

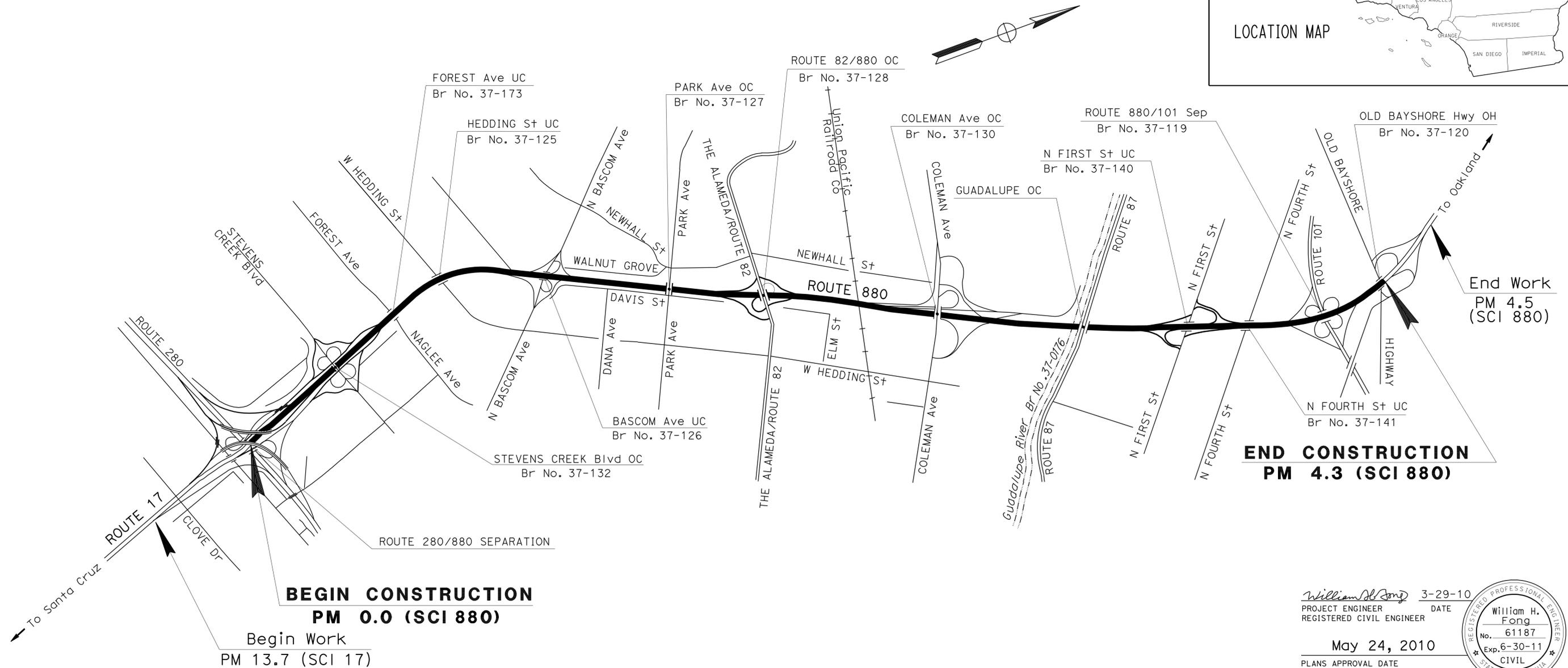
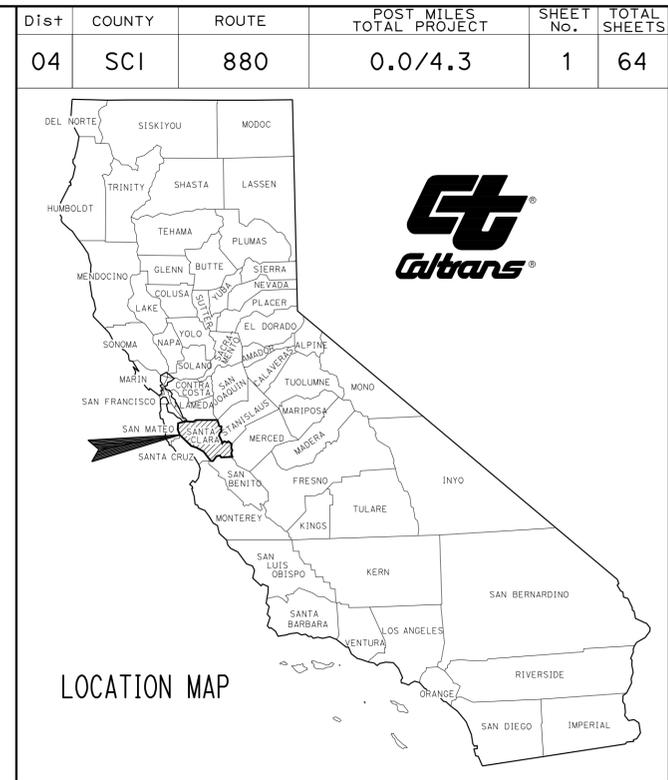
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2 & 3	TYPICAL CROSS SECTIONS
4 & 5	CONSTRUCTION DETAILS
6	TEMPORARY WATER POLLUTION CONTROL PLAN
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34 - 43	ELECTRICAL PLANS
44 - 64	REVISED AND NEW STANDARD PLANS

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

STATE OF CALIFORNIA IM-880-1(061)E  
 DEPARTMENT OF TRANSPORTATION  
**PROJECT PLANS FOR CONSTRUCTION ON  
 STATE HIGHWAY**  
**IN SANTA CLARA COUNTY  
 IN SAN JOSE**  
**FROM ROUTE 280/880 SEPARATION  
 TO OLD BAYSHORE HIGHWAY OVERHEAD**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT MANAGER  
 FRANCIS MENSAR  
 DESIGN ENGINEER  
 WILLIAM H. FONG

**BEGIN CONSTRUCTION  
 PM 0.0 (SCI 880)**

Begin Work  
 PM 13.7 (SCI 17)

**END CONSTRUCTION  
 PM 4.3 (SCI 880)**

End Work  
 PM 4.5  
 (SCI 880)

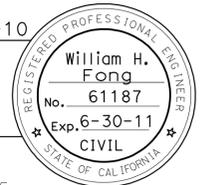
NO SCALE

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

*William H. Fong* 3-29-10  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER

May 24, 2010

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



CONTRACT No. **04-3A0504**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CHECKED BY: MICHAEL NGUYEN  
 WILLIAM FONG  
 MICHAEL NGUYEN  
 REVISOR: WILLIAM FONG  
 DATE: 3/29/10  
 WF  
 3/29/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	2	64

REGISTERED CIVIL ENGINEER  
 William H. Fong  
 No. 61187  
 Exp. 6-30-11  
 CIVIL  
 3-29-10  
 DATE  
 5-24-10  
 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.

**DESIGN DESIGNATION**

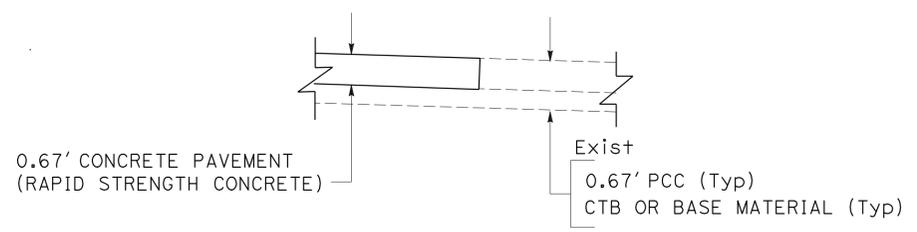
2010 ADT	158000
2030 ADT	200000
D	54.1
T	4.19
DHV	6800
TI 20 YEAR	12.5
ESAL 20 YEARS	20190000

**NOTES:**

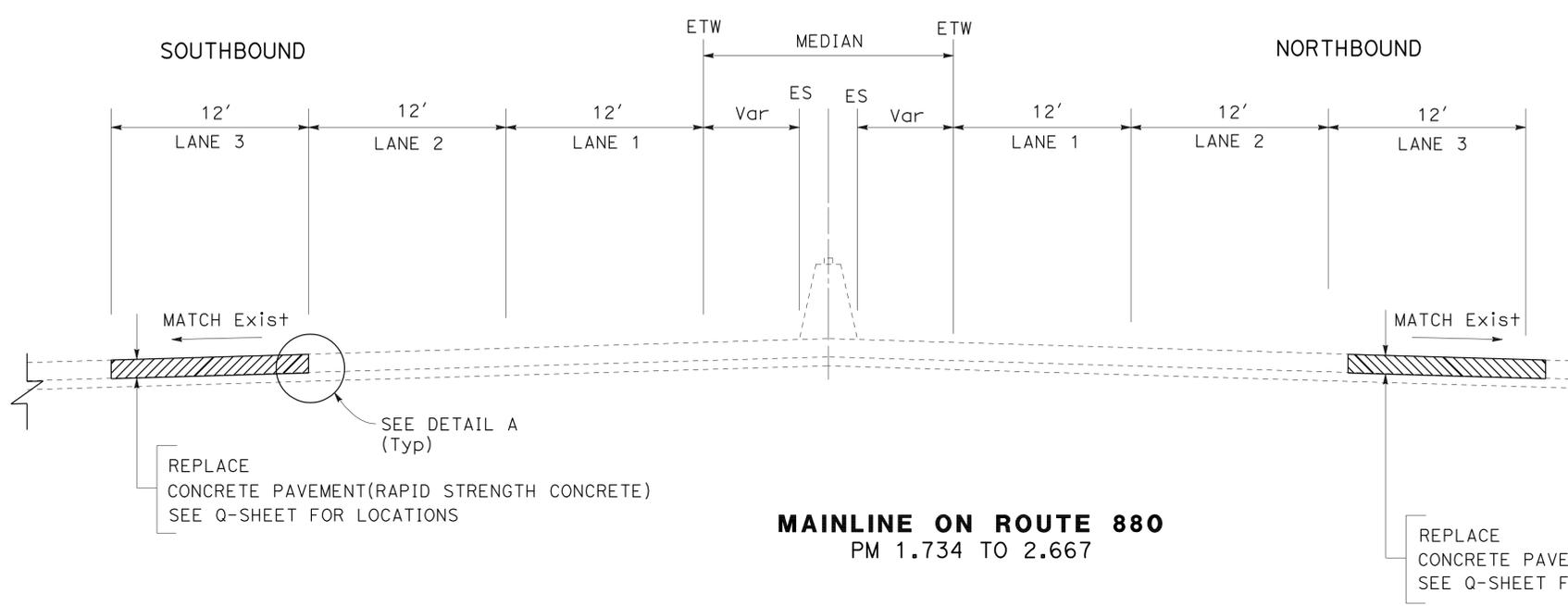
- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- FOR LOCATIONS AND DIMENSIONS OF REMOVE MBGR, AC DIGOUTS, REMOVE AC DIKE AND HMA DIKE, SEE Q SHEETS.
- EXACT LOCATIONS OF MBGR, AC DIGOUTS AND LIMITS OF PAVING WILL BE DETERMINED BY THE ENGINEER.

**ABBREVIATIONS:**

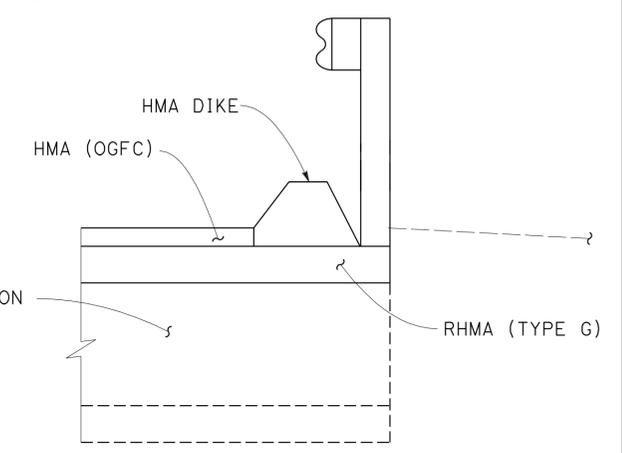
HMA (OGFC)	HOT MIXED ASPHALT (OPEN GRADED FRICTION COURSE)
RHMA (TYPE G)	RUBBERIZED HOT MIXED ASPHALT (GAP GRADED)



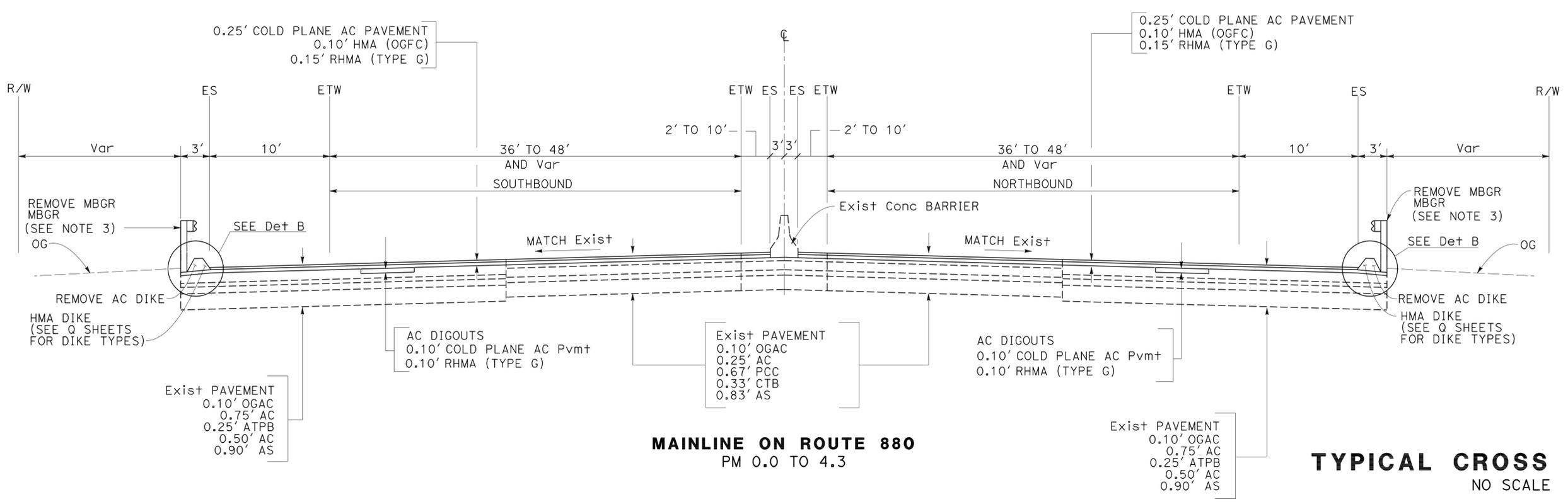
**DETAIL A**



**MAINLINE ON ROUTE 880**  
PM 1.734 TO 2.667



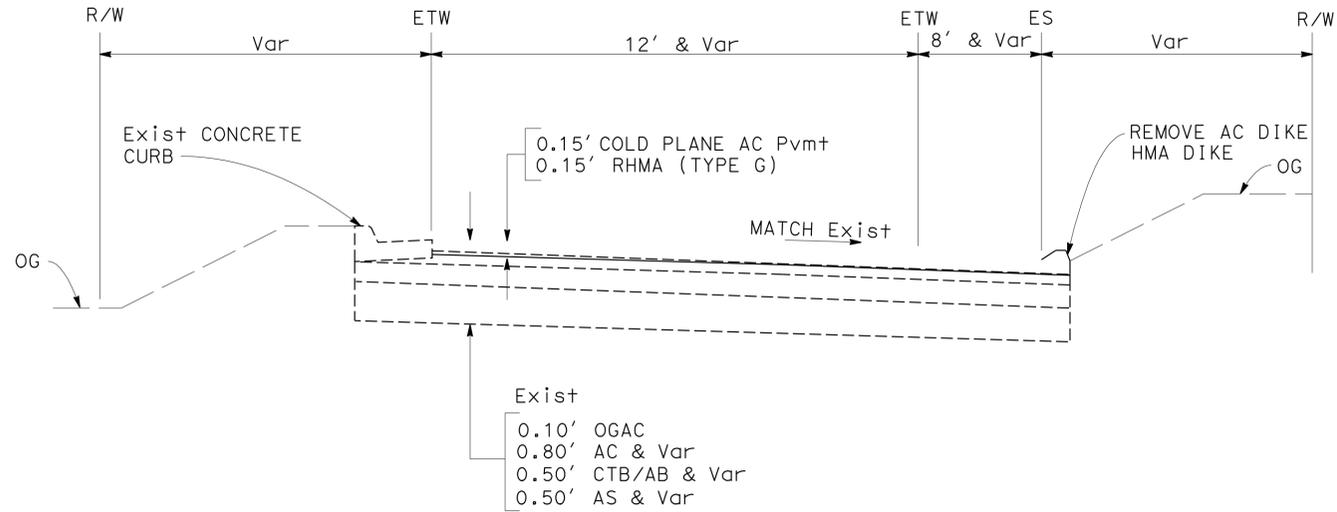
**DETAIL B**



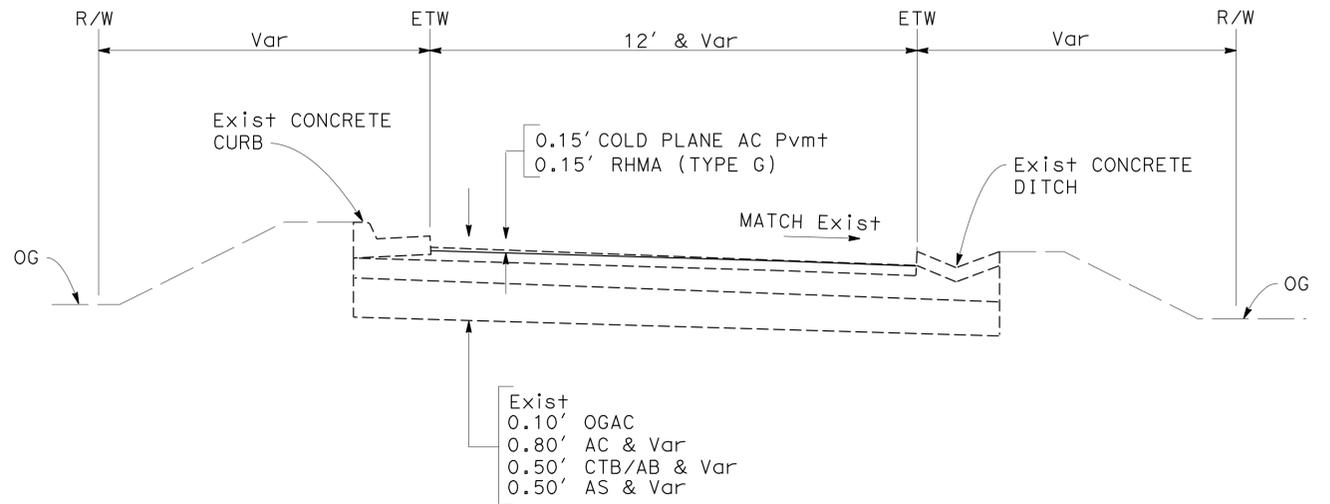
**MAINLINE ON ROUTE 880**  
PM 0.0 TO 4.3

**TYPICAL CROSS SECTIONS**  
NO SCALE

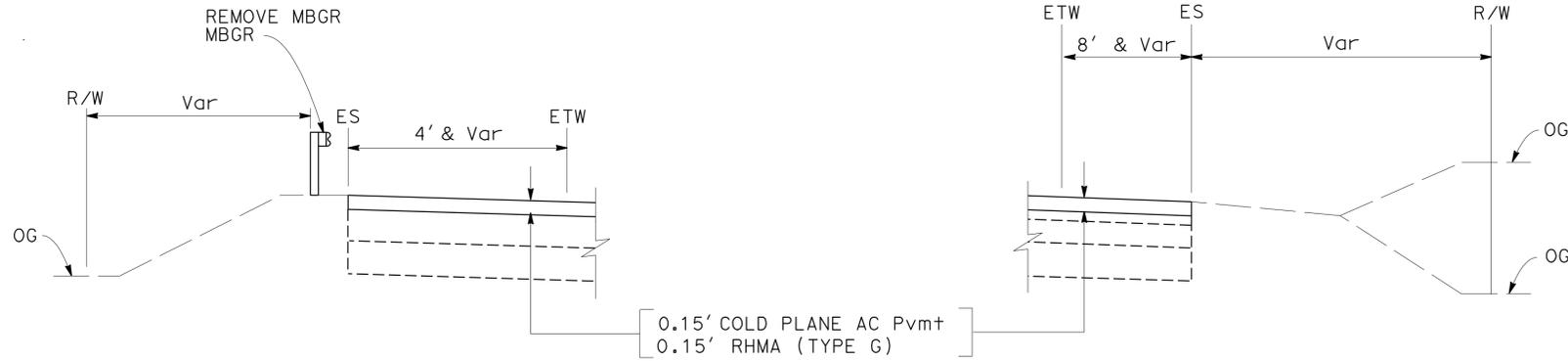
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	3	64
<i>William H. Fong</i> 3-29-10 REGISTERED CIVIL ENGINEER DATE			REGISTERED PROFESSIONAL ENGINEER William H. Fong No. 61187 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA		
5-24-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



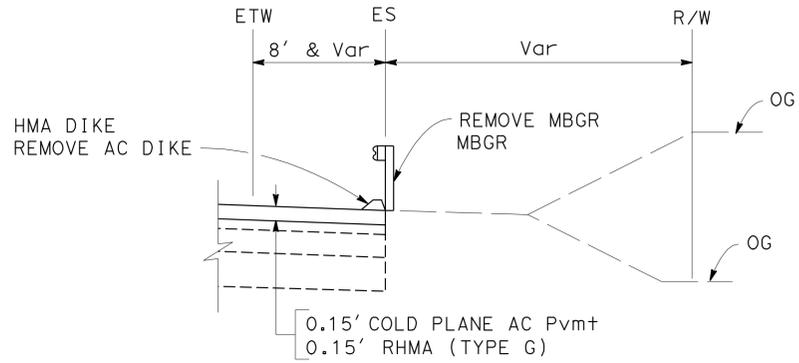
**TYPICAL RAMP WITH EXISTING CONCRETE CURB**



**TYPICAL RAMP WITH EXISTING CONCRETE DITCH**



**TYPICAL RAMP WITHOUT EXISTING AC DIKE**



**TYPICAL RAMP WITH EXISTING AC DIKE**

**TYPICAL CROSS SECTIONS**  
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CHECKED BY: MICHAEL NGUYEN  
 WILLIAM FONG  
 REVISOR: MICHAEL NGUYEN  
 DATE: 3/29/10  
 WF

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	4	64

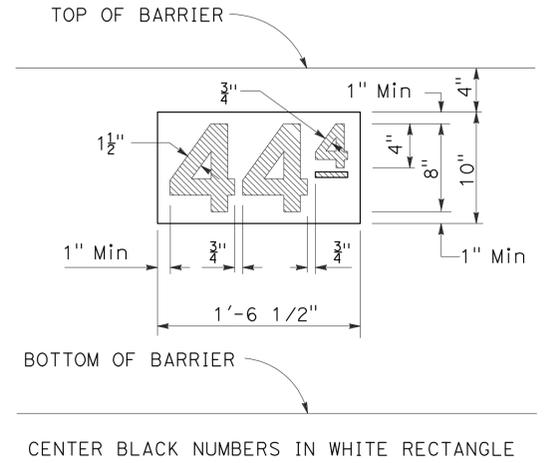
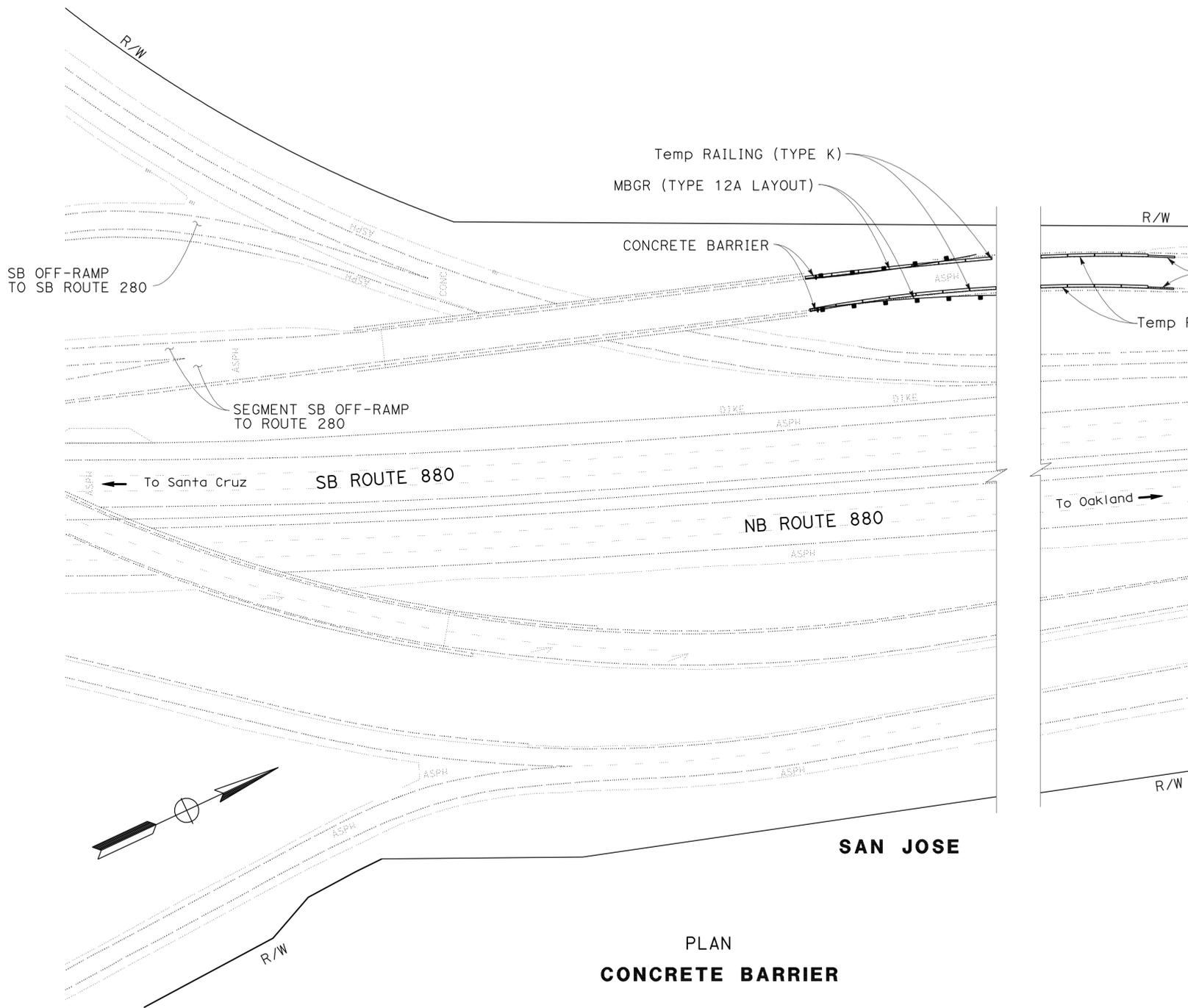
REGISTERED CIVIL ENGINEER: *William H. Fong* 3-29-10  
 DATE: 3-29-10  
 PLANS APPROVAL DATE: 5-24-10  
 No. 61187  
 Exp. 6-30-11  
 CIVIL  
 STATE OF CALIFORNIA

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.

WILLIAM FONG  
 MICHAEL NGUYEN  
 REVISOR  
 DATE REVISED

FUNCTIONAL SUPERVISOR  
 MICHAEL NGUYEN

DESIGN



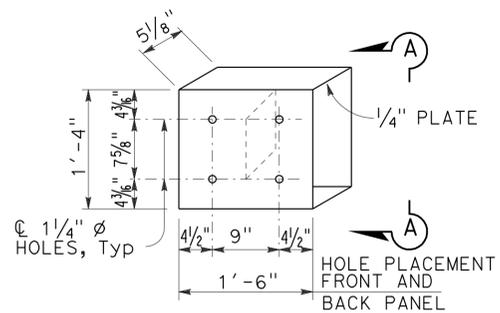
**NOTES:**

1. POST MILE MARKING SHALL BE PAINTED ON EACH SIDE OF BARRIER.
2. WHOLE NUMBERS SHALL BE PAINTED USING A STENCIL SIZE DESIGNATION OF "BD" TENTHS SHALL PAINTED USING A STENCIL SIZE DESIGNATION OF "4D"
3. THE POST MILE TENTH NUMERAL SHOULD BE STENCILED ON THE CONC BARRIER EVERY ONE-TENTH OF A MILE.

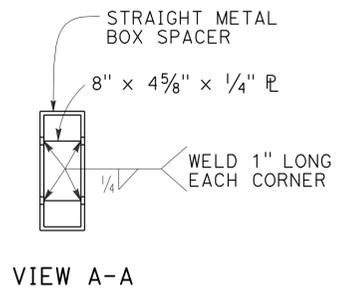
**CONCRETE BARRIER POST MILE MARKING**

**CONSTRUCTION DETAILS**  
 NO SCALE

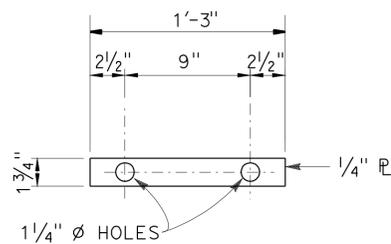
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	5	64
<i>William H. Fong</i> 3-29-10 REGISTERED CIVIL ENGINEER DATE			REGISTERED PROFESSIONAL ENGINEER William H. Fong No. 61187 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA		
5-24-10			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



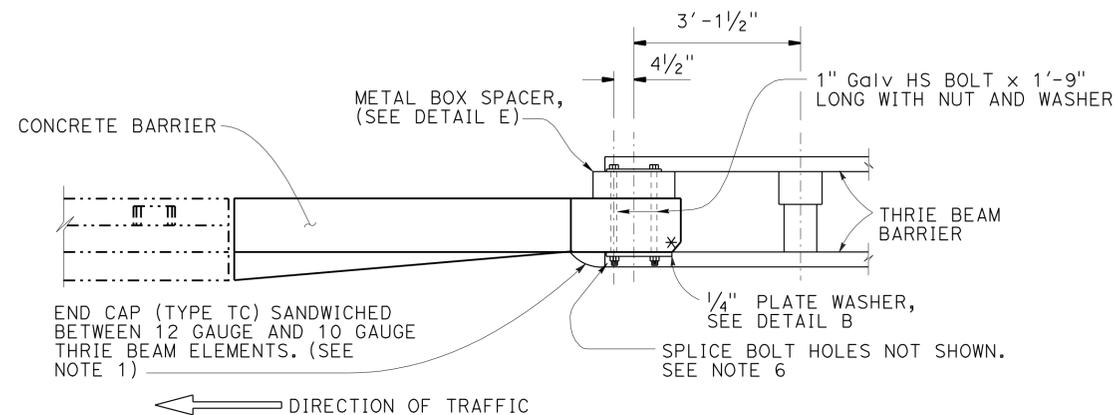
**DETAIL A**



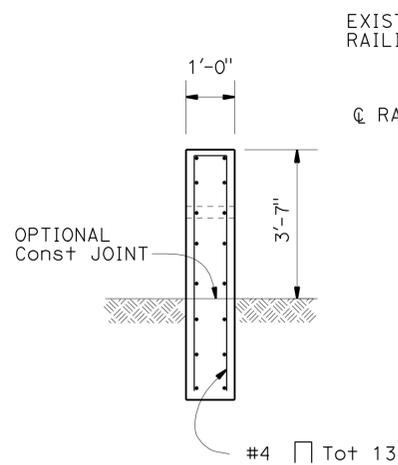
**VIEW A-A**



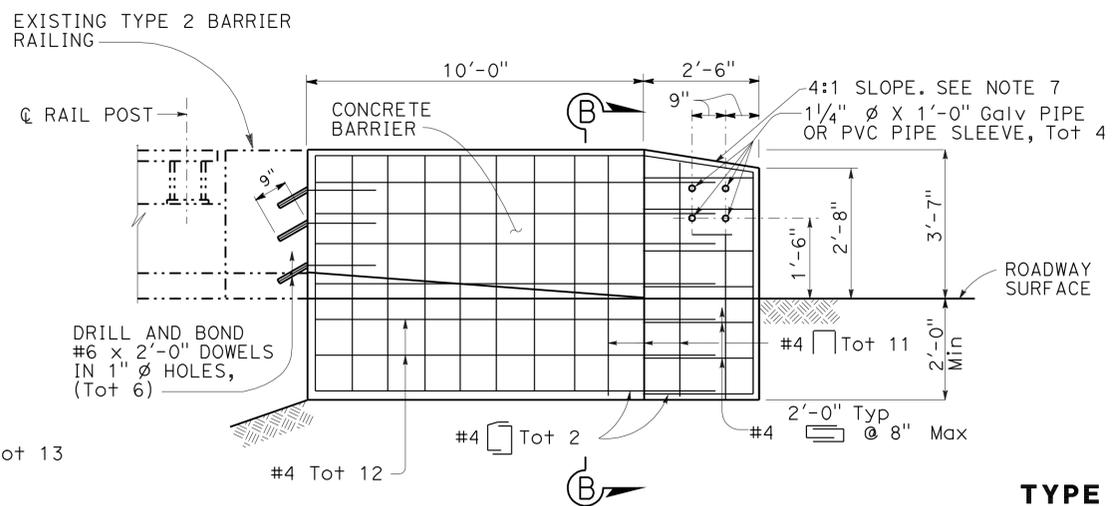
**DETAIL B**



**PLAN**



**SECTION B-B**



**ELEVATION TYPE 2**

**TYPE 2 BARRIER TYPICAL SECTION**

**NOTES:**

- FOR DETAILS NOT SHOWN, SEE STANDARD PLANS, JULY 2006.
- DEPENDENT DIMENSIONS WILL BE VERIFIED IN THE FIELD BEFORE FABRICATING ANY END CONNECTION TO CONFORM WITH EXISTING PAVED CONDITIONS.
- WHEN END SECTION IS CALLED FOR, MODIFY TYPICAL TERMINAL SECTION TO FIT. SEE DETAIL A.
- ALL PLATES AND BOLTS ARE GALVANIZED.
- CUT AND REMOVE PORTION OF TYPE 1, 2 AND BAGR AS REQUIRED.
- EXTERIOR SPLICE BOLT HOLES SHALL BE THE STANDARD 7/8" X 1/8" SLOT SIZE FOR RAIL SPLICES AT POST OR RAILING. INTERIOR SPLICE BOLT HOLES MAY BE INCREASED UP TO 1 1/4" Dia. WASHERS SHALL BE USED WITH SPLICE BOLTS ON BACK SIDE OF RAIL ELEMENT AT POST #T4 AND CONNECTION TO THE CONCRETE BARRIER OR RAILING.
- TAPER THE TOP OF THE END OF THE BRIDGE RAILING AT 4:1 TO MATCH THE TOP ELEVATION OF THE THRIE BEAM RAIL ELEMENT.

**CONSTRUCTION DETAILS  
CONCRETE BARRIER  
NO SCALE**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY: MICHAEL NGUYEN  
 CHECKED BY:  
 WILLIAM FONG  
 MICHAEL NGUYEN  
 REVISED BY: WF  
 DATE REVISED: 3/29/10  
 DISTRICT: 04  
 COUNTY: SCI  
 ROUTE: 880  
 POST MILES TOTAL PROJECT: 0.0/4.3  
 SHEET No.: 5  
 TOTAL SHEETS: 64

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	6	64

5-24-10  
 REGISTERED CIVIL ENGINEER DATE  
 Kamran Nakhjiri  
 No. 57499  
 Exp. 2-31-11  
 CIVIL  
 STATE OF CALIFORNIA

5-24-10  
 PLANS APPROVAL DATE

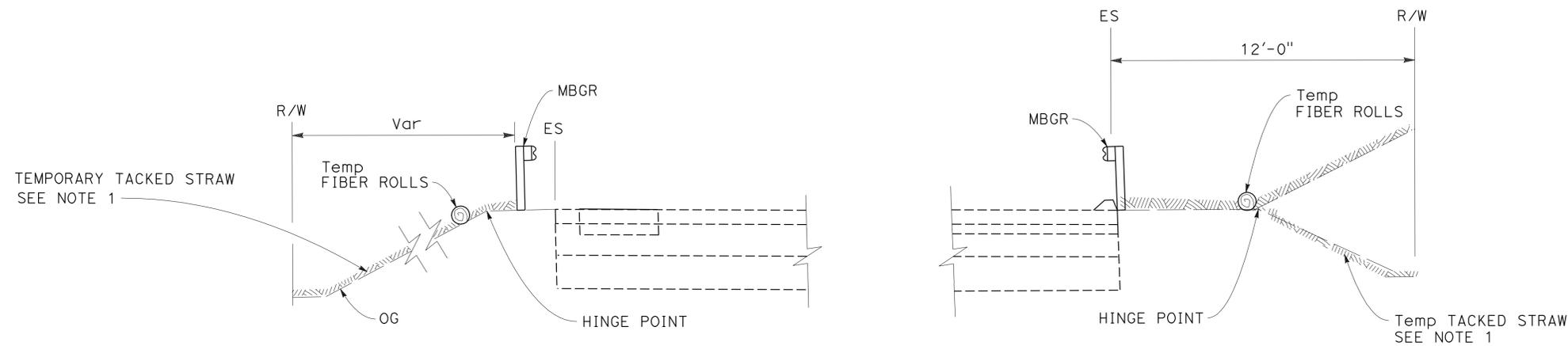
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**TEMPORARY WATER POLLUTION CONTROL QUANTITIES**

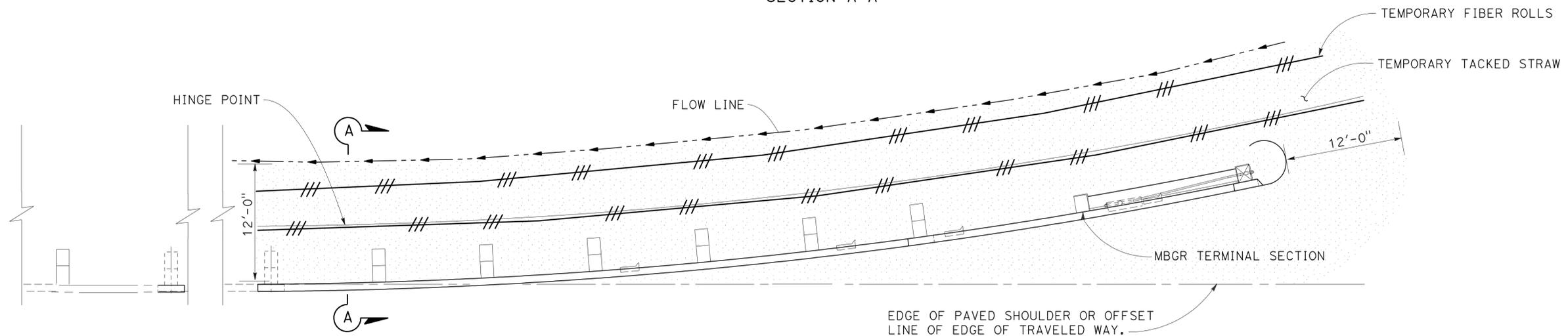
ITEM	UNIT	QUANTITY	TOTAL
TEMPORARY TACKED STRAW	SQYD	4000	4000
TEMPORARY FIBER ROLLS	LF	1400	1400
TEMPORARY DRAINAGE INET PROTECTION	EA	150	150
TEMPORARY CHECK DAM	LF	200	200
TEMPORARY CONCRETE WASHOUT (PORTABLE)	LS	LS	LS

**NOTE:**

1. LEAVE TEMPORARY TACKED STRAW IN PLACE AFTER FINISHING CONSTRUCTION.



SECTION A-A



PLAN  
**TEMPORARY TACKED STRAW AT MBGR INSTALLATION**

**TEMPORARY WATER POLLUTION CONTROL PLAN**

NO SCALE

**WPC-1**

THIS PLAN IS ACCURATE FOR TEMPORARY WATER POLLUTION CONTROL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** WATER QUALITY  
 FUNCTIONAL SUPERVISOR: HARDEEP S. TAKHAR  
 CALCULATED/DESIGNED BY: JIANGFAN CHEN  
 CHECKED BY: KAMRAN NAKHJIRI  
 REVISED BY: JC  
 DATE REVISED: 5/24/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	7	64

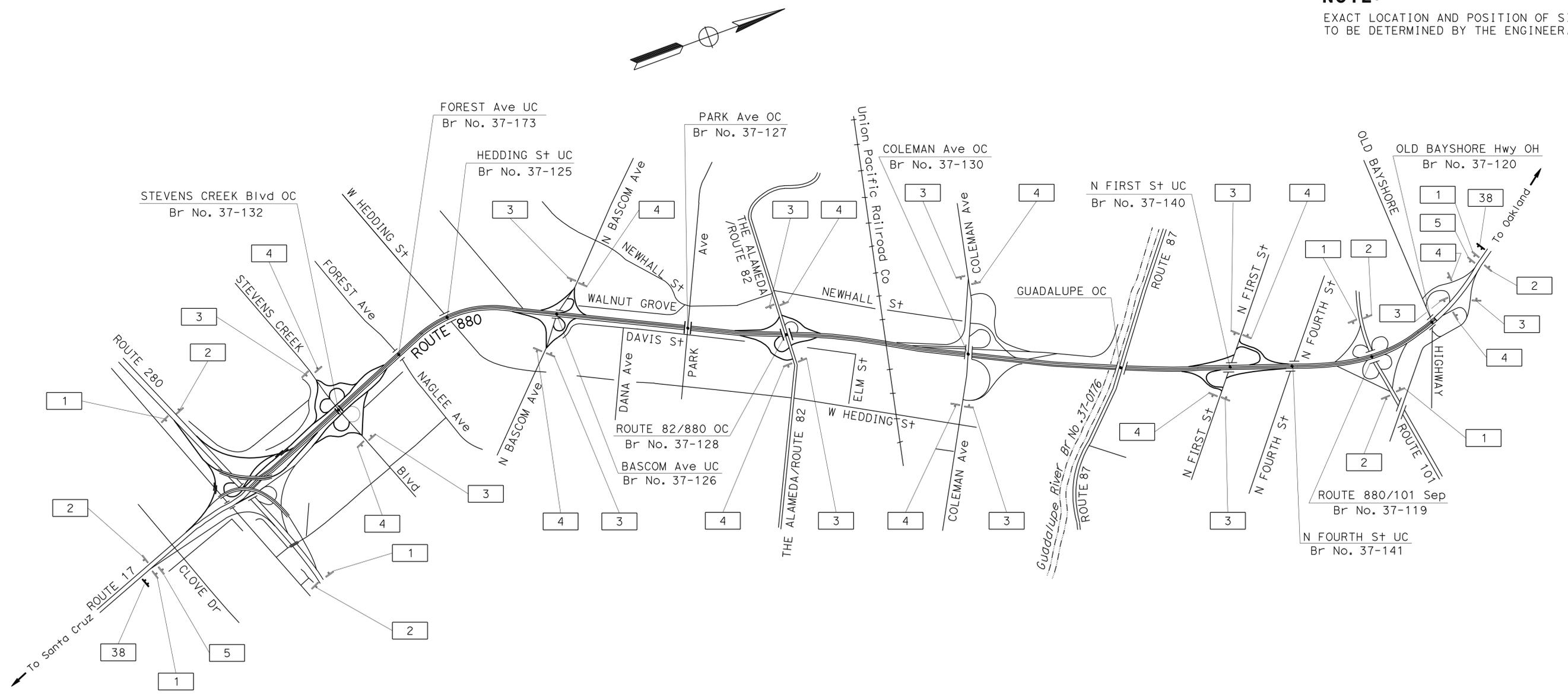
*Jeryl Struven* 4-19-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 Jeryl L. Struven  
 No. 49964  
 Exp. 2-31-10  
 CIVIL  
 STATE OF CALIFORNIA

