Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	1	60

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

IM-005-1(618)E

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN SAN DIEGO COUNTY
IN NATIONAL CITY AND SAN DIEGO
FROM 24TH STREET UNDERCROSSING TO 0.1 MILE SOUTH OF ROUTE 8/5 SEPARATION AND OVERHEAD

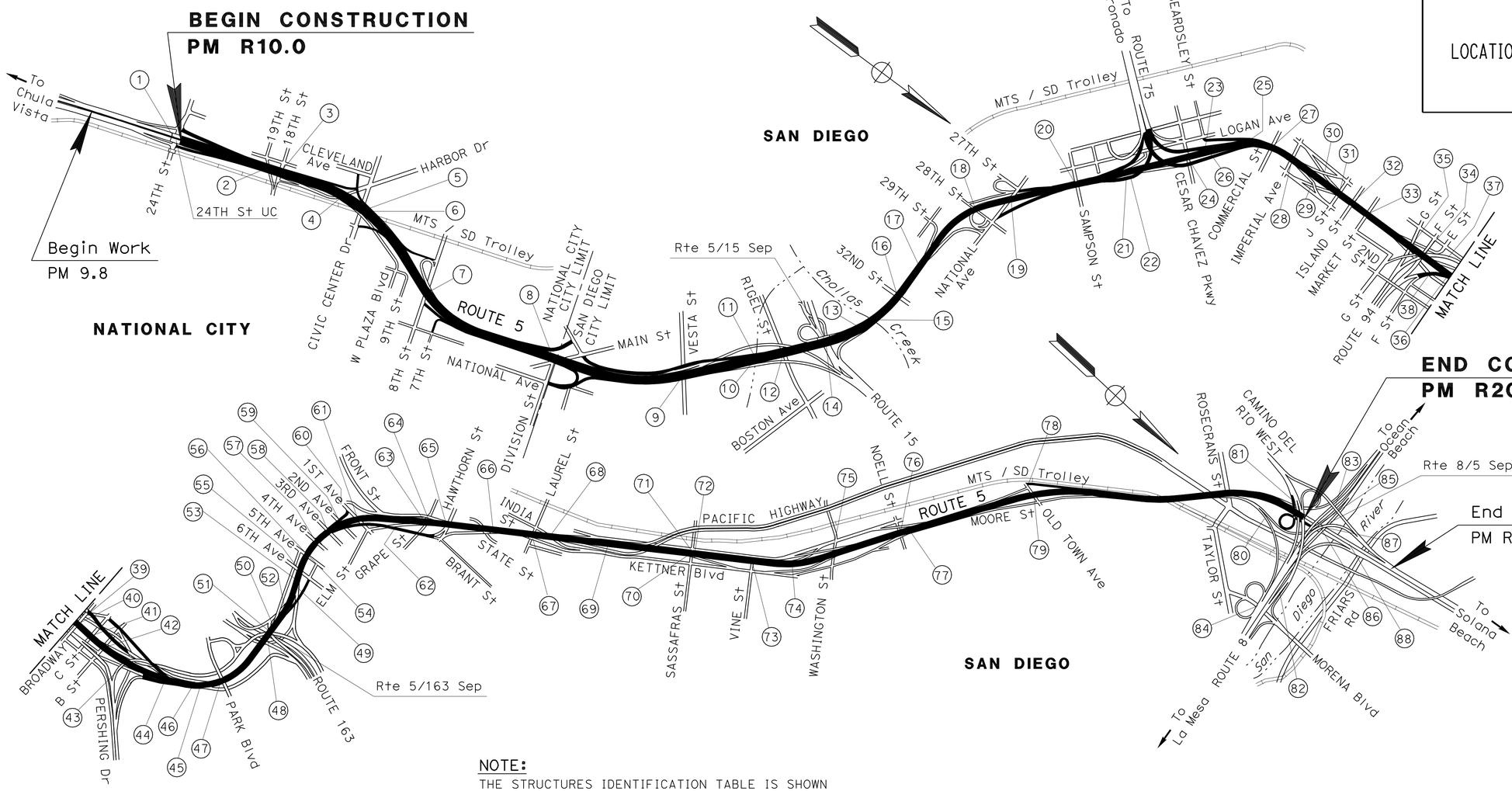
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

INDEX OF PLANS

Sheet No.	Description
1	Title and Location Map
2	Location of Construction
3-5	Typical Cross Sections
6-10	Construction Details
11-12	Construction Area Signs
13-33	Traffic Handling Plans
34-37	Pavement Delineation Details and Quantities
38-40	Sign Plan and Quantities
41-42	Summary of Quantities
43-44	Electrical Plans
45-55	Revised Standard Plans
STRUCTURE PLANS	
56	General Plan
57	Joint Seal Details
58-60	Structure Approach

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

LOCATION MAP



NOTE:
THE STRUCTURES IDENTIFICATION TABLE IS SHOWN ON THE IDENTIFICATION OF PROJECT STRUCTURES SHEET.

NO SCALE

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

PROJECT MANAGER: BRUCE LAMBERT
DESIGN ENGINEER: CHRIS THOMAS

Deborah J. Yost — 08-03-10
PROJECT ENGINEER — DATE
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — DEBORAH YOST — No. 70685 — Exp. 06-30-11 — CIVIL — STATE OF CALIFORNIA

August 9, 2010
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.	11-240104
PROJECT ID	1100020023

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:47

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	2	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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

LOCATIONS OF CONSTRUCTION

Loc #	Rte	PM	BRIDGE NAME	BRIDGE NUMBER*	Loc #	Rte	PM	BRIDGE NAME	BRIDGE NUMBER*
1	5	R10.04	24TH STREET UC	57-0251L	45	5	R15.65	S163-S5 CONNECTOR OC	
2	5	R10.39	19TH STREET UC		46	5	R15.67	STADIUM Ped OC	
3	5	R10.43	18TH STREET UC		47	5	R15.82	PARK Blvd OC	
4	5	R10.68	HARBOR DRIVE OFF-RAMP UC		48	5	R16.02	ROUTE 5/163 SEPARATION	57-0391
5	5	R10.72	CIVIC CENTER DRIVE UC		49	5	R16.05	S5-N163 CONNECTOR OC	
6	5	R10.75	CIVIC CENTER DRIVE OH	57-0468L/R	50	5	R16.11	S5-S163 OFF-RAMP OC	
7	5	R11.13	8TH STREET UC	57-0469	51	5	R16.12	N163-N5 CONNECTOR OC	
8	5	R11.66	MAIN STREET UC	57-0434	52	5	R16.12	S163-S5 CONNECTOR OC	
9	5	R12.03	VESTA STREET UC	57-0435	53	5	R16.17	N5-6TH AVENUE/N&S163-N5 OC	
10	5	R12.39	N5-N15 CONNECTOR OC		54	5	R16.18	5TH AVENUE ON-RAMP OC	
11	5	R12.43	SOUTH CHOLLAS CREEK	57-0436	55	5	R16.31	SIXTH AVENUE OC	
12	5	R12.53	RIGEL STREET UC		56	5	R16.37	FIFTH AVENUE OC	
13	5	R12.55	S15-S5 CONNECTOR OC		57	5	R16.42	FOURTH AVENUE OC	
14	5	R12.63	ROUTE 5/15 SEPARATION	57-0438	58	5	R16.47	THIRD AVENUE OC	
15	5	R12.73	CHOLLAS CREEK Br	57-0473	59	5	R16.53	SECOND AVENUE OC	
16	5	R12.88	32ND STREET OC		60	5	R16.55	CEDAR STREET OFF-RAMP UC	
17	5	R13.12	30TH STREET Ped OC		61	5	R16.59	FIRST AVENUE OC	
18	5	R13.39	28TH STREET OC		62	5	R16.68	1ST AVENUE-N5/N5-HAWTHORN	
19	5	R13.48	NATIONAL AVENUE OC		63	5	R16.80	GRAPE STREET OC	
20	5	R13.76	SAMPSON STREET OC		64	5	R16.83	GRAPE STREET UC	
21	5	R13.90	N5-S75 CONNECTOR OC		65	5	R16.91	HAWTHORN STREET UC	
22	5	R13.99	DEWEY STREET Ped OC		66	5	R17.04	STATE STREET UC	57-0453
23	5	R14.07	E75-N5 CONNECTOR OC		67	5	R17.21	LAUREL STREET UC	
24	5	R14.12	CESAR CHAVEZ PARKWAY UC	57-0445	68	5	R17.28	INDIA STREET UC	
25	5	R14.16	S5-S75 CONNECTOR OC		69	5	R17.50	PALM STREET Ped OC	
26	5	R14.25	BEARDSLEY STREET Ped OC		70	5	R17.57	SASSAFRAS STREET VIADUCT N/B	
27	5	R14.42	COMMERCIAL STREET OH		71	5	R17.60	SASSAFRAS STREET VIADUCT S/B	
28	5	R14.50	IMPERIAL AVENUE UC	57-0448	72	5	R17.77	SASSAFRAS STREET UC	
29	5	R14.64	N5-19TH ST/19TH ST-N5 OC		73	5	R17.99	VINE STREET UC	
30	5	R14.64	17TH ST-S5/S5-17TH ST OC		74	5	R18.20	HANCOCK STREET UC	
31	5	R14.74	J STREET OC		75	5	R18.28	WASHINGTON STREET UC	
32	5	R14.81	ISLAND AVENUE OC		76	5	R18.53	NOELL STREET UC	
33	5	R14.89	MARKET STREET OC		77	5	R18.53	NOELL STREET OFF- RAMP UC	
34	5	R14.98	ROUTE 94/5 SEPARATION		78	5	R19.03	OLD TOWN AVENUE OC	
35	5	R15.00	S5-G STREET/19TH-E 94 OC		79	5	R19.41	OLD TOWN VIADUCT	
36	5	R15.04	ROUTE 94/5 SEPARATION		80	5	R19.90	N5-E8 CONNECTOR OH	
37	5	R15.07	S5-E94 CONNECTOR VIADUCT		81	5	R19.98	N209-N5&E8 SEPARATION & OH	
38	5	R15.10	W94-N5 CONNECTOR OC		82	5	R20.01	W8-S5&S209 CONNECTOR	
39	5	R15.11	17TH STREET RAMP OC		83	5	R20.04	S5-S209 CONNECTOR OC	
40	5	R15.18	BROADWAY OC		84	5	R20.05	N5-E8 CONNECTOR OC	
41	5	R15.24	C STREET UC		85	5	R20.07	N5-W8 CONNECTOR OC	
42	5	R15.32	B STREET UC		86	5	R20.08	S5-E8 CONNECTOR OH	
43	5	R15.41	PERSHING DRIVE UC		87	5	R20.09	ROUTE 8/5 SEPARATION & OH	
44	5	R15.43	PERSHING DRIVE OFF-RAMP OC		88	5	R20.12	SAN DIEGO RIVER	

* - BRIDGE NUMBERS PROVIDED FOR STRUCTURES BEING WORKED ON.

REVISED BY | DATE REVISED
DEBORAH YOST | BAHMAN YAZDANI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
CHRIS M. THOMAS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

LOCATIONS OF CONSTRUCTION

LC-1

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	3	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER DEBORAH YOST No. 70685 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA

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

NOTES:

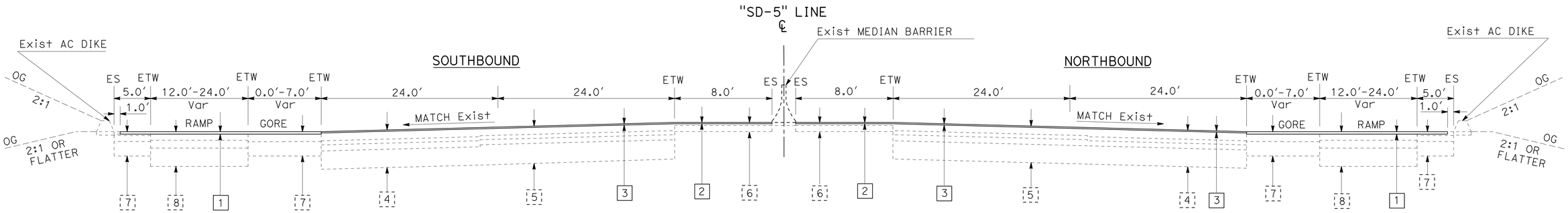
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOG SEAL COAT SHALL BE APPLIED TO ALL HMA SURFACES EXCEPT TRAVELED WAYS AND DETOURS.
4. FOR RAMP REHABILITATION LOCATIONS, SEE QUANTITY SHEETS.
5. FINAL HMA SURFACE TO MATCH THE SURFACE OF GROUND PCC PAVEMENT.
6. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED.

ABBREVIATIONS:

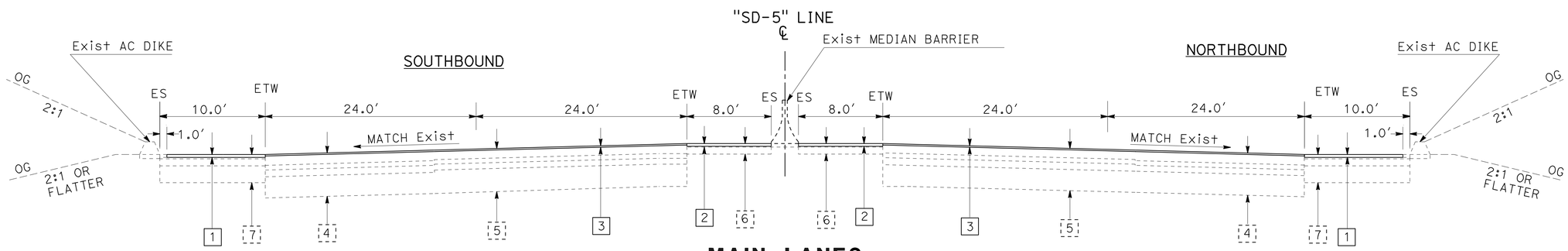
RHMA-G = RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

LEGEND:

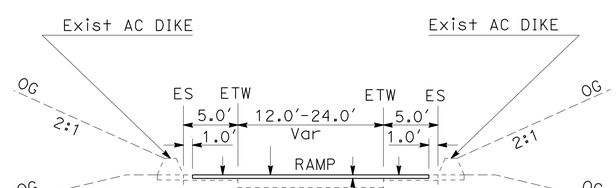
- 1 — COLD PLANE AC (0.20′ Max)
0.20′ RHMA-G
- 2 — COLD PLANE AC (0.10′ Max)
0.10′ RHMA-G
- 3 — GRIND PCC PAVEMENT
- 4 — 0.75′ PCC
0.33′ CTB
0.42′ AB
1.50′ AS
- 5 — 0.67′ PCC
0.33′ CTB
0.50′ AB
1.50′ AS
- 6 — 0.25′ AC
0.50′ AB
- 7 — 0.30′ AC
0.50′ AB
1.20′ AS
- 8 — 0.70′ AC
0.65′ CTB
1.50′ AS
- 9 — 0.20′ AC (Max DEPTH)
0.75′ PCC
0.33′ CTB
0.42′ AB
1.50′ AS
- 10 — REMOVE AC COMPLETELY TO EXPOSE PCC
GRIND PCC PAVEMENT



MAIN LANES WITH GORE AREAS AND RAMPS



MAIN LANES



TYPICAL RAMP

TYPICAL CROSS SECTIONS X-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS M. THOMAS
CALCULATED-DESIGNED BY: BAHMAN YAZDANI
CHECKED BY: DEBORAH YOST
REVISED BY / DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:00

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	4	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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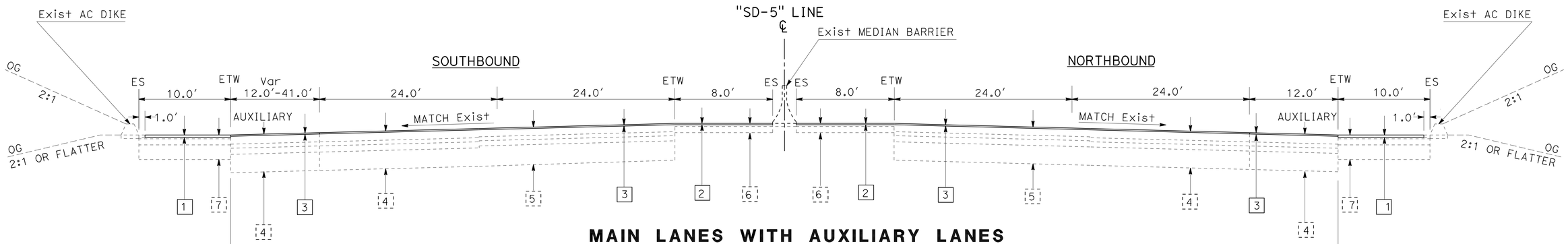
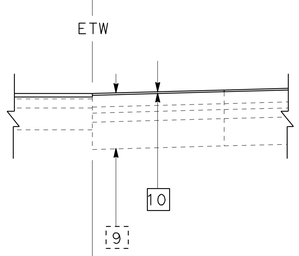
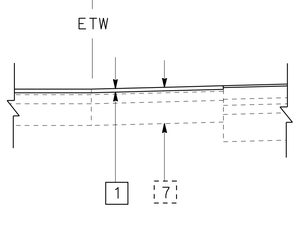


MAIN LANES WITH AUXILIARY LANES





SOUTHBOUND AUXILIARY LANE STRUCTURAL SECTION TYPE 4

LOCATION		
DIRECTION	FROM PM	TO PM
SB 5	R12.10	R11.00

SOUTHBOUND AUXILIARY LANE STRUCTURAL SECTION TYPE 9

LOCATION		
DIRECTION	FROM PM	TO PM
SB 5	R19.82	R18.44
SB 5	R17.61	R16.97

SOUTHBOUND AUXILIARY LANE STRUCTURAL SECTION TYPE 7

LOCATION		
DIRECTION	FROM PM	TO PM
SB 5	R16.75	R16.52
SB 5	R16.52	R16.24
SB 5	R16.24	R16.10
SB 5	R16.10	R15.64
SB 5	R14.53	R14.40
SB 5	R14.40	R14.18
SB 5	R13.90	R13.66

NORTHBOUND AUXILIARY LANE STRUCTURAL SECTION TYPE 4

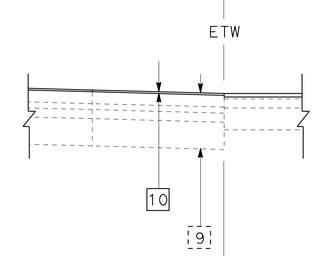
LOCATION		
DIRECTION	FROM PM	TO PM
NB 5	R11.95	R12.27
NB 5	R18.56	R18.84
NB 5	R19.38	R19.64

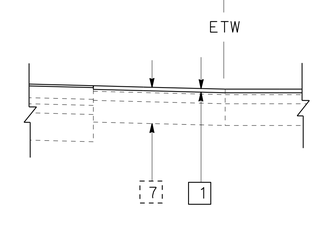
NORTHBOUND AUXILIARY LANE STRUCTURAL SECTION TYPE 9

LOCATION		
DIRECTION	FROM PM	TO PM
NB 5	R16.84	R17.37

NORTHBOUND AUXILIARY LANE STRUCTURAL SECTION TYPE 7

LOCATION		
DIRECTION	FROM PM	TO PM
NB 5	R11.83	R 11.95
NB 5	R13.49	R 13.56
NB 5	R13.56	R 13.92
NB 5	R13.92	R 14.10
NB 5	R14.31	R 14.70
NB 5	R14.75	R 14.95
NB 5	R15.34	R 15.89
NB 5	R15.89	R 16.13





TYPICAL CROSS SECTIONS X-2

NO SCALE

REVISED BY | DATE REVISED
DEBORAH YOST | BAHMAN YAZDANI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
CHRIS M. THOMAS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	5	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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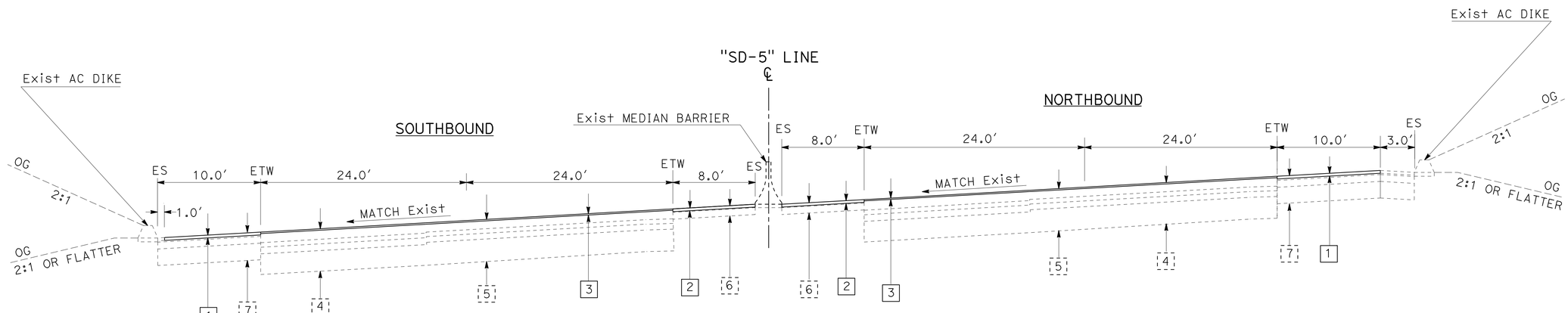

MAIN LANES WITH SUPERELEVATION

TYPICAL CROSS SECTIONS

X-3

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS M. THOMAS

CALCULATED-DESIGNED BY: DEBORAH YOST
CHECKED BY: BAHMAN YAZDANI

REVISED BY
DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	6	60

Deborah J. Yost 08-03-10
REGISTERED ELECTRICAL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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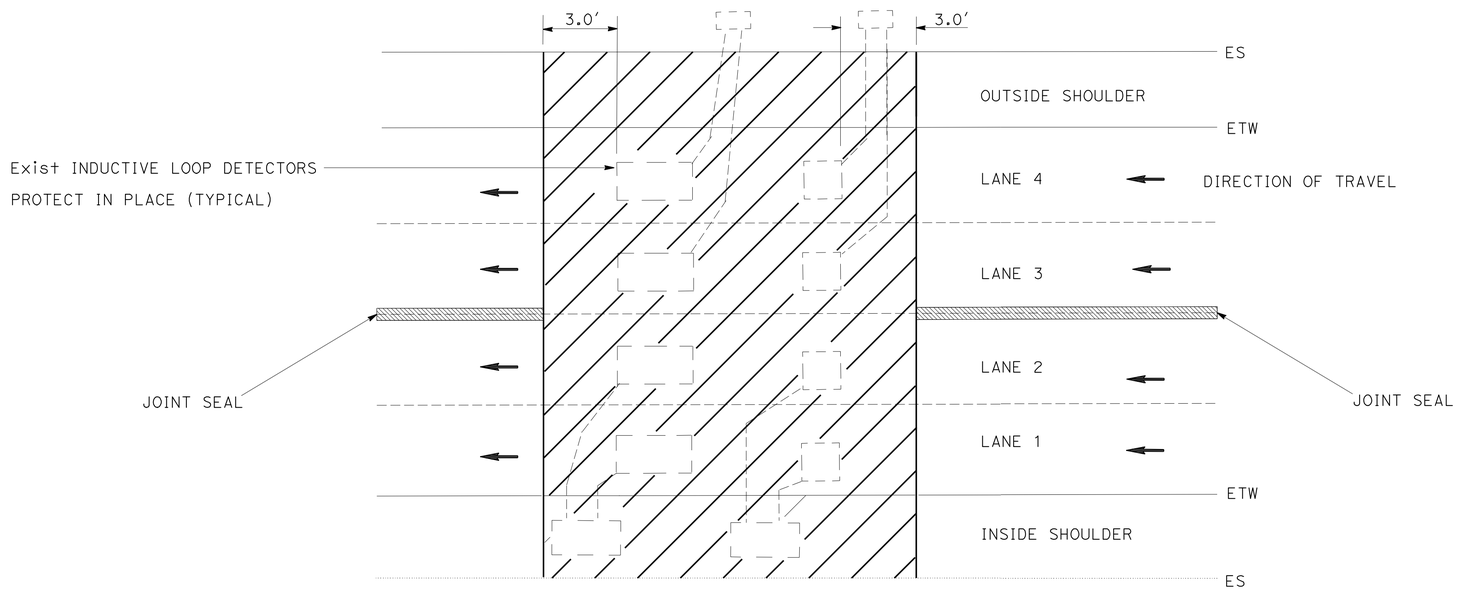
LEGEND:

- NO JOINT SEAL WORK WITHIN THE HATCH AREA.
- LONGITUDINAL JOINT SEAL BETWEEN LANES 2 & 3



Exist INDUCTIVE LOOP
ROUTE 5

SB DIRECTION SHOWN (NB DIRECTION SIMILAR)

8TH St UC	PM R11.129 (SB-COUNT Sta), PM R11.129 (NB-COUNT Sta)
Jct 15, NORTH	PM R12.647 (SB-COUNT Sta), PM R12.647 (NB-COUNT Sta)
J St OC	PM R14.740 (SB-COUNT Sta), PM R14.740 (NB-COUNT Sta)
PACIFIC Hwy VIADUCT	PM R17.530 (SB-COUNT Sta), PM R17.530 (NB-COUNT Sta)

CONSTRUCTION DETAILS
NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS THOMAS
CALCULATED-DESIGNED BY: DEBORAH YOST
CHECKED BY: BAHMAN YAZDANI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	7	60

Deborah J. Yost 08-03-10
REGISTERED ELECTRICAL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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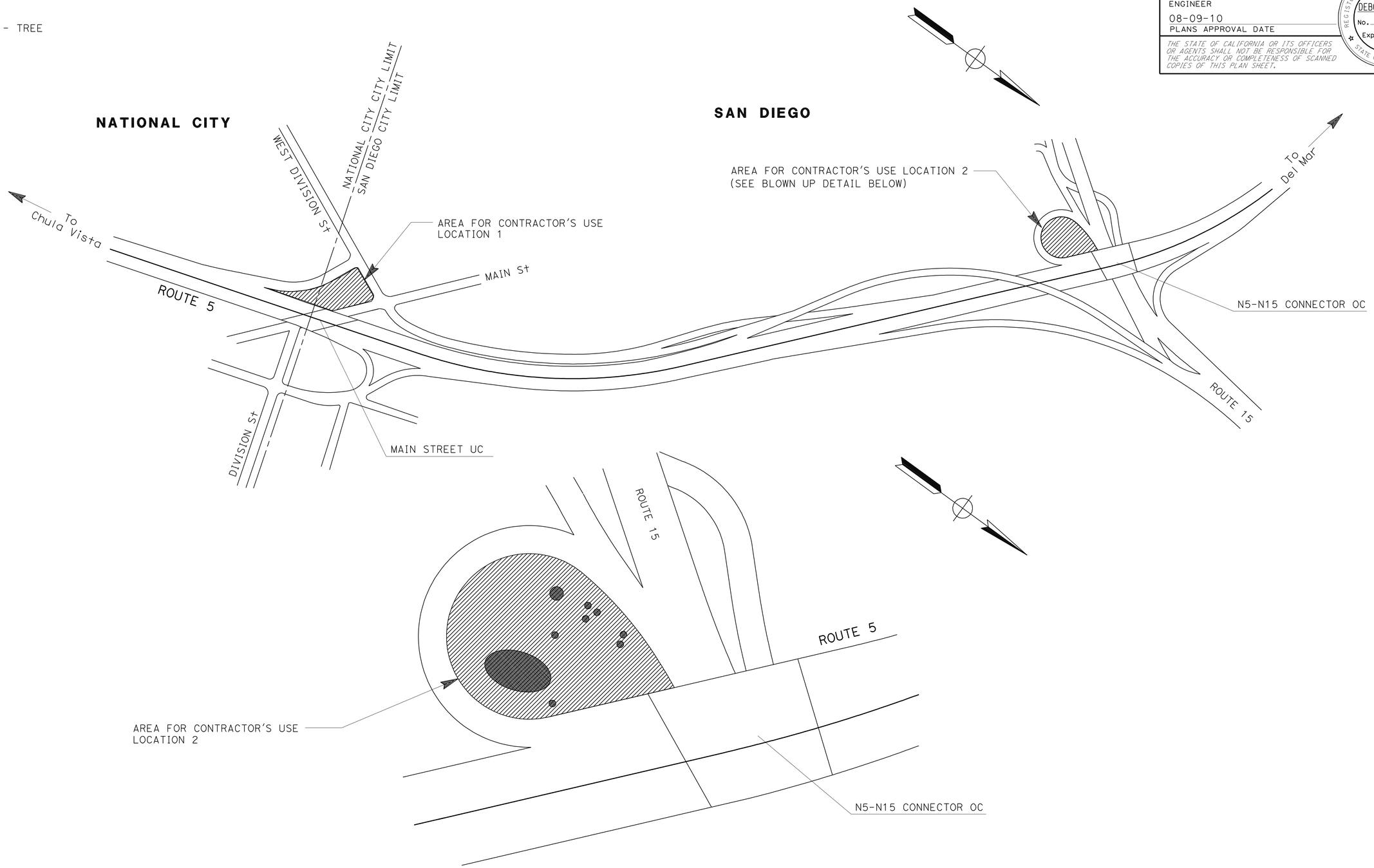
LEGEND:

- AREA FOR CONTRACTOR'S USE
- TREE



AREAS FOR CONTRACTOR'S USE

ROUTE 5

CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS THOMAS
CALCULATED-DESIGNED BY: DEBORAH YOST
CHECKED BY: BAHMAN YAZDANI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	8	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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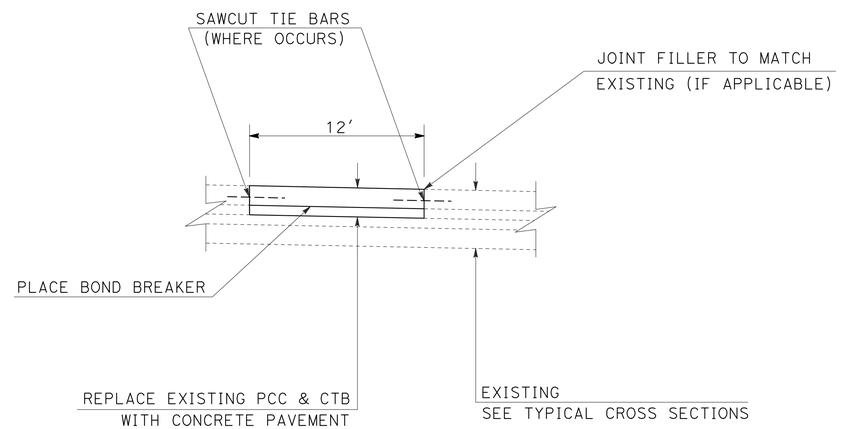
NOTE:

DOWEL BAR BASKETS TO BE USED WHEN TWO OR MORE ADJACENT SLABS ARE REPLACED



REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

TYPICAL DETAIL

CONSTRUCTION DETAILS

NO SCALE **C-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS THOMAS
CALCULATED-DESIGNED BY: DEBORAH YOST
CHECKED BY: BAHMAN YAZDANI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	9	60

Deborah J. Yost 08-03-10
REGISTERED ELECTRICAL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

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DEBORAH YOST
No. 70685
Exp. 06-30-11
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STATE OF CALIFORNIA

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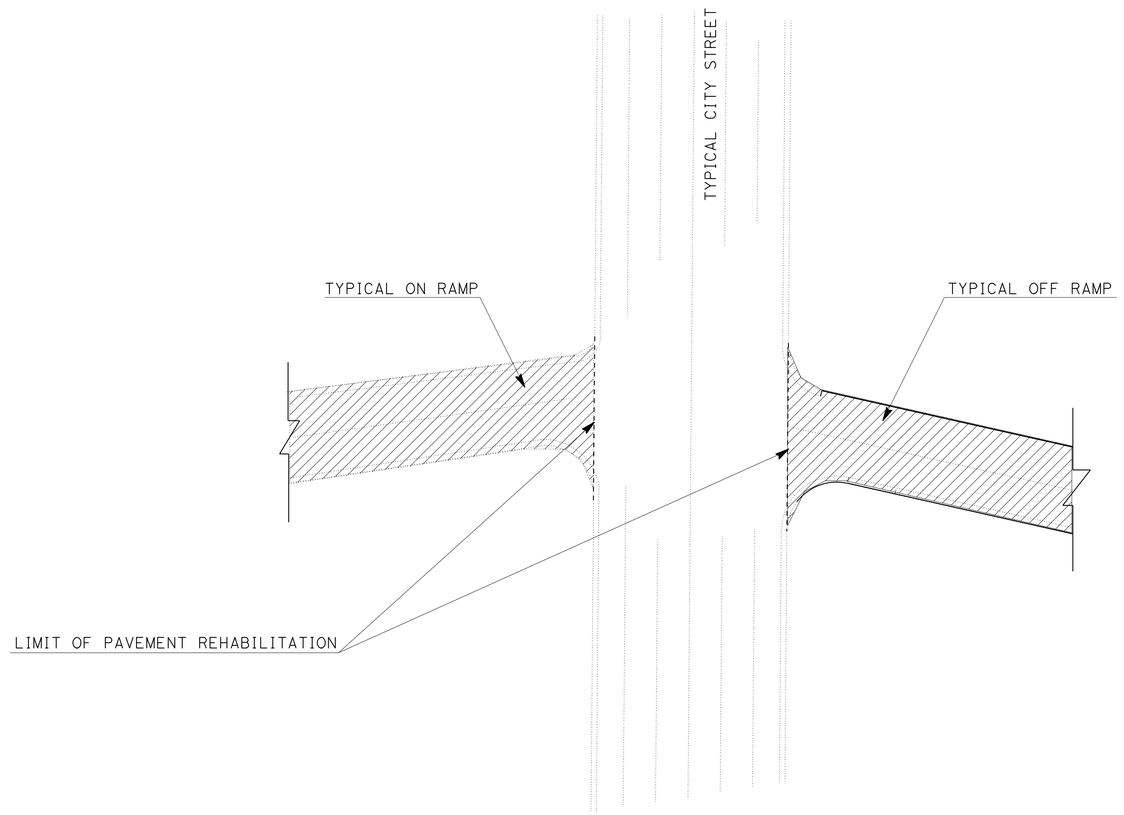
LEGEND:

AREA OF PAVEMENT REHABILITATION



LIMIT OF PAVEMENT REHABILITATION FOR RAMPS

ROUTE 5

CONSTRUCTION DETAILS

NO SCALE

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS THOMAS
CALCULATED-DESIGNED BY: DEBORAH YOST
CHECKED BY: BAHMAN YAZDANI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	10	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

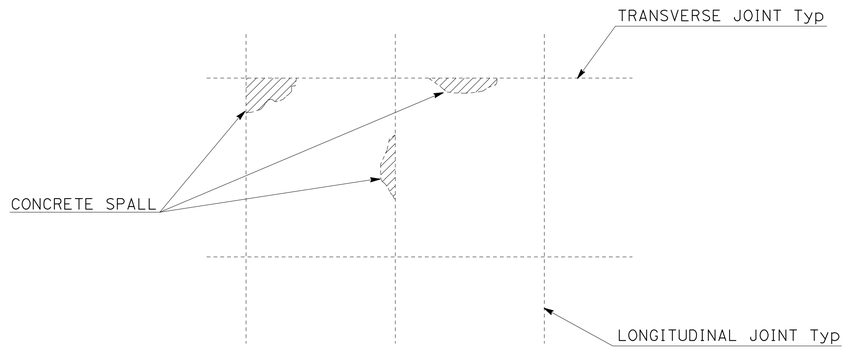
08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
DEBORAH YOST
No. 70685
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

