

INDEX OF PLANS

SHEET No.	DISCRIPTION
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2	CONSTRUCTION AREA SIGNS
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10-16	NEW AND REVISED STANDARD PLANS

STRUCTURE PLANS

17-26 ROUTE 10, 164 BRIDGES

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

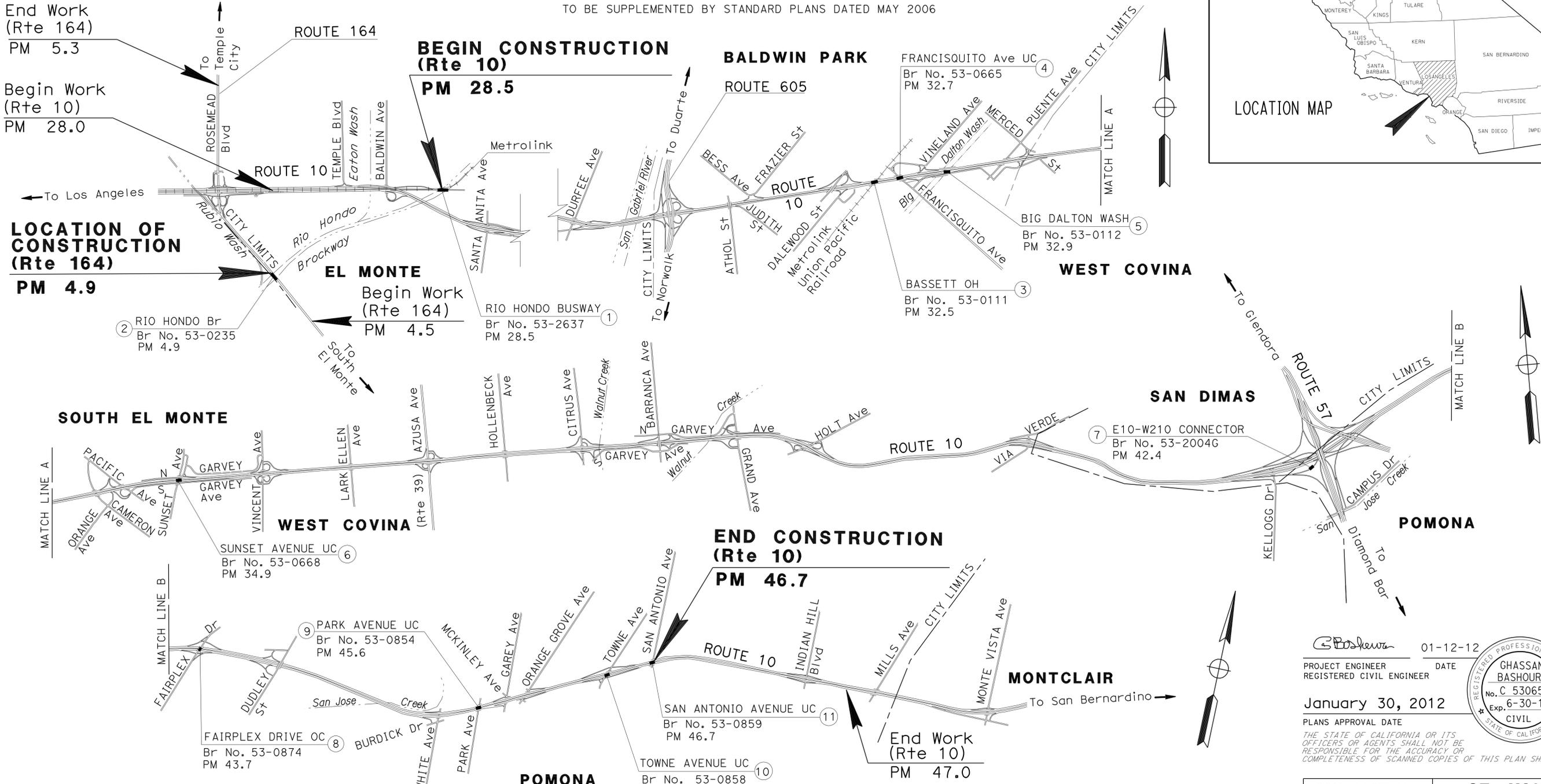
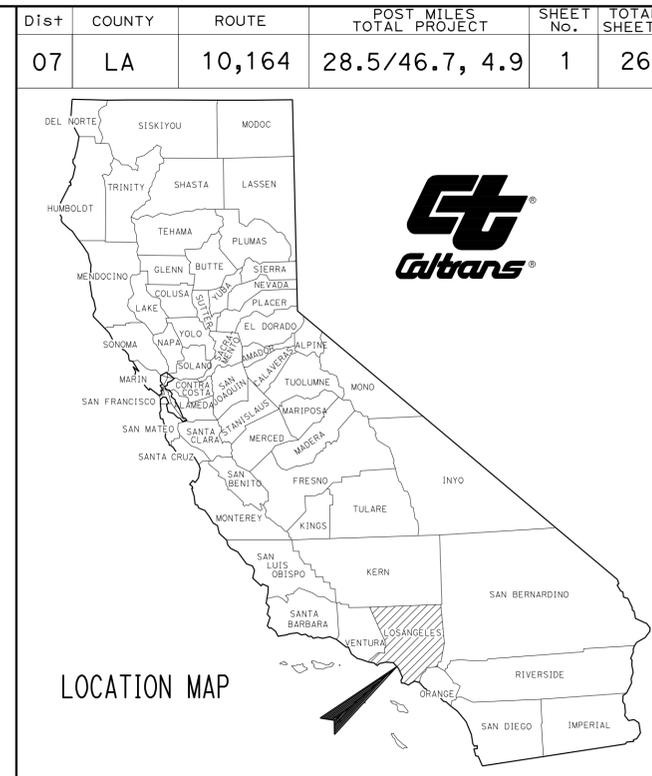
End Work (Rte 164)
PM 5.3

Begin Work (Rte 10)
PM 28.0

LOCATION OF CONSTRUCTION (Rte 164)
PM 4.9

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN LOS ANGELES COUNTY
AT VARIOUS LOCATIONS
ON ROUTE 10 FROM RIO HONDO BUSWAY
TO SAN ANTONIO AVENUE UNDERCROSSING
AND ON ROUTE 164 AT RIO HONDO BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT MANAGER	CHRISTIAN SAM
DESIGN ENGINEER	LARRY WIERING

PROJECT ENGINEER: *G. Bashoura* DATE: 01-12-12
 REGISTERED CIVIL ENGINEER
 Ghassan BASHOURA
 No. C 53065
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

January 30, 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.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "BID BOOK"

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	2	26

REGISTERED CIVIL ENGINEER DATE 01-12-12
 G. Bashoura
 01-30-12
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

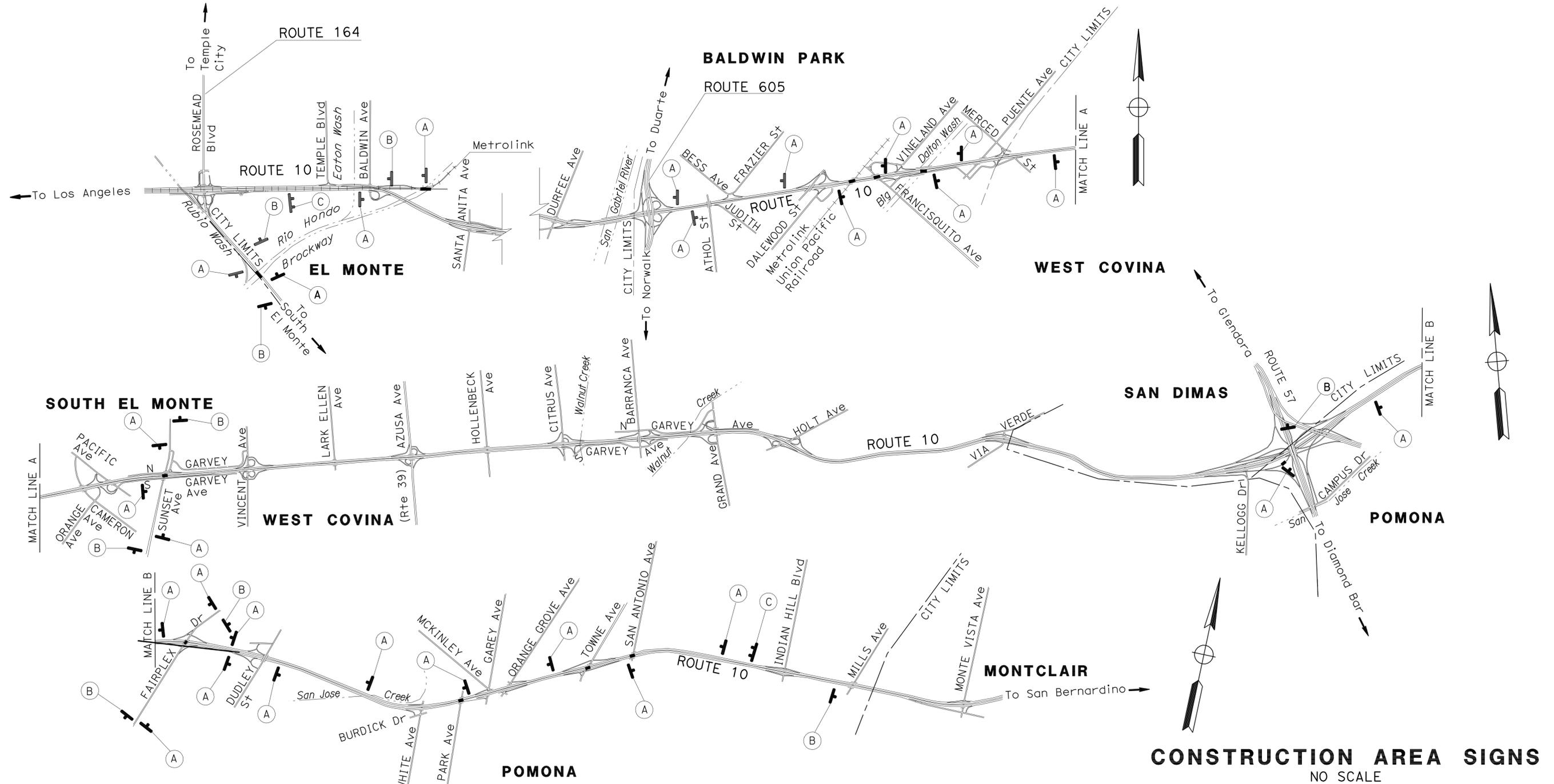
REGISTERED PROFESSIONAL ENGINEER
GHASSAN BASHOURA
 No. C 53065
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

NOTES:

- "TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES" SIGNS SHALL BE PLACED APPROXIMATELY 500' IN ADVANCE OF "ROAD WORK AHEAD" SIGNS OR AS DETERMINED BY THE ENGINEER.
- LOCATIONS OF CONSTRUCTION AREA SIGNS AS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN NUMBER	SIGN CODE	PANEL SIZE	QUANTITY	NUMBER OF POSTS AND SIZE	SIGN MESSAGE
(A)	W20-1	48" x 48"	28	1 - 6" x 6"	ROAD WORK AHEAD
(B)	G20-2	48" x 24"	9	1 - 4" x 6"	END ROAD WORK
(C)	C40(CA)	144" x 60"	2	2 - 6" x 8"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES



CONSTRUCTION AREA SIGNS
NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING
 FUNCTIONAL SUPERVISOR: LARRY WIERING
 CALCULATED/DESIGNED BY: GHASSAN BASHOURA
 CHECKED BY: LARRY WIERING
 REVISED BY: GHASSAN BASHOURA
 DATE REVISED: LARRY WIERING

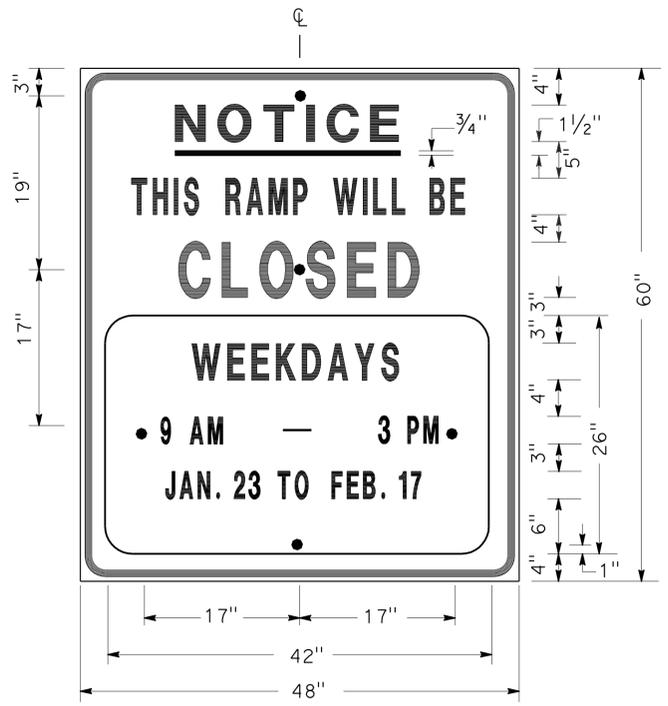
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	3	26

REGISTERED CIVIL ENGINEER
 DATE 05-4-11
 No. C56816
 Exp. 6-30-13
 CIVIL

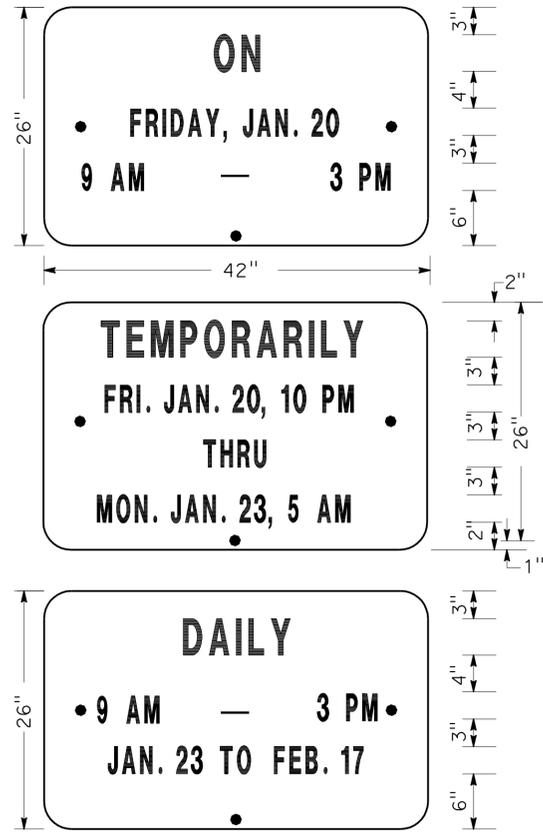
Martin Oregel
 REGISTERED CIVIL ENGINEER

01-30-12
 PLANS APPROVAL DATE

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SIGN SP-1



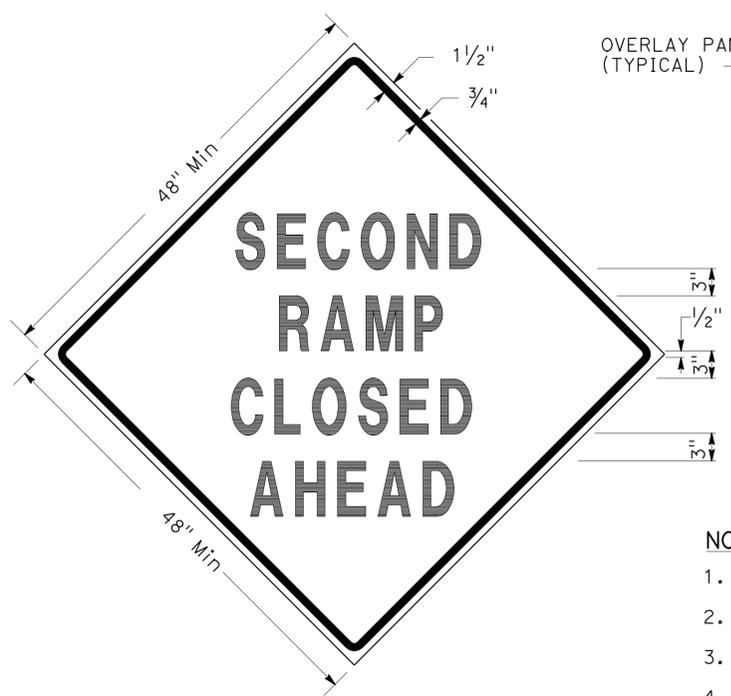
ALTERNATE OVERLAY PANELS (TYPICAL)

- 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

SPECIAL SIGN FOR EXIT RAMP CLOSURES

- 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.



SIGN SP-5



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.

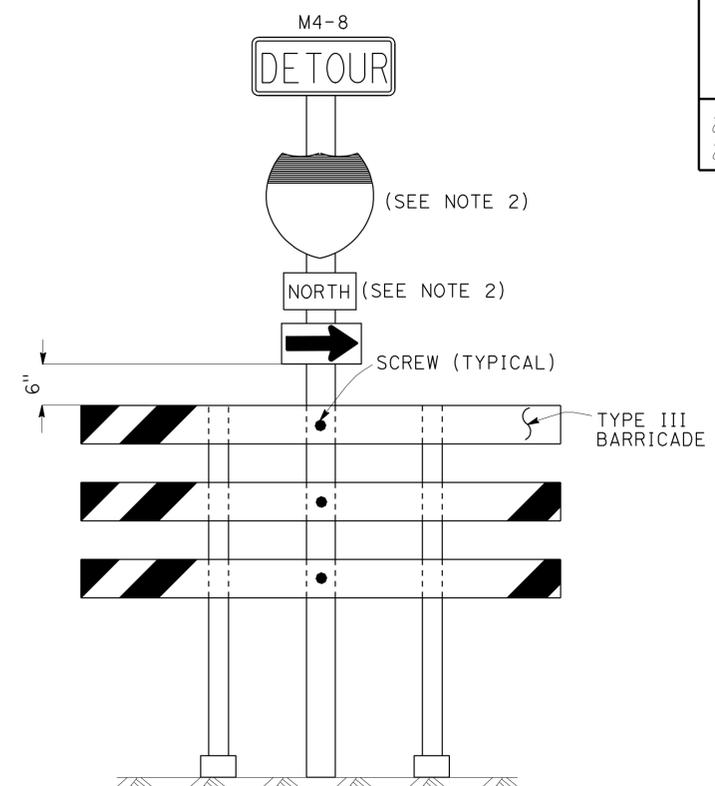
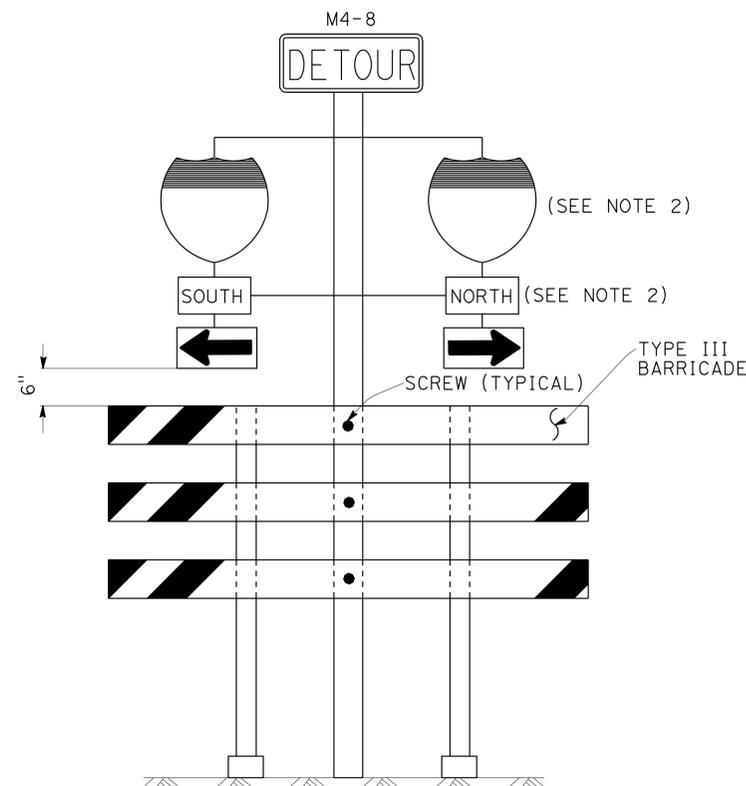
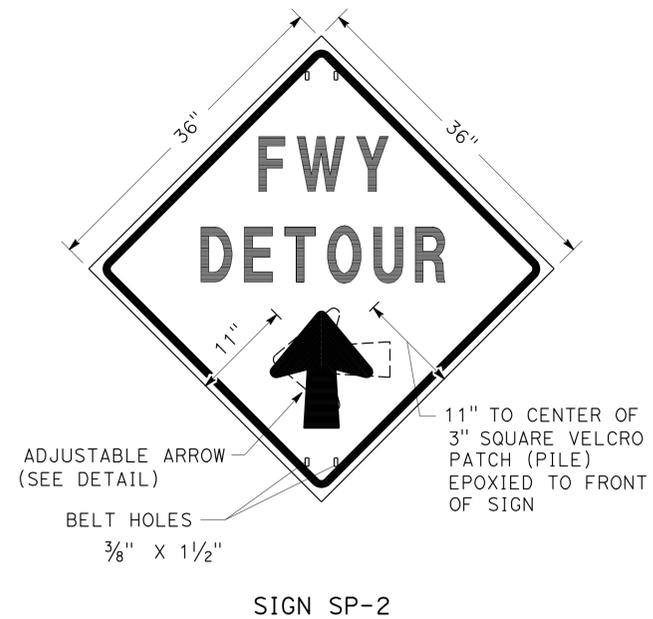
SPECIAL SIGN FOR ENTRANCE RAMP CLOSURES

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

SHEET 1 OF 2

NO SCALE

THD-1

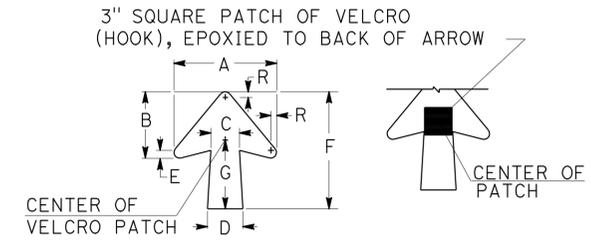


- NOTES:** (SIGN SP-2)
- LETTERS -6" SERIES E.
 - LETTERS, BORDER AND ARROW - BLACK ON RETROREFLECTORIZED ORANGE BACKGROUND.
 - BASE MATERIAL FOR SIGNS AND ARROWS SHALL BE ALUMINUM (MINIMUM 0.06").
 - BELTS (LUGGAGE STRAPS) SHALL BE 1" WIDE BY 48" LONG, MADE OF COTTON OR POLYPROPYLENE WEB MATERIAL.
 - 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 1/8"	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
DTM
 FUNCTIONAL SUPERVISOR JOHN YANG
 CHECKED BY
 CALCULATED/DESIGNED BY
 REVISOR BY JC DATE REVISED 7/10
 DESIGNED BY ALBERT K YU JOCELYN C CHIANG

