

INDEX OF PLANS

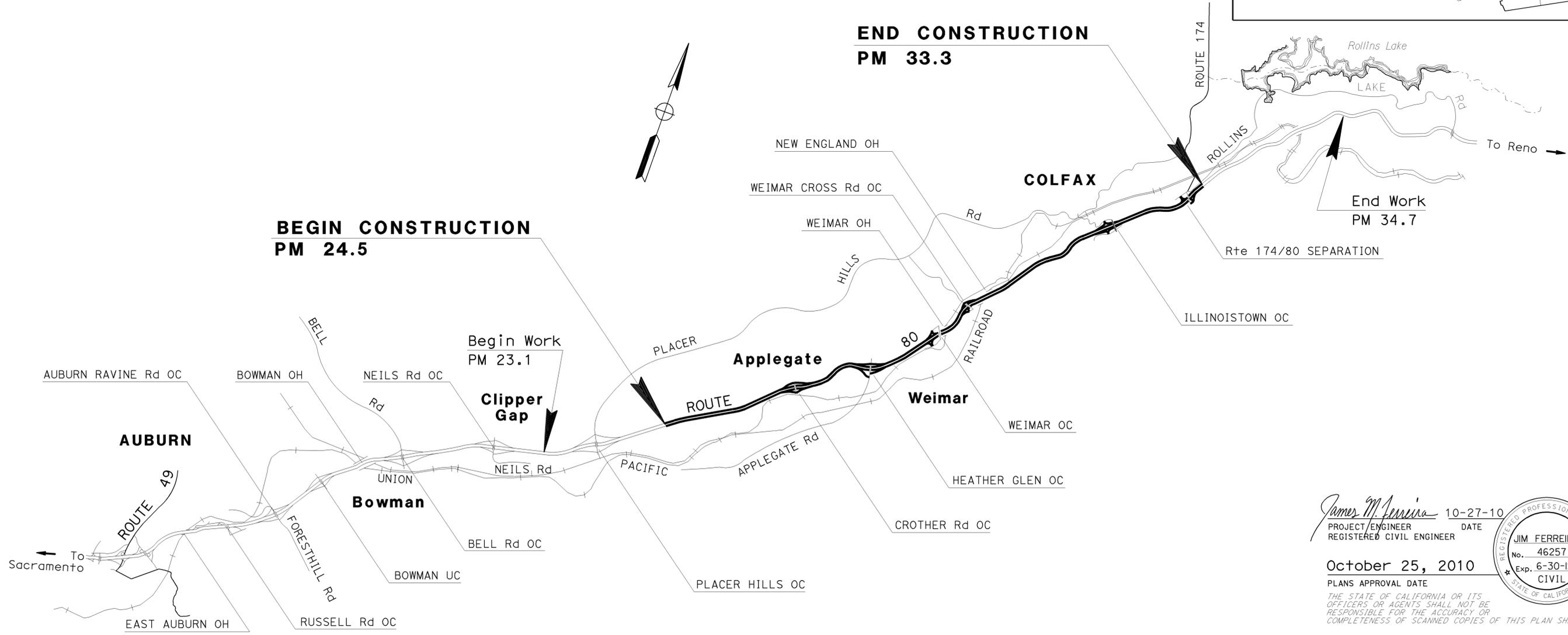
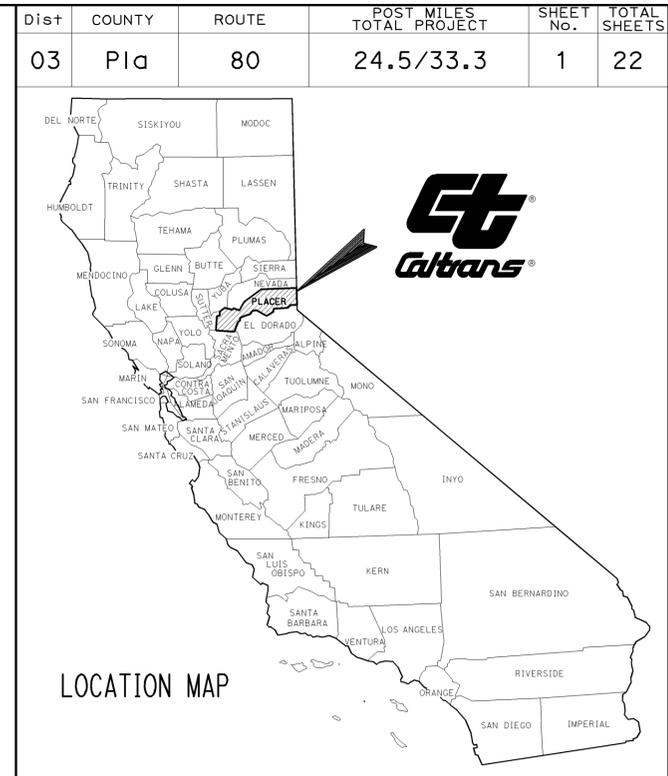
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-5	TYPICAL CROSS SECTIONS
6-8	CONSTRUCTION DETAILS
9	CONSTRUCTION AREA SIGNS
10-12	PAVEMENT DELINEATION AND QUANTITIES
13-14	SUMMARY OF QUANTITIES
15	ELECTRICAL PLAN
16-22	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACIM-080(239)E
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN PLACER COUNTY
IN AND NEAR COLFAX
FROM 1.1 MILES EAST OF PLACER HILLS OVERCROSSING
TO 0.2 MILES EAST OF ROUTE 174/80 SEPARATION