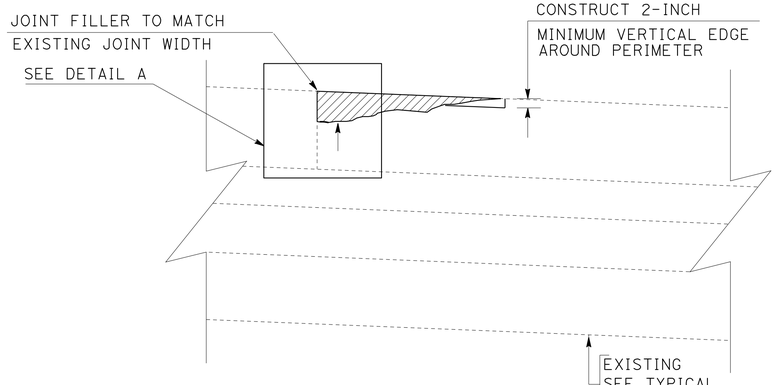
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND

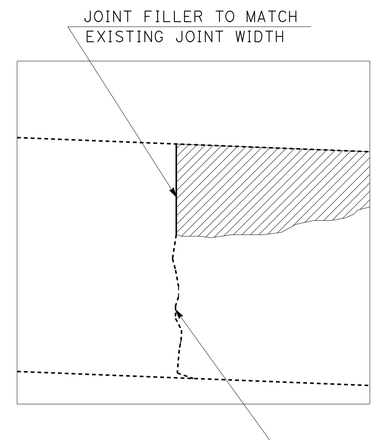
REPAIR SPALLED CONCRETE



PLAN



ELEVATION



DETAIL A

REPAIR SPALLED CONCRETE
TYPICAL DETAIL

NOTE: LOCATIONS AND QUANTITIES TO BE DETERMINED BY THE ENGINEER

CONSTRUCTION DETAILS

NO SCALE

C-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS THOMAS
CALCULATED-DESIGNED BY: DEBORAH YOST
CHECKED BY: BAHMAN YAZDANI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10 DATE PLOTTED => 13-SEP-2010 TIME PLOTTED => 10:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	11	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

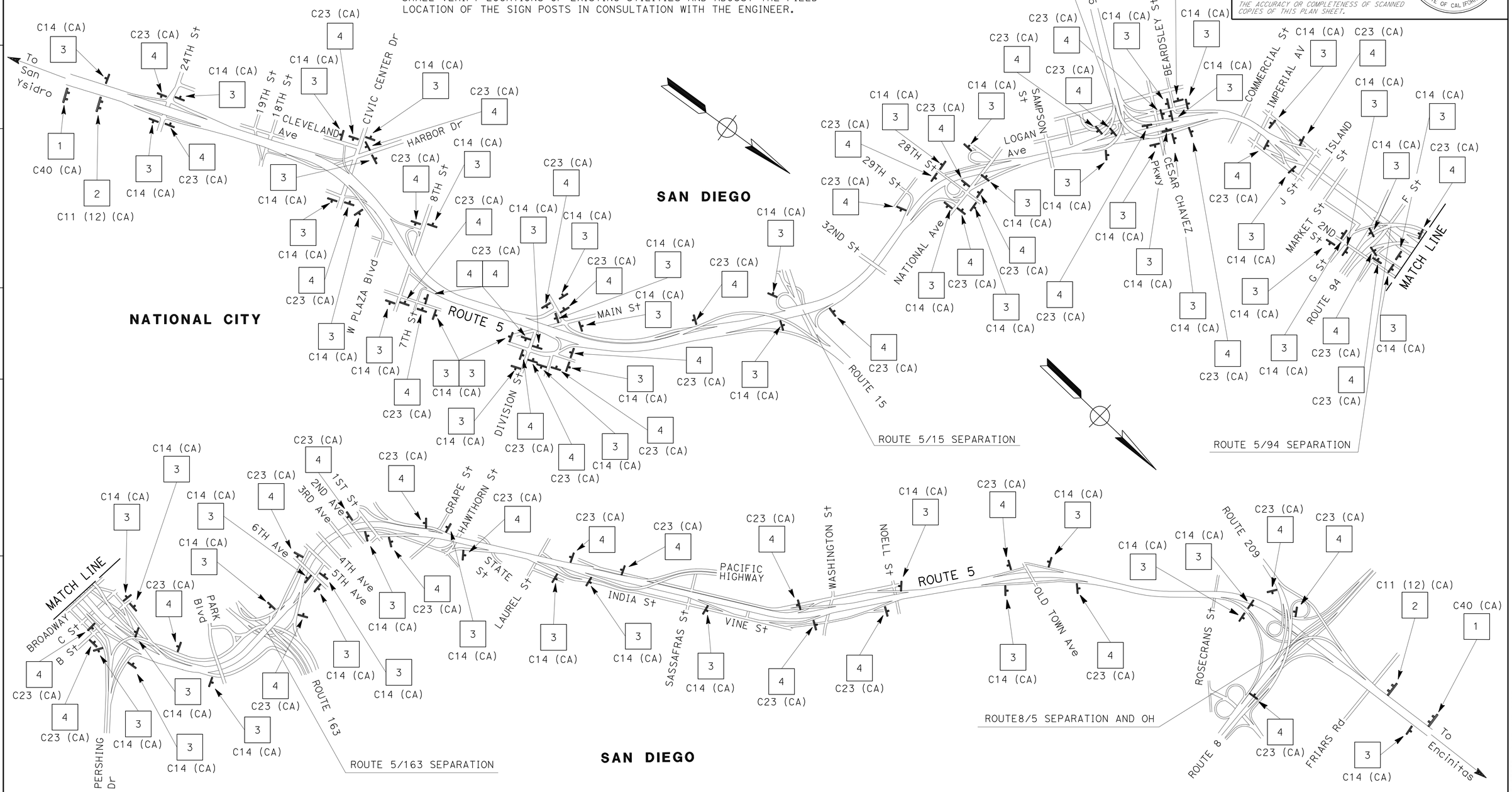
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND:

XX = CONSTRUCTION AREA SIGN

NOTES:

1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS SHALL BE DETERMINED BY THE ENGINEER.
2. FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
3. SEE TRAFFIC HANDLING PLAN FOR ADDITIONAL CONSTRUCTION AREA SIGNS.
4. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF THE SIGN POSTS IN CONSULTATION WITH THE ENGINEER.



CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	12	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

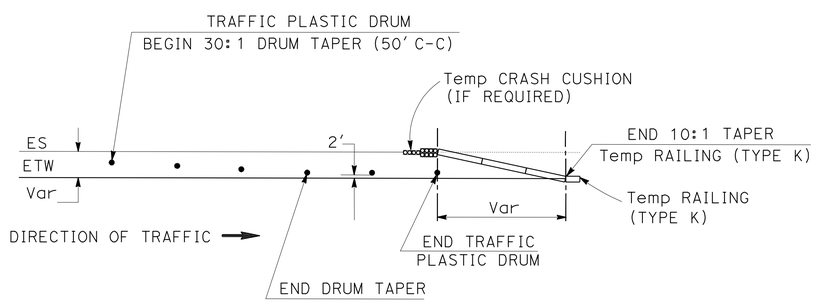
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CONSTRUCTION AREA SIGNS

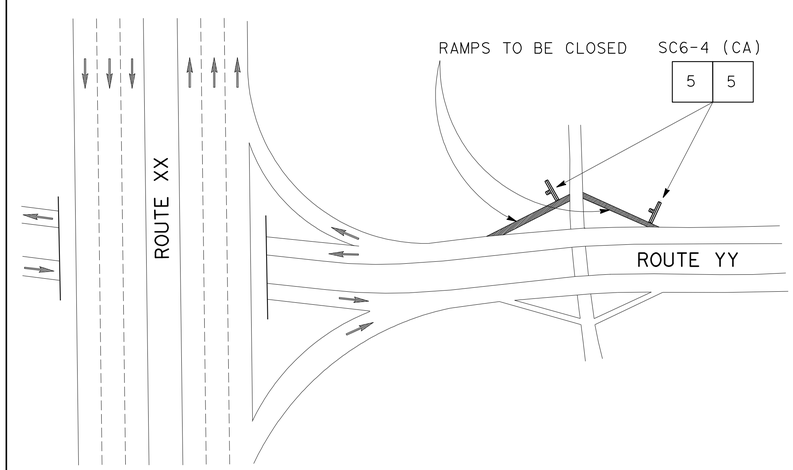
SIGN No.	TYPE	PANEL SIZE (In)	No. OF POST AND SIZE (In)	No. OF SIGNS
1	C40 (CA)	108 X 42	2-4 X 6 (S)	2
2	C11 (12) (CA)	60 X 36	2-4 X 6 (S)	2
3	C14 (CA)	48 X 24	1-4 X 4 (S)	63
4	C23 (CA)	48 X 48	1-4 X 6 (S)	52
5	SC6-4 (CA)	48 X 60	PORTABLE	76
			TOTAL	195

(S) DENOTES STATIONARY MOUNTED SIGN

TYPICAL PLACEMENT OF TRAFFIC PLASTIC DRUM



TYPICAL- PLACEMENT OF SC6-4 (CA)



THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	13	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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

NOTES:

1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS SHALL BE DETERMINED BY THE ENGINEER.
2. FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
3. ROTATE ARROW ON SC9 (CA) PANEL TO REFLECT DIRECTION OF DETOUR.
4. SEE CONSTRUCTION AREA SIGN PLAN FOR ADDITIONAL CONSTRUCTION AREA SIGNS.
5. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF THE SIGN POSTS IN CONSULTATION WITH THE ENGINEER.

LEGEND

XX = CONSTRUCTION AREA SIGNS

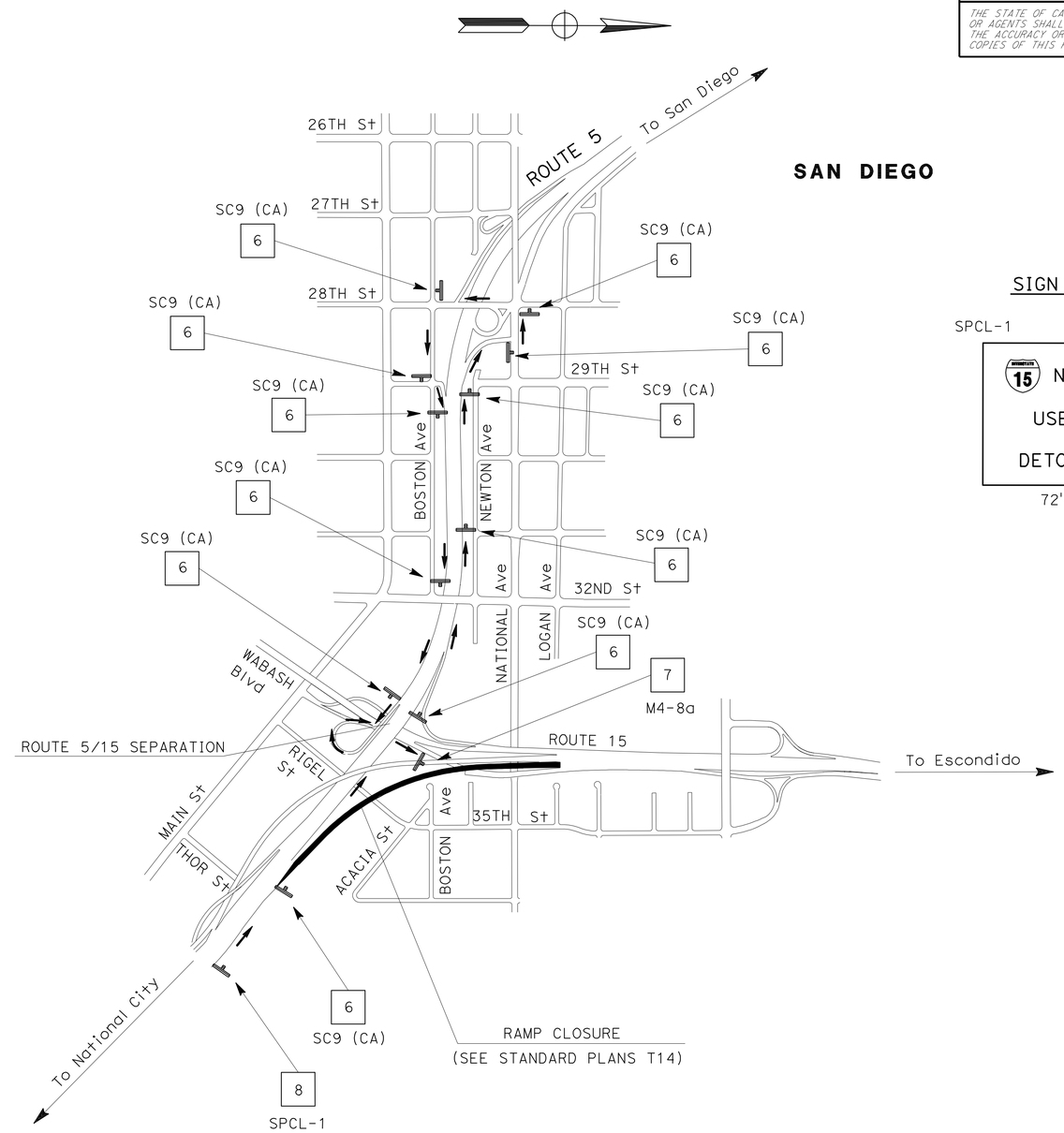
SPCL = SPECIAL CONSTRUCTION AREA SIGN

Caps = CAPITAL LETTERING

→ = DETOUR DIRECTION OF TRAVEL

CONSTRUCTION AREA SIGNS

SIGN No.	TYPE	PANEL SIZE (In)	No. OF POSTS AND SIZE (In)	No. OF SIGNS
6	SC9 (CA)	36 X 36	PORTABLE	206
7	M4-8a	24 X 18	PORTABLE	23
8	SPCL-1	72 X 72	PORTABLE	2
9	SPCL-2	72 X 72	PORTABLE	6
10	SPCL-3	72 X 72	PORTABLE	2
11	SPCL-4	72 X 72	PORTABLE	4
12	SPCL-5	72 X 72	PORTABLE	1
13	SPCL-6	72 X 72	PORTABLE	2
14	SPCL-7	72 X 72	PORTABLE	1
15	SPCL-8	72 X 72	PORTABLE	1
16	SPCL-9	72 X 72	PORTABLE	4
17	SPCL-10	72 X 72	PORTABLE	1
18	SPCL-11	72 X 72	PORTABLE	1
19	SPCL-12	72 X 72	PORTABLE	1
20	SPCL-13	72 X 72	PORTABLE	1
21	M4-10R	48 X 18	PORTABLE	1
22	SC3 (CA)	48 X 18	PORTABLE	1
			TOTAL	258



SIGN #8

SPCL-1 8" Caps

15 NORTH
USE
DETOUR

72" 72"

NB 5 CONNECTOR TO NB 15 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-1

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

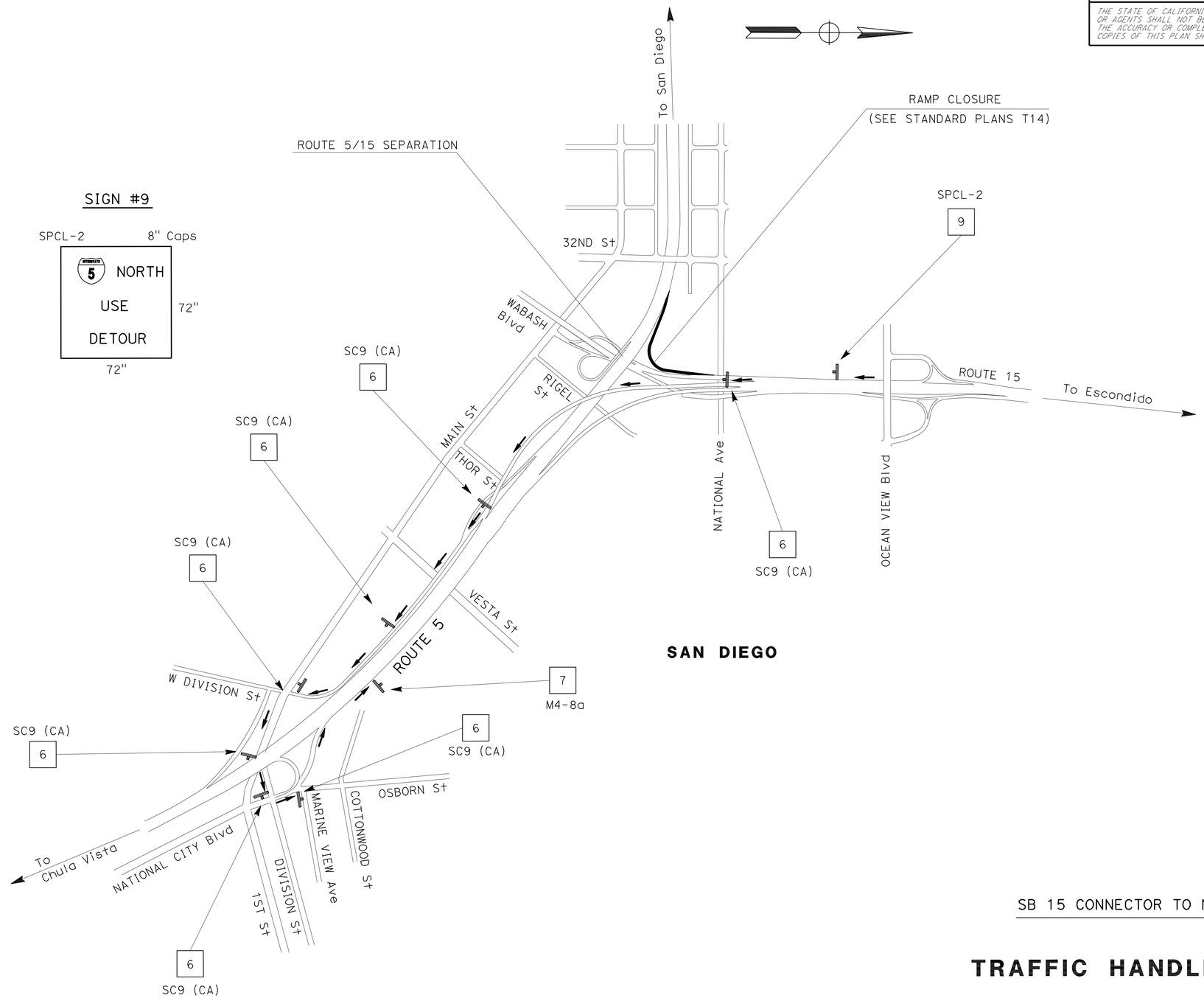
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	14	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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



THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

SB 15 CONNECTOR TO NB 5 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

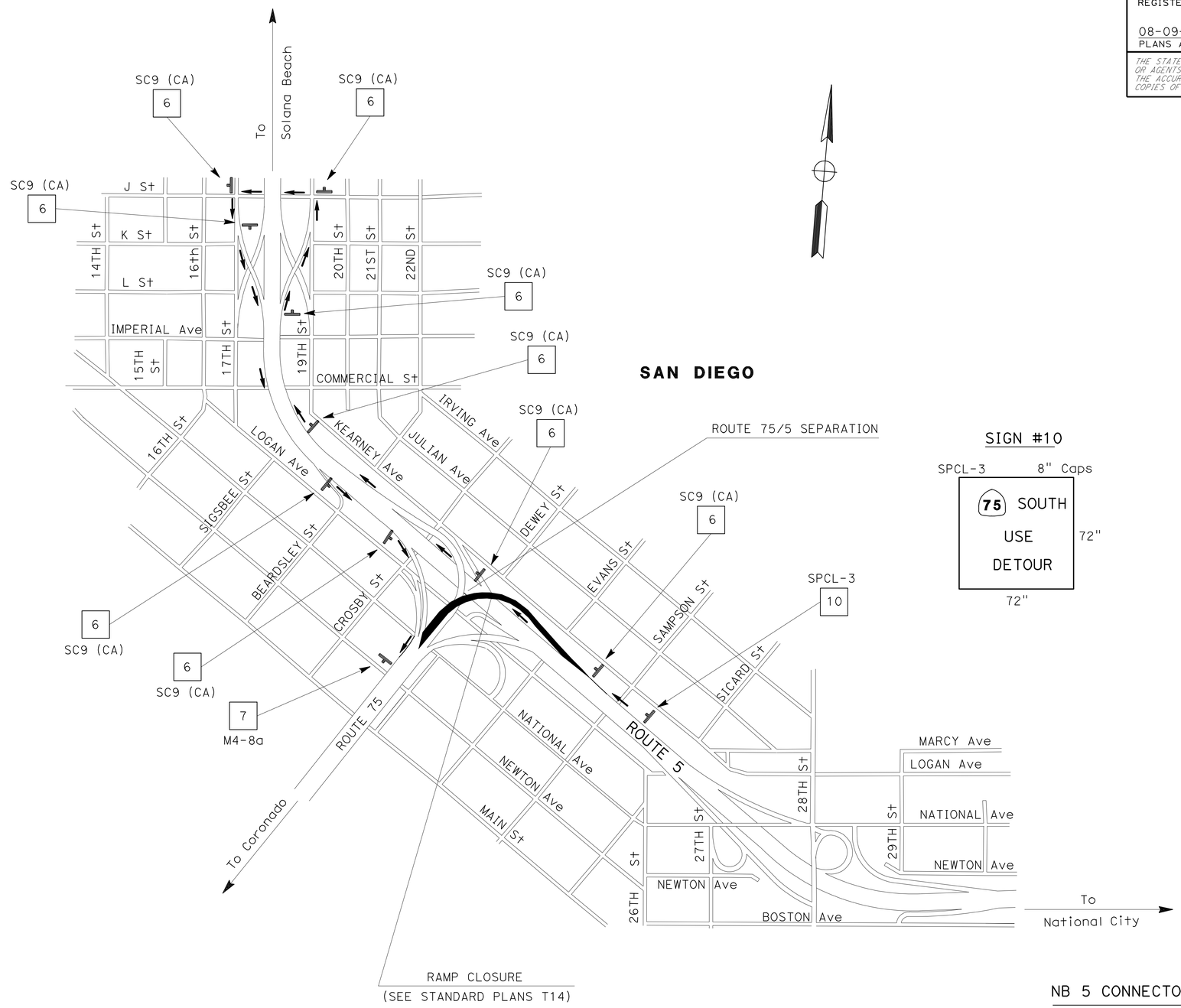
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	15	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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



SAN DIEGO

SIGN #10

SPCL-3 8" Caps

75 SOUTH
USE
DETOUR

72"
72"

NB 5 CONNECTOR TO SB 75 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-3

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	16	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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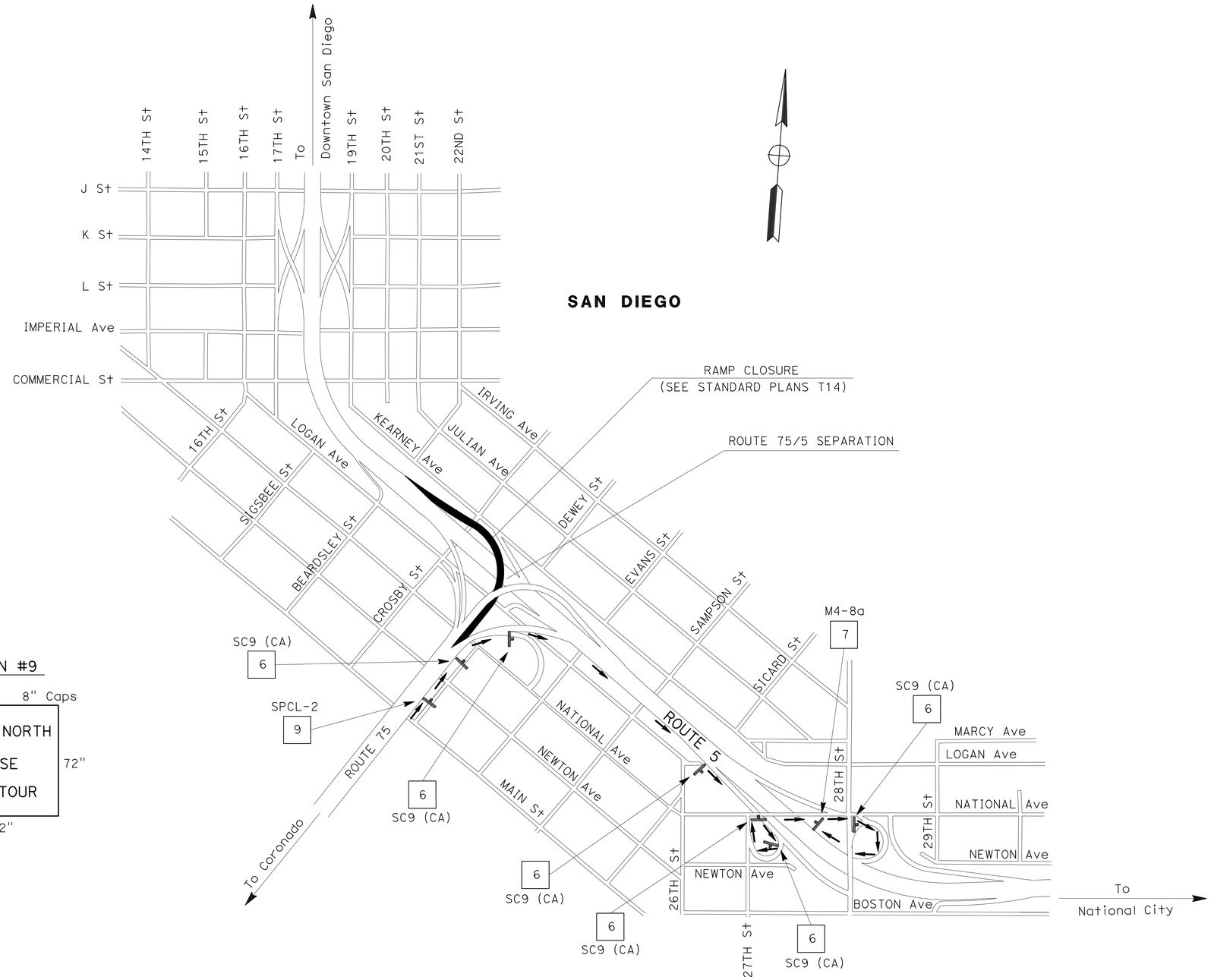


SIGN #9

SPCL-2 8" Caps

NORTH
USE
DETOUR

72" 72"

NB 75 CONNECTOR TO NB 5 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-4

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

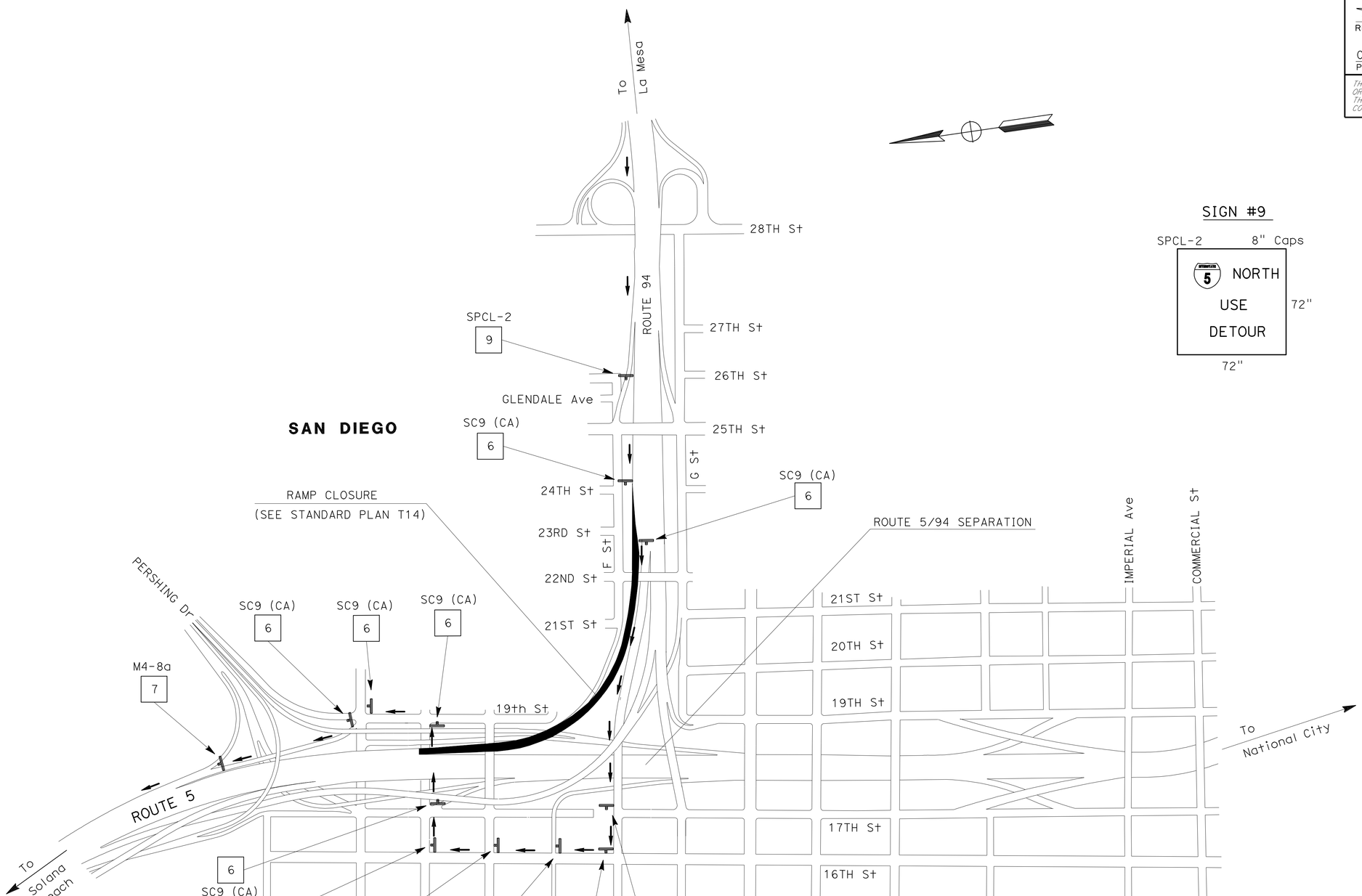
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	17	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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



SIGN #9

SPCL-2 8" Caps

5 NORTH
USE
DETOUR

72" 72"

WB 94 CONNECTOR TO NB 5 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-5

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:01

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s127400 | DGN FILE => b24010md005.dgn | CU 11383 | EA 240101

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	18	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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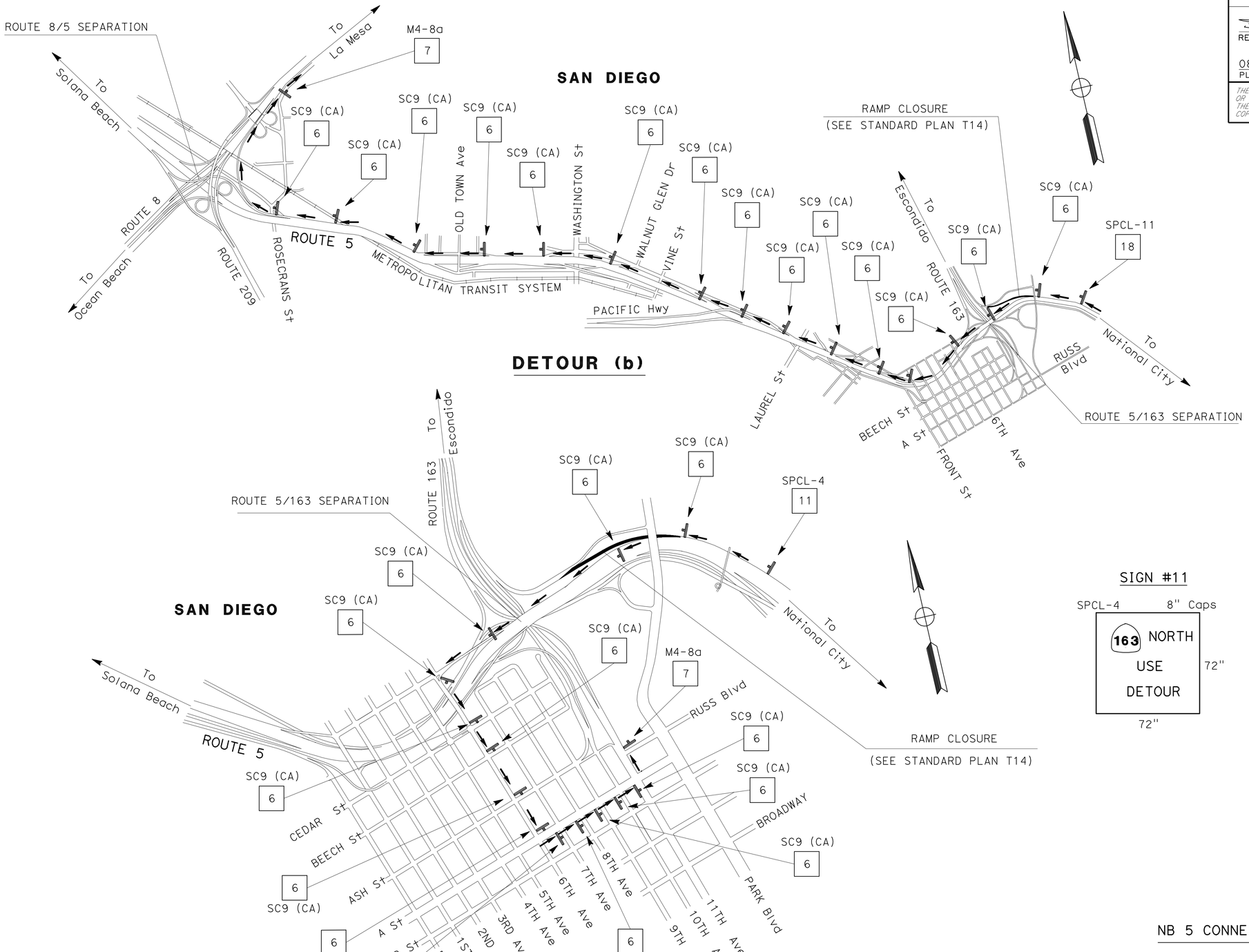

SIGN #11

SPCL-4 8" Caps

163 NORTH
USE
DETOUR

72" × 72"

SIGN #18

SPCL-11 8" Caps

163 NORTH
USE
8 EAST

72" × 72"

