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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

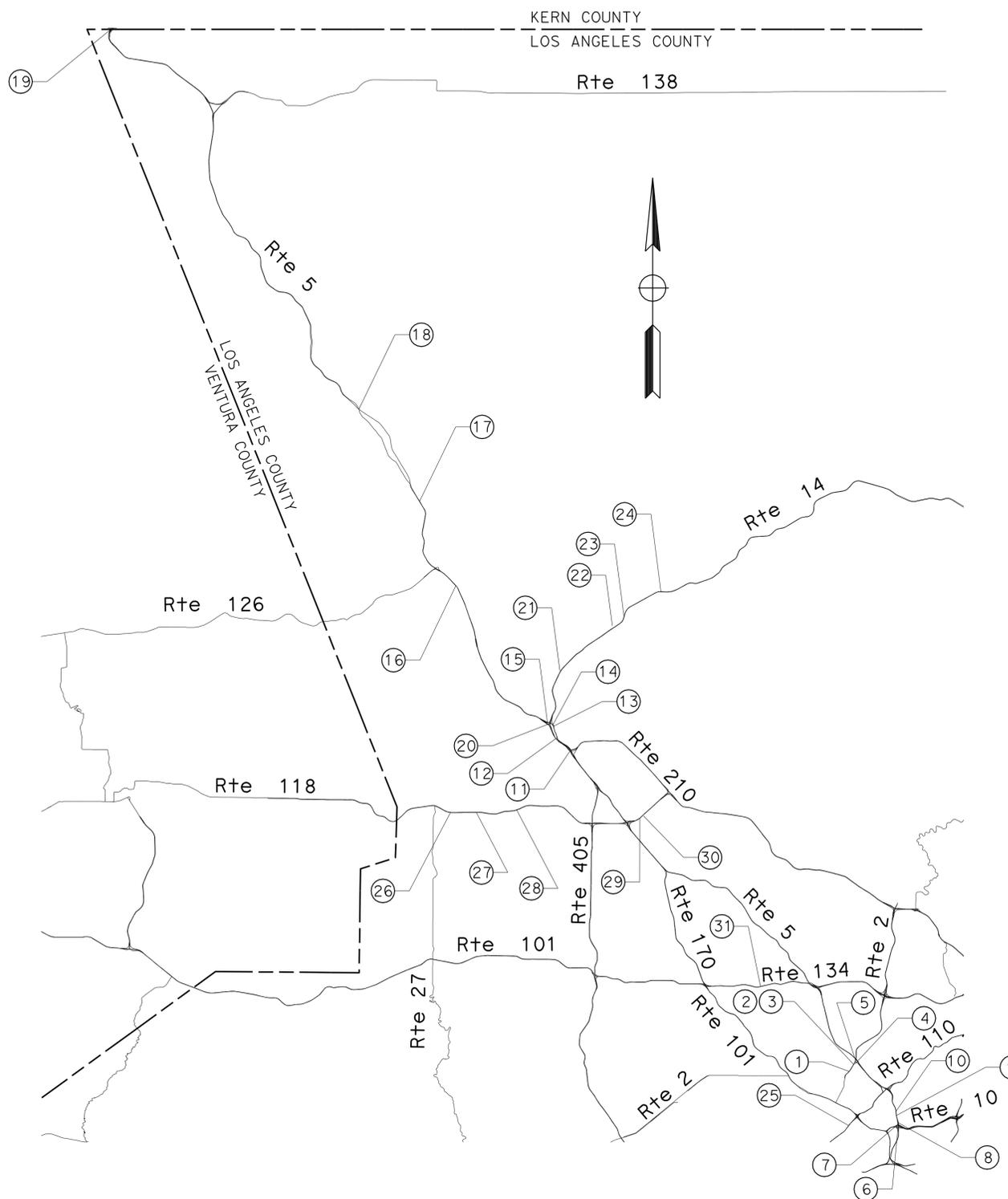
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN LOS ANGELES COUNTY
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110,118,134	Var	1	47

Caltrans

LOCATIONS OF CONSTRUCTION				
Loc	ROUTE	PM	BRIDGE NAME	BRIDGE No.
①	2	14.46	OAK GLEN PLACE OC	53-1414
②	2	14.84	ROSEBUD AVENUE UC	53-1475L
③	2	14.84	ROSEBUD AVENUE UC	53-1475G
④	2	14.95	RIVERSIDE DRIVE UC	53-0570G
⑤	2	14.98	ROUTE 2/5 SEPARATION	53-0527L
⑥	5	18.52	ECHANDIA OH	53-1333
⑦	5	18.53	S5-E10 CONNECTOR OH	53-1332F
⑧	5	18.62	S5-E10 CONNECTOR OC	53-1317F
⑨	5	18.96	ALHAMBRA AVENUE OH	53-0368
⑩	5	19.20	MAIN STREET UC	53-1360
⑪	5	R44.01	S5-E210 CONNECTOR SEPARATION	53-1985F
⑫	5	R44.87	WEST SYLMAR OH	53-1984R
⑬	5	C45.49	SIERRA HIGHWAY SEPARATION	53-0848
⑭	5	C45.63	N5 TRK-N14 CONNECTOR	53-1961G
⑮	5	C45.75	WELDON CANYON OH	53-0849
⑯	5	R54.17	RYE CANYON ROAD UC	53-1688
⑰	5	R59.01	PARKER ROAD OC	53-1909
⑱	5	R64.49	ROUTE 5/5 SEPARATION NORTH	53-1903R
⑲	5	R88.56	FRAZIER MOUNTAIN UC	53-1776L
⑳	14	R24.81	S14 TRUCK-S5 TRUCK CONNECTOR	53-1962F
㉑	14	27.3	LOS ANGELES AQUEDUCT	53-0363L
㉒	14	R30.81	SIERRA HIGHWAY OFF-RAMP OC	53-2200S
㉓	14	R31.62	HUMPHREYS OH	53-2029
㉔	14	R33.94	OAK SPRINGS ROAD UC	53-1539
㉕	110	23.12	3RD STREET OC	53-0684
㉖	118	R2.55	BROWNS CANYON WASH	53-2182
㉗	118	R3.86	PORTER RANCH DRIVE	53-2500
㉘	118	R5.81	RESEDA Blvd OC	53-2510
㉙	118	R12.13	TELFAIR AVENUE UC	53-2337
㉚	118	R12.33	PAXTON STREET UC	53-2364S
㉛	134	2.67	BOB HOPE DRIVE UC	53-1282



PROJECT MANAGER
CHRISTIAN SAM

DESIGN ENGINEER
DEBORAH WONG

12-15-11
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

January 23, 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.

CONTRACT No.	07-4Y8404
PROJECT ID	0700020041

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	2	47

12-15-11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE

DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 CIVIL

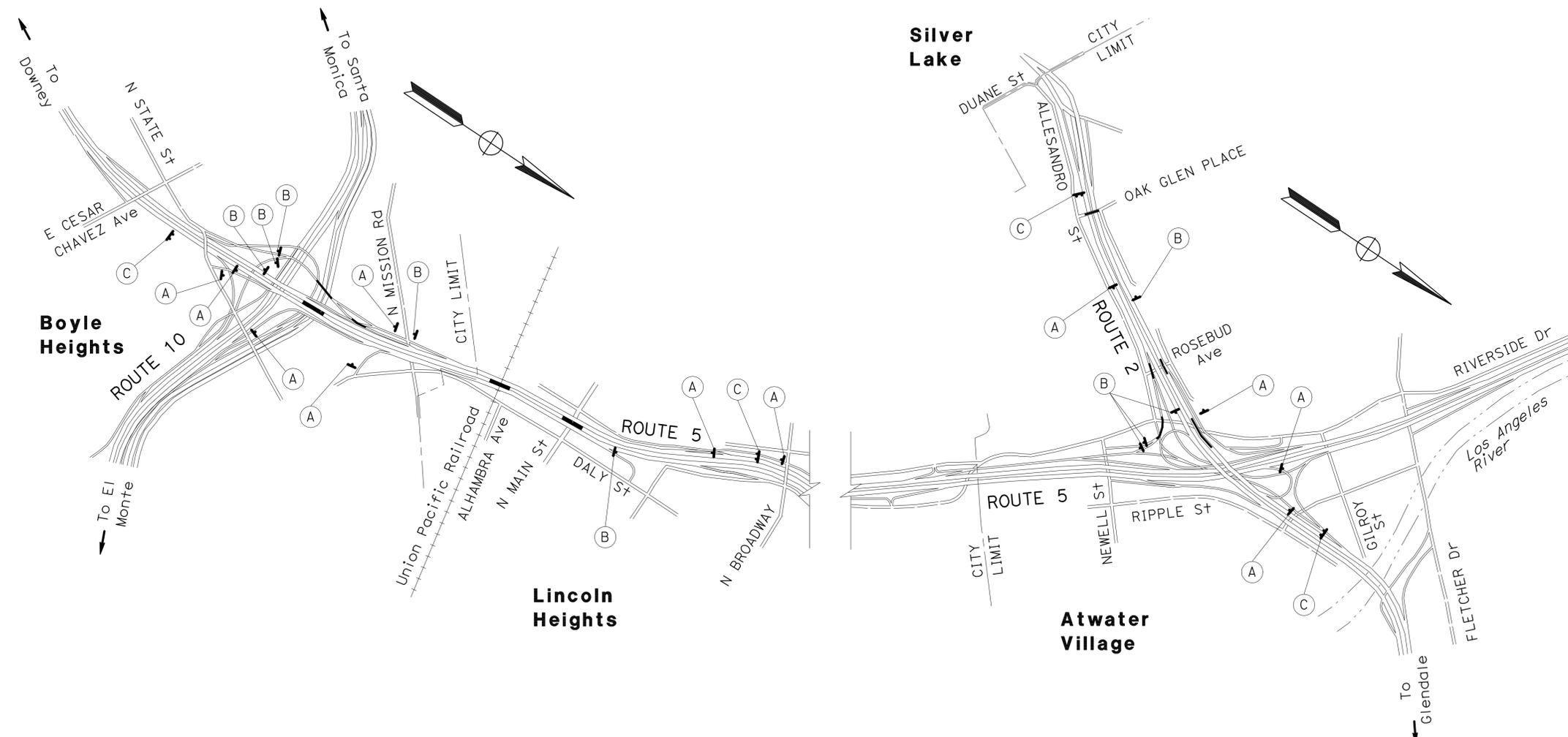
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE	SIGN MESSAGE	PANEL SIZE (INCH)	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
A	W20-1	ROAD WORK AHEAD	48 x 48	1-6"x6"	29
B	G20-2	END ROAD WORK	48 x 24	1-4"x6"	27
C	C40 (CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	144 x 60	2-6"x8"	12



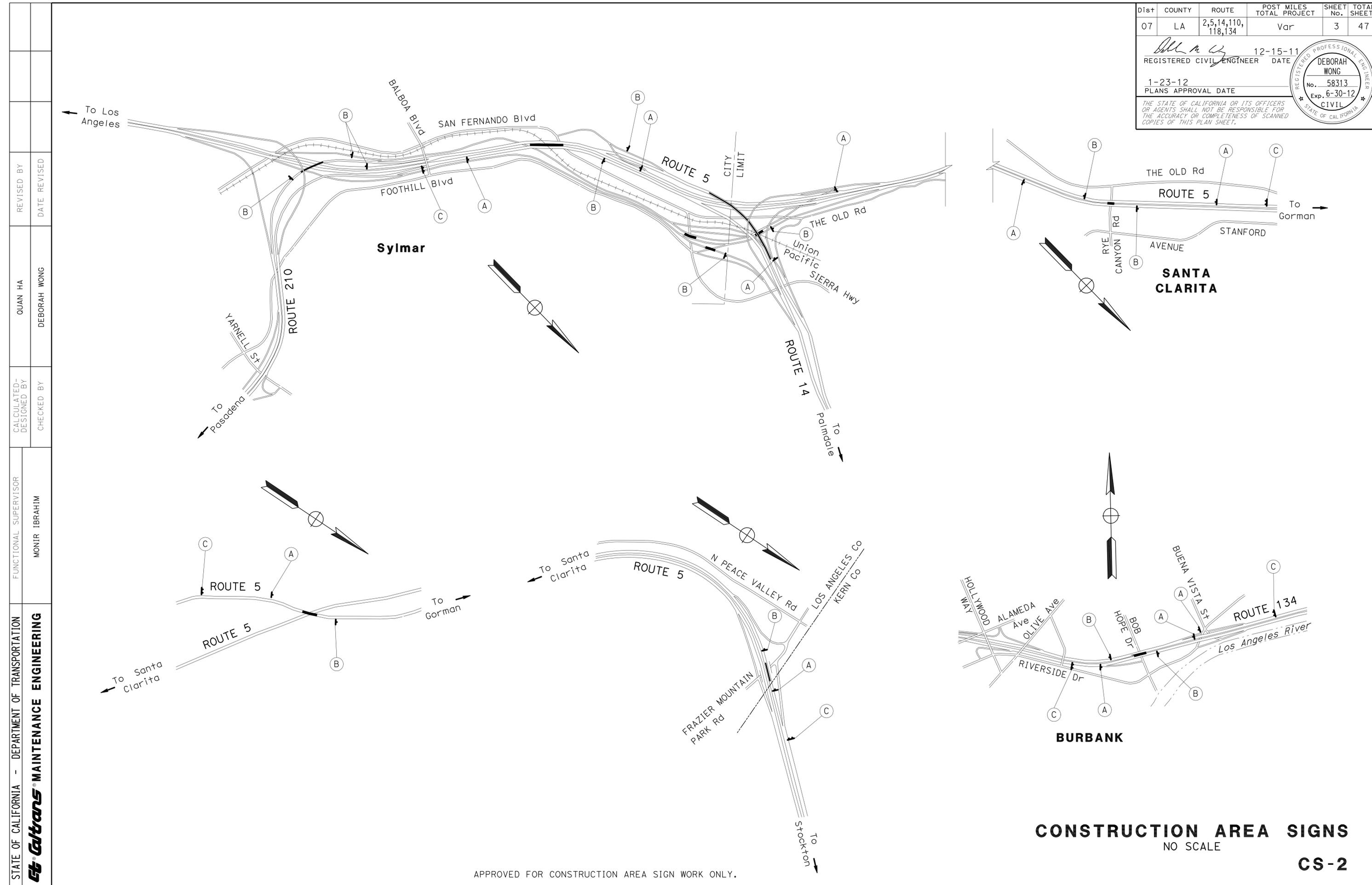
REVISIONS:
 QUAN HA
 DEBORAH WONG
 MONIR IBRAHIM
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

CONSTRUCTION AREA SIGNS
NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	3	47
			12-15-11	DATE	
REGISTERED CIVIL ENGINEER					
1-23-12			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	REVISOR	DATE
Caltrans MAINTENANCE ENGINEERING	MONIR IBRAHIM	QUAN HA	DEBORAH WONG
		CALCULATED/DESIGNED BY	CHECKED BY
		REVISOR	DATE

CONSTRUCTION AREA SIGNS
NO SCALE
CS-2

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY.

LAST REVISION | DATE PLOTTED => 20-JAN-2012
00-00-00 | TIME PLOTTED => 08:44

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

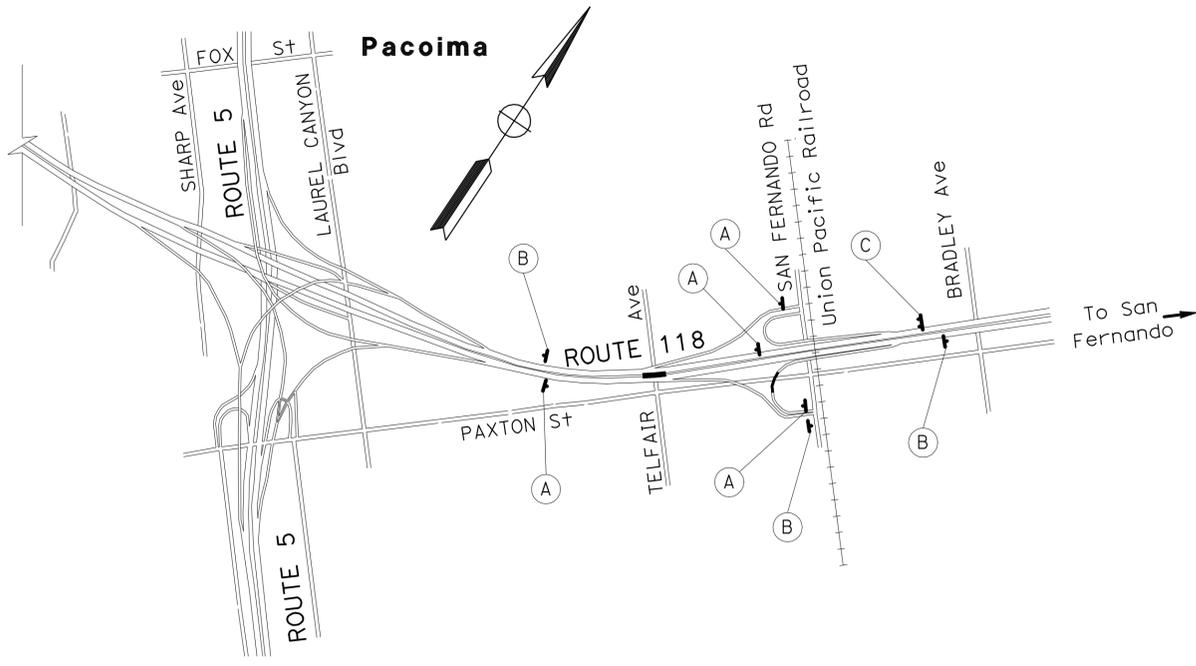
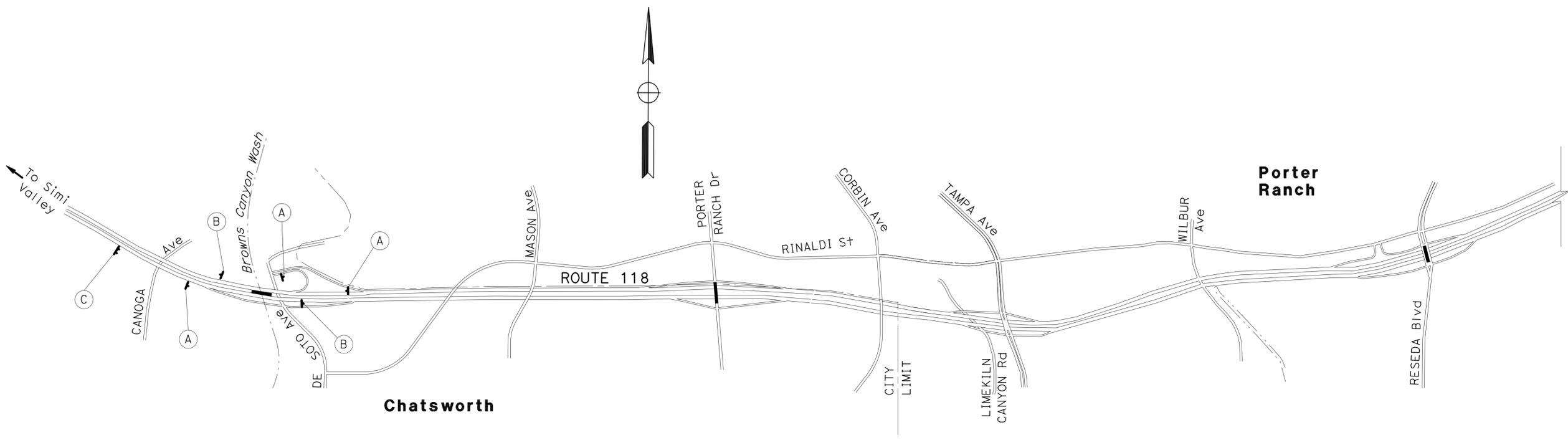
FUNCTIONAL SUPERVISOR	QUAN HA	REVISOR	REVISOR
MONIR IBRAHIM	DEBORAH WONG	DATE	DATE
CALCULATED-DESIGNED BY	CHECKED BY		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	4	47

12-15-11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE

DEBORAH WONG
 No. 58313
 Exp. 6-30-12
 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.



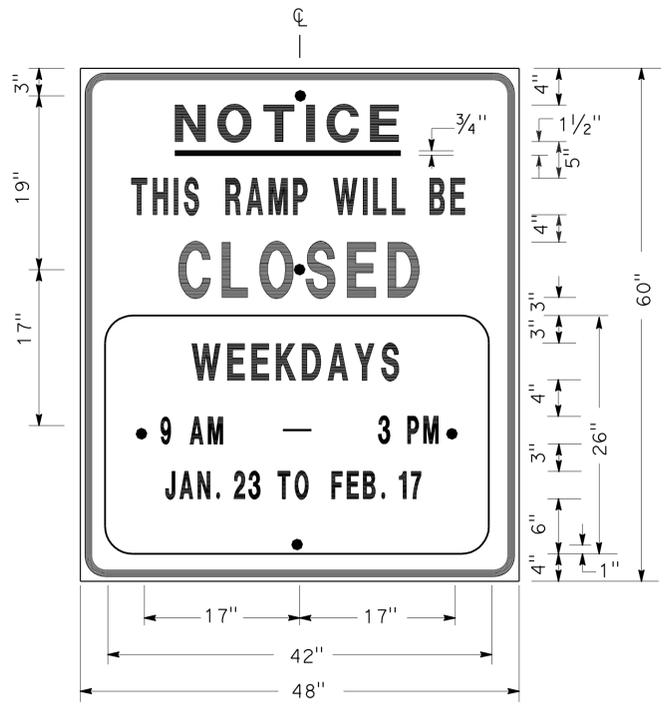
CONSTRUCTION AREA SIGNS
 NO SCALE
CS-3

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY.

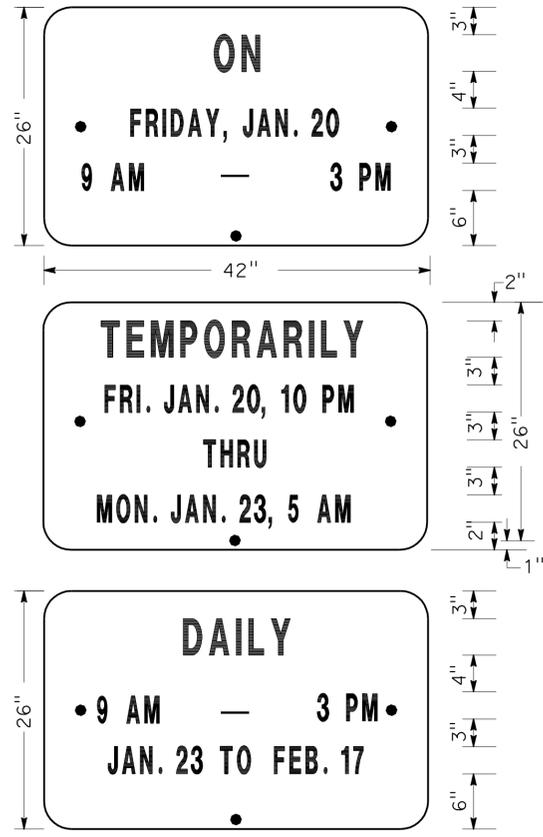
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	5	47

REGISTERED CIVIL ENGINEER: *Daisy Vergara* 5-20-11
 DATE: 1-23-12
 PLANS APPROVAL DATE: 6-30-12
 No. 62656
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER

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SIGN SP-1



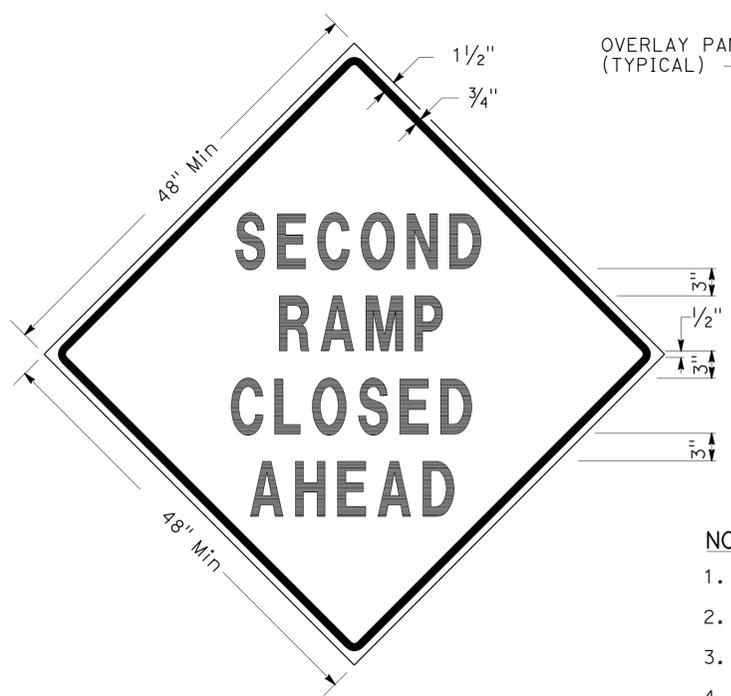
ALTERNATE OVERLAY PANELS (TYPICAL)

- NOTES: (SIGN SP-1)
- SIGNS SHALL HAVE ORANGE RETROREFLECTORIZED BACKGROUND WITH BLACK BORDER AND LETTERS.
 - BOLT HOLES SHALL BE 3/8" DIAMETER.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND.

SIZE	BORDER	MARGIN	LETTER SIZE					CORNER RADIUS
	WIDTH	WIDTH	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 BORDERS - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' ABOVE GROUND.

SPECIAL SIGN FOR EXIT RAMP CLOSURES



SIGN SP-4

- NOTES: (SIGN SP-4)
- LETTERS - 6" SERIES C.
 - LETTERS AND BORDERS - BLACK ON RETROREFLECTORIZED WHITE BACKGROUND.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGNS SHALL BE PLACED AT RAMP ENTRANCES IN ADDITION TO SIGNS POSTED IN ACCORDANCE WITH STANDARD PLAN T14.

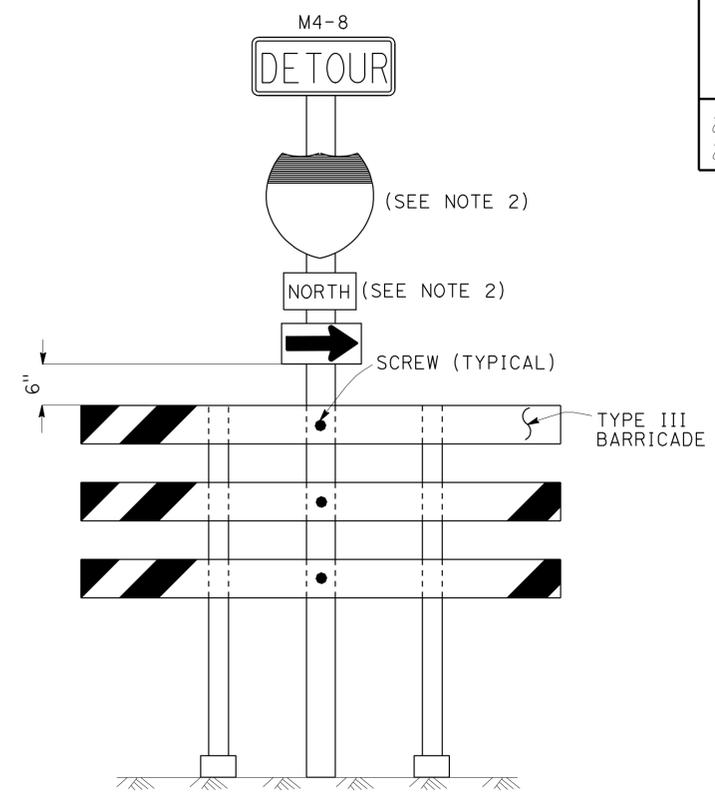
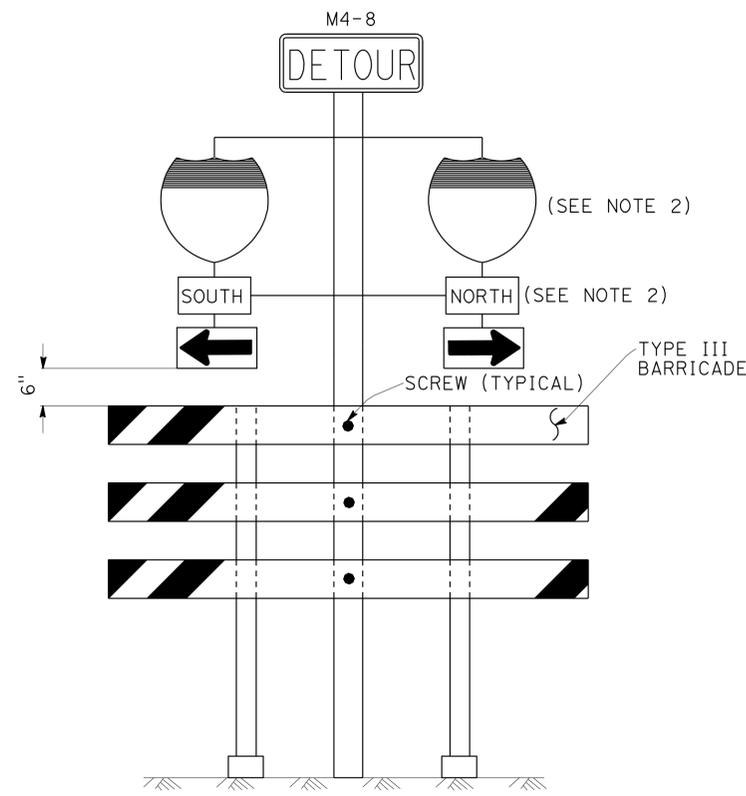
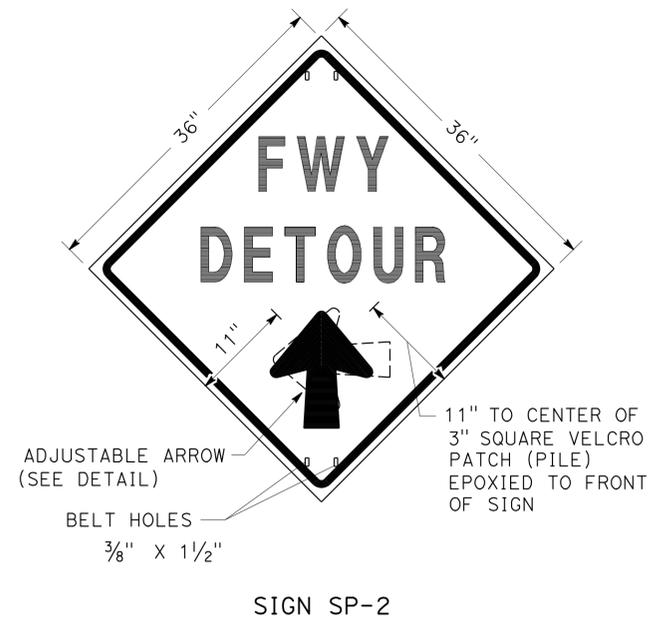
SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

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

SHEET 1 OF 2

NO SCALE

THD-1

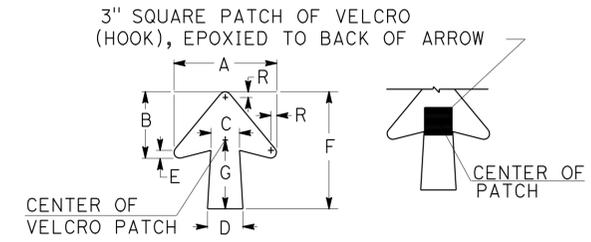


- NOTES:** (SIGN SP-2)
- LETTERS -6" SERIES E.
 - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL FOR SIGNS AND ARROWS SHALL BE ALUMINUM (MINIMUM 0.06").
 - BELTS (LUGGAGE STRAPS) SHALL BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
 - SIGNS SHALL BE MOUNTED WITH BOTTOMS OF SIGNS A MINIMUM OF 6' 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 SHIELD [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



DIMENSIONS							
A	B	C	D	E	F	G	R
11 1/4"	7 1/4"	3 3/8"	4"	7/8"	13"	7 1/2"	5/8"

SPECIAL PORTABLE FREEWAY DETOUR SIGN

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

THD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: JC 7/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	8	47

<i>Daisy Vergara</i>		5-20-11
REGISTERED CIVIL ENGINEER	DATE	
1-23-12		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER	
DAISY VERGARA	
No. 62656	Exp. 6-30-12
CIVIL	

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NOTES:

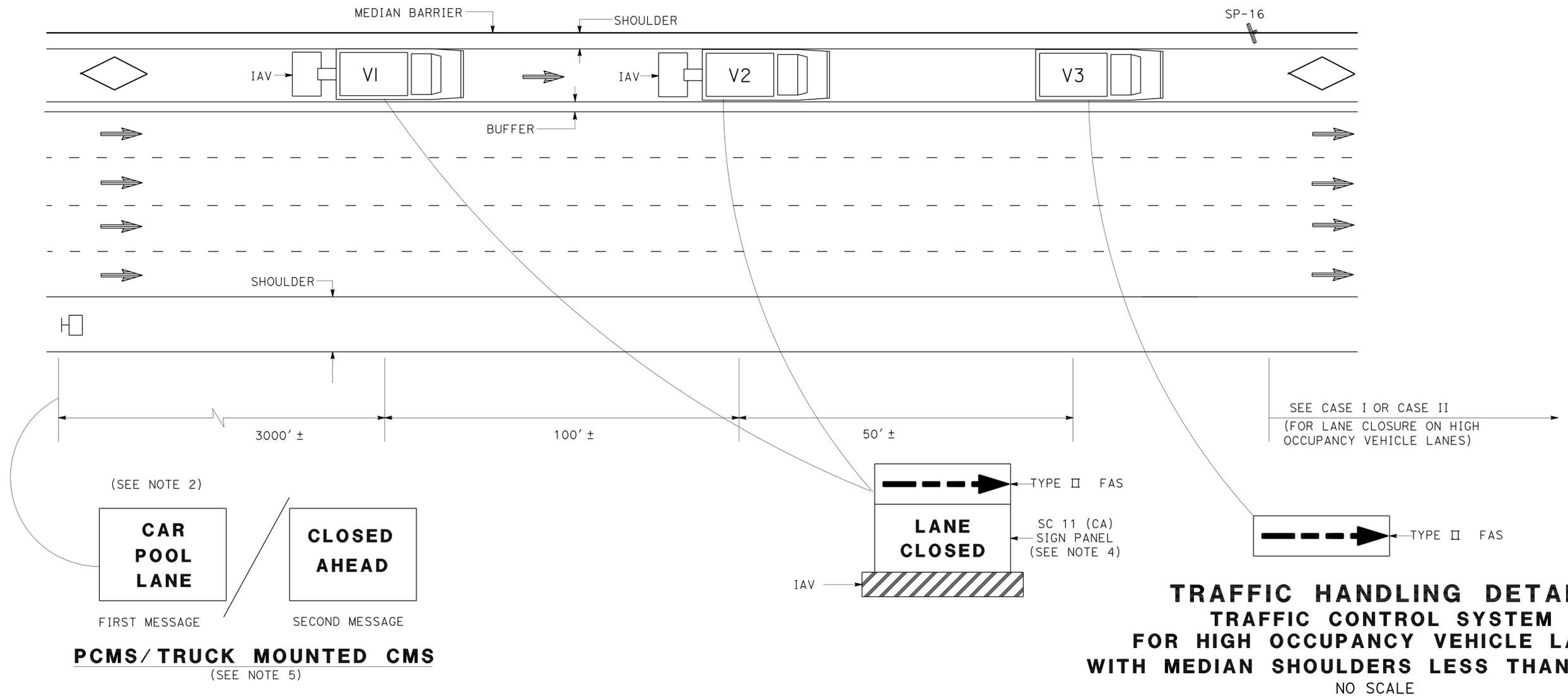
- LANE CLOSURES SHALL NOT BE PLACED ON CREST VERTICAL CURVES OR ON HORIZONTAL CURVES.
- PCMS SHALL BE ACTIVATED PRIOR TO TRAFFIC CONTROL ACTIVITIES ON THE HOV LANE.
- A MINIMUM SIGHT DISTANCE OF 1500' SHALL BE PROVIDED IN ADVANCE OF PCMS.
- VEHICLE-MOUNTED SIGN PANELS SHALL BE TYPE III OR IV RETROREFLECTORIZED SHEETING, BLACK ON WHITE OR BLACK ON ORANGE WITH 8" MINIMUM SERIES D LETTERS PER CALTRANS SIGN SPECIFICATIONS.
- PLACE PCMS ON THE MEDIAN SHOULDER WHERE SUFFICIENT ROOM (SUCH AS CHP ENFORCEMENT AREAS) EXISTS.