**LEGEND:**

- No. CONSTRUCTION AREA SIGN NUMBER
- TRAFFIC DIRECTION
- X RAMP CLOSED

**NOTE:**  
 EXACT LOCATION AND POSITION OF SIGNS TO BE DETERMINED BY THE ENGINEER.



**CONSTRUCTION AREA SIGNS**  
 NO SCALE

THIS PLAN ACCURATE FOR  
 CONSTRUCTION AREA SIGN WORK ONLY

**CS-1**

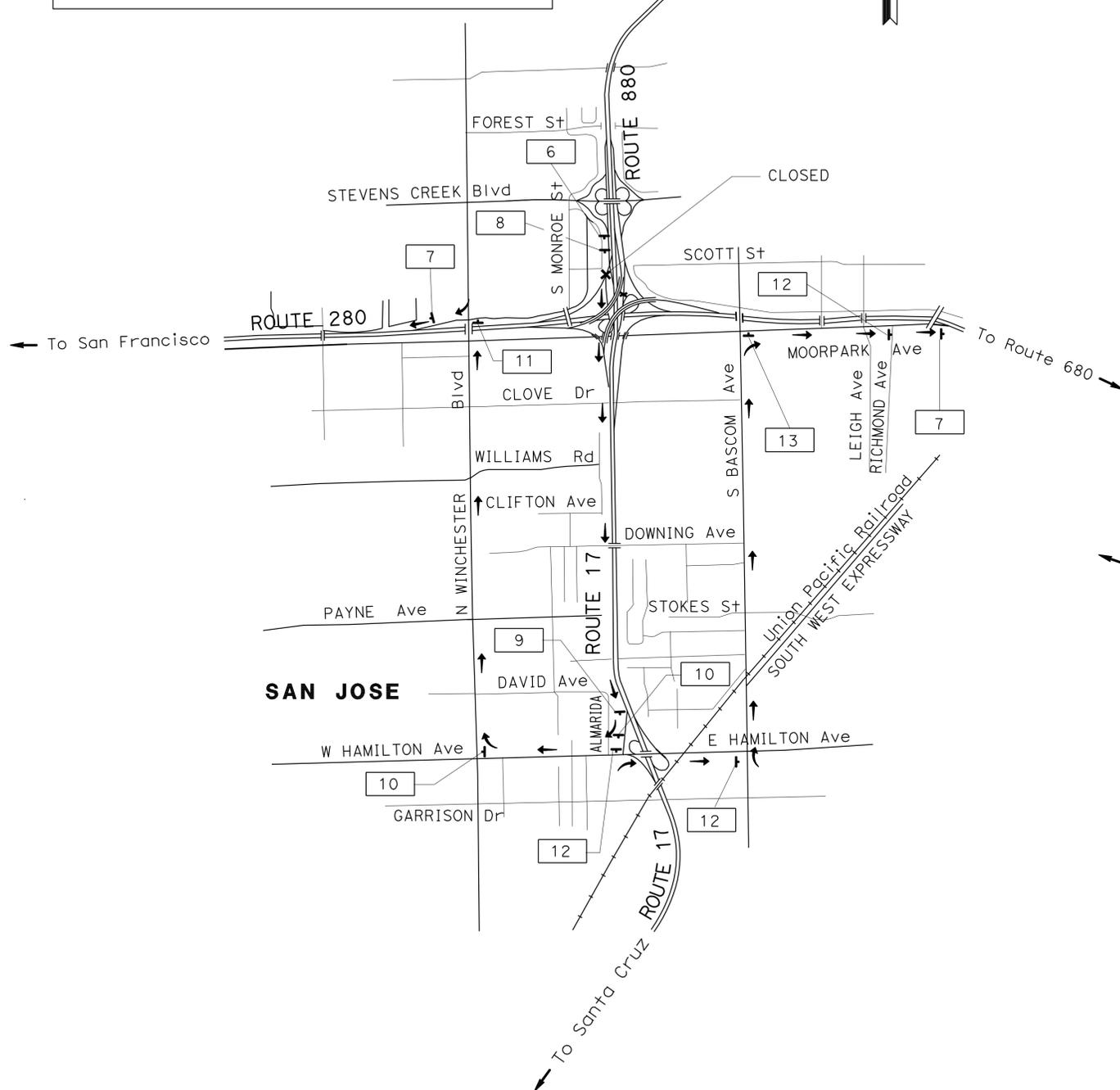
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG  
 CALCULATED/DESIGNED BY: JERILYN L. STRUVEN  
 CHECKED BY: ROY YUAN  
 REVISOR: JERILYN L. STRUVEN  
 DATE: 3/30/10  
 RY: 3/30/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	8	64

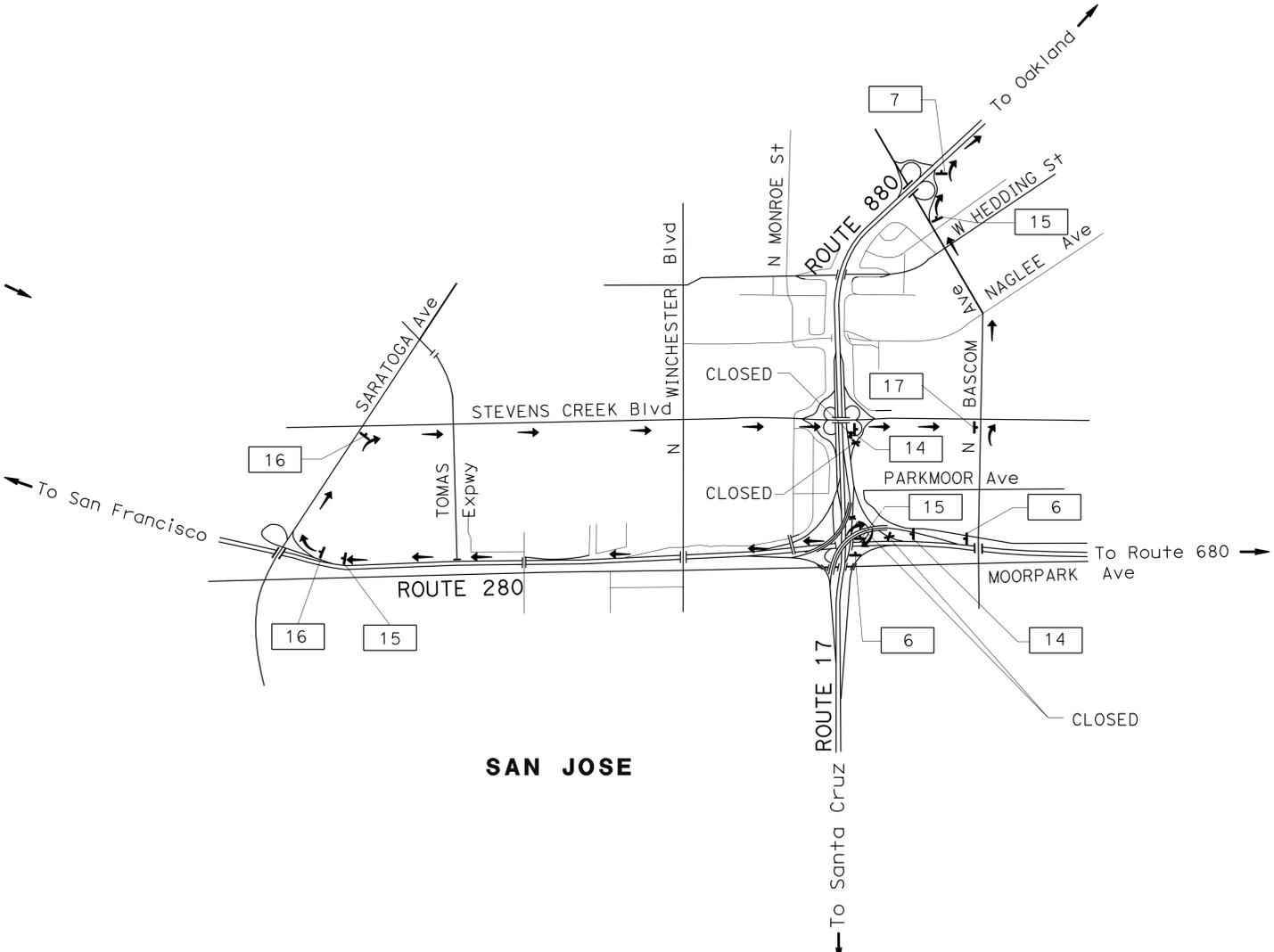
REGISTERED CIVIL ENGINEER: Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-10  
 CIVIL  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA  
 DATE: 4-19-10  
 PLANS APPROVAL DATE: 5-24-10  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**DETOUR**  
 VIA  
 SB ROUTE 880;  
 SB ROUTE 17 TO HAMILTON Ave OFF-RAMP;  
 NB ROUTE 280;  
 WB HAMILTON Ave;  
 NB N WINCHESTER Blvd TO NB ROUTE 280 ON-RAMP;  
 SB ROUTE 280;  
 EB HAMILTON Ave;  
 NB S BASCOM Ave;  
 EB MOORPARK Ave TO SB ROUTE 280 ON-RAMP

**DETOUR**  
 VIA  
 NB ROUTE 280;  
 OFF-RAMP TO SARATOGA Ave;  
 NB SARATOGA Ave;  
 EB STEVENS CREEK Blvd;  
 NB N BASCOM Ave TO ON-RAMP TO NB ROUTE 880



**DETOUR PLAN No. 1**  
 SB ROUTE 880 CONNECTOR OFF-RAMP TO ROUTE 280  
 CLOSURE



**DETOUR PLAN No. 2**  
 NB ROUTE 880 CONNECTOR  
 FROM NB ROUTE 17/NB ROUTE 280  
 AND EB STEVENS CREEK Blvd ON-RAMP  
 CLOSURE

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

FOR NOTES, ABBREVIATIONS  
 AND LEGEND, SEE SHEET CS-1

THIS PLAN ACCURATE FOR  
 CONSTRUCTION AREA SIGN WORK ONLY

**CS-2**

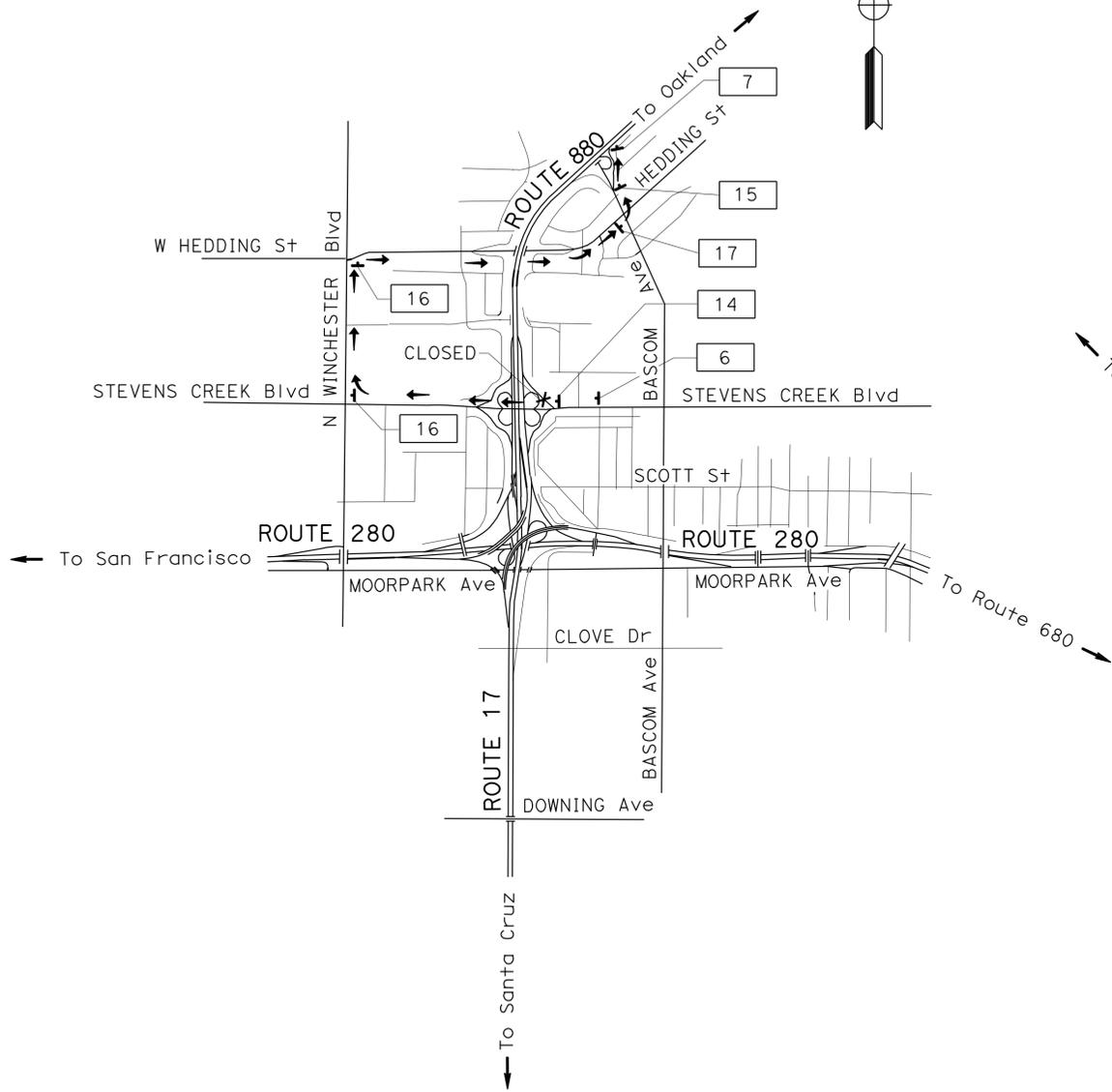
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG  
 CHECKED BY: JERILYN L. STRUVEN  
 ROY YUAN  
 REVISOR: JERILYN L. STRUVEN  
 DATE: 3/30/10  
 RY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	9	64

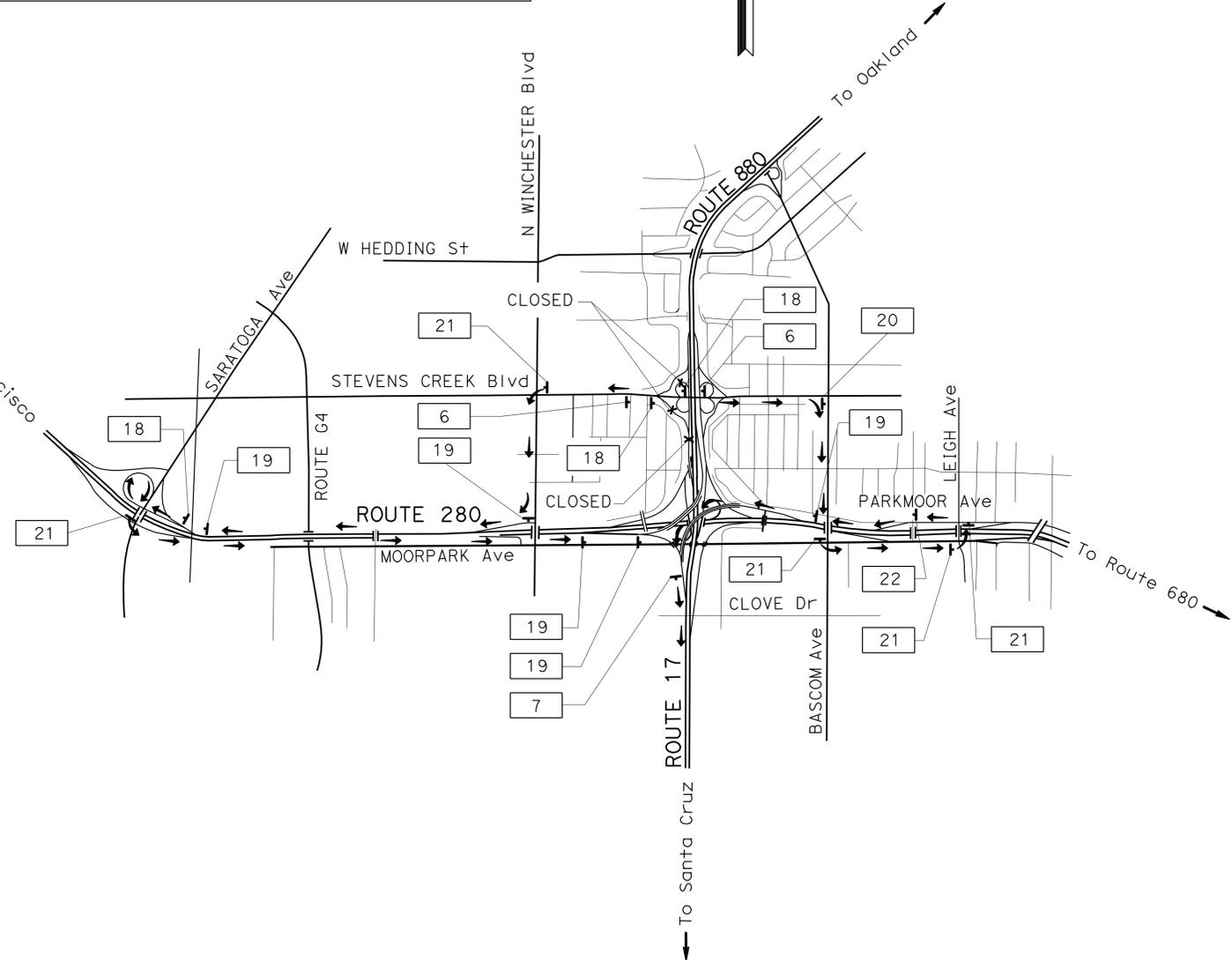
REGISTERED CIVIL ENGINEER: Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-10  
 CIVIL  
 DATE: 4-19-10  
 PLANS APPROVAL DATE: 5-24-10  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**DETOUR**  
 VIA  
 WB STEVENS CREEK Blvd;  
 NB N WINCHESTER Blvd;  
 EB W HEDDING St;  
 NB N BASCOM Ave TO NB ROUTE 880 ON-RAMP

**DETOUR**  
 VIA  
 1. WB STEVENS CREEK Blvd;  
 SB N WINCHESTER Blvd ON-RAMP TO NB ROUTE 280;  
 OFF-RAMP TO SB SARATOGA Ave;  
 ON-RAMP TO SB ROUTE 280;  
 CONNECTOR OFF TO SB ROUTE 17  
 2. EB STEVENS CREEK Blvd;  
 SB BASCOM Ave;  
 EB MOORPARK Ave TO SB ROUTE 280 ON-RAMP;  
 NB LEIGH Ave;  
 WB MOORPARK Ave;  
 ON-RAMP TO NB ROUTE 280;  
 CONNECTOR OFF TO SB ROUTE 17



**DETOUR PLAN No. 3**  
 NB ROUTE 880 ON-RAMP FROM WB STEVENS CREEK Blvd  
 CLOSURE



**DETOUR PLAN No. 4**  
 SB ROUTE 880 CONNECTOR Rd FROM STEVENS CREEK Blvd  
 CLOSURE

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

**CS-3**

FOR NOTES, ABBREVIATIONS  
 AND LEGEND, SEE SHEET CS-1

THIS PLAN ACCURATE FOR  
 CONSTRUCTION AREA SIGN WORK ONLY

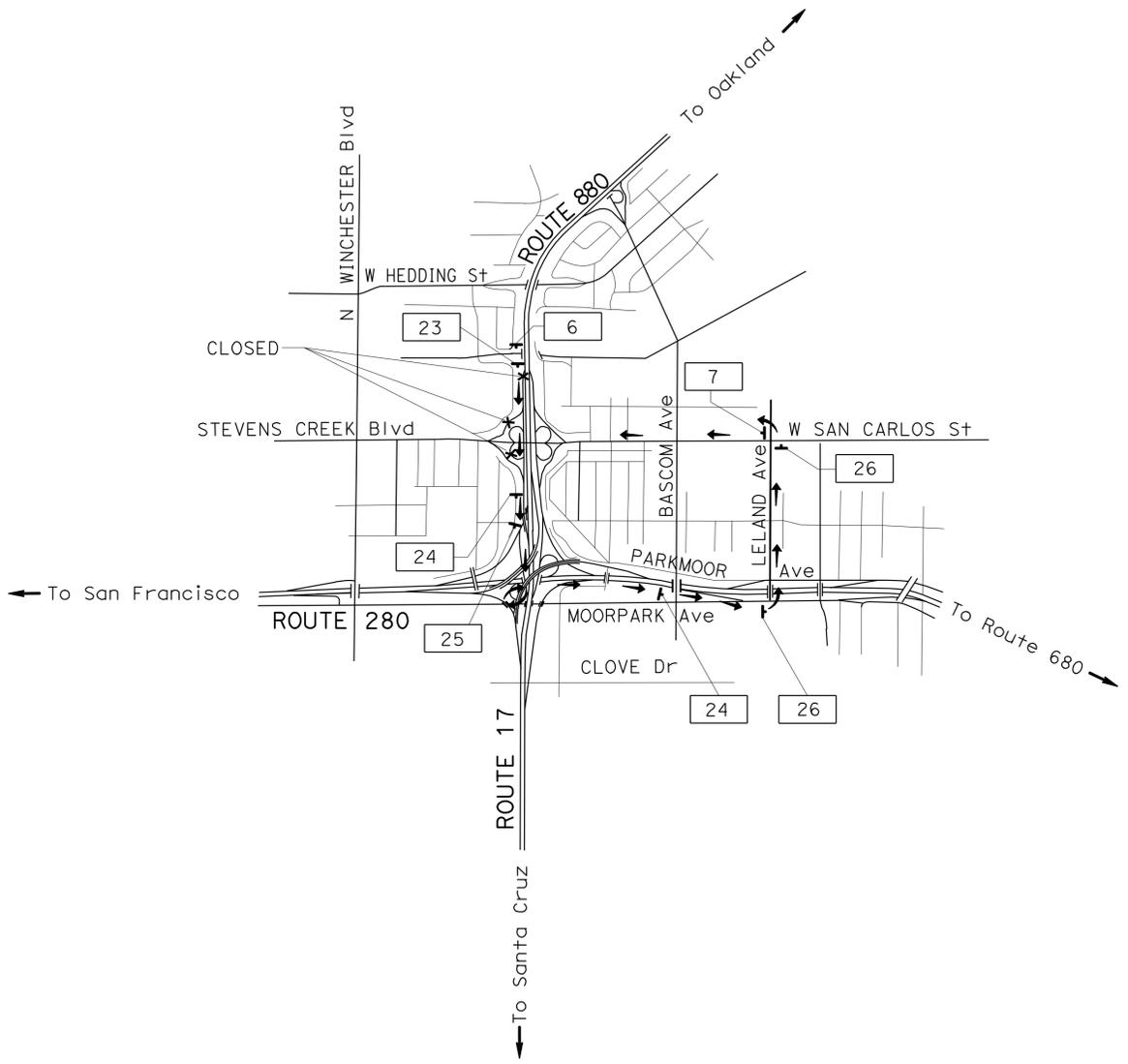
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG  
 CALCULATED/DESIGNED BY: JERILYN L. STRUVEN  
 ROY YUAN  
 REVISOR: JERILYN L. STRUVEN  
 RY: 3/30/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	10	64

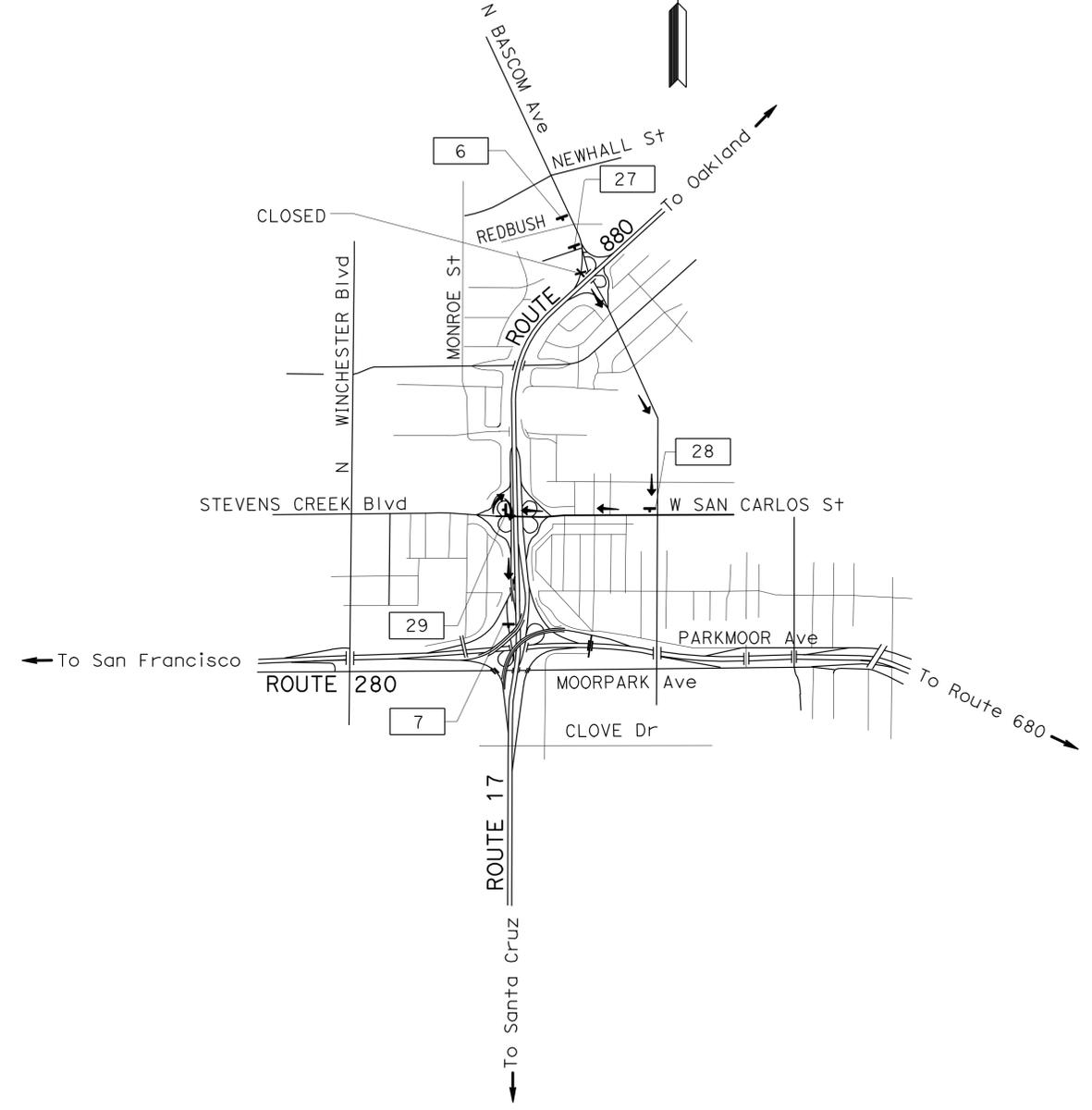
REGISTERED CIVIL ENGINEER: Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-10  
 CIVIL  
 DATE: 4-19-10  
 PLANS APPROVAL DATE: 5-24-10  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**DETOUR**  
 VIA  
 SB ROUTE 880 CONNECTOR TO LOOP OFF-RAMP TO SB ROUTE 280;  
 SB ROUTE 280;  
 OFF-RAMP TO MOORPARK Ave;  
 NB LELAND Ave TO STEVENS CREEK Blvd

**DETOUR**  
 VIA  
 EB N BASCOM Ave;  
 WB W SAN CARLOS St;  
 SB LOOP ON-RAMP TO SB ROUTE 880



**DETOUR PLAN No. 5**  
 SB OFF-RAMPS TO ROUTE 880 CONNECTOR ROAD AND EB/WB STEVENS CREEK Blvd CLOSURE



**DETOUR PLAN No. 6**  
 SB ROUTE 880 ON-RAMP FROM EB N BASCOM Ave CLOSURE

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

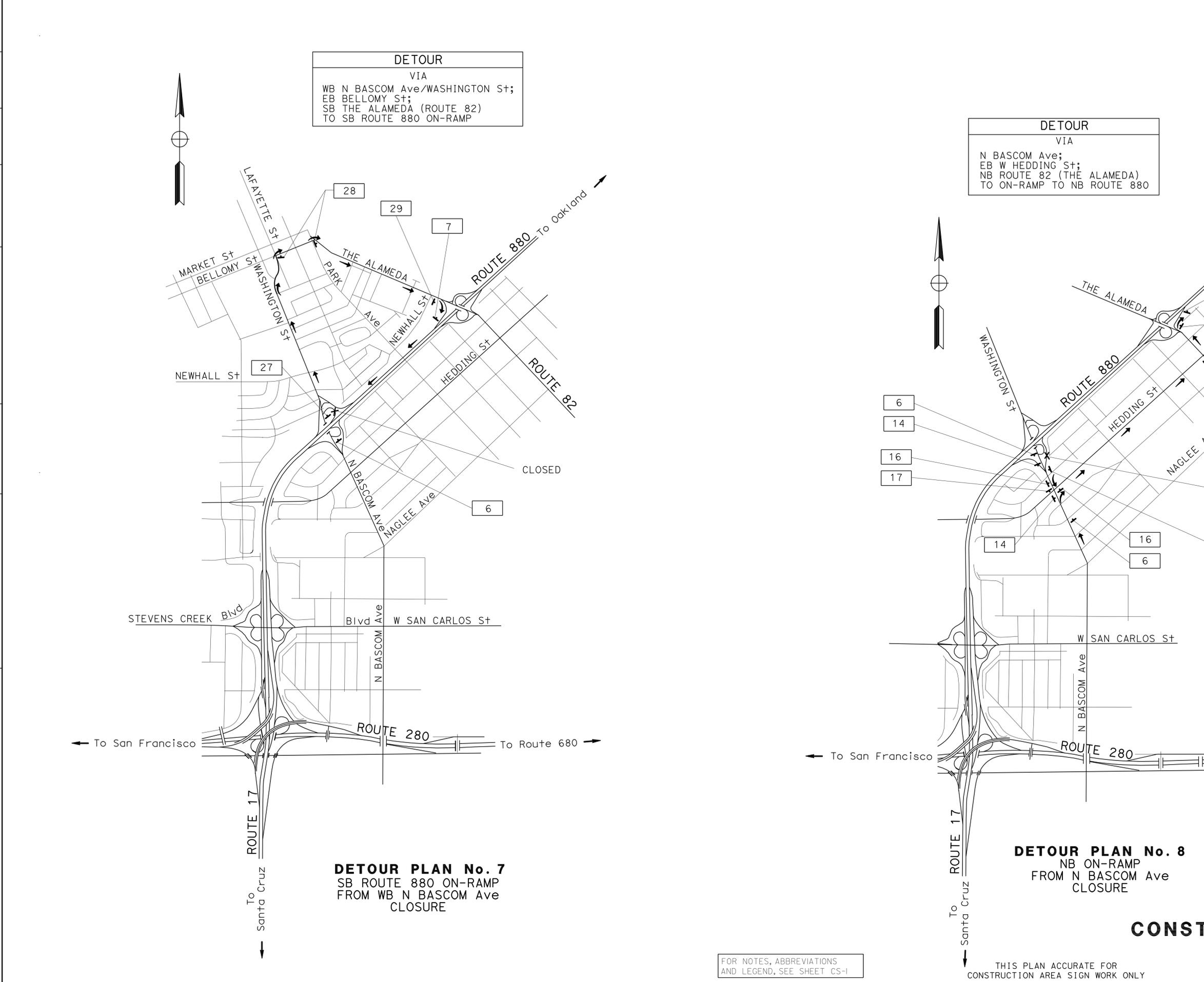
**CS-4**

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG  
 TRAFFIC



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	11	64

REGISTERED CIVIL ENGINEER: Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-10  
 CIVIL

4-19-10 DATE  
 5-24-10 PLANS APPROVAL DATE

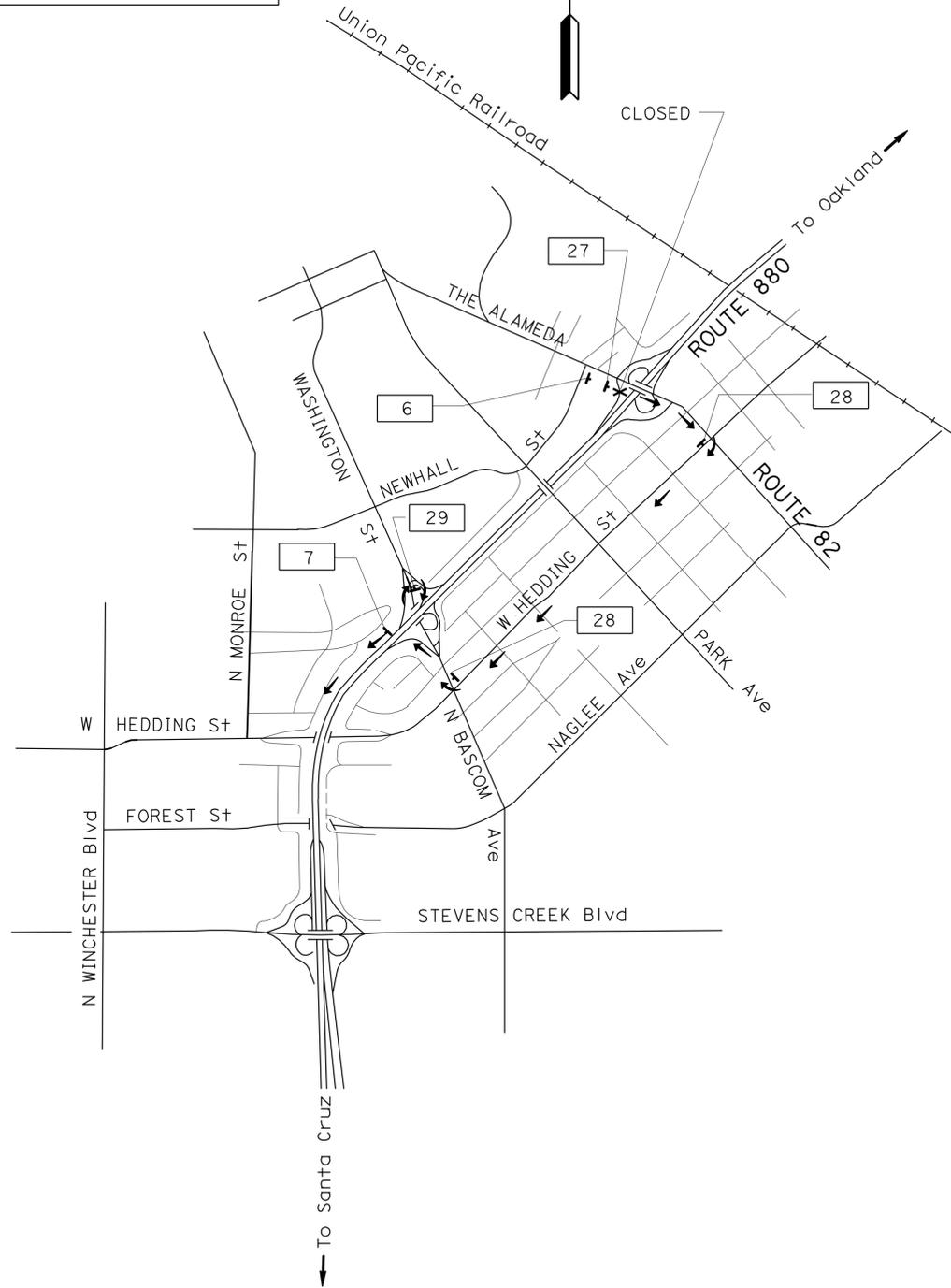
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET CS-1



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 ROY YUAN  
 JERILYN L. STRUVEN  
 REVISED BY: DATE REVISED:  
 RY 3/30/10

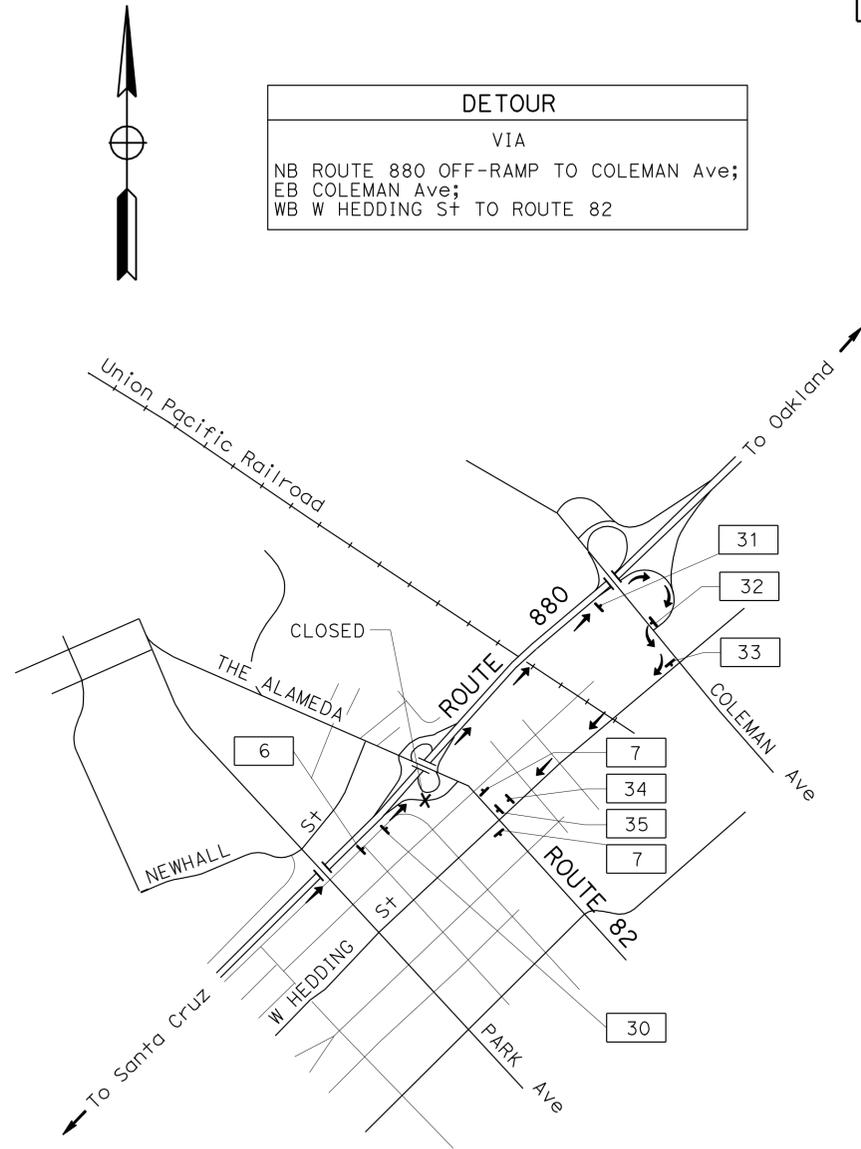
**DETOUR**  
 VIA  
 SB ROUTE 82; WB W HEDDING St;  
 WB N BASCOM Ave; ON-RAMP TO  
 SB ROUTE 880



**DETOUR PLAN No. 9**

SB ROUTE 880 ON-RAMP FROM SB ROUTE 82 (THE ALAMEDA)  
 CLOSURE

**DETOUR**  
 VIA  
 NB ROUTE 880 OFF-RAMP TO COLEMAN Ave;  
 EB COLEMAN Ave;  
 WB W HEDDING St TO ROUTE 82



**DETOUR PLAN No. 10**

NB ROUTE 880 OFF-RAMP TO ROUTE 82 (THE ALAMEDA)  
 CLOSURE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	12	64

REGISTERED CIVIL ENGINEER  
 4-19-10 DATE  
 5-24-10 PLANS APPROVAL DATE  
 Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-10  
 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.

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

**CS-6**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	13	64

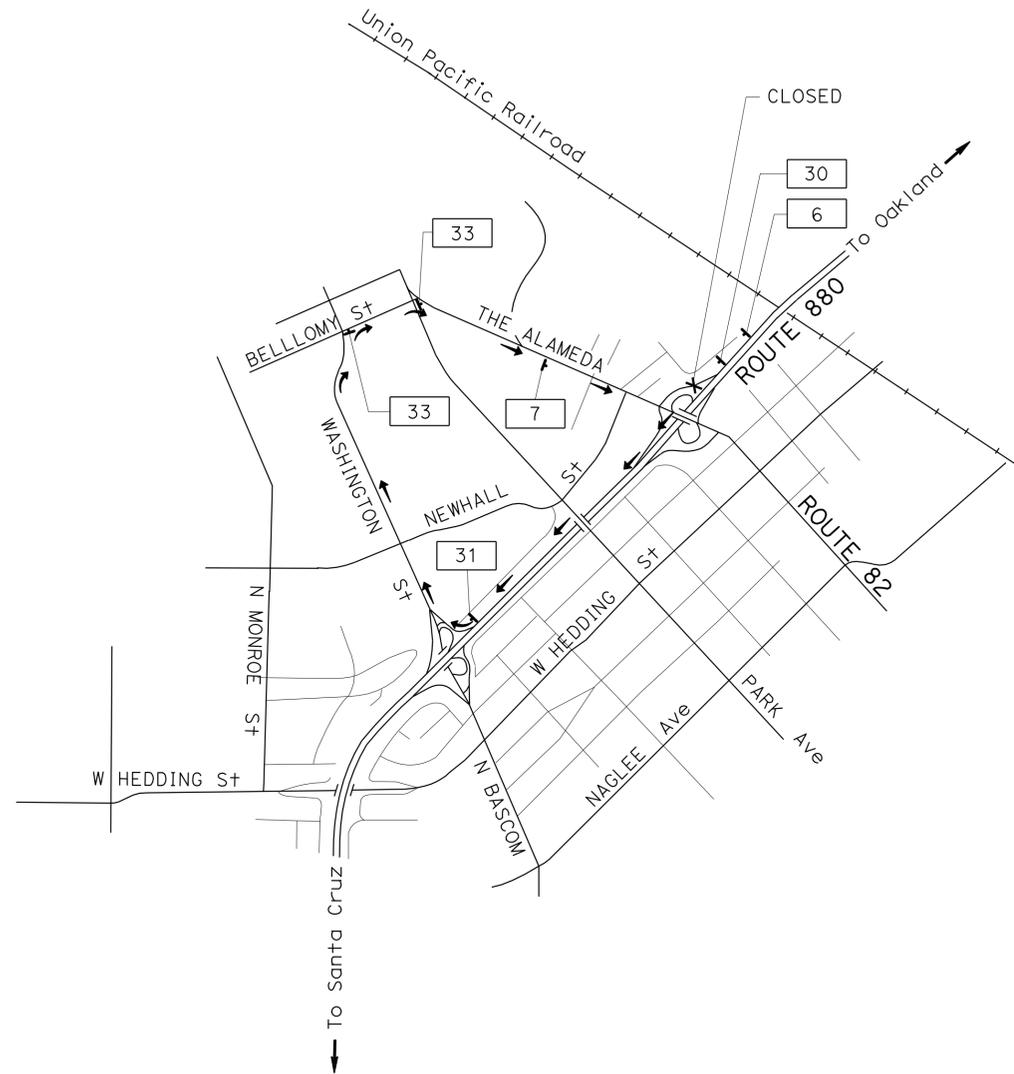
*Jerilyn L. Struven* 4-19-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-10  
 CIVIL  
 STATE OF CALIFORNIA

**DETOUR**

VIA

SB ROUTE 880;  
 OFF-RAMP TO N BASCOM Ave;  
 WB N BASCOM Ave/WASHINGTON St;  
 EB BELLOMY St;  
 EB THE ALAMEDA TO ROUTE 82