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT MANAGER
BRIAN TOEPFER

DESIGN ENGINEER
BRIAN TOEPFER

James M. Ferreira 10-27-10
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

October 25, 2010
PLANS APPROVAL DATE

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

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

NO SCALE

CONTRACT No. **03-4M0404**
PROJECT ID **0300001135**

NOTES:

- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- EXTEND 0.10' BWC (GAP GRADED) AND 0.10' COLD PLANE AC PAVEMENT TO THE EP ON HIGH SIDE OF SUPERELEVATION IN CURVES ON MAIN LINE.
- PLACE BWC FULL WIDTH FOR RIGHT SIDE RAMP SHOULDERS ON HIGH SIDE OF SUPERELEVATION.
- RAMP TYPICAL CROSS SECTIONS ARE SHOWN IN THE DIRECTION OF TRAVEL

ABBREVIATIONS

BWC = BONDED WEARING COURSE
 RHMA = RUBBERIZED HOT MIX ASPHALT

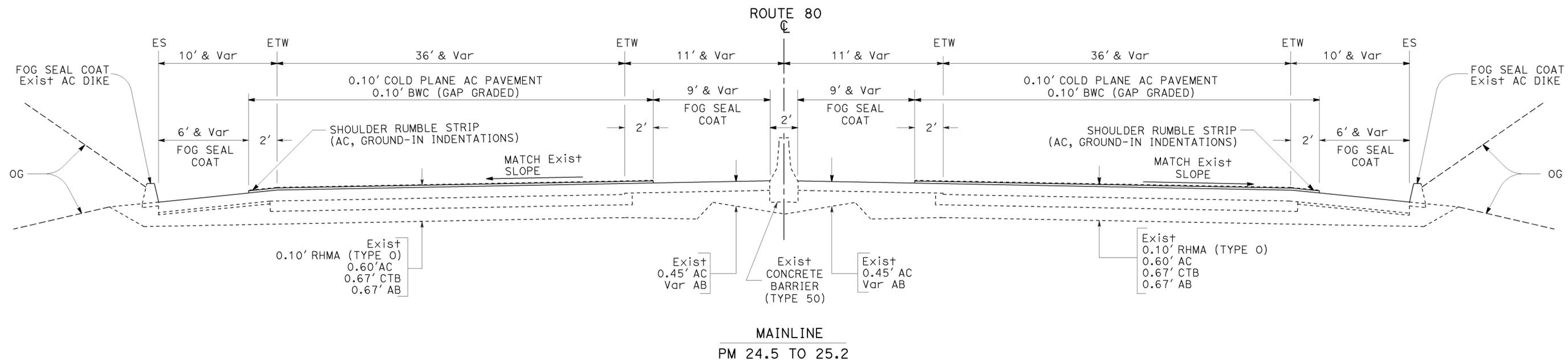
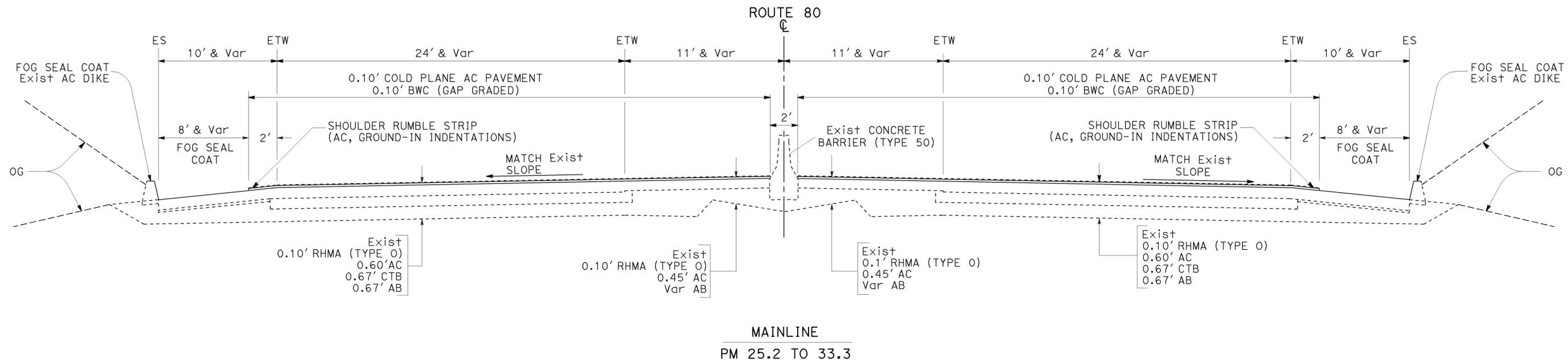
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	24.5/33.3	2	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

