Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	152A	208

4

Jacqueline C Tan 12/5/13
REGISTERED ELECTRICAL ENGINEER DATE

2-10-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
Exp. 12/31/15
ELECTRICAL
STATE OF CALIFORNIA

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

ABBREVIATIONS: (SHEETS E-6 TO E-8)

2P22	2 PAIR 22 AWG TWISTED PAIR CABLE
6PR	6 PAIR
12P22	12 PAIR 22 AWG TWISTED PAIR CABLE
50P22	50 PAIR 22 AWG TWISTED PAIR CABLE
CMS	CHANGEABLE MESSAGE SIGN
PDA	POWER DISTRIBUTION ASSEMBLY

LEGEND: (SHEETS E-6 TO E-8)

NEW	EXISTING	
CMS	CMS	CMS CABINET
6	6	WIRE SIZE, IF NOT INDICATED SHALL BE #12 AWG
		EQUIPMENT GROUNDING

GENERAL NOTES: (SHEET E-6 ONLY)

1. EXISTING IRRIGATION SYSTEMS ARE NOT SHOWN FOR CLARITY.

4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19, 2014**

MODIFY CHANGEABLE MESSAGE SIGN
(ABBREVIATIONS, LEGEND AND NOTES)

NO SCALE

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® OFFICE OF ITS

FUNCTIONAL SUPERVISOR: JACQUELINE C. TAN
CALCULATED-DESIGNED BY: HENRY H. TRINH
CHECKED BY: JACQUELINE C. TAN
REVISED BY: HT
DATE REVISED: 12/13

LAST REVISION 12-18-13
DATE PLOTTED => 17-JUN-2014
TIME PLOTTED => 14:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	152B	208

4

Jacqueline C Tan 12/5/13
REGISTERED ELECTRICAL ENGINEER DATE

2-10-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JACQUELINE C. TAN No. E015611 Exp. 12/31/15 ELECTRICAL STATE OF CALIFORNIA

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

LEGENDS: (THIS SHEET ONLY)

1 RC CMS PANEL.

2 Exist 2"C, RC CMS CONTROL CABLES.
INSTALL DEPARTMENT-FURNISHED CMS CONTROL CABLES.

3 RC CMS CONTROL CABLES.
ADD DEPARTMENT-FURNISHED CMS CONTROL CABLES IN Exist MODEL 334 CONTROLLER CABINET (CMS No. 45)

4 EXISTING 120/240 V, TYPE III CF SERVICE EQUIPMENT ENCLOSURE:
30 A, 120 V, 1P, CIRCUIT BREAKER FOR CMS CONTROLLER CABINET.
RC 40 A, 120 V, 1P, CIRCUIT BREAKER FOR CMS PANEL.
ADD 30 A, 240 V, 2P, CIRCUIT BREAKER (GANGED) FOR CMS PANEL.
Ctid 07-53-605-0-006.752-M
ADDRESS: 10670 ROSECRANS Ave

5 EXISTING 3"C IN SIDEWALK, 6#2/0, 2#6.

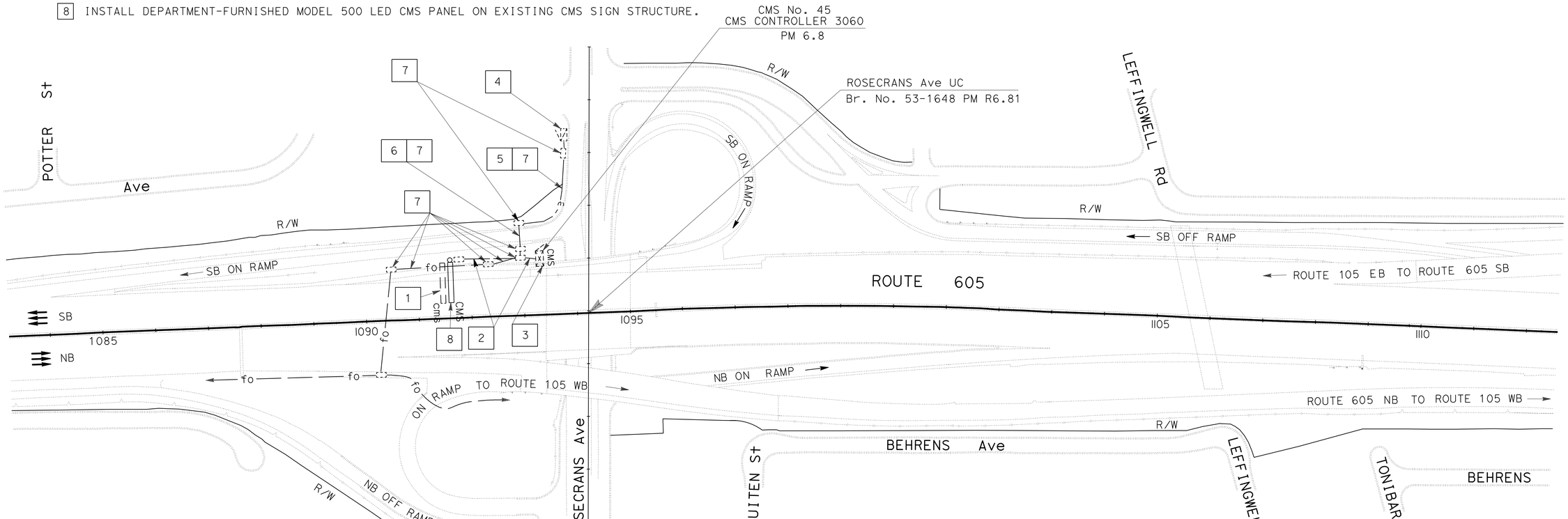
6 EXISTING 3"C BENEATH ROADWAY, 6#2/0, 2#6.