LEGEND

- V1, V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
-  PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
-  DIRECTION OF TRAVEL
-  HOV LANE

ABBREVIATIONS

- FAS FLASHING ARROW SIGN
- IAV IMPACT ATTENUATOR VEHICLE
- CMS CHANGEABLE MESSAGE SIGN
- (CA) CALIFORNIA CODE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- HOV HIGH OCCUPANCY VEHICLE



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DTM

FUNCTIONAL SUPERVISOR: MARTIN OREGEL

DESIGNED BY: [Blank]

CHECKED BY: [Blank]

REVISOR: ALBERT K YU

DATE REVISOR: JOCELYN C CHIANG

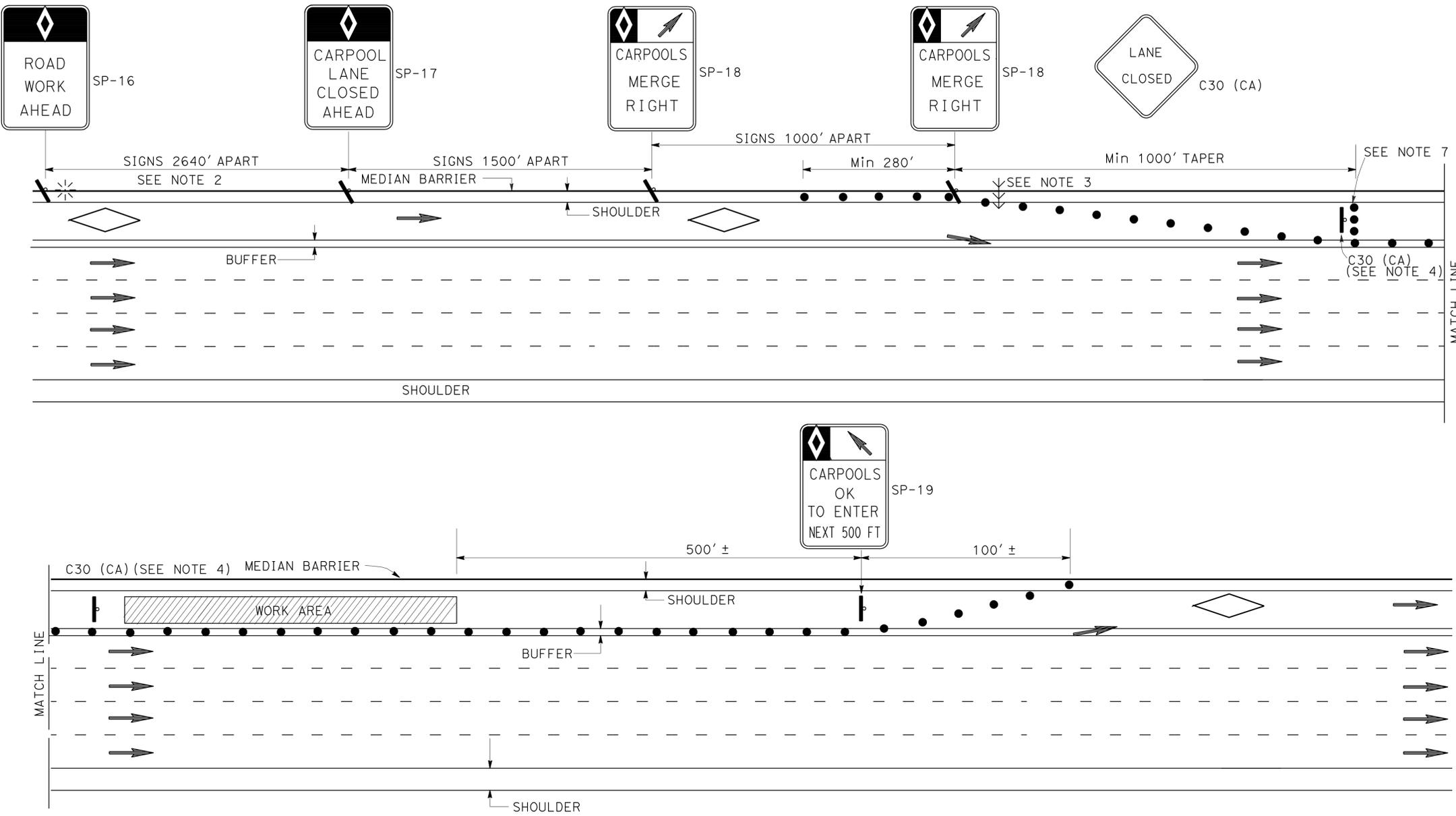
DATE REVISOR: 7/10

DATE REVISOR: JC

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	9	47

REGISTERED CIVIL ENGINEER *Daisy Vergara* DATE 5-20-11
 PLANS APPROVAL DATE 1-23-12
 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
DAISY VERGARA
 No. 62656
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA



ABBREVIATIONS

(CA) CALIFORNIA CODE
 HOV HIGH OCCUPANCY VEHICLE

NOTES: FOR CASE I AND CASE II

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

LEGEND

- CONE
- ⚡ FLASHING BEACON
- ◇ HOV LANE
- ←←← FLASHING ARROW SIGN
- ▬ PORTABLE SIGN
- DIRECTION OF TRAVEL

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"

**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR HIGH OCCUPANCY VEHICLE LANES
 AT NON-INGRESS/EGRESS AREAS**

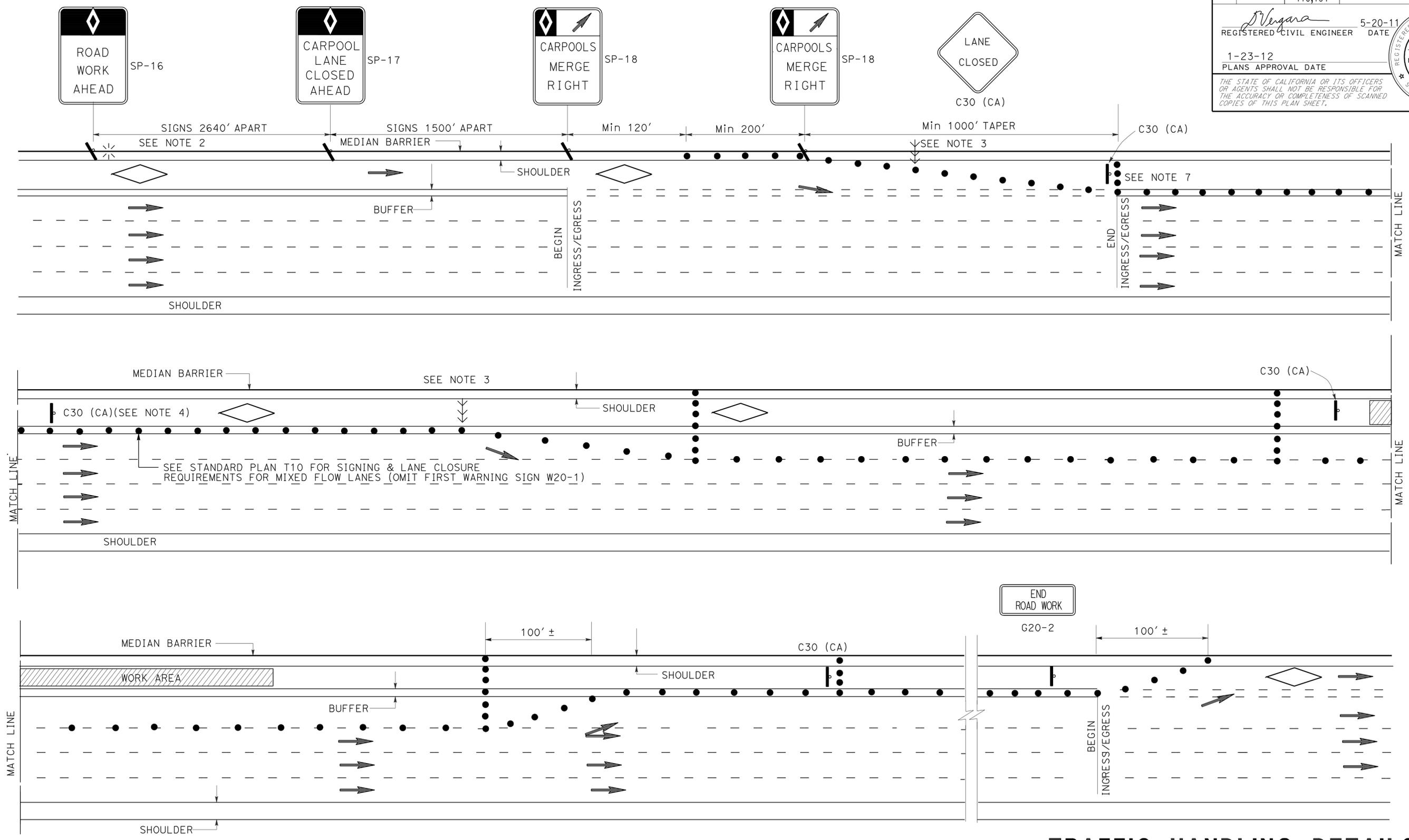
**CASE I
 NO SCALE**

THD-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR MARTIN OREGEL
 CHECKED BY JOCELYN C CHIANG
 DESIGNED BY ALBERT K YU
 REVISIONS: 7/10
 DATE REVISIONS: 7/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	10	47
REGISTERED CIVIL ENGINEER			DATE	5-20-11	
1-23-12			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DT M
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 DESIGNED BY: ALBERT K YU
 REVISIONS: JC 7/10
 REVISIONS: DATE REVISED



- NOTES:**
- SEE CASE I FOR NOTES, LEGENDS AND ABBREVIATIONS FOR THIS SHEET.
 - CLOSURES OF ONE MIXED FLOW TRAFFIC LANE ADJACENT TO HOV LANE SHOWN. 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-6**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	11	47

REGISTERED CIVIL ENGINEER *Daisy Vergara* DATE 5-20-11
 1-23-12 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
DAISY VERGARA
 No. 62656 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA
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NOTES:

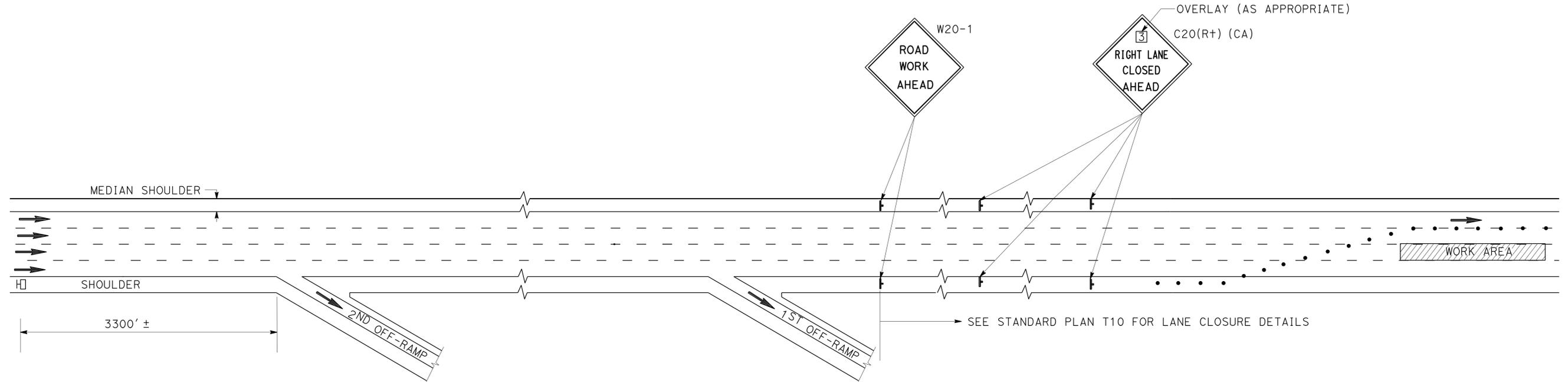
- WORDING DISPLAYED ON PCMS WILL BE APPROVED BY THE ENGINEER.
- EXACT LOCATIONS OF PCMS WILL BE DETERMINED BY THE ENGINEER.
- CHANGE PCMS MESSAGE AT THE BEGINNING OF CURE PERIOD TO REFLECT NUMBER OF CLOSED LANES.

ABBREVIATIONS

PCMS PORTABLE CHANGEABLE MESSAGE SIGN
 (CA) CALIFORNIA CODE

LEGEND

- CONE
- ⊥ PORTABLE SIGN
- ➔ DIRECTION OF TRAVEL
- ⊞ PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- (CA) CALIFORNIA CODE



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

WORDING FOR PORTABLE CHANGEABLE MESSAGE SIGN

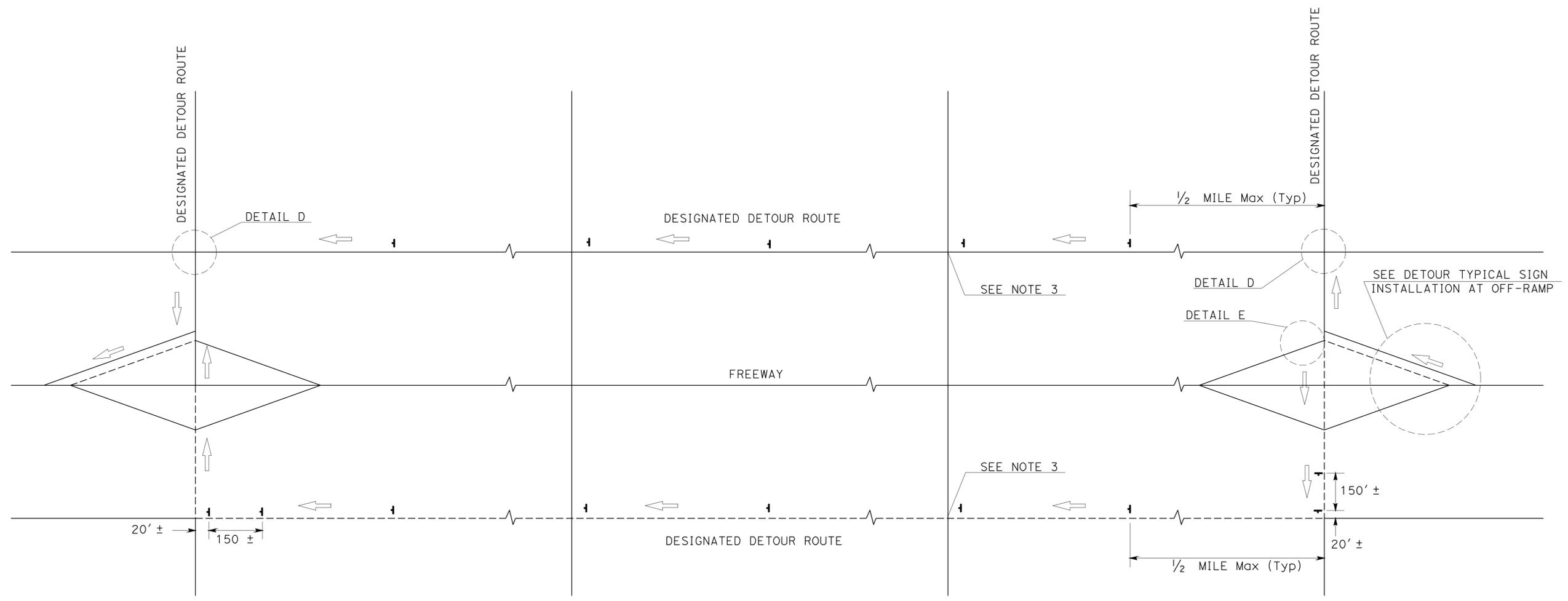
**TRAFFIC HANDLING DETAILS
 TRAFFIC CONTROL SYSTEM
 FOR CONCRETE PAVEMENT AND
 APPROACH SLAB REPLACEMENT
 NO SCALE**

THD-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: MARTIN OREGEL
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: JC 7/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	12	47
 REGISTERED CIVIL ENGINEER			5-20-11	DATE	
1-23-12 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
DTM	MARTIN OREGEL	ALBERT K YU JOCELYN C CHIANG	JC	7/10
Caltrans				



TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE

LEGEND

	TEMPORARY SIGN (SP-2)
	AND/OR DESIGNATED DETOUR ROUTE
	DIRECTION OF TRAVEL

- NOTES:**
1. SP-2 SIGNS SHALL NOT BE INSTALLED ON BARRICADES EXCEPT AS OTHERWISE SHOWN.
 2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
 3. SP-2 SIGNS SHALL BE POSTED AT SIGNALIZED INTERSECTIONS ALONG THE DESIGNATED DETOUR ROUTE OR 1/2 MILE MAXIMUM APART.

TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 1 OF 2
 NO SCALE

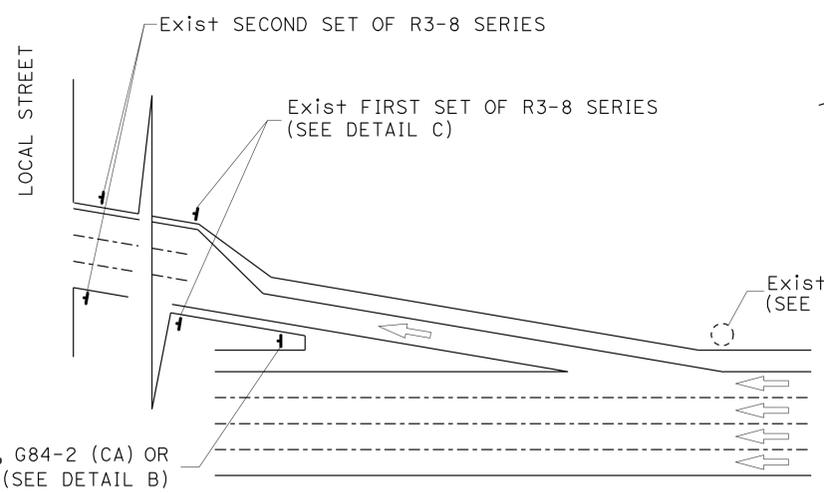
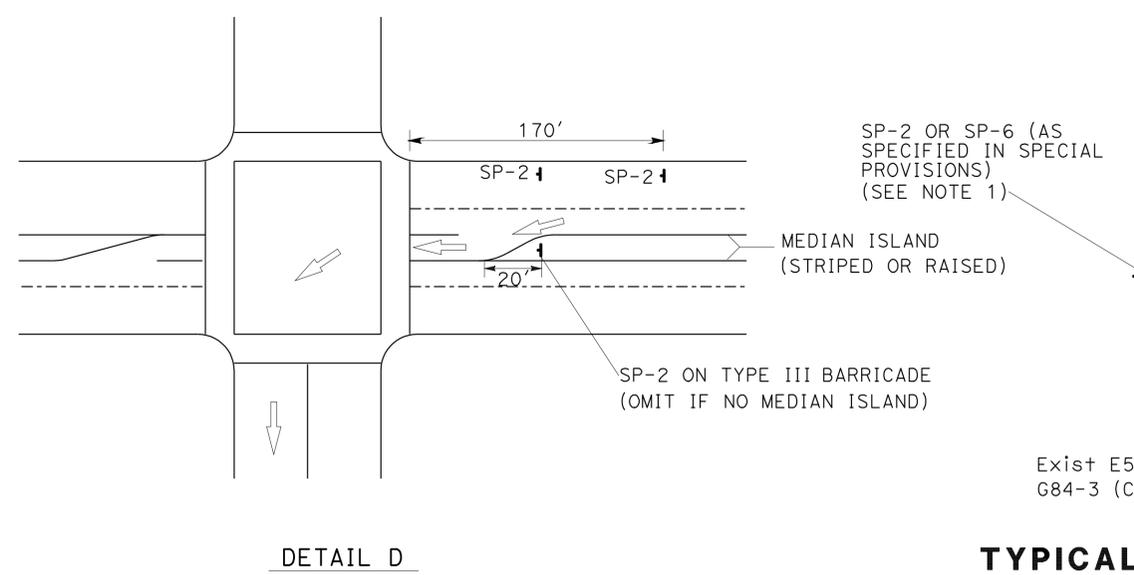
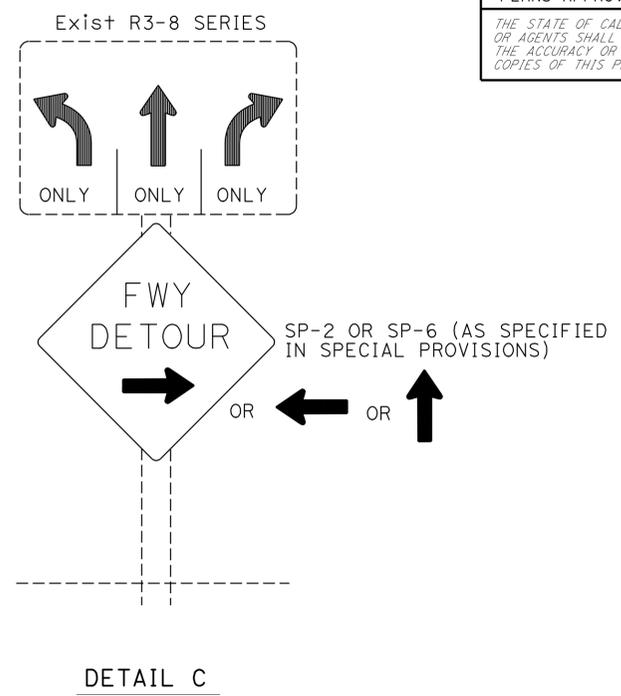
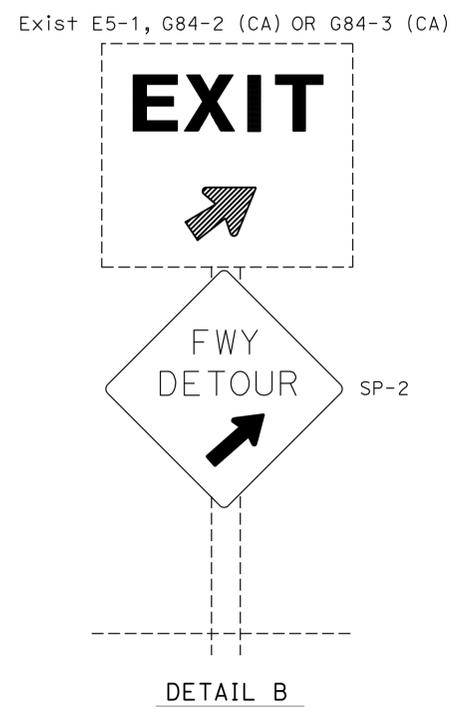
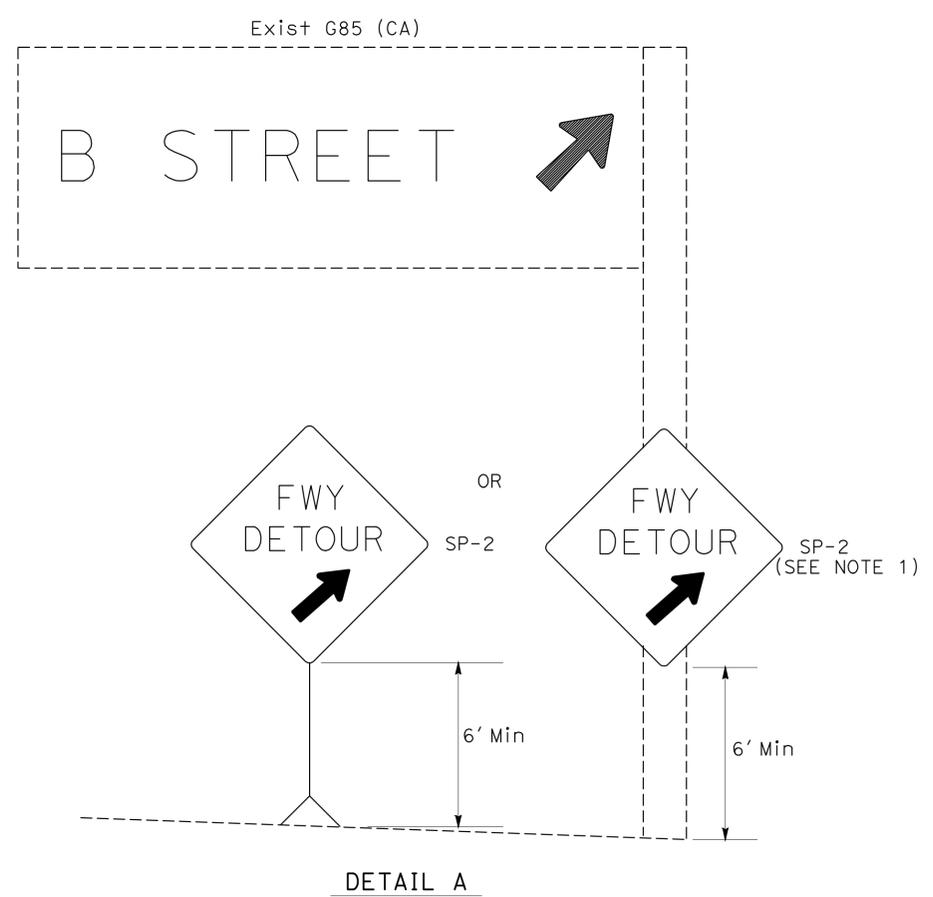
THD-8

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	13	47

<i>D. Vergara</i>	5-20-11
REGISTERED CIVIL ENGINEER	DATE
1-23-12	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
DAISY VERGARA
No. 62656
Exp. 6-30-12
CIVIL
STATE OF CALIFORNIA

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TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP

- NOTES:**
1. TEMPORARY SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POSTS, OR SIGN POSTS.
 2. OMIT DETAIL A AND DETAIL B FOR FULL FREEWAY CLOSURES.
 3. SEE TRAFFIC HANDLING DETAILS PLAN-TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES, DETOUR SIGNS AND MISCELLANEOUS DETAILS SHEET 2 OF 2 FOR SP-6.

ABBREVIATIONS
(CA) CALIFORNIA CODE

- LEGENDS**
- TRAFFIC CONE
 - ↑ TEMPORARY SIGN
 - DIRECTION OF TRAVEL
 - EXISTING OVERHEAD SIGN

**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 2 OF 2
NO SCALE**

THD-9

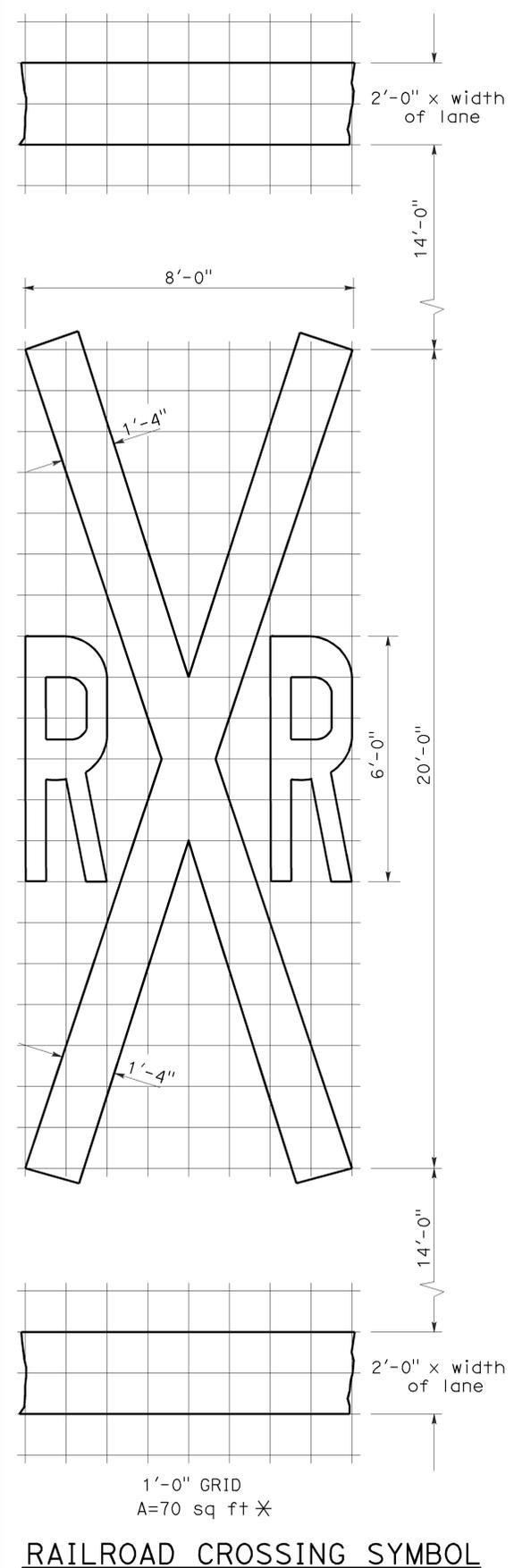
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DTM
FUNCTIONAL SUPERVISOR: MARTIN OREGEL
CALCULATED/DESIGNED BY: ALBERT K YU
CHECKED BY: JOCELYN C CHIANG
REVISOR: JC
DATE REVISED: 8/10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14, 110,118,134	Var	17	47

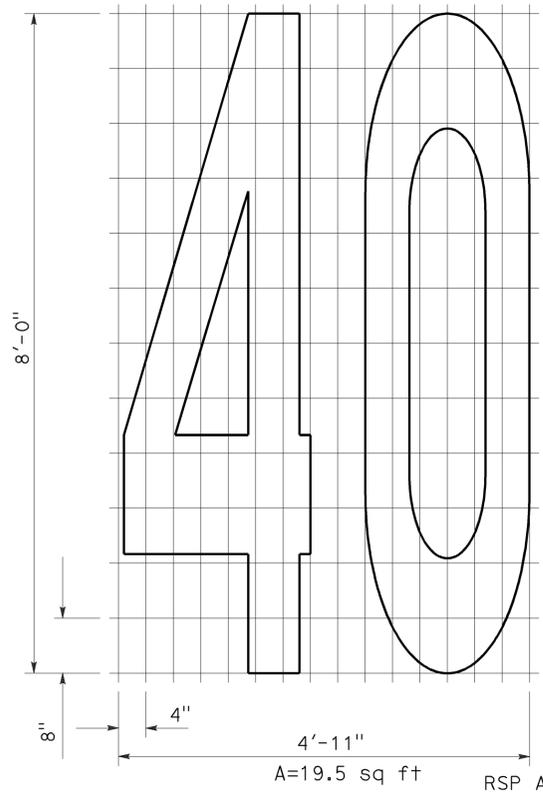
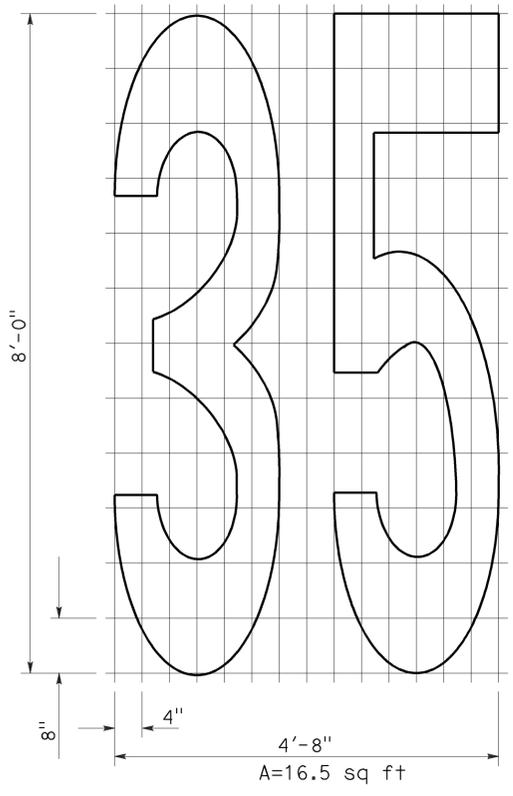
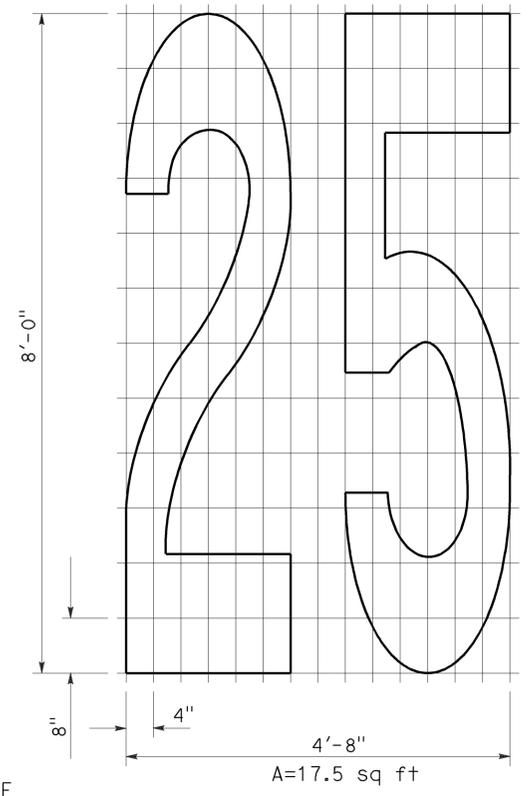
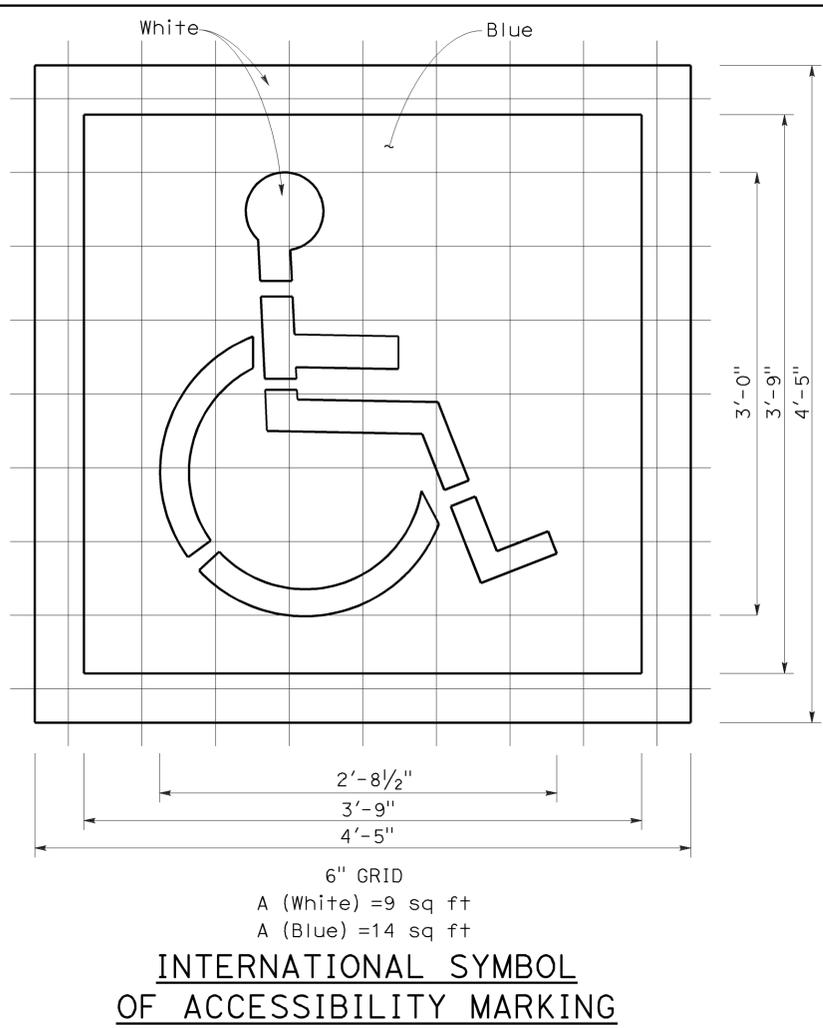
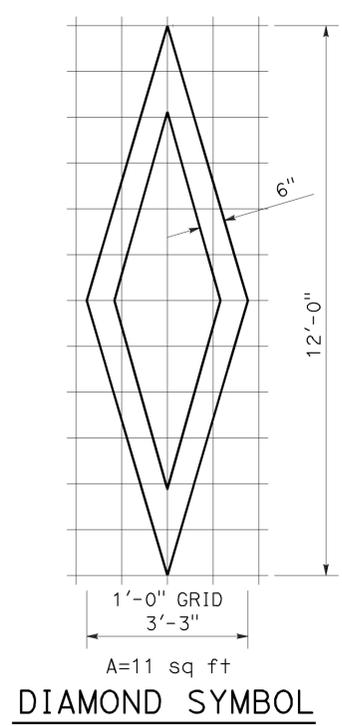
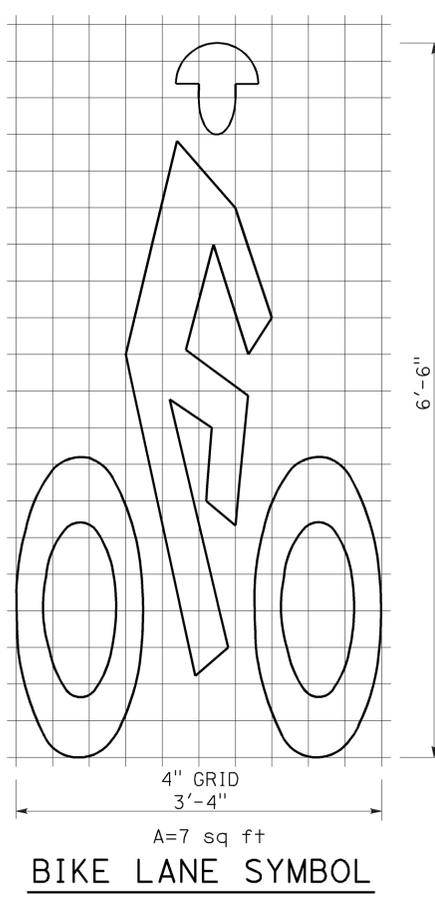
Donald E. Howe
 REGISTERED CIVIL ENGINEER
 No. C46402
 Exp. 3-31-09
 CIVIL
 STATE OF CALIFORNIA