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

NB 5 CONNECTOR TO NB 163 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	19	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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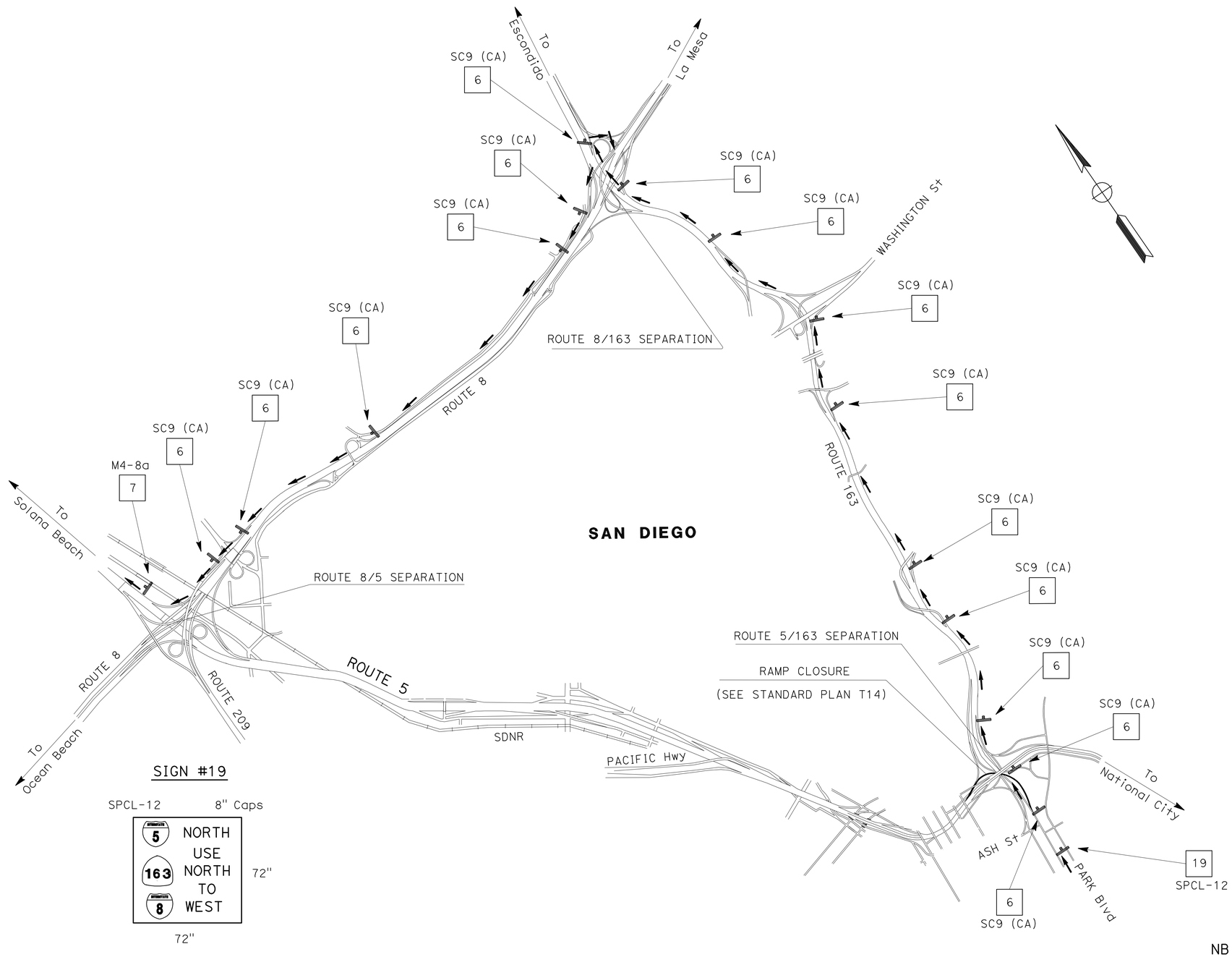

SIGN #19

SPCL-12 8" Caps

5	NORTH
163	USE NORTH TO WEST
8	

72" 72"

NB 163 CONNECTOR TO NB 5 DETOUR

TRAFFIC HANDLING PLAN

TH-7

NO SCALE

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	20	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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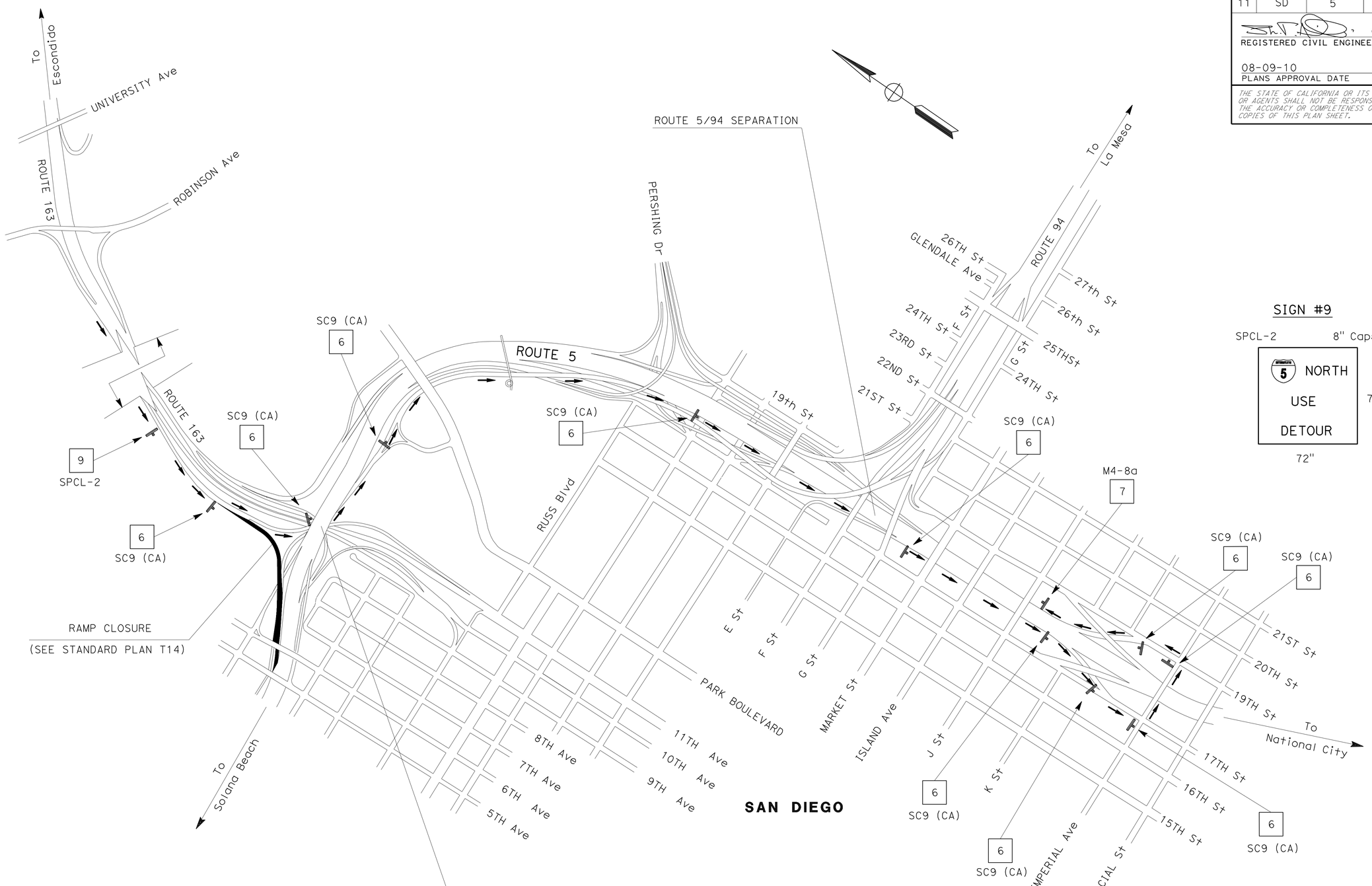

SIGN #9

SPCL-2 8" Caps

5 NORTH
USE
DETOUR

72" 72"

SB 163 CONNECTOR TO NB 5 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-8

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	21	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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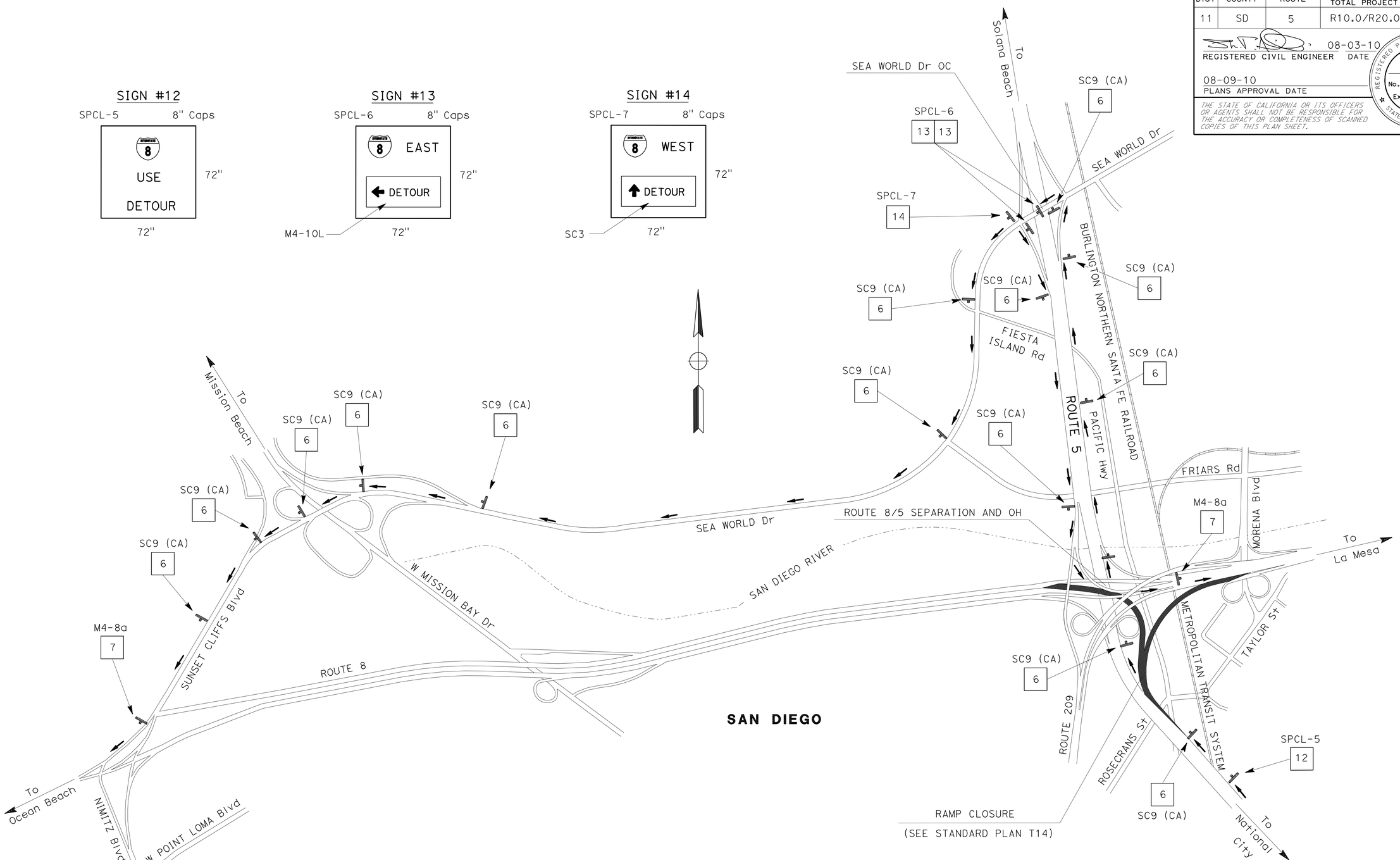

NB 5 CONNECTOR TO EB/WB 8 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-9

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 13-AUG-2010
08-11-10 TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	22	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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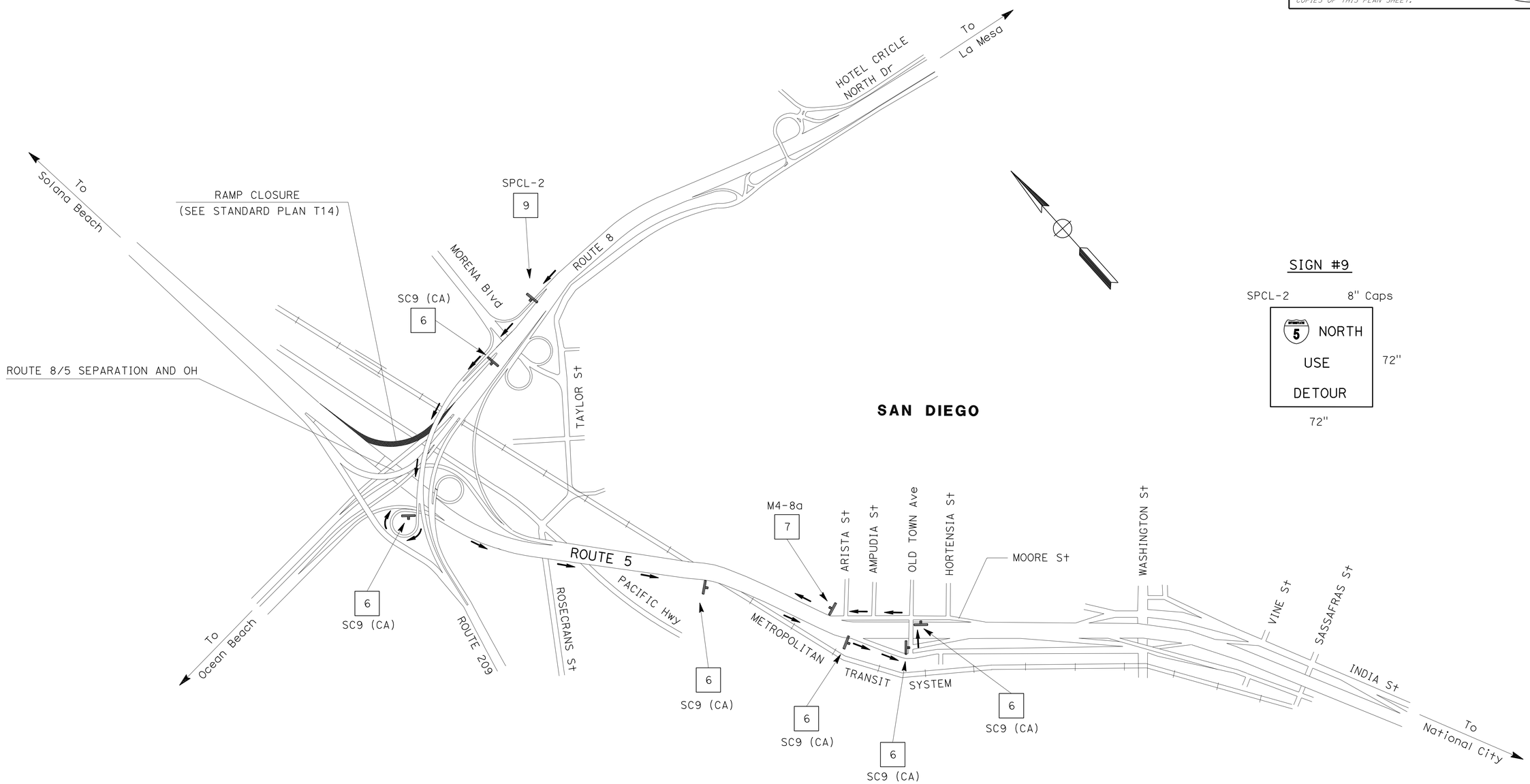


SIGN #9

SPCL-2 8" Caps

5 NORTH
USE
DETOUR

72"

72"

NB 5 CONNECTOR FROM WB 8 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-10

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:02

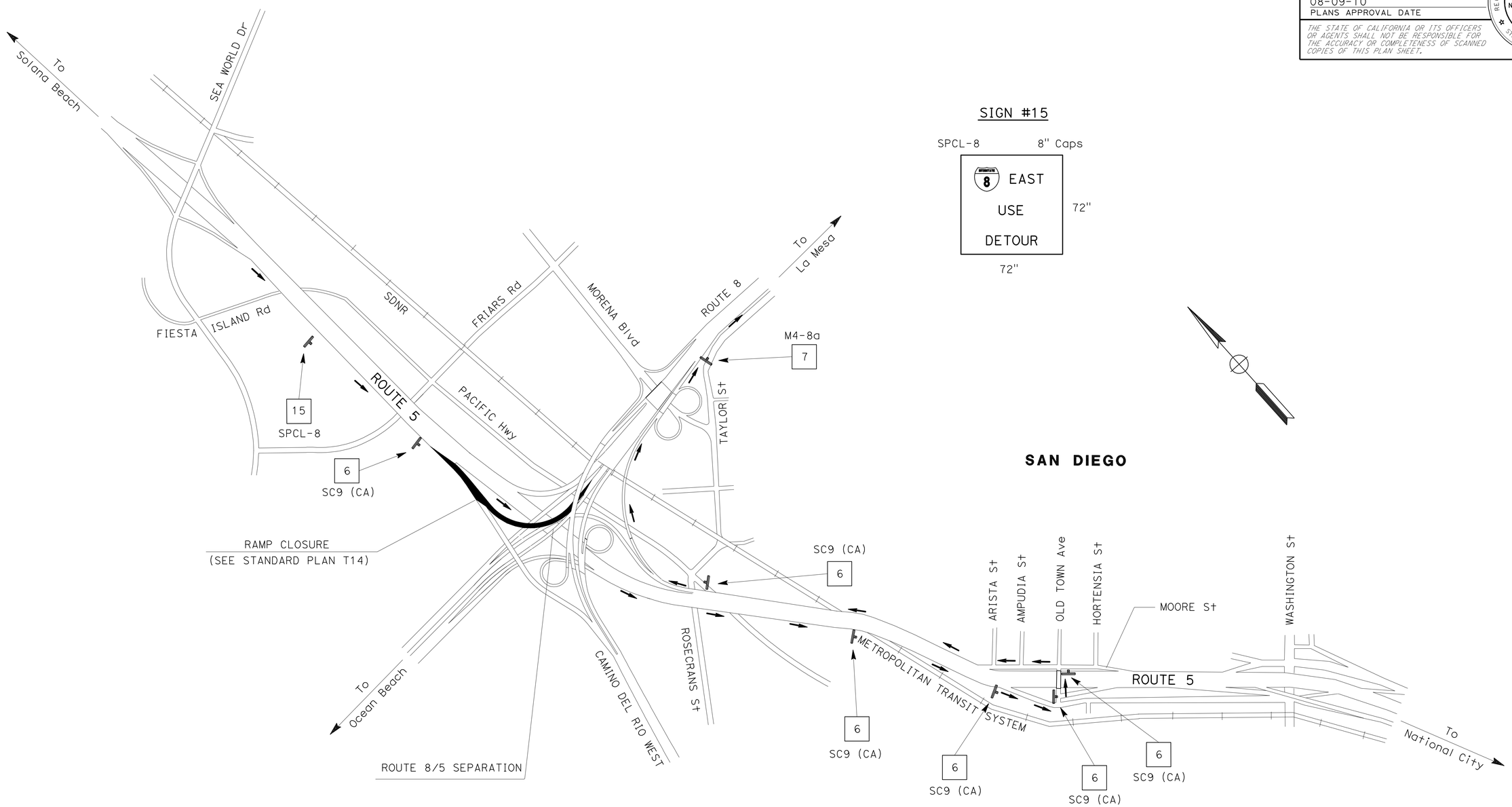
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	23	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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



SIGN #15

SPCL-8 8" Caps

8 EAST
USE
DETOUR

72"

72"

SAN DIEGO

SB 5 CONNECTOR TO EB 8 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-11

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	24	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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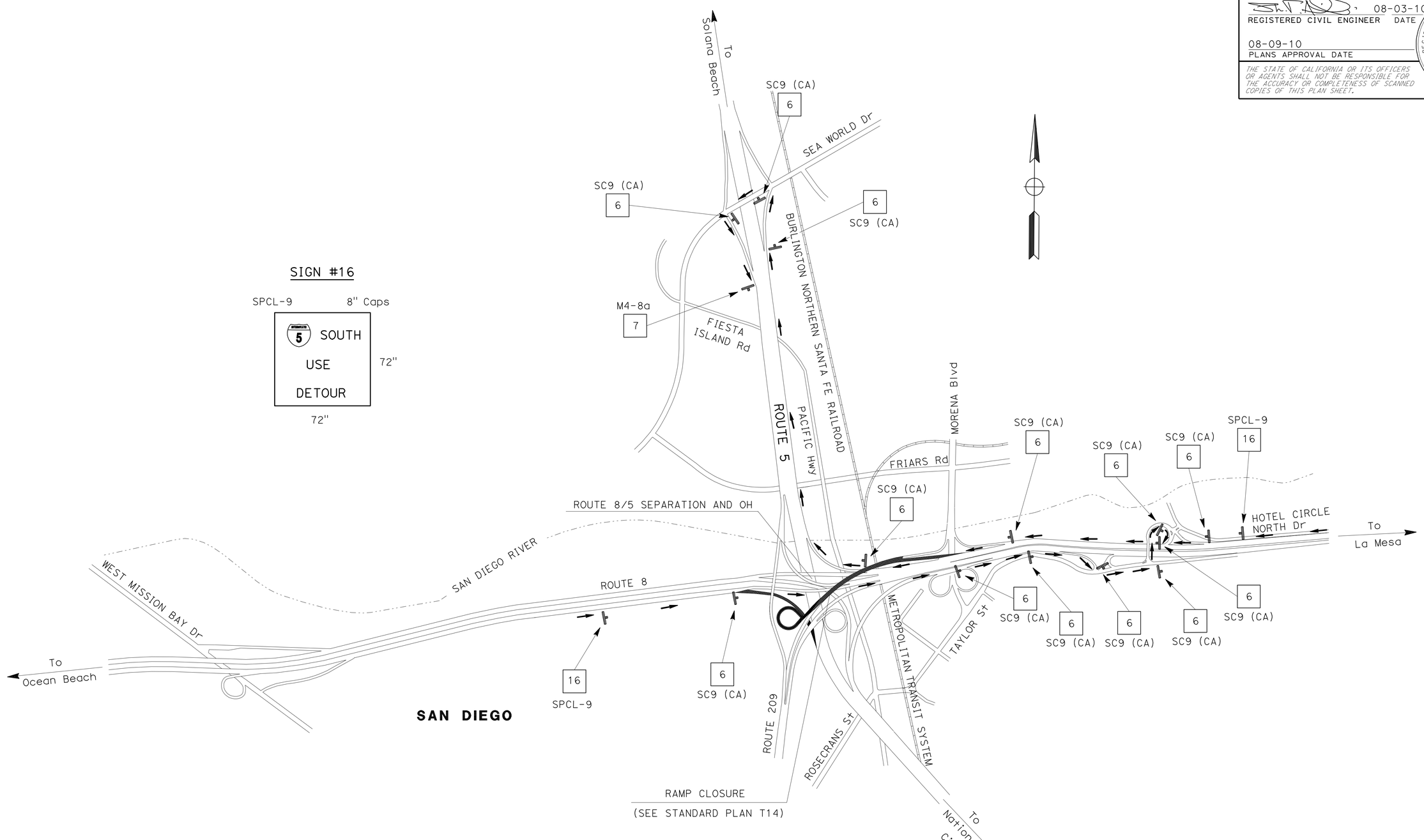
SIGN #16

SPCL-9 8" Caps

5 SOUTH
USE
DETOUR

72" 72"



SB 5 CONNECTOR FROM EB/WB 8 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-12

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	25	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

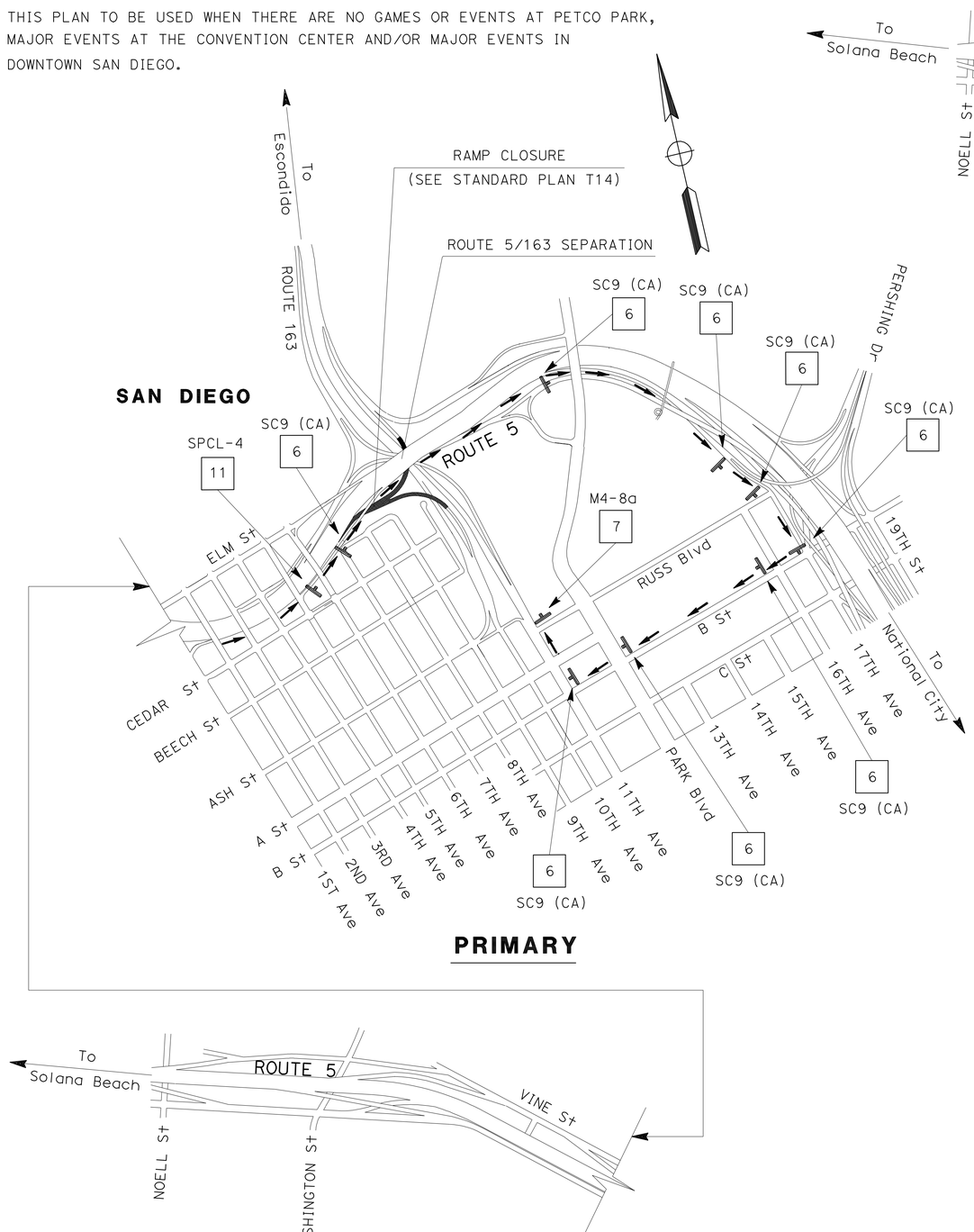
08-09-10
PLANS APPROVAL DATE

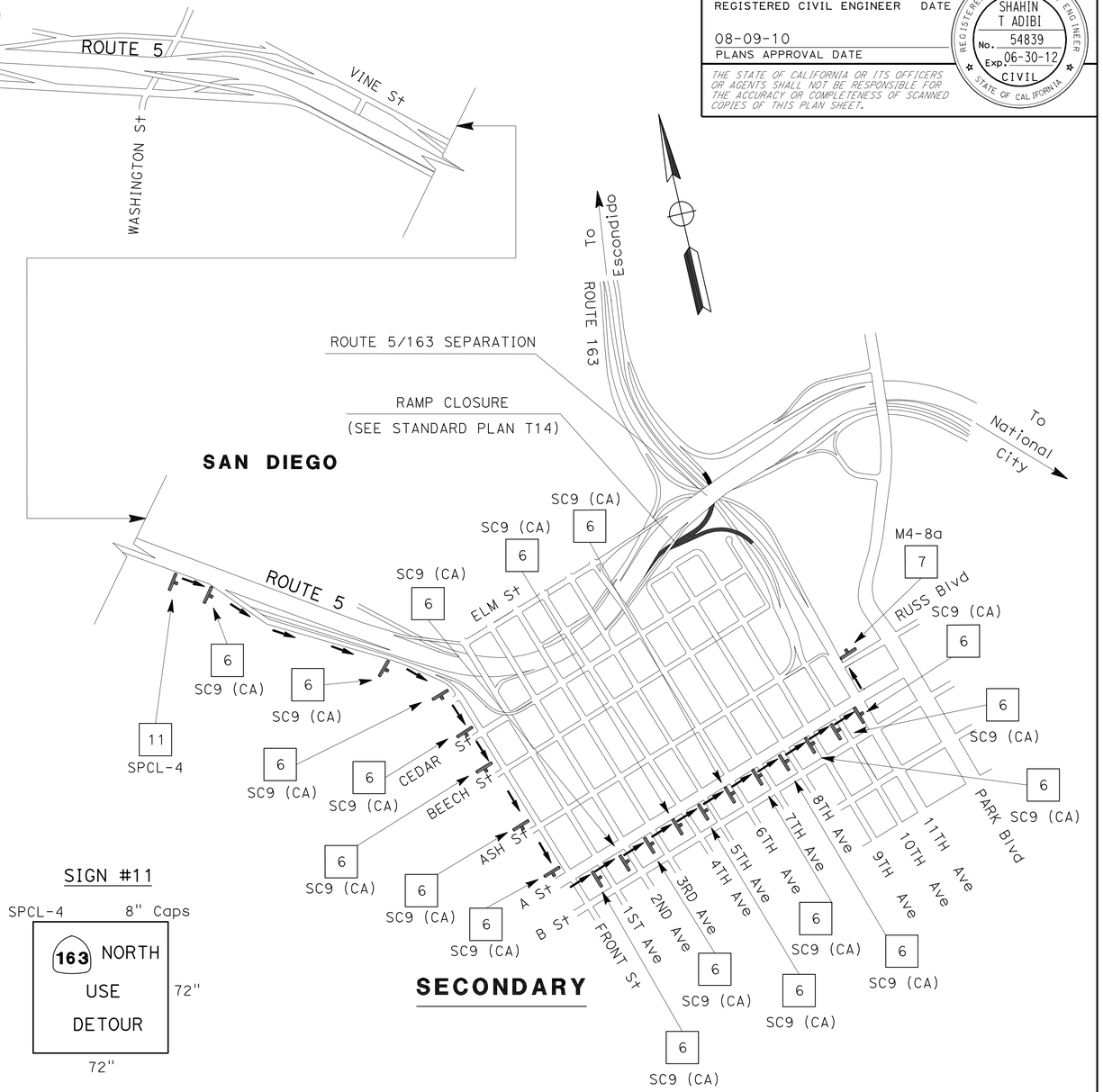
REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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

NOTE:

THIS PLAN TO BE USED WHEN THERE ARE NO GAMES OR EVENTS AT PETCO PARK, MAJOR EVENTS AT THE CONVENTION CENTER AND/OR MAJOR EVENTS IN DOWNTOWN SAN DIEGO.





SIGN #11

SPCL-4 8" Caps

163 NORTH
USE
DETOUR

72" 72"

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

SB 5 CONNECTOR TO NB 163/10TH AVENUE DETOUR (A)

TRAFFIC HANDLING PLAN

NO SCALE

TH-13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	26	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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

NOTE:

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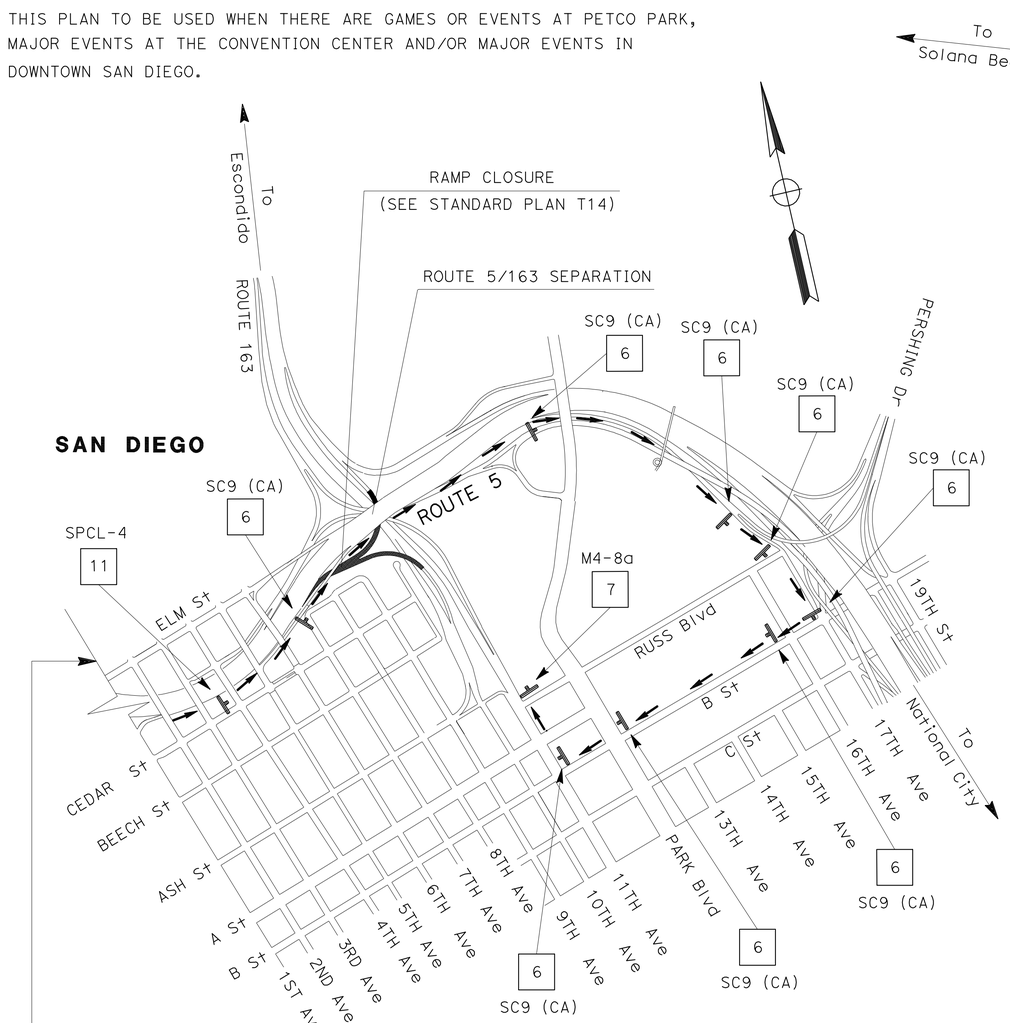
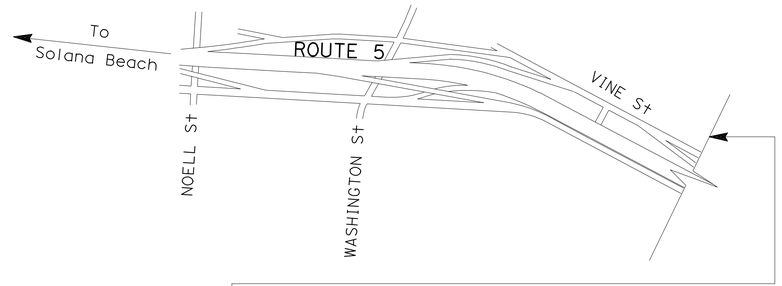
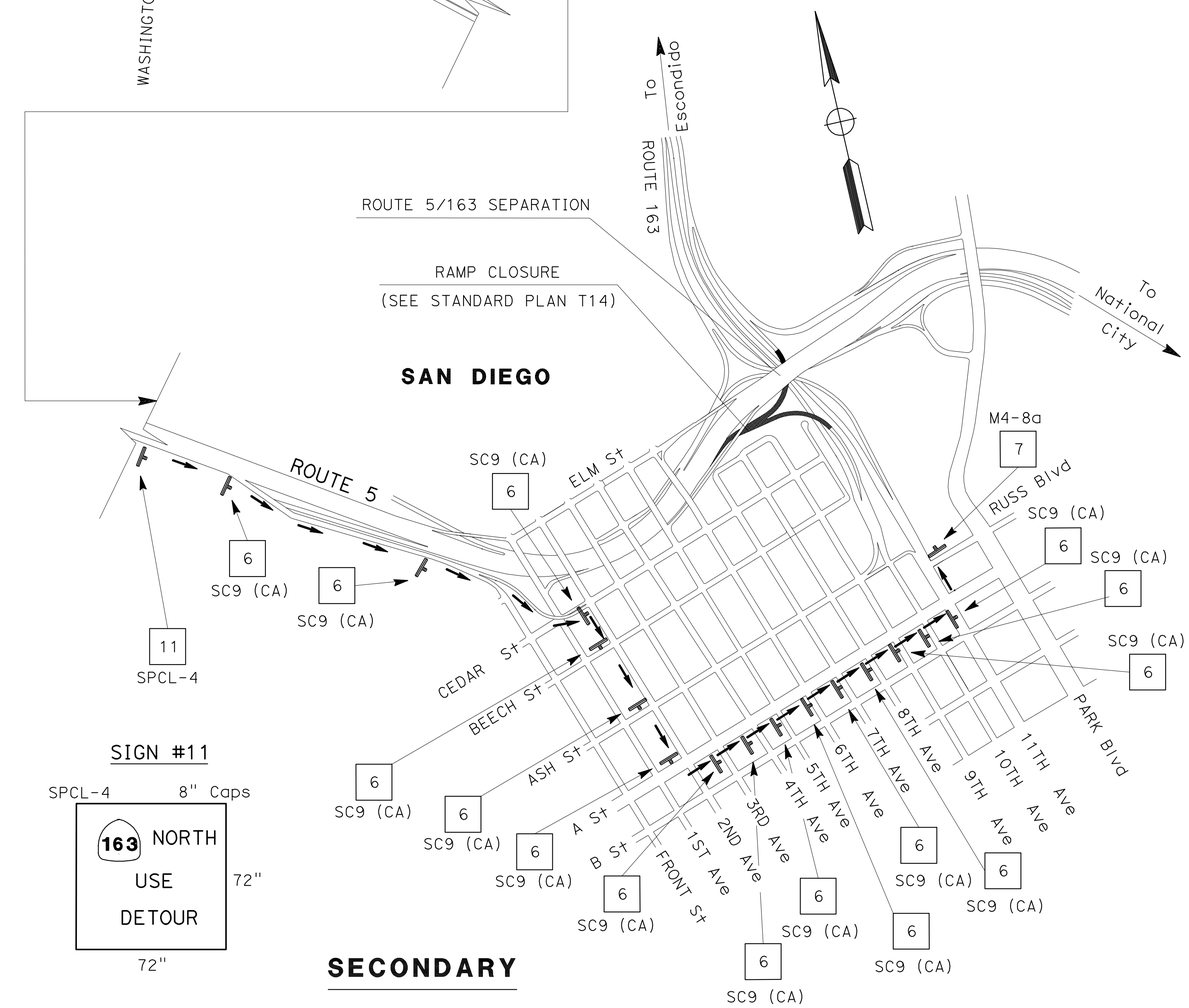


