INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION AREA SIGNS
3	TRAFFIC HANDLING PLAN
4	SUMMARY OF QUANTITIES
5-6	TRAFFIC CONTROL SYSTEMS
7	REVISED STANDARD PLAN

STRUCTURE PLANS

8-12	GENERAL PLAN

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

ACBHIM-0803(242)

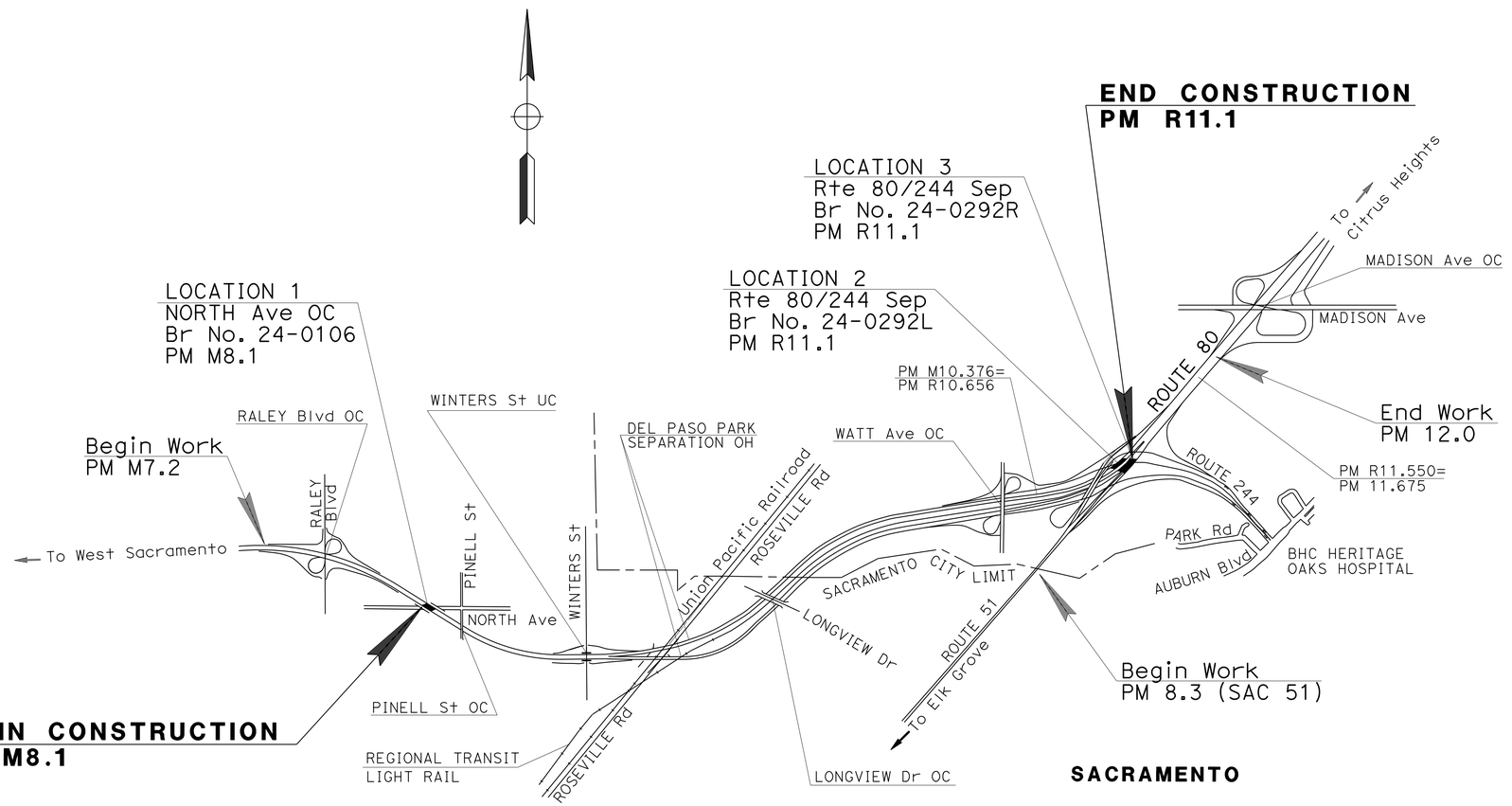
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	1	12

PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY

IN SACRAMENTO COUNTY IN AND NEAR SACRAMENTO AT VARIOUS LOCATIONS FROM NORTH AVENUE OVERCROSSING TO ROUTE 80/244 SEPARATION

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

LOCATION MAP



NO SCALE

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

PROJECT MANAGER: DOUG LANGE

DESIGN ENGINEER: DEANN SPANGLER

11-19-12
PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE

DINESH ADHIKARI
No. 76808
Exp. 12-31-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

November 19, 2012
PLANS APPROVAL DATE

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

CONTRACT No.	03-0F6804
PROJECT ID	0300000099

LAST REVISION 10-23-12
DATE PLOTTED => 31-JAN-2013
TIME PLOTTED => 15:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	2	12

REGISTERED CIVIL ENGINEER — 11-19-12 DATE

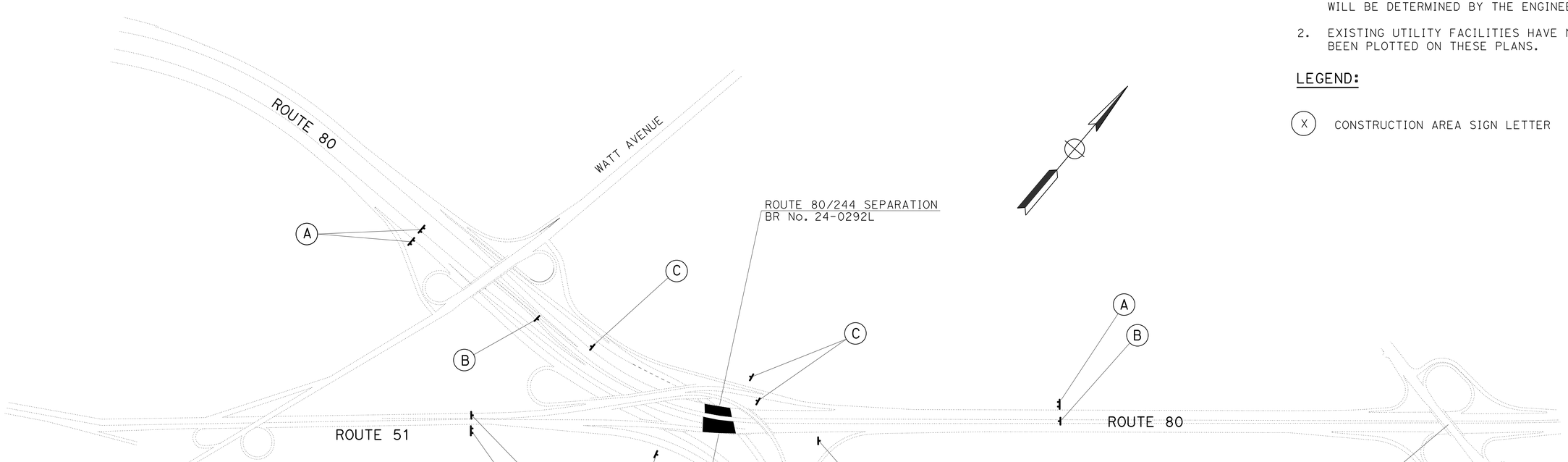
11-19-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DINESH ADHIKARI
No. 76808
Exp. 12-31-14
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.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No. (X)	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
A	W20-1	C23	60" x 60"	ROAD WORK AHEAD	2 - 4" x 6"	4
B	W20-1	C23	48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	3
C		C14	48" x 24"	END ROAD WORK	1 - 4" x 6"	5



NOTES:

1. EXACT LOCATION AND POSITION OF SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

LEGEND:

(X) CONSTRUCTION AREA SIGN LETTER

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING
FUNCTIONAL SUPERVISOR: DEANN SPANGLER
CALCULATED-DESIGNED BY: DINESH ADHIKARI
CHECKED BY: DOUG LANGE
REVISED BY
DATE REVISED

LAST REVISION
DATE PLOTTED => 31-JAN-2013
TIME PLOTTED => 15:03
00-00-00

BORDER LAST REVISED 7/2/2010
USERNAME => s125660
DGN FILE => 03000000991a001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0327
PROJECT NUMBER & PHASE 03000000991

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	3	12

REGISTERED CIVIL ENGINEER — 11-19-12 DATE

11-19-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DINESH ADHIKARI
No. 76808
Exp. 12-31-14
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.