June 6, 2008
 PLANS APPROVAL DATE
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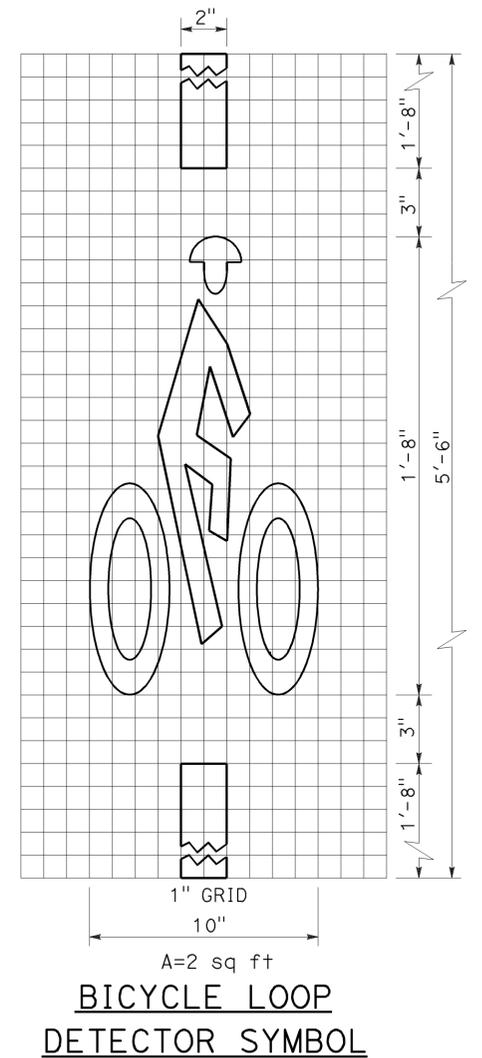
To accompany plans dated 1-23-12



*70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



NUMERALS



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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

2006 REVISED STANDARD PLAN RSP A24C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14, 110,118,134	Var	18	47

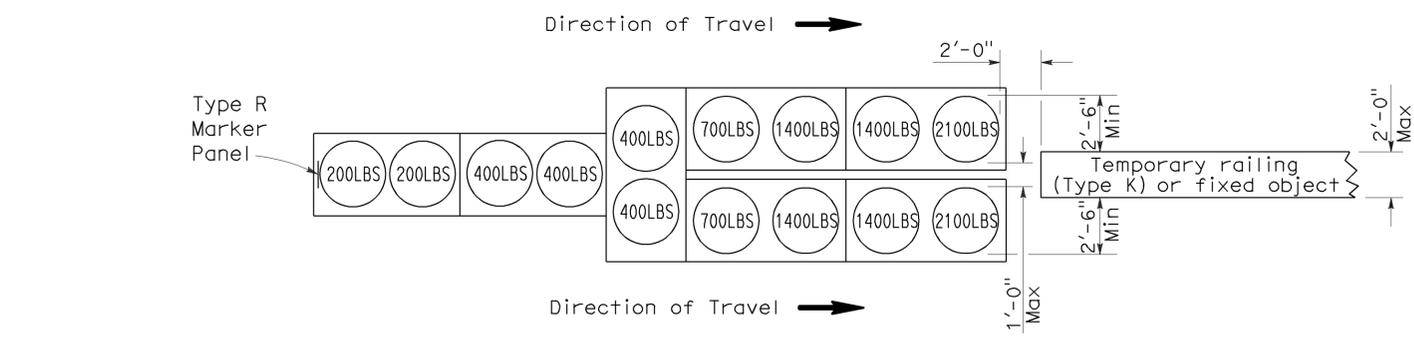
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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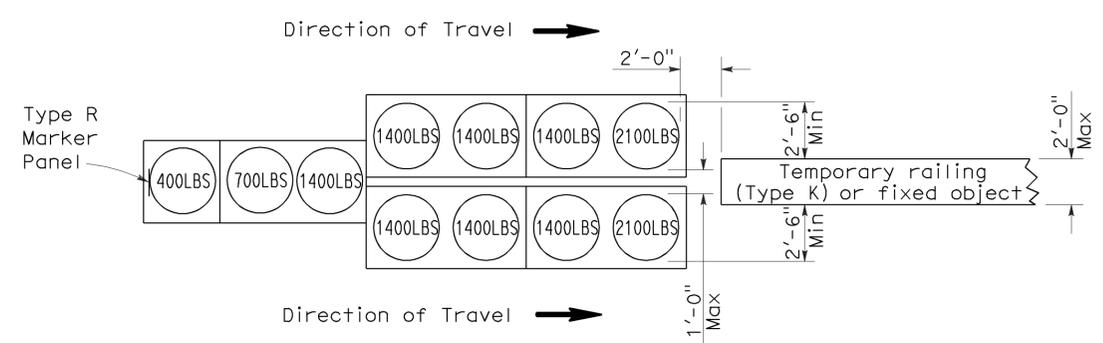
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 1-23-12



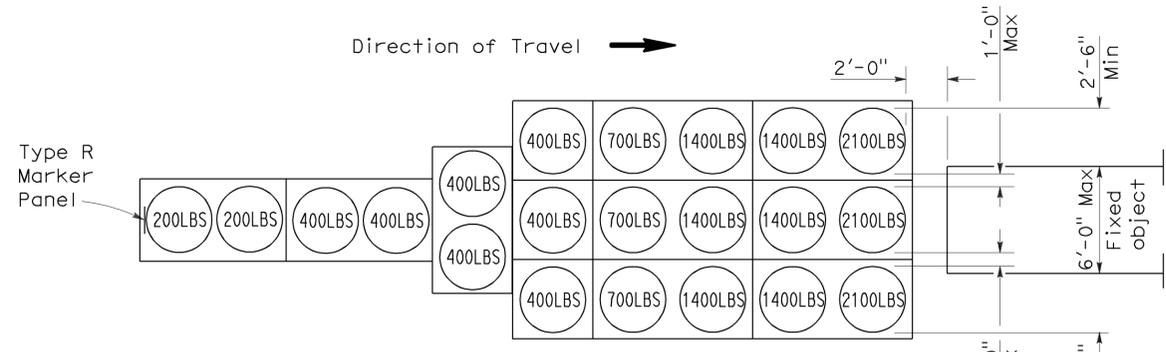
ARRAY 'TU14'

Approach speed 45 mph or more



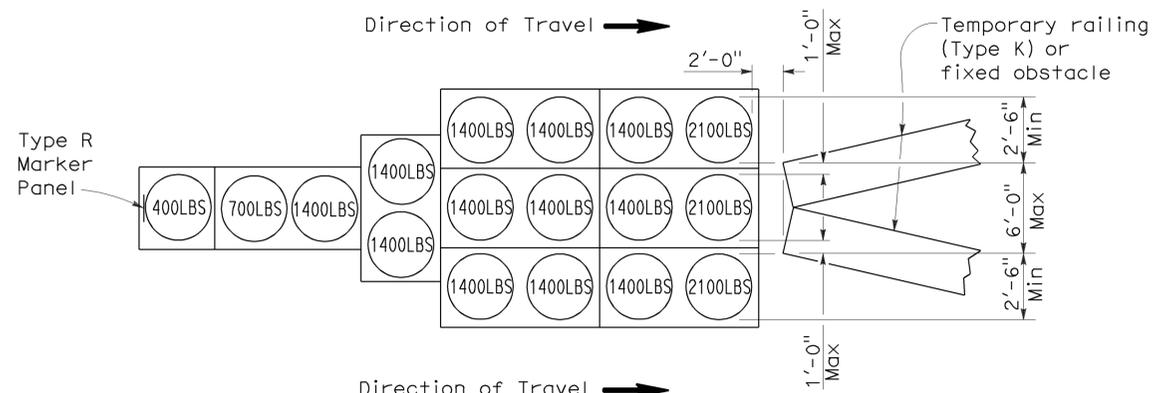
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more

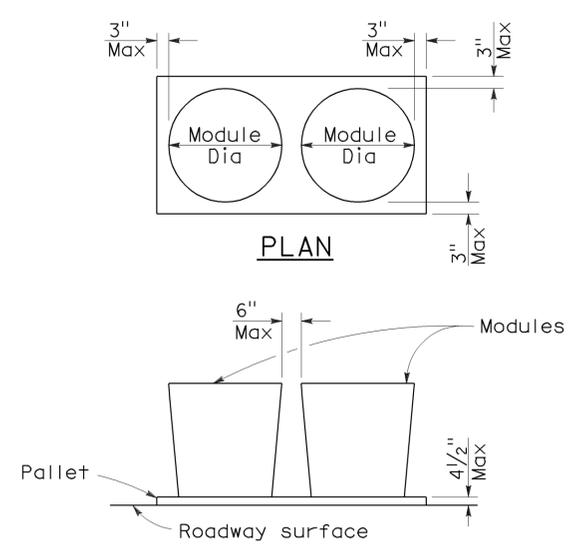


ARRAY 'TU17'

Approach speed less than 45 mph

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.



CRASH CUSHION PALLET DETAIL
See Note 7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

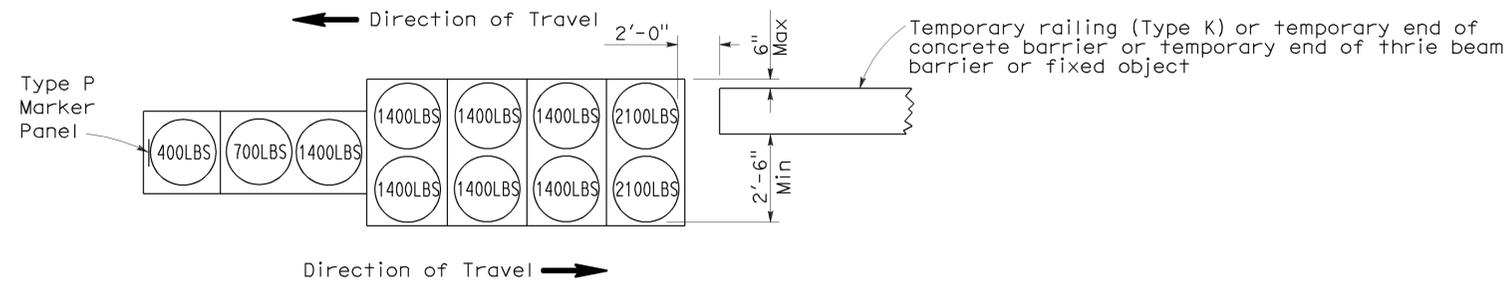
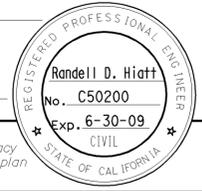
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14, 110,118,134	Var	19	47

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

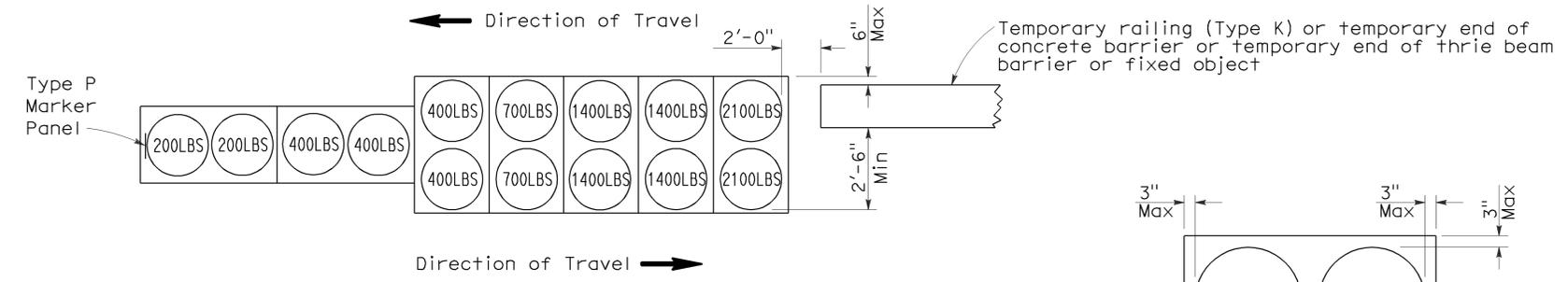
June 6, 2008
PLANS APPROVAL DATE

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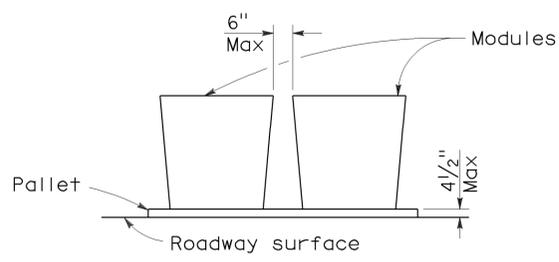
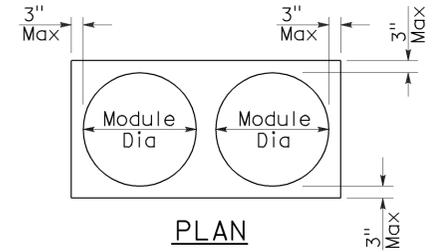
To accompany plans dated 1-23-12



ARRAY 'TB11'
Approach speed less than 45 mph



ARRAY 'TB14'
Approach speed 45 mph or more



CRASH CUSHION PALLET DETAIL
See Note 7

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

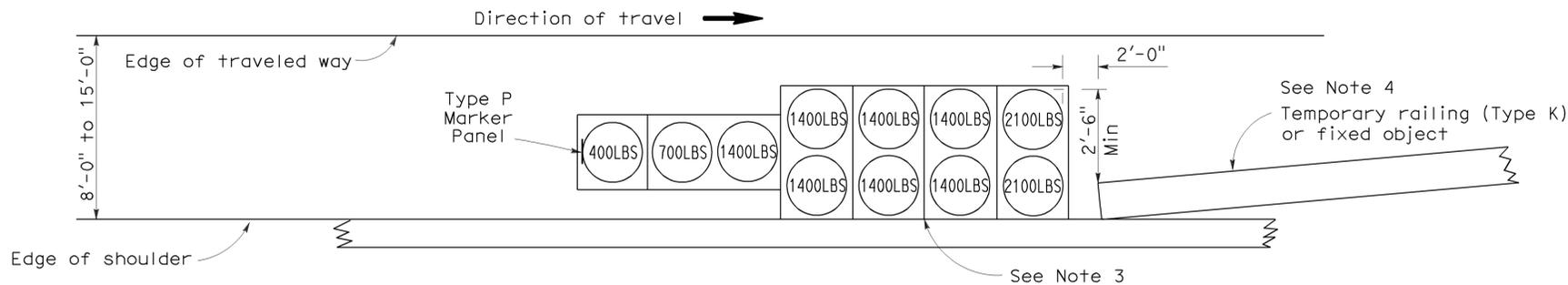
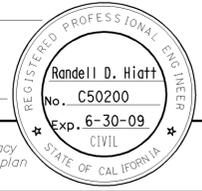
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14, 110,118,134	Var	20	47

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

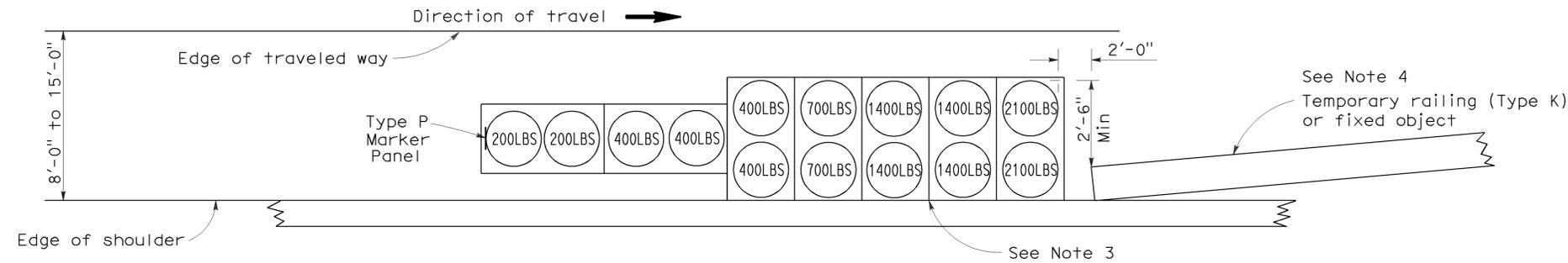
June 6, 2008
PLANS APPROVAL DATE

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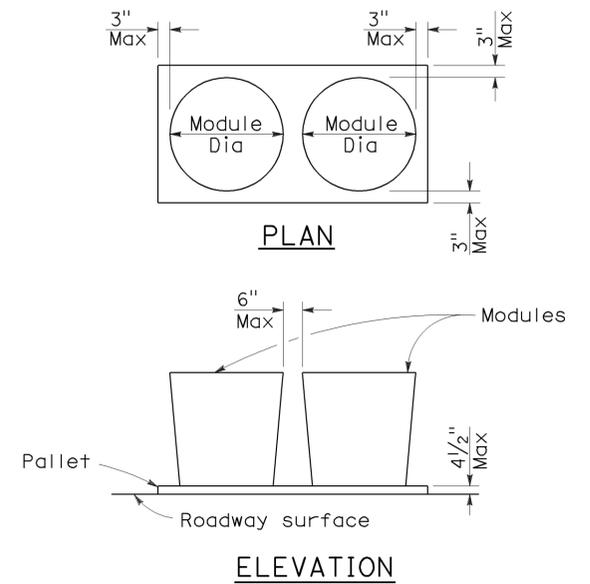
To accompany plans dated 1-23-12



ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



ARRAY 'TS14'
Approach speed 45 mph or more
See Note 9



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

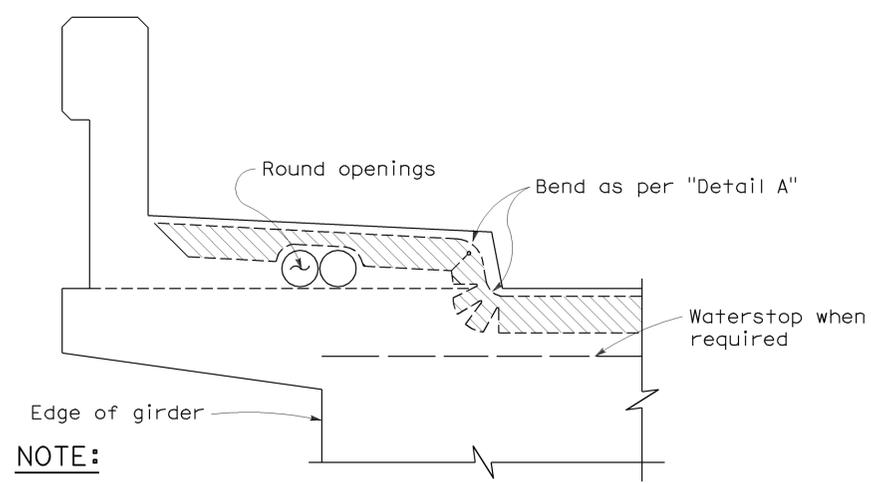
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE

RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

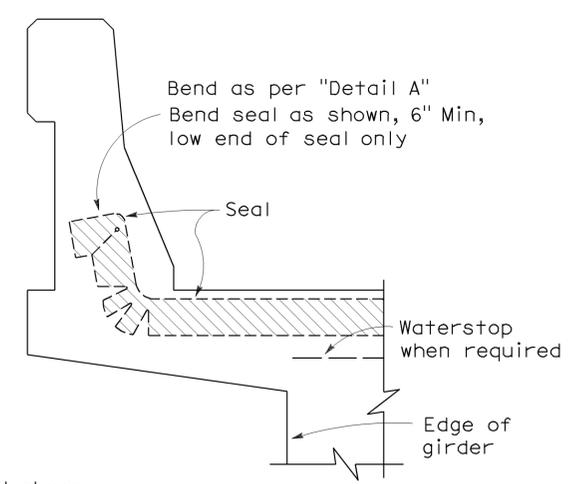
REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

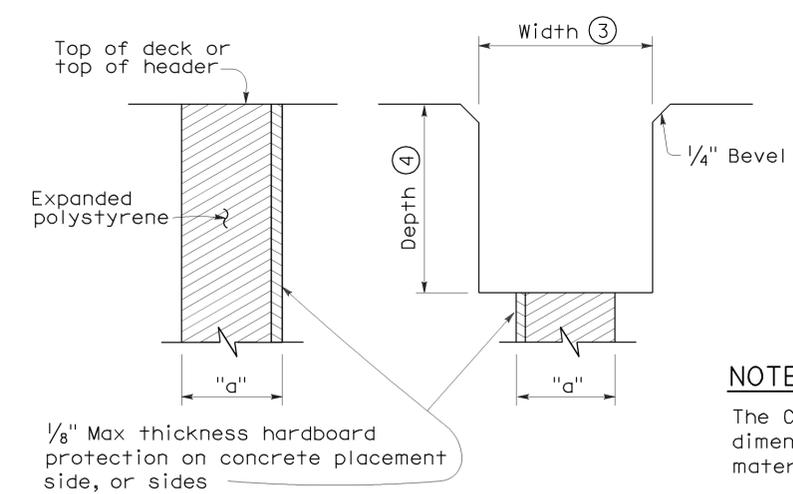


NOTE:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



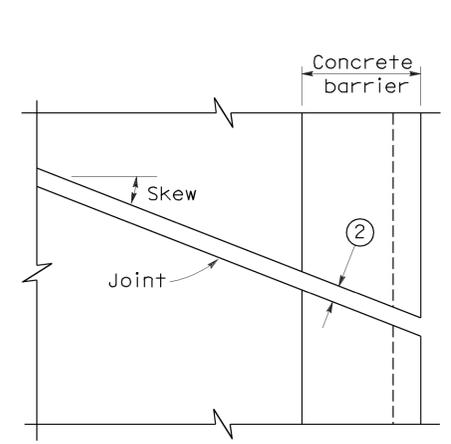
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

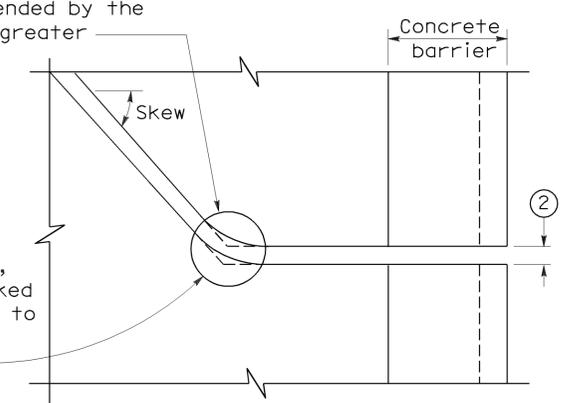
NOTE:
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

JOINT SEALS DETAILS



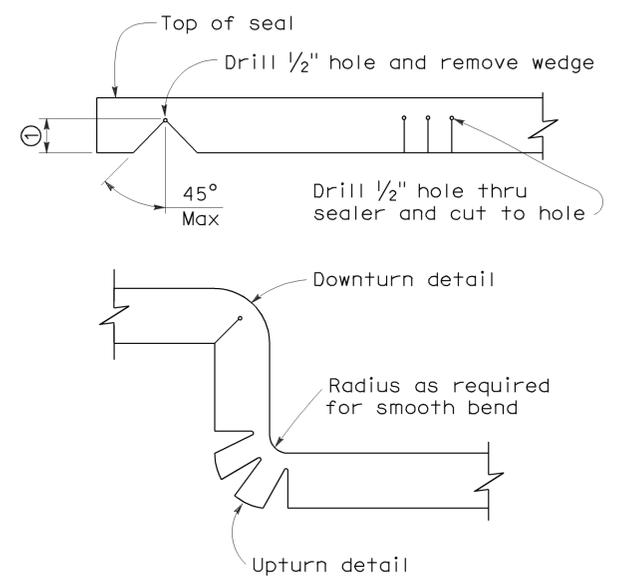
PLAN OF JOINT (SKEW ≤ 20°)

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.

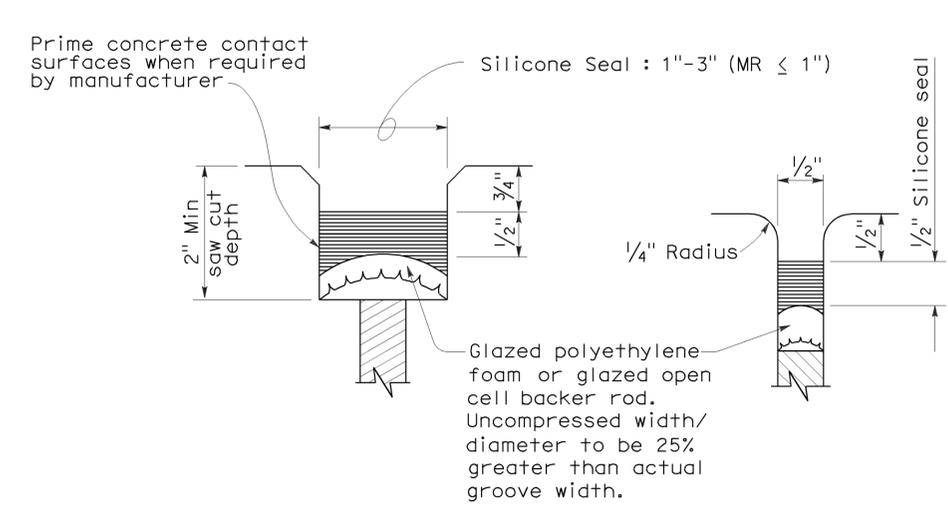


DETAIL A

- NOTES:**
- Make smooth cuts from the bottom of seal to 1 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.

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"

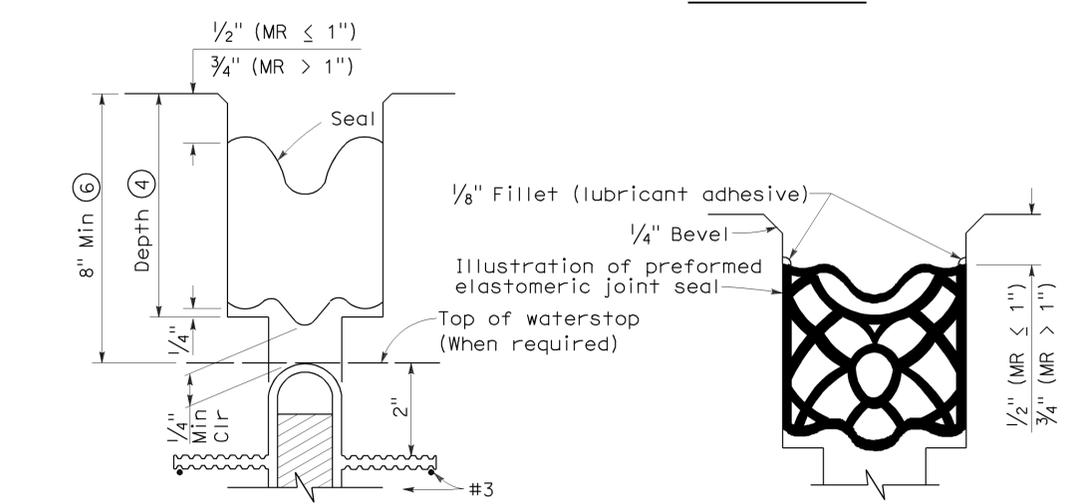


TYPE A SEAL

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"

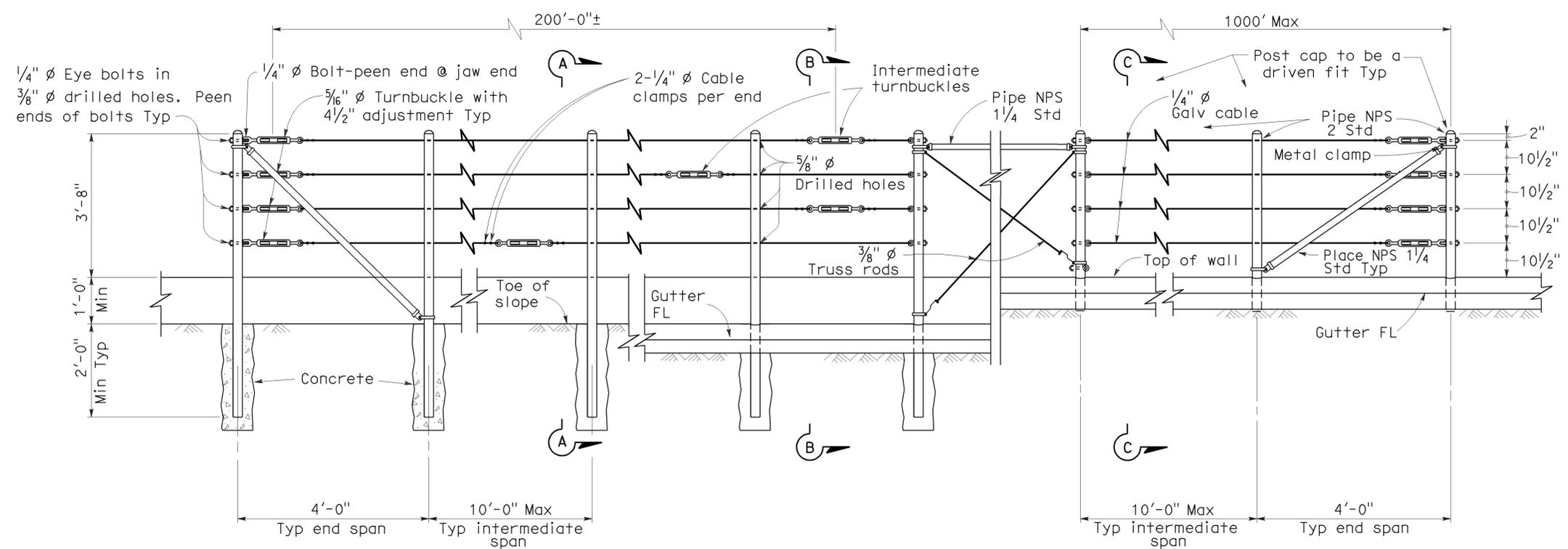
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
JOINT SEALS
(MAXIMUM MOVEMENT RATING = 2")
 NO SCALE

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14, 110,118,134	Var	22	47

REGISTERED CIVIL ENGINEER
 October 21, 2011
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Tillet Satter
 No. C42892
 Exp. 3-31-12
 CIVIL
 STATE OF CALIFORNIA

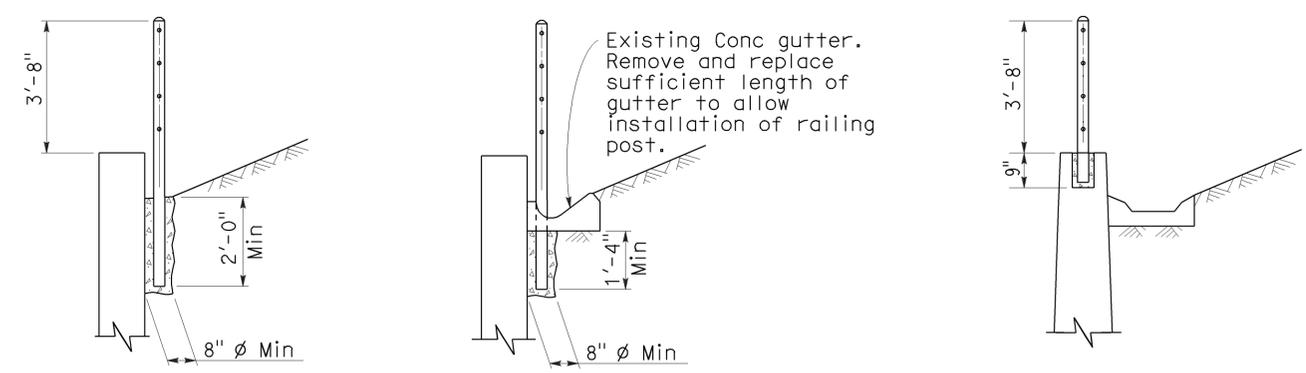


EXISTING WALL (WITHOUT GUTTER) Existing
RETAINING WALL (WITH GUTTER) Existing
RETAINING WALL (WITH GUTTER) New construction

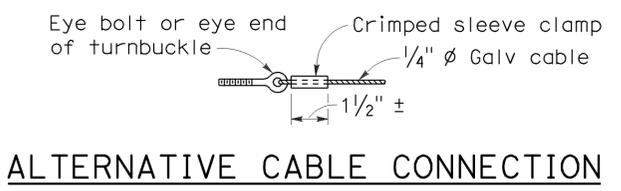
ELEVATION

NOTES:

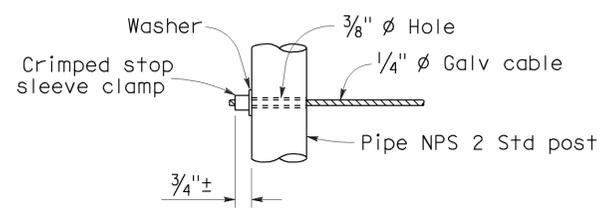
- Maximum distance between turnbuckles shall be 200'-0"±.
- Intermediate turnbuckles to be placed in adjacent spans.
- Cable shall not be spliced between intermediate turnbuckles and end posts.
- All posts, cable, and hardware to be galvanized.
- Posts to be vertical.
- Alignment of holes in posts may vary to conform to slope of top of retaining wall.
- The Contractor shall verify all dependent dimensions in the field before ordering or fabricating any material.
- Alternative details may be submitted by the Contractor for approval by the Engineer.
- Line posts shall be braced horizontally and trussed diagonally in both directions at intervals not to exceed 1000'.
- Post pockets to be centered in top of wall.
- Typical end spans, braced in both directions, shall be constructed at changes in line where the angle of deflection is 15° or more.
- Provide thimbles at all cable loops.



