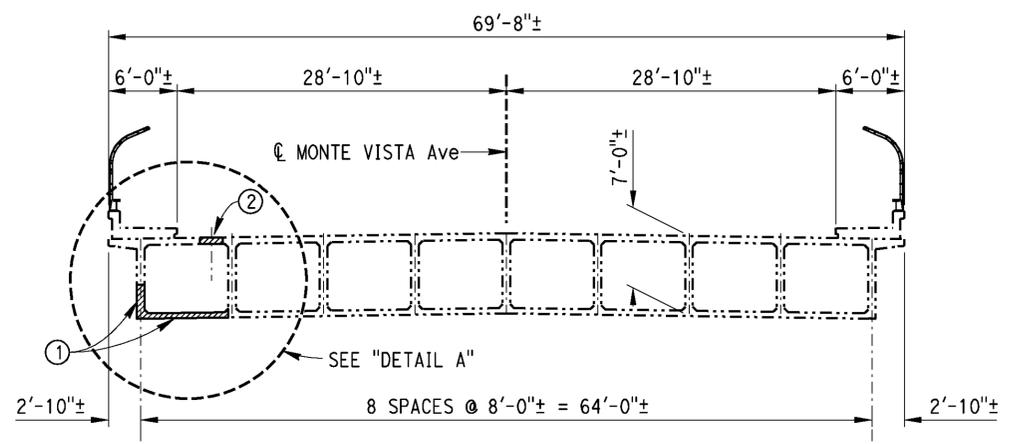


**ELEVATION A-A**  
1" = 20'

- NOTES: (APPLY TO THIS SHEET ONLY)
- ① Repair damaged existing concrete exterior girder and box girder bottom slab. For details see "DETAIL A" on "GIRDER REPAIR DETAILS" sheet.
  - ② Indicates location of temporary deck access opening. For details see "DETAIL A" on "GIRDER REPAIR DETAILS" and "DECK OPENINGS" sheets.



**PLAN**  
1" = 20'



**SECTION B-B**  
1/8" = 1'



**MONTE VISTA AVENUE OVERCROSSING**

Br No. 54-0746, SBd, ROUTE 60, PM R1.87  
1" = 20'

**MONTE VISTA AVE OC (54-0746)  
QUANTITIES**

CLOSE ACCESS, DECK	1 EA
ACCESS OPENING, DECK	1 EA
BRIDGE REMOVAL (PORTION), LOCATION 2	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	2 CY

Michael J. Lee 1-10-14  
DESIGN ENGINEER

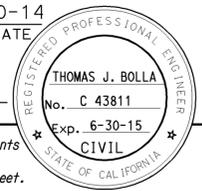
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DETAILS	BY G. Bidwell	CHECKED F. Espinoza	LAYOUT	BY G. Bidwell
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza	SPECIFICATIONS	BY Xiaodong Chen

STATE OF CALIFORNIA  
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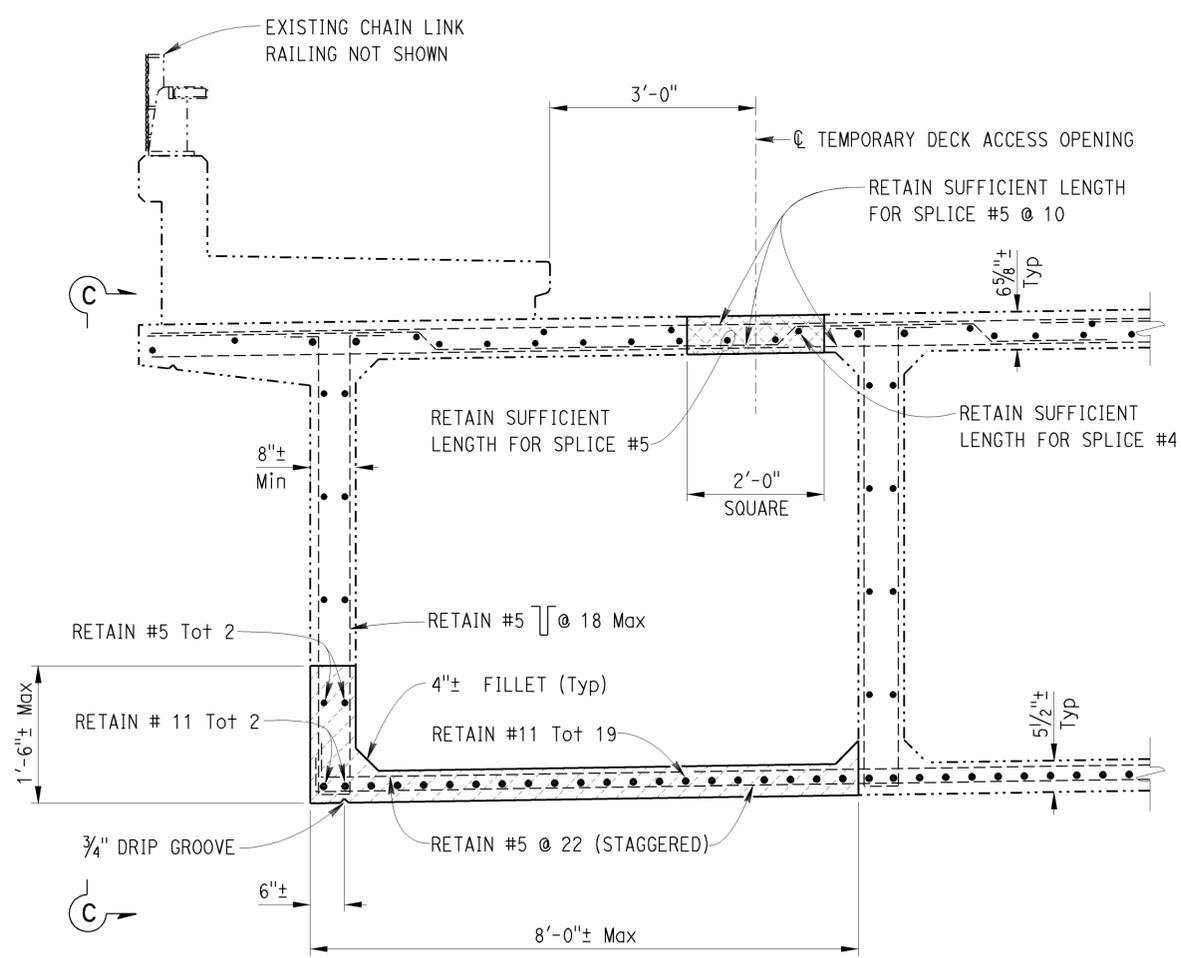
DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
POST MILE VARIES  
**ROUTES 15, 60, 138 & 215 BRIDGES**  
**GENERAL PLAN No. 5**