PRIMARY





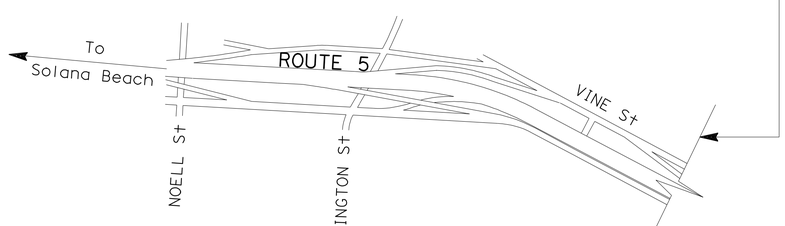
SECONDARY

SIGN #11

SPCL-4 8" Caps

163 NORTH USE DETOUR

72" 72"



THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

SB 5 CONNECTOR TO NB 163/10TH AVENUE DETOUR (B)

TRAFFIC HANDLING PLAN

NO SCALE

TH-14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	27	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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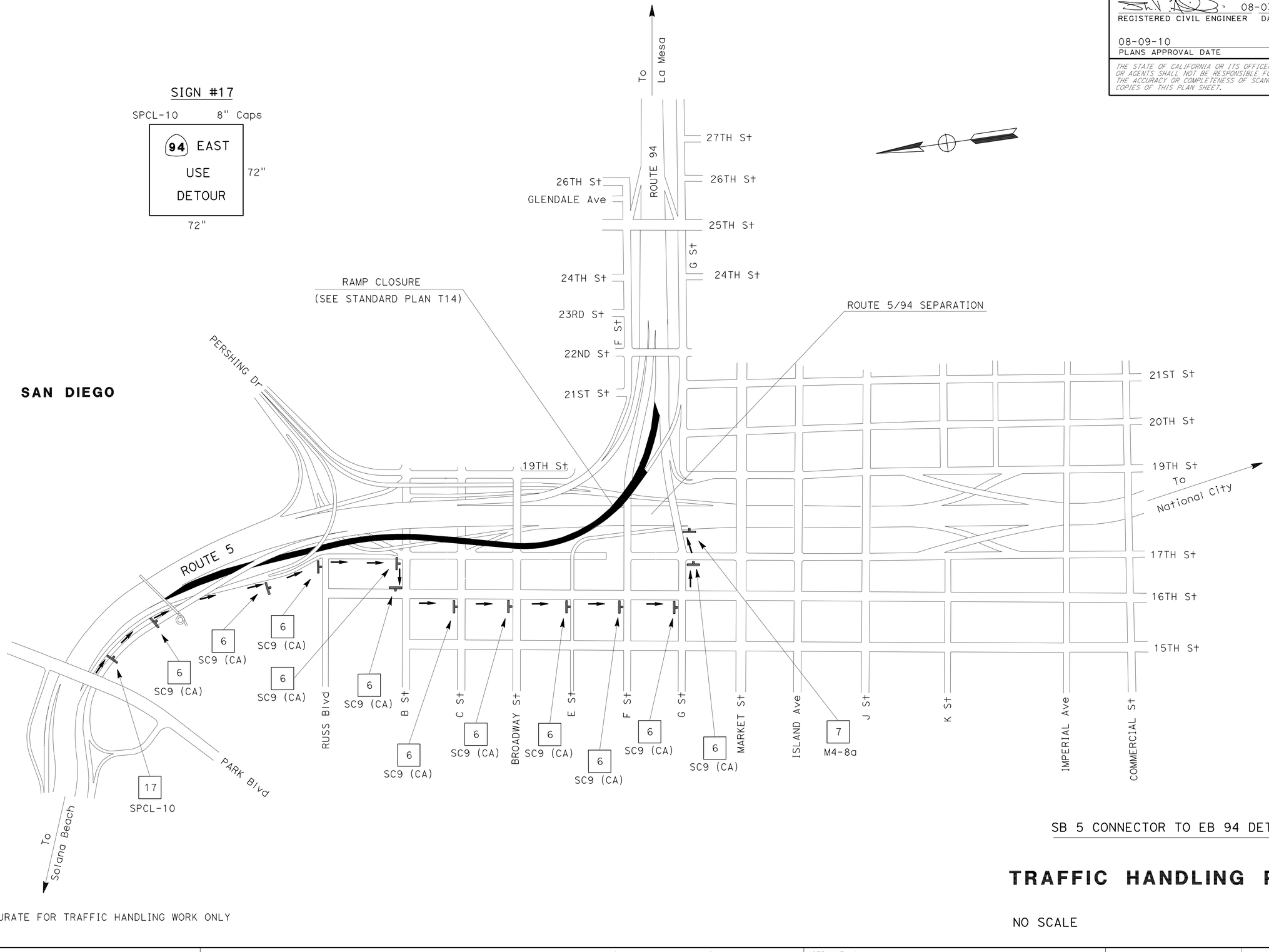

SB 5 CONNECTOR TO EB 94 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-15

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	28	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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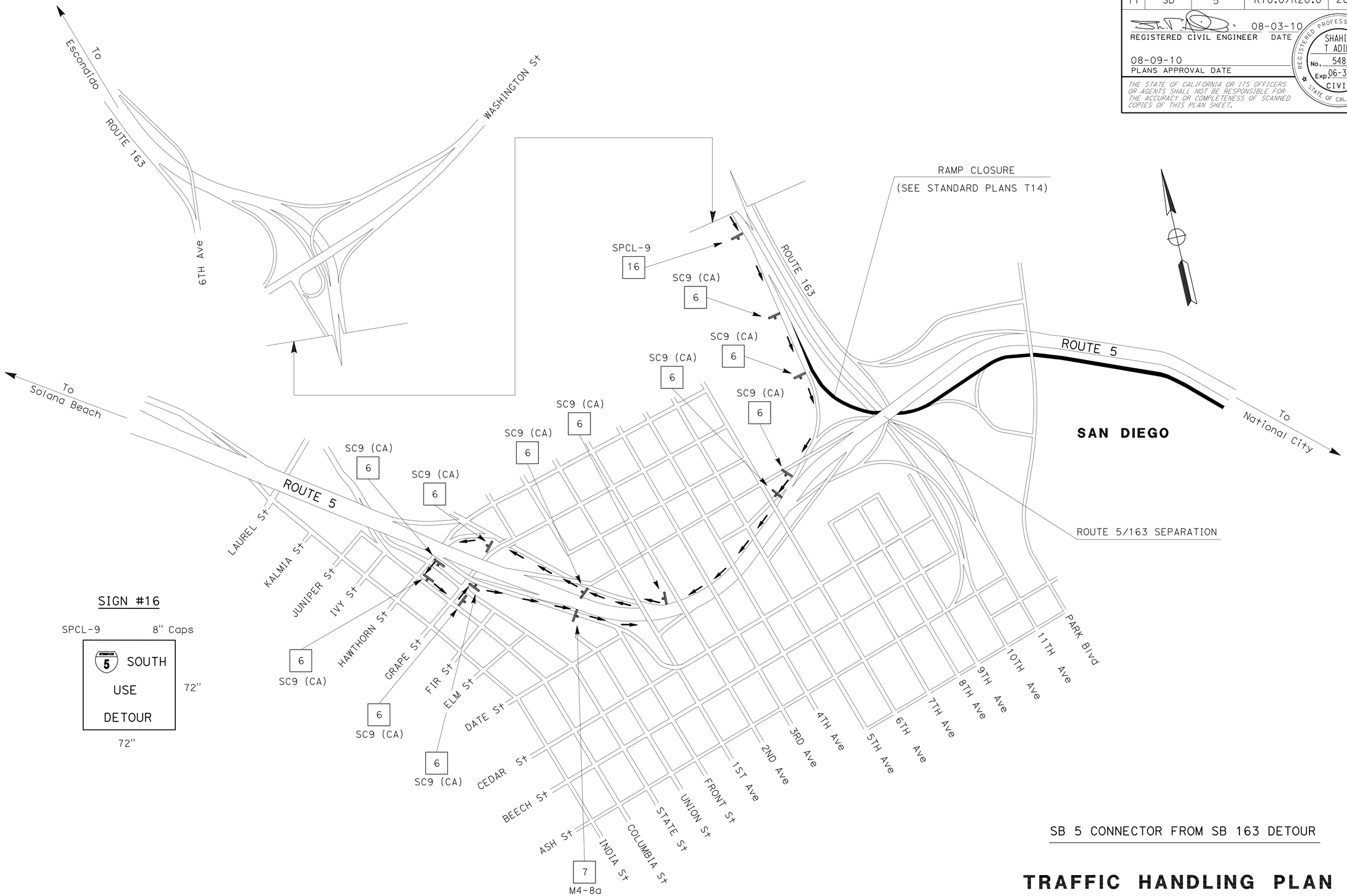

SIGN #16

SPCL-9 8" Caps

SOUTH
USE
DETOUR

72" 72"

SB 5 CONNECTOR FROM SB 163 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-16

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

REVISED BY	DATE REVISED
ROBERT EDEJER	SHAHIN T ADIBI
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:02

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	29	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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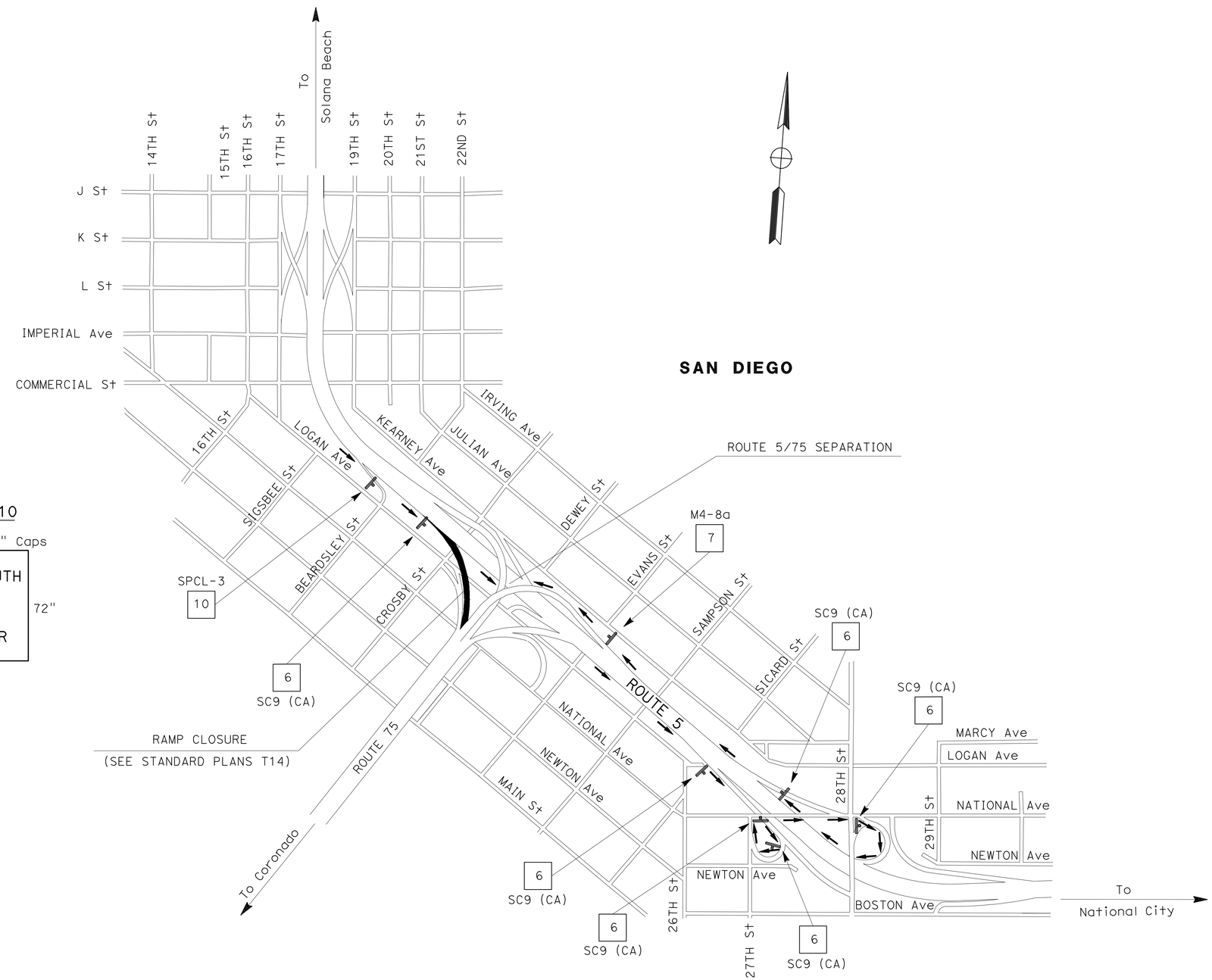

SIGN #10

SPCL-3 8" Caps

75 SOUTH
USE
DETOUR

72" 72"

SB 5 CONNECTOR TO SB 75 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-17

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	30	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
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STATE OF CALIFORNIA

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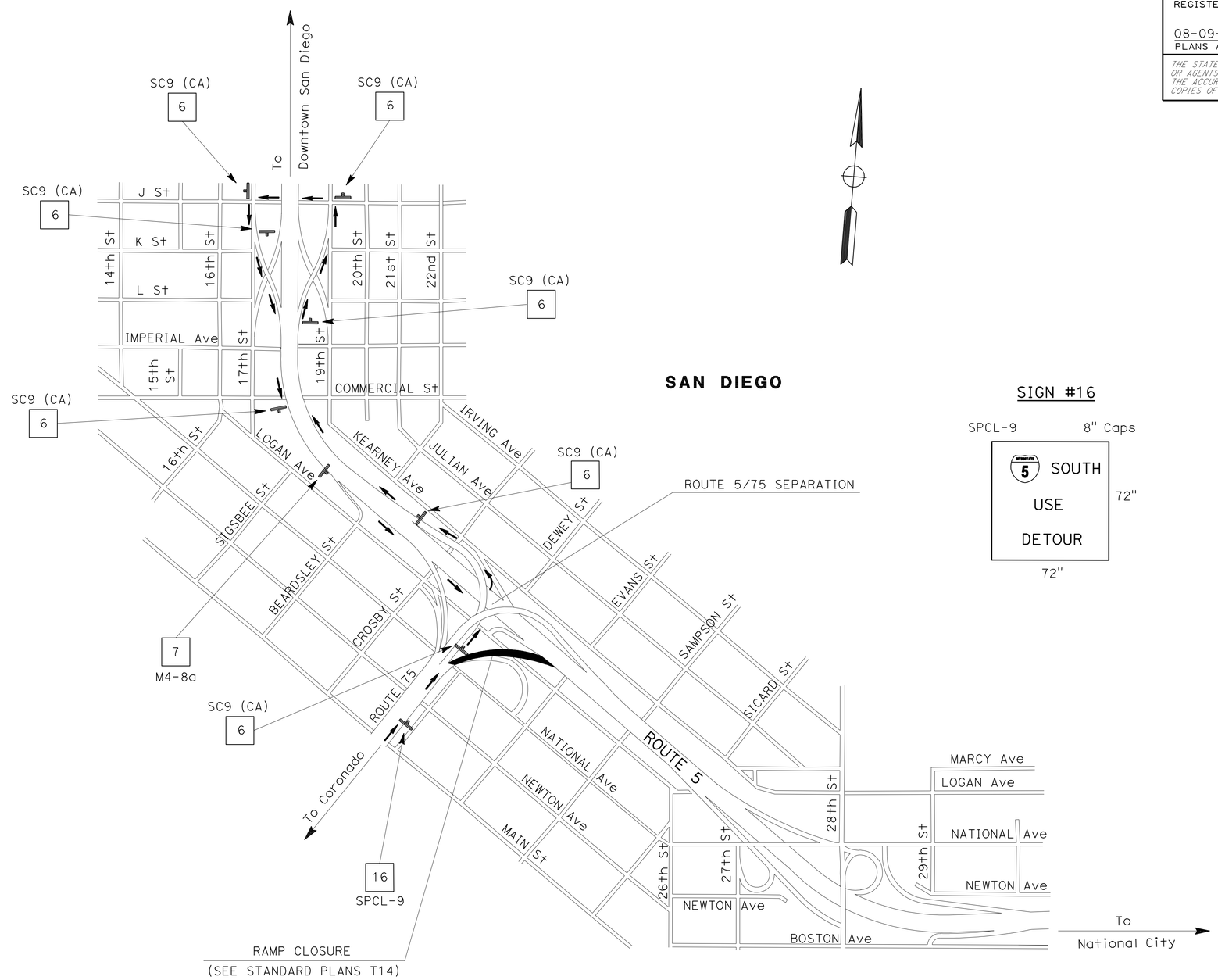

SIGN #16

SPCL-9 8" Caps

5 SOUTH
USE
DETOUR

72"

72"

SB 5 CONNECTOR FROM NB 75 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-18

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

REVISED BY	DATE REVISED

ROBERT EDEJER — CALCULATED-DESIGNED BY
SHAHIN T ADIBI — CHECKED BY
CAMILLE ABOUFADEL — FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	31	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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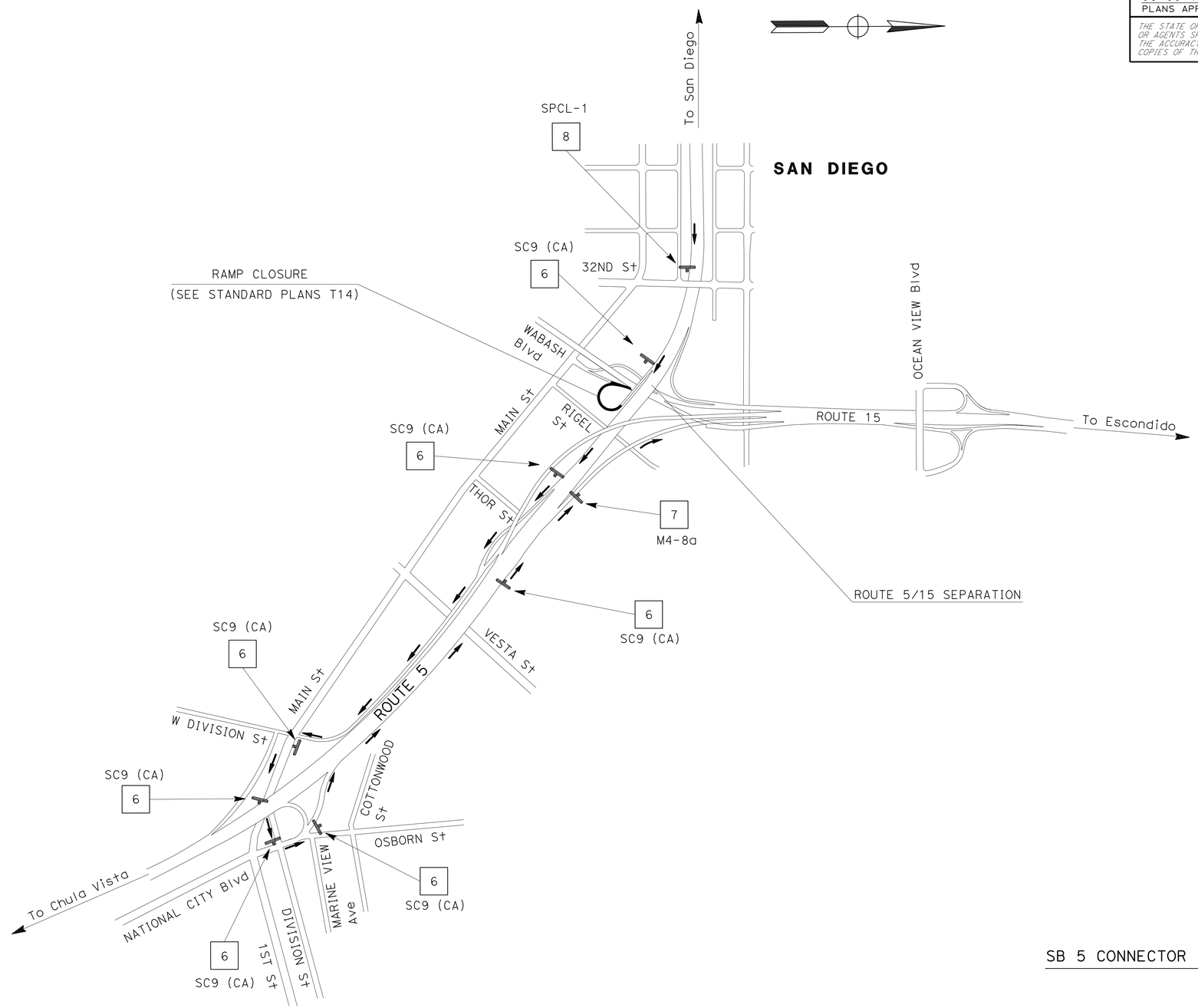
SIGN #8

SPCL-1 8" Caps

15 NORTH
USE
DETOUR

72" 72"



SB 5 CONNECTOR TO NB 15 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-19

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	32	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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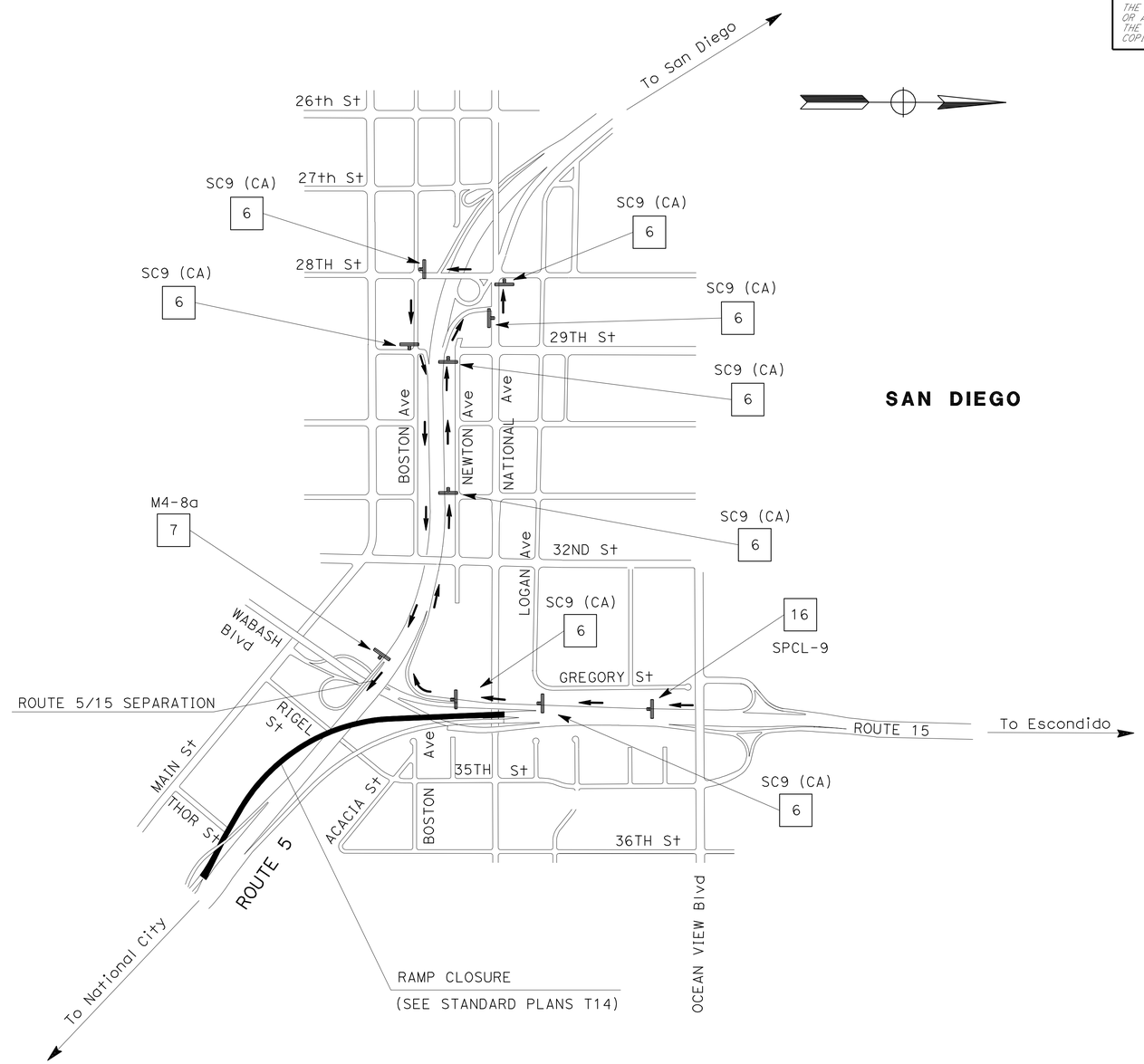
SIGN #16

SPCL-9 8" Caps

SOUTH
USE
DETOUR

72"

72"



SAN DIEGO

SB 5 CONNECTOR FROM SB 15 DETOUR

TRAFFIC HANDLING PLAN

NO SCALE

TH-20

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL

CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI

REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	33	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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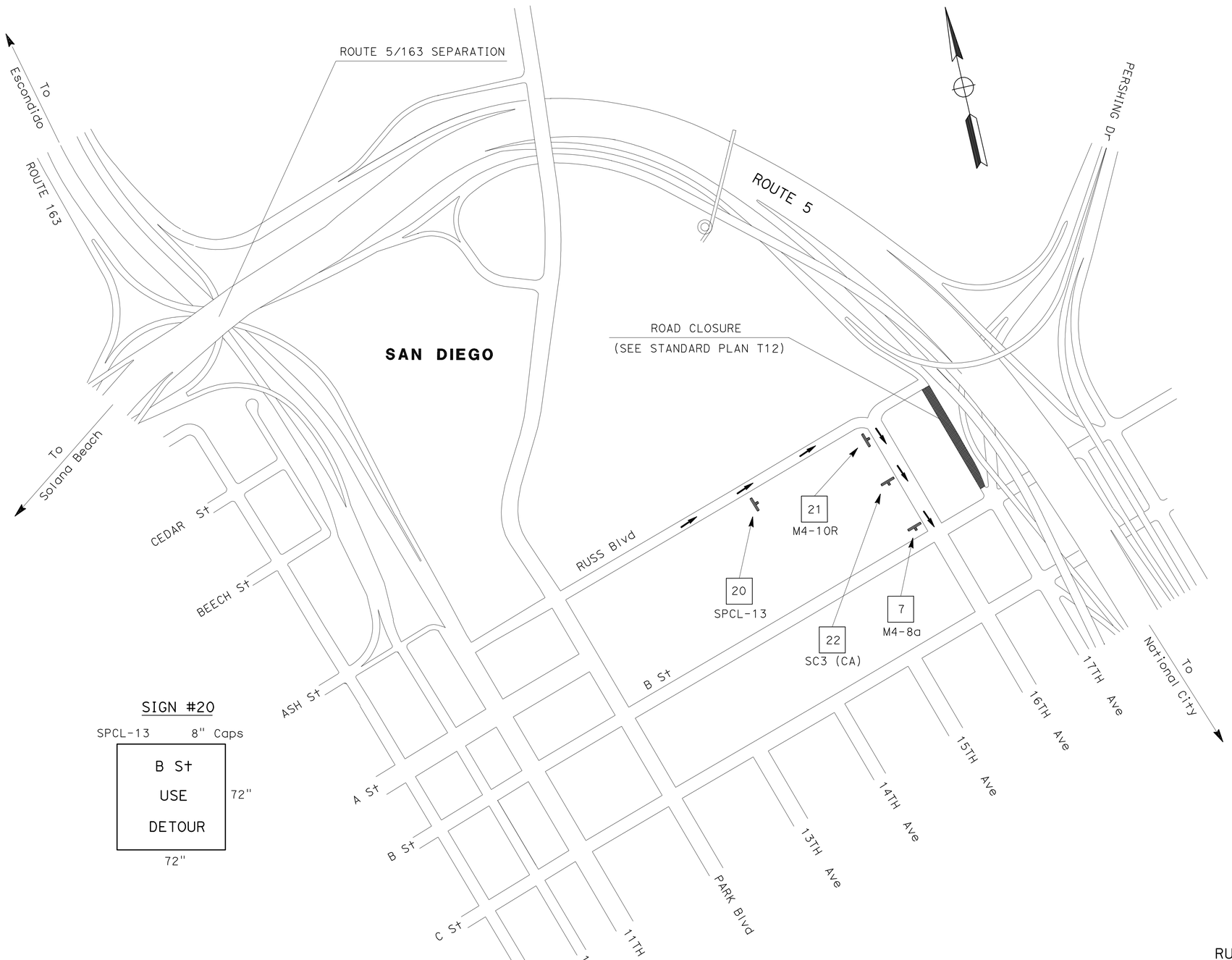

SIGN #20

SPCL-13 8" Caps

B St
USE
DETOUR

72" 72"

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

RUSS BOULEVARD TO B STREET

TRAFFIC HANDLING PLAN

NO SCALE

TH-21

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN T ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	34	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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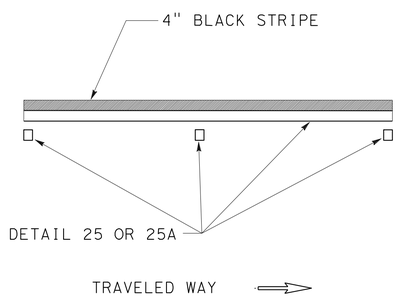
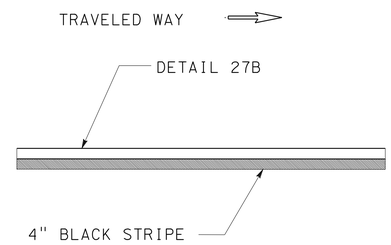
DETAIL 25 (Mod) AND 25A (Mod)

TYPICAL



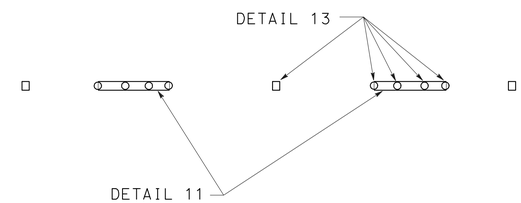
DETAIL 27B (Mod)

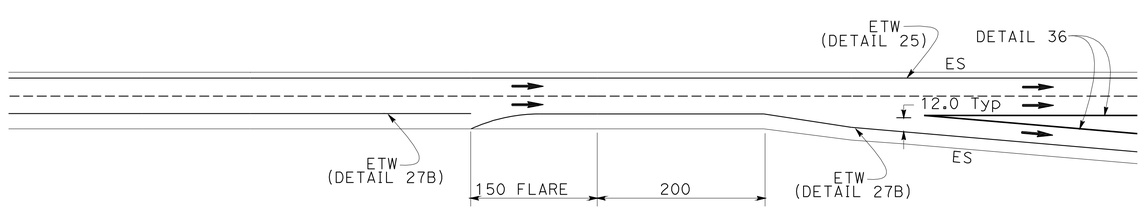
TYPICAL



DETAIL 11/13 COMBINATION

TYPICAL





RIGHT EDGELINE FLARE DETAIL

[FOR USE ON ALL EXIT RAMPS EXCEPT WHERE LANE(S) TRAP OFF]

DETAIL 8/10 COMBINATION

TYPICAL

PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-1

REVISED BY | DATE REVISED
ROBERT EDEJER | SHAHIN T ADIBI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	35	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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NOTE:
1. ALL PAVEMENT DELINEATION SHALL BE REPLACED IN KIND UNLESS INDICATED OTHERWISE.
2. ALL PAVEMENT DELINEATION ON BRIDGES SHALL BE REPLACED WITH THERMOPLASTIC PAINT.
3. INSTALL DETAIL 14 PER STANDARD PLAN A20A.

