

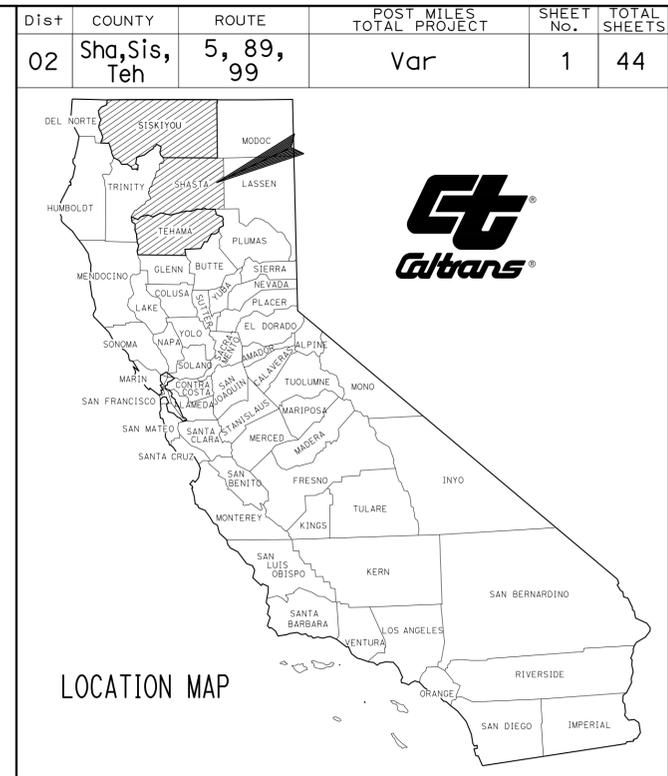
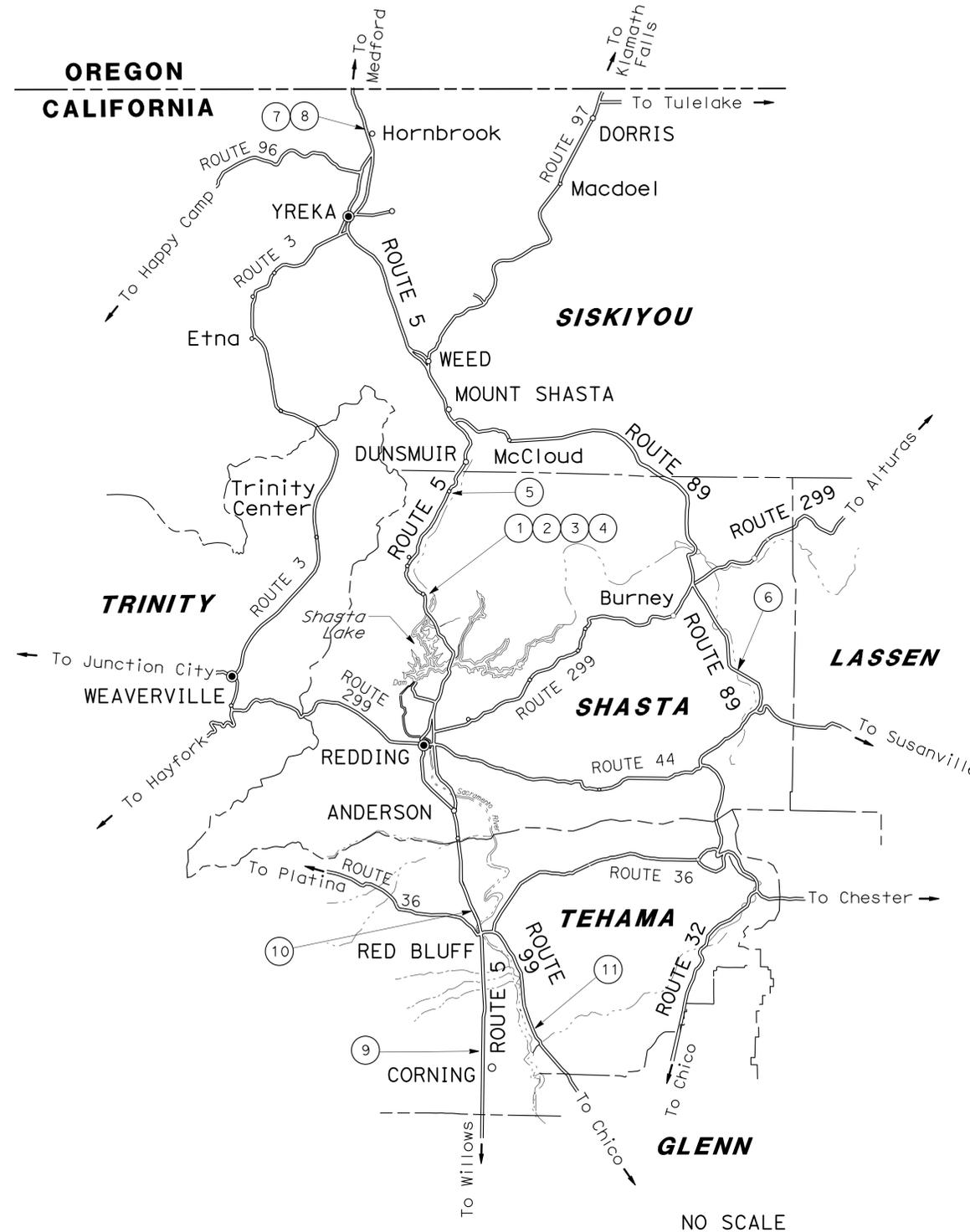
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-5	CONSTRUCTION DETAILS
6-7	CONSTRUCTION AREA SIGNS
8-10	TRAFFIC HANDLING PLAN AND QUANTITIES
11	DETOUR PLAN
12-13	SUMMARY OF QUANTITIES
14-15	ELECTRICAL PLANS
16-33	REVISED STANDARD PLANS
34-44	STRUCTURE PLANS

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN SHASTA, SISKIYOU AND TEHAMA
COUNTIES AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATIONS OF CONSTRUCTION

No.	COUNTY	ROUTE	PM	BRIDGE No.	BRIDGE NAME
1	Sha	5	R41.05	06-0163L	ANTLER UC
2	Sha	5	R41.05	06-0163R	ANTLER UC
3	Sha	5	R42.32	06-0164L	LAKEHEAD UC
4	Sha	5	R42.32	06-0164R	LAKEHEAD UC
5	Sha	5	63.31	06-0116	CASTLE CREEK
6	Sha	89	3.89	06-0085	HAT CREEK
7	Sis	5	R63.65	02-0175R	COTTONWOOD CREEK
8	Sis	5	R63.77	02-0175L	COTTONWOOD CREEK
9	Teh	5	R12.16	08-0165	THOMES CREEK
10	Teh	5	R27.47	08-0157	ADOBE ROAD OC
11	Teh	99	8.38	08-0163	TOOMES CREEK

PROJECT MANAGER
LANCE BROWN
 DESIGN ENGINEER
LANCE BROWN

Roy & Cahill 02-10-14
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
February 10, 2014
 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 OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

CONTRACT No. **02-4F6904**
 PROJECT ID **0213000104**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shg, Sis, Teh	5, 89, 99	Var	2	44
<i>Roy & Cahill</i> REGISTERED CIVIL ENGINEER			02-10-14 DATE		
			02-10-14 PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

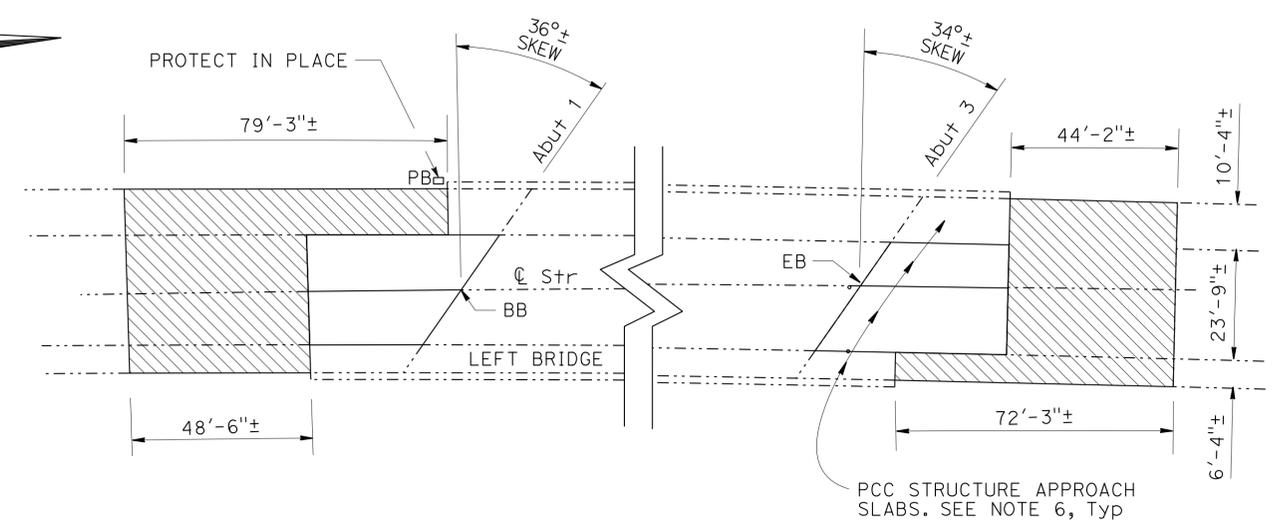
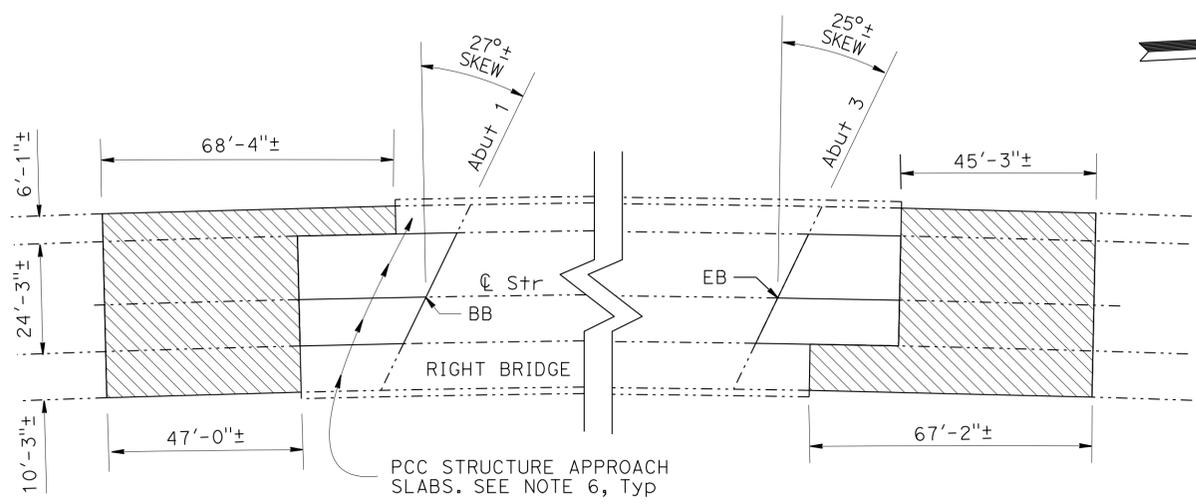
- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATION AND CROSS SLOPE TO MATCH EXISTING OR AS DIRECTED BY THE ENGINEER.
- SEE GENERAL PLANS FOR DETAILS NOT SHOWN.
- EXISTING UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.
- EXISTING BRIDGE JOINTS ARE NOT SHOWN ON THIS PLAN.
- SEE "GENERAL PLAN No. 4" AND "STRUCTURE APPROACH TYPE R(30D) MODIFIED" SHEETS FOR DETAILS ON NEW AND EXISTING PCC STRUCTURE APPROACH SLABS.

LEGEND:

HOT MIX ASPHALT, SUPERPAVE (TYPE A)

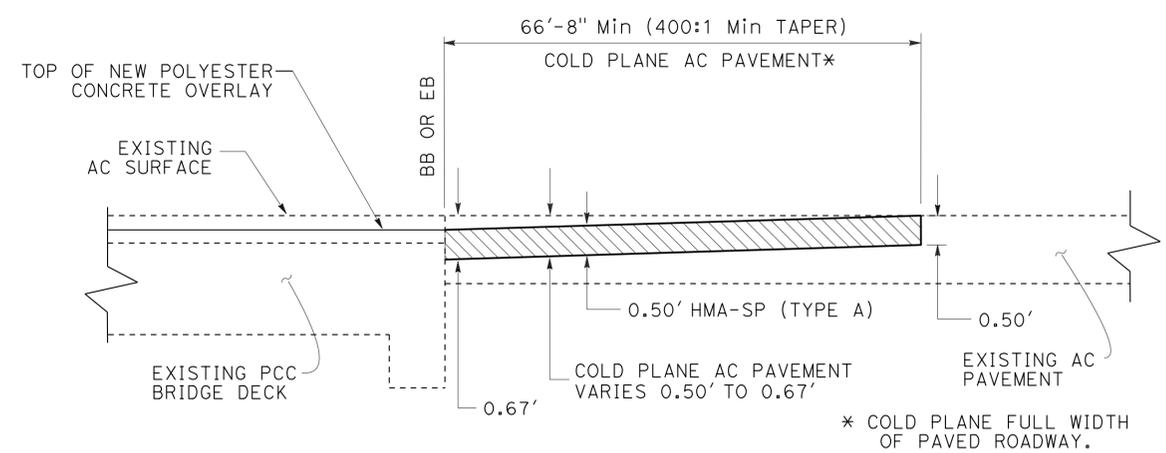
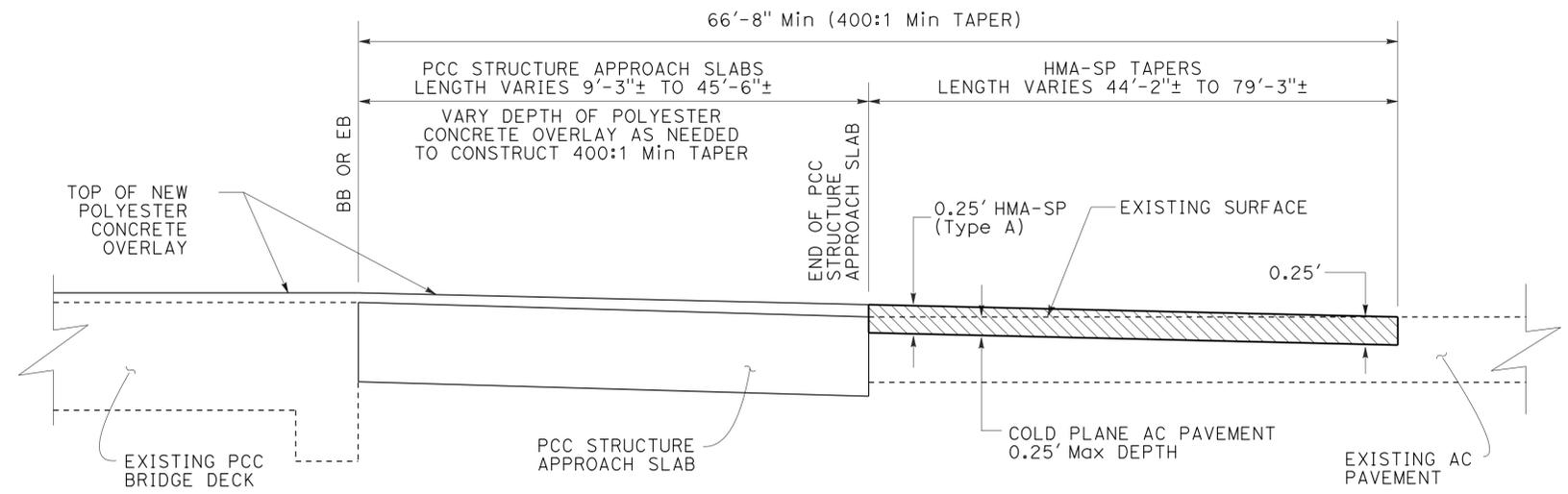
ABBREVIATIONS:

HMA-SP (TYPE A) HOT MIX ASPHALT, SUPERPAVE (TYPE A)



COTTONWOOD CREEK
Br No. 02-0175R, ROUTE 5, Sis, PM R63.65

COTTONWOOD CREEK
Br No. 02-0175L, ROUTE 5, Sis, PM R63.77



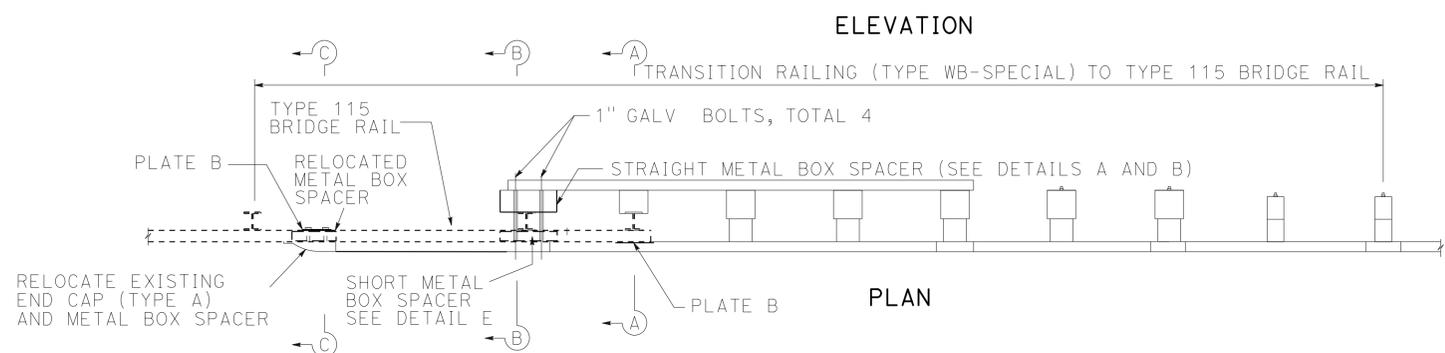
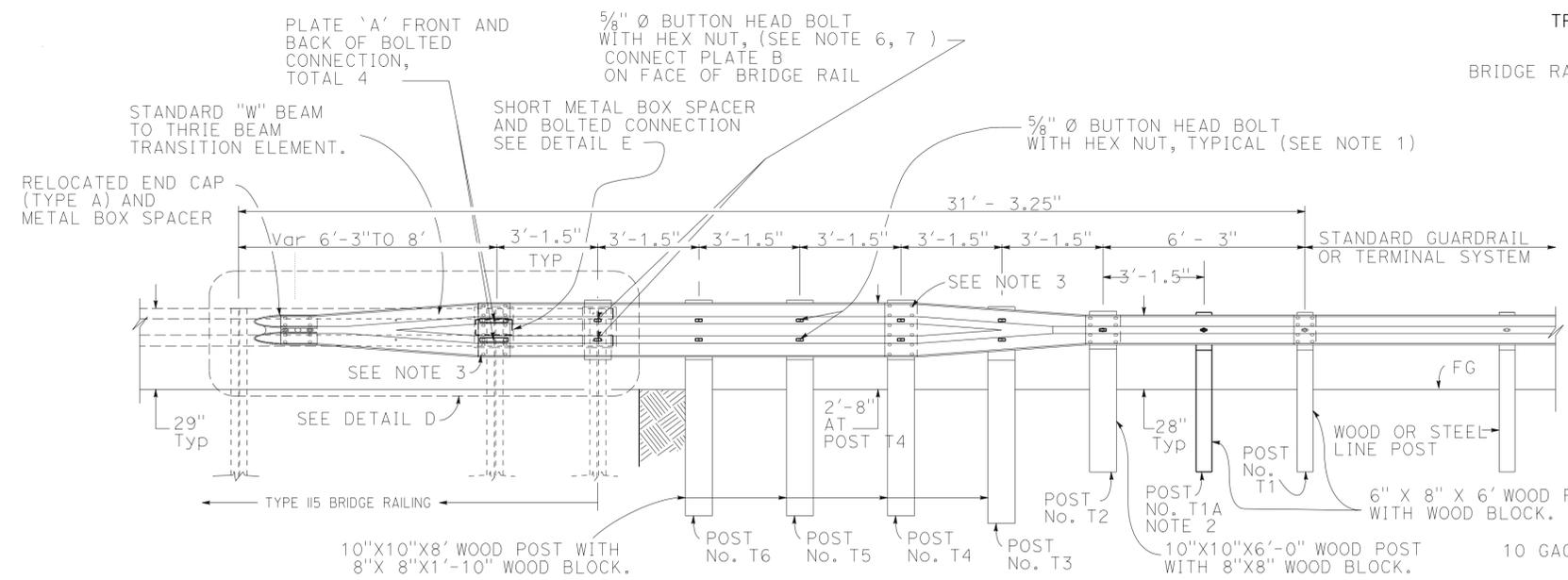
PROFILE
HMA CONFORM TYPICAL
COTTONWOOD CREEK, Br No. 02-0175L
COTTONWOOD CREEK, Br No. 02-0175R

PROFILE
HMA CONFORM TYPICAL
HAT CREEK, Br No. 06-0085

CONSTRUCTION DETAILS
NO SCALE
C-1

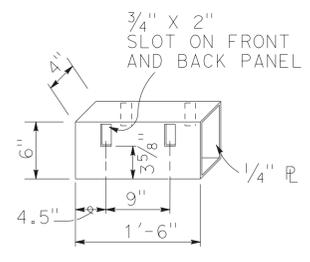
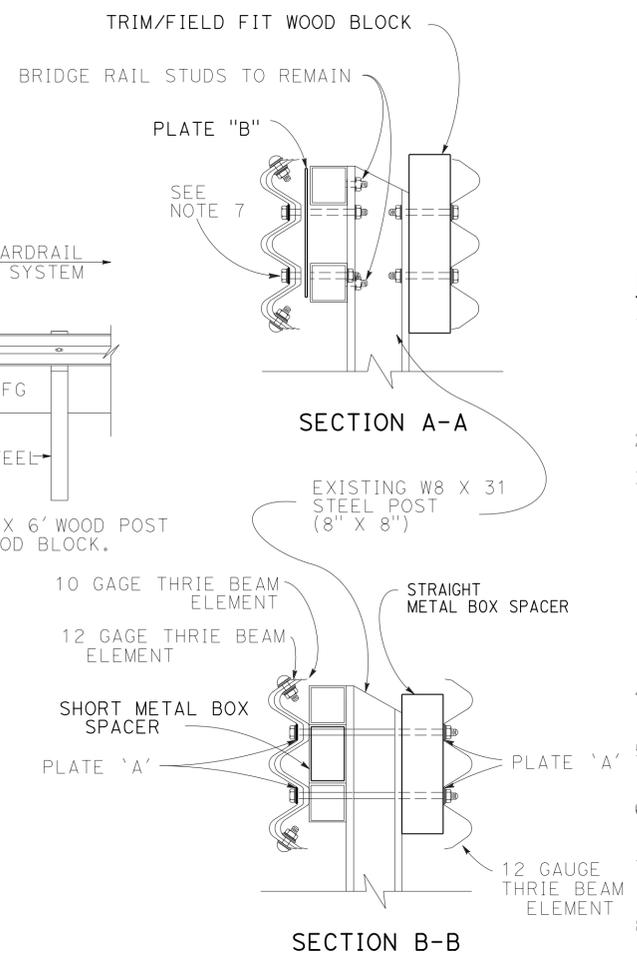
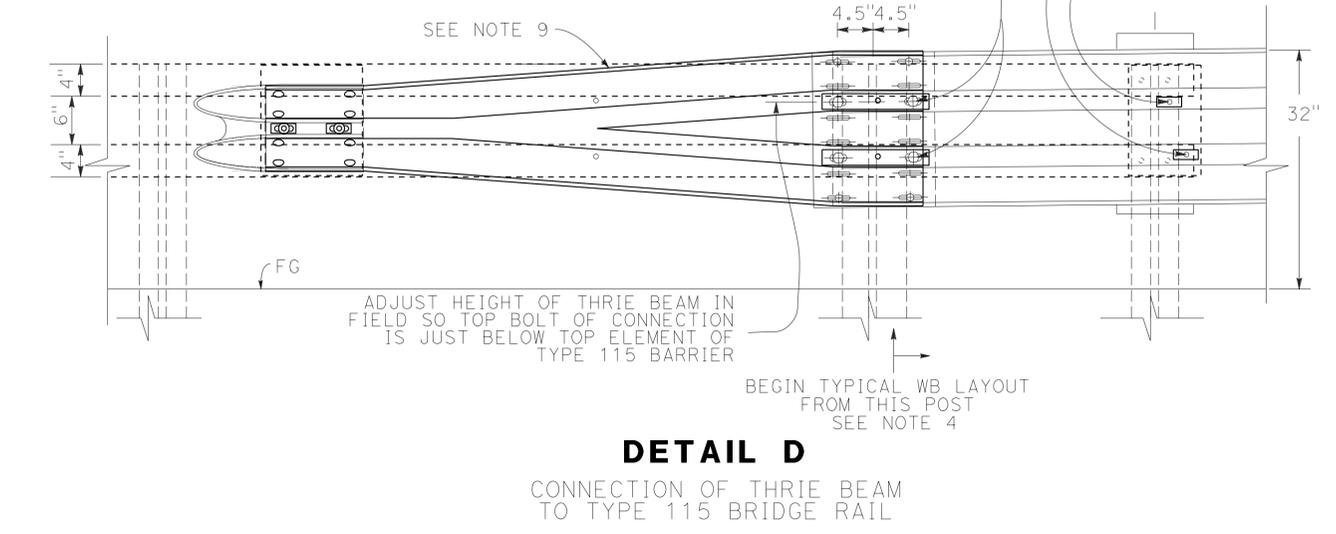
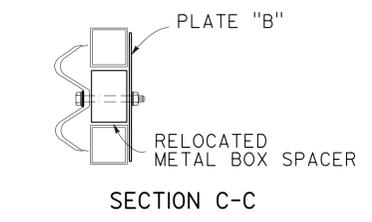
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 FUNCTIONAL SUPERVISOR: LANCE BROWN
 CALCULATED/DESIGNED BY: ROY CAHILL
 CHECKED BY: MIKE CONNER
 REVISED BY: DATE
 REVISIONS:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq, Sis, Teh	5, 89, 99	Var	3	44
DWIGHT WINTERLIN 02-10-14 REGISTERED CIVIL ENGINEER DATE					
02-10-14 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>					

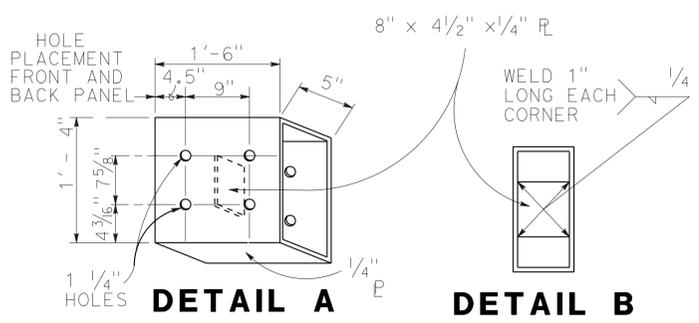


**TRANSITION RAILING (TYPE WB-SPECIAL)
TO TYPE 115 BRIDGE RAIL**

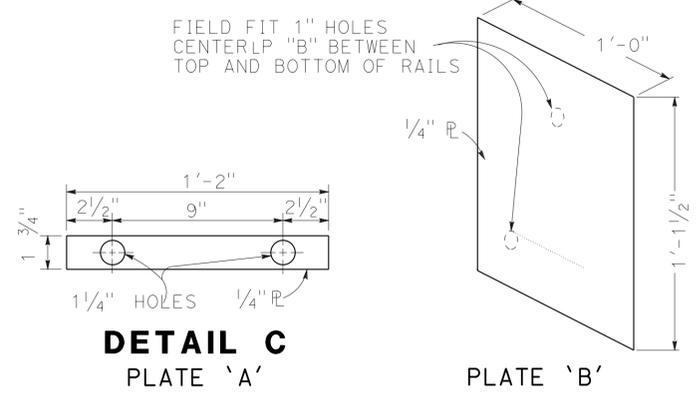
(SPECIAL CONNECTION TO TYPE 115 BRIDGE RAIL BLOCKOUT ATTACHMENT)



DETAIL E
SHORT METAL BOX SPACER



DETAIL A **DETAIL B**
STRAIGHT METAL BOX SPACER SPECIAL



DETAIL C
PLATE 'A'

PLATE 'B'

**CONSTRUCTION DETAILS
TRANSITION RAILING
(TYPE WB-SPECIAL) TO
TYPE 115 BRIDGE RAIL**

NO SCALE **C-2**

- NOTES:**
- USE 5/8" Ø BUTTON HEAD BOLTS AND HEX NUTS FOR CONNECTIONS TO POSTS. PLACE PLATE WASHER ON RAIL FACE FOR BOLTED CONNECTIONS TO 10"X10" WOOD POST.
 - PLACE POST T1A IF APPROACH SPEEDS ARE OVER 45 MPH.
 - EXTERIOR SPLICE BOLT HOLES FOR RAIL SPLICES AT "W" BEAM TO THRIE BEAM CONNECTIONS SHALL BE THE STANDARD 3/32" X 1 1/8" SLOT SIZE. INTERIOR SPLICE BOLT HOLES AT THESE LOCATIONS MAY BE INCREASED UP TO 1/4" Ø. ONLY THE TOP 2 AND THE BOTTOM 2 SPLICE BOLTS WITH WASHERS AND NUTS ARE REQUIRED FOR RAIL SPLICES AT THESE CONNECTIONS
 - PLACE 1" BOLTS ON EACH SIDE OF BRIDGE RAIL POST FLANGE. DO NOT MODIFY BRIDGE RAIL POST.
 - THE TOP ELEVATION OF POST SHALL NOT PROJECT MORE THAN 1" ABOVE THE TOP ELEVATION OF THE RAIL ELEMENT.
 - FIELD DRILL 3/4" HOLE THROUGH R B AND POST FLANGE AS NEEDED FOR 5/8" BOLT WITH PLATE WASHER.
 - FIELD DRILL 3/4" HOLE THROUGH THRIE BEAM R B AND BRIDGE RAIL EXISTING BRIDGE RAIL STUD TO REMAIN.
 - FOR INFORMATION NOT SHOWN REFER TO SHEET C-4.
 - IF TOP OF BRIDGE RAIL IS 30" OR LESS ABOVE THE TRAVELWAY PLACE THRIE BEAM TO MBGR TRANSITION WITH TYPE A END CAP. IF TOP OF BRIDGE RAIL IS GREATER THAN 30" ABOVE THE TRAVELWAY PLACE TYPE TC END CAP.
 - EXISTING UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.

DWIGHT WINTERLIN
 ROY CAHILL
 KRISTI WESTOBY
 DEPARTMENT OF TRANSPORTATION
 TRAFFIC
 STATE OF CALIFORNIA
 Et caltrans

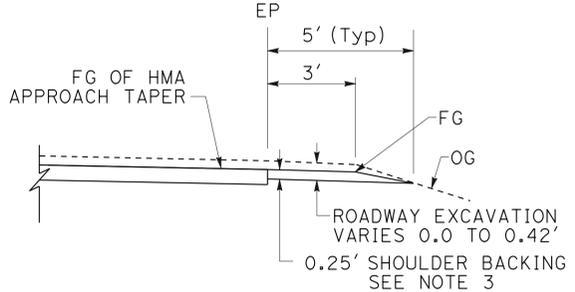
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shasta, Tehama	5, 89, 99	Var	4	44
<i>Roy & Cahill</i> 02-10-14 REGISTERED CIVIL ENGINEER DATE					
02-10-14			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

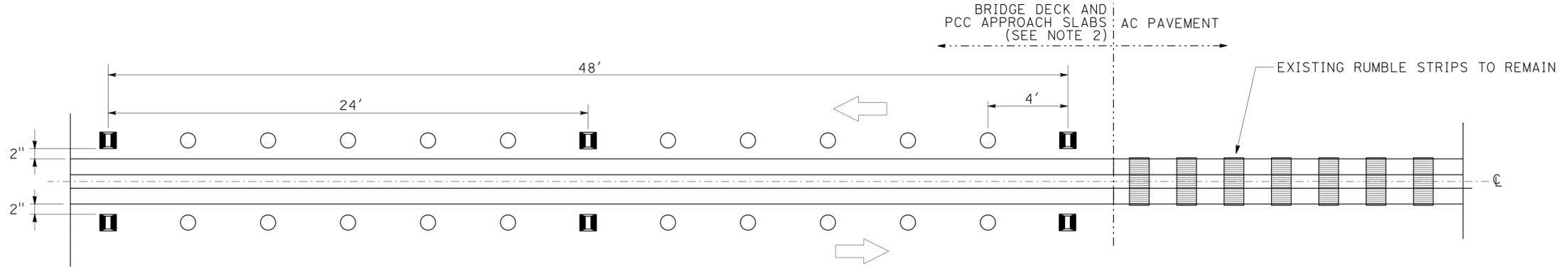
- EXISTING UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS.
- REMOVE EXISTING STRIPING AND MARKERS. REPLACE STRIPING AND MARKERS IN THE SAME LOCATION.
- PLACE SHOULDER BACKING ON BOTH SIDES OF EACH HMA APPROACH TAPER FOR THE FULL LENGTH OF THE NEW TAPER.