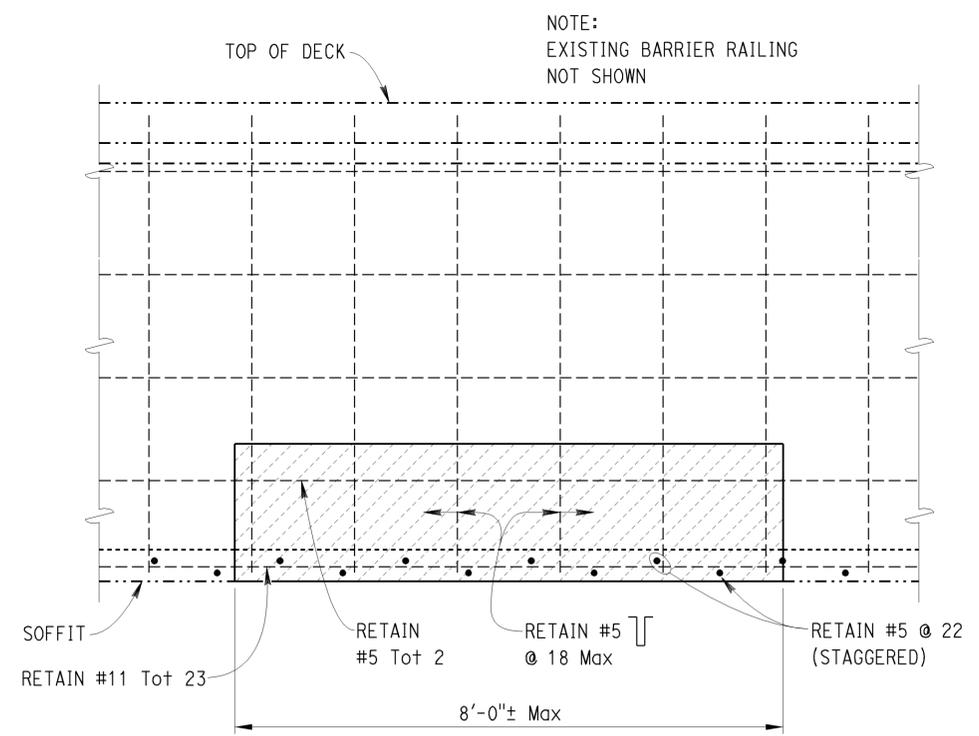
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	21	25
Thomas J. Bolla REGISTERED CIVIL ENGINEER			1-10-14 DATE		
			1-12-15 PLANS APPROVAL DATE		
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- NOTES:** (APPLY TO THIS SHEET ONLY)
- Indicates approximate limits of remove unsound existing concrete. Retain all existing reinforcing steel (bend back into correct position as necessary). Reconstruct with PCC.
  - Indicates limits of temporary deck access opening. For details see "DECK OPENINGS" sheet.



**DETAIL A**  
 Br No. 54-0746  
 3/4" = 1'



**PARTIAL ELEVATION C-C**  
 3/4" = 1'

DESIGN	BY T. Bolla	CHECKED F. Espinoza
DETAILS	BY G. Bidwell	CHECKED F. Espinoza
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza

**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

**DIVISION OF MAINTENANCE**  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

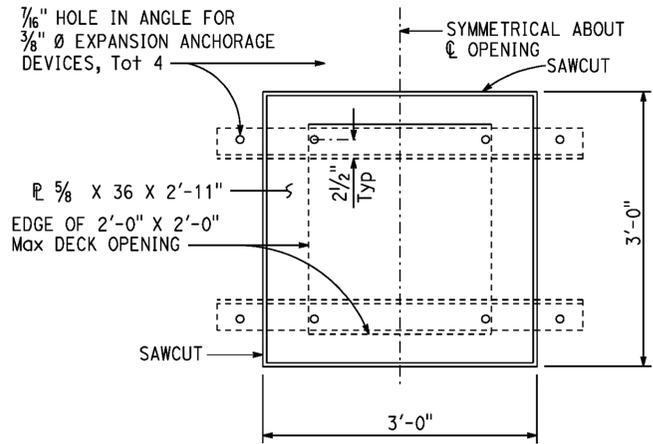
**ROUTES 15, 60, 138 & 215 BRIDGES**  
**GIRDER REPAIR DETAILS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	22	25

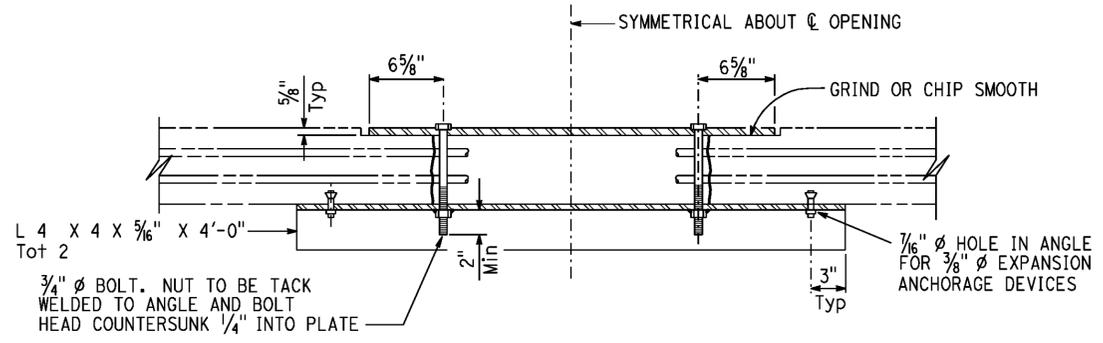
Thomas J. Bolla 1-10-14  
 REGISTERED CIVIL ENGINEER DATE