7 SHOWN FOR REFERENCE ONLY.

8 INSTALL DEPARTMENT-FURNISHED MODEL 500 LED CMS PANEL ON EXISTING CMS SIGN STRUCTURE.

NOTE: (THIS SHEET ONLY)

FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



4 ADDED PER ADDENDUM No. 4 DATED JUNE 19, 2014

MODIFY CHANGEABLE MESSAGE SIGN (CMS No. 45)

SCALE: 1"=100'

FOR LEGENDS, NOTES AND ABBREVIATIONS SEE SHEET E-5.
APPROVED FOR ELECTRICAL WORK ONLY.

E-6

REVISED BY	DATE REVISED
HT	12/13

HENRY H. TRINH
JACQUELINE C. TAN
CALCULATED-DESIGNED BY
CHECKED BY
FUNCTIONAL SUPERVISOR
JACQUELINE C. TAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
OFFICE OF ITS

LAST REVISION 12-18-13
DATE PLOTTED => 17-JUN-2014
TIME PLOTTED => 14:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	152C	208

4

Jacqueline C Tan 12/5/13
REGISTERED ELECTRICAL ENGINEER DATE

2-10-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
Exp. 12/31/15
ELECTRICAL
STATE OF CALIFORNIA

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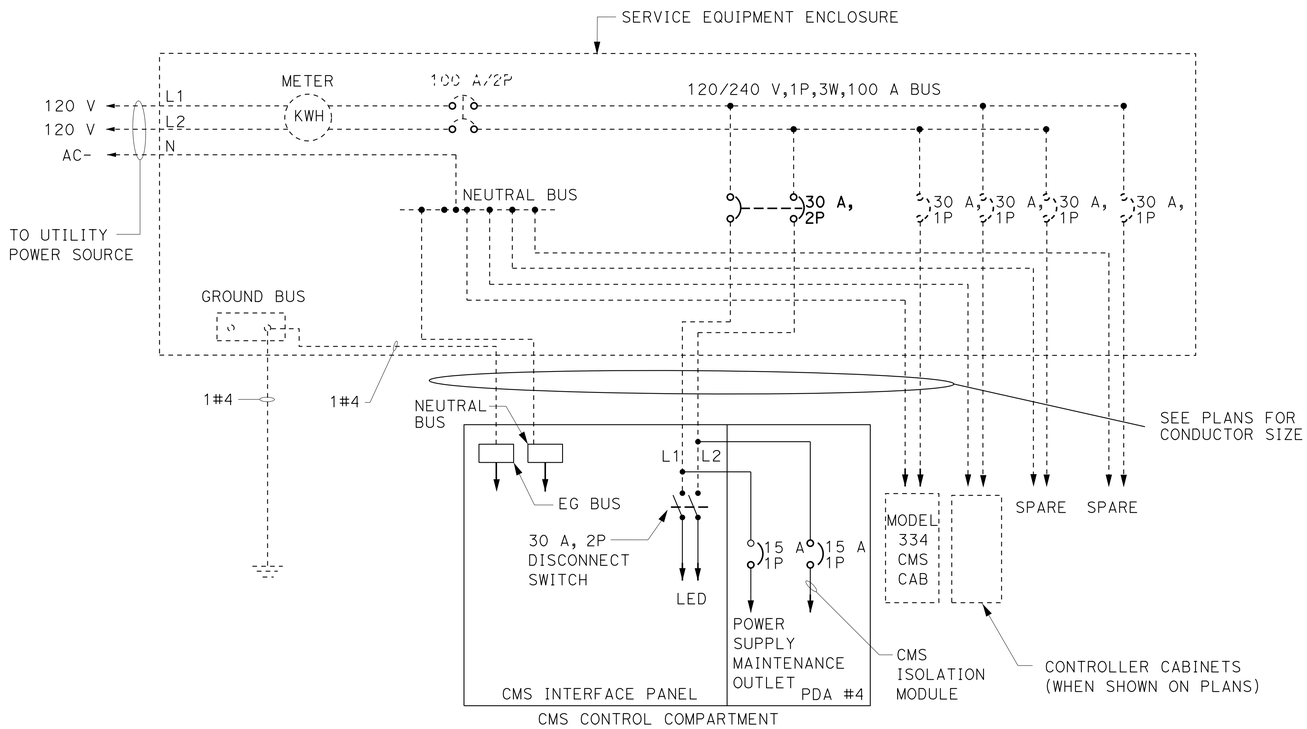
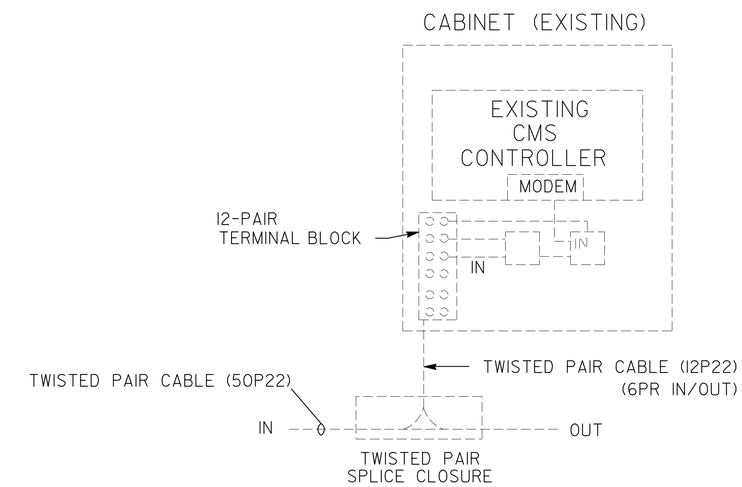


TYPICAL CMS 500 LED SYSTEM AC WIRING AND CIRCUIT BREAKER



TYPICAL CMS CONTROLLER DETAIL

4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19, 2014**

MODIFY CHANGEABLE MESSAGE SIGN (WIRING DETAILS)

