| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 1 | 45 |

IM-0056(334)E

STATE OF CALIFORNIA
# DEPARTMENT OF TRANSPORTATION

## PROJECT PLANS FOR CONSTRUCTION ON
# STATE HIGHWAY

## IN SACRAMENTO COUNTY
## IN SACRAMENTO
## FROM FLORIN ROAD TO 0.6 MILE NORTH OF ROUTE 5/50 SEPARATION AND
## FROM 0.5 MILE SOUTH TO 0.2 MILE NORTH OF RICHARDS BOULEVARD UNDERCROSSING

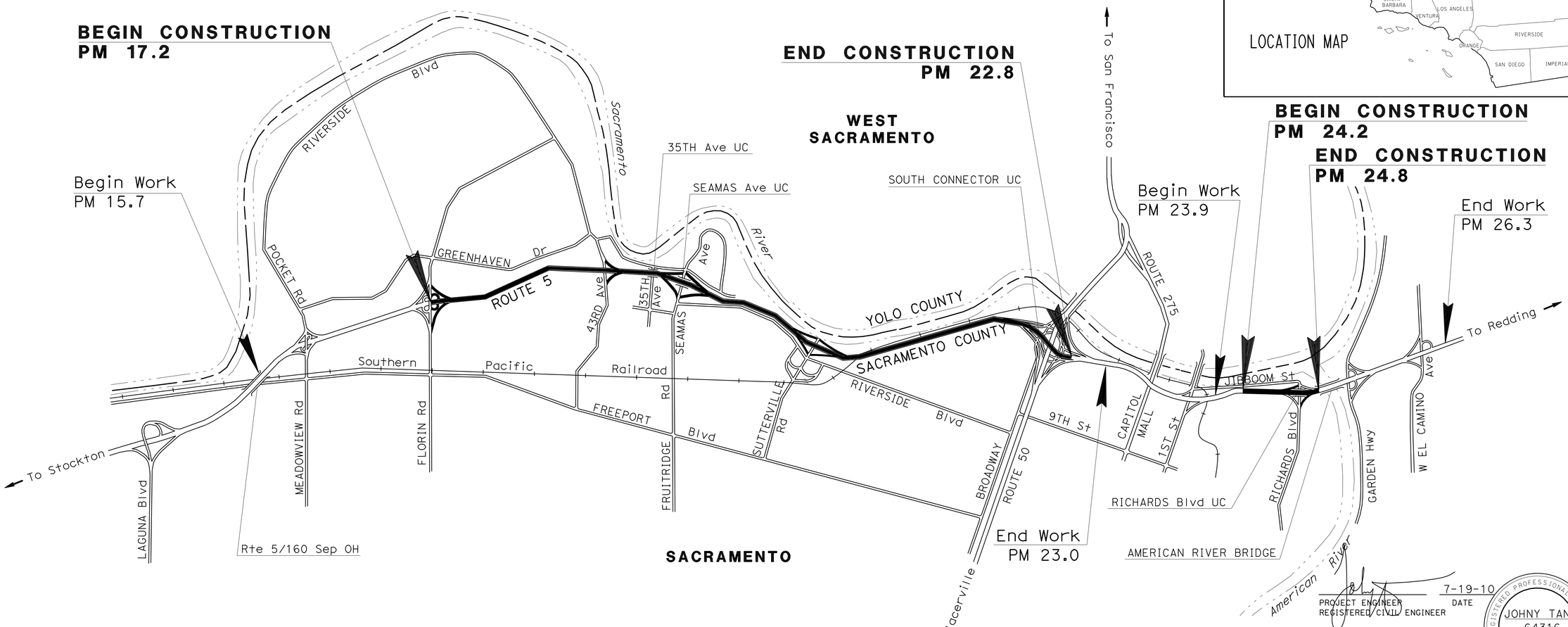
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

INDEX OF PLANS


| SHEET No. | DESCRIPTION |
|---|---|
| 1 | TITLE AND LOCATION MAP |
| 2-6 | TYPICAL CROSS SECTIONS |
| 7-8 | CONSTRUCTION DETAILS |
| 9-11 | CONSTRUCTION AREA SIGNS |
| 12-24 | DETOUR PLANS |
| 25 | PAVEMENT DELINEATION QUANTITIES |
| 26-27 | SUMMARY OF QUANTITIES |
| 28-30 | ELECTRICAL PLANS |
| 31-45 | REVISED AND NEW STANDARD PLANS |


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

LOCATION MAP




PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

7-19-10
DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

August 16, 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.*

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

NO SCALE

| CONTRACT No. | 03-1F4504 |
|---|---|
| PROJECT ID | 0300020025 |

PROJECT MANAGER: MELANI MILLARD
DESIGN ENGINEER: JOHNY TAN

LAST REVISION 00-00-00
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:13

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 2 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JOHNY TAN No. 64316 Exp. 6-30-11 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.*

1 Exist
0.35' AC (TYPE A)
0.35' - 0.85' AB
0.80' CI 4 AS

2 Exist
0.75' PCC
0.45'-0.95' CTB
0.80' CI 4 AS

3 Exist
0.10' RAC-G
0.75' PCC
0.45'-0.95' CTB
0.80' CI 4 AS

4 Exist
0.70' PCC
0.45' CTB
0.80' CI 4 AS

5 Exist
0.10' RAC-G
0.70' PCC
0.45' CTB
0.80' CI 4 AS

6 Exist
0.45' AC
1.20' AB
0.80' AS

7 Exist
0.17'-0.20' AC (TYPE A)
0.50'-0.95' AB
0.80' CI 4 AS

8 Exist
0.17' AC (TYPE A)
0.50' CI 2 AB

9 Exist
0.25' AC (TYPE A)
0.50'-1.00' AB
0.75' AS OR 0.50' CTS

10 Exist
0.79' AC (TYPE A)
1.23' CI 2 AB
2.02' AS

11 Exist
0.30' AC (TYPE A)
0.50' AB
1.20' AS

12 Exist
0.40' AC (TYPE A)
0.75' CTB
0.85' AS

13 Exist
0.06' OGAC
0.40' AC (TYPE A)
0.75' CTB
0.85' AS

14 Exist
0.75' PCC
0.50' CTB
0.75' AS OR 0.50' CTS

15 Exist
0.67' PCC
0.35' CTB
0.75' AS OR 0.50' CTS

16 Exist
0.50' AC (TYPE A)
0.75' AB
0.50' LT

17 Exist
0.35' AC (TYPE A)
0.75' CTB
1.15' AS

18 Exist
0.08' OGAC
0.79' AC
2.80' AB

19 Exist
0.08' OGAC
0.30' AC
0.67' PCC
0.35' CTB
0.98' AS

20 Exist
0.08' OGAC
0.30' AC
0.98' PCC
0.50' CTB
0.98' AS

21 Exist
0.08' OGAC
0.55' AC
0.75' CTB
1.15' AS

22 COLD PLANE AC PAVEMENT (0.25' Max)
0.25' HMA

23 COLD PLANE AC PAVEMENT (0.10' Max)
0.10' RHMA-O

24 COLD PLANE AC PAVEMENT (0.17' Max)
0.17' HMA

25 COLD PLANE AC PAVEMENT (0.35' Max)
0.10' RHMA-O
0.25' HMA

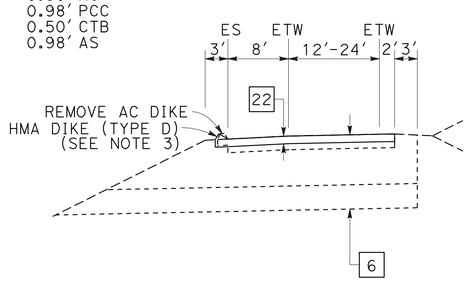
26 COLD PLANE AC PAVEMENT (0.27' Max)
0.10 RHMA-O
0.17' HMA

## NOTES:

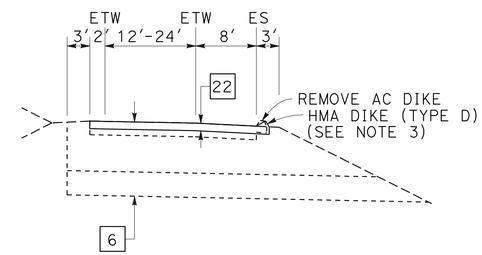
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. SEE SUMMARY OF QUANTITIES SHEET FOR LOCATIONS.
4. NO WORK SHALL BE PERFORMED ON BRIDGE DECK AND APPROACH/DEPARTURE SLABS.

## ABBREVIATIONS

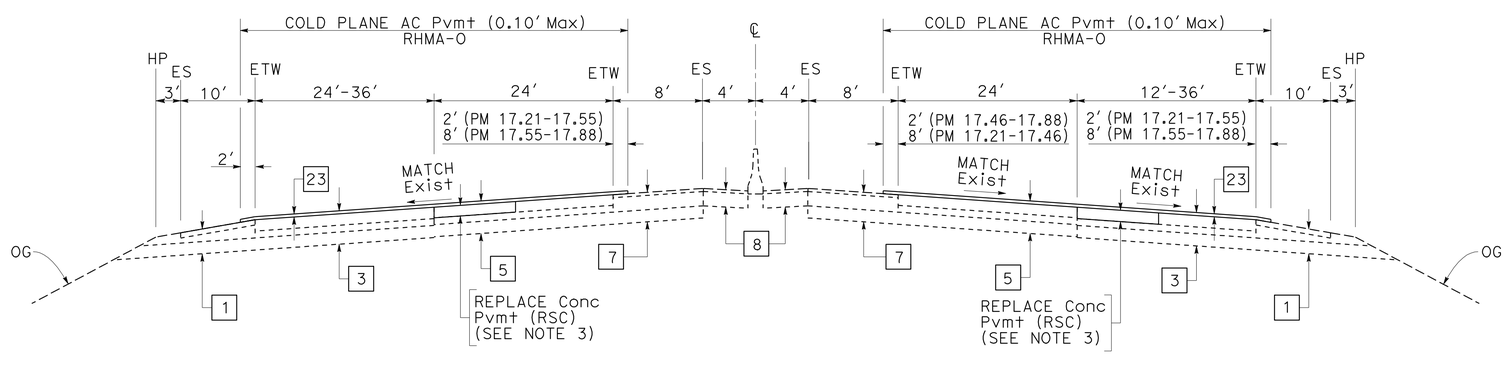
CTS - CEMENT TREATED SUBBASE
RAC-O - RUBBERIZED ASPHALT CONCRETE (TYPE O)
RHMA-O - RUBBERIZED HOT MIX ASPHALT (TYPE O)
RSC - RAPID STRENGTH CONCRETE




FLORIN ROAD SB SLIP OFF RAMP
FLORIN ROAD SB LOOP ON RAMP




FLORIN ROAD NB SLIP ON RAMP
FLORIN ROAD NB LOOP OFF RAMP




**ROUTE 5**
PM 17.21 - 17.88

# TYPICAL CROSS SECTIONS
NO SCALE

**X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JT
CHECKED BY:
REVISED BY:
DATE REVISED:

LAST REVISION 05-27-10 | DATE PLOTTED => 05-AUG-2010 | TIME PLOTTED => 13:13

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| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 3 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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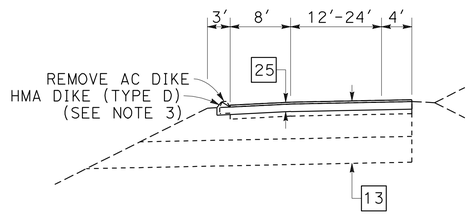
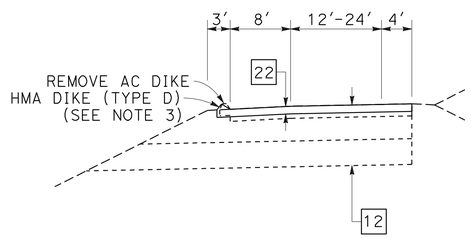
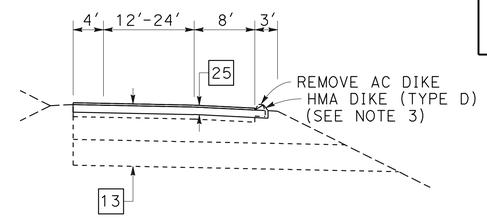


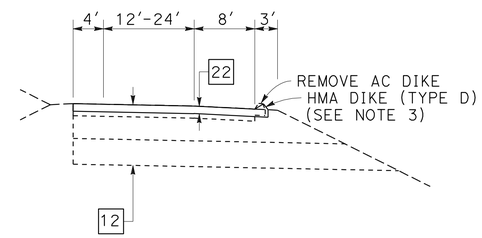

SEAMAS Ave SB OFF RAMP



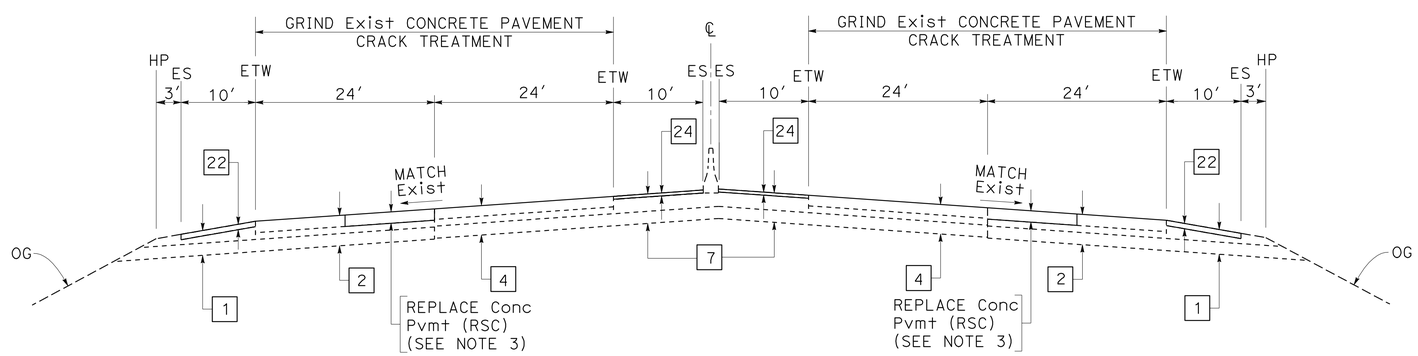

43RD Ave SB OFF RAMP
SEAMAS Ave SB ON RAMP
SUTTERVILLE Rd SB RAMPS




43RD Ave NB ON RAMP
SEAMAS Ave NB ON RAMP
SUTTERVILLE Rd NB ON RAMP




SEAMAS Ave NB OFF RAMP
SUTTERVILLE Rd NB OFF RAMP




**ROUTE 5**
PM 17.88 - 18.65

# TYPICAL CROSS SECTIONS
NO SCALE

**X-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:
REVISED BY: JT
DATE REVISED:

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:13

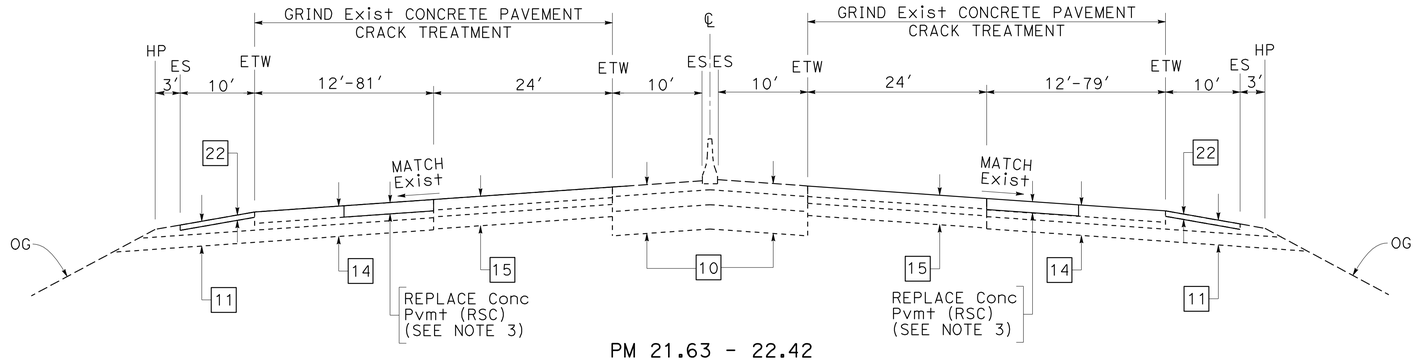
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 4 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

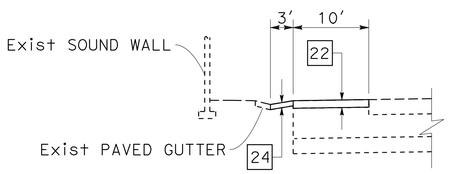
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

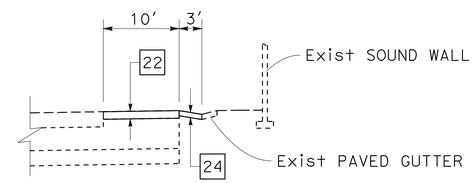
*THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.*



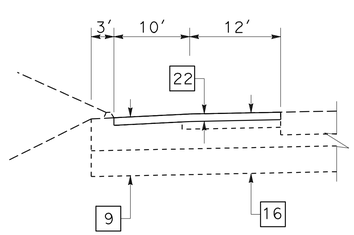

PM 21.63 - 22.42



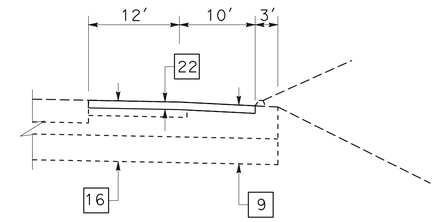

PM 19.40 - PM 19.90



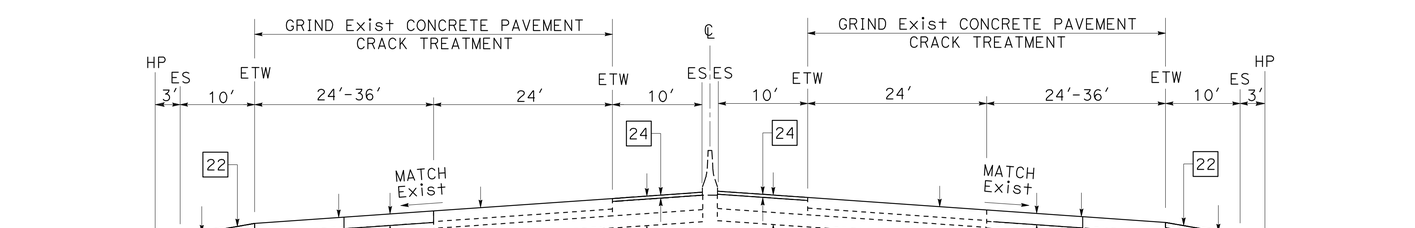

PM 20.90 - PM 21.40




PM 18.85 - PM 19.12
AUXILIARY LANE




PM 18.84 - PM 19.11
AUXILIARY LANE




**ROUTE 5**
PM 18.65 - 21.63

# TYPICAL CROSS SECTIONS
NO SCALE

**X-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY: JT
REVISED BY
DATE REVISED

LAST REVISION 05-27-10 | DATE PLOTTED => 05-AUG-2010 | TIME PLOTTED => 13:14

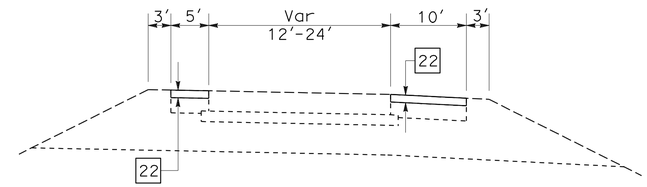
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 5 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

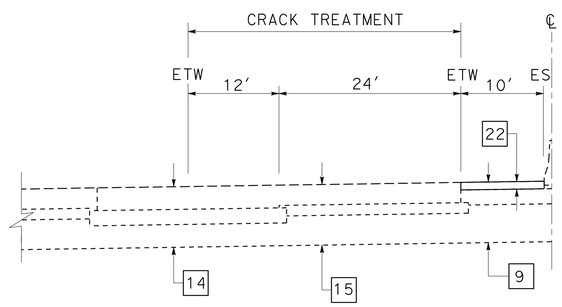
REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

*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.*

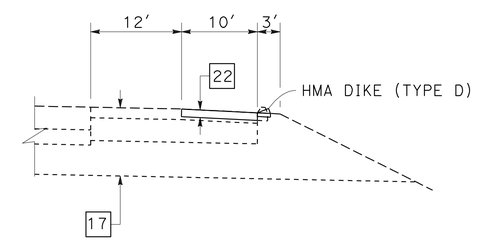



WB ROUTE 50 TO SB ROUTE 5 CONNECTOR
PM 22.16 - PM 22.34

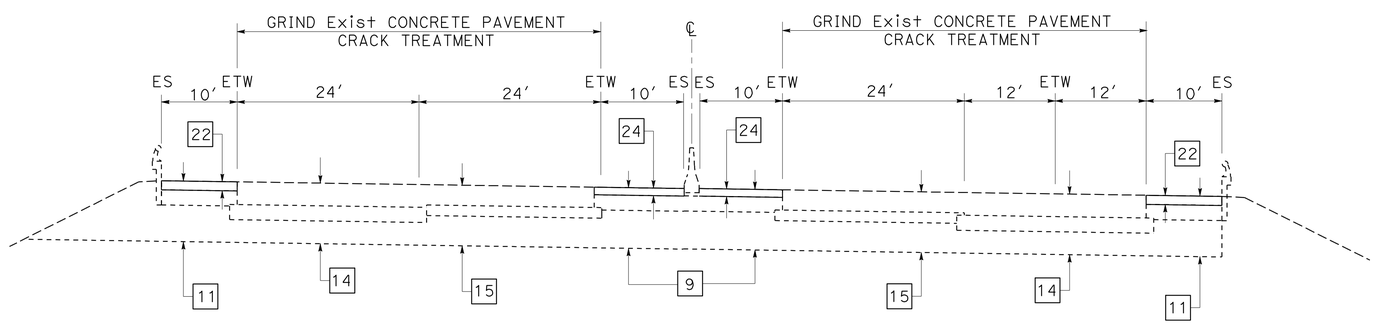
EB ROUTE 50 TO SB ROUTE 5 CONNECTOR
PM 22.33 - PM 22.38




PM 22.61 - 22.75




EB ROUTE 50 TO NB ROUTE 5 CONNECTOR
PM 22.65 - PM 22.75




**SB ROUTE 5**
PM 22.49 - 22.61

**NB ROUTE 5**
PM 22.49 - 22.75

# TYPICAL CROSS SECTIONS
NO SCALE

**X-4**

| REVISED BY | DATE REVISED |
|---|---|
| JT | |

CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:
FUNCTIONAL SUPERVISOR: JOHNY TAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:14

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
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| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 6 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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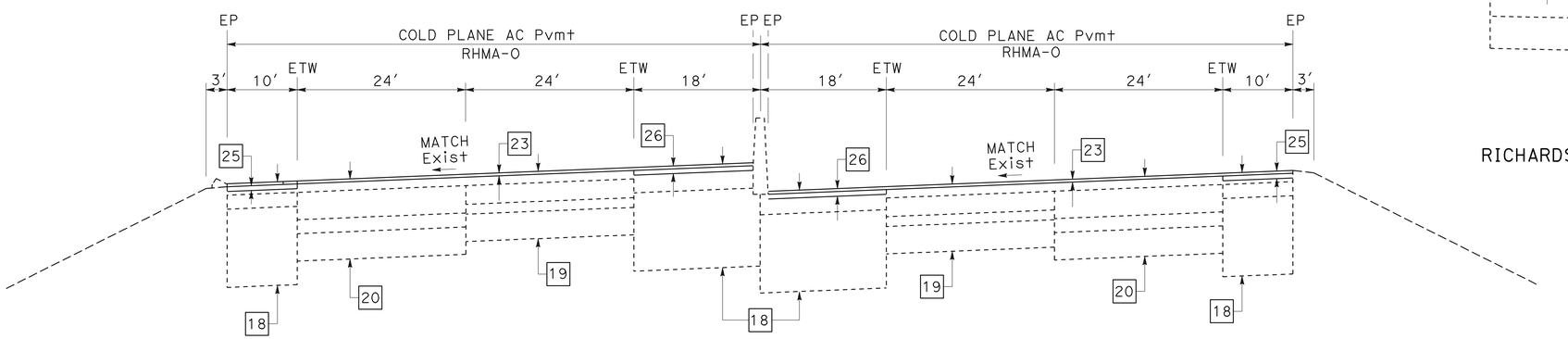
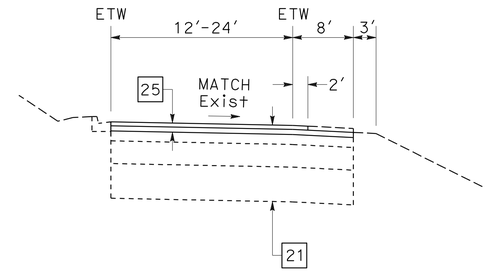
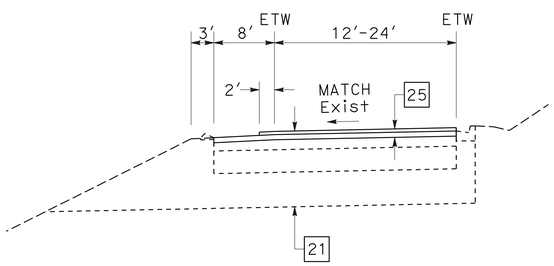


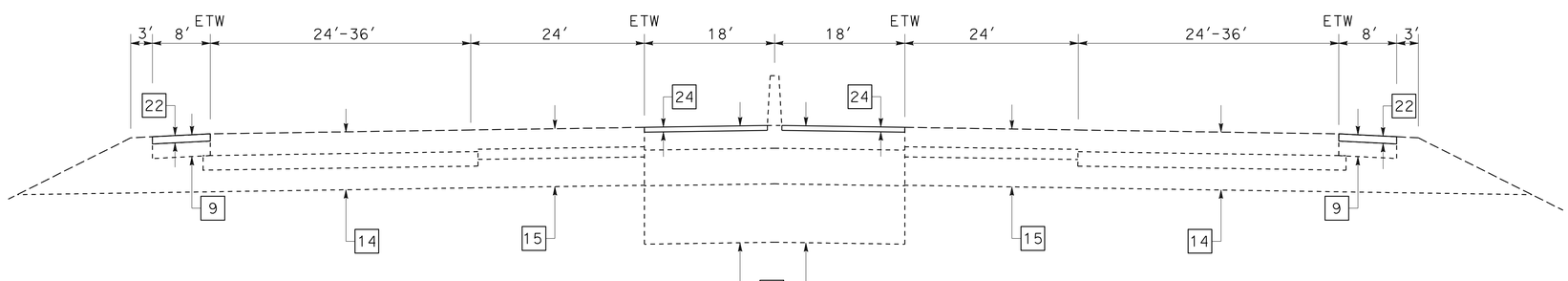

PM 24.68 TO PM 24.82




RICHARDS Blvd NB ON RAMP




RICHARDS Blvd SB ON RAMP




**ROUTE 5**
PM 24.19 TO PM 24.68

# TYPICAL CROSS SECTIONS
NO SCALE

**X-5**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:
REVISED BY: JT
DATE REVISED:

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:14

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| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 7 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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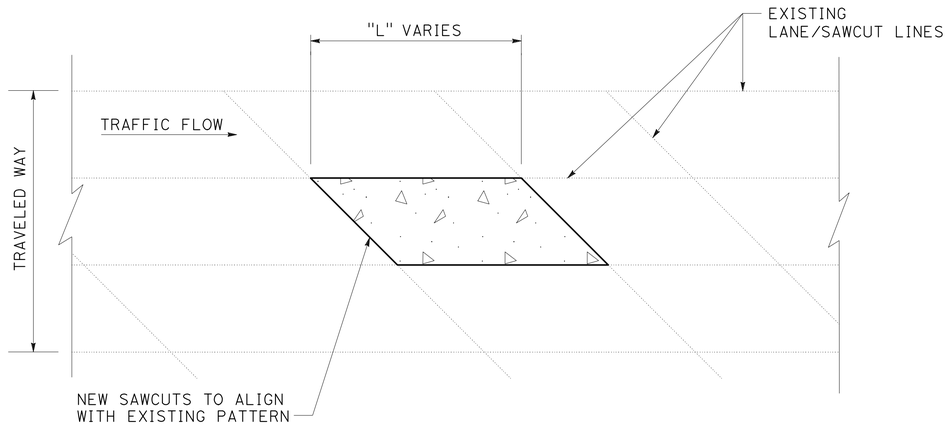
NOTES:

1. REPLACE CONCRETE PAVEMENT SHALL BE TYPE I. SEE Std PLAN P8 FOR DETAILS.
2. FOR SLAB REPLACEMENTS GREATER THAN 100 FEET USE LANE RECONSTRUCTION DETAILS ON Std PLAN P1.
3. DOWEL BAR RETROFIT SHALL BE OMITTED AT REPLACE CONCRETE PAVEMENT LOCATIONS.
4. JOINT SEALANT SHALL BE PLACED AT NEW TRANSVERSE CONTRACTION JOINT LOCATIONS AT REPLACE CONCRETE PAVEMENT WITH MULTIPLE SLABS. SEE Std PLAN P8 AND P1 FOR DETAILS.
5. L, REPLACEMENT SLAB LENGTH IN FEET.
6. MATCH EXISTING PCC SLAB THICKNESS.
7. THE OUTLINE OF THE CONCRETE SLAB TO BE REMOVED SHALL BE SAWCUT FULL DEPTH.