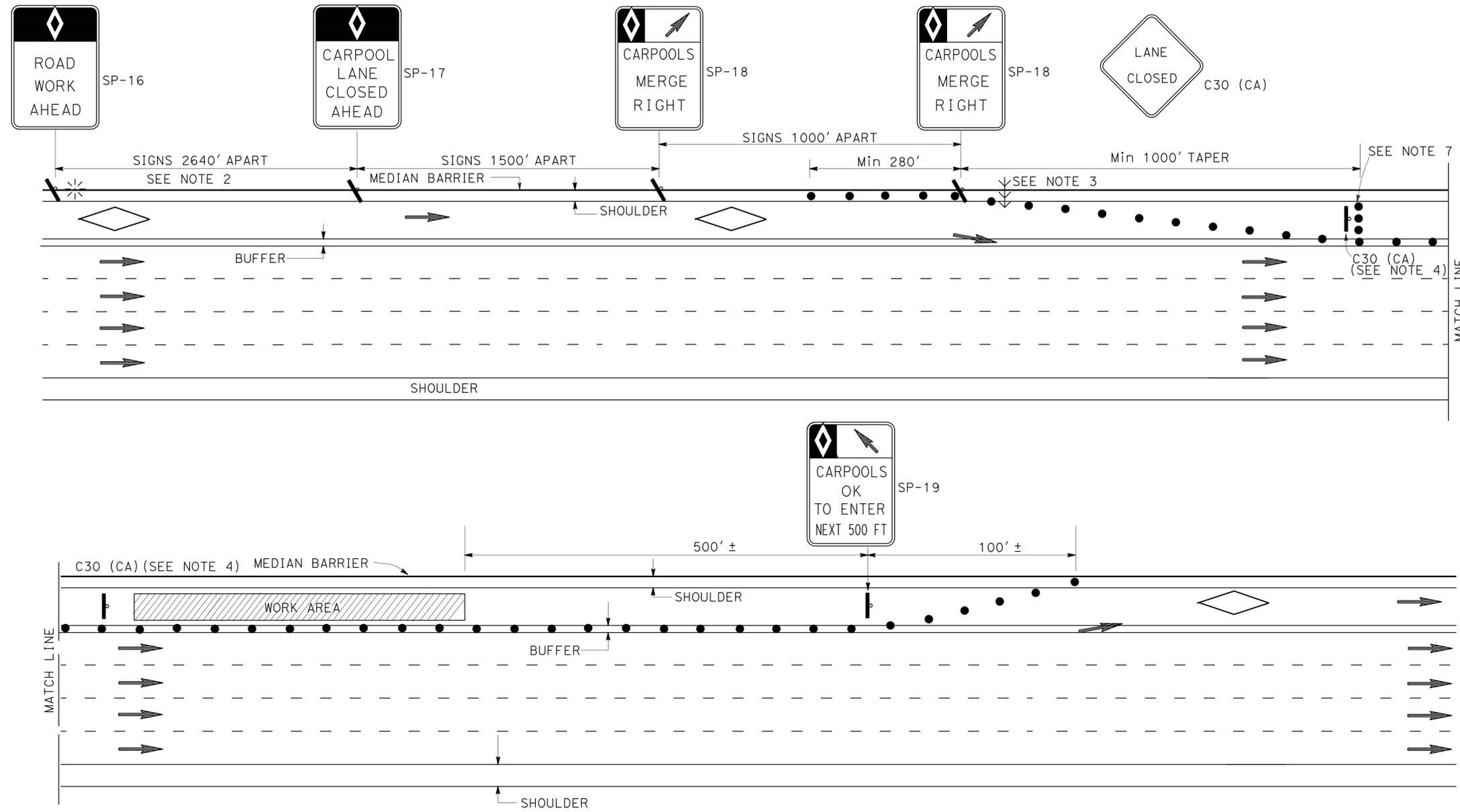
LAST REVISION DATE PLOTTED => 12-JAN-2012
 01-30-12 TIME PLOTTED => 15:07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	5	26

05-4-11
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE

MARTIN OREGEL
 No. C56816
 Exp. 6-30-13
 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: 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

ABBREVIATIONS

(CA)	CALIFORNIA CODE
HOV	HIGH OCCUPANCY VEHICLE

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

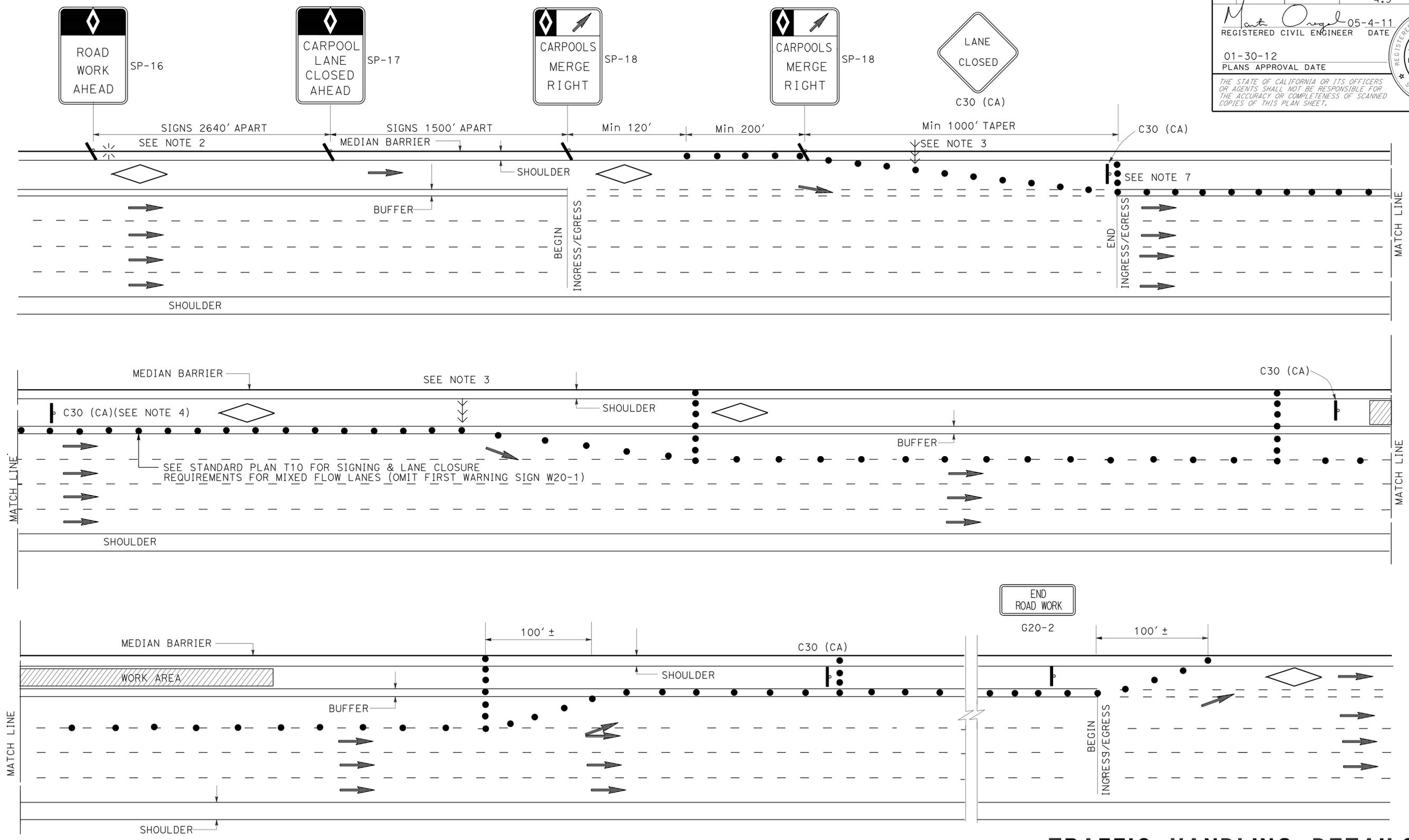
CASE I
 NO SCALE

THD-3

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	6	26
<i>Martin Oregel</i> 05-4-11 REGISTERED CIVIL ENGINEER DATE			REGISTERED PROFESSIONAL ENGINEER MARTIN OREGEL No. C56816 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA		
01-30-12 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 JOHN YANG
 CHECKED BY JOCELYN C CHIANG
 DESIGNED BY ALBERT K YU
 REVISIONS: JC 7/10
 REVISIONS:



- 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-4

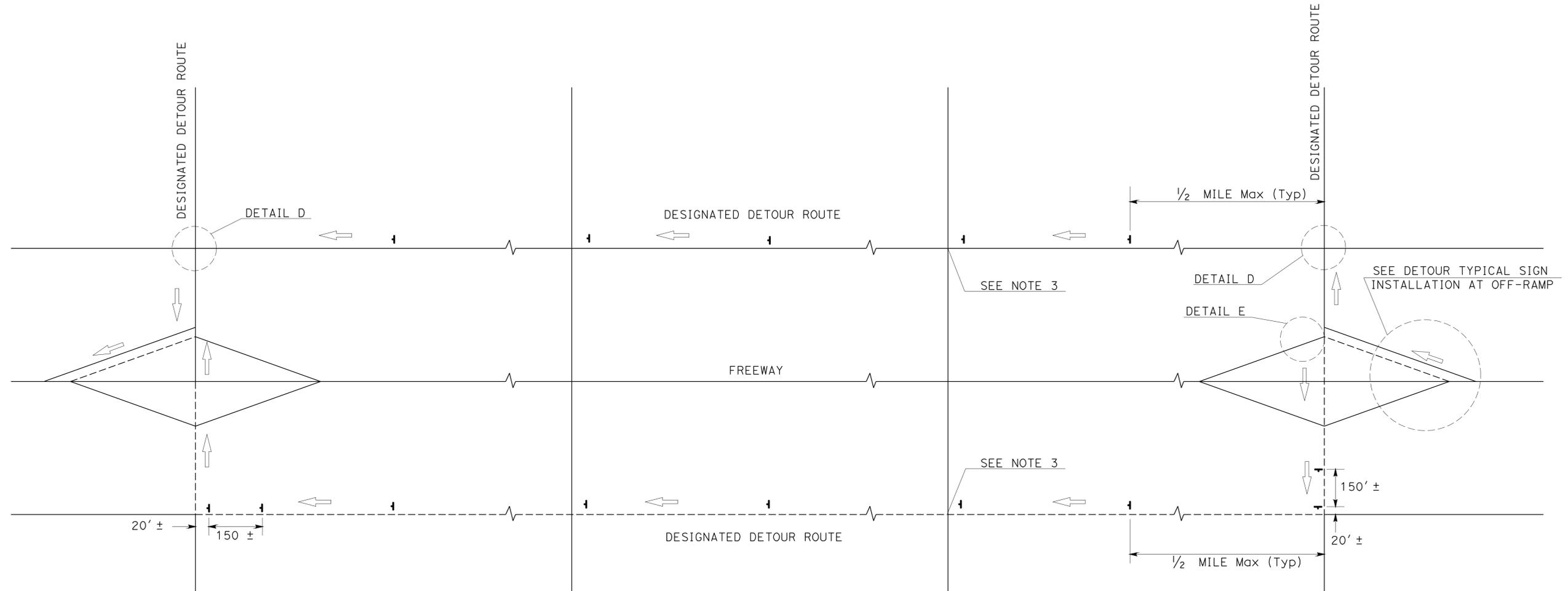
LAST REVISION: 01-30-12 DATE PLOTTED => 12-JAN-2012 TIME PLOTTED => 15:07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	7	26

Martin Oregel 05-4-11
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MARTIN OREGEL
 No. C56816
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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TYPICAL DETOUR SIGN INSTALLATION ALONG DESIGNATED DETOUR ROUTE

LEGEND

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

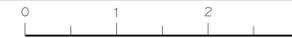
NOTES:

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.

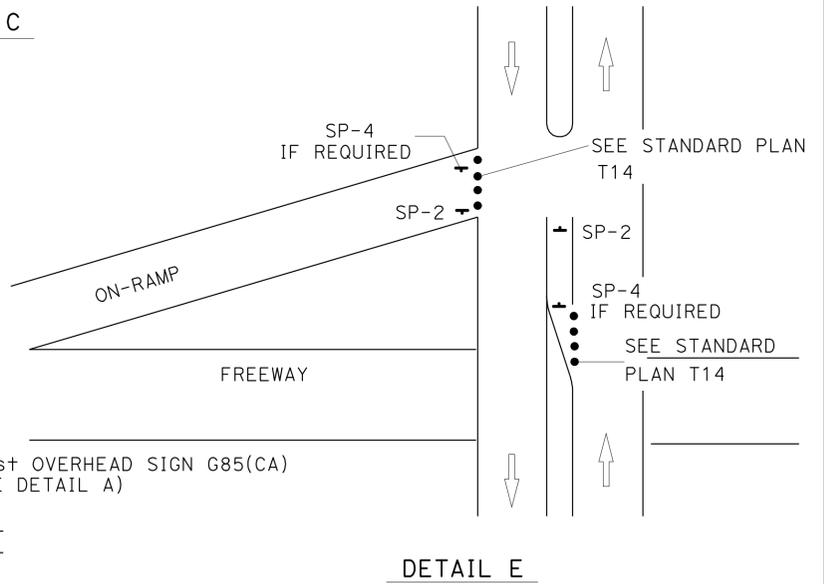
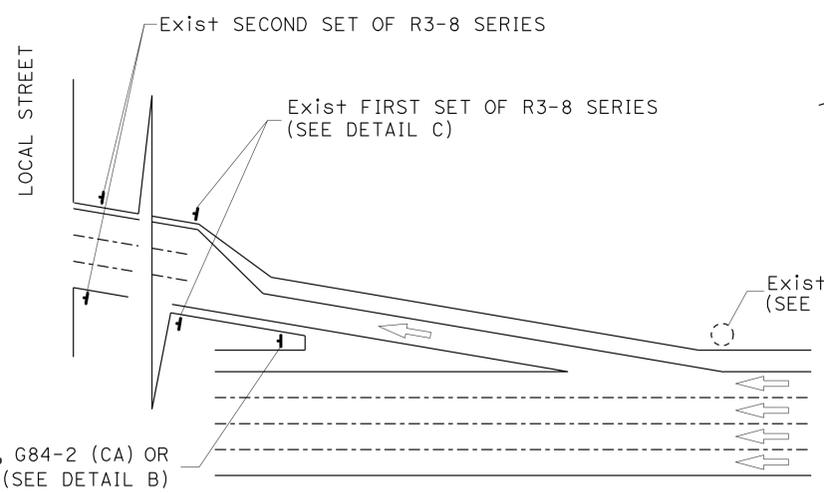
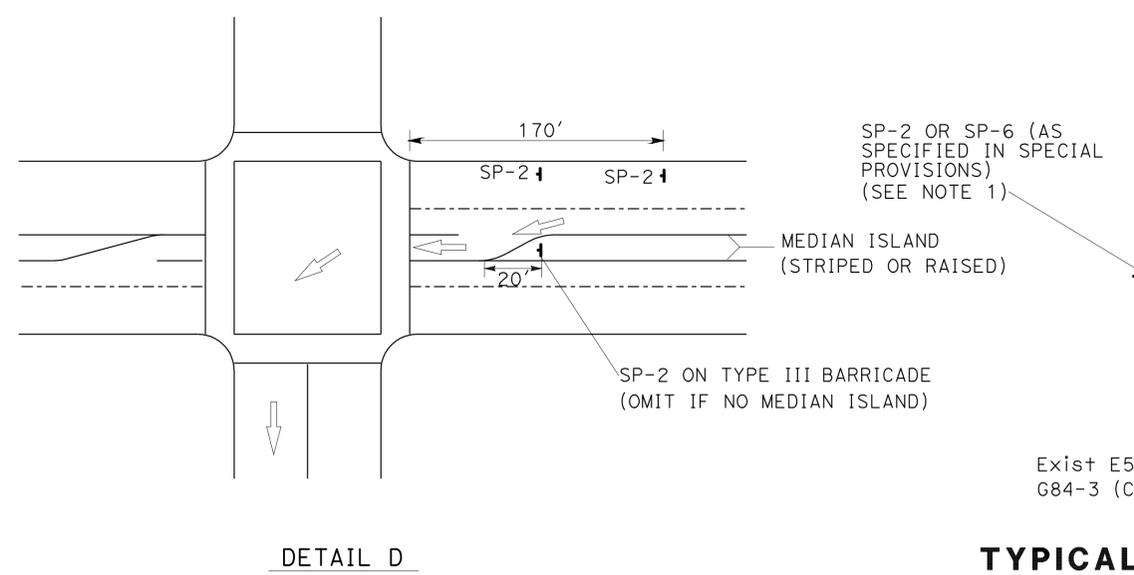
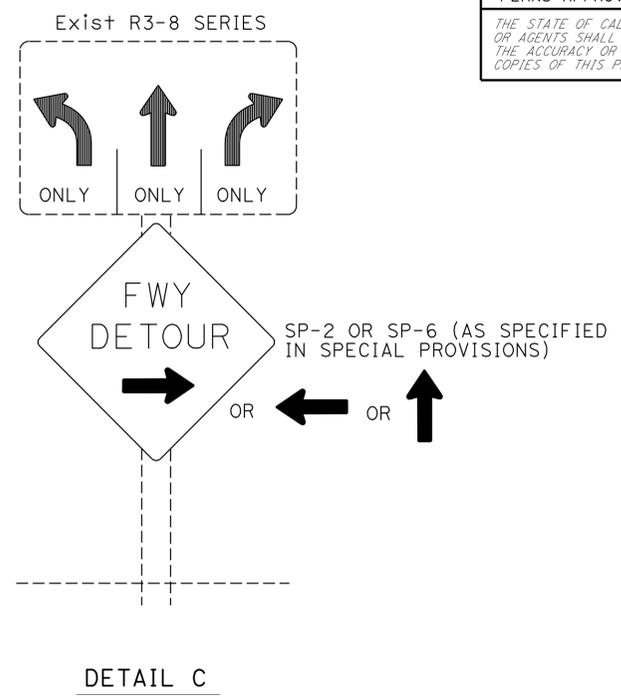
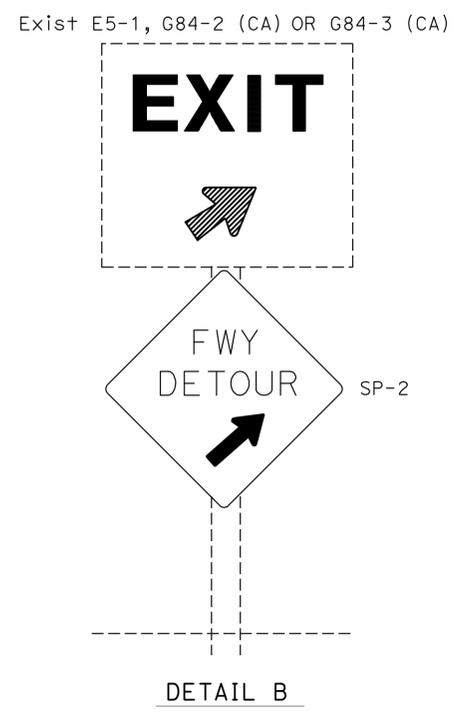
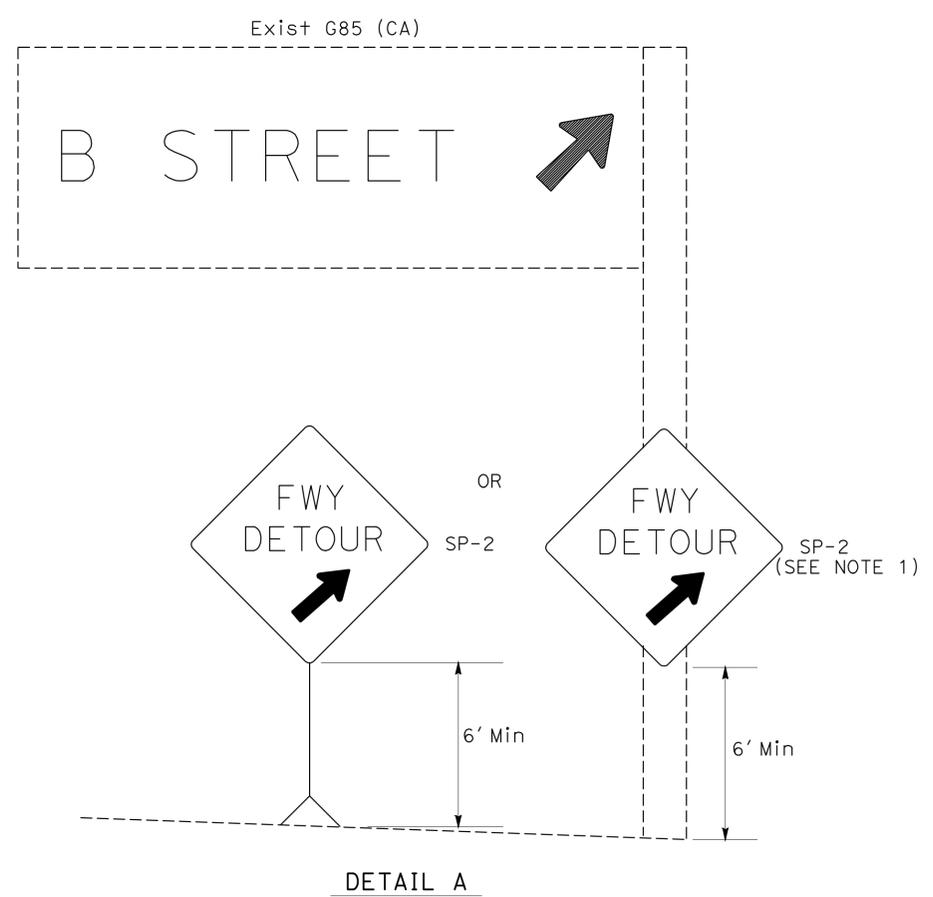
**TRAFFIC HANDLING DETAILS
TRAFFIC CONTROL SYSTEM
FOR DETOUR SIGN INSTALLATION
ALONG DESIGNATED DETOUR ROUTE
SHEET 1 OF 2
NO SCALE**

THD-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	ALBERT K YU	REVISOR BY	JC
DTM	JOCELYN C CHIANG	DATE REVISED	7/10
FUNCTIONAL SUPERVISOR	JOHN YANG	CHECKED BY	
CALCULATED/DESIGNED BY			



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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<i>Martin Oregel</i> 05-4-11 REGISTERED CIVIL ENGINEER DATE					
01-30-12 PLANS APPROVAL DATE					
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REGISTERED PROFESSIONAL ENGINEER MARTIN OREGEL No. C56816 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA					



TYPICAL DETOUR SIGN INSTALLATION AT OFF-RAMP

NOTES:
 1. TEMPORARY SIGNS MAY BE STRAPPED ON EXISTING ELECTROLIER, SIGNAL POSTS, OR SIGN POSTS.