NO SCALE

FOR ABBREVIATIONS AND GENERAL NOTES SEE SHEET E-5

E-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® OFFICE OF ITS

FUNCTIONAL SUPERVISOR: JACQUELINE C. TAN
CALCULATED-DESIGNED BY: HENRY H. TRINH
CHECKED BY: JACQUELINE C. TAN
REVISED BY: HT
DATE REVISED: 12/13

LAST REVISION 12-18-13
DATE PLOTTED => 17-JUN-2014
TIME PLOTTED => 14:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	152D	208

4

Jacqueline C Tan 12/5/13
REGISTERED ELECTRICAL ENGINEER DATE

2-10-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE C. TAN
No. E015611
Exp. 12/31/15
ELECTRICAL
STATE OF CALIFORNIA

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

MODIFY CHANGEABLE MESSAGE SIGN

	(N) CHANGEABLE MESSAGE SIGN PANEL	(N) CMS CONTROL CABLES	(N) 30A, 2P CIRCUIT BREAKER
SHEET No.	EA	LF	EA
E-6	1	120	1
TOTAL	1	120	1

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

4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19, 2014**

ELECTRICAL QUANTITIES

E-8

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
OFFICE OF ITS

FUNCTIONAL SUPERVISOR: JACQUELINE C. TAN
CALCULATED-DESIGNED BY: HENRY H. TRINH
CHECKED BY: JACQUELINE C. TAN
REVISED BY: HT
DATE REVISED: 12/13

LAST REVISION
DATE PLOTTED => JUN-2014
TIME PLOTTED => 1:16
12-18-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	184A	208

William K. Farnbach
REGISTERED CIVIL ENGINEER

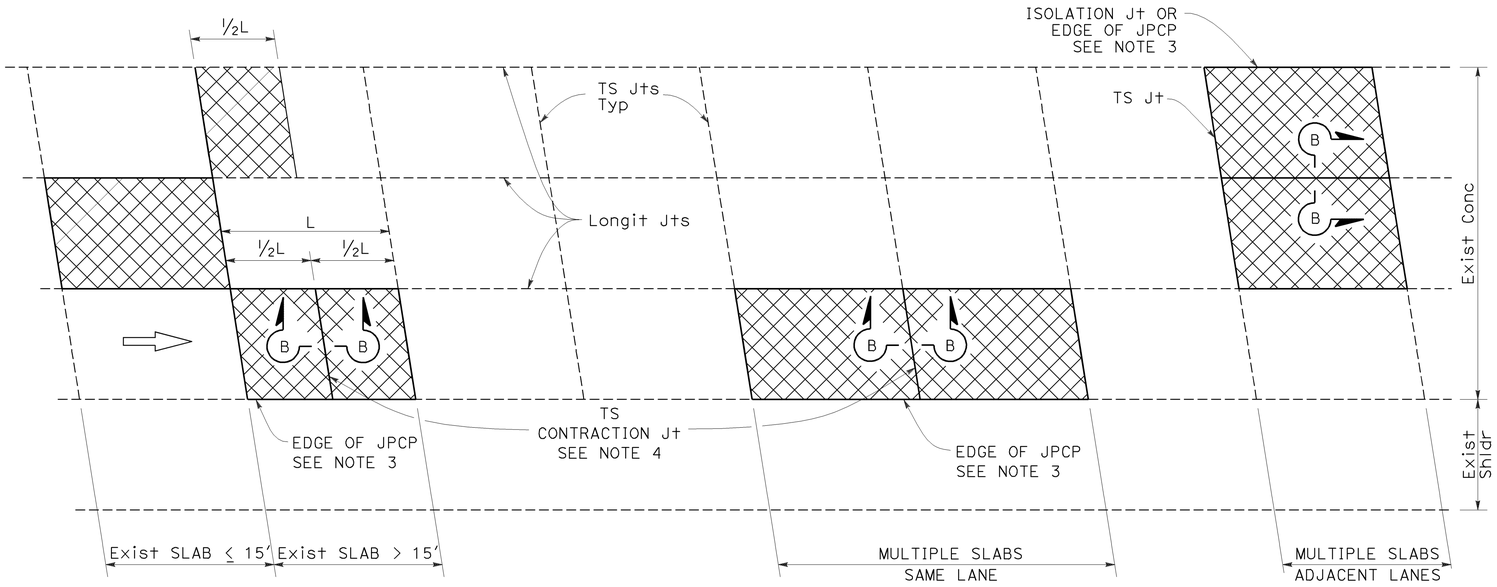
July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-14 CIVIL STATE OF CALIFORNIA

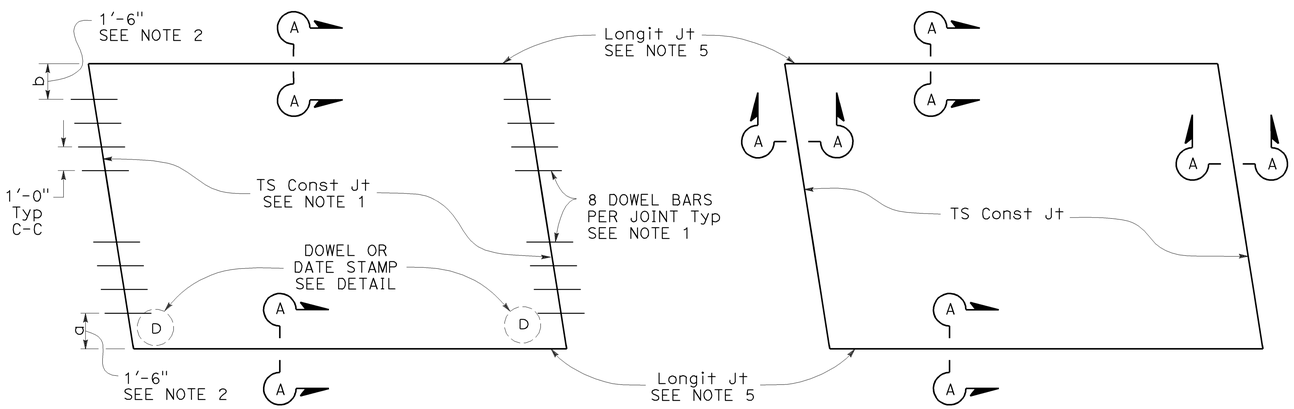
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