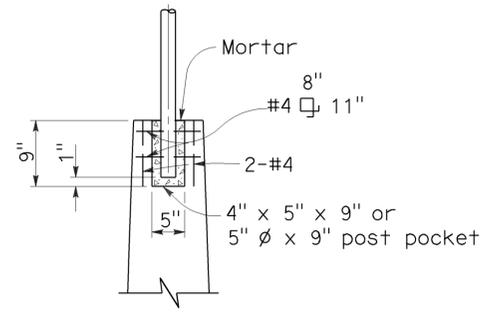
SECTION A-A Existing
SECTION B-B Existing
SECTION C-C New construction



ALTERNATIVE CABLE CONNECTION



ALTERNATIVE DEAD END ANCHORAGE



POST POCKET

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CABLE RAILING

NO SCALE

RSP B11-47 DATED OCTOBER 21, 2011 SUPERSEDES STANDARD PLAN B11-47
 DATED MAY 1, 2006 - PAGE 268 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP B11-47

2006 REVISED STANDARD PLAN RSP B11-47

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14, 110,118,134	Var	23	47

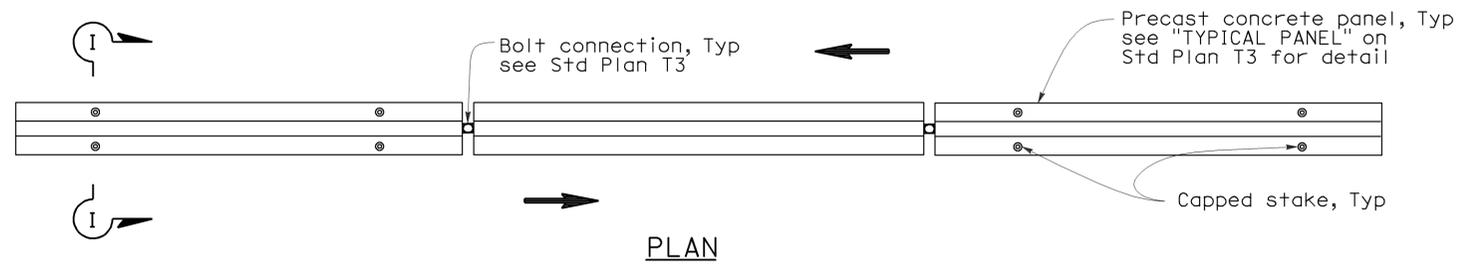
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

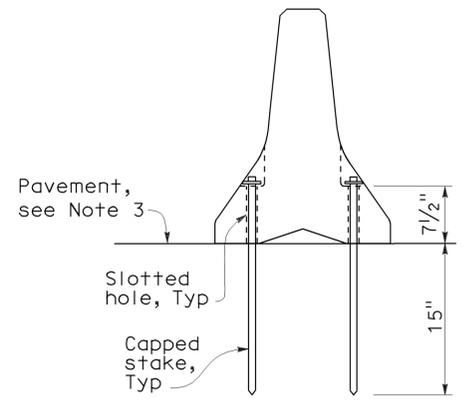
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REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 1-23-12

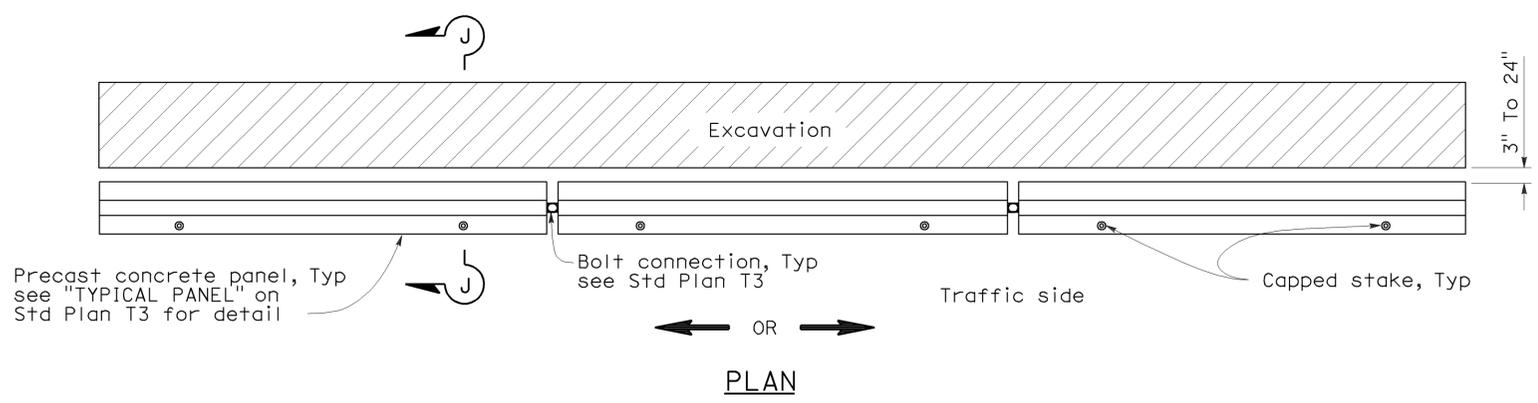


RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC
See Note 1

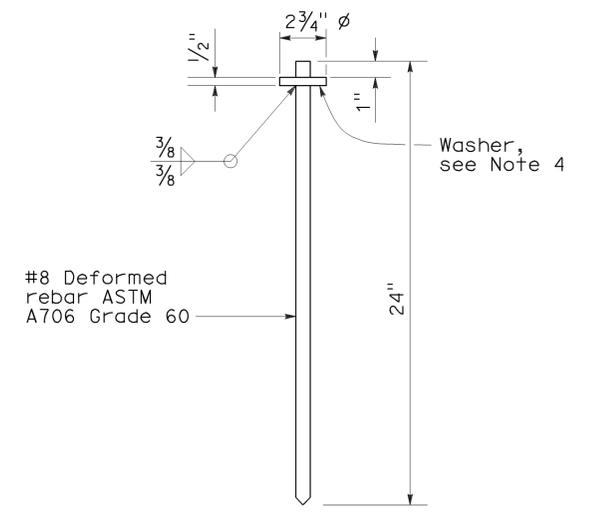
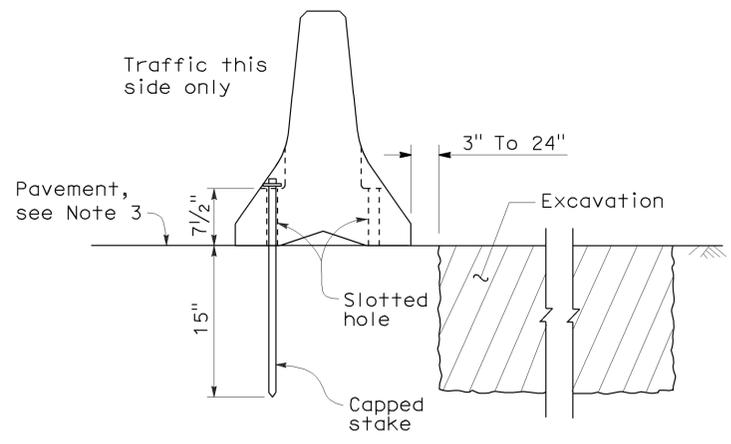


NOTES:

1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by \Rightarrow .



RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION
See Note 2



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY RAILING
(TYPE K)**

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T3A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	24	47

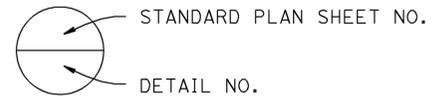
08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
 GERALD D. JOO
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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
3	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	GENERAL PLAN NO. 12
13	GENERAL PLAN NO. 13
14	GENERAL PLAN NO. 14
15	GENERAL PLAN NO. 15
16	MISCELLANEOUS DETAILS NO. 1
17	MISCELLANEOUS DETAILS NO. 2
18	ACCESS OPENING HATCH, SOFFIT DETAILS
19	JOINT SEAL ASSEMBLY DETAILS
20	JOINT SEAL ASSEMBLY (MR=4")
21	BARRIER RAIL DETAILS
22	STRUCTURE APPROACH TYPE R(30D)
23	STRUCTURE APPROACH TYPE R(30S)
24	BARRIER RAILING TYPE 9 (AS-BUILT)

STANDARD PLANS DATED MAY 2006

SHEET NO.	TITLE
A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B11-47	CABLE RAILING

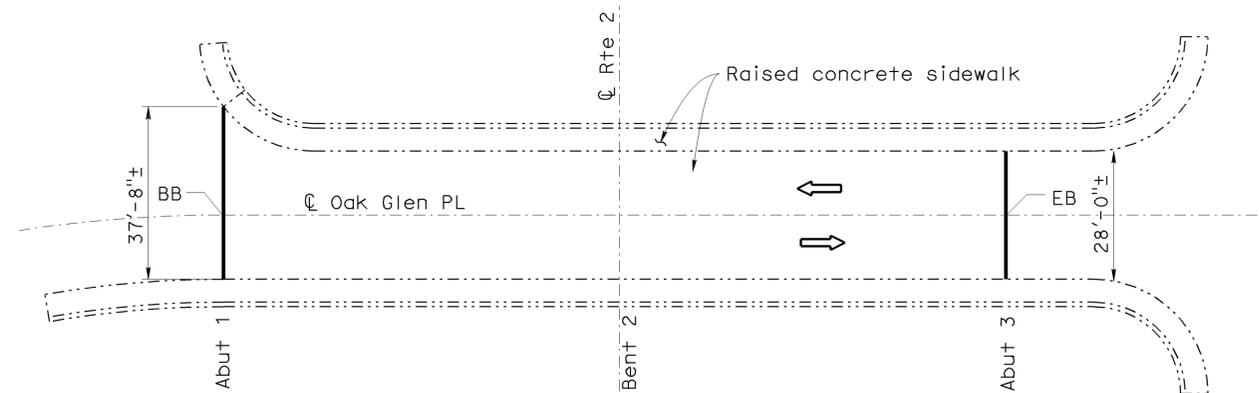


LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.
- /— Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal repair joint by removing unsound concrete and placing rapid setting concrete patch.

NOTES:

- For clean expansion joint and joint seal details, see "MISCELLANEOUS DETAILS NO. 1" sheet.



OAK GLEN PLACE OC

Br No. 53-1414, Rte 2, PM 14.46
1" = 20'

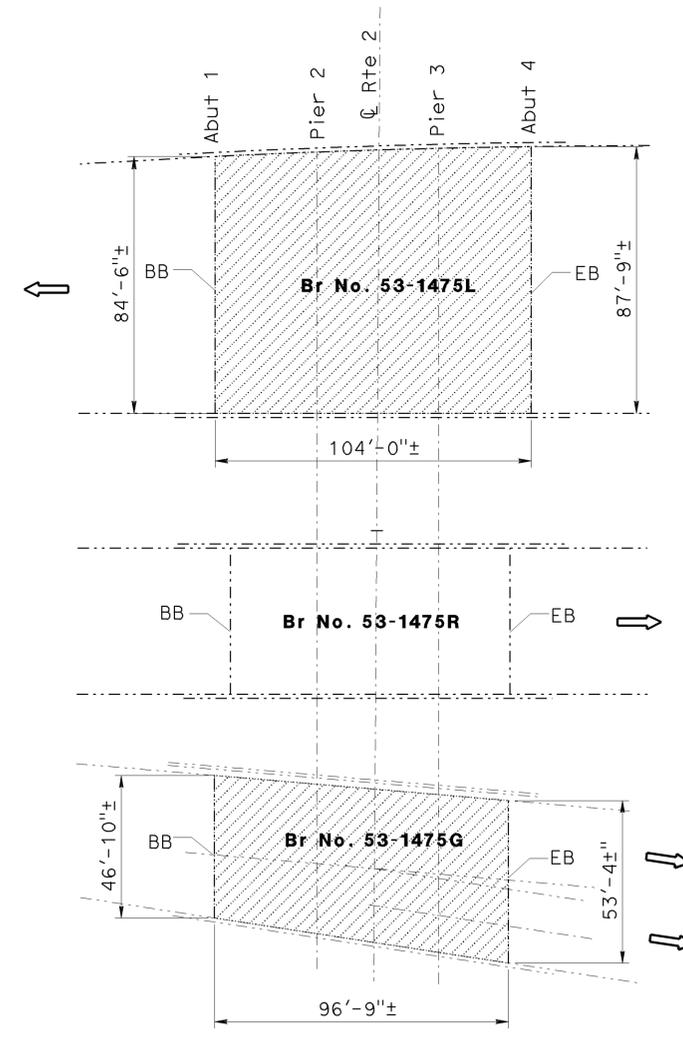
OAK GLEN PLACE OC

BRIDGE NO. 53-1414

QUANTITIES

REMOVE UNSOUND CONCRETE	2	CF
CLEAN EXPANSION JOINT	66	LF
RAPID SETTING CONCRETE (PATCH)	2	CF
JOINT SEAL (MR 1/2")	66	LF

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



ROSEBUD AVENUE UC

Br No. 53-1475L, Rte 2, PM 14.84
1" = 30'

ROSEBUD AVENUE UC

Br No. 53-1475G, Rte 2, PM 14.84
1" = 30'

ROSEBUD AVENUE UC

BRIDGE NO. 53-1475G/L

QUANTITIES

CLEAN BRIDGE DECK	13,900	SQFT
TREAT BRIDGE DECK	13,900	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	177	GAL
PUBLIC SAFETY PLAN		LUMP SUM

DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

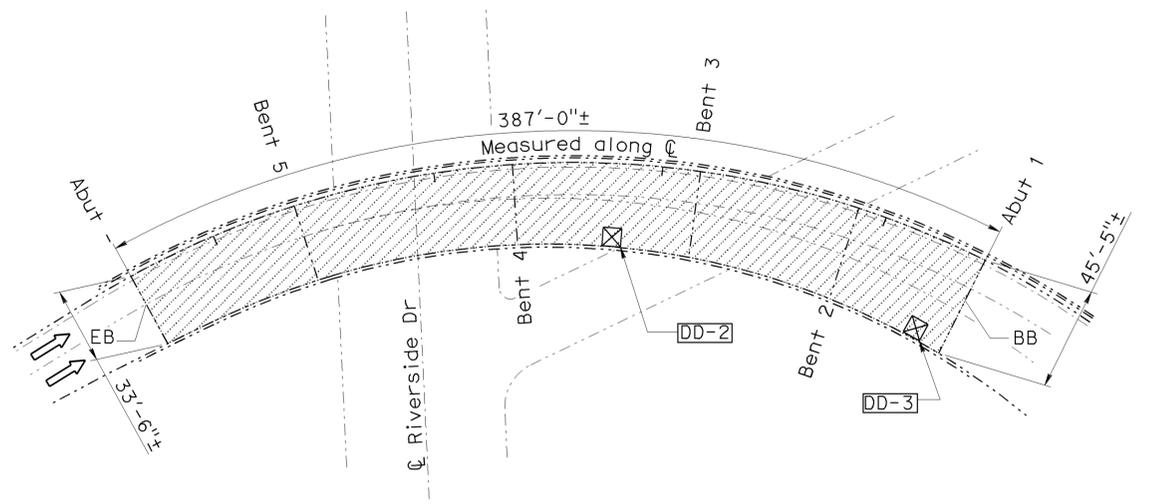
BRIDGE NO. Various
POST MILE Varies

ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
GENERAL PLAN NO. 1

USERNAME => s129239 DATE PLOTTED => 24-OCT-2011 TIME PLOTTED => 10:10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	25	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
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LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- ▨ Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.
- ⊗ Indicates approximate location of cleanout plugged drain pipe.

RIVERSIDE DRIVE UC

Br No. 53-0570G, Rte 2, PM 14.95
1" = 40'



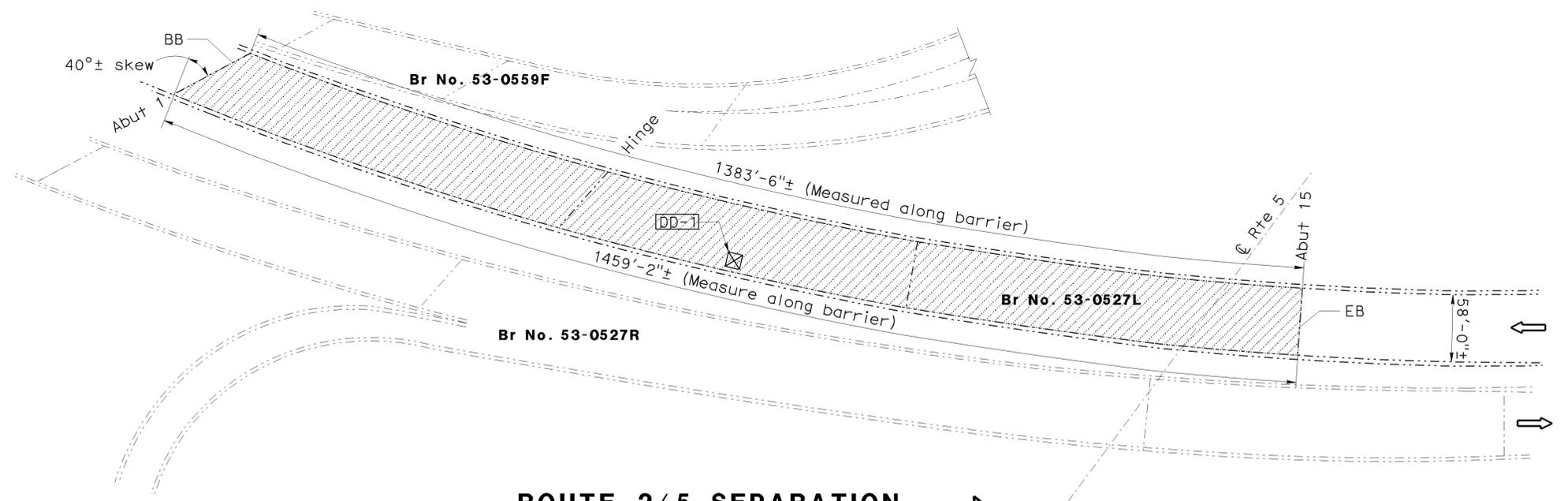
RIVERSIDE DRIVE UC

BRIDGE NO. 53-0570G

QUANTITIES

CLEAN BRIDGE DECK	15,300	SQFT
CLEAN BRIDGE DECK DRAIN	2	EA
TREAT BRIDGE DECK	15,300	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	195	GAL
PUBLIC SAFETY PLAN		LUMP SUM

DECK DRAIN CLEANING			
BRIDGE NUMBER	INLET ID	EXISTING DRAINAGE INLET TYPE	APPROX LENGTH OF CLEAN OUT (FT)
53-0527L	DD-1	D1	90
53-0570G	DD-2	D1	90
	DD-3	D1	90



ROUTE 2/5 SEPARATION

Br No. 53-0527L, Rte 2, PM 14.98
NO SCALE



ROUTE 2/5 SEPARATION

BRIDGE NO. 53-0527L

QUANTITIES

CLEAN BRIDGE DECK	82,500	SQFT
CLEAN BRIDGE DECK DRAIN	1	EA
TREAT BRIDGE DECK	82,500	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	1,050	GAL
PUBLIC SAFETY PLAN		LUMP SUM

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DESIGN ENGINEER TONY D. BRAKE	DESIGN	BY: Gerald Joo	CHECKED: Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY: Tom Dang	CHECKED: Vinh Dang	LAYOUT	BY: Tom Dang
	QUANTITIES	BY: Gerald Joo	CHECKED: Vinh Dang	SPECIFICATIONS	BY: Dave Klein

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	Various
	POST MILE	Varies
	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	

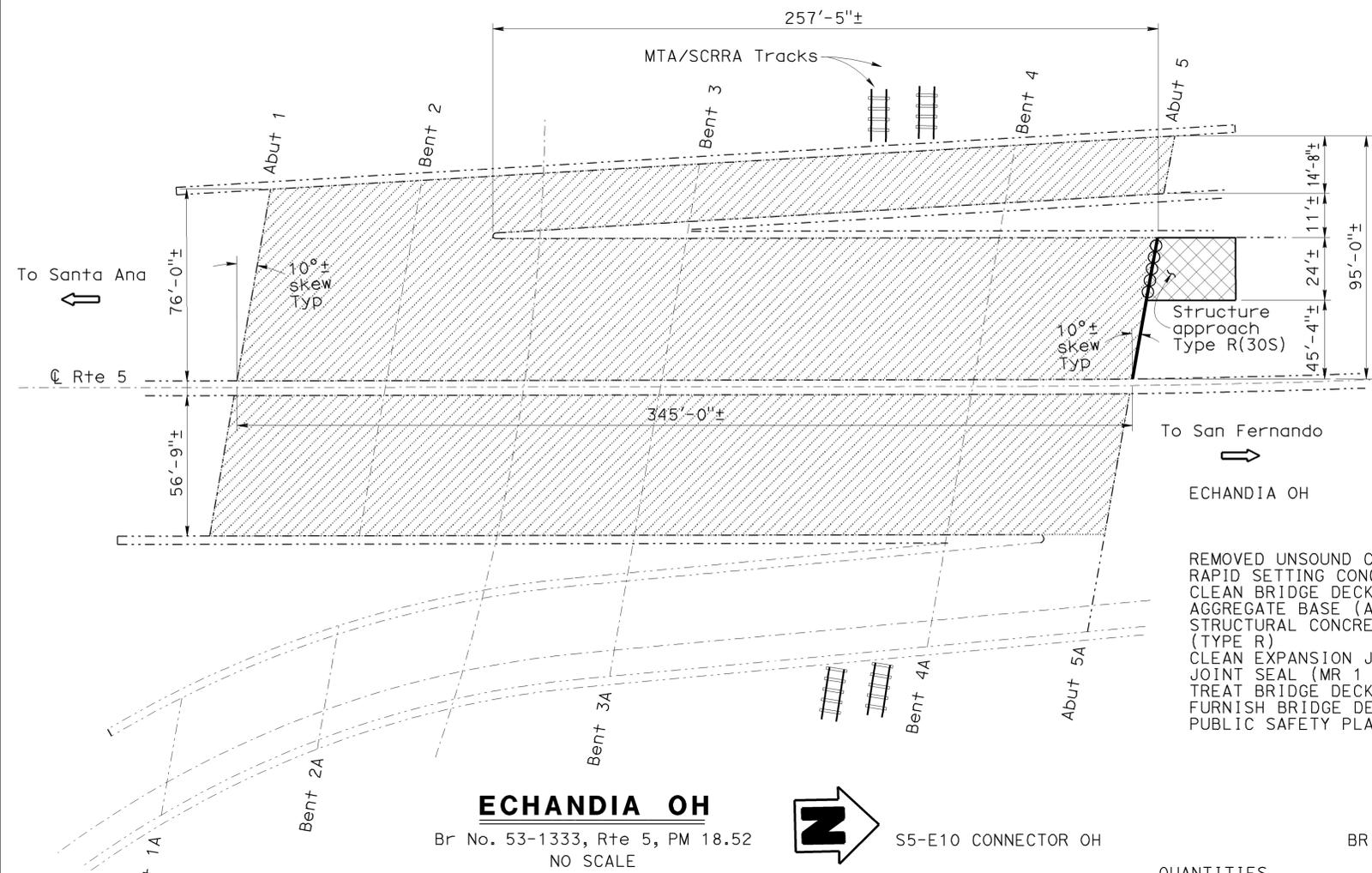
ROUTE 2, 5, 14, 110, 118, 134 BRIDGES	
GENERAL PLAN NO. 2	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110,118,134	Var	26	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- [Hatched Box] Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.
- [Diagonal Line] Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal repair joint by removing unsound concrete and placing rapid setting concrete patch.
- [Cross-hatched Box] Indicates limits of remove AC roadway and construct new structure approach.
- Indicates location of placement of new joint seal.



ECHANDIA OH

Br No. 53-1333, Rte 5, PM 18.52
NO SCALE



S5-E10 CONNECTOR OH

BRIDGE NO. 53-1332F

QUANTITIES

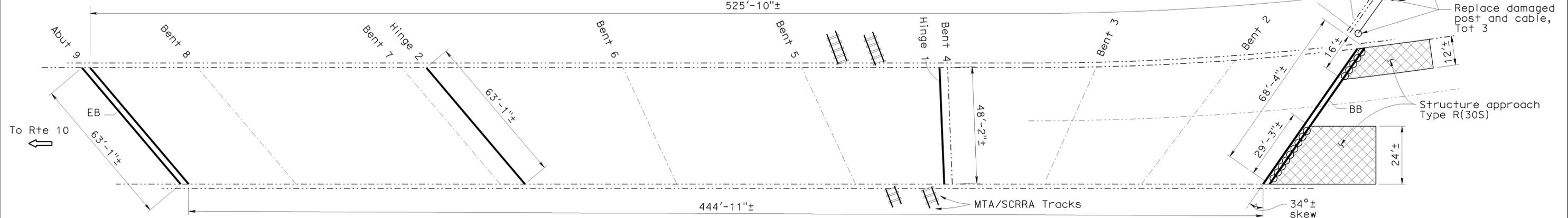
- REMOVED UNSOUND CONCRETE 1 CF
- RAPID SETTING CONCRETE (PATCH) 1 CF
- CLEAN BRIDGE DECK 48,559 SQFT
- AGGREGATE BASE (APPROACH SLAB) 4 CY
- STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R) 35 CY
- CLEAN EXPANSION JOINT 33 LF
- JOINT SEAL (MR 1 1/2") 57 LF
- TREAT BRIDGE DECK 48,559 SQFT
- FURNISH BRIDGE DECK TREATMENT MATERIAL 607 GAL
- PUBLIC SAFETY PLAN LUMP SUM

NOTES:

1. For clean expansion joint and joint seal details, see "MISCELLANEOUS DETAILS NO. 1" sheet.
2. For repair joint details, see "MISCELLANEOUS DETAILS NO. 2" sheet.
3. For approach slab details, see "STRUCTURE APPROACH TYPE R(30S)" sheet.

- REMOVE CABLE RAILING 21 LF
- REMOVE UNSOUND CONCRETE 6 CF
- AGGREGATE BASE (APPROACH SLAB) 5 CY
- STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R) 50 CY
- CLEAN EXPANSION JOINT 291 LF
- RAPID SETTING CONCRETE (PATCH) 6 CF
- JOINT SEAL (MR 1 1/2") 379 LF
- CABLE RAILING 21 LF
- CABLE RAILING (CABLE) 420 LF

QUANTITIES



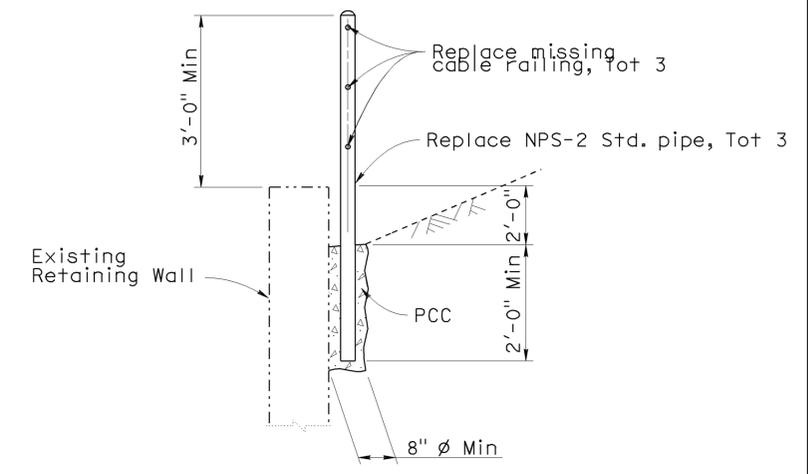
S5-E10 CONNECTOR OH

Br No. 53-1332F, Rte 5, PM 18.53
1" = 20'



SECTION A-A

NO SCALE



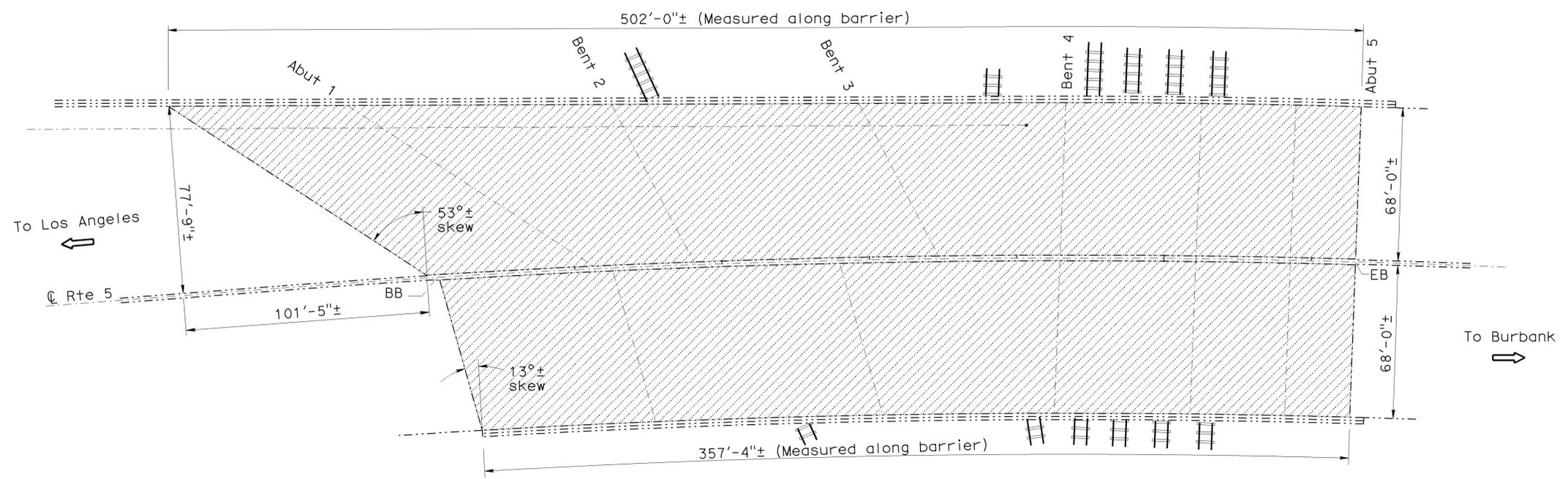
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 2,5,14,110,118,134 BRIDGES GENERAL PLAN NO. 3	
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang		CHECKED Gerald Joo		POST MILE
	QUANTITIES	BY Gerald Joo	Vinh Dang	SPECIFICATIONS	BY Dave Klein		CHECKED Dave Klein		VARIES

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 - UNIT: X PROJECT NUMBER & PHASE: 0700020041 CONTRACT NO.: 4Y8401 DISREGARD PRINTS BEARING EARLIER REVISION DATES 2-15-11 SHEET 03 OF 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110,118,134	Var	27	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
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ALHAMBRA AVENUE OH

BRIDGE NO. 53-0368

ALHAMBRA AVENUE OH

Br No. 53-0368, Rte 5, PM 18.96
NO SCALE

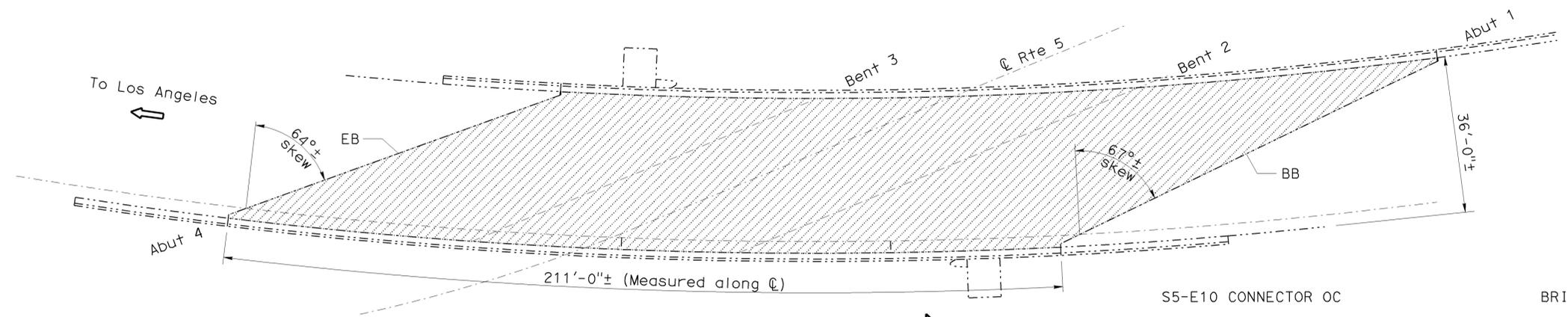


QUANTITIES

CLEAN BRIDGE DECK	58,000	SQFT
TREAT BRIDGE DECK	58,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	725	GAL
PUBLIC SAFETY PLAN		LUMP SUM

LEGEND:

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



S5-E10 CONNECTOR OC

Br No. 53-1317F, Rte 5, PM 18.62
NO SCALE



S5-E10 CONNECTOR OC

BRIDGE NO. 53-1317F

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

QUANTITIES

CLEAN BRIDGE DECK	7,600	SQFT
TREAT BRIDGE DECK	7,600	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	100	GAL
PUBLIC SAFETY PLAN		LUMP SUM

DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies
ROUTE 2,5,14,110,118,134 BRIDGES
GENERAL PLAN NO. 4

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: X
PROJECT NUMBER & PHASE: 0700020041

CONTRACT NO.: 4Y8401

DISREGARD PRINTS BEARING EARLIER REVISION DATES

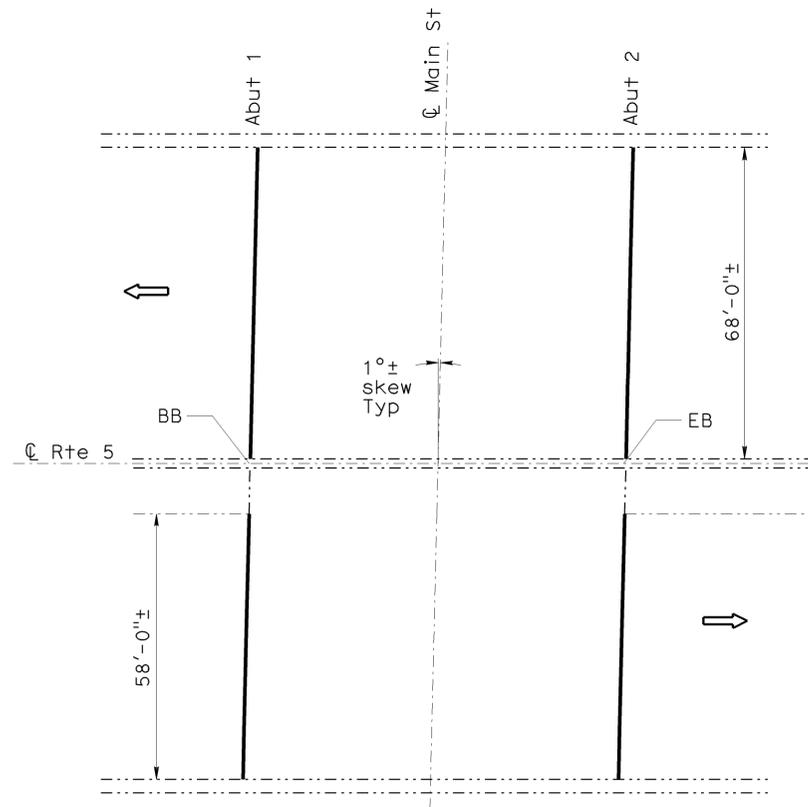
REVISION DATES	SHEET	OF
2-15-11	04	24

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USERNAME => s129239 DATE PLOTTED => 24-OCT-2011 TIME PLOTTED => 10:10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	28	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
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MAIN STREET UC BRIDGE NO. 53-1360G
 QUANTITIES
 REMOVE UNSOUND CONCRETE 4 CF
 CLEAN EXPANSION JOINT 252 LF
 RAPID SETTING CONCRETE (PATCH) 4 CF
 JOINT SEAL (MR 1 1/2") 252 LF

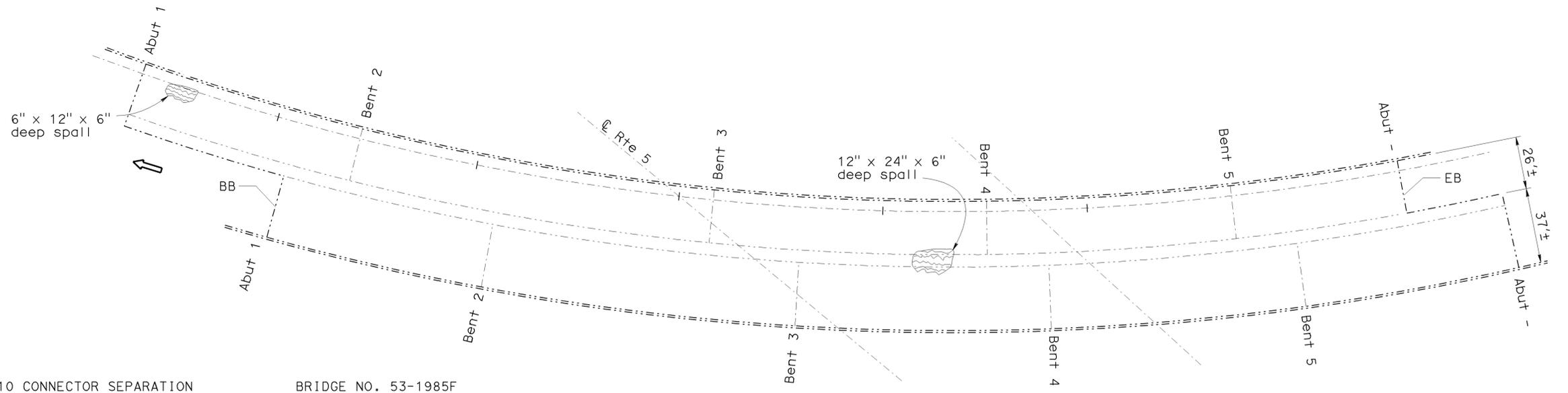
LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- /— Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal repair joint by removing unsound concrete and placing rapid setting concrete patch.
- ▨ Indicates removal of unsound concrete and place rapid setting concrete patch.