9-25-10
 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.

REVISOR: JIM FERREIRA, BRIAN TOEPPER
 CHECKED BY: BRIAN TOEPPER
 SUPERVISOR: BRIAN TOEPPER
 TRANSPORTATION: MAINTENANCE
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION



TYPICAL CROSS SECTIONS
 NO SCALE
X-1

LAST REVISION DATE PLOTTED => 16-NOV-2010 00-00-00 TIME PLOTTED => 08:35

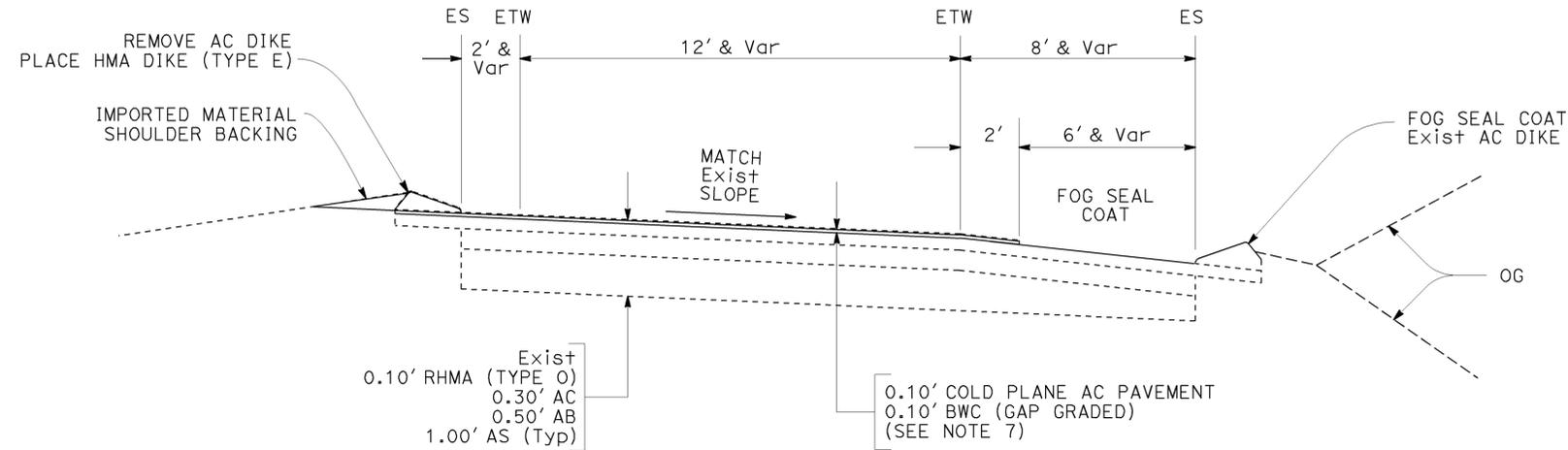
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plac	80	24.5/33.3	3	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