4

TO ACCOMPANY PLANS DATED 2-10-14



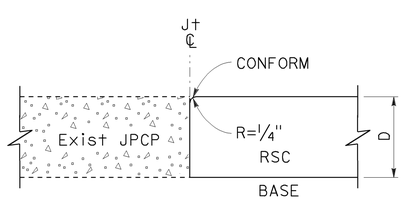
PLAN



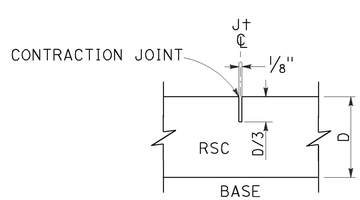
TYPE I
See Design Note 1

TYPE II
See Design Note 2

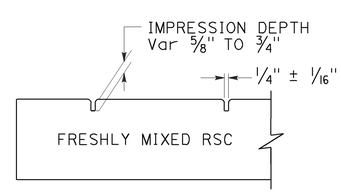
SLAB LAYOUT



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND:

RSC RAPID STRENGTH CONCRETE

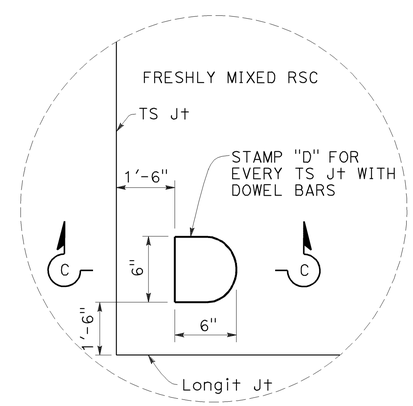
INDIVIDUAL SLAB REPLACEMENT WITH RSC

NOTES:

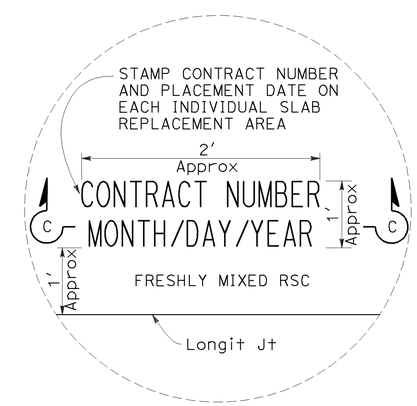
1. For details not shown, see Revised Standard Plan RSP P10.
2. Where the existing outside shoulder is asphalt concrete pavement, "a" = 1'-0" and "b" = 2'-0".
3. Use side forms where edge of RSC pavement is adjacent to asphalt concrete.
4. Transverse contraction joint to match skew of existing joint. Omit dowel bars.
5. Do not place tie bars at longitudinal joints.

DESIGN NOTES:

1. For concrete slab repair with at least 5 years design life.
2. For short term repairs < 5 yrs design life or for slab replacements with cracking and seating.



DOWEL STAMP DETAIL



DATE STAMP DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

INDIVIDUAL SLAB REPLACEMENT WITH RAPID STRENGTH CONCRETE

NO SCALE

RSP P8 DATED JULY 19, 2013 SUPERSEDES RSP P8 DATED APRIL 20, 2012 AND STANDARD PLAN P8 DATED MAY 20, 2011 - PAGE 130 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P8

2010 REVISED STANDARD PLAN RSP P8

4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19,2014**

5-31-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	184B	208

William K. Farnbach
REGISTERED CIVIL ENGINEER

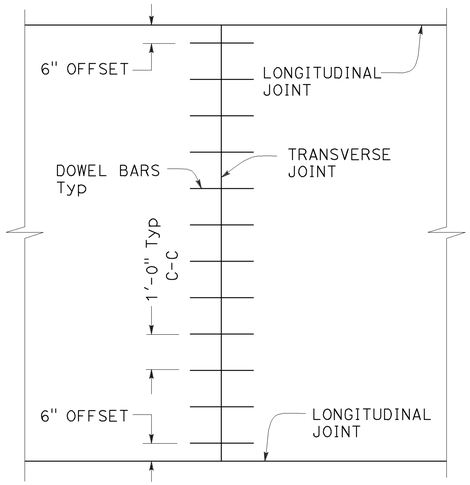
July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-14 CIVIL STATE OF CALIFORNIA

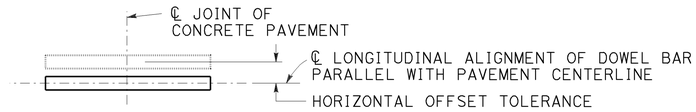
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