MARKER LEGEND:

- TYPE A WHITE NON-REFLECTIVE
- TYPE D TWO-WAY YELLOW RETROREFLECTIVE



ROADWAY EXCAVATION DETAIL (Typ)
HAT CREEK, Br No. 06-0085



DETAIL 22 (MODIFIED)
TOOMES CREEK, Br No. 08-0163

CONSTRUCTION DETAILS

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR LANCE BROWN
 CALCULATED/DESIGNED BY CHECKED BY
 ROY CAHILL MIKE CONNER
 REVISED BY DATE REVISED
 USERNAME => s115152
 DGN FILE => 24f690ga003.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shg, Sis, Teh	5, 89, 99	Var	5	44

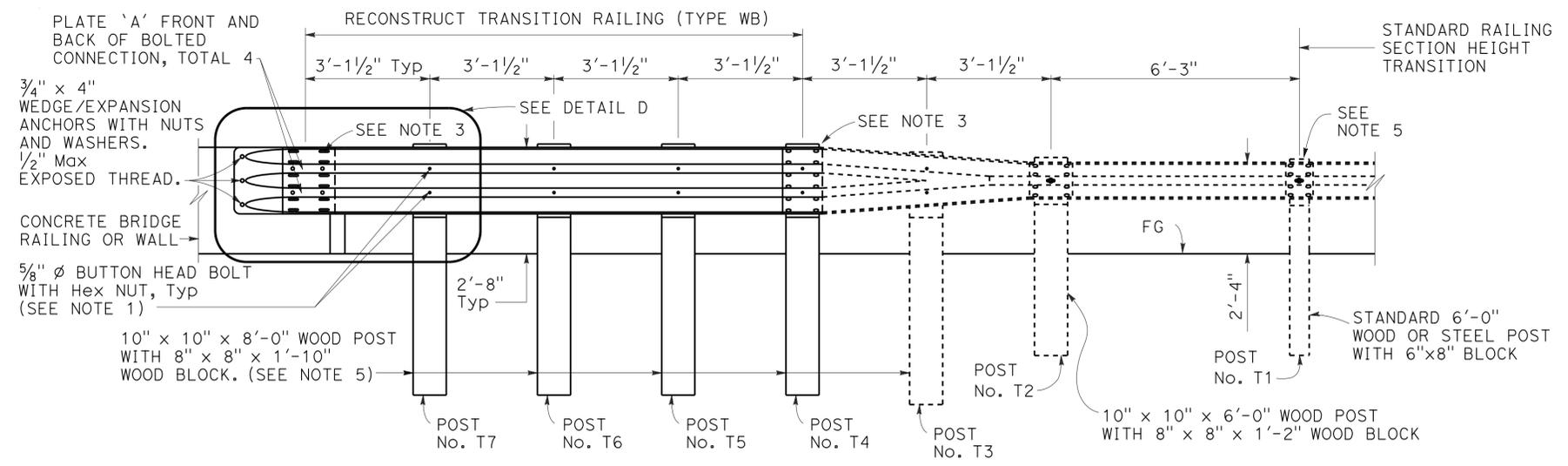
02-10-14
 REGISTERED CIVIL ENGINEER DATE
 DWIGHT WINTERLIN
 No. C68438
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA

LEGEND:

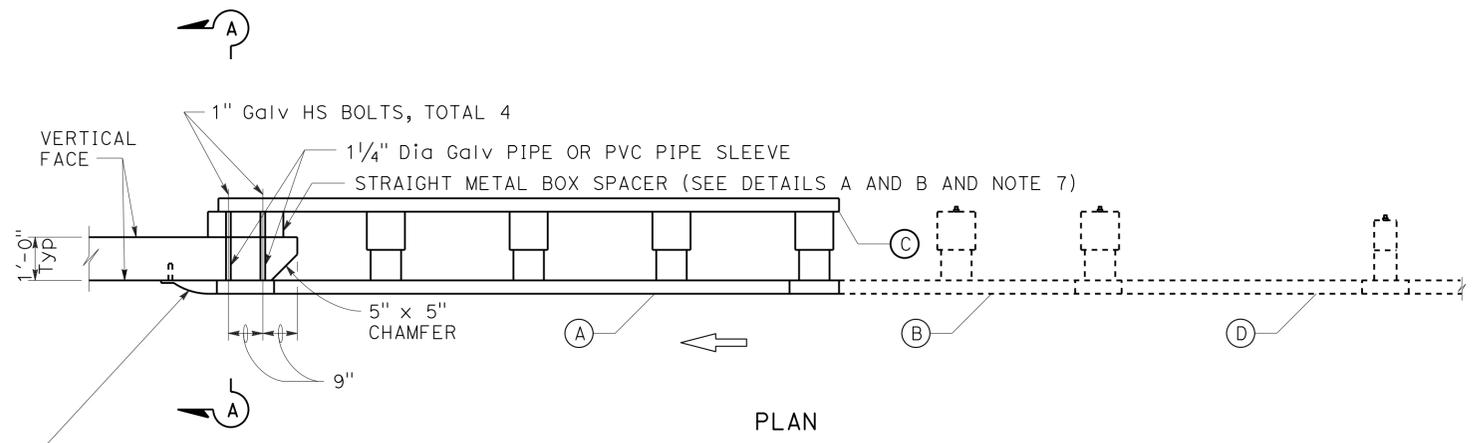
- (A) NESTED THRIE BEAM ELEMENTS (ONE 12 GAUGE ELEMENT NESTED OVER ONE 10 GAUGE ELEMENT).
 - (B) ONE 10 GAUGE "W" BEAM TO THRIE BEAM ELEMENT.
 - (C) ONE 12 GAUGE THRIE BEAM ELEMENT.
 - (D) ONE 10 GAUGE "W" BEAM RAIL ELEMENT (7'-3 1/2" LENGTH)
- 10 GAUGE = 0.135" THICK
 12 GAUGE = 0.108" THICK

NOTES:

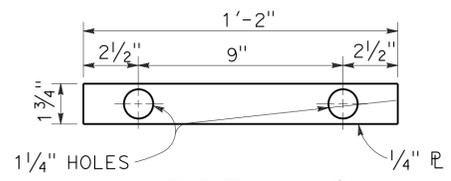
1. USE 5/8" * BUTTON HEAD BOLTS AND HEX NUTS FOR CONNECTIONS TO POSTS. NO WASHER ON RAIL FACE FOR BOLTED CONNECTIONS TO POST.
2. THE NESTED RAIL ELEMENTS, END CAP, AND "W" BEAM TO THRIE BEAM ELEMENT MAY BE SPLICED TOGETHER PRIOR TO BOLTING THE ELEMENTS TO THE WOOD POST AND CONCRETE BARRIER OR RAILING.
3. EXTERIOR SPLICE BOLT HOLES FOR RAIL ELEMENT SPLICES AT POST NO. T4 AND THE CONNECTION TO THE CONCRETE BARRIER OR RAILING SHALL BE THE STANDARD 13/16" x 1 1/8" SLOT SIZE. INTERIOR SPLICE BOLT HOLES AT THESE LOCATIONS MAY BE INCREASED UP TO 1 1/4" *. ONLY THE TOP 2 AND THE BOTTOM 2 SPLICE BOLTS WITH WASHERS AND NUTS ARE REQUIRED FOR RAIL SPLICES AT POST NO. T4 AND THE CONNECTION TO THE CONCRETE BARRIER OR RAILING.
4. THE TOP ELEVATION OF POSTS NO. T2 THROUGH NO. T7 SHALL NOT PROJECT MORE THAN 1" ABOVE THE TOP ELEVATION OF THE RAIL ELEMENT.
5. THE GUARD RAILING CONNECTED TO TRANSITION RAILING (TYPE WB) WILL BE A STANDARD RAILING SECTION OF METAL BEAM GUARD RAILING WITH HEIGHT TRANSITION RATIO OF 120:1
6. THE DEPTH OF THE METAL BOX SPACER VARIES FROM THE 5 1/8" TO 1 1/2" AND IS DEPENDENT ON THE WIDTH OF THE CONCRETE RAILING OR WALL. THE COMBINED DIMENSION FOR THE DEPTH OF THE METAL BOX SPACER PLUS THE WIDTH OF RAILING OR WALL SHOULD BE 17 1/8".
7. END CAP MAY BE INSTALLED OVER 12 GAUGE AND 10 GAUGE THRIE BEAM ELEMENTS WHERE TRANSITION RAILING IS INSTALLED ON THE DEPARTURE END OF BRIDGE RAILING. SEE STANDARD PLAN A78C1 FOR TYPE TC END CAP.
8. EXISTING UTILITY FACILITIES ARE NOT SHOWN ON THESE PLANS



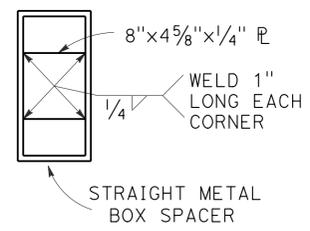
ELEVATION



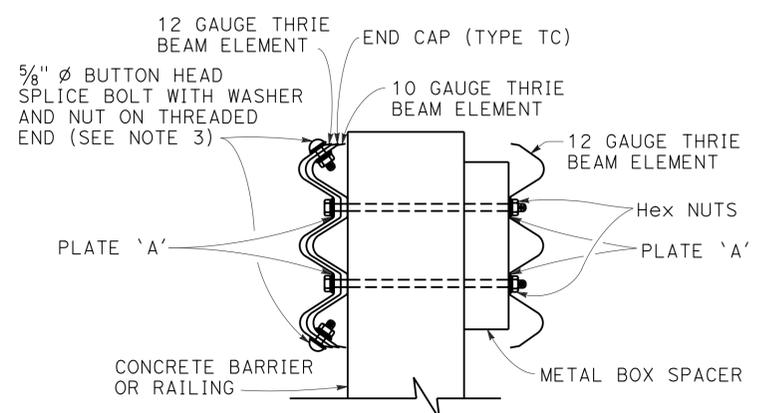
TRANSITION RAILING (TYPE WB)



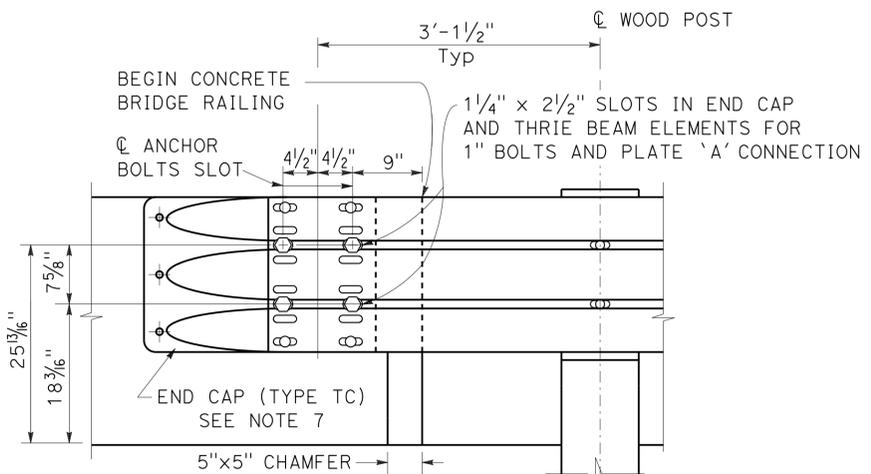
**DETAIL C
PLATE 'A'**



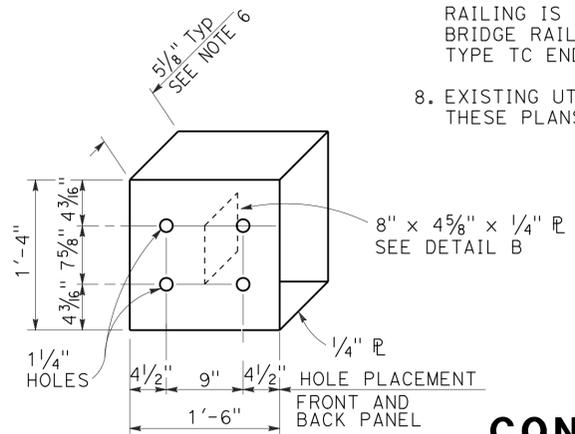
DETAIL B



SECTION A-A



DETAIL D



**DETAIL A
STRAIGHT METAL
BOX SPACER**

**CONSTRUCTION DETAILS
RECONSTRUCT
TRANSITION RAILING
(TYPE WB)**

NO SCALE **C-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DWIGHT WINTERLIN ROY CAHILL
 KRISTI WESTOBY
 TRAFFIC
 02-10-14

NOTES:

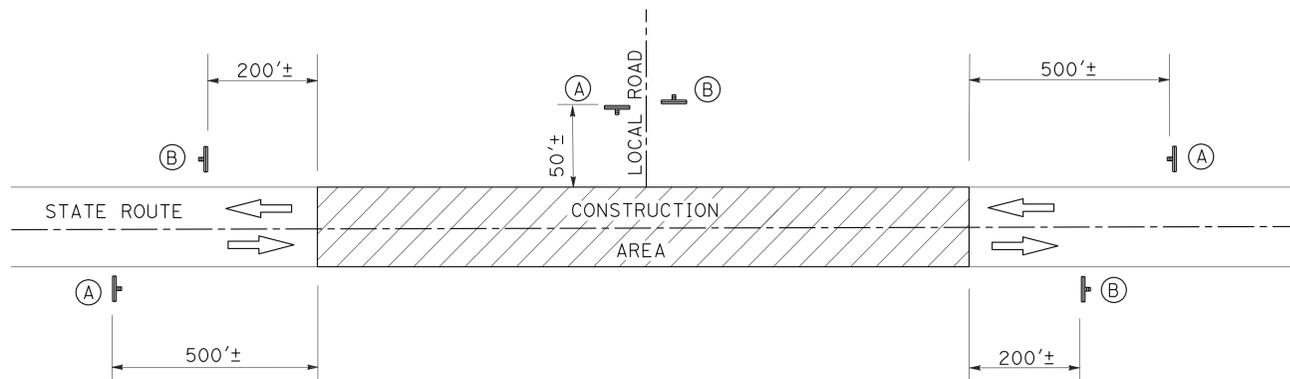
1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.
3. CONSTRUCTION AREA SIGNS MAY BE STATIONARY MOUNTED, BARRIER MOUNTED OR PORTABLE AS APPROVED BY THE ENGINEER.
4. NO CONSTRUCTION AREA SIGNS ARE REQUIRED FOR LOCATIONS 5, 10 AND 11.

LEGEND:

▬ PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

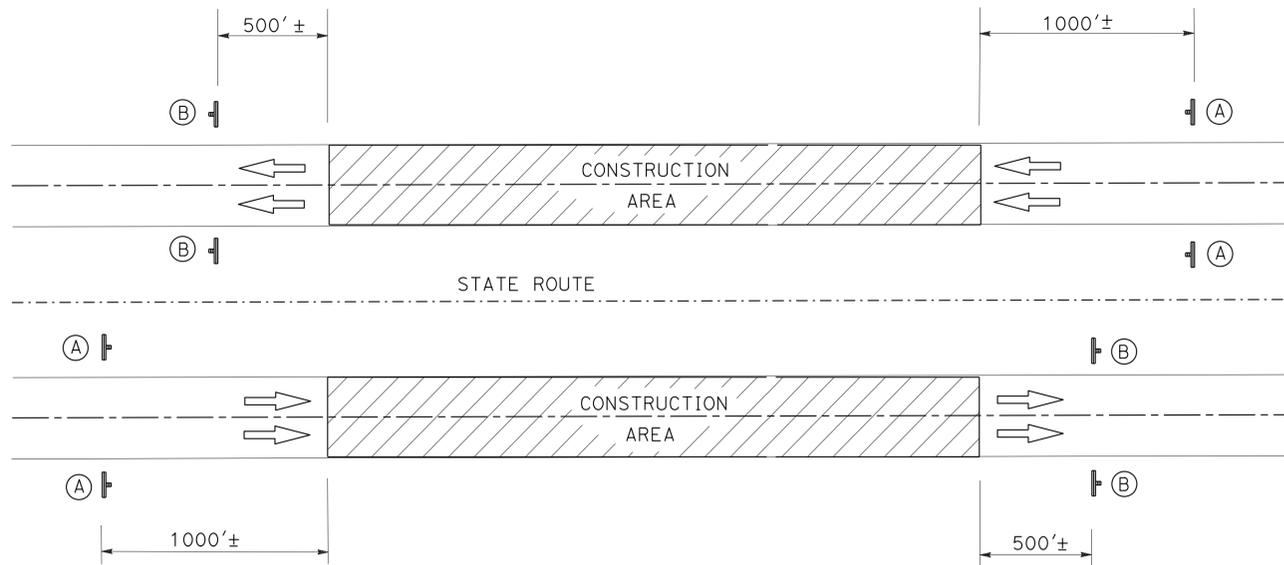
LOCAL ROAD CONNECTIONS

LOCATION	Co-Rte-PM	CONNECTION NAME
6	Sha-89-3.98	BRIDGE CAMPGROUND Rd (L+ AND R+)



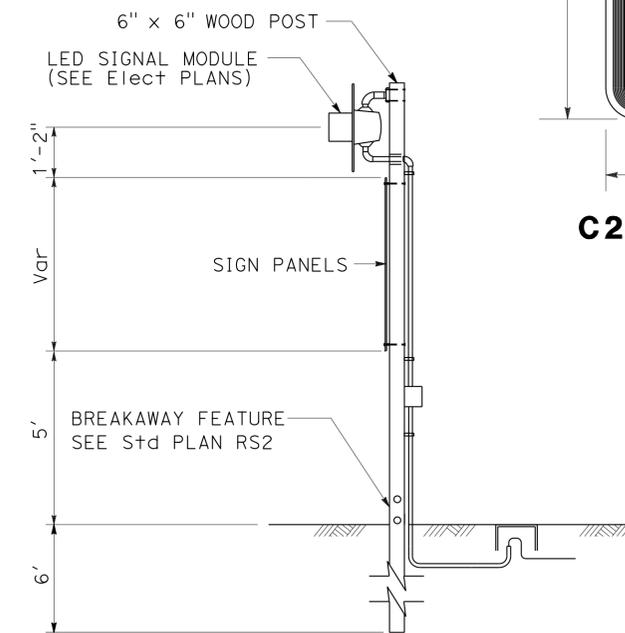
CONSTRUCTION AREA SIGNS

HAT CREEK, Br No. 06-0085

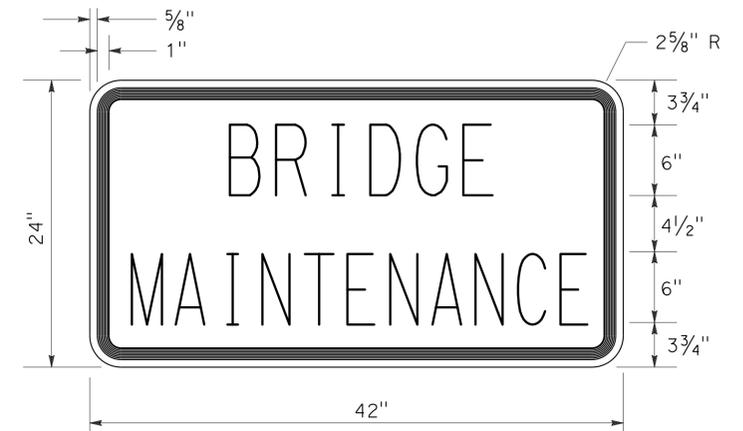


CONSTRUCTION AREA SIGNS

ANTLER UC, Br No. 06-0163L&R
LAKEHEAD UC, Br No. 06-0164L&R
COTTONWOOD CREEK, Br No. 02-0175L&R
THOMES CREEK, Br No. 08-0165



TEMPORARY FLASHING BEACON SYSTEM



C23B(CA) SIGN PANEL DETAIL

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN No.	TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
Ⓐ	W20-1 C23B(CA)	48" x 48" 42" x 24"	ROAD WORK AHEAD BRIDGE MAINTENANCE	1 - 4" x 6"	20
Ⓑ	G20-2	48" x 24"	END ROAD WORK	1 - 4" x 4"	20

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

P:\proj\1102\4f690\plans\pse\24f690\001.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
LANCE BROWN

CALCULATED/DESIGNED BY
CHECKED BY

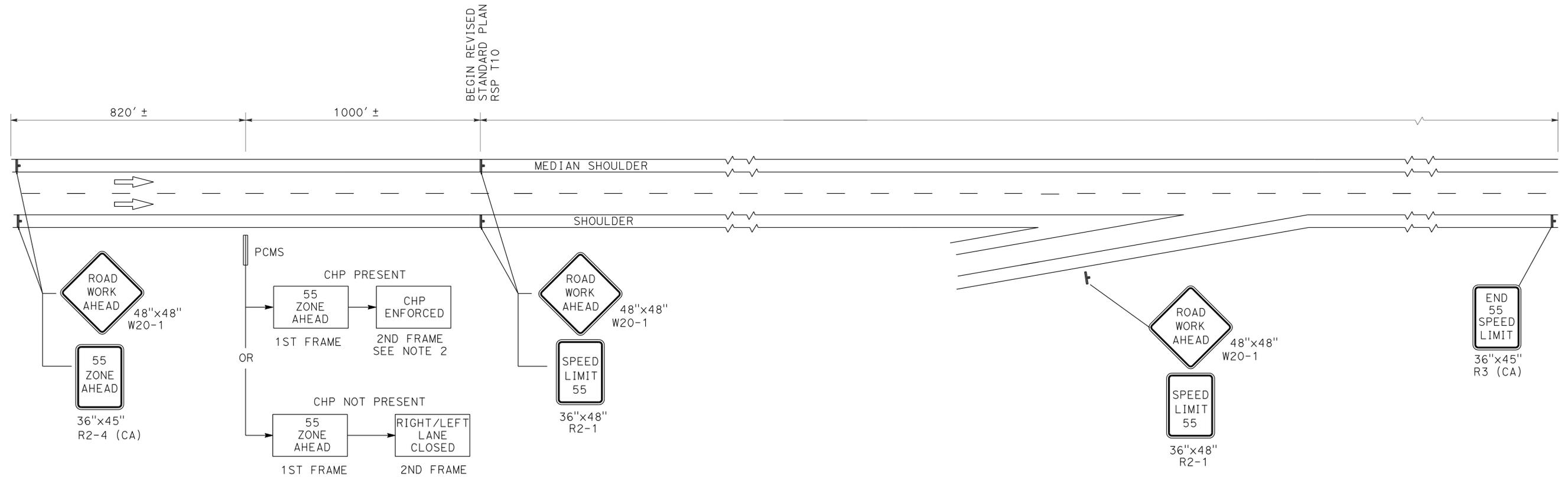
ROY CAHILL
MIKE CONNER

REVISED BY
DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shasta, Tehama	5, 89, 99	Var	7	44
<i>Roy & Cahill</i> 02-10-14 REGISTERED CIVIL ENGINEER DATE					
02-10-14			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

1. EXACT SIGN AND PCMS LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. USE THE "CHP ENFORCED" SIGN FRAMES ONLY WHEN COZEEP OFFICERS ARE PRESENT.
3. COVER EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE.
4. IF THERE IS NO SPEED LIMIT SIGN (R2-1) WITHIN 1 MILE BEYOND THE END OF SPEED LIMIT SIGN (R3) (CA), INSTALL A TEMPORARY APPLICABLE SPEED LIMIT SIGN (R2-1) WITHIN 500 FT +/- OF THE END OF SPEED LIMIT SIGN (R3) (CA).



TYPICAL SIGNING FOR REDUCED SPEED ZONE

CASTLE CREEK, Br. No. 06-0116
 THOMES CREEK, Br. No. 08-0165

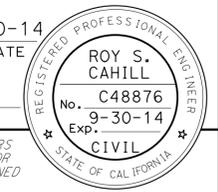
CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR LANCE BROWN
 CALCULATED/DESIGNED BY ROY CAHILL
 CHECKED BY MIKE CONNER
 REVISED BY DATE REVISION
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

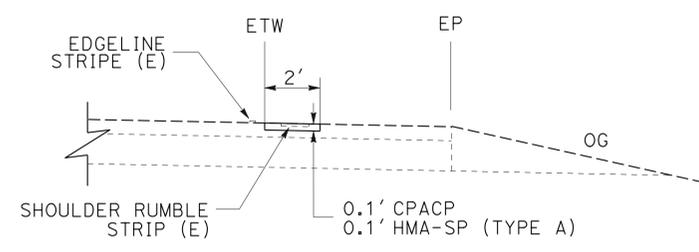
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sho, Sis, Teh	5, 89, 99	Var	8	44
Roy & Cahill			02-10-14	REGISTERED CIVIL ENGINEER DATE	
Roy S. Cahill			02-10-14	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



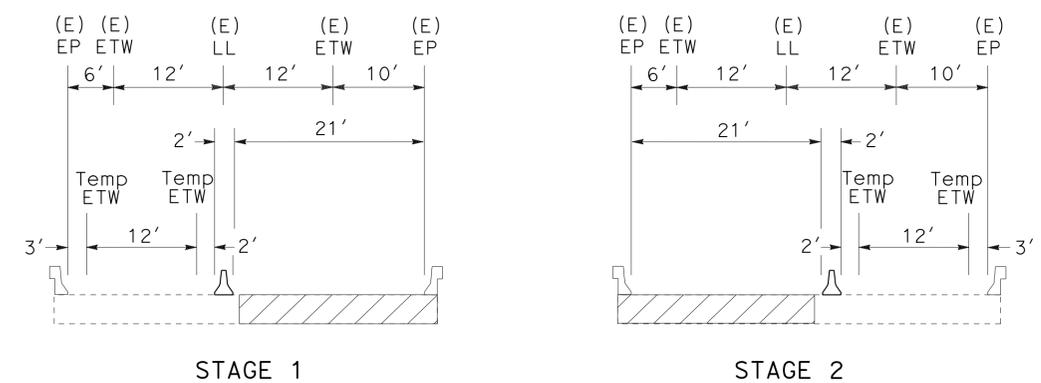
NOTE:
1. TEMPORARY RAILING (TYPE K) SHALL BE PINNED WHEN LESS THAN 2' FROM EDGE OF EXCAVATION.

- LEGEND:**
- WORK AREA
 - TEMPORARY RAILING (TYPE K)
 - TEMPORARY CRASH CUSHION MODULE (TYPE TS14)
 - TYPE P MARKER
 - CHANNELIZER (SURFACE MOUNTED)
 - FLASHING ARROW SIGN
 - TEMPORARY FLASHING BEACON SYSTEM
 - TEMPORARY TRAFFIC CONTROL SIGN

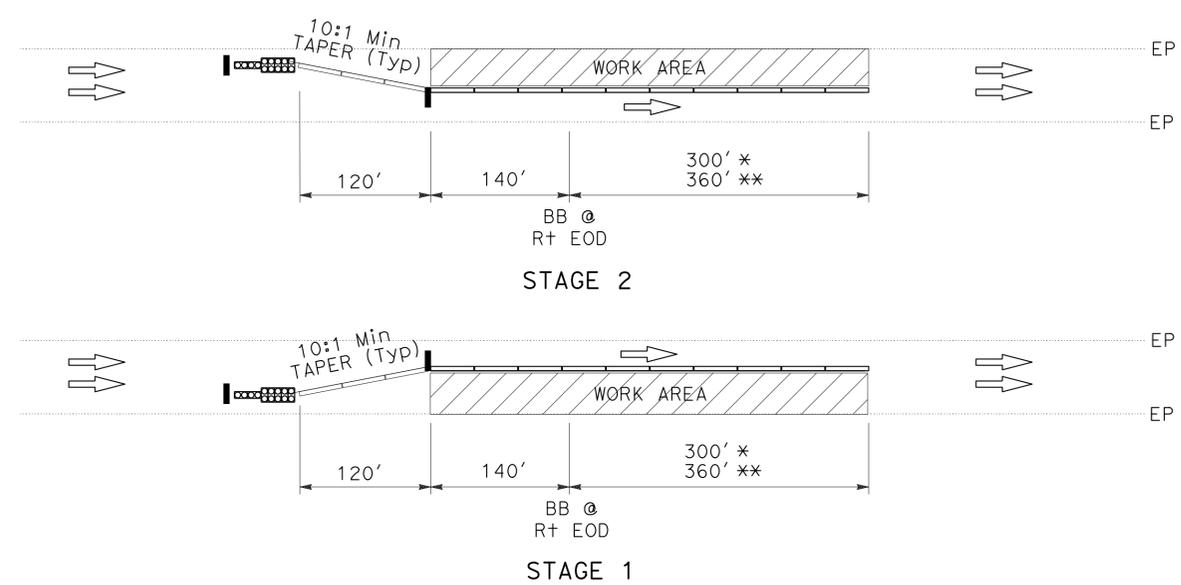
- ABBREVIATIONS:**
- CPACP COLD PLANE ASPHALT CONCRETE PAVEMENT
 - TAPE TEMPORARY TRAFFIC STRIPE (TAPE)
 - (E) EXISTING
 - HMA-SP (TYPE A) HOT MIX ASPHALT, SUPERPAVE (TYPE A)



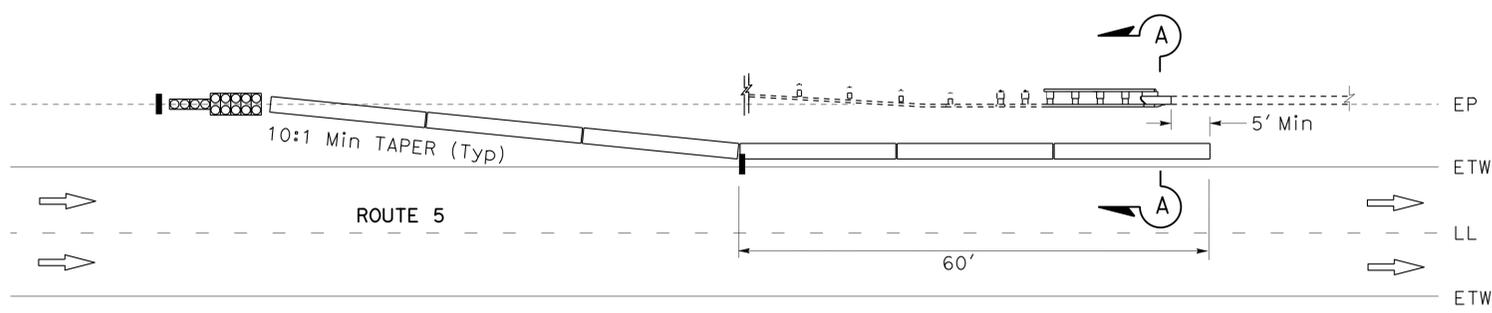
REMOVE RUMBLE STRIP DETAIL (TYPICAL)



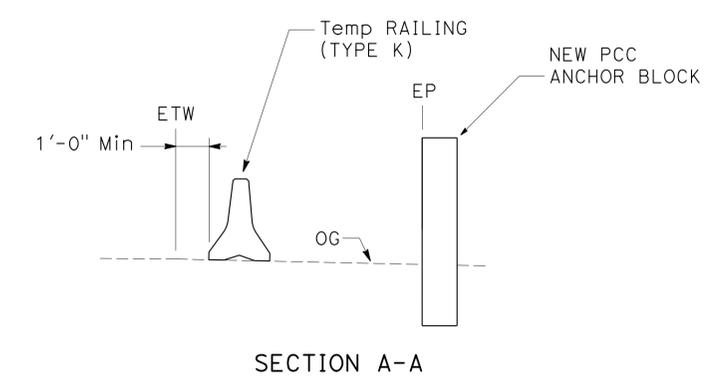
TYPICAL SECTION
COTTONWOOD Cr, Br No. 02-0175R
COTTONWOOD Cr, Br No. 02-0175L (MIRRORED)



TEMPORARY RAILING (TYPE K) LAYOUT
* COTTONWOOD Cr, Br No. 02-0175R
** COTTONWOOD Cr, Br No. 02-0175L (MIRRORED)



TEMPORARY RAILING (TYPE K) LAYOUT
ANTLER UC, Br No. 06-0163L&R
LAKEHEAD UC, Br No. 06-0164L&R
NOTE: ONLY PLACE Temp RAILING (TYPE K) ON ONE SIDE OF ROADWAY AT A TIME. LEFT SIDE SHOWN, RIGHT SIDE MIRRORRED.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 FUNCTIONAL SUPERVISOR: LANCE BROWN
 CALCULATED/DESIGNED BY: ROY CAHILL
 CHECKED BY: MIKE CONNER
 REVISIONS: REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shasta, Tehama	5, 89, 99	Var	9	44

Roy & Cahill		02-10-14
REGISTERED CIVIL ENGINEER	DATE	
02-10-14		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER	ROY S. CAHILL
No.	C48876
Exp.	9-30-14
CIVIL	

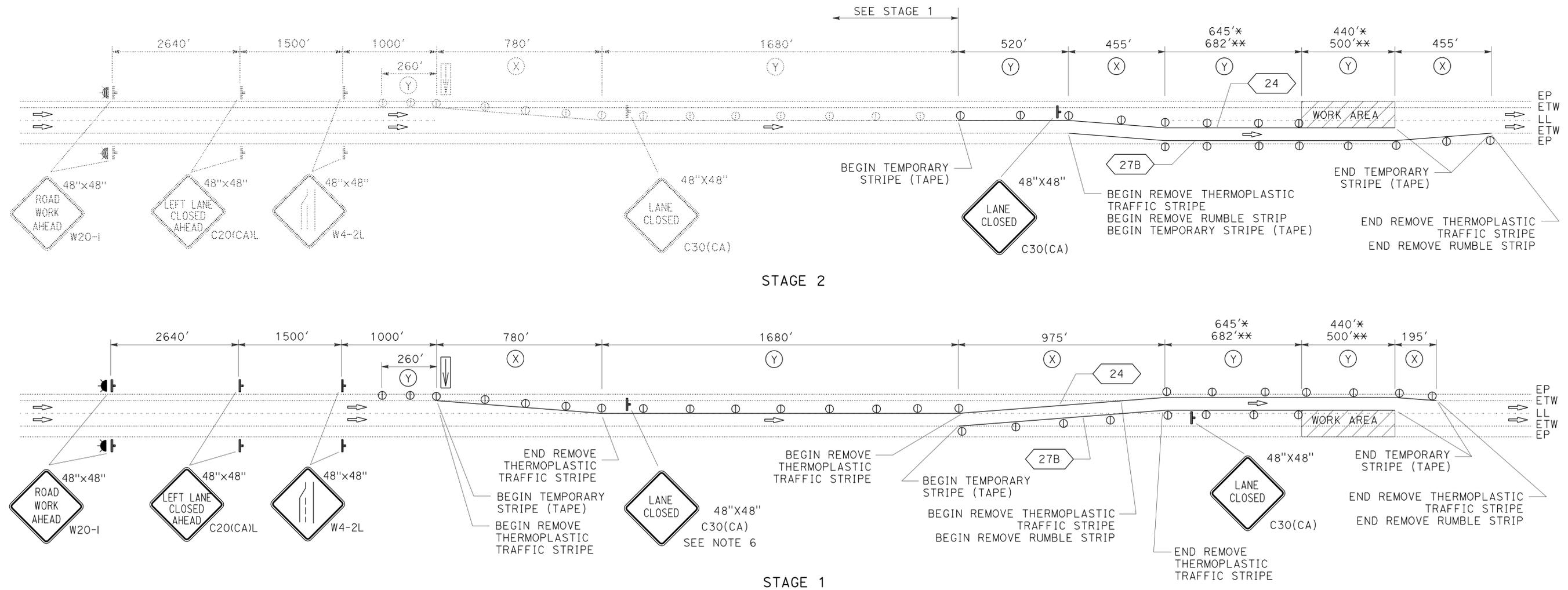
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. SIGNS ASSOCIATED WITH THIS TRAFFIC HANDLING PLAN WILL BE STATIONARY MOUNTED, OR AS DIRECTED BY THE ENGINEER.
3. REFER TO RSP T9, RSP T10 AND RSP T10A FOR DETAILS NOT SHOWN.
4. CALIFORNIA SIGN CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL SIGN CODES ARE SHOWN.
5. UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS, ALL TEMPORARY WARNING SIGNS SHALL HAVE BLACK LEGEND ON FLUORESCENT ORANGE BACKGROUND.
6. PLACE A C30(CA) SIGN EVERY 2000' THROUGHOUT LENGTH OF LANE CLOSURE.
7. SEE TABLE TITLED "CHANNELIZER (SURFACE MOUNTED) Max SPACING" ON THIS SHEET FOR Max SPACING BETWEEN CHANNELIZERS.