NOTES:

1. For deck damage repair detail and spall repair detail, see "MISCELLANEOUS DETAILS NO. 2" sheet.
2. For clean expansion joint and joint seal details, see "MISCELLANEOUS DETAILS NO. 1" sheet.

MAIN STREET UC
 Br No. 53-1360, Rte 5, PM 19.20
 1" = 20'



S5-E210 CONNECTOR SEPARATION BRIDGE NO. 53-1985F
 QUANTITIES
 REMOVE UNSOUND CONCRETE 2 CF
 RAPID SETTING CONCRETE (PATCH) 2 CF

S5-E210 CONNECTOR SEPARATION

Br No. 53-1985F, Rte 5, PM R44.01
 1" = 30'



NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN
 BRIDGE NO. Various
 POST MILE Varies

ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
GENERAL PLAN NO. 5

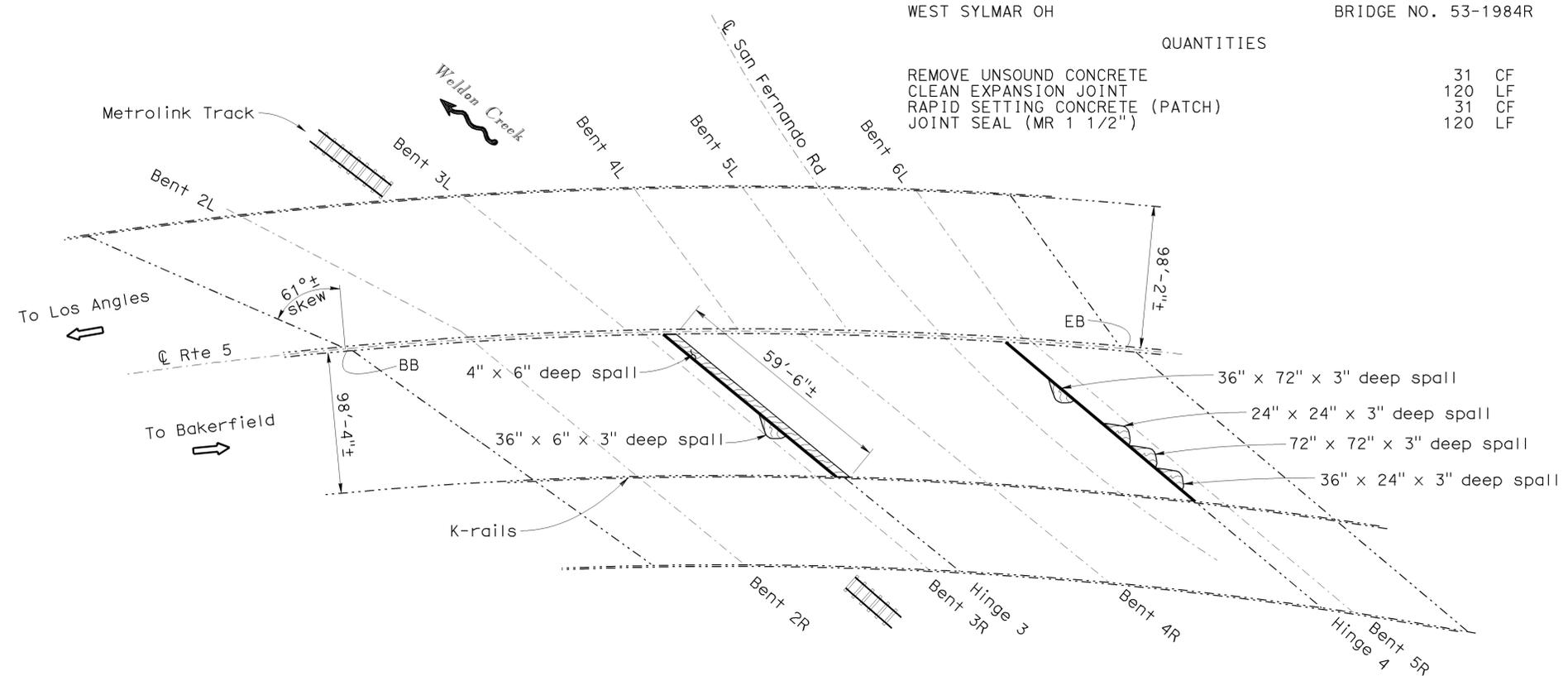
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	29	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
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 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
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WEST SYLMAR OH BRIDGE NO. 53-1984R

QUANTITIES

REMOVE UNSOUND CONCRETE	31	CF
CLEAN EXPANSION JOINT	120	LF
RAPID SETTING CONCRETE (PATCH)	31	CF
JOINT SEAL (MR 1 1/2")	120	LF



LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.
- Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal repair joint by removing unsound concrete and placing rapid setting concrete patch.
- Indicates removal of unsound concrete and place rapid setting concrete patch.

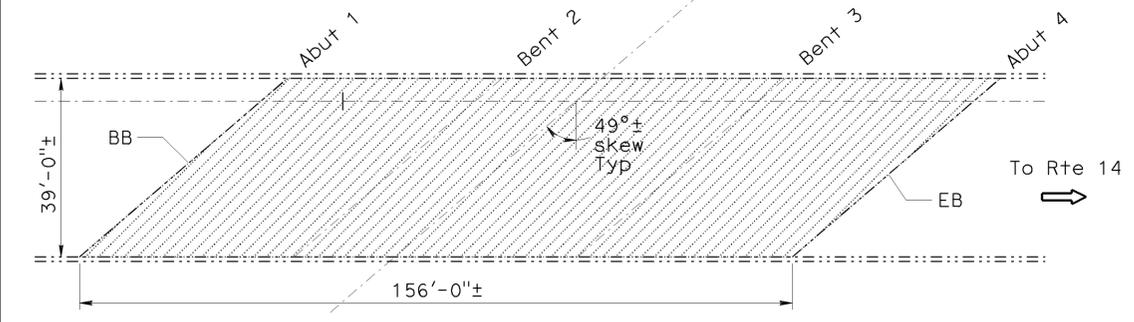
NOTES:

1. For deck damage repair detail and joint spall repair detail, see "MISCELLANEOUS DETAILS NO. 2" sheet.
2. For clean expansion joint and joint seal details, see "MISCELLANEOUS DETAILS NO. 1" sheet.
3. For repair joint spalls and deck repair details, see "MISCELLANEOUS DETAILS NO. 2" sheet.

N5 TRK-N14 CONNECTOR BRIDGE NO. 53-1961G

QUANTITIES

CLEAN BRIDGE DECK	6,100	SQFT
TREAT BRIDGE DECK	6,100	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	80	GAL
PUBLIC SAFETY PLAN	LUMP	SUM



N5 TRK-N14 CONNECTOR

Br No. 53-1961G, Rte 5, PM C45.63
1" = 20'

NOTE:
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WEST SYLMAR OH

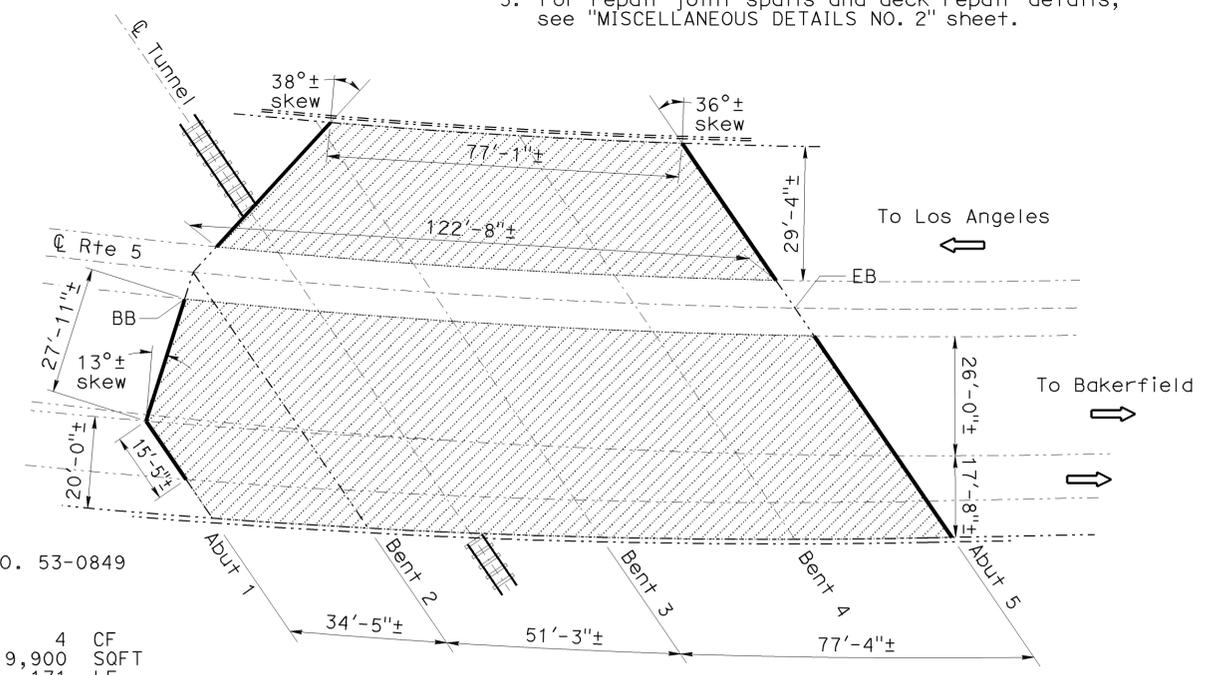
Br No. 53-1984R, Rte 5, PM R44.87
NO SCALE

WELDON CANYON OH

QUANTITIES

REMOVE UNSOUND CONCRETE	4	CF
CLEAN BRIDGE DECK	9,900	SQFT
CLEAN EXPANSION JOINT	171	LF
RAPID SETTING CONCRETE (PATCH)	4	CF
JOINT SEAL (MR 1 1/2")	171	LF
TREAT BRIDGE DECK	9,900	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	125	GAL
PUBLIC SAFETY PLAN	LUMP	SUM

BRIDGE NO. 53-0849



WELDON CANYON OH

Br No. 53-0849, Rte 5, PM C45.75
1" = 20'

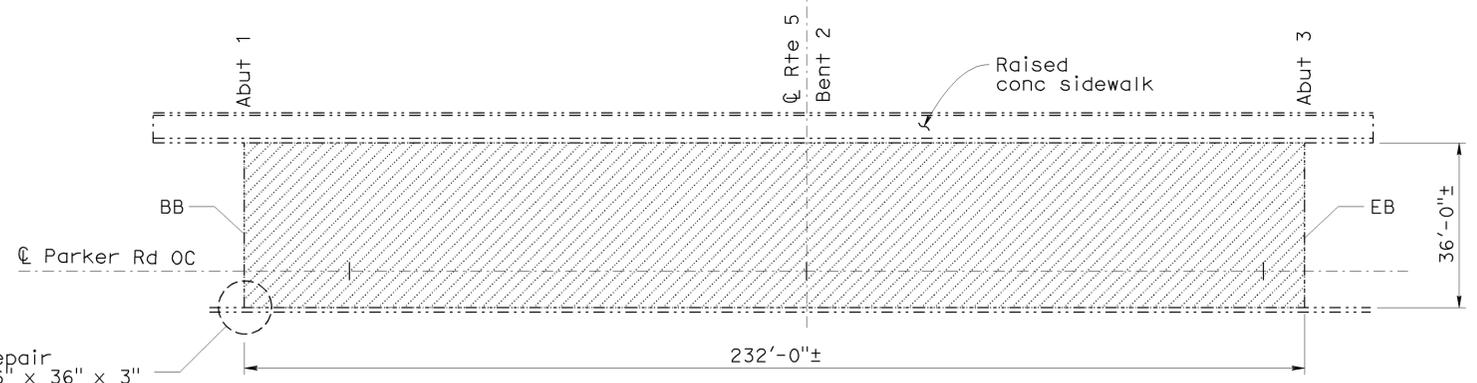
DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA	DIVISION OF MAINTENANCE	BRIDGE NO.
DEPARTMENT OF TRANSPORTATION	STRUCTURE MAINTENANCE DESIGN	Various
		POST MILE
		Varies

ROUTE 2, 5, 14, 110, 118, 134 BRIDGES		
GENERAL PLAN NO. 6		

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110,118,134	Var	30	47

08/25/11
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 STATE OF CALIFORNIA
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PARKER ROAD OC

Br No. 53-1909, Rte 5, PM 59.01
1" = 20'



PARKER ROAD OC

BRIDGE NO. 53-1909

QUANTITIES

CLEAN BRIDGE DECK	8,360	SQFT
REPAIR SPALLED SURFACE AREA	9	SQFT
TREAT BRIDGE DECK	8,360	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	105	GAL
PUBLIC SAFETY PLAN		LUMP SUM

SIERRA HIGHWAY SEPARATION

BRIDGE NO. 53-0848

QUANTITIES

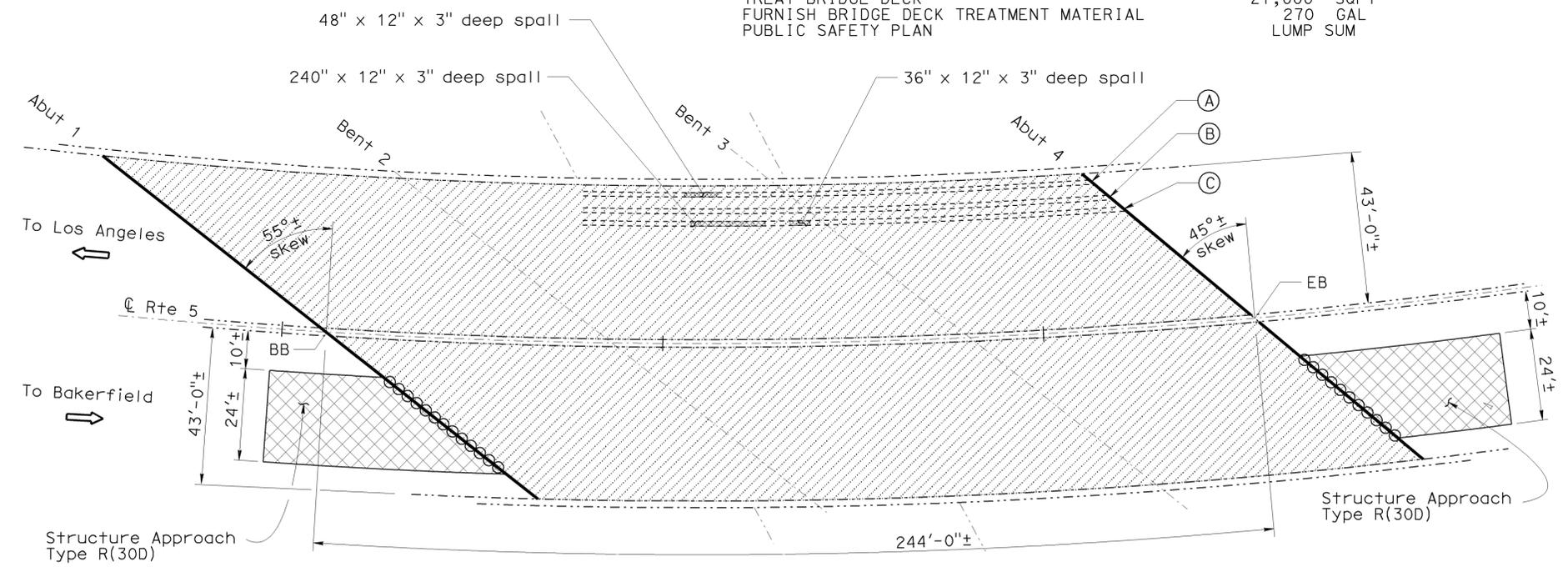
REMOVE UNSOUND CONCRETE	10	CF
CLEAN BRIDGE DECK	21,000	SQFT
AGGREGATE BASE (APPROACH SLAB)	8	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	80	CY
PAVING NOTCH EXTENSION	50	CF
CLEAN EXPANSION JOINT	177	LF
RAPID SETTING CONCRETE (PATCH)	10	CF
REPAIR SPALLED SURFACE AREA	27	SQFT
JOINT SEAL (MR 1 1/2")	244	LF
TREAT BRIDGE DECK	21,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	270	GAL
PUBLIC SAFETY PLAN		LUMP SUM

LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.
- Indicates limits of remove AC roadway and construct new structure approach slabs with paving notch extension.
- Indicates limits of repair spalled concrete. Remove existing concrete and place new rapid setting concrete.
- Indicates location of placement of new joint seal.
- Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal repair joint by removing unsound concrete and placing rapid setting concrete patch.

NOTES:

- For deck damage repair detail and joint spall repair detail, see "MISCELLANEOUS DETAILS NO. 2" sheet.
- For clean expansion joint and joint seal details, see "MISCELLANEOUS DETAILS NO. 1" sheet.
- For repair joint spalls and deck repair details, see "MISCELLANEOUS DETAILS NO. 2" sheet.
- For approach slab details, see "STRUCTURE APPROACH TYPE R(30D)" sheet.

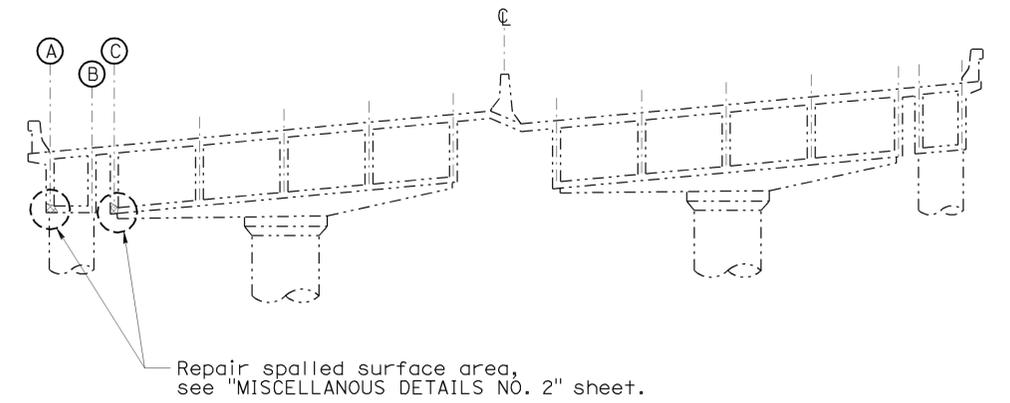


SIERRA HIGHWAY SEPARATION

Br No. 53-0848, Rte 5, PM C45.49
1" = 20'



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



TYPICAL SECTION

NO SCALE

TONY D. BRAKE
DESIGN ENGINEER

DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

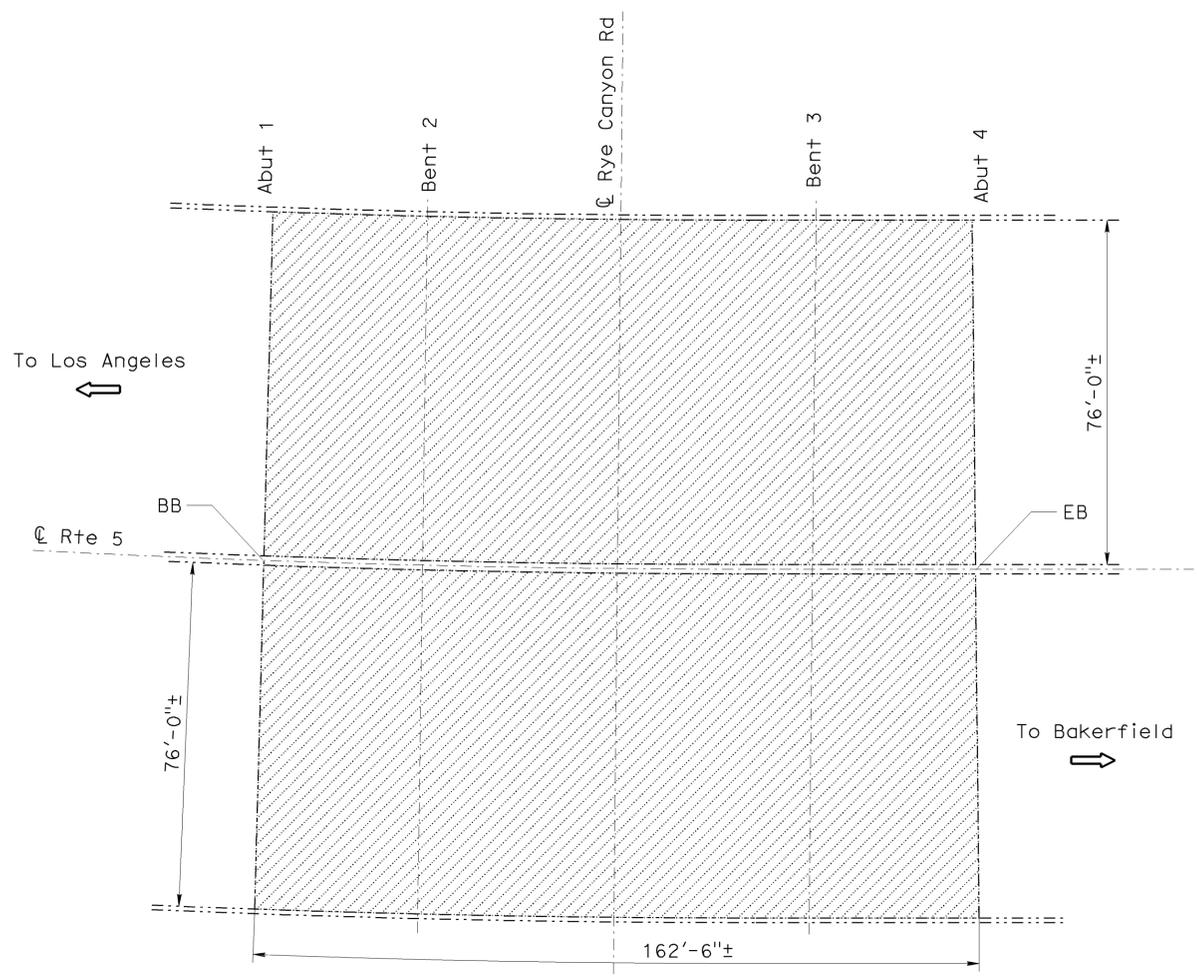
BRIDGE NO. Various
POST MILE Varies
ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
GENERAL PLAN NO. 7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	31	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
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LEGEND:

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



RYE CANYON ROAD UC BRIDGE NO. 53-1688

QUANTITIES

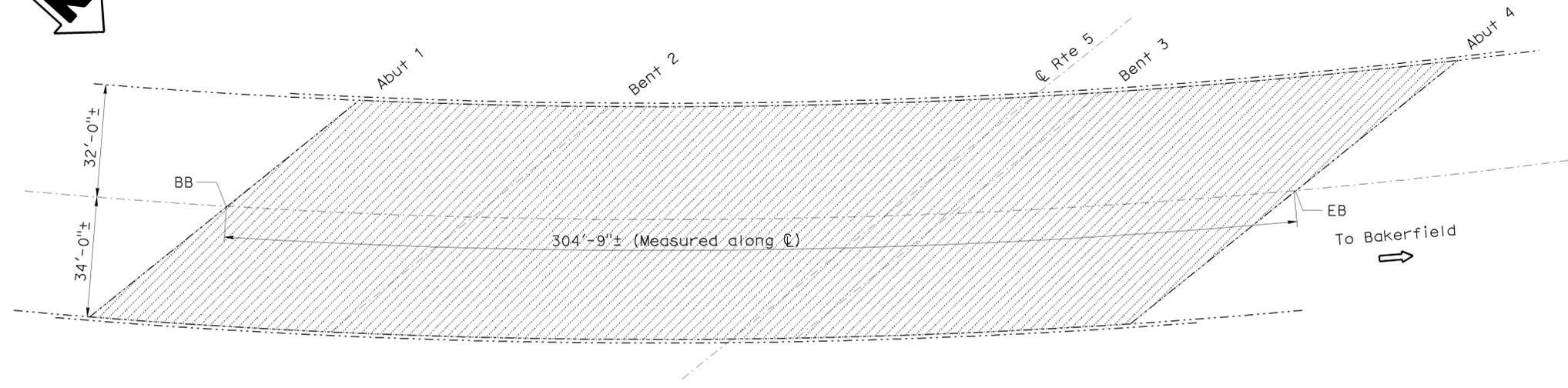
CLEAN BRIDGE DECK	24,700	SQFT
TREAT BRIDGE DECK	24,700	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	310	GAL
PUBLIC SAFETY PLAN		LUMP SUM

RYE CANYON ROAD UC
 Br No. 53-1688, Rte 5, PM R54.17
 NO SCALE

ROUTE 5/5 SEPARATION NORTH BRIDGE NO. 53-1903R

QUANTITIES

CLEAN BRIDGE DECK	20,800	SQFT
TREAT BRIDGE DECK	20,800	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	260	GAL
PUBLIC SAFETY PLAN		LUMP SUM



ROUTE 5/5 SEPARATION NORTH
 Br No. 53-1903R, Rte 5, PM R64.49
 NO SCALE

NOTE:
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DESIGN ENGINEER TONY D. BRAKE	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies

ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
GENERAL PLAN NO. 8

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	32	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
 GERALD D. JOO

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BARRIER RAIL REPAIR

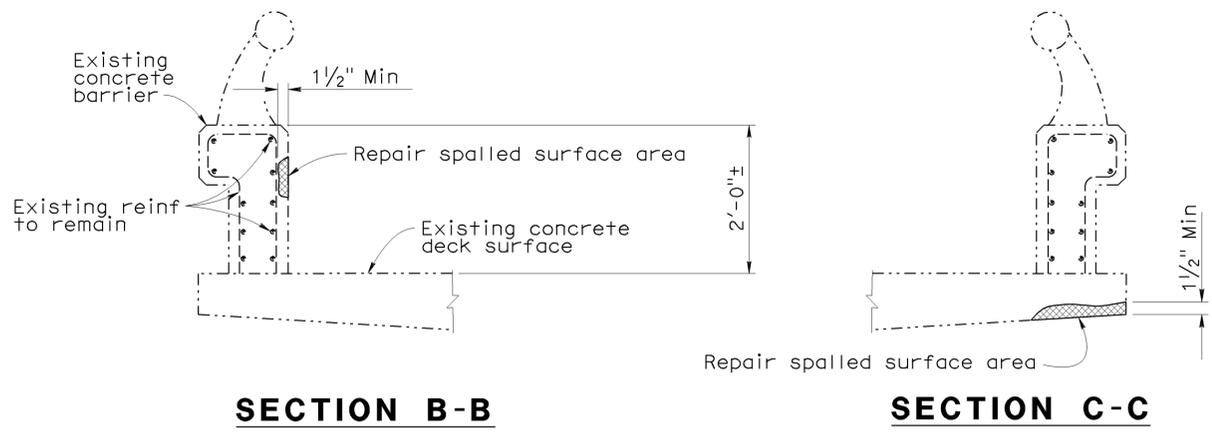
BRIDGE NAME	BRIDGE NUMBER	BARRIER AREA (SQFT)	APPROX AREA DAMAGED	REPAIR SURFACE AREA (SQFT)
FRAZIER MOUNTAIN UC	53-1776L	200	1%	2

LEGEND:

- Indicates existing.
- Indicates direction of traffic.
- ▨ Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.
- ▩ Indicates repair spalled surface area.

NOTES:

- For repair spalled surface area details, see "MISCELLANEOUS DETAILS NO. 2" sheet.

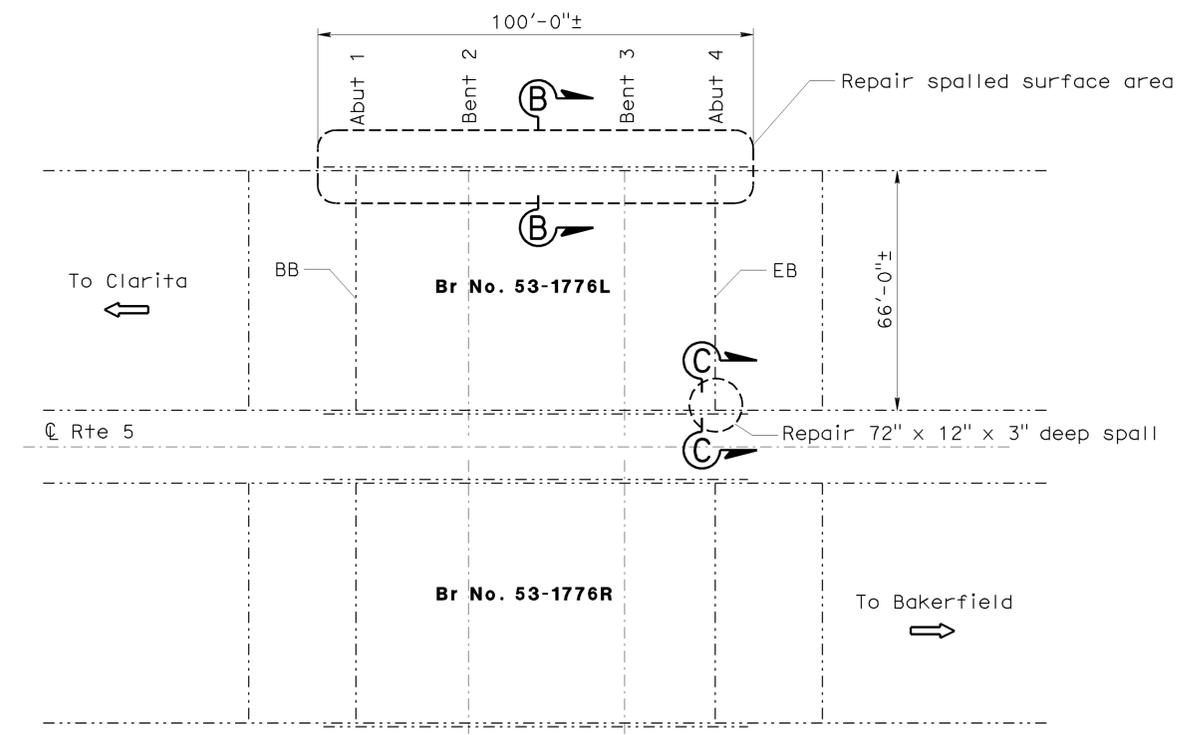


SECTION B-B

SECTION C-C

BARRIER RAIL REPAIR

NO SCALE



FRAZIER MOUNTAIN UC

Br No. 53-1776L, Rte 5, PM R88.56
NO SCALE

FRAZIER MOUNTAIN UC BRIDGE NO. 53-1776L

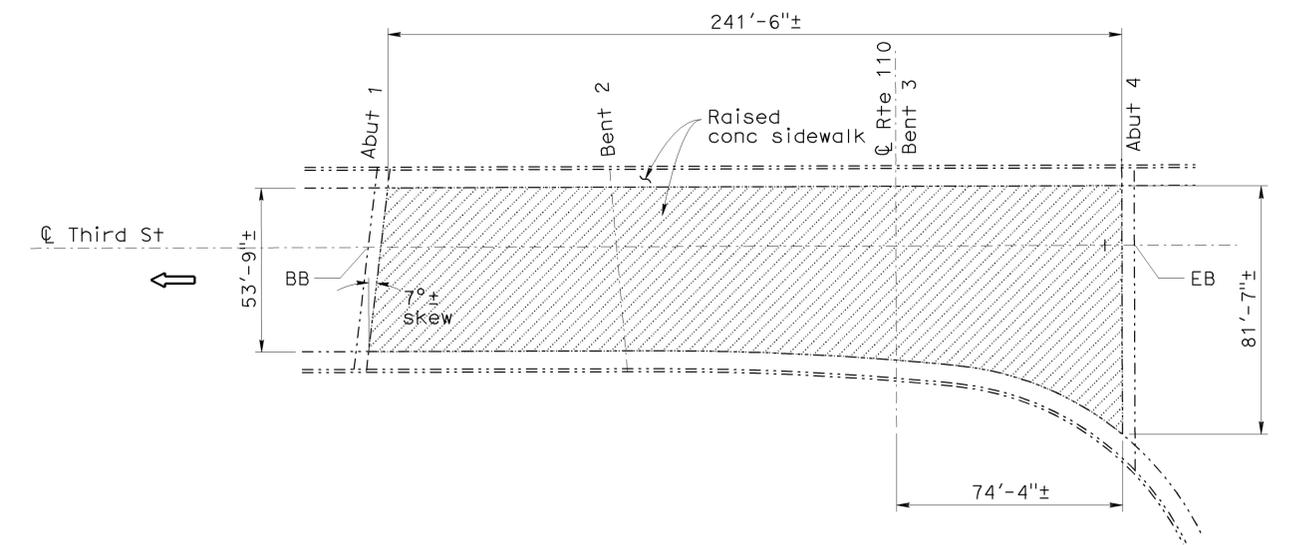
QUANTITIES
REPAIR SPALLED SURFACE AREA 8 SQFT

3RD STREET OC

BRIDGE NO. 53-0684

QUANTITIES

CLEAN BRIDGE DECK	14,500	SQFT
TREAT BRIDGE DECK	14,500	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	185	GAL
PUBLIC SAFETY PLAN		LUMP SUM



3RD STREET OC

Br No. 53-0684, Rte 110, PM 23.12
1" = 30'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. Various	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES GENERAL PLAN NO. 9
		POST MILE Varies	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110,118,134	Var	33	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
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 No. C65380
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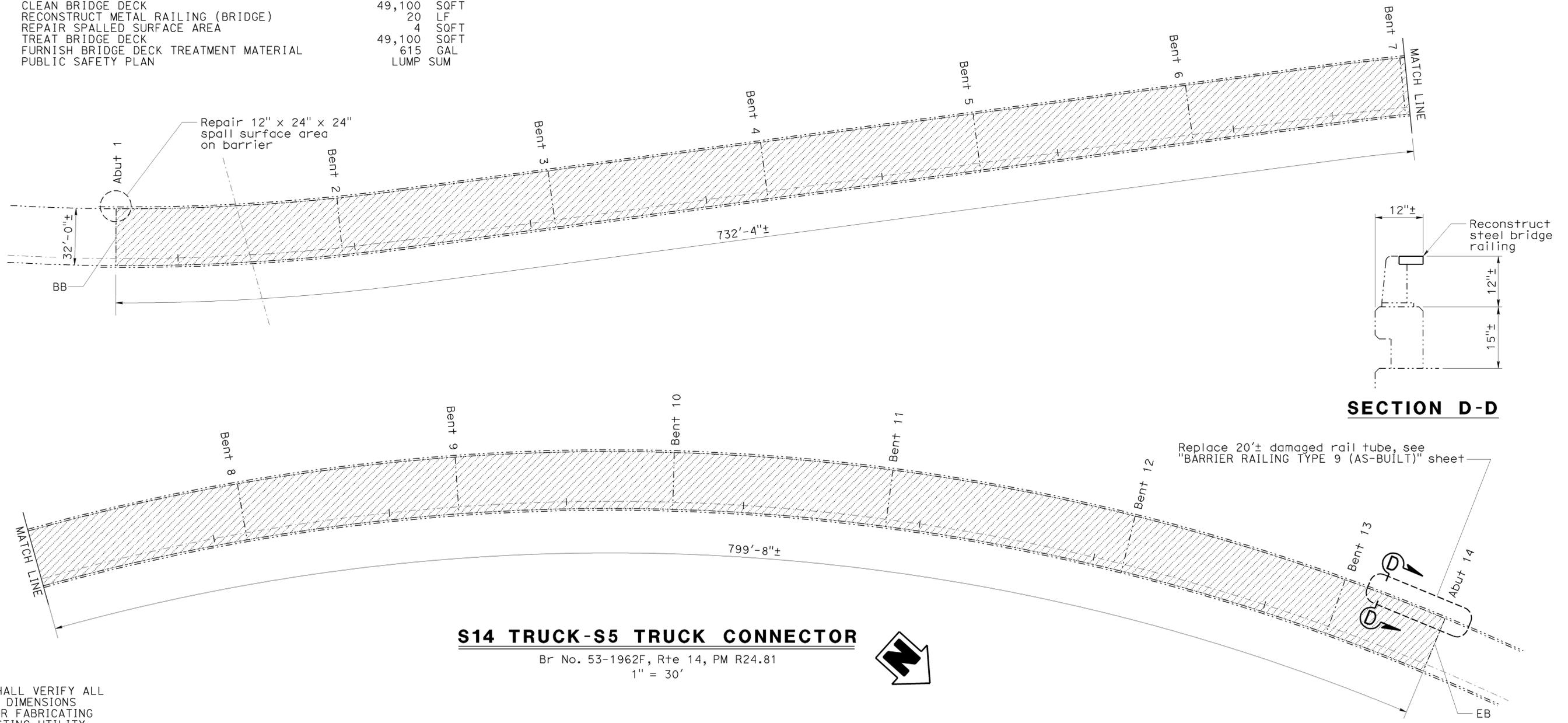
LEGEND:

- Indicates existing.
- ➔ Indicates direction of traffic.
- ▨ Indicates limits of clean bridge deck and treat existing bridge deck with high molecular weight methacrylate.