TRAFFIC HANDLING SIGNAGE

SIGN No. (X)	CODE	SIGN PANEL SIZE (MINIMUM)	NUMBER OF SIGN PANELS REQUIRED
D	M4-10L	48" x 18"	2
E	M4-10R	48" x 18"	5
F	SC3<CA>	48" x 18"	1

LEGEND

⇨ DIRECTION OF DETOUR TRAFFIC

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

EXISTING SIGNALIZED INTERSECTION

NOTES:

1. EXACT SIGN LOCATIONS, INCLUDING CMS SIGNS, TO BE DETERMINED BY THE ENGINEER.
2. NUMBER OF SIGN PANELS REQUIRED PER DETOUR SHOWN DOES NOT INCLUDE SIGNS SHOWN ON STANDARD PLANS.
3. THIS PLAN ACCURATE FOR FREEWAY DETOUR TRAFFIC HANDLING ONLY.

APPROVED FOR TRAFFIC HANDLING WORK ONLY

LOCATION 2 AND 3
AUBURN BOULEVARD DETOUR
TRAFFIC HANDLING PLAN

NO SCALE

TH-1

REVISED BY | DATE REVISED

DINESH ADHIKARI | DOUG LANGE

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: DEANN SPANGLER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING

LAST REVISION | DATE PLOTTED => 31-JAN-2013 | TIME PLOTTED => 15:03 | 00-00-00

BORDER LAST REVISED 7/2/2010 | USERNAME => s125660 | DGN FILE => 0300000099md001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0327 | PROJECT NUMBER & PHASE 03000000991

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	4	12

REGISTERED CIVIL ENGINEER — 11-19-12 DATE

11-19-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — DINESH ADHIKARI No. 76808 Exp. 12-31-14 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.

4" THERMOPLASTIC TRAFFIC STRIPE

BRIDGE No.	DETAIL No. 25	DETAIL No. 27B
	LF	LF
24-0292L	540	540
24-0292R	499	628
SUBTOTAL	1,039	1,168
TOTAL	2,207	

4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)

BRIDGE No.	DETAIL No. 12	DETAIL No. 14A
	LF	LF
24-0292L	1,188	432
24-0292R	1,670	
SUBTOTAL	2,858	432
TOTAL	3,290	

PAVEMENT MARKER

BRIDGE No.	RETROREFLECTIVE TYPE C	TYPE G	TYPE H
	EA	EA	EA
24-0292L	12	26	13
24-0292R		55	13
SUBTOTAL	12	81	26
TOTAL	119		

8" THERMOPLASTIC TRAFFIC STRIPE

BRIDGE No.	DETAIL No. 36A
	LF
24-0292R	338
TOTAL	338

REMOVE THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKERS

BRIDGE No.	LANELINE	LEFT EDGELINE	RIGHT EDGELINE	HOV LANELINES	8" GORE STRIPING	PAVEMENT MARKER
	LF	LF	LF	LF	LF	EA
24-0292L	240	285	315			51
24-0292R	360	363	468	84	338	68
SUBTOTAL	600	648	783	84	338	119
TOTAL	2,453					119

4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)

BRIDGE No.	DETAIL No. 9
	LF
24-0292R	404
TOTAL	404

THERMOPLASTIC PAVEMENT MARKING

BRIDGE No.	DIAMOND SYMBOL
	SQFT
24-0292L	11
TOTAL	11

TEMPORARY DRAINAGE INLET PROTECTION

LOCATION Appox PM	EA
Sac 80 WB PM R10.86/R11.08	2
Sac 80 EB PM R11.26	1
TOTAL	3

SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
DINESH ADHIKARI | DOUG LANGE
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: DEANN SPANGLER
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING

LAST REVISION DATE PLOTTED => 31-JAN-2013
00-00-00 TIME PLOTTED => 15:03

BORDER LAST REVISED 7/2/2010 | USERNAME => s125660 | DGN FILE => 0300000099pa001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0327 | PROJECT NUMBER & PHASE 03000000991

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	5	12

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

11-19-12
PLANS APPROVAL DATE

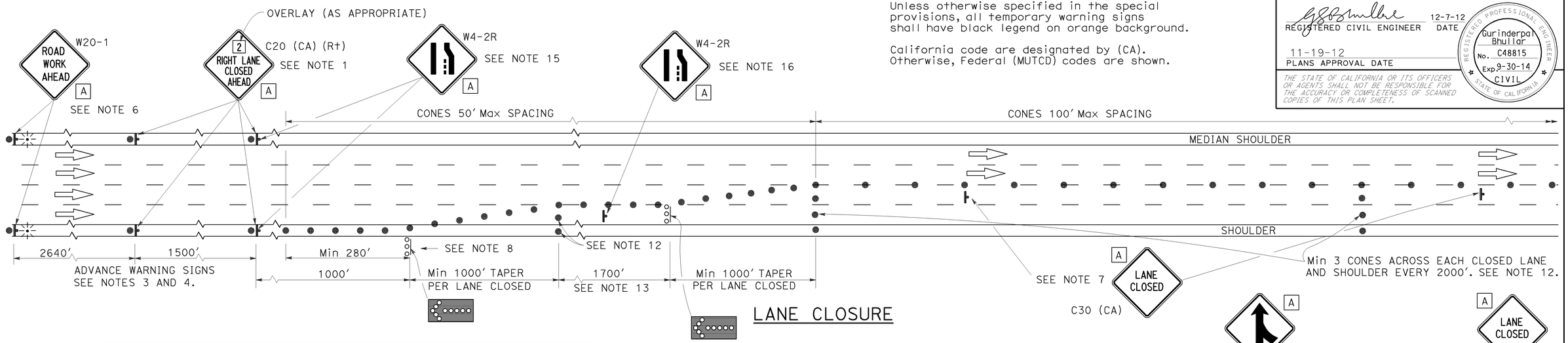
Gurinderpal Bhullar
No. C48815
Exp. 9-30-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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.

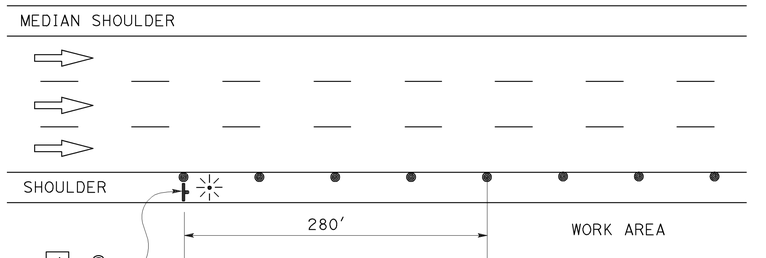
NOTES:

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

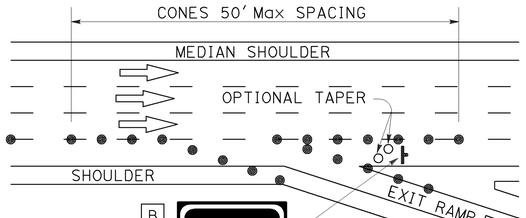
California code are designated by (CA).
Otherwise, Federal (MUTCD) codes are shown.