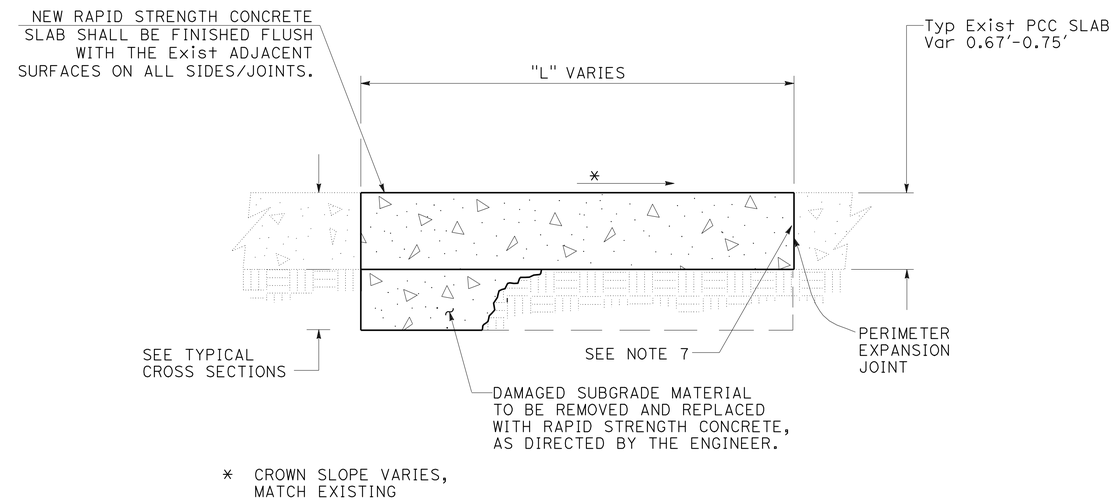
LEGEND

REPLACE CONCRETE Pvmt (RAPID STRENGTH CONCRETE)

Exist BASE MATERIAL



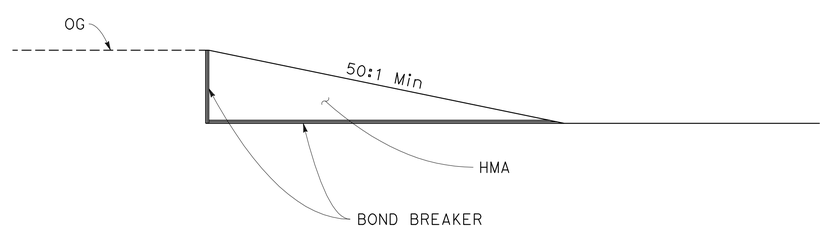

## REPLACE CONCRETE PAVEMENT




* CROWN SLOPE VARIES, MATCH EXISTING

## TYPICAL PCC SLAB REPLACEMENT DETAIL

RAPID STRENGTH CONCRETE




## TEMPORARY HMA TAPER

# CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION 05-27-10 | DATE PLOTTED => 05-AUG-2010 | TIME PLOTTED => 13:14

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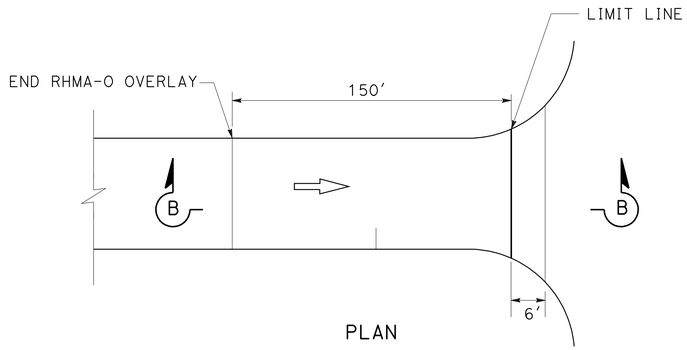
REGISTERED CIVIL ENGINEER 7-19-10 DATE

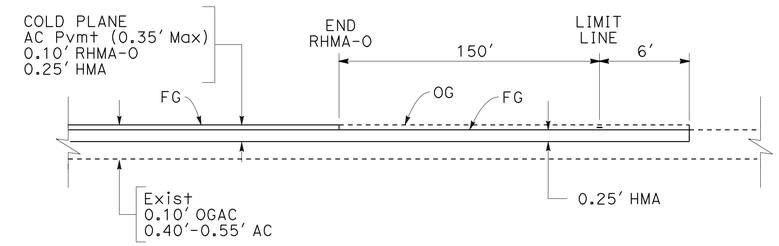
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

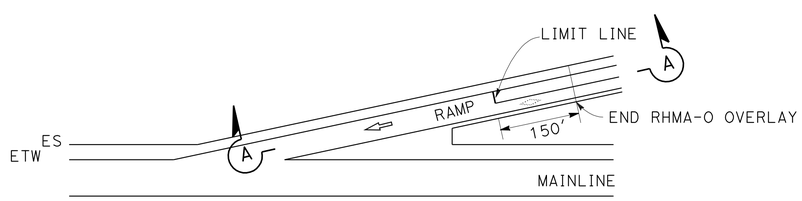



PLAN

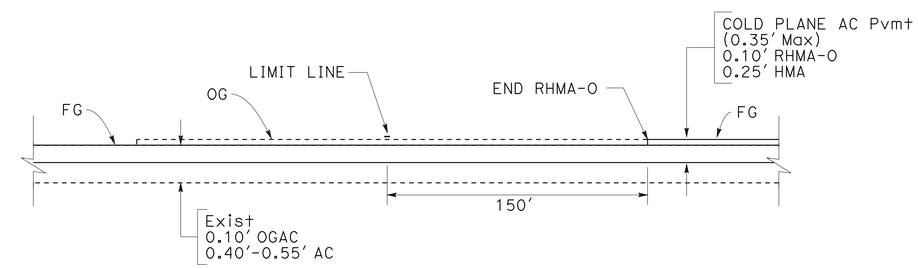



SECTION B-B

LOCATION: SEAMAS AVENUE SB OFF RAMP

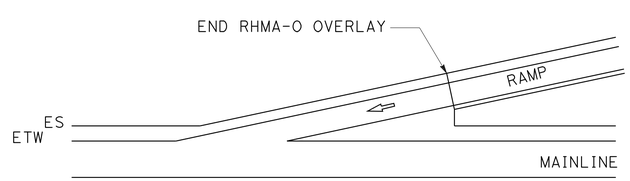



PLAN




SECTION A-A

LOCATION: SUTTERVILLE ROAD NB ON RAMP
43RD AVENUE NB ON RAMP
SEAMAS AVENUE NB ON RAMP
RICHARDS BOULEVARD SB ON RAMP




PLAN

LOCATION: RICHARDS BOULEVARD NB ON RAMP

## RAMP RHMA-O LIMIT DETAILS

## CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:14

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8, 24.2/24.8 | 9 | 45 |

REGISTERED CIVIL ENGINEER 5-20-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffrey S Jewett No. 49233 Exp. 9-30-10 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.*

# STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

| SIGN LETTER | SIGN CODE FEDERAL | SIGN CODE CALIFORNIA | PANEL SIZE | SIGN MESSAGE | NUMBER OF POST AND SIZE | NUMBER OF SIGNS |
|---|---|---|---|---|---|---|
| A | W20-1 | C23 | 48" x 48" | ROAD WORK AHEAD | 1 - 6" x 6" | 12 |
| B | W20-1 | C23 | 48" x 48" | ROAD WORK AHEAD | SSBM | 2 |
| C | W20-1 | C23 | 60" x 60" | ROAD WORK AHEAD | 2 - 4" x 6" | 2 |
| D | G20-2 | C14 | 36" x 18" | END ROAD WORK | 1 - 4" x 4" | 11 |
| E | | C14 | 48" x 24" | END ROAD WORK | 1 - 4" x 6" | 3 |
| F | G20-1 [Spec](6) | | 84" x 42" | ROAD WORK NEXT 6 MILES | 2 - 4" x 6" | 2 |
| G | | C40(Mod) | 96" x 60" | TRAFFIC FINES DOUBLED IN WORK ZONES | 2 - 6" x 6" | 2 |

NOTES:

1. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE DE SHEETS.
3. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES

## SIGN DETAILS

(F) G20-1 [Spec](6)

ROAD WORK
NEXT 6 MILES

84"x42"

8" C SERIES LETTERS

RETROREFLECTIVE ORANGE BACKGROUND WITH BLACK LEGEND AND BORDER.

(G) C40(Mod)<CA>

TRAFFIC FINES
DOUBLED IN
WORK ZONES

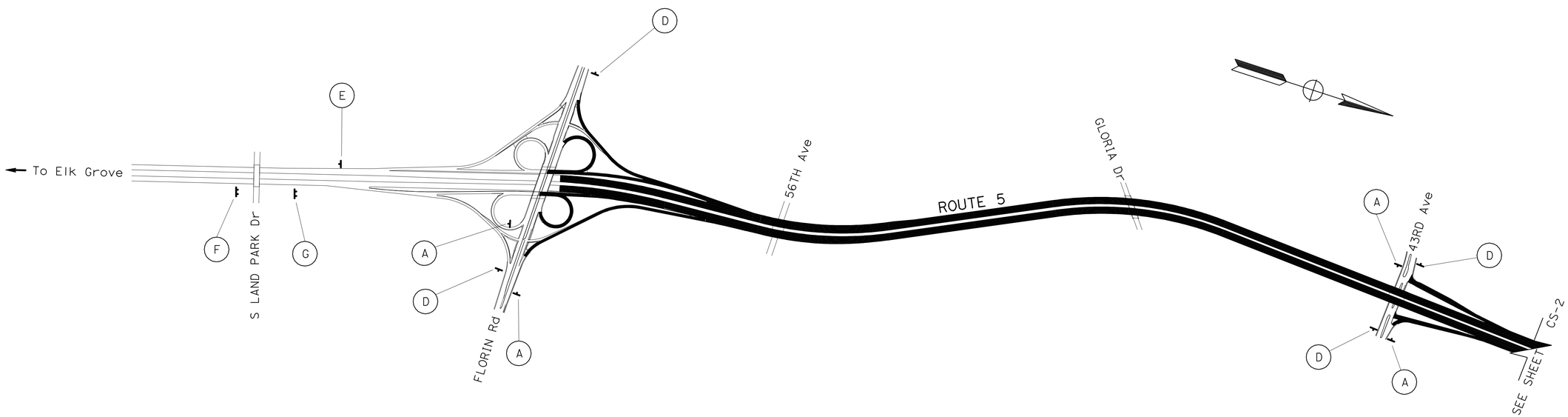
96"x60"

8" D SERIES LETTERS

RETROREFLECTIVE WHITE BACKGROUND WITH BLACK LEGEND AND BORDER.

## LEGEND

<CA> CALIFORNIA SIGN CODE




# CONSTRUCTION AREA SIGNS

NO SCALE

NOTE: THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

CS-1

REVISED BY | DATE REVISED
CHUCK COOK | JEFF JEWETT
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
JOSEPH W. HORTON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

P:\dis+03\03000200025\03000200251a001.dgn

LAST REVISION 7-9-10
DATE PLOTTED => 06-AUG-2010
TIME PLOTTED => 10:17

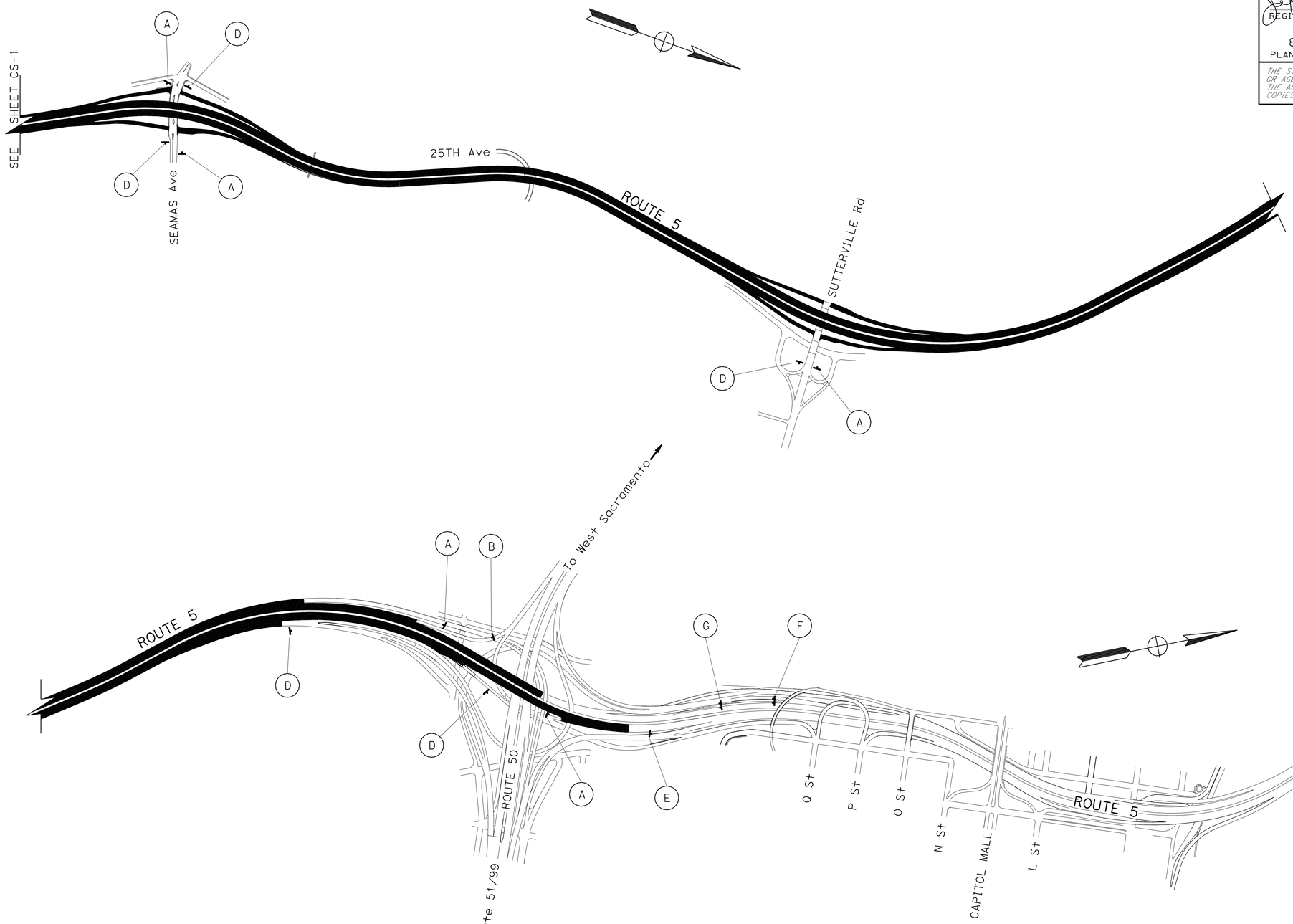
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8, 24.2/24.8 | 10 | 45 |

REGISTERED CIVIL ENGINEER 5-20-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffrey S. Jewett No. 49233 Exp. 9-30-10 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.*




# CONSTRUCTION AREA SIGNS

NO SCALE

NOTE: THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

**CS-2**

| REVISED BY | DATE REVISED |
|---|---|
| | |

CALCULATED-DESIGNED BY: CHUCK COOK
CHECKED BY: JEFF JEWETT
FUNCTIONAL SUPERVISOR: JOSEPH W. HORTON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

P:\dist03\03000200251\03000200251a002.dgn

LAST REVISION 7-9-10
DATE PLOTTED => 06-AUG-2010
TIME PLOTTED => 10:17

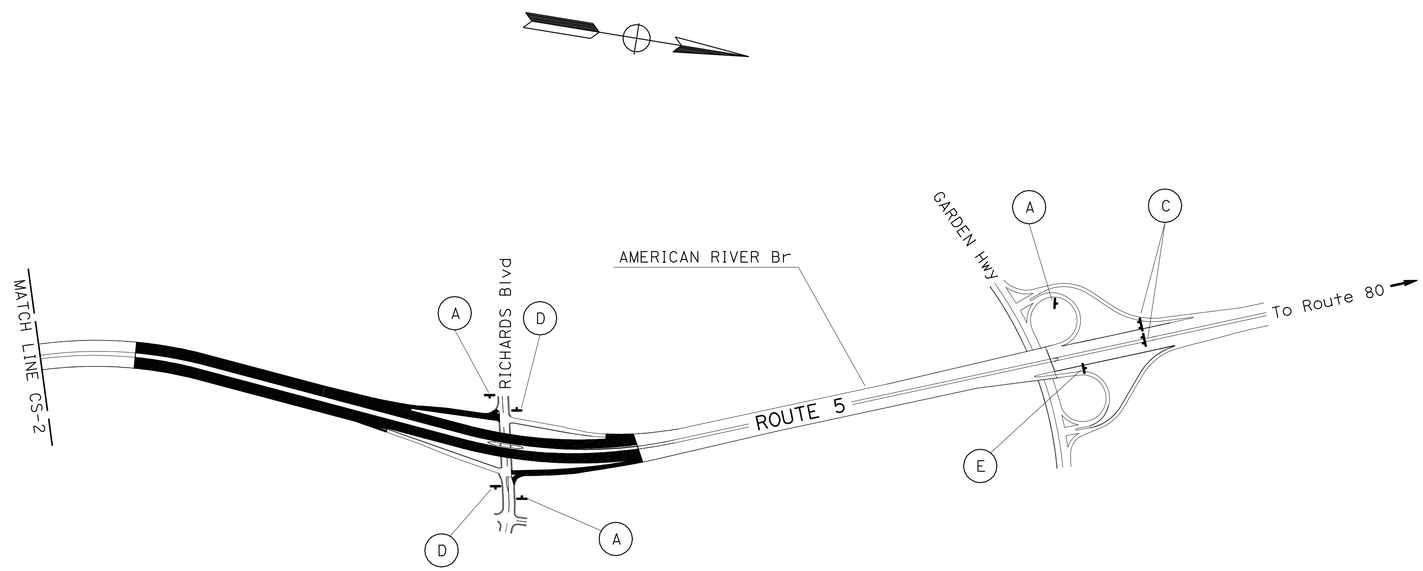
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8, 24.2/24.8 | 11 | 45 |

REGISTERED CIVIL ENGINEER 5-20-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffrey S. Jewett No. 49233 Exp. 9-30-10 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.*




# CONSTRUCTION AREA SIGNS

NO SCALE

**CS-3**

NOTE: THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

| | |
|---|---|
| REVISED BY | |
| DATE REVISED | |
| CHUCK COOK | |
| JEFF JEWETT | |
| CALCULATED-DESIGNED BY | |
| CHECKED BY | |
| FUNCTIONAL SUPERVISOR | JOSEPH W. HORTON |

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

P:\dist03\03000200251\03000200251a003.dgn

LAST REVISION 7-9-10

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 12 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

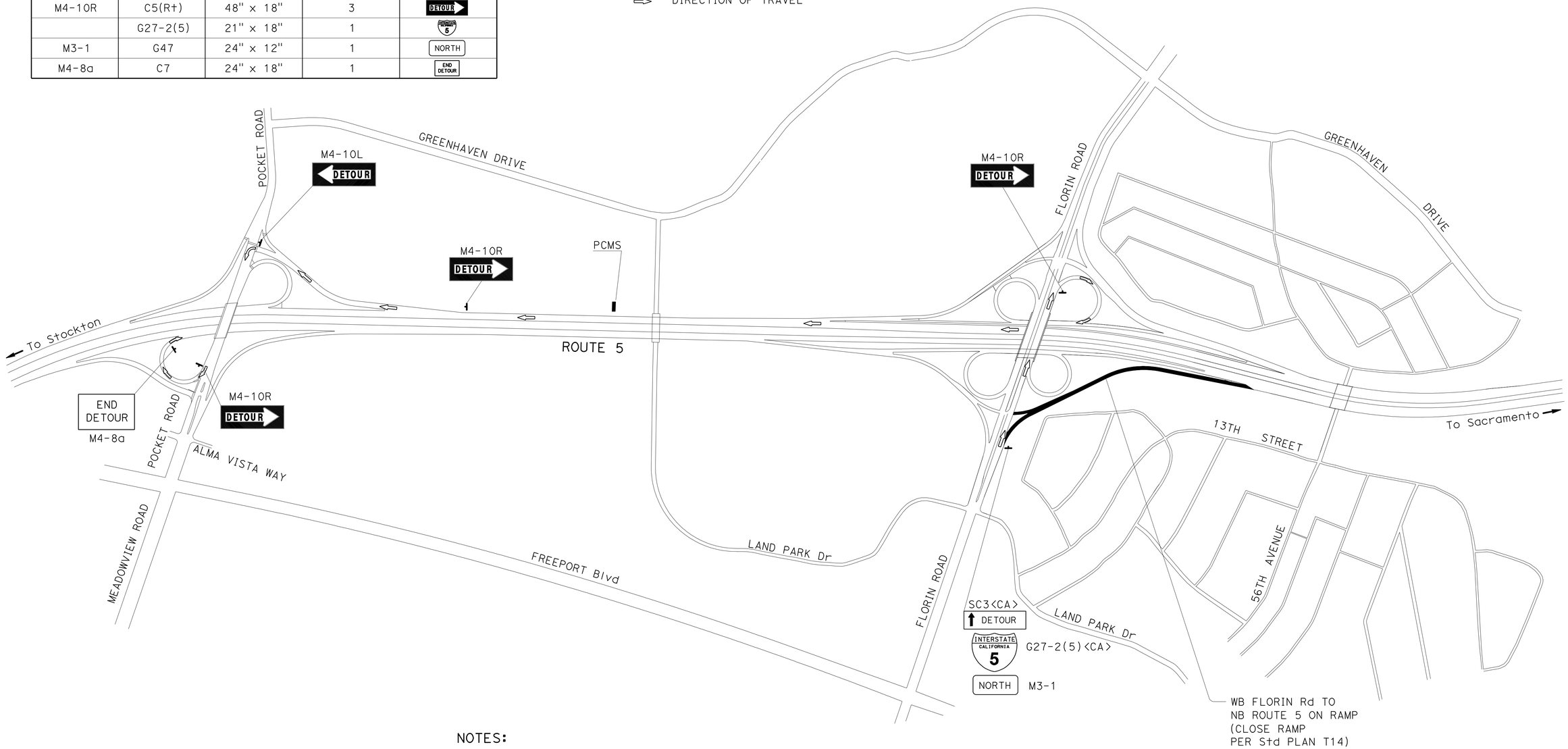
| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 1 | DETOUR |
| M4-10L | C5(L†) | 48" x 18" | 1 | DETOUR |
| M4-10R | C5(R†) | 48" x 18" | 3 | DETOUR |
| | G27-2(5) | 21" x 18" | 1 | INTERSTATE CALIFORNIA 5 |
| M3-1 | G47 | 24" x 12" | 1 | NORTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

LEGEND

▮ PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

<CA> CALIFORNIA SIGN CODE

⇨ DIRECTION OF TRAVEL




NOTES:

1. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE CONSTRUCTION AREA SIGNS SHEETS.
2. EXACT SIGN LOCATIONS, INCLUDING PCMS SIGNS, TO BE DETERMINED BY THE ENGINEER.
3. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
4. NUMBER OF SIGN PANELS REQUIRED PER DETOUR SHOWN DOES NOT INCLUDE SIGNS SHOWN ON STANDARD PLANS.
5. THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## WB FLORIN ROAD TO NB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 13 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