1-12-15  
 PLANS APPROVAL DATE

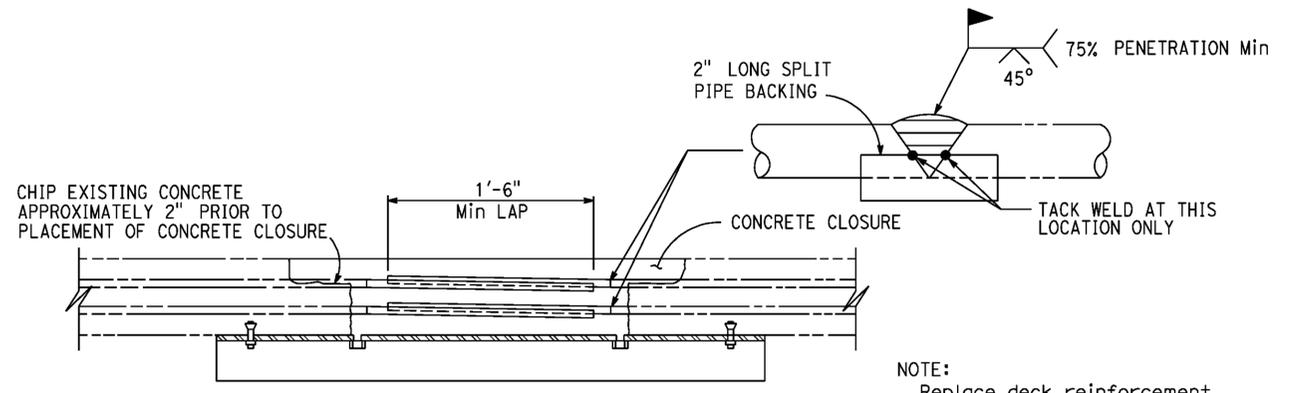
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**PLAN**  
NO SCALE



**TEMPORARY DECK COVER PLATE**  
NO SCALE



**DECK CLOSURE**  
NO SCALE

NOTE:  
Replace deck reinforcement.  
Butt weld to existing

DESIGN	BY T. Bolla	CHECKED F. Espinoza
DETAILS	BY G. Bidwell	CHECKED F. Espinoza
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza

**STATE OF CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

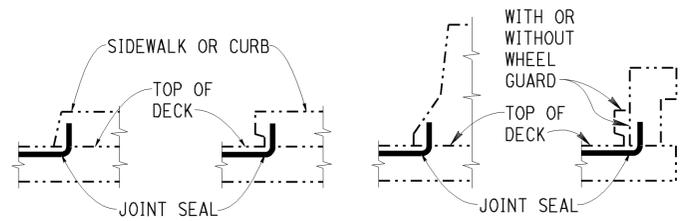
**ROUTES 15, 60, 138 & 215 BRIDGES**  
**DECK OPENINGS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	23	25
Thomas J. Bolla REGISTERED CIVIL ENGINEER			1-10-14	DATE	
1-12-15 PLANS APPROVAL DATE					
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JOINT SEAL TABLE										
BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (INCHES)	APPROXIMATE LENGTH (FEET)	EXISTING WATERSTOP	APPROXIMATE DEPTH TO CLEAN EXPANSION JOINT (INCHES)	JOINT SPALLS		
								APPROXIMATE DEPTH OF JOINT SPALLS (INCHES)	APPROXIMATE WIDTH OF JOINT SPALLS (INCHES)	APPROXIMATE LENGTH OF JOINT SPALLS (FEET)
TEMECULA RIVER	56-0047L	Abut 1	BB	1.5 *	73	NO	11.5	-	-	-
TEMESCAL CANYON ROAD UNDERCROSSING	56-0681L	Abut 1	BB	1.5 *	124	NO	72.0	-	-	-
		Abut 4	EB	2.0 *	124	NO	72.0	-	-	-
INDIAN TRUCK TRAIL UNDERCROSSING	56-0676L	Abut 1	BB	1.0	73	NO	12.0	-	-	-
		Abut 2	EB	1.0	73	NO	12.0	-	-	-
SIXTH STREET UNDERCROSSING	56-0494R	Abut 1	BB	0.5	68	NO	14.0	-	-	-
		Abut 2	EB	1.5	68	NO	14.0	-	-	-
ROUTE 60,215/91,215 SEPARATION	56-0402	Abut 1	BB	0.5	183	NO	60.0	-	-	-
		BENT 2	CL	0.5	184	NO	60.0	-	-	-
		BENT 3	CL	1.0	186	NO	60.0	-	-	-
		BENT 4	CL	1.0	187	NO	60.0	-	-	-
		Abut 5	EB	0.5	187	NO	60.0	-	-	-
CENTER STREET OVERCROSSING	56-0436	Abut 1	BW	1.5	41	YES	6.0	6	6	3
		Abut 5	BW	1.5 *	47	YES	6.0	-	-	-

LEGEND:  
 BB = BEGINNING OF BRIDGE  
 EB = END OF BRIDGE  
 BW = ABUTMENT BACKWALL  
 CL = CENTERLINE OF BENT  
 \* = BONDED JOINT SEAL

- The following notes apply to JOINT SEAL TYPE B:
- Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
  - Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be calculated by the Engineer.
  - W1 shall be the smaller of the values determined as follows:
    - 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
    - The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3 psi.
  - Bend Type B joint seal 6" 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 