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-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DT M
 FUNCTIONAL SUPERVISOR: JOHN YANG
 CHECKED BY: JOCELYN C CHIANG
 REVISIONS: JC 7/10

USERNAME => s122436
 DGN FILE => 74y810me006.dgn

RELATIVE BORDER SCALE IS IN INCHES
 0 1 2 3

UNIT 1887

PROJECT NUMBER & PHASE

07000200361

LAST REVISION: DATE PLOTTED => 12-JAN-2012
 01-30-12 TIME PLOTTED => 15:07

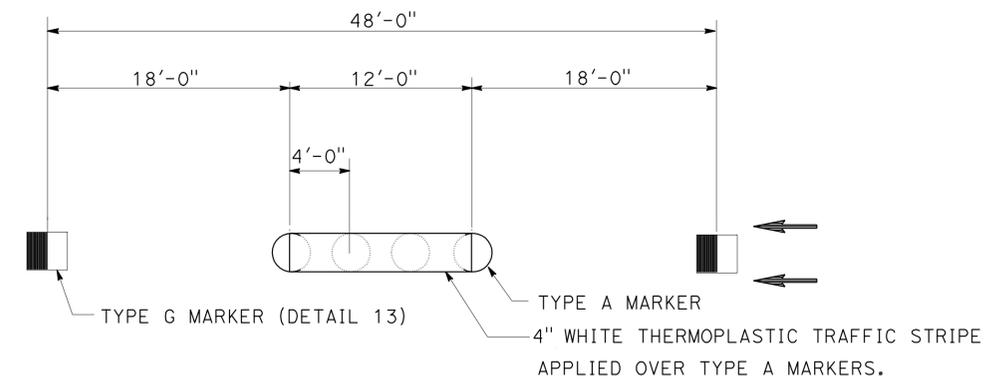
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01-12-12
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE

Ghassan Bashoura
 No. C 53065
 Exp. 6-30-13
 CIVIL

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- LEGEND:**
- TYPE A PAVEMENT MARKER
 - TYPE G PAVEMENT MARKER
 - ← DIRECTION OF TRAVEL



DETAIL 13 (MODIFIED)

PAVEMENT DELINEATION QUANTITIES

Loc	ROUTE 10 PM	ROUTE 164 PM	BRIDGE No.	NAME OF BRIDGE	REMOVE THERMOPLASTIC TRAFFIC STRIPE LF	REMOVE PAVEMENT MARKER EA	REMOVE THERMOPLASTIC PAVEMENT MARKING (DIAGONALS, LIMIT LINE, ARROWS, CHEVRON) SQFT	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE) LF	THERMOPLASTIC TRAFFIC STRIPE					THERMOPLASTIC PAVEMENT MARKING (DIAGONALS, SYMBOLS, WORDS, LIMIT LINE, ARROWS, CHEVRON) SQFT	PAVEMENT MARKER			
									DETAIL						RETROREFLECTIVE		NON-REFLECTIVE	
									4"(BROKEN 36-12) 13 WHITE (MODIFIED)	4" WHITE 27B	4" YELLOW 22, 25	8" WHITE 38	8"(BROKEN 12-3) 37 WHITE		TYPE G	TYPE D	TYPE H	TYPE A
1	28.50		53-2637	RIO HONDO BUSWAY														
2		4.91	53-0235	RIO HONDO BRIDGE	440	160	133	1680	1680	425	1680	150		133	3	51	14	12
3	32.50		53-0111	BASSETT OH	130	78		70	210	70	70		35		9			30
4	32.66		53-0665	FRANCISQUITO AVENUE UC	315	156		180	540	90	180	90			18		3	57
5	32.93		53-0112	BIG DALTON WASH	406	194		232	696	232	232				23		4	70
6	34.85		53-0668	SUNSET AVENUE UC	60	32							220		16			
7	42.44		53-2004G	E10-W210 CONNECTOR OC	113	60		90	90	90	90				7		3	20
8	43.66		53-0874	FAIRPLEX AVENUE OC	390	244	60	440	880		440	170		60	32		5	85
9	45.55		53-0854	PARK AVENUE UC	790	184		600	600	400	600		160		16	20	6	50
10	46.40		53-0858	TOWNE AVENUE UC	1120	278		900	900	600	900				24	30	10	75
11	46.72		53-0859	SAN ANTONIO AVENUE UC	750	184	10	600	600	400	600			10	16	20	6	50
TOTAL					4514	1570	203	4792	6196	7099	410	415	203		336			449

PAVEMENT DELINEATION QUANTITIES
 NO SCALE
PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: LARRY WIERING

REVISOR: GHASSAN BASHOURA, LARRY WIERING

DATE: 01-30-12

PROJECT NUMBER & PHASE: 07000200361

LAST REVISION DATE PLOTTED => 23-JAN-2012
 01-30-12 TIME PLOTTED => 14:38

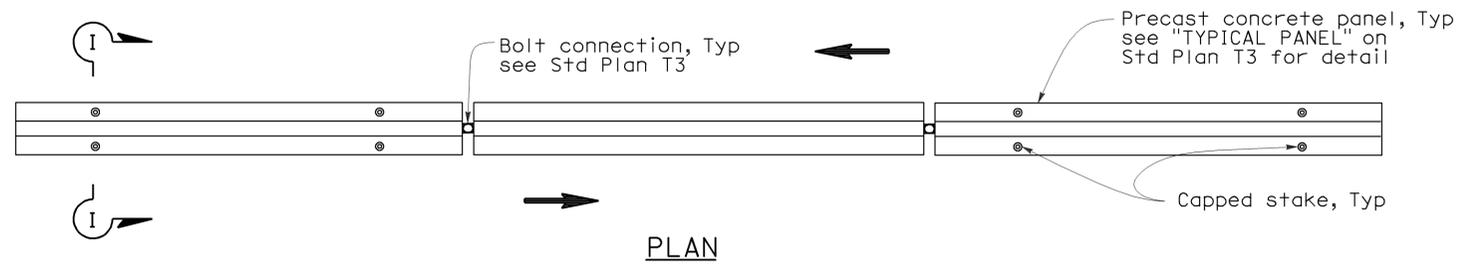
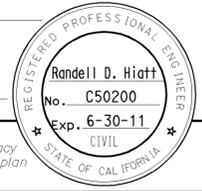
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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Randell D. Hiatt
REGISTERED CIVIL ENGINEER

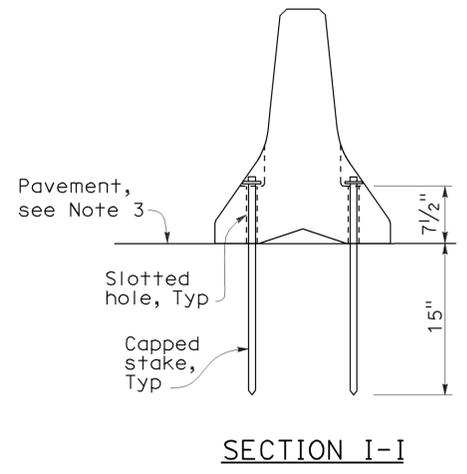
May 20, 2011
PLANS APPROVAL DATE

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

To accompany plans dated 01-30-12

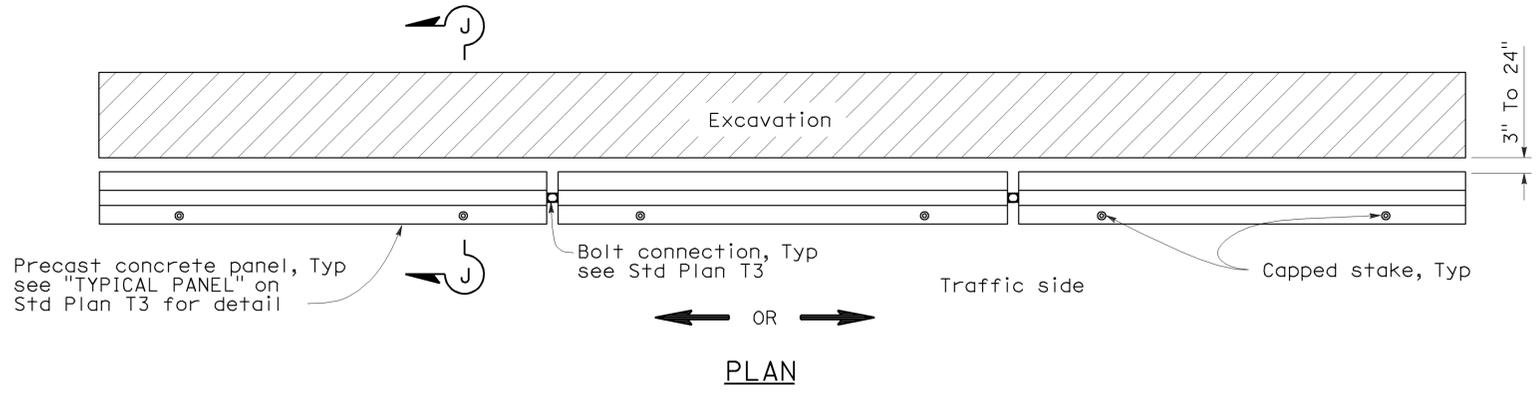


RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC
See Note 1

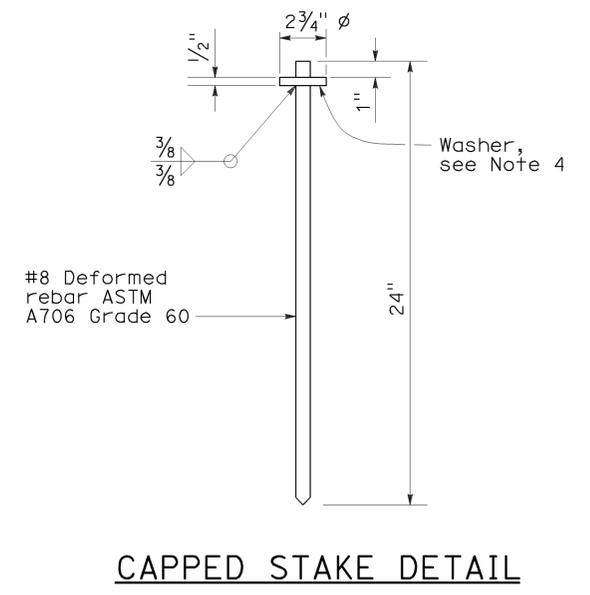
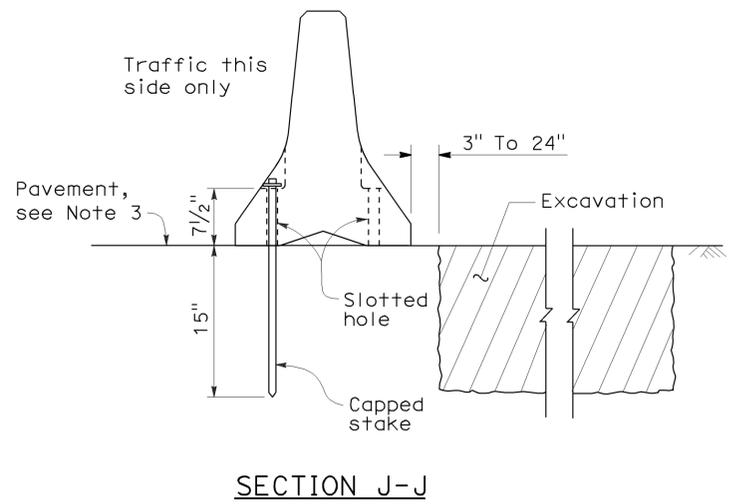


NOTES:

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.

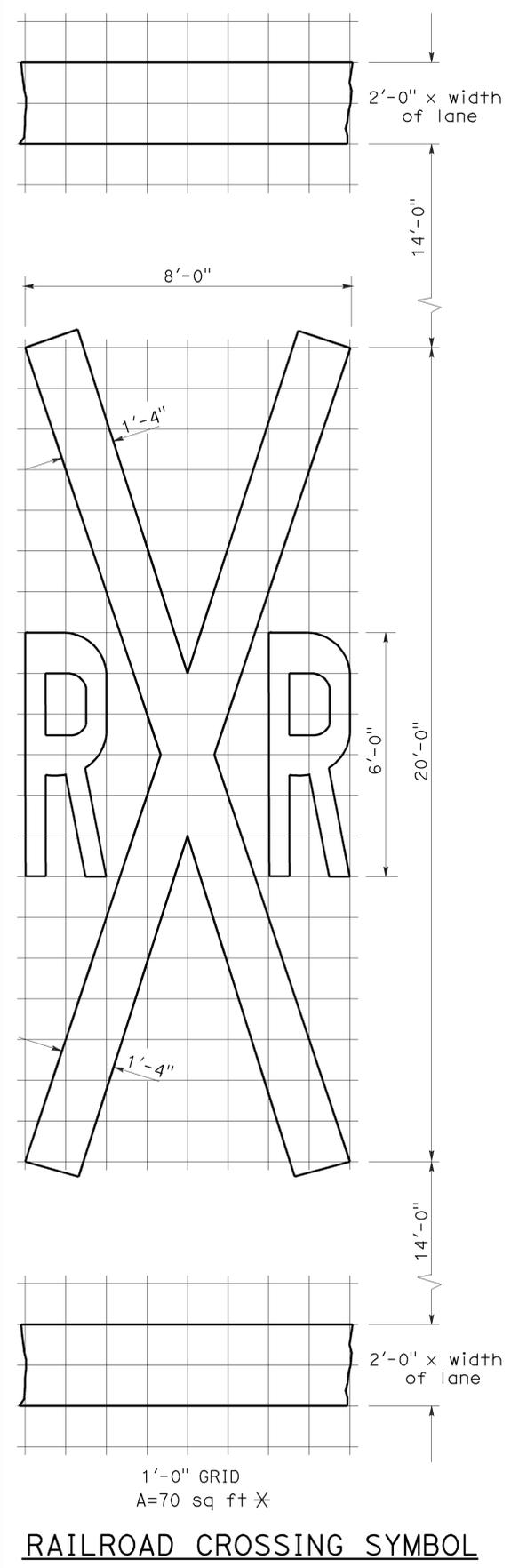
2006 NEW STANDARD PLAN NSP T3A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10, 164	28.5/46.7, 4.9	11	26

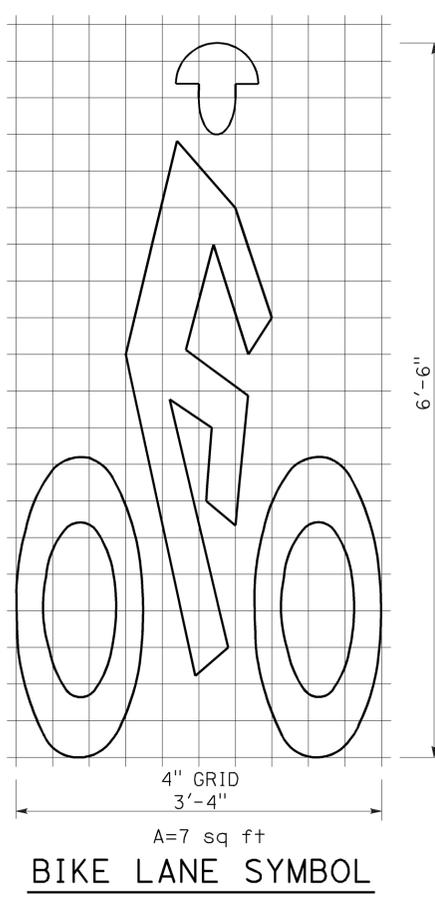
Donald E. Howe
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Donald E. Howe
 No. C46402
 Exp. 3-31-09
 CIVIL
 STATE OF CALIFORNIA

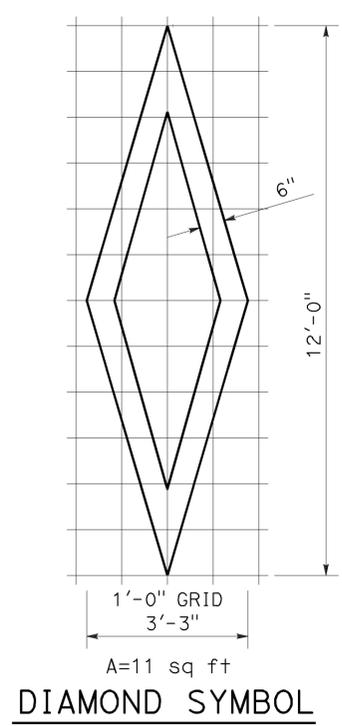
To accompany plans dated 01-30-12



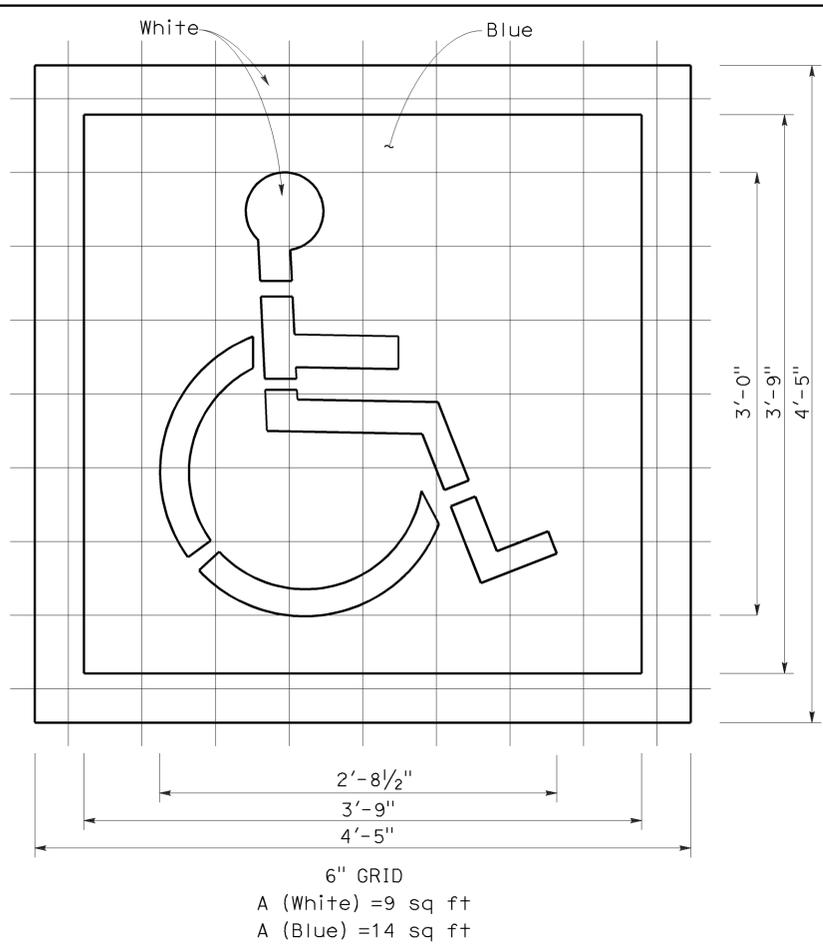
RAILROAD CROSSING SYMBOL
 *70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



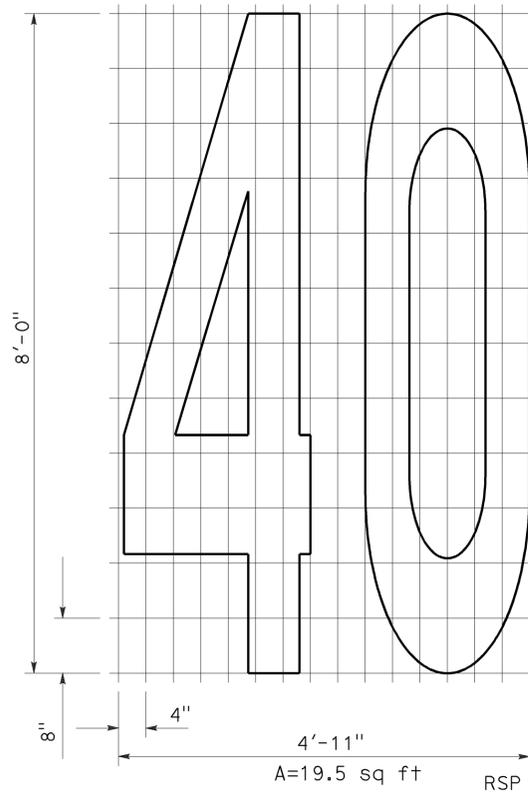
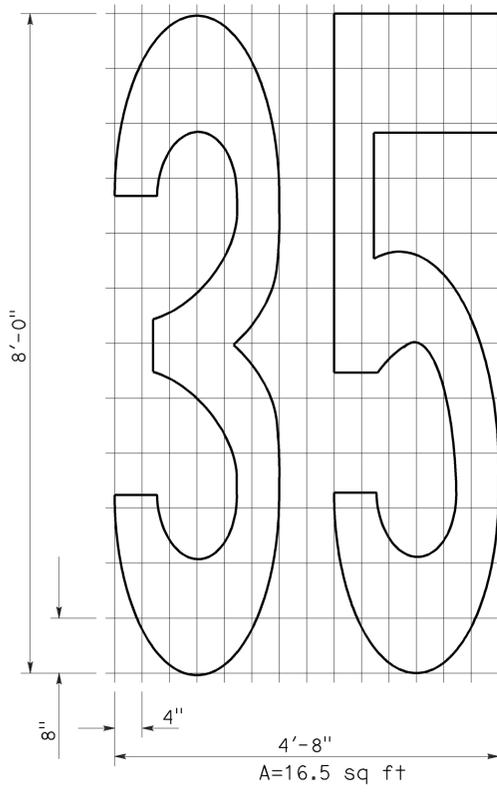
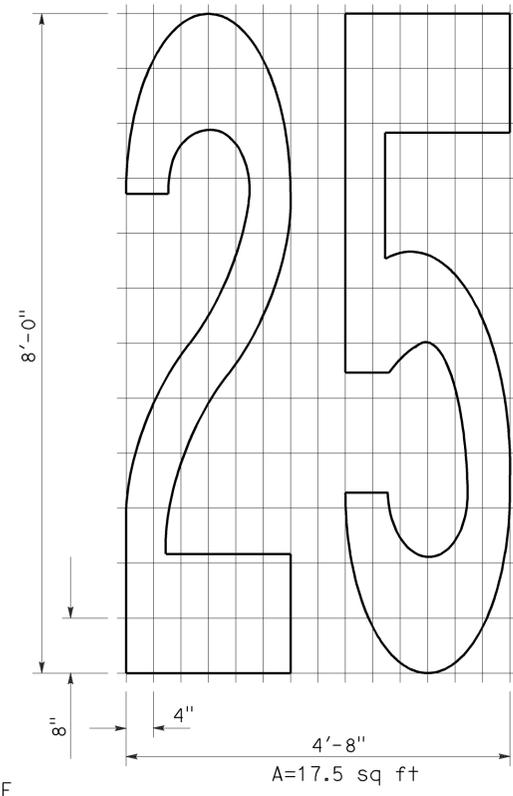
BIKE LANE SYMBOL