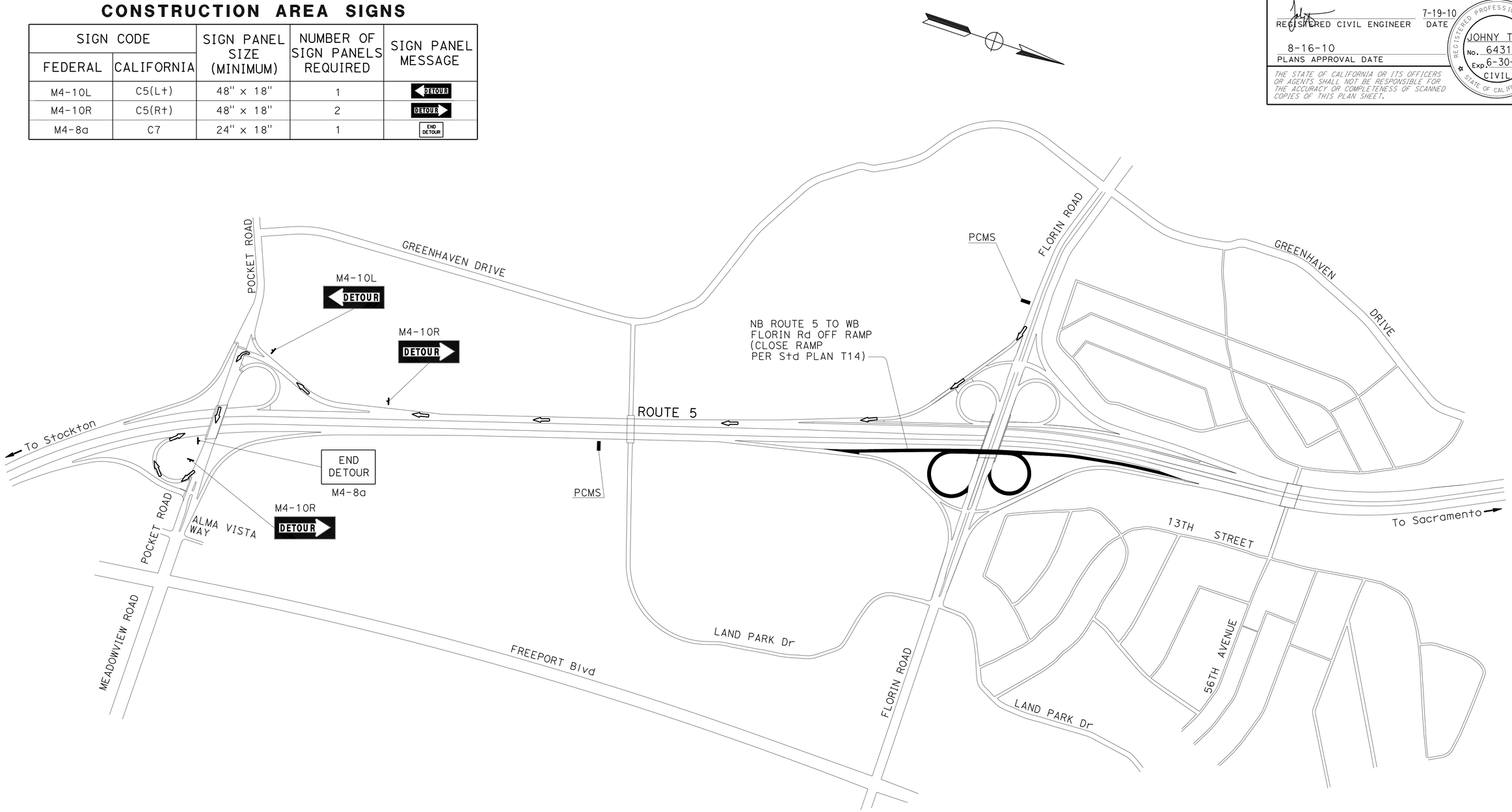
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| M4-10L | C5(Lt) | 48" x 18" | 1 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 2 | DETOUR |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |




# DETOUR PLAN

## NB ROUTE 5 TO WB FLORIN ROAD LOOP OFF RAMP
## EB FLORIN ROAD TO NB ROUTE 5 ON RAMP
## CLOSURE DETOUR

NO SCALE

**DE-2**

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15

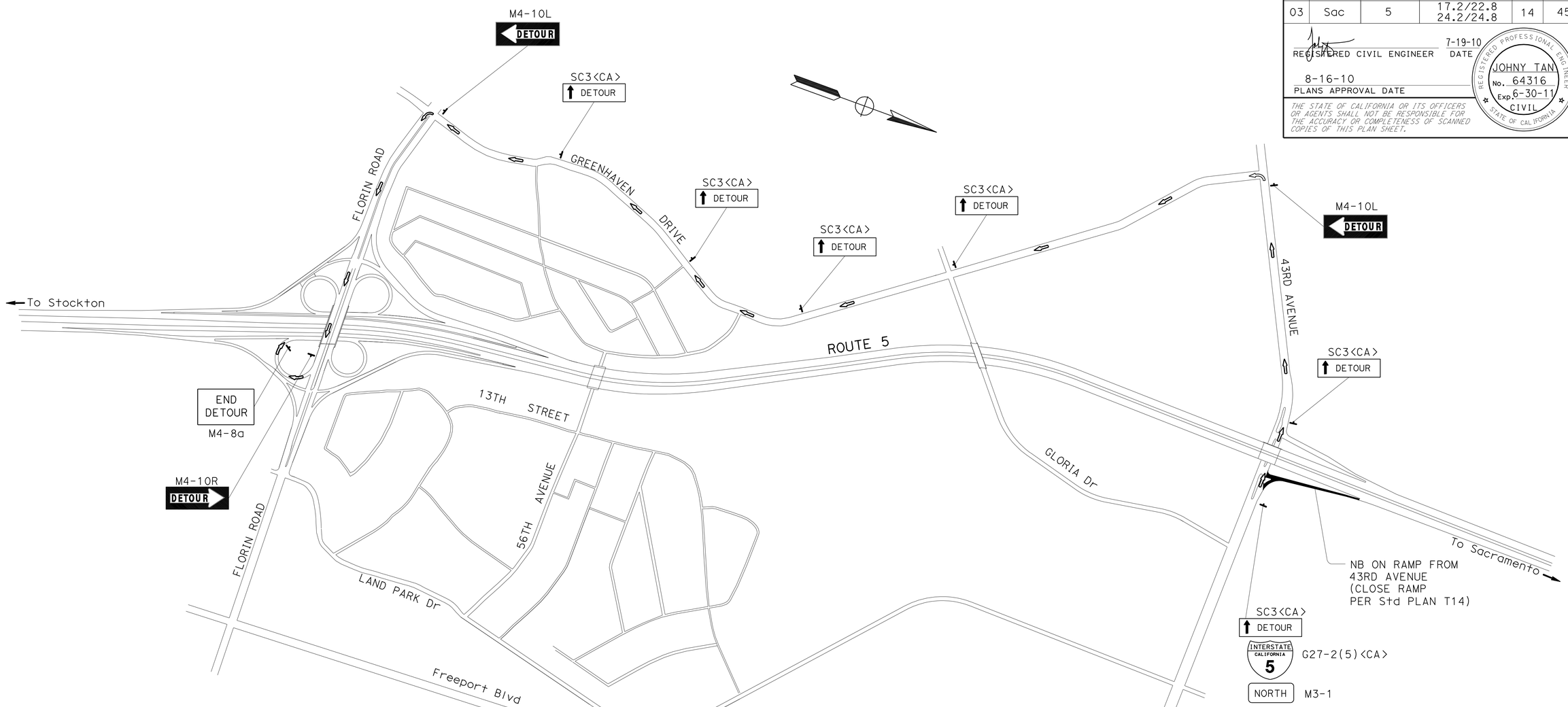
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 14 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*




## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 6 | DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 2 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 1 | DETOUR |
| | G27-2(5) | 21" x 18" | 1 | INTERSTATE CALIFORNIA 5 |
| M3-1 | G47 | 24" x 12" | 1 | NORTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## 43RD AVENUE TO NB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN

REVISED BY: JT
DATE REVISED:

JOHNY TAN
CALCULATED-DESIGNED BY
CHECKED BY

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15

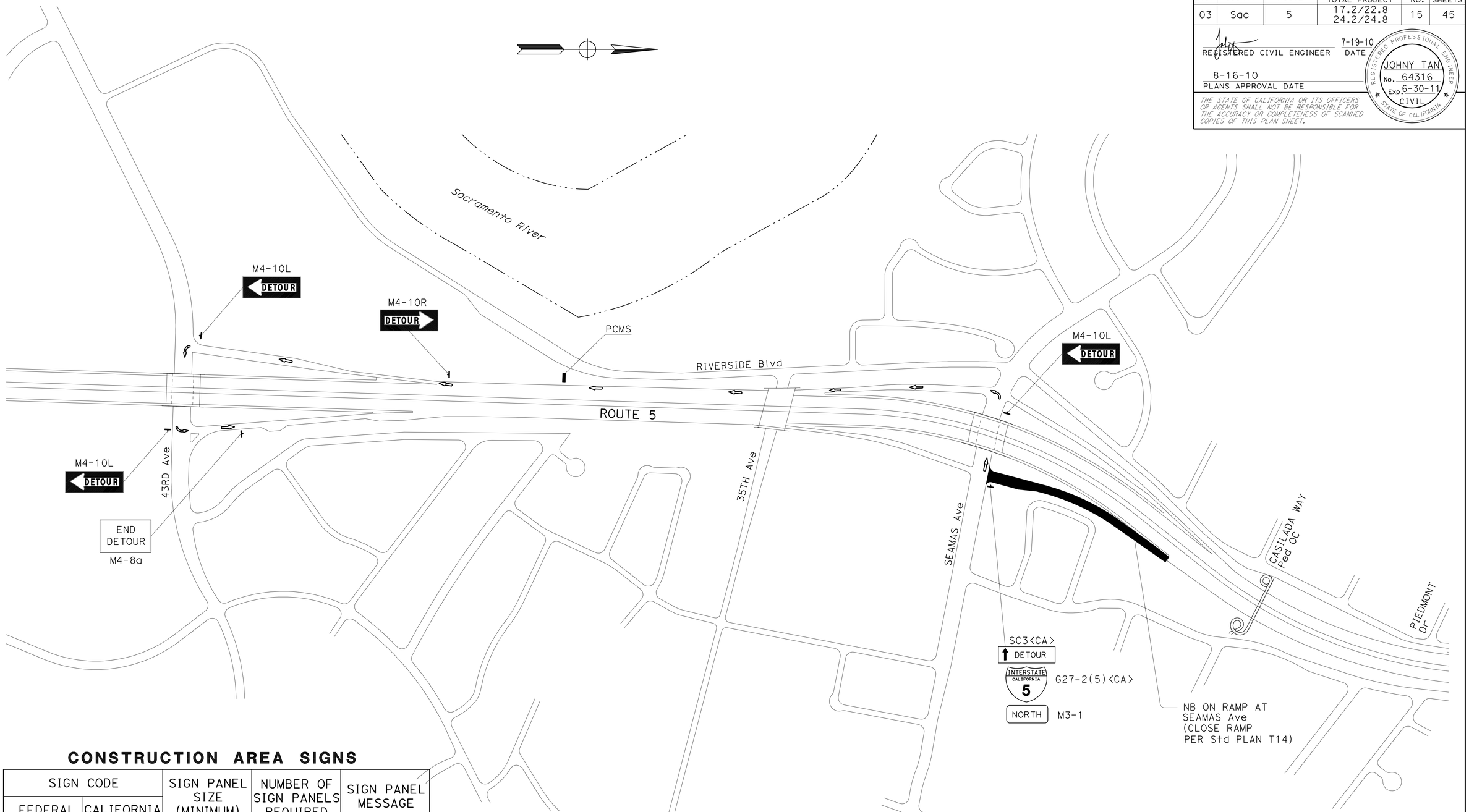
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 15 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*




## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 1 | DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 3 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 1 | DETOUR |
| | G27-2(5) | 21" x 18" | 1 | INTERSTATE CALIFORNIA 5 |
| M3-1 | G47 | 24" x 12" | 1 | NORTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## SEAMAS AVENUE TO NB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY: JT
REVISED BY
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 16 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

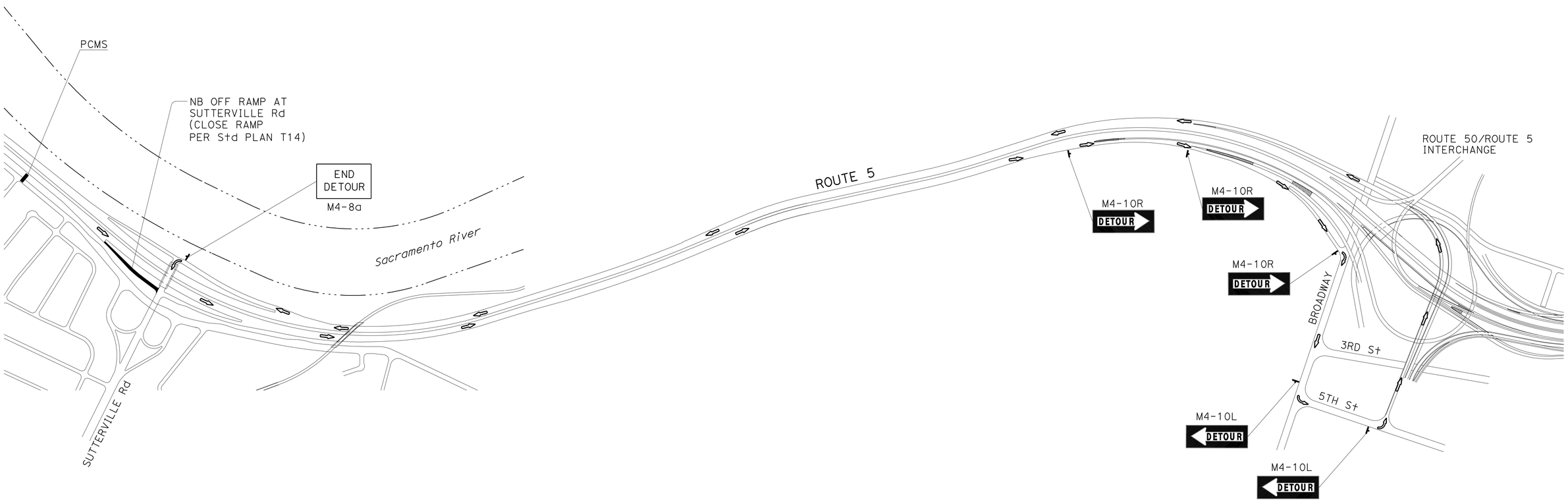
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| M4-10L | C5(L+) | 48" x 18" | 2 | DETOUR |
| M4-10R | C5(R+) | 48" x 18" | 3 | DETOUR |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |




# DETOUR PLAN

## NB ROUTE 5 TO SUTTERVILLE ROAD OFF RAMP CLOSURE DETOUR

NO SCALE

**DE-5**

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:
REVISED BY: JT
DATE REVISED:

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 17 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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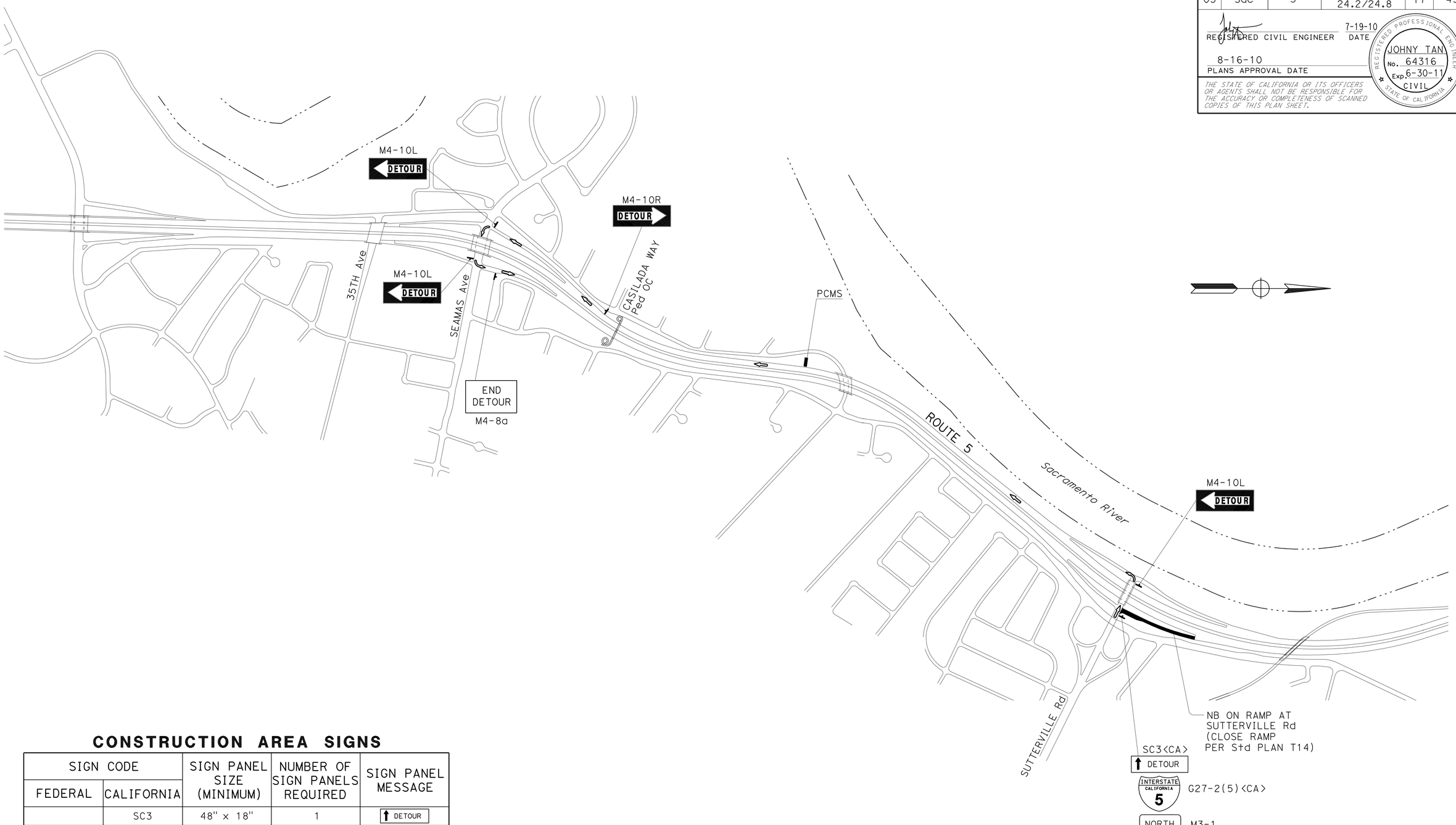



## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 1 | DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 3 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 1 | DETOUR |
| | G27-2(5) | 21" x 18" | 1 | INTERSTATE CALIFORNIA 5 |
| M3-1 | G47 | 24" x 12" | 1 | NORTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## SUTTERVILLE ROAD TO NB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:
REVISED BY: JT
DATE REVISED:

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15

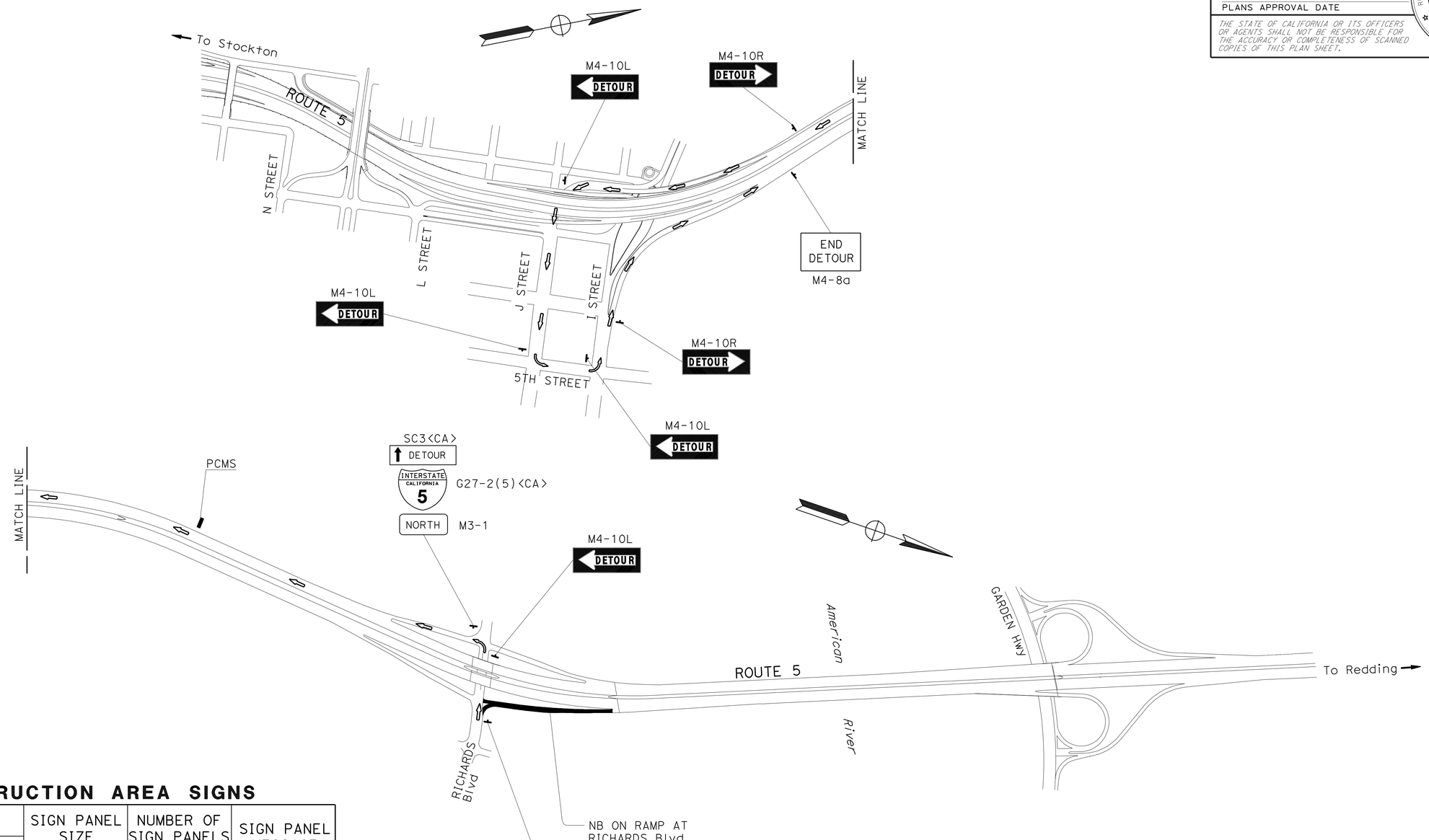
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 18 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*




## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 2 | DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 4 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 2 | DETOUR |
| | G27-2(5) | 21" x 18" | 2 | INTERSTATE CALIFORNIA 5 |
| M3-1 | G47 | 24" x 12" | 2 | NORTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## RICHARDS BOULEVARD TO NB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-7**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN

CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:

REVISED BY: JT
DATE REVISED:

LAST REVISION DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:15
05-27-10

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 19 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

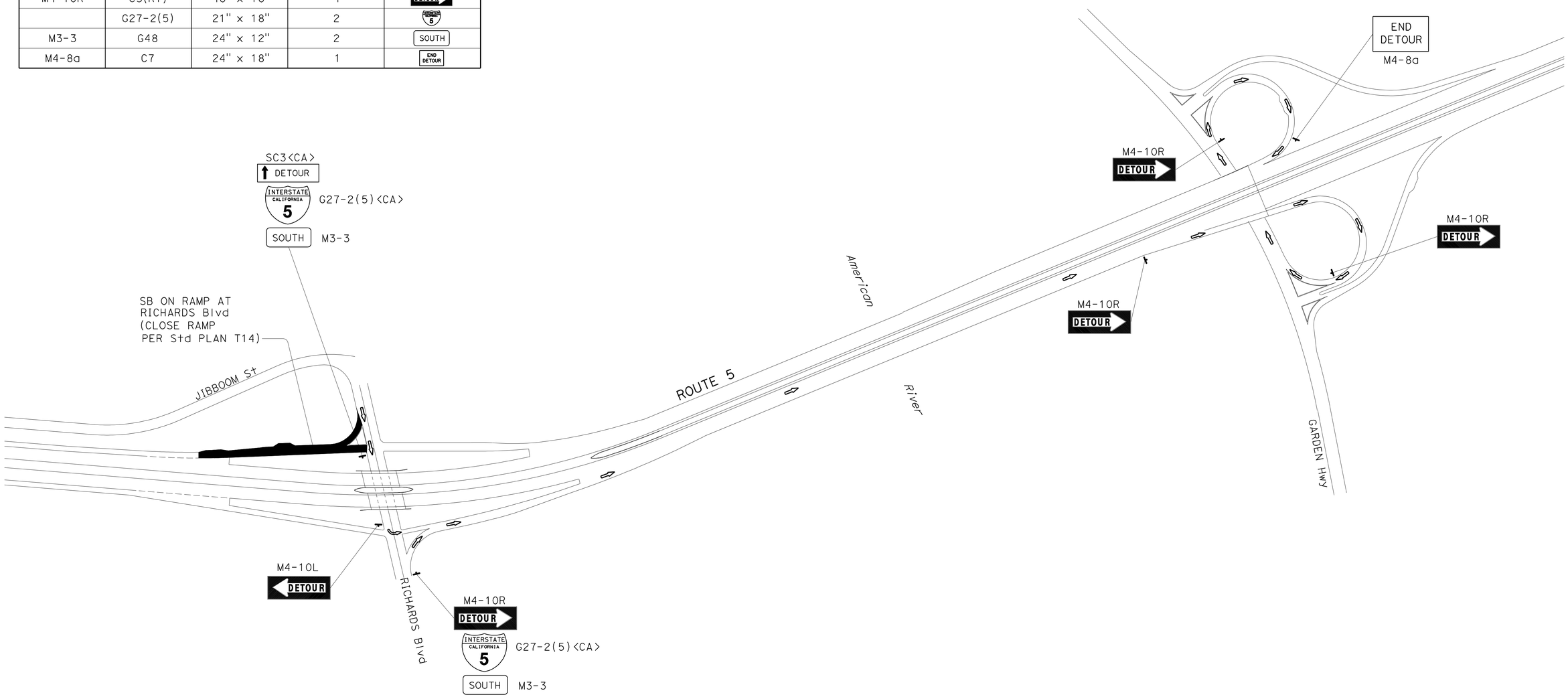
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 1 | DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 1 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 4 | DETOUR |
| | G27-2(5) | 21" x 18" | 2 | INTERSTATE CALIFORNIA 5 |
| M3-3 | G48 | 24" x 12" | 2 | SOUTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |




THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## RICHARDS BOULEVARD TO SB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-8**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY: JT
REVISED BY
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:16

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 20 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| M4-10L | C5(Lt) | 48" x 18" | 2 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 1 | DETOUR |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## SB ROUTE 5 TO SUTTERVILLE ROAD OFF RAMP CLOSURE DETOUR

NO SCALE

**DE-9**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY:
REVISED BY: JT
DATE REVISED:

LAST REVISION DATE PLOTTED => 05-AUG-2010
05-27-10 TIME PLOTTED => 13:16

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 21 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