CHANNELIZER (SURFACE MOUNTED) Max SPACING		
(X)	(Y)	(Z) **
TAPER	TANGENT	CONFLICT
F+	F+	F+
65	130	32

** - USE FOR TAPER AND TANGENT SECTIONS WHERE THERE ARE NO PAVEMENT MARKINGS OR WHERE THERE IS A CONFLICT BETWEEN EXISTING PAVEMENT MARKINGS AND CHANNELIZERS (CA).



* COTTONWOOD Cr, Br No. 02-0175R
 ** COTTONWOOD Cr, Br No. 02-0175L (MIRRORED)

TRAFFIC HANDLING PLAN
 NO SCALE
TH-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 LANCE BROWN
 ROY CAHILL
 MIKE CONNER
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sho, Sis, Teh	5, 89, 99	Var	10	44

Roy & Cahill 02-10-14
REGISTERED CIVIL ENGINEER DATE

02-10-14
PLANS APPROVAL DATE

ROY S. CAHILL
No. C48876
Exp. 9-30-14
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. NEW RUMBLE STRIP TO BE INSTALLED IN SAME LOCATIONS AS EXISTING RUMBLE STRIPE WHICH WAS REMOVED TO ACCOMMODATE TRAFFIC HANDLING PLAN TH-2.
2. NO RUMBLE STRIP WILL BE REMOVED FROM, OR PLACED ON, PCC BRIDGE DECKS OR PCC STRUCTURE APPROACH SLABS.
3. (N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

ABBREVIATIONS:

HMA-SP (TYPE A) HOT MIX ASPHALT, SUPERPAVE (TYPE A)

FLASHING ARROW SIGN

	EA
TOTAL	2

TRAFFIC CONTROL SIGNS (STATIONARY MOUNTED) (N)

TYPE	PANEL SIZE INCHES	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS
W20-1	48" x 48"	ROAD WORK AHEAD	1- 4" x 6"	4
C20(CA)L	48" x 48"	LEFT LANE CLOSED AHEAD	1- 4" x 6"	4
W4-2L	48" x 48"	LEFT LANE ENDS	1- 4" x 6"	4
C30(CA)	48" x 48"	LANE CLOSED	1- 4" x 6"	6

TRAFFIC HANDLING QUANTITIES

Loc	Co	Rte	PM	Br No.	BRIDGE NAME	STAGE	TEMPORARY TRAFFIC STRIPE (TAPE)		CHANNELIZER (SURFACE MOUNTED)	TEMPORARY RAILING (TYPE K)		TEMPORARY CRASH CUSHION MODULE		REMOVE THERMOPLASTIC TRAFFIC STRIPE		OBJECT MARKER (TYPE P)	(N)	COLD PLANE AC PAVEMENT	HMA-SP (TYPE A)	TACK COAT	REMOVE PAVEMENT MARKER	SHOULDER RUMBLE STRIP (HMA GROUND-IN INDENTATIONS)
							LF	EA		LF	EA	LF	EA	SQYD	TON							
1	Sha	5	R41.05	06-0163L	ANTLER UC	R+					100	14				2						
						L+				140	14				2							
2	Sha	5	R41.05	06-0163R	ANTLER UC	R+					140	14				2						
						L+				100	14				2							
3	Sha	5	R42.32	06-0164L	LAKEHEAD UC	R+					100	14				2						
						L+				140	14				2							
4	Sha	5	R42.32	06-0164R	LAKEHEAD UC	R+					140	14				2						
						L+				100	14				2							
7	Sis	5	R63.65	02-0175R	COTTONWOOD CREEK	1	6775	59	560	14	3230	2	281	20	0.2	68	12.6					
						2	4055	32	560	14	1995	2	396	28	0.3							
8	Sis	5	R63.77	02-0175L	COTTONWOOD CREEK	1	6969	60	620	14	3327	2	292	21	0.2	70	13.1					
						2	4249	33	620	14	2092	2	407	29	0.3							
TOTAL							22,048	184	3320	168	10,644	24	1376	98	1.0	138	61.8					

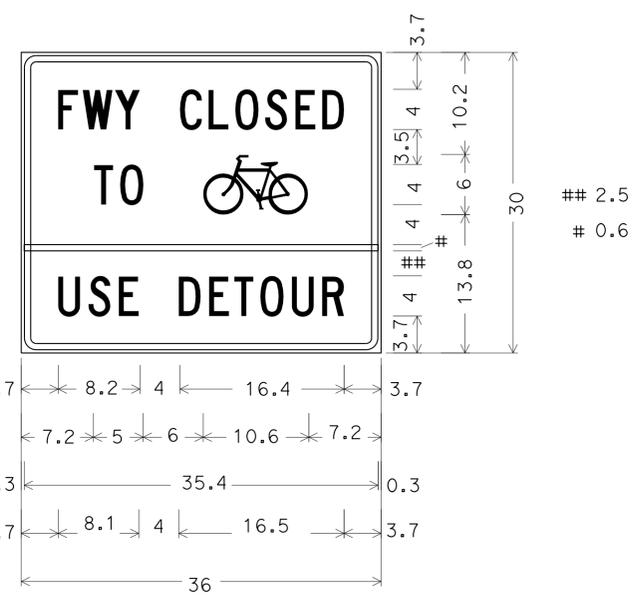
TRAFFIC HANDLING QUANTITIES THQ-1

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 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR LANCE BROWN
 CALCULATED/DESIGNED BY
 CHECKED BY
 ROY CAHILL
 MIKE CONNER
 REVISED BY
 DATE REVISED

NOTES:

- EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR LANCE BROWN
 CALCULATED/DESIGNED BY
 CHECKED BY
 ROY CAHILL
 MIKE CONNER
 REVISED BY
 DATE REVISED

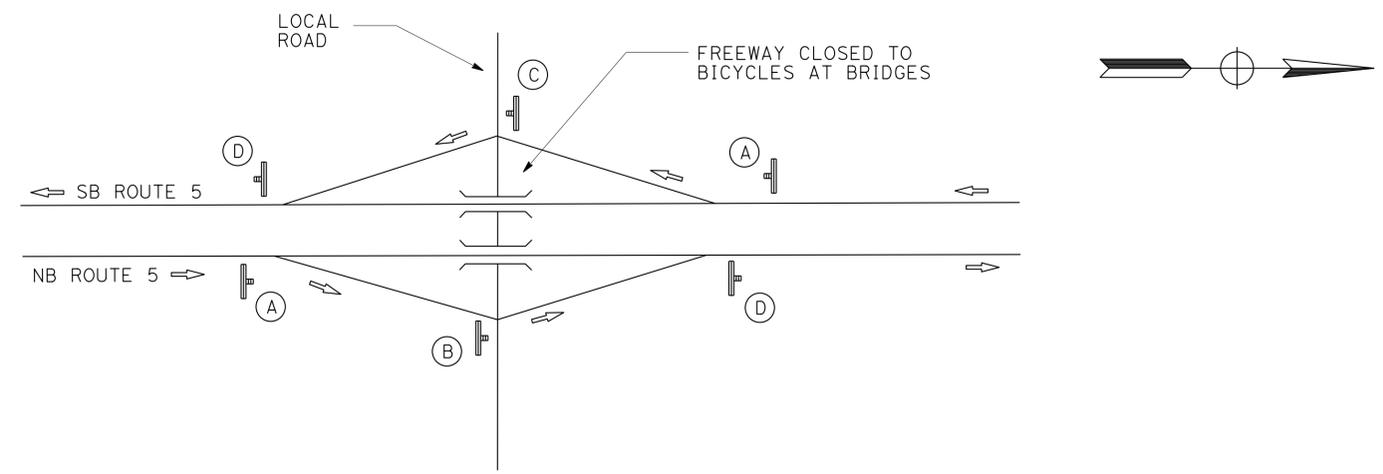


1.5" RADIUS, 0.6" BORDER,
 0.3" INDENT, BLACK ON ORANGE;
 [FWY CLOSED] C;
 [TO] C; SYMBOL RG025;
 [USE DETOUR] C;

SPECIAL SIGN DETAIL
ALL DIMENSIONS IN INCHES

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED) (N)

SIGN TYPE	CODE	PANEL SIZE	MESSAGE	NUMBER OF POST AND SIZE	NUMBER OF SIGNS
(A)	SPECIAL 4F-9C (RIGHT)	36" X 30" 30" X 24"	FREEWAY CLOSED TO BICYCLES BICYCLE DETOUR (RIGHT)	1 - 4" X 6"	4
(B)	SC-3(CA) W11-1 M3-1	36" X 12" 24" X 24" 24" X 12"	DETOUR WITH UP ARROW BICYCLE SYMBOL "NORTH"	1 - 4" X 6"	2
(C)	SC-3(CA) W11-1 M3-3	36" X 12" 24" X 24" 24" X 12"	DETOUR WITH UP ARROW BICYCLE SYMBOL "SOUTH"	1 - 4" X 6"	2
(D)	M4-8A	24" X 18"	"END DETOUR"	1 - 4" X 6"	4



DETOUR FOR CLOSURE OF ROUTE 5 TO BICYCLES

ANTLER UC, BRIDGE No. 06-0163L&R
 LAKEHEAD UC, BRIDGE No. 06-0164L&R

LAST REVISION DATE PLOTTED => 11-FEB-2014
 02-10-14 TIME PLOTTED => 13:46

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha, Sis, Teh	5, 89, 99	Var	12	44

Roy & Cahill 02-10-14
REGISTERED CIVIL ENGINEER DATE

02-10-14
PLANS APPROVAL DATE

ROY S. CAHILL
No. C48876
Exp. 9-30-14
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. NEW TRAFFIC STRIPE PATTERN TO MATCH EXISTING TRAFFIC STRIPE PATTERN.
2. REMOVE THERMOPLASTIC TRAFFIC STRIPE QUANTITIES SHOWN ON THIS SHEET APPLY ONLY TO TRAFFIC STRIPE LOCATED ON PCC BRIDGE DECKS OR PCC STRUCTURE APPROACH SLABS.
3. STRIPING QUANTITIES SHOWN ON THIS SHEET INCLUDE THE LENGTH OF EACH BRIDGE, THE LENGTH OF CONFORM TAPERS, APPROXIMATELY 50' BEYOND THE END OF EACH CONFORM TAPER AND THE QUANTITY NECESSARY TO REPLACE THE STRIPING REMOVED TO ACCOMMODATE THE TRAFFIC HANDLING PLAN TH-2.
4. NO RECESSED PAVEMENT MARKERS SHALL BE PLACED ON THE BRIDGE DECKS.
5. (N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

ABBREVIATIONS:

HMA-SP (TYPE A) HOT MIX ASPHALT, SUPERPAVE (TYPE A)

ROADWAY QUANTITIES SUMMARY

Loc	Co	Rte	PM	BRIDGE NUMBER	BRIDGE NAME	PAVEMENT QUANTITIES			SHOULDER BACKING	ROADWAY EXCAVATION
						COLD PLANE AC PAVEMENT	HMA-SP (TYPE A)	TACK COAT		
						SQYD	TON	TON	TON	CY
1	Sha	5	R41.05	06-0163L	ANTLER UC					
2	Sha	5	R41.05	06-0163R	ANTLER UC					
3	Sha	5	R42.32	06-0164L	LAKEHEAD UC					
4	Sha	5	R42.32	06-0164R	LAKEHEAD UC					
5	Sha	5	63.31	06-0116	CASTLE CREEK					
6	Sha	89	3.89	06-0085	HAT CREEK	395	138	0.3	15	13
7	Sis	5	R63.65	02-0175R	COTTONWOOD CREEK	455	80	0.3		
8	Sis	5	R63.77	02-0175L	COTTONWOOD CREEK	471	83	0.3		
9	Teh	5	R12.16	08-0165	THOMES CREEK					
10	Teh	5	R27.47	08-0157	ADOBE ROAD OC					
11	Teh	99	8.38	08-0163	TOOMES CREEK					
TOTAL						1321	301	0.9	15	13

PAVEMENT DELINEATION QUANTITIES

Loc	Co	Rte	PM	BRIDGE NUMBER	BRIDGE NAME	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)						PAVEMENT MARKER (RETROREFLECTIVE)		PAVEMENT MARKER (RETROREFLECTIVE-RECESSED)			PAVEMENT MARKER (NON-REFLECTIVE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING				
						DETAIL 12	DETAIL 19	DETAIL 22	DETAIL 25	DETAIL 27B	DETAIL 38	TYPE D	TYPE G	TYPE D	TYPE G	TYPE H	TYPE AY						
						LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA						
1	Sha	5	R41.05	06-0163L	ANTLER UC																		
2	Sha	5	R41.05	06-0163R	ANTLER UC																		
3	Sha	5	R42.32	06-0164L	LAKEHEAD UC																		
4	Sha	5	R42.32	06-0164R	LAKEHEAD UC																		
5	Sha	5	63.31	06-0116	CASTLE CREEK																		
6	Sha	89	3.89	06-0085	HAT CREEK				277						6					12			
7	Sis	5	R63.65	02-0175R	COTTONWOOD CREEK	2183														47	29		
8	Sis	5	R63.77	02-0175L	COTTONWOOD CREEK	2239														48	30		
9	Teh	5	R12.16	08-0165	THOMES CREEK																		
10	Teh	5	R27.47	08-0157	ADOBE ROAD OC						233			506	446	22	20						
11	Teh	99	8.38	08-0163	TOOMES CREEK						492*			984		44					1630		
SUBTOTAL						4422	277	725	3047	6130	446			66	20	6	95	71			164		
TOTAL										15,047				86			172				164	4465	15

* SEE SHEET C-3 FOR DETAIL 22 (MODIFIED) STRIPE.
** TYPE IV (L) ARROW

SUMMARY OF QUANTITIES Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
FUNCTIONAL SUPERVISOR LANCE BROWN
ROY CAHILL MIKE CONNER
REVISOR BY DATE REVISOR BY DATE
CALCULATED/DESIGNED BY CHECKED BY
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha, Sis, Teh	5, 89, 99	Var	13	44

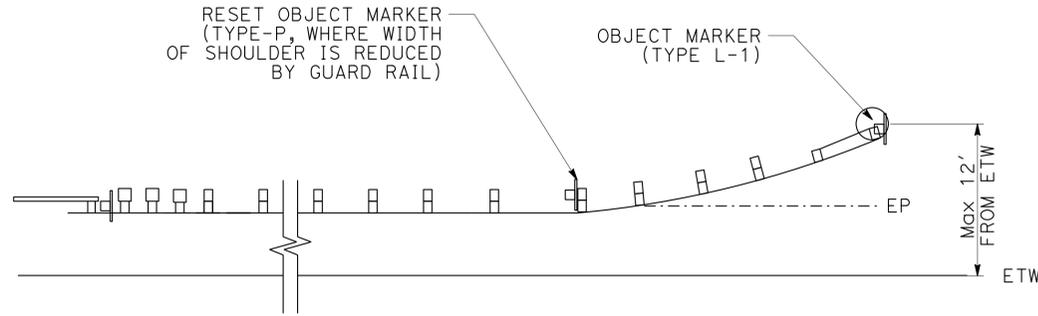
DWIGHT WINTERLIN 02-10-14
 REGISTERED CIVIL ENGINEER DATE
 02-10-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 DWIGHT WINTERLIN
 No. C68438
 Exp. 9-30-15
 CIVIL
 STATE OF CALIFORNIA

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

NOTES:

- IF SPACING OF BRIDGE RAIL POST DO NOT MATCH APPROACH MBGR POST SPACING, LAP WITHIN RECONSTRUCT MBGR AREA.
- EXACT LOCATIONS OF MBGR WORK TO BE DETERMINED BY THE ENGINEER.



TYPICAL OBJECT MARKER LOCATIONS

GUARDRAIL QUANTITIES

Loc	Co	Rte	PM	BRIDGE No.	BRIDGE NAME	BRIDGE QUADRANT	TRANSITION RAILING (TYPE WB-SPECIAL)*		RECONSTRUCT GUARDRAIL (WOOD POST)	RECONSTRUCT TRANSITION RAILING (TYPE WB)**	RECONSTRUCT TERMINAL SYSTEM	RESET OBJECT MARKER	OBJECT MARKER (TYPE L-1)	TREATED WOOD WASTE
							EA	LF	LF	EA	EA	EA	LB	
1	Sha	5	R41.05	06-0163L	ANTLER UC	BB	L+			12.5				351
							R+			12.5				
2	Sha	5	R41.05	06-0163R	ANTLER UC	BB	L+			12.5				351
							R+			12.5				
3	Sha	5	R42.32	06-0164L	LAKEHEAD UC	BB	L+			12.5				351
							R+			12.5				
4	Sha	5	R42.32	06-0164R	LAKEHEAD UC	BB	L+			12.5				351
							R+			12.5				
6	Sha	89	3.89	06-0085	HAT CREEK	BB	L+	1	25		SRT	1		5613
							R+	1	25		SRT	1	1	
						EB	L+	1	25		SRT	1	1	
							R+	1	25		SRT	1	1	
TOTAL								4	100	100	4	4	2	7017

* FOR DETAILS SEE SHEET C-2.

** FOR LOCATIONS 1, 2, 3 AND 4 SEE SHEET C-4 FOR RECONSTRUCT TRANSITION RAILING (TYPE WB) DETAILS.

**SUMMARY OF QUANTITIES
Q-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 TRAFFIC
 DWIGHT WINTERLIN
 ROY CAHILL
 KRISTI WESTOBY
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISOR BY
 DATE REVISED
 USERNAME => s115152
 DGN FILE => 24f690pa002.dgn
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0148
 PROJECT NUMBER & PHASE 02-1300-0104-1 EA 02-4F6901

LAST REVISION DATE PLOTTED => 11-FEB-2014
 02-10-14 TIME PLOTTED => 13:46

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: ROB STINGER
 CALCULATED/DESIGNED BY: ARTURO P. ROBLES
 CHECKED BY: ROY CAHILL
 REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shasta, Tehama	5,89,99	Var	15	44
ART REGISTERED ELECTRICAL ENGINEER DATE: 02-10-14					
PLANS APPROVAL DATE: 02-10-14					
<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>					

TEMPORARY FLASHING BEACON SYSTEM

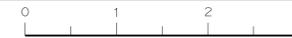
TRENCH	1" TYPE 1 CONDUIT	1/2" TYPE 1 CONDUIT	UF CABLE	No. 5 PULL BOX	PHOTOVOLTAIC PANEL	NEMA 3R ENCLOSURE WITH 15 A DISCONNECT	BATTERY AND CONTROL ENCLOSURE COMPLETE	12" LED SIGNAL MODULE WITH BACKPLATE	6" x 6" WOOD POST	CLASS 5 WOOD POLE
LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA
40	50	50	40	4	4	2	2	2	2	2

ITEMS SHOWN IN THIS TABLE ARE NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS TO BE MAINTAINED

PROJ Loc	ELEMENT	LOCATION Co-Rte-PM	DESCRIPTION
3, 4	CCTV	Sha-5-42.35	IN MEDIAN JUST NORTH OF LAKEHEAD UC

ELECTRICAL QUANTITIES E-2



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

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

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	16	44

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 02-10-14

UNIT OF MEASUREMENT SYMBOLS:

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

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

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

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

* For use on a sign panel only

STATE OF CALIFORNIA
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**ABBREVIATIONS
(SHEET 2 OF 2)**

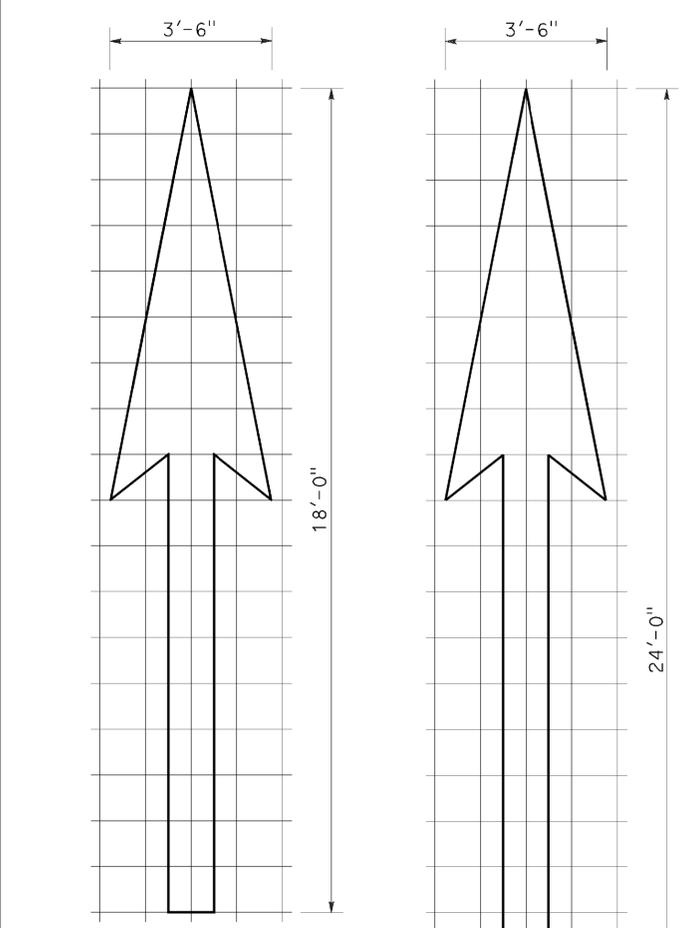
NO SCALE

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

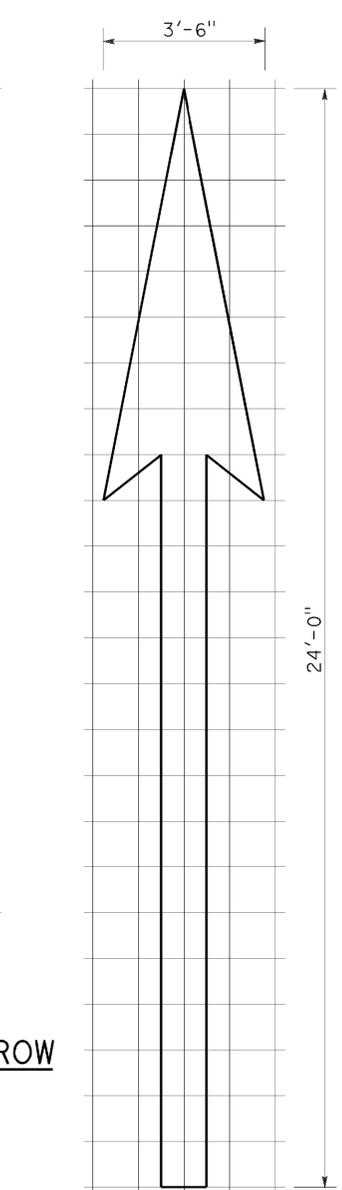
REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	17	44
REGISTERED CIVIL ENGINEER Roberta L. McLaughlin April 20, 2012 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>					

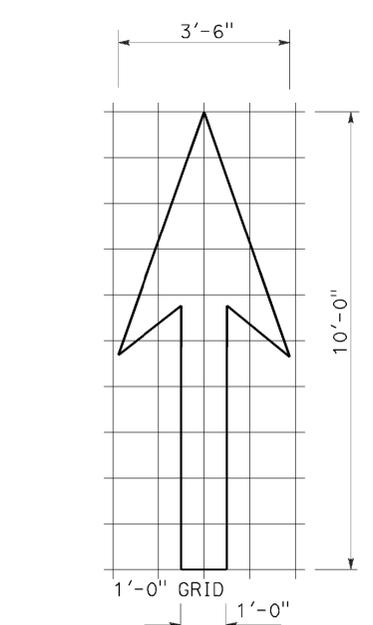
TO ACCOMPANY PLANS DATED 02-10-14



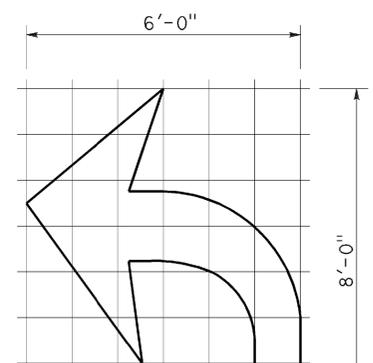
A=25 ft²
TYPE I 18'-0" ARROW



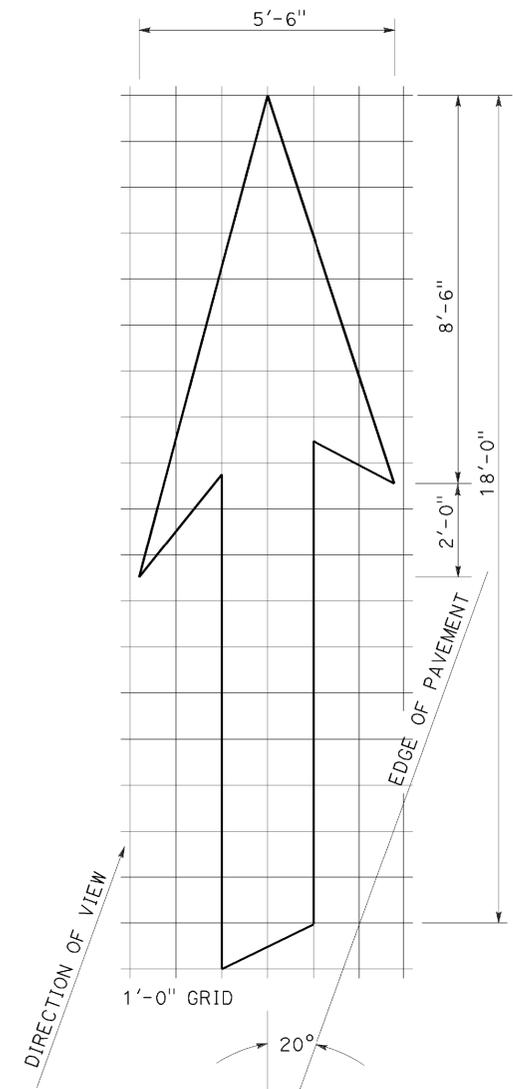
A=31 ft²
TYPE I 24'-0" ARROW



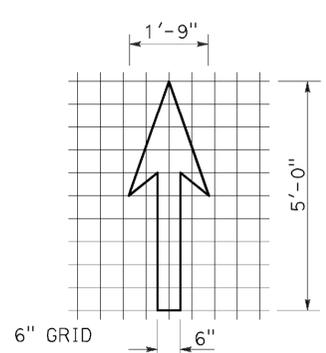
A=14 ft²
TYPE I 10'-0" ARROW



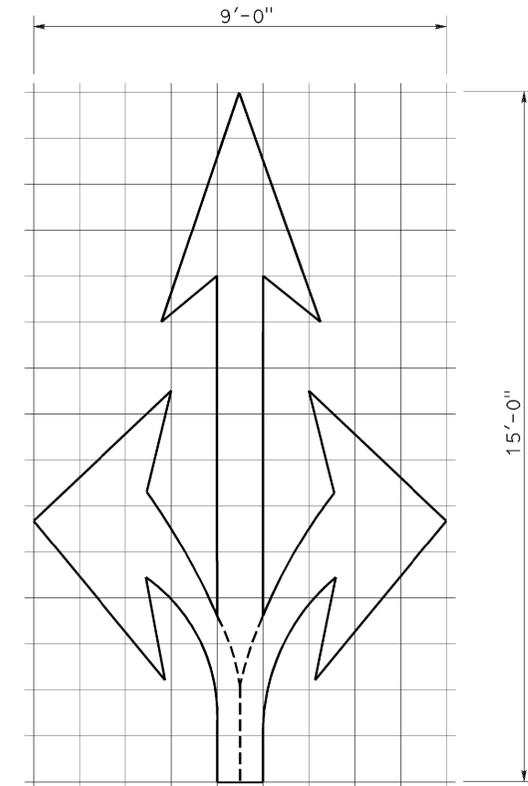
A=15 ft²
TYPE IV (L) ARROW
(For Type IV (R) arrow, use mirror image)



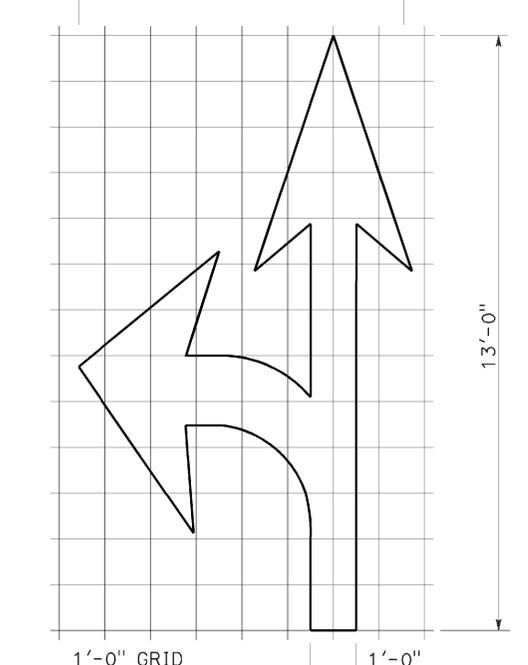
A=42 ft²
TYPE VI ARROW
Right lane drop arrow
(For left lane, use mirror image)



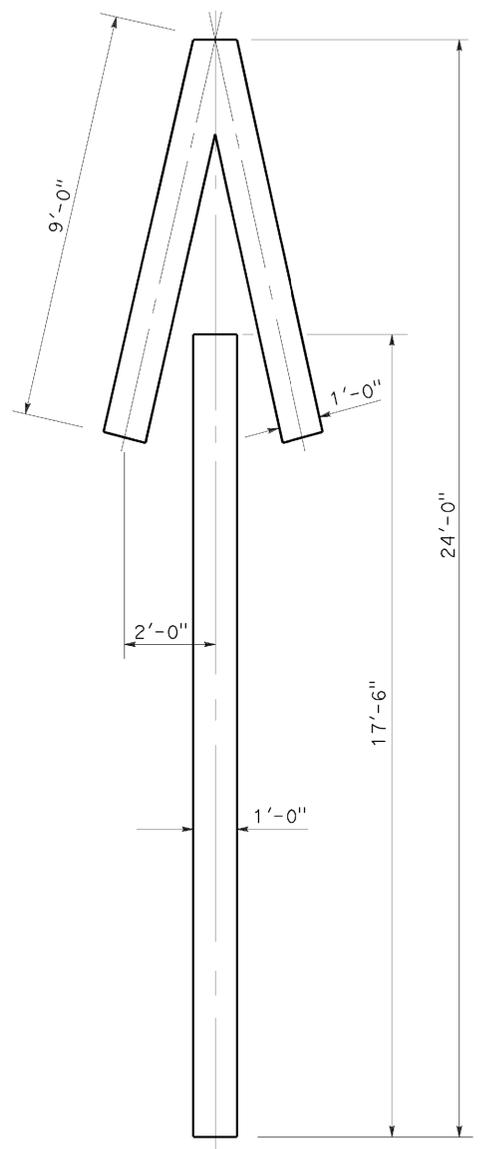
A=3.5 ft²
BIKE LANE ARROW



A=36 ft²
TYPE VIII ARROW



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



A=33 ft²
TYPE V ARROW

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

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

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

REVISED STANDARD PLAN RSP A24A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	18	44

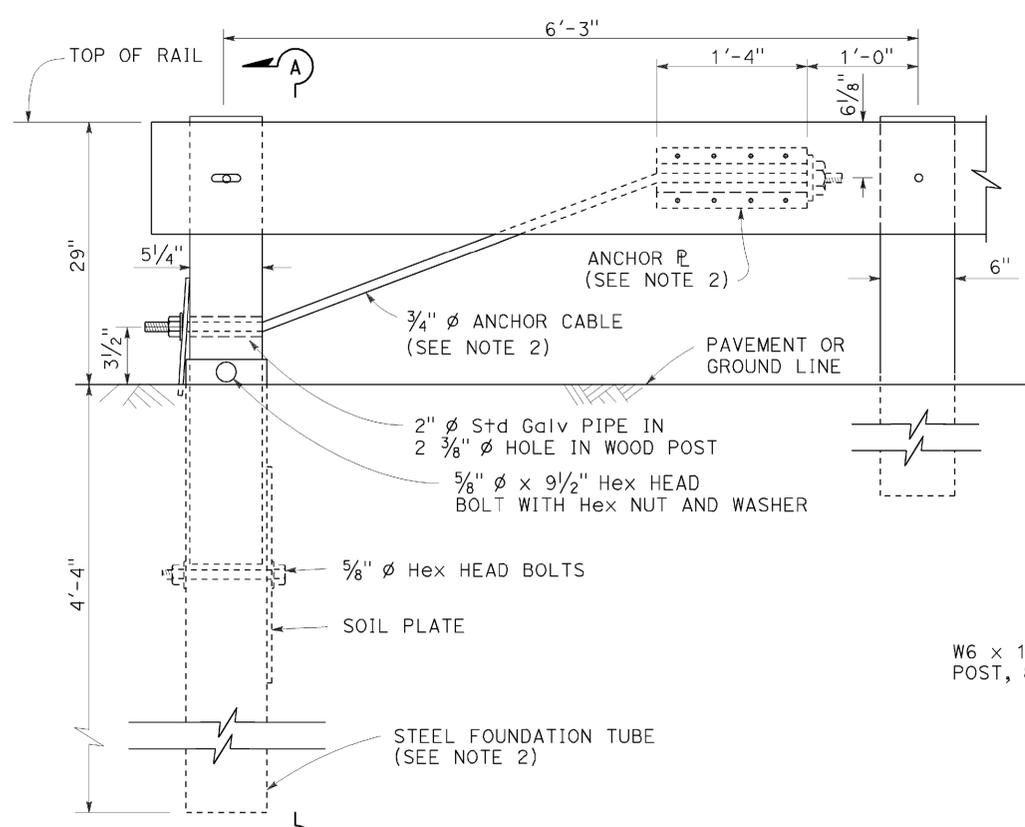
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