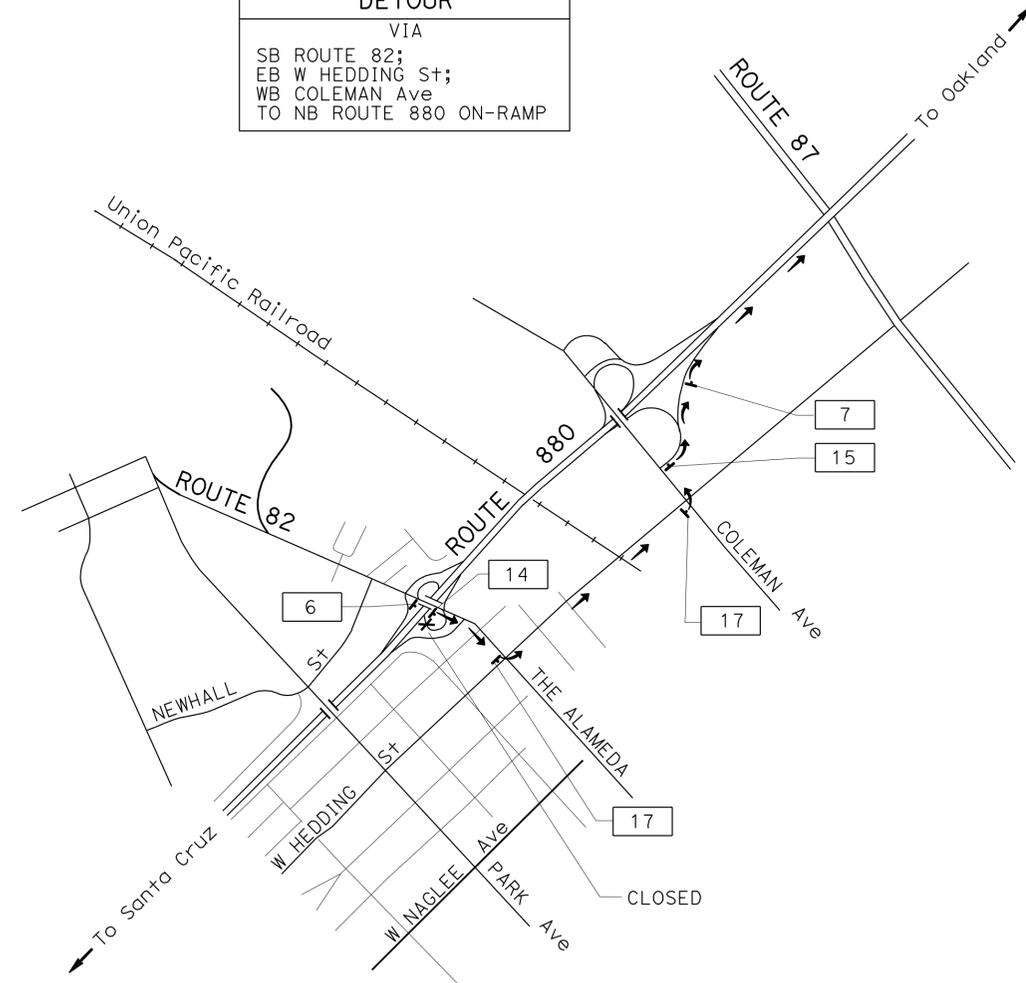


**DETOUR PLAN No. 11**  
 SB ROUTE 880 OFF-RAMP  
 TO ROUTE 82 (THE ALAMEDA)  
 CLOSURE

**DETOUR**

VIA

SB ROUTE 82;  
 EB W HEDDING St;  
 WB COLEMAN Ave  
 TO NB ROUTE 880 ON-RAMP



**DETOUR PLAN No. 12**  
 NB ROUTE 880 ON-RAMP  
 FROM SB ROUTE 82 (THE ALAMEDA)  
 CLOSURE

FOR NOTES, ABBREVIATIONS  
 AND LEGEND, SEE SHEET CS-1

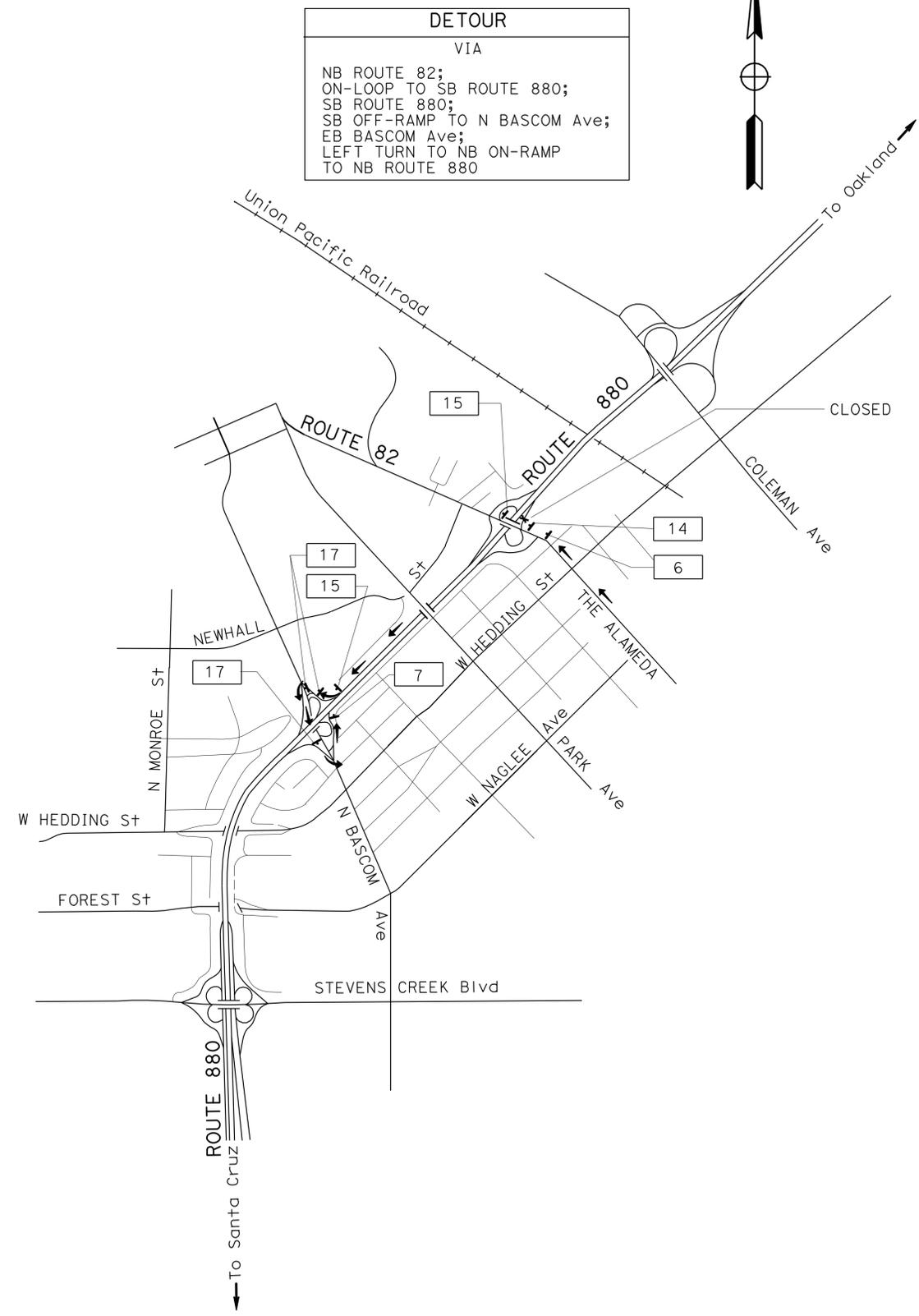
THIS PLAN ACCURATE FOR  
 CONSTRUCTION AREA SIGN WORK ONLY

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

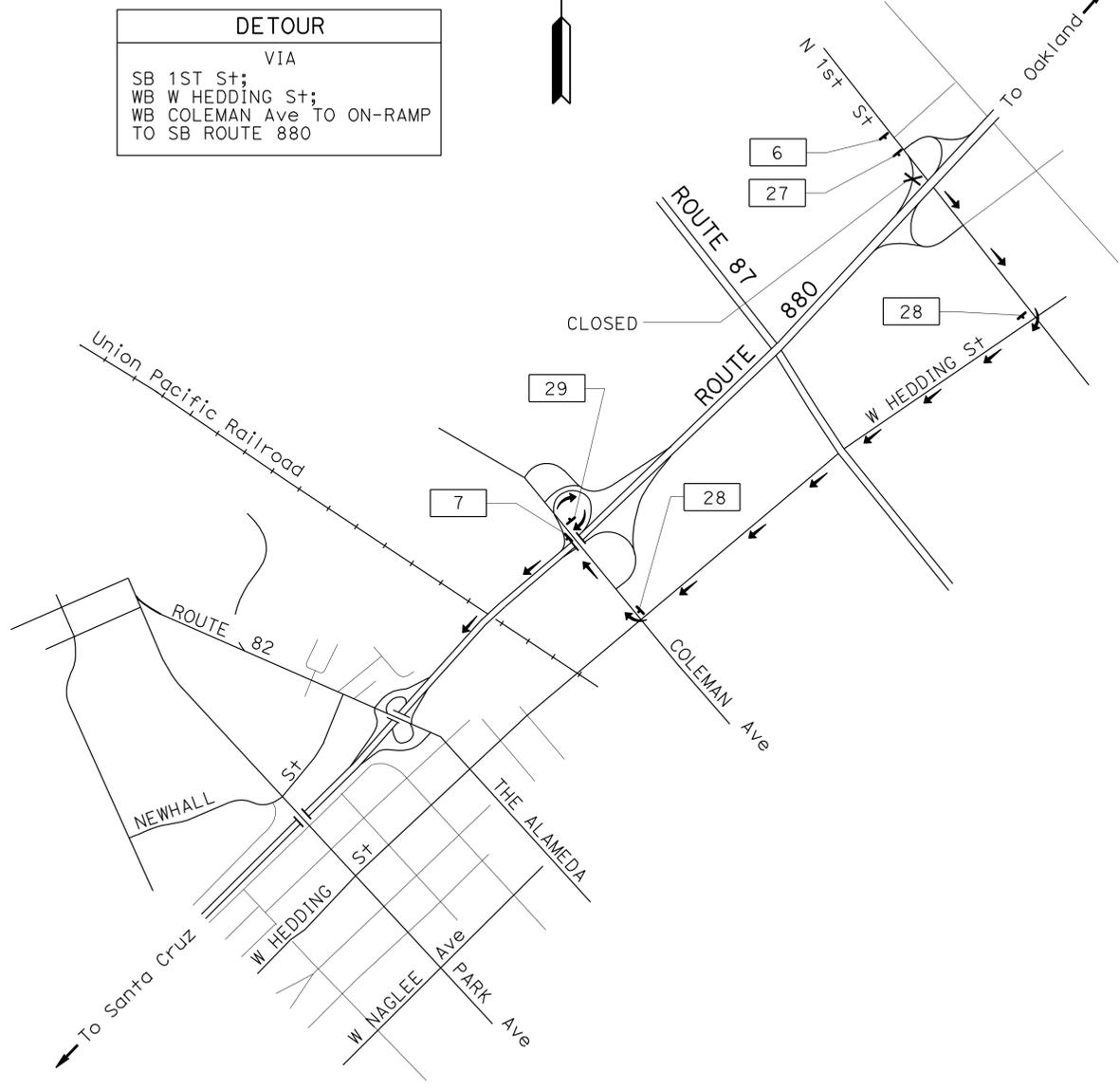
**CS-7**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	14	64

*Jerilyn L. Struven*  
 REGISTERED CIVIL ENGINEER DATE: 4-19-10  
 PLANS APPROVAL DATE: 5-24-10  
 No. 49964  
 Exp. 2-31-10  
 CIVIL  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**DETOUR PLAN No. 13**  
 NB ROUTE 880 ON-RAMP  
 FROM NB ROUTE 82 (THE ALAMEDA)  
 CLOSURE



**DETOUR PLAN No. 14**  
 SB ROUTE 880 ON-RAMP FROM SB 1ST St  
 CLOSURE

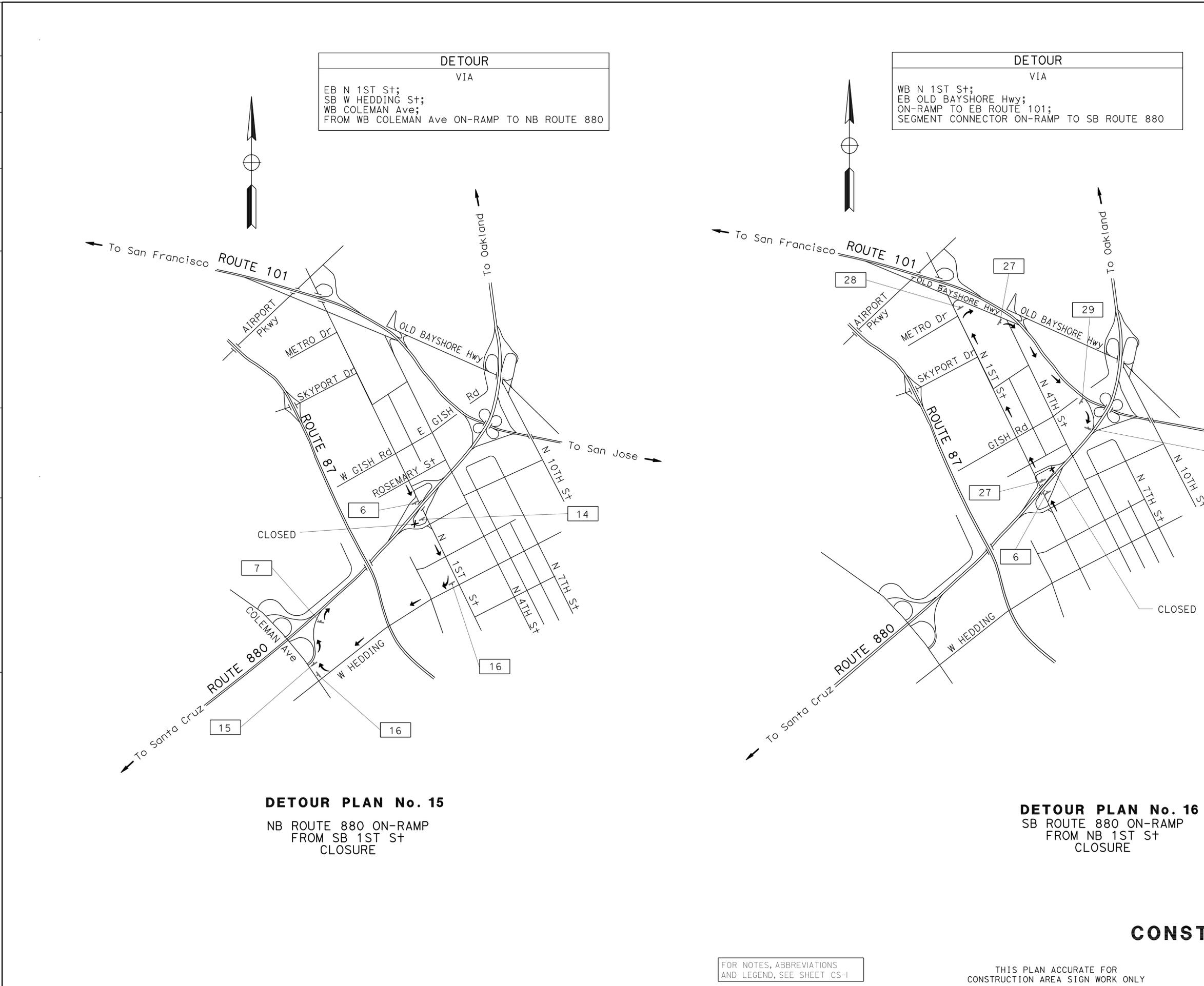
**CONSTRUCTION AREA SIGNS**  
 NO SCALE

**CS-8**

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY





**DETOUR**  
 VIA  
 EB N 1ST St+;  
 SB W HEDDING St+;  
 WB COLEMAN Ave+;  
 FROM WB COLEMAN Ave ON-RAMP TO NB ROUTE 880

**DETOUR**  
 VIA  
 WB N 1ST St+;  
 EB OLD BAYSHORE Hwy+;  
 ON-RAMP TO EB ROUTE 101+;  
 SEGMENT CONNECTOR ON-RAMP TO SB ROUTE 880

**DETOUR PLAN No. 15**  
 NB ROUTE 880 ON-RAMP  
 FROM SB 1ST St+  
 CLOSURE

**DETOUR PLAN No. 16**  
 SB ROUTE 880 ON-RAMP  
 FROM NB 1ST St+  
 CLOSURE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	15	64

REGISTERED CIVIL ENGINEER  
 4-19-10 DATE  
 5-24-10  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER  
 Jerilyn L. Struven  
 No. 49964  
 Exp. 12-31-10  
 CIVIL  
 STATE OF CALIFORNIA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG  
 TRAFFIC

ROY YUAN  
 JERILYN L. STRUVEN  
 REVISIONS: RY 3/30/10

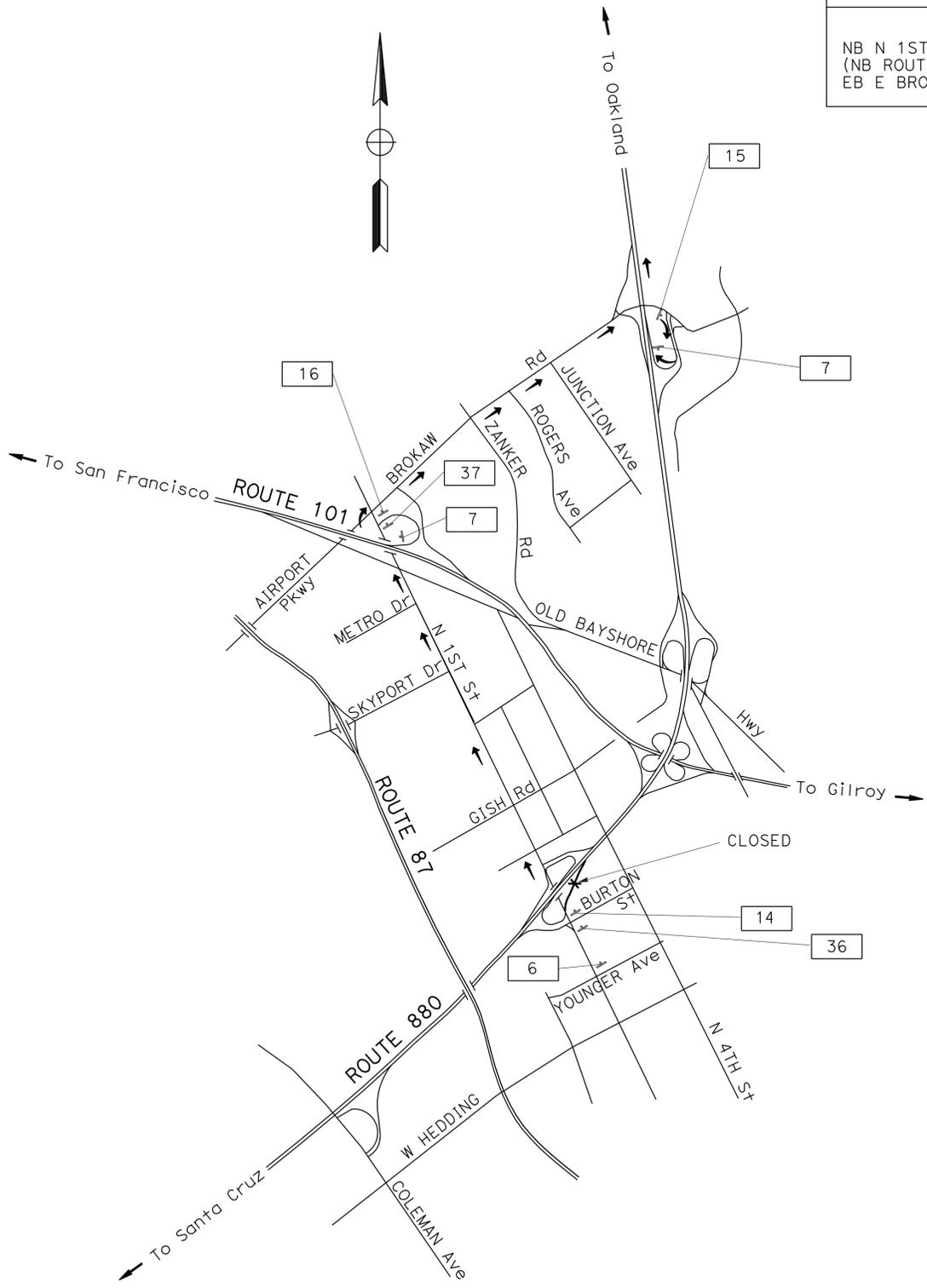
CALCULATED/DESIGNED BY: ROLAND AU-YEUNG  
 CHECKED BY: JERILYN L. STRUVEN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	16	64

REGISTERED CIVIL ENGINEER: Jerilyn L. Struven  
 No. 49964  
 Exp. 2-31-08  
 CIVIL  
 DATE: 4-19-10  
 PLANS APPROVAL DATE: 5-24-10

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.

**DETOUR**  
 VIA  
 NB N 1ST St;  
 (NB ROUTE 101 TRAFFIC TAKE LOOP ON-RAMP);  
 EB E BROKAW Rd TO NB ROUTE 880 ON-RAMP



**DETOUR PLAN No. 17**  
 NB ROUTE 880 ON-RAMP  
 FROM NB 1ST St  
 CLOSURE

FOR NOTES, ABBREVIATIONS  
 AND LEGEND, SEE SHEET CS-1



THIS PLAN ACCURATE FOR  
 CONSTRUCTION AREA SIGN WORK ONLY

**CONSTRUCTION AREA SIGNS**  
 NO SCALE

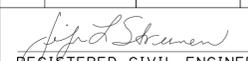
**CS-10**

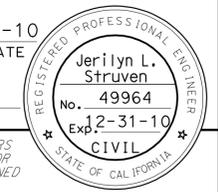
**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN No.	MUTCD CODE	MESSAGE	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
1	W20-1	ROAD WORK AHEAD	48'' x 48''	(ONE) 4'' x 6''	6
2	G20-2	END ROAD WORK	48'' x 24''	(ONE) 4'' x 4''	6
3	W20-1	ROAD WORK AHEAD	36'' x 36''	(ONE) 4'' x 6''	12
4	G20-2	END ROAD WORK	36'' x 18''	(ONE) 4'' x 4''	12
5	G20-1	ROAD WORK NEXT 5 MILES	36'' x 18''	(ONE) 4'' x 4''	2
6	W20-2	DETOUR AHEAD	48'' x 48''	(ONE) 4'' x 6''	20
7	M4-8a	END DETOUR	24'' x 18''	(ONE) 4'' x 4''	20
8	SC3(▲)(CA)	DETOUR (STRAIGHT ARROW)	48'' x 18''	(ONE) 4'' x 6''	1
	M3-1	NORTH	21'' x 9''		
	M3-3	SOUTH	21'' x 9''		
9	G27-2(280)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	1
	M4-8	DETOUR	21'' x 9''		
	M3-1	NORTH	21'' x 9''		
	M3-3	SOUTH	21'' x 9''		
10	G27-2(280)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	2
	M4-10(R+)	DETOUR (R+)	48'' x 18''		
	M3-1	NORTH	21'' x 9''		
11	G27-2(280)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	1
	M4-10(L+)	DETOUR (L+)	48'' x 18''		
12	G27-2(280)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	3
	M4-10(L+)	DETOUR (L+)	48'' x 18''		
	M3-3	SOUTH	21'' x 9''		
13	G27-2(280)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	1
	M4-10(R+)	DETOUR (R+)	48'' x 18''		
14	SC3(▲)(CA)	DETOUR(STRAIGHT ARROW)	48'' x 18''	(ONE) 4'' x 6''	9
	M3-1	NORTH	21'' x 9''		
	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''		
15	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	10
	M4-8	DETOUR	21'' x 9''		
	M3-1	NORTH	21'' x 9''		
	M6-2 (▼)	DETOUR(DIAGONAL ARROW)	21'' x 15''		
16	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	9
	M4-10(R+)	DETOUR (R+)	48'' x 18''		
17	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	10
	M4-10(L+)	DETOUR (L+)	48'' x 18''		
	M3-1	NORTH	21'' x 9''		

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

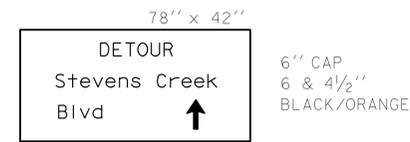
SIGN No.	MUTCD CODE	MESSAGE	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
18	SC3(▲)(CA)	DETOUR(STRAIGHT ARROW)	48'' x 18''	(ONE) 4'' x 6''	3
	M3-3	SOUTH	21'' x 9''		
	G28-2(17)(CA)	ROUTE SHIELD	24'' x 25''		
19	G28-2(17)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	5
	M4-8	DETOUR	21'' x 9''		
	M3-3	SOUTH	21'' x 9''		
	M6-2 (▼)	DETOUR(DIAGONAL ARROW)	21'' x 15''		
20	G28-2(17)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	1
	M4-10(R+)	DETOUR (R+)	48'' x 18''		
	M3-3	SOUTH	21'' x 9''		
21	G28-2(17)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	5
	M4-10(L+)	DETOUR (L+)	48'' x 18''		
22	G28-2(17)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	1
	M3-3	SOUTH	21'' x 9''		
	M6-2 (▼)	DETOUR(DIAGONAL ARROW)	21'' x 15''		
23	SPECIAL	SEE SPECIAL 1	78'' x 42''	(TWO) 4'' x 6''	1
24	SPECIAL	SEE SPECIAL 2	78'' x 42''	(TWO) 4'' x 6''	2
25	SPECIAL	SEE SPECIAL 3	78'' x 42''	(TWO) 4'' x 6''	1
26	SPECIAL	SEE SPECIAL 4	78'' x 42''	(TWO) 4'' x 6''	2
27	SC3(▲)(CA)	DETOUR(STRAIGHT ARROW)	48'' x 18''	(ONE) 4'' x 6''	6
	M3-3	SOUTH	21'' x 9''		
	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''		
28	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	8
	M4-10(R+)	DETOUR (R+)	48'' x 18''		
29	G27-2(880)(CA)	ROUTE SHIELD	30'' x 25''	(ONE) 4'' x 6''	5
	M3-3	SOUTH	21'' x 9''		
	M6-2 (▼)	DETOUR(DIAGONAL ARROW)	21'' x 15''		
30	G28-2(82)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	2
	SC3(▲)(CA)	DETOUR(STRAIGHT ARROW)	48'' x 18''		
31	G28-2(82)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	2
	M4-8	DETOUR	21'' x 9''		
	M6-2 (▼)	DETOUR(DIAGONAL ARROW)	21'' x 15''		
32	G28-2(82)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	1
	M4-10(L+)	DETOUR (L+)	48'' x 18''		
33	G28-2(82)(CA)	ROUTE SHIELD	24'' x 25''	(ONE) 4'' x 6''	3
	M4-10(R+)	DETOUR (R+)	48'' x 18''		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	17	64
			4-19-10	DATE	
REGISTERED CIVIL ENGINEER			PLANS APPROVAL DATE		
No. 49964			Exp. 2-31-10		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



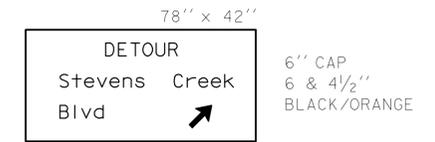
### STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	MUTCD CODE	MESSAGE	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
34	M4-10(L+)	DETOUR(L+)	48'' x 18''	(ONE) 4'' x 6''	1
	M3-3	SOUTH	21'' x 9''		
	G28-2(82)(CA)	ROUTE SHIELD	24'' x 25''		
35	M4-10(R+)	DETOUR(R+)	48'' x 18''	(ONE) 4'' x 6''	1
	M3-1	NORTH	21'' x 9''		
	G28-2(82)(CA)	ROUTE SHIELD	24'' x 25''		
36	SC3(↑)(CA)	DETOUR(STRAIGHT ARROW)	48'' x 18''	(ONE) 4'' x 6''	1
	M3-1	NORTH	21'' x 9''		
	G26-2(101)(CA)	ROUTE SHIELD	28'' x 24''		
37	M4-8	DETOUR	21'' x 9''	(ONE) 4'' x 6''	1
	M3-1	NORTH	21'' x 9''		
	G26-2(101)(CA)	ROUTE SHIELD	28'' x 24''		
	M6-2 (↘)	DETOUR(DIAGONAL ARROW)	21'' x 15''		
38	C40 (CA)	TRAFFIC FINES DOUBLE IN CONSTRUCTION ZONES	72'' x 36''	(TWO) 4'' x 6''	2



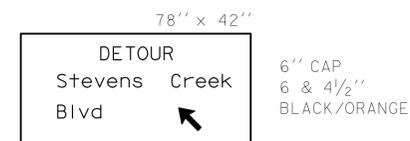
**SPECIAL 1**

6'' CAP  
 6 & 4 1/2''  
 BLACK/ORANGE



**SPECIAL 2**

6'' CAP  
 6 & 4 1/2''  
 BLACK/ORANGE



**SPECIAL 3**

6'' CAP  
 6 & 4 1/2''  
 BLACK/ORANGE



**SPECIAL 4**

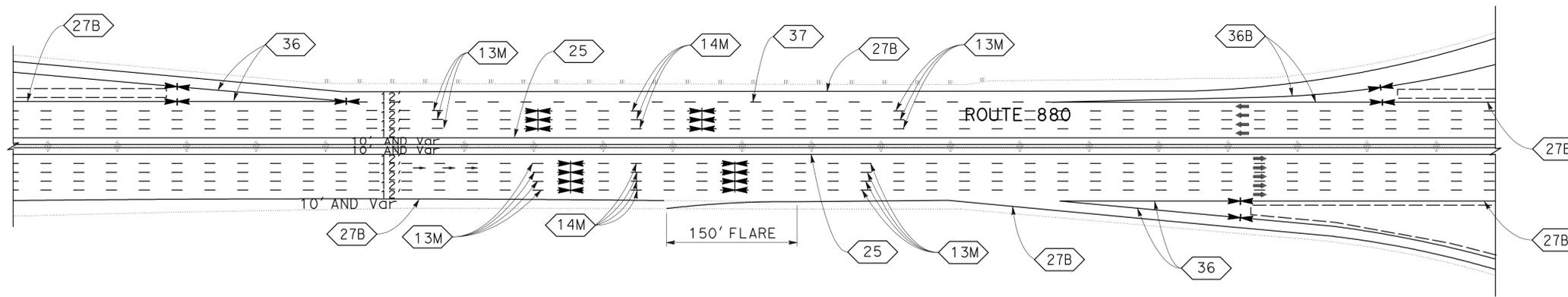
6'' CAP  
 6 & 4 1/2''  
 BLACK/ORANGE

## CONSTRUCTION AREA SIGNS

NO SCALE

**CS-12**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	19	64
William H. Fong REGISTERED CIVIL ENGINEER			3-29-10 DATE	William H. Fong No. 61187 Exp. 6-30-11 CIVIL	
5-24-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



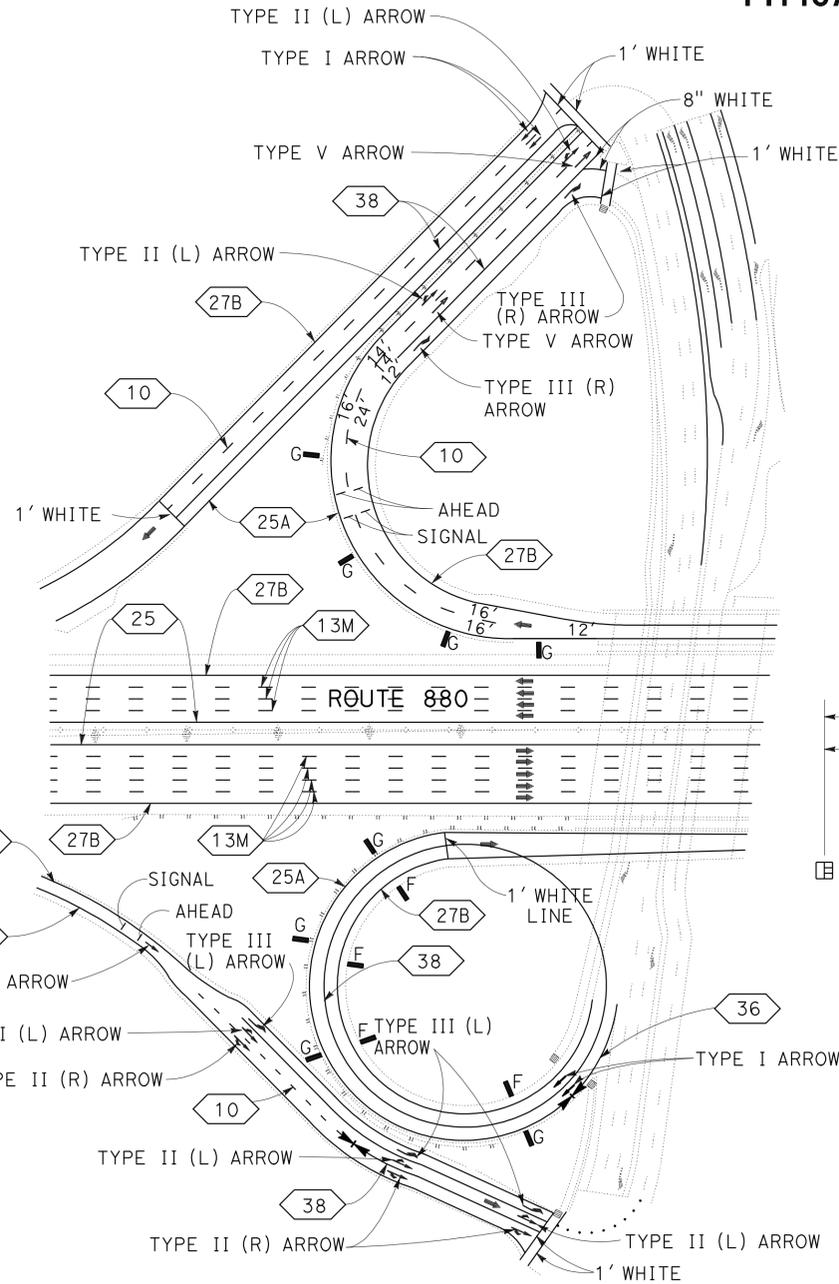
**TYPICAL STRIPING (MAINLINE)**

**LEGEND:**

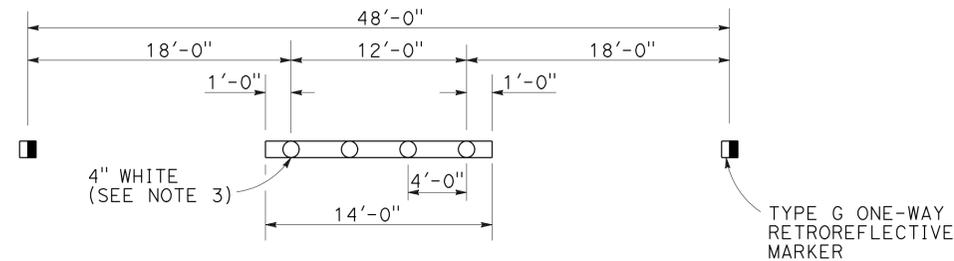
- PAVEMENT DELINEATION DETAIL
- CHANGE OF PAVEMENT DELINEATION DETAILS
- DIRECTION OF TRAFFIC
- DELINEATION (CLASS 1) TYPE G
- DELINEATION (CLASS 1) TYPE F

**NOTE:**

ALL PAVEMENT DELINEATION SHALL BE PLACED ON THE SAME ALIGNMENT AND LOCATIONS AS EXISTING PAVEMENT DELINEATION



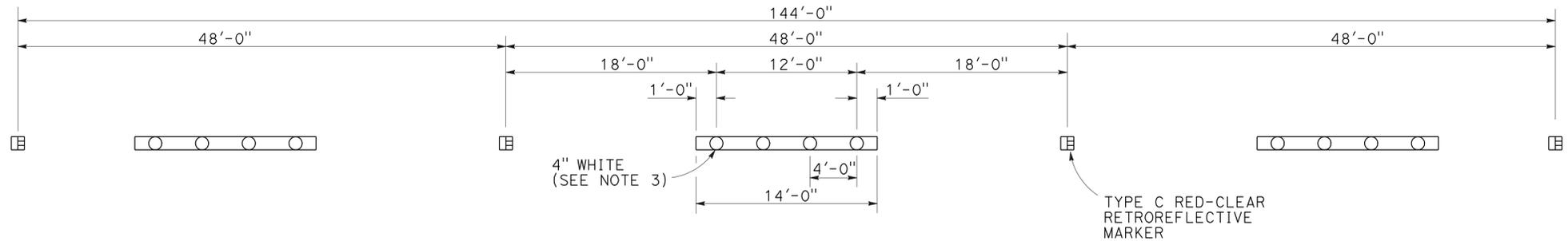
**TYPICAL STRIPING (ON-RAMP AND OFF-RAMP)**



**DETAIL 13M**

**NOTES:**

1. DETAIL 13M IS MODIFIED PAVEMENT DELINEATION DETAIL 13.
2. FOR DETAILS NOT SHOWN, SEE STANDARD PLAN A20A.
3. INSTALL 4" WHITE AFTER INSTALLING PAVEMENT MARKERS.



**DETAIL 14M**

**NOTES:**

1. DETAIL 14M IS MODIFIED PAVEMENT DELINEATION DETAIL 14.
2. FOR DETAILS NOT SHOWN, SEE STANDARD PLAN A20A.
3. INSTALL 4" WHITE AFTER INSTALLING PAVEMENT MARKERS.

**PAVEMENT DELINEATION PLAN**  
NO SCALE

**PD-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CHECKED BY: MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY: WILLIAM FONG  
 REVISOR: MICHAEL NGUYEN  
 DATE REVISOR: 3/29/10  
 WF

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	20	64

William H. Fong 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 William H. Fong  
 No. 61187  
 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.

### TRAFFIC STRIPES, PAVEMENT MARKING AND PAVEMENT MARKERS (RAMPS)

DESCRIPTION	PM	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	PAVEMENT MARKER				THERMO-PLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE							
				NON-REFLECTIVE	RETROREFLECTIVE				WHITE	YELLOW		WHITE				
					TYPE A	TYPE C	TYPE G			TYPE H	4 INCH	4 INCH	4 INCH (BROKEN 17-7)	4 INCH (BROKEN 36-12)	8 INCH (BROKEN 12-3)	8 INCH
				EA					SQFT	LF						
SB OFF-RAMP TO SB ROUTE 280	0.0	25A 27B	770				34		770							
SEGMENT FROM NB DIAGONAL OFF-RAMP TO NB ON-RAMP TO ROUTE 880	0.4	25A 27B	1427				60		1427	670						
		36 38				5 5							95 102			
		8									66					
		LIMIT LINE						596								
		25A 27B	3400				144		3400							
SEGMENT SB OFF-RAMP TO ROUTE 280	0.0	13M 36 36B					9 14 16			3000 102						
		37 38A				68						990		432		
		TO SB 17 TO SB 280						44 44								
		25A 27B	720				30		720		720					
		TYPE V ARROW							66							
		25A 27B	650				30		650		650					
SB DIAGONAL ON-RAMP		13M 38A					8							50		
		TYPE VI ARROW TYPE V ARROW							84 66							
		25A 27B	460				20		460	440						
NB LOOP ON-RAMP		25A 27B	600				28		600	600						
		TYPE I ARROW 24'							31							
NB DIAGONAL ON-RAMP		25A 27B	640				27		640	640						
		25A 27B	600				28		600	600						
SB LOOP ON-RAMP		TYPE I ARROW 24'							31							
		25A 27B	470				22		470	490						
SB DIAGONAL OFF-RAMP		13M 38					17 3			192				48		
		TYPE IV ARROW (R)							30							
		TYPE V ARROW							66							
SB DIAGONAL ON-RAMP		25A 27B	560				26		560							
		13M									560					
		TYPE I ARROW 24'							31		164					
NB DIAGONAL OFF-RAMP		25A 27B	520				22		520	520						
		LIMIT LINE							32							
SB LOOP ON-RAMP		25A 27B	330				16		330	330						
		TYPE I ARROW 24'							31							
NB DIAGONAL ON-RAMP	1.3	25A 27B	570				24		570	570						
		LIMIT LINE TYPE I ARROW 18'							62 25							
SB DIAGONAL OFF-RAMP		25A 27B	600				28		600	600						
		TYPE III (L) ARROW TYPE VI ARROW							42 84							
SHEET TOTAL			12317				173	68	90	539	1365	12317	12362	66	990	1255

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CHECKED BY: MICHAEL NGUYEN  
 WILLIAM FONG  
 MICHAEL NGUYEN  
 REVISOR: WILLIAM FONG  
 DATE REVISOR: 3/29/10  
 WF  
 3/29/10

## PAVEMENT DELINEATION QUANTITIES

### PDQ-1

LAST REVISION DATE PLOTTED => 31-AUG-2010 05-24-10 TIME PLOTTED => 09:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	21	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE

5-24-10  
 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.

### TRAFFIC STRIPES, PAVEMENT MARKING AND PAVEMENT MARKERS (RAMPS)

DESCRIPTION	PM	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	PAVEMENT MARKER			THERMO-PLASTIC PAVEMENT MARKING WHITE	THERMOPLASTIC TRAFFIC STRIPE							
				NON-REFLECTIVE TYPE A	RETROREFLECTIVE			WHITE SQFT	YELLOW 4 INCH	WHITE					
					TYPE C	TYPE G				TYPE H	4 INCH (BROKEN 17-7)	4 INCH (BROKEN 36-12)	8 INCH (BROKEN 12-3)	8 INCH	
NB LOOP OFF-RAMP	1.3	25A	320			14		320							
SB DIAGONAL ON-RAMP		27B							320						
		25A	600			28		600		600					
NB DIAGONAL OFF-RAMP	2.1	27B													
		38A											20		
		25A	700			30		700		700					
		27B													
SB DIAGONAL OFF-RAMP		38				8								153	
		LIMIT LINE													
		TYPE I ARROW 18'							116						
		TYPE III ARROW (L)							25						
NB LOOP ON-RAMP		TYPE V ARROW							84						
		25A	800												
		27B													
		38A													
NB DIAGONAL ON-RAMP		TYPE VI ARROW							33						
		25A	479			36		800		800					
		27B													
		38A												40	
NB DIAGONAL ON-RAMP		TYPE VI ARROW							42						
		25A	420			20		479		479					
		27B													
		LIMIT LINE													
NB DIAGONAL OFF-RAMP	3.6	25A	755						48						
		27B													
		38													
		LIMIT LINE													
SB DIAGONAL OFF-RAMP		25A	750						53						
		27B													
		38													
		LIMIT LINE													
NB LOOP ON-RAMP		TYPE V ARROW							106						
		25A	615			17		755		755				380	
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE VI ARROW							33						
		25A	750												
		27B													
		38A													
NB LOOP ON-RAMP		TYPE VI ARROW							42						
		25A	615												
		27B													
		LIMIT LINE													
SB LOOP ON-RAMP		TYPE I ARROW 18'							90						
		25A	685			34		750		750					
		27B													
		38A													
NB DIAGONAL ON-RAMP		TYPE VI ARROW							42						
		25A	615												
		27B													
		LIMIT LINE													
SB DIAGONAL OFF-RAMP		TYPE I ARROW 18'							73						
		25A	685												
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE I ARROW 18'							25						
		25A	600			24		525		525					
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE I ARROW 24'							49						
		25A	600												
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE I ARROW 24'							25						
		25A	600			28		600		750					
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE I ARROW 24'							62						
		25A	600												
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE III(L) ARROW							42						
		25A	600												
		27B													
		38A													
SB DIAGONAL OFF-RAMP		TYPE III(B) ARROW							73						
		25A	600												
		27B													
		38A													
SHEET TOTAL			6724			34	319	1714	6724	7614				1012	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION DESIGN  
 FUNCTIONAL SUPERVISOR MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY CHECKED BY  
 WILLIAM FONG MICHAEL NGUYEN  
 REVISED BY DATE REVISED  
 WF 3/29/10

## PAVEMENT DELINEATION QUANTITIES PDQ-2

LAST REVISION DATE PLOTTED => 31-AUG-2010 05-24-10 TIME PLOTTED => 09:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	22	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE

5-24-10  
 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.

### TRAFFIC STRIPES, PAVEMENT MARKING AND PAVEMENT MARKERS (MAINLINE-NORTHBOUND)

DESCRIPTION	PM	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	PAVEMENT MARKER				THERMO-PLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE					
				NON-REFLECTIVE	RETROREFLECTIVE				WHITE	YELLOW	WHITE			
					TYPE A	TYPE C	TYPE G				TYPE H	4 INCH	4 INCH (BROKEN 17-7)	4 INCH (BROKEN 36-12)
				EA					SQFT	LF				
FROM 280/880 SEPARATION TO STEVENS CREEK Blvd	0.0/0.4	13M		352		88					4224			
		25	2112			44		2112						
		27B								2256				
		36A				8					160			188
FROM STEVENS CREEK Blvd TO BASCOM AVENUE	0.4/1.3	13M		768		192						9216		
		14M		24	8							288		
		25	4752			99		4752						
		27B								4752				
		36				20								480
		36B				14								322
		37				190	4						2864	
		38B					10							118
		LIMIT LINE						110						
		EXIT ONLY						72						
						66								
FROM BASCOM AVENUE TO ROUTE 82/THE ALAMEDA	1.3/2.1	13M		680		170						8160		
		14M		24	8							288		
		25	4224			88		4224						
		27B								4439				
		36				30								700
		36B				6								140
		37				196	4						2995	
		EXIT ONLY						48						
		MARKER (A)						44						
		13M			110									
14M			504		126						6048			
25		3168		24	8						288			
27B						66		3168		3168				
36					7								112	
36A					4					300			92	
37					38	4						548		
38					8								183	
38B					30								354	
13M				768	8	192					9216			
14M				24							288			
25	4752					99		4752						
27B									4892					
36					14								316	
36A					15					396			350	
13M				592		148					7104			
14M				24	8						288			
25	3696					77		3696		3696				
27B														
36					22								504	
36A					6					200			120	
36B					4								94	
37					108	4						1610		
LIMIT LINE								355						
EXIT ONLY								72						
								66						
20								19.5						
MPH								20						
<b>SHEET TOTAL</b>			22704	3894	572	1130	473	872.5	22704	23203	1056	45408	8017	4073

## PAVEMENT DELINEATION QUANTITIES

**PDQ-3**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	23	64

William H. Fong 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 William H. Fong  
 No. 61187  
 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.