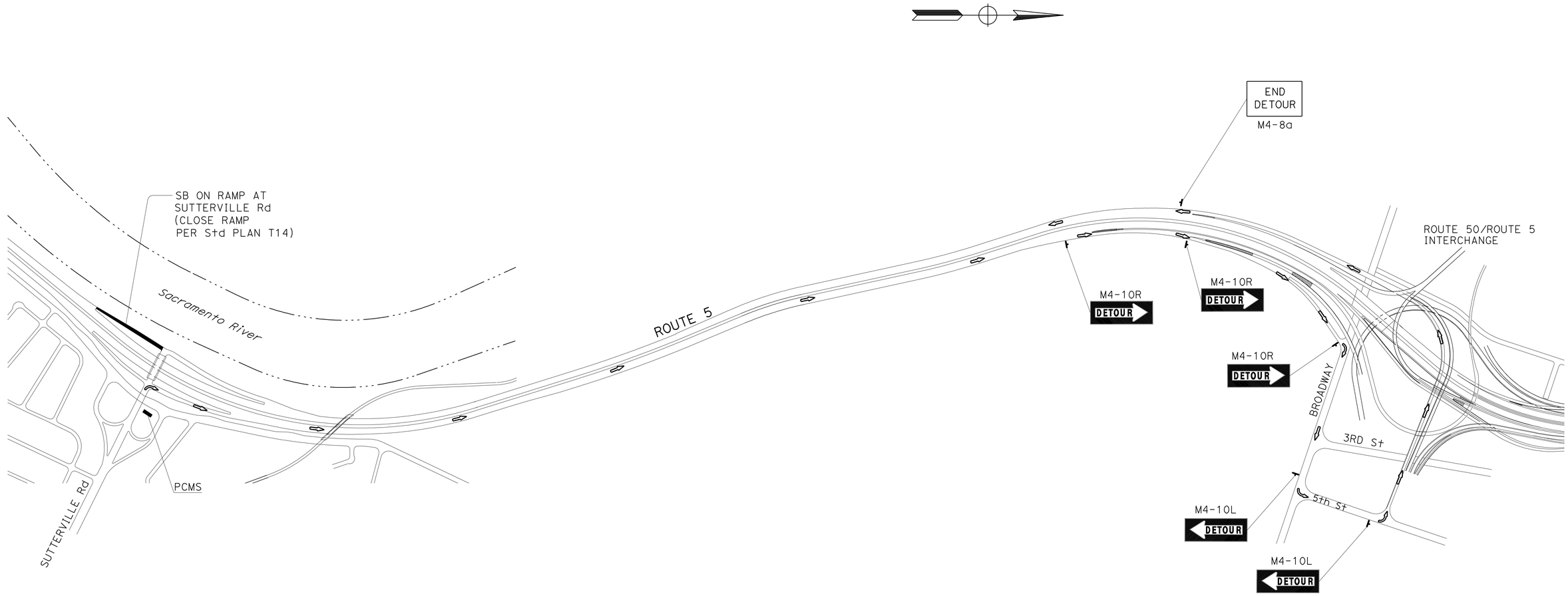
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| M4-10L | C5(Lt) | 48" x 18" | 2 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 3 | DETOUR |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |




# DETOUR PLAN

## SUTTERVILLE ROAD TO SB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-10**

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY: JT
REVISED BY
DATE REVISED

LAST REVISION 05-27-10 | DATE PLOTTED => 05-AUG-2010 | TIME PLOTTED => 13:16

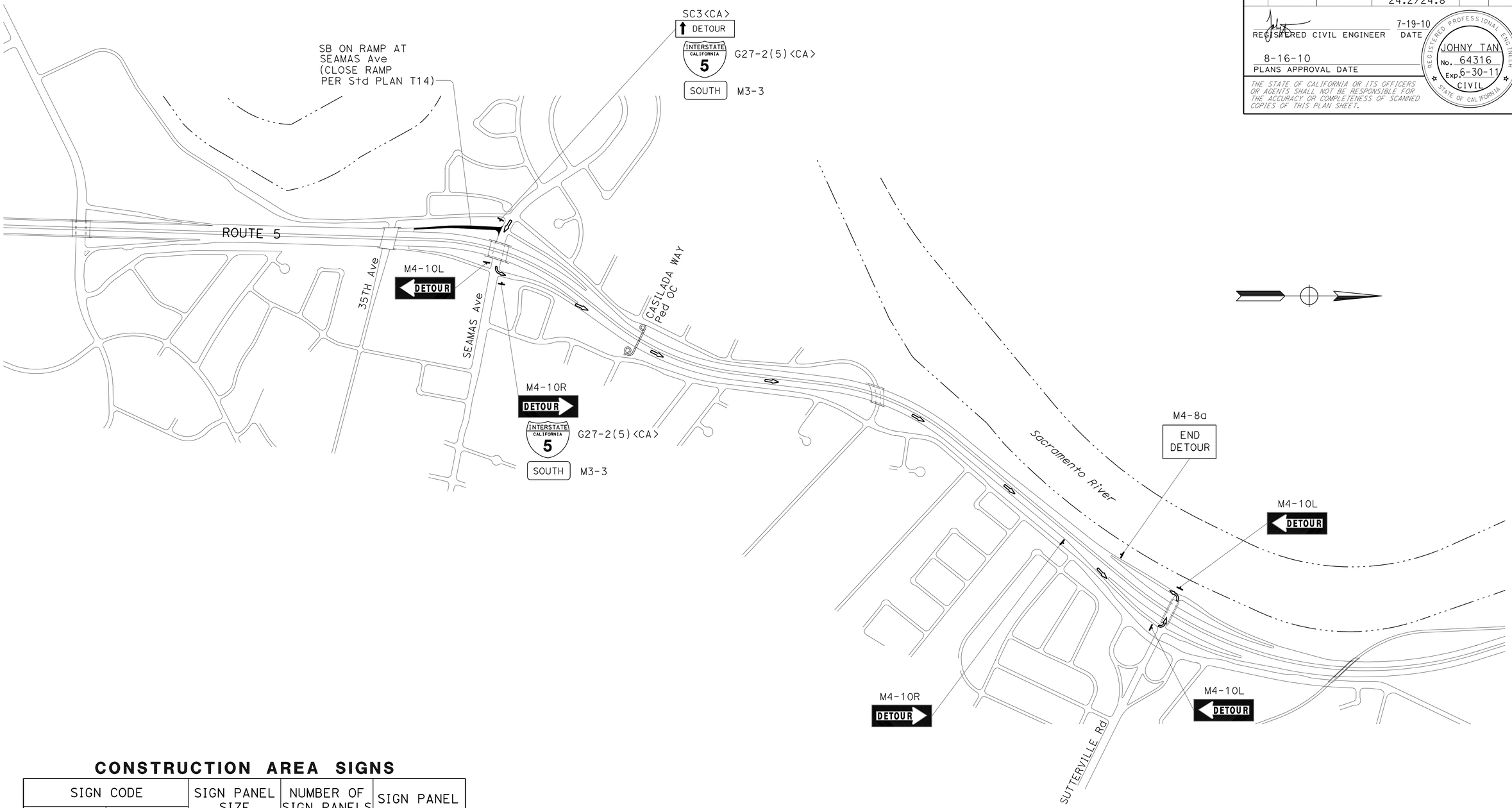
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 22 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*




## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 1 | DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 3 | DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 2 | DETOUR |
| | G27-2(5) | 21" x 18" | 2 | INTERSTATE CALIFORNIA 5 |
| M3-3 | G48 | 24" x 12" | 2 | SOUTH |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## SEAMAS AVENUE TO SB ROUTE 5 ON RAMP CLOSURE DETOUR

NO SCALE

**DE-11**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:16
05-27-10

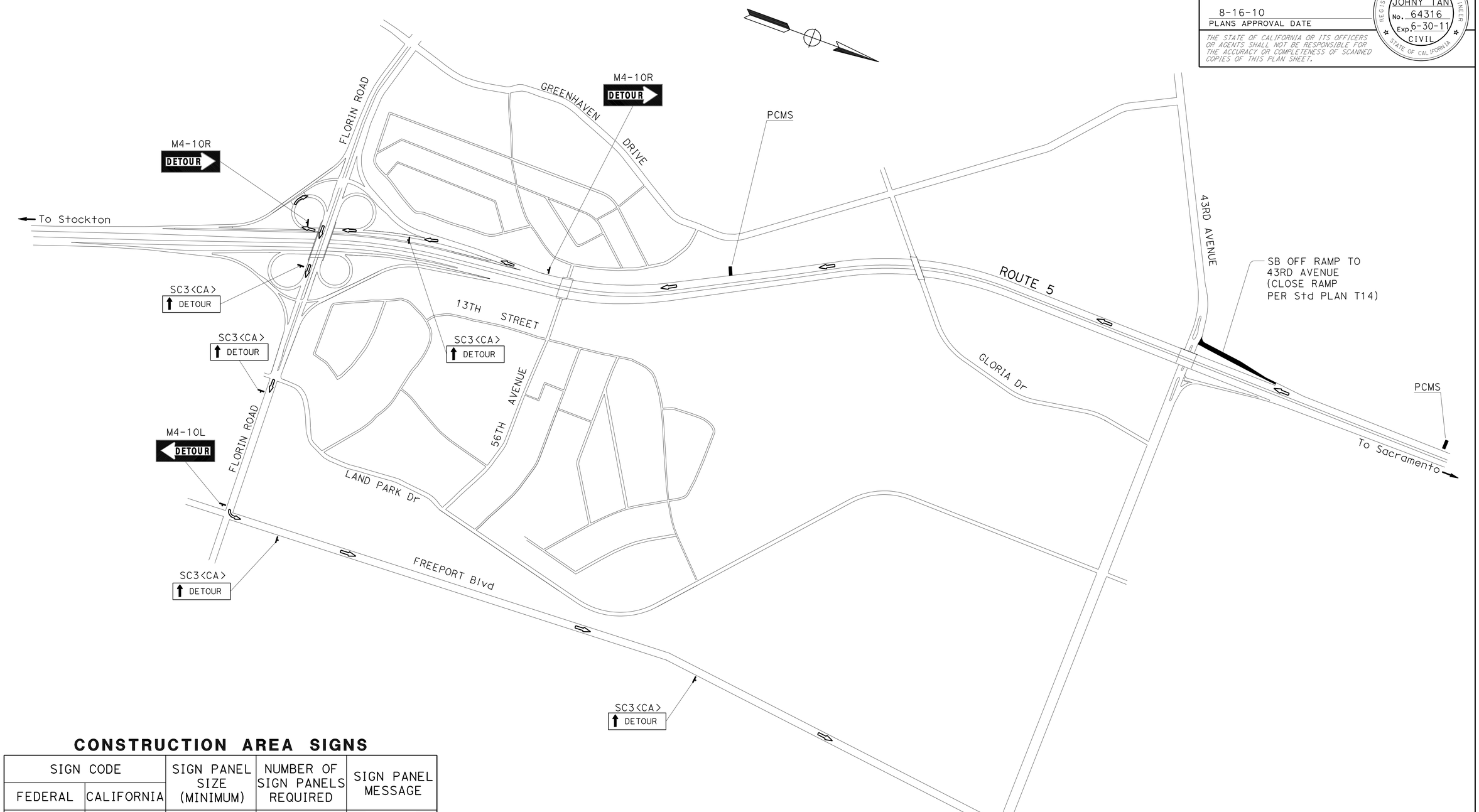
| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 23 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*




## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 5 | DETOUR |
| M4-10L | C5(L+) | 48" x 18" | 1 | DETOUR |
| M4-10R | C5(R+) | 48" x 18" | 2 | DETOUR |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

# DETOUR PLAN

## SB ROUTE 5 TO 43RD AVENUE OFF RAMP CLOSURE DETOUR

NO SCALE

**DE-12**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:16

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 24 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

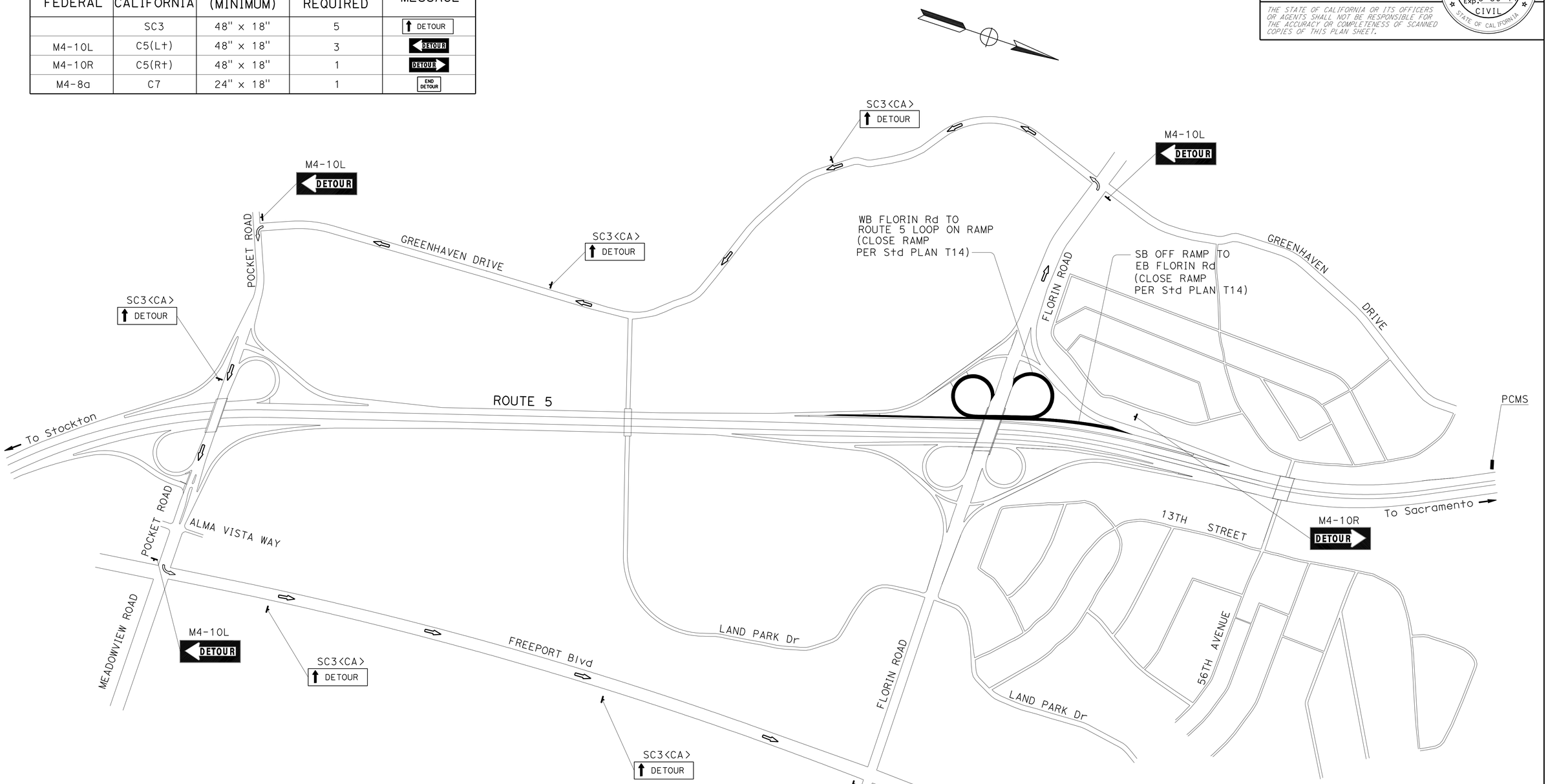
8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## CONSTRUCTION AREA SIGNS

| SIGN CODE | | SIGN PANEL SIZE (MINIMUM) | NUMBER OF SIGN PANELS REQUIRED | SIGN PANEL MESSAGE |
|---|---|---|---|---|
| FEDERAL | CALIFORNIA | | | |
| | SC3 | 48" x 18" | 5 | ↑ DETOUR |
| M4-10L | C5(Lt) | 48" x 18" | 3 | ← DETOUR |
| M4-10R | C5(Rt) | 48" x 18" | 1 | DETOUR → |
| M4-8a | C7 | 24" x 18" | 1 | END DETOUR |




# DETOUR PLAN

## WB FLORIN ROAD TO SB ROUTE 5 LOOP ON RAMP
## SB ROUTE 5 OFF RAMP TO EB FLORIN ROAD
## CLOSURE DETOUR

NO SCALE

**DE-13**

THIS PLAN ACCURATE FOR DETOUR TRAFFIC HANDLING ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

FUNCTIONAL SUPERVISOR: JOHNY TAN
JOHNY TAN
CALCULATED-DESIGNED BY
CHECKED BY
JT
REVISED BY
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:16

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8, 24.2/24.8 | 25 | 45 |

REGISTERED CIVIL ENGINEER 5-20-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Jeffrey S. Jewett No. 49233 Exp. 9-30-10 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.*

## 4" THERMOPLASTIC TRAFFIC STRIPE

| DETAIL NUMBER | LF |
|---|---|
| 25 | 65,135 |
| 25A | 14,587 |
| 27B | 84,909 |
| TOTAL | 164,631 |

## 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36 - 12)

| DETAIL NUMBER | LF |
|---|---|
| 12 | 166,641 |
| 14A | 7,488 |
| TOTAL | 174,129 |

## 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17 - 7)

| DETAIL NUMBER | LF |
|---|---|
| 9 | 5,854 |
| TOTAL | 5,854 |

## 8" THERMOPLASTIC TRAFFIC STRIPE

| DETAIL NUMBER | LF |
|---|---|
| 36 | 7,253 |
| 36A | 4,869 |
| 38 | 3,809 |
| 38B | 1,637 |
| TOTAL | 17,568 |

## THERMOPLASTIC PAVEMENT MARKING

| DESCRIPTION | NUMBER | SQFT |
|---|---|---|
| TYPE 1 (24') ARROW | 9 | 279 |
| TYPE II ARROW | 10 | 450 |
| TYPE III ARROW | 19 | 798 |
| TYPE V ARROW | 14 | 462 |
| TYPE VI ARROW | 3 | 126 |
| "SIGNAL" | 3 | 96 |
| "STOP" | 6 | 132 |
| "AHEAD" | 5 | 155 |
| "CAR" | 3 | 51 |
| "POOL" | 3 | 69 |
| "LANE" | 3 | 72 |
| DIAMOND SYMBOL | 7 | 77 |
| 12" WHITE CHEVRON | 25 | 505 |
| 12" WHITE DIAGONAL | 4 | 103 |
| LIMIT LINE | 5 | 122 |
| CROSSWALK | 14 | 1,781 |
| TOTAL | | 5,278 |

## 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6 - 1)

| DETAIL NUMBER | LF |
|---|---|
| 40 | 105 |
| TOTAL | 105 |

## 8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12 - 3)

| DETAIL NUMBER | LF |
|---|---|
| 37 | 7,641 |
| TOTAL | 7,641 |

## PAVEMENT MARKER

| DETAIL NUMBER | RETROREFLECTIVE | | |
|---|---|---|---|
| | TYPE C | TYPE G | TYPE H |
| | EACH | EACH | EACH |
| 9 | | 123 | |
| 12 | | 3,473 | |
| 14A | 208 | | |
| 25 | | | 1358 |
| 25A | | | 609 |
| 36 | | 304 | |
| 36A | | 204 | |
| 37 | 32 | 489 | |
| 38 | | 160 | |
| 38B | | 139 | |
| SUBTOTAL | 240 | 4,892 | 1,967 |
| TOTAL | 7,099 | | |

# PAVEMENT DELINEATION QUANTITIES

**PDQ-1**

REVISED BY | DATE REVISED
CHUCK COOK | JEFF JEWETT
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
JOSEPH W. HORTON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

P:\dis+03\0300020025\0300020025nc001.dgn

LAST REVISION 6-10-10 | DATE PLOTTED => 06-AUG-2010 | TIME PLOTTED => 10:18

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 26 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JOHNY TAN
No. 64316
Exp. 6-30-11
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.*

## REPLACE CONCRETE PAVEMENT QUANTITIES

| REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) | | | | | | |
|---|---|---|---|---|---|---|
| NORTHBOUND ROUTE 5 | | | | | | |
| LOCATION PM-PM | (N) LANE # | (N) No. OF SLABS | (N) LENGTH | (N) WIDTH | (N) AREA | VOLUME |
| | | | FT | FT | SQFT | CY |
| 17.21-17.80 | Var | 113 | 1695 | 12 | 20,340 | 1,130.0 |
| 17.80-18.50 | 3 | 3 | 45 | 12 | 540 | 29.0 |
| 18.50-19.00 | 3 | 5 | 75 | 12 | 900 | 47.3 |
| 18.50-19.00 | 4 | 5 | 75 | 12 | 900 | 50.0 |
| 19.00-19.50 | 2 | 16 | 240 | 12 | 2,880 | 151.5 |
| 19.00-19.50 | 3 | 5 | 75 | 12 | 900 | 50.0 |
| 19.50-20.00 | 2 | 5 | 75 | 12 | 900 | 47.3 |
| 19.50-20.00 | 3 | 84 | 1260 | 12 | 15,120 | 840.0 |
| 19.50-20.00 | 4 | 59 | 885 | 12 | 10,620 | 590.0 |
| 20.00-20.50 | 2 | 5 | 75 | 12 | 900 | 47.3 |
| 20.00-20.50 | 3 | 59 | 885 | 12 | 10,620 | 590.0 |
| 20.00-20.50 | 4 | 71 | 1065 | 12 | 12,780 | 710.0 |
| 20.50-21.00 | 2 | 10 | 150 | 12 | 1,800 | 94.7 |
| 20.50-21.00 | 3 | 77 | 1155 | 12 | 13,860 | 770.0 |
| 21.00-21.50 | 3 | 46 | 690 | 12 | 8,280 | 460.0 |
| 21.50-22.00 | 1 | 19 | 285 | 12 | 3,420 | 179.9 |
| 21.50-22.00 | 2 | 37 | 555 | 12 | 6,660 | 350.3 |
| 21.50-22.00 | 3 | 48 | 720 | 12 | 8,640 | 480.0 |
| 21.50-22.00 | 4 | 7 | 105 | 12 | 1,260 | 70.0 |
| | | | | | SUBTOTAL NB | 6,687.3 |

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

LANE NUMBERS INCREASE FROM LEFT TO RIGHT IN DIRECTION OF TRAVEL

## HMA DIKE QUANTITIES

| DIRECTION | DESCRIPTION | LOCATION | REMOVE AC DIKE | PLACE HMA DIKE (TYPE D) | * HMA | REMARKS |
|---|---|---|---|---|---|---|
| NB/SB | | R+/L+ | LF | LF | TON | |
| NB | WB FLORIN Rd TO NB ROUTE 5 ON RAMP | R+ | 1,055 | 1,055 | 2.2 | |
| NB | NB ROUTE 5 TO WB FLORIN Rd LOOP ON RAMP | R+ | 261 | 261 | 0.6 | |
| NB | SEAMAS AVENUE OFF RAMP | R+ | 238 | 238 | 0.5 | |
| NB | SUTTERVILLE ROAD OFF RAMP | R+ | 282 | 282 | 0.6 | |
| NB | SUTTERVILLE ROAD OFF RAMP | L+ | 35 | 35 | 0.1 | |
| NB | SUTTERVILLE ROAD ON RAMP | R+ | 110 | 110 | 0.2 | REMOVE HMA DIKE-A (NOT TYPE C OR F) |
| NB | EB ROUTE 50 TO NB ROUTE 5 CONNECTOR | R+ | 475 | 475 | 1.0 | |
| SB | SUTTERVILLE ROAD OFF RAMP | R+ | 557 | 557 | 1.2 | |
| SB | SUTTERVILLE ROAD ON RAMP | R+ | 340 | 340 | 0.7 | |
| SB | SEAMAS AVENUE OFF RAMP | R+ | 839 | 839 | 1.8 | |
| SB | SEAMAS AVENUE ON RAMP | R+ | 268 | 268 | 0.6 | REMOVE HMA DIKE-A (NOT TYPE C OR F) |
| SB | SB ROUTE 5 OFF RAMP TO WB FLORIN Rd | R+ | 792 | 792 | 1.7 | |
| SB | WB FLORIN Rd TO SB LOOP ON RAMP | R+ | 182 | 182 | 0.4 | |
| | | TOTAL | 5,434 | 5,434 | 11.6 | |

* FOR TOTAL QUANTITY SEE ROADWAY QUANTITIES, SHEET Q-2

## REPLACE CONCRETE PAVEMENT QUANTITIES (CONTINUED)

| REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) | | | | | | |
|---|---|---|---|---|---|---|
| SOUTHBOUND ROUTE 5 | | | | | | |
| LOCATION PM-PM | (N) LANE # | (N) No. OF SLABS | (N) LENGTH | (N) WIDTH | (N) AREA | VOLUME |
| | | | FT | FT | SQFT | CY |
| 22.00-21.50 | 2 | 32 | 480 | 12 | 5,760 | 302.9 |
| 22.00-21.50 | 3 | 61 | 915 | 12 | 10,980 | 610.0 |
| 22.00-21.50 | 4 | 21 | 315 | 12 | 3,780 | 210.0 |
| 22.00-21.50 | Aux | 3 | 45 | 17.5 | 788 | 43.8 |
| 21.50-20.82 | 2 | 13 | 195 | 12 | 2,340 | 123.1 |
| 21.50-20.82 | 3 | 63 | 945 | 12 | 11,340 | 630.0 |
| 21.50-20.82 | 4 | 75 | 1125 | 12 | 13,500 | 750.0 |
| 20.82-20.50 | 2 | 3 | 45 | 12 | 540 | 28.4 |
| 20.82-20.50 | 3 | 22 | 330 | 12 | 3,960 | 220.0 |
| 20.50-20.00 | 1 | 2 | 30 | 12 | 360 | 18.9 |
| 20.50-20.00 | 2 | 11 | 165 | 12 | 1,980 | 104.1 |
| 20.50-20.00 | 3 | 38 | 570 | 12 | 6,840 | 380.0 |
| 20.50-20.00 | 4 | 30 | 450 | 12 | 5,400 | 300.0 |
| 20.00-19.50 | 2 | 17 | 255 | 12 | 3,060 | 160.9 |
| 20.00-19.50 | 3 | 28 | 420 | 12 | 5,040 | 280.0 |
| 20.00-19.50 | 4 | 9 | 135 | 12 | 1,620 | 90.0 |
| 19.50-18.65 | 2 | 11 | 165 | 12 | 1,980 | 104.1 |
| 19.50-18.65 | 3 | 45 | 675 | 12 | 8,100 | 450.0 |
| 19.50-18.65 | 4 | 25 | 375 | 12 | 4,500 | 250.0 |
| 18.65-18.19 | 1 | 5 | 75 | 12 | 900 | 47.3 |
| 18.65-18.19 | 2 | 5 | 75 | 12 | 900 | 47.3 |
| 18.65-18.19 | 3 | 10 | 150 | 12 | 1,800 | 100.0 |
| 18.65-18.19 | 4 | 11 | 165 | 12 | 1,980 | 110.0 |
| 18.19-17.88 | 1 | 3 | 45 | 12 | 540 | 29.0 |
| 18.19-17.88 | 2 | 4 | 60 | 12 | 720 | 38.7 |
| 18.19-17.88 | 3 | 22 | 330 | 12 | 3,960 | 220.0 |
| 18.19-17.88 | 4 | 26 | 390 | 12 | 4,680 | 260.0 |
| 17.88-17.21 | Var | 58 | 870 | 12 | 10,440 | 580.0 |
| | | | | | SUBTOTAL NB | 6,687.3 |
| | | | | | SUBTOTAL SB | 6,488.5 |
| | | | | | TOTAL | 13,175.8 |

# SUMMARY OF QUANTITIES

Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY
REVISED BY: JT
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:17

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 27 | 45 |

REGISTERED CIVIL ENGINEER 7-19-10 DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JOHNY TAN No. 64316 Exp. 6-30-11 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.