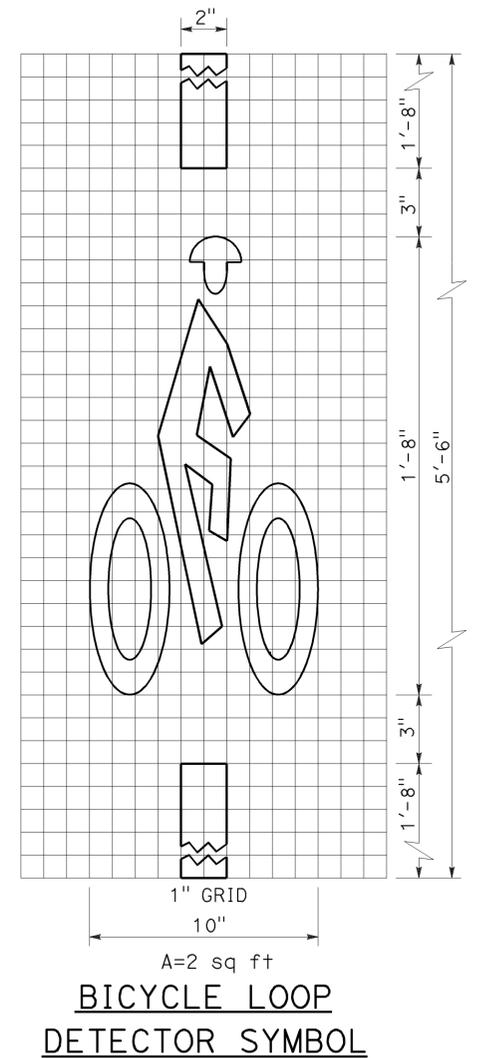
DIAMOND SYMBOL



INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



NUMERALS



BICYCLE LOOP DETECTOR SYMBOL

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

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A24C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10, 164	28.5/46.7, 4.9	12	26

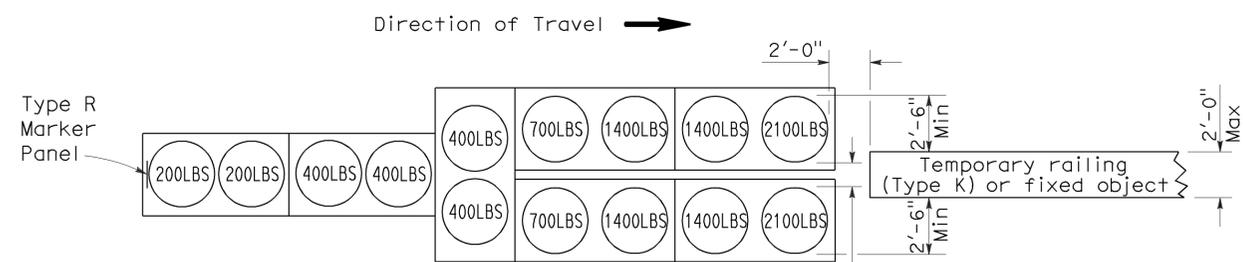
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

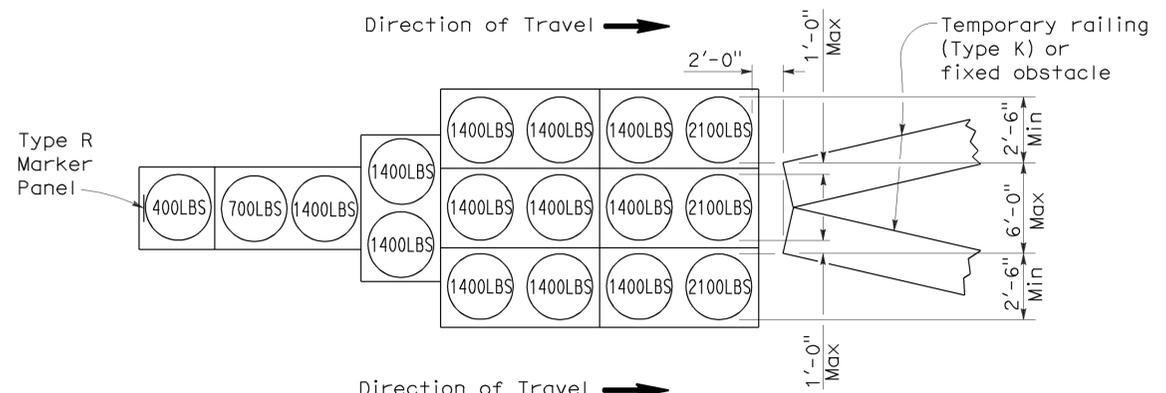
To accompany plans dated 01-30-12

2006 REVISED STANDARD PLAN RSP T1A



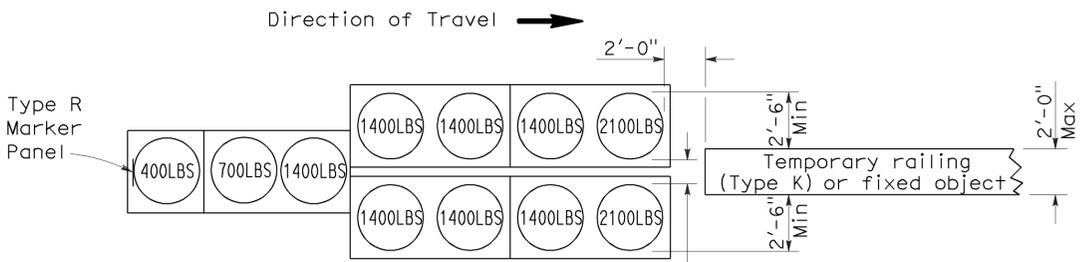
ARRAY 'TU14'

Approach speed 45 mph or more



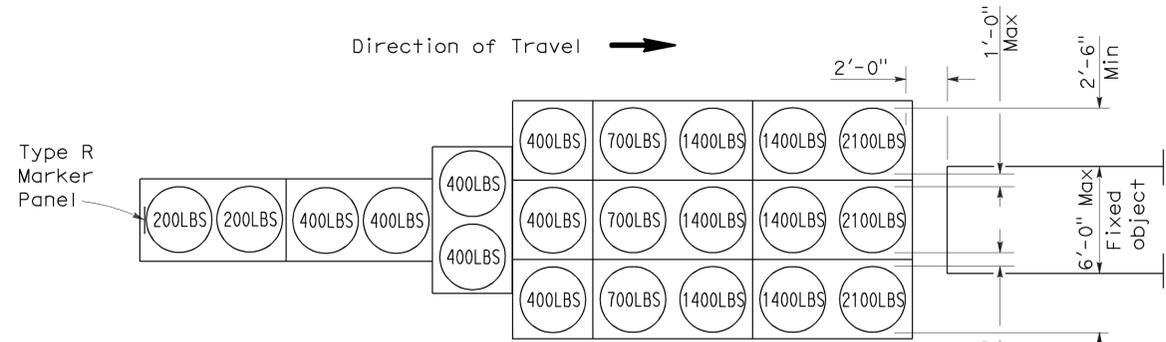
ARRAY 'TU17'

Approach speed less than 45 mph



ARRAY 'TU11'

Approach speed less than 45 mph

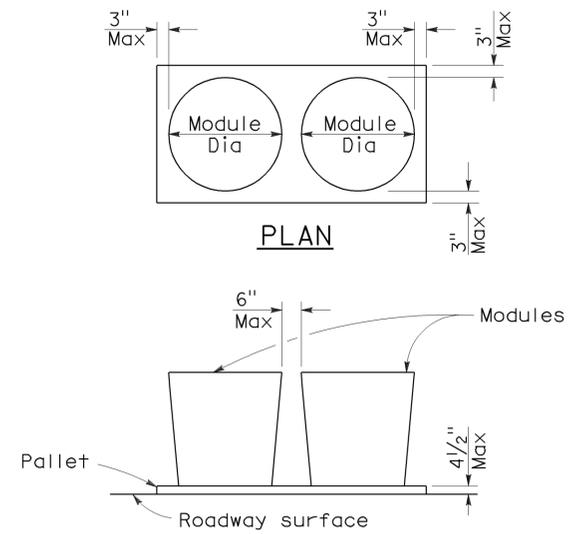


ARRAY 'TU21'

Approach speed 45 mph or more

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

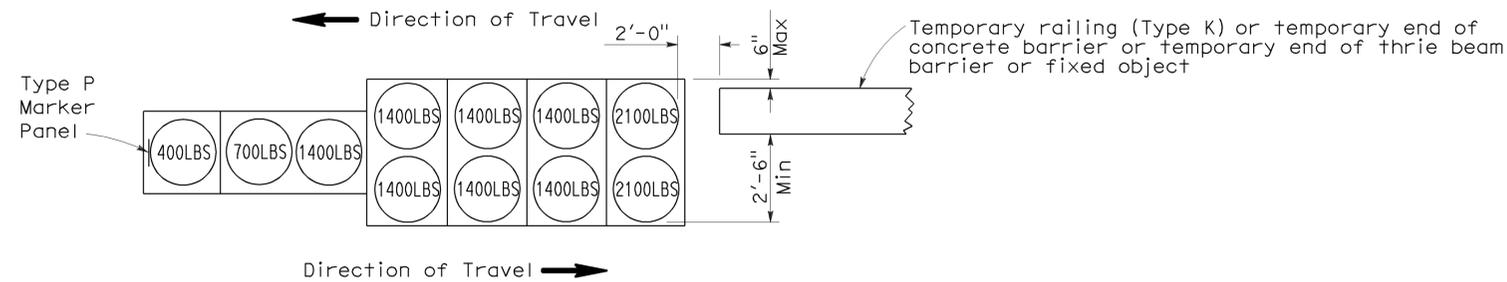
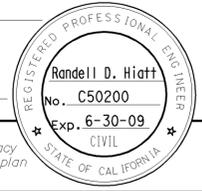
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10, 164	28.5/46.7, 4.9	13	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

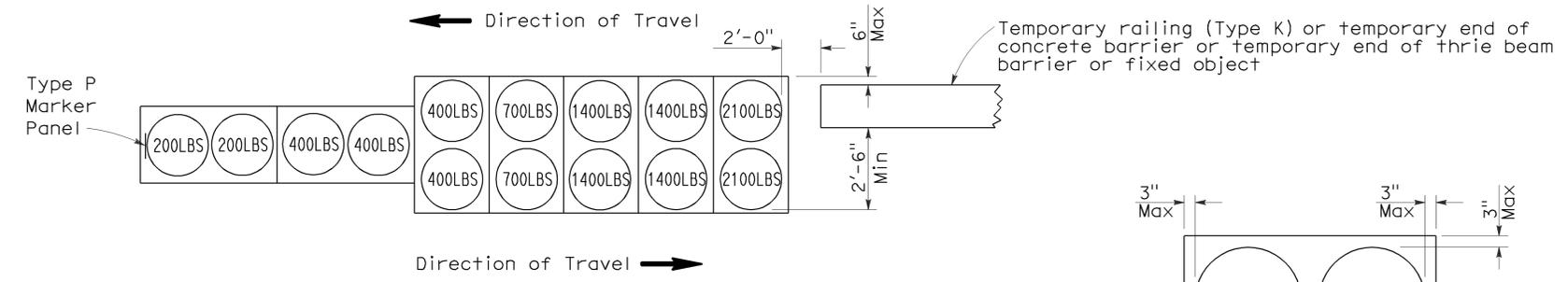
June 6, 2008
PLANS APPROVAL DATE

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

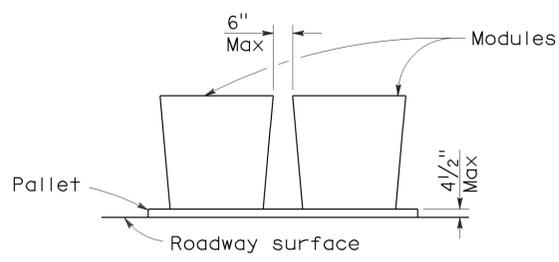
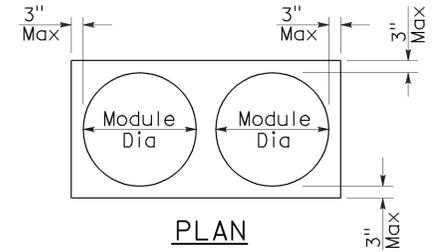
To accompany plans dated 01-30-12



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

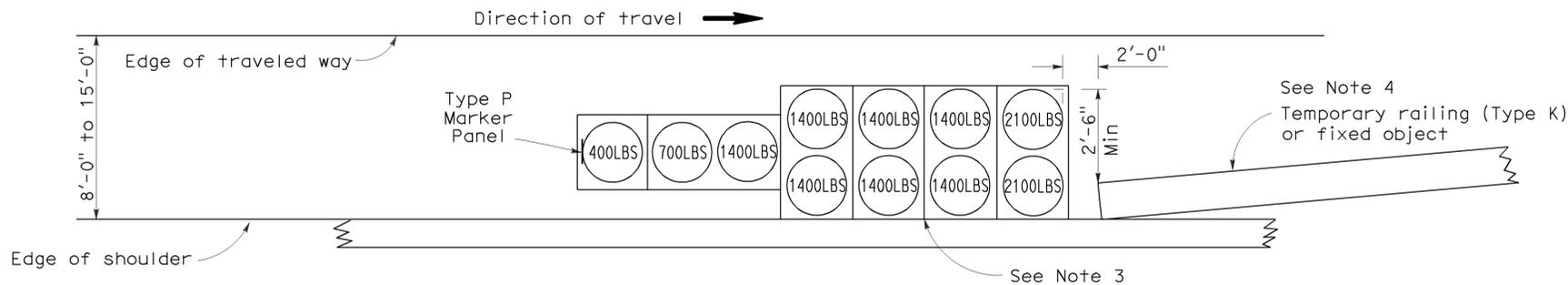
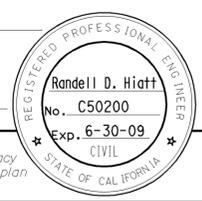
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10, 164	28.5/46.7, 4.9	14	26

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

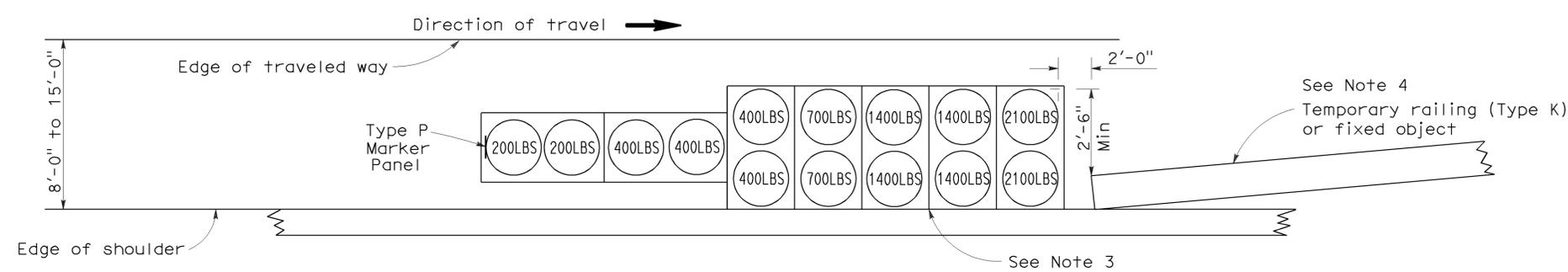
June 6, 2008
PLANS APPROVAL DATE

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To accompany plans dated 01-30-12



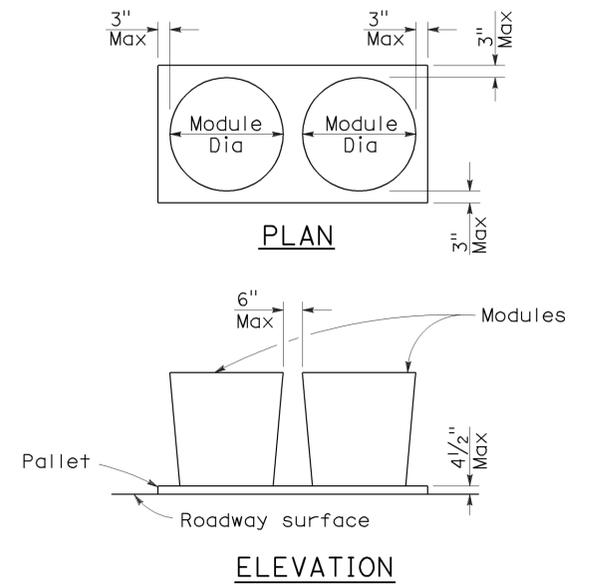
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



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

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.



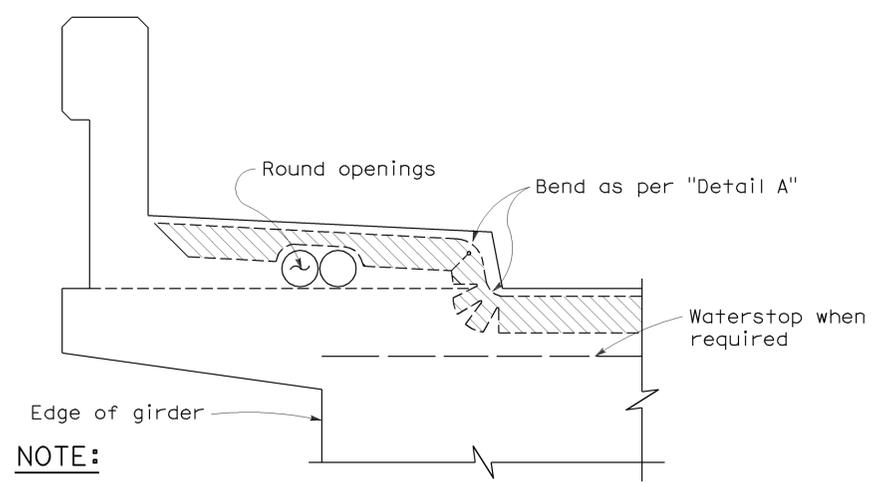
CRASH CUSHION PALLET DETAIL
See Note 11

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.

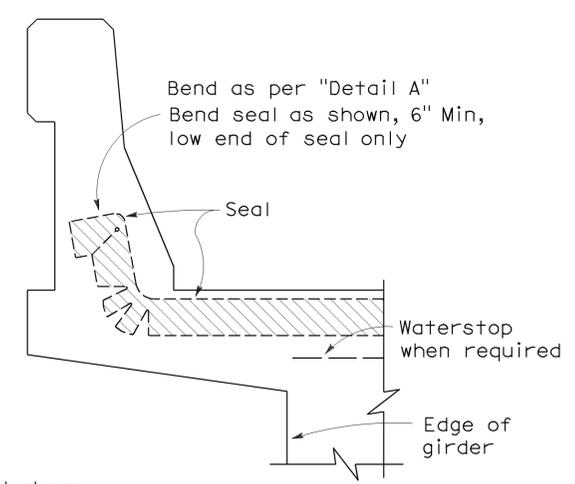
REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

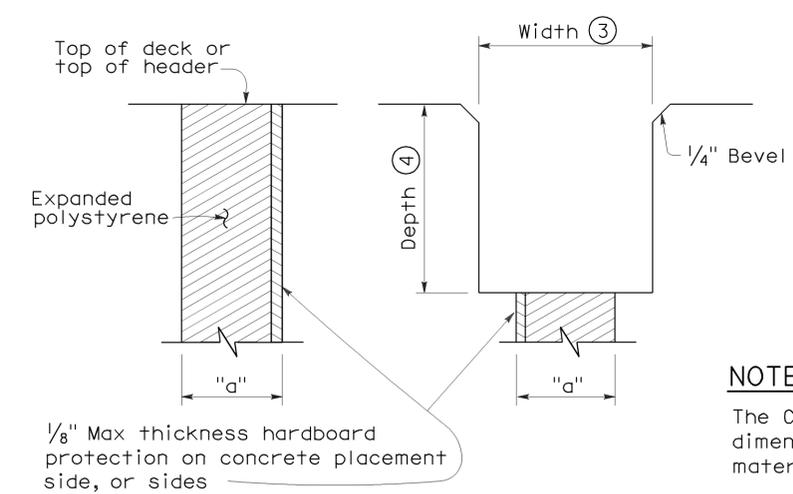


NOTE:
Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



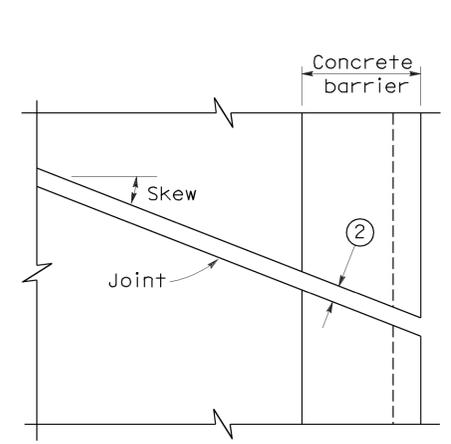
CONCRETE BARRIER



FORMING DETAIL SAWCUT DETAIL

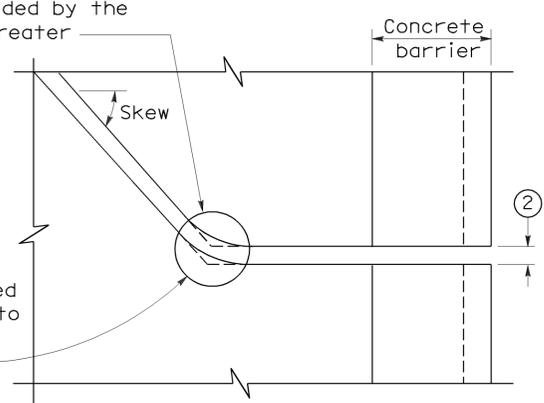
NOTE:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

JOINT SEALS DETAILS



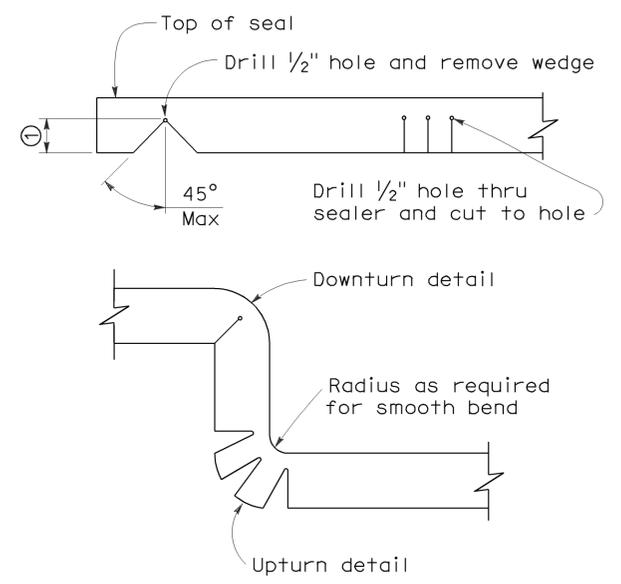
PLAN OF JOINT (SKEW ≤ 20°)

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.