ROUTE	DESCRIPTION	POSTMILE	DETAIL	PAVEMENT MARKER SUMMARY: NON-REFLECTIVE (EA) TYPE A WHITE	RETROREFLECTIVE (EA) TYPE C RED-CLEAR	TYPE D YELLOW	TYPE G CLEAR	TYPE H YELLOW	TRAFFIC STRIPE SUMMARY: PAINT (LF) (2-COAT)	THERMOPLASTIC (LF) 4" SOLID	8" SOLID	4" (BROKEN 17-7)	4" (BROKEN 36-12)	8" (BROKEN 12-3)	REMARKS
5	NB - MAINLANE	R10.042/R20.071	8									1,181			
			9				22		1,000						
			11/13/14	12,277	244		2,735		146,918						
			11/13*	1,551			487						18,611		BRIDGES
			25					968	45,709						
			25(Mod)					41	1,194						
			25(Mod)*					124	5,967**	5,967					BRIDGES
			25A					4	65						
			27					7	275						
			27B						45,383						
			27B(Mod)						2,189						
			27B(Mod)*						5,935**	5,935					BRIDGES
			36				410				9,573				
			36A				158				3,502				
			37		104		1,086							17,437	
			38A								450				
			38B				341				3,903				
				30											IRRIGATION CROSSOVER MARKER
5	SB - MAINLANE	R20.071/R10.042	8									990			
			11/13/14	12,737	276		2,809		152,513						
			11/13*	1,815			562						21,778		BRIDGES
			25					984	46,470						
			25(Mod)					19	161						
			25(Mod)*					129	6,169**	6,169					BRIDGES
			27B						46,722						
			27B(Mod)						776						
			27B(Mod)*						6,414**	6,414					BRIDGES
			36				334				7,688				
			36A				150				3,396				
			37		88		838							13,549	
			38A								132				
			38B				275				3,118				
				20											IRRIGATION CROSSOVER MARKER
			SUBTOTAL 1	28,430	712	0	10,207	2,276	513,860	24,485	31,762	2,171	40,389	30,986	

* - THERMOPLASTIC

** - BLACK PAINT

PAVEMENT DELINEATION QUANTITIES
PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOU-FADEL
CALCULATED-DESIGNED BY: SHAHIN ADIBI
CHECKED BY: ROBERT EDEJER
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	36	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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

NOTE:
1. ALL PAVEMENT DELINEATION SHALL BE REPLACED IN KIND UNLESS INDICATED OTHERWISE.
2. (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

REMOVE PAVEMENT MARKER (N)

ROUTE	DESCRIPTION	POSTMILE	NON-REFLECTIVE (EA)	RETROREFLECTIVE (EA)			
			TYPE A	TYPE C	TYPE D	TYPE G	TYPE H
			WHITE	RED-CLEAR	YELLOW	CLEAR	YELLOW
5	NB/SB MAINLANE	R10.042/R20.071	28,430	712		10,207	2,276
5	NB/SB - RAMPS	R10.042/R20.071	398	8	32	222	987
		SUBTOTAL	28,828	720	32	10,429	3,263
		TOTAL	28,828	14,444			
		GRAND TOTAL	43,272				

PAVEMENT MARKER SUMMARY / TRAFFIC STRIPE SUMMARY

ROUTE	DESCRIPTION	POSTMILE	DETAIL	NON-REFLECTIVE (EA)	RETROREFLECTIVE (EA)				PAINT (LF)	THERMOPLASTIC (LF)					REMARKS
				TYPE A	TYPE C	TYPE D	TYPE G	TYPE H		4"	8"	4"	4"	8"	
				WHITE	RED-CLEAR	YELLOW	CLEAR	YELLOW	(2-COAT)	SOLID	SOLID	(BROKEN 17-7)	(BROKEN 36-12)	(BROKEN 12-3)	
5	NB - RAMPS	R10.042/R20.071	8									180			
			8/10	132			22		1,020						
			22			32			320						
			25A(Mod)					28	640						
			25A					444	10,622						
			27B						11,622						
			27B(Mod)						640						
			37		8									50	
			38				50				1,181				
			38B				20				220				
			SEE REMARKS	30											IRRIGATION CROSSOVER MARKER
5	SB - RAMPS	R20.071/R10.042	8/10	216			36		1,695						
			25A(Mod)					35	806						
			25A					480	11,505						
			27B						11,505						
			27B(Mod)						806						
			36				68				1,618				
			38				26				598				
			SEE REMARKS	20											IRRIGATION CROSSOVER MARKER
		SUBTOTAL 2		398	8	32	222	987	51,745	0	3,617	180	0	50	
		SUBTOTAL 1		28,430	712	0	10,207	2,276	513,860	24,485	31,762	2,171	40,389	30,986	
		TOTAL		28,828	14,444				565,605	24,485	35,379	2,351	40,389	31,036	

REMOVE PAINTED TRAFFIC STRIPE

ROUTE	DESCRIPTION	POSTMILE	DETAIL	LENGTH (LF)
5	NB - BRIDGES	R10.042/R20.071	11	18,611
			27B(Mod)	5,935
5	SB - BRIDGES	R20.071/R10.042	11	21,778
			27B(Mod)	6,414
			TOTAL	52,738

REMOVE YELLOW PAINTED TRAFFIC STRIPE (HAZARDOUS WASTE)

ROUTE	DESCRIPTION	POSTMILE	DETAIL	LENGTH (LF)	REMARKS
5	NB - BRIDGES	R10.042/R20.071	25(Mod)	5,967	
5	SB - BRIDGES	R20.071/R10.042	25(Mod)	6,169	
			TOTAL	12,136	

PAVEMENT DELINEATION QUANTITIES
PDQ-2

REVISED BY | DATE REVISED
ROBERT EDEJER | SHAHIN ADIBI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CAMILLE ABOU-FADEL
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 09-SEP-2010 | TIME PLOTTED => 10:53

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	37	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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NOTE: 1. ALL PAVEMENT DELINEATION SHALL BE REPLACED IN KIND UNLESS INDICATED OTHERWISE.

THERMOPLASTIC PAVEMENT MARKING

ROUTE	LOCATION	DIRECTION	POSTMILE	TYPE I-24' SQFT	TYPE II (L) SQFT	TYPE II (R) SQFT	TYPE II (B) SQFT	TYPE III (L) SQFT	TYPE III (R) SQFT	TYPE IV SQFT	TYPE V SQFT	TYPE VI SQFT	TYPE VIII SQFT	SIGNAL SQFT	AHEAD SQFT	STOP SQFT	12" LIMIT LINE SQFT
5	MAINLANE - NORTH OF 18TH UC	NB	R10.46/R10.50									126					
	MAINLANE - NORTH OF IMPERIAL Ave UC		R14.60/R14.63									84					
	MAINLANE - NORTH OF 5/163 SEPARATION		R16.21/R16.25									84					
	NB ON - 24TH St		R10.244	62													122
	NB ON - CIVIC CENTER Dr		R10.981								99						
	NB ON - 7TH St		R11.265	31													
	NB ON - 7TH St/8TH St		R11.342	62													
	NB OFF - MAIN St/DIVISION St		R11.708	124				84			33				31	66	30
	NB ON - MAIN St/DIVISION St		R11.868	62												22	24
	NB ON - 28TH St/NATIONAL Ave		R13.432								132						70
	NB OFF - ROUTE 75 SB		R13.825														
	NB OFF - KEARNY Ave		R14.028							15	66		36				
	NB ON - ROUTE 75 NB		R14.281								33						
	NB ON - ROUTE 94 WB/F St		R15.260								66						
	NB ON - B St/PERSHING Dr		R15.539	31							165						
	NB OFF - 6TH Ave		R16.145	93	45				84		66			64	62		150
	NB ON - ROUTE 209 NB		R19.967														
	SB OFF - B St/PERSHING Dr	SB	R15.816								198					22	40
	SB OFF - ROUTE 94 EB/G St		R15.640								66				31	44	
	SB OFF - LOGAN Ave/BEARDSLEY St		R14.341								33				31	44	38
	SB OFF - ROUTE 75 SB		R14.175														
	SB ON - ROUTE 75 NB		R13.904														
	SB OFF - NATIONAL Ave/28TH St		R13.540								33			32	31		
	SB OFF - MAIN St		R12.108	31	45		59	84			66			64	62		130
	SB ON - MAIN St		R11.614	31							33						
	SB ON - 8TH St		R10.955	31							33						
	SB OFF - CLEVELAND Ave		R10.776			45									31	44	100
	SB ON - HARBOR Dr		R10.600	31							33						
	SB OFF - 24TH St		R10.213		90		118	84			66						133
			SUBTOTAL	589	180	45	177	252	84	15	1,125	294	36	160	279	242	837
			TOTAL	4,315													

PAVEMENT DELINEATION QUANTITIES
PDQ-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: CAMILLE ABOU-FADEL
CALCULATED-DESIGNED BY: ROBERT EDEJER
CHECKED BY: SHAHIN ADIBI
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED =>
TIME PLOTTED =>

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	38	60

08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
SHAHIN T ADIBI
No. 54839
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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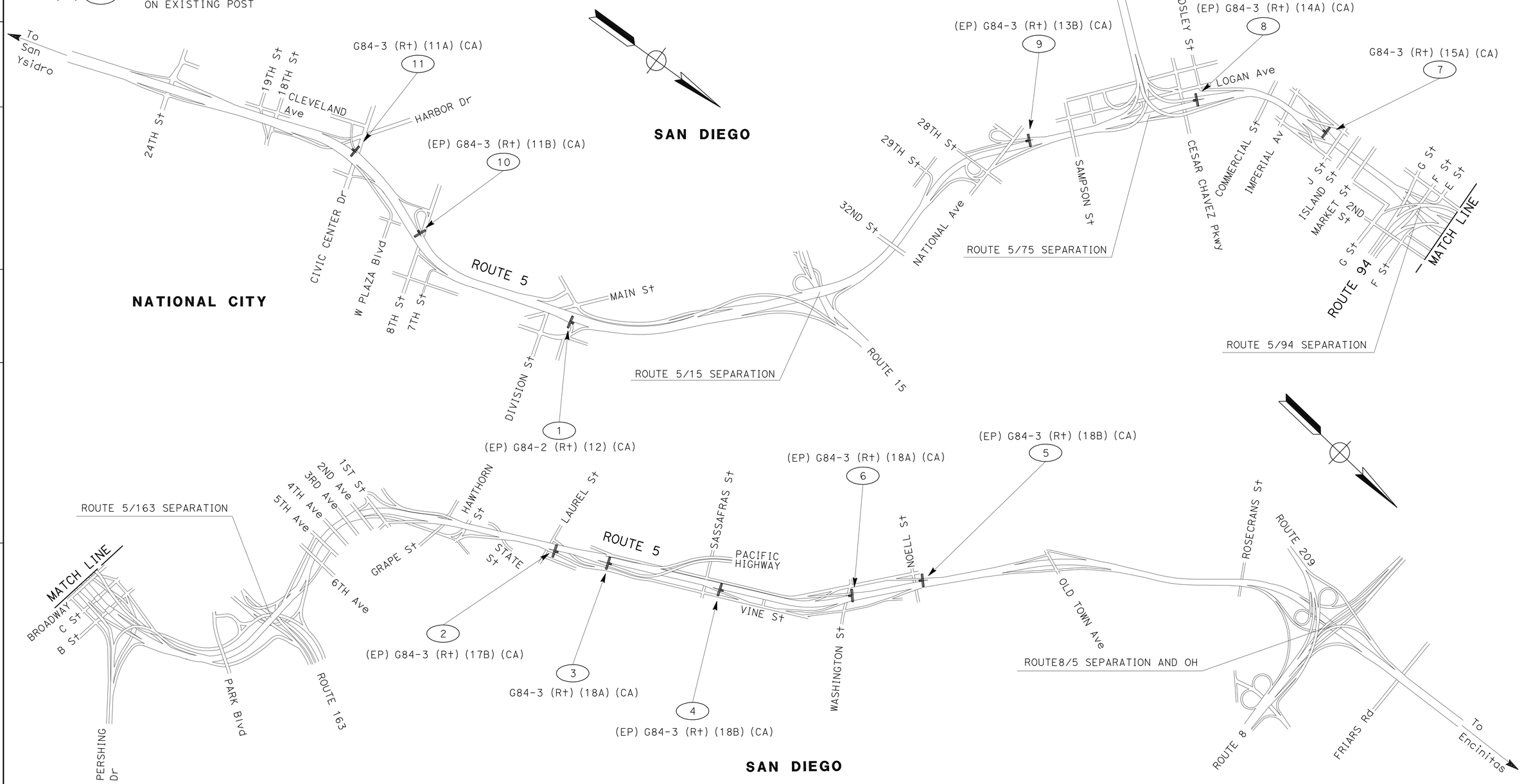
LEGEND:

(X) = ROADSIDE SIGN

(EP) (X) = INSTALL ROADSIDE SIGN PANEL ON EXISTING POST



THIS PLAN ACCURATE FOR SIGN WORK ONLY

NO SCALE

SIGN PLAN

S-1

REVISED BY	DATE REVISED
ROBERT EDEJER	SHAHIN T ADIBI
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:03

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	39	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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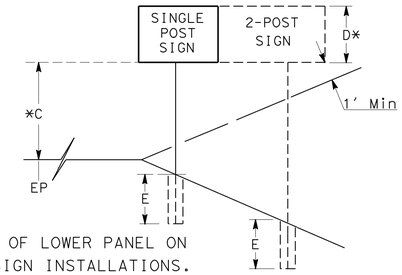
NOTES:

1. FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
2. MINIMUM POST LENGTHS WERE CALCULATED ASSUMING A LEVEL GROUND SURFACE FROM THE EP. ENSURE "C" DIMENSION IS MET. POST LENGTHS MAY VARY DUE TO SITE CONDITIONS.
3. EXACT LOCATIONS OF SIGNS AND POSTS SHALL BE DETERMINED BY THE ENGINEER.
4. REFER TO "FURNISH ROADSIDE SIGN PANEL" CHART FOR FURTHER INFORMATION.



*TO BOTTOM OF LOWER PANEL ON MULTIPLE SIGN INSTALLATIONS.

ROADSIDE SIGN QUANTITIES

SIGN No.	ROUTE	CODE	PANEL SIZE Horiz x Vert	D	C	E	Min POST LENGTH	POST SIZE 4X4	POST SIZE 4X6	POST SIZE 6X6	POST SIZE 6X8	ROADSIDE SIGN ONE POST	ROADSIDE SIGN TWO POST	INSTALL ROAD-SIDE SIGN PANEL ON Exist POST	REMARKS
			INCHES X INCHES	Ft	Ft	Ft	Ft	INCHES X INCHES				EA	EA	EA	
1	5	G84-2 (Rt) (12) (CA)	54x48											1	
2		G84-3 (Rt) (17B) (CA)	48x60											1	
3		G84-3 (Rt) (18A) (CA)	48x60	5	7	5	17			X		1			NO EXISTING SIGN
4		G84-3 (Rt) (18B) (CA)	48x60											1	
5		G84-3 (Rt) (18B) (CA)	48x60											1	
6		G84-3 (Rt) (18A) (CA)	48x60											1	
7		G84-3 (Rt) (15A) (CA)	48x60	5	7	5	17			X		1			NO EXISTING SIGN
8		G84-3 (Rt) (14A) (CA)	48x60											1	
9		G84-3 (Rt) (13B) (CA)	48x60											1	
10		G84-3 (Rt) (11B) (CA)	48x60											1	
11		G84-3 (Rt) (11A) (CA)	48x60	5	7	5	17			X		1			NO EXISTING SIGN
											TOTAL	3		8	

SIGN QUANTITIES
SQ-1

REVISED BY | DATE REVISED
ROBERT EDEJER | SHAHIN ADIBI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:04

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	40	60

REGISTERED CIVIL ENGINEER 08-03-10 DATE

08-09-10
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REGISTERED PROFESSIONAL ENGINEER SHAHIN T ADIBI No. 54839 Exp. 06-30-12 CIVIL STATE OF CALIFORNIA

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NOTES:

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2. PROTECTIVE OVERLAY DESIGNATIONS ARE AS FOLLOWS: SOC-SPRAY-ON COATING, SF-STANDARD FILM, AND PF-PREMIUM FILM.
3. REFER TO "ROADSIDE SIGN QUANTITIES" CHART FOR FURTHER INFORMATION.
4. GREEN - Grn, WHITE - Wht, BLACK - Blk, BLUE - Blu, YELLOW - Ylw, BROWN - Brn, RED - Red, ORANGE - Org

FURNISH ROADSIDE SIGN PANEL

SIGN No.	CODE	PANEL SIZE Horiz x Vert INCHES X INCHES	BACKGROUND SHEETING COLOR	BACKGROUND RETRO-REFLECTIVE ASTM TYPE	LEGEND SHEETING COLOR	LEGEND REFLECTIVE ASTM TYPE	LEGEND BLACK (NON-REFLECTIVE)	SIGN PANEL SINGLE SHEET ALUMINUM (SQFT) UNFRAMED 0.063 INCHES	SIGN PANEL SINGLE SHEET ALUMINUM (SQFT) UNFRAMED 0.080 INCHES	SIGN PANEL PROTECTIVE OVERLAY SOC	SIGN PANEL PROTECTIVE OVERLAY SF	SIGN PANEL PROTECTIVE OVERLAY PF	REMARKS
1	G84-2 (Rt) (12) (CA)	54 X 48	Grn	IV	Wht	IV			18			X	
2	G84-3 (Rt) (17B) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
3	G84-3 (Rt) (18A) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
4	G84-3 (Rt) (18B) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
5	G84-3 (Rt) (18B) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
6	G84-3 (Rt) (18A) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
7	G84-3 (Rt) (15A) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
8	G84-3 (Rt) (14A) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
9	G84-3 (Rt) (13B) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
10	G84-3 (Rt) (11B) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
11	G84-3 (Rt) (11A) (CA)	48 X 60	Grn	IV	Wht	IV			20			X	
						TOTAL			218				

SIGN QUANTITIES
SQ-2

REVISED BY | DATE REVISED
ROBERT EDEJER | SHAHIN ADIBI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CAMILLE ABOUFADEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

LAST REVISION 08-11-10 | DATE PLOTTED => 13-AUG-2010 | TIME PLOTTED => 10:04

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	41	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER DEBORAH YOST No. 70685 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA

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RAMP AND GORE QUANTITIES

DESCRIPTION	LOCATION		RAMP AREA	GORE AREA	COLD PLANE AC PAVEMENT	RUBBERIZED HMA (GAP GRADED)	TACK COAT	ASPHALTIC EMULSION (FOG SEAL COAT)
	DIRECTION	BEGIN PM	SQYD (N)	SQYD (N)	SQYD	TON	TON	TON
NB ON FROM 24TH St	NB 5	R10.244	1,578.11	254.22	1,832.34	244.31	0.22	0.29
NB ON FROM CIVIC CENTER Dr	NB 5	R10.981	1,928.29	320.22	2,248.51	299.80	0.27	0.40
NB ON FROM 8TH	NB 5	R11.264	790.11	191.89	982.00	130.93	0.12	0.20
NB ON FROM 7TH St	NB 5	R11.265	404.44	135.67	540.11	72.01	0.06	0.08
NB ON FROM 7TH AND 8TH St	NB 5	R11.342	1,786.78	122.22	1,909.00	254.53	0.23	0.41
NB OFF TO NATIONAL/DIVISION St	NB 5	R11.708	2,894.67	122.22	3,016.89	402.25	0.36	0.76
NB ON FROM NATIONAL/DIVISION St	NB 5	R11.868	3,371.33	249.33	3,620.67	482.76	0.43	0.52
NB ON FROM 28TH/NATIONAL Ave	NB 5	R13.432	1,447.33	207.78	1,655.11	220.68	0.20	0.27
NB OFF TO NORTH Jct 75	NB 5	R13.825	5,561.83	299.44	5,861.28	781.50	0.70	0.00
NB OFF TO KEARNEY Ave	NB 5	R14.028	3,798.89	293.33	4,092.22	545.63	0.49	0.48
NB ON FROM NORTH Jct 75	NB 5	R14.281	9,068.22	227.33	9,295.56	1,239.41	1.12	0.31
NB ON FROM Rte 94 & F	NB 5	R15.260	8,158.22	305.56	8,463.78	1,128.50	1.02	0.75
NB ON FROM B St & PERSHING Dr	NB 5	R15.539	4,082.00	61.11	4,143.11	552.41	0.50	1.04
NB OFF TO 6TH Ave	NB 5	R16.145	3,921.67	122.22	4,043.89	539.19	0.49	0.00
NB OFF TO BRANT/HAWTHORN	NB 5	R16.618	5,720.00	237.11	5,957.11	794.28	0.71	0.59
NB ON FROM CAMINO DEL RIO WEST	NB 5	R19.967	3,767.83	204.11	3,971.94	529.59	0.48	0.41
SB ON FROM PACIFIC HIGHWAY	SB 5	R10.213	3,898.33	454.67	4,353.00	580.40	0.52	0.36
SB ON FROM NB 1ST Ave	SB 5	R10.600	936.00	220.00	1,156.00	154.13	0.14	0.14
SB OFF TO B St/PERSHING	SB 5	R10.776	2,545.11	239.56	2,784.67	371.29	0.33	0.29
SB OFF TO Rte 94 & G St	SB 5	R10.955	1,642.33	217.56	1,859.89	247.99	0.22	0.38
SB OFF TO LOGAN/BEARDSLEY	SB 5	R11.614	938.89	348.33	1,287.22	171.63	0.15	0.17
SB OFF TO NORTH Jct 75	SB 5	R12.108	5,945.33	295.78	6,241.11	832.15	0.75	0.00
SB ON FROM NORTH Jct 75	SB 5	R13.540	5,945.33	352.00	6,297.33	839.64	0.76	0.00
SB OFF TO NATIONAL/28TH	SB 5	R13.904	3,135.17	355.67	3,490.83	465.44	0.42	0.48
SB 5/15 OFF TO MAIN St	SB 5	R14.175	7,927.11	427.78	8,354.89	1,113.99	1.00	0.40
SB ON FROM MAIN St	SB 5	R14.341	1,805.56	376.44	2,182.00	290.93	0.26	0.42
SB ON FROM 8TH St	SB 5	R15.640	938.89	193.11	1,132.00	150.93	0.14	0.14
SB OFF TO CLEVELAND Ave	SB 5	R15.816	3,284.67	223.67	3,508.33	467.78	0.42	0.32
SB ON FROM HARBOR Dr	SB 5	R16.523	2,545.11	341.00	2,886.11	384.81	0.35	0.35
SB OFF TO 24TH St	SB 5	R17.591	624.00	356.89	980.89	130.79	0.12	0.33
				SUBTOTAL	108,147.79	14,419.71	12.98	10.30

REPAIR SPALLED JOINTS

ROUTE	PM	SQYD
5 NORTH	R10.0 - R20.0	282
5 SOUTH	R20.0 - R10.0	282
	TOTAL	564

CONCRETE SLAB REPLACEMENT QUANTITIES

			REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)		DRILL AND BOND TIE BARS	DOWEL BAR (DRILL AND BOND)
DIRECTION	PM	LANE	No. OF SLABS (N)	CY	No. OF TIE BARS (N)	EA
NB 5	R12.56	3	1	7.2	10	16
NB 5	R14.10	1,2,3,4	4	28.8	15	64
SB 5	R19.37	3,4,Aux	3	21.6	15	48
SB 5	R19.25	1,2	2	14.4	10	32
SB 5	R18.73	3,4	4	28.8	10	32
SB 5	R18.10	3,4	4	28.8	10	32
SB 5	R17.25	2,3,4	3	21.6	10	48
SB 5	R17.24	3,4	2	14.4	10	32
SB 5	R14.65	3,4	2	14.4	10	32
SB 5	R14.35	3,4	2	14.4	10	32
SB 5	R14.34	3,4	2	14.4	10	32
SB 5	R14.33	2	1	7.2	10	16
SB 5	R14.31	1	1	7.2	5	16
SB 5	R14.28	2	1	7.2	10	16
SB 5	R14.27	2	2	14.4	10	16
SB 5	R14.04	3,4	2	14.4	10	32
SB 5	R14.03	4	1	7.2	5	16
SB 5	R14.02	4	1	7.2	5	16
SB 5	R14.02	4	1	7.2	5	16
SB 5	R13.58	3,4	2	14.4	10	32
SB 5	R13.50	3,4	2	14.4	10	32
SB 5	R13.47	3,4	2	14.4	10	32
SB 5	R13.45	4	1	7.2	5	16
		TOTAL		331.2		656

AUXILIARY LANE QUANTITIES

LOCATION			LENGTH	AUXILIARY LANE WIDTH	AUXILIARY LANE STRUCTURAL SECTION	GRIND EXISTING CONCRETE PAVEMENT	COLD PLANE AC PAVEMENT	RUBBERIZED HMA (GAP GRADED)	TACK COAT
DIRECTION	FROM PM	TO PM	LF (N)	LF (N)	TYPE	SQYD	SQYD	TON	TON
NB 5	R11.83	R11.95	623.01	12	7	0.00	817.59	109.01	0.10
NB 5	R11.95	R12.27	1,692.41	12	4	2,221.00	0.00	0.00	0.00
NB 5	R13.49	R13.56	358.32	12	7	0.00	470.24	62.70	0.06
NB 5	R13.56	R13.92	1,918.58	12	7	0.00	2,517.81	335.71	0.30
NB 5	R13.92	R14.10	954.34	12	7	0.00	1,252.40	166.99	0.15
NB 5	R14.31	R14.70	2,059.20	12	7	0.00	2,702.35	360.31	0.32
NB 5	R14.75	R14.95	1,056.00	12	7	0.00	1,385.82	184.78	0.17
NB 5	R15.34	R15.89	2,904.00	12	7	0.00	3,811.01	508.13	0.46
NB 5	R15.89	R16.13	1,267.20	12	7	0.00	1,662.99	221.73	0.20
NB 5	R16.84	R17.37	2,798.40	12	9	3,672.43	3,672.43	489.66	0.44
NB 5	R18.56	R18.84	1,478.40	12	4	1,940.15	0.00	0.00	0.00
NB 5	R19.38	R19.64	1,372.80	12	4	1,801.57	0.00	0.00	0.00
SB 5	R19.82	R18.44	7,254.08	41	9	33,319.18	33,319.18	4,442.56	4.00
SB 5	R17.61	R16.97	3,374.61	38	9	14,269.95	14,269.95	1,902.66	1.71
SB 5	R16.75	R16.52	1,213.19	35	7	0.00	4,687.87	625.05	0.56
SB 5	R16.52	R16.24	1,475.50	31	7	0.00	5,163.58	688.48	0.62
SB 5	R16.24	R16.10	734.87	28	7	0.00	2,303.82	307.18	0.28
SB 5	R16.10	R15.64	2,428.80	25	7	0.00	6,728.94	897.19	0.81
SB 5	R14.53	R14.40	686.40	22	7	0.00	1,651.44	220.19	0.20
SB 5	R14.40	R14.18	1,161.60	18	7	0.00	2,371.30	316.17	0.28
SB 5	R13.90	R13.66	1,267.20	15	7	0.00	2,124.93	283.32	0.25
SB 5	R12.10	R11.00	5,814.40	12	4	7,630.42	0.00	0.00	0.00
					SUBTOTAL	64,854.71	90,913.66	12,121.82	10.91

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

SUMMARY OF QUANTITIES
Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

FUNCTIONAL SUPERVISOR: CHRIS M. THOMAS
CALCULATED-DESIGNED BY: BAHMAN YAZDANI
CHECKED BY: DEBORAH YOST
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:04

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	42	60

Deborah J. Yost 08-03-10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER DEBORAH YOST No. 70685 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA

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

MAIN LANE QUANTITIES

LOCATION			LENGTH	TRAVELED WAY WIDTH	GRIND EXISTING CONCRETE PAVEMENT	SHOULDER WIDTH		COLD PLANE AC PAVEMENT	RUBBERIZED HMA (GAP GRADED)	TACK COAT	ASPHALTIC EMULSION (FOG SEAL COAT)	* SEAL JOINT (Exist Conc PAVEMENT)
DIRECTION	FROM PM	TO PM	LF (N)	LF (N)	SQYD	INSIDE LF (N)	OUTSIDE LF (N)	SQYD	TON	TON	TON	LF
NB 5	R10.00	R10.04	221.76	48	1,182.72	8	10	418.88	55.85	0.05	0.13	221.76
NB 5	R10.07	R10.39	1,673.76	48	8,926.72	8	10	3,161.55	421.54	0.38	1.00	1,673.76
NB 5	R10.41	R10.43	105.60	48	563.20	8	10	199.47	26.60	0.02	0.06	105.60
NB 5	R10.45	R10.68	1,198.56	48	6,392.32	8	10	2,263.95	301.86	0.27	0.72	1,198.56
NB 5	R10.71	R10.75	221.76	48	1,182.72	8	10	418.88	55.85	0.05	0.13	221.76
NB 5	R10.84	R11.13	1,536.48	48	8,194.56	8	10	2,902.24	386.97	0.35	0.92	1,536.48
NB 5	R11.17	R11.66	2,597.76	48	13,854.72	8	10	4,906.88	654.25	0.59	1.56	2,597.76
NB 5	R11.72	R12.03	1,636.80	48	8,729.60	8	10	3,091.73	412.23	0.37	0.98	1,636.80
NB 5	R12.05	R12.43	2,027.52	48	10,813.44	8	10	3,829.76	510.63	0.46	1.22	2,027.52
NB 5	R12.48	R12.53	253.44	48	1,351.68	8	10	478.72	63.83	0.06	0.15	253.44
NB 5	R12.55	R12.62	380.16	48	2,027.52	8	10	718.08	95.74	0.09	0.23	380.16
NB 5	R12.68	R12.73	279.84	48	1,492.48	8	10	528.59	70.48	0.06	0.17	279.84
NB 5	R12.76	R14.12	7,143.84	48	38,100.48	8	10	13,493.92	1,799.19	1.62	4.29	7,143.84
NB 5	R14.15	R14.43	1,473.12	48	7,856.64	8	10	2,782.56	371.01	0.33	0.88	1,473.12
NB 5	R14.47	R14.51	200.64	48	1,070.08	8	10	378.99	50.53	0.05	0.12	200.64
NB 5	R14.54	R15.25	3,748.80	48	19,993.60	8	10	7,081.07	944.14	0.85	2.25	3,748.80
NB 5	R15.26	R15.32	311.52	48	1,661.44	8	10	588.43	78.46	0.07	0.19	311.52
NB 5	R15.33	R15.41	380.16	48	2,027.52	8	10	718.08	95.74	0.09	0.23	380.16
NB 5	R15.43	R16.02	3,146.88	48	16,783.36	8	10	5,944.11	792.55	0.71	1.89	3,146.88
NB 5	R16.11	R16.83	3,828.00	48	20,416.00	8	10	7,230.67	964.09	0.87	2.30	3,828.00
NB 5	R16.85	R16.91	337.92	48	1,802.24	8	10	638.29	85.11	0.08	0.20	337.92
NB 5	R16.92	R17.04	617.76	48	3,294.72	8	10	1,166.88	155.58	0.14	0.37	617.76
NB 5	R17.06	R17.21	792.00	48	4,224.00	8	10	1,496.00	199.47	0.18	0.48	792.00
NB 5	R17.22	R17.28	311.52	48	1,661.44	8	10	588.43	78.46	0.07	0.19	311.52
NB 5	R17.30	R17.77	2,486.88	48	13,263.36	8	10	4,697.44	626.33	0.56	1.49	2,486.88
NB 5	R17.80	R17.99	1,003.20	48	5,350.40	8	10	1,894.93	252.66	0.23	0.60	1,003.20
NB 5	R18.01	R18.28	1,425.60	48	7,603.20	8	10	2,692.80	359.04	0.32	0.86	1,425.60
NB 5	R18.32	R18.56	1,261.92	48	6,730.24	8	10	2,383.63	317.82	0.29	0.76	1,261.92
NB 5	R18.53	R19.41	4,641.12	48	24,752.64	8	10	8,766.56	1,168.87	1.05	2.78	4,641.12
NB 5	R19.71	R20.00	1,547.04	48	8,250.88	8	10	2,922.19	389.62	0.35	0.93	1,547.04
SB 5	R20.00	R19.71	1,547.04	48	8,250.88	8	10	2,922.19	389.62	0.35	0.93	1,547.04
SB 5	R19.41	R18.53	4,641.12	48	24,752.64	8	10	8,766.56	1,168.87	1.05	2.78	4,641.12
SB 5	R18.56	R18.32	1,261.92	48	6,730.24	8	10	2,383.63	317.82	0.29	0.76	1,261.92
SB 5	R18.28	R18.01	1,425.60	48	7,603.20	8	10	2,692.80	359.04	0.32	0.86	1,425.60
SB 5	R17.99	R17.80	1,003.20	48	5,350.40	8	10	1,894.93	252.66	0.23	0.60	1,003.20
SB 5	R17.77	R17.30	2,486.88	48	13,263.36	8	10	4,697.44	626.33	0.56	1.49	2,486.88
SB 5	R17.28	R17.22	311.52	48	1,661.44	8	10	588.43	78.46	0.07	0.19	311.52
SB 5	R17.21	R17.06	792.00	48	4,224.00	8	10	1,496.00	199.47	0.18	0.48	792.00
SB 5	R17.04	R16.92	617.76	48	3,294.72	8	10	1,166.88	155.58	0.14	0.37	617.76
SB 5	R16.91	R16.85	337.92	48	1,802.24	8	10	638.29	85.11	0.08	0.20	337.92
SB 5	R16.83	R16.11	3,828.00	48	20,416.00	8	10	7,230.67	964.09	0.87	2.30	3,828.00
SB 5	R16.02	R15.43	3,146.88	48	16,783.36	8	10	5,944.11	792.55	0.71	1.89	3,146.88
SB 5	R15.41	R15.33	380.16	48	2,027.52	8	10	718.08	95.74	0.09	0.23	380.16
SB 5	R15.32	R15.26	311.52	48	1,661.44	8	10	588.43	78.46	0.07	0.19	311.52
SB 5	R15.25	R14.54	3,748.80	48	19,993.60	8	10	7,081.07	944.14	0.85	2.25	3,748.80
SB 5	R14.51	R14.47	200.64	48	1,070.08	8	10	378.99	50.53	0.05	0.12	200.64
SB 5	R14.43	R14.15	1,473.12	48	7,856.64	8	10	2,782.56	371.01	0.33	0.88	1,473.12
SB 5	R14.12	R12.76	7,143.84	48	38,100.48	8	10	13,493.92	1,799.19	1.62	4.29	7,143.84
SB 5	R12.73	R12.68	279.84	48	1,492.48	8	10	528.59	70.48	0.06	0.17	279.84
SB 5	R12.62	R12.55	380.16	48	2,027.52	8	10	718.08	95.74	0.09	0.23	380.16
SB 5	R12.53	R12.48	253.44	48	1,351.68	8	10	478.72	63.83	0.06	0.15	253.44
SB 5	R12.43	R12.05	2,027.52	48	10,813.44	8	10	3,829.76	510.63	0.46	1.22	2,027.52
SB 5	R12.03	R11.72	1,636.80	48	8,729.60	8	10	3,091.73	412.23	0.37	0.98	1,636.80
SB 5	R11.66	R11.17	2,597.76	48	13,854.72	8	10	4,906.88	654.25	0.59	1.56	2,597.76
SB 5	R11.13	R10.84	1,536.48	48	8,194.56	8	10	2,902.24	386.97	0.35	0.92	1,536.48
SB 5	R10.75	R10.71	221.76	48	1,182.72	8	10	418.88	55.85	0.05	0.13	221.76
SB 5	R10.68	R10.45	1,198.56	48	6,392.32	8	10	2,263.95	301.86	0.27	0.72	1,198.56
SB 5	R10.43	R10.41	105.60	48	563.20	8	10	199.47	26.60	0.02	0.06	105.60
SB 5	R10.39	R10.07	1,673.76	48	8,926.72	8	10	3,161.55	421.54	0.38	1.00	1,673.76
SB 5	R10.04	R10.00	221.76	48	1,182.72	8	10	418.88	55.85	0.05	0.13	221.76
SUBTOTAL (THIS SHEET)					499,107.84			176,767.36	23,568.98	21.21	56.15	93,582.72
SUBTOTAL (RAMPS AND GORES)					0.00			108,147.79	14,419.71	12.98	10.30	0.00
SUBTOTAL (AUXILIARY LANES)					64,854.71			90,913.66	12,121.82	10.91	0.00	0.00
TOTAL					563,962.55			375,828.81	50,110.51	45.10	66.45	93,582.72

* SEAL JOINT SHALL BE TYPE R. ONLY THE LONGITUDINAL JOINT BETWEEN LANES 2 AND 3 WILL HAVE SEAL JOINT.