# ROADWAY QUANTITIES

| LOCATION PM BEGIN | LOCATION PM END | DIRECTION NB/SB | DESCRIPTION | (N) LENGTH FT | (N) WIDTH FT | COLD PLANE AC PAVEMENT .10' Max SQYD | .17' Max SQYD | .25' Max SQYD | .27' Max SQYD | .35' Max SQYD | HOT MIX ASPHALT TON | RUBBERIZED HOT MIX ASPHALT (OPEN GRADED) TON | TACK COAT TON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB | WB FLORIN Rd TO NB ROUTE 5 ON RAMP | 1,620 | Var | | | 3,869 | | | 632 | | 0.82 |
| | | NB | NB ROUTE 5 TO WB FLORIN Rd LOOP OFF RAMP | 797 | Var | | | 2,005 | | | 328 | | 0.43 |
| | | NB | EB FLORIN Rd TO NB ROUTE 5 ON RAMP (PARTIAL) | 412 | Var | | | 858 | | | 140 | | 0.18 |
| | | NB | 43RD AVENUE ON RAMP | 688 | Var | | | | | 3,051 | 498 | 193 | 1.30 |
| | | NB | SEAMAS AVENUE OFF RAMP | 690 | Var | | | 2,167 | | | 354 | | 0.46 |
| | | NB | SEAMAS AVENUE ON RAMP | 589 | Var | | | | | 2,091 | 342 | 132 | 0.89 |
| | | NB | SUTTERVILLE ROAD OFF RAMP | 616 | Var | | | 1,935 | | | 316 | | 0.41 |
| | | NB | SUTTERVILLE ROAD ON RAMP | 682 | Var | | | | | 2,263 | 370 | 143 | 0.96 |
| | | NB | RICHARDS Blvd ON RAMP | 738 | Var | | | | | 2,694 | 440 | 170 | 1.15 |
| | | SB | RICHARDS Blvd ON RAMP | 619 | Var | | | | | 2,594 | 424 | 164 | 1.10 |
| | | SB | SUTTERVILLE ROAD OFF RAMP | 836 | Var | | | 3,014 | | | 492 | | 0.64 |
| | | SB | SUTTERVILLE ROAD ON RAMP | 605 | Var | | | 1,983 | | | 324 | | 0.42 |
| | | SB | SEAMAS AVENUE OFF RAMP | 828 | Var | | | | | 2,723 | 445 | 172 | 1.16 |
| | | SB | SEAMAS AVENUE ON RAMP | 719 | Var | | | 2,249 | | | 367 | | 0.48 |
| | | SB | 43RD AVENUE OFF RAMP | 774 | Var | | | 3,346 | | | 546 | | 0.71 |
| | | SB | SB ROUTE 5 OFF RAMP TO WB FLORIN Rd | 1,559 | Var | | | 4,998 | | | 816 | | 1.06 |
| | | SB | SB OFF RAMP TO EB FLORIN Rd (PARTIAL) | 876 | Var | | | 1,800 | | | 294 | | 0.38 |
| | | SB | WB FLORIN Rd TO SB LOOP ON RAMP | 875 | Var | | | 2,217 | | | 362 | | 0.47 |
| PM 17.21 | TO PM 17.88 | NB | NB MAINLINE | 3,538 | 66-97 | 28,145 | | | | | | 1,774 | 5.99 |
| PM 17.88 | TO PM 17.21 | SB | SB MAINLINE | 3,538 | 66-110 | 29,058 | | | | | | 1,831 | 6.18 |
| PM 17.88 | TO PM 18.65 | NB | AC SHOULDER - OUTSIDE | 4,066 | 10 | | | 4,482 | | | 732 | | 0.95 |
| PM 17.88 | TO PM 18.65 | NB | AC SHOULDER - INSIDE | 4,066 | 10-14 | | 5,295 | | | | 577 | | 1.13 |
| PM 18.65 | TO PM 17.88 | SB | AC SHOULDER - OUTSIDE | 4,066 | 10 | | | 4,557 | | | 744 | | 0.97 |
| PM 18.65 | TO PM 17.88 | SB | AC SHOULDER - INSIDE | 4,066 | 10-14 | | 5,306 | | | | 579 | | 1.13 |
| PM 18.69 | TO PM 19.13 | NB | AC SHOULDER - OUTSIDE | 2,324 | 10-43 | | | 5,466 | | | 892 | | 1.16 |
| PM 18.69 | TO PM 19.13 | NB | AC SHOULDER - INSIDE | 2,324 | 10 | | 2,674 | | | | 292 | | 0.57 |
| PM 19.13 | TO PM 18.69 | SB | AC SHOULDER - OUTSIDE | 2,324 | 10-44 | | | 5,472 | | | 893 | | 1.16 |
| PM 19.13 | TO PM 18.69 | SB | AC SHOULDER - INSIDE | 2,324 | 10 | | 2,677 | | | | 292 | | 0.57 |
| PM 19.17 | TO PM 19.30 | NB | AC SHOULDER - OUTSIDE | 687 | 10-43 | | | 1,264 | | | 207 | | 0.27 |
| PM 19.17 | TO PM 19.30 | NB | AC SHOULDER - INSIDE | 687 | 10 | | 867 | | | | 95 | | 0.18 |
| PM 19.30 | TO PM 19.17 | SB | AC SHOULDER - OUTSIDE | 687 | 10-41 | | | 1,238 | | | 202 | | 0.26 |
| PM 19.30 | TO PM 19.17 | SB | AC SHOULDER - INSIDE | 687 | 10 | | 865 | | | | 95 | | 0.18 |
| PM 19.34 | TO PM 19.95 | NB | AC SHOULDER - OUTSIDE | 3,221 | 10-41 | | | 4,933 | | | 805 | | 1.05 |
| PM 19.34 | TO PM 19.95 | NB | AC SHOULDER - INSIDE | 3,221 | 10 | | 3,652 | | | | 398 | | 0.78 |
| PM 19.95 | TO PM 19.34 | SB | AC SHOULDER - OUTSIDE | 3,221 | 10-43 | | 880 | 4,316 | | | 705 | | 0.92 |
| PM 19.95 | TO PM 19.34 | SB | AC SHOULDER - INSIDE | 3,221 | 10 | | 3,655 | | | | 399 | | 0.78 |
| PM 19.98 | TO PM 22.00 | NB | AC SHOULDER - OUTSIDE | 10,666 | 10-43 | | 880 | 13,859 | | | 2,261 | | 2.95 |
| PM 19.98 | TO PM 21.63 | NB | AC SHOULDER - INSIDE | 8,712 | 10 | | 9,713 | | | | 1,059 | | 2.07 |
| PM 22.16 | TO PM 19.98 | SB | AC SHOULDER - OUTSIDE | 11,511 | 10-49 | | | 15,199 | | | 2,480 | | 3.23 |
| PM 21.63 | TO PM 19.98 | SB | AC SHOULDER - INSIDE | 8,712 | 10 | | 10,562 | | | | 1,151 | | 2.25 |
| PM 22.33 | TO PM 22.16 | SB | AC SHOULDER - OUTSIDE | 898 | 11 | | | 1,063 | | | 174 | | 0.23 |
| PM 22.42 | TO PM 22.33 | SB | AC SHOULDER - OUTSIDE | 476 | 10-25 | | | 553 | | | 91 | | 0.12 |
| PM 22.00 | TO PM 22.42 | NB | AC SHOULDER - OUTSIDE | 2,218 | 10-21 | | | 2,394 | | | 391 | | 0.51 |
| PM 22.49 | TO PM 22.75 | NB | AC SHOULDER - OUTSIDE | 1,373 | 8-37 | | | 2,401 | | | 392 | | 0.64 |
| PM 22.49 | TO PM 22.75 | NB | AC SHOULDER - INSIDE | 1,373 | 10-11 | | 1,776 | | | | 194 | | 0.38 |
| PM 22.53 | TO PM 22.49 | SB | AC SHOULDER - OUTSIDE | 212 | 10 | | | 228 | | | 38 | | 0.05 |
| PM 22.75 | TO PM 22.49 | SB | AC SHOULDER - INSIDE | 1,373 | 11-13 | | 1,934 | | | | 211 | | 0.41 |
| PM 22.34 | TO PM 22.16 | SB | WB ROUTE 50 TO SB ROUTE 5 CONNECTOR OUTSIDE SHOULDER | 951 | 10 | | | 1,080 | | | 177 | | 0.23 |
| PM 22.34 | TO PM 22.16 | SB | WB ROUTE 50 TO SB ROUTE 5 CONNECTOR INSIDE SHOULDER | 951 | 5 | | | 537 | | | 88 | | 0.11 |
| PM 22.38 | TO PM 22.33 | SB | EB ROUTE 50 TO SB ROUTE 5 CONNECTOR OUTSIDE SHOULDER | 265 | 10 | | | 311 | | | 51 | | 0.07 |
| PM 22.38 | TO PM 22.33 | SB | EB ROUTE 50 TO SB ROUTE 5 CONNECTOR INSIDE SHOULDER | 265 | 5 | | | 152 | | | 24 | | 0.03 |
| PM 22.65 | TO PM 22.75 | NB | EB ROUTE 50 TO NB ROUTE 5 CONNECTOR OUTSIDE SHOULDER | 528 | 10 | | | 587 | | | 96 | | 0.13 |
| PM 24.19 | TO PM 24.68 | NB | AC SHOULDER - OUTSIDE | 2,429 | 8-51 | | | 3,581 | | | 585 | | 0.76 |
| PM 24.19 | TO PM 24.68 | NB | AC SHOULDER - INSIDE | 2,429 | 14-17 | | 4,506 | | | | 491 | | 0.96 |
| PM 24.68 | TO PM 24.19 | SB | AC SHOULDER - OUTSIDE | 2,429 | 8-43 | | | 3,440 | | | 562 | | 0.73 |
| PM 24.68 | TO PM 24.19 | SB | AC SHOULDER - INSIDE | 2,429 | 14-17 | | 4,516 | | | | 492 | | 0.96 |
| PM 24.68 | TO PM 24.82 | NB | NB MAINLINE | 740 | 48 | 4,332 | | | | | | 273 | 0.92 |
| PM 24.68 | TO PM 24.82 | NB | AC SHOULDER - OUTSIDE | 740 | 10-41 | | | | | 1,264 | 207 | 80 | 0.27 |
| PM 24.68 | TO PM 24.82 | NB | AC SHOULDER - INSIDE | 740 | 17 | | | | 1,525 | | 167 | 97 | 0.32 |
| PM 24.82 | TO PM 24.68 | SB | SB MAINLINE | 740 | 48 | 4,310 | | | | | | 272 | 0.92 |
| PM 24.82 | TO PM 24.68 | SB | AC SHOULDER - OUTSIDE | 740 | 10-54 | | | | | 1,755 | 287 | 111 | 0.37 |
| PM 24.82 | TO PM 24.68 | SB | AC SHOULDER - INSIDE | 740 | 17 | | | | 1,538 | | 168 | 97 | 0.33 |
| | | | HMA DIKE (SEE Q-1) | | | | | | | | 11.6 | | |
| | | | | | TOTAL | | | 254,655 | | | 27,245.6 | 5,509 | 57.20 |

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

# ROADWAY QUANTITIES

| LOCATION PM BEGIN | LOCATION PM END | DIRECTION NB/SB | (N) LENGTH FT | (N) WIDTH FT | GRIND EXISTING CONCRETE PAVEMENT SQYD | CRACK TREATMENT LNMI |
|---|---|---|---|---|---|---|
| PM 17.88 | TO PM 18.65 | NB | 4,066 | Var | 21,591 | |
| PM 18.69 | TO PM 19.13 | NB | 2,323 | Var | 12,800 | |
| PM 19.17 | TO PM 19.30 | NB | 686 | Var | 4,166 | |
| PM 19.34 | TO PM 19.95 | NB | 3,221 | Var | 17,613 | |
| PM 19.98 | TO PM 22.42 | NB | 12,883 | Var | 75,760 | |
| PM 22.49 | TO PM 22.75 | NB | 1,373 | Var | 7,603 | |
| PM 18.65 | TO PM 17.88 | SB | 4,066 | Var | 21,794 | |
| PM 19.13 | TO PM 18.69 | SB | 2,323 | Var | 12,884 | |
| PM 19.30 | TO PM 19.17 | SB | 686 | Var | 4,150 | |
| PM 19.95 | TO PM 19.34 | SB | 3,221 | Var | 17,414 | |
| PM 22.42 | TO PM 19.98 | SB | 12,883 | Var | 80,065 | |
| PM 22.61 | TO PM 22.49 | SB | 634 | Var | 3,574 | |
| | | | | | | |
| PM 17.20 | TO PM 17.58 | NB | | | | 1.06 |
| PM 17.58 | TO PM 17.20 | SB | | | | 1.06 |
| PM 17.60 | TO PM 18.65 | NB | | | | 2.95 |
| PM 18.65 | TO PM 17.60 | SB | | | | 1.99 |
| PM 18.68 | TO PM 19.14 | NB | | | | 1.28 |
| PM 19.14 | TO PM 18.68 | SB | | | | 1.24 |
| PM 19.16 | TO PM 19.30 | NB | | | | 0.41 |
| PM 19.30 | TO PM 19.16 | SB | | | | 0.41 |
| PM 19.33 | TO PM 19.95 | NB | | | | 1.74 |
| PM 19.95 | TO PM 19.33 | SB | | | | 1.74 |
| PM 19.97 | TO PM 22.42 | NB | | | | 6.86 |
| PM 22.42 | TO PM 19.97 | SB | | | | 6.86 |
| PM 22.49 | TO PM 22.75 | NB | | | | 0.74 |
| PM 22.75 | TO PM 22.49 | SB | | | | 0.30 |
| | | | | | | |
| | | | | TOTAL | 279,414 | 28.64 |

# SEAL PAVEMENT JOINT

| LOCATION PM TO PM | DIRECTION NB/SB | SEAL PAVEMENT JOINT LF |
|---|---|---|
| 17.2 TO 22.8 | NB | 69,770 |
| 22.8 TO 17.2 | SB | 69,770 |
| | | |
| | TOTAL | 139,540 |

# SUMMARY OF QUANTITIES

Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN, SOUTH
DESIGN BRANCH 09

Caltrans

FUNCTIONAL SUPERVISOR: JOHNY TAN
CALCULATED-DESIGNED BY: JOHNY TAN
CHECKED BY: JT
REVISED BY
DATE REVISED

LAST REVISION 05-27-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:17

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 28 | 45 |

H. Golban 7-19-10
REGISTERED ELECT. ENGINEER DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
HABIB GOLBAN
No. E17928
Exp. 9-30-10
ELECT.
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.*

**GENERAL NOTES:**

1. NOTIFY ELECTRICAL SYSTEMS SUPPORT IN TRANSPORTATION MANAGEMENT CENTER BEFORE START OF WORK TO DISABLE THE SITES UNTIL REHABILITATION WORK IS COMPLETED.
2. PROTECT EXISTING CONDUITS, CONDUCTORS FOR RAMP LIGHTS AND LOOP DETECTOR LEAD IN CABLES AT THE PULL BOXES TO BE REPLACED DURING COLD PLANE OF AC PAVEMENT AT BOTH FREEWAY AND RAMPS AC PAVED SHOULDERS AS SHOWN IN THE QUANTITY TABLES, SHEET E-2.
3. EXTEND EXISTING TERMINATION CONDUIT FOR LOOP WIRES IF NECESSARY TO ETW AS PER "SHOULDER TERMINATION DETAILS" OF THE STANDARD PLAN SHEET ES-5D AS SHOWN IN THE QUANTITY TABLES, SHEET E-2.
4. REPLACE ALL DAMAGED LOOPS LOCATED WITHIN THE COLD PLANE OF AC PAVEMENT, GRINDING EXISTING CONCRETE PAVEMENT CRACK TREATMENT, AND REPLACEMENT OF EXISTING CONCRETE SLABS AT THE FREEWAY AND RAMPS TRAFFIC LANES AS SHOWN IN THE QUANTITY TABLE, SHEET E-2.
5. THERE ARE EXISTING DETECTOR LEAD IN CABLES TO THE PULL BOXES FOR LOOP WIRES SPLICES.
6. REPLACE ALL EXISTING DETECTOR HANDHOLES LOCATED AT THE RAMP SHOULDER LOCATIONS WITH NEW TYPE A DETECTOR HANDHOLES WITH CAST IRON FRAME AND COVER WITH HOLD DOWN SCREWS.
7. EXISTING LOOP DETECTOR LEAD IN CABLES ARE LOCATED IN THE EXISTING PULL BOXES WHICH ARE LOCATED EITHER IN THE PAVED SHOULDER OR OUTSIDE THE EDGE OF PAVED SHOULDER IN THE DIRT AREA. DURING SHOULDER PAVEMENT GRINDIND, PROTECT EXISTING LOOP DETECTOR LEAD IN CABLES FOR SPLICING TO THE NEW LOOP WIRES IF EXISTING PULL BOXES ARE TO BE REPLACED WITH NEW PULL BOXES.

NO SCALE

**LEGEND:**

○ LOCATIONS (SEE SHEET E-2)

# MODIFY SIGNAL
# MODIFY RAMP METERING SYSTEM
# MODIFY TRAFFIC MONITORING STATION (COUNT)

**E-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
OFFICE OF ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED-DESIGNED BY: JAMIE KOJAK
CHECKED BY: HABIB GOLBAN
REVISED BY
DATE REVISED

LAST REVISION 07-15-10 | DATE PLOTTED => 05-AUG-2010 | TIME PLOTTED => 13:17

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 29 | 45 |

H. Golban 7-19-10
REGISTERED ELECT. ENGINEER DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
HABIB GOLBAN
No. E17928
Exp. 9-30-10
ELECT.
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.*

# QUANTITY TABLE:

| LOCATION No. | APPROXIMATE LOCATION | ELEMENTS | CO | RTE | APPROXIMATE POST MILE | SIDE OF FREEWAY (MAIN LINE) | | ON RAMP: RAMP METER: ADVANCED LOOP | ON RAMP: RAMP METER: LIMIT LINE | ON RAMP: RAMP METER: COUNT | OFF RAMP | LOOP (EACH) (6 X 6) | LOOP (EACH) (6 X 8) | SC (EACH) | RC Exist dh (EACH) | DH (EACH) | DETECTOR TERMINATION SHOULDER | EXIST TRAFFIC PULL BOX | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | I-5/0.2 MILES NORTH OF FLORIN RD OVER PASS | RAMP METERING SYSTEM | SAC | 5 | 17.4 | NB | | | | | | 8 | | 8 | | | 2 | | |
| | | | | | | | SB | | | | | 8 | | 8 | | | 2 | | |
| | | | | | | | | NB | | | | 1 | | 1 | 1 | 1 | | | |
| | | | | | | | | | NB | | | 4 | | 2 | 2 | 2 | | | |
| | | | | | | | | | | | SB | 2 | | 2 | 1 | 1 | | | SB OFF TO FLORIN RD |
| 2 | 0.1 MILES NORTH OF GLORIA DR OVER PASS | COUNT STATION | SAC | 5 | 18.2 | NB | | | | | | 8 | | 8 | 2 | 2 | 1 | | |
| | | | | | | | SB | | | | | 8 | | 8 | 2 | 2 | 1 | 1 | EXIT (T) IN MEDIAN |
| 3 | I-5/ 43rd Ave. | TRAFFIC SIGNAL | SAC | 5 | 18.8 | | | | | | SB | 12 | | 6 | | | 3 | | COORDINATE WITH CITY OF SACRAMENTO |
| | | RAMP METERING SYSTEM | SAC | 5 | 18.75 | NB | | | | | | 8 | | | | | 2 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | SB | | | | | 8 | | | | | 2 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | | NB | | | | 2 | | 2 | 1 | 1 | | | |
| | | | | | | | | | NB | | | 8 | | 4 | 4 | 4 | | | |
| | | COUNT LOOP | SAC | 5 | 18.82 | | | | | | SB | 1 | | 1 | 1 | 1 | | | SB OFF TO 43 RD |
| 4 | I-5/ SEAMAS Ave. | TRAFFIC SIGNAL | SAC | 5 | 19.18 | | | | | | NB | 2 | | 2 | | | | | COORDINATE WITH CITY OF SACRAMENTO<br>DETECTOR TERMINATION IN Exist # 3½ PULL BOX IN SIDE WALK |
| | | | | | 19.25 | | | | | | SB | 2 | | 2 | | | | | |
| | | COUNT LOOP | SAC | 5 | 19.17 | | | | | | NB | 1 | | 1 | 1 | 1 | | | NB OFF TO SEAMAS AVE |
| | | | | | 19.18 | | | | | SB | | 1 | | 1 | 1 | 1 | | | SB ON FROM SEAMAS AVE |
| | | | | | 19.47 | | | | | | SB | | 1 | 1 | 1 | 1 | | | SB OFF TO SEAMAS AVE |
| | | RAMP METERING SYSTEM | SAC | 5 | 19.39 | NB | | | | | | 8 | | 8 | | | 4 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | SB | | | | | 8 | | 8 | | | 4 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | | NB | | | | 1 | 1 | 2 | 1 | 1 | | | LANE # 2 (6 X 8) |
| | | | | | | | | | NB | | | 8 | | 4 | 4 | 4 | | | |
| 5 | I-5/SUTTERVILLE RD. | COUNT LOOP | SAC | 5 | 20.42 | | | | | | NB | 1 | | 1 | 1 | 1 | | | NB OFF TO SUTTERVILLE RD |
| | | | | | 20.34 | | | | | SB | | 1 | | 1 | 1 | 1 | | | SB ON FROM SUTTERVILLE RD |
| | | | | | 20.73 | | | | | | SB | | 1 | 1 | 1 | 1 | | | SB OFF TO SUTTERVILLE RD |
| | | RAMP METERING SYSTEM | SAC | 5 | 19.39 | NB | | | | | | 8 | | 8 | | | 4 | 1 | EXST (T) IN MEDIAN |
| | | | | | | | SB | | | | | 8 | | 8 | | | 4 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | | NB | | | | 1 | 1 | 2 | 1 | 1 | | | LANE # 2 (6 X 8) |
| | | | | | | | | | NB | | | 8 | | 4 | 4 | 4 | | | |
| 6 | I-5/230' NORTH OF SP RAILROAD BRIDGE | COUNT STATION | SAC | 5 | 20.9 | NB | | | | | | 8 | | 8 | 2 | 2 | | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | SB | | | | | 8 | | 8 | 2 | 2 | | 1 | EXIST (T) IN MEDIAN |
| 7 | I-5/RICHARDS BLVD. | RAMP METERING SYSTEM | SAC | 5 | 24.5 | NB | | | | | | 8 | | 8 | | | 2 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | SB | | | | | 8 | | 8 | | | 2 | 1 | EXIST (T) IN MEDIAN |
| | | | | | | | | NB | | | | 1 | 2 | 3 | 2 | 2 | | | LANES # 2 & 3 (6 X 8) |
| | | | | | | | | | NB | | | 8 | | 2 | 4 | 4 | | | |
| | | | | | | | | | | NB | | | 1 | 1 | 1 | 1 | | | NB OFF RAMP TO RICHARDS BLVD |
| | | COUNT LOOP | SAC | 5 | 24.75 | | | | | | NB | | 1 | 1 | 1 | 1 | | | NB ON RAMP FROM RICHARDS BLVD |
| | | | | | | | | | | | TOTAL: | 177 | 8 | 143 | 42 | 42 | 33 | 11 | |

## MODIFY SIGNAL
## MODIFY RAMP METERING SYSTEM
## MODIFY TRAFFIC MONITORING STATION (COUNT)

E-2

REVISED BY | DATE REVISED
JAMIE KOJAK | HABIB GOLBAN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: NELSON LEE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans OFFICE OF ELECTRICAL DESIGN

LAST REVISION 06-03-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:17

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 30 | 45 |

H. Golban 7-19-10
REGISTERED ELECT. ENGINEER DATE

8-16-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
HABIB GOLBAN
No. E17928
Exp. 9-30-10
ELECT.
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.*

# QUANTITY TABLE: RAMP SYSTEM PULL BOXES

| LOCATION No. | APPROXIMATE LOCATION | ELEMENTS | CO | RTE | APPROXIMATE POST MILE | SIDE OF FREEWAY (MAIN LINE) | ON RAMP | OFF RAMP | LOOP (EACH) (6 X 6) | LOOP (EACH) (6 X 8) | SC (EACH) | RC Exist dh (EACH) | AC PAVED SHOULDER PULL BOXES #5 | AC PAVED SHOULDER PULL BOXES #5(T) | AC PAVED SHOULDER PULL BOXES #6(T) | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | I-5/0.2 MILES NORTH OF FLORIN RD OVER PASS | RAMP METERING SYSTEM | SAC | 5 | 17.4 | | NB | | | | | | | 9 | 2 | NB Florin Rd Slip ON Ramp & Main line shoulders |
| | | | | | | | | SB | | | | | | | | |
| | | | | | | | | NB | | | | | | | | |
| | | | | | | | | | SB | | | | | 10 | 2 | SB 5, Auxiliary Lane & OFF Ramp to Florin Rd. |
| 2 | 0.1 MILES NORTH OF GLORIA DR OVER PASS | COUNT STATION | SAC | 5 | 18.2 | | | | | | | | | | | |
| 3 | I-5/ 43rd Ave. | TRAFFIC SIGNAL | SAC | 5 | 18.8 | | | | | | | | | | | |
| | | RAMP METERING SYSTEM | SAC | 5 | 18.75 | | NB | | | | | | | 1 | 1 | NB 5, 43 Ave. ON Ramp shoulders |
| | | | | | | | | SB | | | | | | | | |
| | | | | | | | | NB | | | | | | | | |
| | | | | | | | | | SB | | | | | | | |
| | | COUNT LOOP | SAC | 5 | 18.82 | | | | | | | | | | | |
| 4 | I-5/ SEAMAS Ave. | TRAFFIC SIGNAL | SAC | 5 | 19.18 | | | | | | | | | | | |
| | | | | | 19.25 | | | | | | | | | | | |
| | | COUNT LOOP | SAC | 5 | 19.17 | | | | | | | | | | | |
| | | | | | 19.18 | | | | | | | | | | | |
| | | | | | 19.47 | | | | | | | | | | | |
| | | RAMP METERING SYSTEM | SAC | 5 | 19.39 | | NB | | | | | | | | 4 | NB 5, Seamas Ave ON Ramp |
| | | | | | | | | SB | | | | | 2 | | | SB 5, SEAMAS Ave ON RAMP |
| | | | | | | | | NB | | | | | 3 | | | NB 5, OFF Ramp to SEAMAS Ave |
| | | | | | | | | | SB | | | | | | | |
| 5 | I-5/SUTTERVILLE RD. | COUNT LOOP | SAC | 5 | 20.42 | | | | | | | | | | | |
| | | | | | 20.34 | | | | | | | | | | | |
| | | | | | 20.73 | | | | | | | | | | | |
| | | RAMP METERING SYSTEM | SAC | 5 | 19.39 | | NB | | | | | | 2 | 3 | 2 | NB 5, Sutterville Road ON Ramp |
| | | | | | | | | SB | | | | | | | | |
| | | | | | | | | NB | | | | | 3 | | | NB 5, OFF Ramp to Sutterville Road |
| | | | | | | | | | SB | | | | | | | |
| 6 | I-5/230' NORTH OF SP RAILROAD BRIDGE | COUNT STATION | SAC | 5 | 20.9 | | | | | | | | | | | |
| 7 | I-5/RICHARDS BLVD. | RAMP METERING SYSTEM | SAC | 5 | 24.5 | | NB | | | | | | | | | |
| | | | | | | | | SB | | | | | | | | |
| | | | | | | | | NB | | | | | 5 | | | NB 5, OFF Ramp to Richard Blvd. |
| | | | | | | | | | SB | | | | | | | |
| | | COUNT LOOP | SAC | 5 | 24.75 | | | | | | | | | | | |
| | | | | | | | | | | TOTAL: | | | 15 | 23 | 11 | |