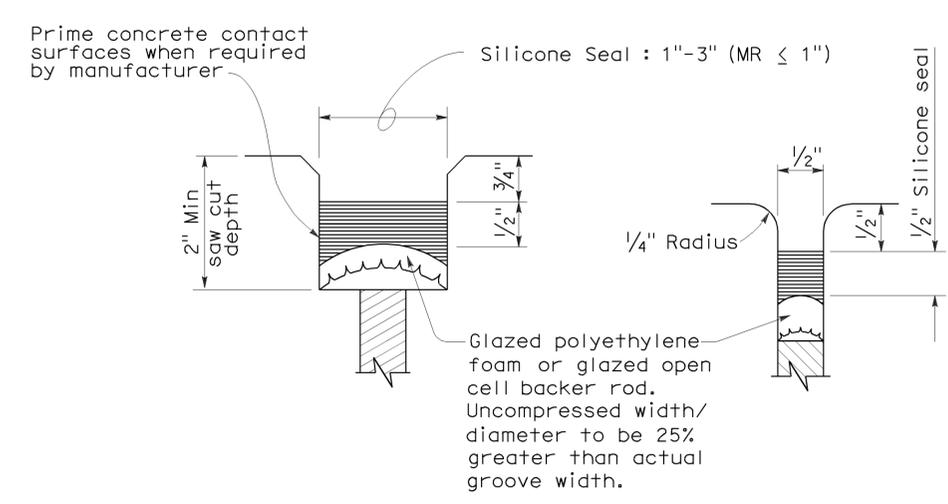


DETAIL A

- 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"

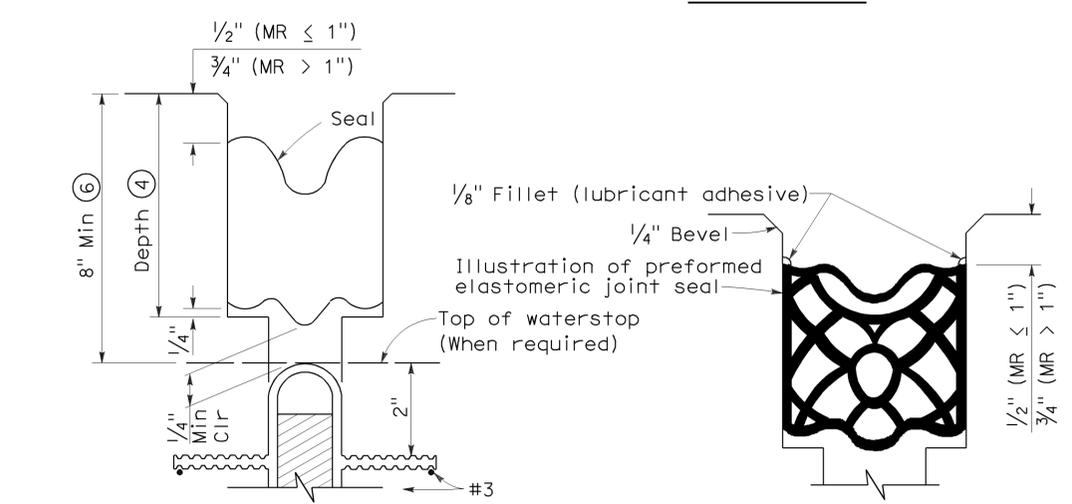


TYPE A SEAL

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	10,164	28.5/46.7 4.9	17	26

11/14/11
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/13
 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.

INDEX TO PLANS

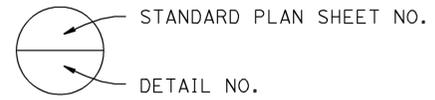
SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	GENERAL PLAN NO. 4
5	GENERAL PLAN NO. 5
6	GENERAL PLAN NO. 6
7	MISCELLANEOUS DETAILS NO. 1
8	MISCELLANEOUS DETAILS NO. 2
9	STRUCTURE APPROACH TYPE R(30D)
10	SOFFIT ACCESS OPENING DETAILS

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")

LEGEND:

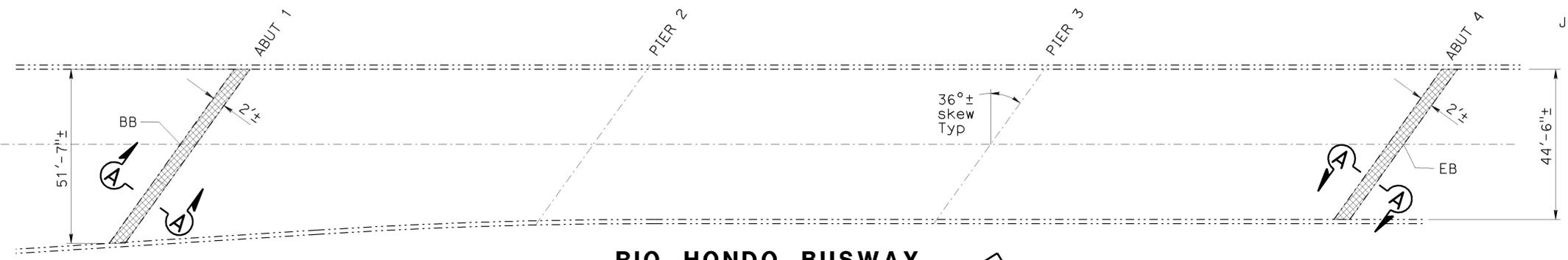
- Indicates existing.
- ➔ Indicates direction of traffic.
- ▨ Indicates limits of install Joint Seal (Asphaltic Plug).
- ▧ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.



RIO HONDO BUSWAY BRIDGE NO 53-2637

QUANTITIES

JOINT SEAL (ASPHALTIC PLUG) 120 LF

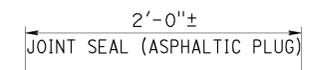


RIO HONDO BUSWAY

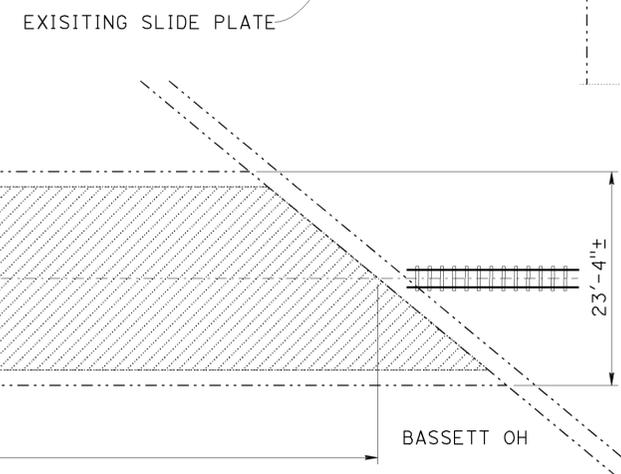
Br No. 53-2637, Rte 10, PM 28.5
1" = 20'



EXISTING CONCRETE DECK



EXISTING COVER STEEL PLATE



BASSETT OH

Br No. 53-0111, Rte 10, PM 32.50
1" = 10'



EXISTING SLIDE PLATE

BASSETT OH

SECTION A-A

NO SCALE

NOTE: NOT ALL DETAILS SHOWN FOR CLARITY

QUANTITIES

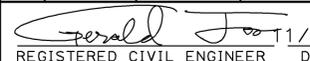
PREPARE CONCRETE BRIDGE DECK SURFACE	4,700	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
TREAT BRIDGE DECK	4,700	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	60	GAL

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

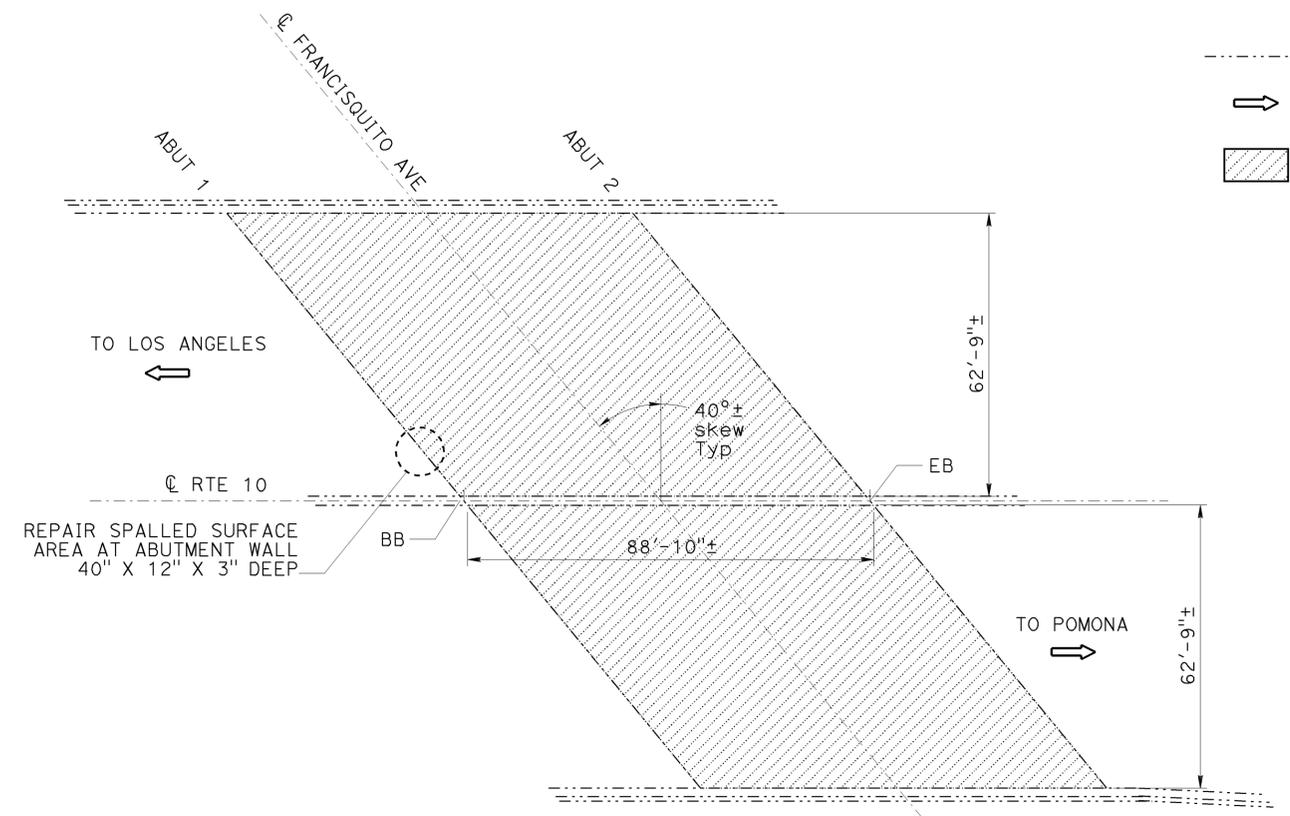
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
 POST MILE Varies
ROUTE 10,164 BRIDGES
GENERAL PLAN NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	18	26
 REGISTERED CIVIL ENGINEER DATE 1/14/11					
01-30-12 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

LEGEND:

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



FRANCISQUITO AVENUE UC

Br No. 53-0665, Rte 10, PM 32.66
1" = 10'

FRANCISQUITO AVE UC

BRIDGE NO 53-0665

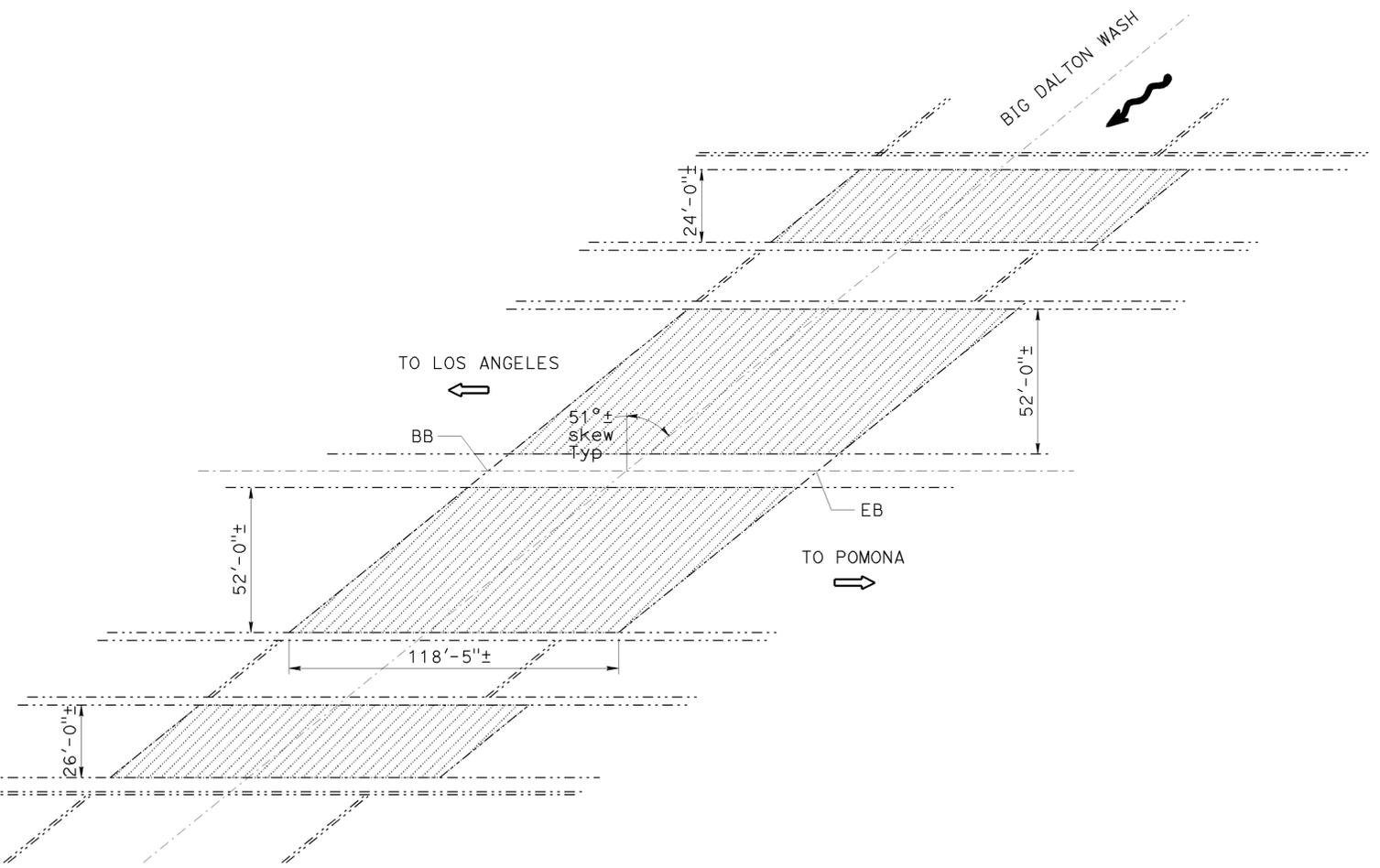
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	11,200 SQFT
REPAIR SPALLED SURFACE AREA	4 SQFT
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	11,200 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	140 GAL

BIG DALTON WASH

BRIDGE NO 53-0112

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	18,300 SQFT
PUBLIC SAFETY PLAN	LUMP SUM
TREAT BRIDGE DECK	18,300 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	230 GAL



BIG DALTON WASH

Br No. 53-0112, Rte 10, PM 32.93
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 Edward Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Tom Dang	CHECKED Edward Li	LAYOUT	BY Tom Dang
QUANTITIES	BY Gerald Joo	CHECKED Edward Li	SPECIFICATIONS	BY Dave Klein
				CHECKED Gerald Joo
				PLANS AND SPECS COMPARED Dave Klein

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various
POST MILE Varies

ROUTE 10,164 BRIDGES
GENERAL PLAN NO. 2

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: 3489
PROJECT NUMBER & PHASE: 07000200361

CONTRACT NO.: 4Y8101

DISREGARD PRINTS BEARING EARLIER REVISION DATES

SHEET 02 OF 10

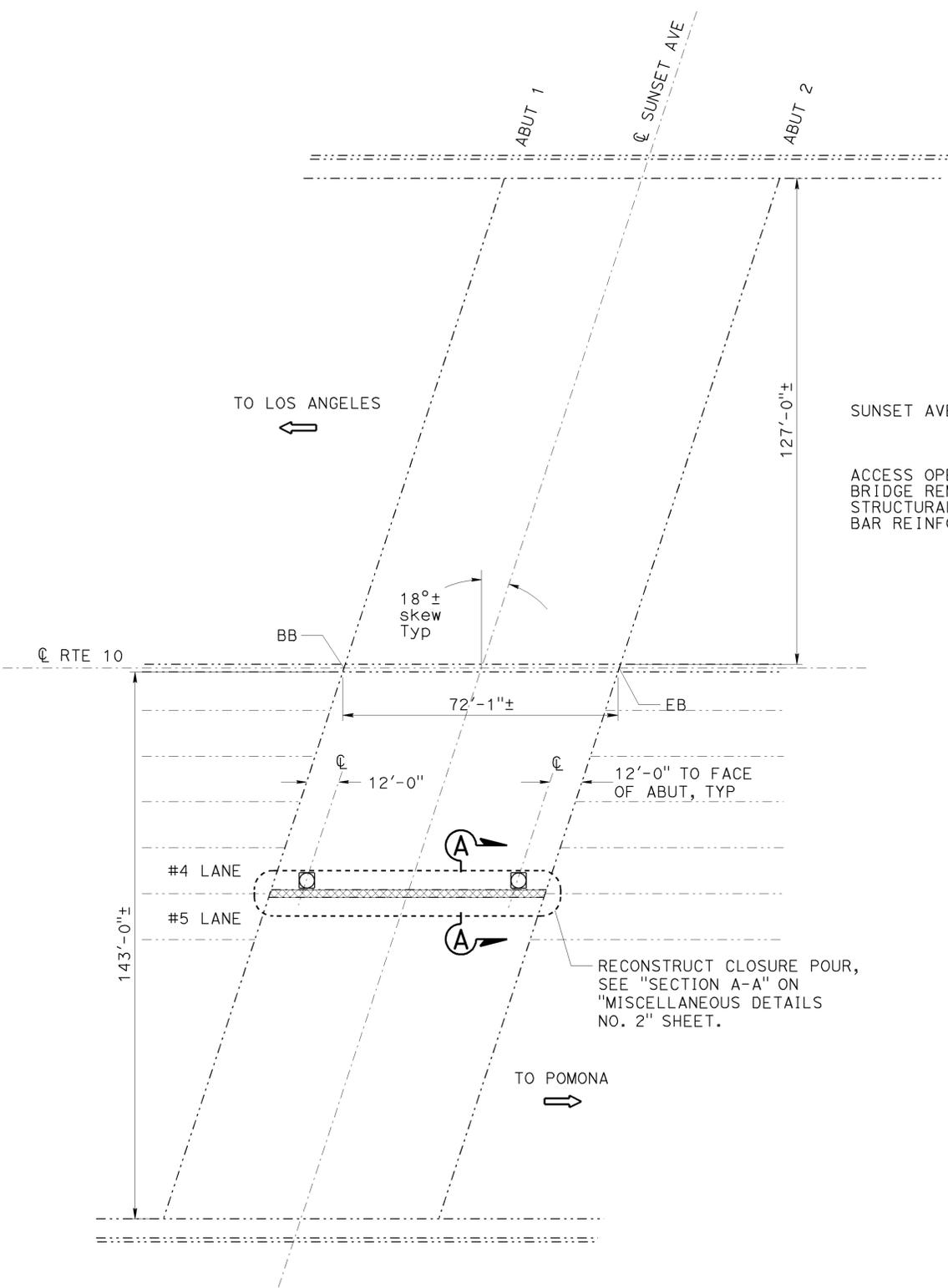
USERNAME => s129239 DATE PLOTTED => 11-JAN-2012 TIME PLOTTED => 09:14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	19	26

1/14/11
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/13
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

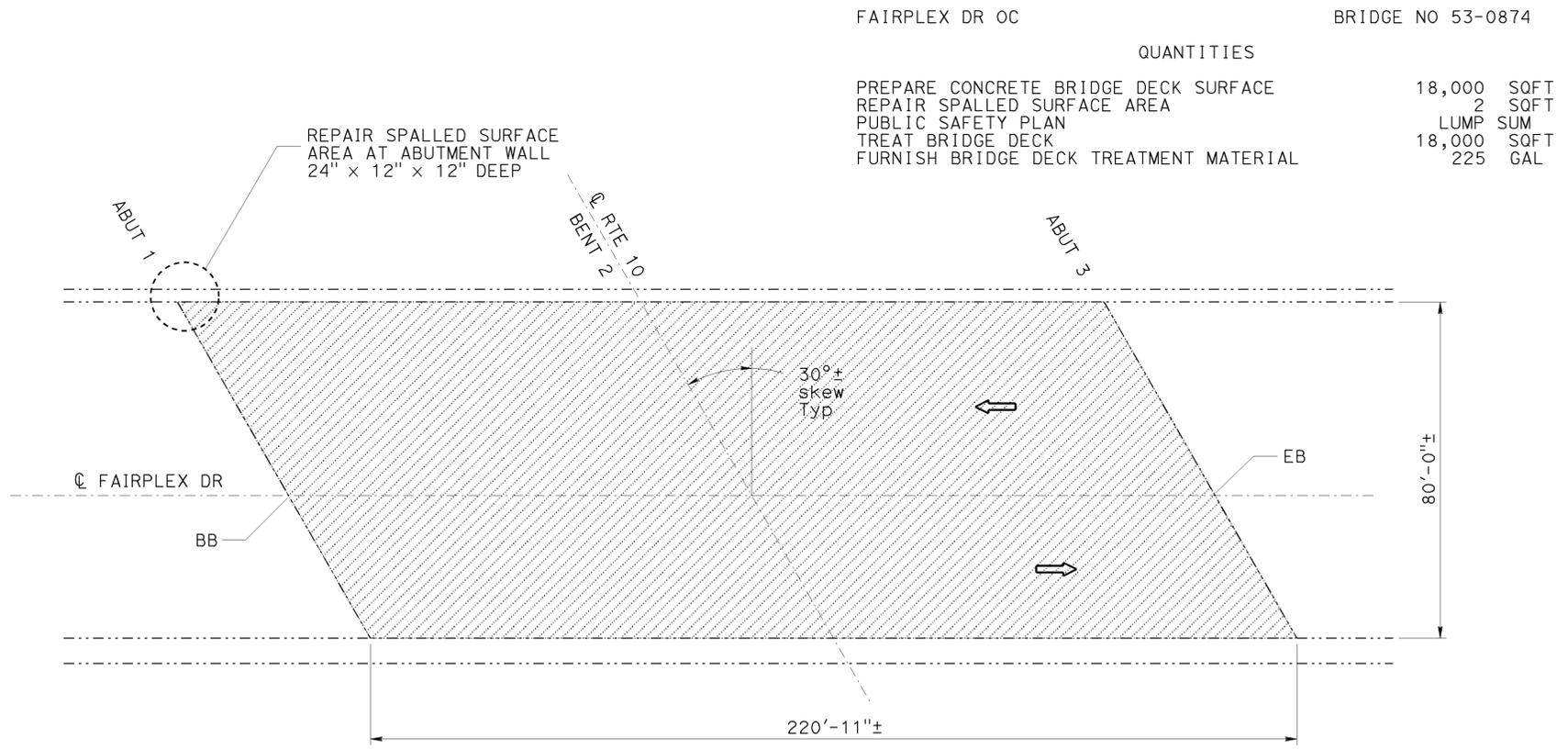
- Indicates existing.
- ⇒ Indicates direction of traffic.
- Indicates location of core 2' diameter opening through existing soffit and install soffit access hatch. See "SOFFIT ACCESS OPENING DETAILS" sheet.
- ▨ Indicates limits of reconstruction closure pour.
- ▧ Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.