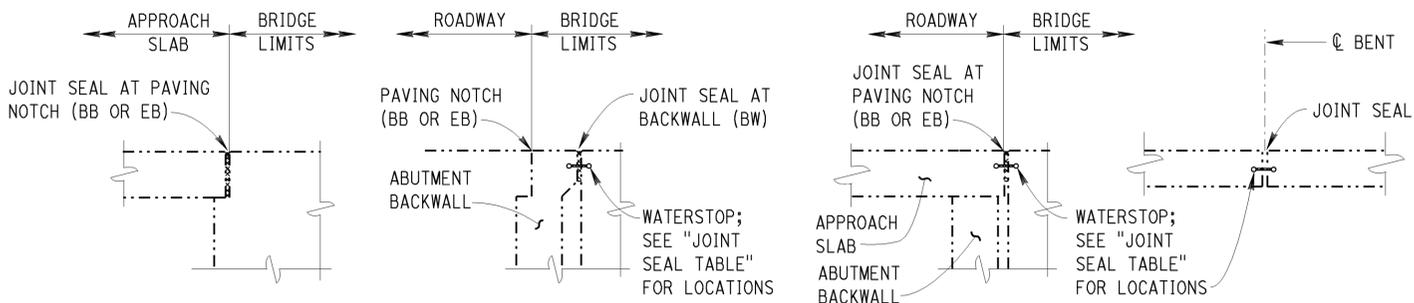
**SIDEWALK OR CURB      BARRIER RAIL**

**JOINT SEAL AT LOW SIDE OF DECK**

DETAILS SHOWN FOR ILLUSTRATION PURPOSES ONLY. FOR USE ONLY WHERE DECK JOINT MATCHES THE BARRIER RAIL, SIDEWALK OR CURB JOINT.  
 NO SCALE

DECK REPAIR TABLE			
REMOVE UNSOUND CONCRETE AND PLACE RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
WEST FORK MOJAVE RIVER	54-0846	1	3

LOCATIONS TO BE DETERMINED BY THE ENGINEER.



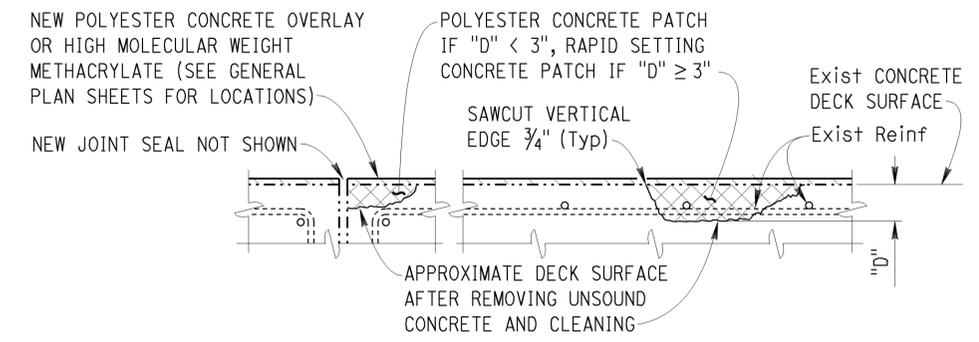
**DIAPHRAGM ABUTMENT**

**ABUTMENT WITH BACKWALL**

**BENT**

**JOINT SEAL LOCATION**

NO SCALE



**JOINT AND DECK REPAIR DETAIL**

LOCATIONS TO BE DETERMINED BY THE ENGINEER.  
 REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.  
 NO SCALE

DESIGN	BY T. Bolla	CHECKED F. Espinoza
DETAILS	BY M. Hallstrom	CHECKED F. Espinoza
QUANTITIES	BY T. Bolla	CHECKED F. Espinoza

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

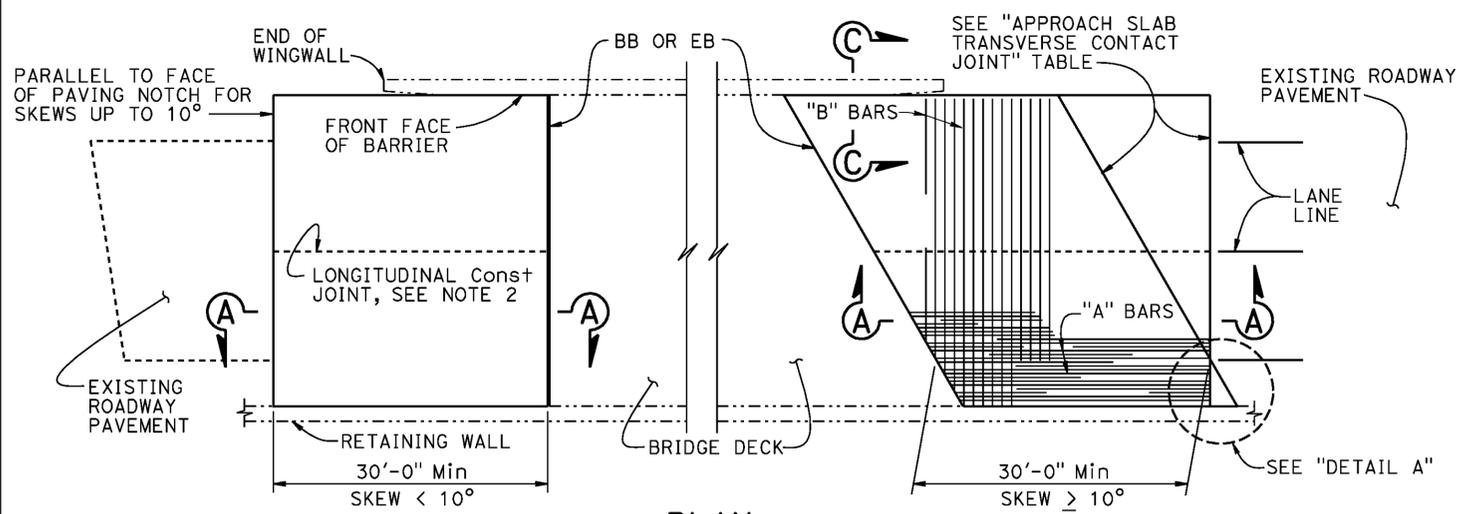
DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS  
 POST MILE VARIES