# MODIFY RAMP METERING SYSTEM

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY

E-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
OFFICE OF ELECTRICAL DESIGN
Caltrans

FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED-DESIGNED BY: JAMIE KOJAK
CHECKED BY: HABIB GOLBAN
REVISED BY
DATE REVISED

LAST REVISION 07-07-10
DATE PLOTTED => 05-AUG-2010
TIME PLOTTED => 13:17

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 31 | 45 |

Donald E. Howe
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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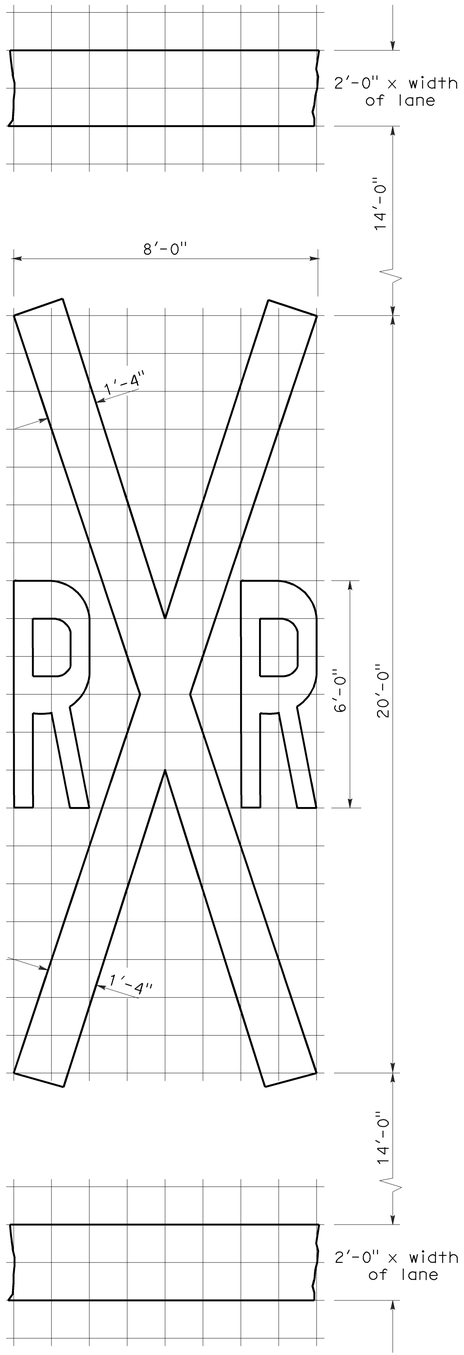
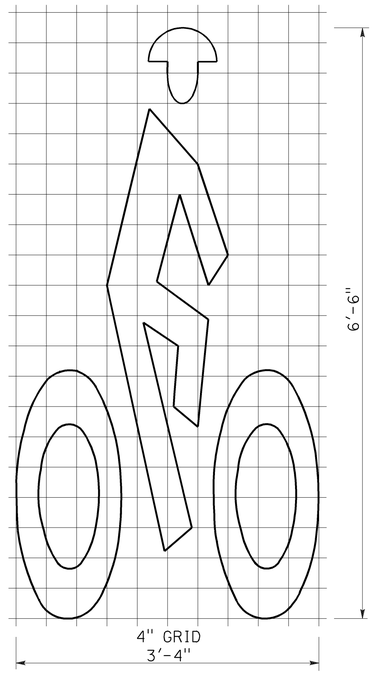
*To accompany plans dated* 8-16-10




1'-0" GRID
A=70 sq ft ✳

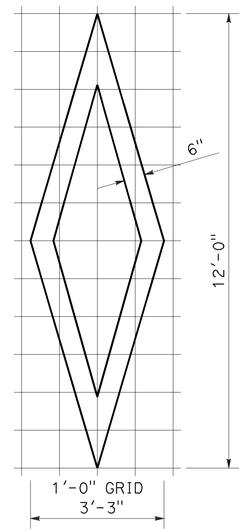
RAILROAD CROSSING SYMBOL

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



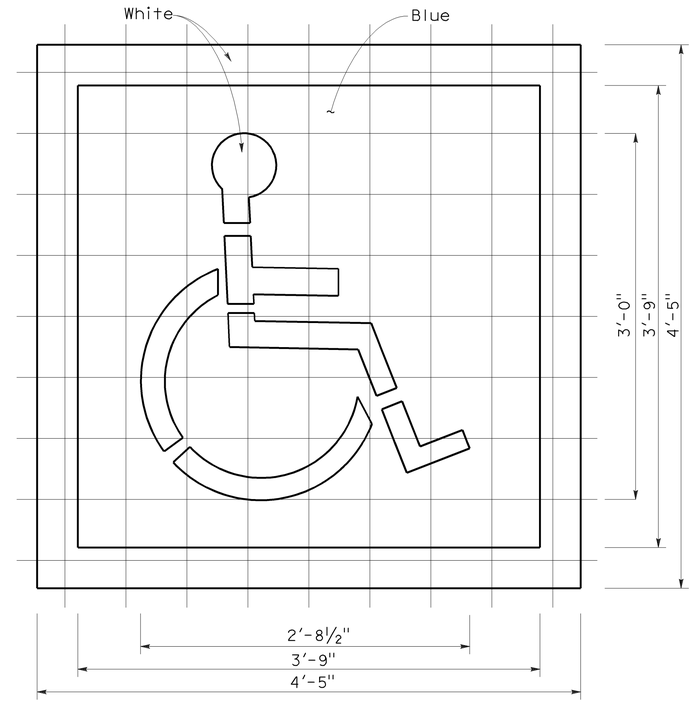

A=7 sq ft

BIKE LANE SYMBOL



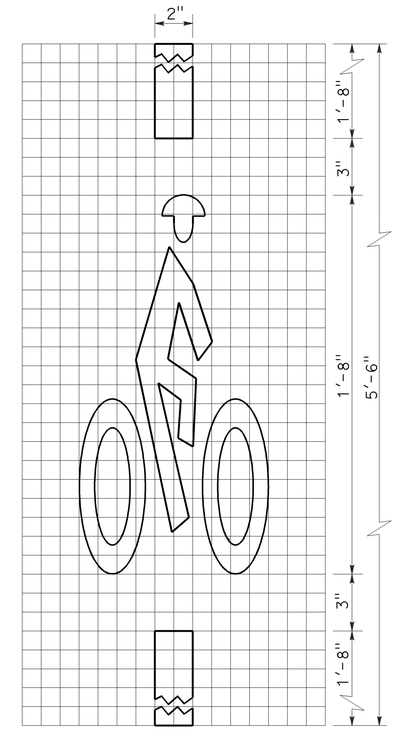

A=11 sq ft

DIAMOND SYMBOL



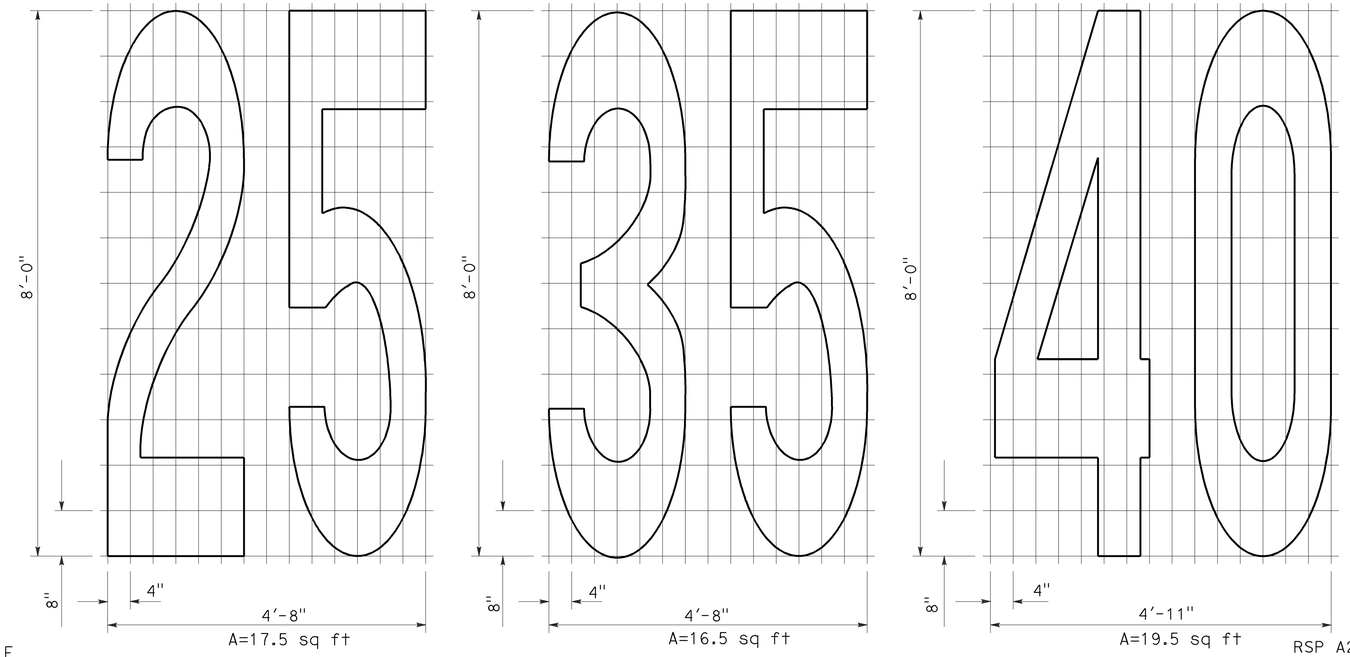

6" GRID
A (White) =9 sq ft
A (Blue) =14 sq ft

INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING




1" GRID
10"
A=2 sq ft

BICYCLE LOOP DETECTOR SYMBOL




A=17.5 sq ft
A=16.5 sq ft
A=19.5 sq ft

NUMERALS

NOTE:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

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

**REVISED STANDARD PLAN RSP A24C**

**2006 REVISED STANDARD PLAN RSP A24C**

5-27-08

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 32 | 45 |

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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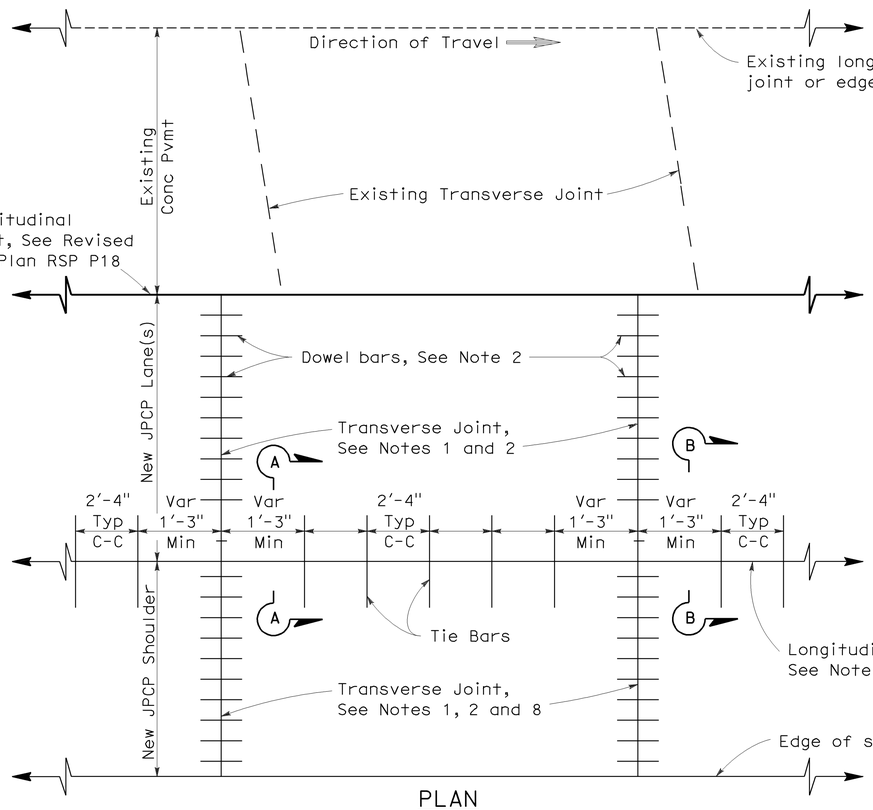
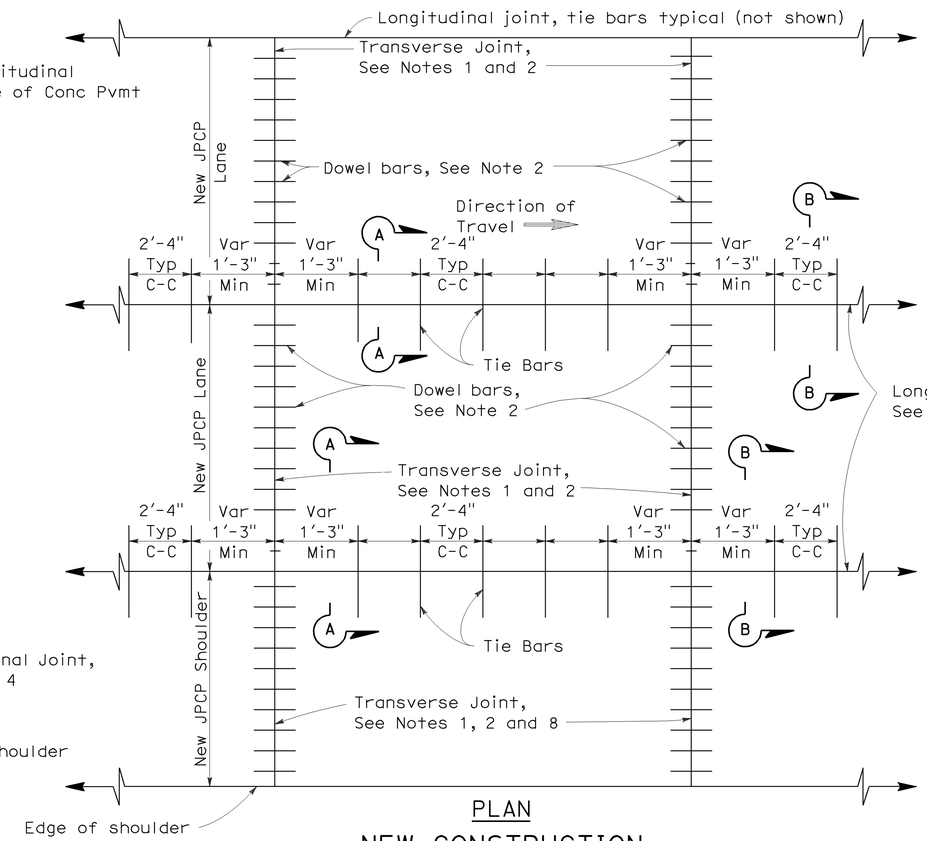
*To accompany plans dated* 8-16-10



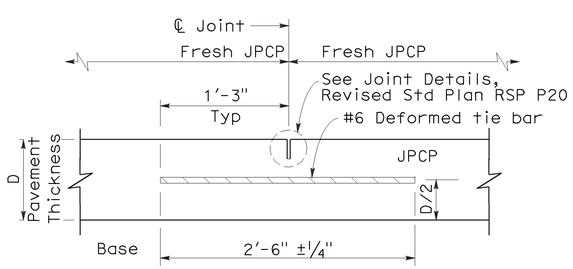

PLAN
LANE/SHOULDER ADDITION OR RECONSTRUCTION
See Notes 6 and 7



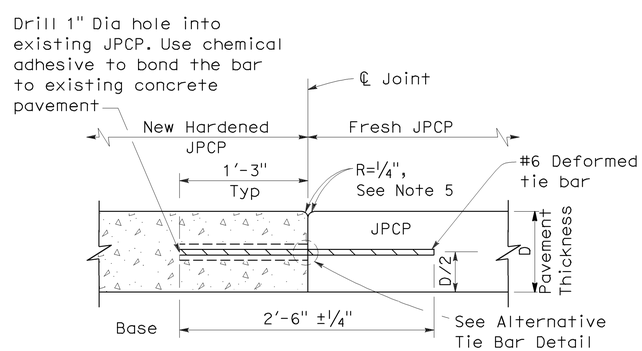

PLAN
NEW CONSTRUCTION
See Notes 6 and 7

## NOTES:

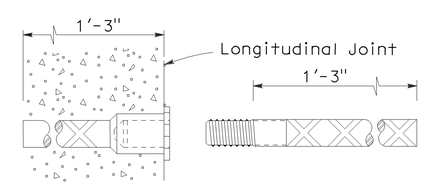
1. Transverse joints shall be constructed at right angles to the longitudinal pavement joints in new jointed plain concrete pavement and spaced at successive repeated intervals of 12', 15', 13' and 14'.
2. For transverse joint and dowel bar details not shown, See Revised Standard Plan RSP P10.
3. Construct longitudinal contraction joints as shown in Section A-A when more than one lane or shoulder widths are placed at one time. If constructing one lane at a time, use longitudinal construction joint, as shown in Section B-B.
4. For additional longitudinal joint details, see Revised Standard Plan RSP P18.
5. If fresh concrete is placed adjacent to existing concrete, the top corner of the new hardened concrete does not need to be rounded to the 1/4" radius as shown.
6. Joint spacing patterns do not apply to intersections.
7. Details can also apply to inside widening.
8. Dowel bars may be omitted from shoulders when the shoulder cross slope is not the same as the adjacent traffic lane.




SECTION A-A
LONGITUDINAL CONTRACTION JOINT




SECTION B-B
LONGITUDINAL CONSTRUCTION JOINT




ALTERNATIVE TIE BAR SPLICE DETAIL
(Splice Coupler)

TIE BAR DETAILS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# JOINTED PLAIN CONCRETE PAVEMENT

NO SCALE

RSP P1 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P1
DATED MAY 1, 2006 - PAGE 119 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P1**

**2006 REVISED STANDARD PLAN RSP P1**



5-8-09

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 33 | 45 |

William K. Farnbach
REGISTERED CIVIL ENGINEER

June 5, 2009
PLANS APPROVAL DATE

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

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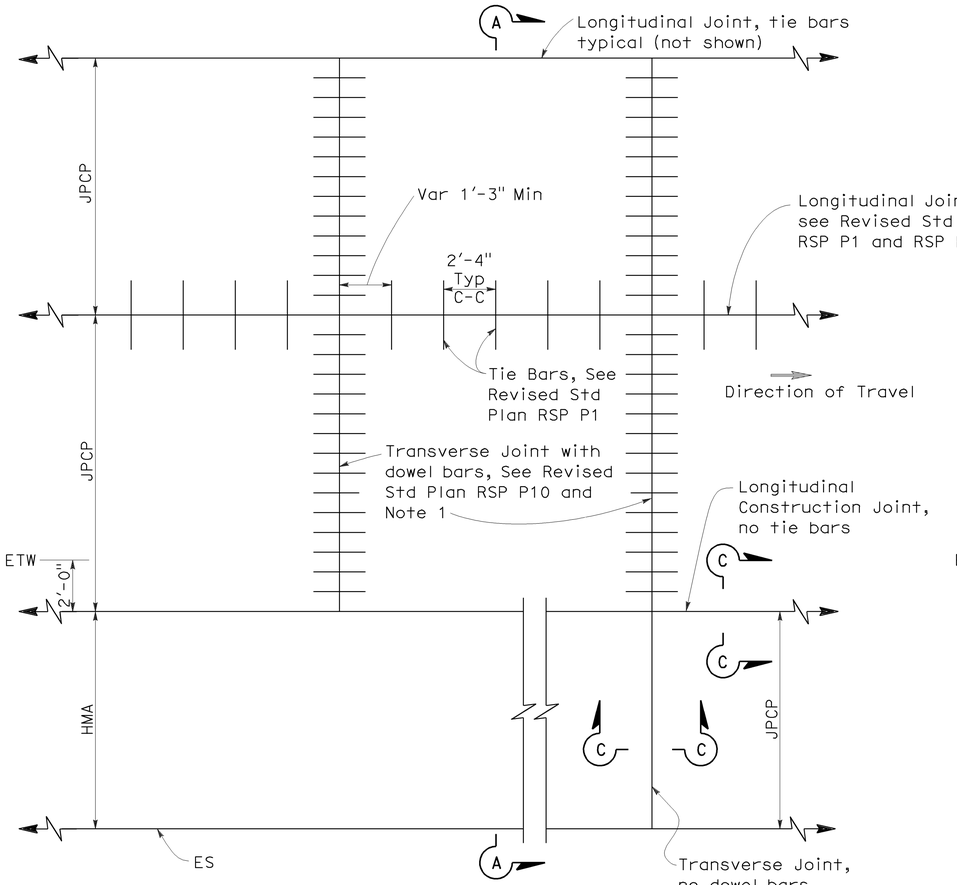
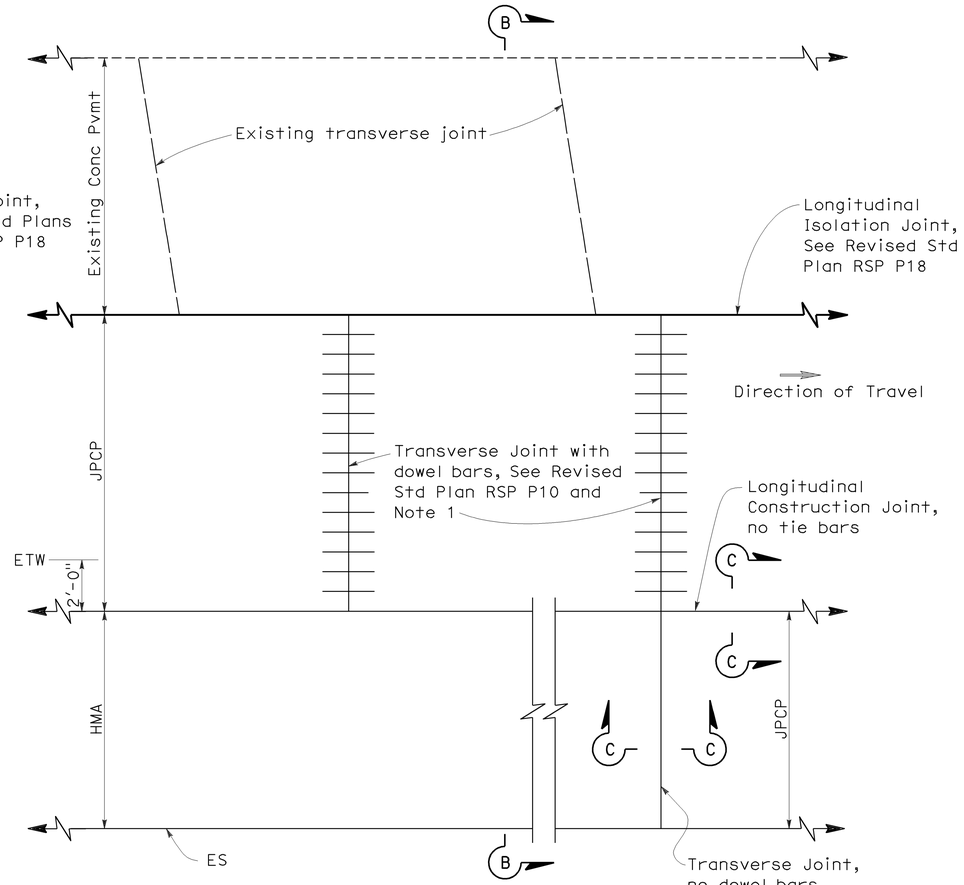
*To accompany plans dated* 8-16-10




PLAN

NEW CONSTRUCTION

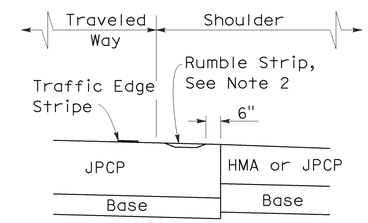



PLAN

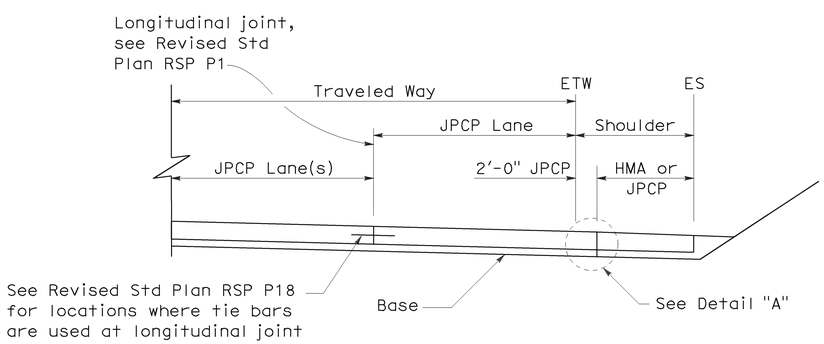
LANE/SHOULDER ADDITION OR RECONSTRUCTION

## NOTES:

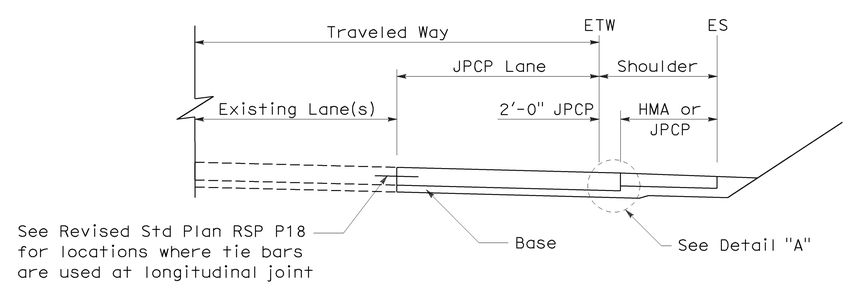
1. Transverse joints shall be constructed at right angles to the longitudinal pavement joints in new Jointed Plain Concrete Pavement and spaced at successive repeated intervals of 12', 15', 13' and 14'.
2. For locations of rumble strips, see project plans. For rumble strip details not shown, see Standard Plans A40A and A40B.
3. Joint spacing patterns do not apply to intersections.