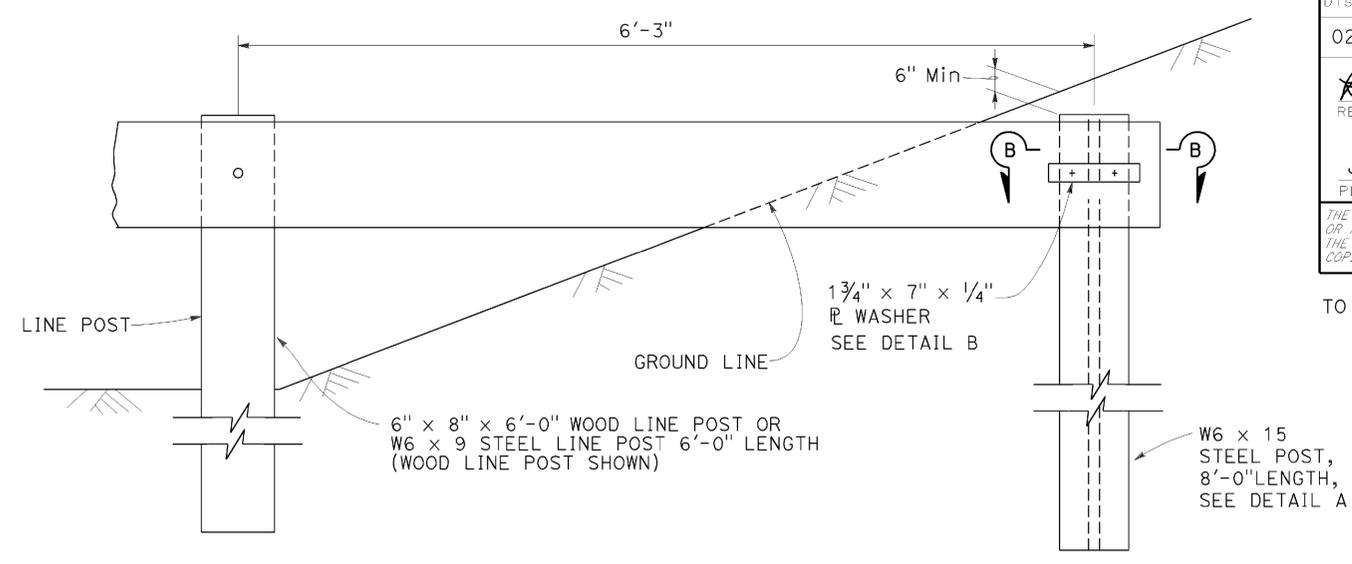
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TO ACCOMPANY PLANS DATED 02-10-14

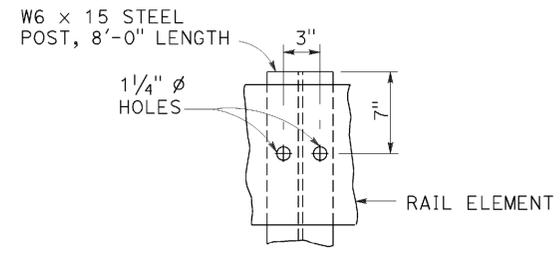
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



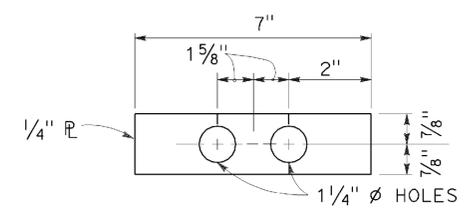
**ELEVATION
END ANCHOR
ASSEMBLY (TYPE SFT)**



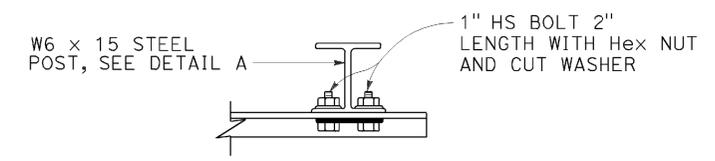
BURIED POST END ANCHOR



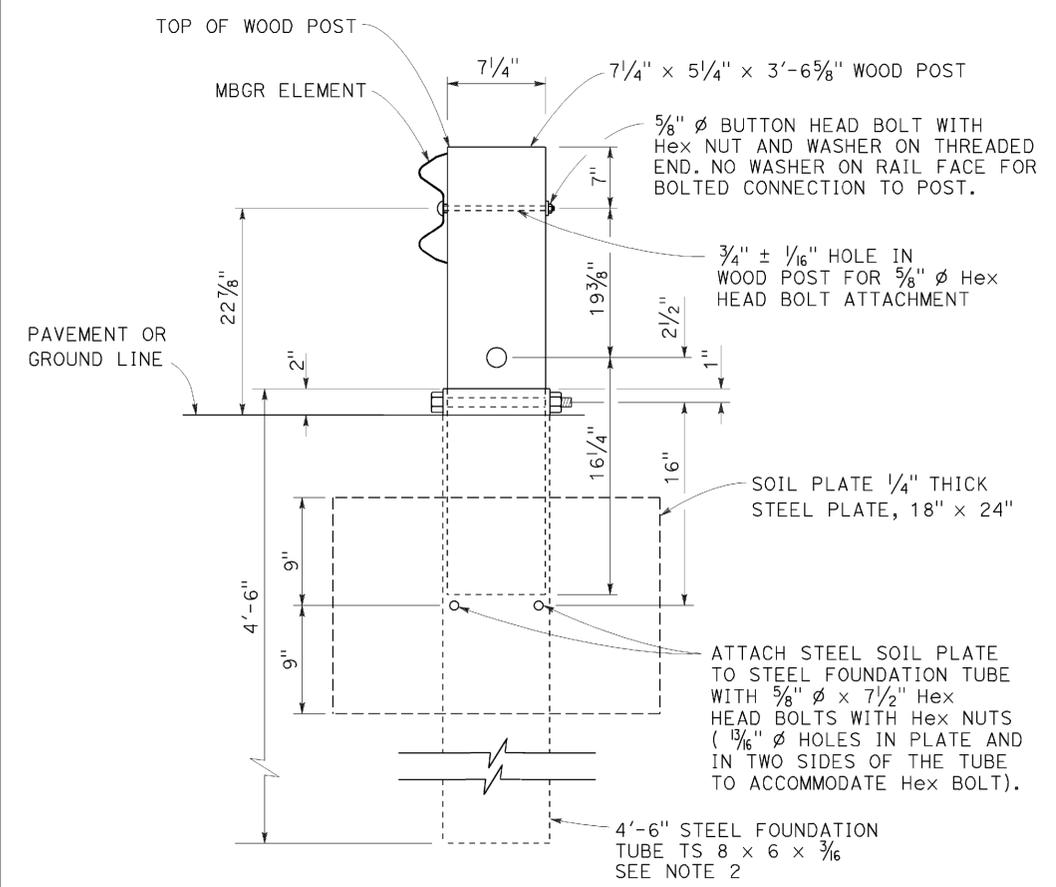
DETAIL A



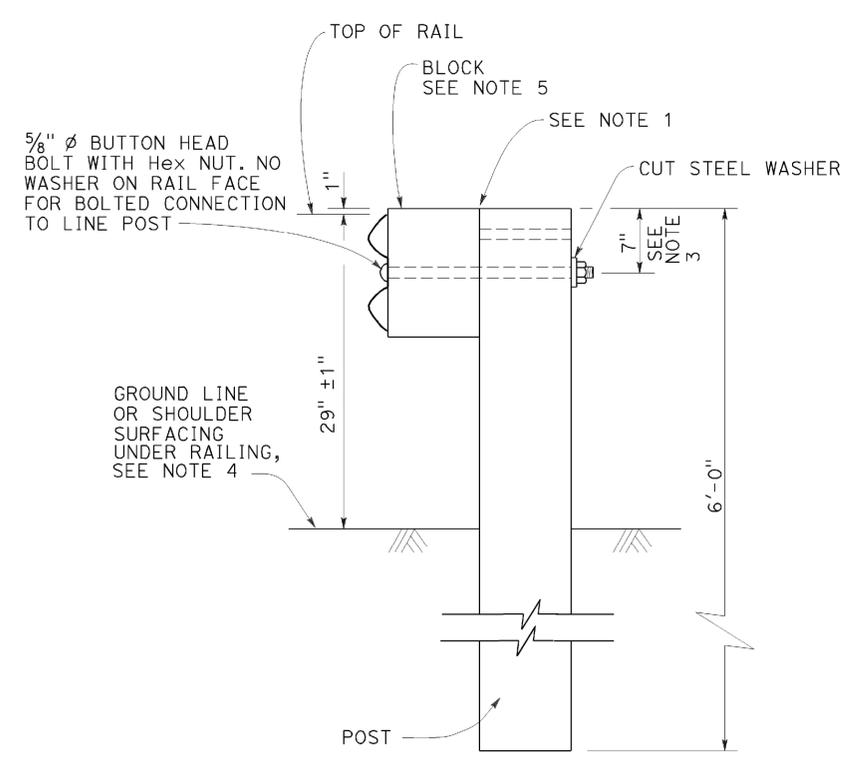
DETAIL B



SECTION B-B



SECTION A-A



**TYPICAL LINE
POST INSTALLATION**

NOTES:

1. For wood post and wood block, toenail with 2-16d Galv nails in top of block. For steel post and notched wood or plastic block, notched face of block faces steel post.
2. A 6'-0" Length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" diameter hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
3. To connect railing to 27" terminal system end treatment, transition the top of railing height at a ratio of 120:1 to terminal system end treatment height plus one 12'-6" standard railing section at the transitioned height for a horizontal connection to the end treatment.
4. Install posts in soil.
5. See Revised Standard Plans RSP A77N1 and RSP A77N2 for details.
6. Holes excavation in the slope to construct the buried post end anchor shall be backfilled with selected earth, placed in layers approximately 1'-0" thick. Each layer shall be moistened and thoroughly compacted.

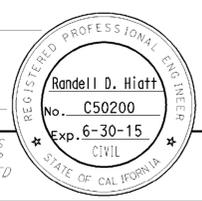
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
RECONSTRUCT INSTALLATION**

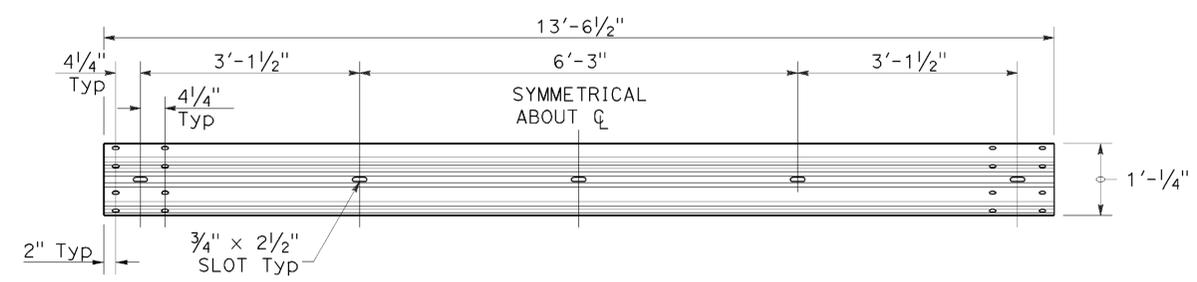
NO SCALE

RSP A77L3 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L3



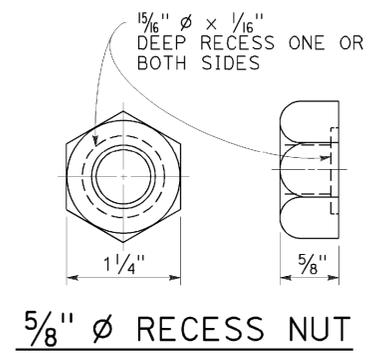
TO ACCOMPANY PLANS DATED 02-10-14



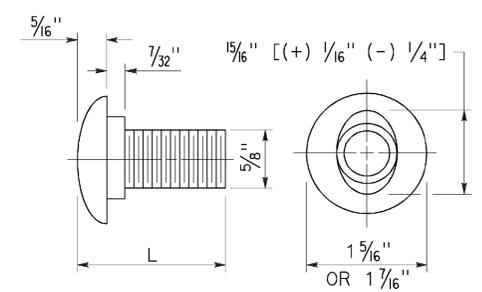
TYPICAL RAIL ELEMENT

NOTE:

1. Slotted holes for splice bolts to overlap ends of rail element.



5/8" Ø RECESS NUT

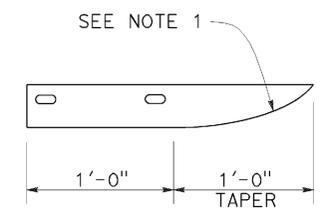


5/8" Ø BUTTON HEAD BOLT

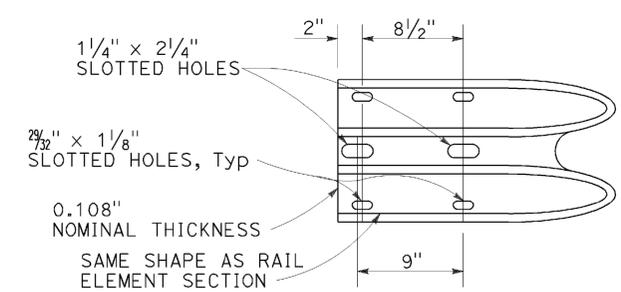
BUTTON HEAD BOLT

L	THREAD LENGTH
1 3/8"	FULL THREAD LENGTH
2"	FULL THREAD LENGTH
10"	4" Min THREAD LENGTH
18"	4" Min THREAD LENGTH
20"	4" Min THREAD LENGTH
22"	4" Min THREAD LENGTH
26"	4" Min THREAD LENGTH
36"	4" Min THREAD LENGTH
** 2 3/4"	2" Min THREAD LENGTH
** 19"	4" Min THREAD LENGTH

** For nested rail applications.



PLAN



**ELEVATION
END CAP
(TYPE A)**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STANDARD HARDWARE**

NO SCALE

RSP A77M1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77M1

2010 REVISED STANDARD PLAN RSP A77M1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shasta, Tehama	5,899	Var	20	44

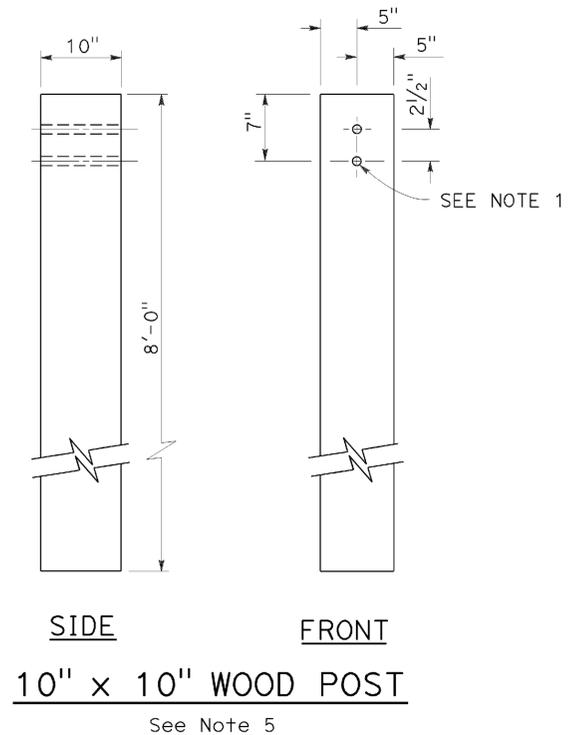
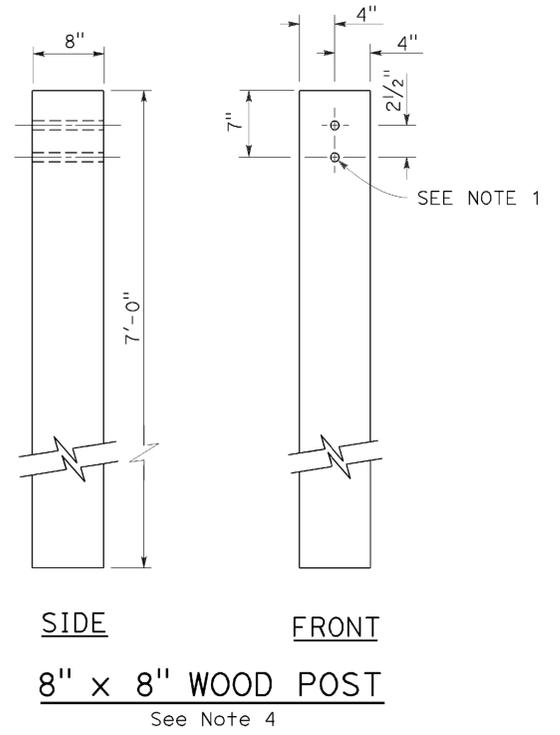
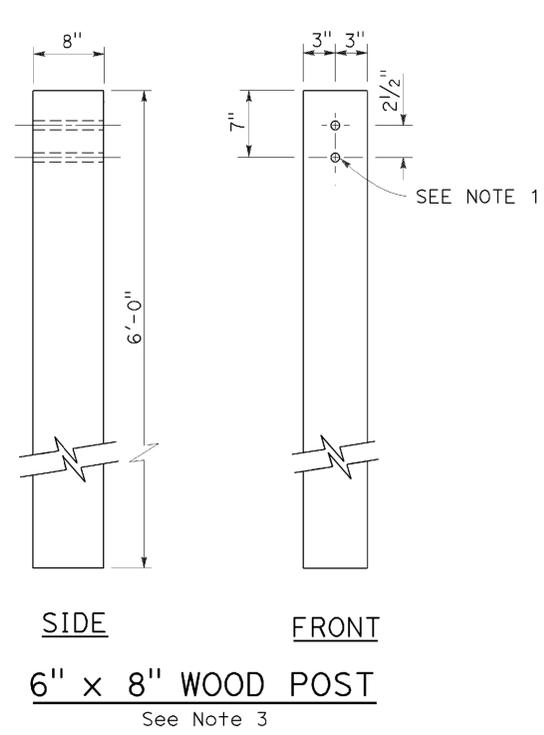
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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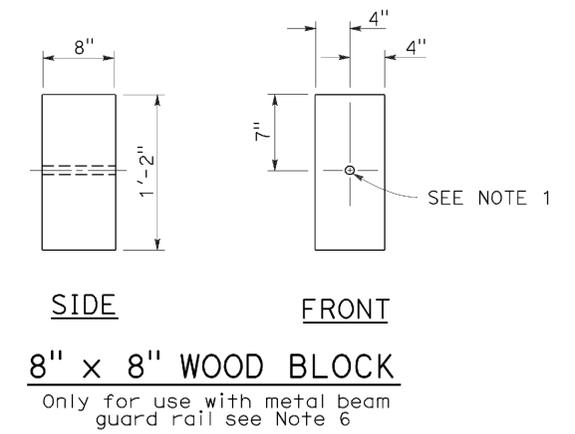
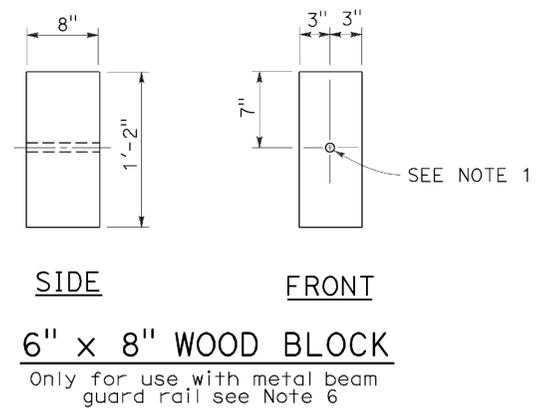
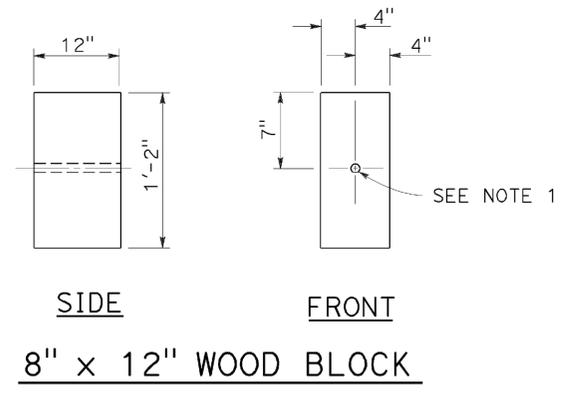
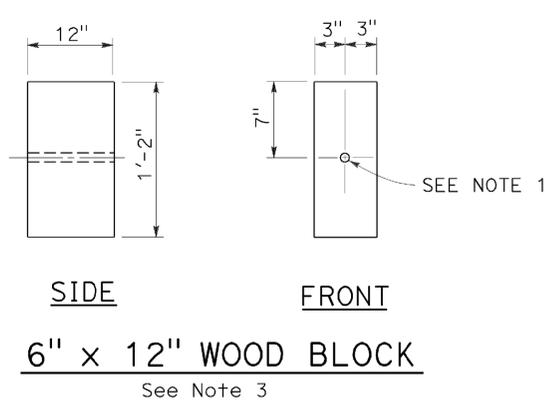
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TO ACCOMPANY PLANS DATED 02-10-14



NOTES:

- All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
- Dimensions shown for wood post are nominal.
- This post and block combination used for standard line post sections of MGS.
- This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
- This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
- See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

NO SCALE

RSP A77N1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N1

2010 REVISED STANDARD PLAN RSP A77N1

DATE PLOTTED => 11-FEB-2014
TIME PLOTTED => 13:46

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	21	44

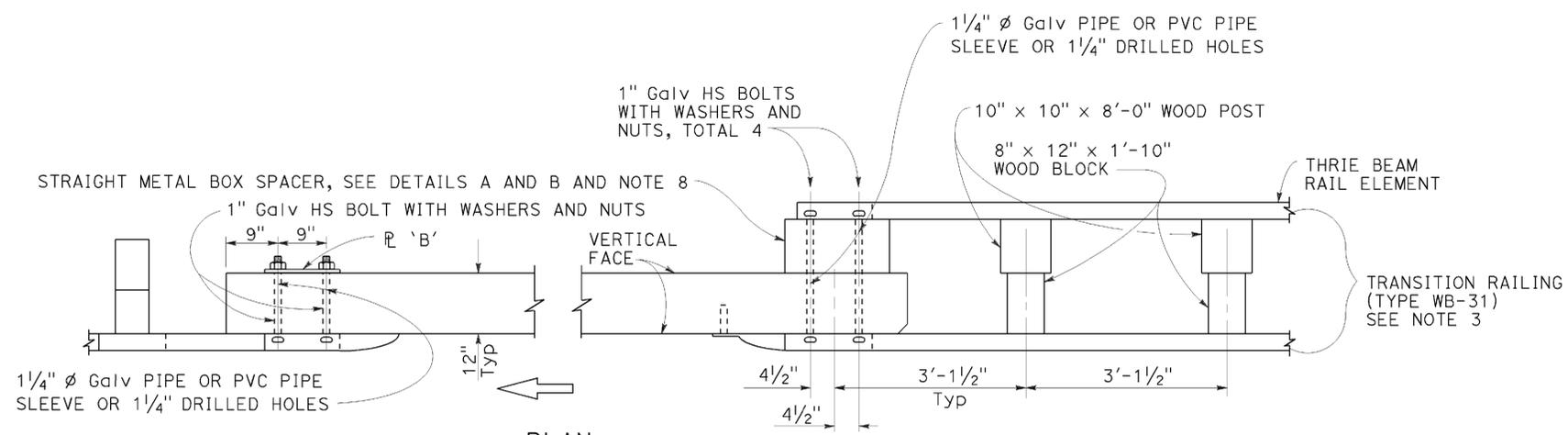
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

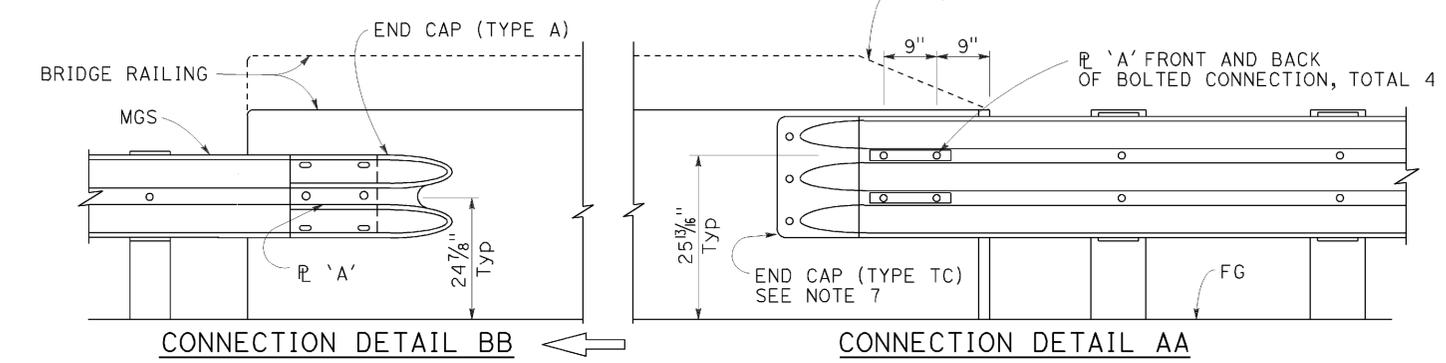
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Exp. 6-30-15
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STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 02-10-14



PLAN

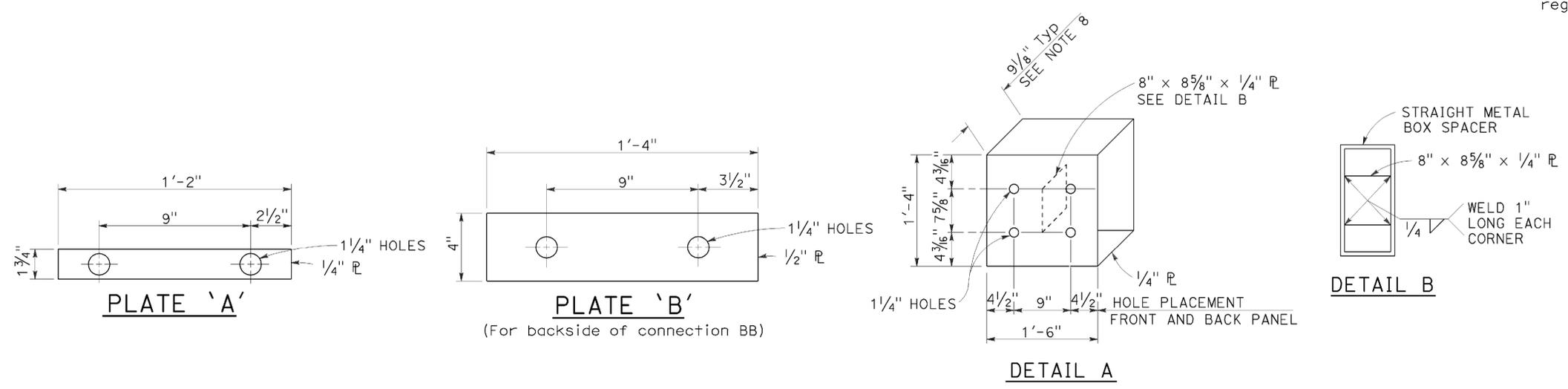


ELEVATION

MIDWEST GUARDRAIL SYSTEM CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77U2 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Revised Standard Plans RSP A77M1, RSP A77N1 and RSP A77N2.
3. For additional details of Transition Railing (Type WB-31), see Revised Standard Plan RSP A77U4. Transition Railing (Type WB-31) transitions the 12 gauge MGS railing section to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
4. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77Q1, Layout Types 12C and 12D on Revised Standard Plan RSP A77Q2, and Layout Type 12E on Revised Standard Plan RSP A77Q3.
5. For typical use of Connection Detail BB, see Layout Type 12D (structure departure railing connection) on Revised Standard Plan RSP A77Q2 and Layout Type 12DD on Revised Standard Plan RSP A77Q5.
6. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam rail.
7. For details of End Cap (Type TC), see Revised Standard Plan RSP A77U4.
8. See Revised Standard Plan RSP A77U4 for additional details regarding depth dimension for straight metal box spacer.



STRAIGHT METAL BOX SPACER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS
DETAILS No. 1

NO SCALE

RSP A77U1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77U1

2010 REVISED STANDARD PLAN RSP A77U1

DATE PLOTTED => 11-FEB-2014
TIME PLOTTED => 13:47

TO ACCOMPANY PLANS DATED 02-10-14

TABLE 1

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

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

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

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

TABLE 2

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

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

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

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**

NO SCALE

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

REVISED STANDARD PLAN RSP T9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis, Teh	5,89, 99	Var	23	44

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

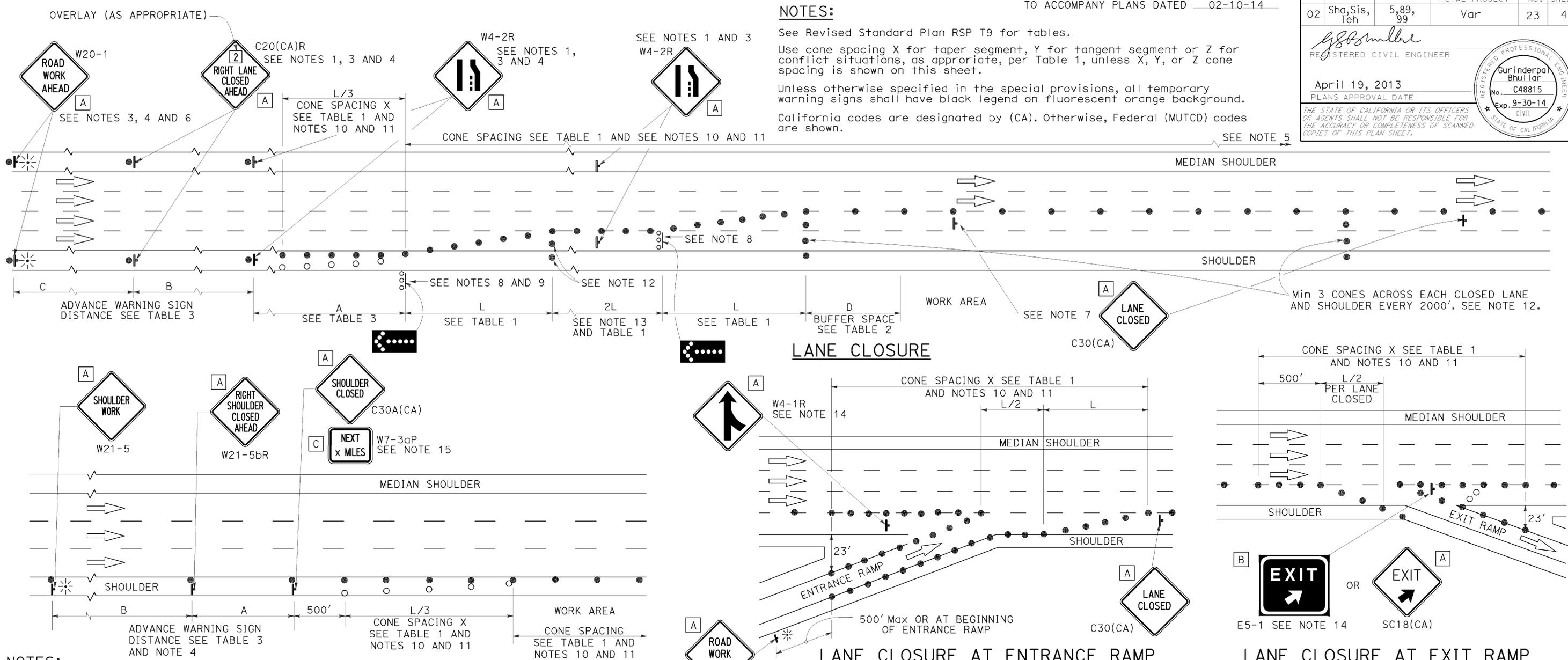
April 19, 2013
 PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 02-10-14

NOTES:

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



NOTES:

1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
 - a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

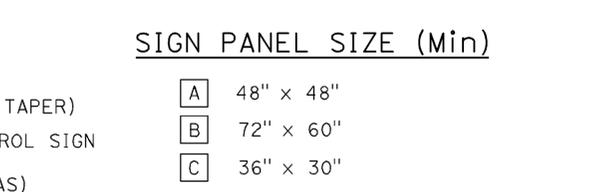
SHOULDER CLOSURE

6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA) sign for the first advance warning sign.
7. Place a C30(CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.