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

SUMMARY OF QUANTITIES
Q-2

REVISED BY | DATE REVISED
DEBORAH YOST | BAHMAN YAZDANI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
CHRIS M. THOMAS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DEVELOPMENT

LAST REVISION 08-11-10 | DATE PLOTTED => 13-SEP-2010 | TIME PLOTTED => 13:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	43	60

Mahendra R. Nirmal 08-03-10
REGISTERED ELECTRICAL ENGINEER — DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — MAHENDRA R. NIRMAL — No. E 10689 — Exp. 06-30-11 — ELECTRICAL — STATE OF CALIFORNIA

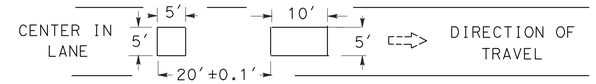
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND:

P - PASSAGE DETECTION
D - DEMAND DETECTION
Q - QUEUE DETECTION
OR - OFF RAMP DETECTION

NOTES:

1. AB Exist DETECTOR LOOPS, REPLACE WITH TYPE E DETECTOR LOOPS.
2. AB Exist DETECTOR LOOPS, REPLACE WITH TYPE A DETECTOR LOOPS.
3. ALL DETECTOR LOOPS TO BE INSTALLED SHALL BE PLACED IN THE CENTER OF THE TRAVELED LANE PER DETAIL "A".



DETAIL 'A'

TYPICAL TYPE A LOOP PLACEMENT
NO SCALE
NOTE: POSITION OF LOOPS TO BE CENTERED IN LANE

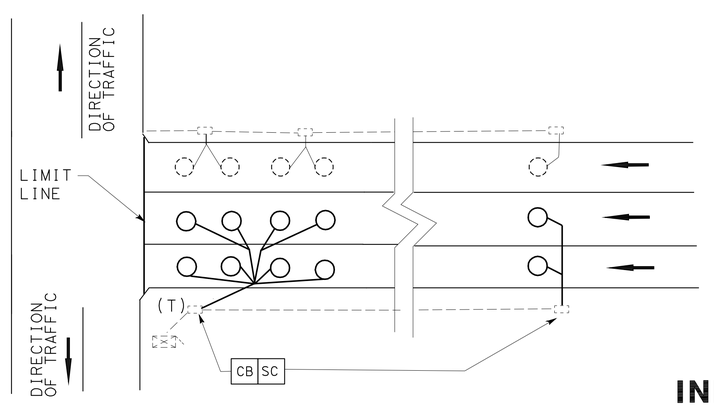
INDUCTIVE LOOP DETECTOR

Rte	POST MILE	LOCATION DESCRIPTION	FACILITIES	DIRECTION	LOCATION OF INDUCTIVE LOOP DETECTORS (N) CENTERED IN LANE: ADVANCE, FRONT, MAIN LANE DETECTOR LOOPS #1	#2	#3	#4	#5	#6	OR DETECTOR LOOPS #1	#2	#3	#4	SEE DETAILS ON SHEET E-2	NOTES	INDUCTIVE LOOP DETECTOR (EA)
5	R10.041	OFF TO 24TH St SIGNAL	SIGNAL	SB	5(Lt)	5(Lt)									DETAIL B		10
5	R11.400	FROM 8TH St	COUNT STATION	NB				1(Rt)							DETAIL 1	2 3	1
5	R13.08	OFF TO NATIONAL/DIVISION St	COUNT STATION	NB							1(Rt)				DETAIL 7	1	1
5	R14.519	SOUTH OF IMPERIAL Ave	COUNT STATION	NB			2(Rt)	2(Rt)							DETAIL 2	2 3	4
5	R14.956	SOUTH OF G St	COUNT STATION	NB				2(Rt)	2(Rt)						DETAIL 5	2 3	4
5	R15.335	FROM RTE 94 & F St	TMS	NB				2(Rt)	2(Rt)	2(Rt)					DETAIL 3	2 3	6
5	R15.335	NORTH OF B St	TMS	SB				2(Rt)							DETAIL 4	2 3	2
5	R15.807	SOUTH OF PARK Blvd	TMS	SB				2(Rt)	2(Rt)	2(Rt)					DETAIL 3	2 3	6
5	R15.807	SOUTH OF PARK Blvd	TMS	NB				2(Rt)	2(Rt)	2(Rt)					DETAIL 3	2 3	6
5	R16.110	SOUTH OF 6TH Ave	RAMP METER	SB				2(Rt)	2(Rt)						DETAIL 2	2 3	4
5	R16.940	OFF TO BRANT/HAWTHORN	RAMP METER	NB							1(Rt)	1(Rt)	1(Rt)	1(Lt)	DETAIL 8	1	4
5	R17.341	NORTH OF INDIA St	TMS	NB					2(Rt)	2(Rt)					DETAIL 6	2 3	4
5	R18.827	SOUTH OF OLD TOWN Ave	RAMP METER	SB			2(Rt)	2(Rt)	2(Rt)						DETAIL 5	2 3	6
																TOTAL	58

(N) = NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

NOTE:

* - LOOP IDENTIFICATION: 1(2-4-Rt)
- 1 → QUANTITY OF LOOPS
- 2 → TRAFFIC PHASE IDENTIFICATION
- 4 → LOOP NUMBER
- Rt → TERMINATION PULL BOX LOCATION IN DIRECTION OF TRAVEL



"DETAIL B"
TRAFFIC SIGNAL
(TYPICAL)

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

NO SCALE

INDUCTIVE LOOP DETECTOR

E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC ELECTRICAL

FUNCTIONAL SUPERVISOR: DALE WILSON
CALCULATED-DESIGNED BY: MAHENDRA R. NIRMAL
CHECKED BY: ENRIQUE P. BERNAL
REVISED BY / DATE REVISED

LAST REVISION 08-11-10 — DATE PLOTTED => 13-AUG-2010 — TIME PLOTTED => 10:04

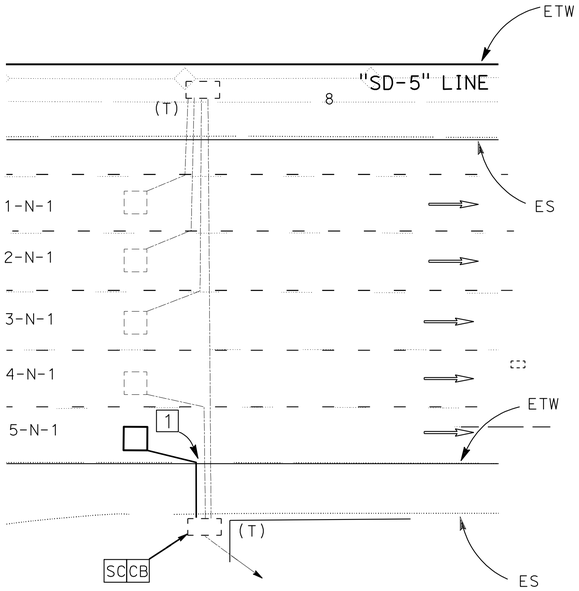
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	44	60

Mahendra R. Nirmal 08-03-10
REGISTERED ELECTRICAL ENGINEER DATE

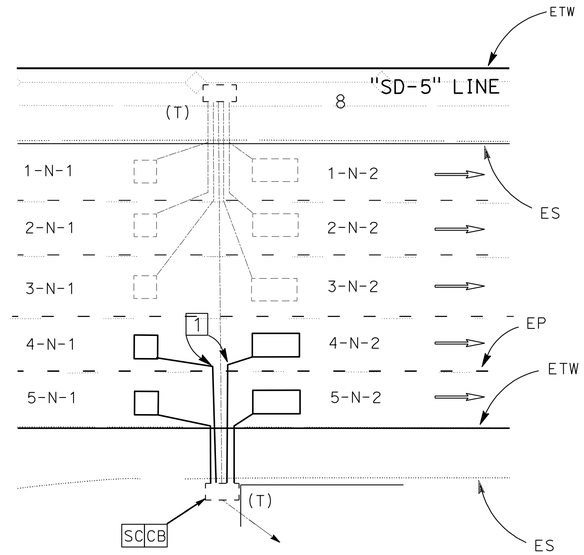
08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER MAHENDRA R. NIRMAL No. E 10689 Exp. 06-30-11 ELECTRICAL STATE OF CALIFORNIA

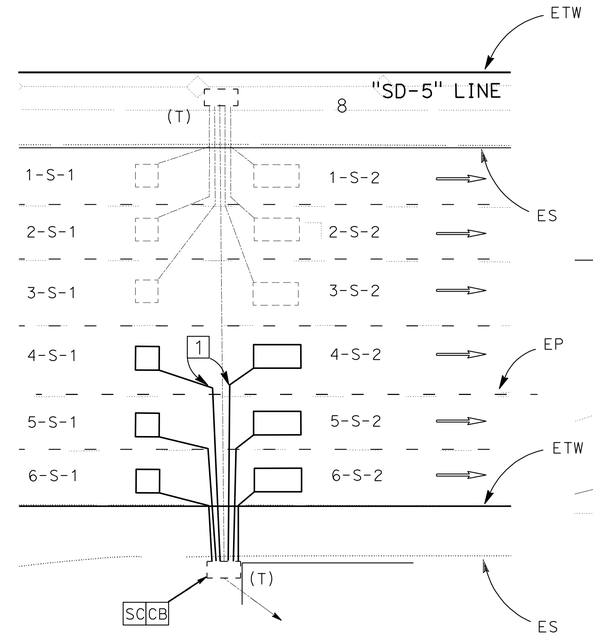
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



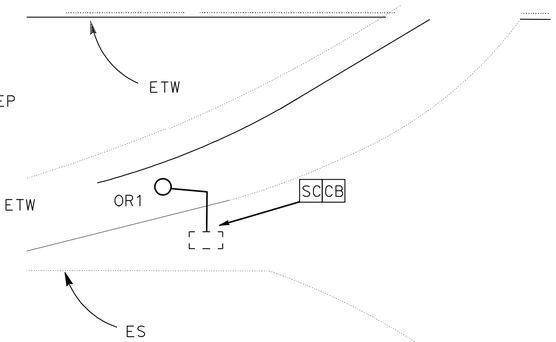
DETAIL 1
NB ON RAMP COUNT STATION



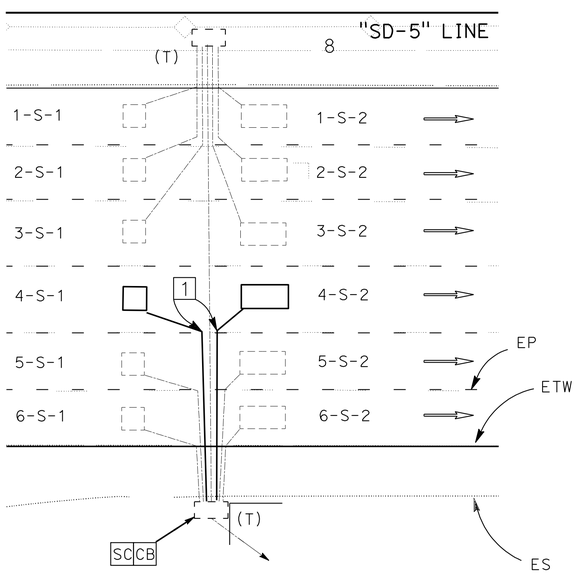
DETAIL 2
NB DIRECTION SHOWN SB DIRECTION SIMILAR



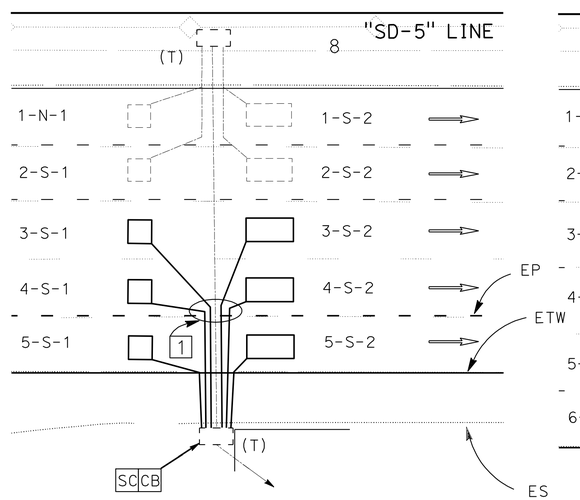
DETAIL 3
SB DIRECTION SHOWN NB DIRECTION SIMILAR



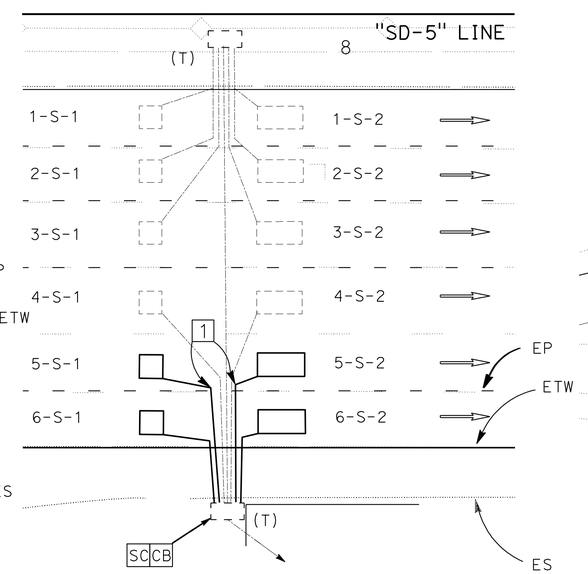
DETAIL 7
NB Off RAMP - COUNT STATION



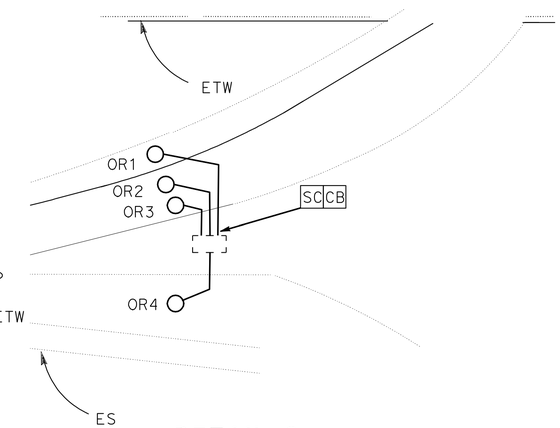
DETAIL 4
SB TMS



DETAIL 5
SB



DETAIL 6
NB TMS



DETAIL 8
NB OFF RAMP - RAMP METER

NOTES:

1 - EXTEND TERMINATION CONDUIT TO THE EDGE OF PAVEMENT (EP).

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

INDUCTIVE LOOP DETECTOR

E-2

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC ELECTRICAL

FUNCTIONAL SUPERVISOR: DALE WILSON
CALCULATED-DESIGNED BY: MAHENDRA R. NIRMAL
CHECKED BY: ENRIQUE P. BERNAL
REVISED BY
DATE REVISED

LAST REVISION 08-11-10
DATE PLOTTED => 13-AUG-2010
TIME PLOTTED => 10:04

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	45	60

REGISTERED CIVIL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Efthymios Delis No. C51434 Exp. 6-30-08 CIVIL STATE OF CALIFORNIA

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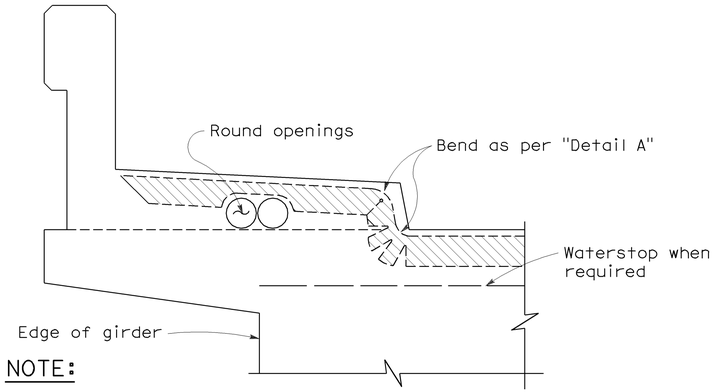
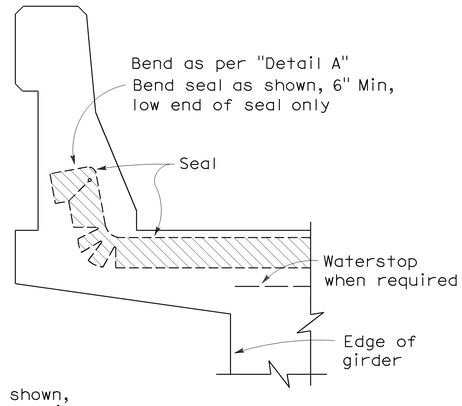
To accompany plans dated 08-09-10



NOTE:

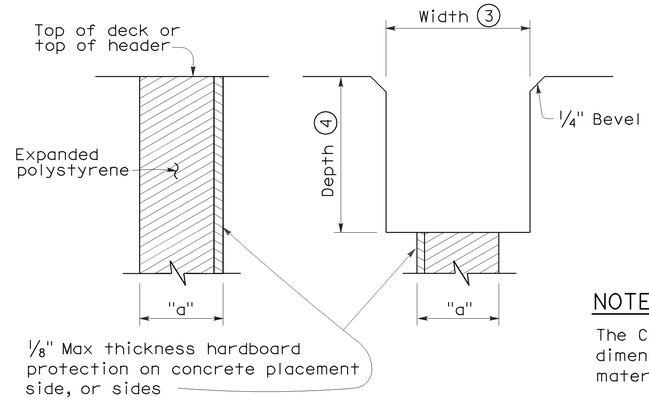
Type "B" seal shown. Type "A" seals to comform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

CONCRETE BARRIER AND SIDEWALK



CONCRETE BARRIER

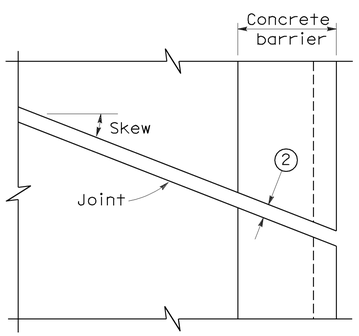
JOINT SEALS DETAILS



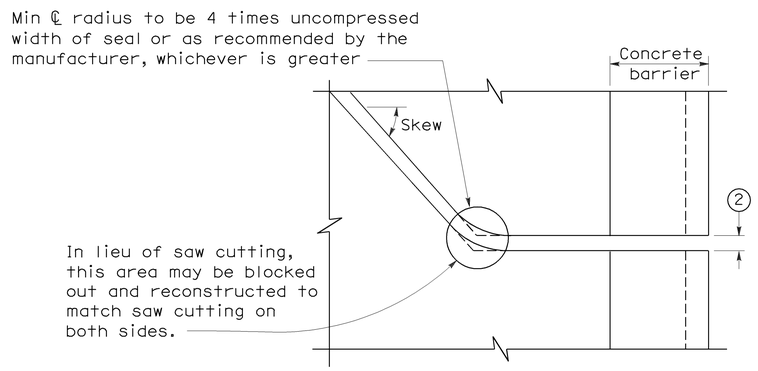
FORMING DETAIL SAWCUT DETAIL

NOTE:

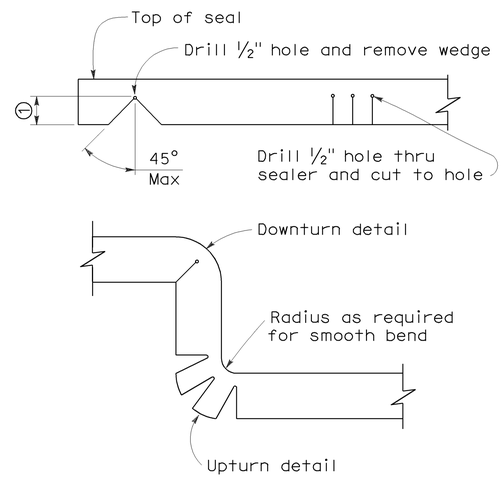
The Contractor shall verify all controlling field dimensions before ordering or fabricatiing any material.



PLAN OF JOINT (SKEW ≤ 20°)



PLAN OF JOINT (SKEW > 20°)



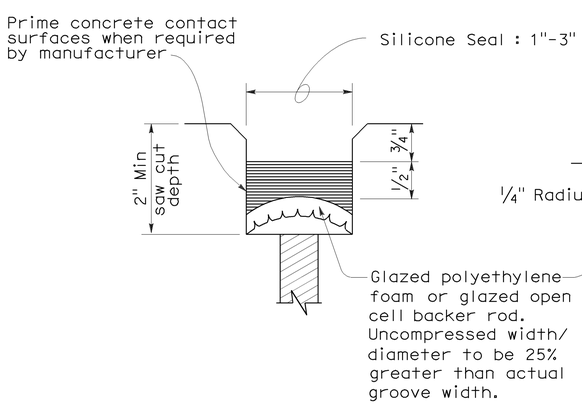
DETAIL A

NOTES:

1. Make smooth cuts from the bottom of seal to 1½" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
2. Opening in barrier to match width of sawn deck joint.
3. Sawcut groove widths shall be as ordered by the Engineer.
4. Depth of sawcut: Type A - Depth to be 2" minimum.
   Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W_2) plus dimensions shown.
5. MR (movement rating) as shown on other plan sheets.
6. Other depths must be approved by the Engineer.

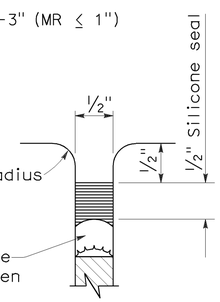
DIMENSIONS "a" OF JOINT REQUIRED

Movement Rating (MR) (5)	Bridge Type	"a" Dimension Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1½"	1¼"	¾"
	CIP/PS	1¼"	1"	½"
1½"	All except CIP/PS	1¼"	1"	½"
	CIP/PS	1"	¾"	½"
1"	All except CIP/PS	1"	¾"	½"
	CIP/PS	¾"	½"	½"
½"	All except CIP/PS	¾"	¾"	½"
	CIP/PS	½"	½"	½"



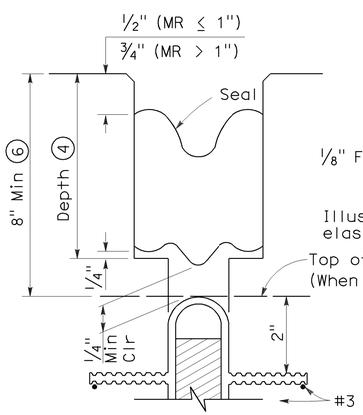
TYPE A SEAL

Movement rating : Silicone = 1" Max

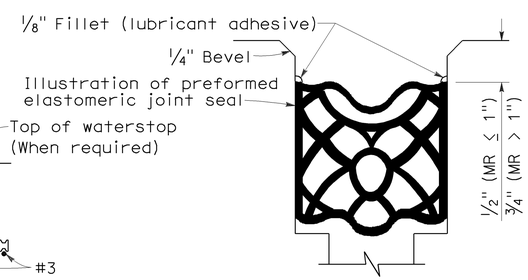


TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL
IN MINIMUM WIDTH POSITION (W_2)



TYPE B SEAL

Movement Rating ≤ 2"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

NO SCALE

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

REVISED STANDARD PLAN RSP B6-21

2006 REVISED STANDARD PLAN RSP B6-21

5-8-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	46	60

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffery G. McRae No. E14512 Exp. 6-30-08 ELECTRICAL STATE OF CALIFORNIA

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To accompany plans dated 08-09-10

ELECTROLIERS

STANDARD TYPES
15, 15D
15 STRUCTURE
21, 21D STRUCTURE
30
31
32
35
36-20A

High mast light pole

Double Arm lighting standard

Existing electrolier

Electrolier foundation (Future installation)

NOTES:

1. Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
2. Luminaires shall be the cutoff type, ANSI Type Ⅲ medium cutoff lighting distribution, unless otherwise specified.
3. Variations noted adjacent to symbol on project plans.

Electrolier (see project notes or project plans)

Luminaire on wood pole

STANDARD NOTES:

- 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 wire or rope.
- 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.
- SF — Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP — Telephone service point.

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED	EXISTING	
BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4B	mas-4B	
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type Ⅰ, Ⅱ, Ⅲ, Ⅳ or Ⅴ as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	47	60

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffery G. McRae No. E14512 Exp. 6-30-08 ELECTRICAL STATE OF CALIFORNIA

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To accompany plans dated 08-09-10

CONDUIT

PROPOSED	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 (RSP ES-9A C)
R	r	Conduit riser in/on structure or service pole

SERVICE EQUIPMENT

PROPOSED	EXISTING	
OH	oh	Overhead lines
U	U	Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
III		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
T	t	Telephone demarcation cabinet

POLE-MOUNTED SERVICE DESIGNATION

Type of installation

TYPE H SERVICE - 28'-10" ← Pole height above grade

ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
PV	PV	Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
R	Y	Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

NOTES:

1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. Signal indication shall be LED.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

2006 REVISED STANDARD PLAN RSP ES-1B

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	48	60

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffery G. McRae No. E14512 Exp. 6-30-08 ELECTRICAL STATE OF CALIFORNIA

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To accompany plans dated 08-09-10

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign No. 12345

10 ISL SCI 1.0

- Sign number - Place on post or structure
- Transformer rating (kVA)
- Lighting control type
- Number and type of fixtures

Do NOT place on standard or structure

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 15'-0"

- Mast arm length, if shown. Do not place on standard or structure.
- Equipment number - Place on standard or structure. Existing equipment numbers are shown in parenthesis

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC

- Number and size of conductors and cables
- Size of conduit in inches

ø1, ø2, ø2P, etc.	Traffic phase identification for signal faces, detectors and phase diagrams
1 2 3	Project note numbers
A B C	Equipment description, installation or item numbers
1 2 3	Conduit run numbers

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 100

- Wind velocity = 100 mph
- Case 3 arm loading
- Standard type
- Standard Plan sheet number
- Detail number or letter

MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
		Highway advisory radio pole and antenna
EMS	ems	Extinguishable message sign
M V	m v	Detection device M = Microwave sensor V = Video image sensor

WIRING DIAGRAM LEGEND

P	Pole
CB	Circuit breaker
A	Ampere
V	Volt
M	Metered
UM	Unmetered
NB	Neutral bus
GB	Ground bus
G	Equipment grounding conductor
N	Grounded conductor (Neutral)

- External conductor
- Conductor or bus
- Tie point
- Contactor coil
- Contactor, Contact NO
- Terminal blocks
- Contactor, Contact NC
- Enclosure bond
- Grounding electrode
- Circuit breaker
- Receptacle

PULL BOXES

PROPOSED EXISTING

Pull box-No. 5 unless otherwise indicated or noted.

3 9A(21)

Pull box-Additional designations or descriptions

3	= No. 3½ pull box
5	= No. 5 pull box
6	= No. 6 pull box
7	= No. 7 (Ceiling pull box)
8	= No. 8 (Pendant soffit pull box)
9	= No. 9 pull box
9A	= No. 9A pull box

(C) = Communications pull box
(E) = Pull box with extension
(S) = Sprinkler control pull box
(21) = Anchor bolts and conduit for future installation of Type 21 Standard
(T) = Traffic pull box

VEHICLE DETECTORS

5 J 9 U

- U = Upper
- L = Lower
- Slot number in input file
- Input file (I or J)
- Phase

PROPOSED EXISTING

	Type A detector loop. Outline of sawcut shown.
	Type B detector loop. Outline of sawcut shown.
	Type C detector loop. Outline of sawcut shown.
	Type D detector loop. Outline of sawcut shown.
	Type E detector loop. Outline of sawcut shown.
	Type Q detector loop. Outline of sawcut shown.
	Magnetic detector
DH dh	Detector handhole
	Microwave or video detection zone

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	49	60

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffery G. McRae No. E14512 Exp. 6-30-08 ELECTRICAL STATE OF CALIFORNIA

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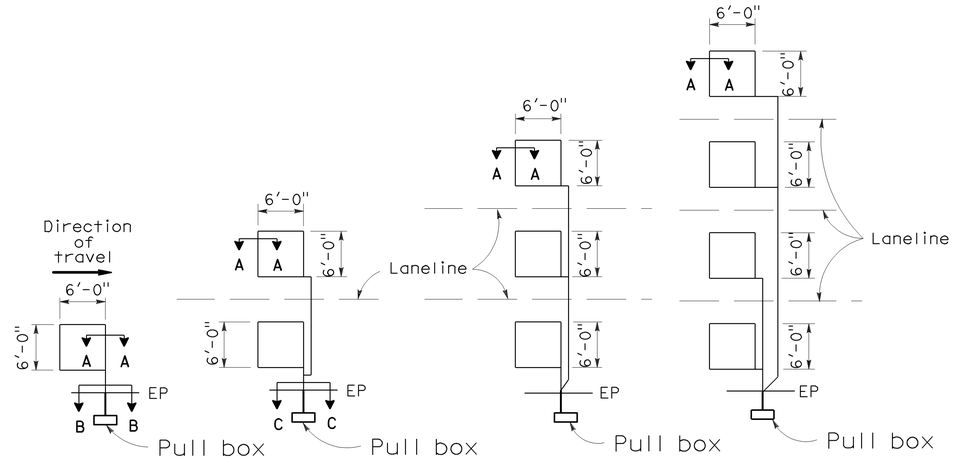
To accompany plans dated 08-09-10

2006 REVISED STANDARD PLAN RSP ES-5A

LOOP INSTALLATION PROCEDURE

1. Loops shall be centered in lanes.
2. Saw slots in pavement for loop conductors as shown in details.
3. Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
4. Bottom of saw slot shall be smooth with no sharp edges.
5. Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
6. Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
7. Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
8. Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
9. No more than 2 twisted pairs shall be installed in one sawed slot.
10. Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
11. The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
12. Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
13. Fill slots as shown in details.
14. Splice loop conductors to lead-in-cable. Splices shall be soldered.
15. End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
16. Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
17. Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
18. Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.

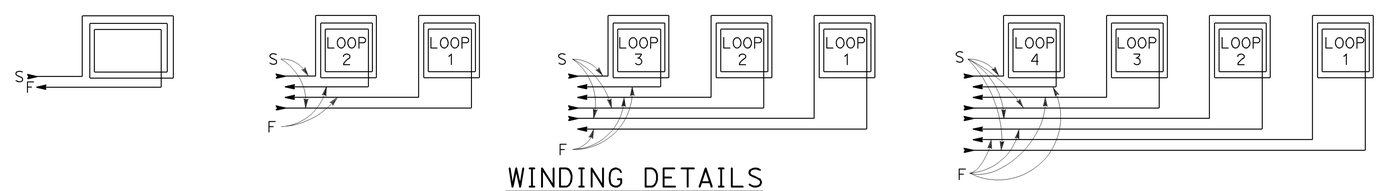


TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

SAWCUT DETAILS

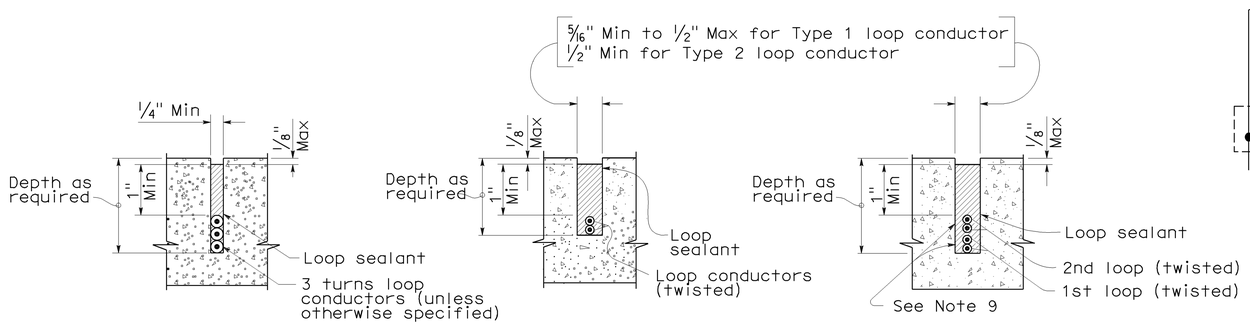
(Type A loop detector configurations illustrated)

1. 1A thru 4A = 1 Type A loop configuration in each lane.
2. 1B thru 4B = 1 Type B loop configuration in each lane.
3. 1C = 1 Type C loop configuration entering lanes as required.
4. 1D thru 4D = 1 Type D loop configuration in each lane.
5. 1E thru 4E = 1 Type E loop configuration in each lane.
6. 1Q thru 4Q = 1 Type Q loop configuration in each lane. (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



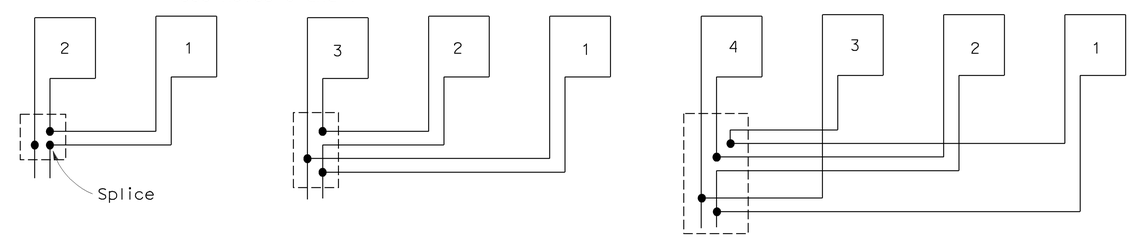
WINDING DETAILS

See Notes 6 and 7



SECTION A-A | SECTION B-B | SECTION C-C

SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A

8-17-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	50	60

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
William K. Farnbach
No. C49042
Exp. 9-30-10
CIVIL
STATE OF CALIFORNIA

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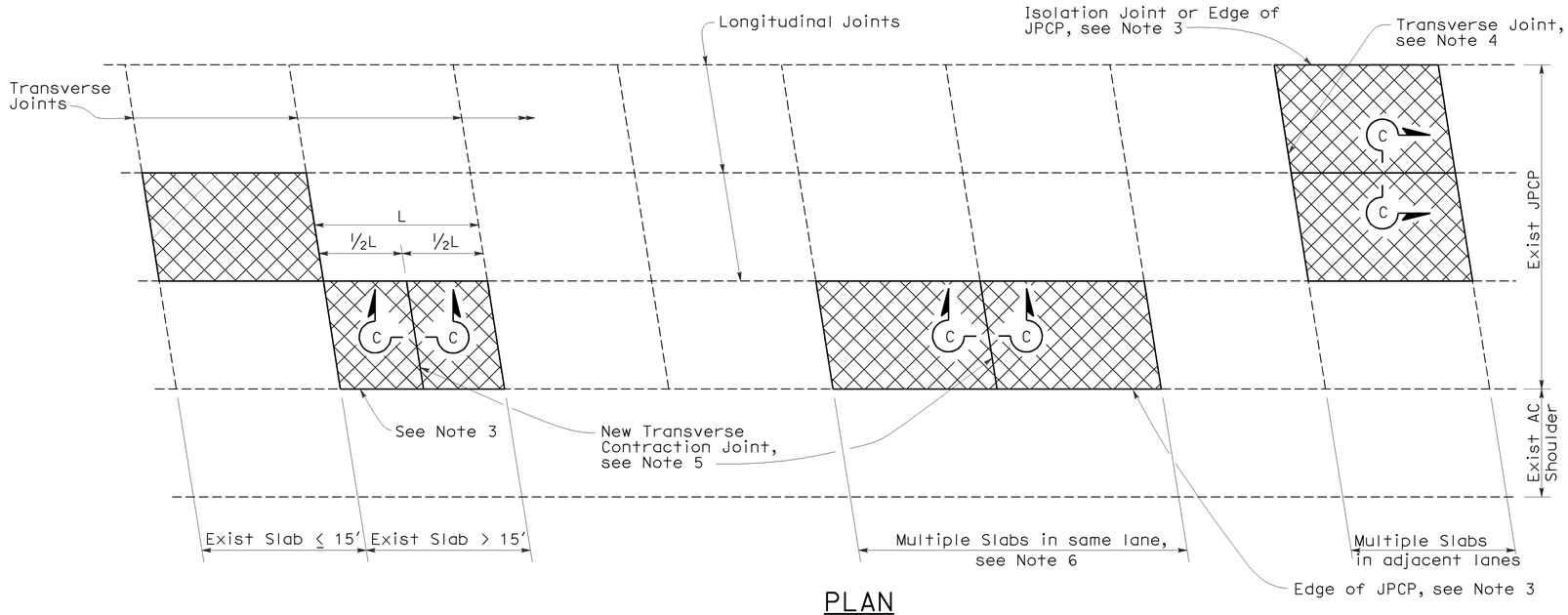
To accompany plans dated 08-09-10



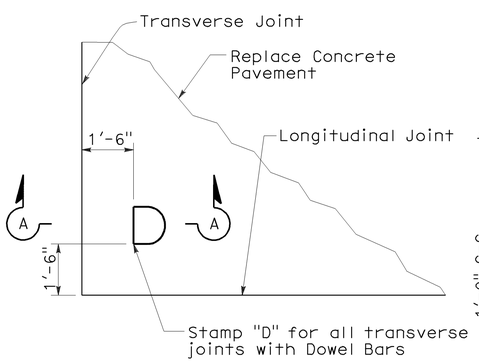
PLAN

NOTES:

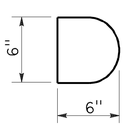
1. For details not shown, see Revised Standard Plan RSP P10.
2. Where the existing outer shoulder pavement is asphalt concrete pavement, the "a" dimension shall be 1′-0" and the "b" dimension shall be 2′-0".
3. Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
4. For detail, see Transverse Construction Joint for existing concrete pavement detail on Revised Standard Plan RSP P10.
5. Transverse joint to match skew of existing joint. Omit dowel bars.
6. This Standard Plan only applicable when replacing multiple slabs in the same lane is less than 100′.