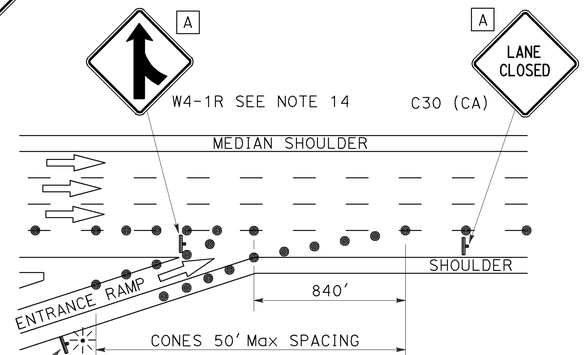
LANE CLOSURE



SHOULDER CLOSURE



LANE CLOSURE AT EXIT RAMP



LANE CLOSURE AT ENTRANCE RAMP

NOTES:

1. Median lane closures shall conform to the details for outside lane closures except that C20 (CA) (Lt) 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 C14 (CA) "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.
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "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 first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 1700' tangent shown along lane lines shall be used between the 1000' tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the G84 (CA) and W4-1 signs shall be used as shown.
15. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.
16. The W4-2 "LANE ENDS" symbol sign shown at this location is to be used where the W4-2 sign is used as advance warning as described in Note 15.

SIGN PANEL SIZE (Min)

A	48" × 48"
B	54" × 48"

LEGEND

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

TCS-1

REVISED BY | DATE REVISED
CALCULATED- | DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	6	12

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

11-19-12
PLANS APPROVAL DATE

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

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

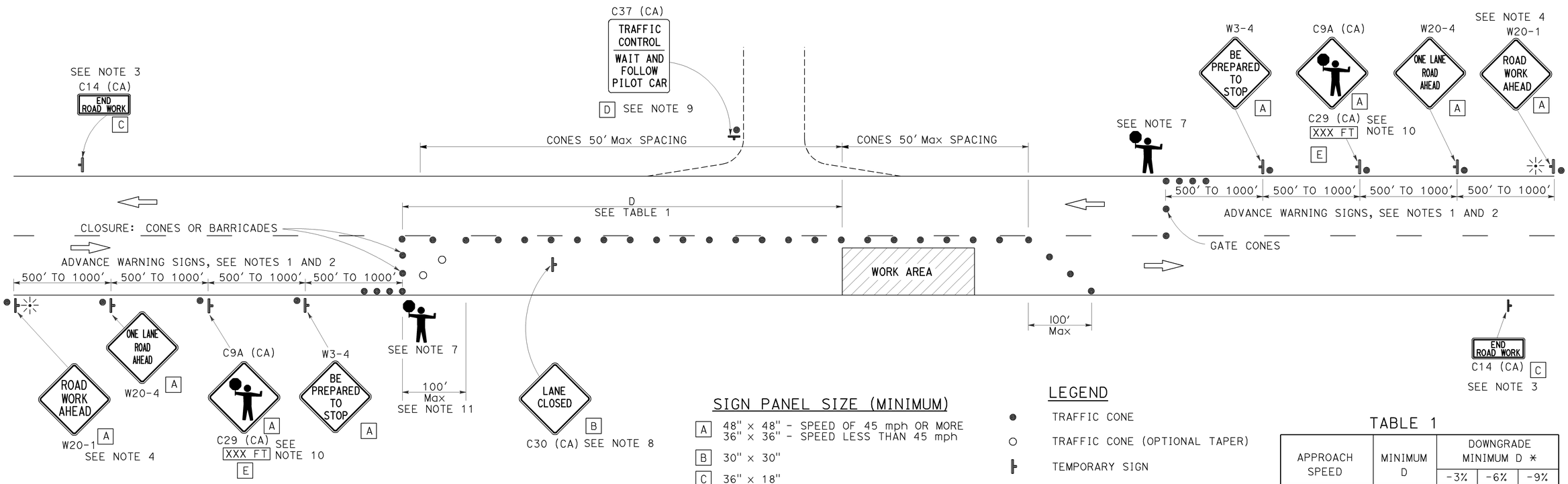
Caltrans

NOTES:

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

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

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A — 48" x 48" - SPEED OF 45 mph OR MORE; 36" x 36" - SPEED LESS THAN 45 mph
- B — 30" x 30"
- C — 36" x 18"
- D — 36" x 42"
- E — 36" x 9"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

TABLE 1

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	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

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
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 C14 (CA) "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.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____MILES", use a W20-4 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. 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.
8. 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.
9. When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
10. An optional C29 (CA) sign may be placed below the C9A (CA) sign.
11. Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

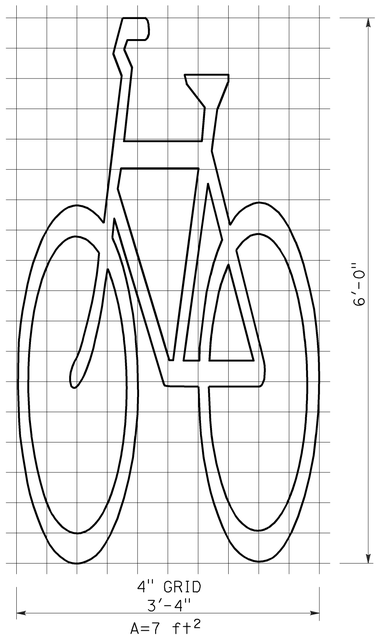
TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

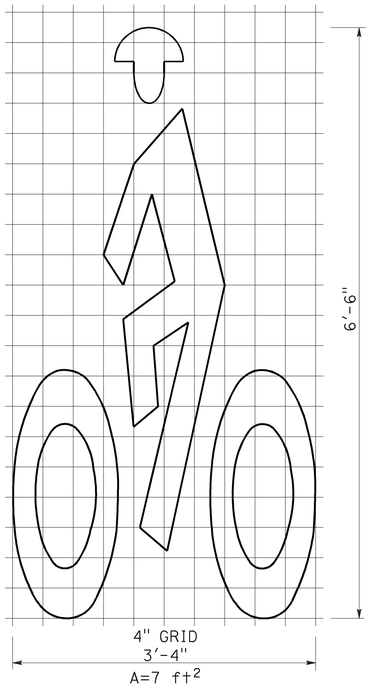
TCS-2

LAST REVISION | DATE PLOTTED => 10-DEC-2012
00-00-00 | TIME PLOTTED => 09:45

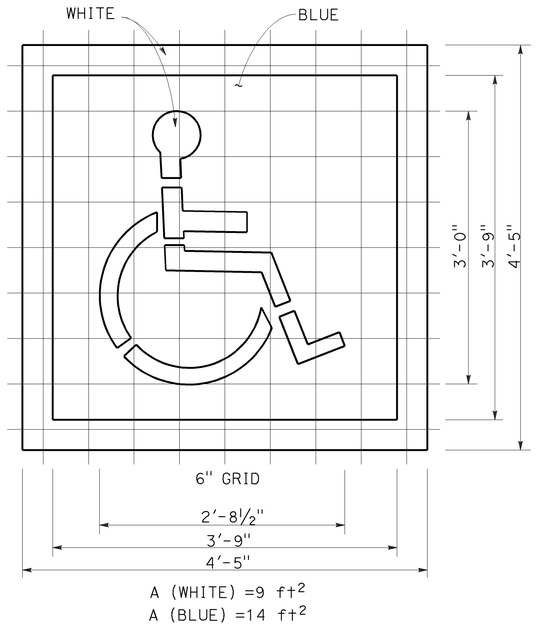
BORDER LAST REVISED 7/2/2010 | USERNAME => s114640 | DGN FILE => tcs13.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0327 | PROJECT NUMBER & PHASE 03000000991