### POSTMILE MARKING ON CONCRETE BARRIER (MAINLINE)

DESCRIPTION	POSTMILE MARKING
	SQFT
SOUTHBOUND (PM 0.0 TO 4.3)	125
NORTHBOUND (PM 0.0 TO 4.3)	125
TOTAL	250

### TRAFFIC STRIPES, PAVEMENT MARKING AND PAVEMENT MARKERS (MAINLINE-SOUTHBOUND)

DESCRIPTION	PM	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	PAVEMENT MARKER				THERMO-PLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE						
				NON-REFLECTIVE	RETROREFLECTIVE				WHITE	YELLOW			WHITE		
					TYPE A	TYPE C	TYPE G			TYPE H	4 INCH	4 INCH	4 INCH (BROKEN 17-7)	4 INCH (BROKEN 36-12)	8 INCH (BROKEN 12-3)
			LF		EA			SQFT	LF						
FROM 280/880 SEPARATION TO STEVENS CREEK Blvd OC	0.0/0.4	25	2112				44	2112							
		27B							2112						
		13M		328			82						3936		
		14M		24	8		46						288		1056
STEVENS CREEK Blvd OC TO BASCOM AVENUE UC	0.4/1.3	36													
		25	4752				99	4752							
		27B							4752						
		13M		768			192						9216		
BASCOM AVENUE UC TO ROUTE 82/THE ALAMEDA OC	1.3/2.1	14M		24	8								288		
		8									336				
		37				107								3168	
		36					22								480
ROUTE 82/THE ALAMEDA OC TO COLEMAN Ave OC	2.1/2.7	36A					7								144
		25	4224				88	4224		144					
		27B							4224						
		13M		680			170						8160		
COLEMAN Ave OC TO NORTH FIRST STREET UC	2.7/3.6	14M		24	8								288		
		8									360				
		37				65								1920	
		36					26								576
NORTH FIRST STREET OC TO OLD BAYSHORE Hwy	3.6/4.3	36A					10								240
		25	3168				66	3168		240					
		27B							3168						
		13M		504			126						6048		
SHEET TOTAL		14M		24	8								288		
		8									408				
		37				24								690	
		36					22								480
TOTAL SHEET PDQ-1		36A													288
		25	4725				98	4725		624					624
		27B							4725		5225				
		13M		768			192						9216		
TOTAL SHEET PDQ-2		14M		24	8								288		
		8									96				
		37				15								420	
		TYPE VI ARROW							126						
TOTAL SHEET PDQ-3		36													288
		36A													576
		25	3696				77	3696		576					
		27B							3696						
SUBTOTAL		13M		592			148						7104		
		14M		24	8								288		
		8										192			
		TYPE VI ARROW							126						
GRAND TOTAL		36													480
		36A													384
		SHEET TOTAL	22677	3784	295	1158	472	252	22677	25145	1392	45408	6198	5328	
		TOTAL SHEET PDQ-1	12317	173	68	90	539	1365	12317	12362	66	990	1255		
TOTAL SHEET PDQ-2	6724			34	319	1714	6724	7614			1012				
TOTAL SHEET PDQ-3	22704	3894	572	1130	473	872.5	22704	23203	1056	45408	8017	4073			
SUBTOTAL	64422	7851	935	2412	1803	4203.5	64422	68324	2514	90816	15205	11668			
GRAND TOTAL	64422	7851		5150		4203.5		132746	2514	90816	15205	11668			

### PAVEMENT DELINEATION QUANTITIES

PDQ-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION DESIGN  
 WILLIAM FONG  
 MICHAEL NGUYEN  
 FUNCTIONAL SUPERVISOR  
 MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 REVISOR BY  
 DATE REVISOR  
 WF  
 3/29/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	24	64
<i>William H. Fong</i> 3-29-10 REGISTERED CIVIL ENGINEER DATE					
5-24-10			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

### METAL BEAM GUARD RAILING MAINLINE - NORTHBOUND

LOCATION (FROM PM TO PM)	PM	LAYOUT TYPE (N)	REMOVE MBGR	INSTALL MBGR					OBJECT MARKERS	
				MBGR	ALTERNATIVE FLARED TERMINAL SYSTEM	ALTERNATIVE IN-LINE TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	TRANSITION RAILING (TYPE WB)	(TYPE L-1)	(TYPE P)
FROM CONSTRUCTION ROUTE 280/880 SEPARATION TO STEVENS CREEK Blvd OC (0.0/0.4)	0.1	16B	25.0	25.0	1		1		1	
	0.2	16A	25.0	25.0		1	1			1
	0.41		75.0							
STEVENS CREEK Blvd OC TO BASCOM Ave UC (0.4/1.3)	0.7	12B	25.0	25.0	1			1	1	
	1.3	12B	62.5	62.5	1			1	1	
	1.3	12BB	62.5	62.5	1		1	1		
BASCOM Ave UC TO THE ALAMEDA/ROUTE 82 OC (1.3/2.1)	1.7	12B	62.5	62.5	1			1	1	
	1.9	16B	25.0	25.0	1		1			
	2.1	12B	62.5	62.5	1			1	1	
COLEMAN Ave OC TO NORTH FIRST St UC (2.7/3.6)	3.1	16B	75.0	75.0	1		1		1	
	3.1	12B	62.5	62.5	1			1	1	
	3.15	12DD		100.0			1			
	3.4		25.0	25.0			1			1
	3.6	12B	50.0	50.0	1			1	1	
NORTH FIRST St UC TO OLD BAYSHORE Hwy (3.6/4.3)	3.8	12B	50.0	50.0	1			1	1	
	3.9	16A	62.5	62.5		1	1		1	
	4.1	12B	62.5	62.5	1			1	1	
	4.1	12DD	62.5	62.5			1			
	4.3	12B	50.0	50.0	1			1	1	
SUBTOTAL (NB)			925.0	950.0	13	2	9	10	12	2

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

### METAL BEAM GUARD RAILING MAINLINE - SOUTHBOUND

LOCATION (FROM PM TO PM)	PM	LAYOUT TYPE (N)	REMOVE MBGR	INSTALL MBGR					OBJECT MARKERS	
				MBGR	ALTERNATIVE FLARED TERMINAL SYSTEM	ALTERNATIVE IN-LINE TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	TRANSITION RAILING (TYPE WB)	(TYPE L-1)	(TYPE P)
NORTH FIRST St UC TO OLD BAYSHORE Hwy (4.3/3.6)	4.10							1	1	
	4.05	12DD	62.5	62.5			1			
	3.65	12B	187.5	187.5	1			1	1	
COLEMAN Ave OC TO NORTH FIRST St UC (3.6/2.7)	3.15		12.5	100.0				1		
THE ALAMEDA/ROUTE 82 OC TO COLEMAN Ave OC (2.7/2.1)	2.11	12B	25.0	25.0	1			1	1	
STEVENS CREEK Blvd OC TO BASCOM Ave UC TO BASCOM Ave UC (1.3/0.4)	1.25	12B	87.5	87.5	1			1	1	
	0.41		75.0							
BEGIN CONSTRUCTION ROUTE 280/880 SEPARATION TO STEVENS CREEK Blvd OC (0.4/0.0)	0.2	2 SIDES	125.0	125.0			2			
	0.05	2 SIDES	100.0	100.0			2			
SUBTOTAL (SB)			675.0	687.5	3		5	5	4	
SUBTOTAL (NB)			925.0	950.0	13	2	9	10	12	2
TOTAL			1600.0 *	1637.5 *	16 *	2 *	14 *	15 *	16 *	2 *

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

\* FOR TOTAL MBGR QUANTITY, SEE Q-2

## SUMMARY OF QUANTITIES

Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 KEITH FANG  
 WILLIAM FONG  
 REVISOR: KEITH FANG  
 DATE: 3/29/10  
 WF  
 3/29/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	25	64

William H. Fong 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

William H. Fong  
 No. 61187  
 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.

### METAL BEAM GUARD RAILING ON SOUTHBOUND RAMPS

LOCATION	PM	LAYOUT TYPE (N)	REMOVE MBGR	INSTALL MBGR						OBJECT MARKERS	
				MBGR	ALTERNATIVE FLARED TERMINAL SYSTEM	ALTERNATIVE IN-LINE TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	BURIED POST ANCHOR (N)	TRANSITION RAILING (TYPE WB)	(TYPE L-1)	(TYPE P)
SB OFF-RAMP TO SB ROUTE 280	0.0	16B	162.5	162.5	1		1			1	
		16B	75.0	75.0	1		1			1	
		16B	50.0	50.0	1		1			1	
		16C	87.5	87.5			1	1		1	
			75.0	75.0			2			1	
SEGMENT SB OFF-RAMP (Approx FROM FOREST Ave UC) TO ROUTE 280	0.0	12B	50.0	50.0	1				1	1	
		12B	62.5	62.5	1				1	1	
		16B	25.0	25.0	1		1			1	
SB Diag ON-RAMP	0.4	12B	62.5	62.5	1			1	1		
SB Diag ON-RAMP	1.3	12B	25.0	25.0	1			1	1		
SB Diag ON-RAMP	2.1	11B	137.5	137.5	1		1			1	
SB Diag OFF-RAMP		11B	87.5	87.5	1		1			1	
SB Diag ON-RAMP	3.6	11A	37.5	37.5		1	1				1
SUBTOTAL (SB)			962.5	962.5	11	1	11	1	4	13	1

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

### METAL BEAM GUARD RAILING ON NORTHBOUND RAMPS

LOCATION	PM	LAYOUT TYPE (N)	REMOVE MBGR	INSTALL MBGR						OBJECT MARKERS	
				MBGR	ALTERNATIVE FLARED TERMINAL SYSTEM	ALTERNATIVE IN-LINE TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	BURIED POST ANCHOR (N)	TRANSITION RAILING (TYPE WB)	(TYPE L-1)	(TYPE P)
NB Diag ON-RAMP	2.1	12B	63.0	63.0	1		1		1	1	
SUBTOTAL (NB RAMPS)			63.0	63.0	1		2		1	2	
SUBTOTAL (SB RAMPS)			962.5	962.5	11	1	11	1	4	13	1
TOTAL			1025.5	1025.5	12	1	13	1	5	15	1
TOTAL FROM Q-1			1600.0	1637.5	16	2	14		15	16	2
GRAND TOTAL			2625.5	2633.0	28	3	27	1	20	31	3

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

## SUMMARY OF QUANTITIES

Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION DESIGN  
 FUNCTIONAL SUPERVISOR MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY KEITH FANG CHECKED BY WILLIAM FONG  
 REVISIONS: WF 3/29/10  
 REVISIONS: DATE REVISIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	26	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 William H. Fong  
 No. 61187  
 Exp. 6-30-11  
 CIVIL  
 STATE OF CALIFORNIA

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### ROADWAY QUANTITY (RAMPS)

PM	LOCATION	RHMA (TYPE G)	TACK COAT	COLD PLANE AC PAVEMENT (0.15 Ft)
		TON		SQYD
0	SB OFF-RAMP TO SB ROUTE 280	133.00	0.28	1311
0.4	SEGMENT FROM NB Diag OFF-RAMP TO NB ON-RAMP TO ROUTE 880	469.62	0.98	4638
0	SEGMENT SB OFF-RAMP TO ROUTE 280	955.00	2.01	9431
0.4	NB Diag OFF-RAMP	122.40	0.25	1209
0.4	SB Diag ON-RAMP	154.00	0.32	1516
0.4	NB LOOP ON-RAMP	126.75	0.26	1252
0.4	SB LOOP OFF-RAMP	87.00	0.18	855
0.4	NB Diag ON-RAMP	97.20	0.20	960
0.4	SB LOOP ON-RAMP	81.00	0.17	803
0.4	SB Diag OFF-RAMP	124.00	0.26	1226
1.3	SB Diag ON-RAMP	128.00	0.27	1265
1.3	NB Diag OFF-RAMP	130.61	0.27	1290
1.3	SB Diag ON-RAMP	65.00	0.14	641
1.3	NB Diag ON-RAMP	182.25	0.38	1800
1.3	SB Diag OFF-RAMP	128.00	0.27	1268
1.3	NB LOOP OFF-RAMP	96.00	0.20	949
2.1	SB Diag ON-RAMP	92.00	0.19	907
2.1	NB Diag OFF-RAMP	252.11	0.52	2490
2.1	SB Diag OFF-RAMP	209.00	0.44	2065
2.1	NB LOOP ON-RAMP	124.00	0.26	1225
2.1	NB Diag ON-RAMP	131.12	0.27	1295
3.6	NB Diag OFF-RAMP	301.56	0.63	2978
3.6	SB Diag ON-RAMP	99.00	0.21	977
3.6	NB LOOP ON-RAMP	162.59	0.34	1606
3.6	SB LOOP ON-RAMP TO ROUTE 880	86.00	0.18	845
3.6	NB Diag ON-RAMP	123.30	0.25	1218
3.6	SB Diag OFF-RAMP	165.00	0.35	1634
TOTAL FOR RAMPS (NB & SB)		4825.51 *	10.08 *	47654 *

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

### SUMMARY OF QUANTITIES

REVISOR: WF  
 DATE: 3/10

REVISOR: KEITH FANG  
 DATE: WILLIAM FONG

DESIGNED BY: KEITH FANG  
 CHECKED BY: WILLIAM FONG

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	27	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

William H. Fong  
 No. 61187  
 Exp. 6-30-11  
 CIVIL

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

**ROADWAY QUANTITY FOR AC DIGOUTS MAINLINE (SOUTHBOUND)**

LOCATION (FROM PM TO PM)	PM	LANE 1		LANE 2		LANE 3		LANE 4		COLD PLANE AC PAVEMENT (0.10 Ft)	TACK COAT	RHMA (G)
		LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH			
		LF										
ROUTE 280/880 SEPARATION TO BASCOM Ave UC (0.0/0.4)	0.02					50	12			66.7	0.02	4.5
	0.10	100	12			100	12			266.7	0.07	18.0
	0.15					100	12			133.3	0.03	9.0
	0.20					100	12			133.3	0.03	9.0
	0.30					150	12			333.3	0.08	13.5
STEVENS CREEK Blvd OC TO BASCOM Ave UC (0.4/1.3)	0.50					100	12			133.3	0.03	9.0
	0.60					150	12			200.0	0.05	13.5
	0.70			50	12	300	12			406.2	0.102	31.5
	0.80					300	12	100	12	533.3	0.13	36.0
	0.91					50	12			66.7	0.02	4.5
	1.00					50	12	50	12	133.3	0.03	9.0
	1.10					150	12			200.0	0.05	13.5
BASCOM Ave UC TO THE ALAMEDA/ROUTE 82 OC (1.3/2.1)	1.20					250	12			333.3	0.08	22.5
	1.40					150	12			200.0	0.05	13.5
	1.80	100	12	200	12	200	12	400	12	1200.0	0.30	81.0
	2.00					300	12			400.0	0.10	27.0
THE ALAMEDA/ROUTE 82 OC TO COLEMAN Ave OC (2.1/2.7)	2.07					158	12			211.2	0.05	14.3
	2.50					100	12			133.3	0.03	9.0
COLEMAN Ave OC TO NORTH FIRST St UC (2.7/3.6)	2.70					150	12			200.0	0.05	13.5
	2.78					250	12			333.4	0.09	22.5
	3.25	200	12	200	12	150	12			733.3	0.18	49.5
	3.30	70	12	70	12	70	12			280.0	0.07	18.9
	3.35					130	12			173.3	0.04	11.7
	3.40					250	12			333.3	0.08	22.5
	3.50	200	12	350	12	350	12			1232.4	0.306	70.3
NORTH FIRST St UC TO OLD BAYSHORE Hwy (2.7/3.6)	3.60	150	12	230	12	230	12			829.9	0.206	76.4
	3.70			75	12	75	12			200.0	0.05	13.5
	3.82	310	12	310	12	310	12	70	12	1333.3	0.33	90.0
	3.90							155	12	206.7	0.05	14.0
SUBTOTAL (SB)	3.95	40	12			50	12	120	12	280.0	0.07	18.9
	3.98					45	12	220	12	353.3	0.09	23.9
SUBTOTAL (SB)										11572.8 *	2.86 *	783.9 *

\* FOR TOTAL QUANTITY, SEE Q-5

**SUMMARY OF QUANTITIES**  
**Q-4**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	28	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE

5-24-10  
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
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### ROADWAY QUANTITY FOR AC DIGOUTS MAINLINE (NORTHBOUND)

LOCATION (FROM PM TO PM)	PM	LANE 1		LANE 2		LANE 3		LANE 4		COLD PLANE AC PAVEMENT (0.10 Ft)	TACK COAT	RHMA (G)
		LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH	LENGTH	WIDTH			
		LF										
FROM ROUTE 280/880 SEPARATION TO STEVENS CREEK Blvd (0.0/0.4)	0.02	100	12	200	12	200	12			666.7	0.17	45.00
FROM STEVENS CREEK Blvd TO BASCOM Ave (0.4/1.3)	0.60			150	12	200	12			466.7	0.12	31.5
	0.85					50	12			66.7	0.02	4.5
	0.91					50	12	100	12	200.0	0.05	13.5
	1.20			100	12	100	12			266.7	0.07	18.0
	1.24					25	12	25	12	66.7	0.02	4.5
FROM BASCOM Ave TO ROUTE 82/ THE ALAMEDA (1.3/2.1)	1.30					150	12			200.0	0.05	13.5
	1.40			100	12	150	12			333.3	0.08	22.5
	1.50					15	12			20.0	0.01	1.4
	1.55					15	12			20.0	0.01	1.4
	1.70							40	12	53.3	0.01	3.6
FROM ROUTE 82/THE ALAMEDA TO COLEMAN Ave (2.1/2.7)	1.80	50	12	50	12	50	12			200.0	0.05	13.5
	2.15					30	12			40.0	0.01	2.7
	2.20					100	12	100	12	266.7	0.07	18.0
	2.60			50	12	50	12			133.3	0.03	9.0
	2.70			50	12	300	12			466.7	0.12	31.5
	2.80					100	12			133.3	0.03	9.0
	2.90			30	12					40.0	0.01	2.7
FROM COLEMAN Ave TO NORTH FIRST STREET (2.7/3.6)	3.00					300	12			400.0	0.10	27.0
	3.10					200	12			266.7	0.07	18.0
	3.20	20	10	150	12	50	12			533.3	0.13	36.0
	3.25			20	12					26.7	0.01	1.8
	3.30			100	12	25	12			166.7	0.04	11.3
FROM NORTH FIRST STREET TO OLD BAYSHORE Hwy (3.6/4.3)	3.60	25	12	100	12	25	12			233.3	0.06	13.5
	3.70					150	12			133.3	0.03	13.5
	3.82							50	12	66.7	0.02	4.5
SUBTOTAL (NB)										5466.8	1.39	371.3
SUBTOTAL (SB)										11572.8	2.86	783.9
TOTAL FOR MAINLINE (SB & NB)										17039.6*	4.25*	1155.2*

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY: KEITH FANG  
 CHECKED BY: WILLIAM FONG  
 REVISED BY: WF  
 DATE REVISED: 3/29/10

## SUMMARY OF QUANTITIES

**Q-5**



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR  
 MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY  
 KEITH FANG  
 CHECKED BY  
 WILLIAM FONG  
 REVISED BY  
 DATE REVISED  
 3/29/10  
 WF

**ROADWAY QUANTITY SUMMARY (MAINLINE - NORTHBOUND)**

LOCATION (FROM PM TO PM)	COLD PLANE AC PAVEMENT 0.25 FT	CONCRETE BARRIER	HMA (OGFC)	TACK COAT	RHMA (TYPE G)
	SQYD	LF	TON		
FROM 280/880 ROUTE SEPARATION TO STEVENS CREEK Blvd (0.0/0.4)	14112	12.5	952.6	3.06	1428.89
FROM STEVENS CREEK Blvd TO BASCOM Ave (0.4/1.3)	29685		2003.7	6.43	3005.63
FROM BASCOM Ave TO ROUTE 82/THE ALAMEDA (1.3/2.1)	24580		1659.2	5.33	2488.79
FROM ROUTE 82/THE ALAMEDA TO COLEMAN Ave (2.1/2.7)	20705		1397.6	4.49	2096.45
FROM COLEMAN Ave TO NORTH FIRST STREET (2.7/3.6)	29933		2020.5	6.49	3030.72
FROM NORTH FIRST STREET TO OLD BAYSHORE Hwy (3.6/4.3)	23146		1562.4	5.01	2343.62
SUBTOTAL (NB)	142161	12.5	9596.0	30.81	14394

**ROADWAY QUANTITY SUMMARY (MAINLINE - SOUTHBOUND)**

LOCATION (FROM PM TO PM)	COLD PLANE AC PAVEMENT 0.25 FT	CONCRETE BARRIER	HMA (OGFC)	TACK COAT	RHMA (TYPE G)
	SQYD	LF	TON		
BEGIN CONSTRUCTION ROUTE 280/880 SEPARATION TO STEVENS CREEK Blvd OC (0.0/0.4)	12659	12.5	854	2.74	1282
STEVENS CREEK Blvd OC TO BASCOM Ave UC (0.4/1.3)	36569		2468	7.92	3703
BASCOM Ave UC TO ROUTE 82/THE ALAMEDA OC (1.3/2.1)	30439		2055	6.60	3082
ROUTE 82/THE ALAMEDA OC TO COLEMAN Ave OC (2.1/2.7)	20749		1401	4.50	2101
COLEMAN Ave OC TO NORTH FIRST STREET UC (2.7/3.6)	27290		1842	5.91	2763
NORTH FIRST STREET UC TO OLD BAYSHORE Hwy (3.6/4.3)	32941		2224	7.14	3335
SUBTOTAL (SB)	160647	12.5	10844	34.81	16266
TOTAL FOR MAINLINE (NB & SB)	302808 *	25.0 *	20440 *	65.62 *	30660 *

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	29	64

William H. Fong 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 William H. Fong  
 No. 61187  
 Exp. 6-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS  
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
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**SUMMARY OF QUANTITIES**



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR  
 MICHAEL NGUYEN  
 CALCULATED/DESIGNED BY  
 KEITH FANG  
 WILLIAM FONG  
 REVISOR BY  
 DATE REVISION  
 WF  
 3/29/10

### REMOVE AC DIKE AND HMA DIKE (MAINLINE - SOUTHBOUND)

BEGIN	PM	END	PM	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE C)	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
				LF				TON
NORTH OF Jct Rte 880/101 Sep	4.07	Jct Rte 880/101 Sep	4.06	150	50	40	110	2.52
SOUTH OF Jct Rte 880/101 Sep	4.06	SOUTH OF Jct Rte 880/101 Sep	4.05	125	50	60	65	2.45
NORTH OF NORTH FIRST UC	3.61	NORTH FIRST St UC	3.56	285	50	30	255	4.20
SOUTH OF NORTH FIRST UC	3.51	NORTH OF GUADALUPE RIVER BRIDGE	3.44	360	60	360		9.48
NORTH OF GUADALUPE RIVER BRIDGE	3.44	GUADALUPE RIVER BRIDGE	3.15	1315	75	1315		34.62
NORTH OF COLEMAN St OC	2.75	NORTH OF COLEMAN St OC	2.68	355	50	280	75	8.37
NORTH OF COLEMAN St OC	2.67	COLEMAN St OC	2.66	250	50	150	100	5.29
SOUTH OF COLEMAN St OC	2.64	SOUTH OF COLEMAN St OC	2.63	170	50	170		4.48
NORTH OF Jct Rte 82/880	2.09	PARK Ave OC	1.73	1900	75	1900		50.02
SOUTH OF PARK Ave OC	1.53	NORTH OF BASCOM Ave UC	1.47	400	50	400		10.53
NORTH OF BASCOM Ave UC	1.43	NORTH OF BASCOM Ave UC	1.42	150	50	50	100	2.65
NORTH OF BASCOM Ave UC	1.37	NORTH OF BASCOM Ave UC	1.36	90	50	90		2.37
FOREST Ave UC	0.67	SOUTH OF FOREST Ave UC	0.62	290	65	290		7.63
SOUTH OF STEVENS CREEK Blvd OC	0.40	CONNECTOR OC	0.09	1800	75	1800		47.39
SUBTOTAL (SB)				7640	800	6935	705	191.99

### REMOVE AC DIKE AND HMA DIKE (MAINLINE - NORTHBOUND)

BEGIN	PM	END	PM	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE C)	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
				LF				TON
200' NORTH OF CALL BOX	0.1	90' AFTER MBGR	0.1	153	50	87	66	3.17
AT END OF GORE AREA (START FROM END LIMIT OF RAMP#2)	0.6	200' SOUTHSIDE OF LIGHT POST 00744	0.6	180	50	180		4.73
PARK Ave OVERCROSSING	1.7	ALAMEDA DIAGONAL OFF-RAMP	1.9	1288	65	1288		33.90
ALAMEDA LOOP ON-RAMP	2.1	THE ALAMEDA BRIDGE	2.1	176	50	112	64	3.80
THE ALAMEDA/ROUTE 82	2.1	0.1 MILE NORTH OF ALAMEDA Ave OC	2.2	462	50	462		12.16
COLEMAN Ave OC	2.7	0.2 MILE NORTH OF COLEMAN Ave OC	2.9	970	50	970		25.53
0.2 MILE NORTH OF COLEMAN Ave OC	2.9	200' SOUTH OF GUADALUPE RIVER	3.1	2293	65	2060	233	57.34
150' NORTH OF GUADALUPE PARKWAY	3.2	START NORTH OF FIRST St Diag ON-RAMP	3.4	968		888	80	24.44
400' SOUTH OF NORTH FIRST St	3.5	170' SOUTH OF NORTH FIRST St	3.6	231	50	181	50	6.74
NORTH OF FIRST STREET	3.6	150' SOUTH OF NORTH FOURTH St	3.8	814	50	814		21.42
START NORTH FOURTH STREET	3.8	END OF Rte 101/880 SEPARATION DIAGONAL OFF-RAMP	3.9	760	65	692	70	19.15
ROUTE 101/880 SEPARATION LOOP ON-RAMP	4.1	ROUTE 101/880 SEPARATION	4.1	100	50	38	62	1.82
ROUTE 101/880 SEPARATION DIAGONAL ON-RAMP	4.2	ROUTE 101/880 SEPARATION DIAGONAL ON-RAMP	4.2	144	50	140		3.68
SUBTOTAL (NB)				8539	700	7912	625	217.88
SUBTOTAL (SB)				7640	800	6935	705	191.99
TOTAL (SB & NB)				16179*	1500*	14847*	1330*	409.87*

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

## SUMMARY OF QUANTITIES

**Q-7**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	30	64
			<i>William H. Fong</i> 3-29-10 REGISTERED CIVIL ENGINEER DATE		
			5-24-10 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.					

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	31	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE

5-24-10  
 PLANS APPROVAL DATE

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### REMOVE AC DIKE AND HMA DIKE NORTHBOUND RAMPS

LOCATION	L+/R+ IN DIRECTION OF TRAVEL	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
		LF			TON
SEGMENT FROM NB Diag OFF-RAMP TO NB ON-RAMP TO ROUTE 880	R+	490	490		12.89
NB Diag OFF-RAMP	R+	80	80		2.11
NB LOOP ON-RAMP	R+	440	440		11.58
NB Diag OFF-RAMP	R+	470	470		12.37
NB LOOP OFF-RAMP	R+	220	220		5.79
NB Diag OFF-RAMP	R+	550	550		14.47
NB LOOP ON-RAMP	R+	432	432		11.37
NB Diag ON-RAMP	R+	120	90	30	2.77
NB Diag OFF-RAMP	R+	250	250		6.58
NB LOOP ON-RAMP	R+	520	520		13.68
NB LOOP ON-RAMP	L+	34	34		.89
NB Diag ON-RAMP	R+	10	10		.26
SUBTOTAL (NB)		3616	3586	30	94.76

### REMOVE AC DIKE AND HMA DIKE SOUTHBOUND RAMPS

LOCATION	L+/R+ IN DIRECTION OF TRAVEL	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
		LF			TON
SB OFF-RAMP TO SB ROUTE 280	L+	376	376		9.90
SB OFF-RAMP TO SB ROUTE 280	R+	122	122		3.21
SEGMENT SB OFF-RAMP TO ROUTE 280	R+	275	275		7.24
SB Diag ON-RAMP	R+	125	125		3.29
SB LOOP ON-RAMP	R+	250	250		6.58
SB Diag OFF-RAMP	R+	250	250		6.58
SB Diag OFF-RAMP	R+	725	595	130	15.66
SB Diag ON-RAMP	R+	620	620		16.32
SB LOOP ON-RAMP	R+	395	395		10.40
SUBTOTAL (SB)		3138	3008	130	79.18
SUBTOTAL (NB)		3616	3586	30	94.76
GRAND TOTAL		6754 *	6594 *	160 *	173.94 *

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

## SUMMARY OF QUANTITIES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MICHAEL NGUYEN  
 CHECKED BY: KEITH FANG, MICHAEL NGUYEN  
 REVISIONS: WF 3/29/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	32	64

*William H. Fong* 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

William H. Fong  
 No. 61187  
 Exp. 6-30-11  
 CIVIL  
 STATE OF CALIFORNIA

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### HMA DIKE BELOW MBGR RAMPS

LOCATION	DIRECTION	L+/R+ IN DIRECTION OF TRAVEL	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
			LF		TON
SB OFF TO ROUTE 82	SB	R+	130	130	1.74
NB Diag ON-RAMP FROM ROUTE 82	NB	R+	30	30	2.77
TOTAL			160*	160*	4.51*

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

### HMA DIKE BELOW MBGR (MAINLINE NB)

BEGIN	PM	END	PM	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
				LF		TON
200' NORTHSIDE OF CALL BOX	0.1	90' AFTER MBGR	0.1	66	66	0.88
ALAMEDA LOOP ON-RAMP	2.1	ALAMEDA BRIDGE	2.1	64	64	0.85
150' NORTH OF GUADALUPE PARKWAY	3.2	START NORTH OF FIRST S+ DIAGONAL ON-RAMP	3.4	80	80	1.06
APPROACH NORTH FOURTH S+	3.6	SOUTH OF NORTH FOURTH S+	3.6	50	50	0.66
START NORTH FOURTH S+	3.8	END OF Rte 101/880 SEPARATION DIAGONAL OFF-RAMP	3.9	70	70	0.93
Rte 101/880 SEPARATION LOOP ON-RAMP	4.1	Rte 101/880 SEPARATION	4.1	62	62	0.82
SUBTOTAL (NB)				392	392	5.20

### HMA DIKE BELOW MBGR (MAINLINE SB)

BEGIN	PM	END	PM	REMOVE AC DIKE	PLACE HOT MIX ASPHALT DIKE (TYPE E)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	MINOR HOT MIX ASPHALT
				LF			TON
NORTH OF Jct Rte 880/101 Sep	4.07	Jct Rte 880/101 Sep	4.06	150	40	110	2.52
SOUTH OF Jct Rte 880/101 Sep	4.06	SOUTH OF Jct Rte 880/101 Sep	4.05	125	60	65	2.45
NORTH OF NORTH FIRST UC	3.61	NORTH FIRST S+ UC	3.56	285	30	255	4.20
NORTH OF COLEMAN S+ OC	2.75	NORTH OF COLEMAN S+ OC	2.68	355	280	75	8.37
NORTH OF COLEMAN S+ OC	2.67	COLEMAN S+ OC	2.66	250	150	100	5.29
NORTH OF BASCOM Ave UC	1.43	NORTH OF BASCOM Ave UC	1.42	150	50	100	2.65
SUBTOTAL (SB)				1315	610	705	25.48
SUBTOTAL (NB)				392		392	5.20
TOTAL				1707*	610*	1097*	30.68*

\* FOR TOTAL ROADWAY QUANTITIES, SEE Q-10

## SUMMARY OF QUANTITIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	33	64

William H. Fong 3-29-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE

William H. Fong  
 No. 61187  
 Exp. 6-30-11  
 CIVIL

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### ROADWAY QUANTITY SUMMARY

LOCATION	HMA (OGFC)	RHMA (TYPE G)	TACK COAT	COLD PLANE Exist AC PAVEMENT			CONCRETE BARRIER	REMOVE AC DIKE	PLACE HMA DIKE (TYPE C)	PLACE HMA DIKE (TYPE E)	PLACE HMA DIKE (TYPE F)	MINOR HOT MIX ASPHALT
				0.10 Ft	0.15 Ft	0.25 Ft						
				TON								
TOTAL FROM Q-3		4825.51	10.08		47654							
TOTAL FROM Q-5		1155.2	4.33	17039.6								
TOTAL FROM Q-6	20440	30660	65.62			302808	25					
TOTAL FROM Q-7								16179	1500	14847	1330	409.87
TOTAL FROM Q-8								6754		6594	160	173.94
TOTAL FROM Q-9 (RAMPS)								160			160	4.51
TOTAL FROM Q-9 (MAINLINE)								1707		610	1097	30.68
SUBTOTAL	20440	36654	80.03	17039.6	47654	302808	25	24800	1500	22051	2747	619
GRAND TOTAL	20440	36654	80.03	367501.6			25	24800	1500	22051	2747	619

### CRASH CUSHION

LOCATION	REMOVE CRASH CUSHION (SAND FILLED)	CRASH CUSHION (REACT 9SCBS)	TEMPORARY ALTERNATIVE CRASH CUSHION	TEMPORARY RAILING (TYPE K)
PM 0.41 (NORTHBOUND)	1	1		
PM 0.41 (SOUTHBOUND)	1	1		
SB OFF-RAMP TO ROUTE 280 (EAST SIDE)			1	60
SB OFF-RAMP TO ROUTE 280 (WEST SIDE)			1	60
TOTAL	2	2	2	120

### REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

LOCATION (PM)	LANE No.	No. OF SLAB	LENGTH	WIDTH	AREA	DEPTH	VOLUME	DOWEL BARS	TIE BARS
			Ft	SQFT	Ft	CY	EA (N)		
NB	1.734	1	16.4	12	196.8	0.67	24.4	276	148
		2	16.4	12	196.8	0.67	39.1		
		3	16.4	12	196.8	0.67	34.2		
NB	2.667	1	16.4	12	196.8	0.67	14.7	276	174
		2	16.4	12	196.8	0.67	44.0		
		3	16.4	12	196.8	0.67	39.1		
SB	1.734	1	16.4	12	196.8	0.67	39.1	312	186
		2	16.4	12	196.8	0.67	29.3		
		3	16.4	12	196.8	0.67	44.0		
SB	2.667	1	16.4	12	196.8	0.67	14.7	216	108
		2	16.4	12	196.8	0.67	19.5		
		3	16.4	12	196.8	0.67	39.1		
TOTAL							381.2	1080	616

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

### SALVAGE TEMPORARY RAILING (TYPE K)

LOCATION	LF
PM 3.25 (SOUTHBOUND)	480
PM 3.25 (NORTHBOUND)	300
TOTAL	780

## SUMMARY OF QUANTITIES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 Michael Nguyen  
 Functional Supervisor  
 William Fong  
 Keith Fang  
 Revised By  
 WF  
 3/29/10  
 Calculated/Designed By  
 Checked By

LAST REVISION | DATE PLOTTED => 31-AUG-2010  
 05-24-10 | TIME PLOTTED => 09:09

FUNCTIONAL SUPERVISOR LAI-HONG CHIU	CALCULATED-DESIGNED BY CHECKED BY	MICHELLE CHAN KENNETH XU	REVISED BY DATE REVISED	KX 3/30/10
--	--------------------------------------	-----------------------------	----------------------------	---------------

**GENERAL NOTES:**

1. ABANDON EXISTING LOOPS IN PLACE WHEN CUTTING NEW REPLACEMENT LOOPS. REPLACE LOOPS SHALL BE AT THE SAME VICINITY OF THE EXISTING LOOPS. SPLICE NEW DETECTOR CONDUCTORS TO CORRESPONDING dlc IN TERMINATION PULL BOX. VERIFY IDENTIFICATION OF EXISTING dlc BEFORE CONNECTING TO THE CORRESPONDING LOOP DETECTORS.
2. INSTALL LOCKING GRADE RING FOR EXISTING DETECTOR HANDHOLE AS NEEDED.
3. EXISTING CONDUIT AND CONDUCTOR REMAIN IN PLACE EXCEPT OTHERWISE SHOWN ON THE PLAN.
4. PULL BOX AND DETECTOR LOOP LOCATIONS ARE APPROXIMATE, EXACT LOCATIONS ARE TO BE DETERMINED BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING LOOP DETECTORS TO BE REPLACED PRIOR TO COLD PLANING EXISTING ASPHALT CONCRETE.
6. ALL LOOP DETECTORS AT EACH LOCATION SHALL BE REPLACED AND TESTED WITHIN THE TIME ALLOTTED FOR TRAFFIC SIGNAL SYSTEM SHUTDOWN AT THAT LOCATION.
7. THE CONTRACTOR SHALL PROVIDE TWO REPORTS PER LOCATION ON THE STATUS OF EACH DETECTOR LOOP REPLACEMENT SHOWING CONTINUITY AND INSULATION RESISTANCE READINGS. THE REPORTS SHALL BE SUBMITTED TO THE ENGINEER, ONE BEFORE STARTING WORK AND THE OTHER AFTER WORK HAS BEEN COMPLETED AT EACH LOCATION.

**ELECTRICAL INDEX**

- E-1 ELECTRICAL NOTES, ABBREVIATIONS AND INDEX
- E-2 TO E-8 REPLACE INDUCTIVE LOOP DETECTOR AND WMVDS
- E-9 & E-10 ELECTRICAL DETAILS

**SYMBOLS AND ABBREVIATIONS:**

- WVDS WIRELESS MAGNETOMETER VEHICLE DETECTOR STATION
- ⊙ VEHICLE SENSOR NODE (VSN)
- AP ACCESS POINT

**PROJECT NOTES:**

- 1 ABANDON EXISTING LOOP AND INSTALL NEW LOOP.
- 2 **RC** EXISTING PULL BOX AND INSTALL NEW PULL BOX. PULL BOX REPLACEMENT SHALL BE AT THE EXACT LOCATION OF THE EXISTING DETECTOR TERMINATION PULL BOX.
- 3 EXISTING CONDUIT AND CONDUCTORS TO REMAIN IN PLACE.
- 4 6' x 30' TYPE C LOOP DETECTOR SHALL BE INSTALLED AND CONNECTED TO EXISTING DLC AS DIRECTED BY THE ENGINEER. AFTER CONDUCTORS ARE INSTALLED IN THE SLOTS CUT IN THE PAVEMENT, ONE INCH STRIPS OF 3/8-INCH DIAMETER FOAM BACKER ROD SHALL BE INSERTED IN THE SLOT OVER THE LOOP WIRES, SPACED AS NECESSARY, BUT NOT MORE THAN 5 FEET APART TO PREVENT THE LOOP WIRES FROM RISING UP IN THE SLOT WHEN THE SLOTS ARE BEING FILLED WITH SEALANT. THE SLOTS SHALL BE FILLED WITH SEALANT TO WITHIN 1/8-INCH OF THE PAVEMENT SURFACE. THE SEALANT SHALL BE A MINIMUM OF 1-1/4 INCH THICK ABOVE THE TOP CONDUCTOR IN THE SLOT. CONDUCTORS IN ASPHALT CONCRETE PAVEMENT AND WITHIN 4 FEET OF THE LIP OF GUTTER SHALL HAVE A MINIMUM COVER OF 3 INCHES. BEFORE SETTING, SURPLUS SEALANT SHALL BE REMOVED FROM THE ADJACENT ROAD SURFACES WITHOUT THE USE OF SOLVENTS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	34	64
<i>Kenneth Y. Xu</i> 4-5-10 REGISTERED ELECTRICAL ENGINEER DATE					
5-24-10 PLANS APPROVAL DATE					
<small>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.</small>					

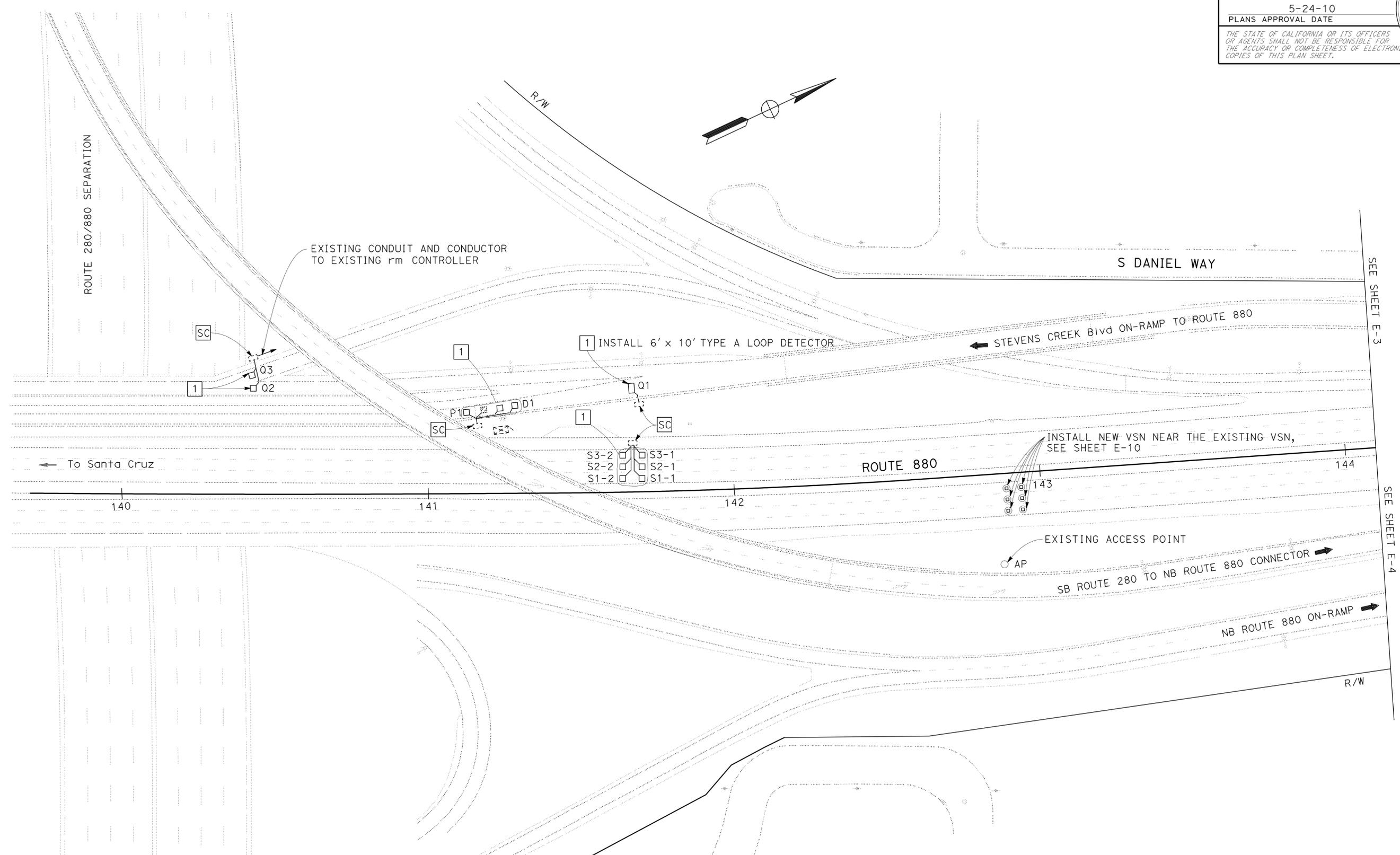
**ELECTRICAL NOTES, ABBREVIATIONS AND INDEX**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	35	64
<i>Kenneth Y. Xu</i> 4-5-10 REGISTERED ELECTRICAL ENGINEER DATE					
5-24-10 PLANS APPROVAL DATE					
<small>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.</small>					

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> ELECTRICAL	LAI-HONG CHIU	KX	3/30/10
CALCULATED/DESIGNED BY	CHECKED BY	MICHELLE CHAN	KENNETH XU



## REPLACE INDUCTIVE LOOP DETECTOR AND WVDS

NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1



USERNAME => s126849  
DGN FILE => 43a050ua002.dgn

CU 04223

EA 3A0501

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** ELECTRICAL

FUNCTIONAL SUPERVISOR  
 LAI-HONG CHIU

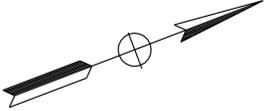
CALCULATED-DESIGNED BY  
 CHECKED BY

MICHELLE CHAN  
 KENNETH XU

REVISED BY  
 DATE REVISED

KX  
 3/30/10

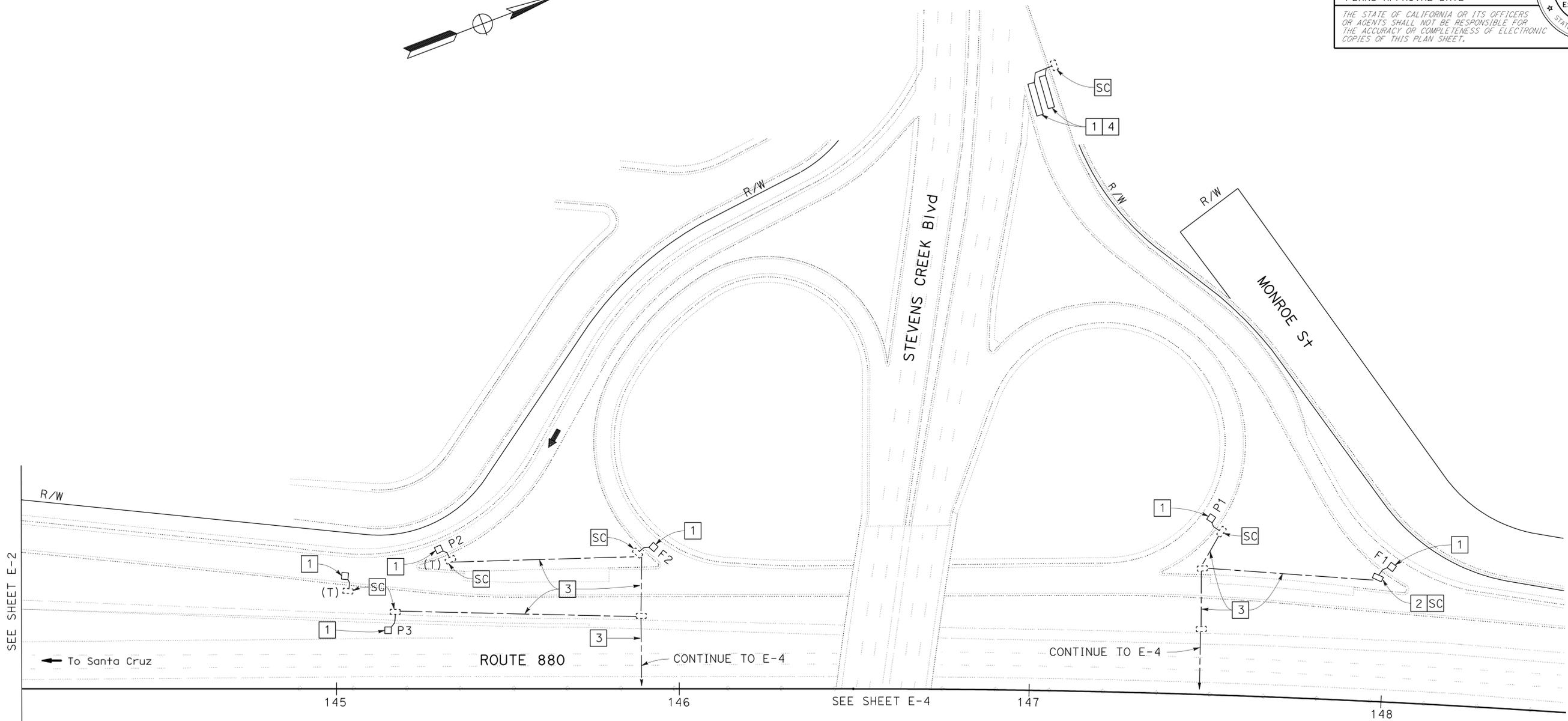
FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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*Kenneth Y. Xu* 4-5-10  
 REGISTERED ELECTRICAL ENGINEER DATE  
 5-24-10  
 PLANS APPROVAL DATE  
 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.