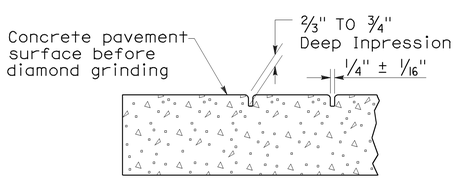
LEGEND

Replace Concrete Pavement (See Slab Layout Detail)

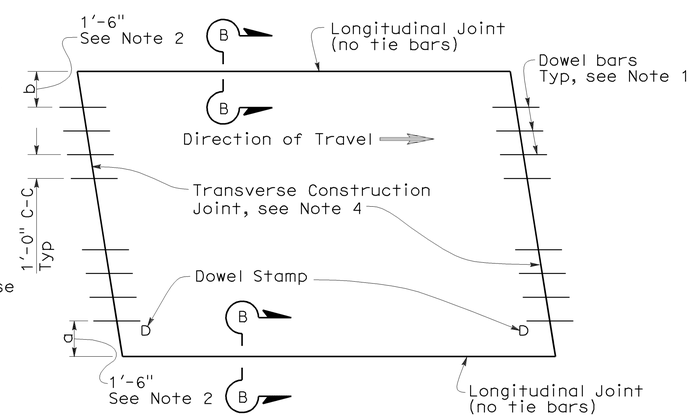


DOWEL STAMP DETAIL

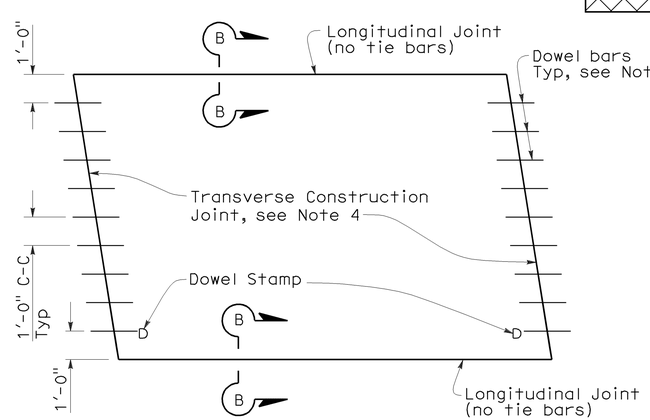




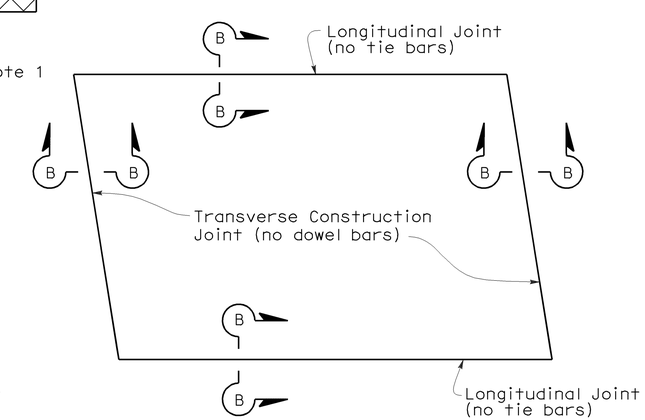
SECTION A-A



TYPE I
(traffic lane lines match longitudinal joints)

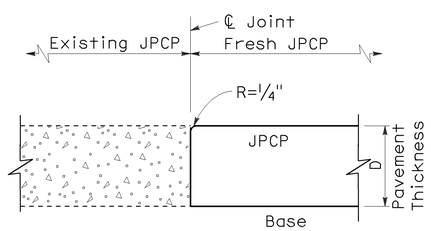


TYPE II
(traffic lane lines do not match longitudinal joints)

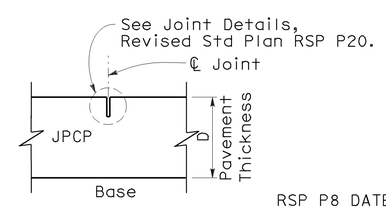


TYPE III
(for short term repairs < 5 yrs design life or for slab replacements with a cracking and seating operation)

SLAB LAYOUT



SECTION B-B



SECTION C-C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

JOINTED PLAIN CONCRETE PAVEMENT-INDIVIDUAL SLAB REPLACEMENT

NO SCALE

RSP P8 DATED MAY 15, 2009 SUPERSEDES RSP P8 DATED SEPTEMBER 1, 2006 AND STANDARD PLAN P8 DATED MAY 1, 2006 - PAGE 123 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P8

2006 REVISED STANDARD PLAN RSP P8

5-8-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	51	60

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-10 CIVIL STATE OF CALIFORNIA

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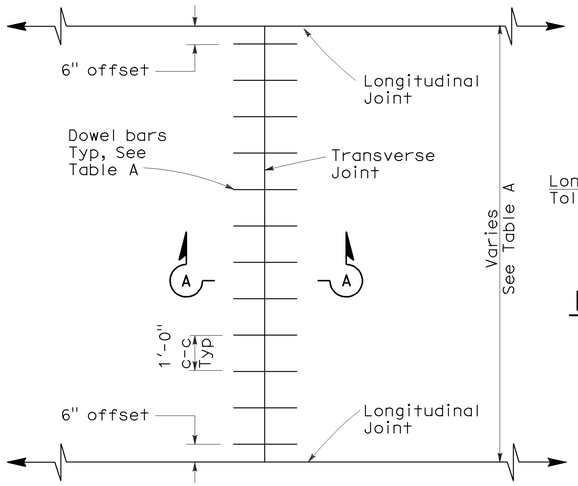
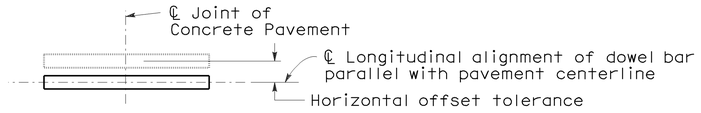
To accompany plans dated 08-09-10

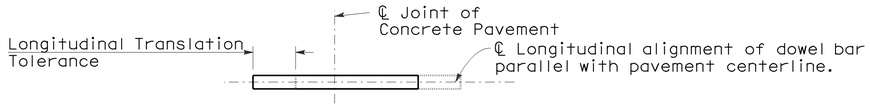


TRANSVERSE JOINT DOWEL BAR LAYOUT



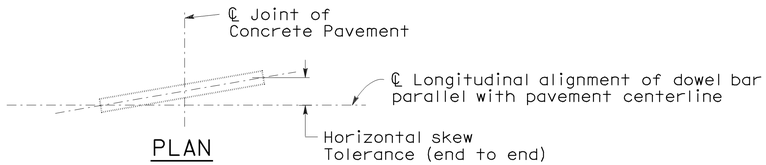
PLAN

HORIZONTAL OFFSET TOLERANCE



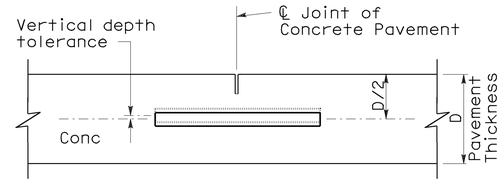
PLAN

LONGITUDINAL TRANSLATION TOLERANCE



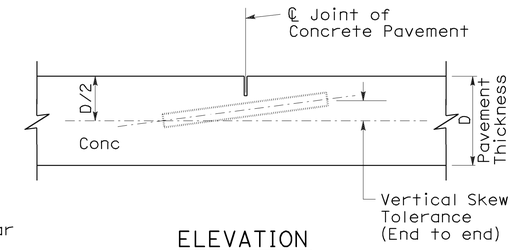
PLAN

HORIZONTAL SKEW TOLERANCE



ELEVATION

VERTICAL DEPTH TOLERANCE



ELEVATION

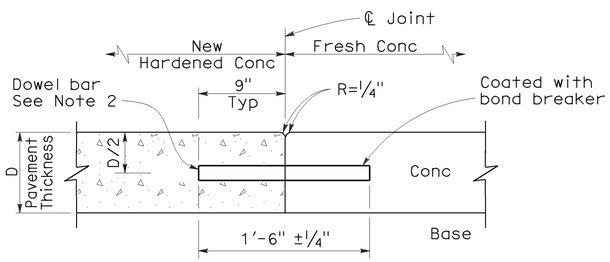
VERTICAL SKEW TOLERANCE

NOTES:

1. See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
2. 1½" Dia smooth dowel bars are to be used with a pavement thickness, D, equal to or greater than 0.70 feet. For pavement thickness, D, less than 0.70 feet, use 1¼" Dia smooth dowel bars.
3. For widths not shown, see Project Plans.
4. If fresh concrete pavement is placed adjacent to existing concrete pavement, the top corner of the existing concrete pavement does not need to be rounded to the ¼" radius, as shown.

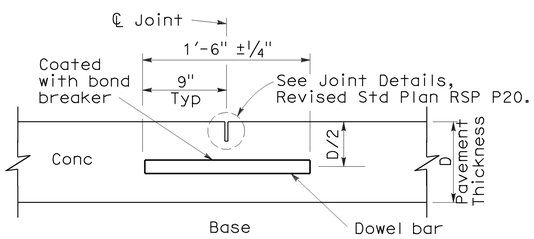
TABLE A (See Note 3)

Dowel Bar Transverse Spacing Table	
Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4

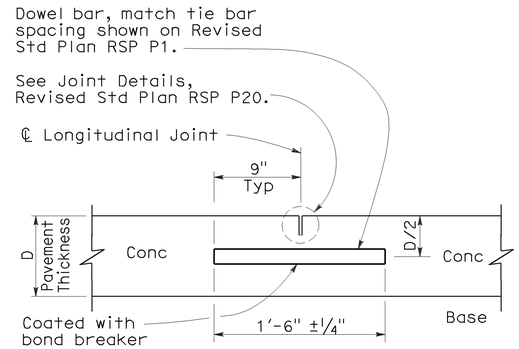


SECTION A-A

TRANSVERSE CONSTRUCTION JOINT DETAIL

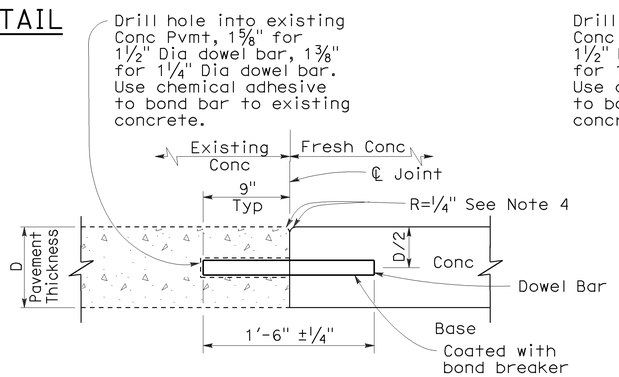


TRANSVERSE CONTRACTION JOINT



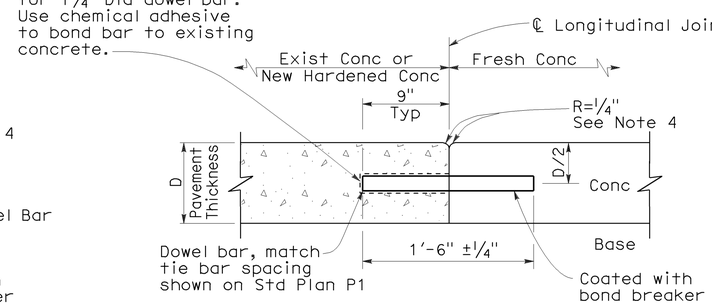
LONGITUDINAL CONTRACTION JOINT WITH DOWEL BARS

(See Revised Std Plan RSP P18)



TRANSVERSE CONSTRUCTION JOINT FOR EXISTING CONCRETE PAVEMENT

(Drill and bond locations)



LONGITUDINAL CONSTRUCTION JOINT WITH DOWEL BARS

(See Revised Std Plan RSP P18)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT-DOWEL BAR DETAILS

NO SCALE

RSP P10 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P10 DATED MAY 1, 2006 - PAGE 124 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P10

2006 REVISED STANDARD PLAN RSP P10

5-8-09

NOTE:

1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	52	60

William K. Farnbach
REGISTERED CIVIL ENGINEER

May 15, 2009
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-10 CIVIL STATE OF CALIFORNIA

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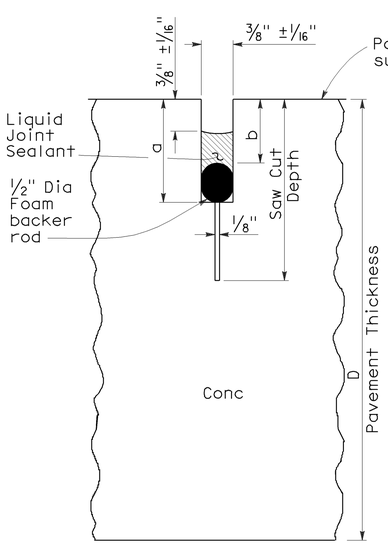
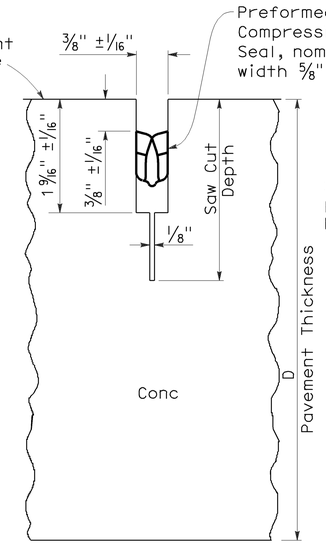
To accompany plans dated 08-09-10



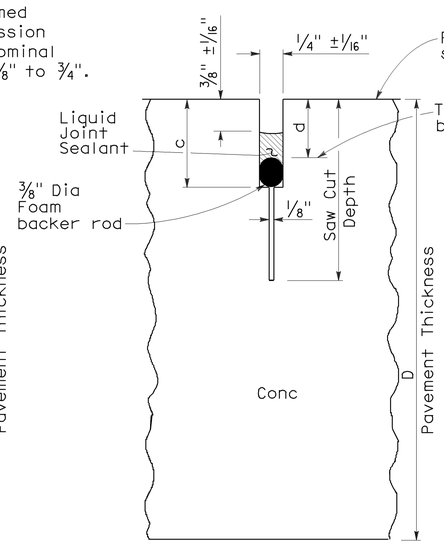
LIQUID SEALANT



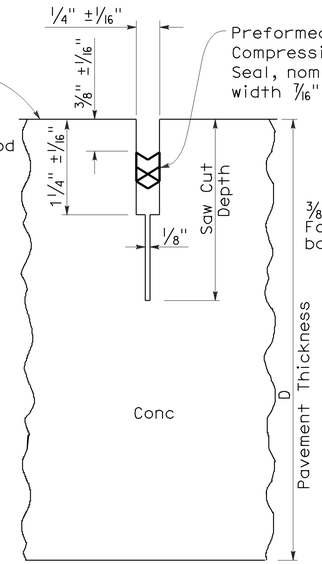
COMPRESSION SEAL

TYPE A1

Transverse Contraction Joints



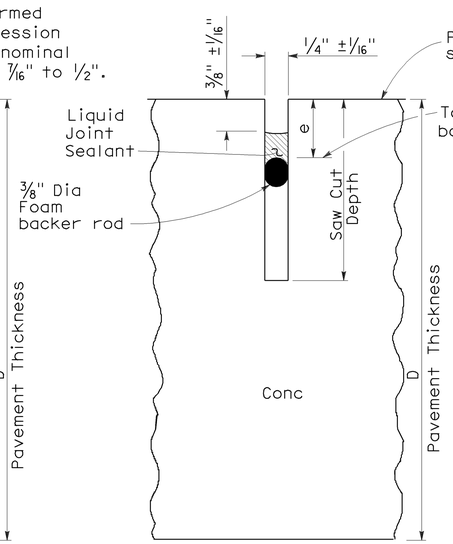
LIQUID SEALANT



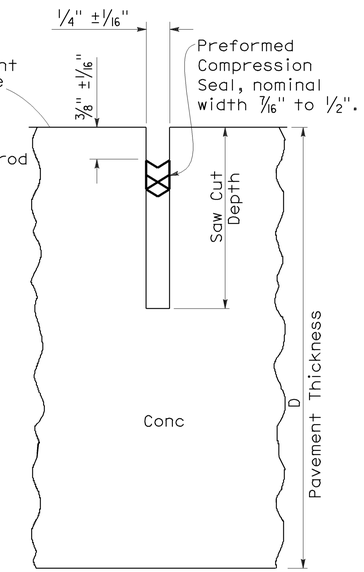
COMPRESSION SEAL

TYPE A2

Longitudinal Contraction Joints



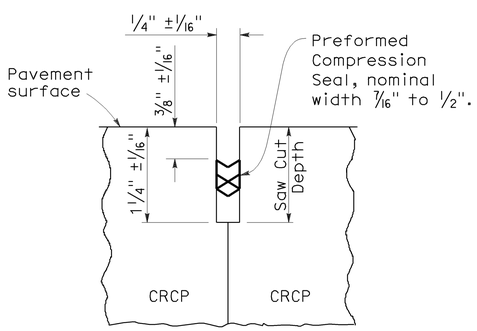
LIQUID SEALANT



COMPRESSION SEAL

TYPE B

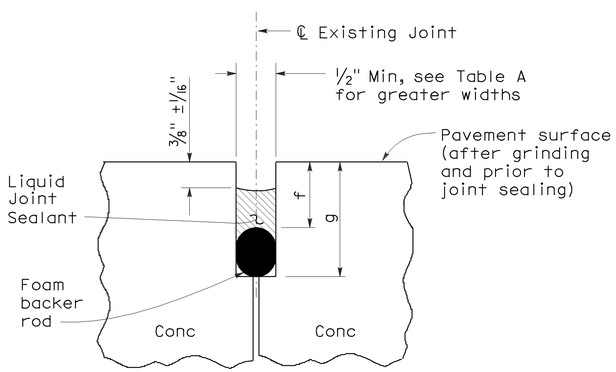
Longitudinal or Transverse Contraction Joint



COMPRESSION SEAL

TYPE C

Transverse and Longitudinal Construction Joints (For CRCP)



LIQUID SEALANT

TYPE R

Retrofit Transverse and Longitudinal Joints

LIQUID SEALANT RESERVOIR DEPTH

LIQUID SEALANT MATERIAL	3/8" Joint Width Type A1		1/4" Joint Width Type A2		1/4" Joint Width Type B
	DIMENSION		DIMENSION		DIMENSION
	a	b	c	d	e
SILCONE	1" ±1/16"	5/8" ±1/16"	15/16" ±1/16"	9/16" ±1/16"	9/16" ±1/16"
ASPHALT RUBBER	1 3/16" ±1/16"	3/4" ±1/16"	1 1/16" ±1/16"	11/16" ±1/16"	11/16" ±1/16"

TABLE A (TYPE R JOINT)

Sawn Joint Width	Backer Rod Diameter ± 1/16"	DIMENSION "f"	DIMENSION "g"
1"	1 5/16"	7/8"	2 1/4"
7/8"	1 3/16"	13/16"	2"
3/4"	1"	3/4"	1 3/4"
5/8"	7/8"	11/16"	1 1/2"
1/2"	11/16"	5/8"	1 1/4"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT-JOINT DETAILS

NO SCALE

RSP P20 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P20
DATED MAY 1, 2006 - PAGE 128 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P20

2006 REVISED STANDARD PLAN RSP P20

5-8-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	53	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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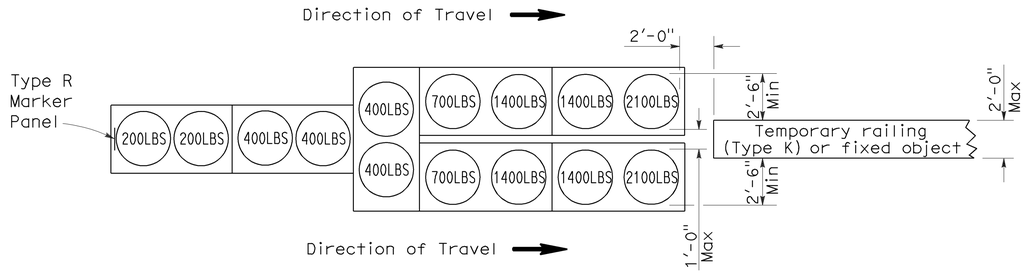
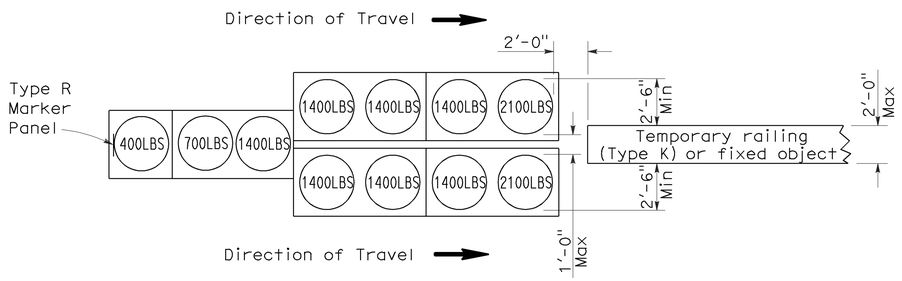
To accompany plans dated 08-09-10



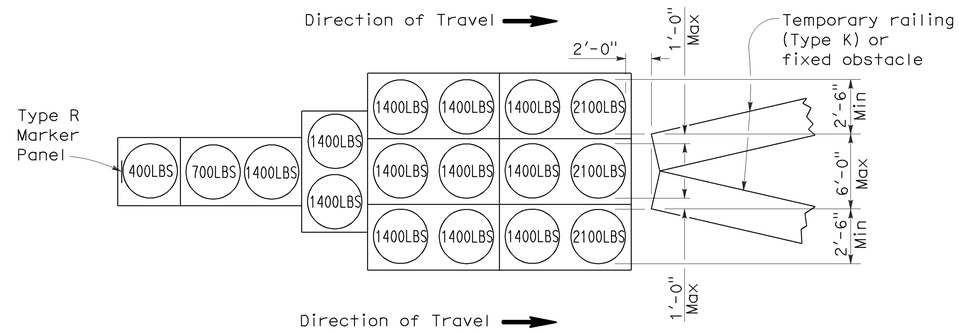
ARRAY 'TU14'

Approach speed 45 mph or more



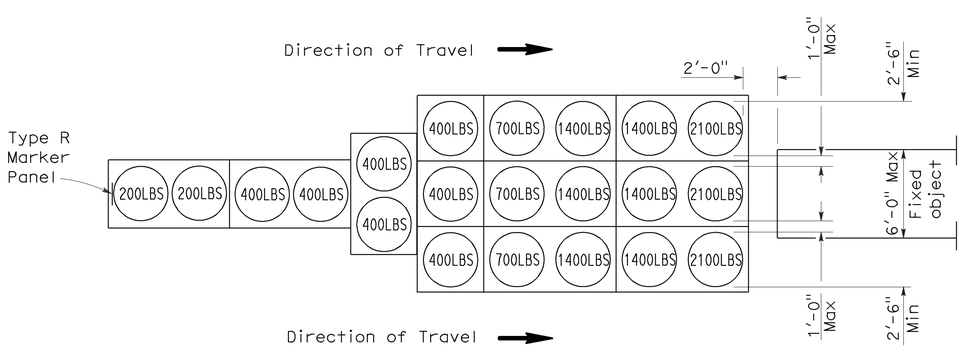
ARRAY 'TU11'

Approach speed less than 45 mph



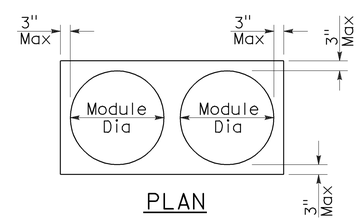
ARRAY 'TU17'

Approach speed less than 45 mph

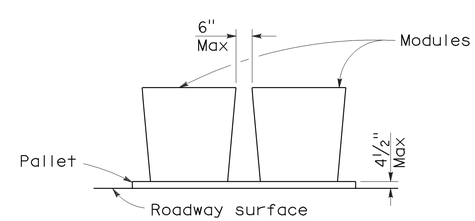


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (UNIDIRECTIONAL)

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	54	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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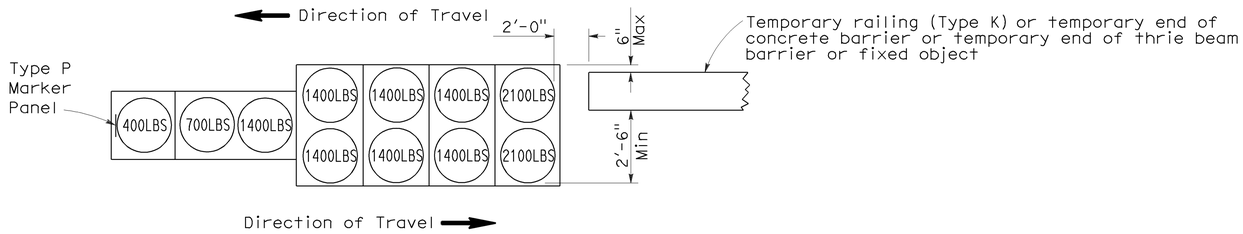
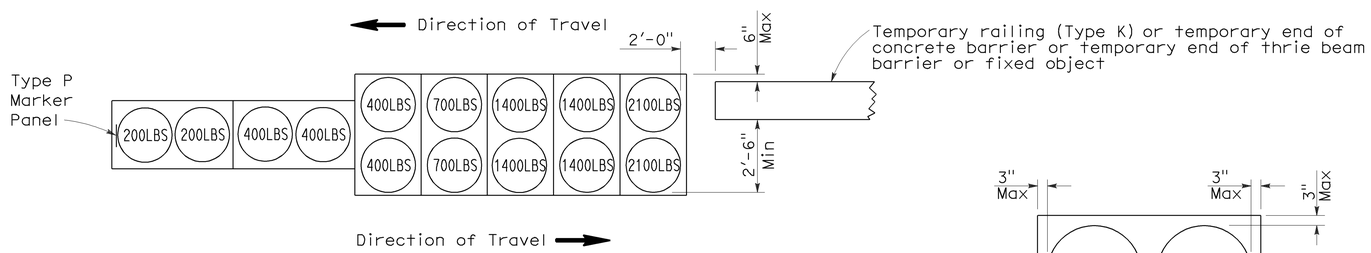
To accompany plans dated 08-09-10



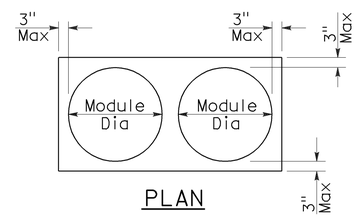
ARRAY 'TB11'

Approach speed less than 45 mph

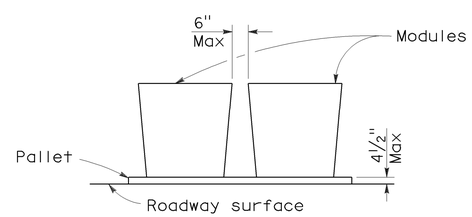


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (BIDIRECTIONAL)

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	55	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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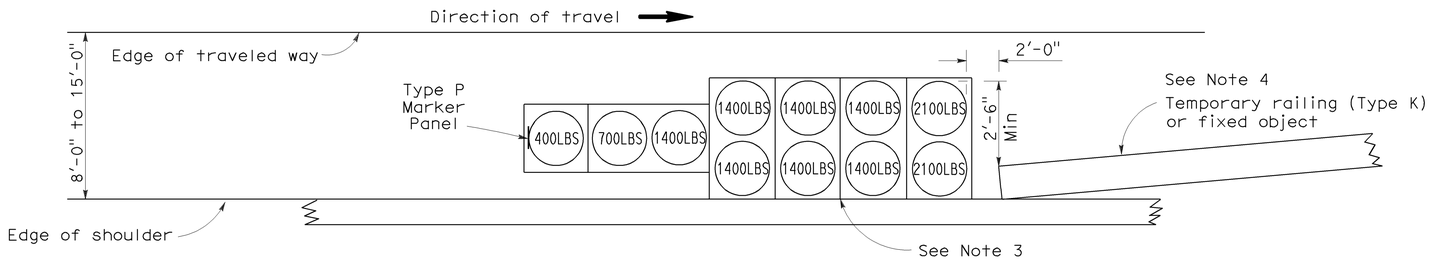
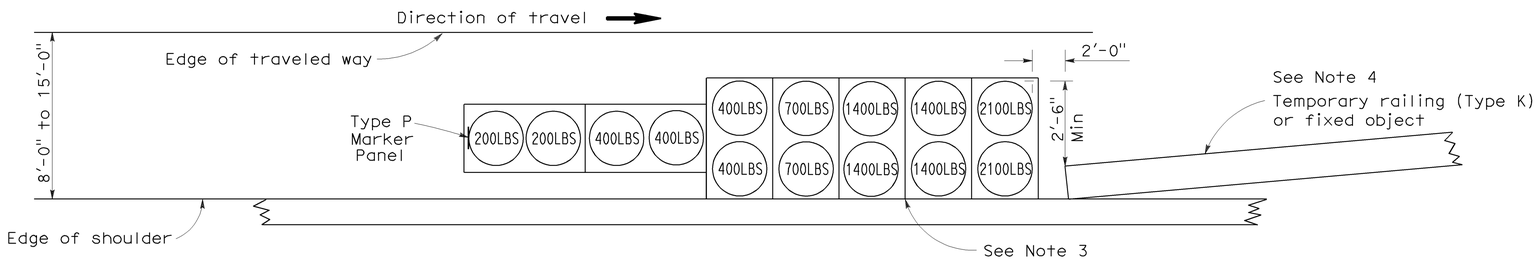
To accompany plans dated 08-09-10



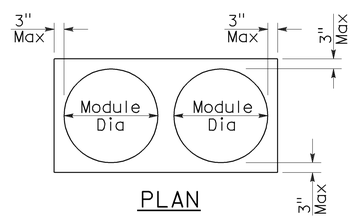
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

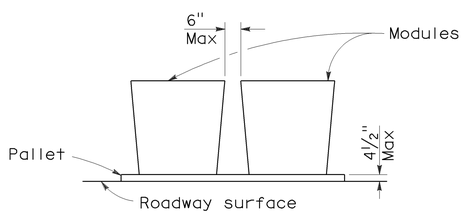


ARRAY 'TS14'

Approach speed 45 mph or more
See Note 9



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 11

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

5-15-08

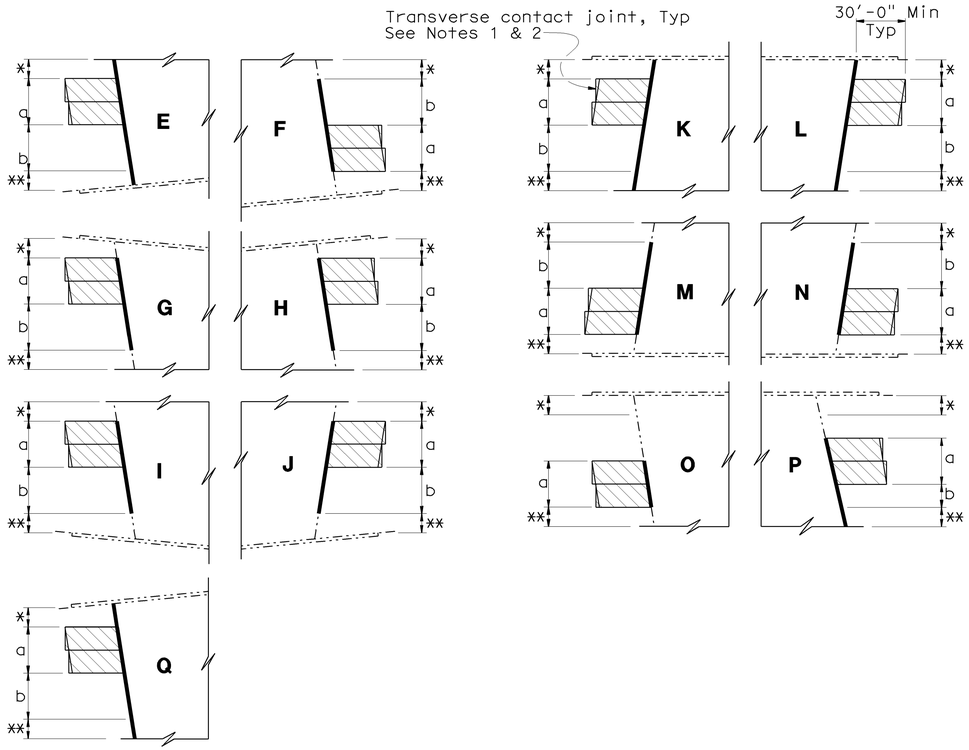
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
11	SD	5	R10.0/R20.0	56	60

Christine Chan 07/20/10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Christine Yuk-Ching Chan No. 74609 Exp. 12/31/11 CIVIL STATE OF CALIFORNIA

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



NOTES:
Approach defined as structure carrying traffic from roadway onto bridge.
Departure defined as structure carrying traffic from bridge onto roadway.

1. Transverse contact joint to be constructed parallel to paving notch for skews < 10°0' and perpendicular to direction of traffic for skews ≥ 10°0'.
2. For a skew > 10°0', stagger transverse contact joint every 2 to 3 lane widths or every 23'-0" to 36'-0" apart.
3. For bridge removal details at location 6 CIVIC CENTER DRIVE OH see "DETAIL A" on "STRUCTURE APPROACH DETAILS" sheet.
4. For bridge removal and paving notch extension details at location 8 MAIN STREET UC see "PARTIAL PLAN" on "STRUCTURE APPROACH DETAILS"sheet.
5. For limits of structural Approach Type R(30S) and Type R(30D) at location 8 MAIN STREET UC see "PARTIAL PLAN" on "STRUCTURE APPROACH DETAILS" sheet.
6. For paving notch extension details at location 48 ROUTE 5/163 SEPARATION see "DETAIL B" on "STRUCTURE APPROACH DETAILS" sheet.