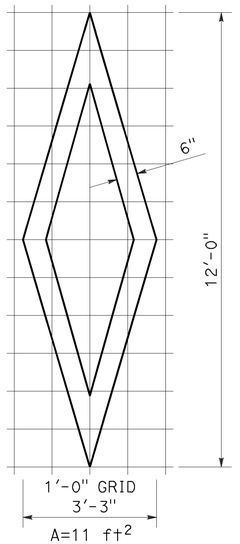
BIKE LANE SYMBOL
WITHOUT PERSON



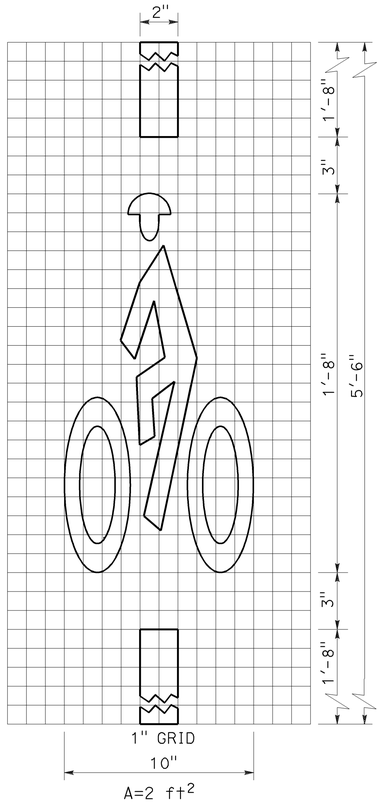
BIKE LANE SYMBOL
WITH PERSON



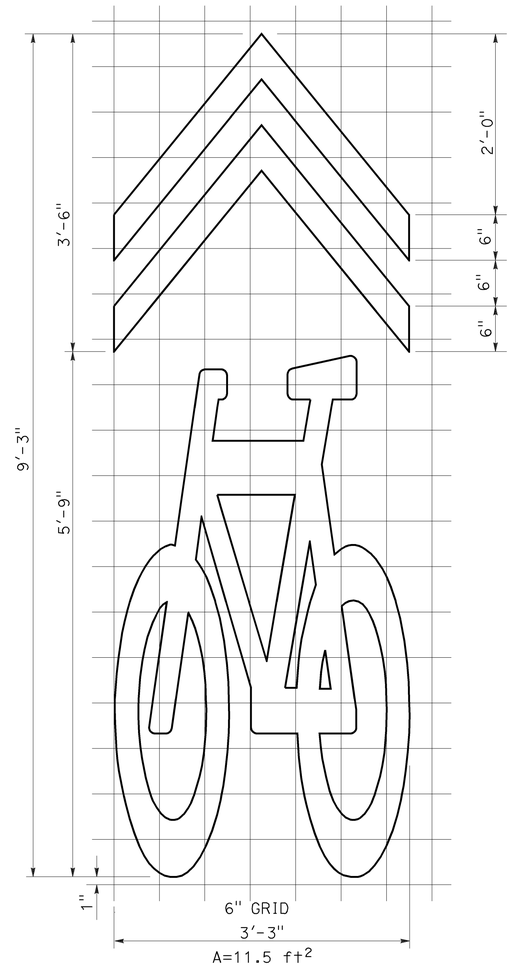
INTERNATIONAL SYMBOL
OF ACCESSIBILITY (ISA) MARKING



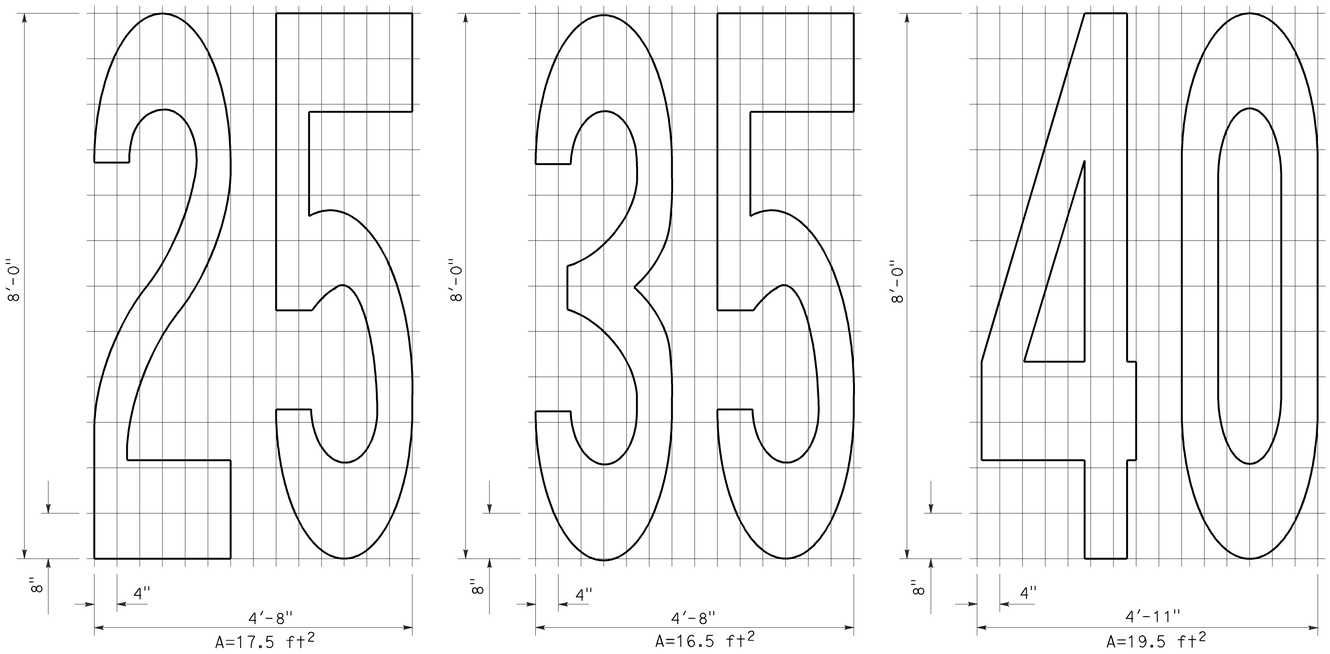
DIAMOND SYMBOL



BICYCLE LOOP
DETECTOR SYMBOL



SHARED ROADWAY BICYCLE MARKING



NUMERALS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	7	12

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

October 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
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.

NOTE: TO ACCOMPANY PLANS DATED 11-19-12

Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

RSP A24C DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A24C DATED MAY 20, 2011 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24C

2010 REVISED STANDARD PLAN RSP A24C

6-28-12

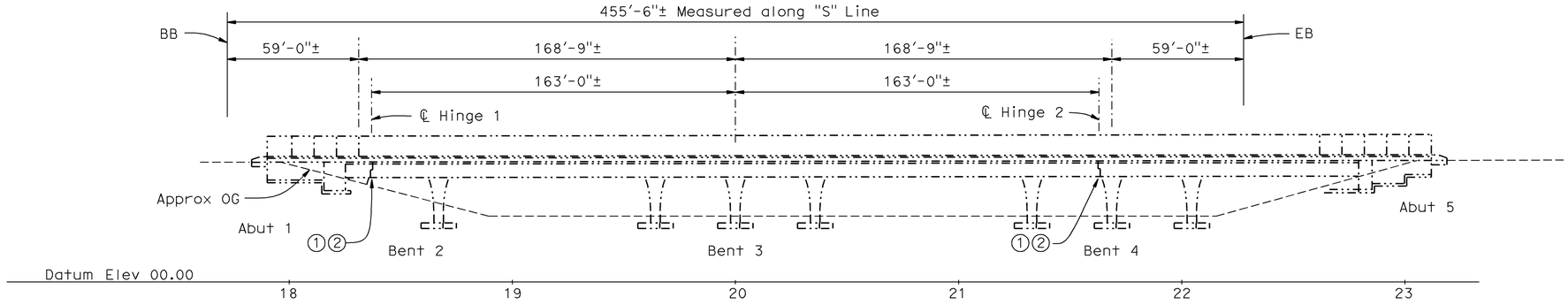
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	8	12

Jose M Aquino III 10/22/12
REGISTERED CIVIL ENGINEER DATE

November 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jose M Aquino III
No. 58386
Exp. 12-31-14
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.