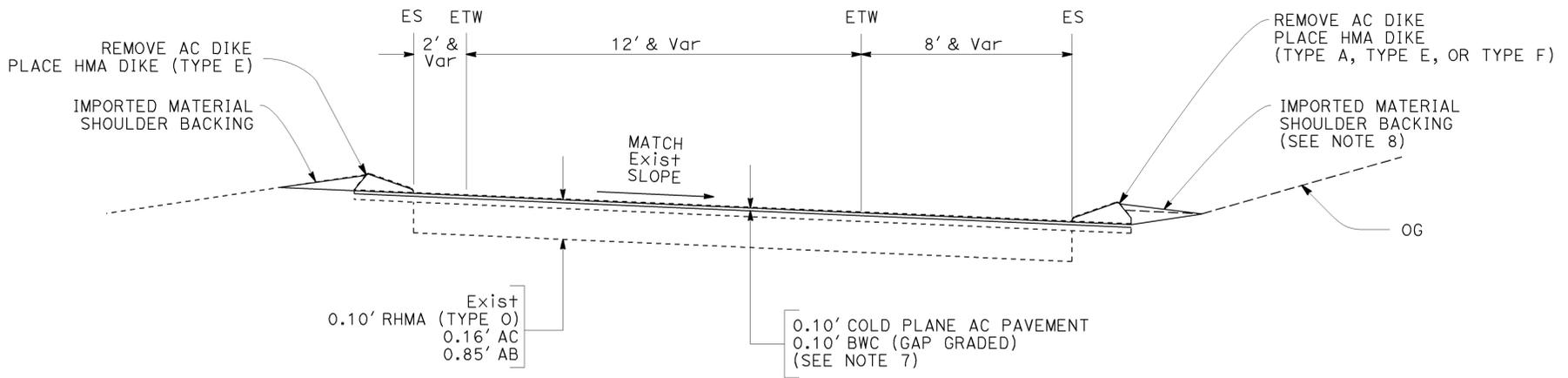
9-25-10
 PLANS APPROVAL DATE

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
JIM FERREIRA
 No. 48257
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA



HEATHER GLEN EB OFF RAMP AND ON RAMP (HEATHER GLEN OC)
 CANYON WAY/PLACER HILLS ROAD EB OFF RAMP AND ON RAMP (ILLINOISTOWN OC)
 HEATHER GLEN WB OFF RAMP (HEATHER GLEN OC)
 WEST PAOLI WB ON RAMP AND OFF RAMP (WEIMAR OH)
 CANYON WAY/PLACER HILLS ROAD WB ON RAMP AND OFF RAMP (ILLINOISTOWN OC)



WEST PAOLI LANE EB OFF RAMP AND ON RAMP (WEIMAR OH)
 WEIMAR CROSS ROAD EB OFF RAMP, ON RAMP AND LOOP ON RAMP (WEIMAR CROSS ROAD OC)
 ROUTE 174 EB OFF RAMP AND ON RAMP (ROUTE 174/80 SEPARATION)
 ROUTE 174 WB OFF RAMP AND ON RAMP (ROUTE 174/80 SEPARATION)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR: BRIAN TOEPFER
 CALCULATED/DESIGNED BY: [blank] CHECKED BY: [blank]
 JIM FERREIRA
 BRIAN TOEPFER
 REVISED BY: [blank] DATE REVISED: [blank]