4

TO ACCOMPANY PLANS DATED 2-10-14

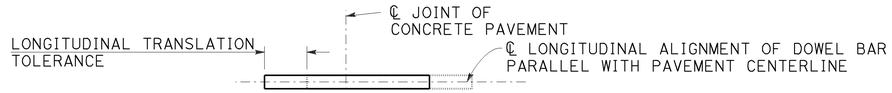


TRANSVERSE JOINT DOWEL BAR LAYOUT



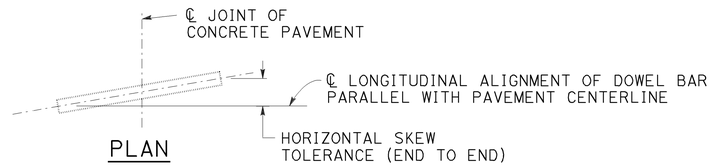
PLAN

HORIZONTAL OFFSET TOLERANCE



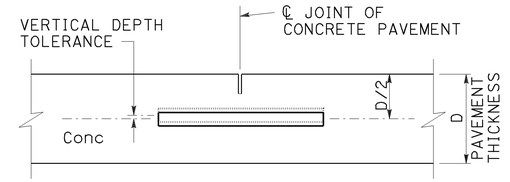
PLAN

LONGITUDINAL TRANSLATION TOLERANCE



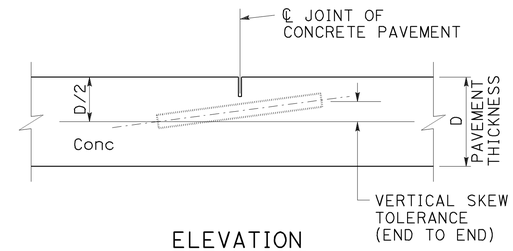
PLAN

HORIZONTAL SKEW TOLERANCE



ELEVATION

VERTICAL DEPTH TOLERANCE

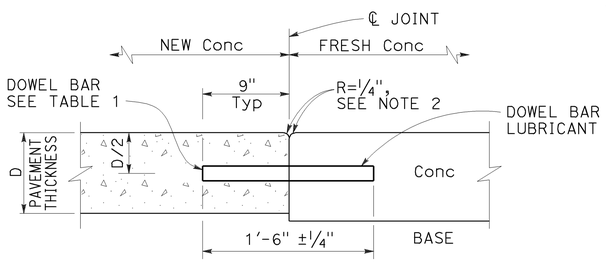


ELEVATION

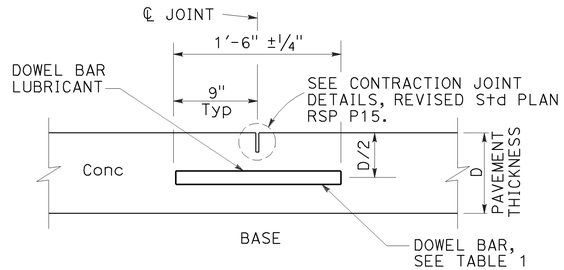
VERTICAL SKEW TOLERANCE

NOTES:

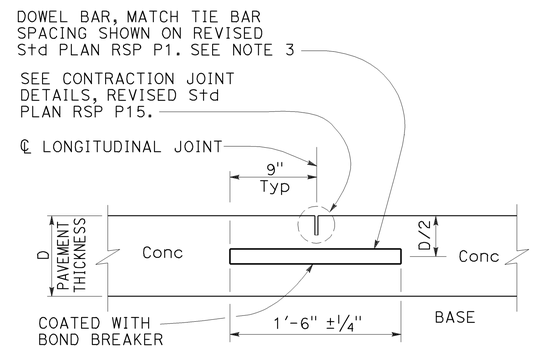
1. See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
2. Where fresh concrete pavement is placed against new concrete or existing concrete pavement, rounding the corner of the existing concrete pavement is not required.
3. May also use ¾" Dia dowel bars 2'-4" ± ¼" in length. Center the length of dowel bars at the centerline of longitudinal joint.



TRANSVERSE CONSTRUCTION JOINT DETAIL



TRANSVERSE CONTRACTION JOINT



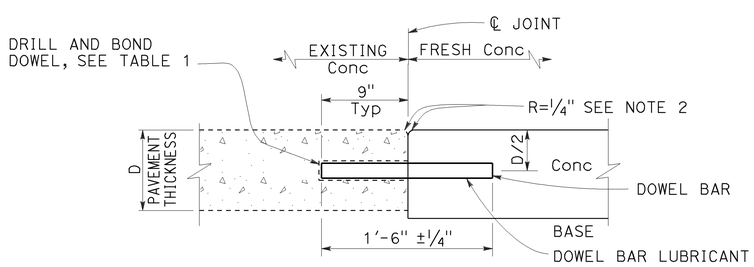
LONGITUDINAL CONTRACTION JOINT WITH DOWEL BARS

See Revised Std Plan RSP P18

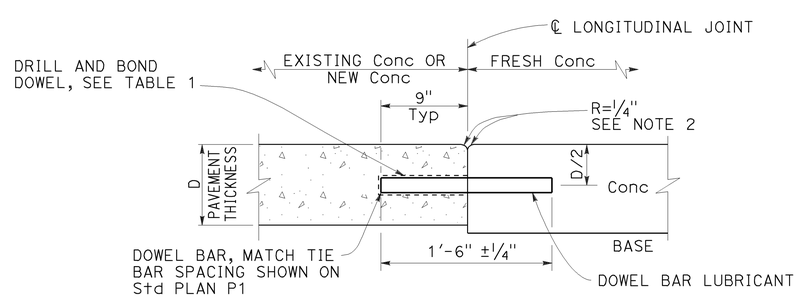
TABLE 1

DOWEL BAR DIAMETER TABLE			
PAVEMENT THICKNESS	0.65'	> 0.65' - 0.85'	> 0.85'
MINIMUM DOWEL * BAR DIAMETER	1"	1¼"	1½"

* The drilled hole diameter must be ⅛" to 3/16" larger than the bar diameter.



TRANSVERSE CONSTRUCTION JOINT FOR EXISTING CONCRETE PAVEMENT



LONGITUDINAL CONSTRUCTION JOINT WITH DOWEL BARS

See Revised Std Plan RSP P18

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT DOWEL BAR DETAILS

NO SCALE

RSP P10 DATED JULY 19, 2013 SUPERSEDES RSP P10 DATED APRIL 20, 2012 AND STANDARD PLAN P10 DATED MAY 20, 2011 - PAGE 131 OF THE STANDARD PLANS BOOK DATED 2010.