LANE CLOSURE AT ENTRANCE RAMP

12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
15. A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

LANE CLOSURE AT EXIT RAMP



LEGEND

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

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 72" x 60"
- C 36" x 30"

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

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10
 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

2010 REVISED STANDARD PLAN RSP T10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	24	44

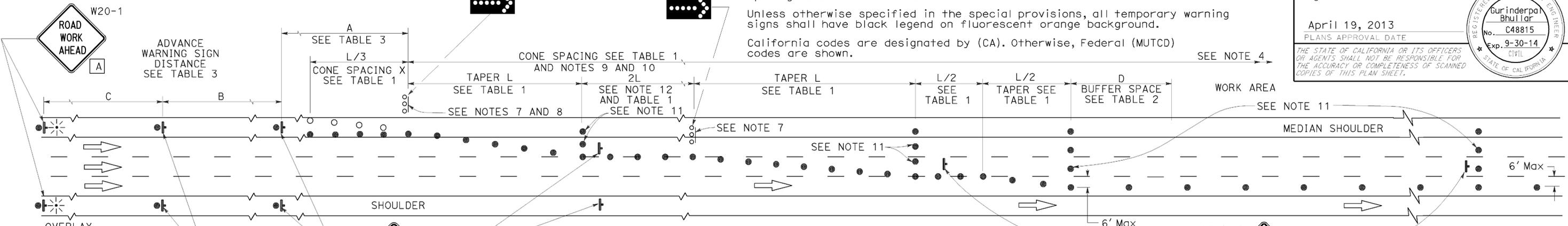
REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

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

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

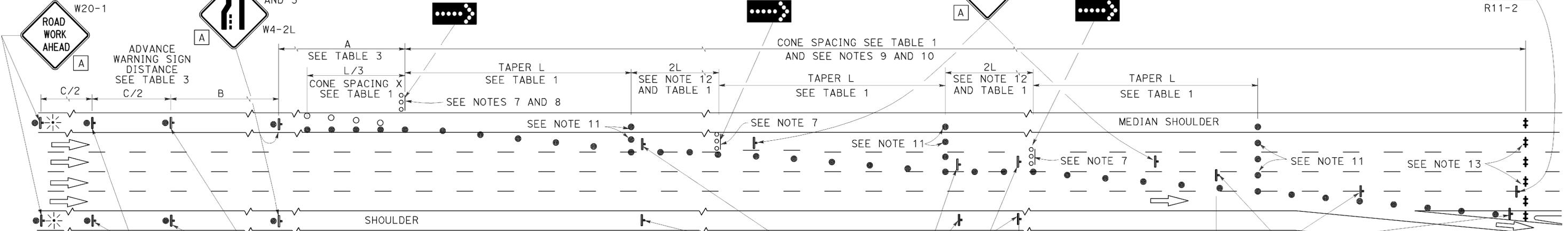
NOTES: See Revised Standard Plan RSP T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Unless otherwise specified in the special provisions, all temporary warning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

SEE NOTES 3 AND 5



LANE CLOSURE WITH PARTIAL SHOULDER USE

SEE NOTES 3 AND 5



COMPLETE CLOSURE

NOTES:

- Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details as shown except that C20(CA)R and W4-2R signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" X 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT ___ MILES", use a C20(CA) sign for the first advance warning sign.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure With Partial Shoulder Use" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- When specified in the special provisions, a W20-2 "DETOUR AHEAD" sign is to be used in place of the W20-3 "FREEWAY CLOSED AHEAD" sign.

SIGN PANEL SIZE (Min)

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

LEGEND

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

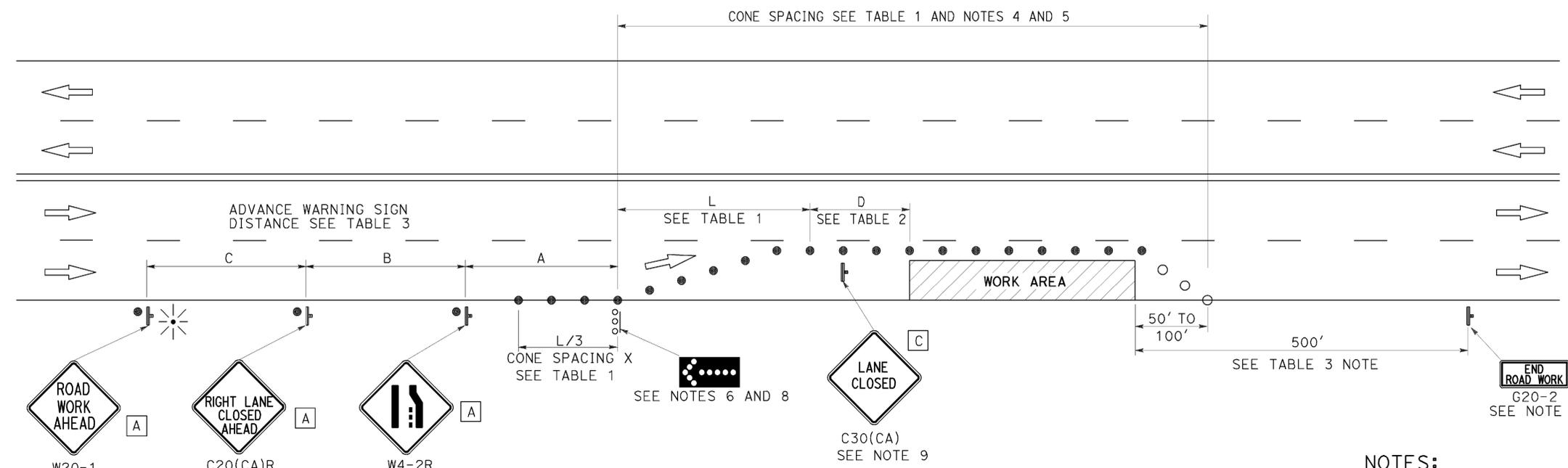
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURES ON
 FREEWAYS AND EXPRESSWAYS**
 NO SCALE

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

REVISED STANDARD PLAN RSP T10A



TO ACCOMPANY PLANS DATED 02-10-14



TYPICAL LANE CLOSURE

NOTES:

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

NOTES:

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

LEGEND

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

SIGN PANEL SIZE (Min)

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

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

NO SCALE

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

REVISED STANDARD PLAN RSP T11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	26	44

Registered Civil Engineer
 April 19, 2013
 PLANS APPROVAL DATE
 No. C48815
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

LEGEND

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

SIGN PANEL SIZE (Min)

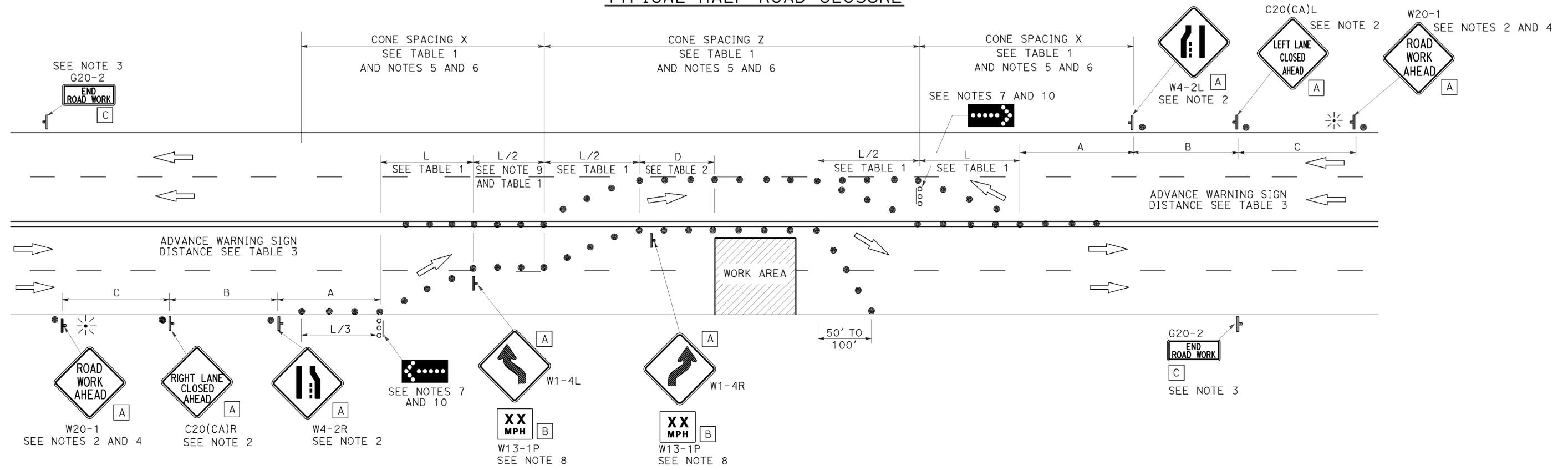
- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

NOTES:

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

TO ACCOMPANY PLANS DATED 02-10-14

TYPICAL HALF ROAD CLOSURE



NOTES:

1. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.
2. Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA) sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow signs shall be either Type I or Type II.
8. Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advisory speed is more than the posted or maximum speed limit.
9. Unless otherwise specified in the special provisions, the tangent (L/2) shall be used.
10. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR HALF ROAD CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS AND EXPRESSWAYS**

NO SCALE

RSP T12 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T12
 DATED MAY 20, 2011 - PAGE 240 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T12

NOTES:

See Revised Standard Plan RSP T9 for tables.

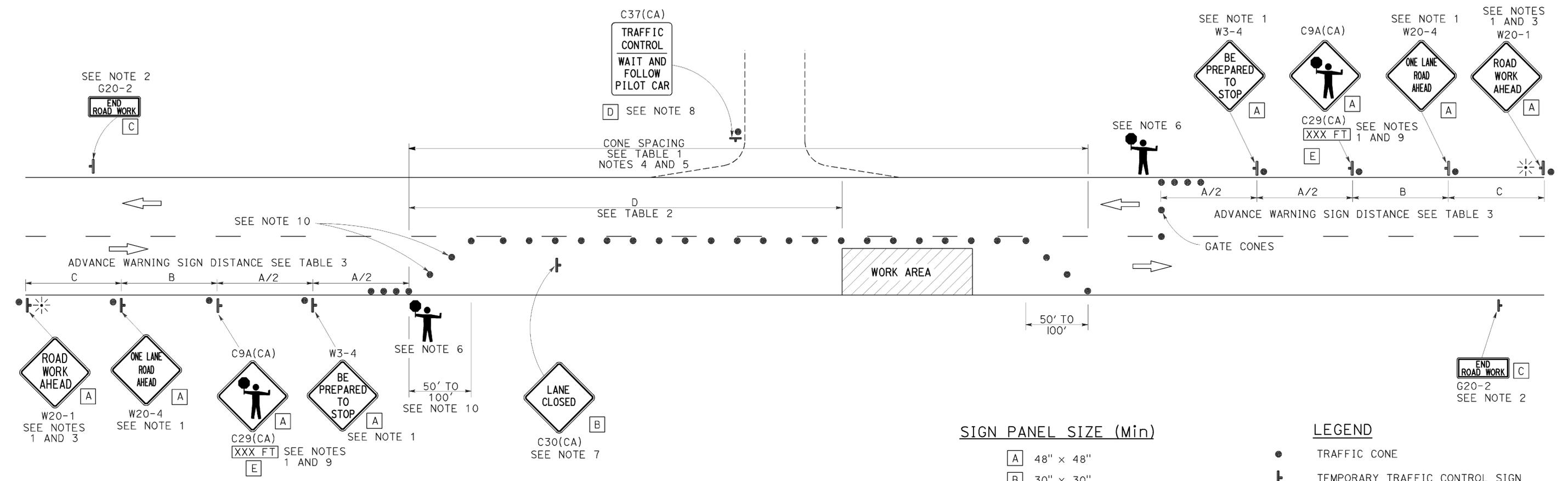
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 02-10-14



- NOTES:**
- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
 - If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
 - All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
 - Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.

- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.

SIGN PANEL SIZE (Min)

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

LEGEND

●	TRAFFIC CONE
⊥	TEMPORARY TRAFFIC CONTROL SIGN
⚡	PORTABLE FLASHING BEACON
👤	FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T13

LEGEND:

- AB** ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS
- BC** INSTALL PULL BOX IN EXISTING CONDUIT RUN
- BP** PEDESTRIAN BARRICADE, TYPE AS INDICATED ON PLAN
- CB** INSTALL CONDUIT INTO EXISTING PULL BOX
- CC** CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED
- CF** CONDUIT TO REMAIN FOR FUTURE USE. REMOVE CONDUCTORS. INSTALL PULL TAPE
- DH** DETECTOR HANDHOLE
- FA** FOUNDATION TO BE ABANDONED
- IS** INSTALL SIGN ON SIGNAL MAST ARM
- NS** NO SLIP BASE ON STANDARD
- PEC** PHOTOELECTRIC CONTROL
- PEU** PHOTOELECTRIC UNIT
- RC** EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR
- RE** REMOVE ELECTROLIER, FUSES AND BALLAST. TAPE ENDS OF CONDUCTORS
- RL** RELOCATE EQUIPMENT
- RR** REMOVE AND REUSE EQUIPMENT
- RS** REMOVE AND SALVAGE EQUIPMENT
- SC** SPLICE NEW TO EXISTING CONDUCTORS
- SD** SERVICE DISCONNECT
- TSP** TELEPHONE SERVICE POINT

ABBREVIATIONS

- | | | | |
|-------|---|-------|--------------------------------------|
| APS | ACCESSIBLE PEDESTRIAN SIGNAL | M/M | MULTIPLE TO MULTIPLE TRANSFORMER |
| BBS | BATTERY BACKUP SYSTEM | Mtg | MOUNTING |
| BC | BOLT CIRCLE | MV | MERCURY VAPOR LIGHTING FIXTURE |
| BPB | BICYCLE PUSH BUTTON | MVDS | MICROWAVE VEHICLE DETECTION SYSTEM |
| C | CONDUIT | N | NEUTRAL (GROUNDED CONDUCTOR) |
| CB | CIRCUIT BREAKER | NB | NEUTRAL BUS |
| CCTV | CLOSED CIRCUIT TELEVISION | NC | NORMALLY CLOSE |
| Ckt | CIRCUIT | NO | NORMALLY OPEN |
| CMS | CHANGEABLE MESSAGE SIGN | P | CIRCUIT BREAKER'S POLE |
| Ctid | CALTRANS IDENTIFICATION | PB | PULL BOX |
| Comm | COMMUNICATION | PBA | PUSH BUTTON ASSEMBLY |
| DLC | LOOP DETECTOR LEAD-IN CABLE | PEC | PHOTOELECTRIC CONTROL |
| EMS | EXTINGUISHABLE MESSAGE SIGN | Ped | PEDESTRIAN |
| EVUC | EMERGENCY VEHICLE UNIT CABLE | PEU | PHOTOELECTRIC UNIT |
| EVUD | EMERGENCY VEHICLE UNIT DETECTOR | PT | CONDUIT WITH PULL TAPE |
| FB | FLASHING BEACON | RE | RELOCATED EQUIPMENT |
| FBCA | FLASHING BEACON CONTROL ASSEMBLY | RM | RAMP METERING |
| FBS | FLASHING BEACON WITH SLIP BASE | RWIS | ROADSIDE WEATHER INFORMATION SYSTEM |
| FO | FIBER OPTIC | SB | SLIP BASE |
| G | EQUIPMENT GROUNDING CONDUCTOR | SIC | SIGNAL INTERCONNECT CABLE |
| GB | GROUND BUS | Sig | SIGNAL |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER | SMA | SIGNAL MAST ARM |
| HAR | HIGHWAY ADVISORY RADIO | SNS | STREET NAME SIGN |
| Hex | HEXAGONAL | SP | SERVICE POINT |
| HPS | HIGH PRESSURE SODIUM | TDC | TELEPHONE DEMARCATION CABINET |
| IISNS | INTERNALLY ILLUMINATED STREET NAME SIGN | TMS | TRAFFIC MONITORING STATION |
| ISL | INDUCTION SIGN LIGHTING | TOS | TRAFFIC OPERATIONS SYSTEM |
| LED | LIGHT EMITTING DIODE | Veh | VEHICLE |
| LMA | LUMINAIRE MAST ARM | VIVDS | VIDEO IMAGE VEHICLE DETECTION SYSTEM |
| LPS | LOW PRESSURE SODIUM | WIM | WEIGH-IN-MOTION |
| Ltg | LIGHTING | Xfmr | TRANSFORMER |
| Lum | LUMINAIRE | | |
| M | METERED | | |
| MAT | MAST ARM MOUNTING TOP ATTACHMENT | | |
| MAS | MAST ARM MOUNTING SIDE ATTACHMENT | | |

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis, Teh	5,89, 99	Var	28	44

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 02-10-14

SOFFIT AND WALL MOUNTED LUMINAIRES

- PENDANT, 70 W HPS UNLESS OTHERWISE SPECIFIED
- FLUSH, 70 W HPS UNLESS OTHERWISE SPECIFIED
- WALL SURFACE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO REMAIN UNMODIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO BE MODIFIED AS SPECIFIED

NOTE:
Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

SYMBOL USED	DEFINITIONS
Ω	OHMS
min	MINUTE
s	SECOND
bps	BITS PER SECOND
Bps	BYTES PER SECOND
A	AMPERE
V	VOLT
V(dc)	VOLT (DIRECT CURRENT)
V(ac)	VOLT (ALTERNATING CURRENT)
FC	FOOT - CANDLE
W	WATTS
VA	VOLT-AMPERE
M	MEGA
k	KILO
m	MILLI
μ	MICRO
P	PICO
HZ	HERTZ

MISCELLANEOUS ELECTROLIERS

NEW	EXISTING	
		LUMINAIRE ON WOOD POLE
		NON-STANDARD ELECTROLIER (SEE PROJECT NOTES OR PROJECT PLANS)
		CITY ELECTROLIER
		ELECTROLIER FOUNDATION (FUTURE INSTALLATION)

- NOTES:**
- HPS luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. HPS luminaires shall be 200 W when installed on other type standards or poles, unless otherwise specified.
 - LED luminaires shall be 235 W when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. LED luminaires shall be 165 W when installed on other type standards or poles, unless otherwise specified.
 - Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.

STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
		15 STRUCTURE
		15D STRUCTURE
		21
		21D
		21 STRUCTURE
		21D STRUCTURE
		30
		31
		32

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

NO SCALE

RSP ES-1A DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 20, 2011 - PAGE 425 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	29	44

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
 No. E15129
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA
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TO ACCOMPANY PLANS DATED 02-10-14

CONDUIT

SIGNAL EQUIPMENT

NEW	EXISTING	
---	---	LIGHTING CONDUIT, UNLESS OTHERWISE INDICATED OR NOTED
---	---	TRAFFIC SIGNAL CONDUIT
---C---	---c---	COMMUNICATION CONDUIT
---T---	---t---	TELEPHONE CONDUIT
---F---	---f---	FIRE ALARM CONDUIT
---FO---	---fo---	FIBER OPTIC CONDUIT
---	---	CONDUIT TERMINATION
		CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

NEW	EXISTING	
		PEDESTRIAN SIGNAL HEAD "C" INDICATES COUNTDOWN PEDESTRIAN HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
		MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)

SERVICE EQUIPMENT

NEW	EXISTING	
---OH---	---oh---	OVERHEAD LINES
		WOOD POLE, "U" INDICATES UTILITY OWNED
		POLE GUY WITH ANCHOR
		UTILITY TRANSFORMER - GROUND MOUNTED
		SERVICE EQUIPMENT ENCLOSURE TYPE. DOOR INDICATES FRONT OF ENCLOSURE
		TELEPHONE DEMARCATION CABINET

POLE-MOUNTED SERVICE DESIGNATION

	TYPE H SERVICE, 28'-10"	TYPE OF INSTALLATION AND POLE HEIGHT ABOVE GRADE
--	-------------------------	--

FLASHING BEACON

NEW	EXISTING	
		FLASHING BEACON (ONE VEHICLE SIGNAL HEAD WITH BACKPLATE AND VISOR) "R" INDICATES RED INDICATION, "Y" INDICATES YELLOW INDICATION
		FLASHING BEACON WITH TYPE 15-FBS STANDARD AND A SIGN.
		FLASHING BEACON WITH TYPES 9, 9A OR 9B SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED

		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

SIGNAL EQUIPMENT Cont

NEW	EXISTING	
		GUARD POST
		TYPE 1 STANDARD WITH RAMP METERING SIGN
		OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION SYSTEM

NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.

ILLUMINATED OVERHEAD SIGN

NEW	EXISTING	
		SINGLE POST, SINGLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, DOUBLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, SINGLE ILLUMINATED SIGN, FULL CANTILEVER
		DOUBLE POST, SINGLE ILLUMINATED SIGN
		SINGLE ILLUMINATED SIGN MOUNTED ON STRUCTURE
		DOUBLE POST, SINGLE ILLUMINATED SIGN WITH ELECTROLIER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

NO SCALE

RSP ES-1B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis, Teh	5,89, 99	Var	30	44

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

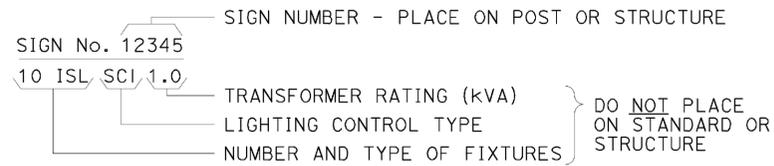
July 19, 2013
PLANS APPROVAL DATE

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

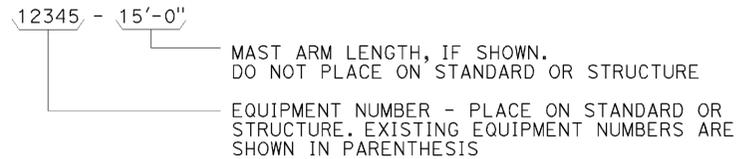
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

EQUIPMENT IDENTIFICATION

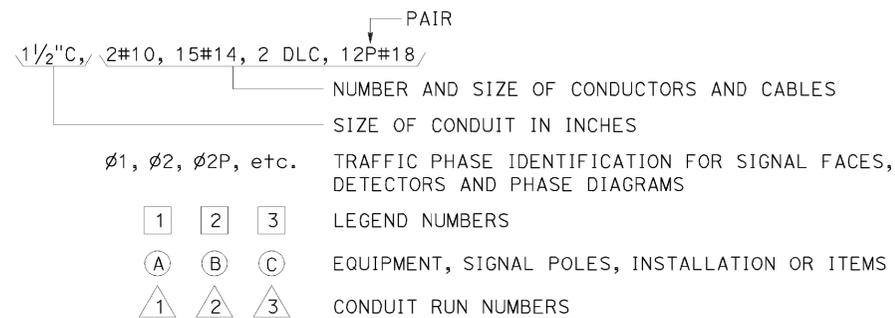
ILLUMINATED SIGN IDENTIFICATION NUMBER:



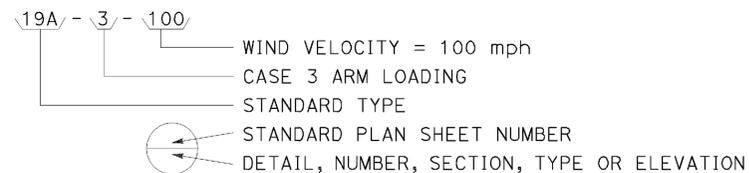
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



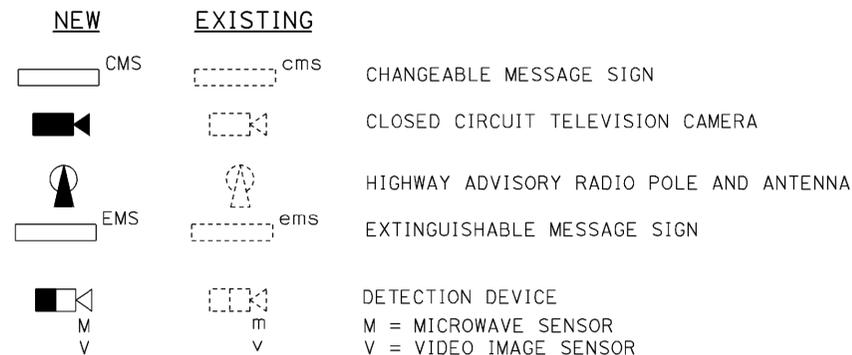
CONDUIT AND CONDUCTOR IDENTIFICATION:



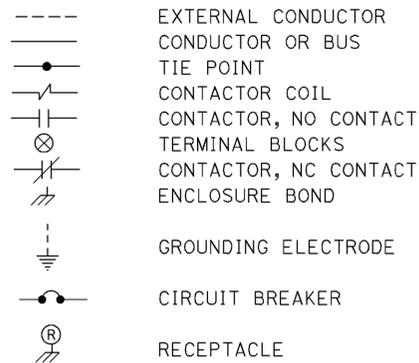
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



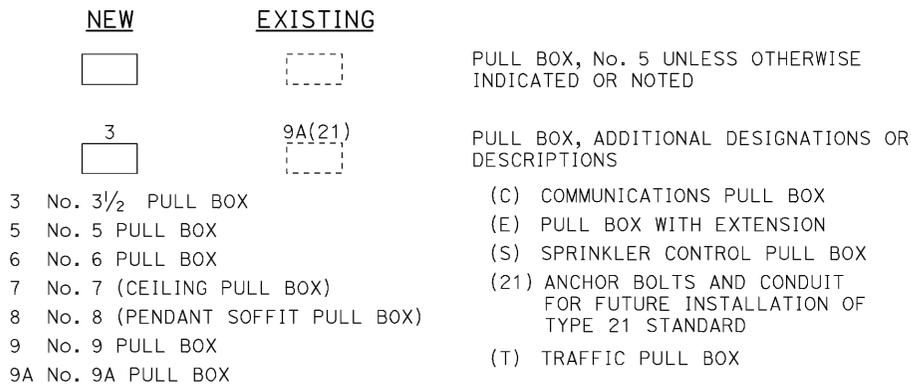
MISCELLANEOUS EQUIPMENT



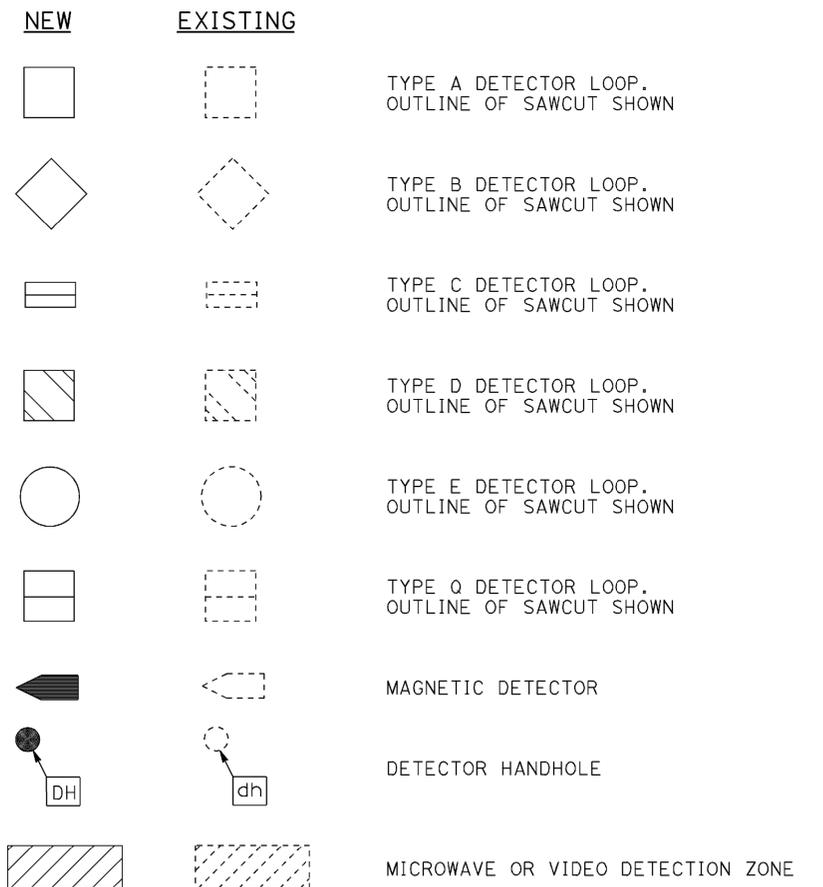
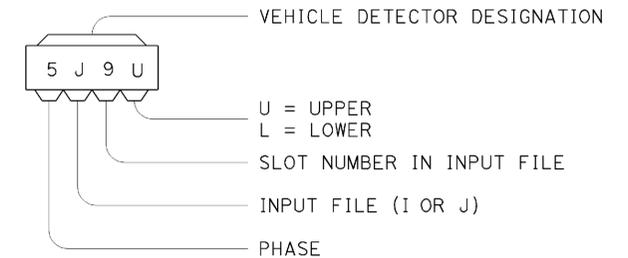
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

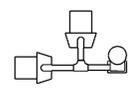
RSP ES-1C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1C
DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1C

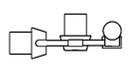
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Shq,Sis, Teh	5,89, 99	Var	31	44
<i>Theresa Gabriel</i> REGISTERED ELECTRICAL ENGINEER No. E15129 Exp. 6-30-14 STATE OF CALIFORNIA					
July 19, 2013 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

TO ACCOMPANY PLANS DATED 02-10-14

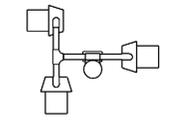
2010 REVISED STANDARD PLAN RSP ES-4A



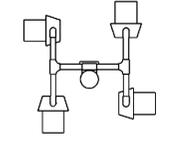
SV-2-TD



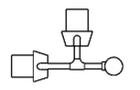
SV-2-TC



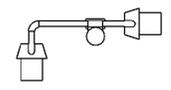
SV-3-TC



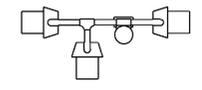
SV-4-TC



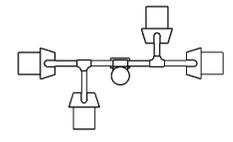
SV-2B



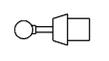
SV-2-TB



SV-3-TB



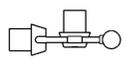
SV-4-TB



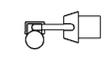
SV



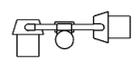
SV-1



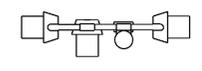
SV-2A



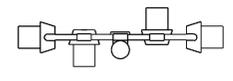
SV-1-T



SV-2-TA



SV-3-TA



SV-4-TA

SIDE MOUNTINGS

PLAN VIEW OF OTHER SIDE MOUNTINGS

ABBREVIATIONS:

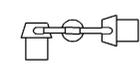
- SV SIDE MOUNTED VEHICLE SIGNALS
- T TERMINAL COMPARTMENT
- TV TOP MOUNTED VEHICLE SIGNALS
- 1, 2, 3, 4 NUMBER OF SIGNAL FACES (3 - SECTION, UNLESS OTHERWISE INDICATED)
- A, B, C, D CONFIGURATION OF SIGNALS

NOTES:

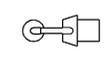
1. Mountings shall be oriented to provide maximum horizontal clearance to adjacent roadway.
2. Bracket arms shall be long enough to permit proper alignment of signals and backplate installation.
3. See Standard Plans ES-4D and ES-4E for attachment fitting details.



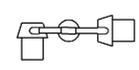
TV-1



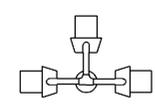
TV-2



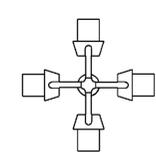
TV-1-T



TV-2-T



TV-3-T



TV-4-T

TOP MOUNTINGS

PLAN VIEW OF TOP MOUNTINGS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (VEHICULAR SIGNAL HEADS
 AND MOUNTINGS)**

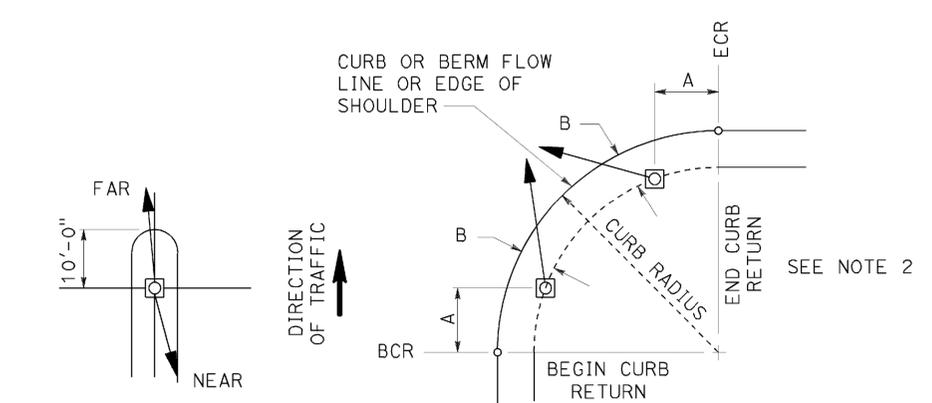
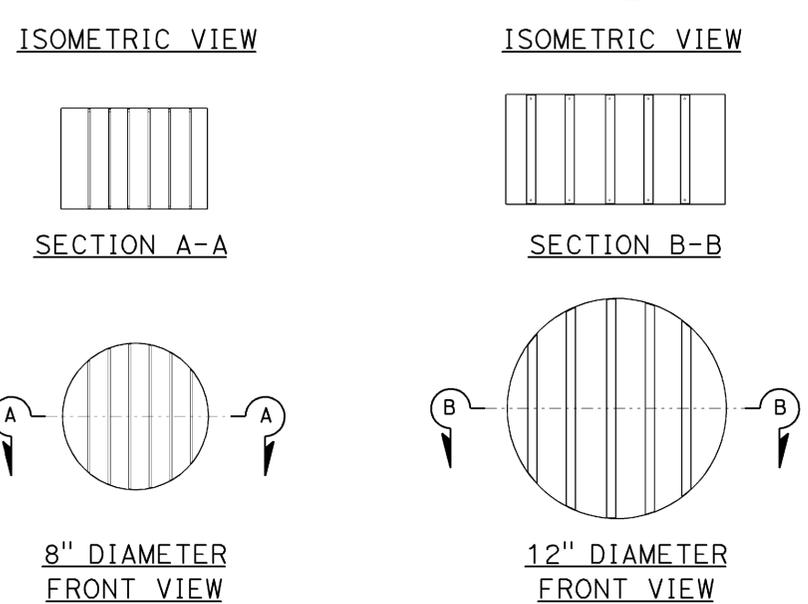
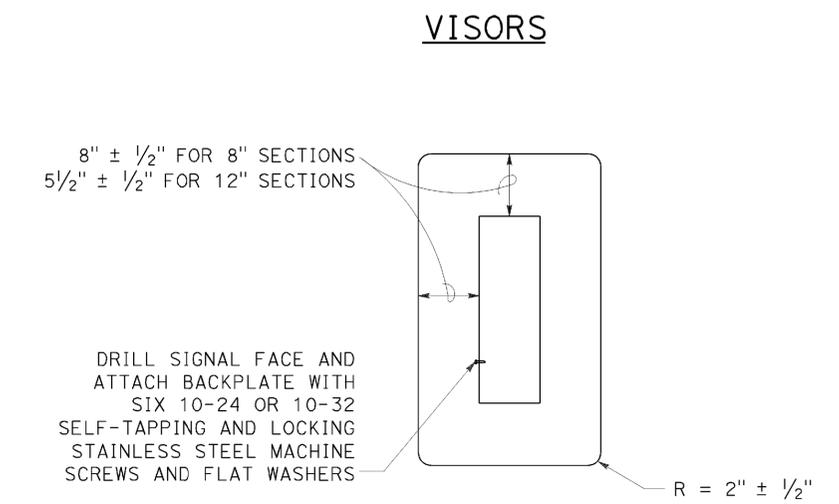
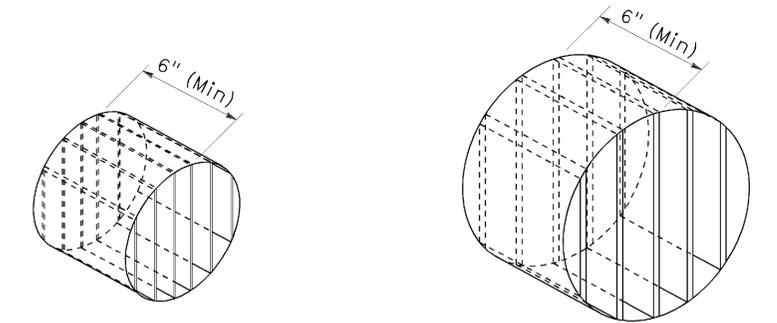
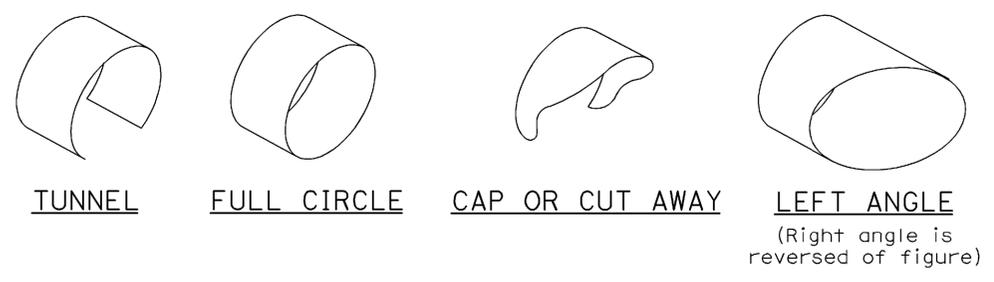
NO SCALE

RSP ES-4A DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-4A DATED MAY 20, 2011 - PAGE 443 OF THE STANDARD PLANS BOOK DATED 2010.