TYPICAL CROSS SECTIONS
 NO SCALE
X-2

LAST REVISION | DATE PLOTTED => 16-NOV-2010
 00-00-00 | TIME PLOTTED => 08:35

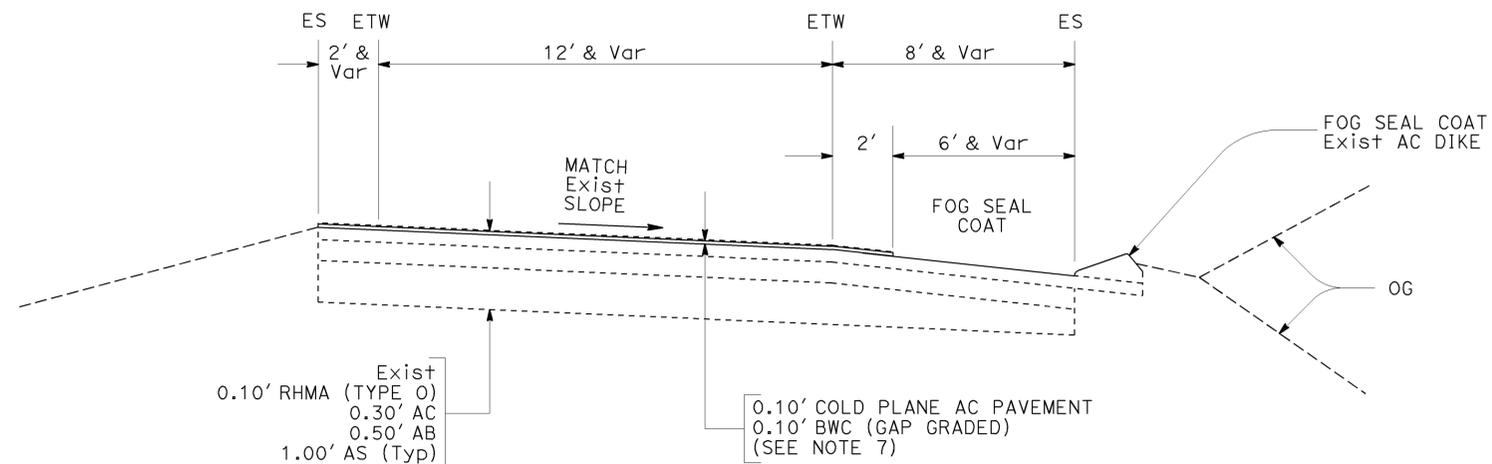
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	24.5/33.3	4	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

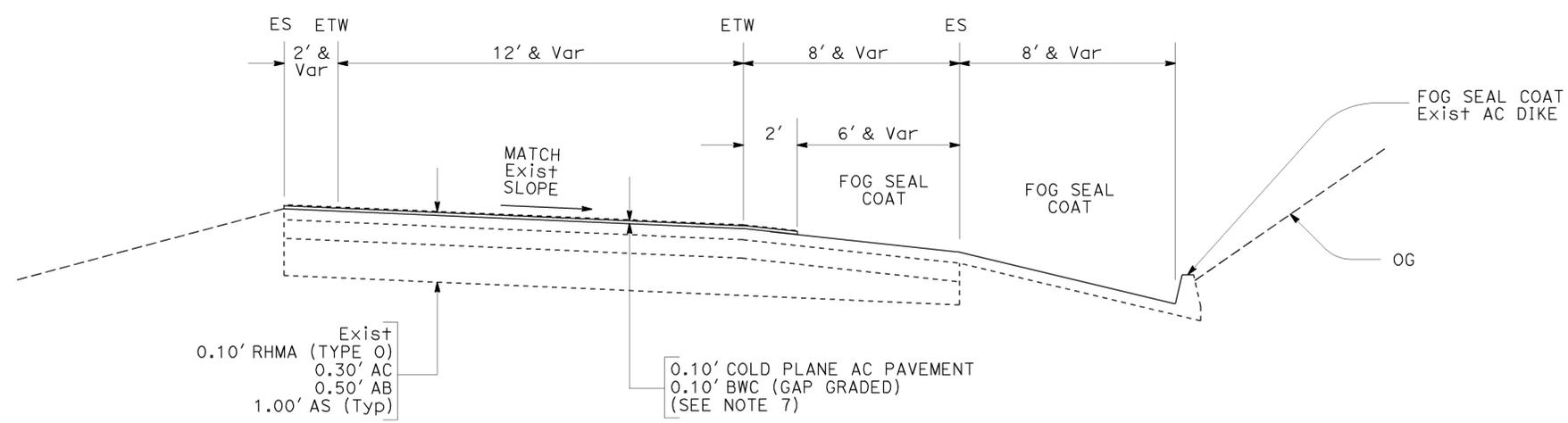
9-25-10
 PLANS APPROVAL DATE

JIM FERREIRA
 No. 48257
 Exp. 6-30-12
 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.