4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19,2014**

REVISED STANDARD PLAN RSP P10

2010 REVISED STANDARD PLAN RSP P10

5-31-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	184C	208

William K. Farnbach
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

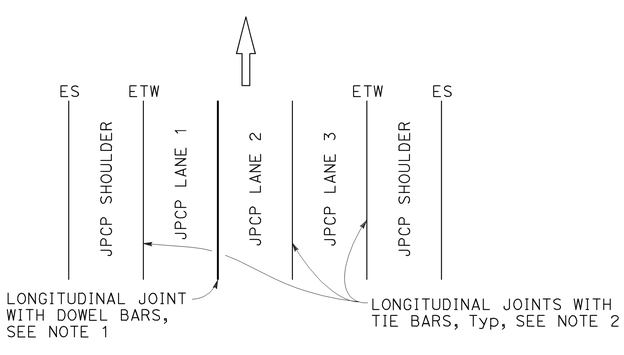
REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-14 CIVIL STATE OF CALIFORNIA

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

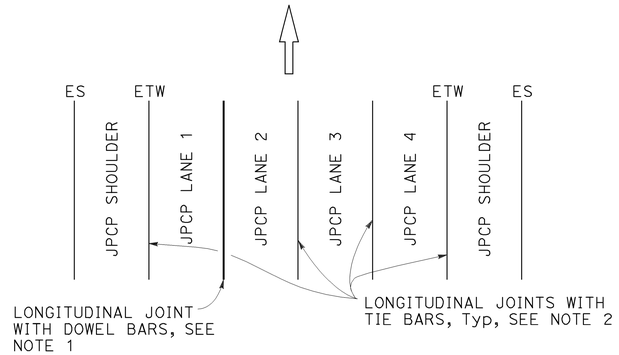
4

TO ACCOMPANY PLANS DATED 2-10-14

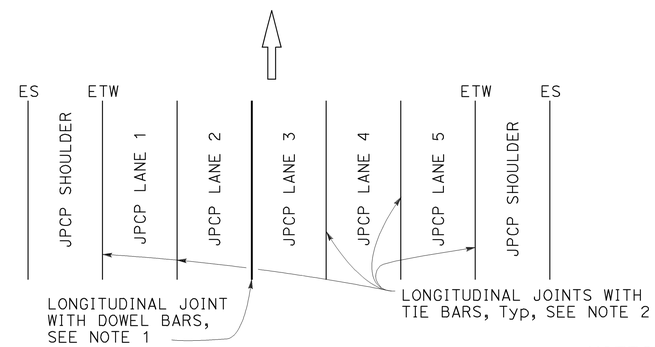
2010 REVISED STANDARD PLAN RSP P18



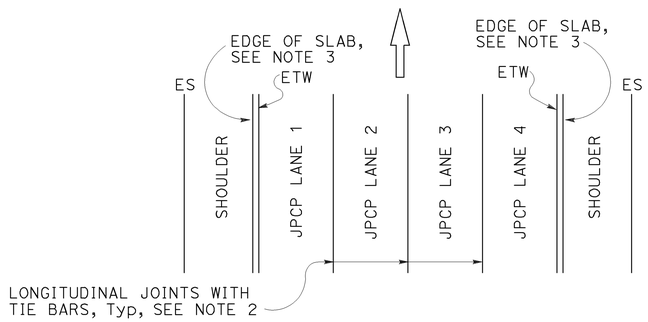
3 LANES WITH CONCRETE SHOULDERS
PLAN



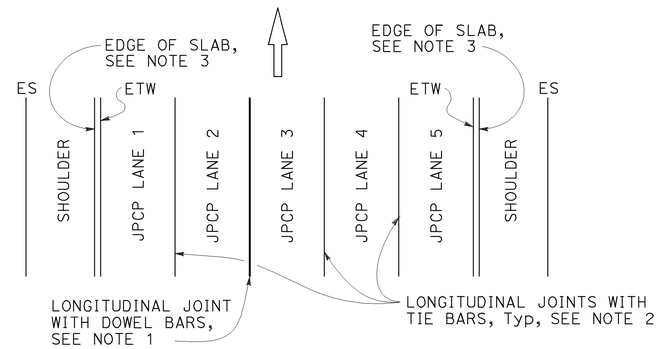
4 LANES WITH CONCRETE SHOULDERS
PLAN



5 LANES WITH CONCRETE SHOULDERS
PLAN



4 LANES OR LESS WITH AC SHOULDERS
PLAN



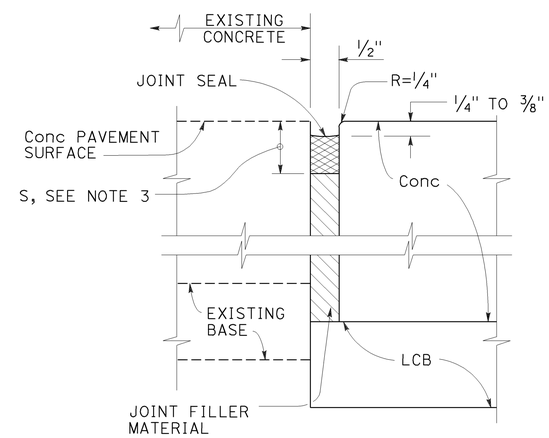
5 LANES WITH AC SHOULDERS
PLAN

NEW CONSTRUCTION

Location of Longitudinal Joints
For JPCP

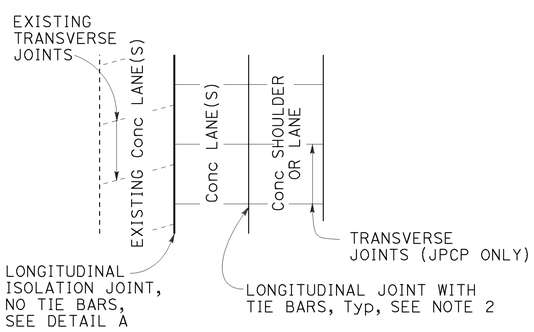
NOTES:

1. See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
2. See Revised Standard Plan RSP P15 for longitudinal joint with tie bars.
3. S= Reservoir depth.
   S= 7/8" ± 1/16" for asphalt rubber seals
   S= 9/16" ± 1/16" for silicone seals
   Preformed compression seals must be 13/16" wide and S= 1 11/16" ± 1/16"