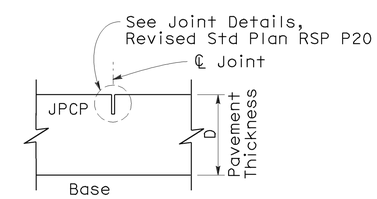

DETAIL "A"




SECTION A-A




SECTION B-B




SECTION C-C

TRANSVERSE/LONGITUDINAL JOINT

(no dowel bars/tie bars)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# JOINTED PLAIN CONCRETE PAVEMENT-WIDENED SLAB DETAILS

NO SCALE

RSP P2 DATED JUNE 5, 2009 SUPERCEDES STANDARD PLAN P2
DATED MAY 1, 2006 - PAGE 120 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P2**

**2006 REVISED STANDARD PLAN RSP P2**

5-19-09

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 34 | 45 |

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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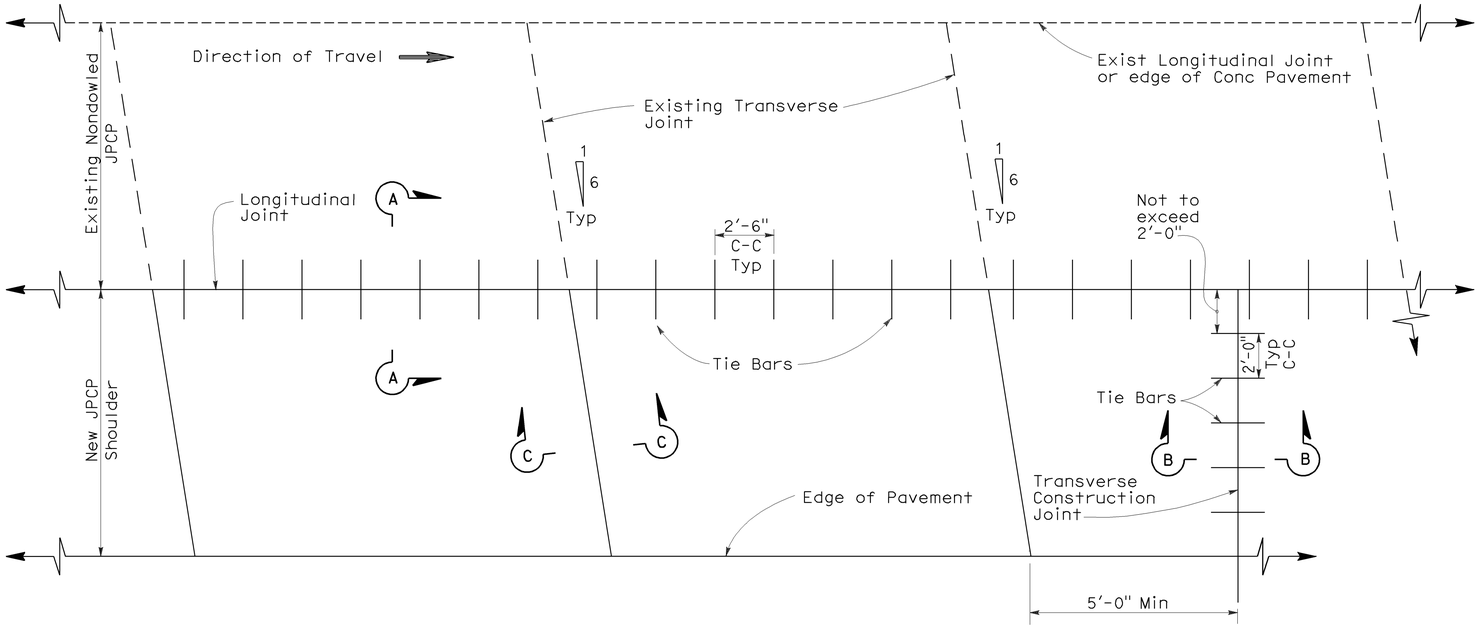
*To accompany plans dated* 8-16-10



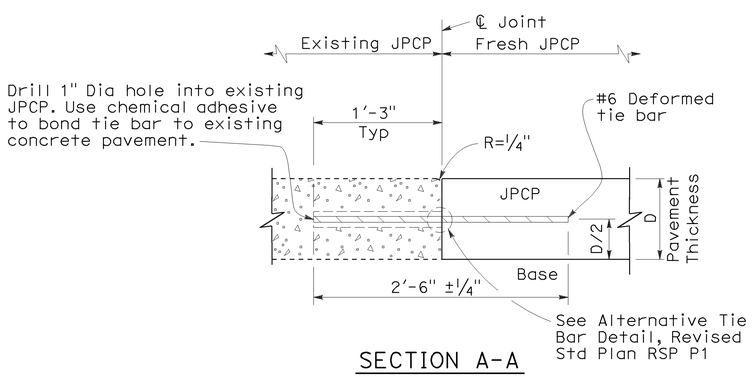

PLAN

## NOTES:

1. New transverse contraction joints shall match the skewed offset and spacing of the adjacent existing contraction joints, as shown.
2. Transverse construction joints, with tie bars spaced as shown, shall be installed at the end of paving operations. Transverse construction joints shall be placed at least 5'-0" from any contraction joint.
3. This Standard Plan only applicable for constructing a nondoweled Jointed Plain Concrete Pavement shoulder next to existing nondoweled Jointed Plain Concrete Pavement lane.
4. If fresh concrete is placed adjacent to existing concrete, the top corner of the new hardened concrete does not need to be rounded to the 1/4" radius as shown.

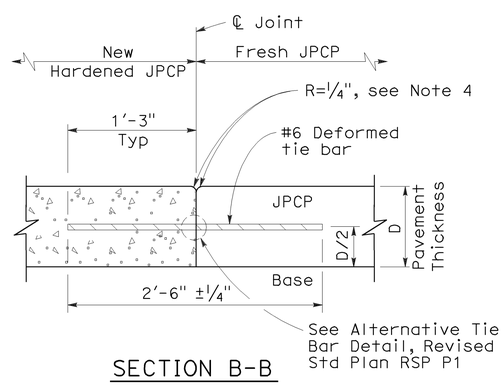
TABLE A

| Tie Bar Spacing | | |
|---|---|---|
| Slab Length | Total Tie Bars per Slab | Clearance Tie Bar to Transverse Joint |
| 9'-0" | 3 | 1'-3" |
| 9'-6" | 3 | 1'-4 1/2" |
| 12'-0" | 5 | 1'-4" |
| 13'-0" | 5 | 1'-10" |
| 14'-0" | 5 | 2'-3 3/4" |
| 15'-0" | 6 | 1'-8" |



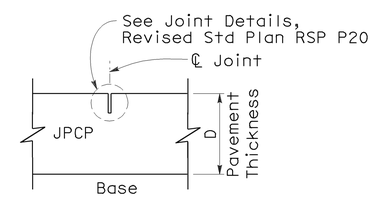

SECTION A-A

LONGITUDINAL JOINT
(Between fresh and hardened concrete)




SECTION B-B

TRANSVERSE CONSTRUCTION JOINT




SECTION C-C

TRANSVERSE CONTRACTION JOINT

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# JOINTED PLAIN CONCRETE PAVEMENT-NONDOWELED SHOULDER ADDITION/RECONSTRUCTION

NO SCALE

RSP P3 DATED MAY 15, 2009 SUPERSEDES RSP P3 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P3 DATED MAY 1, 2006 - PAGE 121 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P3**

**2006 REVISED STANDARD PLAN RSP P3**



5-8-09

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 35 | 45 |

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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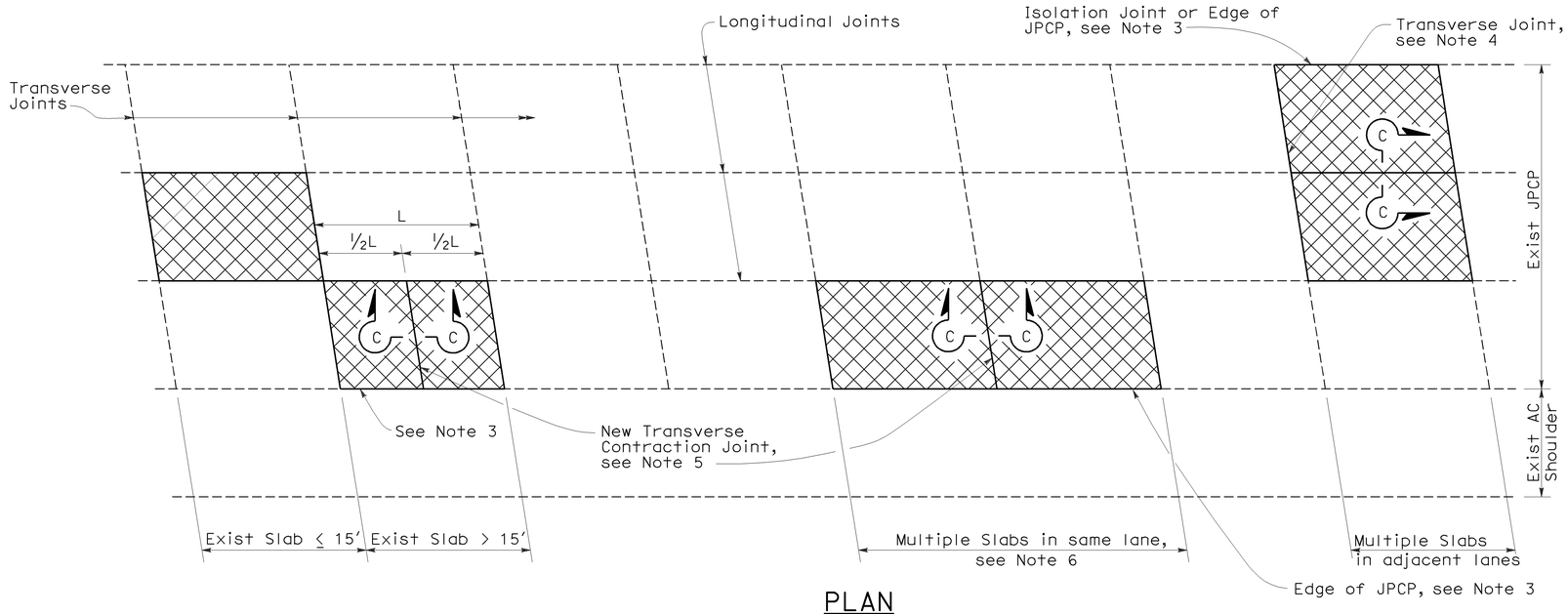
*To accompany plans dated* 8-16-10



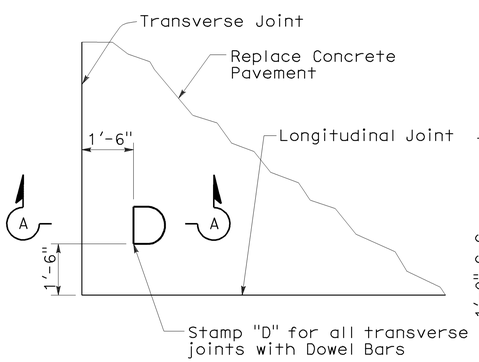

PLAN

## NOTES:

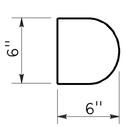
1. For details not shown, see Revised Standard Plan RSP P10.
2. Where the existing outer shoulder pavement is asphalt concrete pavement, the "a" dimension shall be 1′-0" and the "b" dimension shall be 2′-0".
3. Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
4. For detail, 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′.

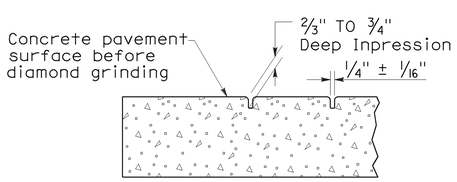
## LEGEND

Replace Concrete Pavement (See Slab Layout Detail)

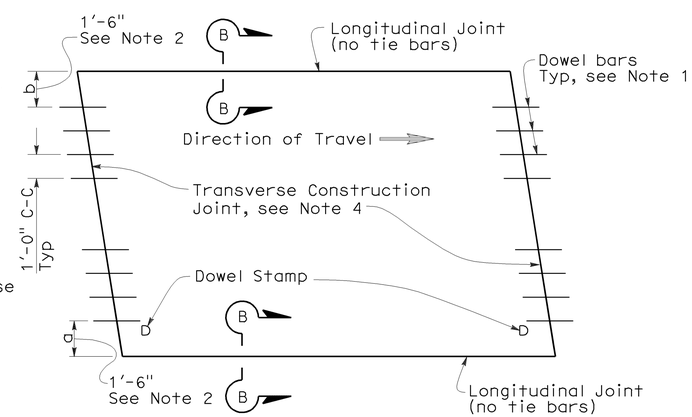



DOWEL STAMP DETAIL

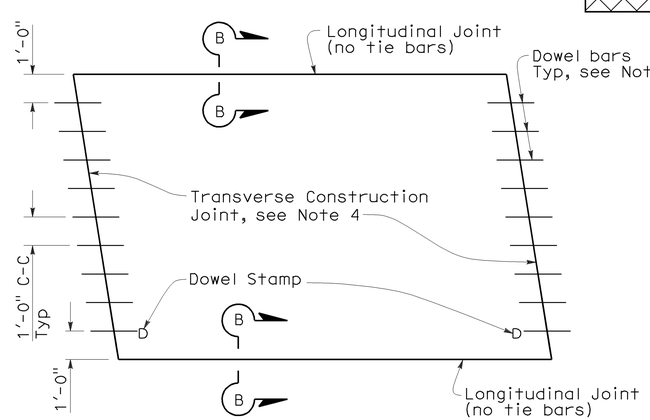



SECTION A-A

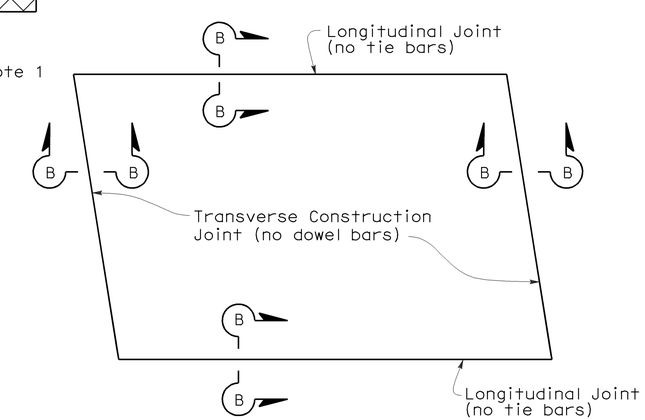



TYPE I
(traffic lane lines match longitudinal joints)

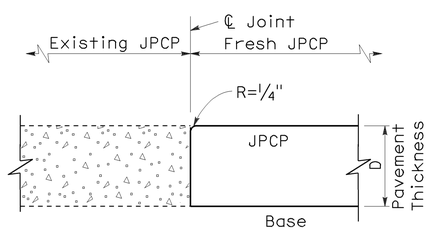



TYPE II
(traffic lane lines do not match longitudinal joints)

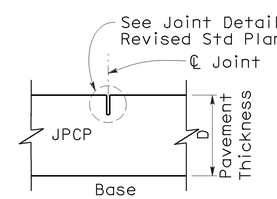
SLAB LAYOUT




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




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 |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 36 | 45 |

William K. Farnbach
REGISTERED CIVIL ENGINEER

June 5, 2009
PLANS APPROVAL DATE

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

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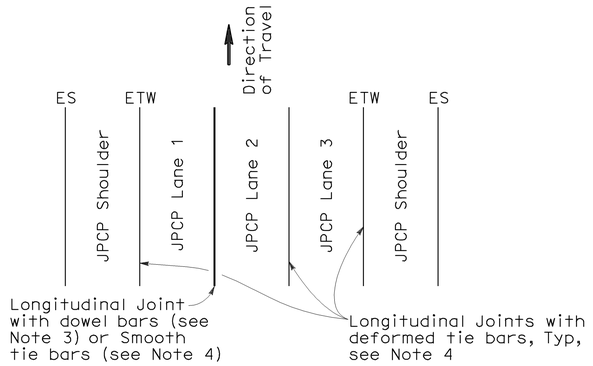
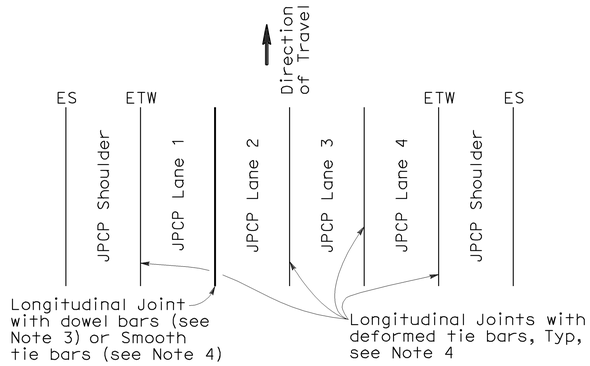
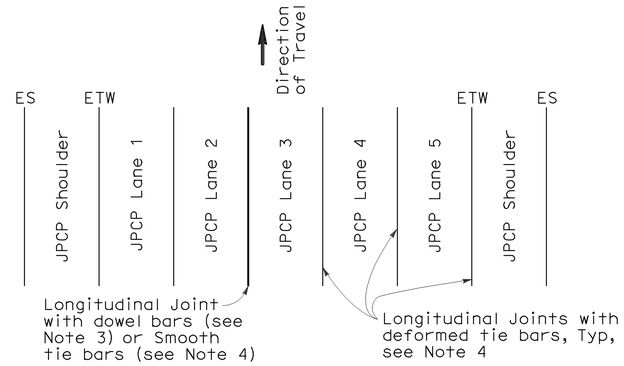
*To accompany plans dated* 8-16-10



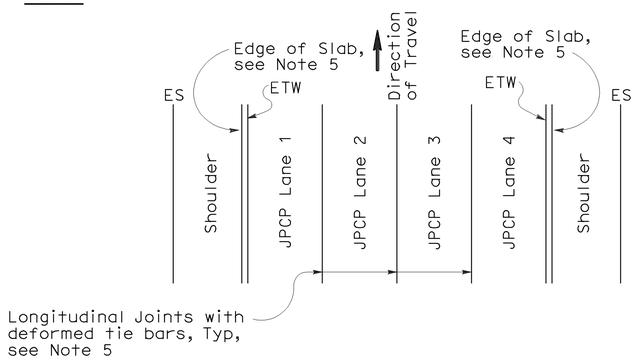

3 LANES WITH TIED CONCRETE SHOULDERS
PLAN



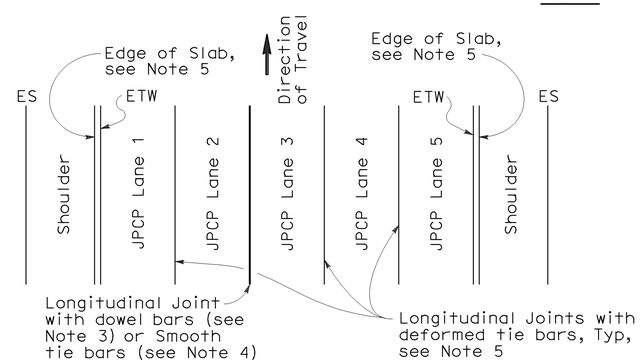

4 LANES WITH TIED CONCRETE SHOULDERS
PLAN




5 LANES WITH TIED CONCRETE SHOULDERS
PLAN



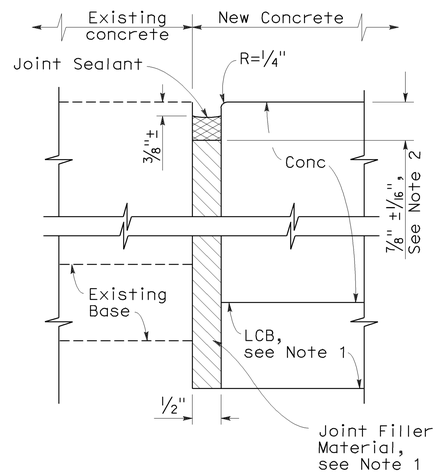

4 LANES OR LESS WITH WIDENED SLAB
PLAN




5 LANES WITH WIDENED SLAB
PLAN

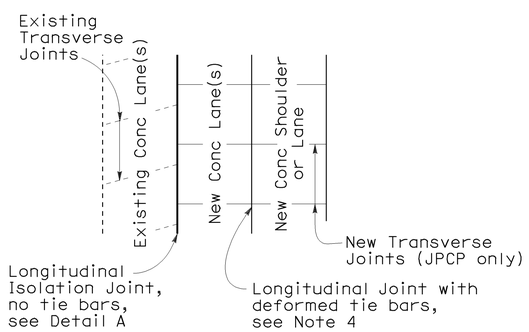
## NEW CONSTRUCTION

Location of Longitudinal Joints
(For JPCP)



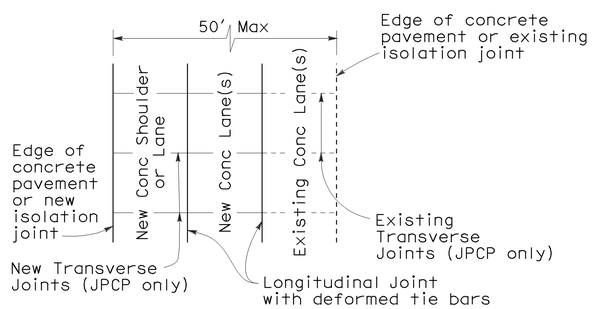

DETAIL A

ISOLATION JOINT



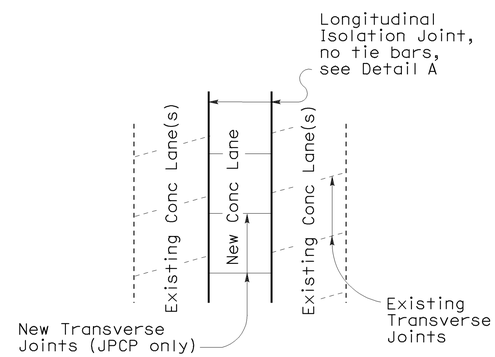

CASE 1
PLAN

Transverse Joints do not align between new and existing




CASE 2
PLAN

Transverse Joints align between new and existing




CASE 3 (INTERIOR LANE REPLACEMENT)
PLAN

Transverse Joints do not align between new and existing

## LANE/SHOULDER ADDITION OR RECONSTRUCTION

(For JPCP and CRCP)

NOTES:

1. Where Lean Concrete Base is not used as base material, the joint filler material used for the longitudinal isolation joint shall only extend to the bottom of the new concrete slab. See Detail A.
2. Use 5/8" ±1/16" dimension for silicone sealant.
3. See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
4. See Revised Standard Plan RSP P1.
5. See Revised Standard Plan RSP P2.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# CONCRETE PAVEMENT-LANE SCHEMATICS AND ISOLATION JOINT DETAIL

NO SCALE

RSP P18 DATED JUNE 5, 2009 SUPERSEDES RSP P18 DATED MAY 15, 2009, RSP P18 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P18 DATED MAY 1, 2006 - PAGE 127 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P18**

**2006 REVISED STANDARD PLAN RSP P18**

5-14-09

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 |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 37 | 45 |

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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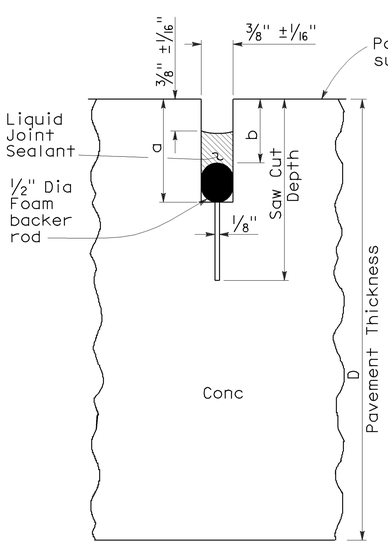
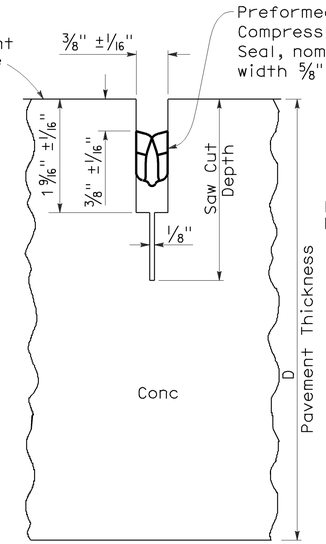
*To accompany plans dated* 8-16-10



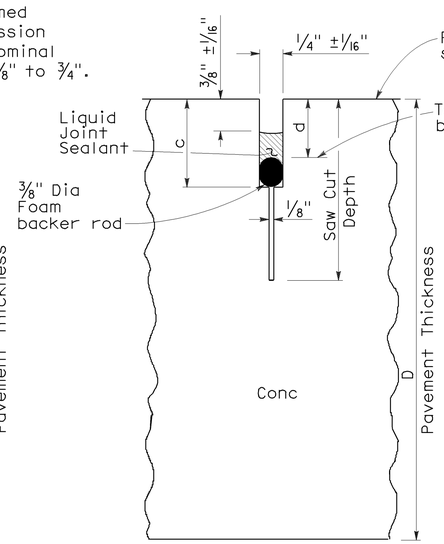

LIQUID SEALANT



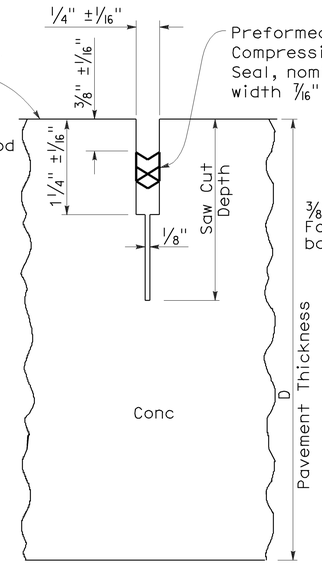

COMPRESSION SEAL

## TYPE A1

Transverse Contraction Joints



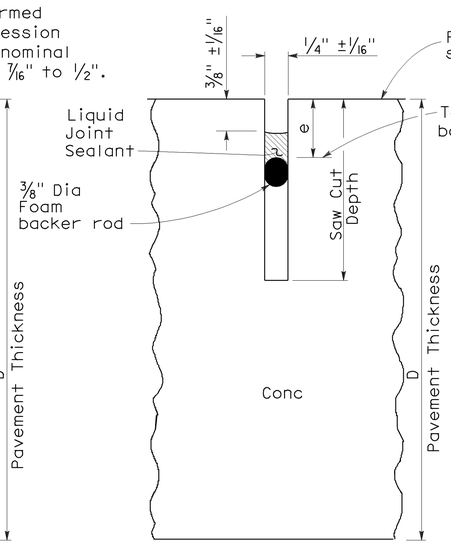

LIQUID SEALANT



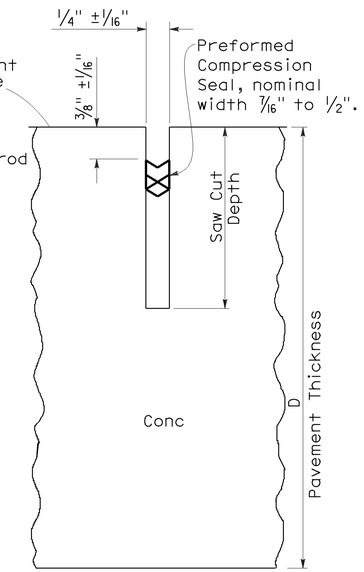

COMPRESSION SEAL

## TYPE A2

Longitudinal Contraction Joints



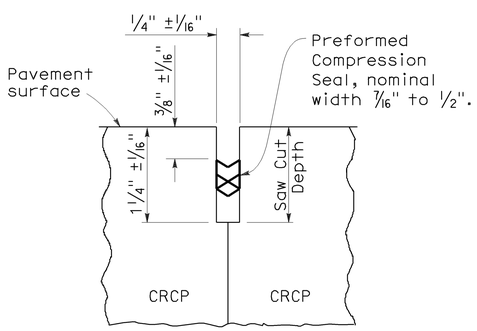

LIQUID SEALANT




COMPRESSION SEAL

## TYPE B

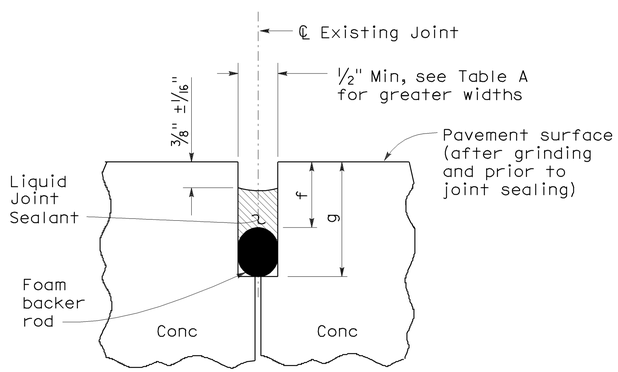
Longitudinal or Transverse Contraction Joint