S14 TRUCK-S5 CONNECTOR BRIDGE NO. 53-1962F

QUANTITIES

CLEAN BRIDGE DECK	49,100	SOFT
RECONSTRUCT METAL RAILING (BRIDGE)	20	LF
REPAIR SPALLED SURFACE AREA	4	SOFT
TREAT BRIDGE DECK	49,100	SOFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	615	GAL
PUBLIC SAFETY PLAN		LUMP SUM



NOTE:
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TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	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 2,5,14,110,118,134 BRIDGES GENERAL PLAN NO. 10
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang			CHECKED Gerald Joo	
	QUANTITIES	BY Gerald Joo	Vinh Dang	SPECIFICATIONS	BY Dave Klein	CHECKED Dave Klein	Varies		

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 1" = 30'
 UNIT: X PROJECT NUMBER & PHASE: 0700020041 CONTRACT NO.: 4Y8401 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 2-15-11 SHEET 10 OF 24

USERNAME => s129239 DATE PLOTTED => 24-OCT-2011 TIME PLOTTED => 10:10

LOS ANGELES AQUEDUCT

BRIDGE NO. 53-0363L

QUANTITIES

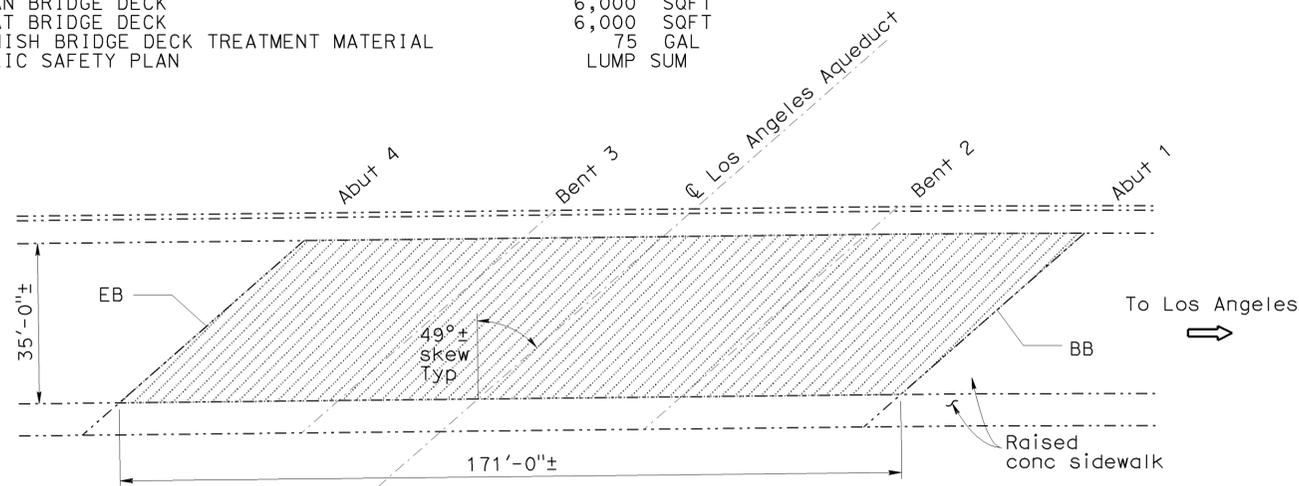
CLEAN BRIDGE DECK	6,000	SQFT
TREAT BRIDGE DECK	6,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	75	GAL
PUBLIC SAFETY PLAN		LUMP SUM

LEGEND:

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	34	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
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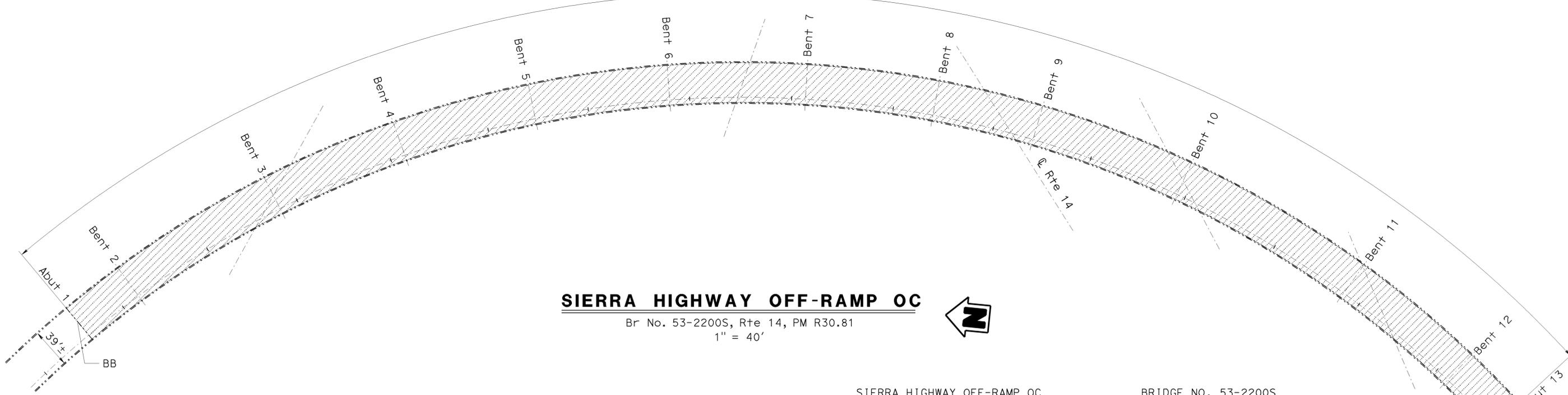


LOS ANGELES AQUEDUCT

Br No. 53-0363L, Rte 14, PM 27.3
1" = 20'



1522'-0"± (Measured along C)



SIERRA HIGHWAY OFF-RAMP OC

Br No. 53-2200S, Rte 14, PM R30.81
1" = 40'



SIERRA HIGHWAY OFF-RAMP OC

BRIDGE NO. 53-2200S

QUANTITIES

CLEAN BRIDGE DECK	59,500	SQFT
TREAT BRIDGE DECK	59,500	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	750	GAL
PUBLIC SAFETY PLAN		LUMP SUM

NOTE:
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DESIGN ENGINEER TONY D. BRAKE	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
GENERAL PLAN NO. 11

FILE => 07-4y8401-a-gp11.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	35	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

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

HUMPHREYS OH BRIDGE NO. 53-2029

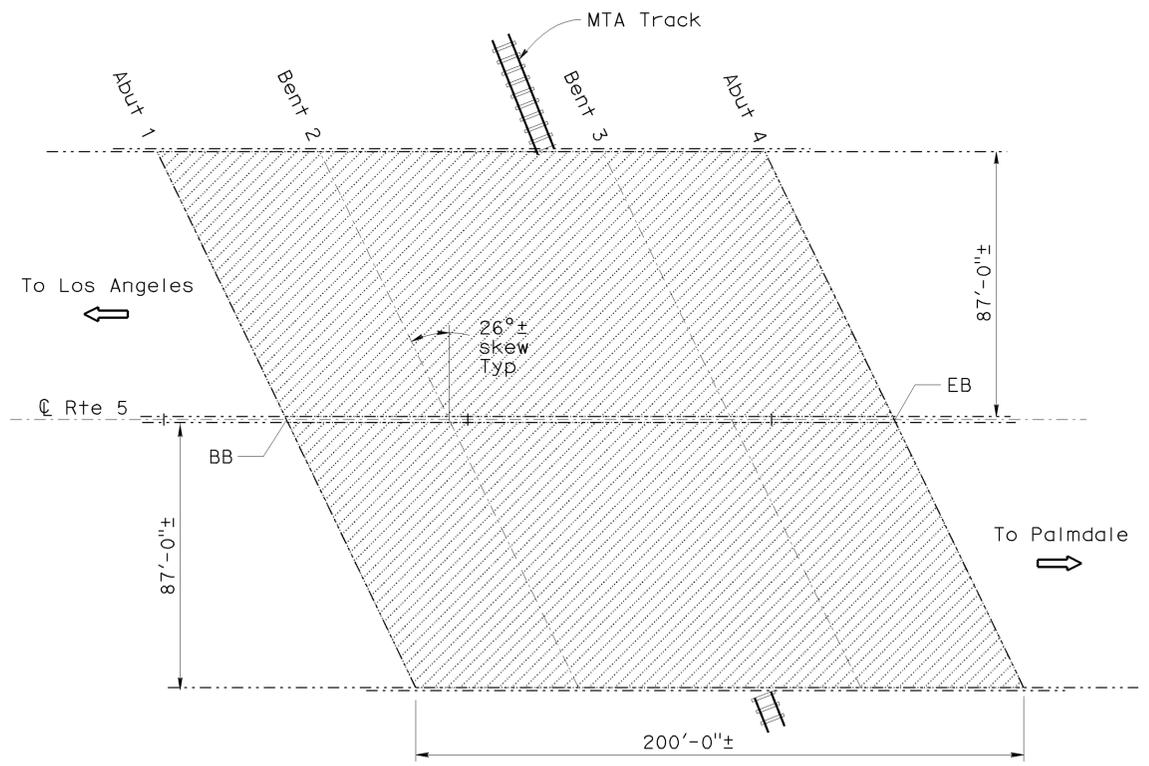
QUANTITIES

CLEAN BRIDGE DECK	34,800	SQFT
TREAT BRIDGE DECK	34,800	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	435	GAL
PUBLIC SAFETY PLAN		LUMP SUM

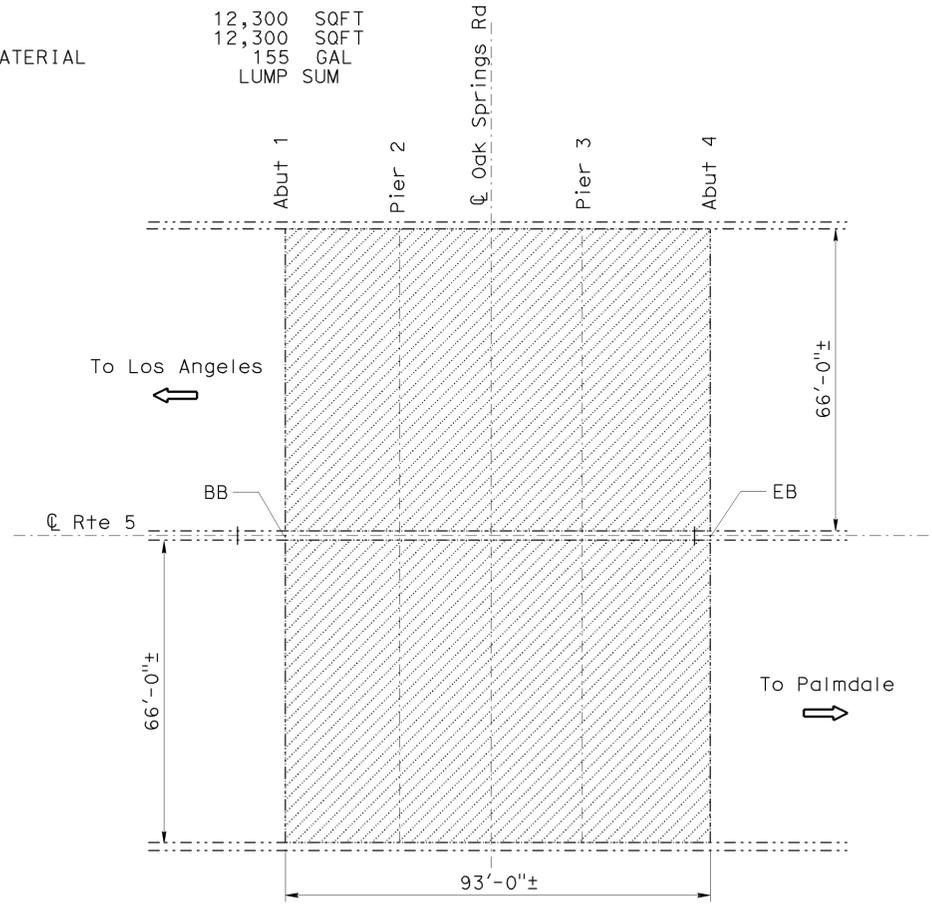
OAK SPRINGS ROAD UC BRIDGE NO. 53-1539

QUANTITIES

CLEAN BRIDGE DECK	12,300	SQFT
TREAT BRIDGE DECK	12,300	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	155	GAL
PUBLIC SAFETY PLAN		LUMP SUM



HUMPHREYS OH
 Br No. 53-2029, Rte 14, PM R31.62
 1" = 30'



OAK SPRINGS ROAD UC
 Br No. 53-1539, Rte 14, PM R33.94
 1" = 20'



NOTE:
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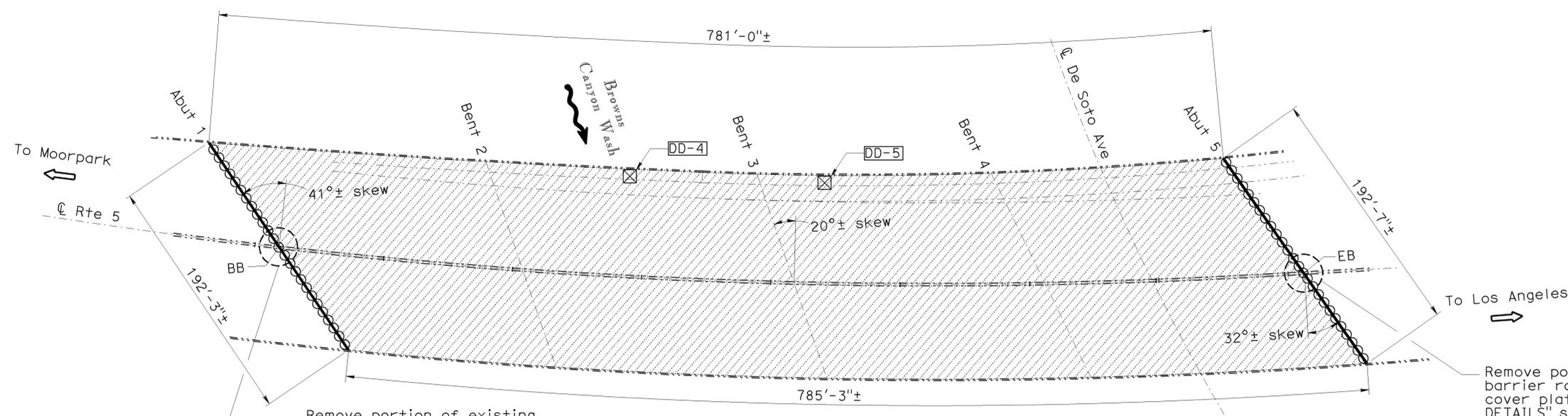
DESIGN ENGINEER TONY D. BRAKE	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE	BRIDGE NO.	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES GENERAL PLAN NO. 12
	STRUCTURE MAINTENANCE DESIGN	Various	
		Varies	

USERNAME => s129239 DATE PLOTTED => 24-OCT-2011 TIME PLOTTED => 10:11
 FILE => 07-4y8401-a-gp12.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	36	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
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BROWNS CANYON WASH
 Br No. 53-2182, Rte 118, PM R2.55
 1" = 50'

BROWNS CANYON WASH BRIDGE NO. 53-2182

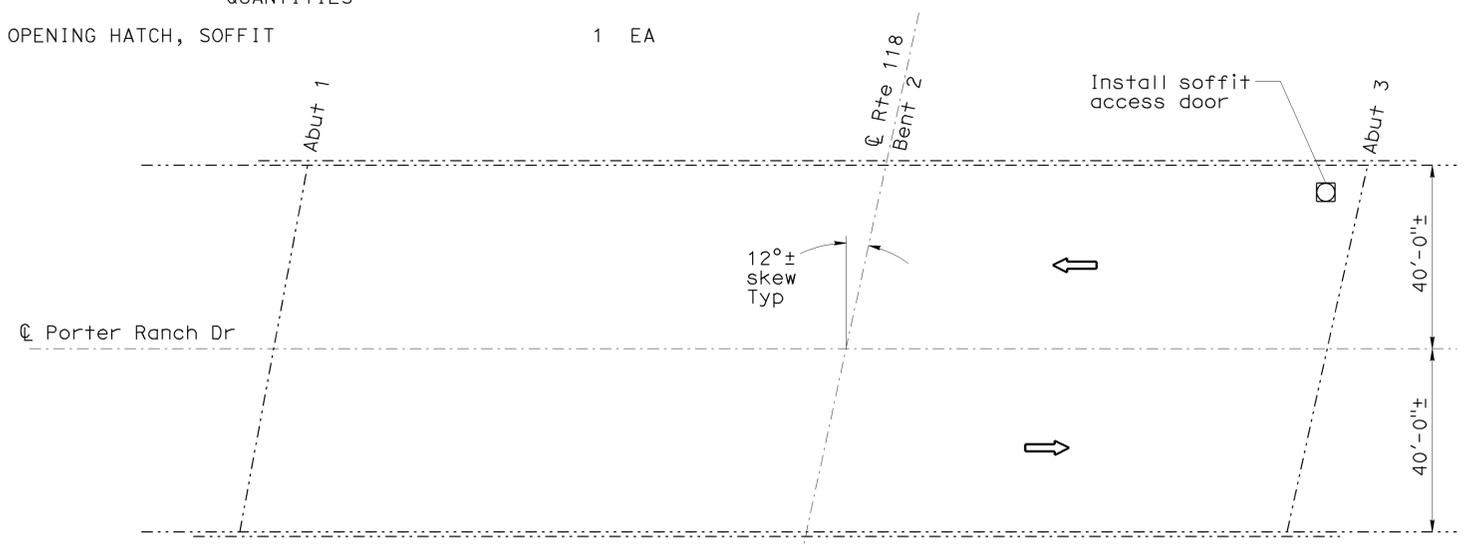
QUANTITIES	
CLEAN BRIDGE DECK	121,100 SQFT
CLEAN BRIDGE DECK DRAIN	2 EA
BRIDGE REMOVAL (PORTION)	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	45 CY
JOINT SEAL ASSEMBLY (MR 3")	386 LF
BAR REINFORCING STEEL (BRIDGE)	6,240 LB
TREAT BRIDGE DECK	121,100 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	1,520 GAL
PUBLIC SAFETY PLAN	LUMP SUM
MISCELLANEOUS METAL (BRIDGE)	1,500 LB

DECK DRAIN CLEANING			
BRIDGE NUMBER	INLET ID	EXISTING DRAINAGE INLET TYPE	APPROX LENGTH OF CLEAN OUT (FT)
53-2182	DD-4	D2	200
	DD-5	D2	200

PORTER RANCH DRIVE BRIDGE NO. 53-2500
 ACCESS OPENING HATCH, SOFFIT 1 EA

LEGEND:

- Indicates existing.
- ➔ Indicates direction of traffic.
- ▨ Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate.
- ☒ Indicates approximate location of cleanout plugged drain pipe.
- ☐ Indicates location of install access opening hatch at existing 2' diameter soffit opening. See "ACCESS OPENING HATCH, SOFFIT DETAILS" sheet.
- ⊖ Indicates location of remove joint seal assembly and install new joint seal assembly, see "JOINT SEAL ASSEMBLY DETAILS" sheet.



PORTER RANCH DRIVE
 Br No. 53-2500, Rte 118, PM R3.86
 1" = 20'

NOTE:
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TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 2,5,14,110,118,134 BRIDGES GENERAL PLAN NO. 13
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang		POST MILE	
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein		VARIES	

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 - UNIT: X PROJECT NUMBER & PHASE: 0700020041 CONTRACT NO.: 4Y8401 DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES SHEET OF 13 24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	37	47

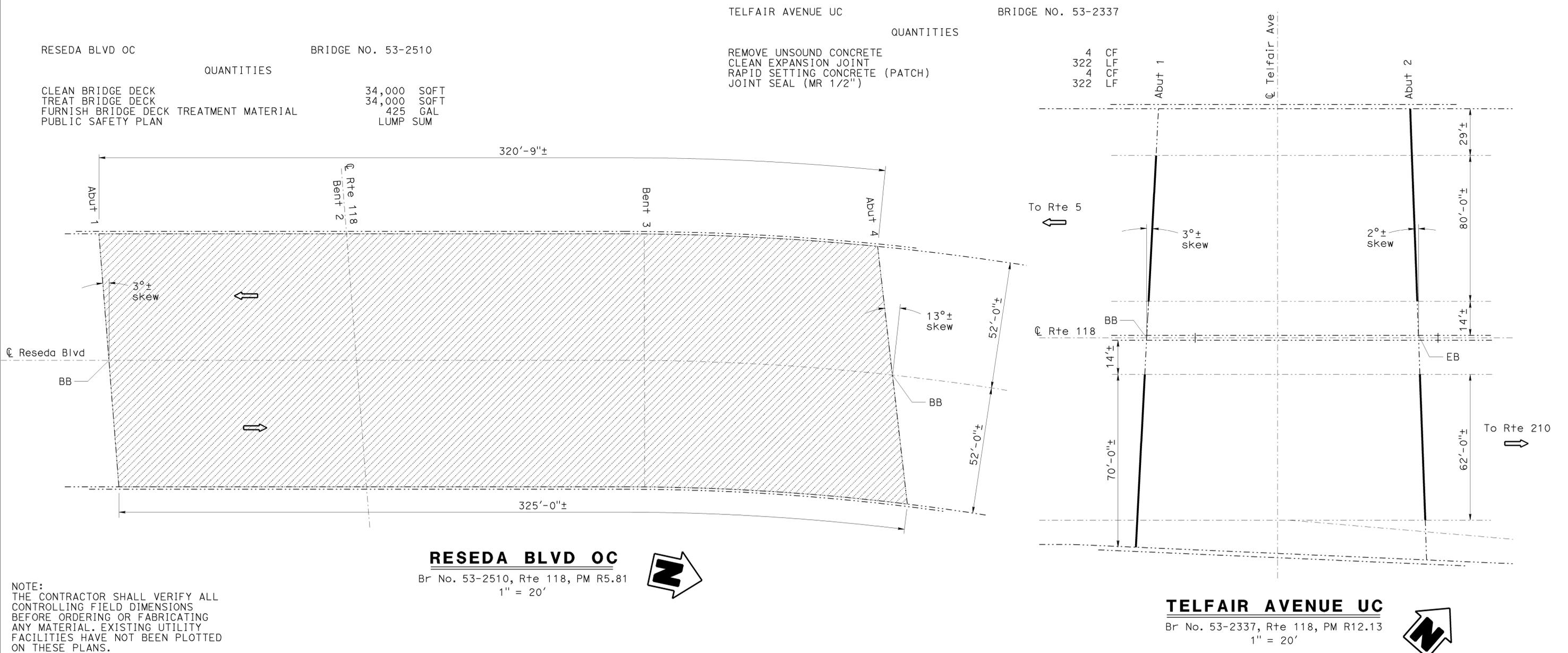
08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

- Indicates existing.
- ➔ Indicates direction of traffic.
- ▨ Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate.
- /— Indicates location of clean expansion joint and placement of new joint seal. Prior to placement of new joint seal repair joint by removing unsound concrete and placing rapid setting concrete patch.

NOTES:

1. For clean expansion joint and joint seal details, see "MISCELLANEOUS DETAILS NO. 1" sheet.
2. For repair joint details, see "MISCELLANEOUS DETAILS NO. 2" sheet.



NOTE:
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TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	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.	Various	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES GENERAL PLAN NO. 14
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang			POST MILE	Varies	
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein			PLANS AND SPECS COMPARED	Dave Klein	

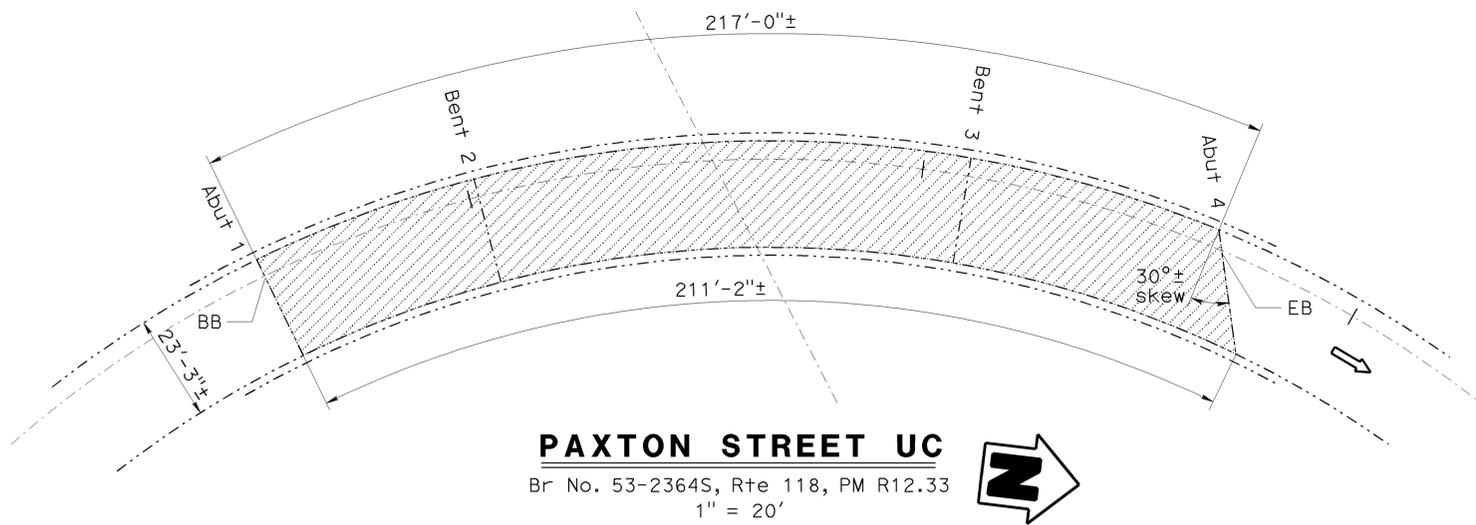
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: X PROJECT NUMBER & PHASE: 0700020041 CONTRACT NO.: 4Y8401 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 2-15-11 SHEET 14 OF 24

USERNAME => s129239 DATE PLOTTED => 24-OCT-2011 TIME PLOTTED => 10:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	38	47

08/25/11
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 PLANS APPROVAL DATE
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LEGEND:

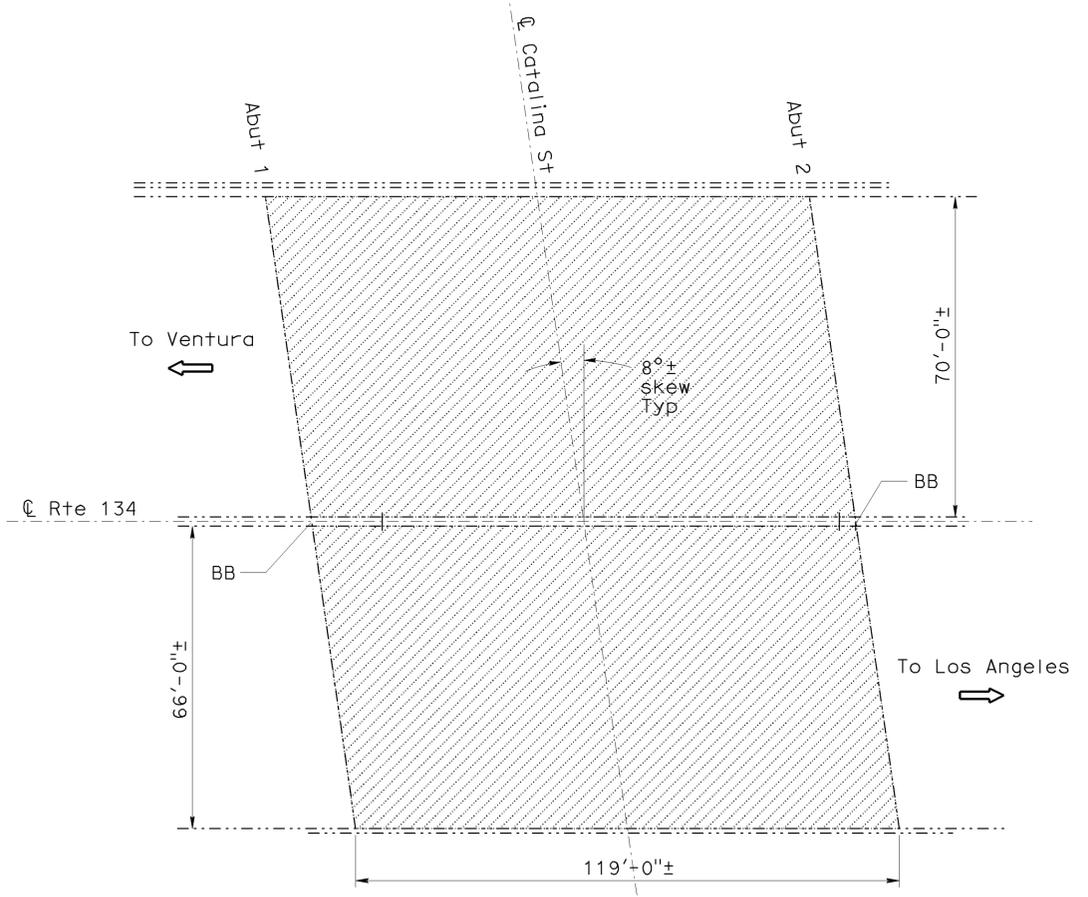
----- Indicates existing.

➔ Indicates direction of traffic.

▨ Indicates limits of clean and treat existing bridge deck with high molecular weight methacrylate.

PAXTON STREET UC BRIDGE NO. 53-2364S

QUANTITIES	
CLEAN BRIDGE DECK	5,000 SQFT
TREAT BRIDGE DECK	5,000 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	65 GAL
PUBLIC SAFETY PLAN	LUMP SUM



BOB HOPE DRIVE UC BRIDGE NO. 53-1282

QUANTITIES	
CLEAN BRIDGE DECK	16,200 SQFT
TREAT BRIDGE DECK	16,200 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	205 GAL
PUBLIC SAFETY PLAN	LUMP SUM

NOTE:
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TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES GENERAL PLAN NO. 15	
	DETAILS	BY Tom Dang	CHECKED Vinh Dang	LAYOUT	BY Tom Dang		CHECKED Gerald Joo		POST MILE
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang	SPECIFICATIONS	BY Dave Klein		CHECKED Dave Klein		Varies

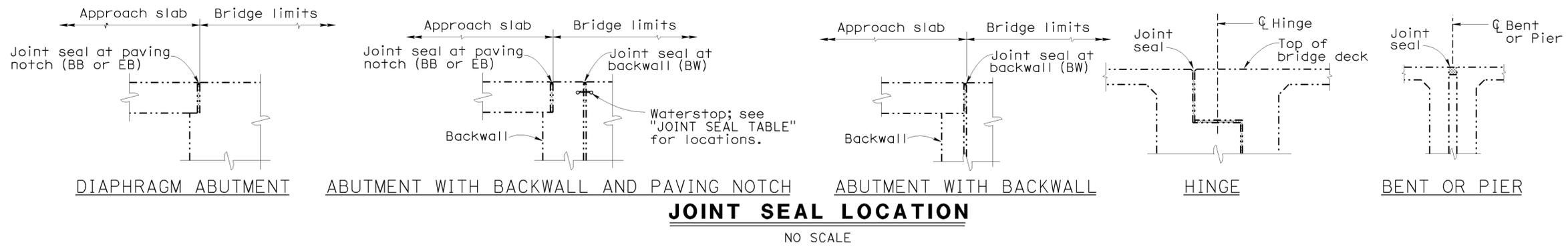
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 - UNIT: X PROJECT NUMBER & PHASE: 0700020041 CONTRACT NO.: 4Y8401 DISREGARD PRINTS BEARING EARLIER REVISION DATES 2-15-11 15 24

USERNAME => s129239 DATE PLOTTED => 24-OCT-2011 TIME PLOTTED => 10:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	39	47

08/25/11
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GERALD D. JOO
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA



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:

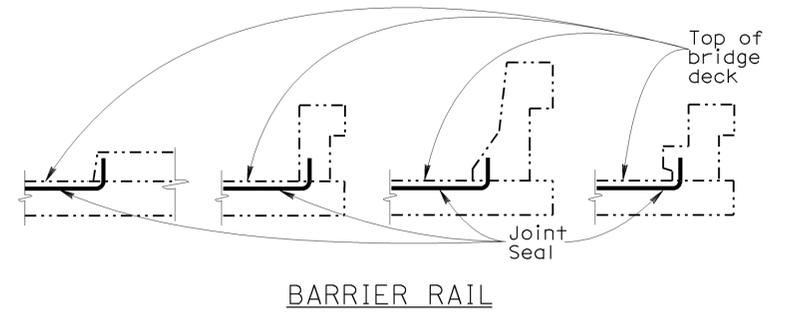
- 1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
- 2) Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.
- 3) W1 shall be the smaller of the values 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 - 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 RSP B6-21 sheet.