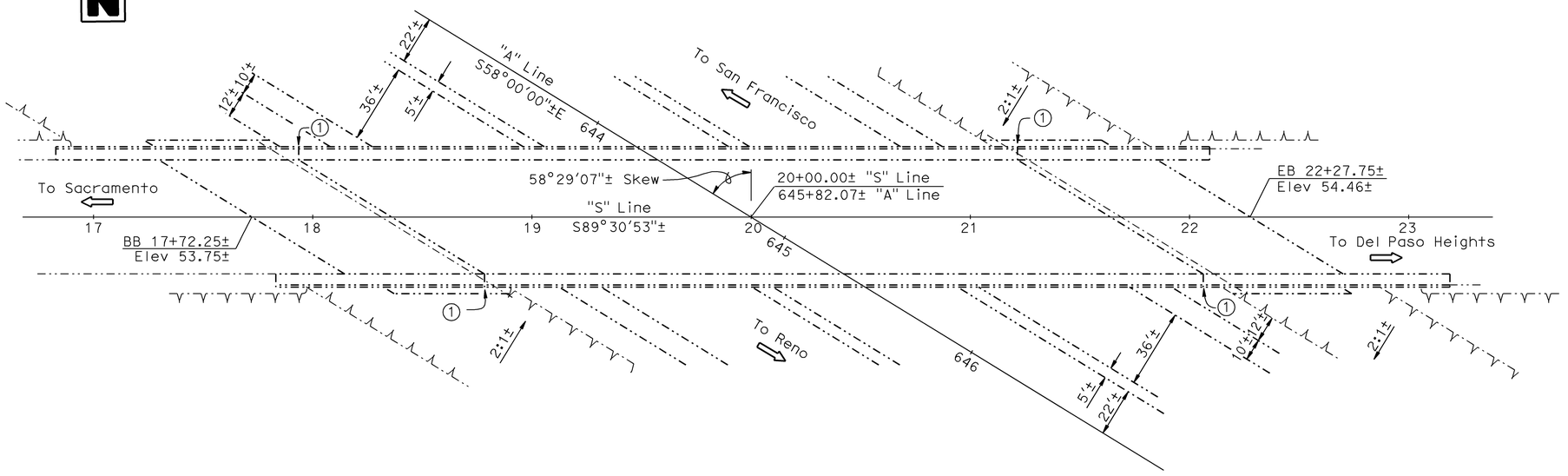


ELEVATION
1" = 30'

NOTES: (This sheet only)

① Seal outside Hinge cracks by Epoxy injection, see "INDEX TO PLANS" sheet

② Repair Spalled surface area



PLAN
1" = 30'

QUANTITIES

INJECT CRACK (EPOXY)	68 LF
REPAIR SPALLED SURFACE AREA	160 SQFT

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

NORTH AVE OVERCROSSING (BR NO. 24-0106, PM M8.0)

Joe Downing DESIGN ENGINEER	DESIGN	BY Joey Aquino	CHECKED Peter Kang	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE		
	DETAILS	BY Nancy Gwynn/S.Motalebi	CHECKED Peter Kang	LAYOUT	BY Nancy Gwynn	CHECKED Joey Aquino	
	QUANTITIES	BY Mike Bergman	CHECKED Art V Herrera	SPECIFICATIONS	BY Todd Geerts	PLANS AND SPECS COMPARED Todd Geerts	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 24-0106
POST MILE M8.0

BRIDGE REHAB
SAC 80/244 BRIDGES
GENERAL PLAN NO. 1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3578
PROJECT NUMBER & PHASE: 0300000099-1 CONTRACT NO.: 0F6801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
11-8-10		10-2-12 10-10-12	1	5

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

FILE => 03-0f6801-a-gp1.dgn

USERNAME = s136540 DATE PLOTTED => 28-JAN-2013 TIME PLOTTED => 11:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	9	12

REGISTERED CIVIL ENGINEER — 10/22/12 DATE

Jose M Aquino III
No. 58386
Exp. 12-31-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

November 19, 2012
PLANS APPROVAL DATE

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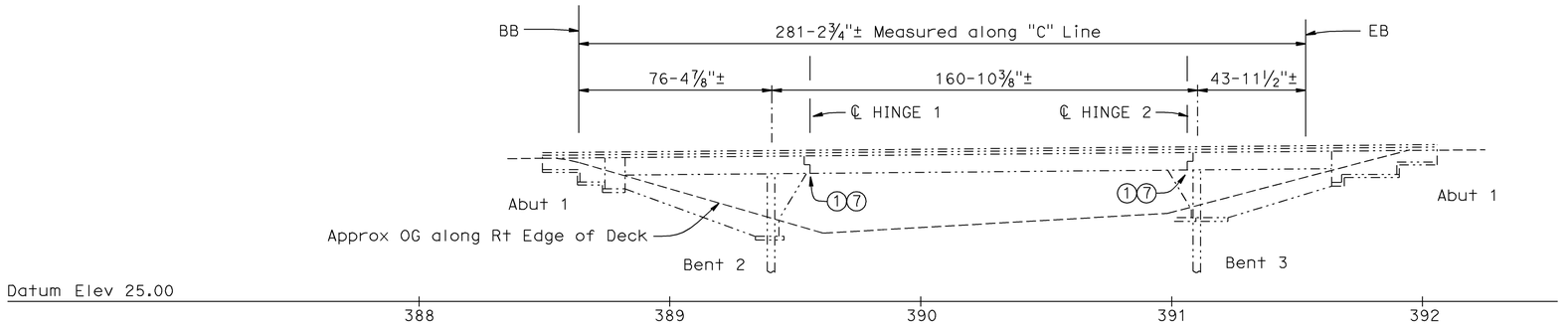
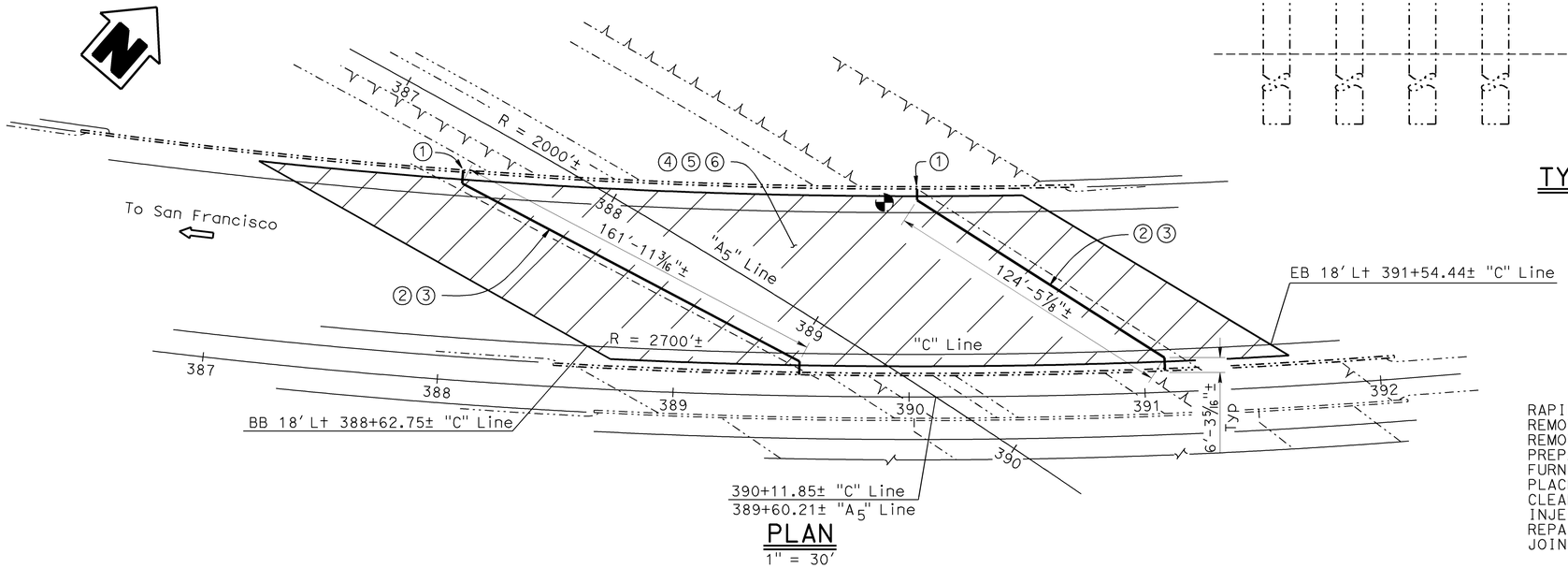