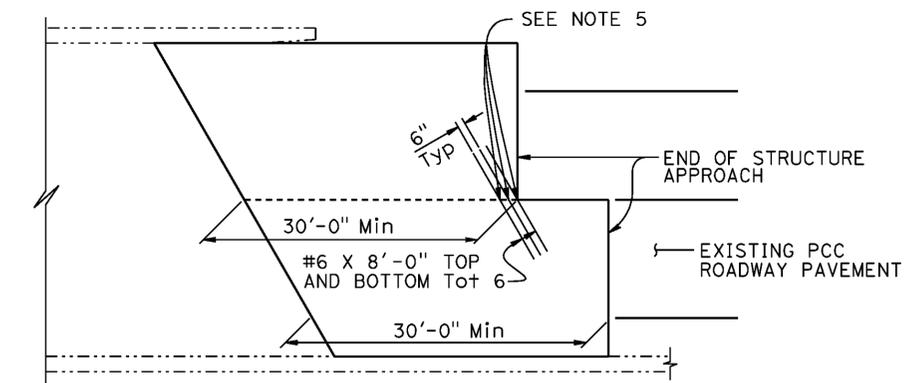
**ROUTES 15, 60, 138 & 215 BRIDGES**  
**JOINT SEAL DETAILS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	24	25

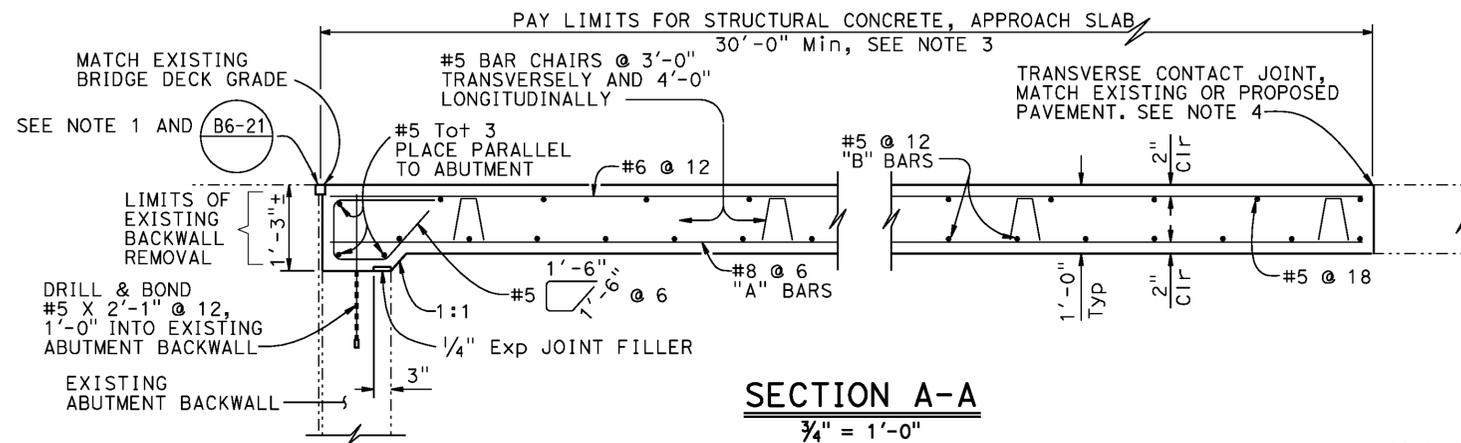
Thomas J. Bolla 1-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 1-12-15  
 PLANS APPROVAL DATE  
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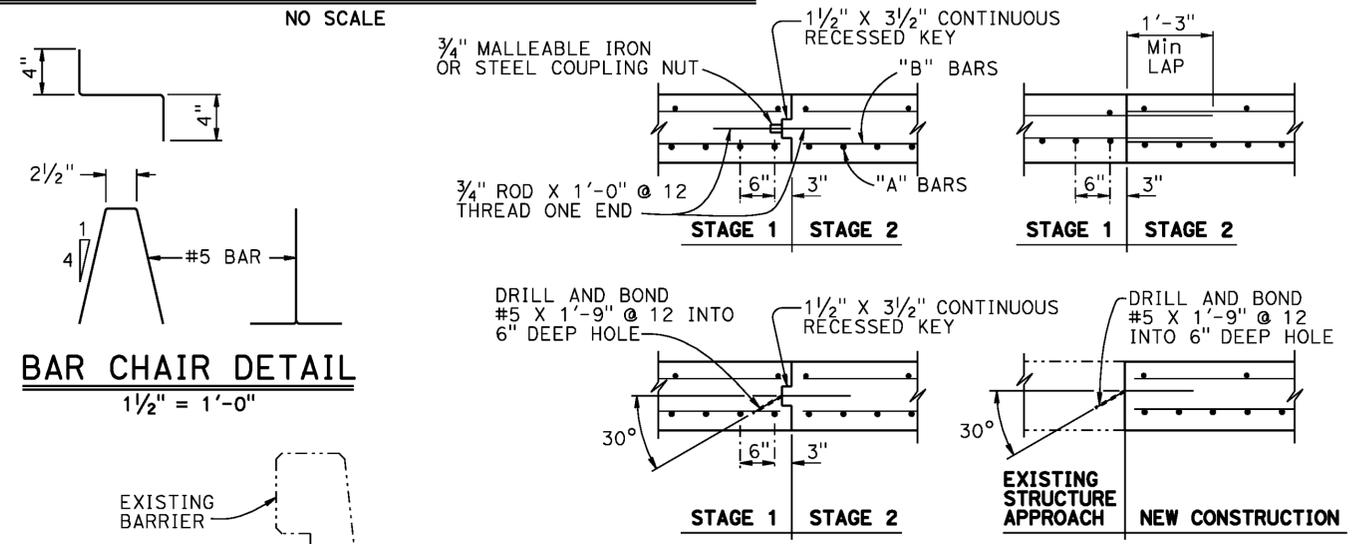
**PLAN**  
1" = 10'