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 |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 38 | 45 |

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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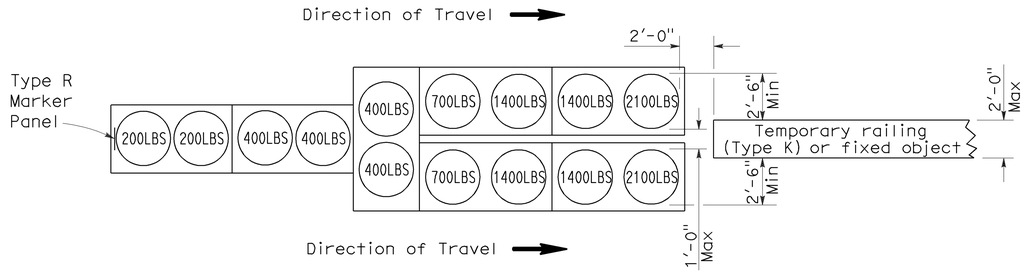
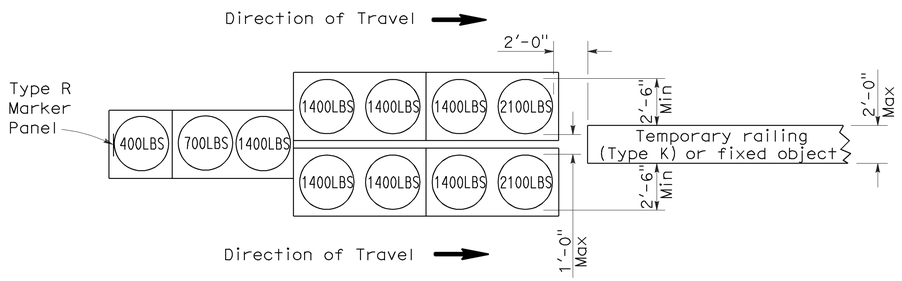
*To accompany plans dated* 8-16-10



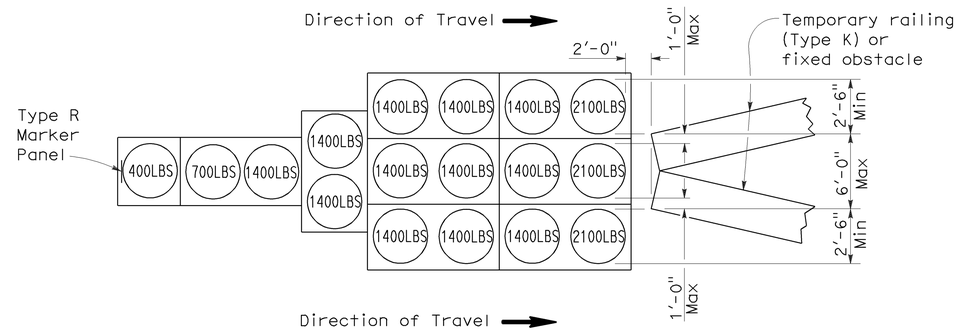

## ARRAY 'TU14'

Approach speed 45 mph or more



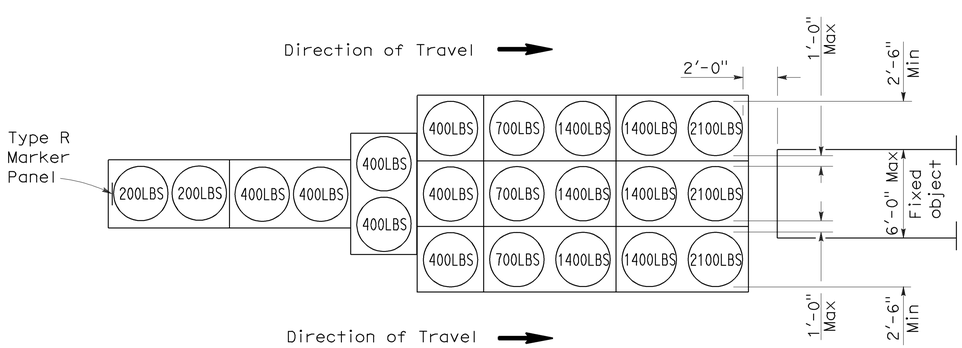

## ARRAY 'TU11'

Approach speed less than 45 mph



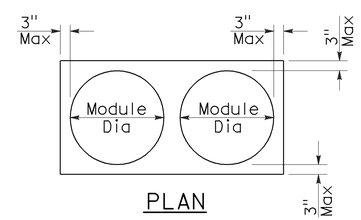

## ARRAY 'TU17'

Approach speed less than 45 mph

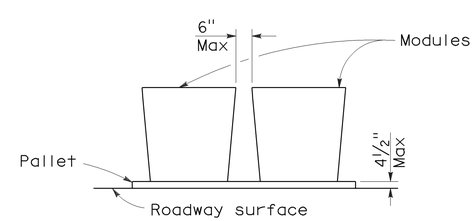



## ARRAY 'TU21'

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 |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 39 | 45 |

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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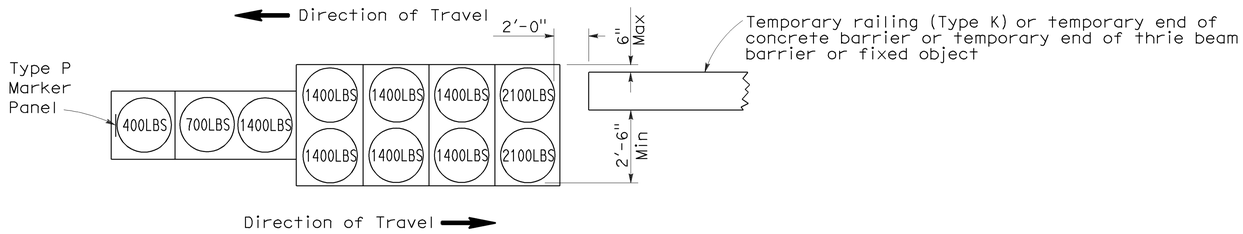
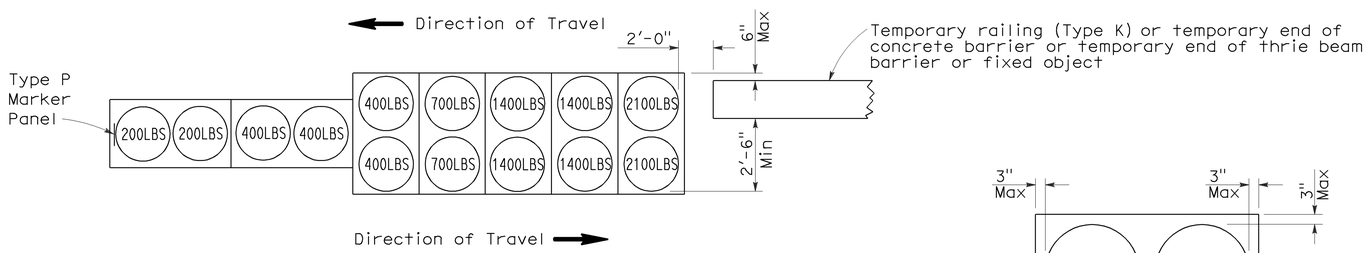
*To accompany plans dated* 8-16-10



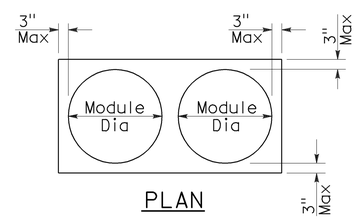

ARRAY 'TB11'

Approach speed less than 45 mph

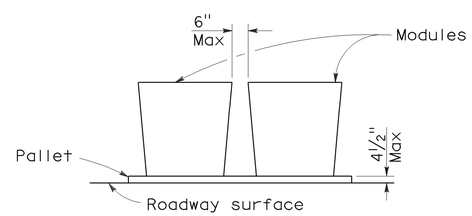



ARRAY 'TB14'

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**

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 40 | 45 |

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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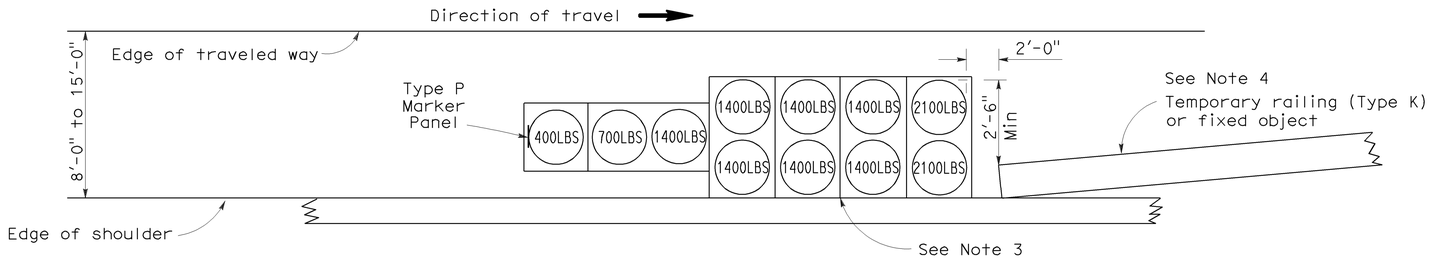
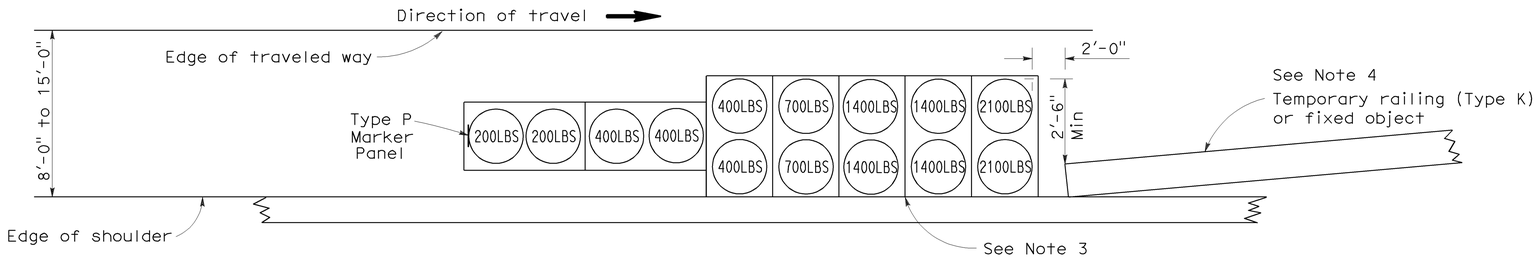
*To accompany plans dated* 8-16-10



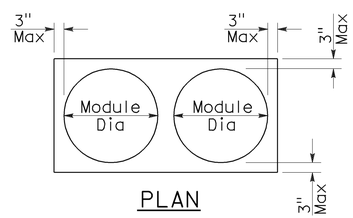

## ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

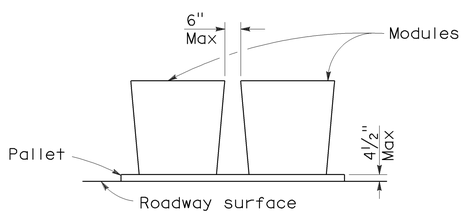



## ARRAY 'TS14'

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 |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 41 | 45 |

REGISTERED CIVIL ENGINEER

November 17, 2006
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Greg W. Edwards — No. C36386 — Exp. 6-30-08 — CIVIL — STATE OF CALIFORNIA

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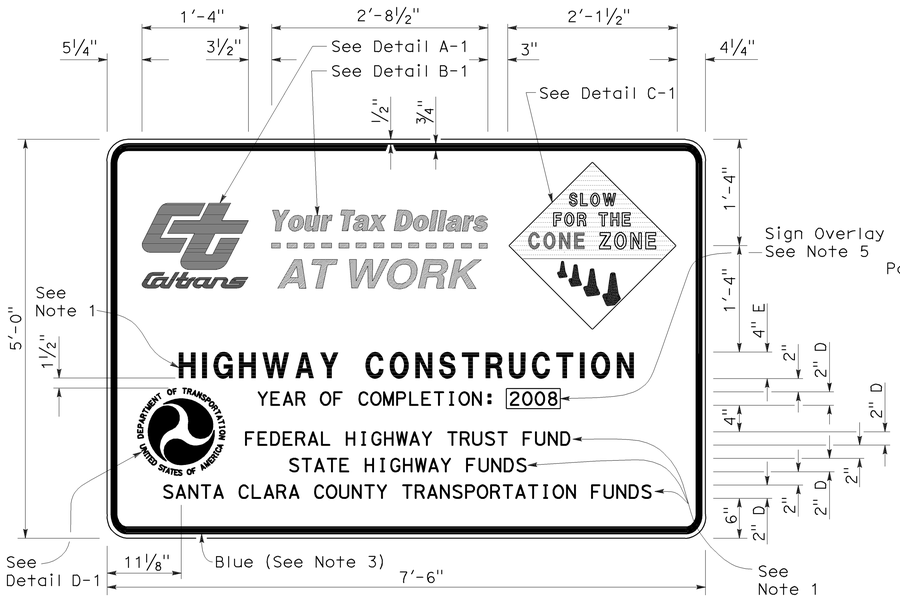
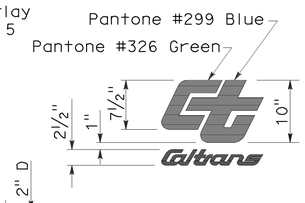
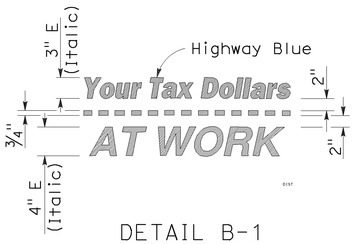
*To accompany plans dated* 8-16-10



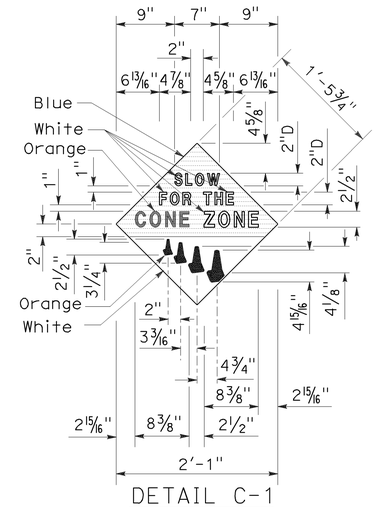

TYPE 1



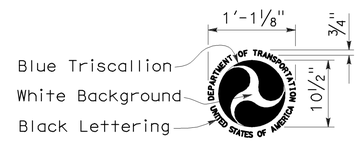

DETAIL A-1




DETAIL B-1
(See Note 3)



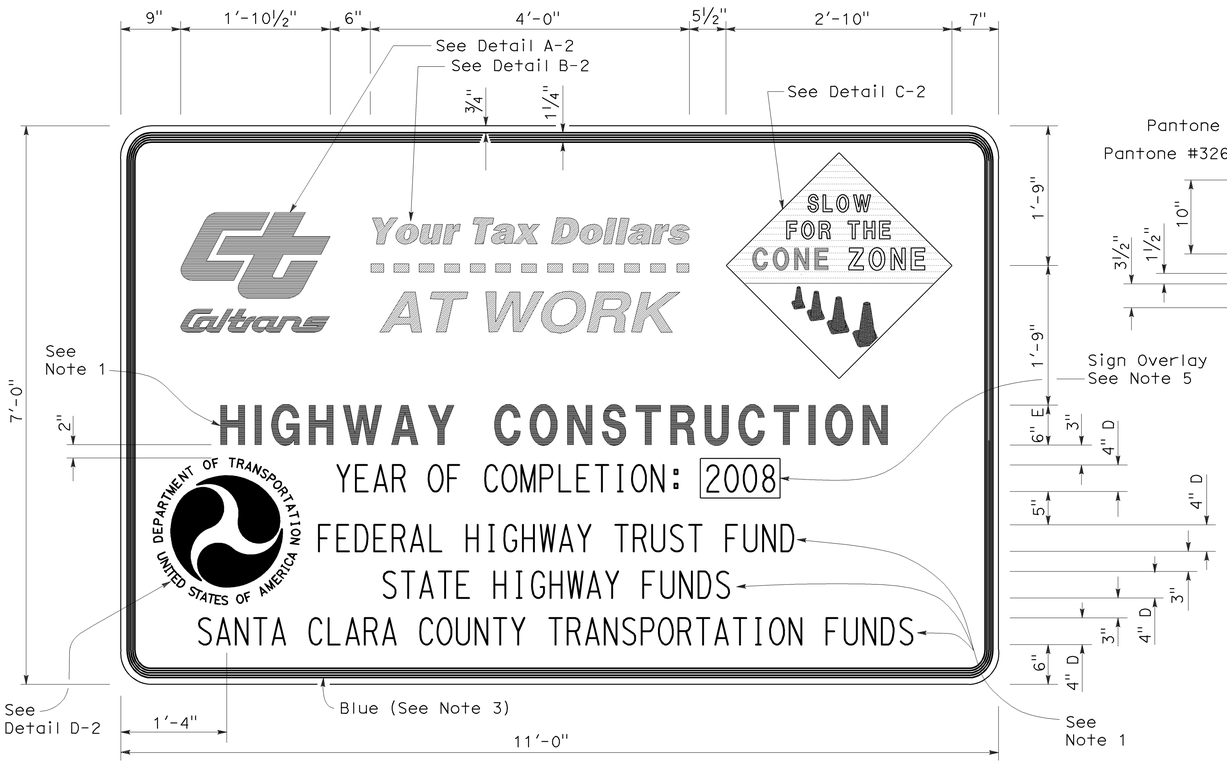

DETAIL C-1
(See Note 4)



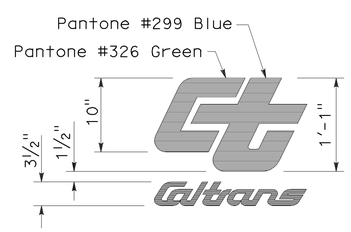

DETAIL D-1
(See Note 6)

## NOTES:

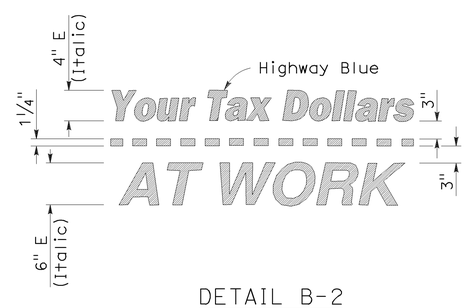
1. The sign messages shown for type of project and fund types are examples only. See the Special Provisions for the applicable type of project and fund type messages to be used.
2. Except as otherwise shown, the legend of sign shall be black on a white background (non-reflective).
3. The border of the signs and details "B-1" and "B-2" shall be blue (non-reflective).
4. The diamond in details "C-1" and "C-2" shall be blue for the background of message, " SLOW FOR THE CONE ZONE", and white background for the orange cones. The color and type of font for the "SLOW FOR THE CONE ZONE" message shall be: "SLOW" white D; "FOR THE" white D; "CONE" orange Arial font; "ZONE" white Arial font.
5. Year of completion of project construction shown on the overlay is an example only. See the Special Provisions.
6. Use when the Project involves Federal Highway Trust Fund.



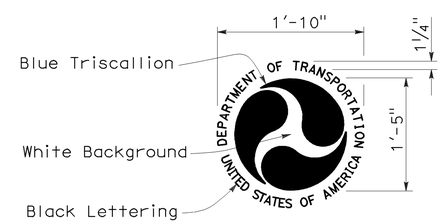

TYPE 2



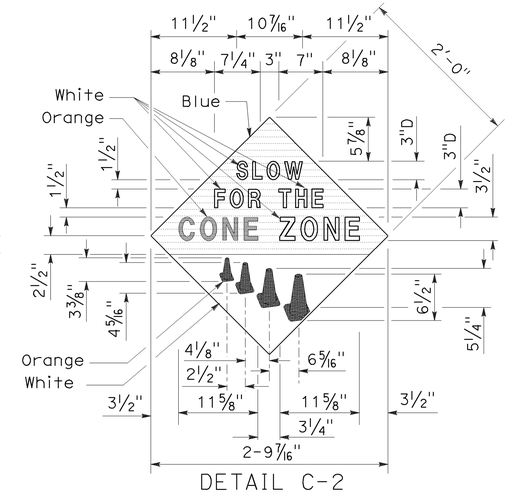

DETAIL A-2




DETAIL B-2
(See Note 3)




DETAIL D-2
(See Note 6)




DETAIL C-2
(See Note 4)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# CONSTRUCTION PROJECT FUNDING IDENTIFICATION SIGNS

NO SCALE

RSP T7 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN T7
DATED MAY 1, 2006 - PAGE 217 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T7**

**2006 REVISED STANDARD PLAN RSP T7**

9-7-06

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 42 | 45 |

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* 8-16-10

**2006 REVISED STANDARD PLAN RSP ES-1A**

## 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<br>MAS-4B<br>MAS-4C | mas-4A<br>mas-4B<br>mas-4C | Mast arm mounting vehicle signal faces, side attachment - 4 signal section |
| MAS-5A<br>MAS-5B | mas-5A<br>mas-5B | Mast arm mounting vehicle signal faces, side attachment - 5 signal section |
| 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**

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 43 | 45 |

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-08
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*To accompany plans dated* 8-16-10

## 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:<br>"L" Indicates all non-arrow sections louvered<br>"LG" Indicates louvered green section only<br>"PV" indicates 12" programmed visibility sections<br>"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 |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 44 | 45 |

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
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Exp. 6-30-08
ELECTRICAL
STATE OF CALIFORNIA

*To accompany plans dated* 8-16-10

**2006 REVISED STANDARD PLAN RSP ES-1C**

## 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<br>M = Microwave sensor<br>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**

7-10-07

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Sac | 5 | 17.2/22.8<br>24.2/24.8 | 45 | 45 |

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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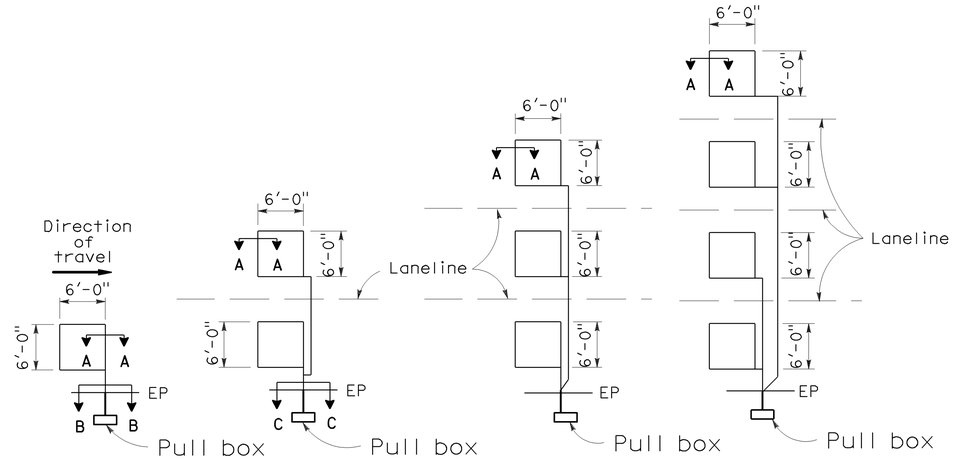
*To accompany plans dated* 8-16-10

**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.

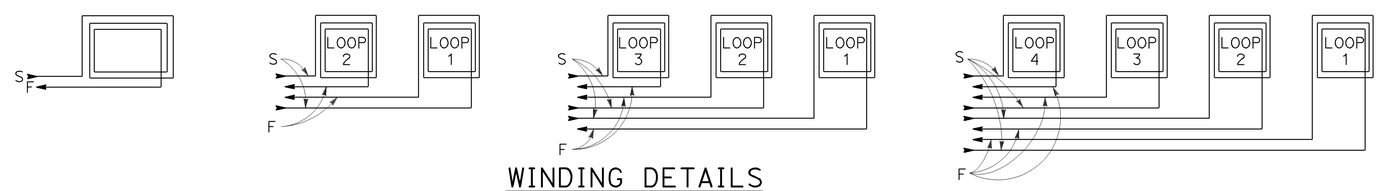



TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

## SAWCUT DETAILS

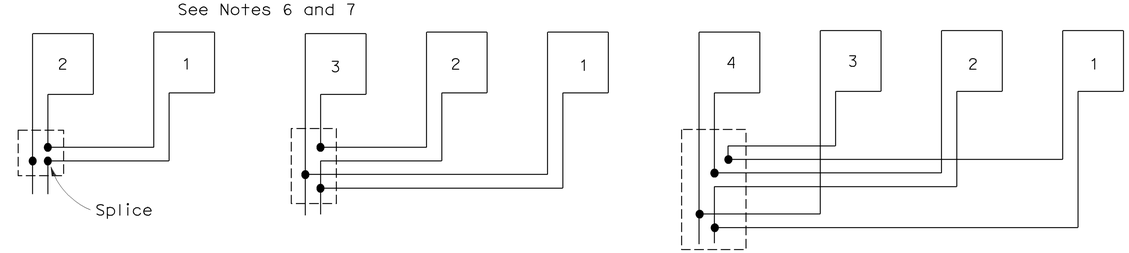
(Type A loop detector configurations illustrated)

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)



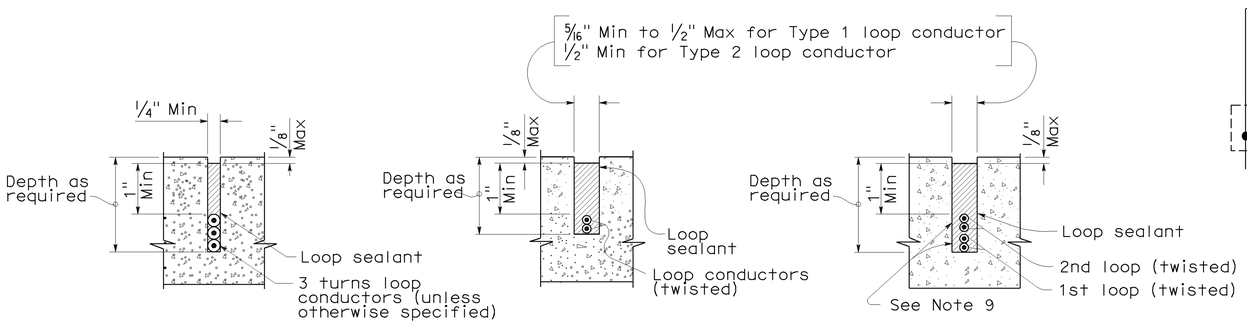

## WINDING DETAILS

See Notes 6 and 7




## TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)




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

## SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

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**