SUNSET AVE UC BRIDGE NO 53-0668

QUANTITIES

ACCESS OPENING, SOFFIT	2	EA
BRIDGE REMOVAL (PORTION), LOCATION A	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	15	CY
BAR REINFORCING STEEL (BRIDGE)	3,450	LB



FAIRPLEX DR OC BRIDGE NO 53-0874

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	18,000	SQFT
REPAIR SPALLED SURFACE AREA	2	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
TREAT BRIDGE DECK	18,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	225	GAL

SUNSET AVENUE UC
 Br No. 53-0668, Rte 10, PM 34.85
 1" = 20'



FAIRPLEX DRIVE OC
 Br No. 53-0874, Rte 10, PM 43.66
 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.

TONY D. BRAKE DESIGN ENGINEER	DESIGN	BY Gerald Joo	CHECKED Edward Li	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 10,164 BRIDGES GENERAL PLAN NO. 3	
	DETAILS	BY Tom Dang	CHECKED Edward Li	LAYOUT	BY Tom Dang		CHECKED Gerald Joo		POST MILE
	QUANTITIES	BY Gerald Joo	CHECKED Edward Li	SPECIFICATIONS	BY Dave Klein		CHECKED Dave Klein		Varies

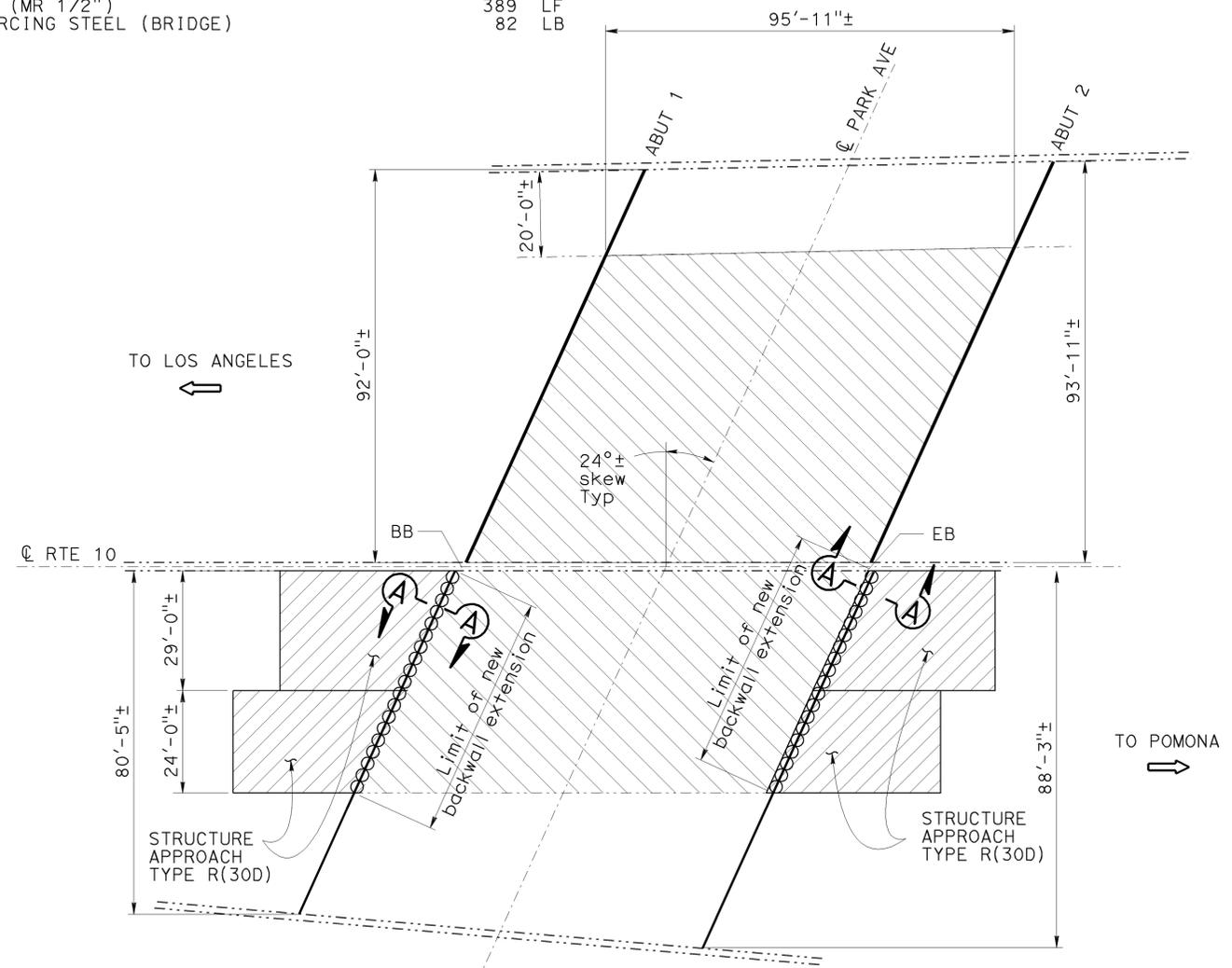
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3489 PROJECT NUMBER & PHASE: 07000200361 CONTRACT NO.: 4Y8101 DISREGARD PRINTS BEARING EARLIER REVISION DATES 11-12-11 SHEET 03 OF 10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	20	26

REGISTERED CIVIL ENGINEER DATE 1/14/11
 No. C65380
 Exp. 09/30/13
 CIVIL
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QUANTITIES

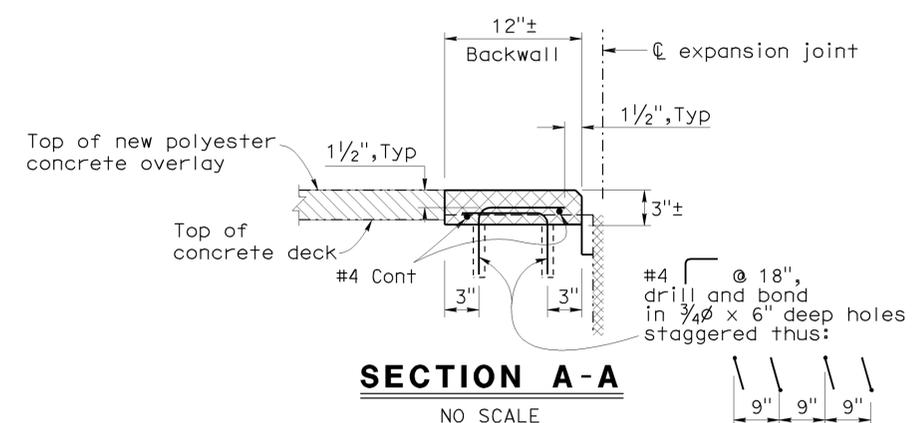
REMOVE ASPHALT CONCRETE SURFACING	12,100	SQFT
REMOVE UNSOUND CONCRETE	35	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	12,100	SQFT
BRIDGE REMOVAL (PORTION), LOCATION B	LUMP	SUM
AGGREGATE BASE (APPROACH SLAB)	15	CY
STRUCTURAL CONCRETE, BRIDGE	3	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	145	CY
PAVING NOTCH EXTENSION	87	CF
CLEAN EXPANSION JOINT	273	LF
RAPID SETTING CONCRETE (PATCH)	35	CF
FURNISH POLYESTER CONCRETE OVERLAY	3,025	CF
PLACE POLYESTER CONCRETE OVERLAY	12,100	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
JOINT SEAL (MR 1/2")	389	LF
BAR REINFORCING STEEL (BRIDGE)	82	LB



PARK AVENUE UC
 Br No. 53-0854, Rte 10, PM 45.55
 1" = 20'

NOTE:
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- 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, remove unsound concrete and place Rapid Setting Concrete (Patch).
 - ▨ Indicates limits of removal of existing 3"± thick Asphalt Concrete Overlay, prepare concrete bridge deck surface and place new 3"± thick polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch with rapid setting concrete. Polyester concrete shall be placed in one lift.
 - ▩ Indicates limits of bridge removal (Portion) and place structural concrete (Bridge).
 - ▧ Indicates limits of remove and replace new structure approach slab and paving notch extension.
 - ⊖ Indicates location of placement of new joint seal.



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

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

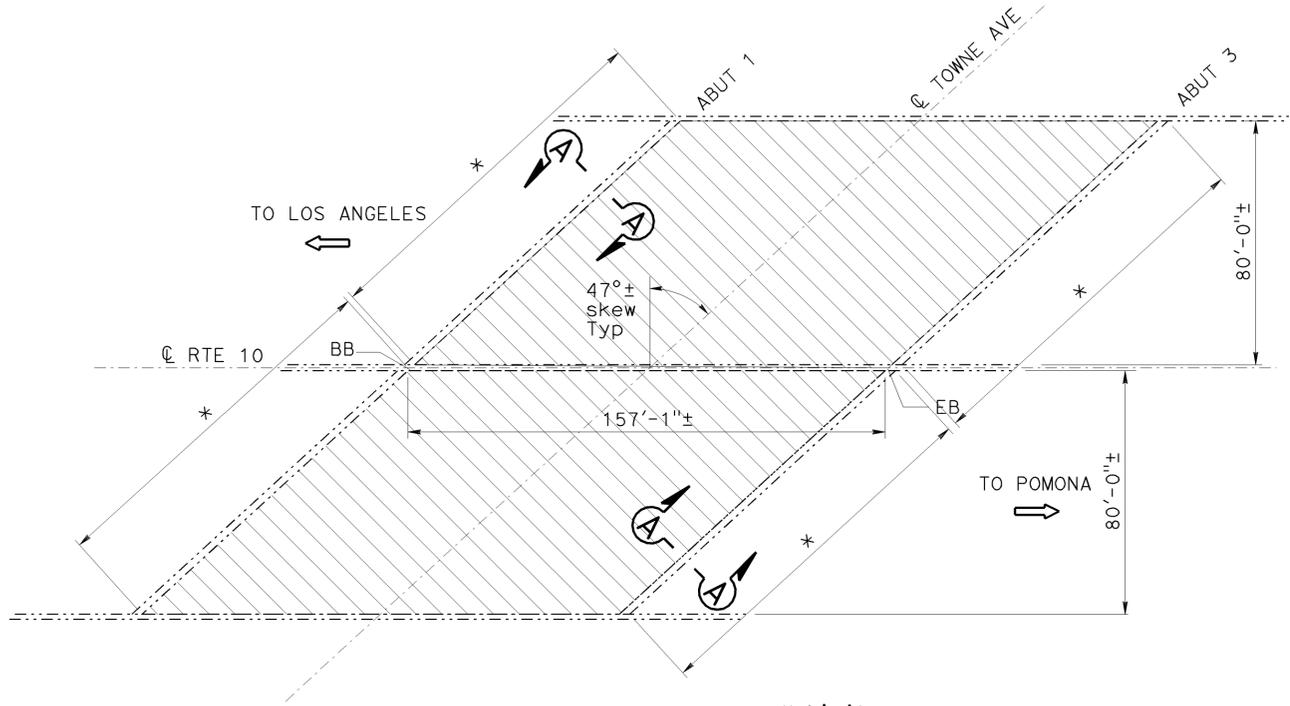
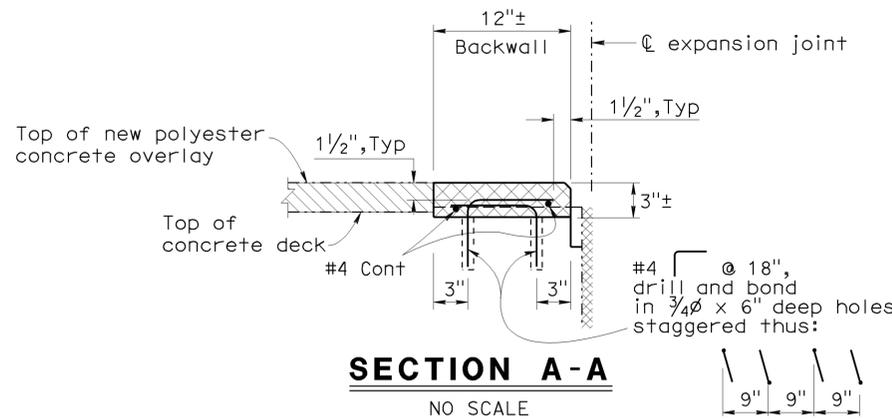
BRIDGE NO. Various
 POST MILE Varies
ROUTE 10,164 BRIDGES
GENERAL PLAN NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7 4.9	21	26

1/14/11
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE
 No. C65380
 Exp. 09/30/13
 CIVIL
 STATE OF CALIFORNIA
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LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of removal of existing 3"± thick Asphalt Concrete Overlay, prepare concrete bridge deck surface and place new 3"± thick polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch with rapid setting concrete. Polyester concrete shall be placed in one lift.
- ▩ Indicates limits of bridge removal (Portion) and place structural concrete (Bridge).



TOWNE AVENUE UC
 Br No. 53-0858, Rte 10, PM 46.40
 1" = 30'

TOWNE AV UC BRIDGE NO 53-0858

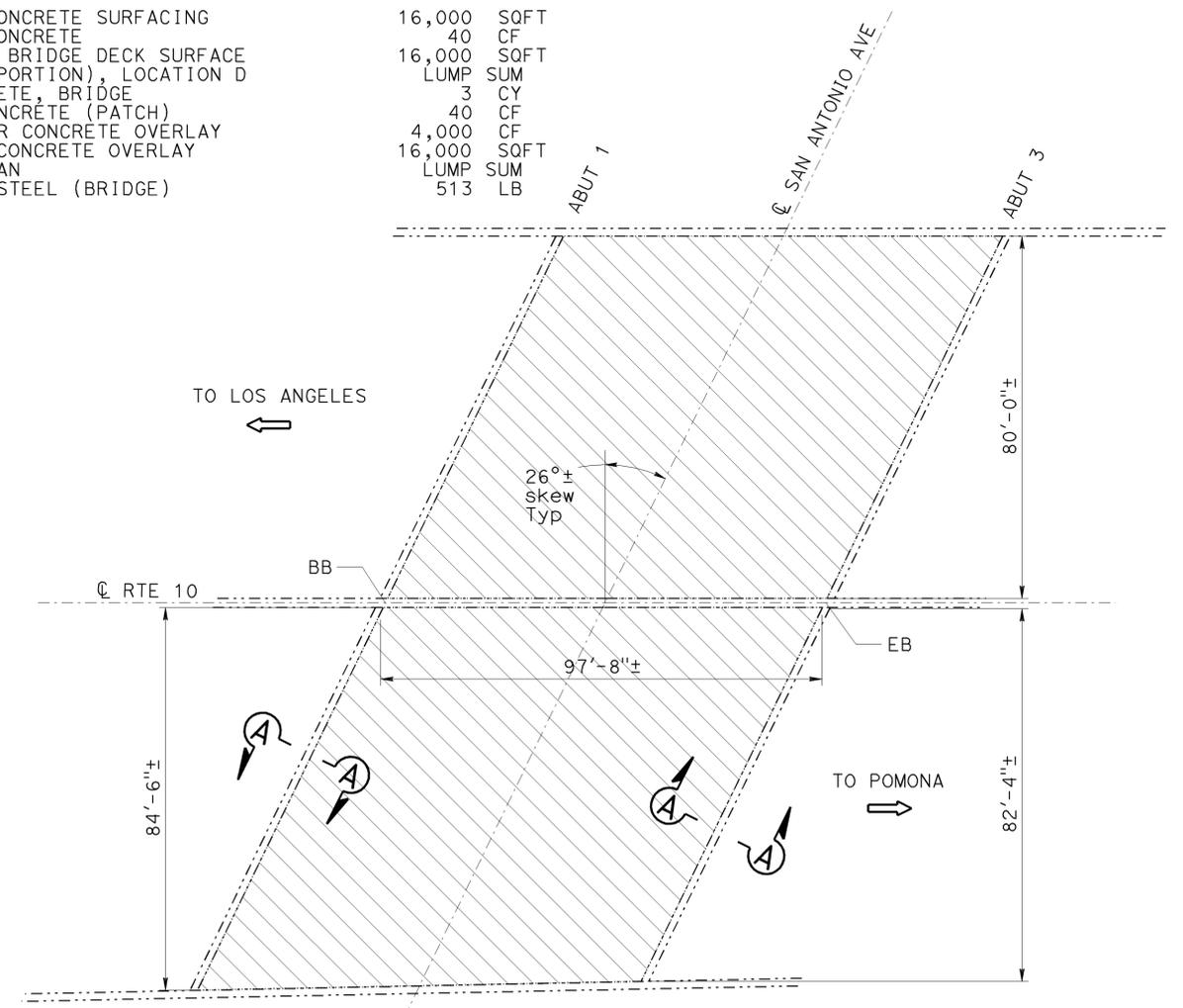
QUANTITIES	
REMOVE ASPHALT CONCRETE SURFACING	25,200 SQFT
REMOVE UNSOUND CONCRETE	65 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	25,200 SQFT
BRIDGE REMOVAL (PORTION), LOCATION C	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	4 CY
RAPID SETTING CONCRETE (PATCH)	65 CF
FURNISH POLYESTER CONCRETE OVERLAY	6,300 CF
PLACE POLYESTER CONCRETE OVERLAY	25,200 SQFT
PUBLIC SAFETY PLAN	LUMP SUM
BAR REINFORCING STEEL (BRIDGE)	658 LB

NOTE:
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SAN ANTONIO AV UC

BRIDGE NO 53-0859

QUANTITIES	
REMOVE ASPHALT CONCRETE SURFACING	16,000 SQFT
REMOVE UNSOUND CONCRETE	40 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	16,000 SQFT
BRIDGE REMOVAL (PORTION), LOCATION D	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	3 CY
RAPID SETTING CONCRETE (PATCH)	40 CF
FURNISH POLYESTER CONCRETE OVERLAY	4,000 CF
PLACE POLYESTER CONCRETE OVERLAY	16,000 SQFT
PUBLIC SAFETY PLAN	LUMP SUM
BAR REINFORCING STEEL (BRIDGE)	513 LB



SAN ANTONIO AVENUE UC
 Br No. 53-0859, Rte 10, PM 46.72
 1" = 20'

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.
 Various
 POST MILE
 Varies

ROUTE 10,164 BRIDGES
GENERAL PLAN NO. 5

TONY D. BRAKE
 DESIGN ENGINEER

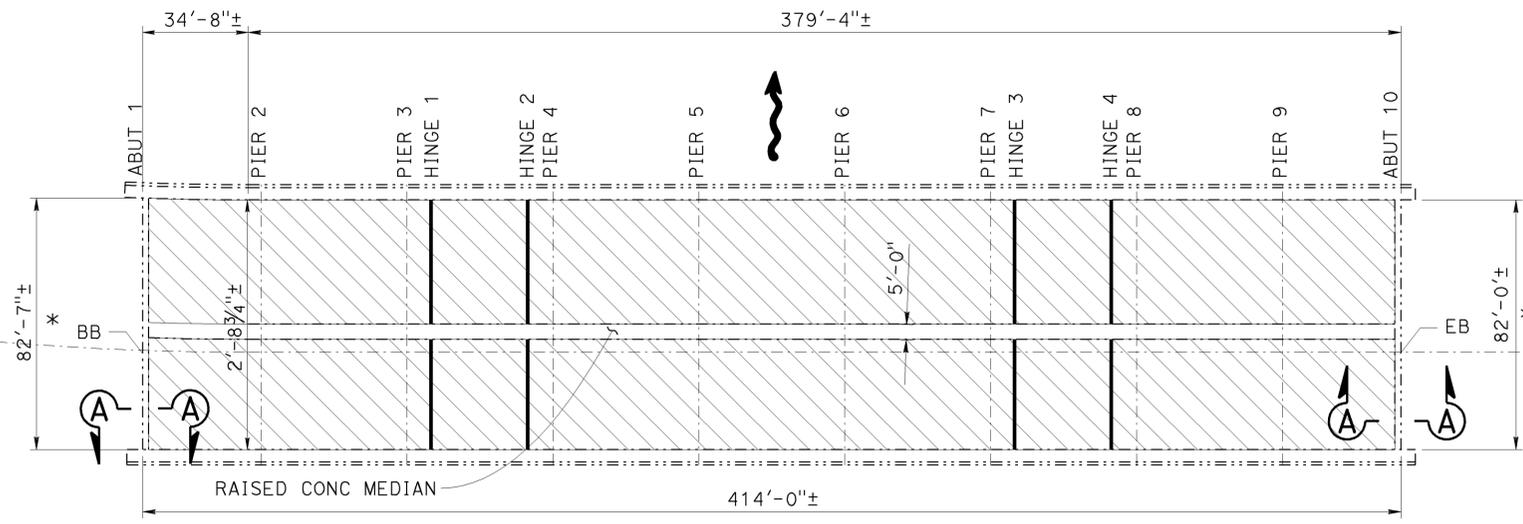
DESIGN	BY Gerald Joo	CHECKED Edward Li
DETAILS	BY Tom Dang	CHECKED Edward Li
QUANTITIES	BY Gerald Joo	CHECKED Edward Li