**STRUCTURE APPROACH - END STAGGER DETAIL**  
NO SCALE

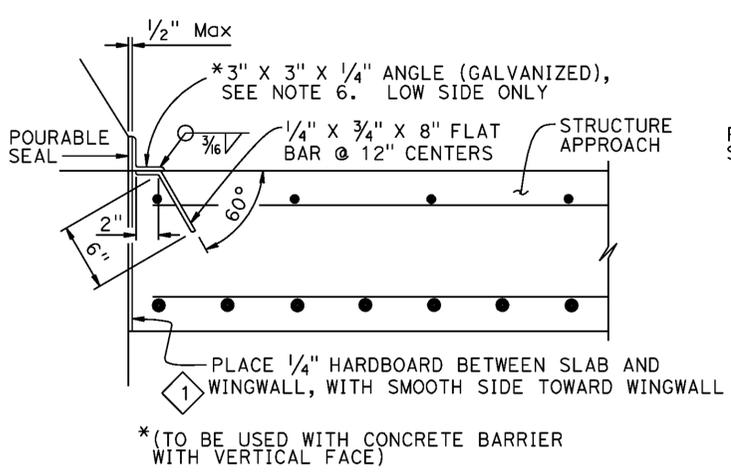


**SECTION A-A**  
3/4" = 1'-0"

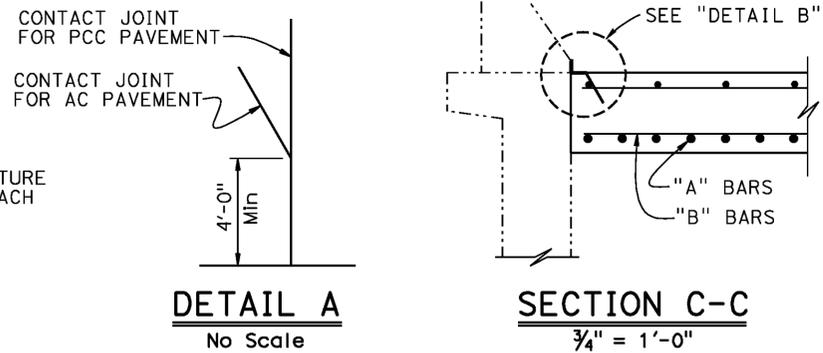
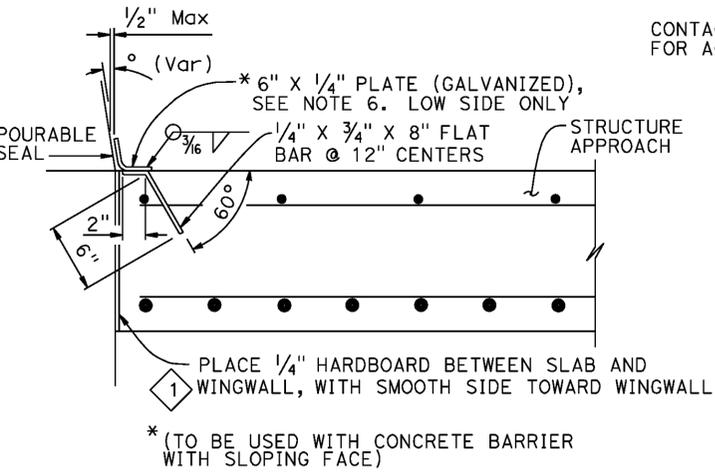


**BAR CHAIR DETAIL**  
1 1/2" = 1'-0"

**LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES**  
3/4" = 1'-0"



**DETAIL B**  
1 1/2" = 1'-0"



**DETAIL A**  
No Scale

**SECTION C-C**  
3/4" = 1'-0"

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 PN
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:
- Sealed joint, for MR see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
  - Longitudinal construction joints, when permitted by 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

STANDARD DRAWING

FILE NO. **xs3-130**

APPROVAL DATE July 2011

1 DETAIL OR NOTE CHANGED

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

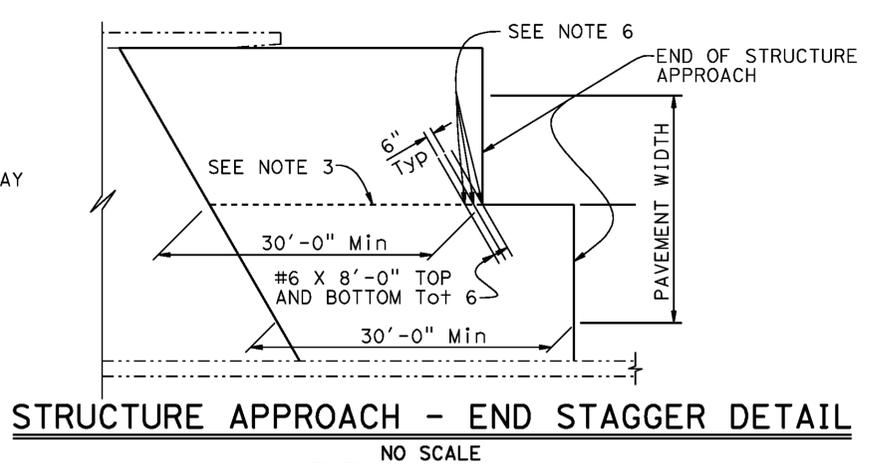
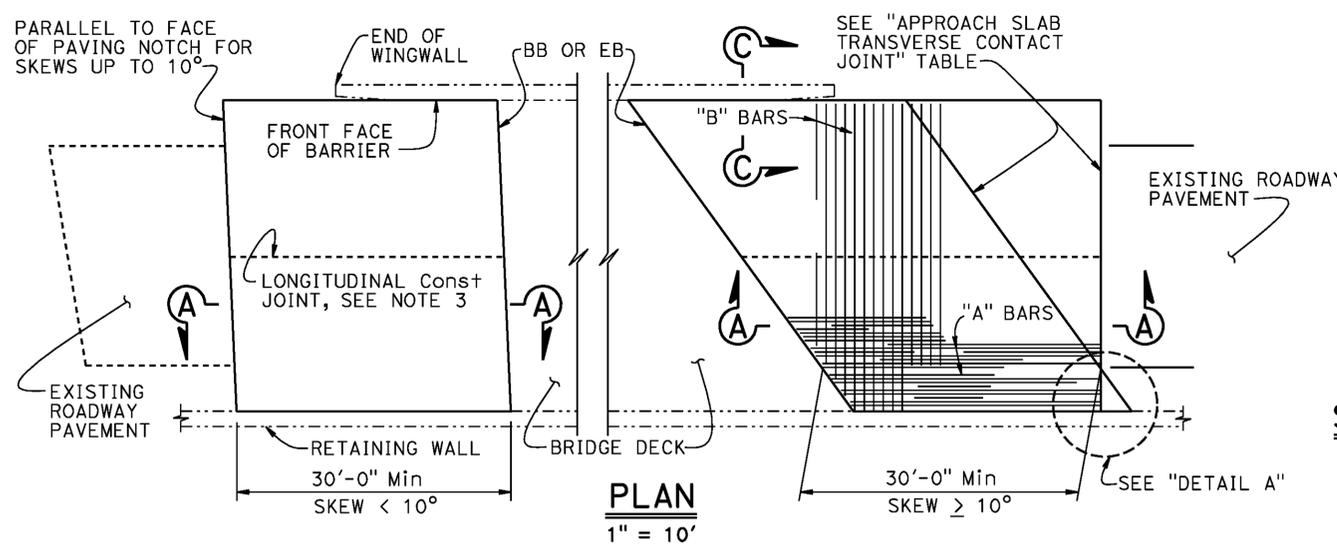
BRIDGE NO. VARIOUS  
POST MILE VARIES