ELEVATION
1" = 30'

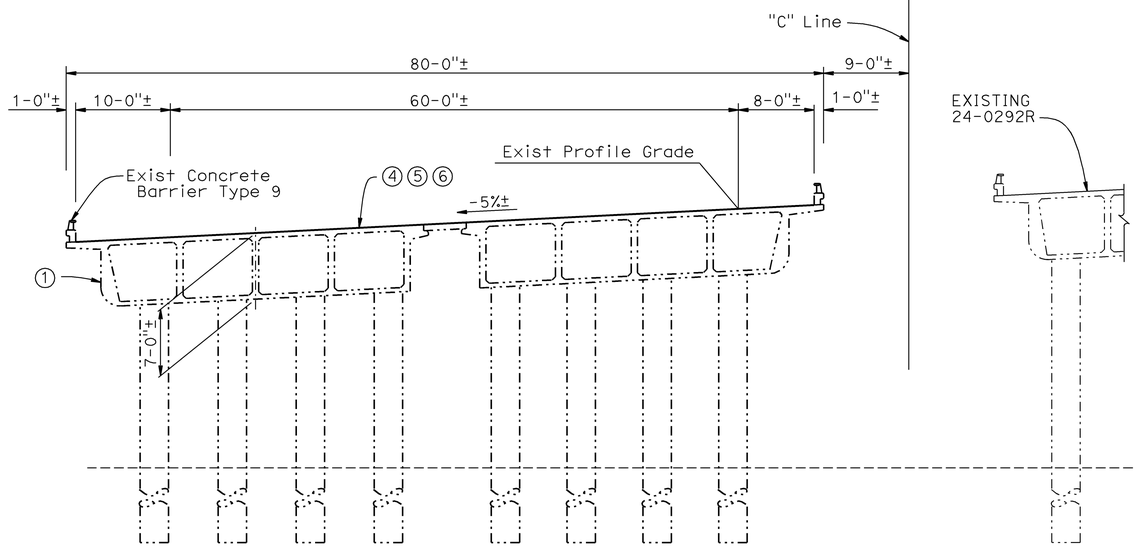
NOTES: (This sheet only)

1. Seal outside cracks @ Hinge location by Epoxy injection, see "INDEX TO PLANS" sheet
2. Clean Exist Expansion Joint
3. Install Type B Joint Seal (MR = 1")
4. Remove unsound concrete
5. Prepare bridge deck for Polyester concrete overlay
6. Place 1" polyster concrete overlay
7. Repair spalled surface area

Indicates limits of remove unsound concrete, rapid setting concrete (patch), prepare bridge deck & polyester concrete overlay



PLAN
1" = 30'



TYPICAL SECTION
⅛" = 1'-0"

QUANTITIES		
RAPID SETTING CONCRETE (PATCH)	274	CF
REMOVE CONCRETE DECK SURFACE	8,810	SQFT
REMOVE UNSOUND CONCRETE	274	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	21,940	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	2,194	CF
PLACE POLYESTER CONCRETE OVERLAY	21,940	SQFT
CLEAN EXPANSION JOINT	304	LF
INJECT CRACK (EPOXY)	34	LF
REPAIR SPALLED SURFACE AREA	160	SQFT
JOINT SEAL (MR 1")	304	LF

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

ROUTE 80/244 SEPARATION (BR NO. 24-0292L, PM R11.1)

DECK REHAB/HINGE REPAIR
SAC 80/244 BRIDGES
GENERAL PLAN NO. 2

	BY	CHECKED
DESIGN	Joey Aquino	Peter Kang
DETAILS	Nancy Gwynn/S.Motalebi	Peter Kang
QUANTITIES	Mike Bergman	Art V Herrera

LOAD & RESISTANCE FACTOR DESIGN — LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE

	BY	CHECKED
LAYOUT	Nancy Gwynn	Joey Aquino
SPECIFICATIONS	Todd Geerts	PLANS AND SPECS COMPARED: Todd Geerts

Joe Downing
DESIGN ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 24-0292L
POST MILE R11.1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3578
PROJECT NUMBER & PHASE: 0300000099-1
CONTRACT NO.: 0F6801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11-8-11	1-9-12	5-8-12	10-10-12	2	5

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

FILE => 03-0f6801-a-gp2.dgn

USERNAME => s136540 DATE PLOTTED => 28-JAN-2013 TIME PLOTTED => 11:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	10	12

Jose M Aquino III 10/22/12
REGISTERED CIVIL ENGINEER DATE

November 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jose M Aquino III — No. 58386 — Exp. 12-31-14 — CIVIL — STATE OF CALIFORNIA