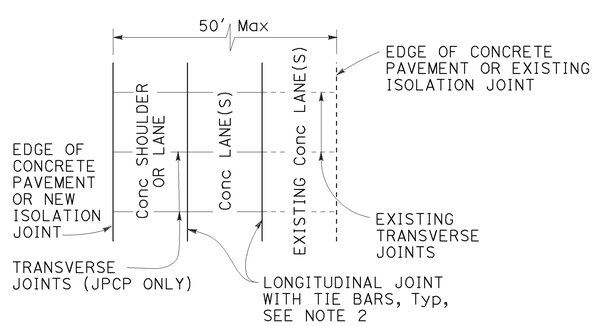
DETAIL "A"

ISOLATION JOINT



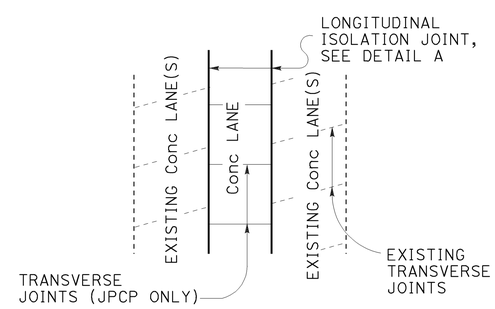
CASE 1
PLAN

Transverse Joints do not align between new and existing.



CASE 2
PLAN

Transverse Joints align between new and existing.
(For JPCP only)



CASE 3 (INTERIOR LANE REPLACEMENT)
PLAN

Transverse Joints do not align between new and existing.

LANE/SHOULDER ADDITION OR RECONSTRUCTION

For JPCP and CRCP

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT LANE SCHEMATICS AND ISOLATION JOINT DETAIL

NO SCALE

RSP P18 DATED JULY 19, 2013 SUPERSEDES RSP P18 DATED APRIL 20, 2012 AND STANDARD PLAN P18 DATED MAY 20, 2011 - PAGE 135 OF THE STANDARD PLANS BOOK DATED 2010.

4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19,2014**

REVISED STANDARD PLAN RSP P18

5-31-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	605	0.0/20.5	182A	208

William K. Farnbach
REGISTERED CIVIL ENGINEER

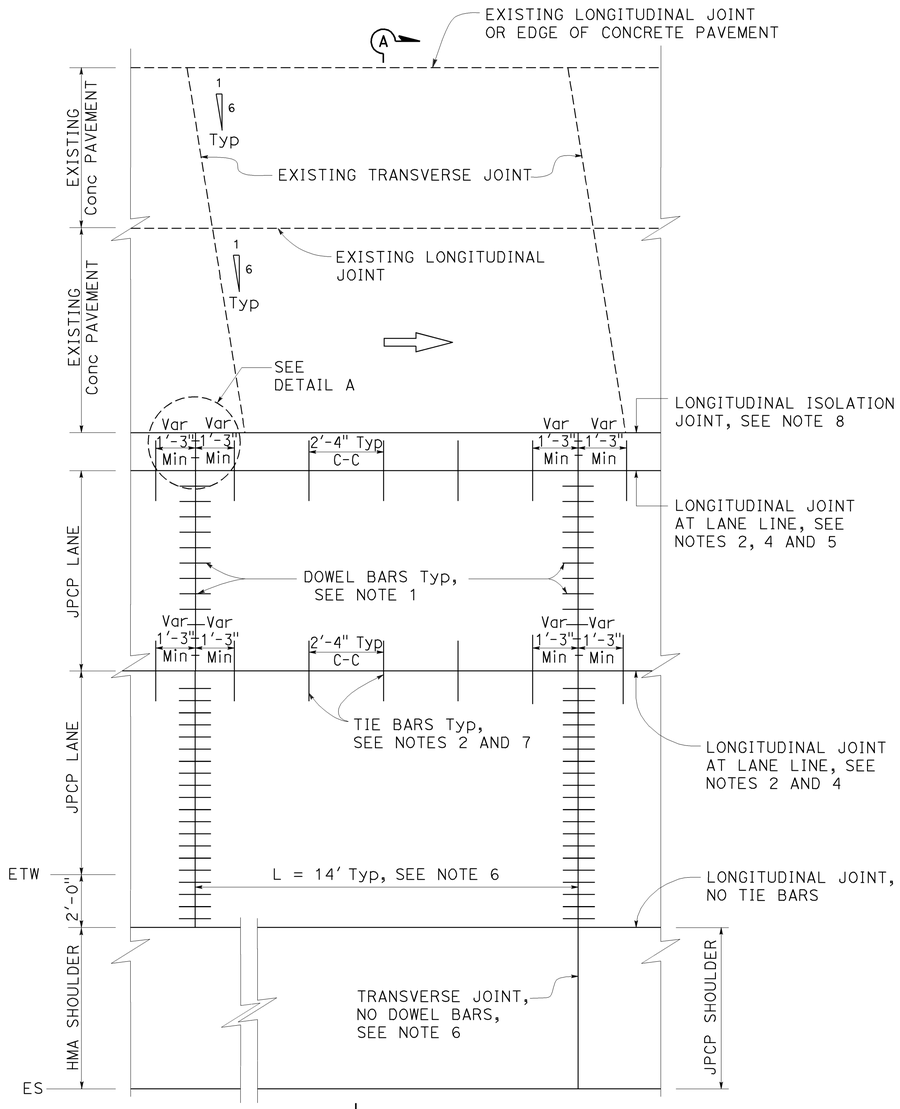
July 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER William K. Farnbach No. C49042 Exp. 9-30-14 CIVIL STATE OF CALIFORNIA