**ROUTES 15, 60, 138 & 215 BRIDGES**

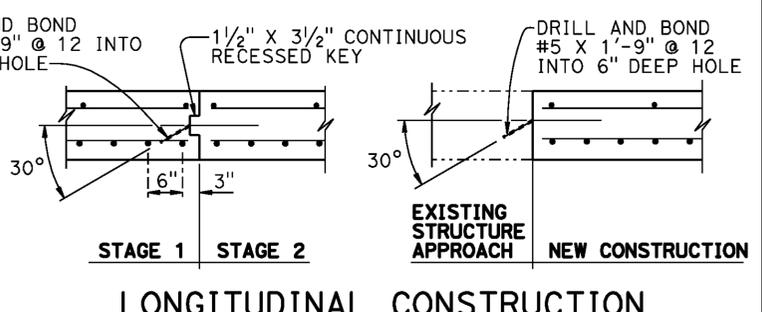
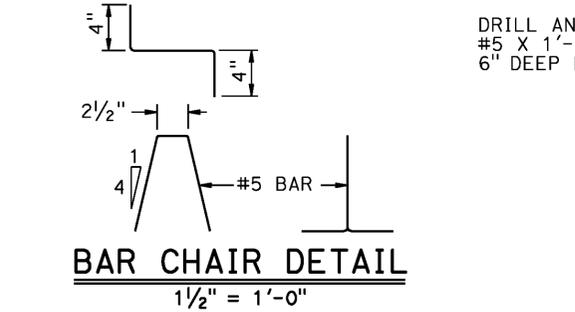
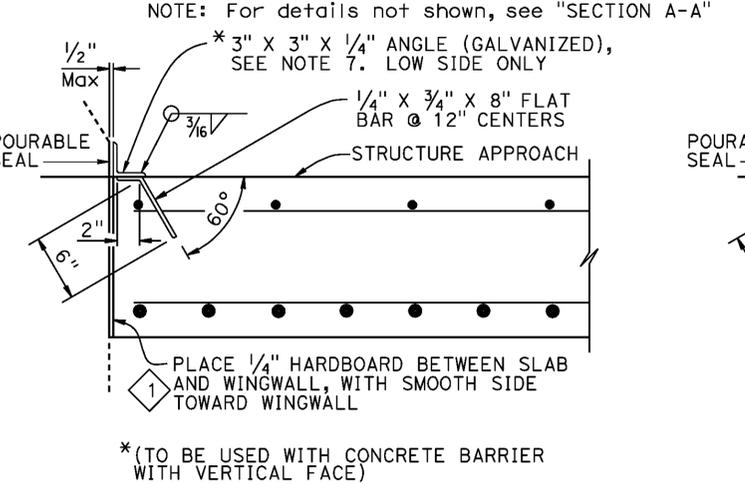
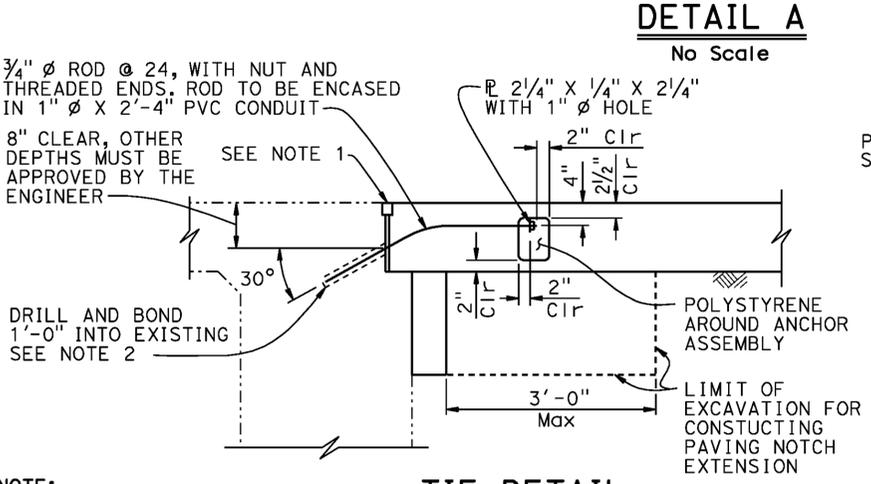
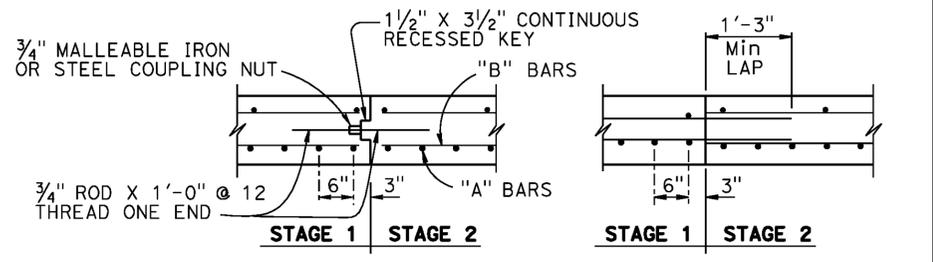
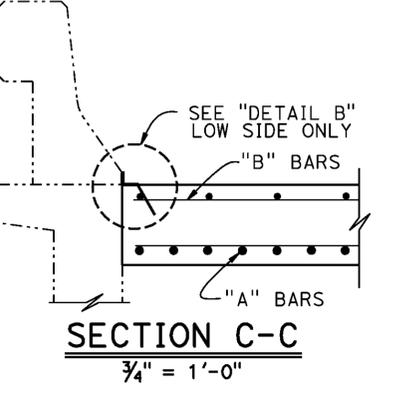
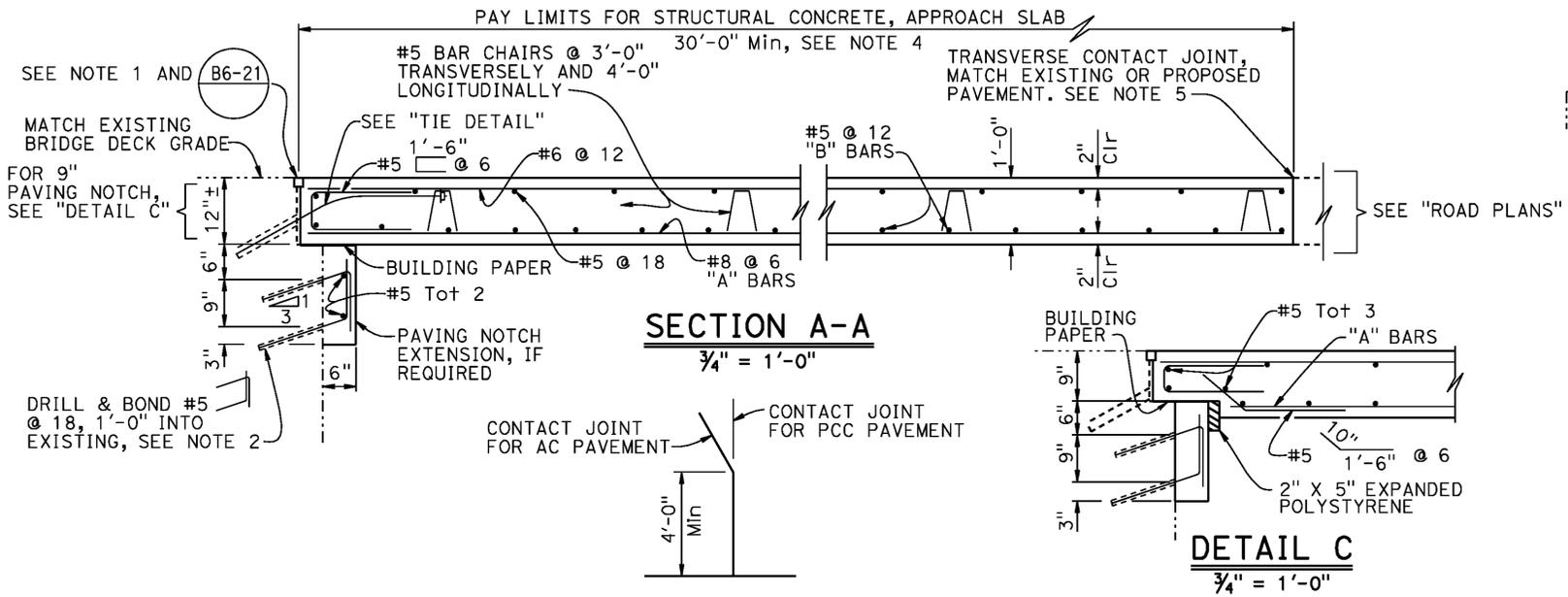
**STRUCTURE APPROACH TYPE R(30S)**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv, SBd	15, 60, 138, 215	Var	25	25

Thomas J. Bolla 1-10-14  
 REGISTERED CIVIL ENGINEER DATE  
 1-12-15  
 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.