REGISTERED PROFESSIONAL ENGINEER  
 Kenneth Y. Xu  
 No. 15219  
 Exp. 3-30-10  
 ELECT  
 STATE OF CALIFORNIA



**REPLACE INDUCTIVE LOOP DETECTOR AND WVDS**  
 NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

**E-3**

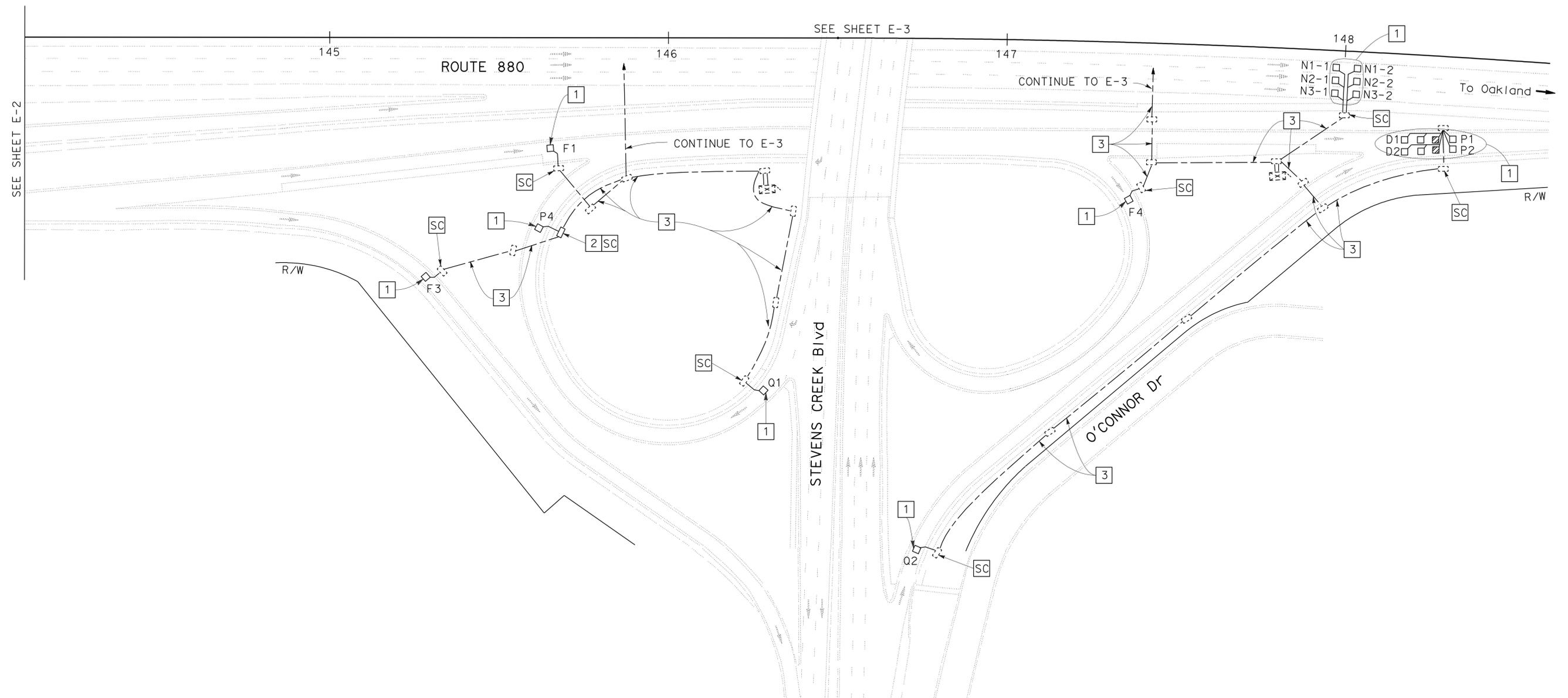
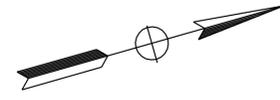
FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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REGISTERED ELECTRICAL ENGINEER		DATE	
Kenneth Y. Xu		4-5-10	
No. 15219		Exp. 6-30-10	
ELECT		PLANS APPROVAL DATE	
		5-24-10	

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
<b>Caltrans</b> ELECTRICAL	LAI-HONG CHIU	KENNETH XU	KX	3/30/10

# REPLACE INDUCTIVE LOOP DETECTOR AND WVDS

NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1



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DGN FILE => 43a050ua004.dgn

CU 04223

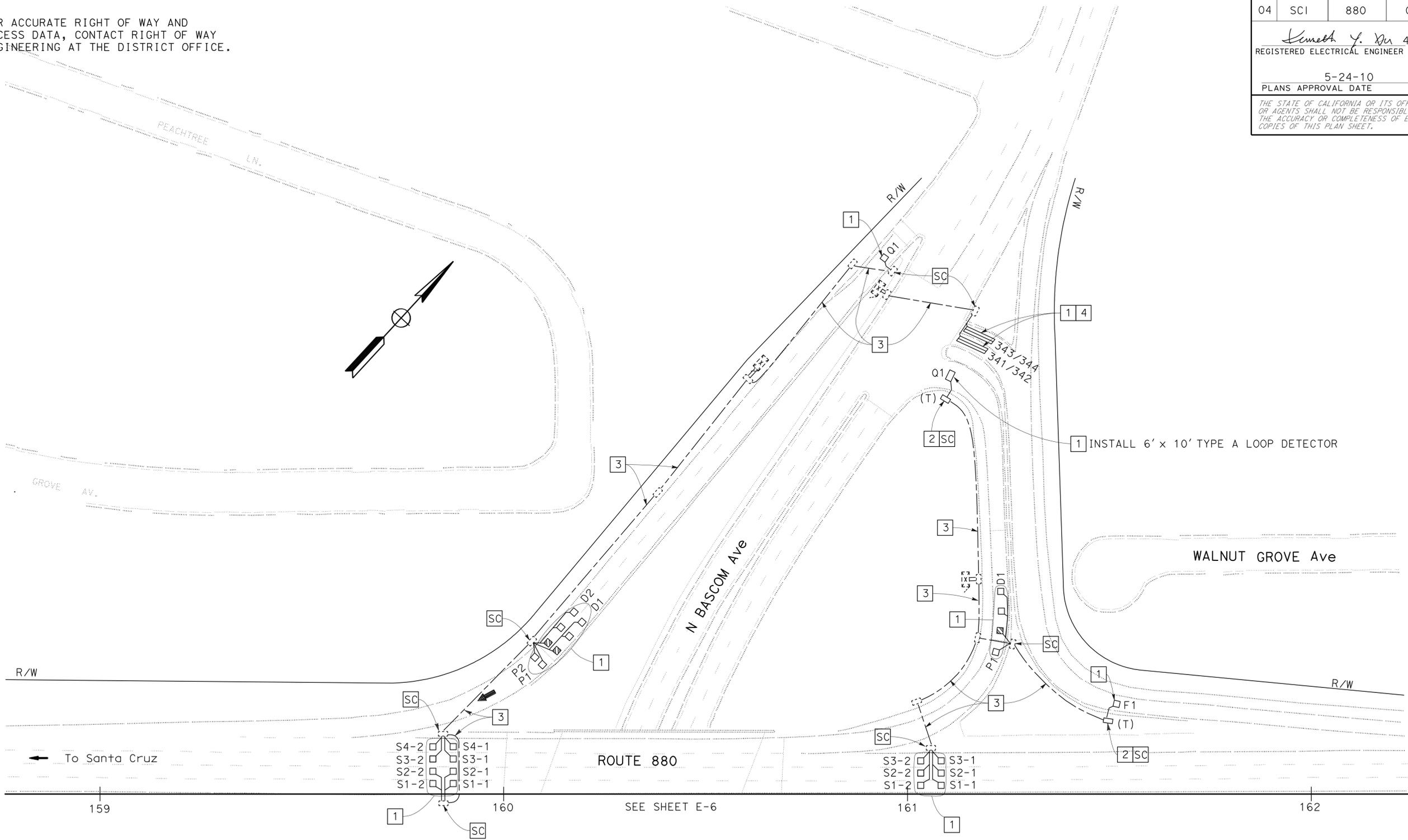
EA 3A0501

BORDER LAST REVISED 4/11/2008

LAST REVISION DATE PLOTTED => 31-AUG-2010  
05-24-10 TIME PLOTTED => 09:10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	38	64
<i>Kenneth Y. Xu</i> 4-5-10 REGISTERED ELECTRICAL ENGINEER DATE				Kenneth Y. XU No. 15219 Exp. 3-30-10 ELECT	
5-24-10 PLANS APPROVAL DATE					
<small>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.</small>					

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



1 INSTALL 6' x 10' TYPE A LOOP DETECTOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** ELECTRICAL  
 FUNCTIONAL SUPERVISOR: LAI-HONG CHIU  
 CALCULATED/DESIGNED BY: MICHELLE CHAN  
 CHECKED BY: KENNETH XU  
 REVISED BY: KX  
 DATE REVISED: 3/30/10

## REPLACE INDUCTIVE LOOP DETECTOR AND WVDs

NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

**E-5**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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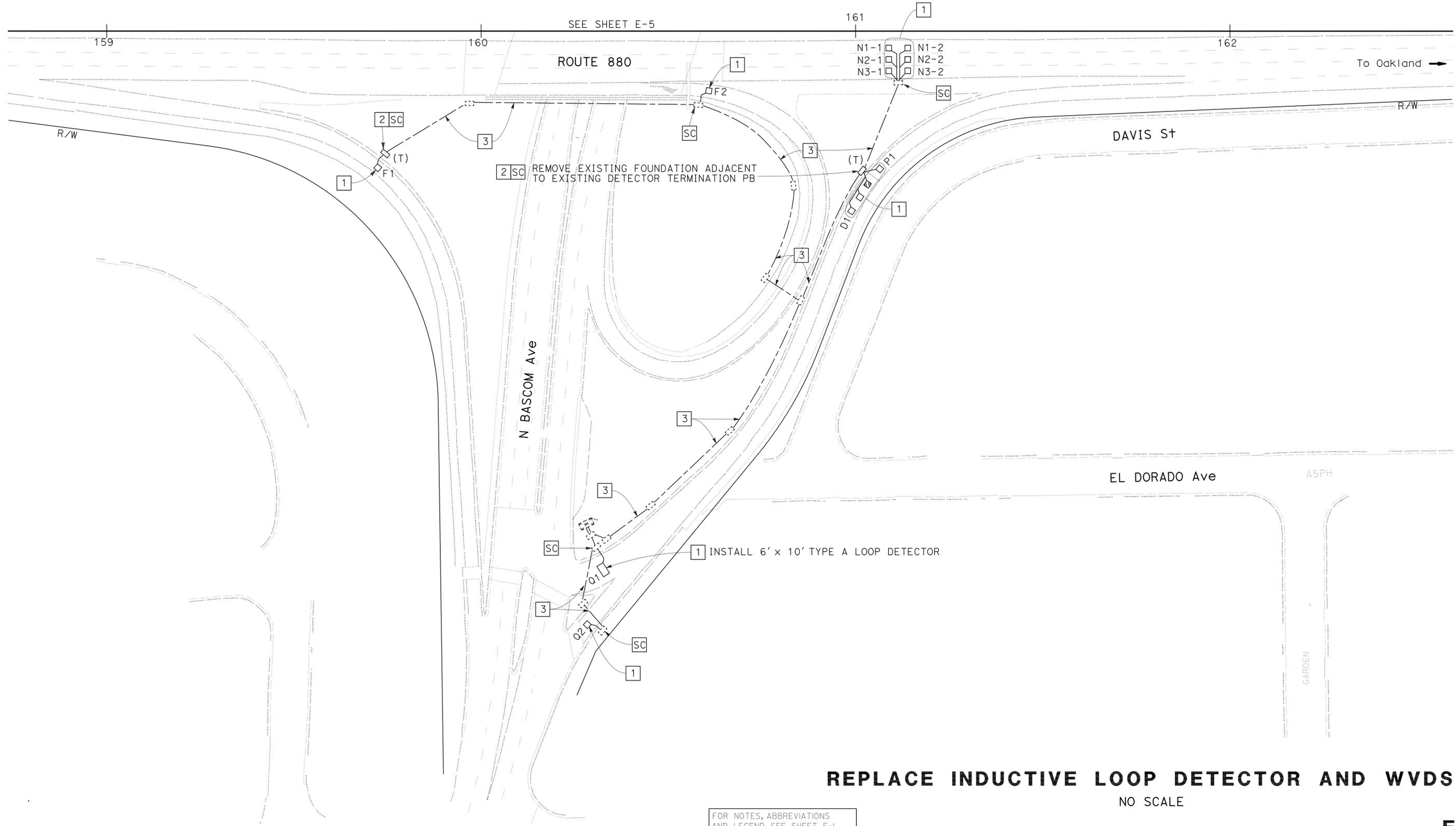
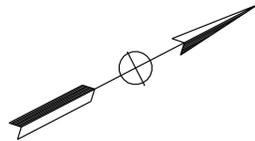
<i>Kenneth Y. Xu</i> 4-5-10 REGISTERED ELECTRICAL ENGINEER DATE	
5-24-10 PLANS APPROVAL DATE	

Kenneth Y. Xu No. 15219 Exp. 6-30-10 ELECT
---

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

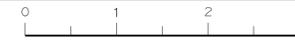


## REPLACE INDUCTIVE LOOP DETECTOR AND WVDs

NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
<b>Caltrans</b> <b>ELECTRICAL</b>
FUNCTIONAL SUPERVISOR LAT-HONG CHIU
CALCULATED-DESIGNED BY CHECKED BY
MICHELLE CHAN KENNETH XU
REVISED BY DATE REVISED
KX 3/30/10



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	880	0.0/4.3	40	64

REGISTERED ELECTRICAL ENGINEER		DATE	
Kenneth Y. Xu		4-5-10	
No. 15219		Exp. 6-30-10	
ELECT		STATE OF CALIFORNIA	

PLANS APPROVAL DATE	5-24-10
---------------------	---------

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 ELECTRICAL

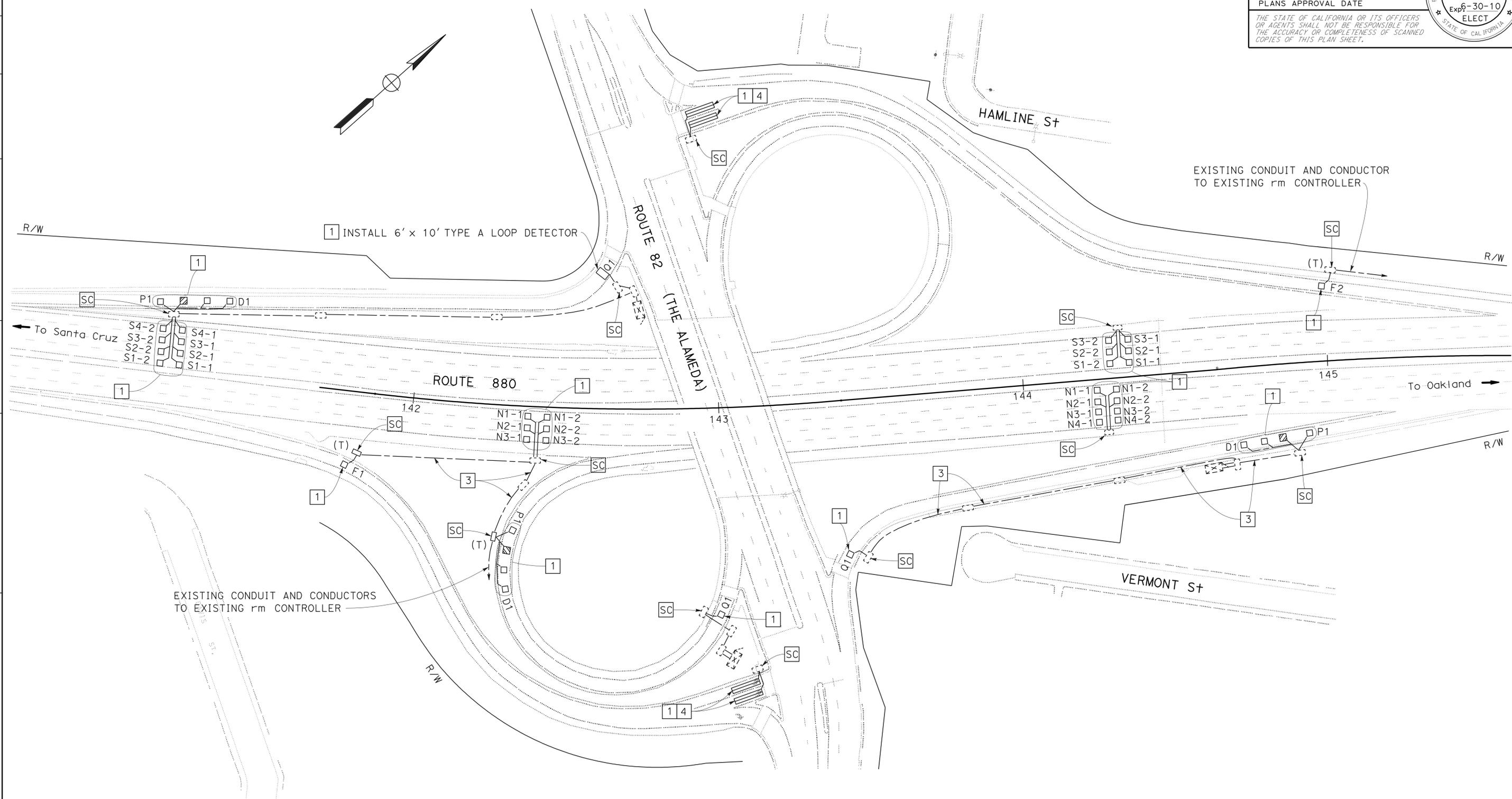
FUNCTIONAL SUPERVISOR  
 LAI-HONG CHIU

CALCULATED/DESIGNED BY  
 CHECKED BY

MICHELLE CHAN  
 KENNETH XU

REVISED BY  
 DATE REVISED

KX  
 3/30/10



# REPLACE INDUCTIVE LOOP DETECTOR AND WVDS

NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

E-7

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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<i>Kenneth Y. Xu</i> 4-5-10 REGISTERED ELECTRICAL ENGINEER DATE	
5-24-10 PLANS APPROVAL DATE	

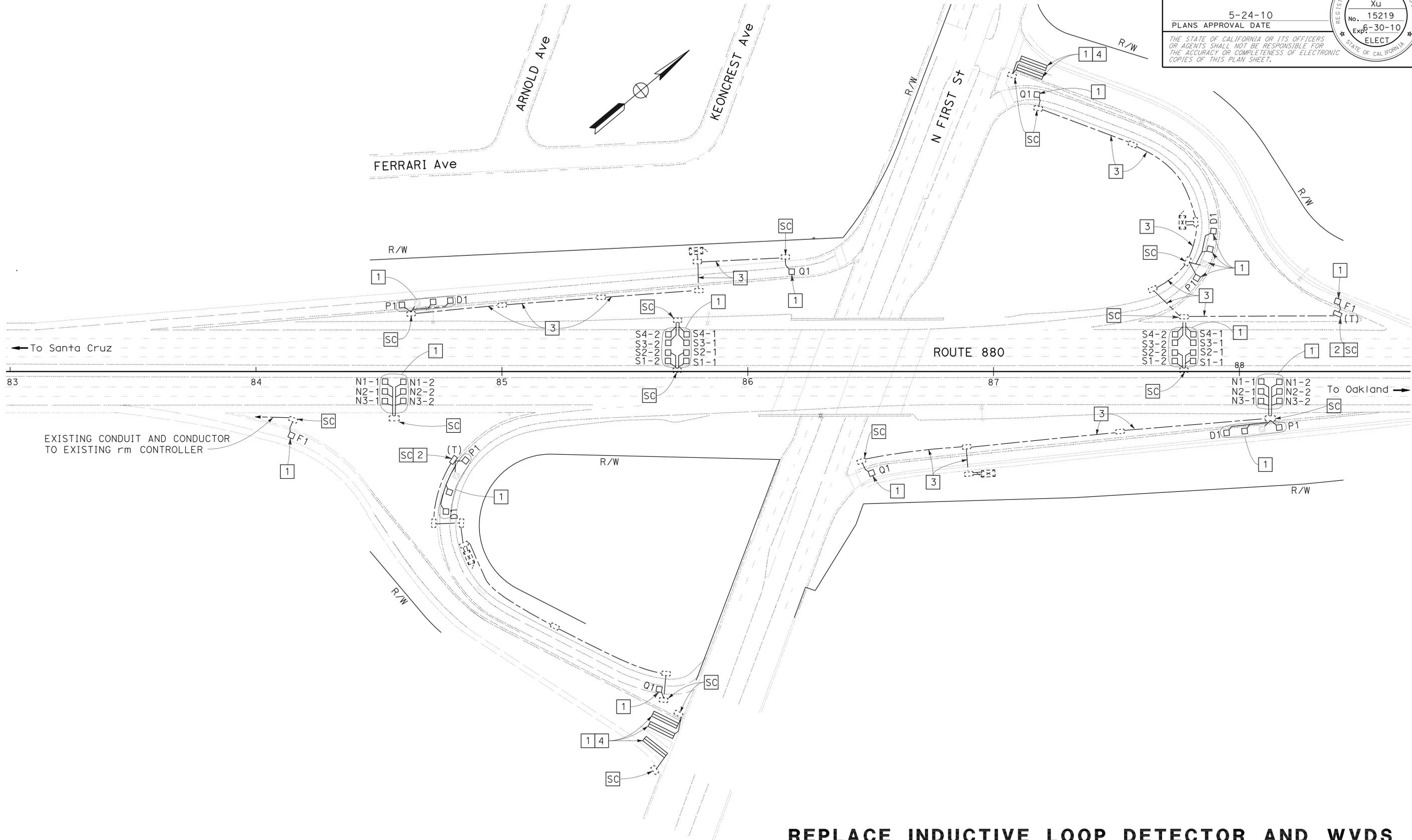
  

REGISTERED PROFESSIONAL ENGINEER Kenneth Y. Xu No. 15219 Exp. 6-30-10 ELECT
---

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.

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	LAI-HONG CHIU	MICHELLE CHAN	KX	3/30/10
<b>ELECTRICAL</b>		KENNETH XU		



# REPLACE INDUCTIVE LOOP DETECTOR AND WVDS

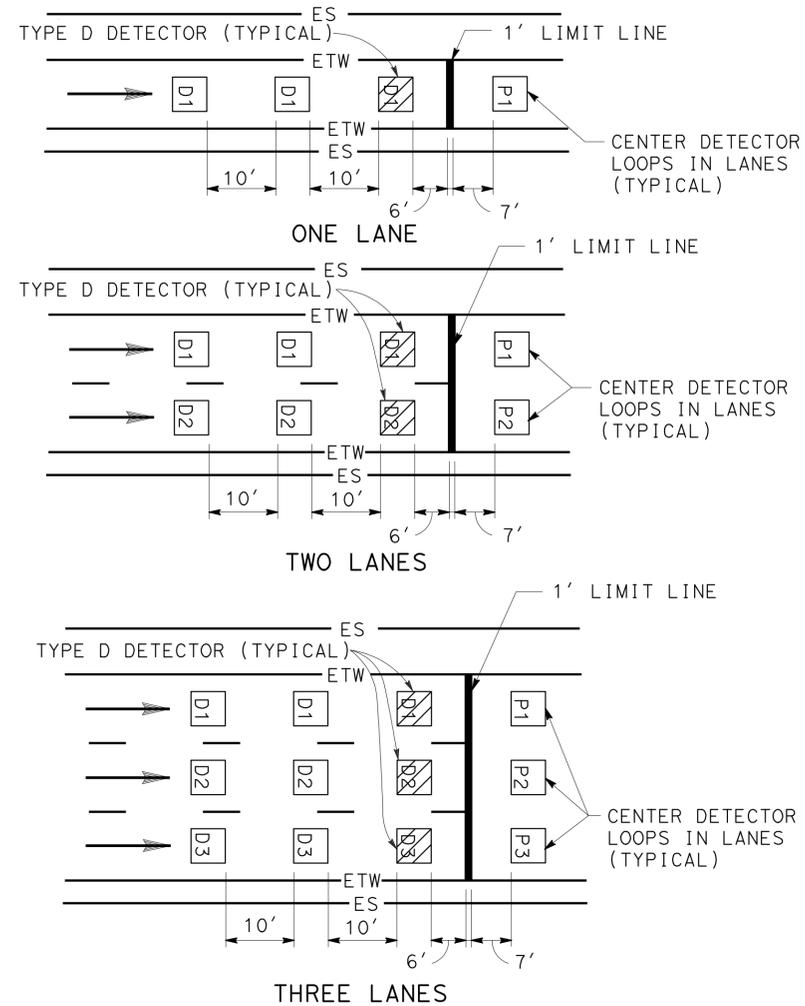
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FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

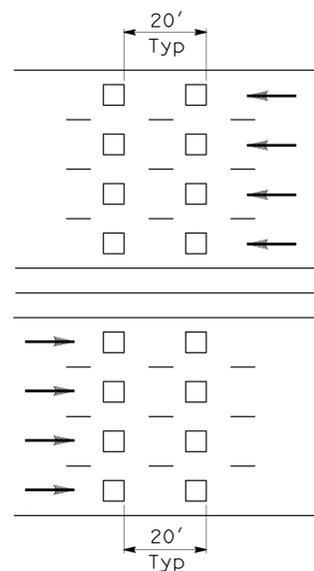
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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<i>Ray C. Duschane</i> 4-20-10 REGISTERED ELECTRICAL ENGINEER DATE					
5-24-10 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.</small>					



**DETAIL "RM"  
RAMP METERING STATION**



**TRAFFIC MONITORING STATION NOTES**

**FREEWAY MAINLINE DETECTOR DESIGNATION:**

- N = NORTHBOUND LANES (NB)
- S = SOUTHBOUND LANES (SB)
- E = EASTBOUND LANES (EB)
- W = WESTBOUND LANES (WB)

**NUMBER OF LANES FROM LEFT WITH RESPECT TO DIRECTION OF TRAFFIC:**

- 1 = FIRST LANE FROM LEFT
- 2 = SECOND LANE FROM LEFT
- 3 = THIRD LANE FROM LEFT
- 4 = FOURTH LANE FROM LEFT

**NUMBER OF DETECTOR IN THE SAME LANE:**

- 1 = ENTERING DETECTOR
- 2 = LEAVING DETECTOR

**DETAIL "TM"  
TRAFFIC MONITORING STATION**

**RAMP METERING STATION NOTES:**

- SEE ES-5A, ES-5B, AND ES-13A FOR ADDITIONAL DETAILS.
- DLC CONDUCTORS SHALL BE SPLICED TO THE LOOP CONDUCTORS IN THE NEAREST PULLBOX.
- ALL SPLICES SHALL BE TYPE "S" OR TYPE "ST" AS REQUIRED.

**RAMP DETECTOR DESIGNATION:**

- D=DEMAND DETECTOR
  - P=PASSAGE DETECTOR
  - Q=QUEUE DETECTOR
  - F=OFFRAMP DETECTOR
- 1 = FIRST LANE FROM LEFT
- 2 = SECOND LANE FROM LEFT

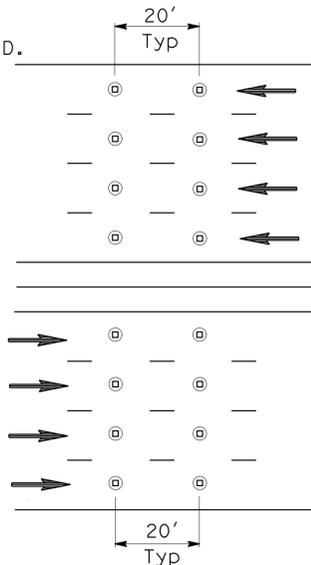
**ELECTRICAL DETAILS  
(RAMP METERING AND TRAFFIC MONITORING  
DETECTOR SPACING AND DESIGNATION)  
NO SCALE**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
<b>Caltrans</b> ELECTRICAL	KENNETH XU	MICHELLE CHAN	3/30/10
	CHECKED BY	REVISOR	DATE
	KENNETH XU	KENNETH XU	3/30/10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	101	0.0/4.3	43	64
<i>Ray C. Duschane</i> 4-20-10 REGISTERED ELECTRICAL ENGINEER DATE					
5-24-10				PLANS APPROVAL DATE	
<small>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.</small>					

### VEHICLE SENSOR NODE INSTALLATION PROCEDURE

1. PRIOR TO INSTALLATION, IDENTIFY VEHICLE SENSOR NODE'S ID, LANE NUMBER, AND LOCATION IN LANE.
2. ENCLOSE VEHICLE SENSOR NODE IN 2 PIECE MOLDED PLASTIC SHELL.
3. MAKE SURE THE VEHICLE SENSOR NODE IS INSTALLED FLAT IN THE CORED HOLE AND IS NOT TILTED.
4. USE HEAT-GUN OR HOT COMPRESSED AIR TO DRY THE INSIDE OF THE CORED HOLE. THERE MUST BE ABSOLUTELY NO MOISTURE ON THE APPLIED SURFACE.
5. FILL THE HOLE ABOUT 1/4 FULL OF SEALANT.
6. PLACE VEHICLE SENSOR NODE IN THE HOLE WITH ARROW POINTING IN THE DIRECTION OF TRAFFIC. THE SEALANT SHOULD STILL HAVE WORK TIME, SO THE VEHICLE SENSOR NODE CAN BE ROTATED TO THE CORRECT ORIENTATION. PUSH VEHICLE SENSOR NODE DOWN SO IT LAYS FLAT ON THE BOTTOM OF THE HOLE.
7. FILL THE HOLE WITH THE REMAINING SEALANT TO COVER THE VEHICLE SENSOR NODE. LEVEL SEALANT WITH THE SURFACE OF ROAD.
8. IMMEDIATELY AFTER PROCEDURE #4, COMPLETE PROCEDURE #5 AND #6 WITHIN 30 SECONDS.
9. DEPENDING ON AMBIENT TEMPERATURE AND HUMIDITY, SEALANT DRYING TIME WILL VARY FROM 5 MINUTES TO 15 MINUTES. VERIFY HARDNESS OF SEALANT BEFORE REOPENING THE LANE FOR TRAFFIC.
10. RECORD DISTANCES BETWEEN EACH VEHICLE SENSOR NODE PAIR.



### VSN NOTES

FREEWAY MAINLINE DETECTOR DESIGNATION

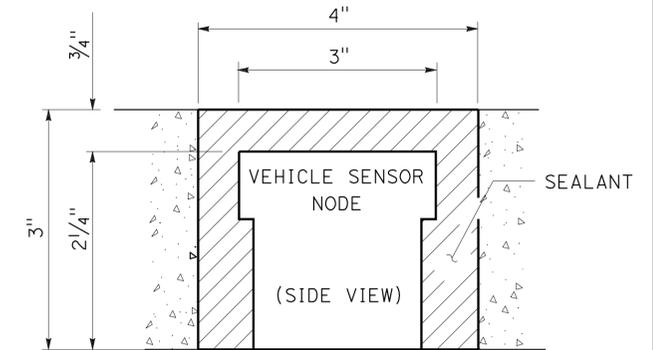
- N = NORTHBOUND LANES (NB)
- S = SOUTHBOUND LANES (SB)
- E = EASTBOUND LANES (EB)
- W = WESTBOUND LANES (WB)

NUMBER OF LANES FROM LEFT WITH RESPECT TO DIRECTION OF TRAFFIC:

- 1 = FIRST LANE FROM LEFT
- 2 = SECOND LANE FROM LEFT
- 3 = THIRD LANE FROM LEFT
- 4 = FOURTH LANE FROM LEFT

NUMBER OF VSN IN THE SAME LANE:

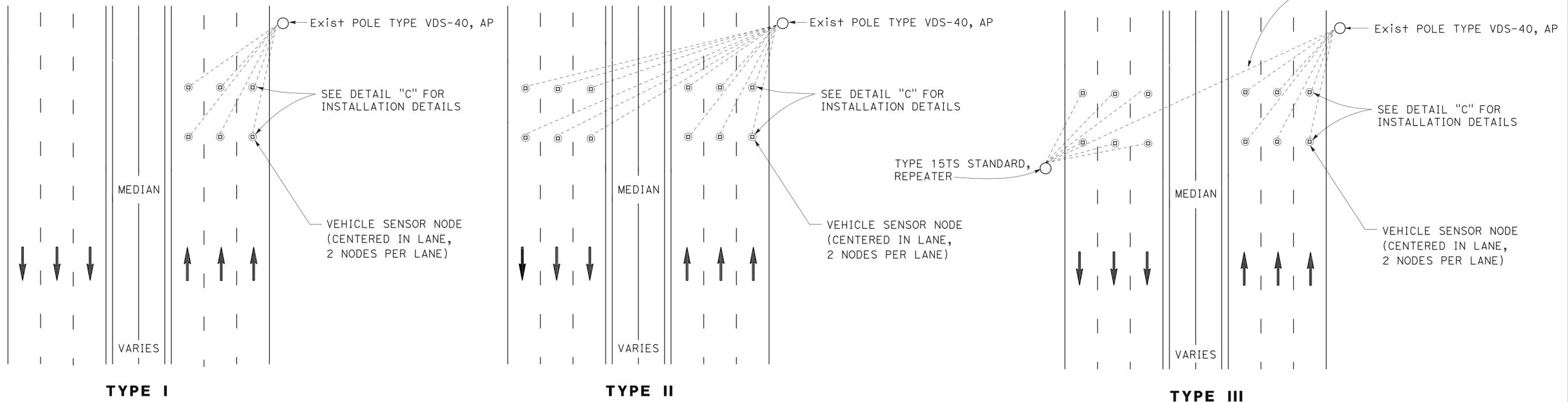
- 1 = ENTERING DETECTOR
- 2 = LEAVING DETECTOR



### DETAIL B

VEHICLE SENSOR NODE  
INSTALLED IN ROADWAY

### DETAIL C



### DETAIL A

VEHICLE SENSOR NODE PLACEMENT DETAIL

## ELECTRICAL DETAILS (VEHICLE SENSOR NODE SYSTEM REPLACE)

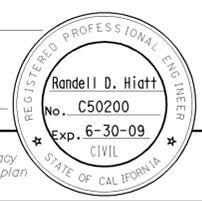
NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	44	64

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

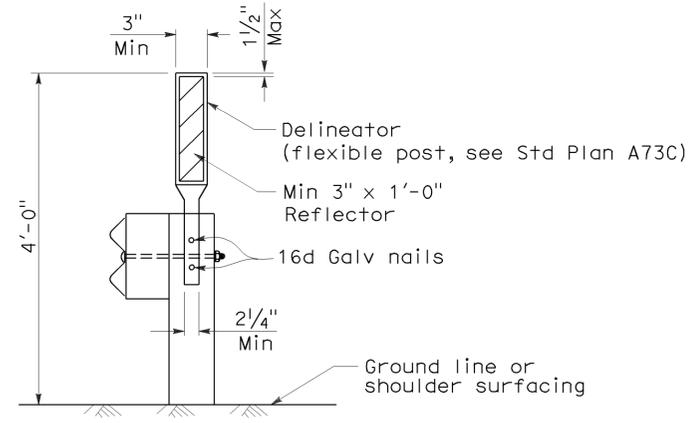
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*



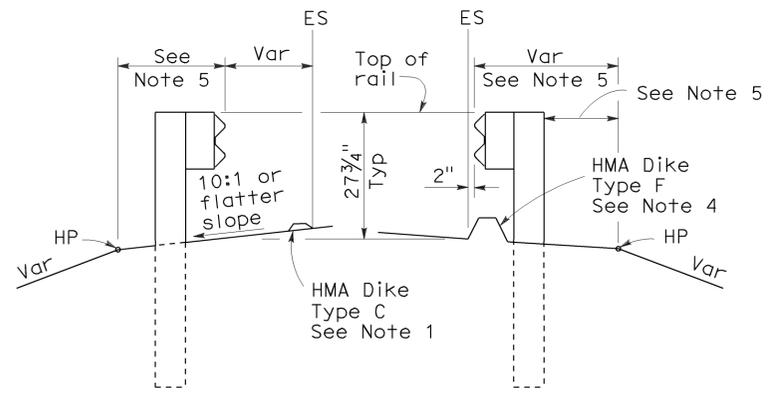
To accompany plans dated 5-24-10

**NOTES:**

1. When necessary to place dike in front of face of guard railing, only Type C dike may be used. For dike details, see Standard Plan A87B.
2. For standard railing post embedment, see Standard Plans A77C3.
3. Guard railing delineation to be used where shown on the Project Plans.
4. When dike or curb is placed under guard railing, the maximum height of the dike or curb shall be 4". Mountable dike should not be used. For dike and curb details, see Revised Standard Plans RSP A87A and Standard Plan A87B.
5. For details of typical distance between the face of rail and hinge point, see Standard Plan A77C3.



**GUARD RAILING DELINEATION**  
See Note 3



**DIKE POSITIONING**  
See Note 1

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL RAILING DELINEATION  
AND DIKE POSITIONING DETAILS**

NO SCALE

RSP A77C4 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77C4  
DATED MAY 1, 2006 - PAGE 47 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP A77C4**

2006 REVISED STANDARD PLAN RSP A77C4

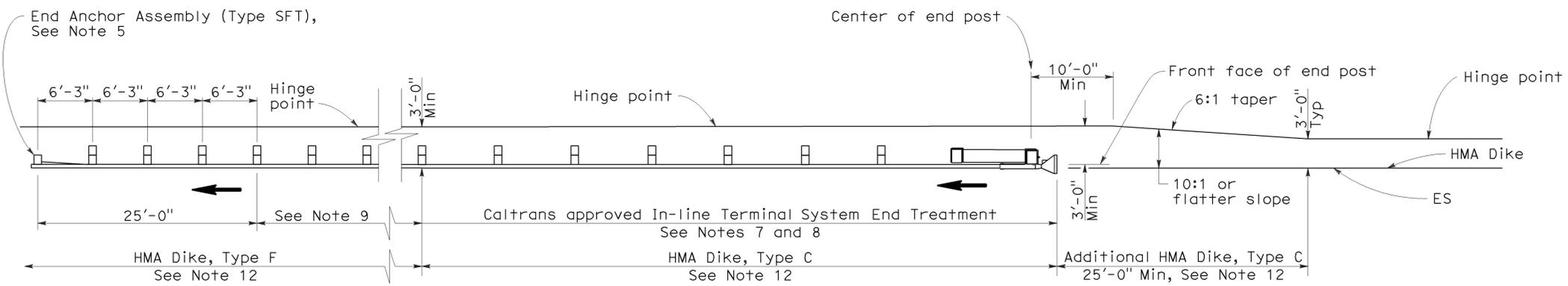
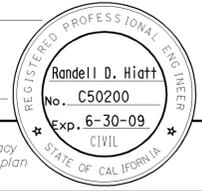
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	45	64

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

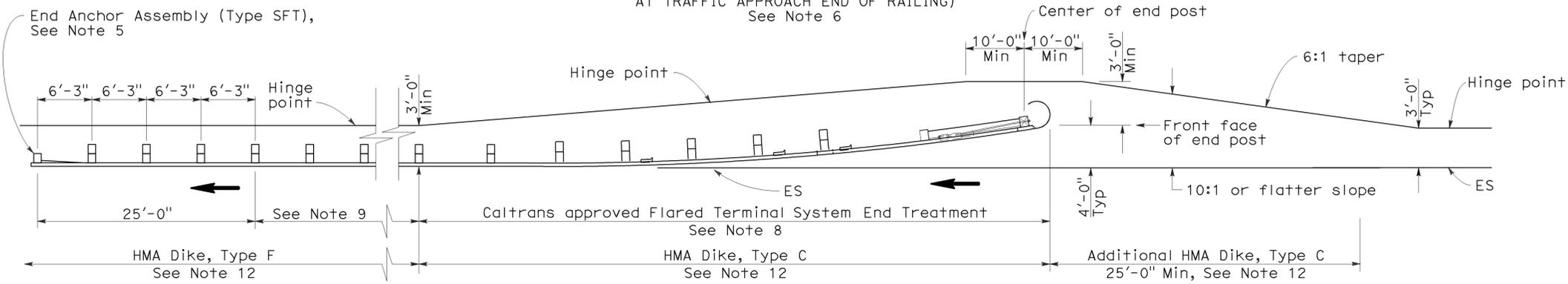
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To accompany plans dated 5-24-10



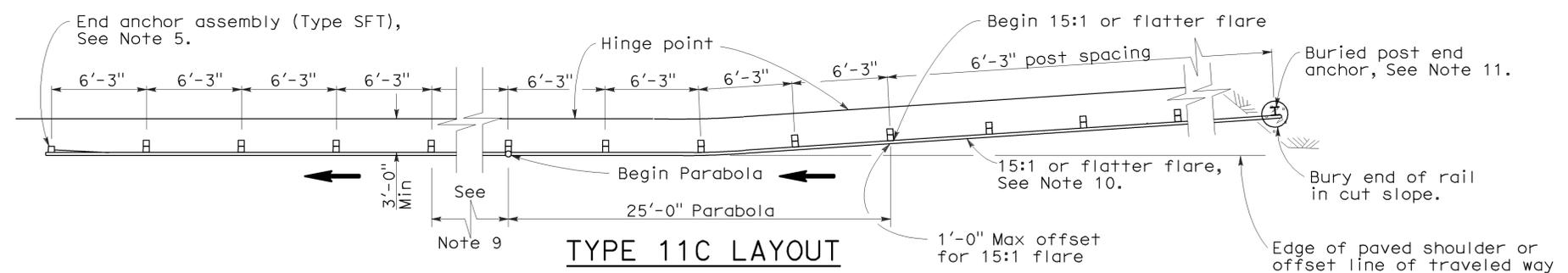
**TYPE 11A LAYOUT**

(EMBANKMENT GUARD INSTALLATION WITH IN-LINE END TREATMENT AT TRAFFIC APPROACH END OF RAILING) See Note 6



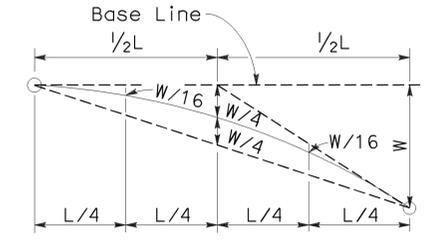
**TYPE 11B LAYOUT**

(EMBANKMENT GUARD RAILING INSTALLATION WITH FLARED END TREATMENT AT TRAFFIC APPROACH END OF RAILING) See Note 6

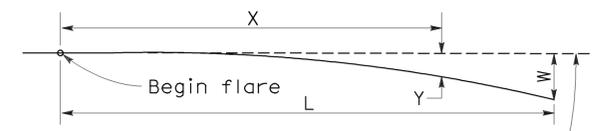


**TYPE 11C LAYOUT**

(EMBANKMENT GUARD RAILING INSTALLATION WITH BURIED END ANCHOR TREATMENT AT TRAFFIC APPROACH END OF RAILING) See Notes 6 and 12



**TYPICAL PARABOLIC LAYOUT**

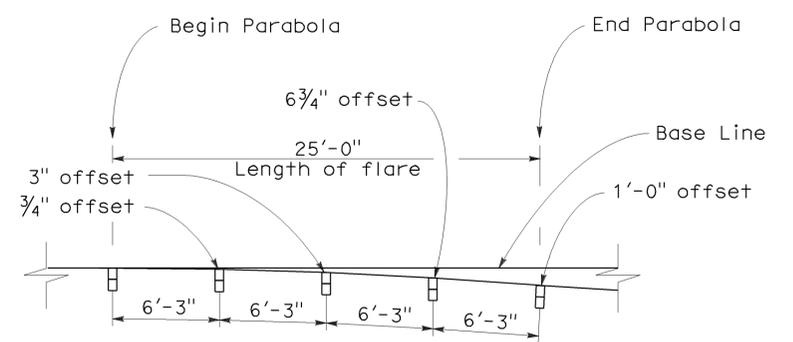


Base Line (Edge of paved shoulder or offset line of edge of traveled way)

$$Y = \frac{WX^2}{L^2}$$

Y = Offset from base line  
W = Maximum offset  
X = Distance along base line  
L = Length of flare

**PARABOLIC FLARE OFFSETS**



**TYPICAL FLARE OFFSETS FOR 1 FOOT MAX END OFFSET**

**NOTES:**

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1, and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or recycled plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by  $\rightarrow$ .
- For End Anchor Assembly (Type SFT) details, see Standard Plan A77H1.
- Layout Types 11A, 11B or 11C are typically used where guard railing is recommended to shield embankment slopes and a crashworthy end treatment is required for only one direction of traffic.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height and side slope), construction of additional guard railing (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- The 15:1 or flatter flare used with buried end anchors is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of guard railing within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the buried post end anchor used with Type 11C Layout, see Standard Plan A77I2.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**METAL BEAM GUARD RAILING  
TYPICAL LAYOUTS FOR  
EMBANKMENTS**  
NO SCALE

RSP A77E1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77E1  
DATED MAY 1, 2006 - PAGE 48 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP A77E1**

2006 REVISED STANDARD PLAN RSP A77E1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	46	64

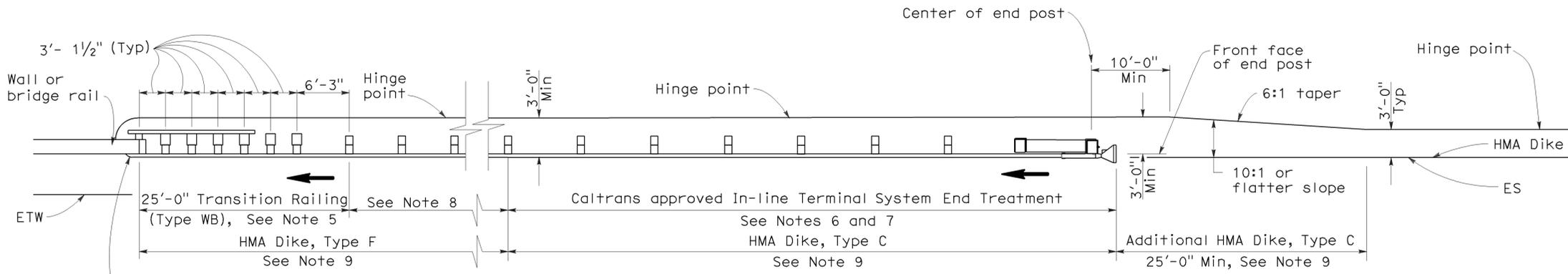
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

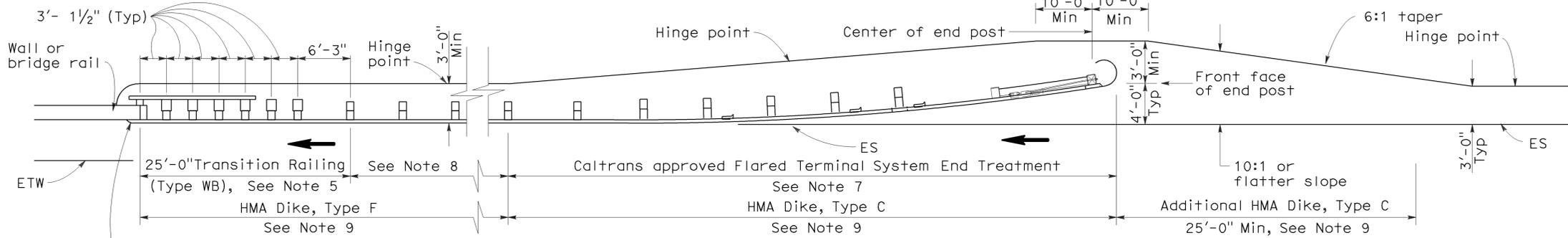
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To accompany plans dated 5-24-10



**TYPE 12A LAYOUT**

(GUARD RAILING INSTALLATION AT STRUCTURE APPROACH WITH AN IN-LINE END TREATMENT AT TRAFFIC APPROACH END OF RAILING)  
See Notes 10



**TYPE 12B LAYOUT**

(GUARD RAILING INSTALLATION AT STRUCTURE APPROACH WITH A FLARED END TREATMENT AT TRAFFIC APPROACH END OF RAILING)  
See Notes 10

**NOTES:**

- Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
- Guard rail post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood posts with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- Direction of adjacent traffic indicated by →.
- For Transition Railing (Type WB) details for Types 12A and 12B Layouts, see Standard Plan A77J4.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment.

- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77C4 for dike positioning details.
- Type 12A or Type 12B Layouts are typically used:
  - To the right of approaching traffic, at the end of a structure, on two-lane conventional highway where the roadbed width across the structure is less than 40 feet.
  - To the left of approaching traffic, at the end of a structure, on two-lane conventional highway where the roadbed width across the structure is less than 40 feet.
  - To the right of approaching traffic at the end of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
  - To the right of approaching traffic at the end of the structure on multilane freeways or expressways with decked median on the bridge.
- See Revised Standard Plan RSP A77F3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.

- For additional details of typical connections to bridge rail, see Connection Detail AA on Revised Standard Plans RSP A77J1 and RSP A77J2 and Connection Detail FF on Standard Plans A77K1 and A77K2.
- For additional details of a typical connection to walls or abutments, see Standard Plan A77J3.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING  
TYPICAL LAYOUTS FOR  
STRUCTURE APPROACH**

NO SCALE

RSP A77F1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77F1  
DATED MAY 1, 2006 - PAGE 54 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP A77F1**

2006 REVISED STANDARD PLAN RSP A77F1

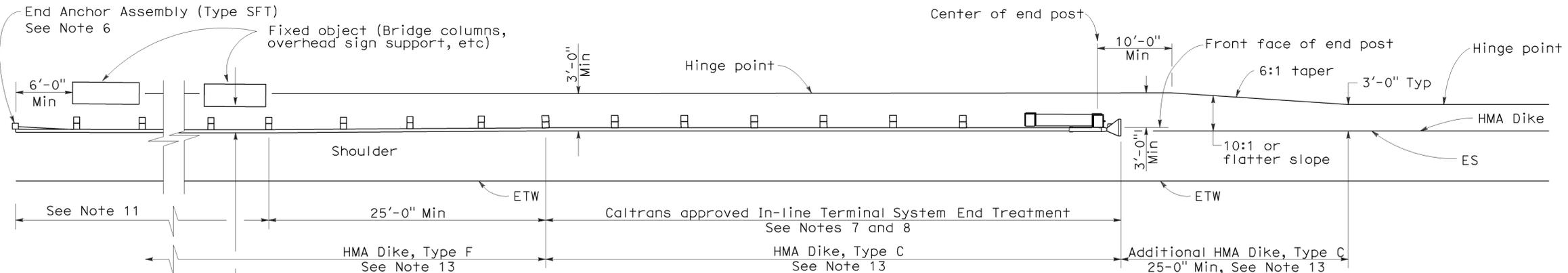
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	47	64

RANDALL D. HIATT  
 REGISTERED CIVIL ENGINEER  
 No. C50200  
 Exp. 6-30-09  
 STATE OF CALIFORNIA  
 CIVIL

June 6, 2008  
 PLANS APPROVAL DATE

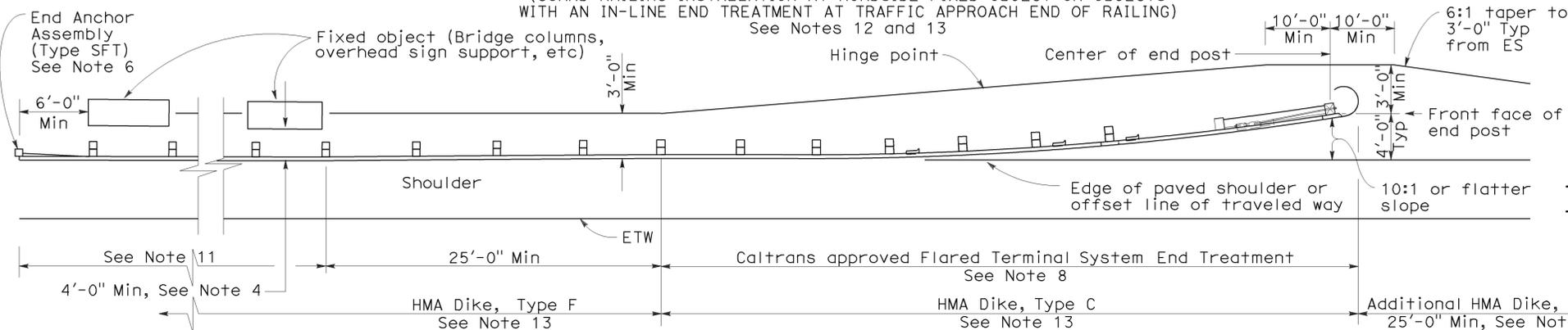
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To accompany plans dated 5-24-10



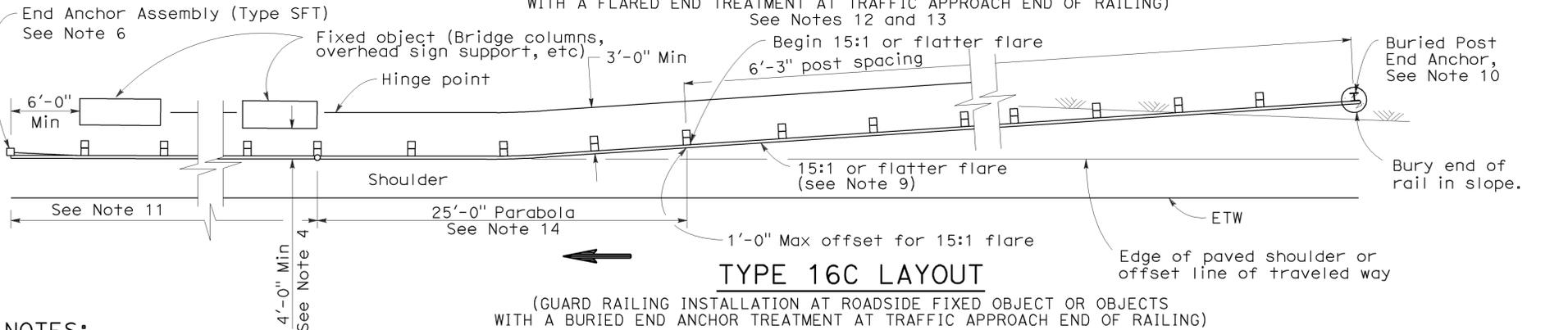
**TYPE 16A LAYOUT**

(GUARD RAILING INSTALLATION AT ROADSIDE FIXED OBJECT OR OBJECTS WITH AN IN-LINE END TREATMENT AT TRAFFIC APPROACH END OF RAILING)  
See Notes 7 and 8



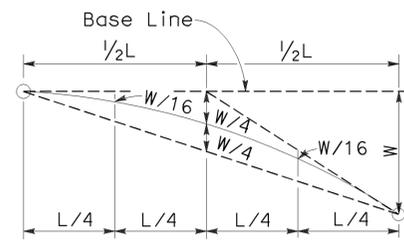
**TYPE 16B LAYOUT**

(GUARD RAILING INSTALLATION AT ROADSIDE FIXED OBJECT OR OBJECTS WITH A FLARED END TREATMENT AT TRAFFIC APPROACH END OF RAILING)  
See Notes 12 and 13

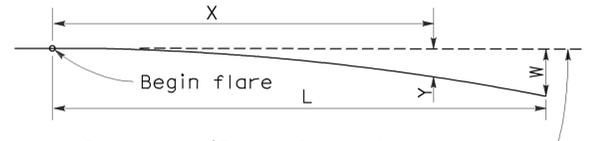


**TYPE 16C LAYOUT**

(GUARD RAILING INSTALLATION AT ROADSIDE FIXED OBJECT OR OBJECTS WITH A BURIED END ANCHOR TREATMENT AT TRAFFIC APPROACH END OF RAILING)  
See Notes 12 and 13



**TYPICAL PARABOLIC LAYOUT**



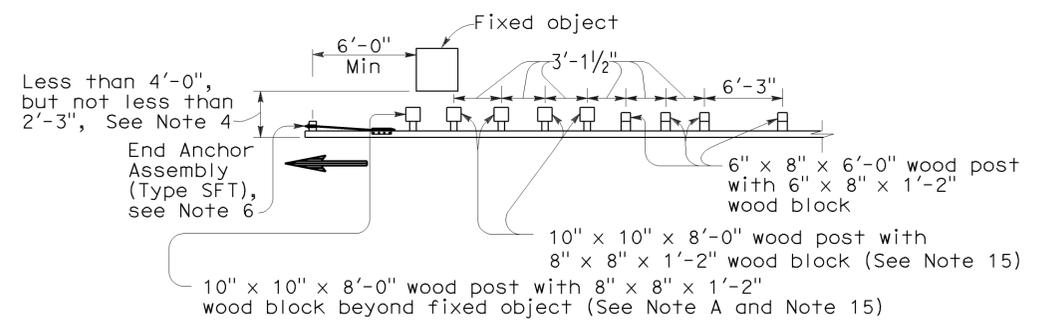
Base Line (Edge of paved shoulder or offset line of edge of traveled way)

$Y = \frac{WX^2}{L^2}$   
 Y = Offset from base line  
 W = Maximum offset  
 X = Distance along base line  
 L = Length of flare

**PARABOLIC FLARE OFFSETS**

**NOTES:**

- Line post, blocks and hardware to be used are shown on Revised Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
- Guard railing post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6" x 8" x 6'-0" wood with 6" x 8" x 1'-2" wood blocks. W6 x 9 steel posts, 6'-0" in length, with 6" x 8" x 1'-2" notched wood blocks or notched recycled plastic blocks may be used for 6" x 8" x 6'-0" wood line posts with 6" x 8" x 1'-2" wood blocks where applicable and when specified.
- A 4'-0" minimum clearance is required between the face of the railing and the face of a fixed object located directly behind standard guard railing sections with post spacing of 6'-3". Construct guard railing as shown in the detail "Strengthened Railing Sections for Fixed Objects" on this plan, where the clearance between the face of the railing and the face of a fixed object is less than 4'-0", but not less than 2'-3". Where the clearance is less than 2'-3", a concrete wall or barrier should be constructed to shield the fixed object(s).
- Direction of adjacent traffic indicated by  $\rightarrow$ .
- For End Anchor Assembly (Type SFT) details, see Standard Plan A77H1.
- In-line Terminal System End Treatments are used where site conditions will not accommodate a flared end treatment.
- The type of terminal system to be used will be shown on the Project Plans.
- The 15:1 or flatter flare used with Type 16C Layout is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of guard railing within the 15:1 or flatter flare is based on site conditions and should be a length equal to multiples of 12'-6".
- For details of the Buried Post End Anchor used with Type 16C Layout, see Standard Plan A77I2.
- As site conditions dictate, construct additional guard railing to shield fixed object(s). Additional guard railing length equal to multiples of 12'-6". Post spacing at 6'-3" except as specified in Note 4.
- Layout Types 16A, 16B or 16C are typically used where guard railing is recommended to shield roadside fixed object(s) and a crashworthy end treatment is required for only one direction of traffic.
- Where placement of dike is required with guard railing, see Revised Standard Plan RSP A77C4 for dike positioning details.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77E1.
- W6 x 15 steel post, 8'-0" in length, with 8" x 8" x 1'-2" notched wood block or notched recycled plastic blocks may be used in place of the 10" x 10" x 8'-0" wood post with 8" x 8" x 1'-2" wood block shown in the "Strengthened Railing Sections Detail".



**NOTE A:** For a series of fixed objects (bridge columns, overhead sign supports, etc.) additional 10" x 10" x 8'-0" wood post with 8" x 8" x 1'-2" wood blocks at 3'-1/2" center to center spacing are to be used between fixed objects.

**STRENGTHENED RAILING SECTIONS FOR FIXED OBJECT**

Use strengthened railing sections with Types 16A, 16B or 16C Layouts where minimum clearance between the face of the guard railing and fixed object(s) is less than 4'-0", but not less than 2'-3". See Note 4

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**METAL BEAM GUARD RAILING TYPICAL LAYOUTS FOR ROADSIDE FIXED OBJECTS**

NO SCALE

RSP A77G3 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77G3 DATED MAY 1, 2006 - PAGE 61 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP A77G3**

2006 REVISED STANDARD PLAN RSP A77G3

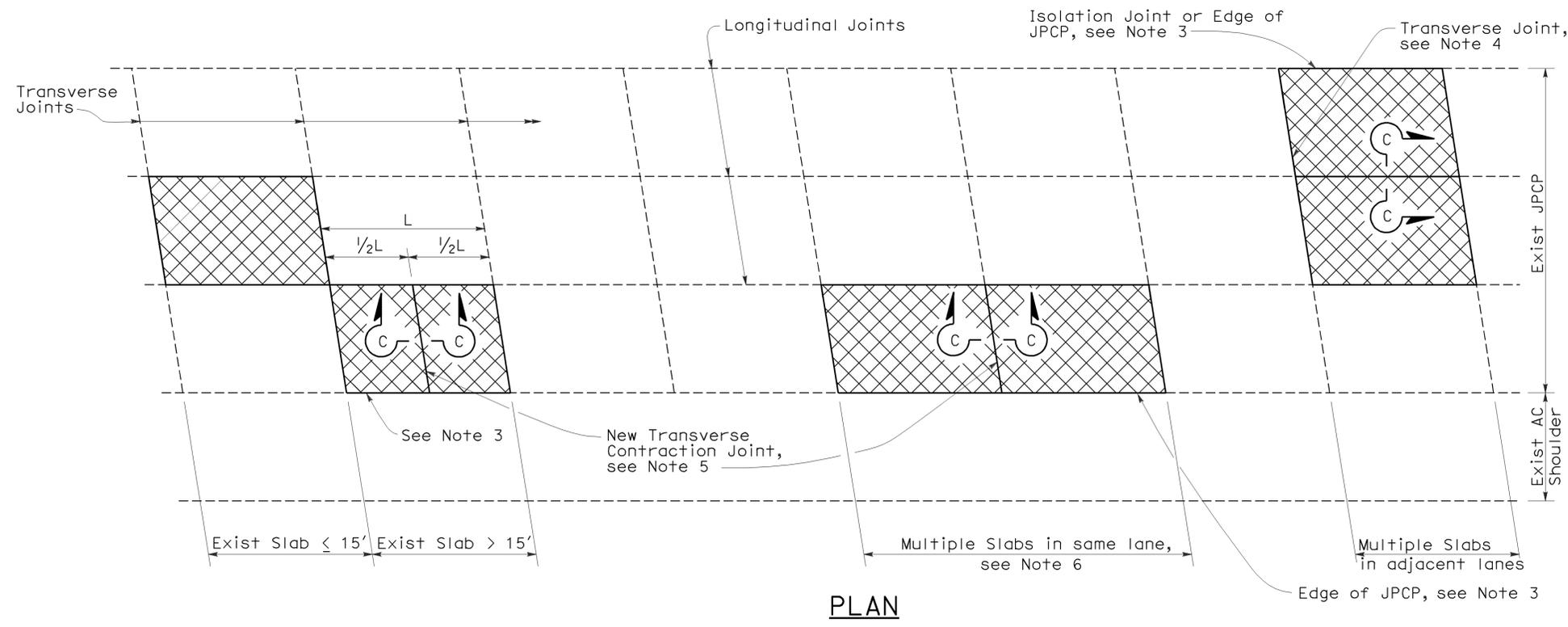


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	49	64

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-10  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 5-24-10

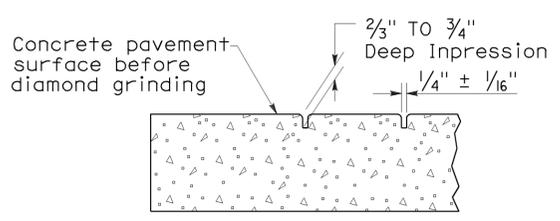
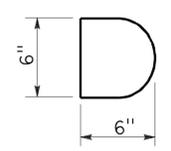
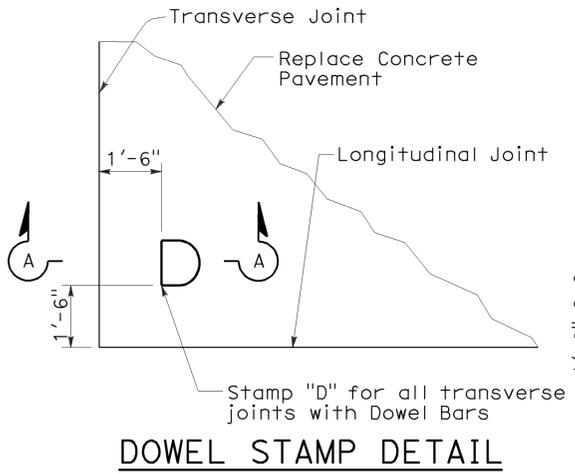


PLAN

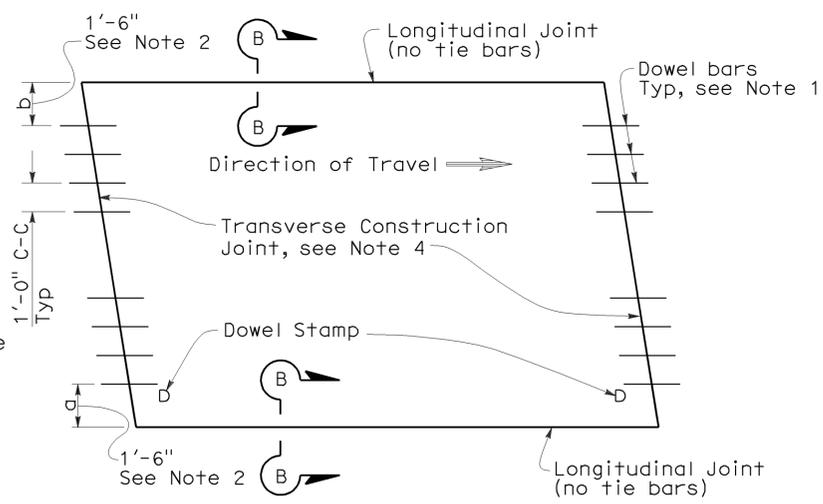
NOTES:

- For details not shown, see Revised Standard Plan RSP P10.
- 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".
- Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
- For detail, see Transverse Construction Joint for existing concrete pavement detail on Revised Standard Plan RSP P10.
- Transverse joint to match skew of existing joint. Omit dowel bars.
- This Standard Plan only applicable when replacing multiple slabs in the same lane is less than 100'.

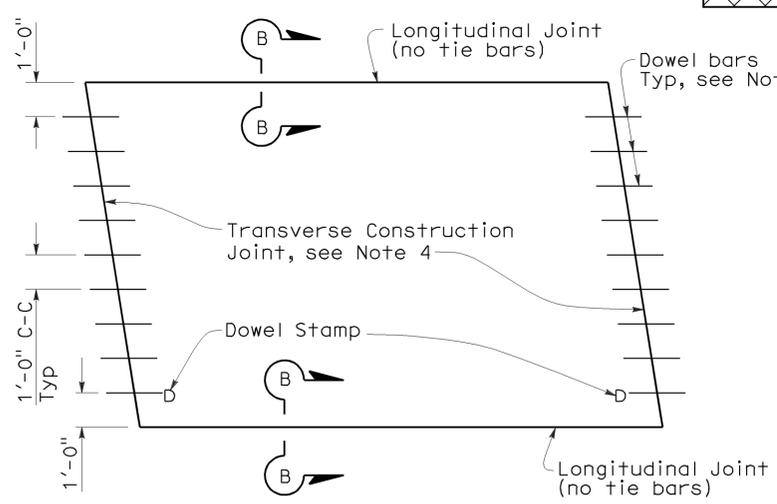
LEGEND



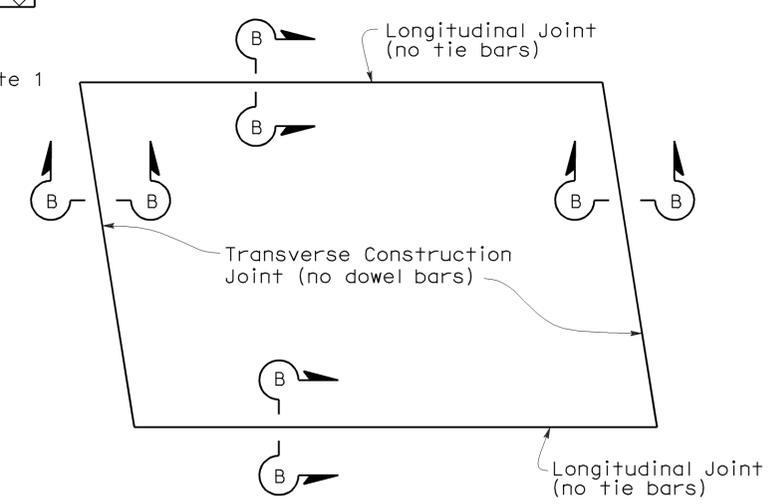
SECTION A-A



TYPE I  
(traffic lane lines match longitudinal joints)

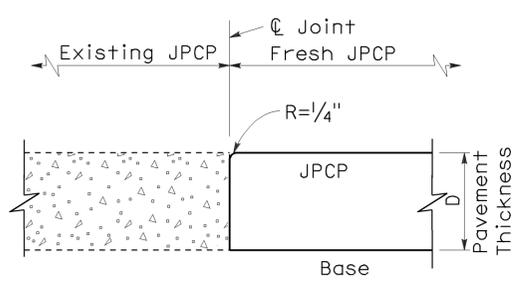


TYPE II  
(traffic lane lines do not match longitudinal joints)

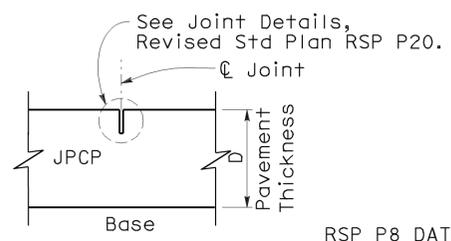


TYPE III  
(for short term repairs < 5 yrs design life or for slab replacements with a cracking and seating operation)

SLAB LAYOUT



SECTION B-B



SECTION C-C

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**JOINTED PLAIN CONCRETE PAVEMENT-INDIVIDUAL SLAB REPLACEMENT**

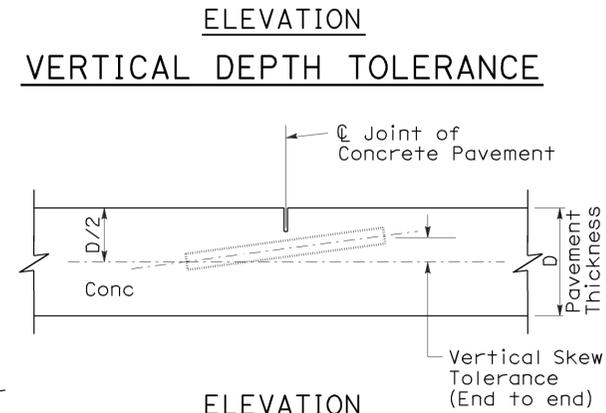
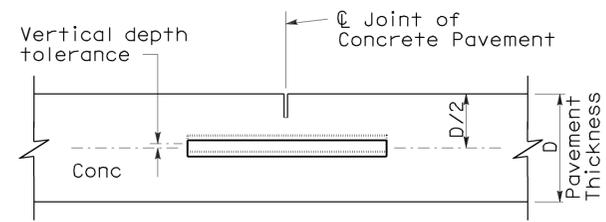
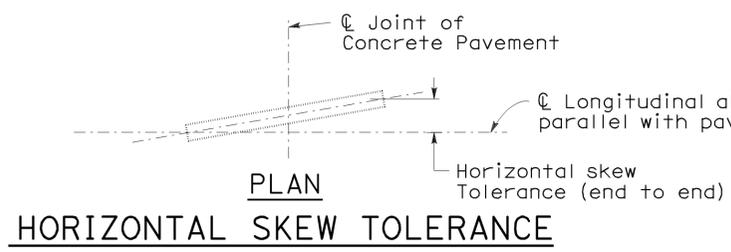
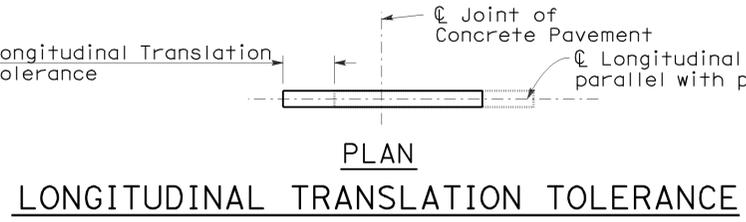
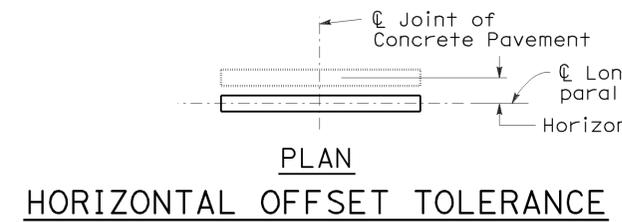
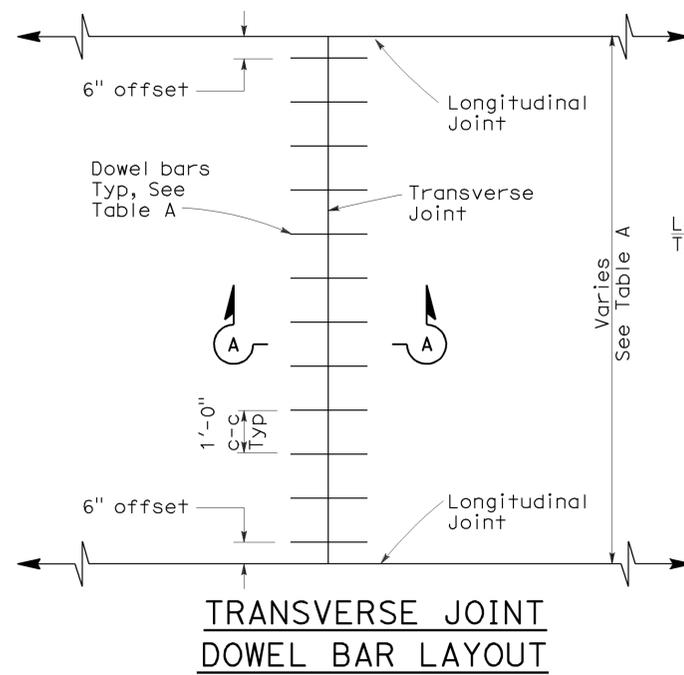
NO SCALE

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

**REVISED STANDARD PLAN RSP P8**

2006 REVISED STANDARD PLAN RSP P8

123



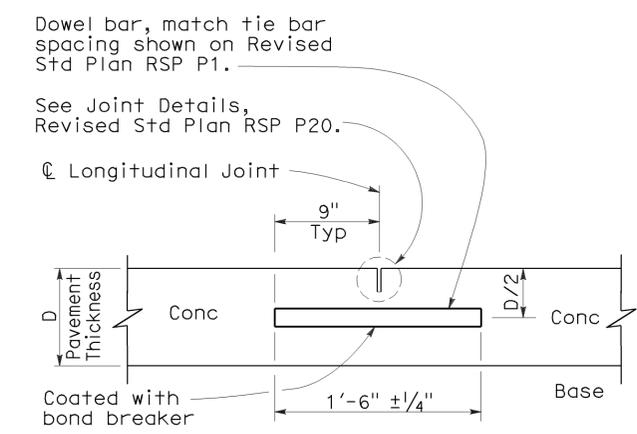
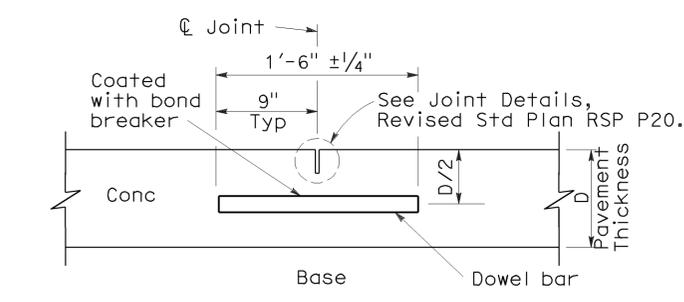
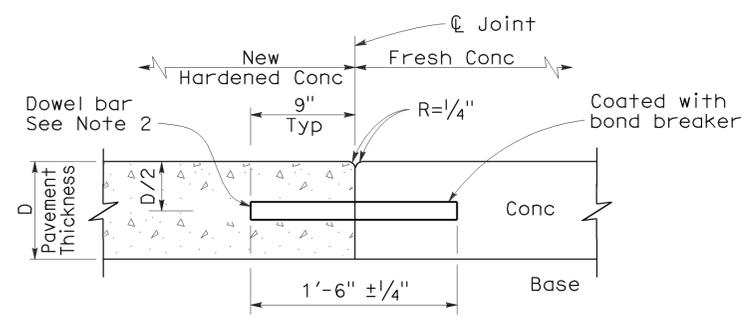
To accompany plans dated 5-24-10

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

**TABLE A (See Note 3)**

Dowel Bar Transverse Spacing Table

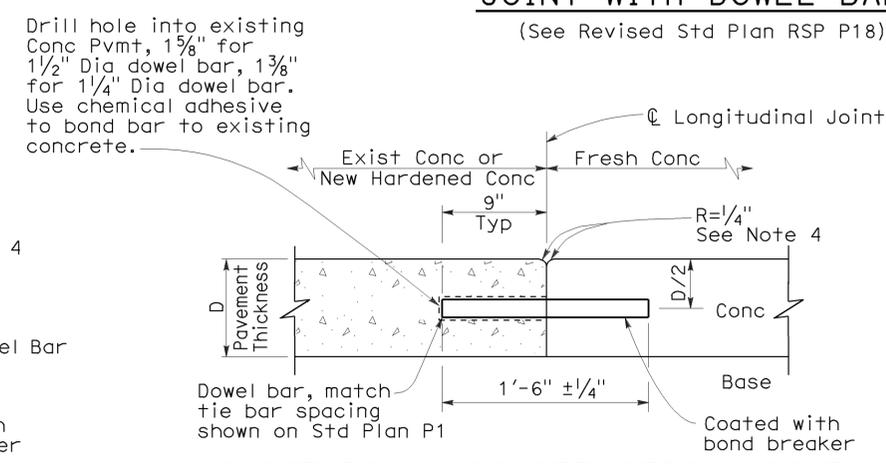
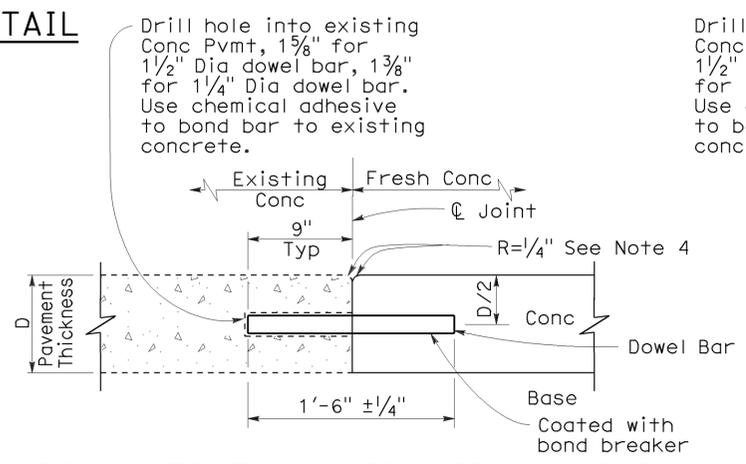
Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4



**SECTION A-A  
TRANSVERSE  
CONSTRUCTION JOINT DETAIL**

**TRANSVERSE CONTRACTION JOINT**

**LONGITUDINAL CONTRACTION  
JOINT WITH DOWEL BARS**  
(See Revised Std Plan RSP P18)



**TRANSVERSE CONSTRUCTION JOINT  
FOR EXISTING CONCRETE PAVEMENT**  
(Drill and bond locations)

**LONGITUDINAL CONSTRUCTION JOINT  
WITH DOWEL BARS**  
(See Revised Std Plan RSP P18)

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT-  
DOWEL BAR  
DETAILS**  
NO SCALE

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

124

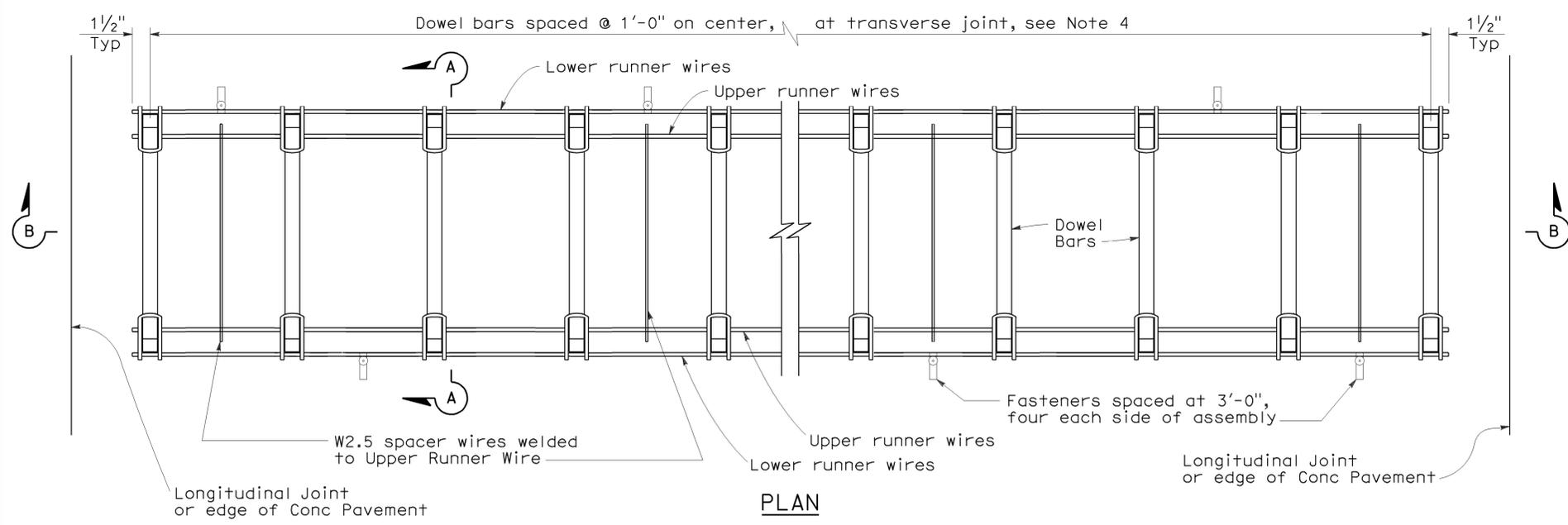
2006 REVISED STANDARD PLAN RSP P10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	51	64

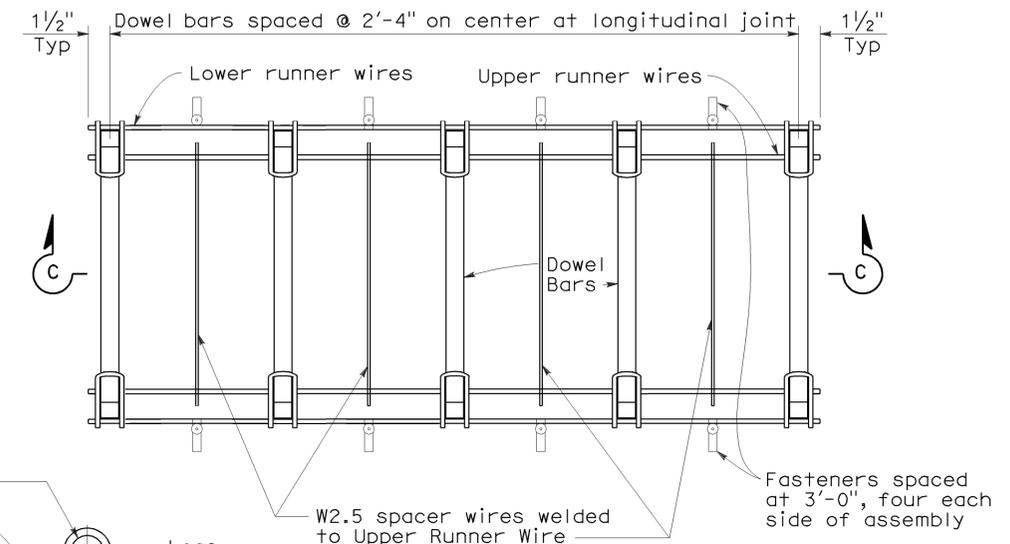
William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-10  
 CIVIL  
 STATE OF CALIFORNIA

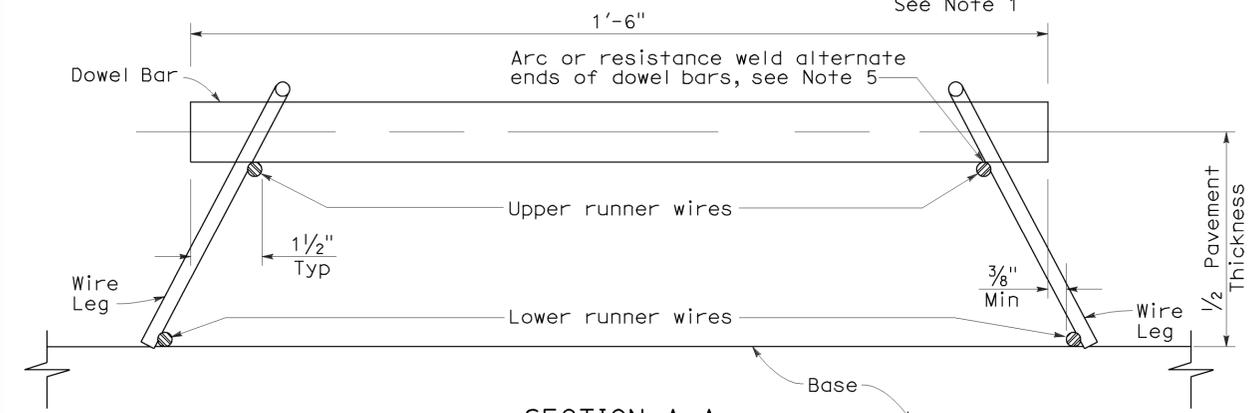
To accompany plans dated 5-24-10



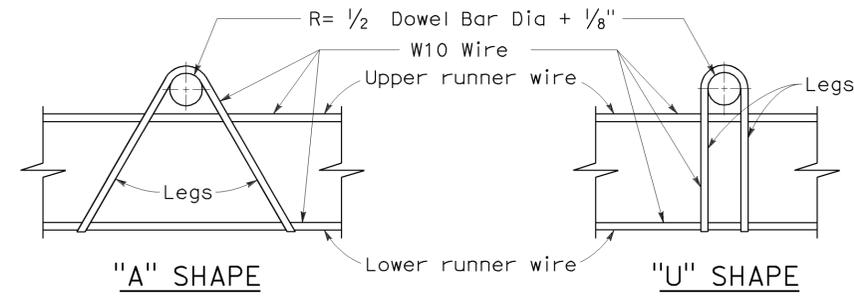
**PLAN**  
**DOWEL BAR BASKET**  
**(TRANSVERSE JOINT)**  
 See Note 1



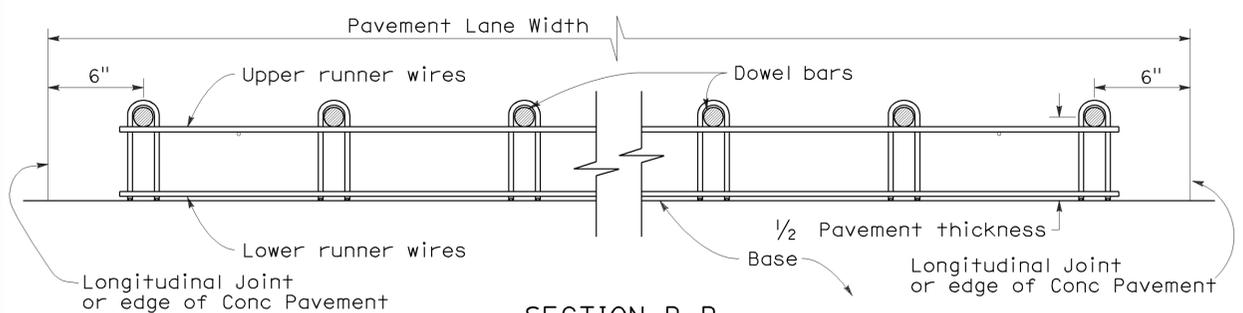
**PLAN**  
**DOWEL BAR BASKET**  
**(LONGITUDINAL JOINT)**  
 See Note 1



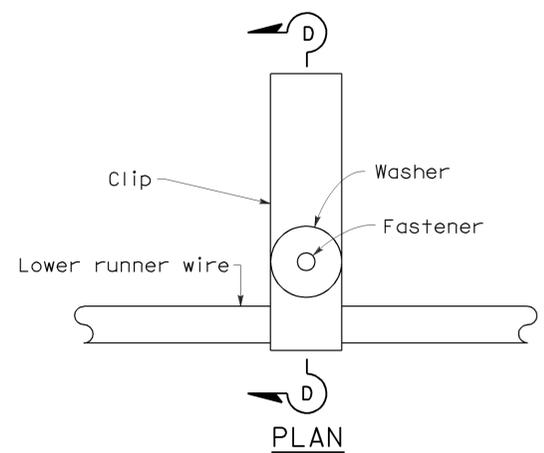
**SECTION A-A**



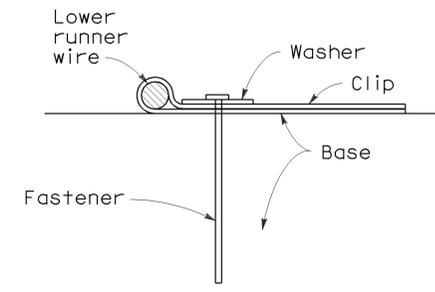
**ASSEMBLY FRAME DETAILS**



**SECTION B-B**  
 See Note 1



**FASTENER DETAIL**



**SECTION D-D**

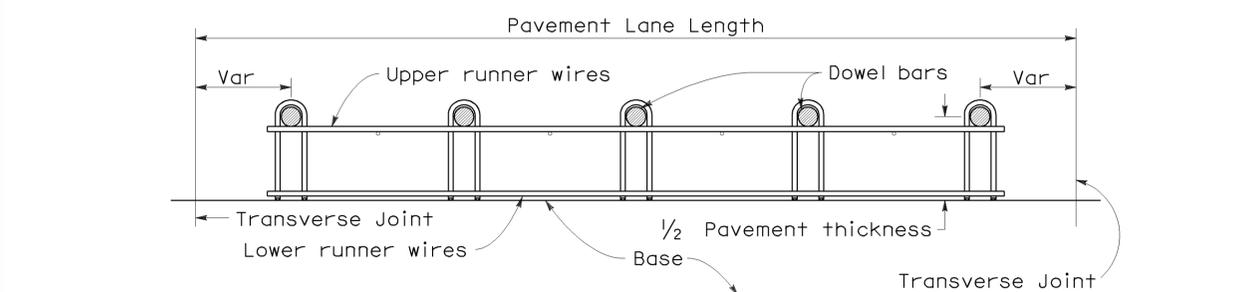
**NOTES:**

- "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
- Wire sizes shown are minimum required.
- All wire intersections are to be resistance welded.
- Use tie bar spacing for longitudinal dowel bar locations. See Revised Std Plans RSPs P1, P2, and P3 for tie bar requirements.
- Weld may be at top or bottom of dowel bar.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT-  
DOWEL BAR BASKET  
DETAILS**