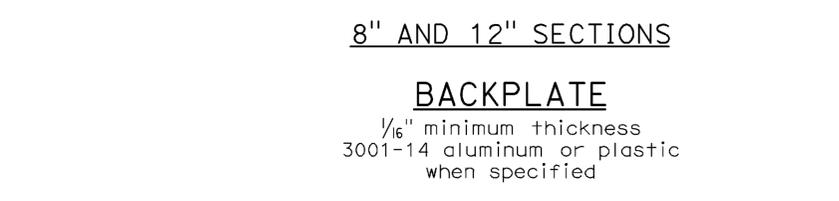
REVISED STANDARD PLAN RSP ES-4A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis, Teh	5,89, 99	Var	32	44
Theresa Gabriel REGISTERED ELECTRICAL ENGINEER July 19, 2013 PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
REGISTERED PROFESSIONAL ENGINEER Theresa Aziz Gabriel No. E15129 Exp. 6-30-14 ELECTRICAL STATE OF CALIFORNIA					

TO ACCOMPANY PLANS DATED 02-10-14

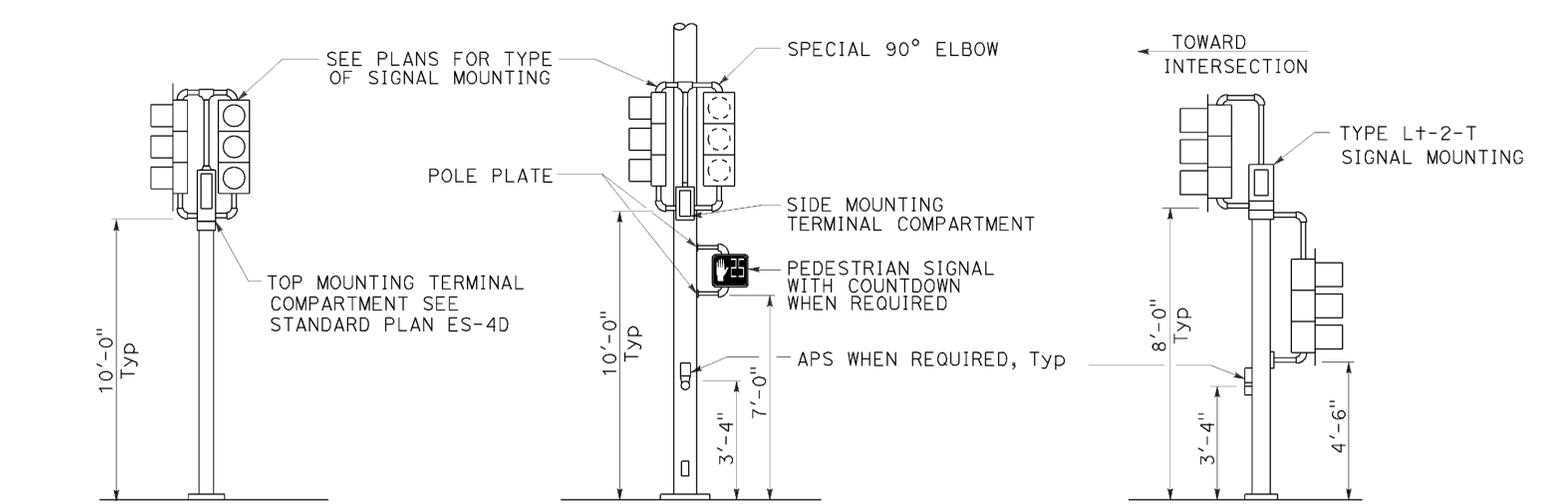


- NOTES:**
1. Typical signal pole placement unless dimensioned on plans.
 2. For A and B dimensions, see Pole Schedule, or as directed by the Engineer.



DIRECTIONAL LOUVER
 Directional louvers shall be oriented as directed by the Engineer and secured in place with one plated brass machine screw and nut.

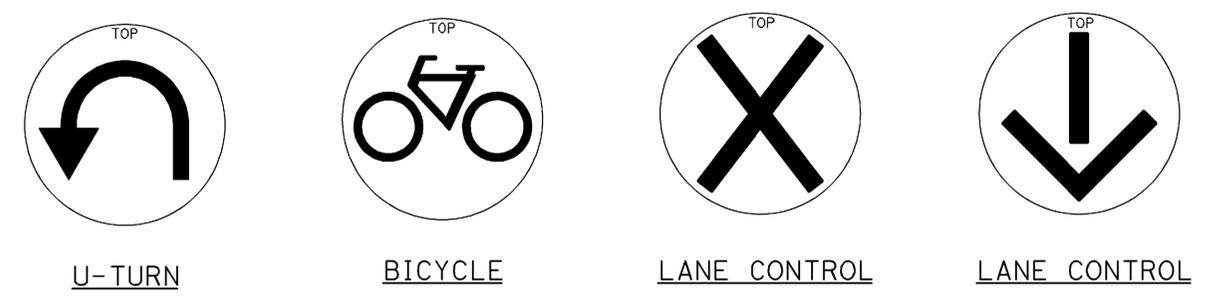
SIGNAL STANDARD PLACEMENT DIMENSIONS AND EQUIPMENT LOCATIONS



TOP MOUNTED SIGNALS (TV)
 Type 1-A, 1-B, 1-C and 1-D standard as indicated on the plans

SIDE MOUNTED SIGNALS (SV AND SP)
 Normally used on standards with luminaire or signal mast arm

LEFT TURN LANE SIGNAL
 Type 1-A, 1-B, 1-C and 1-D standard as indicated on plans



SIGNAL FACES

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (VEHICULAR SIGNAL HEADS AND MOUNTINGS)

TYPICAL SIGNAL INSTALLATIONS

NO SCALE
 RSP ES-4C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-04C DATED MAY 20, 2011 - PAGE 445 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-4C

2010 REVISED STANDARD PLAN RSP ES-4C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Sha,Sis, Teh	5,89, 99	Var	33	44

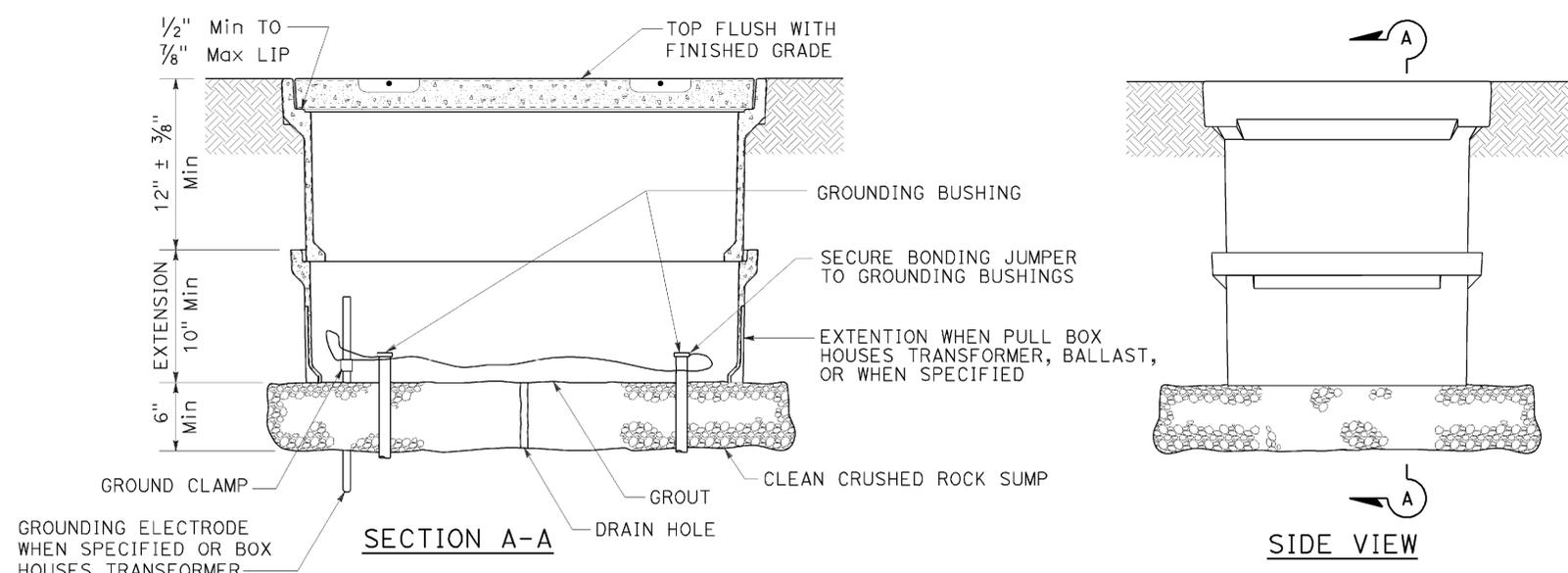
Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

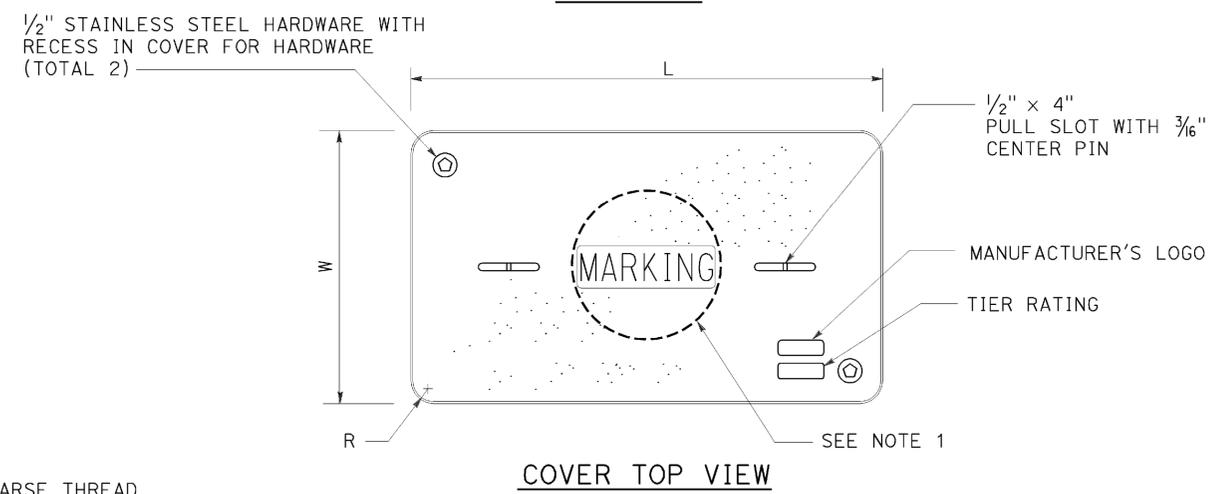
Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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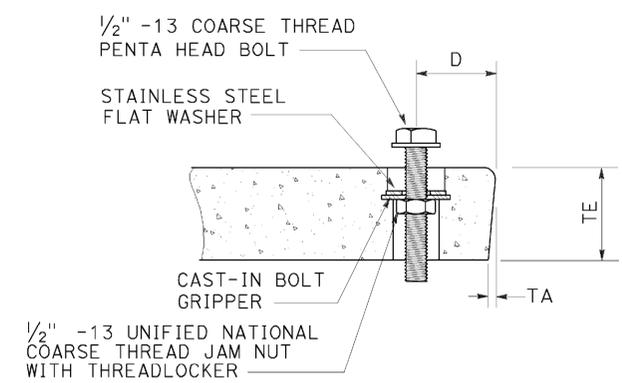
TO ACCOMPANY PLANS DATED 02-10-14



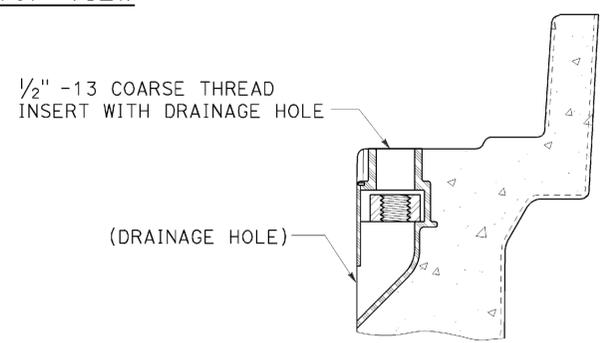
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES:

- Pull box covers shall be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - No. 3 1/2 pull box.
 - "SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - No. 5, 6, 9 or 9A pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - "LIGHTING-HIGH VOLTAGE" - Lighting or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATIONS" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communication line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
 - "BOOSTER PUMP" - Booster pump circuit.
- The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
- Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within 1/8". Top outside radius of covers and pull boxes shall have a 1/8" radius.
- Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.
- All dimensions for the cover for non-traffic pull box are nominal values.

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3 1/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(NON-TRAFFIC PULL BOX)
NO SCALE

RSP ES-8A DATED JULY 19, 2013 SUPERSEDES RSP ES-8A DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8A

2010 REVISED STANDARD PLAN RSP ES-8A

NOTE: (APPLY TO ALL SHEETS)
 ----- Indicates existing.

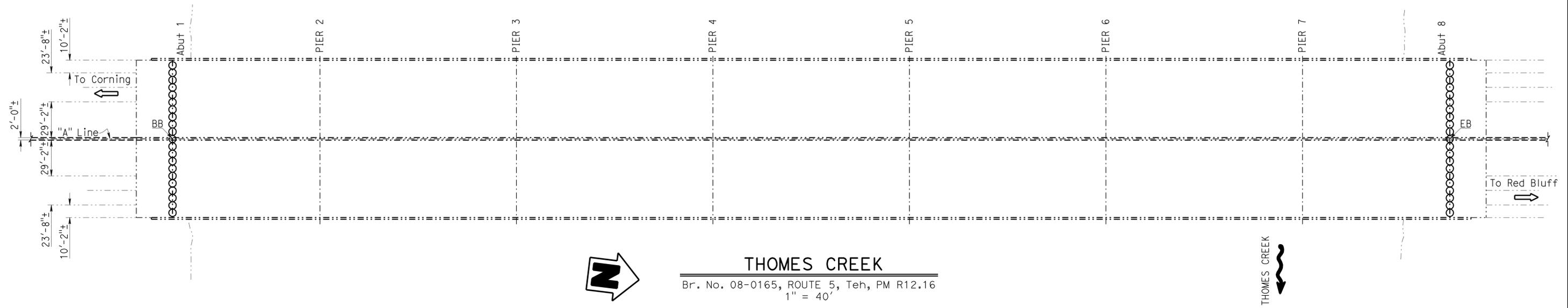
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	34	44

Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE

2-10-14
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 TIM CAMPBELL
 No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA

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THOMES CREEK BRIDGE NO 08-0165

QUANTITIES

BRIDGE REMOVAL (PORTION)	LUMP SUM
RECONSTRUCT STEEL COVER PLATE	6 EA
STRUCTURAL CONCRETE, BRIDGE	28 CY
JOINT SEAL ASSEMBLY (MR 6")	259 LF
BAR REINFORCING STEEL (BRIDGE)	1,345 LB
CONCRETE BARRIER (TYPE 60A MODIFIED)	4 LF

NOTES: (APPLY TO THIS SHEET ONLY)

Indicates location of existing joint seal assembly removal and placement of new joint seal assembly. For details, see "JOINT SEAL DETAILS NO. 2" sheet.

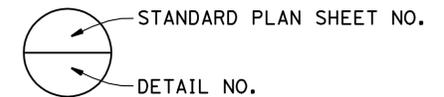
INDEX TO PLANS

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	EXISTING THRIE BEAM CONNECTION (TYPE 9 BARRIER)
7	NEW THRIE BEAM CONNECTION (TYPE 9 BARRIER)
8	JOINT SEAL DETAILS NO. 1
9	JOINT SEAL DETAILS NO. 2
10	JOINT SEAL DETAILS NO. 3
11	STRUCTURE APPROACH TYPE R(30D) MODIFIED

STANDARD PLANS 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A76A	CONCRETE BARRIER TYPE 60
RSP A77U1	MIDWEST GUARDRAIL SYSTEM CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS NO. 1
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

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



Matthew Lee 9-30-13
 DESIGN ENGINEER

DESIGN	BY T. Campbell	CHECKED A. Frank	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED A. Frank	LAYOUT	BY Dale Kubochi
QUANTITIES	BY T. Campbell	CHECKED A. Frank	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

ROUTE 5, 89, 99 BRIDGES
GENERAL PLAN NO. 1

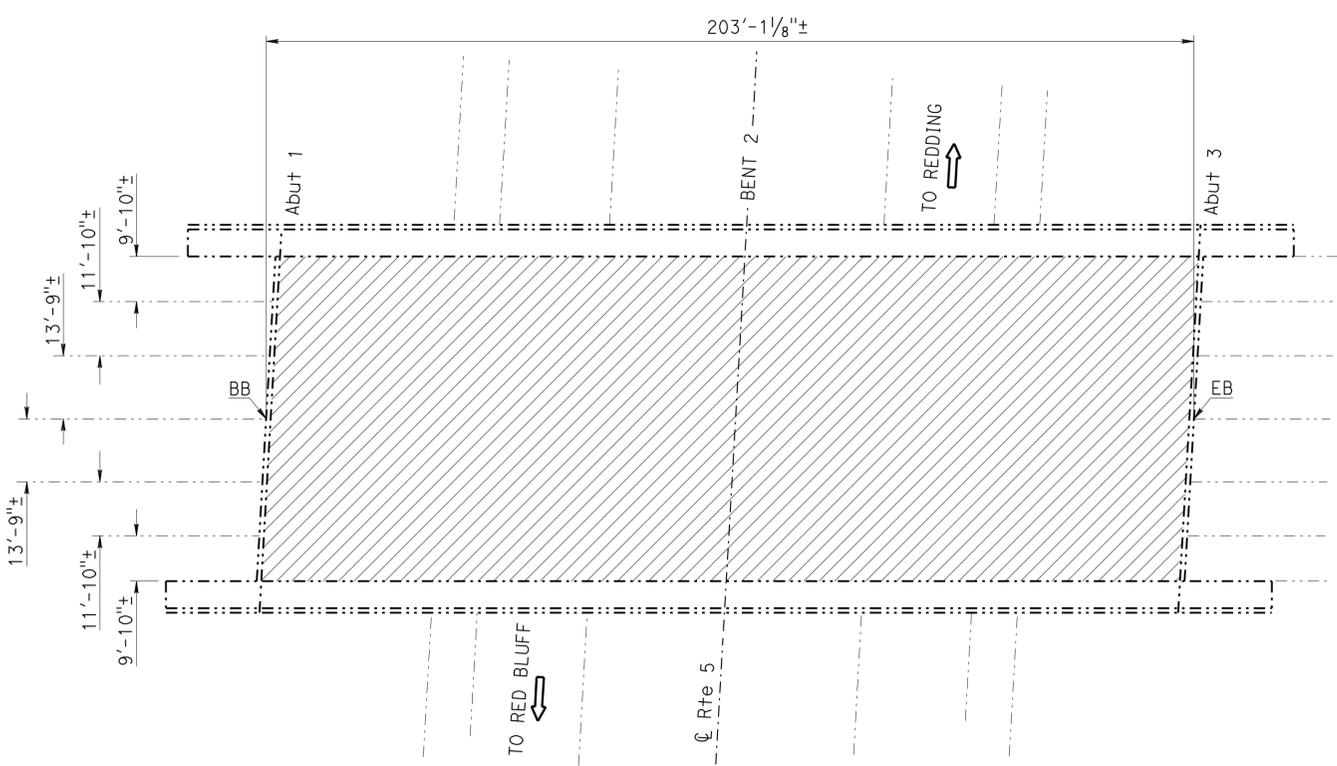
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha, Sis, Teh	5, 89, 99	Var	35	44

Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE

2-10-14
 PLANS APPROVAL DATE

No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA

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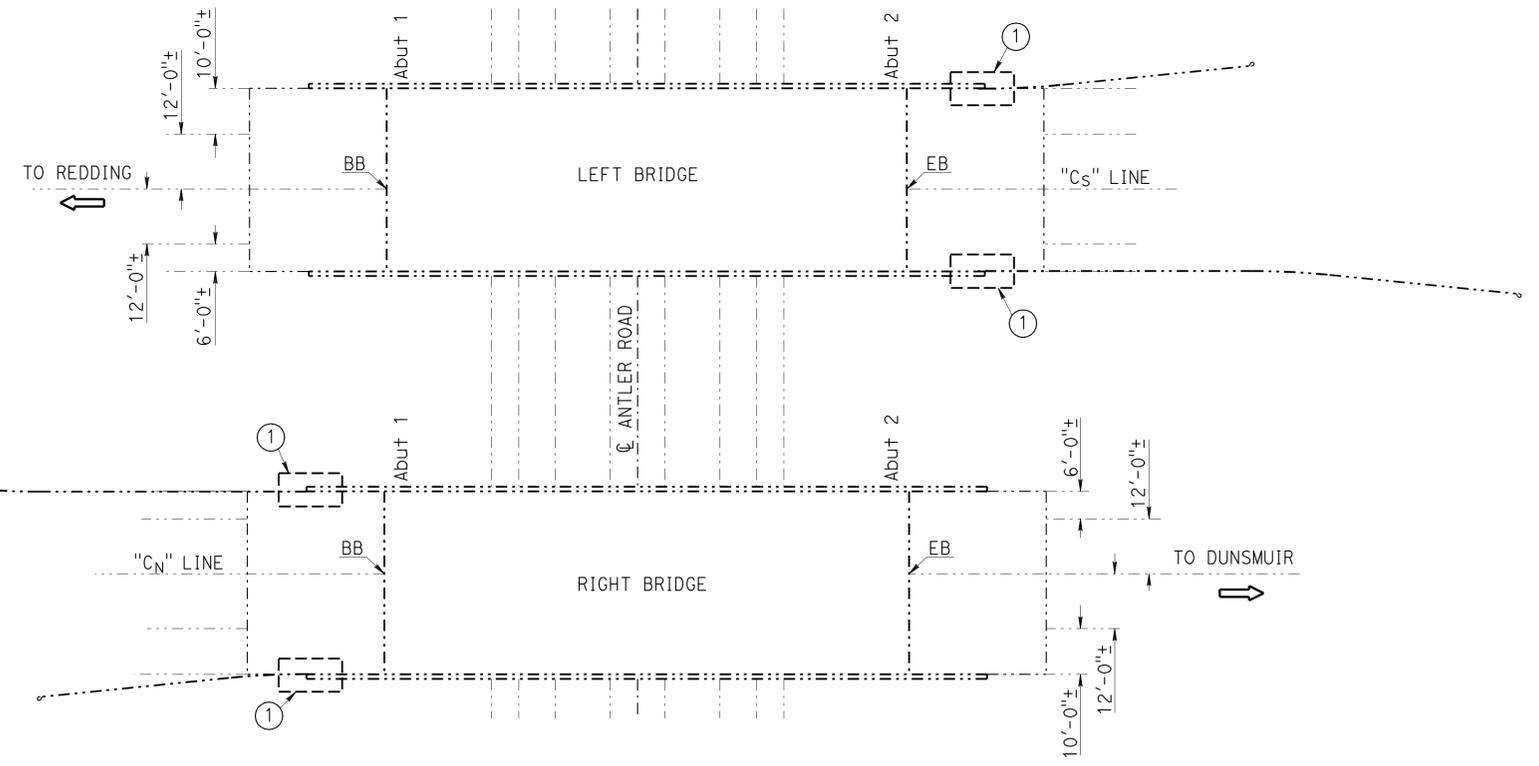


ADOBE ROAD OVERCROSSING

Br. No. 08-0157, ROUTE 5, Teh, PM R27.47
 1" = 20'

ADOBE ROAD OVERCROSSING	BRIDGE NO 08-0157
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	14,386 SQFT
TREAT BRIDGE DECK	14,386 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	160 GAL

- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.
 - ① Reconstruct MBGR connection. For details, see "Concrete Barrier (Anchor Block) Details" on "EXISTING THRIE BEAM CONNECTION (TYPE 9 BARRIER)" sheet.



ANTLER UNDERCROSSING

Br. No. 06-0163L/R, ROUTE 5, Sha, PM R41.05
 1" = 20'

ANTLER UNDERCROSSING	BRIDGE NO 06-0163L/R
QUANTITIES	
CONCRETE BARRIER (TRANSITION)	16 LF

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

DESIGN ENGINEER 9-30-13

DESIGN	BY T. Campbell	CHECKED A. Frank	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED A. Frank	LAYOUT	BY Dale Kubochi
QUANTITIES	BY T. Campbell	CHECKED A. Frank	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89, 99 BRIDGES GENERAL PLAN NO. 2

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: 3488
 PROJECT NUMBER & PHASE: 0213000104

CONTRACT NO.: 02-4F6901

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
3-26-13 5-14-13 1-28-13 2-7-14	2	11

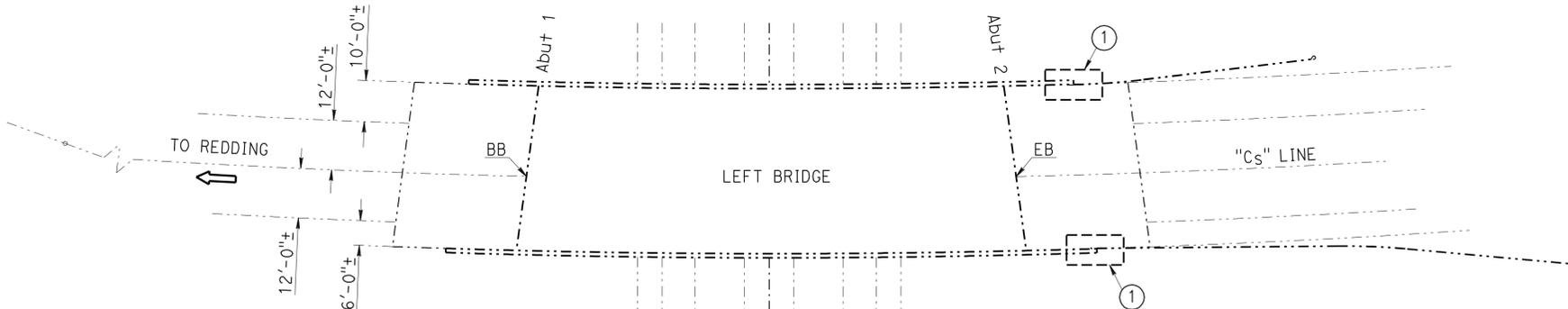
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	36	44

Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE

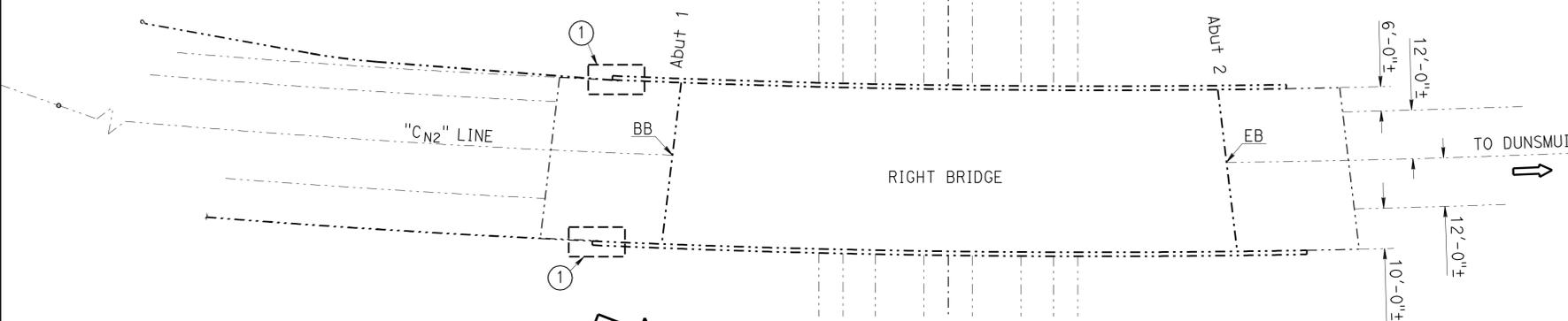
2-10-14
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
 TIM CAMPBELL
 No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA

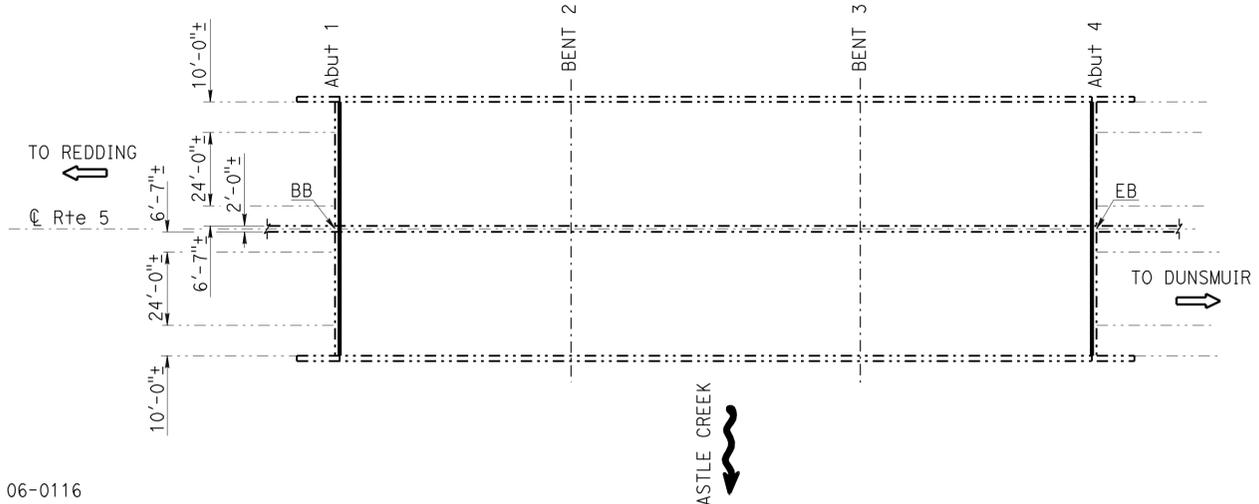


- NOTES: (APPLY TO THIS SHEET ONLY)
- ① Reconstruct MBGR connection. For details, see "Concrete Barrier (Anchor Block) Details" on "EXISTING THRIE BEAM CONNECTION (TYPE 9 BARRIER)" sheet.
 - Indicates location of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS NO. 1" sheet.