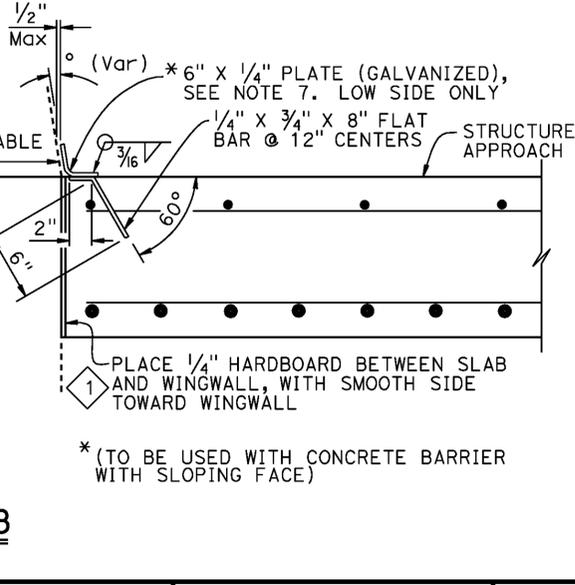


APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT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



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

NOTE: For details not shown, see "SECTION A-A"



- 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

STANDARD DRAWING

FILE NO. **xs3-150**

APPROVAL DATE July 2011

1 DETAIL OR NOTE CHANGED

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. VARIOUS

POST MILE VARIES

**ROUTES 15, 60, 138 & 215 BRIDGES**

**STRUCTURE APPROACH TYPE R(30D)**