NO SCALE



**SECTION C-C**  
 See Notes 1 and 4

RSP P12 DATED MAY 15, 2009 SUPERSEDES RSP P12 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P12 DATED MAY 1, 2006 - PAGE 125 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P12**

2006 REVISED STANDARD PLAN RSP P12

125

**NOTE:**

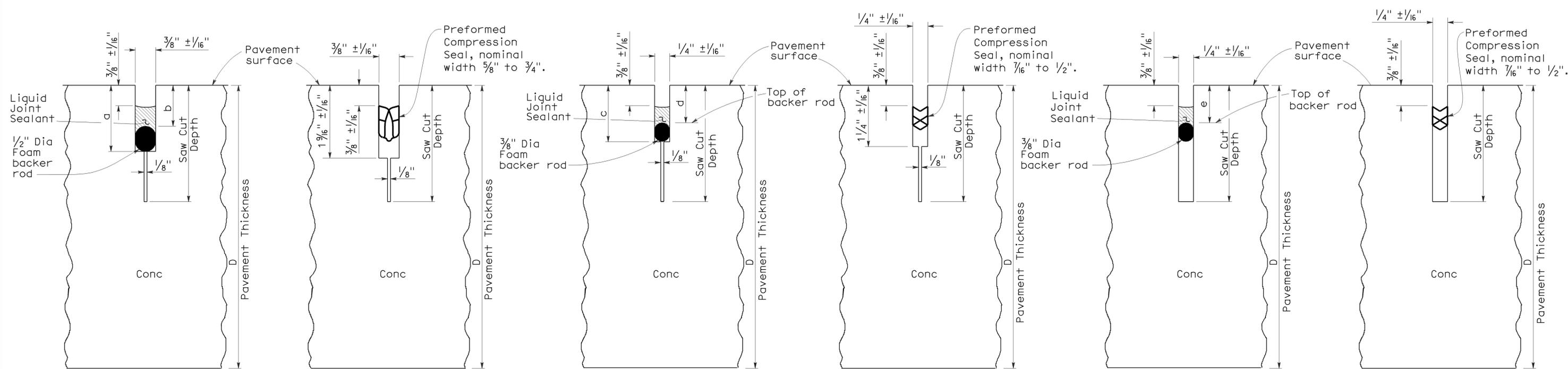
1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	52	64

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

May 15, 2009  
 PLANS APPROVAL DATE

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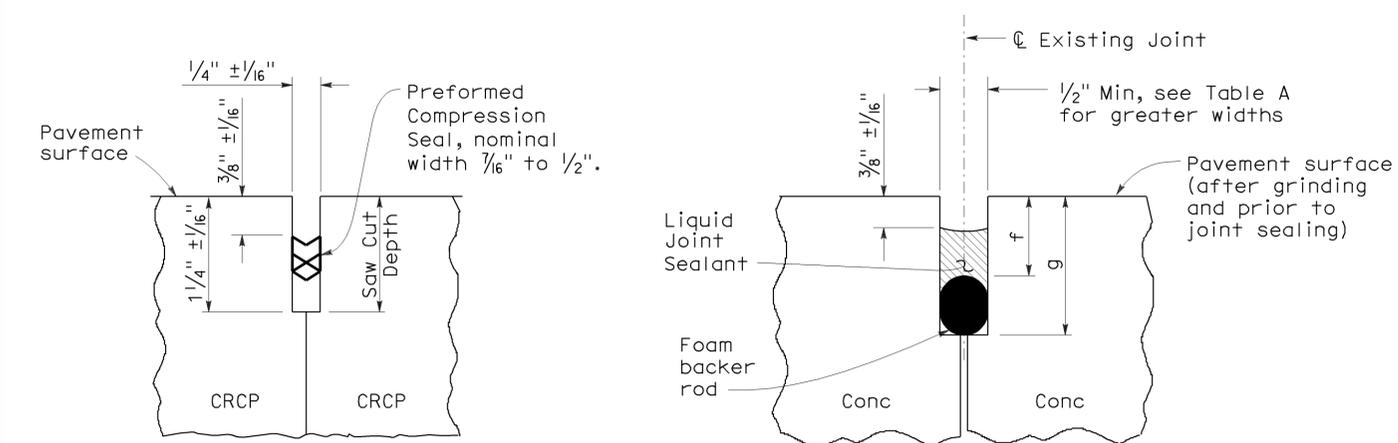


LIQUID SEALANT      COMPRESSION SEAL      LIQUID SEALANT      COMPRESSION SEAL      LIQUID SEALANT      COMPRESSION SEAL  
**TYPE A1**      **TYPE A2**      **TYPE B**  
 Transverse Contraction Joints      Longitudinal Contraction Joints      Longitudinal or Transverse Contraction Joint

To accompany plans dated 5-24-10

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2006 REVISED STANDARD PLAN RSP P20



COMPRESSION SEAL      LIQUID SEALANT  
**TYPE C**      **TYPE R**  
 Transverse and Longitudinal Construction Joints (For CRCP)      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
SILICONE	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**

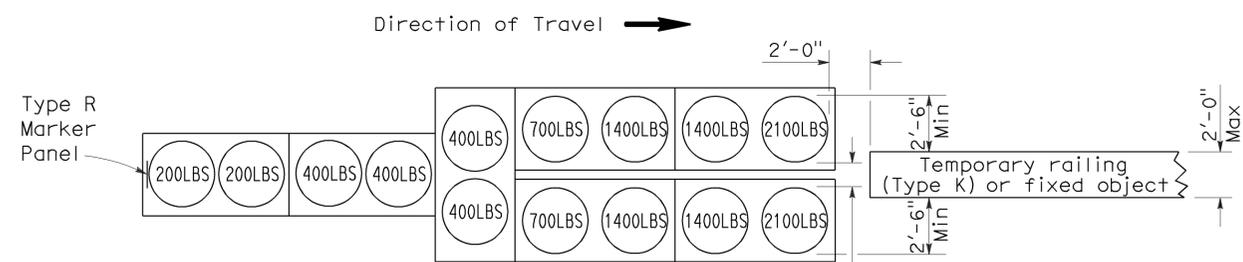
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	53	64

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

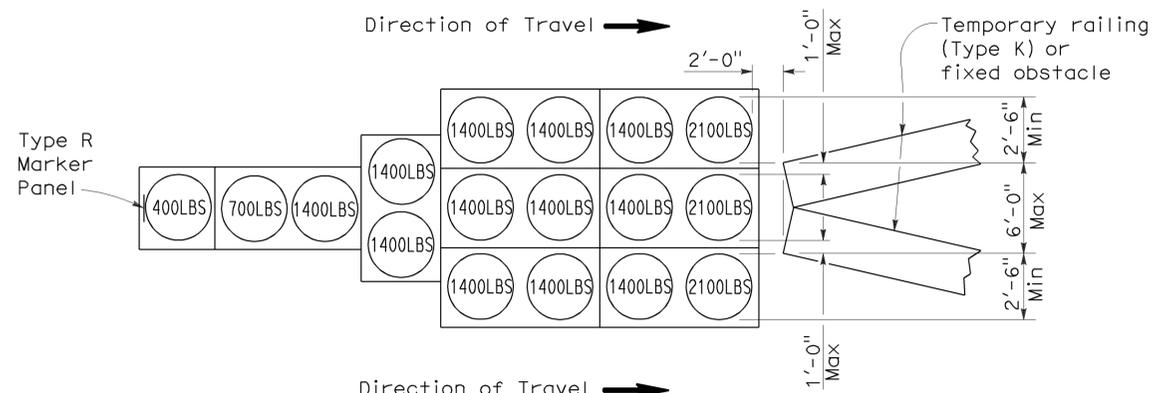
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 5-24-10



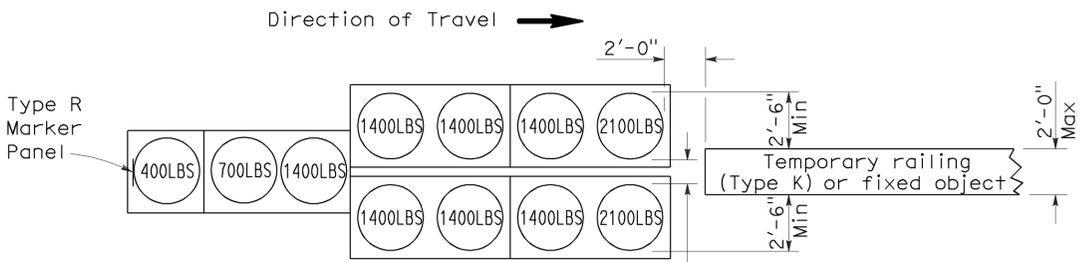
**ARRAY 'TU14'**

Approach speed 45 mph or more



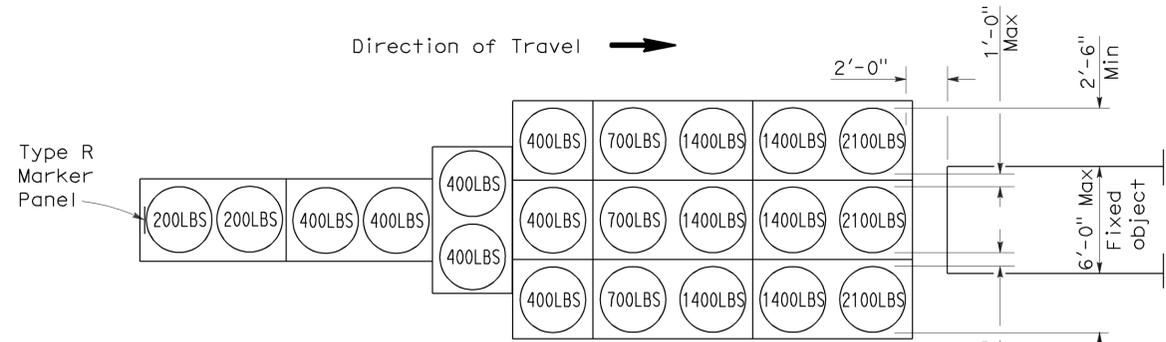
**ARRAY 'TU17'**

Approach speed less than 45 mph



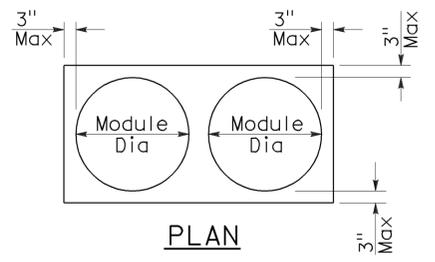
**ARRAY 'TU11'**

Approach speed less than 45 mph

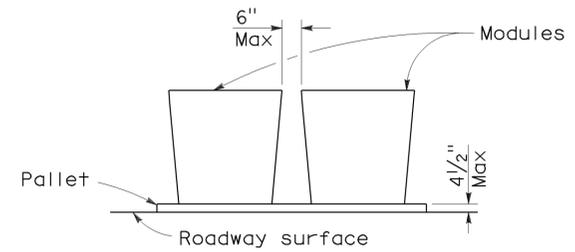


**ARRAY 'TU21'**

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
04	SCI	880	0.0/4.3	54	64

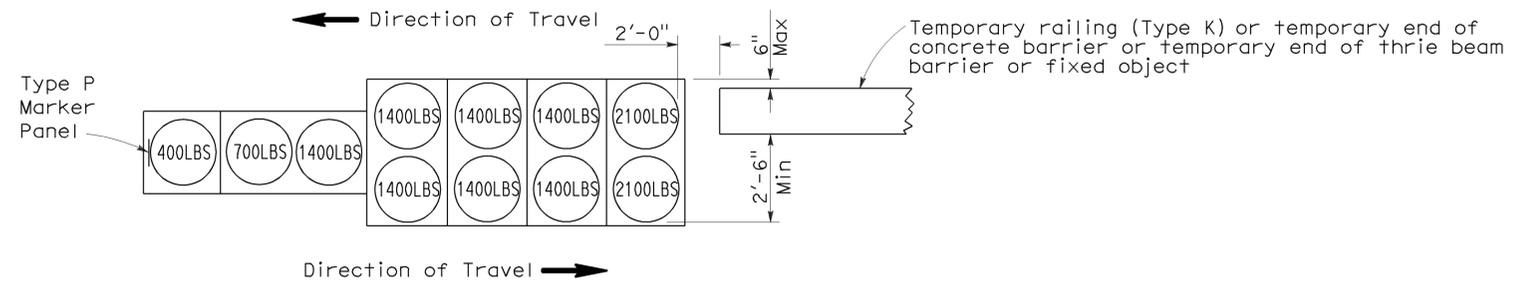
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

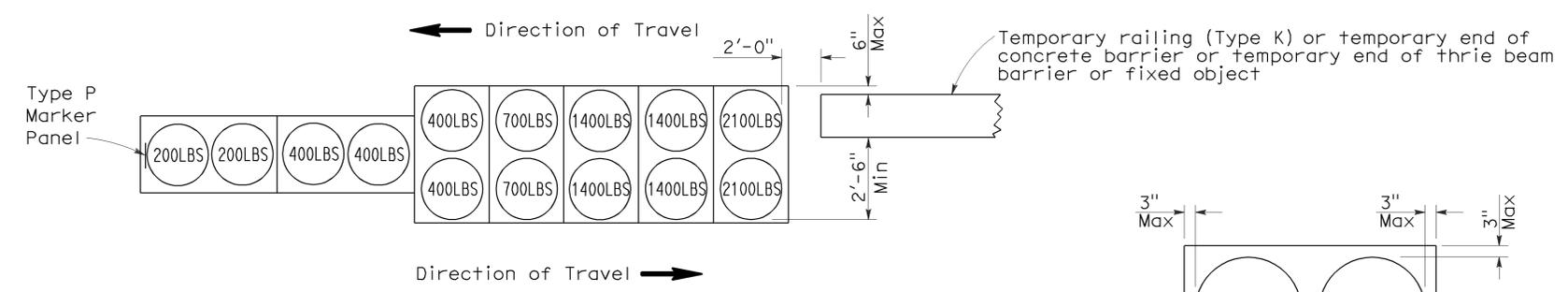
*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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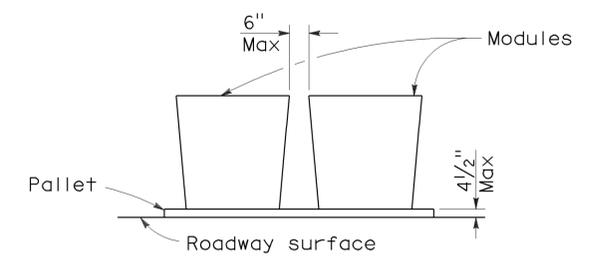
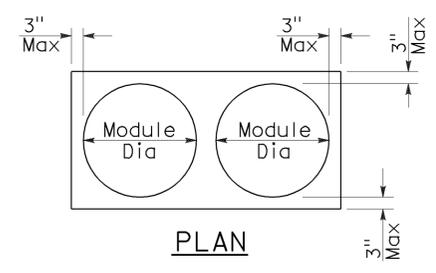
To accompany plans dated 5-24-10



**ARRAY 'TB11'**  
Approach speed less than 45 mph



**ARRAY 'TB14'**  
Approach speed 45 mph or more



**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

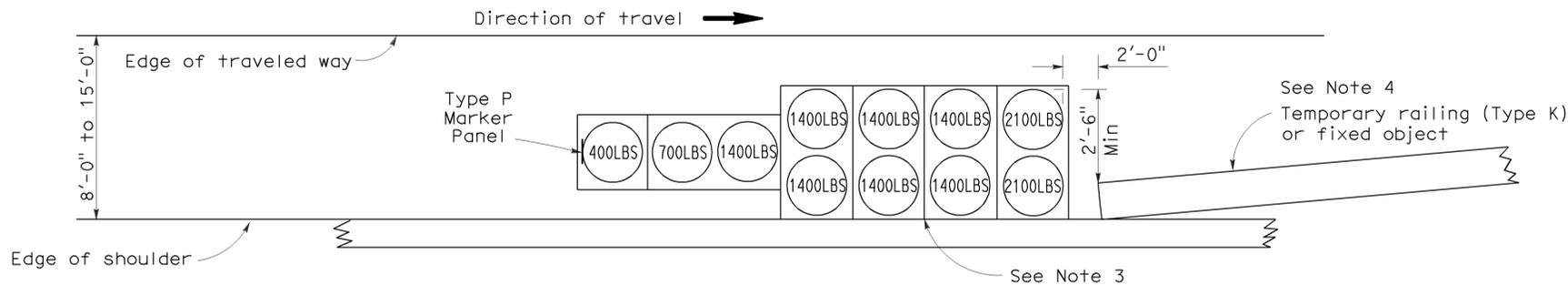
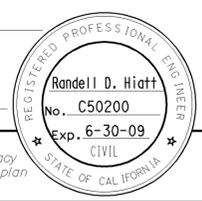
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	55	64

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

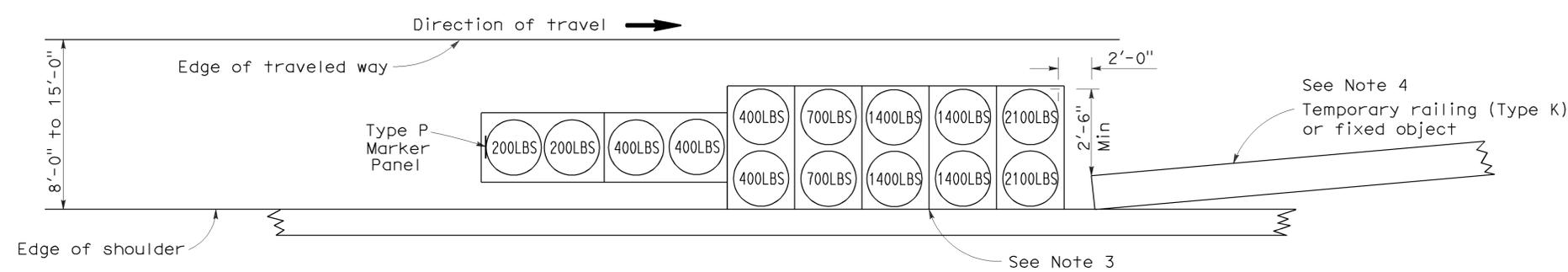
June 6, 2008  
PLANS APPROVAL DATE

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To accompany plans dated 5-24-10



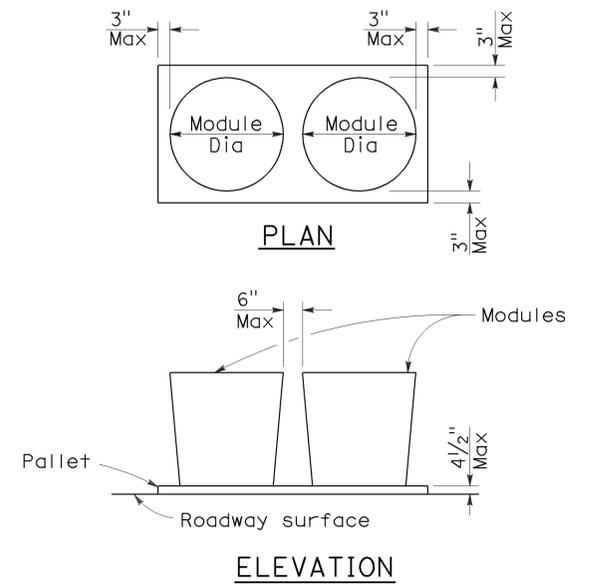
**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



**ARRAY 'TS14'**  
Approach speed 45 mph or more  
See Note 9

**NOTES:**

- (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.
- All sand weights are nominal.
- 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.
- 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.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- 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.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.



**CRASH CUSHION PALLET DETAIL**  
See Note 11

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE

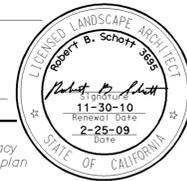
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T2**

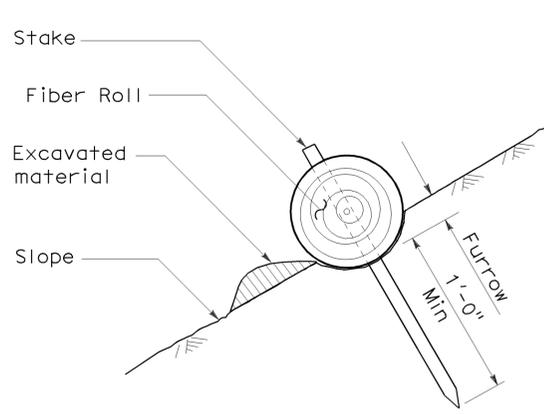
2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	56	64

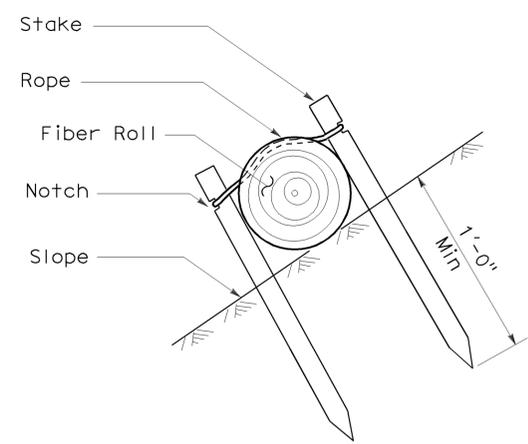
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 April 3, 2009  
 PLANS APPROVAL DATE  
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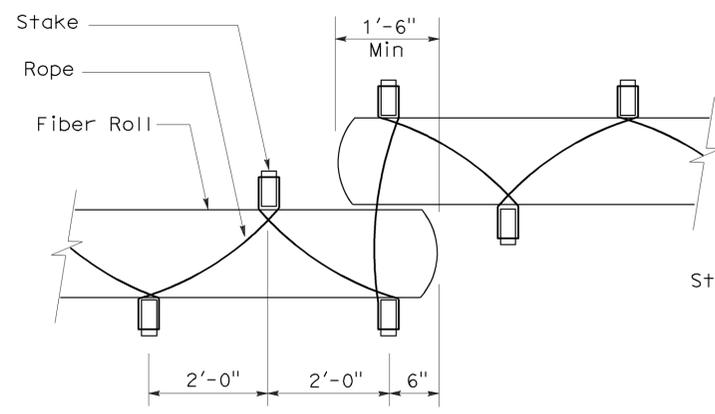
To accompany plans dated 5-24-10



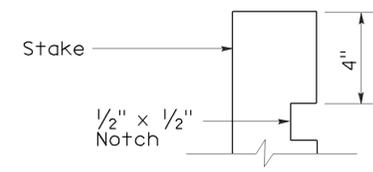
**SECTION**  
**TEMPORARY FIBER ROLL (TYPE 1)**



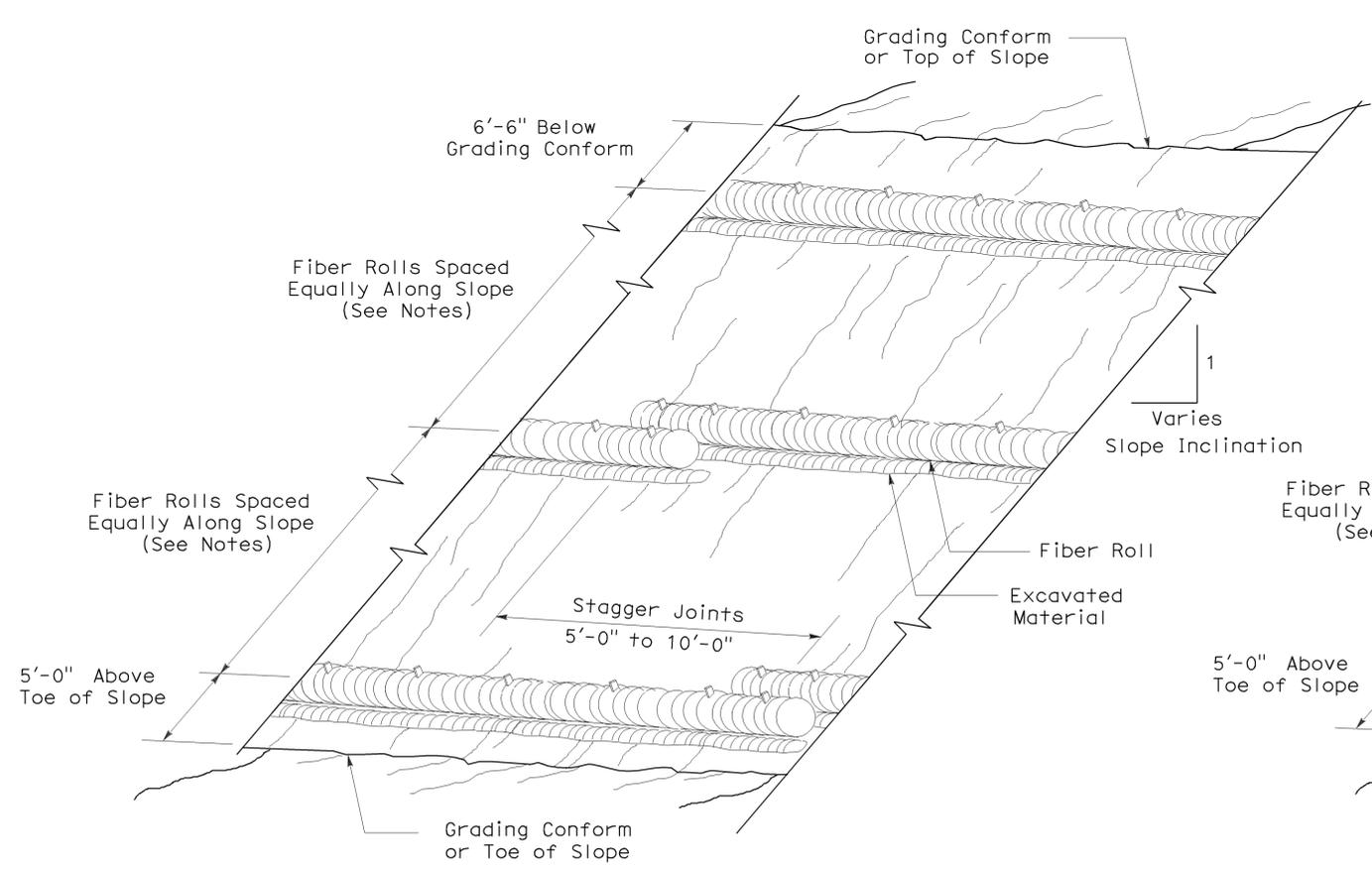
**SECTION**  
**TEMPORARY FIBER ROLL (TYPE 2)**



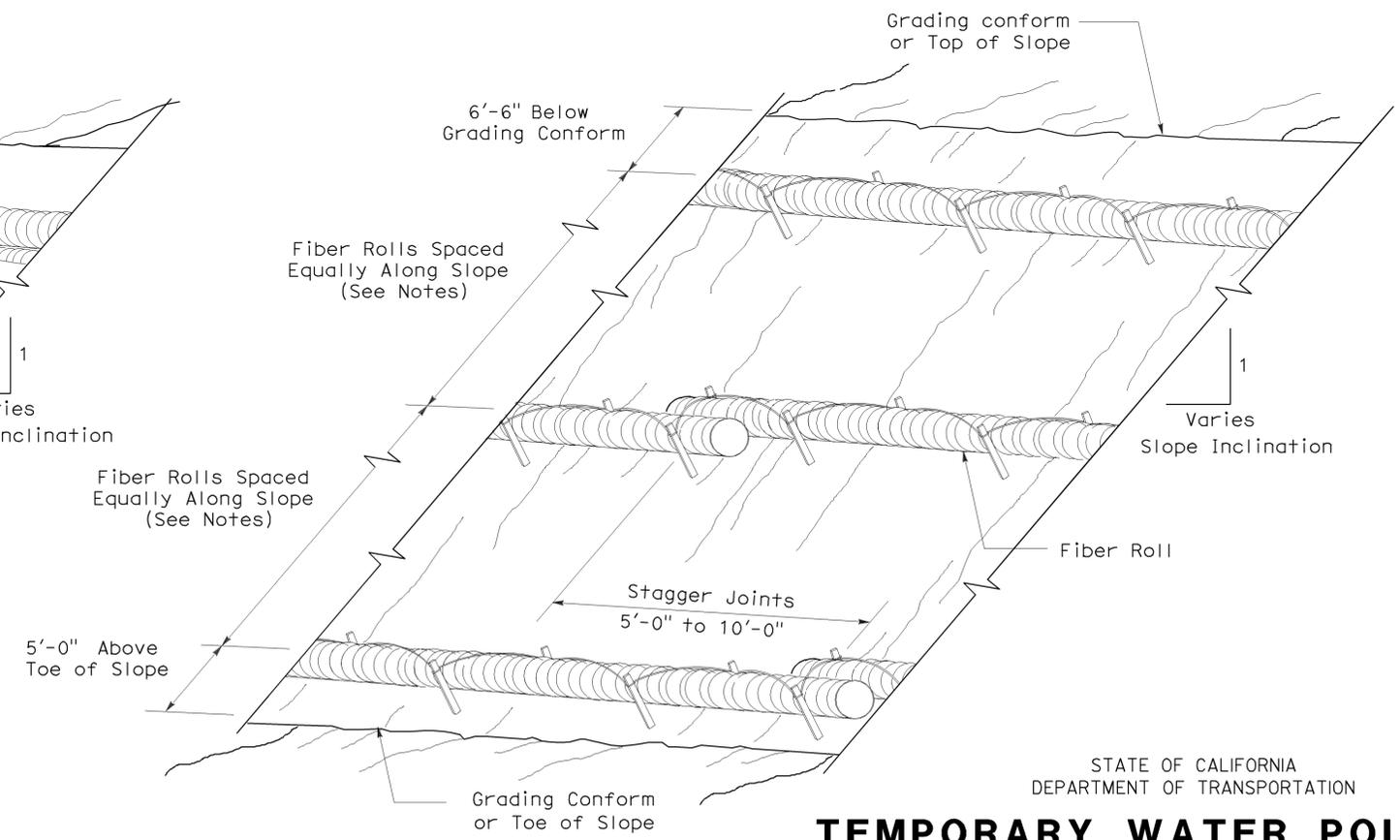
**PLAN**  
**ELEVATION**  
**STAKE NOTCH DETAIL**



- NOTES:**
1. Temporary fiber roll spacing varies depending upon slope inclination.
  2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



**PERSPECTIVE**  
**TEMPORARY FIBER ROLL (TYPE 1)**



**PERSPECTIVE**  
**TEMPORARY FIBER ROLL (TYPE 2)**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY FIBER ROLL)**  
 NO SCALE

RSP T56 DATED APRIL 3, 2009 SUPERSEDES STANDARD PLAN T56 DATED MAY 1, 2006 - PAGE 232 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T56**

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2006 REVISED STANDARD PLAN RSP T56

# ELECTROLIERS

STANDARD TYPES		
15, 15D		High mast light pole
15 STRUCTURE		Double Arm lighting standard
21, 21D STRUCTURE		Existing electrolier
30		Electrolier foundation (Future installation)
31		
32		
35		
36-20A		

**NOTES:**

- 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.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
- Variations noted adjacent to symbol on project plans.

- Electrolier (see project notes or project plans)
- Luminaire on wood pole

## STANDARD NOTES:

- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF** Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH** Detector handhole.
- FA** Foundation to be abandoned.
- IS** Install sign on signal mast arm.
- NS** No slip base on standard.
- PEC** Photoelectric control.
- PEU** Photoelectric unit.
- RC** Equipment or material to be removed and become the property of the Contractor.
- RE** Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL** Relocate equipment.
- RR** Remove and reuse equipment.
- RS** Remove and salvage equipment.
- SC** Splice new to existing conductors.
- SD** Service disconnect.
- SF** Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP** Telephone service point.

# ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

## PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	57	64

*Jeffery G. McRae*  
REGISTERED ELECTRICAL ENGINEER

October 5, 2007  
PLANS APPROVAL DATE

*Jeffery G. McRae*  
No. E14512  
Exp. 6-30-08  
ELECTRICAL  
STATE OF CALIFORNIA

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To accompany plans dated 5-24-10

## SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- Existing soffit or wall luminaire to be modified as specified.

### NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

# ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

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

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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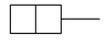
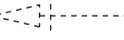
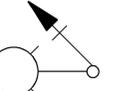
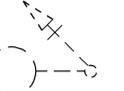
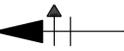
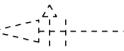
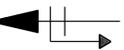
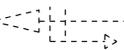
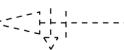
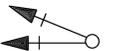
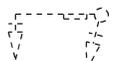
Jeffrey G. McRae  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 PLANS APPROVAL DATE  
 Jeffrey G. McRae  
 No. E14512  
 Exp. 6-30-08  
 ELECTRICAL  
 STATE OF CALIFORNIA

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### 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 
		Conduit riser in/on structure or service pole

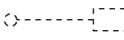
### SIGNAL EQUIPMENT

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
		Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" Indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign

### SERVICE EQUIPMENT

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

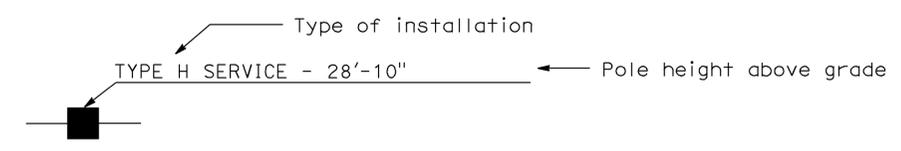
### SIGNAL EQUIPMENT Cont

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

### NOTES:

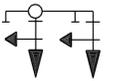
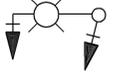
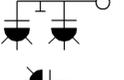
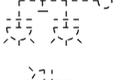
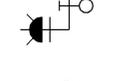
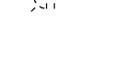
- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

### POLE-MOUNTED SERVICE DESIGNATION



### ILLUMINATED OVERHEAD SIGN

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

		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
		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

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
 (SYMBOLS AND ABBREVIATIONS)**  
 NO SCALE

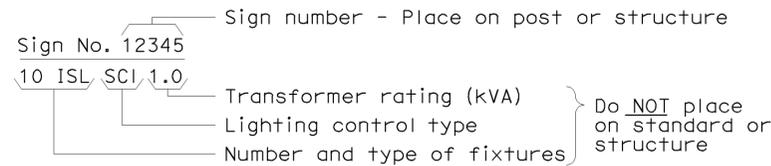
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B  
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1B**

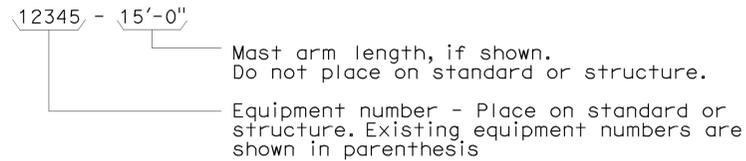
2006 REVISED STANDARD PLAN RSP ES-1B

### EQUIPMENT IDENTIFICATION

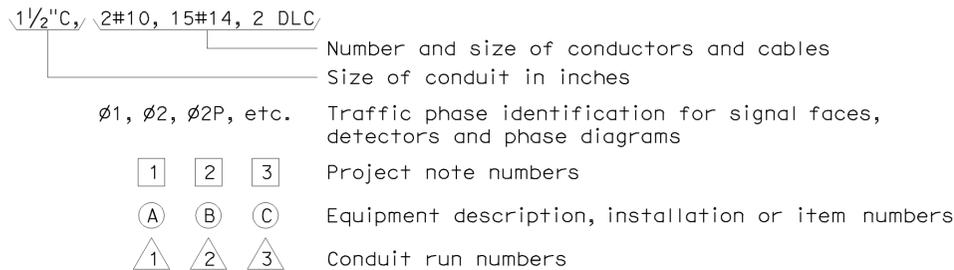
#### ILLUMINATED SIGN IDENTIFICATION NUMBER:



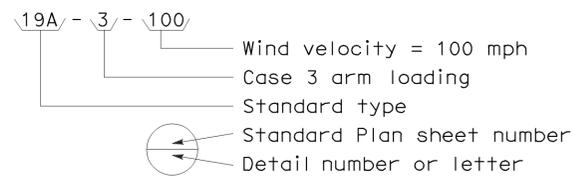
#### ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



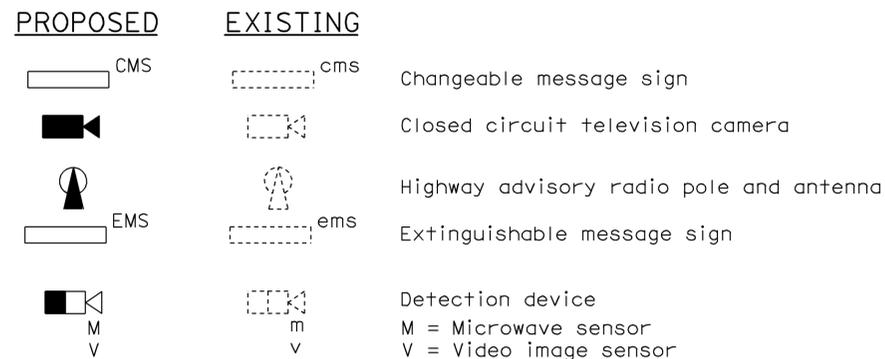
#### CONDUIT AND CONDUCTOR IDENTIFICATION:



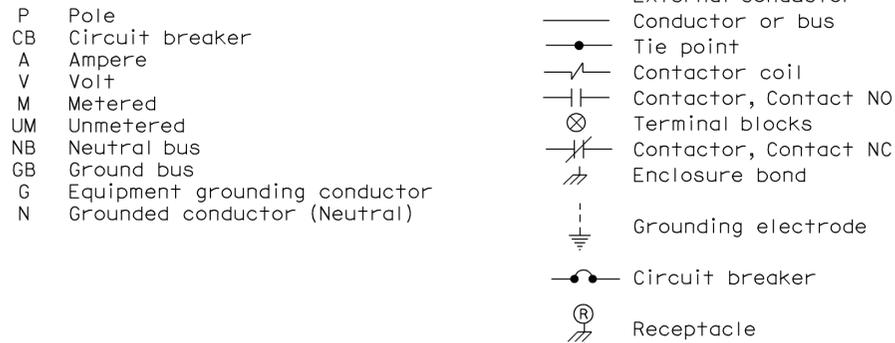
#### SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



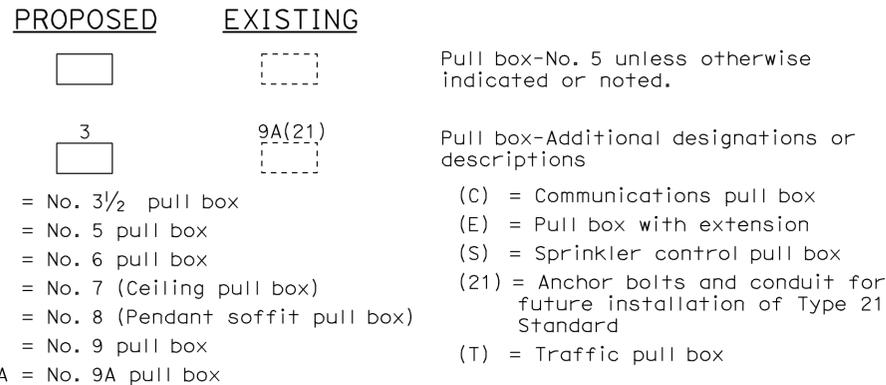
### MISCELLANEOUS EQUIPMENT



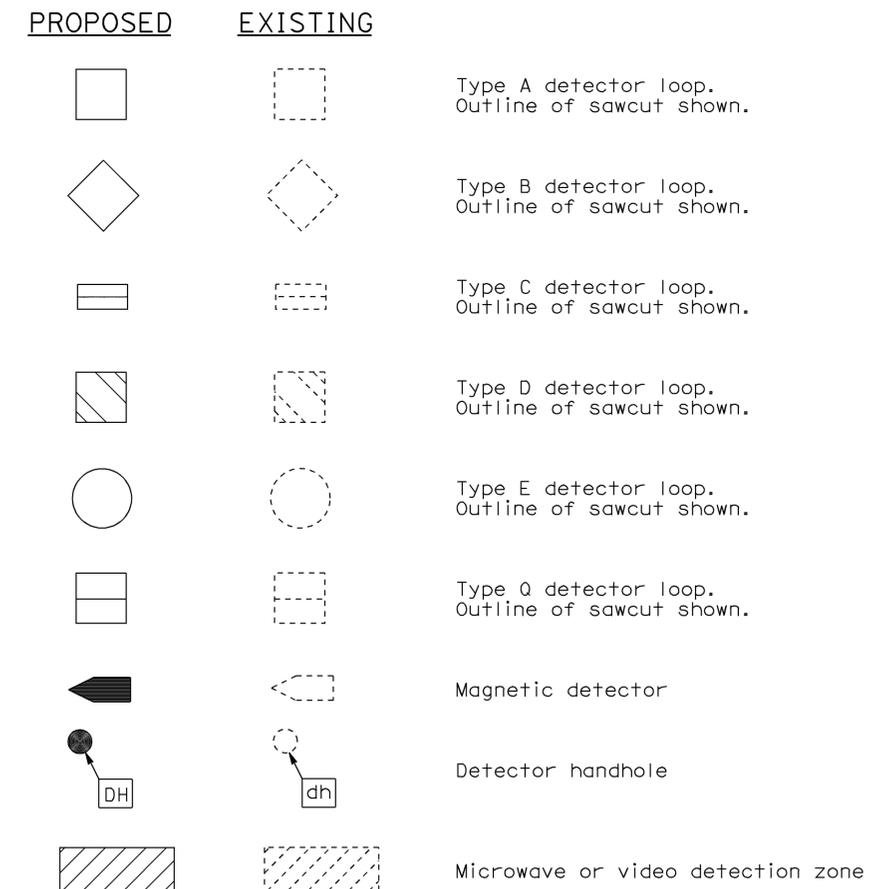
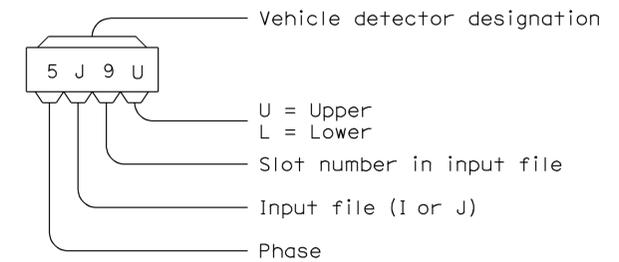
### WIRING DIAGRAM LEGEND



### PULL BOXES



### VEHICLE DETECTORS



STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

## ELECTRICAL SYSTEMS (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.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	60	64

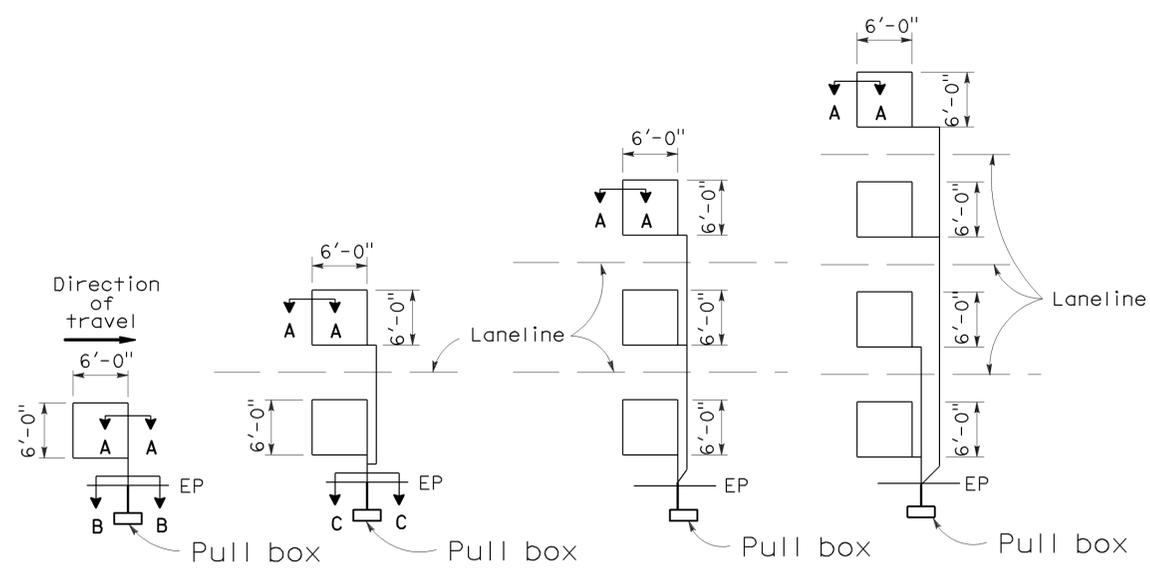
*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 5-24-10

2006 REVISED STANDARD PLAN RSP ES-5A

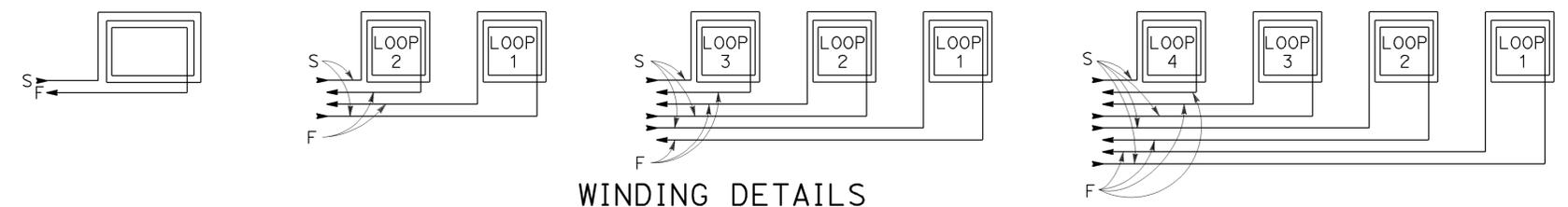
## LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- 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.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- 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.
- 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.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- 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.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- 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.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- 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.