LOAD FACTOR DESIGN	BY	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
LAYOUT	BY Tom Dang	CHECKED Gerald Joo
SPECIFICATIONS	BY Dave Klein	CHECKED PLANS AND SPECS COMPARED Dave Klein

USERNAME => s129239 DATE PLOTTED => 11-JAN-2012 TIME PLOTTED => 09:14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7 4.9	22	26

REGISTERED CIVIL ENGINEER DATE 1/14/11
 No. C65380
 Exp. 09/30/13
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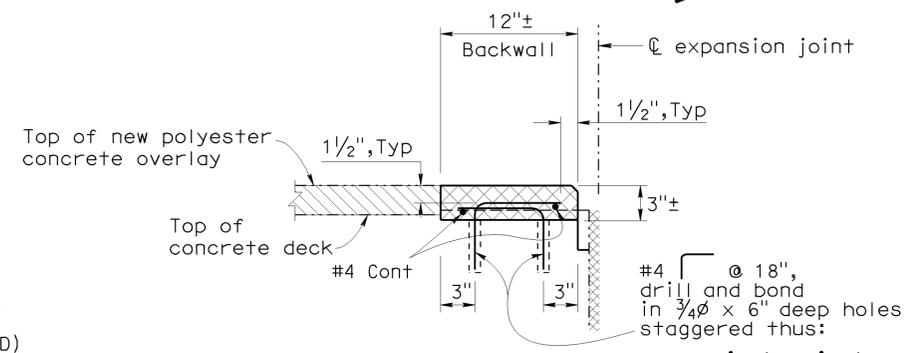
QUANTITIES

REMOVE ASPHALT CONCRETE SURFACING	32,000	SQFT
REMOVE UNSOUND CONCRETE	84	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	32,000	SQFT
BRIDGE REMOVAL (PORTION), LOCATION E	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	2	CY
CLEAN EXPANSION JOINT	308	LF
RAPID SETTING CONCRETE (PATCH)	84	CF
FURNISH POLYESTER CONCRETE OVERLAY	8,000	CF
PLACE POLYESTER CONCRETE OVERLAY	32,000	SQFT
PUBLIC SAFETY PLAN	LUMP	SUM
JOINT SEAL (MR 1/2")	308	LF
BAR REINFORCING STEEL (BRIDGE)	232	LB

RIO HONDO

Br No. 53-0235, Rte 164, PM 4.91
 1" = 30'

* Limits of construct new backwall extension

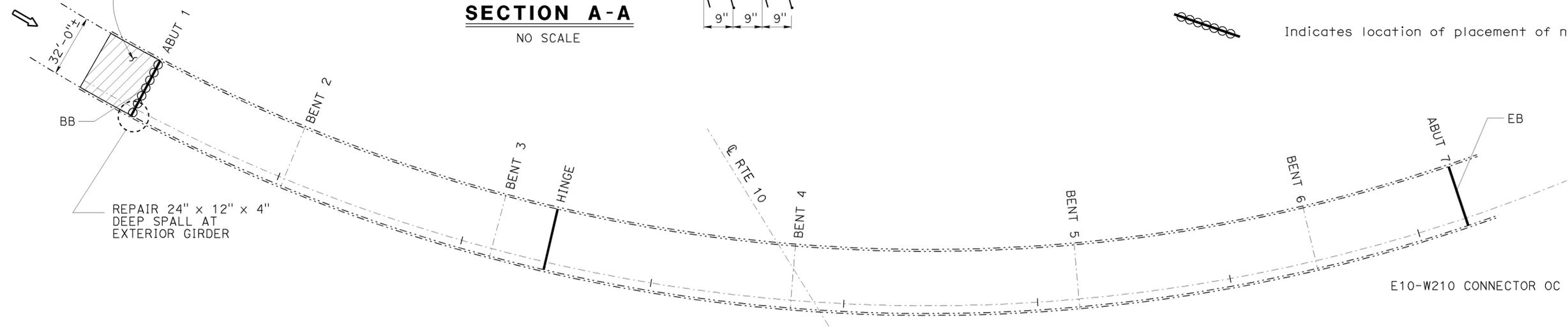


SECTION A-A

NO SCALE

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 with Unsound Concrete, and Rapid Setting Concrete (Patch).
- [Hatched Box] Indicates limits of removal of existing 3"± thick Asphalt Concrete Overlay, prepare concrete bridge deck surface and place new 3"± thick polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch with rapid setting concrete. Polyester concrete shall be placed in one lift.
- [Cross-hatched Box] Indicates limits of bridge removal (Portion) and place structural concrete, Bridge.
- [Diagonal Hatched Box] Indicates limits of remove AC roadway and construct new structure approach slabs with paving notch extension.
- ⊖ Indicates location of placement of new joint seal.



E10-W210 CONNECTOR OC

Br No. 53-2004G, Rte 10, PM 42.44
 1" = 20'

E10-W210 CONNECTOR OC

BRIDGE NO 53-2004G

QUANTITIES

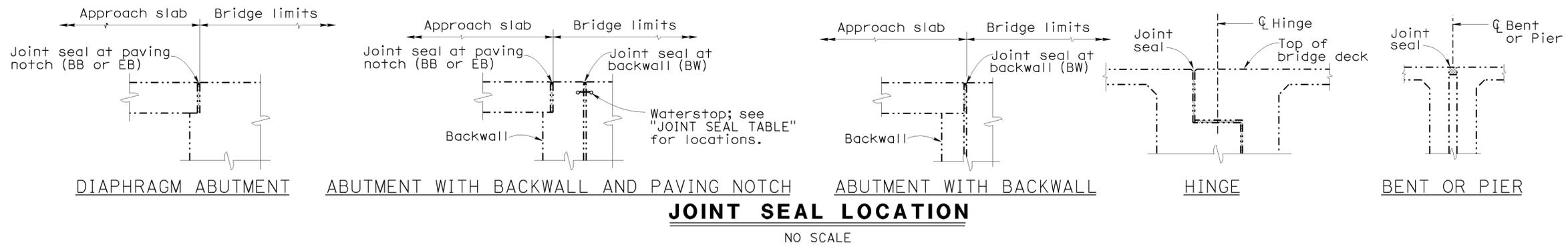
REMOVE UNSOUND CONCRETE	3	CF
AGGREGATE BASE (APPROACH SLAB)	4	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	36	CY
PAVING NOTCH EXTENSION	24	CF
CLEAN EXPANSION JOINT	64	LF
RAPID SETTING CONCRETE (PATCH)	3	CF
REPAIR SPALLED SURFACE AREA	2	SQFT
JOINT SEAL (MR 1 1/2")	96	LF

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

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

BRIDGE NO. Various
 POST MILE Varies
ROUTE 10,164 BRIDGES
GENERAL PLAN NO. 6

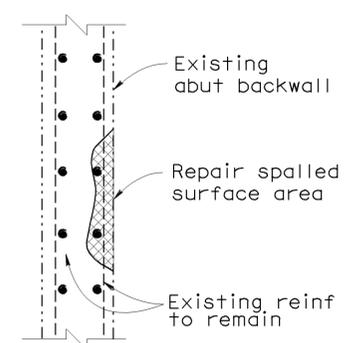


JOINT SEAL TABLE										
BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (INCHES)	APPROX LENGTH (FT)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	REMOVE UNSOUND CONCRETE (CU FT)	RAPID SETTING CONCRETE (PATCH) (CU FT)		
PARK AVENUE UC	53-0854	ABUT 1	PN	1/2	189	NO	12	2	2	
		ABUT 2	PN	1/2	200	NO	12	2	2	
RIO HONDO	53-0235	HINGE 1	DJ	1/2	77	NO	12	1	1	
		HINGE 2	DJ	1/2	77	NO	12	1	1	
		HINGE 3	DJ	1/2	77	NO	12	1	1	
		HINGE 4	DJ	1/2	77	NO	12	1	1	
E10-W210 CONNECTOR OC	53-2004G	ABUT 1	DJ	1 1/2	32	NO	12	1	1	
		HINGE	DJ	1 1/2	32	YES	12	1	1	
		ABUT 7	PN	1 1/2	32	NO	12	1	1	

PN = Paving notch DJ = Deck Joint

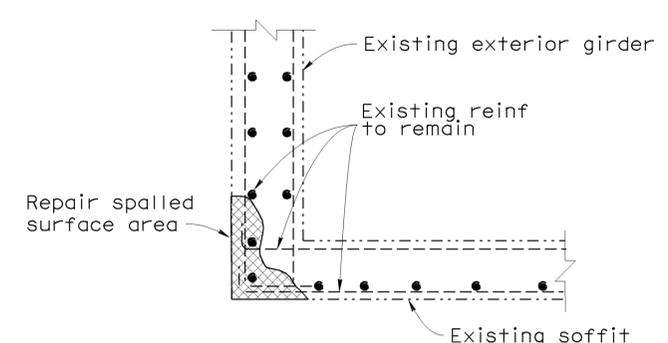
NOTES:

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



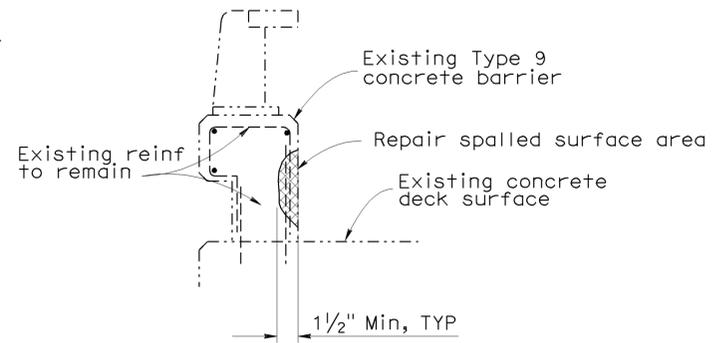
ABUTMENT BACKWALL SPALLED SURFACE AREA DETAIL

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



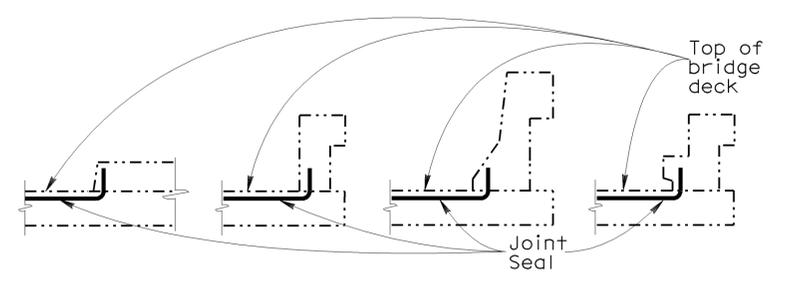
GIRDER SPALLED SURFACE AREA DETAIL

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.



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.

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DESIGN	BY Gerald Joo	CHECKED Edward Li
DETAILS	BY Tom Dang	CHECKED Edward Li
QUANTITIES	BY Gerald Joo	CHECKED Edward Li

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

ROUTE 10,164 BRIDGES
MISCELLANEOUS DETAILS NO. 1

GENERAL NOTES LOAD FACTOR DESIGN

DESIGN: CALTRANS BRIDGE DESIGN SPECIFICATIONS, APRIL 2000 (LFD) (1996 AASHTO with INTERIMS and REVISIONS by CALTRANS)

DEAD LOAD: Includes 35 psf for future wearing surface.

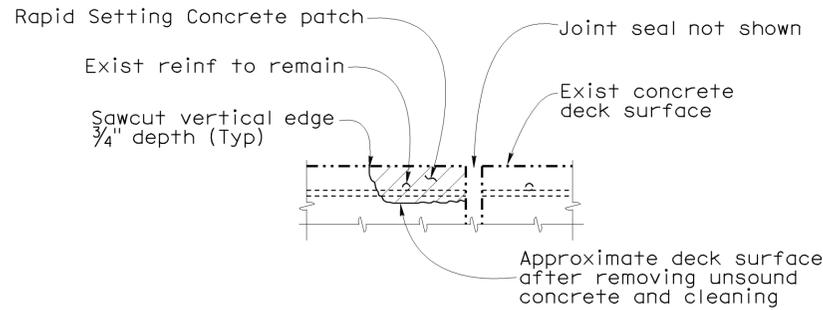
LIVE LOADING: HS20-44 and alternative.

REINFORCED CONCRETE:
 $f_y = 60,000$ psi
 $f'_c = 3,600$ psi
 $n = 8$

Transverse Deck Slabs (Working Stress Design)
 $f_s = 20,000$ psi
 $f_c = 1,200$ psi
 $n = 10$

LEGEND:

- Indicates existing structure.
- Indicates new structure.
-  Indicates limits of core soffit access opening.
-  Indicates limits of bridge removal (Portion) and place rapid setting concrete for structure.



JOINT SPALL REPAIR DETAIL

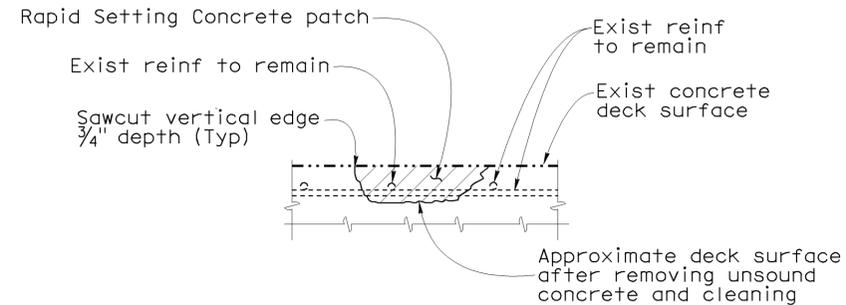
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

NOTES:

1. Reinforcement during deck concrete removal is to remain undamaged.
2. Not all details shown for clarity.
3. Remove unsound concrete to allow access to pour concrete. Holes shall be patched after placing concrete.

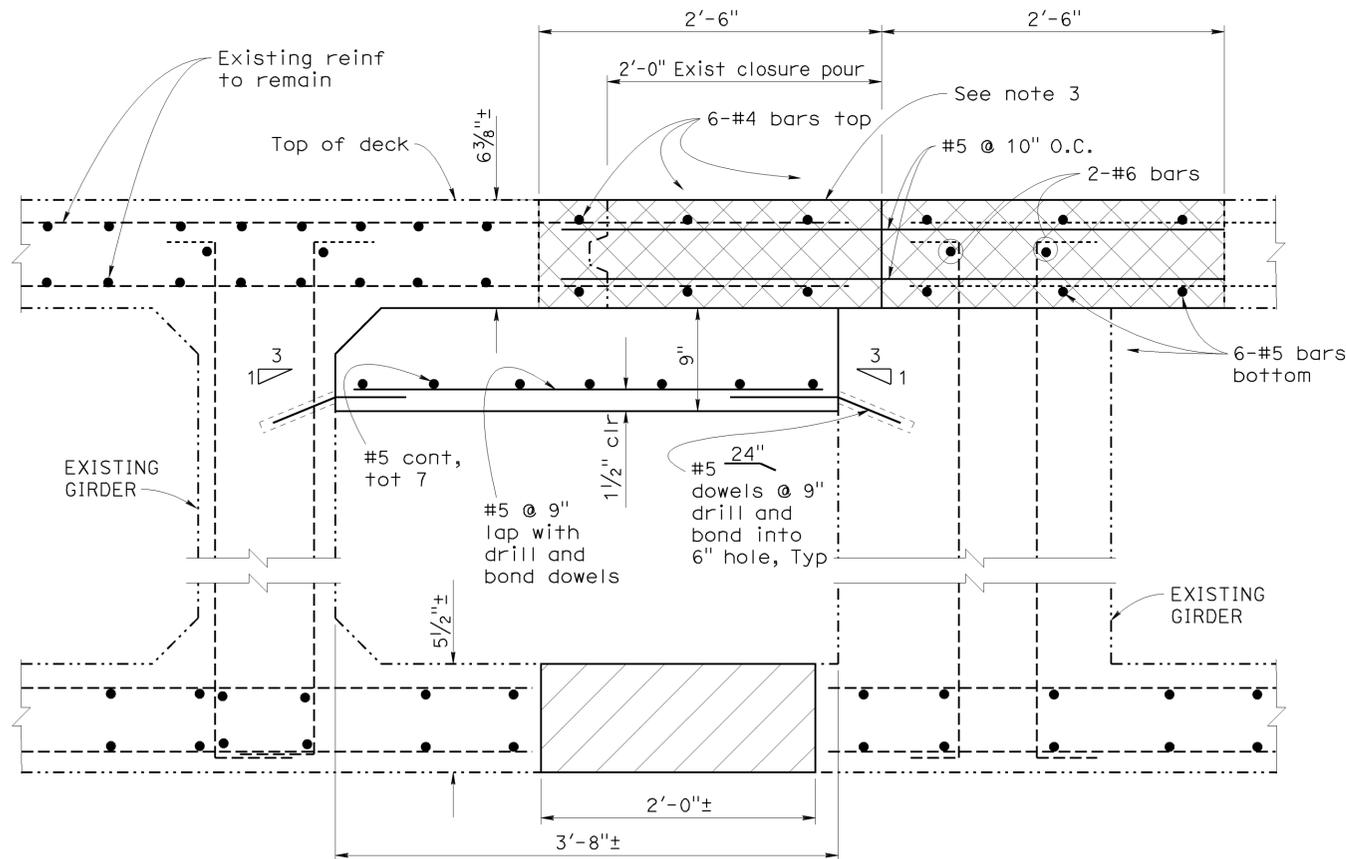
DECK REPAIR NOTES:

1. Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
2. It is responsibility of the Contractor to repair any reinforcement that is accidentally cut by saw cutting operations.
3. When existing transverse reinforcement is exposed in the deck surface, saw cutting may be waived with the approval of the Engineer.
4. The saw cut depth shall not exceed 3/4 inch or the concrete cover over the top steel reinforcing bars, whichever is less.
5. Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original deck surface with rapid setting concrete patch.



DECK DAMAGE REPAIR DETAIL

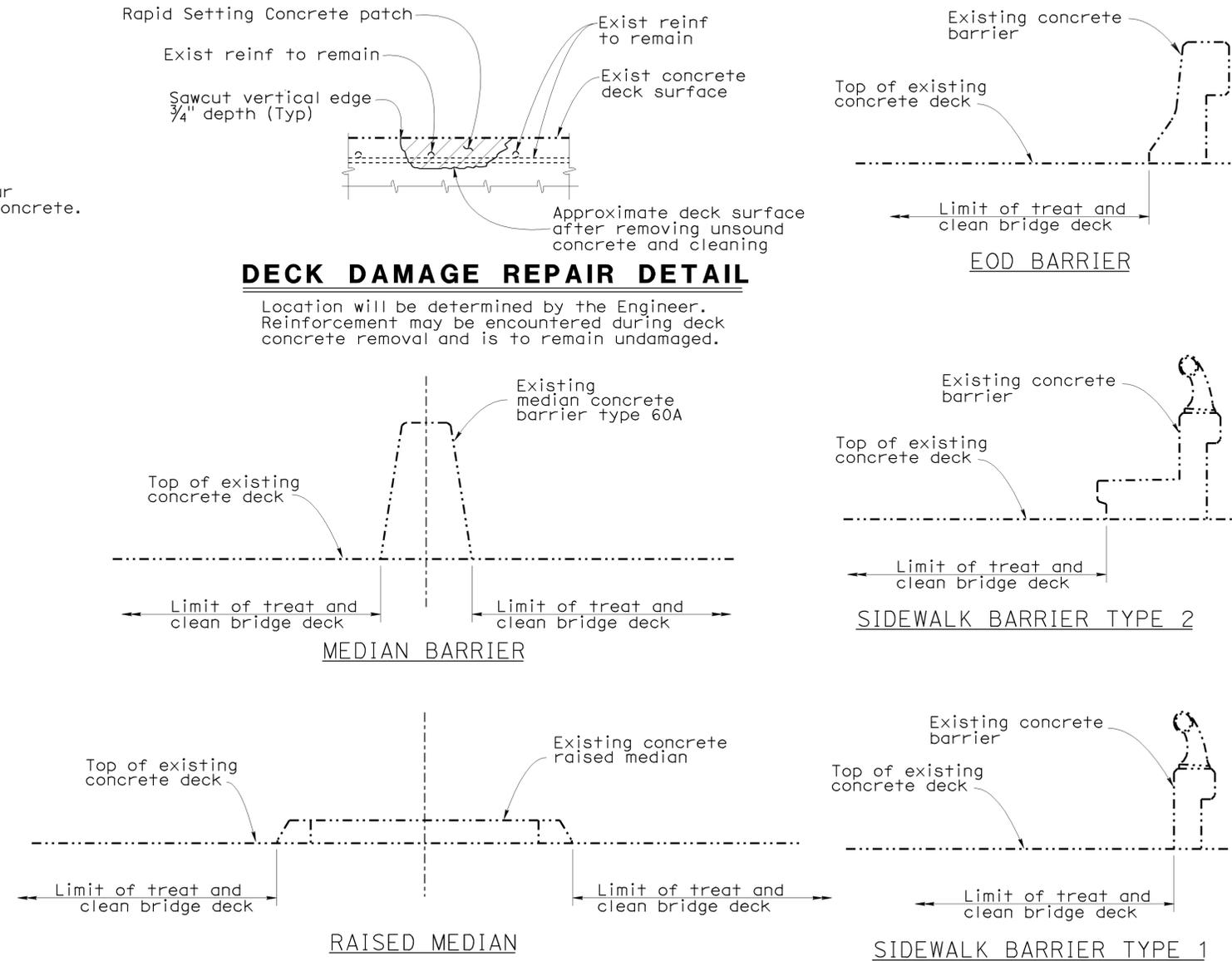
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



SECTION A-A
NO SCALE

SUNSET AVENUE UC

Br No. 53-0668, Rte 10, PM 34.85



TYPICAL LIMITS OF DECK WORK

NO SCALE

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DESIGN	BY Gerald Joo	CHECKED Edward Li
DETAILS	BY Tom Dang	CHECKED Edward Li
QUANTITIES	BY Gerald Joo	CHECKED Edward Li