JOINT SEAL TABLE									
BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (INCHES)	APPROX LENGTH (FT)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	UN SOUND CONCRETE (CU FT)	RAPID SETTING CONCRETE (PATCH) (CU FT)
		ABUTMENT	JOINT TYPE						
OAK GLEN PLACE OC	53-1414	ABUT 1	PN	1/2	38	NO	12	1	1
		ABUT 3	PN	1/2	28	NO	12	1	1
ECHANDIA OH	53-1333	ABUT 5	PN	1 1/2	57	NO	12	1	1
S5-E10 CONNECTOR OH	53-1332F	ABUT 1	BW	1 1/2	64	NO	12	1	1
		ABUT 1	PN	1 1/2	64	NO	12	1	1
		HINGE 1	DJ	1 1/2	49	YES	12	1	1
		HINGE 2	DJ	1 1/2	64	YES	12	1	1
		ABUT 9	BW	1 1/2	69	NO	12	1	1
MAIN STREET UC	53-1360	ABUT 1	PN	1 1/2	126	NO	12	2	2
		ABUT 2	PN	1 1/2	126	NO	12	2	2
WEST SYLMAR OH	53-1984R	HINGE 3	DJ	1 1/2	60	YES	12	30	30
		HINGE 4	DJ	1 1/2	60	YES	12	1	1
WELDON CANYON OH	53-0849	ABUT 1	PN	1 1/2	80	NO	12	2	2
		ABUT 5	PN	1 1/2	91	NO	12	2	2
SIERRA HIGHWAY SEPARATION	53-0848	ABUT 1	PN	1 1/2	122	NO	12	5	5
		ABUT 4	PN	1 1/2	122	NO	12	5	5
TELFAIR AVENUE UC	53-2337	ABUT 1	PN	1 1/2	151	NO	12	2	2
		ABUT 2	PN	1 1/2	171	NO	12	2	2
BROWNS CANYON WASH	53-2182	ABUT 1	PN	3	193	NO	12	-	-
		ABUT 5	PN	3	193	NO	12	-	-

PN = Paving notch
 BW = Backwall
 DJ = Deck Joint

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



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.

DESIGN BY Gerald Joo CHECKED Vinh Dang DETAILS BY Tom Dang CHECKED Vinh Dang QUANTITIES BY Gerald Joo CHECKED Vinh Dang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES MISCELLANEOUS DETAILS NO. 1	
			Various		
			Varies		
STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)		UNIT: X PROJECT NUMBER & PHASE: 0700020041	CONTRACT NO.: 4Y8401	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES SHEET 16 OF 24

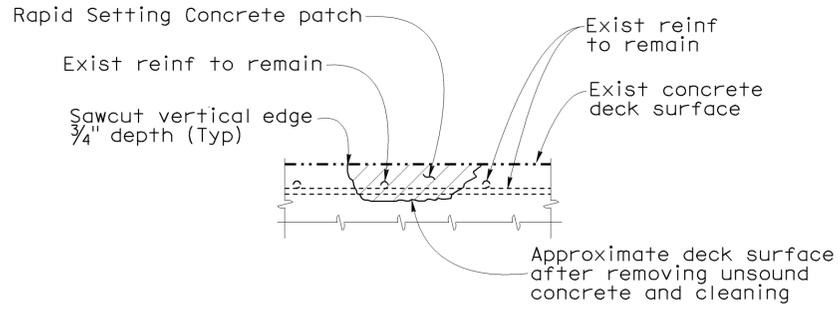
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 -

FILE => 07-4y8401-b-misc01.dgn

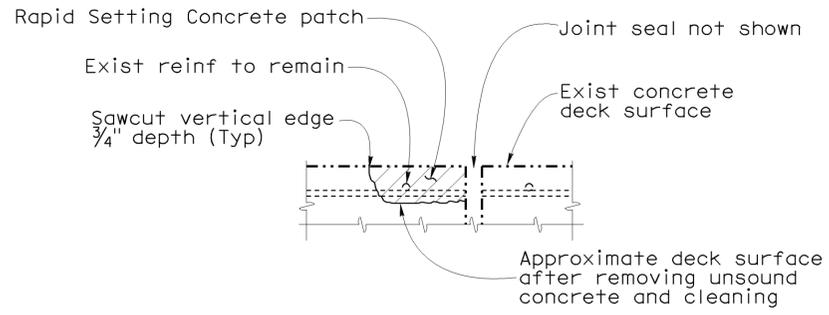
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	40	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 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.

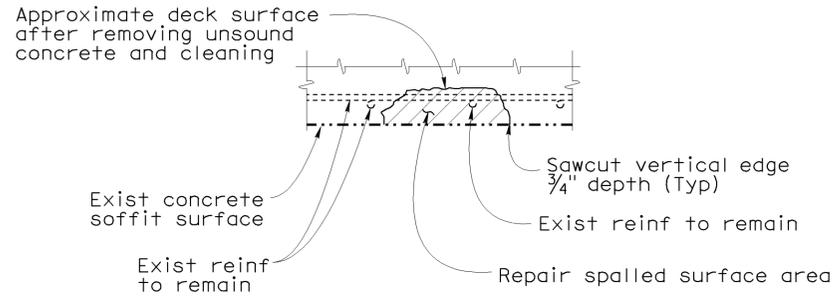


JOINT REPAIR DETAIL

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

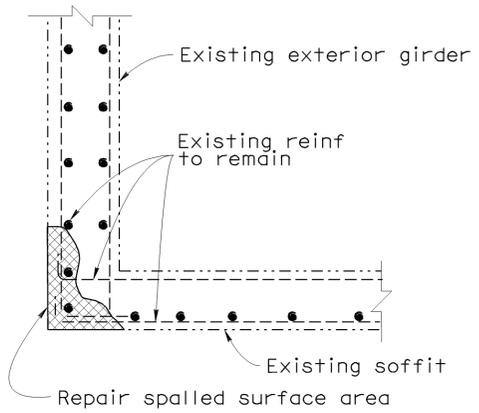
DECK REPAIR NOTES:

- Existing reinforcement shall be 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.



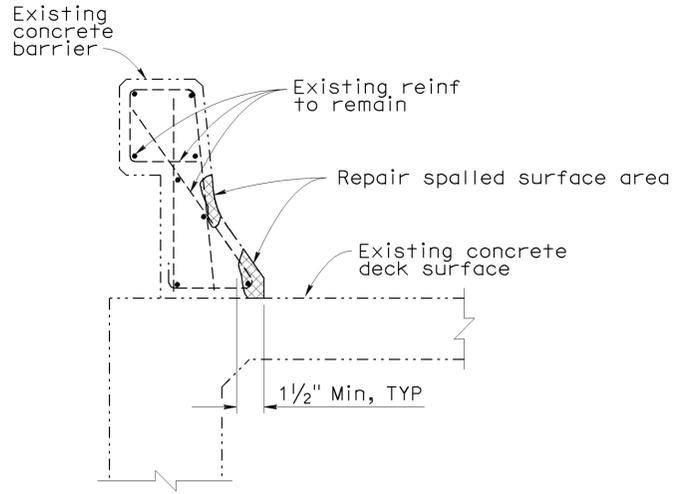
SOFFIT REPAIR DETAIL

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



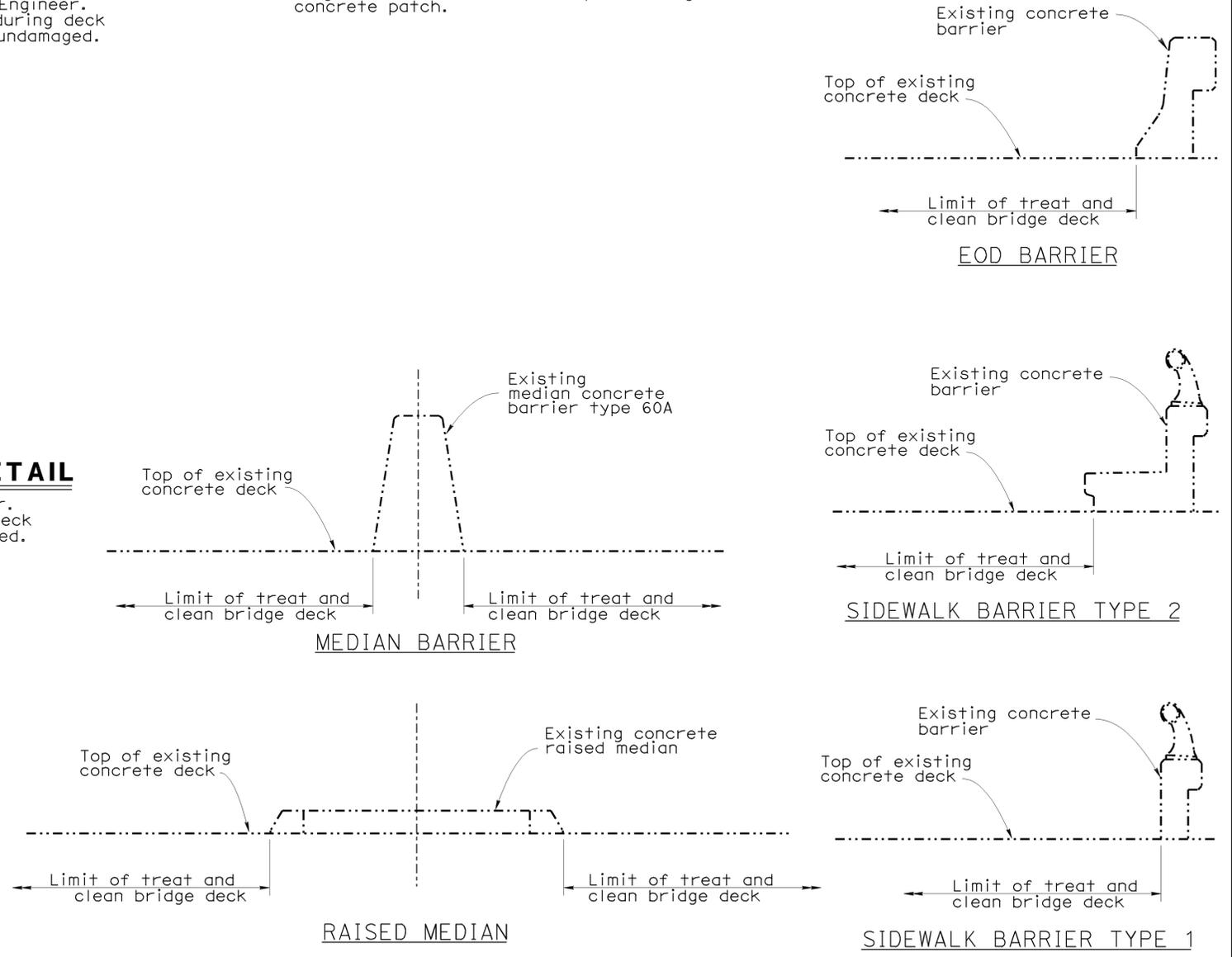
SPALLED SURFACE AREA DETAIL

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.



TYPICAL LIMITS OF DECK WORK

NO SCALE

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DESIGN	BY Gerald Joo	CHECKED Vinh Dang
DETAILS	BY Tom Dang	CHECKED Vinh Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang

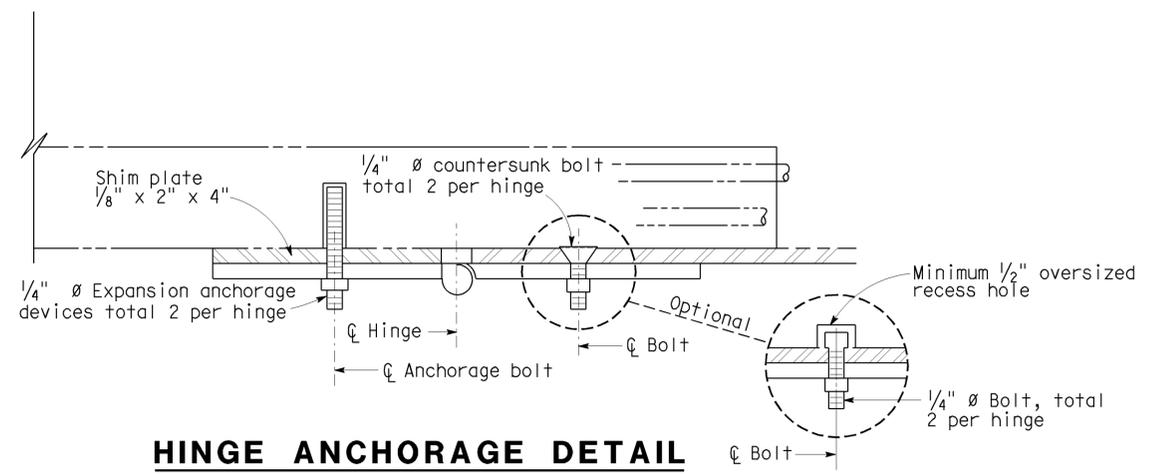
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

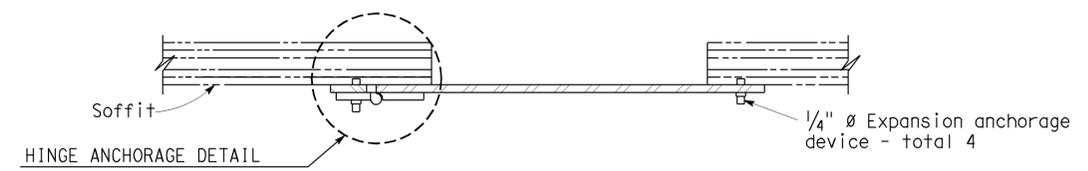
BRIDGE NO.	Various
POST MILE	Varies

ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
MISCELLANEOUS DETAILS NO. 2

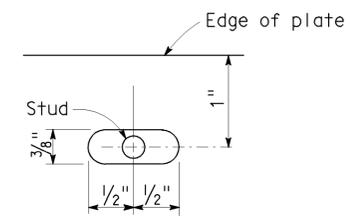
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	41	47
 REGISTERED CIVIL ENGINEER DATE 08/25/11					
1-23-12 PLANS APPROVAL DATE					
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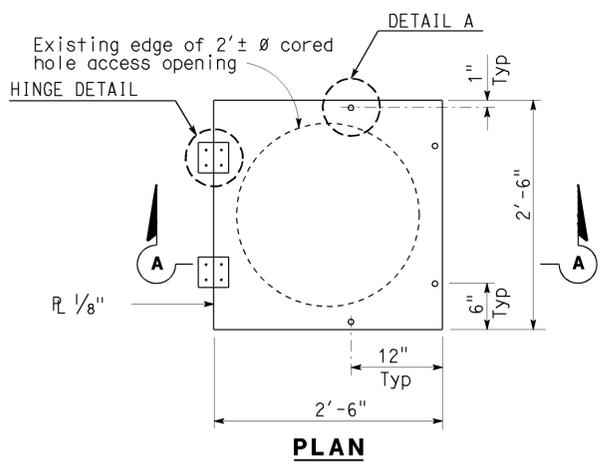
HINGE ANCHORAGE DETAIL



SECTION A-A

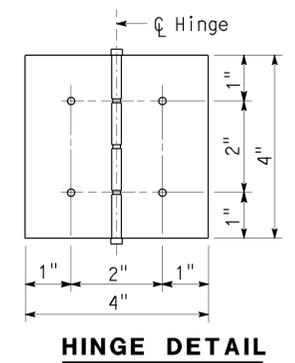


DETAIL A



SOFFIT OPENING HATCH DETAIL

Note: Soffit access door opening direction to be determined by the Engineer



HINGE DETAIL

NOTES:

1. Non-removable pin in hinge.
2. Hinge assembly to be galvanized, brass or stainless steel.
3. Use thread locking system for all hinge nuts.
4. Hinge assembly to be minimum 1/8" thick.

NOTE:
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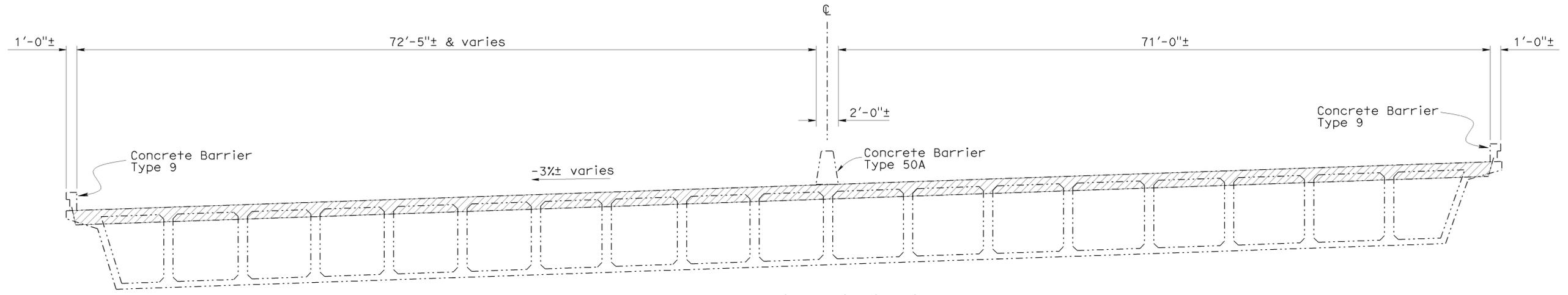
DESIGN BY Gerald Joo CHECKED Vinh Dang DETAILS BY Tom Dang CHECKED Vinh Dang QUANTITIES BY Gerald Joo CHECKED Vinh Dang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. 53-2500 POST MILE Varies	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES ACCESS OPENING HATCH, SOFFIT DETAILS
	PROJECT NUMBER & PHASE: 0700020041 CONTRACT NO.: 4Y8401	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 18 OF 24
	STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: X	FILE => 07-4y8401-c-soffitopen.dgn

LEGEND:

- Indicates existing.
- Indicates new structure.
- Indicates concrete removal limits. Preserve existing reinf.
- Indicates new PCC.

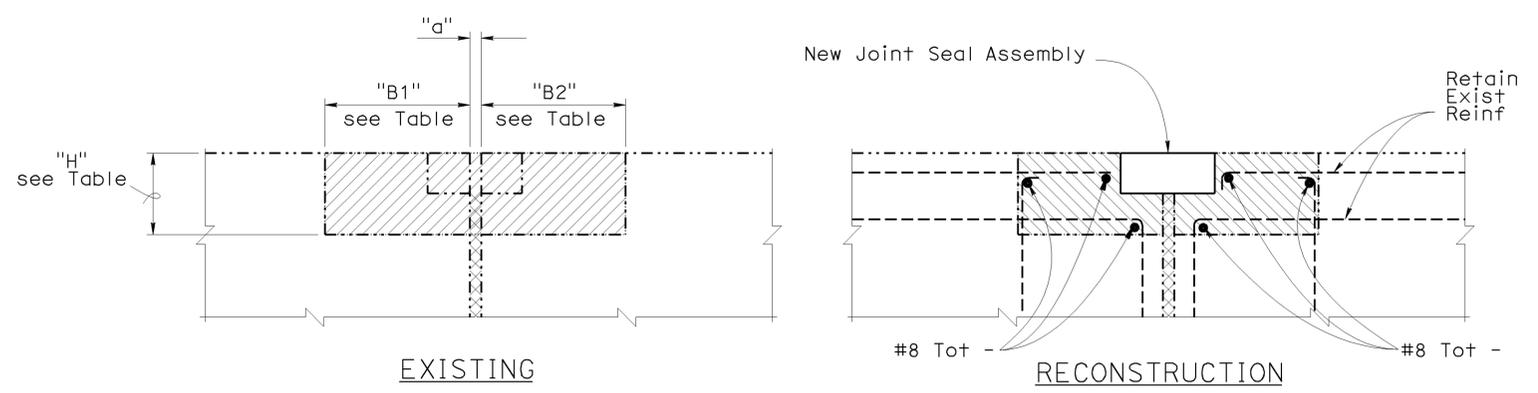
TEMPORARY DECKING DESIGN LOADING:

1. Moment demand per foot = 3800 lbs-ft/ft
2. For steel plate systems:
 - a. anchor bolt shear per foot = 2700 lbs/ft
 - b. anchor bolt tension = 4225 lbs
 - c. maximum anchor bolt spacing = 1.0 ft



TYPICAL SECTION

Br No. 53-2182
NO SCALE



JOINT SEAL ASSEMBLY REPLACEMENT

NO SCALE

NOTE:
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JOINT SEAL ASSEMBLY DIMENSIONS							
BRIDGE NUMBER	JOINT SEAL LOCATION	"B1"	"B2"	"H"	"a"		
					winter	Fall/Spring	Summer
53-2182	Abut 1	16"	16"	1'-2"	3"	2/4"	1/2"
	Abut 5	16"	16"	1'-2"	3"	2/4"	1/2"

DESIGN	BY Gerald Joo	CHECKED Vinh Dang
DETAILS	BY Tom Dang	CHECKED Vinh Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang

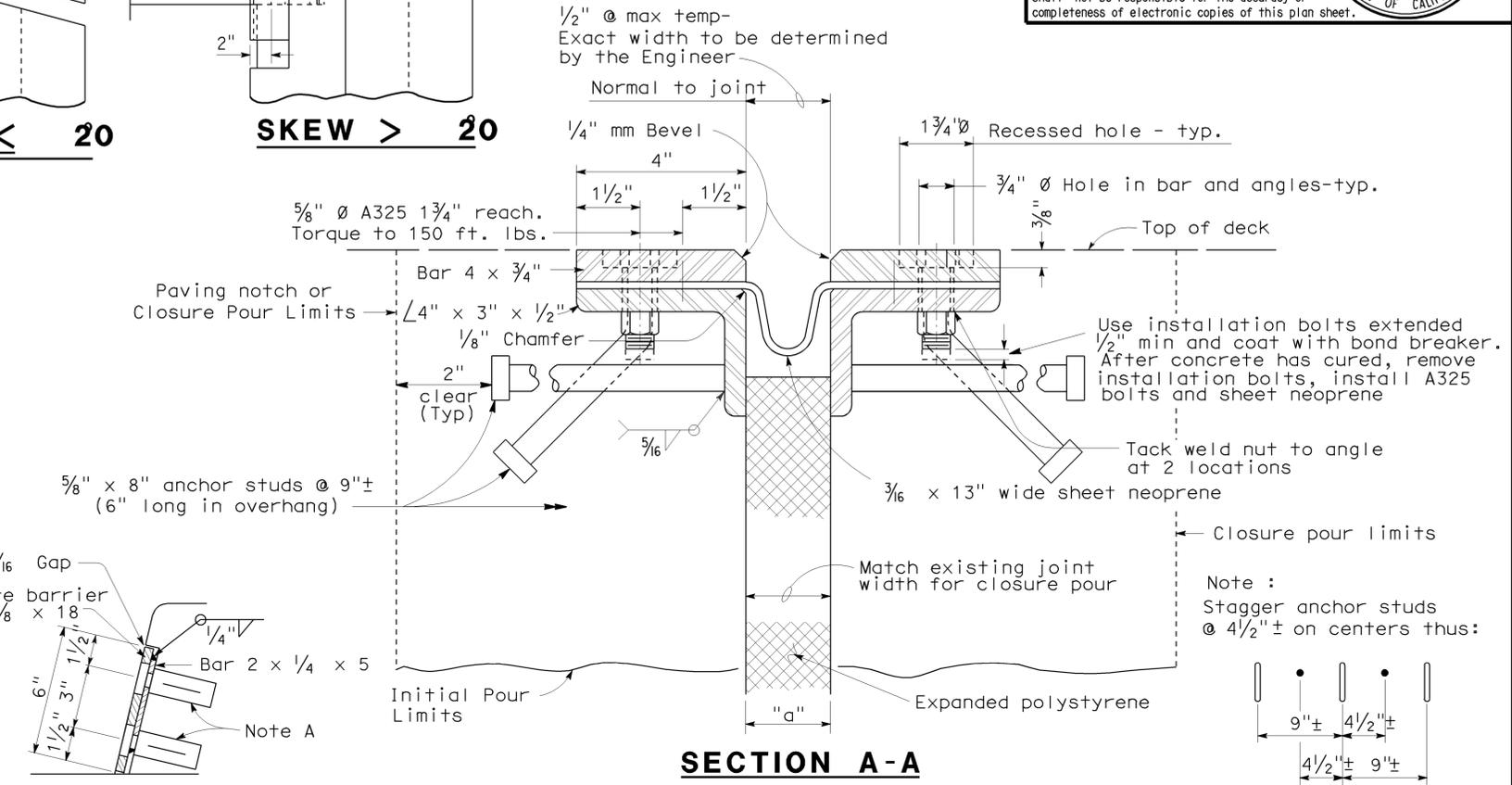
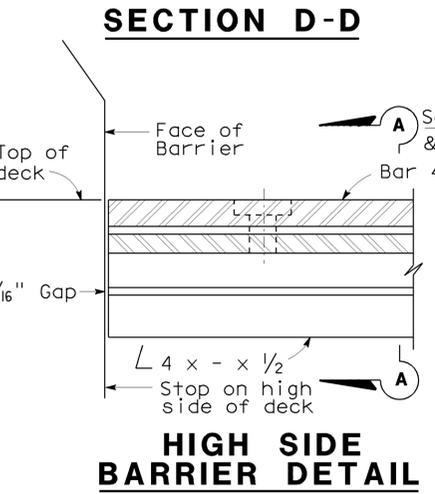
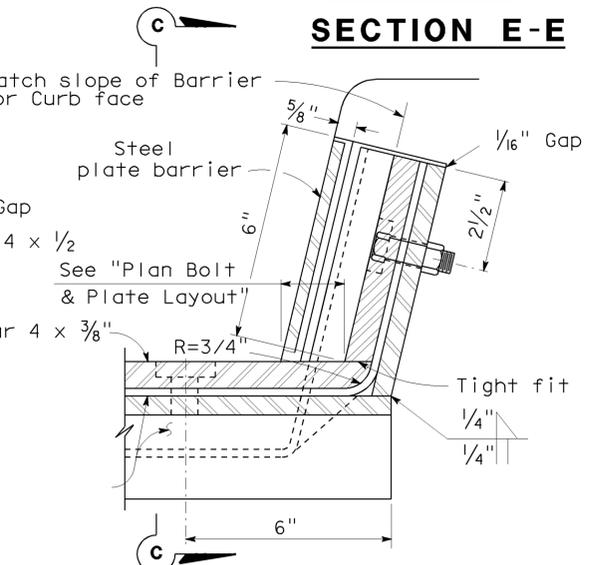
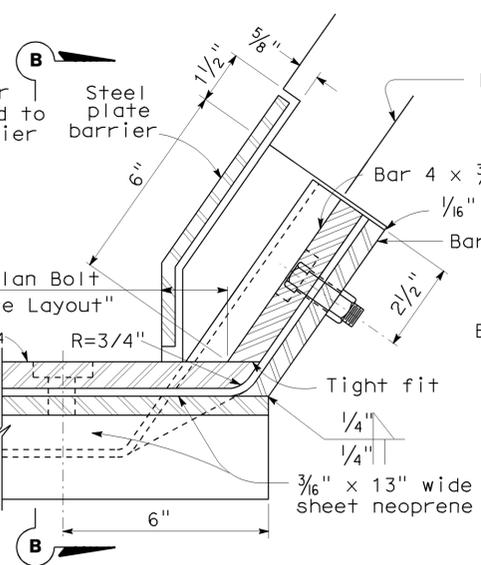
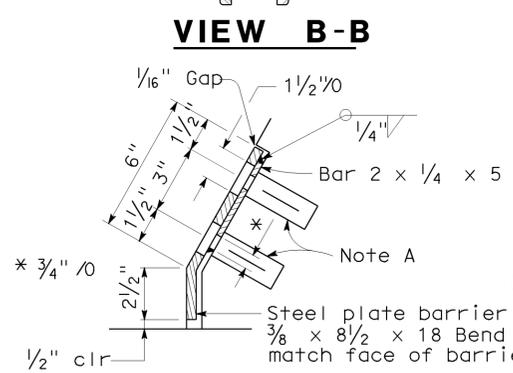
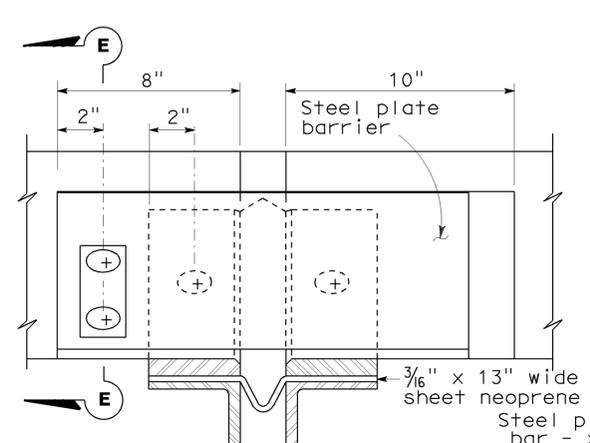
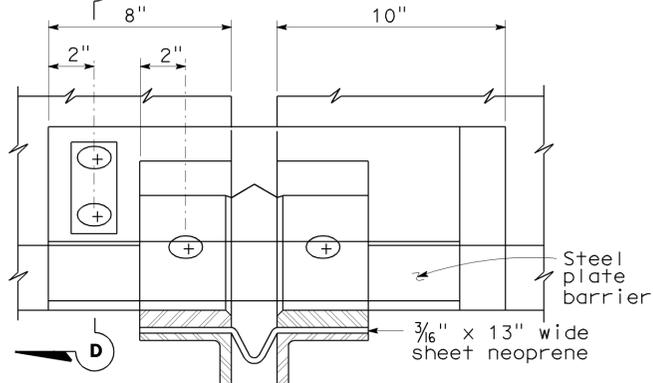
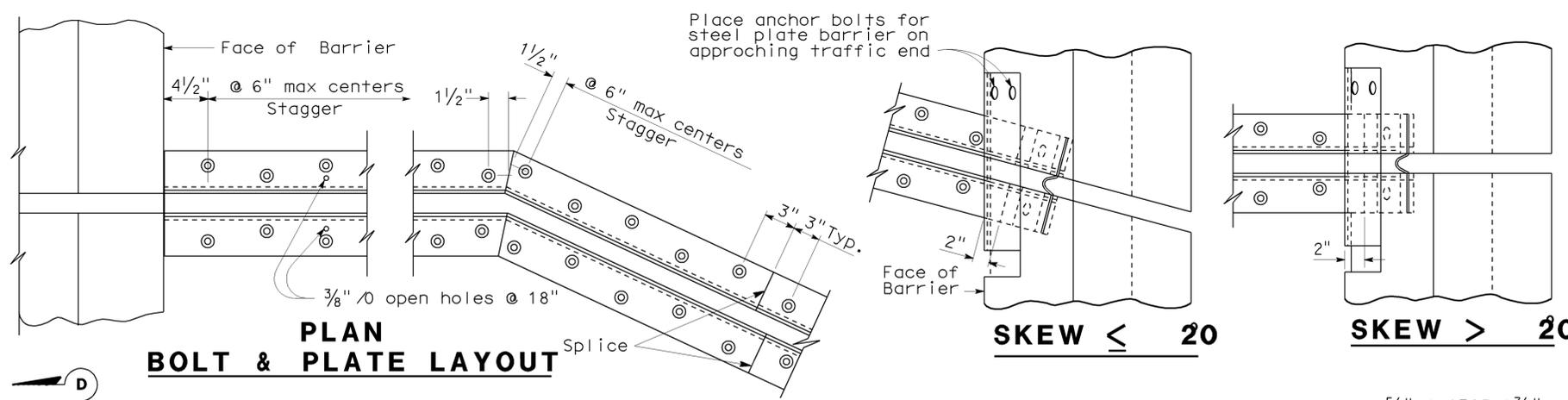
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. 53-2182
POST MILE Varies
ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
JOINT SEAL ASSEMBLY DETAILS

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	43	47

08/25/11
 REGISTERED ENGINEER - CIVIL
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA



NOTES: Full penetration butt welds may be substituted for fillet welds on all anchor studs. Alternate types of anchor studs may be permitted subject to the approval by the Engineer. Joint seal assembly to be used in conjunction with closure pour. (See other sheets for limits). Closure pour shall not be placed until final deck surface is within the tolerances specified. Use joint at crown of roadway, at any change in traverse slope in deck and at changes in horizontal direction. Place other joints at or near lanes. All metal parts to be painted or galvanized after fabrication. Sheet neoprene shall be fabricated in one continuous piece or joints shall be vulcanized. Neoprene shall be fabricated to bend around corners. Holes in neoprene sheets shall be drilled or punched so that the neoprene is not distorted at the time of installation.

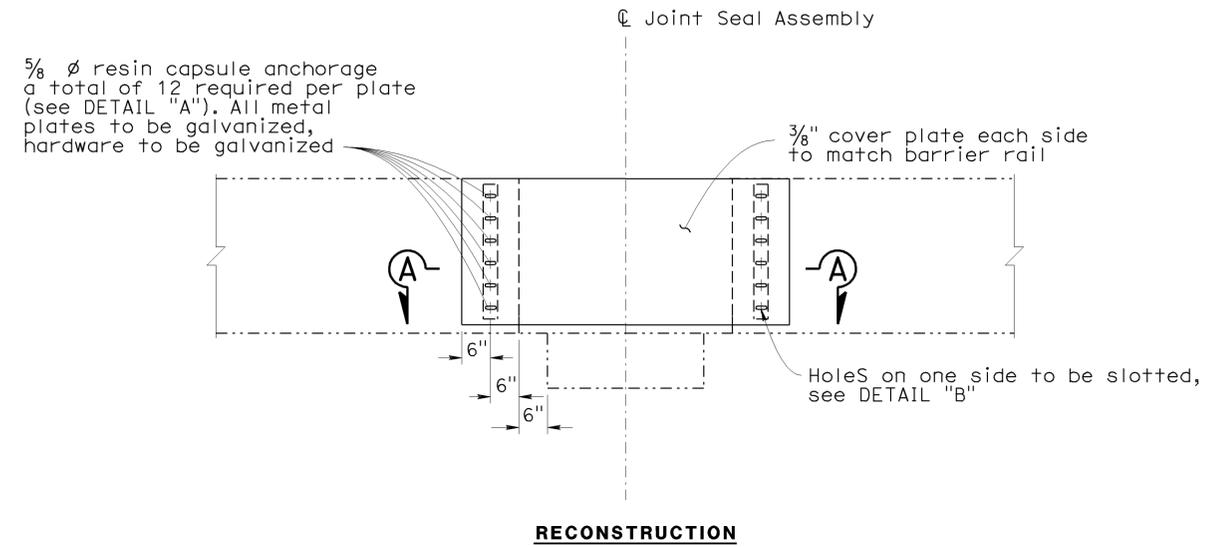
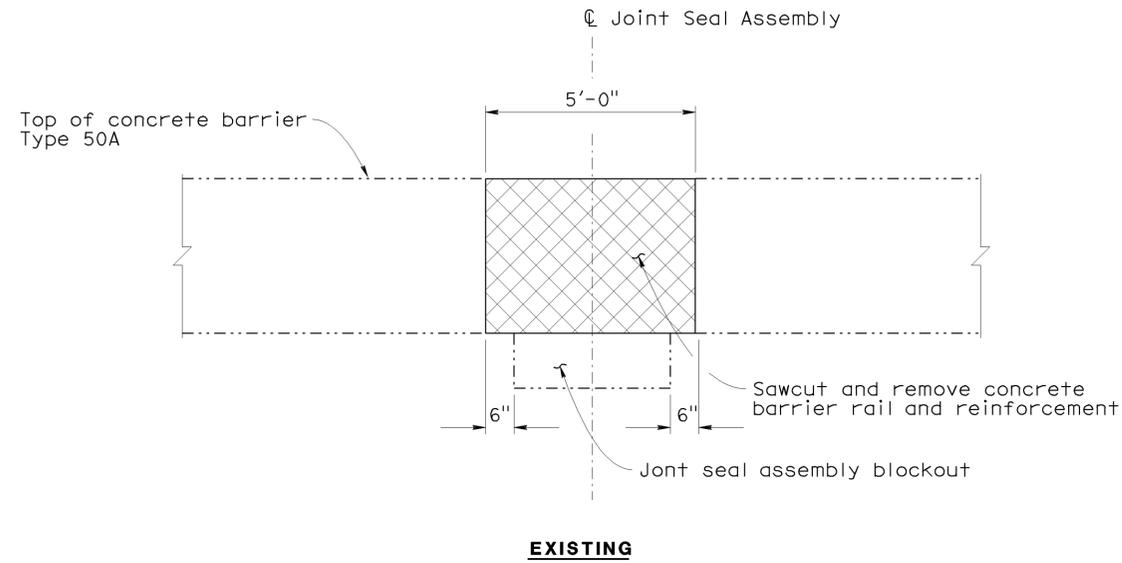
NOTE A
Insert assembly or expansion anchorage for 5/8" x 1 3/4" A325 bolt.