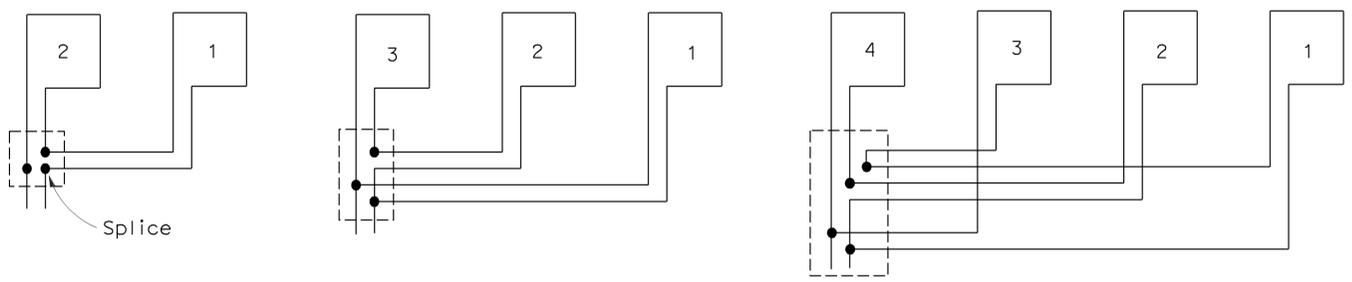
TYPE 1A INSTALLATION    TYPE 2A INSTALLATION    TYPE 3A INSTALLATION    TYPE 4A INSTALLATION  
**SAWCUT DETAILS**

- (Type A loop detector configurations illustrated)
- 1A thru 4A = 1 Type A loop configuration in each lane.
  - 1B thru 4B = 1 Type B loop configuration in each lane.
  - 1C = 1 Type C loop configuration entering lanes as required.
  - 1D thru 4D = 1 Type D loop configuration in each lane.
  - 1E thru 4E = 1 Type E loop configuration in each lane.
  - 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)



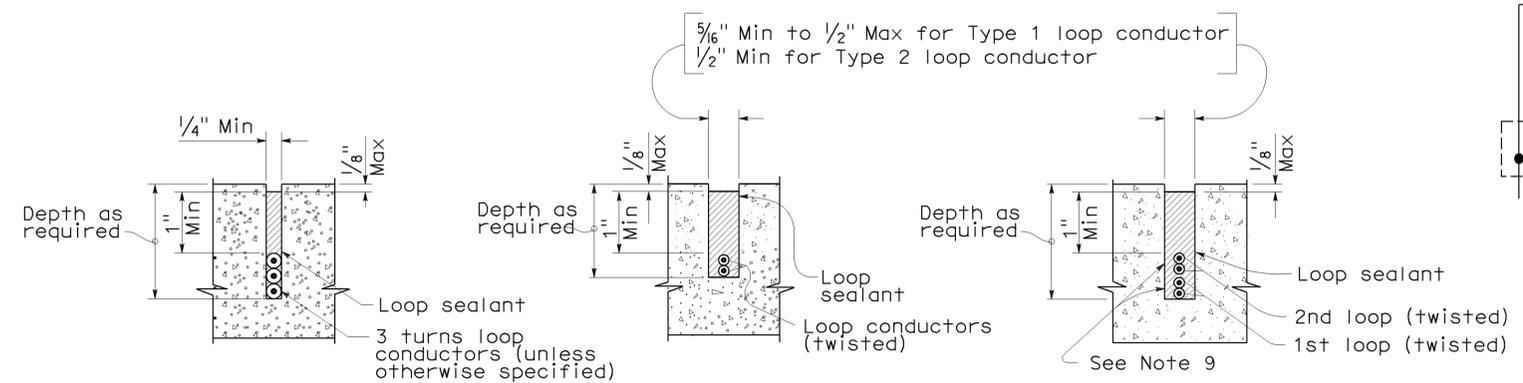
**WINDING DETAILS**

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)**

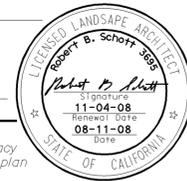
NO SCALE

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**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	61	64

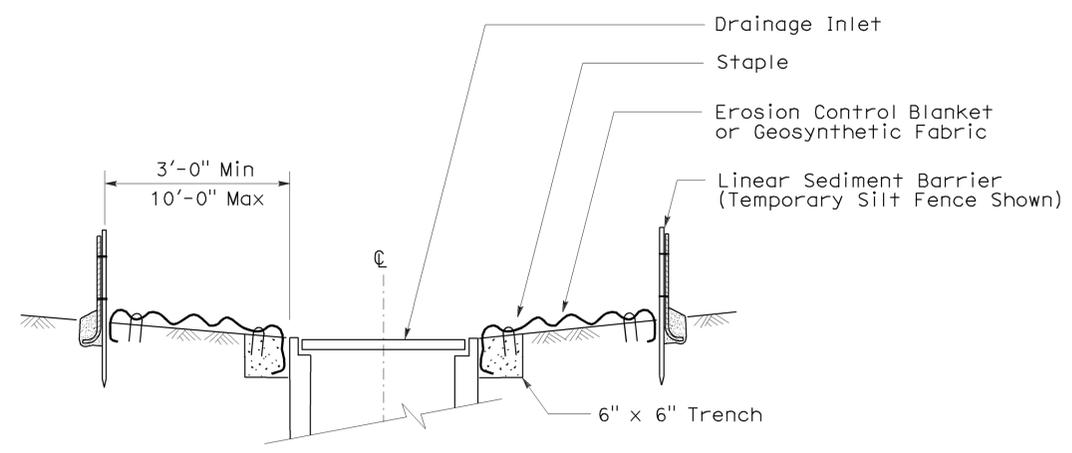
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS Approval DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



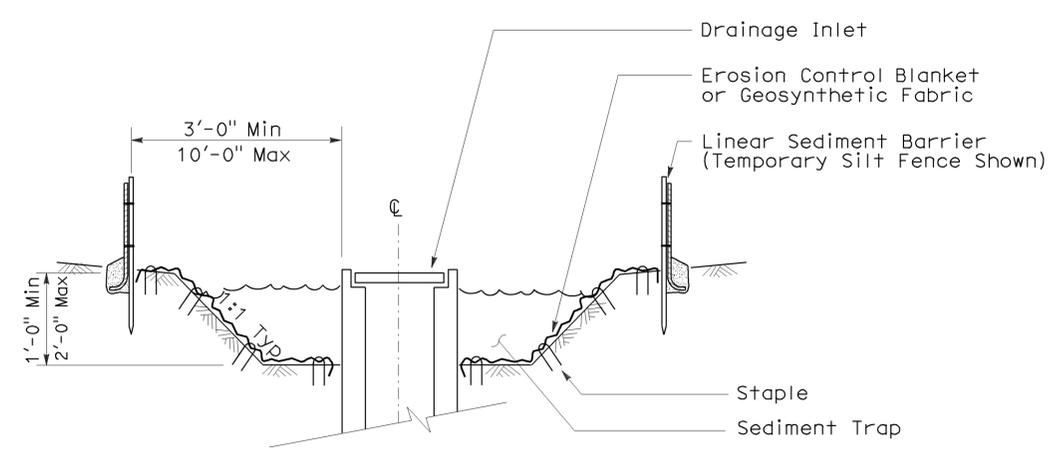
To accompany plans dated 5-24-10

**NOTES:**

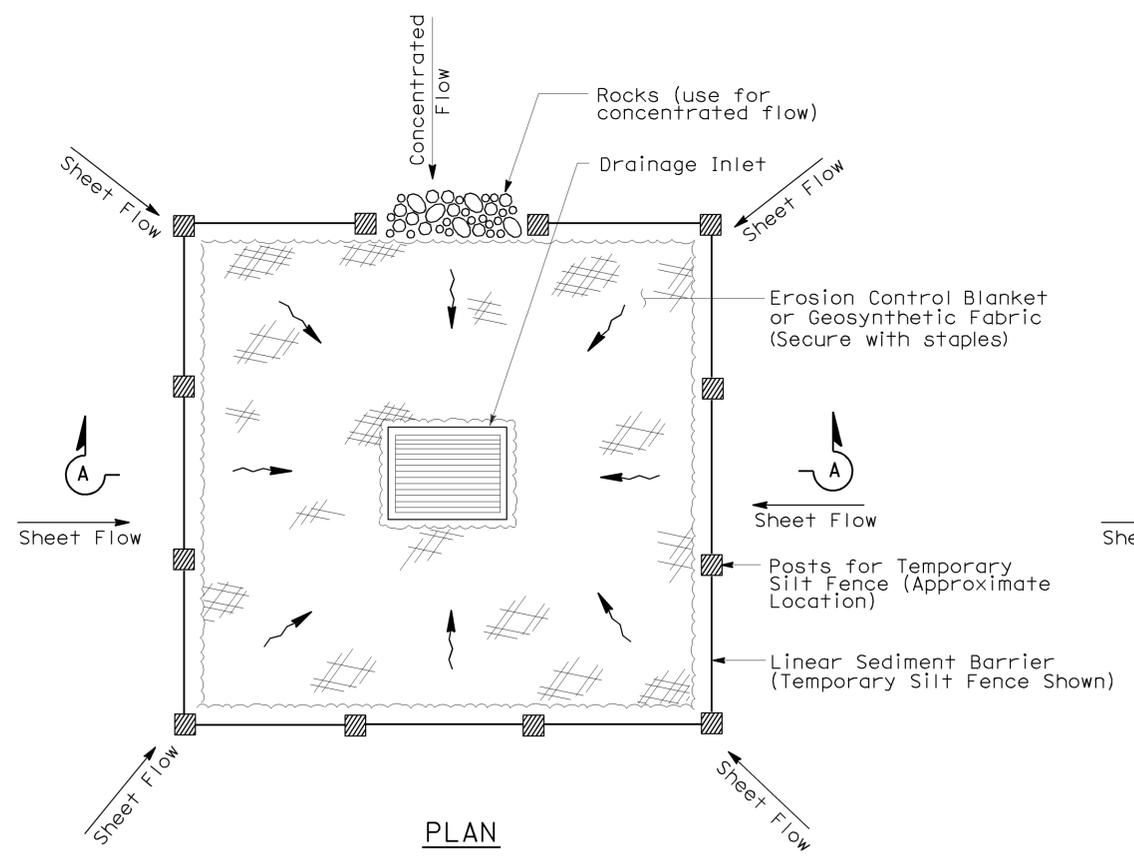
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.



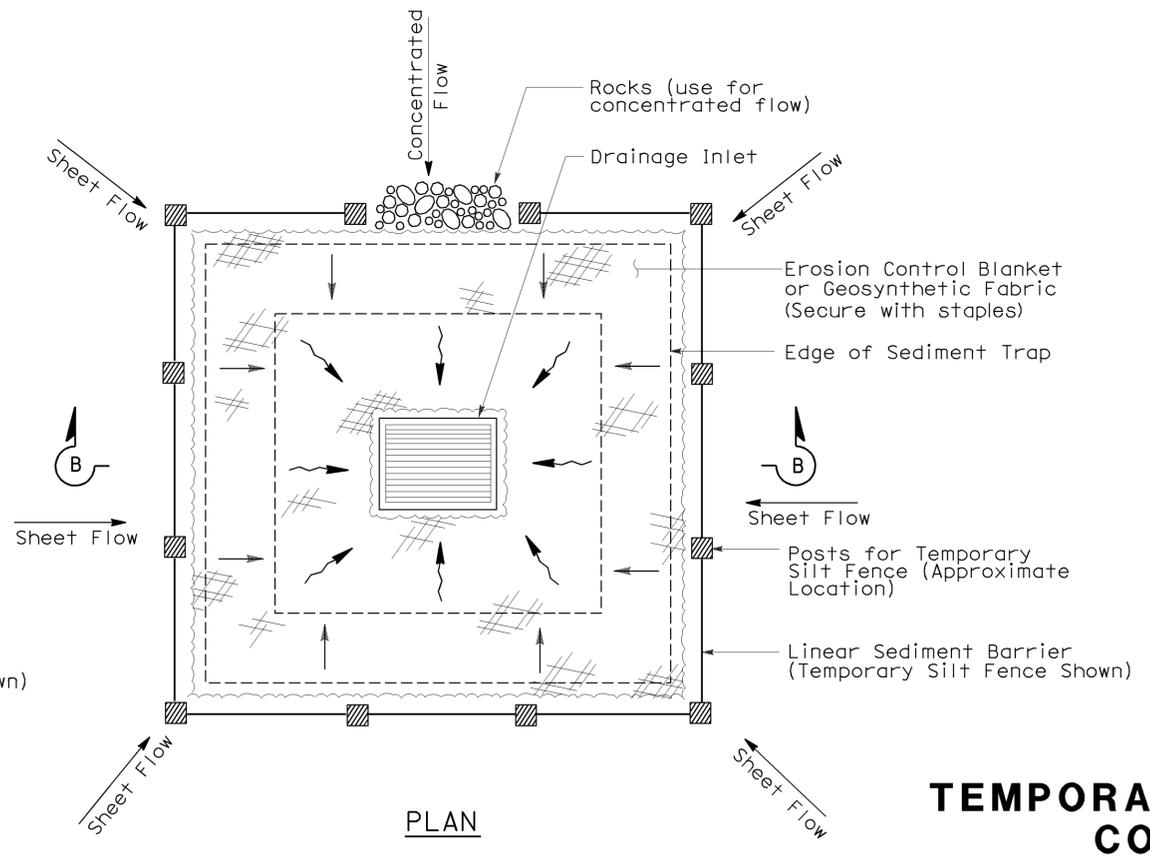
**SECTION A-A**



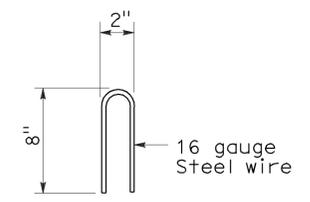
**SECTION B-B**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)**



**STAPLE DETAIL**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**  
 NO SCALE

Nsp t61 dated august 15, 2008 supplements the standard plans book dated may 2006.

**2006 NEW STANDARD PLAN NSP T61**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	62	64

Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT

August 15, 2008  
 PLANS APPROVAL DATE

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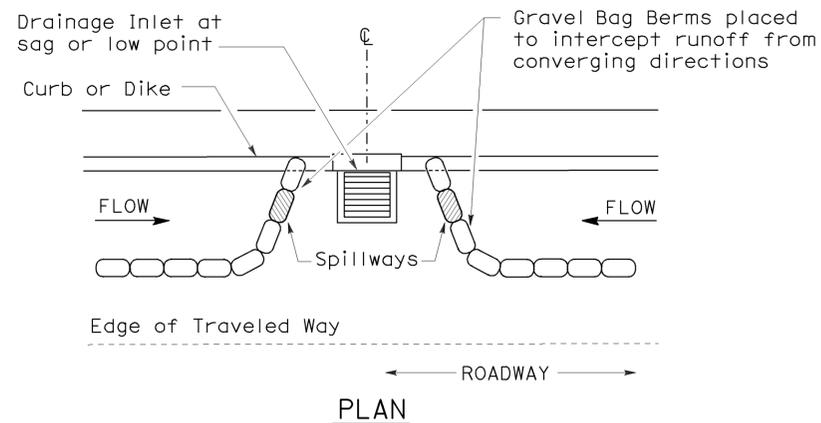
To accompany plans dated 5-24-10



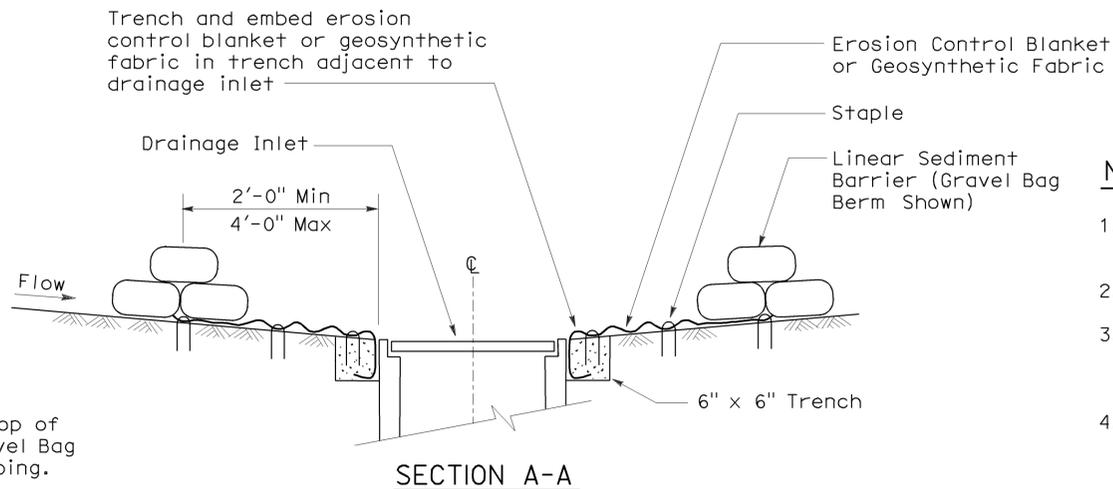
### GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

For slope of less than 1%, install barriers only if erosion/sediment is prevalent



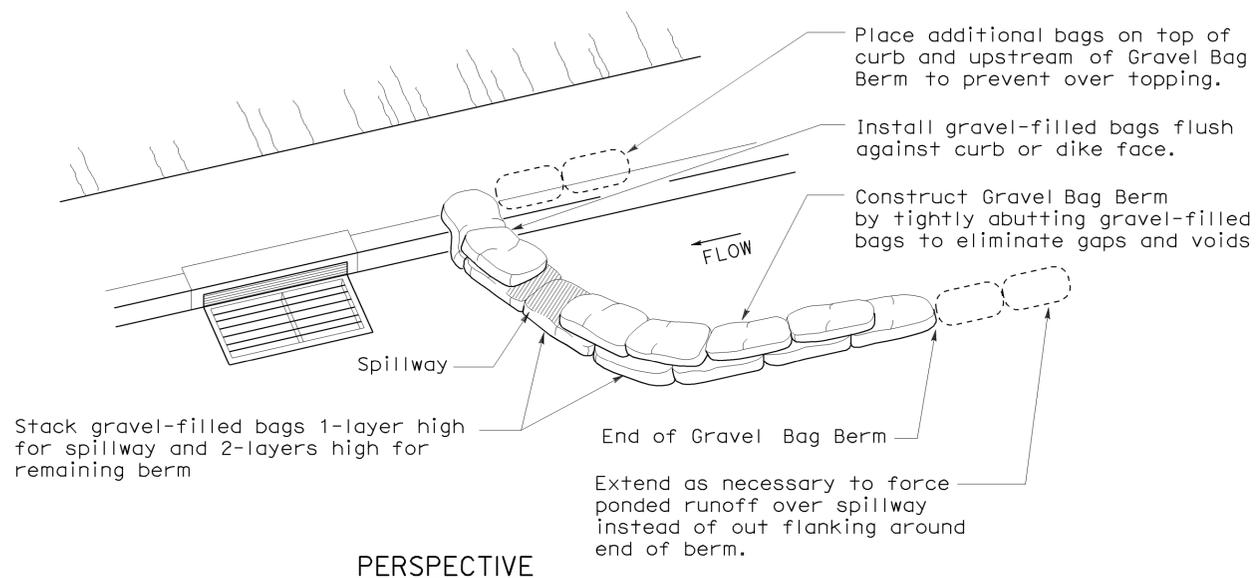
**CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)**



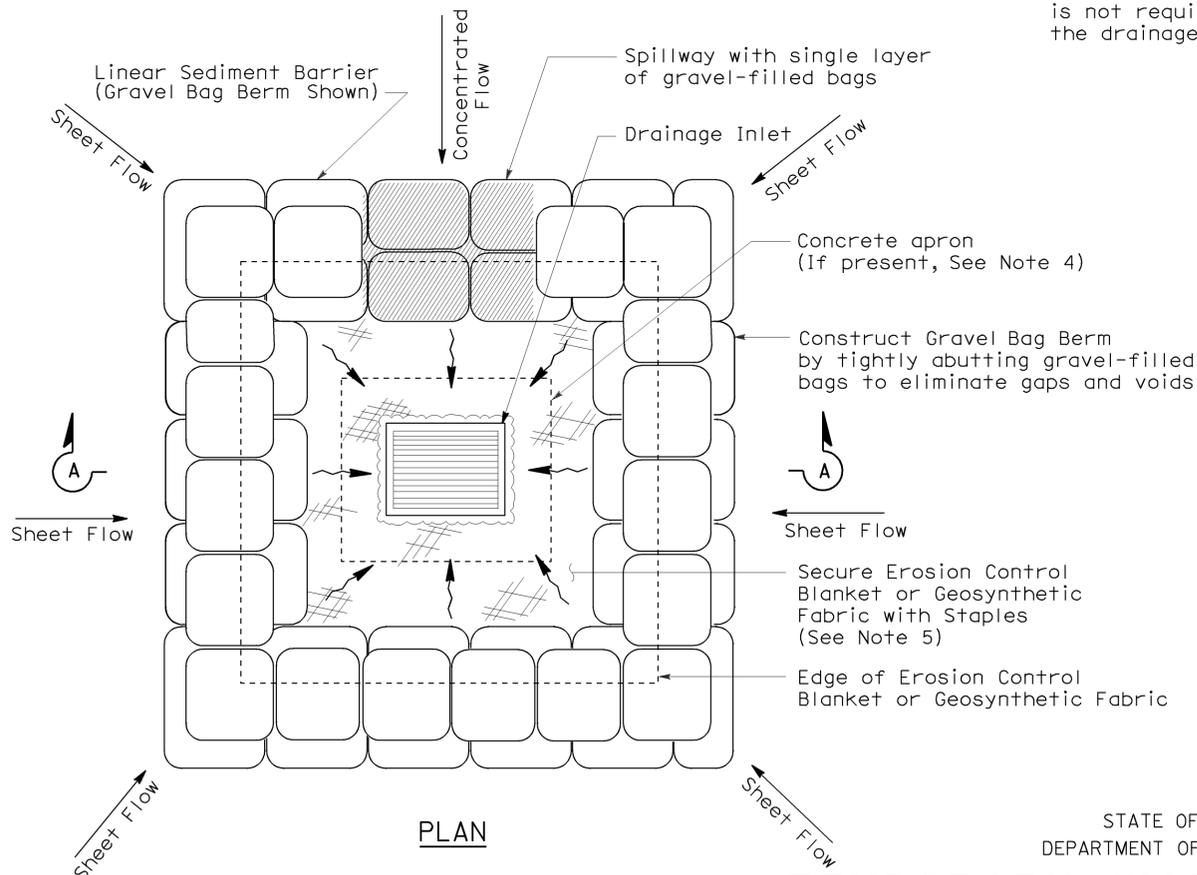
**SECTION A-A**

**NOTES:**

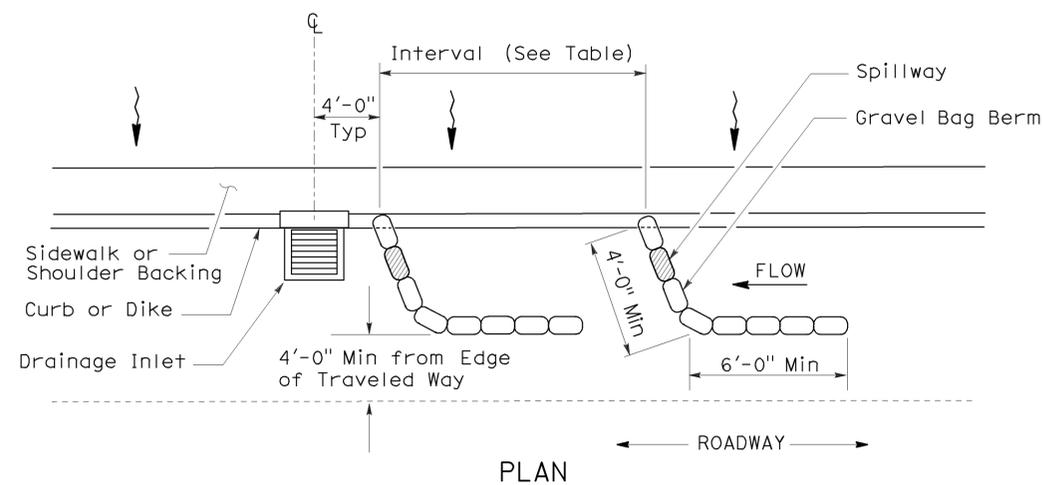
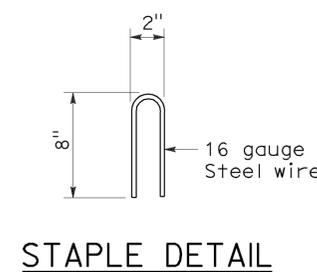
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.



**PERSPECTIVE**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
 NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

FLEXIBLE SEDIMENT BARRIER SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'

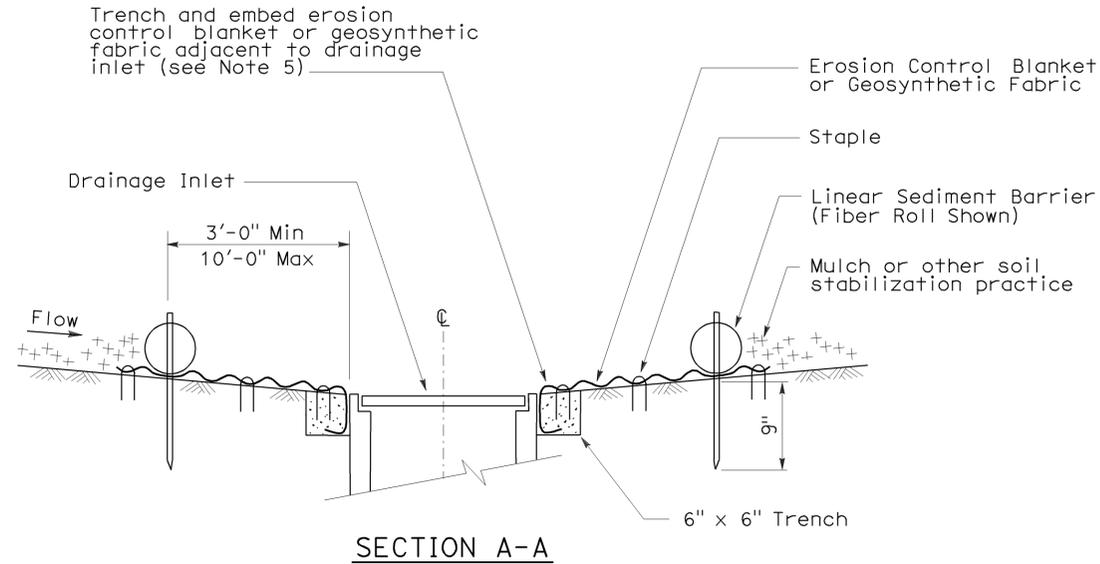
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	63	64

Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT

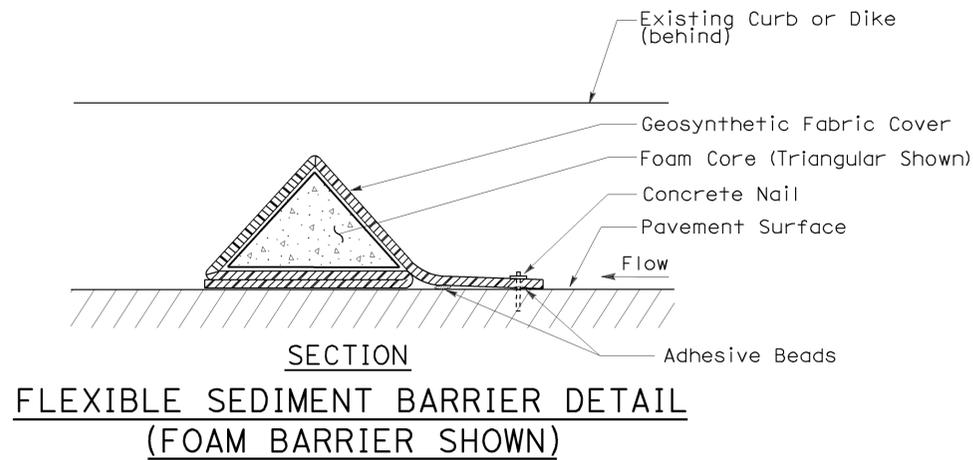
August 15, 2008  
 PLANS APPROVAL DATE

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.

To accompany plans dated 5-24-10



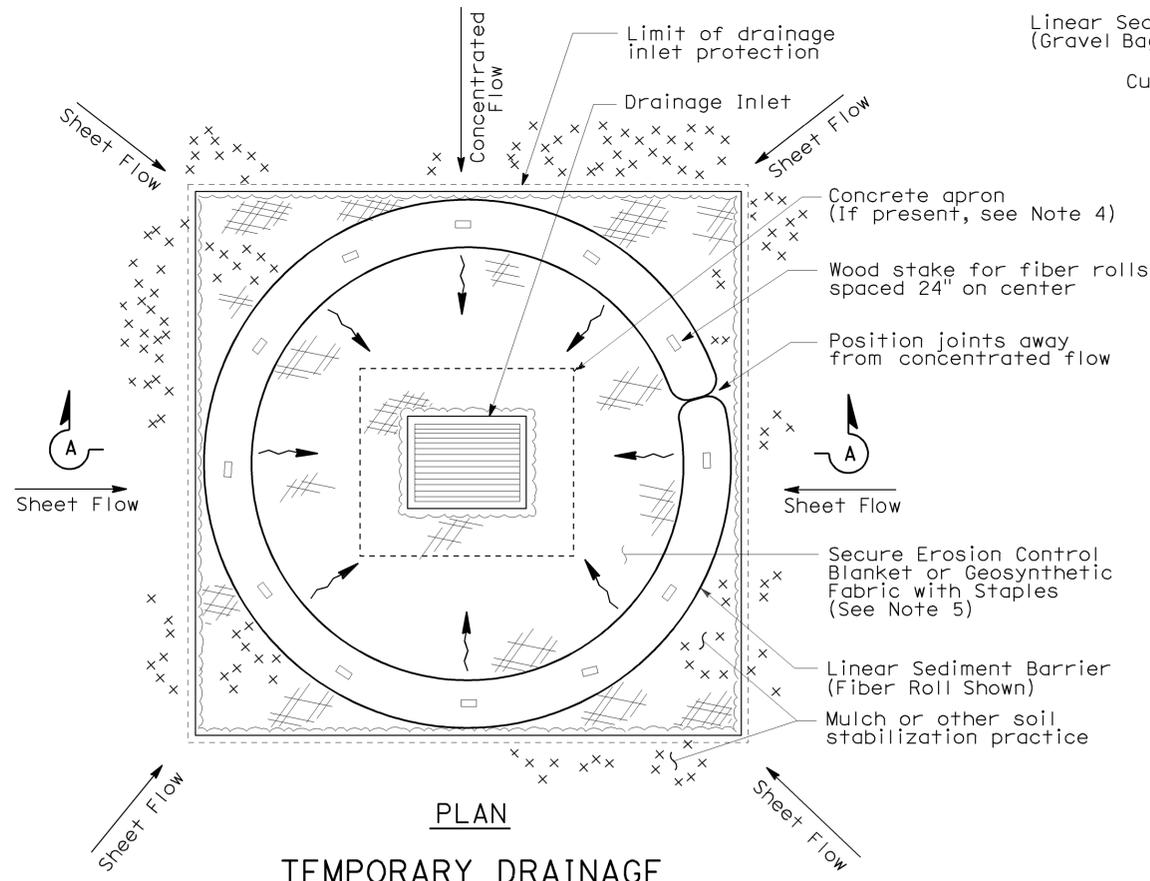
SECTION A-A



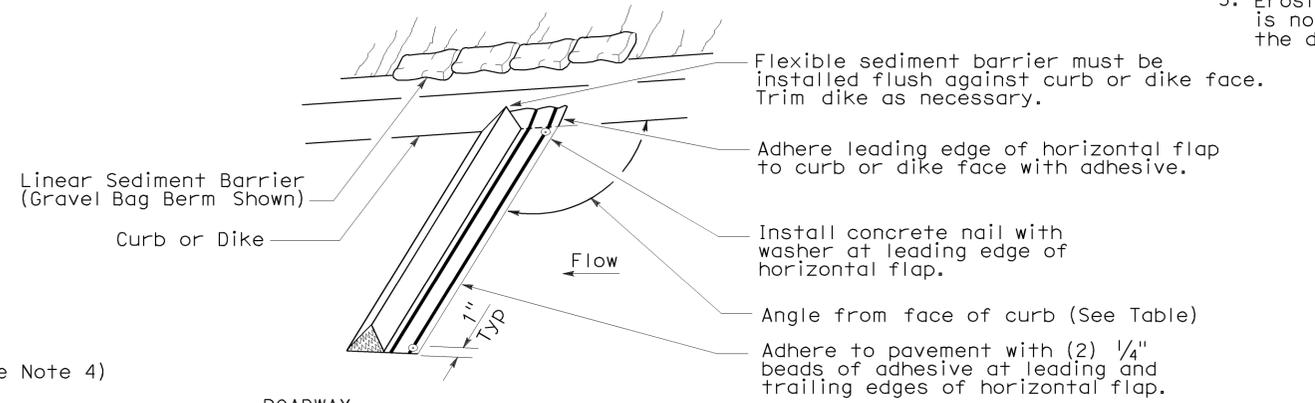
SECTION  
 FLEXIBLE SEDIMENT BARRIER DETAIL  
 (FOAM BARRIER SHOWN)

NOTES:

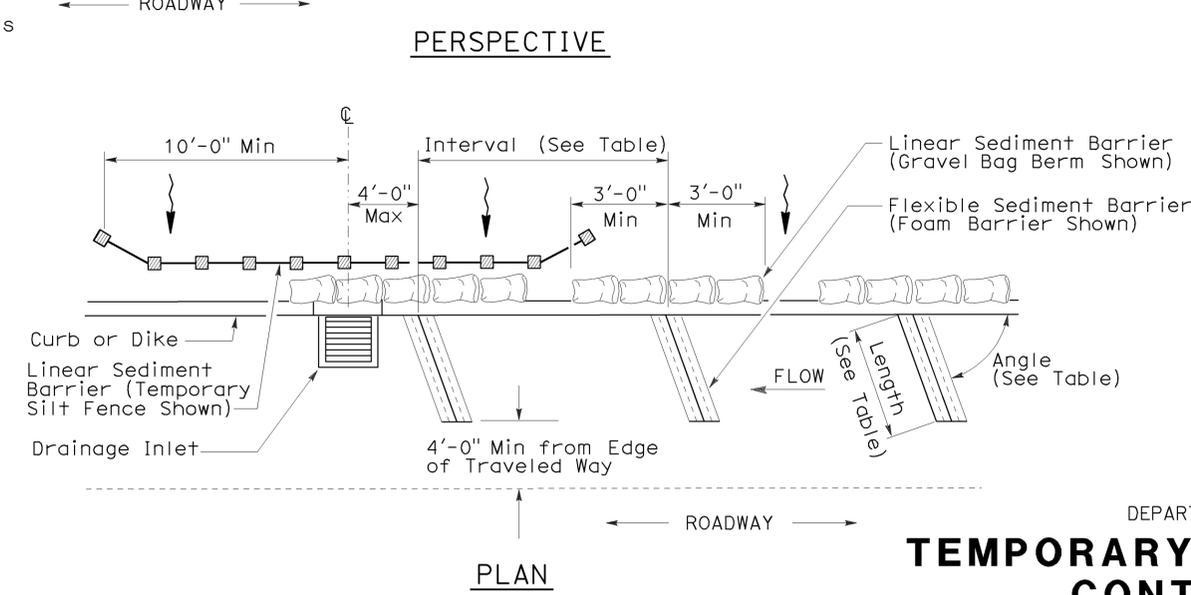
- See Standard Plan T51 for Temporary Silt Fence.
- Dimensions may vary to fit field conditions.
- Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
- Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
- Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.



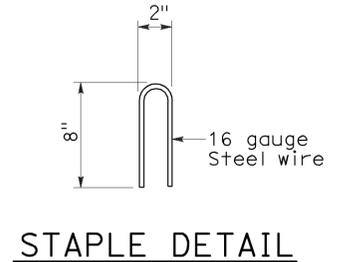
PLAN  
 TEMPORARY DRAINAGE  
 INLET PROTECTION (TYPE 4A)



PERSPECTIVE



PLAN  
 TEMPORARY DRAINAGE  
 INLET PROTECTION (TYPE 4B)  
 FLEXIBLE SEDIMENT BARRIER



STAPLE DETAIL

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

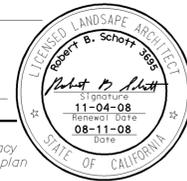
**TEMPORARY WATER POLLUTION  
 CONTROL DETAILS  
 (TEMPORARY DRAINAGE  
 INLET PROTECTION)**

NO SCALE  
 NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS  
 THE STANDARD PLANS BOOK DATED MAY 2006.

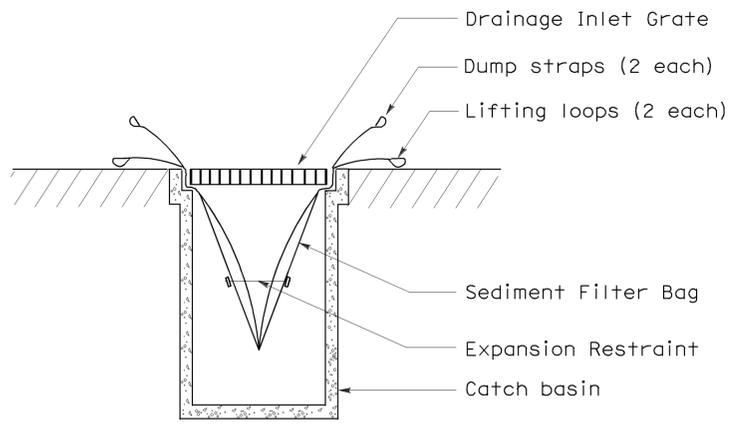
2006 NEW STANDARD PLAN NSP T63

DIST	COUNTY	ROUTE	POST MILES OF TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	880	0.0/4.3	64	64

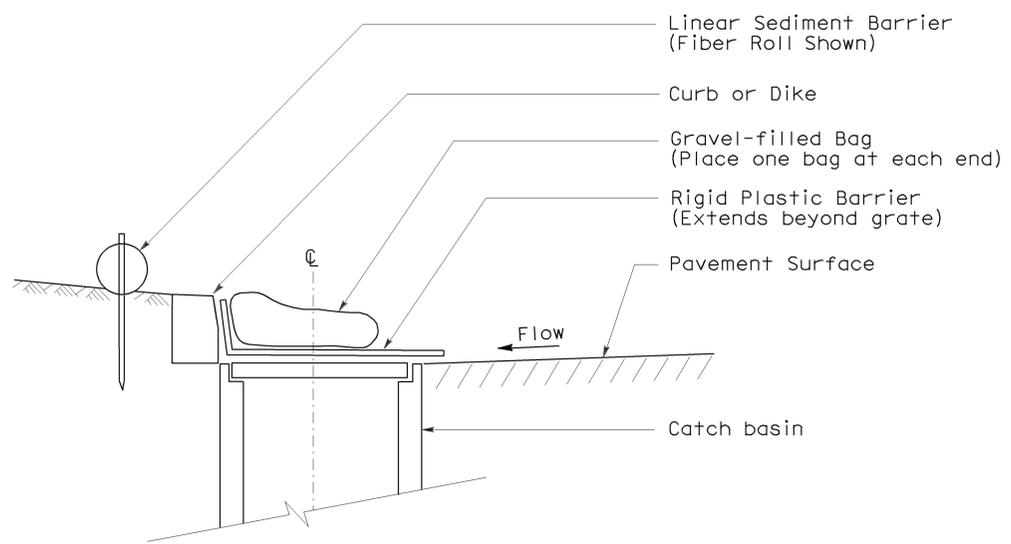
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS APPROVAL DATE  
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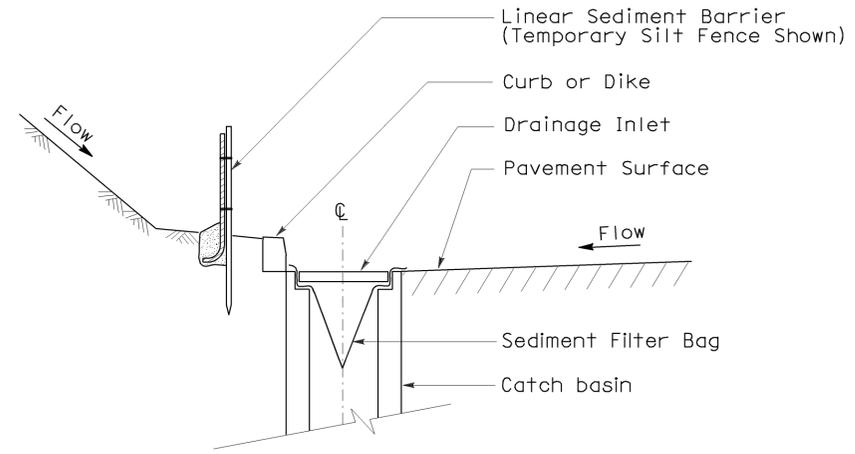
To accompany plans dated 5-24-10



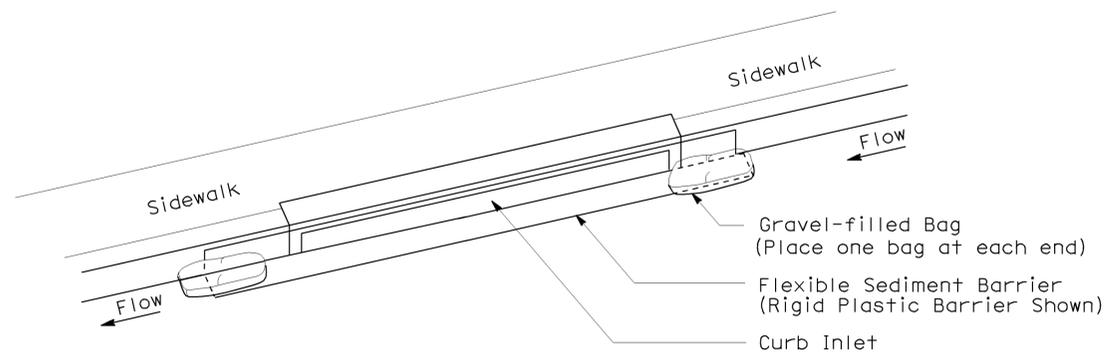
**SECTION B-B**  
**SEDIMENT FILTER BAG DETAIL**



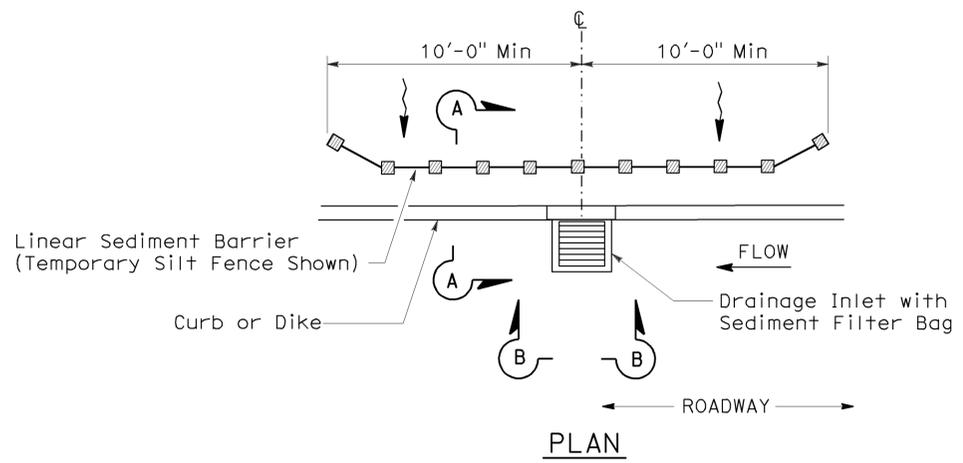
**SECTION**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 6A)**  
**(CATCH BASIN WITH GRATE)**



**SECTION A-A**



**PERSPECTIVE**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 6B)**  
**(CURB INLET WITHOUT GRATE)**



**PLAN**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 5)**  
**(SEDIMENT FILTER BAG)**

**NOTES:**

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.

**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T64