LEGEND:

/ Indicates location of joint seal removal and placement of new joint seal, see "JOINT SEAL DETAILS" sheet for details.

Indicates location and limits of structure approach/departure slab replacement.

Indicates existing structure

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	JOINT SEAL DETAILS
3	STRUCTURE APPROACH DETAILS
4	STRUCTURE APPROACH TYPE R(30D)
5	STRUCTURE APPROACH TYPE R(30S)

STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

STANDARD PLAN SHEET NO.

DETAIL NO.

STRUCTURE APPROACH AND DEPARTURE REPLACEMENT INFORMATION				NORTHBOUND APPROACH							NORTHBOUND DEPARTURE					SOUTHBOUND APPROACH							SOUTHBOUND DEPARTURE							QUANTITIES									
Location	Bridge Name	Bridge No.	PM	Skew	Type	* (ft)	** (ft)	a (ft)	b (ft)	Layout	Skew	Type	a (ft)	b (ft)	Layout	Skew	Type	* (ft)	** (ft)	a (ft)	b (ft)	Layout	Skew	Type	* (ft)	** (ft)	a (ft)	b (ft)	Layout	BRIDGE REMOVAL (PORTION) LOCATION A (LS)	BRIDGE REMOVAL (PORTION) LOCATION B (LS)	AGGREGATE BASE (APPROACH SLAB) (CY)	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R) (CY)	PAVING NOTCH EXTENSION (CF)	CLEAN EXPANSION JOINT (LF)	JOINT SEAL MR 1/2" (LF)	JOINT SEAL MR 1" (LF)	JOINT SEAL MR 1 1/2" (LF)
1	24TH STREET UC	57-0251L	R10.04																				0°50'±	R(30D)	10.0±	8.0±	24.0±	36.0±	K			3	28	20	56		80	
6	CIVIC CENTER DRIVE OH	57-0468L/R	R10.75	2°45'±	R(30S)	8.0	10.0	48.0±	0	E						63°50'±	R(30S)	8.0±	8.0±	12.0±	48.0±	L	16°59'±	R(30S)	10.0±	8.0±	12.0±	36.0±	Q	1		8	85		224			312
7	8TH STREET UC	57-0469	R11.13								33°42'±	R(30D)	24.0±	24.0±	F																	3	30	20	30	58		
8	MAIN STREET UC	57-0434	R11.66													57°35'±	R(30D) R(30S)	10.0±	11.0±	36.0±	24.0±	L									1	5	52	50	85	153		
9	VESTA STREET UC	57-0435	R12.03													44°03'±	R(30D)			12.0±	60.0±	H	46°27'±	R(30D)			12.0±	60.0±	G			3	32	25	170	204		
11	SOUTH CHOLLAS CREEK	57-0436	R12.43	49°41'±	R(30D)			36.0±	12.0±	M	49°41'±	R(30D)	36.0±	12.0±	N	49°41'±	R(30D)			48.0±	0	H	49°41'±	R(30D)			36.0±	12.0±	G			20	215	180	55		297	
14	ROUTE 5/15 SEPARATION	57-0438	R12.63	13°23'±	R(30D)			48.0±	0	I	6°17'±	R(30D)	48.0±	0	J								13°23'±	R(30D)			24.0±	24.0±	G			13	138	90	25	147		
15	CHOLLAS CREEK	57-0473	R12.73	35°00'±	R(30D)			48.0±	0	I																						6	60	45			58	
24	CESAR CHAVEZ PARKWAY UC	57-0445	R14.12	00°00'±	R(30D)			12.0±	36.0±	M																						2	15	10	36		48	
28	IMPERIAL AVENUE UC	57-0448	R14.50													0°00'±	R(30D)		11.0±	12.0±	36.0±	P										2	15	10	48	59		
48	ROUTE 5/163 SEPARATION	57-0391	R16.02																				02°39'±	R(30D)			48.0±		O			5	55	35		48		
66	STATE STREET UC	57-0453	R17.04													37°20'±	R(30D)		11.0±	24.0±	24.0±	P										3	30	25	45	75		

*/** = Shoulder width, no structure approach/departure slab replacement required.
a = Total width of structure approach/departure slab replacement at through-traffic lanes(s).
b = Total width of through-traffic lanes(s), no structure approach/departure slab replacement required.

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

NO SCALE

T. Menard
DESIGN ENGINEER

	BY	CHECKED
DESIGN	C. Chan	D. Vargas
DETAILS	Y. Feng/T. Trefz	D. Vargas
QUANTITIES	C. Chan	D. Vargas

LOAD FACTOR DESIGN — LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
LAYOUT — BY C. Chan — CHECKED D. Vargas
SPECIFICATIONS — BY E. Rufino — PLANS AND SPECS COMPARED C. Chan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN 15

CU 11
EA 240101

BRIDGE NO. Various
POST MILE Various

ROUTE 5 BRIDGE APPROACH AND DEPARTURE SLAB REPLACEMENT
GENERAL PLAN

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES (PRELIMINARY STAGE ONLY) 3-18-10 04-09-10 04-09-10 04-14-10 04-28-10 04-21-10 07-26-10 08-03-10

SHEET 1 OF 5

FILE => 11-240101-a-gp01.dgn

USERNAME => hmaurosc DATE PLOTTED => 05-AUG-2010 TIME PLOTTED => 14:30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
11	SD	5	R10.0/R20.0	57	60

Christine Chan 07/20/10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Christine Yuk-Ching Chan
No. 74609
Exp. 12/31/11
CIVIL
STATE OF CALIFORNIA

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JOINT SEAL TABLE

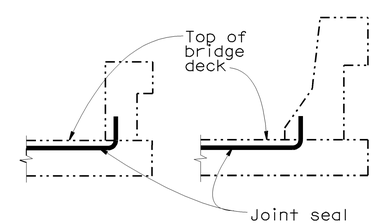
LOCATION	BRIDGE NAME	BRIDGE NUMBER			MINIMUM "MR" (in)	Approximate Length (LF)	Existing Waterstop (Y/N)	Approx. Depth to Clean Exp. Joint (in)
1	24TH STREET UC	57-0251L	Abut 1 (SB only)	PN	1	80	Y	12
6	CIVIC CENTER DRIVE OH	57-0468L	Abut 1		1½	69	Y	12
			Abut 8		1½	177	Y	12
		57-0468R	Abut 1		1½	66	Y	12
7	8TH STREET UC	57-0469	Abut 4 (NB only)	PN	½	58	Y	12
8	MAIN STREET UC	57-0434	Abut 4 (SB only)	PN	½	153	Y	12
9	VESTA STREET UC	57-0435	Abut 1 (SB only)	PN	½	104	N	12
			Abut 4 (SB only)	PN	½	100	N	12
11	SOUTH CHOLLAS CREEK	57-0436	Abut 1	PN	1	149	Y	12
			Abut 4	PN	1	149	Y	12
14	ROUTE 5/15 SEPARATION	57-0438	Abut 1	PN	½	99	N	12
			Abut 5 (NB only)	PN	½	49	N	12
15	CHOLLAS CREEK	57-0473	Abut 1 (NB only)	PN	1	59	N	12
24	CESAR CHAVEZ PARKWAY UC	57-0445	Abut 1 (NB only)	PN	1	48	N	12
28	IMPERIAL AVENUE UC	57-0448	Abut 4 (SB only)	PN	½	59	N	12
48	ROUTE 5/163 SEPARATION	57-0391	Abut 1 (SB only)	PN	½	48	N	12
66	STATE STREET UC	57-0453	Abut 2 (SB only)	PN	½	75	Y	12

The following note applies to JOINT SEAL TYPE A:

Install Type A joint seal 3" up into curb or rail on the low side of the deck where joint matches curb or rail joint. For details not shown see, RSP B6-21

The following notes apply to JOINT SEAL TYPE B:

1. Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
2. Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be recalculated by the Engineer.
3. W1 shall be the smaller of the values determined as follows:
   A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
   B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3 psi.
4. 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.
5. For details not shown see, RSP B6-21



BARRIER RAIL

JOINT SEAL AT LOW SIDE OF DECK

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

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

	BY	CHECKED
DESIGN	C. Chan	D. Vargas
DETAILS	Y. Feng/T.Trefz	D. Vargas
QUANTITIES	C. Chan	D. Vargas

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 15

BRIDGE NO. Various
POST MILE Various

ROUTE 5 BRIDGE APPROACH AND DEPARTURE SLAB REPLACEMENT

JOINT SEAL DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 11
EA 240101

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES 3-18-10 04-01-10 04-15-10 04-26-10 07-20-10

SHEET 2 OF 5

FILE => 11-240101-j-jsd.dgn

USERNAME => hmaurosc DATE PLOTTED => 05-AUG-2010 TIME PLOTTED => 14:32

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
11	SD	5	R10.0/R20.0	58	60

Christine Chan 07/20/10
REGISTERED CIVIL ENGINEER DATE

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Christine Yuk-Ching Chan No. 74609 Exp. 12/31/11 CIVIL STATE OF CALIFORNIA

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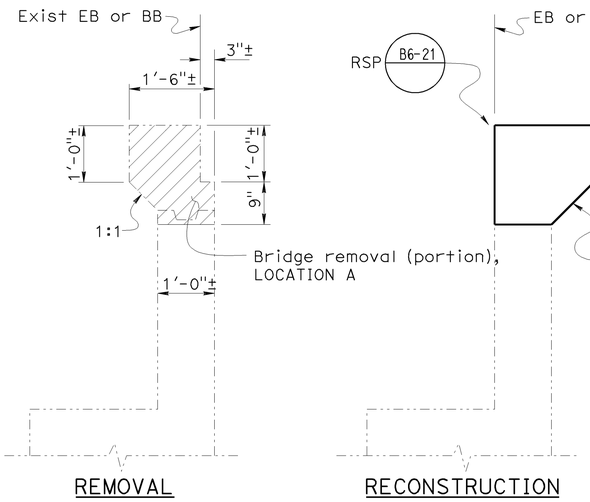
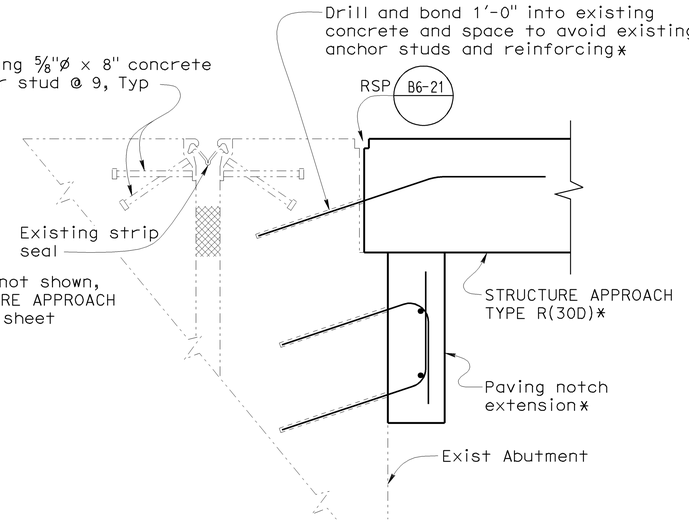


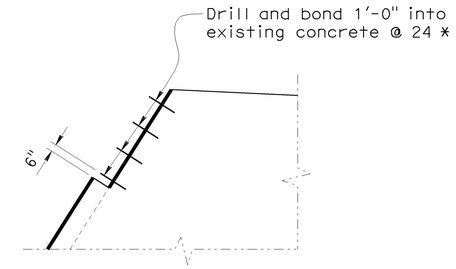
Location (6)
CIVIC CENTER DRIVE OH (Br. No. 57-0468L/R)

DETAIL A
No Scale



Location (48)
ROUTE 5/163 SEPARATION (Br. No. 57-0391)

DETAIL B
1½" = 1'-0"



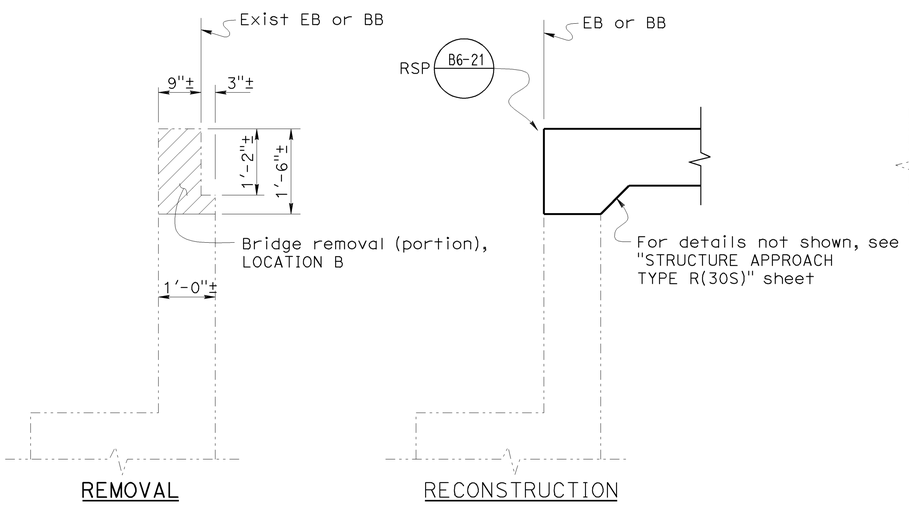
DETAIL C
1" = 5'

LEGEND:

/ Indicates location of joint seal removal and placement of new joint seal. See "JOINT SEAL DETAILS" sheet for details

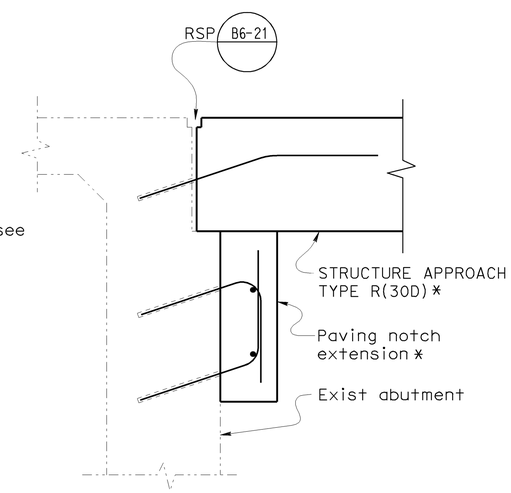
Indicates location and limits of structure approach slab replacement

* For details not shown, see "STRUCTURE APPROACH TYPE R(30D)"



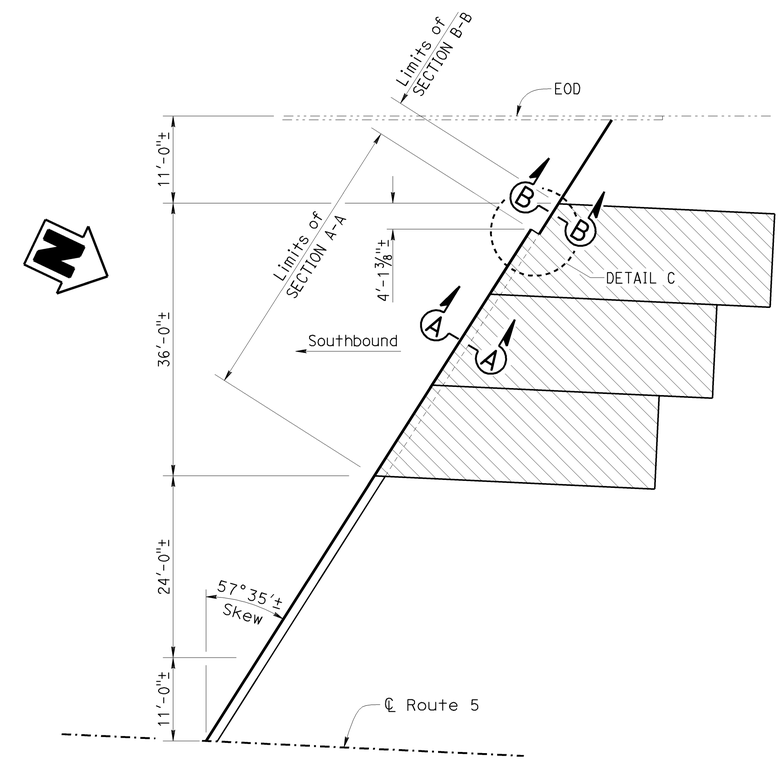
Location (8)
MAIN STREET UC (Br. No. 57-0434)

SECTION A-A
No Scale



Location (8)
MAIN STREET UC (Br. No. 57-0434)

SECTION B-B
¾" = 1'-0"



Location (8)
MAIN STREET UC (Br. No. 57-0434)

PARTIAL PLAN
1" = 10'

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

	BY	CHECKED
DESIGN	C. Chan	D. Vargas
DETAILS	Y. Feng/T.Trefz	D. Vargas
QUANTITIES	C. Chan	D. Vargas

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 15

BRIDGE NO. Various
POST MILE Various

ROUTE 5 BRIDGE APPROACH AND DEPARTURE SLAB REPLACEMENT
STRUCTURE APPROACH DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 11
EA 240101

DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES: 3-31-10 04-01-10 04-15-10 04-26-10 07-29-10 08-03-10

SHEET 3 OF 5

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USERNAME => hmaurosc DATE PLOTTED => 05-AUG-2010 TIME PLOTTED => 14:32

DIST.	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	59	60

Christine Chan
REGISTERED ENGINEER - CIVIL

08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Christine Yuk-Ching Chan No. 74609 Exp. 12/31/11 CIVIL STATE OF CALIFORNIA

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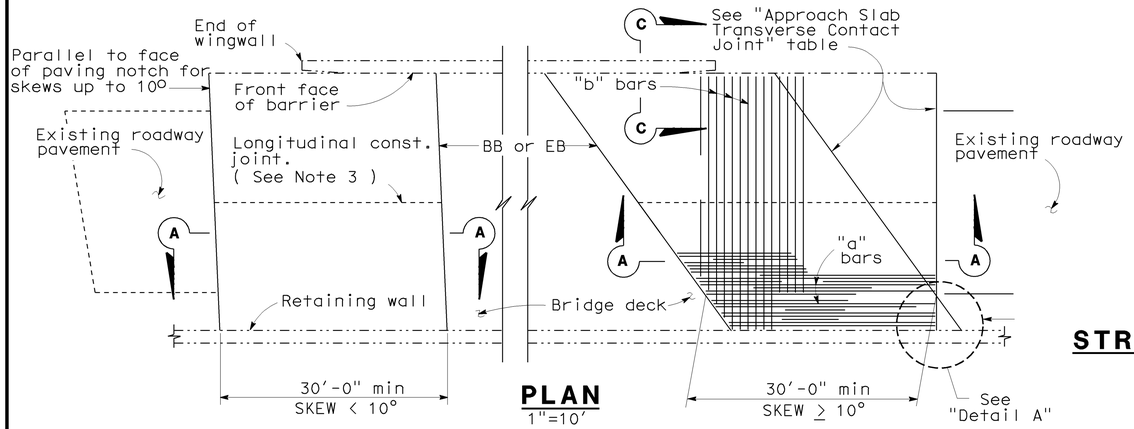
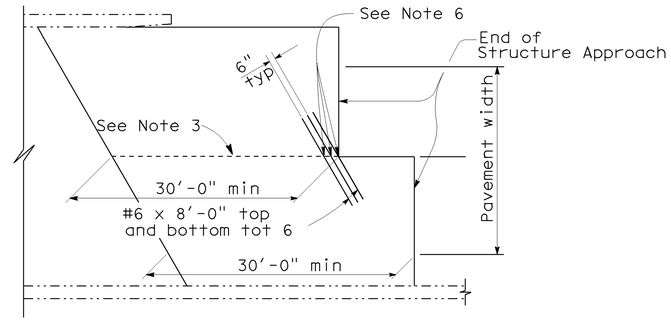
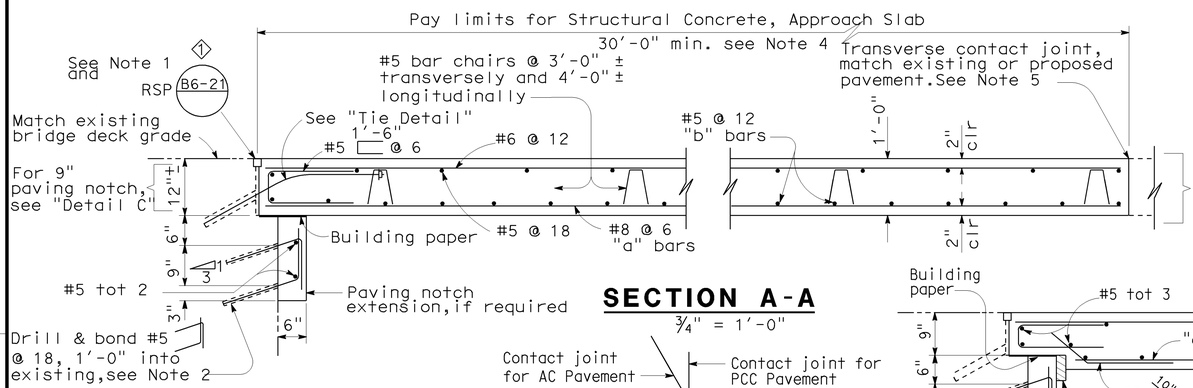


PLAN
1"=10'

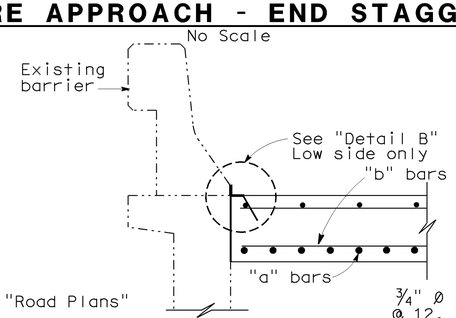


STRUCTURE APPROACH - END STAGGER DETAIL
No Scale

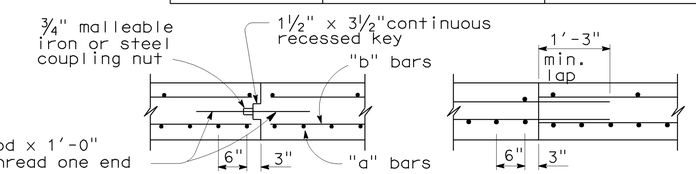
APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
10° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 24' to 36' apart
> 45°	Parallel to face of P N use (Detail A)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



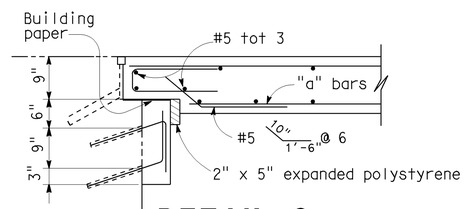
SECTION A-A
¾" = 1'-0"



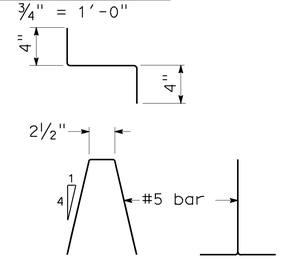
SECTION C-C
¾" = 1'-0"



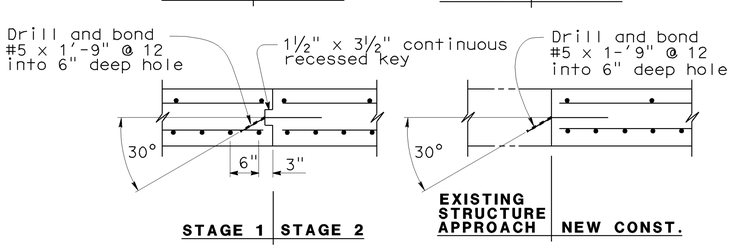
DETAIL A
No Scale



DETAIL C
¾" = 1'-0"

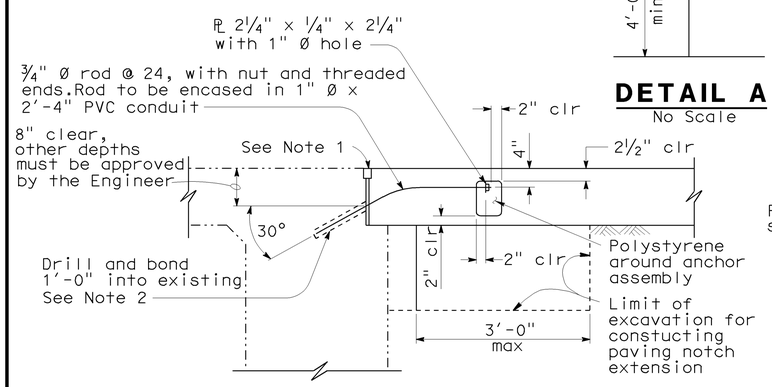


BAR CHAIR DETAIL
1½" = 1'-0"



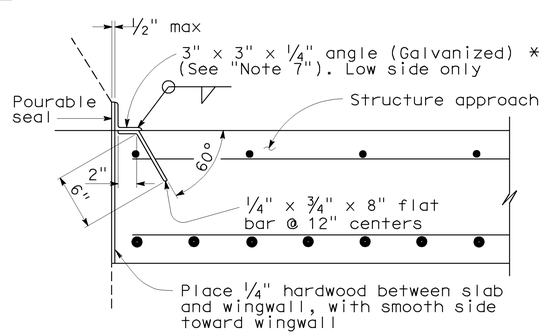
LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
¾" = 1'-0"

NOTE: For details not shown, see "Section A-A".

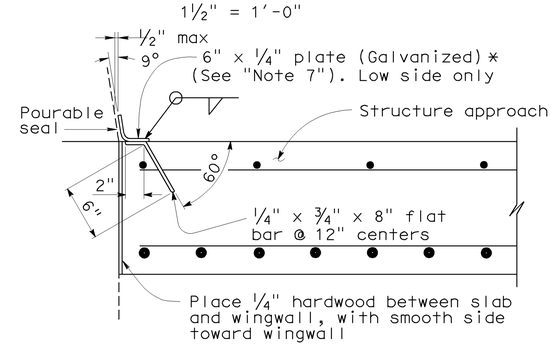


TIE DETAIL
¾" = 1'-0"

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



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



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

DETAIL B
1½" = 1'-0"

NOTES:

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

STANDARD DRAWING

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

DS OSD 2147A (ENGLISH) (REV. X/XX/XX)

1 "RSP" added to detail call-out B6-21

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. Various
MILE POST Various

ROUTE 5 BRIDGE APPROACH AND DEPARTURE SLAB REPLACEMENT
STRUCTURE APPROACH TYPE R(30D)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 11
EA 240101

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) 02-18-10 03-19-10 04-15-10

SHEET 4 OF 5

USERNAME => hmaurosc

DATE PLOTTED => 05-AUG-2010 TIME PLOTTED => 14:33

11-240101-s-sa01.dg

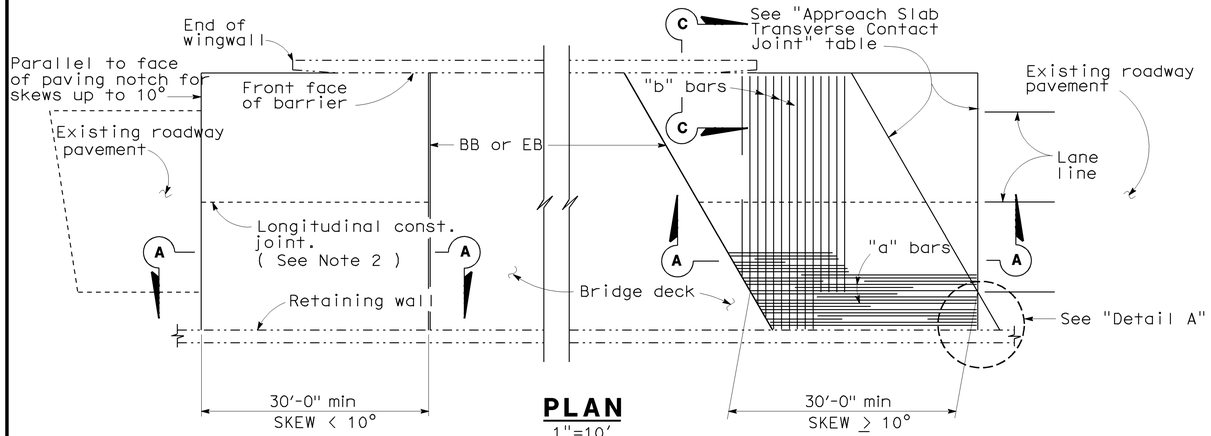
DIST.	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R10.0/R20.0	60	60

Christine Chan
REGISTERED ENGINEER - CIVIL

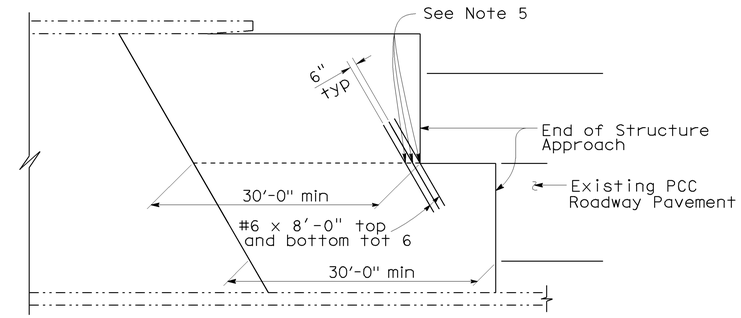
08-09-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Christine Yuk-Ching Chan No. 74609 Exp. 12/31/11 CIVIL STATE OF CALIFORNIA

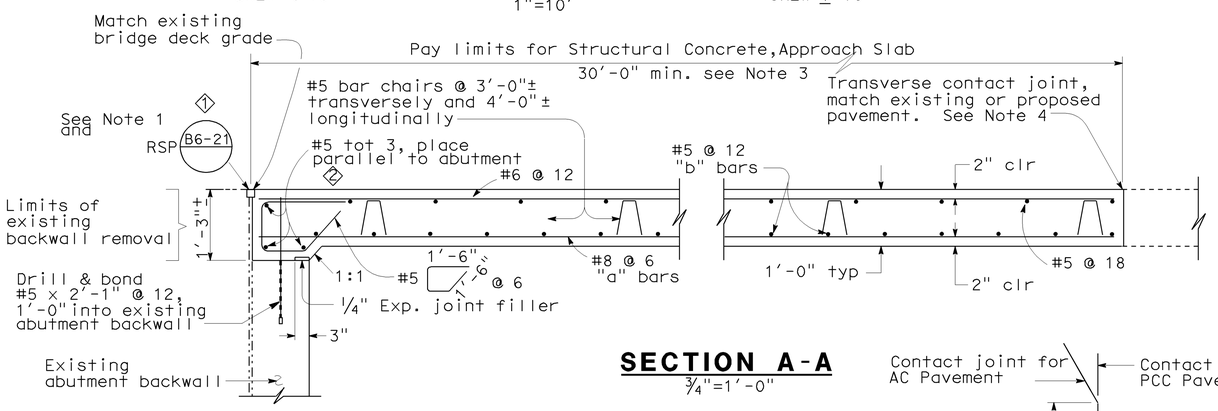
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



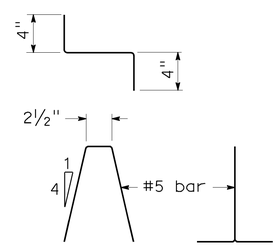
PLAN
1"=10'



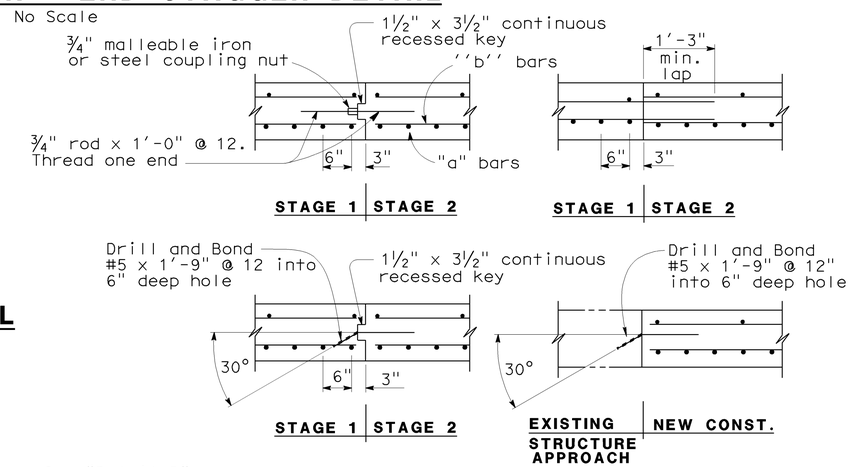
STRUCTURE APPROACH - END STAGGER DETAIL
No Scale



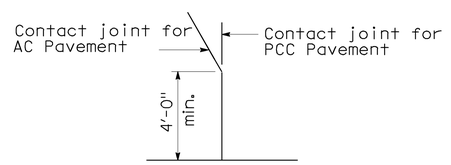
SECTION A-A
3/4"=1'-0"



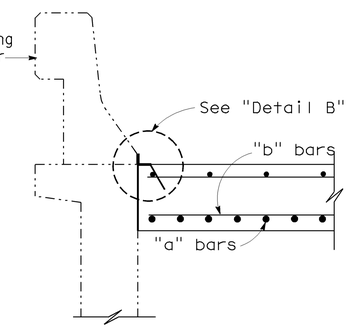
BAR CHAIR DETAIL
1 1/2"=1'-0"



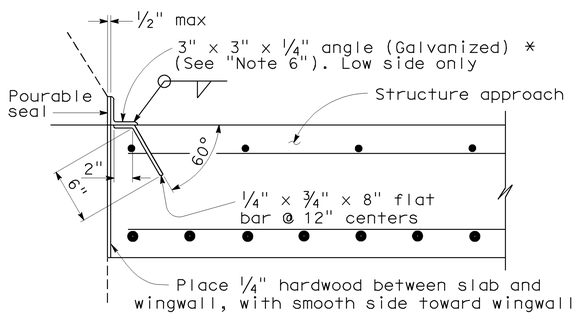
LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
3/4"=1'-0"



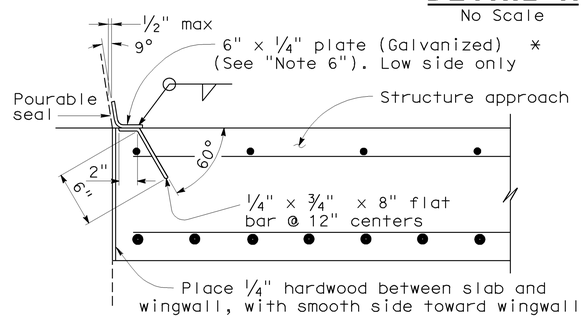
DETAIL A
No Scale



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



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



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

NOTE:

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

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

APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
2 10°- 45°	Parallel to face of PN use (Detail A)	Stagger lines 24' to 36' apart
2 > 45°	Parallel to face of PN use (Detail A)	Stagger at each lane line

NOTES:

2 1. Sealed joint,for MR see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint,when required.
2. Longitudinal construction joints,when permitted by Engineer,shall be located on lane lines.
3. Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint.
4. For transverse contact joint with new PCC paving, refer to Standard Plan P10.
5. Couplers are required for stage construction.
6. End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable.

STANDARD DRAWING

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

1 "RSP" added to detail call-out B6-21
2 Modified note

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. Various
MILE POST Various

ROUTE 5 BRIDGE APPROACH AND DEPARTURE SLAB REPLACEMENT

STRUCTURE APPROACH TYPE R(30S)

DS OSD 2147A (ENGLISH) (REV. X/XX/XX)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 11
EA 240101

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) 03-12-10 04-12-10 04-26-10 07-26-10 08-03-10

SHEET 5 OF 5

USERNAME => hmaurosc

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DATE PLOTTED => 05-AUG-2010 TIME PLOTTED => 14:33