NOTE B
Use the sidewalk Detail at all sidewalk joints. Use the Barrier Detail at both sides if the roadway is crowned or if the difference in elevation between the ends of the seal is 0.5' or less.

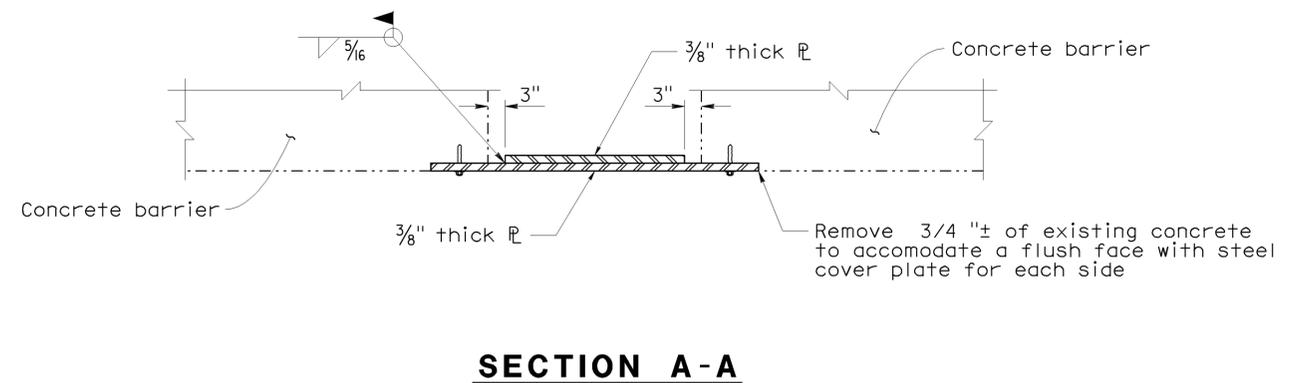
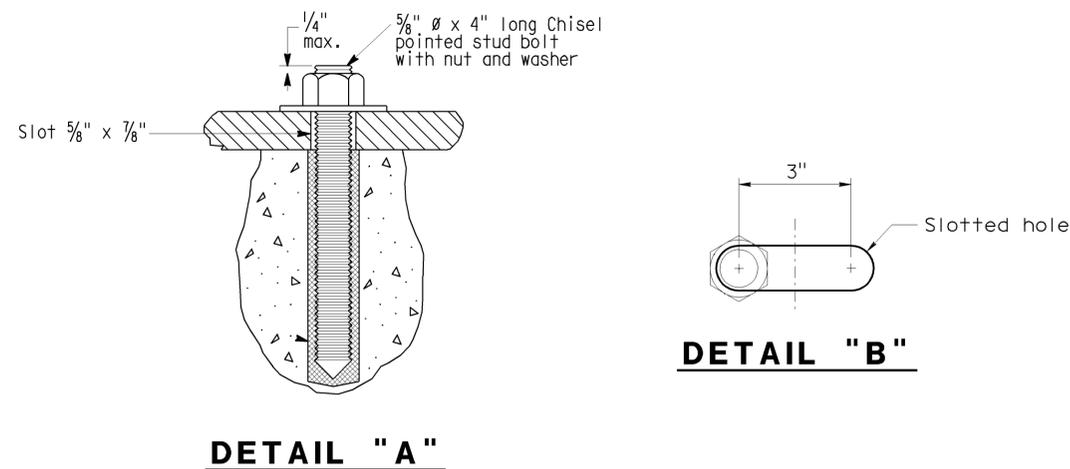
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	44	47
 REGISTERED CIVIL ENGINEER DATE 08/25/11					
1-23-12 PLANS APPROVAL DATE					
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NOTES:

1. Resin capsule anchorage is subject to approval of the Engineer. Install procedures shall comply with manufacturer's instructions.



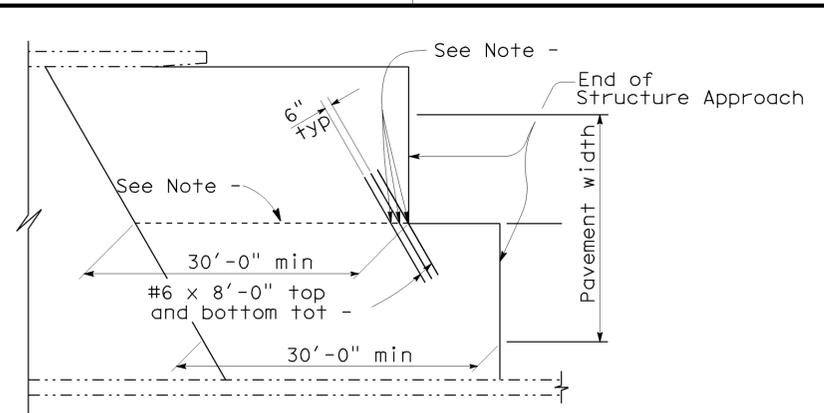
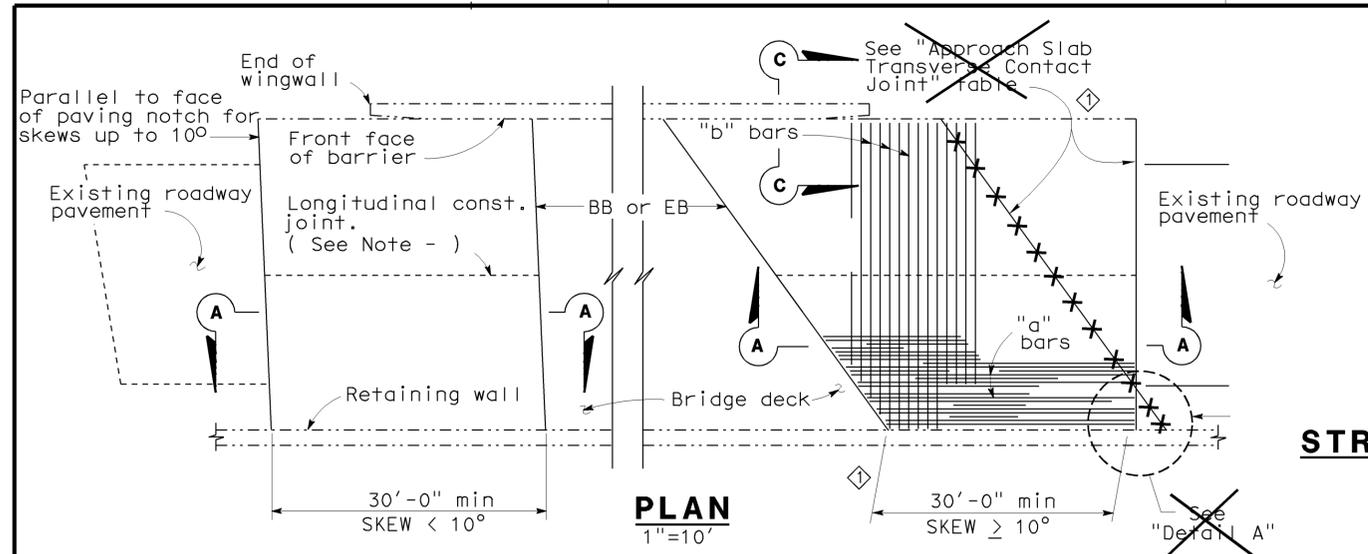
ELEVATION



NOTE:
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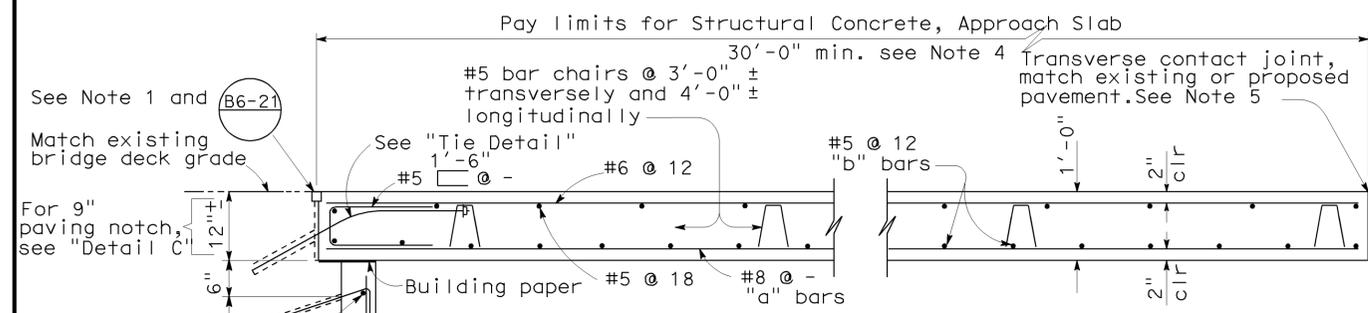
NO SCALE

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Gerald Joo	CHECKED Vinh Dang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
	DETAILS	BY Tom Dang	CHECKED Vinh Dang			53-2500	
	QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang			Varies	
				UNIT: X	PROJECT NUMBER & PHASE: 0700020041	CONTRACT NO.: 4Y8401	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 -	REVISION DATES	SHEET 21 OF 24



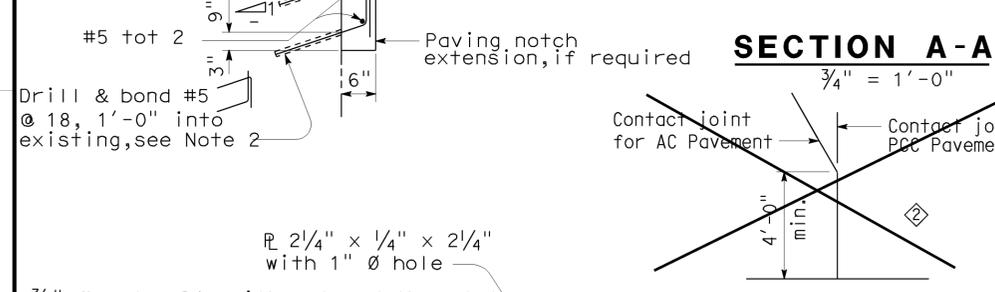
STRUCTURE APPROACH - END STAGGER DETAIL

APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
10° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 24' to 36' apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line

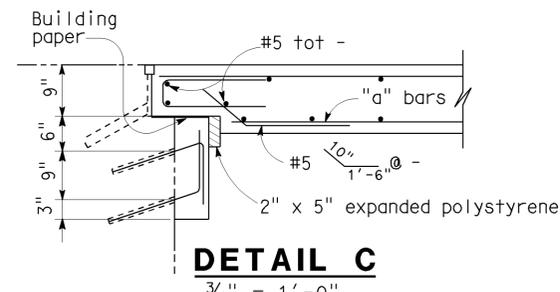


SECTION A-A

SECTION C-C



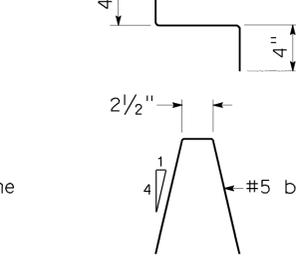
DETAIL A



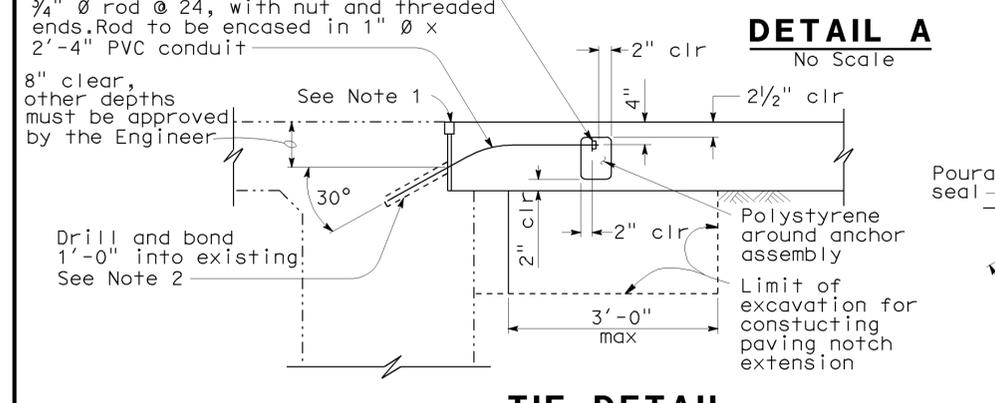
DETAIL C

SECTION C-C

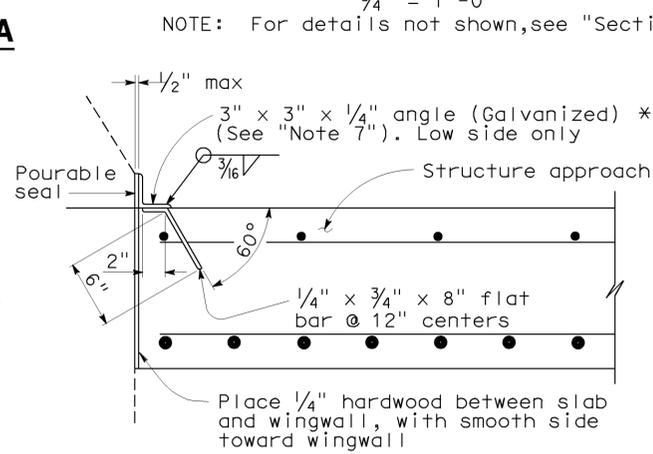
BAR CHAIR DETAIL



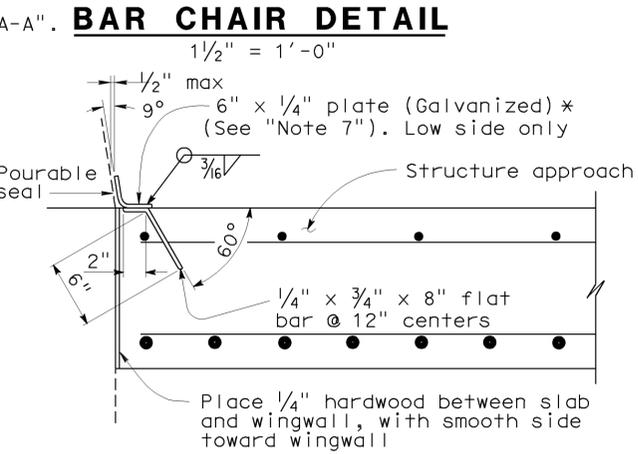
BAR CHAIR DETAIL



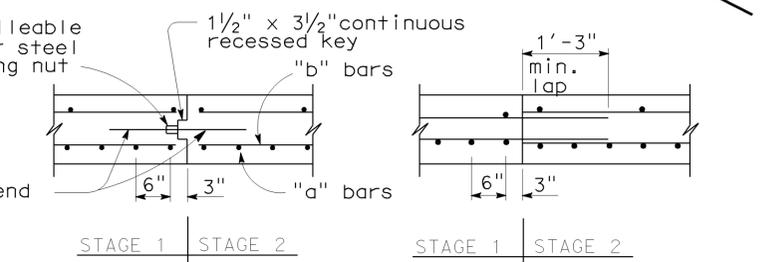
TIE DETAIL



DETAIL B



*(TO BE USED WITH TYPE 25 OR TYPE 27 CONCRETE BARRIER) *(TO BE USED WITH TYPE 732 OR TYPE 736 CONCRETE BARRIER)



LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES

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

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

STANDARD DRAWING			
RELEASE DATE	DESIGN BY	CHECKED BY	RELEASED BY
3/14/05	M. TRAFFALIS	E. THORKILDSEN	
FILE NO.	DETAILS BY	CHECKED BY	
xs3-140e	R. YEE	E. THORKILDSEN	
	SUBMITTED BY	DRAWING DATE	OFFICE CHIEF
	M. HA	8/92	

- ◇ MODIFIED
- ◇ DELETED

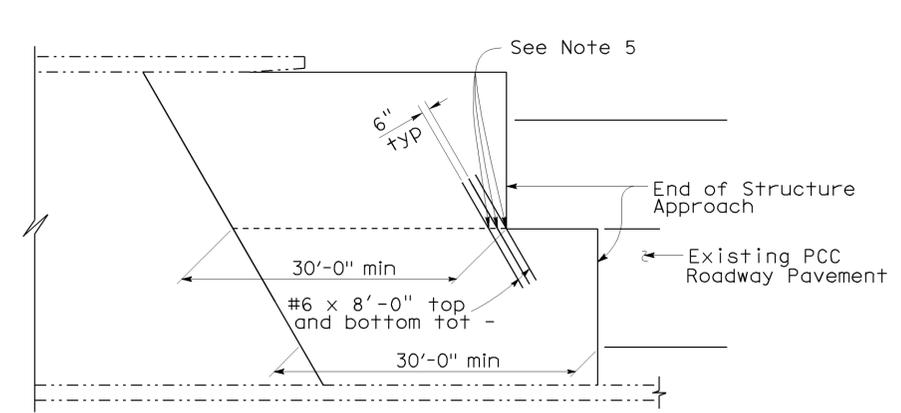
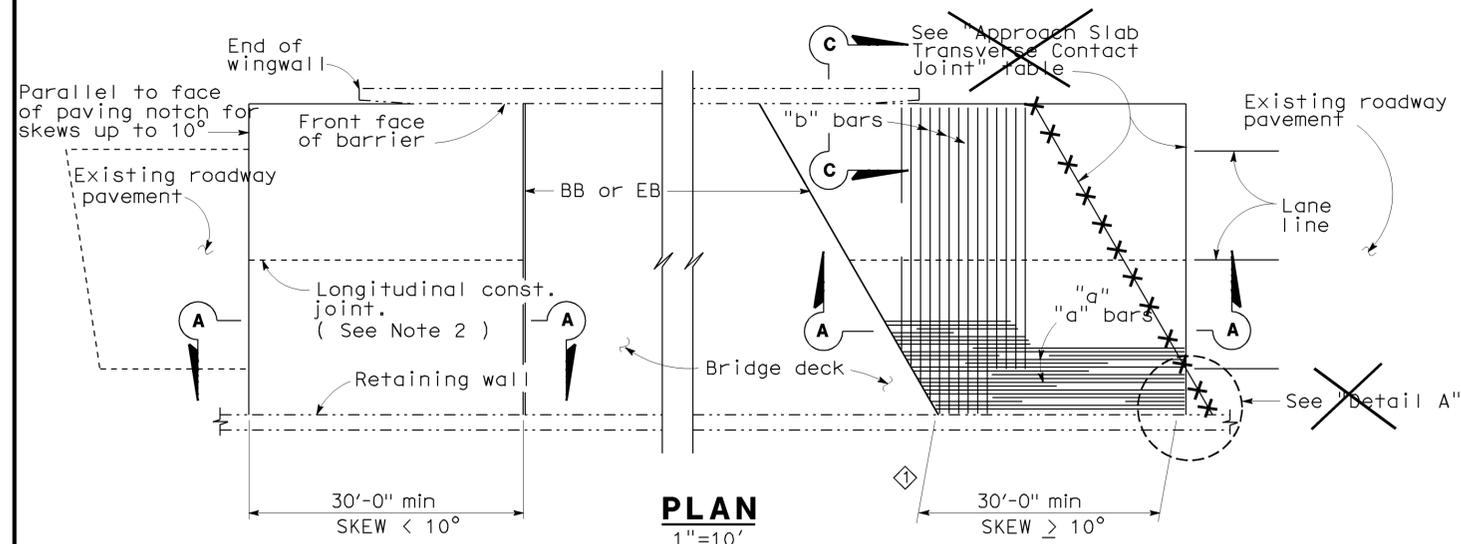
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES

BRIDGE NO. Various
MILE POST Varies
ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
STRUCTURE APPROACH TYPE R(30D)

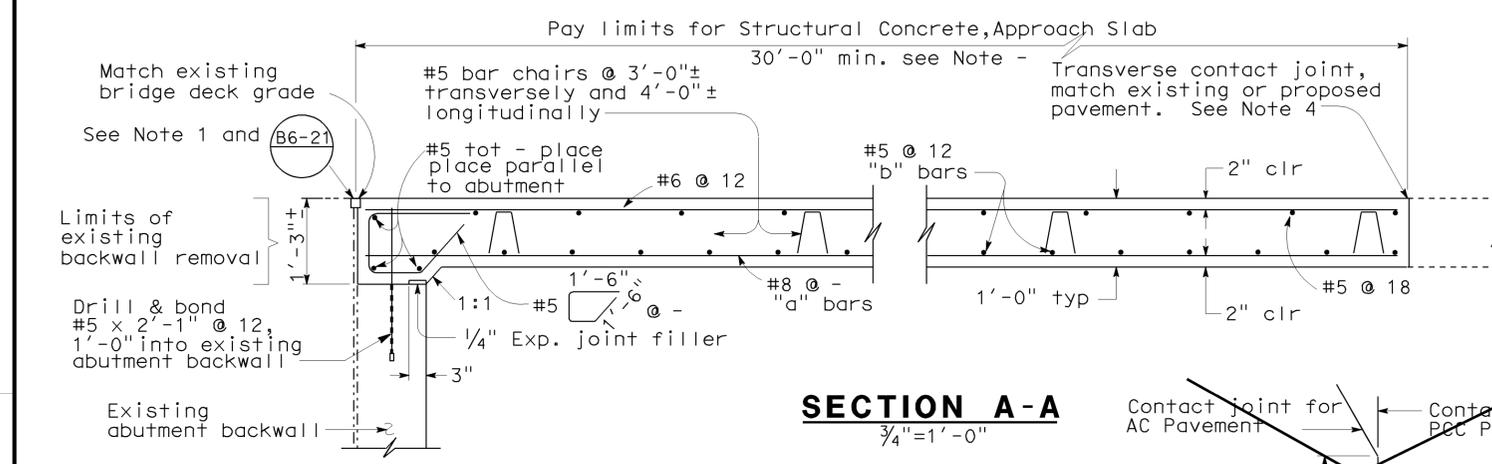
DIST.	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	46	47

08/25/11
 REGISTERED ENGINEER - CIVIL
 No. C65380
 Exp. 09/30/11
 CIVIL
 STATE OF CALIFORNIA

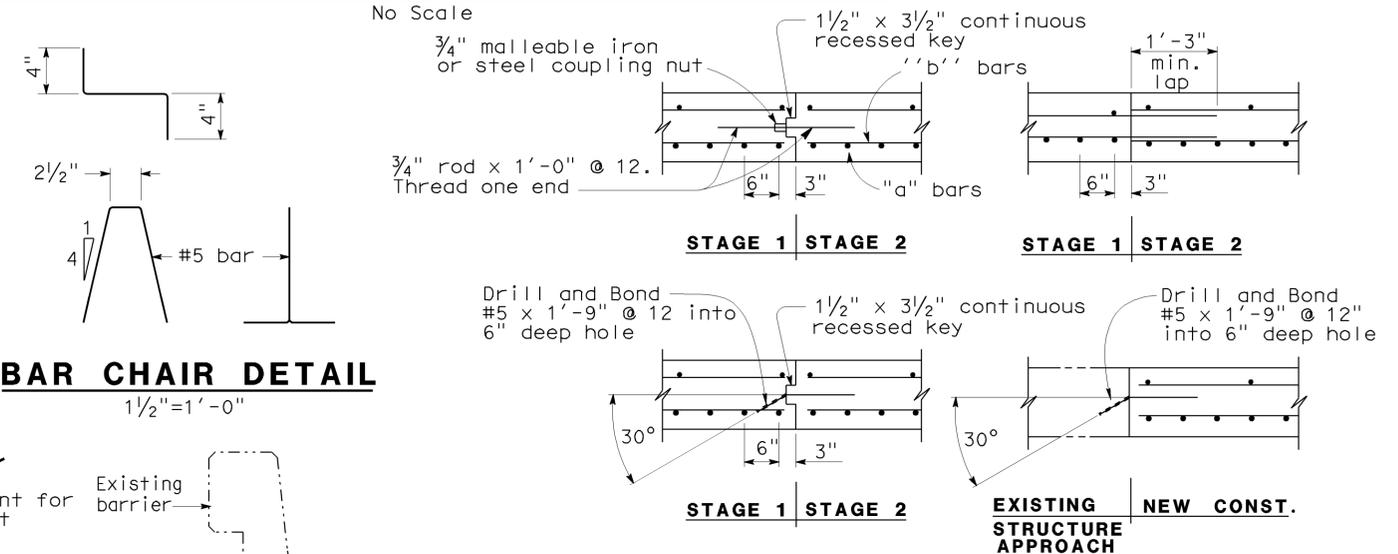
1-23-12
 PLANS APPROVAL DATE
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STRUCTURE APPROACH - END STAGGER DETAIL

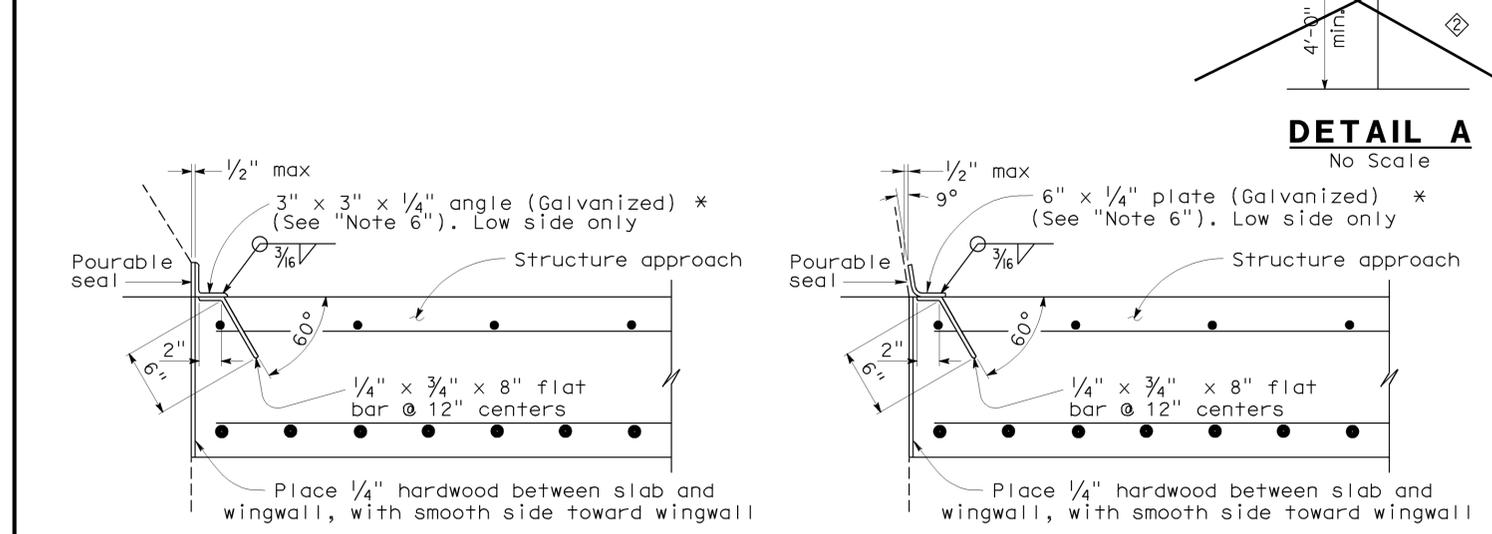


SECTION A-A



BAR CHAIR DETAIL

LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES



DETAIL B

SECTION C-C

APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
10° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 24' to 36' apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line

NOTES:

- Sealed joint, for M.R. 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 Standard Plan P10.
- Couplers are required for stage construction.
- End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable.

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

STANDARD DRAWING			
RELEASE DATE: 3/14/05	DESIGN BY: M. TRAFFALIS	CHECKED: E. THORKILDSEN	RELEASED BY:
FILE NO.: xs3-130e	DETAILS BY: R. YEE	CHECKED: E. THORKILDSEN	
	SUBMITTED BY: M. HA	DRAWING DATE: 8/92	OFFICE CHIEF:

- ◇ MODIFIED
- ◇ DELETED

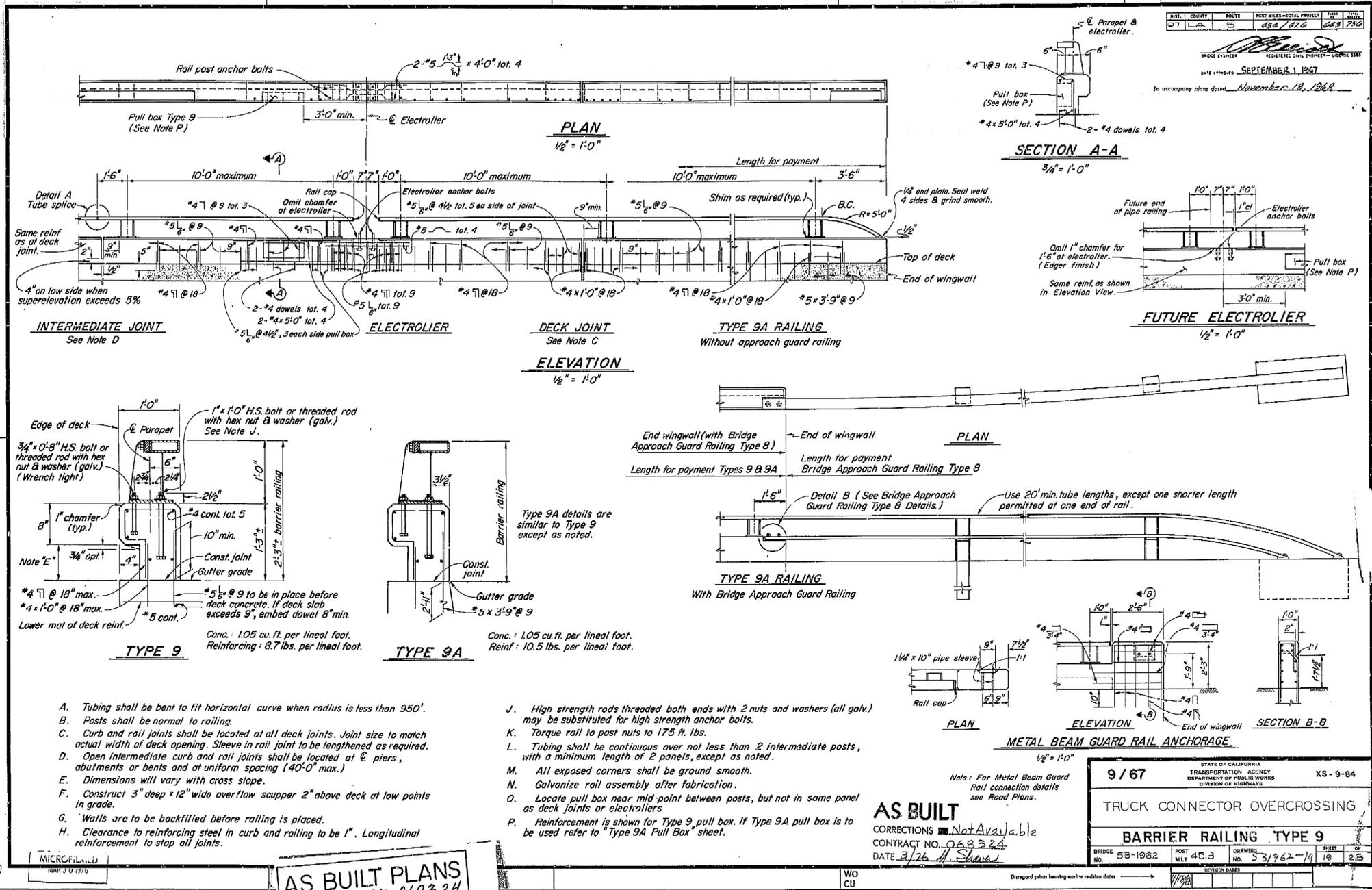
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

BRIDGE NO. Various
 MILE POST Varies
ROUTE 2, 5, 14, 110, 118, 134 BRIDGES
STRUCTURE APPROACH TYPE R(30S)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	2,5,14,110, 118,134	Var	47	47

08/25/11
 REGISTERED CIVIL ENGINEER DATE
 1-23-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/11
 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.



- A. Tubing shall be bent to fit horizontal curve when radius is less than 950'.
- B. Posts shall be normal to railing.
- C. Curb and rail joints shall be located at all deck joints. Joint size to match actual width of deck opening. Sleeve in rail joint to be lengthened as required.
- D. Open intermediate curb and rail joints shall be located at piers, abutments or bents and at uniform spacing (40'-0" max.).
- E. Dimensions will vary with cross slope.
- F. Construct 3" deep x 12" wide overflow scupper 2" above deck at low points in grade.
- G. Walls are to be backfilled before railing is placed.
- H. Clearance to reinforcing steel in curb and railing to be 1". Longitudinal reinforcement to stop all joints.
- I. High strength rods threaded both ends with 2 nuts and washers (all galv.) may be substituted for high strength anchor bolts.
- J. Torque rail to post nuts to 175 ft. lbs.
- K. Tubing shall be continuous over not less than 2 intermediate posts, with a minimum length of 2 panels, except as noted.
- L. All exposed corners shall be ground smooth.
- M. Galvanize rail assembly after fabrication.
- N. Locate pull box near mid-point between posts, but not in same panel as deck joints or electroliers.
- O. Reinforcement is shown for Type 9 pull box. If Type 9A pull box is to be used refer to "Type 9A Pull Box" sheet.

AS BUILT PLANS
 Contract No. 07-068324
 Date Completed
 Document No. 10007347

9/67	STATE OF CALIFORNIA TRANSPORTATION AGENCY DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS	XS-9-84
TRUCK CONNECTOR OVERCROSSING		
BARRIER RAILING TYPE 9		
BRIDGE NO. 53-1962	POST MILE 45.3	DRAWING NO. 53/762-19
SHEET 10 OF 23		

I HEREBY CERTIFY THAT THIS IS A TRUE AND ACCURATE COPY OF THE ABOVE DOCUMENT TAKEN UNDER MY DIRECTION AND CONTROL ON THIS DATE IN SINGAPORE, CALIFORNIA PURSUANT TO AUTHORIZATION BY THE DIRECTOR OF TRANSPORTATION.

DATE: 3/26/11
 BY: [Signature]
 TITLE: [Title]

FOR INFORMATIONAL USE ONLY

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DESIGN	BY Gerald Joo	CHECKED Vinh Dang
DETAILS	BY Tom Dang	CHECKED Vinh Dang
QUANTITIES	BY Gerald Joo	CHECKED Vinh Dang

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. 53-1962F
 POST MILE Varies
ROUTE 2,5,14,110,118,134 BRIDGES
BARRIER RAILING TYPE 9 (AS-BUILT)