APPLEGATE WB ON RAMP AND OFF RAMP (CROTHER ROAD OC)



HEATHER GLEN WB ON RAMP (HEATHER GLEN OC)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE

FUNCTIONAL SUPERVISOR: BRIAN TOEPFER

DESIGNED BY: JIM FERREIRA

CHECKED BY: BRIAN TOEPFER

REVISIONS:

NO.	DATE	BY	REVISION

TYPICAL CROSS SECTIONS
 NO SCALE
X-3

LAST REVISION | DATE PLOTTED => 16-NOV-2010
 00-00-00 TIME PLOTTED => 08:35

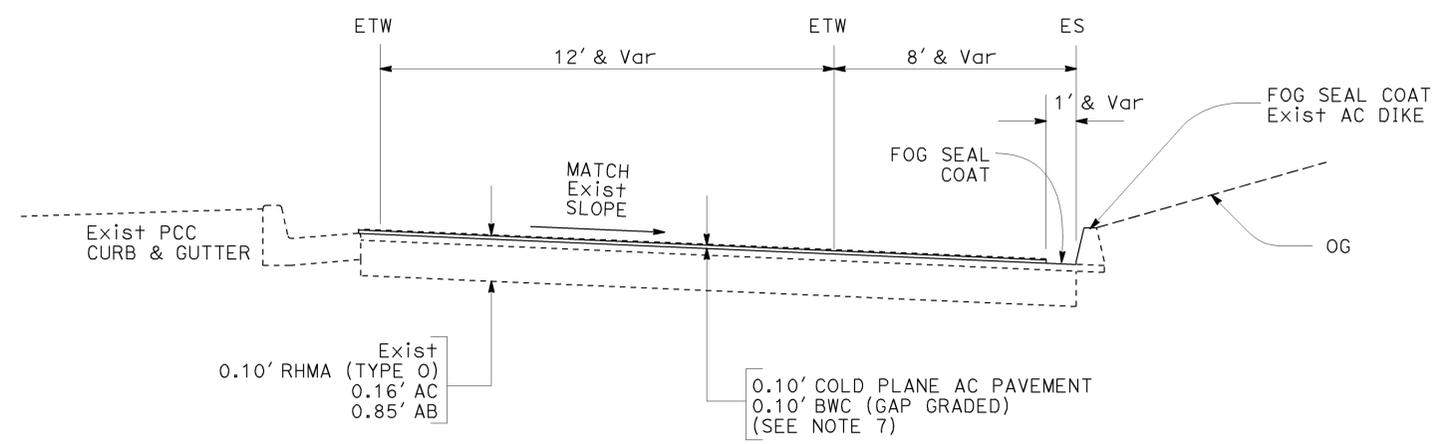
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	24.5/33.3	5	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