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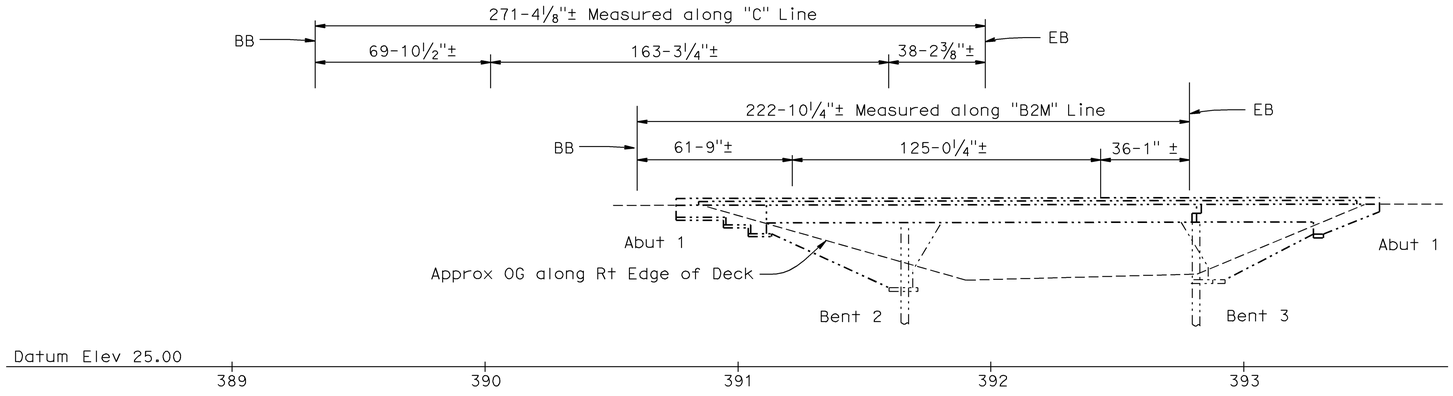
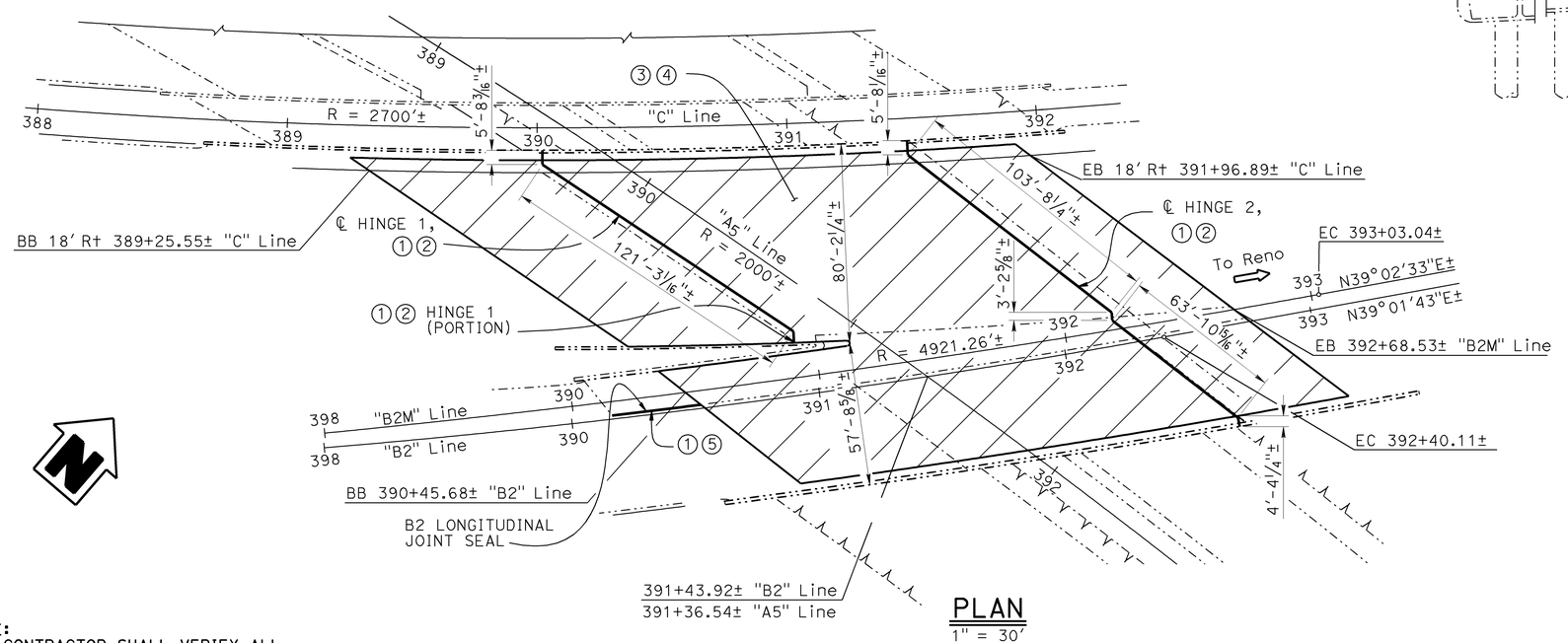


ELEVATION
1" = 30'

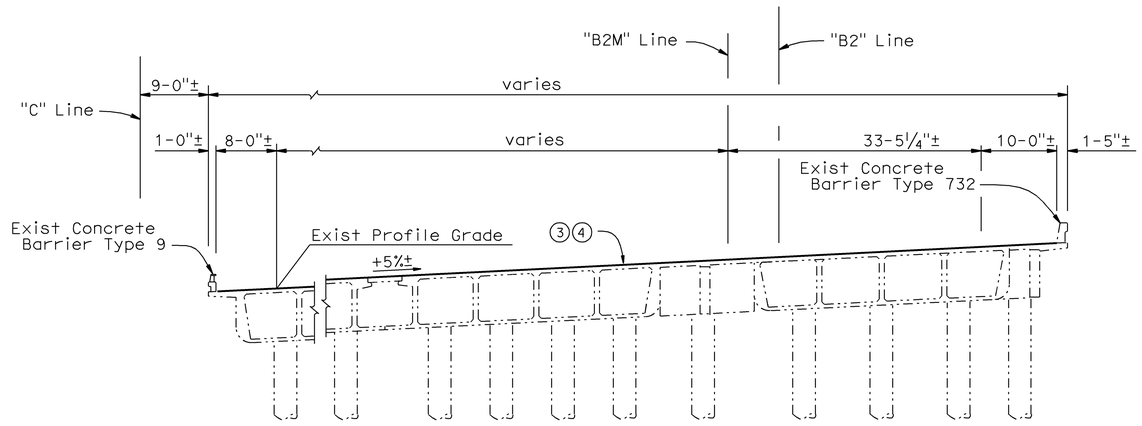
NOTES: (This sheet only)

① Clean Exist Expansion Joint
② Install Type B Joint Seal MR = 1"(Hinge 1)
MR = 1.5" (Hinge 2)
MR= 2" (Hinge 1, Portion)
③ Prepare bridge deck for Polyester concrete overlay
④ Place 1" Polyester concrete overlay
⑤ Install Type AL Seal MR =1"(B2)

Indicates limits of prepare bridge deck & polyester concrete overlay



PLAN
1" = 30'



TYPICAL SECTION
1" = 10'

QUANTITIES

REMOVE CONCRETE DECK SURFACE	11,750	SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	34,620	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	3,462	CF
PLACE POLYESTER CONCRETE OVERLAY	34,620	SQFT
CLEAN EXPANSION JOINT	348	LF
JOINT SEAL (MR 1")	127	LF
JOINT SEAL (MR 1½")	181	LF
JOINT SEAL (MR 2")	7	LF
JOINT SEAL (TYPE AL)	33	LF

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

ROUTE 80/244 SEPARATION (BR No. 24-0292R, PM R11.1)

BRIDGE REHAB/HINGE REPAIR
SAC 80/244 BRIDGE
GENERAL PLAN NO. 3

		BY	CHECKED				
	DESIGN	Joey Aquino	Peter Kang	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE		
	DETAILS	Nancy Gwynn	Peter Kang	LAYOUT	Nancy Gwynn	Joey Aquino	
Joe Downing	QUANTITIES	Mike Bergman	Art V Herrera	SPECIFICATIONS	Todd Geerts	PLANS AND SPECS COMPARED: Todd Geerts	
DESIGN ENGINEER							

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 24-0292R
POST MILE R11.1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3578
PROJECT NUMBER & PHASE: 0300000099-1 CONTRACT NO.: 0F6801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
7-31-12		10-2-12	10-10-12	3	5

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

FILE => 03-0f6801-a-gp3.dgn

USERNAME = s136540 DATE PLOTTED => 28-JAN-2013 TIME PLOTTED => 11:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	11	12

Jose M Aquino III 10/22/12
REGISTERED CIVIL ENGINEER DATE

November 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jose M Aquino III — No. 58386 — Exp.12-31-14 — CIVIL — STATE OF CALIFORNIA

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BRIDGE DECK REPAIR TABLE

BRIDGE NO.	APPROXIMATE AREA DAMAGED (%) PER BRIDGE	APPROXIMATE DEPTH (in)	REMOVE UNSOUND CONCRETE ft^3	RAPID SETTING CONCRETE (PATCH) ft^3
24-0292L	5%	3"	274	274