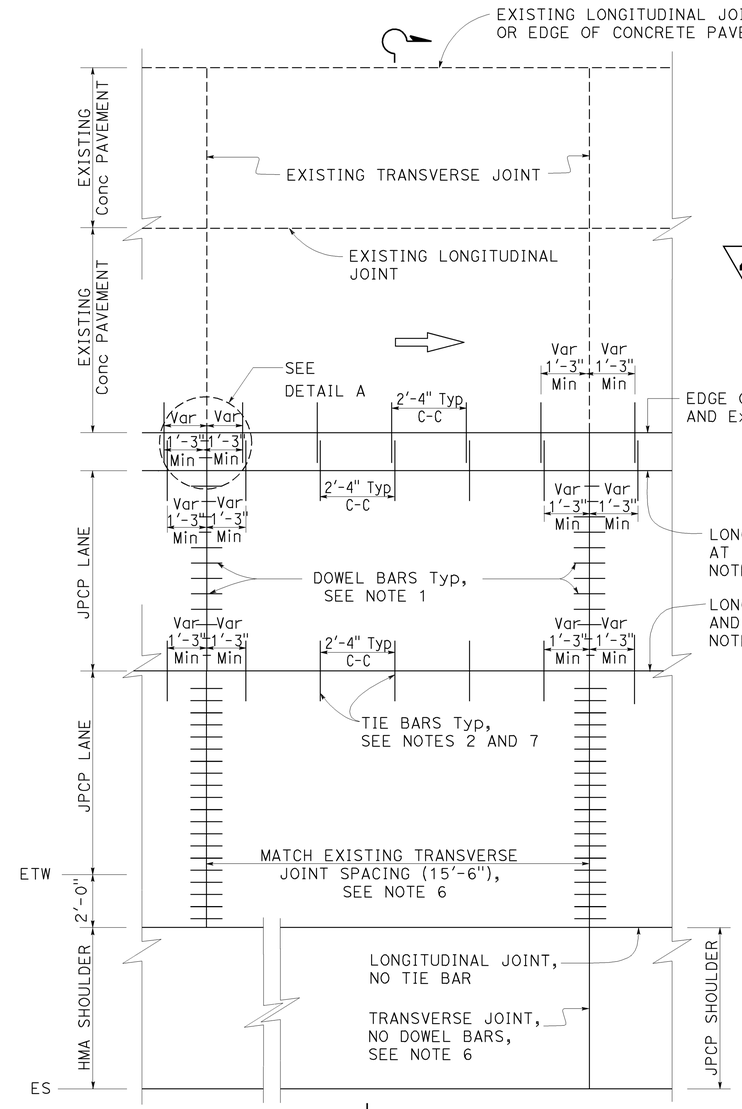
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 2-10-14

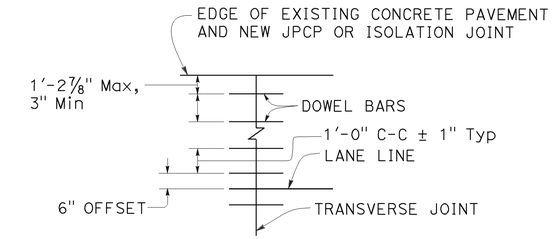
4 **ADDED PER ADDENDUM No. 4 DATED JUNE 19, 2014**



A PLAN
ISOLATED
See Note 3



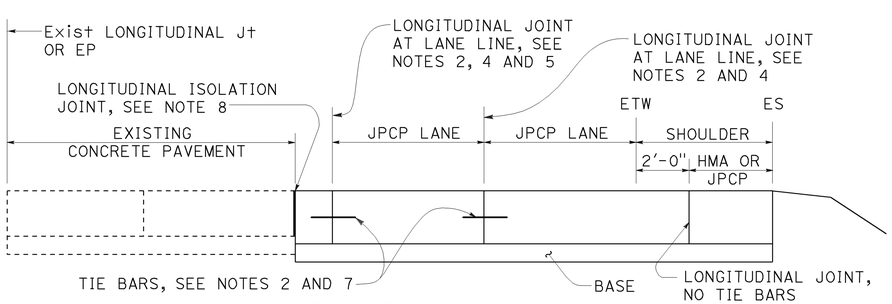
B PLAN
TIED
See Note 3



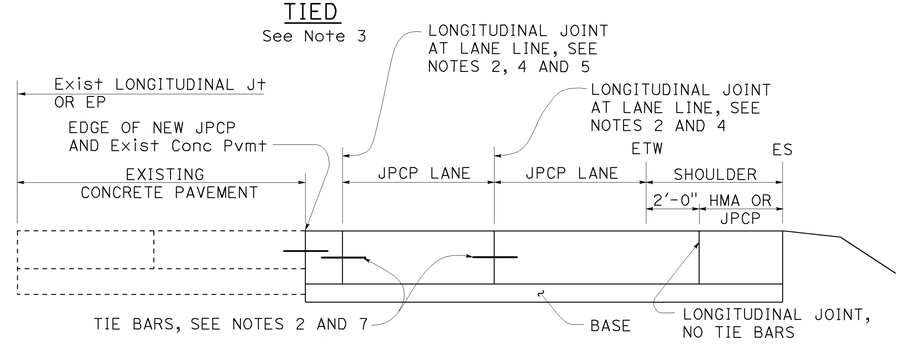
DETAIL A

NOTES:

1. For transverse joint and dowel bar details not shown, see Revised Standard Plan RSP P10.
2. For longitudinal joint and tie bar details not shown, see Revised Standard Plan RSP P15.
3. For joint layout at intersections, see Project Plans.
4. For additional longitudinal joint details, see Revised Standard Plan RSP P18.
5. Omit longitudinal joint when edge of new concrete pavement is 3'-3" or less from JPCP lane line.
6. Transverse joint spacing may be adjusted to no less than 10' and no more than 15'-6" to conform to bridges, change in pavement type and existing pavement.
7. For dowel bars at longitudinal joint. see Revised Standard Plan RSP P18.
8. For isolation joints, see Detail A on Revised Standard Plan RSP P18.



SECTION A-A



SECTION B-B

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

JOINTED PLAIN CONCRETE PAVEMENT (WIDENED LANE) LANE AND SHOULDER ADDITION OR REPLACEMENT

NO SCALE

RSP P3B DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P3B

2010 REVISED STANDARD PLAN RSP P3B

5-31-13