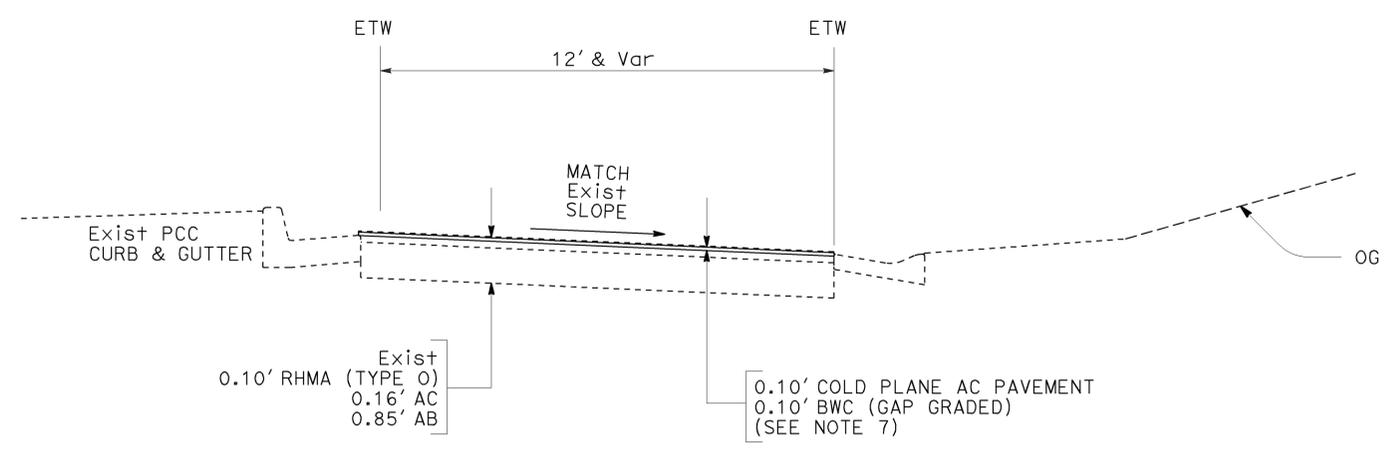
9-25-10
 PLANS APPROVAL DATE

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
JIM FERREIRA
 No. 48257
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA



WEIMAR CROSS ROAD WB ON RAMP (WEIMAR CROSS ROAD OC)



WEIMAR CROSS ROAD WB OFF RAMP (WEIMAR CROSS ROAD OC)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans	BRIAN TOEPFER	JIM FERREIRA	BRIAN TOEPFER
MAINTENANCE	CHECKED BY	DATE	REVISOR

TYPICAL CROSS SECTIONS
NO SCALE **X-4**

LAST REVISION | DATE PLOTTED => 16-NOV-2010
 00-00-00 TIME PLOTTED => 08:35

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	24.5/33.3	6	22

James M. Ferreira 9-25-10
REGISTERED CIVIL ENGINEER DATE

9-25-10
PLANS APPROVAL DATE

JIM FERREIRA
No. 48257
Exp. 6-30-12
CIVIL
STATE OF CALIFORNIA

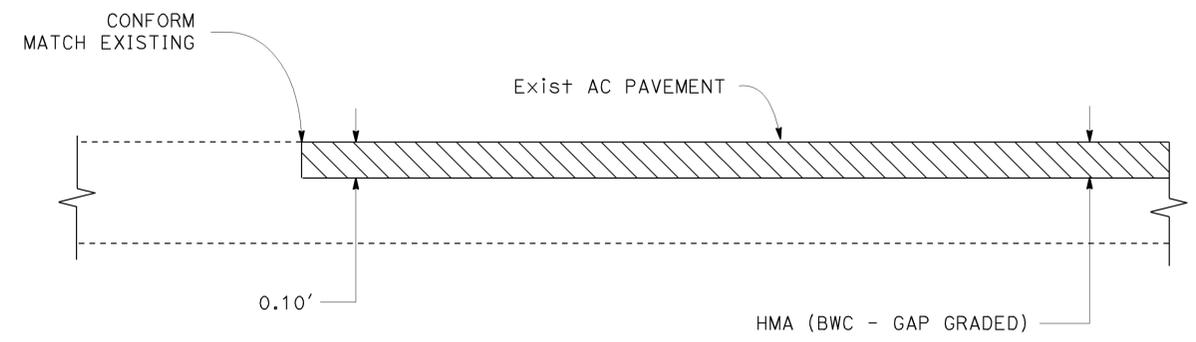
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