LAKEHEAD UNDERCROSSING
 Br. No. 06-0164L/R, ROUTE 5, Sha, PM R42.32
 1" = 20'

LAKEHEAD UNDERCROSSING	BRIDGE NO 06-0164L/R
QUANTITIES	
CONCRETE BARRIER (TRANSITION)	16 LF



CASTLE CREEK BRIDGE NO 06-0116

QUANTITIES	
CLEAN EXPANSION JOINT	169 LF
JOINT SEAL (MR 1 1/2")	169 LF

CASTLE CREEK
 Br. No. 06-0116, ROUTE 5, Sha, PM 63.31
 1" = 30'

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

Matthew Lee 9-30-13
 DESIGN ENGINEER

DESIGN	BY T. Campbell	CHECKED A. Frank	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED A. Frank	LAYOUT	BY Dale Kubochi
QUANTITIES	BY T. Campbell	CHECKED A. Frank	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89, 99 BRIDGES
GENERAL PLAN NO. 3

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3488
 PROJECT NUMBER & PHASE: 0213000104

CONTRACT NO.: 02-4F6901

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
3-28-13 5-14-13 7-24-13 2-7-14	3	11

FILE => 02-4f6901-a-gp-03.dgn

USERNAME => s124428 DATE PLOTTED => 07-FEB-2014 TIME PLOTTED => 10:43

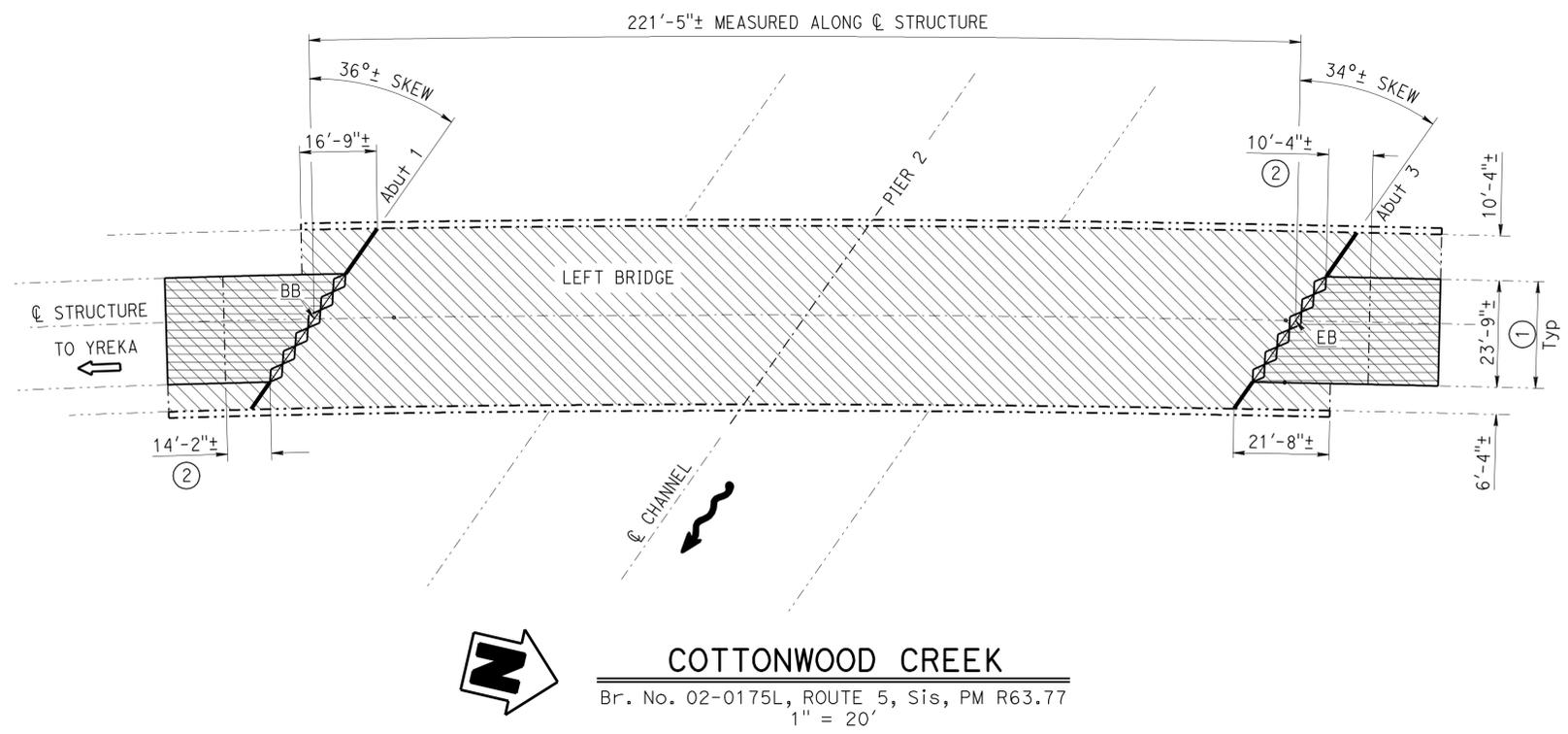
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	37	44

Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE

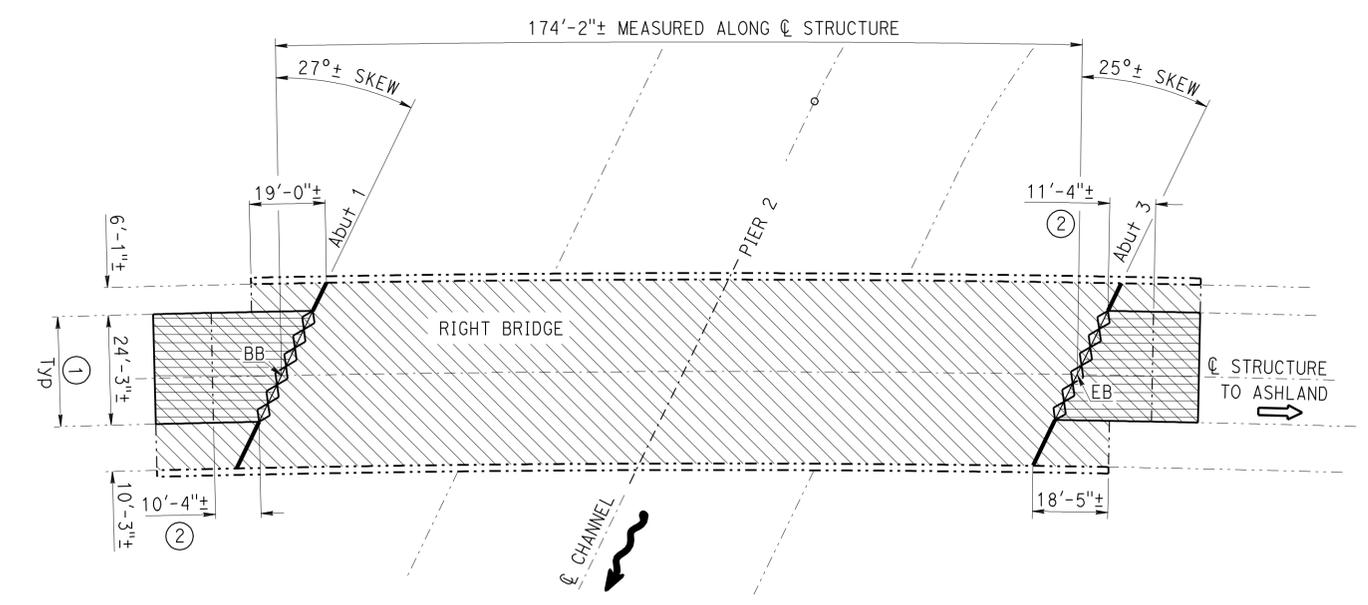
2-10-14
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
 TIM CAMPBELL
 No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA



COTTONWOOD CREEK
 Br. No. 02-0175L, ROUTE 5, Sis, PM R63.77
 1" = 20'



COTTONWOOD CREEK
 Br. No. 02-0175R, ROUTE 5, Sis, PM R63.65
 1" = 20'

- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates limits of construct new approach slab. For details, see "STRUCTURE APPROACH TYPE R(30D) MODIFIED" sheet.
 - Indicates limits of prepare concrete bridge deck surface and furnish and place new 1" minimum depth polyester concrete overlay.
 - Indicates location of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS NO. 1" sheet.
 - Indicates location of install new joint seal. For details, see "JOINT SEAL DETAILS NO. 1" sheet.
 - ① Indicates limits of construct paving notch.
 - ② Indicates limits of existing approach slab.

COTTONWOOD CREEK BRIDGE NO 02-0175L/R

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	20,428	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	2,043	CF
PLACE POLYESTER CONCRETE OVERLAY	20,428	SQFT
AGGREGATE BASE (APPROACH SLAB)	34	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	136	CY
PAVING NOTCH EXTENSION	85	CF
CLEAN EXPANSION JOINT	80	LF
JOINT SEAL (MR 1 1/2")	192	LF

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

Matthew W. Lee 9-30-13
 DESIGN ENGINEER

DESIGN	BY T. Campbell	CHECKED A. Frank	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED A. Frank	LAYOUT	BY Dale Kubochi
QUANTITIES	BY T. Campbell	CHECKED A. Frank	SPECIFICATIONS	BY Dave Klein

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

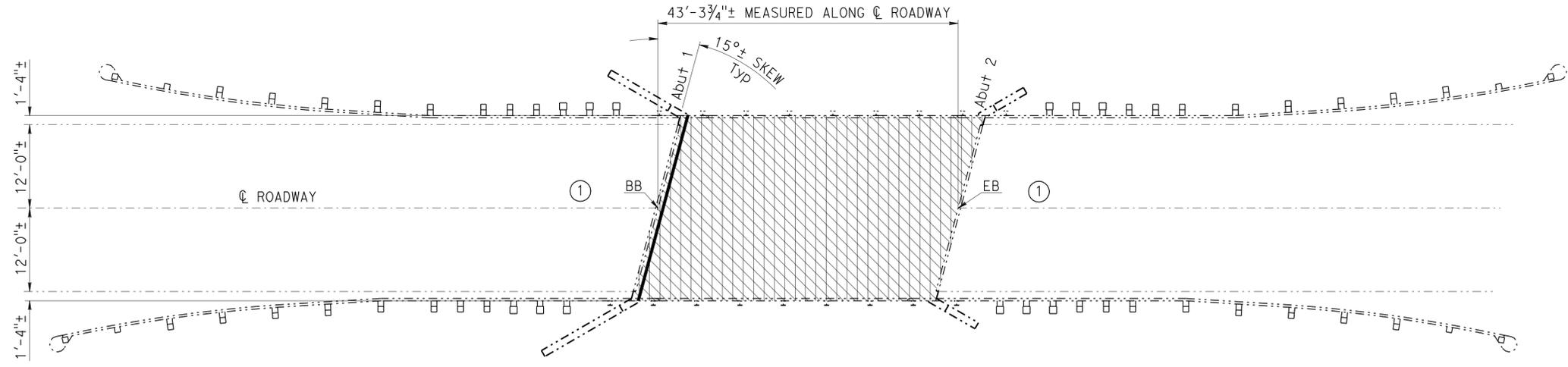
DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89, 99 BRIDGES
GENERAL PLAN NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	38	44

Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE
 2-10-14
 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.

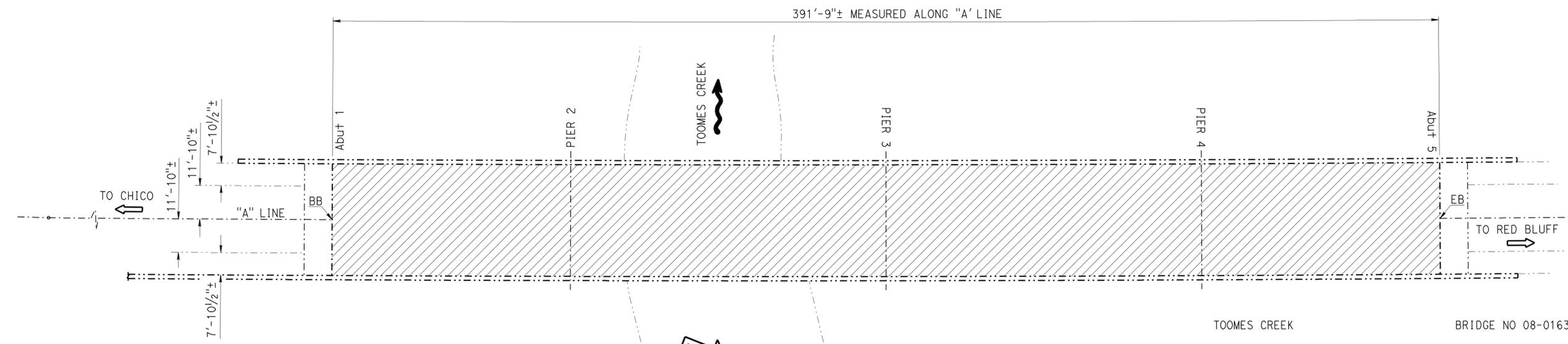


HAT CREEK
 Br. No. 06-0085, ROUTE 89, Sha, PM 3.89
 1" = 10'

HAT CREEK BRIDGE NO 06-0085

QUANTITIES	
RAPID SETTING CONCRETE (PATCH)	29 CF
REMOVE ASPHALT CONCRETE SURFACING	1,156 SQFT
REMOVE UNSOUND CONCRETE	29 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	1,156 SQFT
FURNISH POLYESTER CONCRETE OVERLAY	116 CF
PLACE POLYESTER CONCRETE OVERLAY	1,156 SQFT
CLEAN EXPANSION JOINT	28 LF
JOINT SEAL (MR 1/2")	28 LF
GALVANIC ANODE	29 EA

- NOTES: (APPLY TO THIS SHEET ONLY)
- Indicates limits of remove existing 3"± depth AC overlay and membrane seal.
 - Indicates limits of prepare concrete bridge deck surface, furnish and place new 1" minimum depth polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete, place galvanic anodes and patch with rapid setting concrete as shown on the "Joint And Deck Repair Detail" on "JOINT SEAL DETAILS NO. 1" sheet.
 - Indicates limits of prepare concrete bridge deck surface and treat bridge deck with methacrylate.
 - Indicates location of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS NO. 1" sheet.
 - ① For approach roadway taper, see "Road Plans".



TOOMES CREEK
 Br. No. 08-0163, ROUTE 99, Teh, PM 8.38
 1" = 20'

TOOMES CREEK BRIDGE NO 08-0163

QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	15,442 SQFT
TREAT BRIDGE DECK	15,442 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	172 GAL

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

Matthew W. Lee 9-30-13
 DESIGN ENGINEER

DESIGN	BY T. Campbell	CHECKED A. Frank	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY Dale Kubochi	CHECKED A. Frank	LAYOUT	BY Dale Kubochi
QUANTITIES	BY T. Campbell	CHECKED A. Frank	SPECIFICATIONS	BY Dave Klein

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

BRIDGE NO. VARIOUS
 POST MILE VARIES
ROUTE 5, 89, 99 BRIDGES
GENERAL PLAN NO. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	39	44

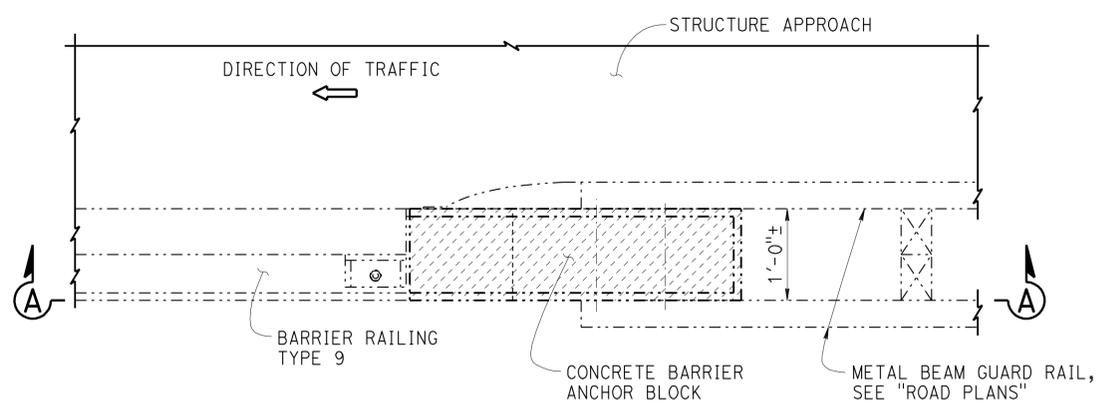
Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE
 2-10-14
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
TIM CAMPBELL
No. 63268
Exp. 06-30-14
CIVIL
STATE OF CALIFORNIA

NOTES: (APPLY TO THIS SHEET ONLY)

 Indicates limits of remove portion of existing concrete barrier.

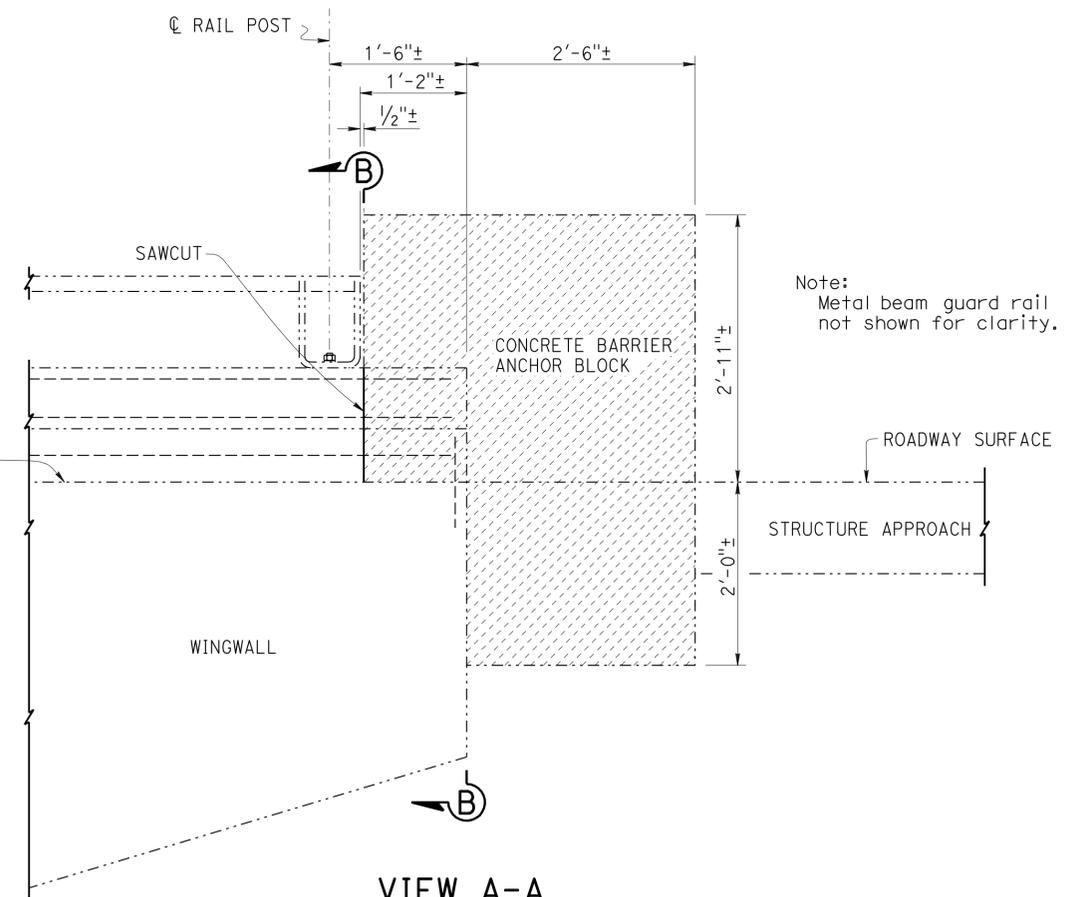
- For Reconstruction of MBGR connection, see "Concrete Barrier (Anchor Block) Details" on "NEW THRIE BEAM CONNECTION (TYPE 9 BARRIER)" sheet.



PART PLAN

1" = 1'-0"

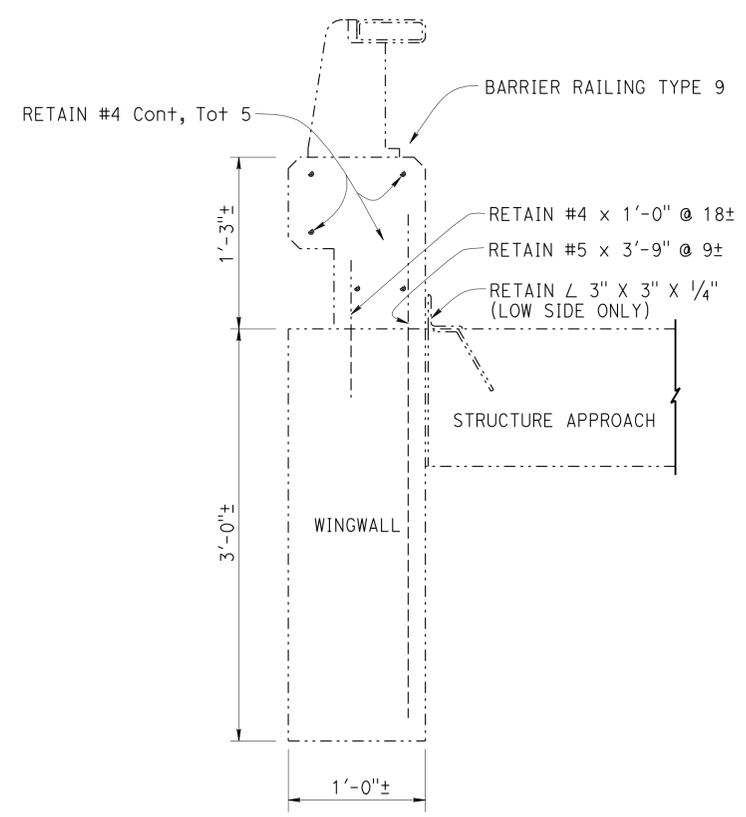
Note: Concrete barrier anchor block shown (Right barrier of Left Bridge), other anchorages similar.



VIEW A-A

1" = 1'-0"

Note: For details not noted, see "Section B-B"



SECTION B-B

1/2" = 1'-0"

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

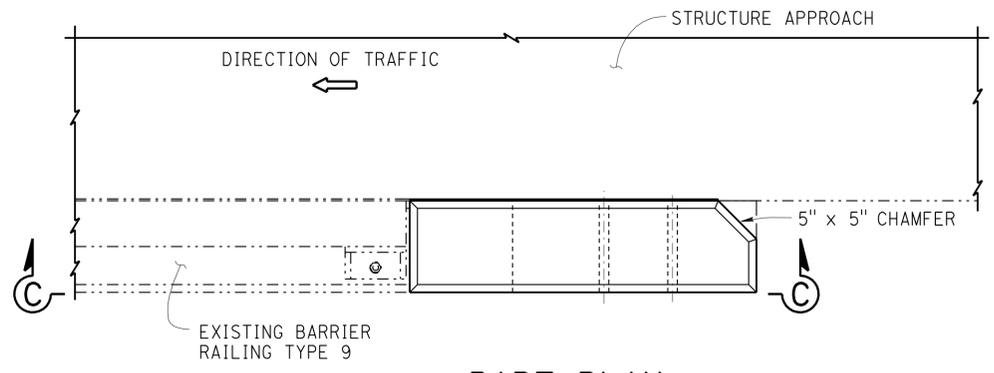
CONCRETE BARRIER (ANCHOR BLOCK) DETAILS

BRIDGE NO.'S 06-0163 L/R & 06-0164 L/R

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY T. Campbell	CHECKED A. Frank	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	VARIOUS	ROUTE 5, 89, 99 BRIDGES EXISTING THRIE BEAM CONNECTION (TYPE 9 BARRIER)
	DETAILS	BY Dale Kubochi	CHECKED A. Frank		POST MILE	VARIES	
	QUANTITIES	BY T. Campbell	CHECKED A. Frank		UNIT: 3488 PROJECT NUMBER & PHASE: 020004F690	CONTRACT NO.: 02-4F6901	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	REVISION DATES	SHEET 6 OF 11	DATE PLOTTED => 07-FEB-2014 10:43

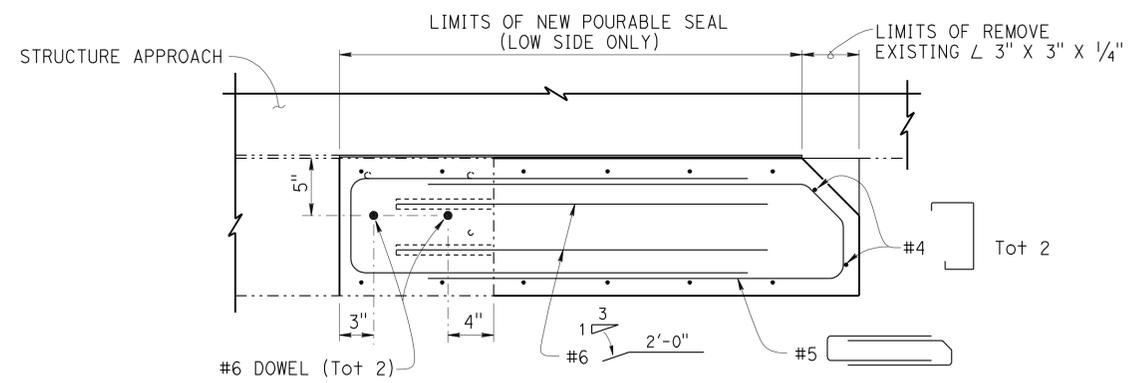
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	40	44

Tim Campbell 9-30-13
 REGISTERED CIVIL ENGINEER DATE
 2-10-14
 PLANS APPROVAL DATE
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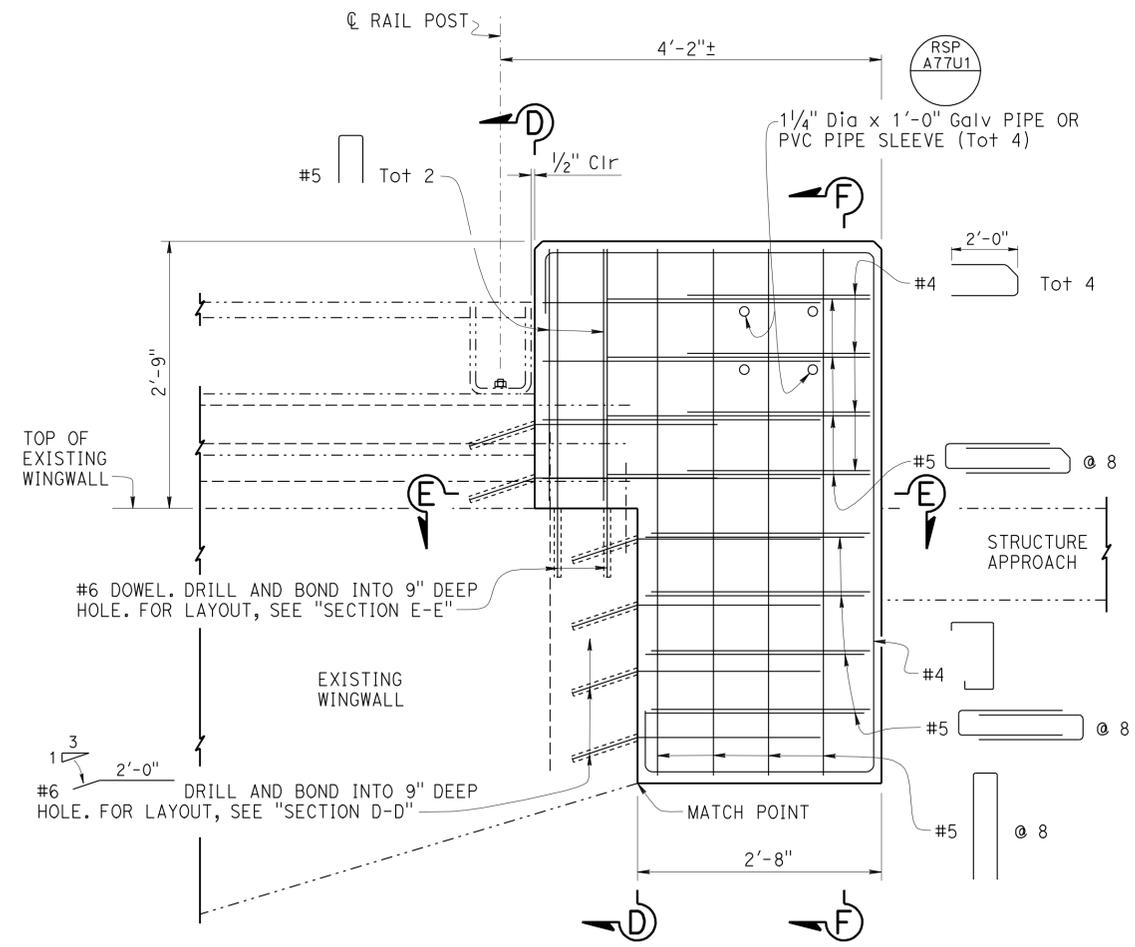


PART PLAN
1" = 1'-0"

Note: Concrete barrier anchor block shown (Right barrier of Left Bridge), other anchorages similar.

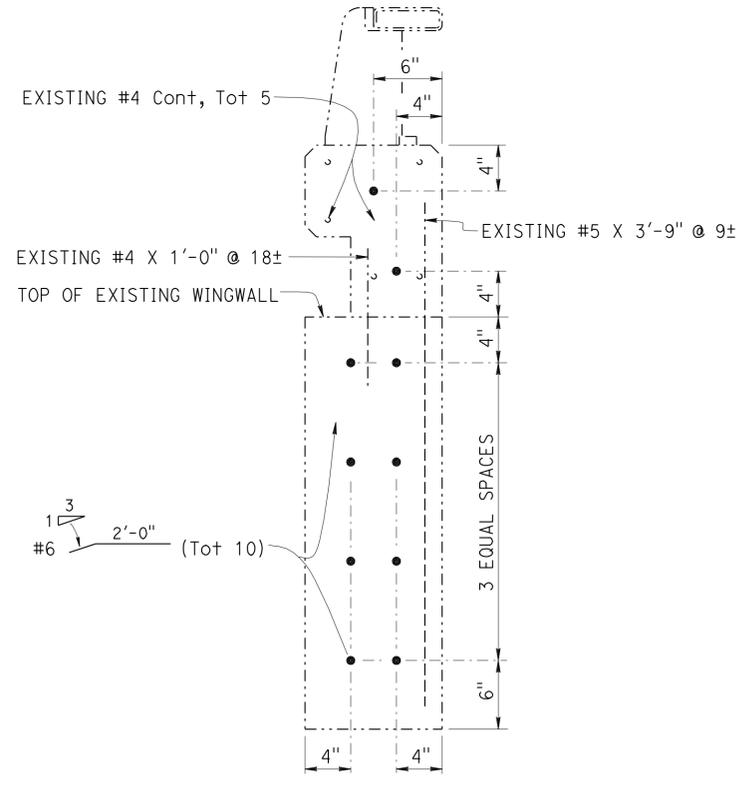


SECTION E-E
1 1/2" = 1'-0"

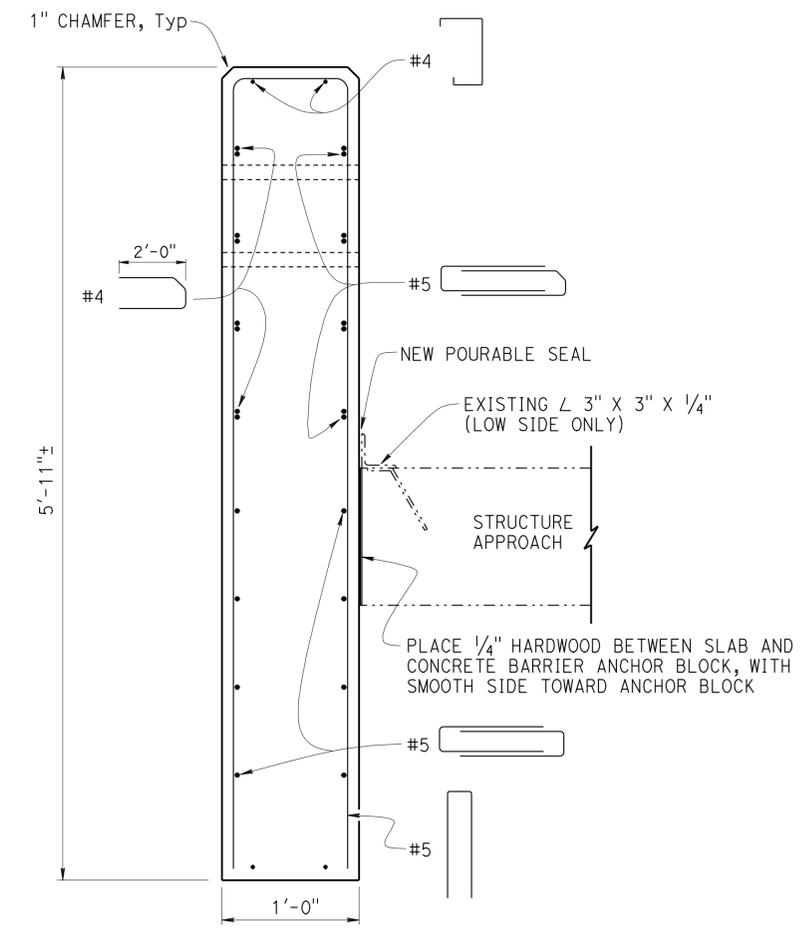


VIEW C-C
1" = 1'-0"

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



SECTION D-D
1 1/2" = 1'-0"



SECTION F-F
1 1/2" = 1'-0"

CONCRETE BARRIER (ANCHOR BLOCK) DETAILS

BRIDGE NO.'S 06-0163 L/R & 06-0164 L/R

DESIGN	BY T. Campbell	CHECKED A. Frank
DETAILS	BY Dale Kubochi	CHECKED A. Frank
QUANTITIES	BY T. Campbell	CHECKED A. Frank

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
POST MILE VARIES

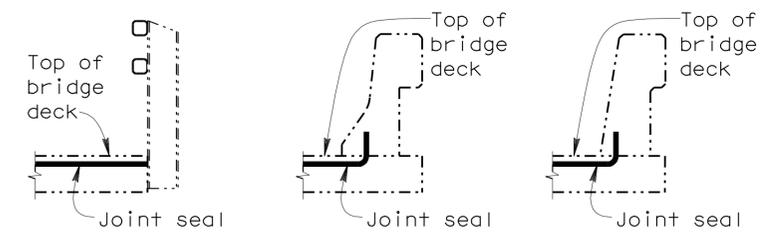
ROUTE 5, 89, 99 BRIDGES
NEW THRIE BEAM CONNECTION (TYPE 9 BARRIER)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	41	44

9-30-13
 REGISTERED CIVIL ENGINEER DATE
 2-10-14
 PLANS APPROVAL DATE
 No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA
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JOINT SEAL TABLE

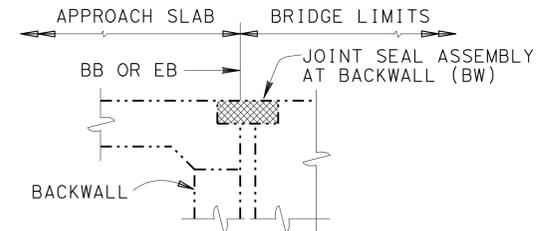
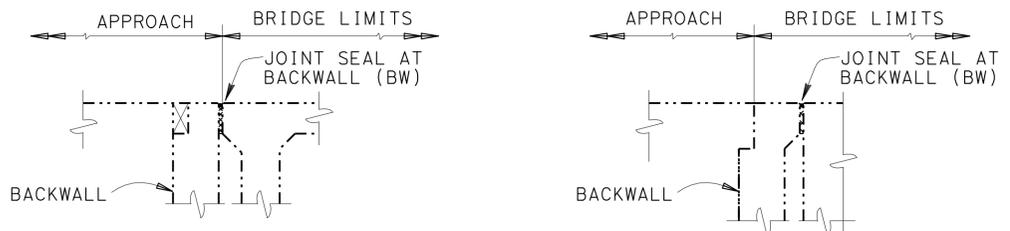
BRIDGE NAME	BRIDGE NUMBER	LOCATION	MINIMUM "MR" (INCHES)	APPROXIMATE LENGTH (FEET)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	
THOMES CREEK	08-0165	Abut 1 **	BW	6	129.0	NO	--
		Abut 8 **	BW	6	129.0	NO	--
CASTLE CREEK	06-0116	Abut 1 *	BW	1 1/2	84.5	NO	12
		Abut 4 *	BW	1 1/2	84.5	NO	12
COTTONWOOD CREEK	02-0175L	Abut 1 *	BB	1 1/2	50.6	NO	15
		Abut 3 *	EB	1 1/2	49.4	NO	15
	02-0175R	Abut 1 *	BB	1 1/2	46.5	NO	15
		Abut 3 *	EB	1 1/2	45.5	NO	15
HAT CREEK	06-0085	Abut 1	BW	1/2	28.0	YES	8



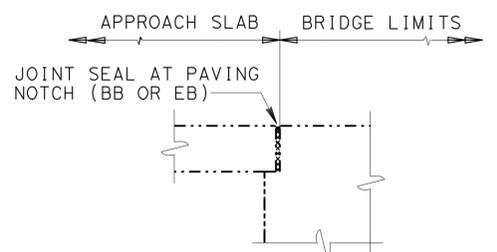
BARRIER RAIL JOINT SEAL AT LOW SIDE OF DECK

Notes: Details shown for illustration purposes only. For use only where deck joint matches the sidewalk, curb or barrier rail joint.