JOINT SEAL TABLE

BRIDGE NUMBER	BRIDGE NAME	LOCATION	MINIMUM "MR" (in) ±		REPLACE (YES/NO)	APPROXIMATE LENGTH (ft) ±	EXISTING WATERSTOP (YES/NO)	Approx DEPTH TO CLEAN Exp JOINT
			TYPE B	TYPE AL				
24-0292L	Rt 80/244 Sep	Hinge 1	1"		Yes	170	Yes	± 8"
		Hinge 2	1"		Yes	134	Yes	± 8"
24-0292R	Rt 80/244 Sep	Hinge 1	1"		Yes	127	Yes	± 8"
		Hinge 2	1.5"		Yes	181	Yes	± 8"
		B2		1"	Yes	33	No	± 8"
		Hinge 1 (portion)	2"		Yes	7	No	± 8"

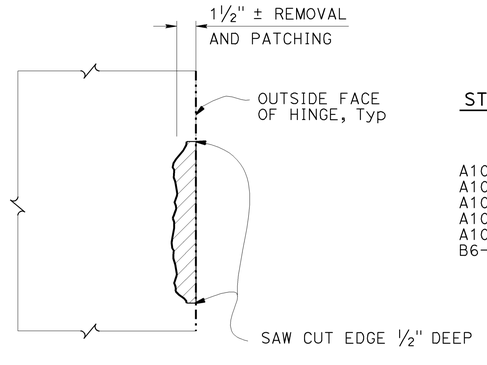
HINGE REPAIR TABLE

BRIDGE NO.	INJECT CRACK (EPOXY) (LF)	REPAIR SPALLED SURFACE AREA (SF)
24-0106	68	160
24-0292L	34	160

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

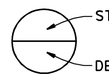
INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	INDEX TO PLANS
5	DECK DETAILS

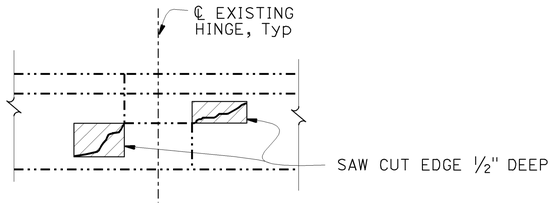


STANDARD PLANS Dated 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING =2")



SPALL REPAIR DETAIL



HINGE CRACK REPAIR DETAIL

NO SCALE

LEGEND:

Limits of repair spalled areas on hinges (Approx only) existing reinforcements to remain

Indicates existing cracks to be sealed by epoxy injection

NOTE:

Cracks shown are approximate only

	BY	CHECKED
DESIGN	Joey Aquino	Peter Kang
DETAILS	Shadi Motalebi	Peter Kang
QUANTITIES	Mike Bergman	Art V Herrera

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 24-0292L/R
POST MILE R11.1

BRIDGE REHAB
SAC 80/244 BRIDGES
INDEX TO PLANS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3578
PROJECT NUMBER & PHASE: 0300000099-1 CONTRACT NO.: 0F6801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
5-3-12	7-24-12	7-31-12	10-10-12	4	5

FILE => 03-0f6801-a-indx.dgn

USERNAME => s136540 DATE PLOTTED => 28-JAN-2013 TIME PLOTTED => 11:11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	80	M8.1/R11.1	12	12

REGISTERED CIVIL ENGINEER — 10/22/12 DATE

November 19, 2012
PLANS APPROVAL DATE

Jose M Aquino III
No. 58386
Exp.12-31-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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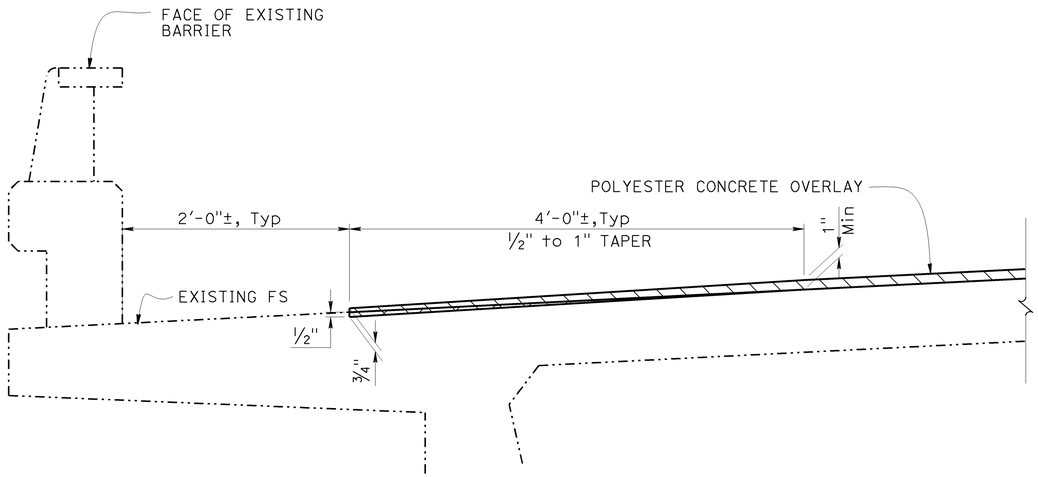
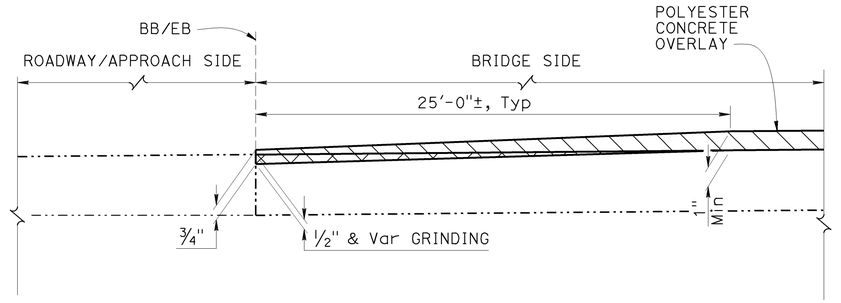


TRANSVERSE TAPER DETAIL AT SHOULDER

No Scale



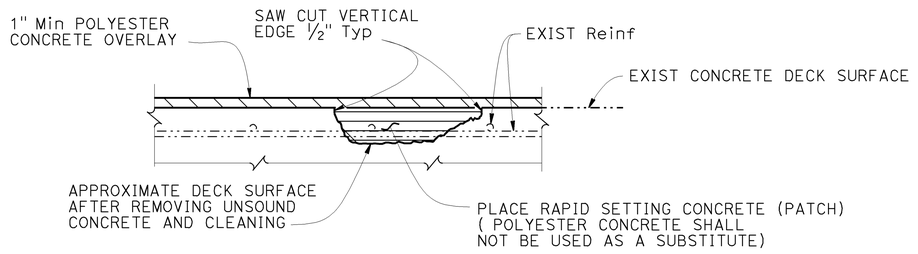
LONGITUDINAL TAPER DETAIL AT BB/EB

No Scale

Grind existing deck ½" and Var

Area of unsound concrete removal

Polyester concrete overlay



DECK REPAIR DETAIL

No Scale

LOCATIONS TO BE DETERMINED BY THE ENGINEER. REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL

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

DESIGN	BY Joey Aquino	CHECKED Peter Kang	
DETAILS	BY Shadi Motalebi	CHECKED Peter Kang	
QUANTITIES	BY Mike Bergman	CHECKED Art V Herrera	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 24-0292L/R
POST MILE R11.1

BRIDGE REHAB
SAC 80/244 BRIDGES
DECK DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3578
PROJECT NUMBER & PHASE: 0300000099-1 CONTRACT NO.: 0F6801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
5-3-12		10-2-12	10-10-12	5	5

FILE => 03-0f6801-d-deck.dgn

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