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

ROUTE 10,164 BRIDGES
MISCELLANEOUS DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	24	26

Gerald Joo 1/14/11
REGISTERED CIVIL ENGINEER DATE

01-30-12
PLANS APPROVAL DATE

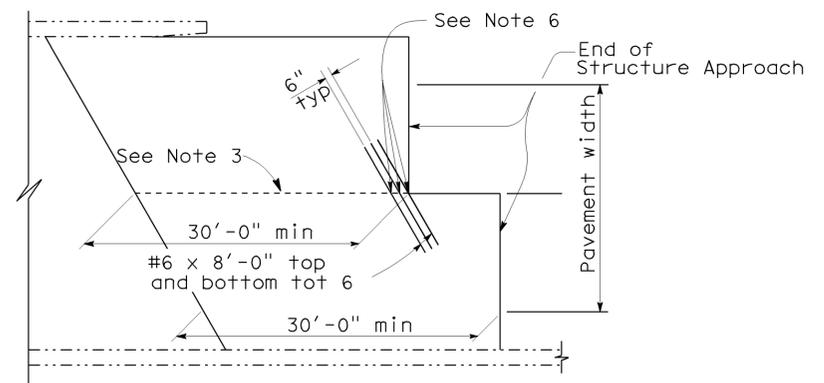
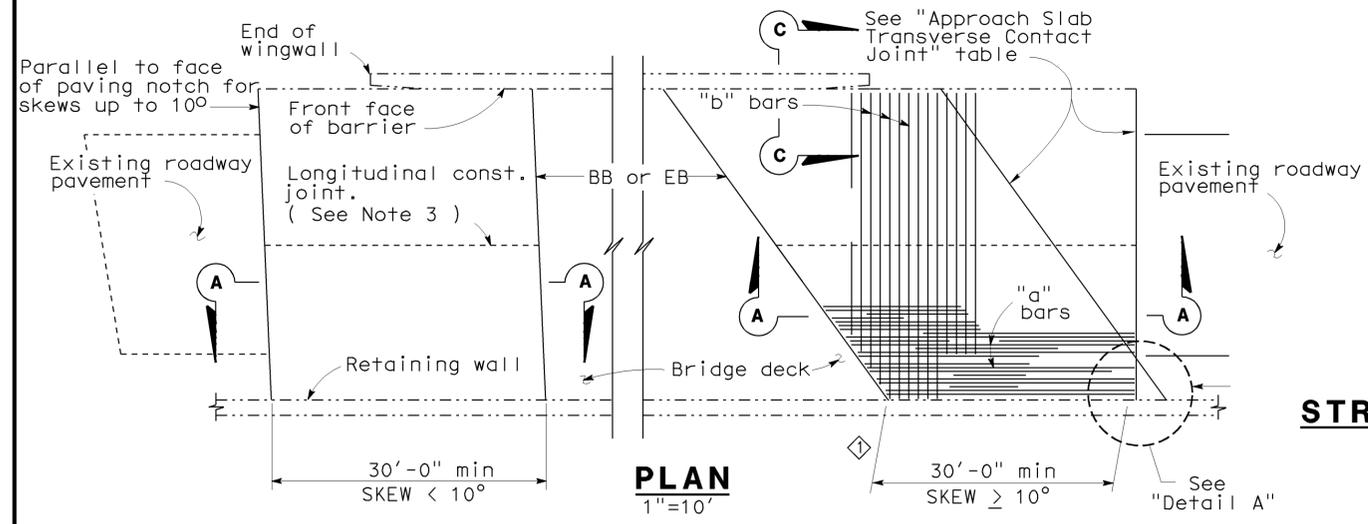
No. C65380
Exp. 09/30/13
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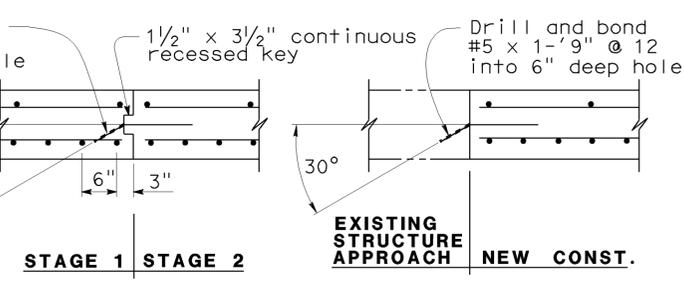
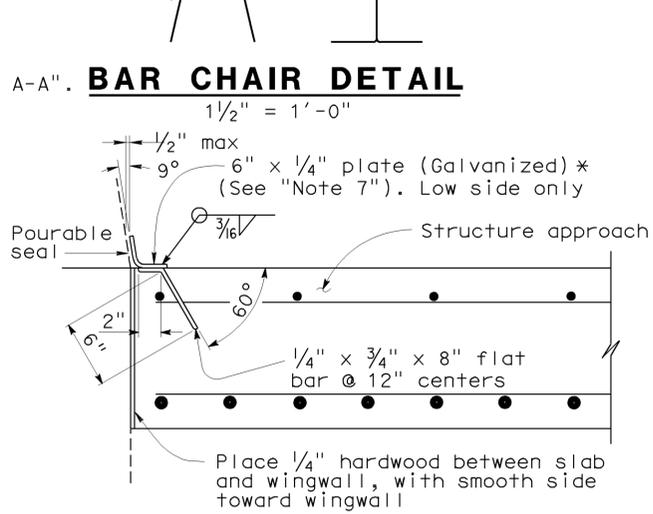
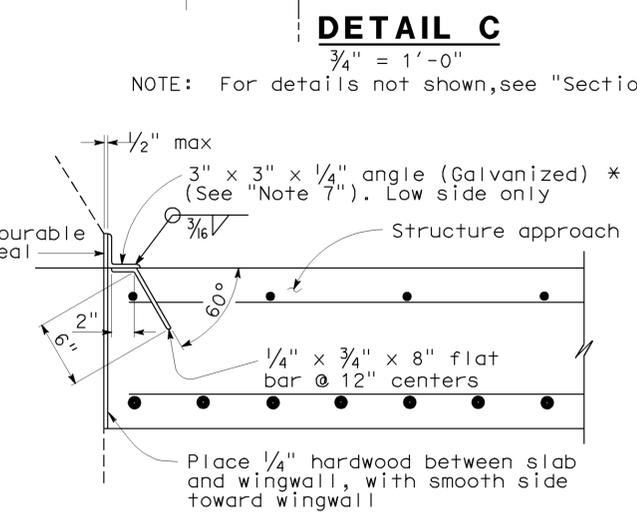
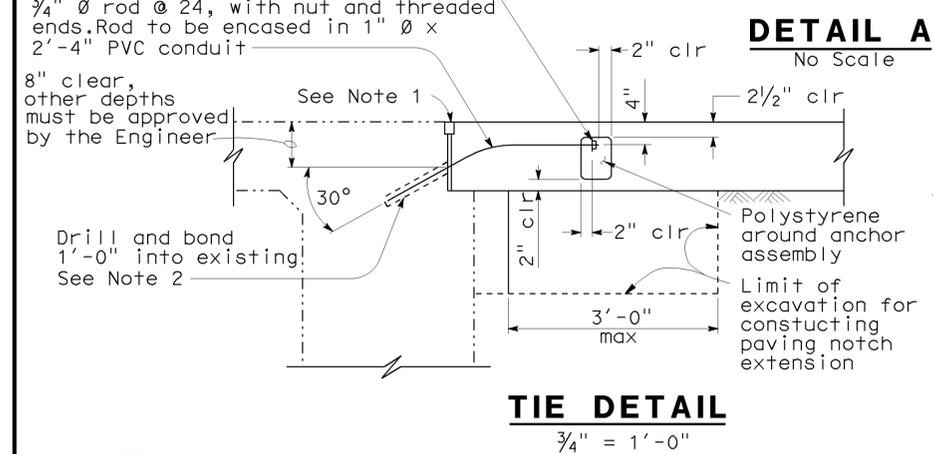
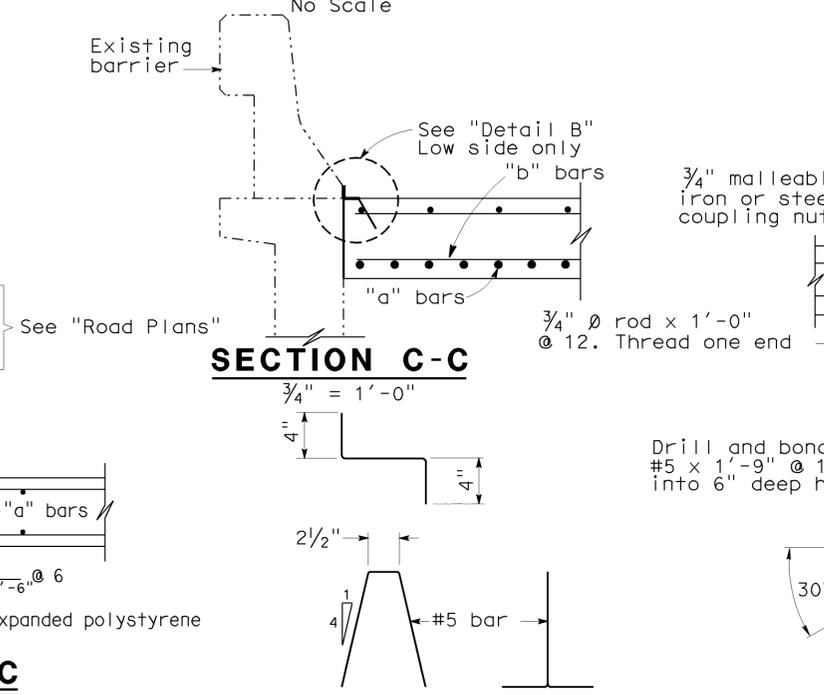
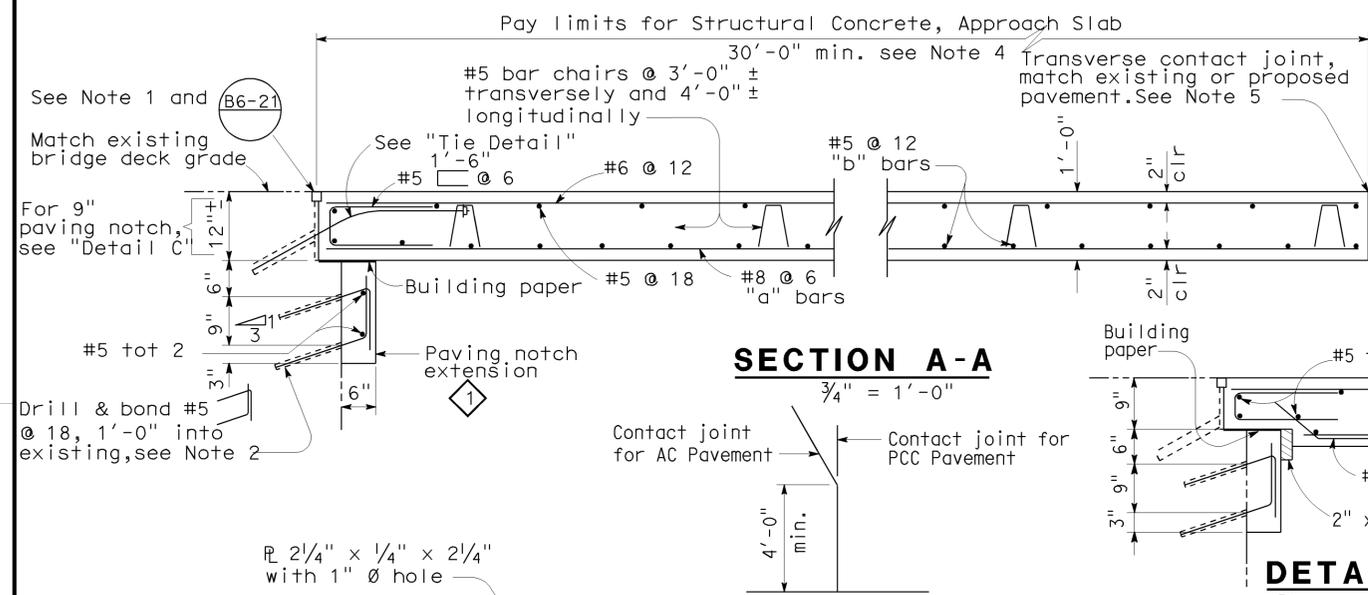
DIST.	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10,164	28.5/46.7, 4.9	25	26

01-30-12
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED ENGINEER - CIVIL
 No. C65380
 Exp. 09/30/13
 CIVIL
 STATE OF CALIFORNIA



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:**
- 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.

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



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

1 REVISED NOTE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.
Various

MILE POST
Varies

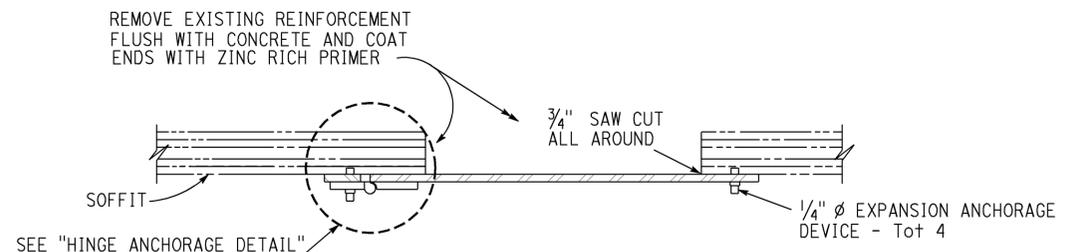
ROUTE 10,164 BRIDGES

STRUCTURE APPROACH TYPE R(30D)

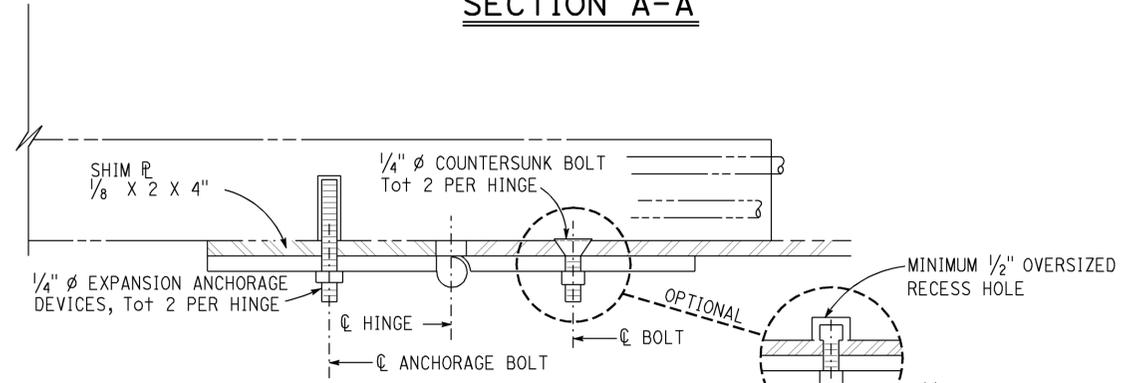
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10,164	28.5/46.7 4.9	26	26

11/14/11
 REGISTERED CIVIL ENGINEER DATE
 01-30-12
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

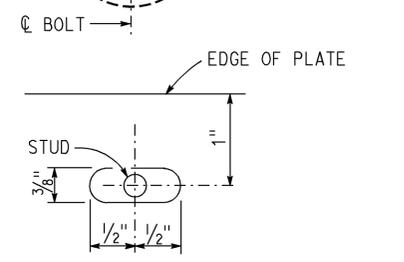
REGISTERED PROFESSIONAL ENGINEER
 GERALD D. JOO
 No. C65380
 Exp. 09/30/13
 CIVIL
 STATE OF CALIFORNIA



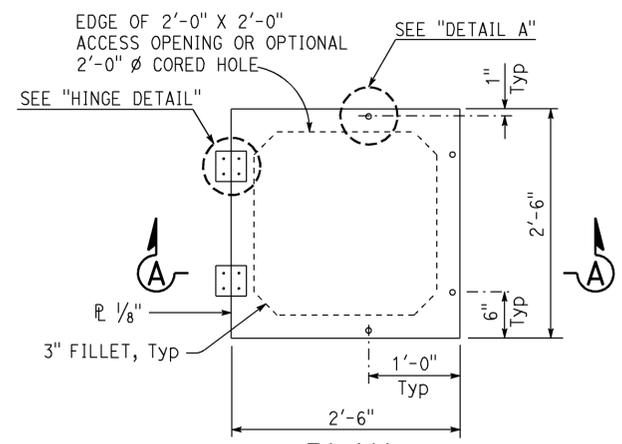
SECTION A-A



HINGE ANCHORAGE DETAIL



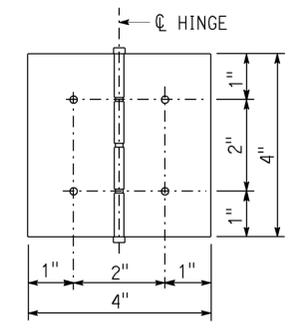
DETAIL A



PLAN

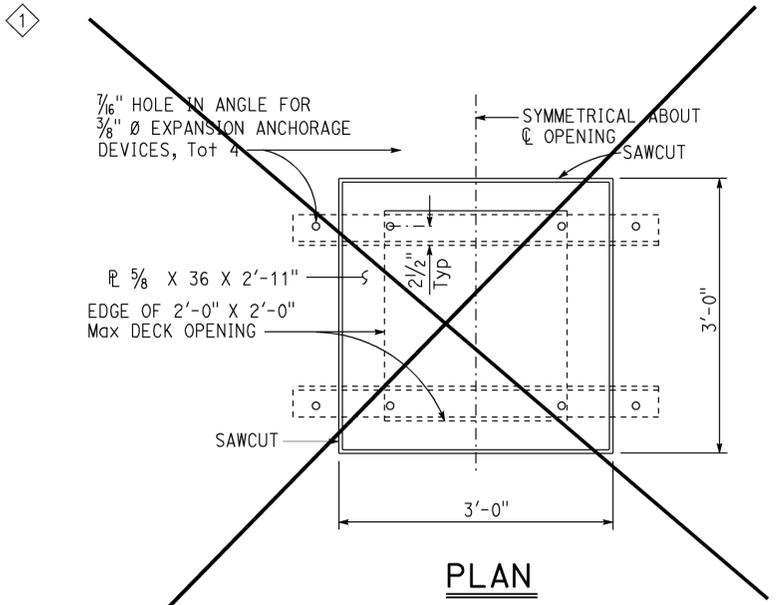
SOFFIT ACCESS DOOR ASSEMBLY

NOTE: SOFFIT ACCESS DOOR OPENING DIRECTION TO BE DETERMINED BY THE ENGINEER

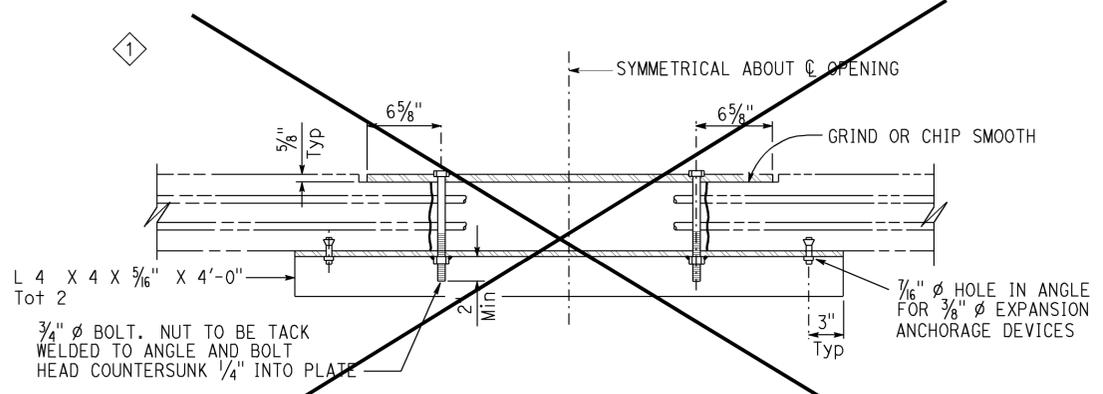


HINGE DETAIL

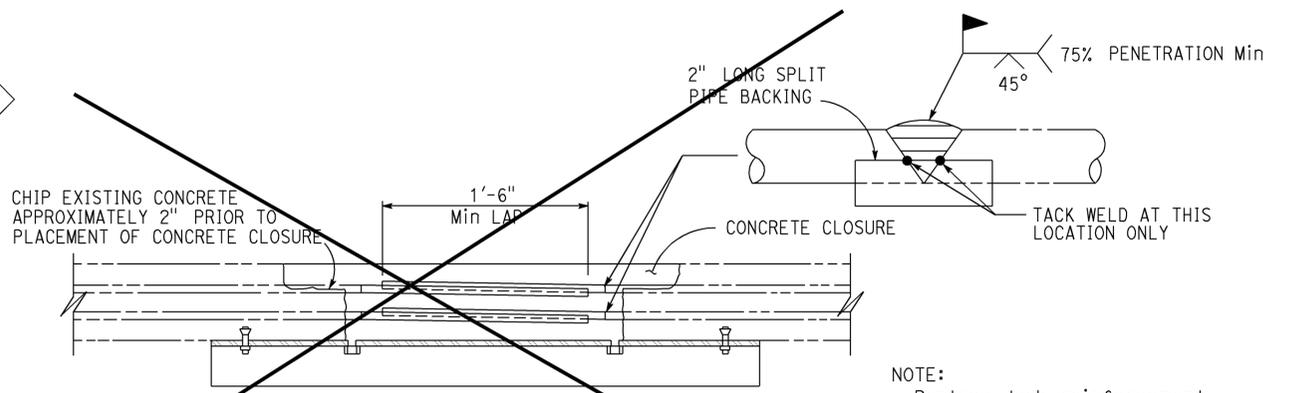
- NOTES:
1. Non-removable pin in hinge
 2. Hinge assembly to be galvanized, brass or stainless steel
 3. Use thread locking system for all hinge nuts
 4. Hinge assembly to be minimum 1/8 inch thick



PLAN



TEMPORARY DECK COVER PLATE



DECK CLOSURE

NOTE: Replace deck reinforcement. Butt weld to existing

NO SCALE

STANDARD DRAWING	
FILE NO. xs7-110	APPROVAL DATE <u>July 2011</u>

DELETED DETAILS

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES
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BRIDGE NO. 53-0668
POST MILE 34.85

SUNSET AVENUE UC	
SOFFIT ACCESS OPENING DETAILS	