- LEGEND:**
- BW - Abutment backwall joint
 - BB - Paving Notch at beginning of bridge
 - EB - Paving Notch at end of bridge
 - * - Use Type B Joint Seal
 - ** - Use Joint Seal Assembly



ABUTMENT WITH BACKWALL



DIAPHRAGM ABUTMENT

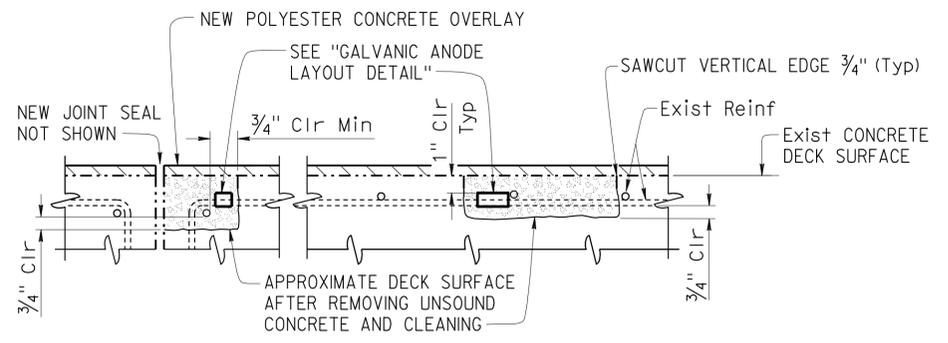
JOINT SEAL LOCATION

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

DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)

BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)	APPROXIMATE NUMBER OF GALVANIC ANODES
HAT CREEK	06-0085	10	3	29

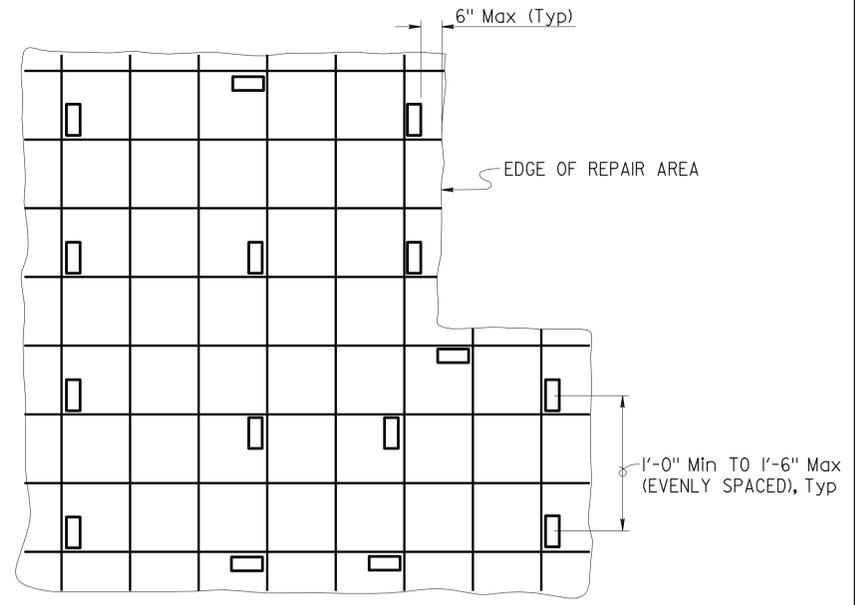
Locations to be determined by the Engineer. For details see "Joint And Deck Repair Detail".



JOINT AND DECK REPAIR DETAIL

Note: Locations to be determined by the Engineer. Reinforcement may be encountered during deck concrete removal.

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



GALVANIC ANODE LAYOUT DETAIL

Note: All galvanic anodes shall be installed with embedding mortar.

DESIGN BY T. Campbell CHECKED A. Frank DETAILS BY Dale Kubochi CHECKED A. Frank QUANTITIES BY T. Campbell CHECKED A. Frank	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 5, 89, 99 BRIDGES JOINT SEAL DETAILS NO. 1
			VARIOUS	
			POST MILE	
			VARIES	

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3488 PROJECT NUMBER & PHASE: 0213000104 CONTRACT NO.: 02-4F6901 DISREGARD PRINTS BEARING EARLIER REVISION DATES

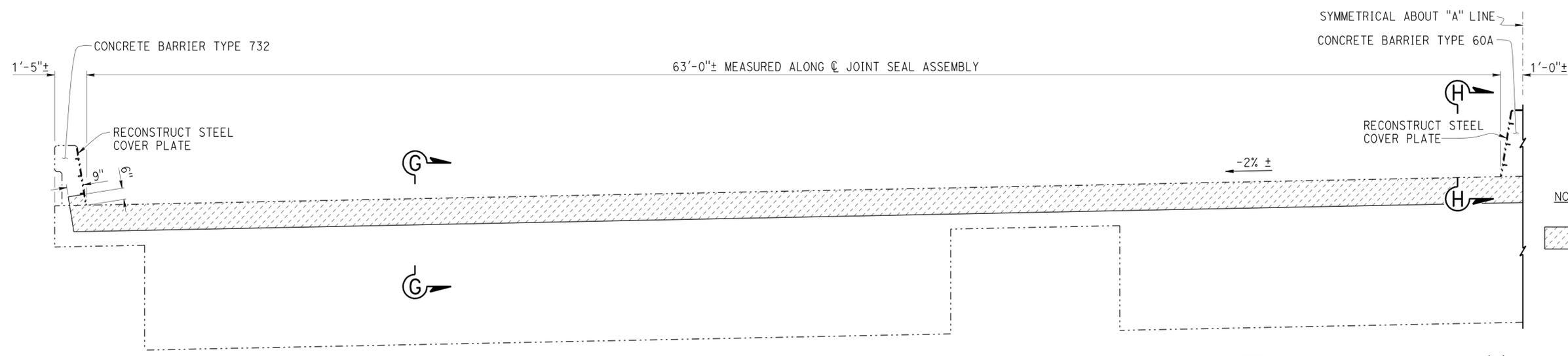
REVISION DATES	SHEET	OF
6-15 2-7-14 10-15	8	11

FILE => 02-4f6901-j-jt-det01.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	42	44

9-30-13
 REGISTERED CIVIL ENGINEER DATE
 2-10-14
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 TIM CAMPBELL
 No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA



NOTES: (APPLY TO THIS SHEET ONLY)
 Indicates limits of remove existing concrete and joint seal assembly. Retain existing reinforcing as noted and place new concrete and joint seal assembly.
 - For "Elevation H-H", see "JOINT SEAL DETAILS NO. 3" sheet.

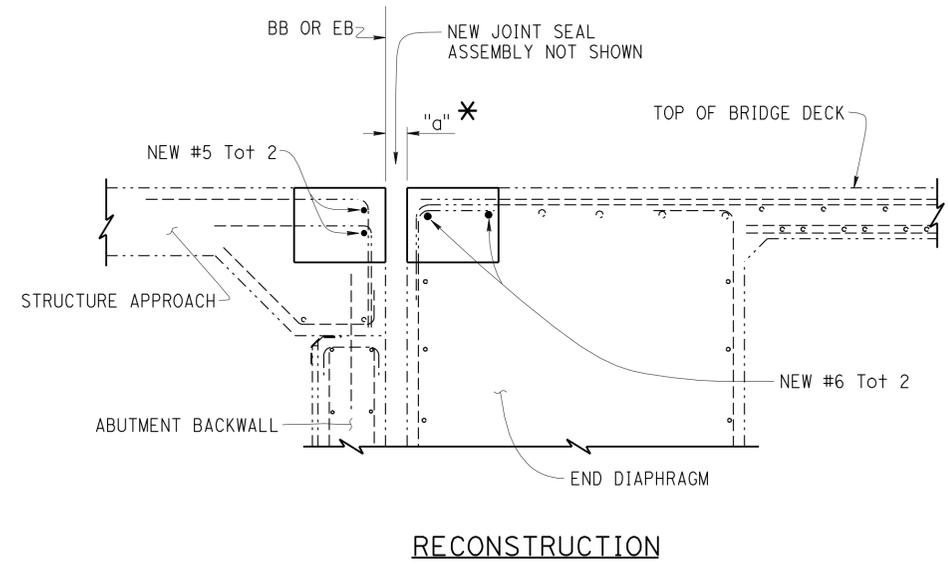
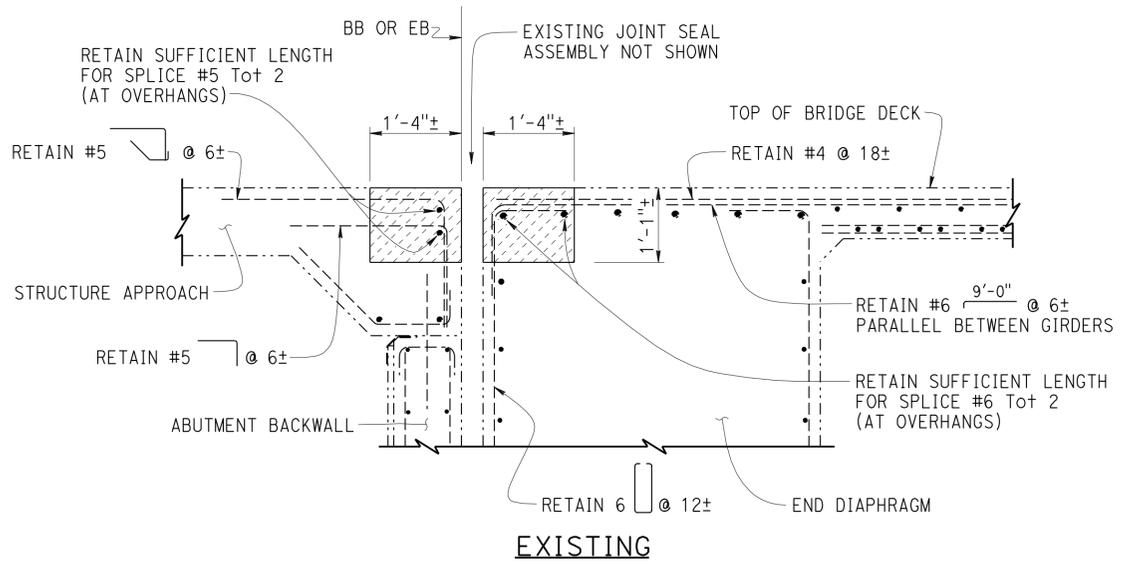
NOTE: Abutment 1 shown, Abutment 8 similar.

PART TYPICAL (END DIAPHRAGM)

$\frac{3}{8}" = 1'-0"$
 (THOMES CREEK, Br. No. 08-0165)

**GENERAL NOTES
LOAD FACTOR DESIGN**

DESIGN: BRIDGE DESIGN SPECIFICATIONS
 (1996 AASHTO with Interims and Revisions by CALTRANS)
 DEAD LOAD: Includes 35 psf for future wearing surface.
 LIVE LOADING: HS20-44 and alternative and permit design load.
 REINFORCED CONCRETE: $f_y = 60,000$ psi
 $f'_c = 3,600$ psi
 $n = 9$



SECTION G-G
 $\frac{3}{4}" = 1'-0"$

TEMPORARY DECK PLATE LOAD CRITERIA		
MOMENT DEMAND/FOOT (kips-ft/ft)	BOLT SHEAR/FOOT (kips/ft)	BOLT TENSION (kips) / bolt
7	8	6

Plate deflection shall not exceed $s/12$ inches (s = span of plate).
 Maximum anchor bolt spacing = 1'-0".

JOINT INFORMATION								
BRIDGE NUMBER	LOCATION	MOVEMENT RATING (INCHES)	SKEW	"a" DIMENSION (INCHES)				
				17°F	43°F	69°F	95°F	121°F
08-0165	Abut 1	6	0°	5	4	3	2	1
	Abut 8	6	0°	5	4	3	2	1

* TO SET JOINT OPENING "a"

$$"a" = \begin{cases} \frac{1}{2} + [(\text{Max Str temperature in } F^\circ) - (\text{actual Str temperature in } F^\circ)] \times (a_c)(12)(\text{contributory L in feet}) \\ 1" \text{ Minimum} \\ a_c = 0.0000060 \end{cases}$$

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

DESIGN BY T. Campbell	CHECKED A. Frank	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. VARIOUS	ROUTE 5, 89, 99 BRIDGES JOINT SEAL DETAILS NO. 2
DETAILS BY Dale Kubochi	CHECKED A. Frank			POST MILE VARIES	
QUANTITIES BY T. Campbell	CHECKED A. Frank				

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS UNIT: 3488 PROJECT NUMBER & PHASE: 0213000104 CONTRACT NO.: 02-4F6901 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
6-11-13 6-19-13 7-24-13 2-7-14	9	11

FILE => 02-4f6901-j-jt-det02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	43	44

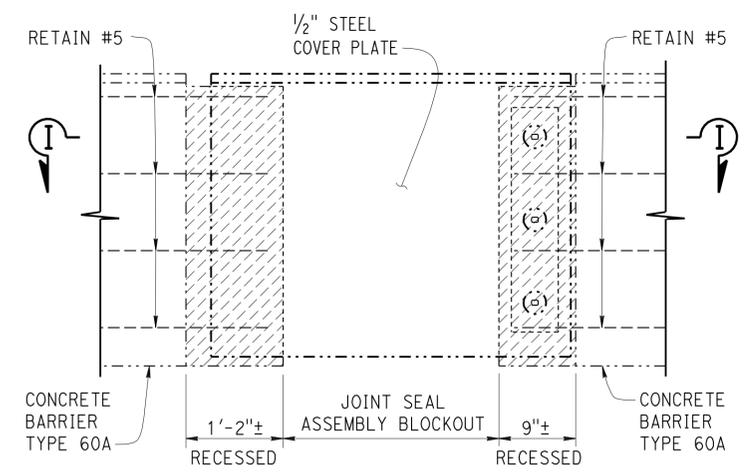
<i>Tim Campbell</i>		9-30-13
REGISTERED CIVIL ENGINEER	DATE	
2-10-14		
PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER No. 63268 Exp. 06-30-14 CIVIL STATE OF CALIFORNIA		

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

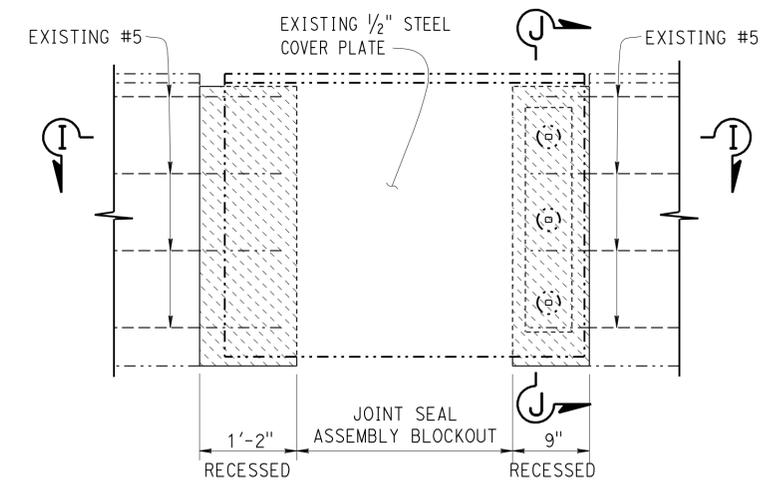
NOTES: (APPLY TO THIS SHEET ONLY)

-  Indicates limits of bridge removal (portion)
-  Indicates limits of concrete barrier (Type 60A Modified)

For "Concrete Barrier Type 60A" see A76A

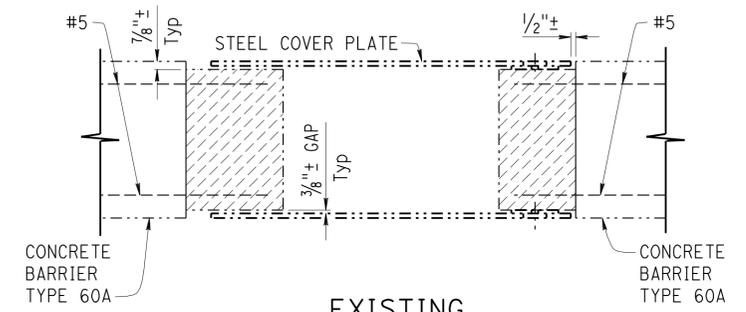


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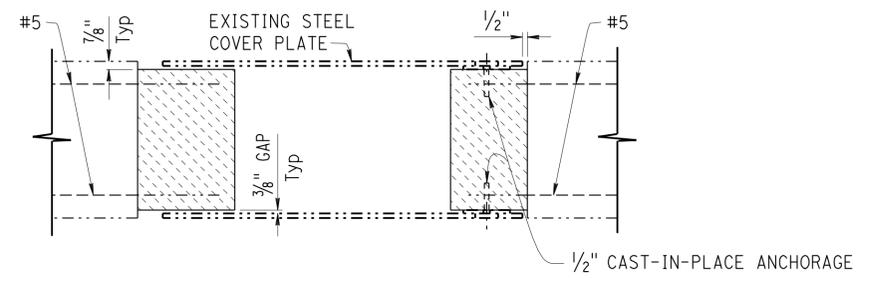


RECONSTRUCTION

ELEVATION H-H
NO SCALE

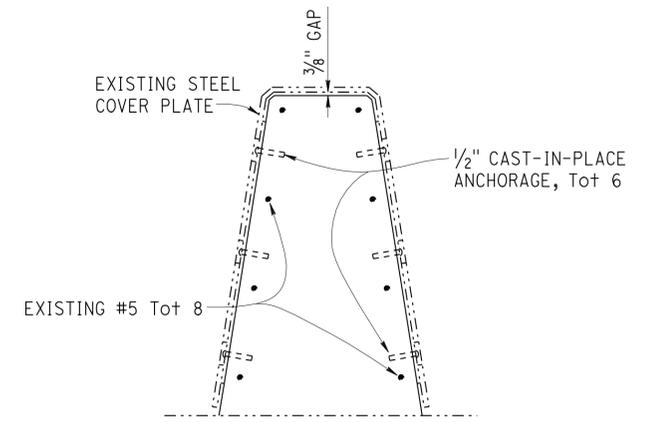


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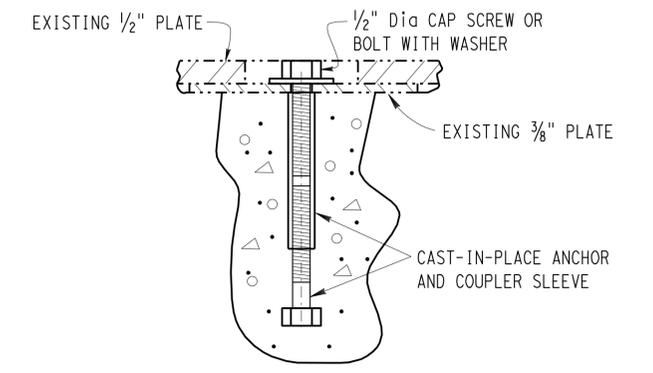


RECONSTRUCTION

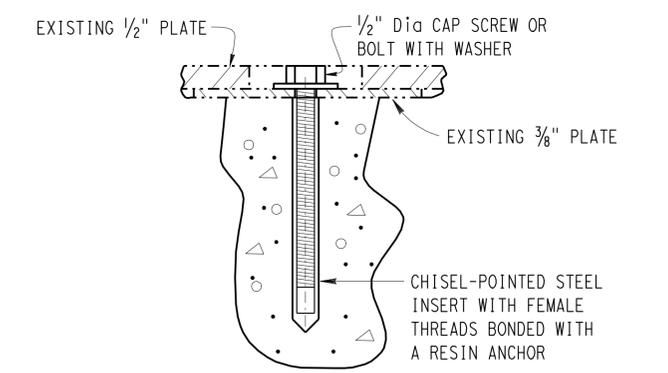
SECTION I-I
NO SCALE



SECTION J-J
NO SCALE



CAST-IN-PLACE ANCHORAGE
NO SCALE



ALTERNATIVE ANCHORAGE
NO SCALE

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

DESIGN	BY T. Campbell	CHECKED A. Frank
DETAILS	BY Dale Kubochi	CHECKED A. Frank
QUANTITIES	BY T. Campbell	CHECKED A. Frank

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
STRUCTURE MAINTENANCE DESIGN

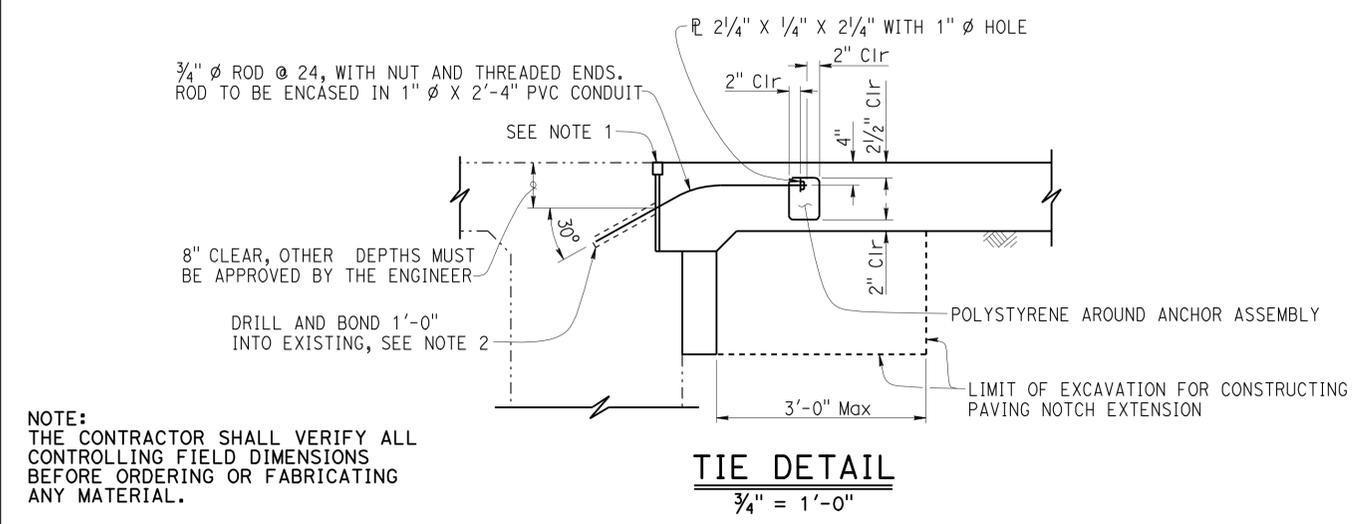
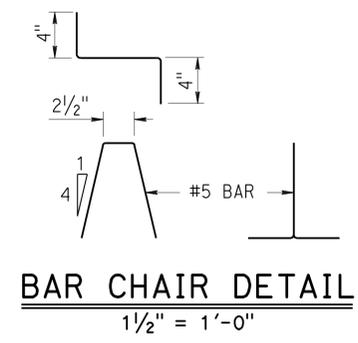
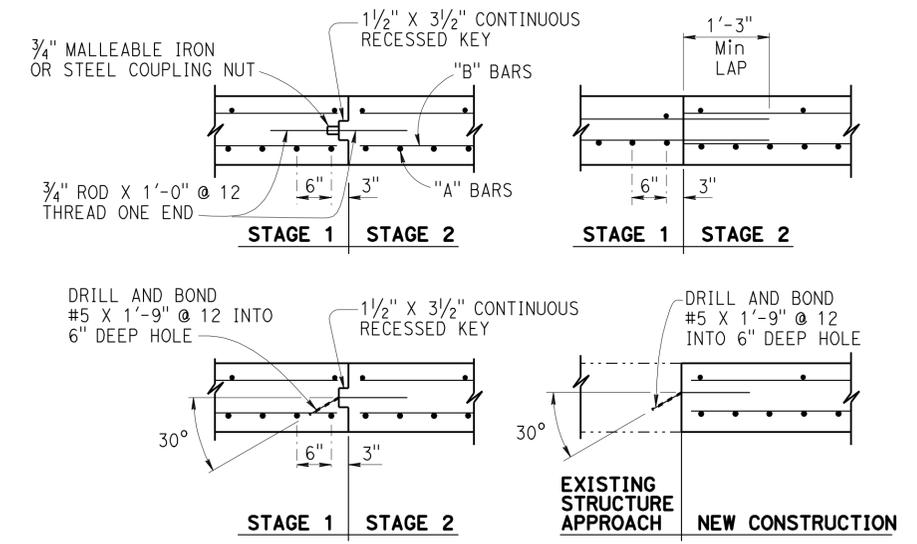
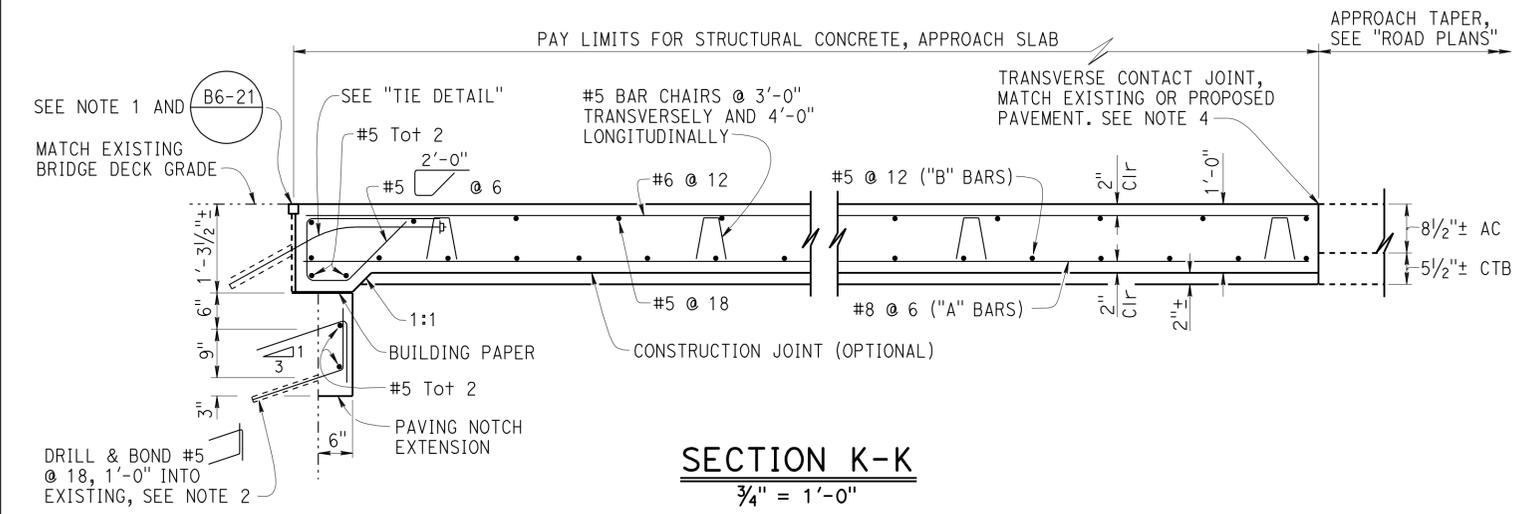
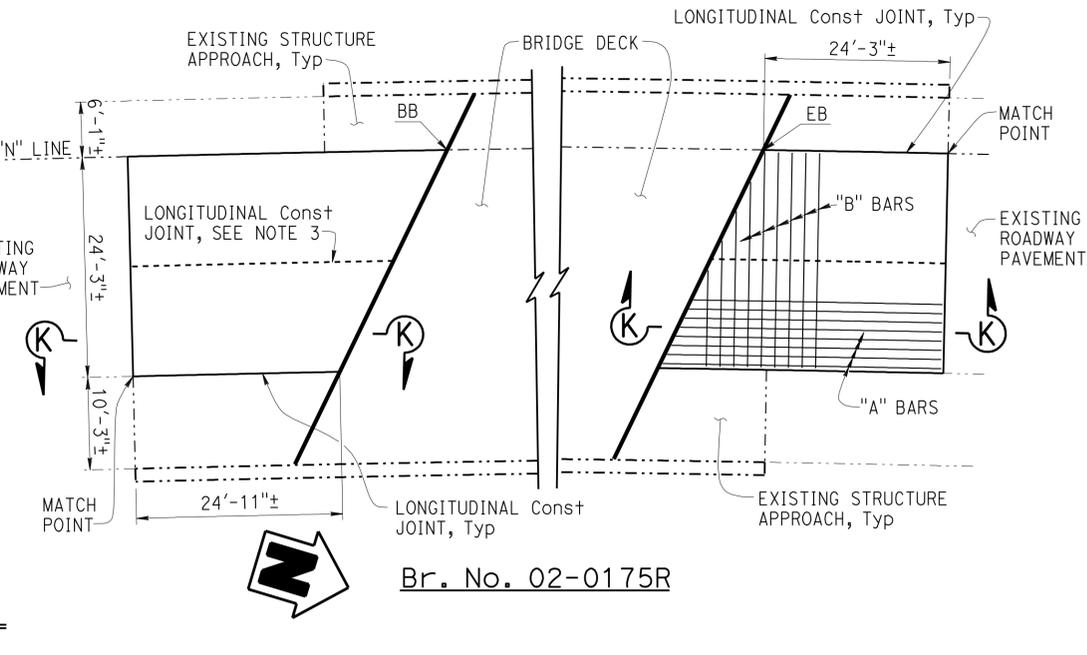
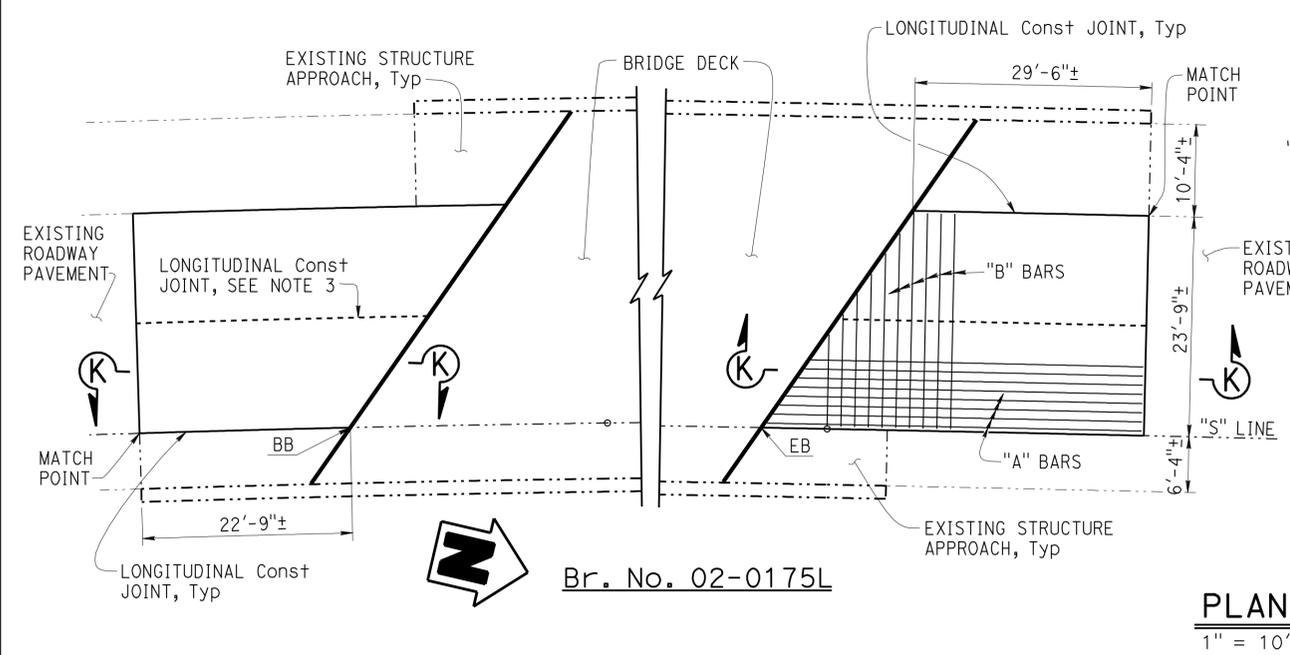
BRIDGE NO.	VARIOUS
POST MILE	VARIES

ROUTE 5, 89, 99 BRIDGES
JOINT SEAL DETAILS NO. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha,Sis,Teh	5,89,99	Var	44	44

9-30-13
 REGISTERED CIVIL ENGINEER DATE
 2-10-14
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 TIM CAMPBELL
 No. 63268
 Exp. 06-30-14
 CIVIL
 STATE OF CALIFORNIA



- 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
 - Couplers are required for stage construction

DESIGN	BY T. Campbell	CHECKED A. Frank	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 5, 89, 99 BRIDGES STRUCTURE APPROACH TYPE R(30D) MODIFIED
DETAILS	BY Dale Kubochi	CHECKED A. Frank			VARIOUS	
QUANTITIES	BY T. Campbell	CHECKED A. Frank			POST MILE	
			UNIT: 3488	PROJECT NUMBER & PHASE: 0213000104	CONTRACT NO.: 02-4F6901	DISREGARD PRINTS BEARING EARLIER REVISION DATES
STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	REVISION DATES	SHEET 11 OF 11