ABBREVIATIONS

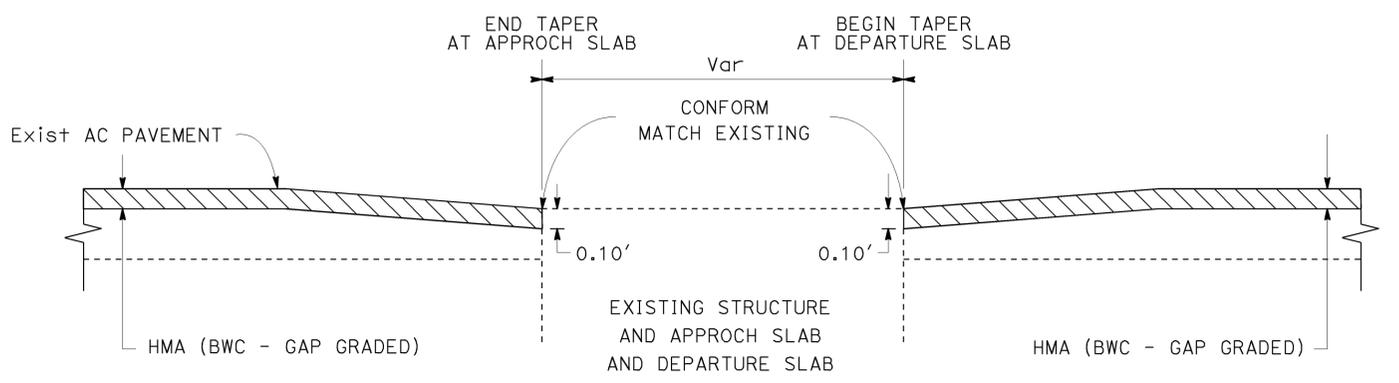
BWC - BONDED WEARING COURSE

LEGEND

 COLD PLANE AC PAVEMENT

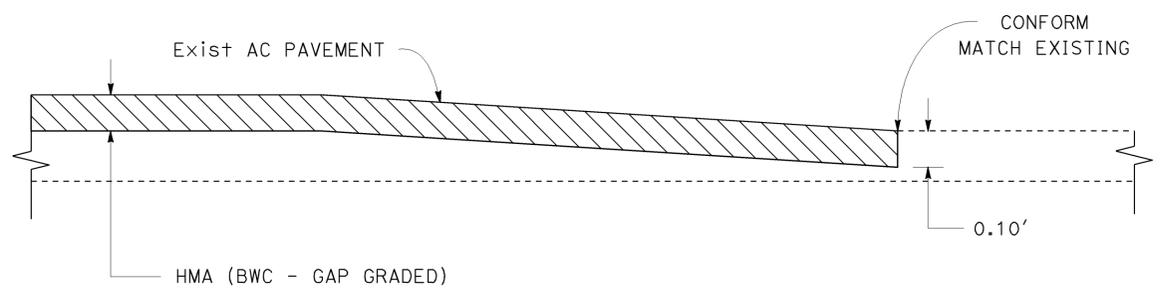


CONFORM - MAINLINE
PM 24.5
ELEVATION VIEW

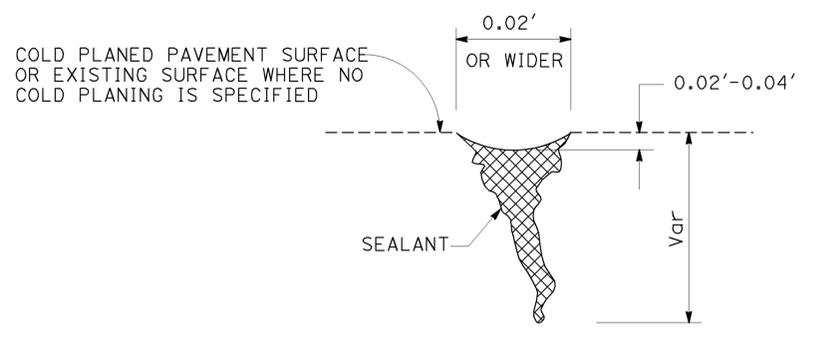


PAVING CONFORM AT BRIDGE STRUCTURES

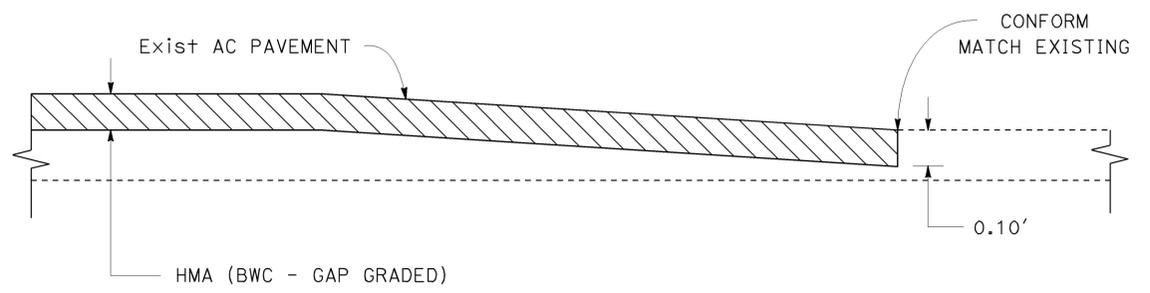
WEIMAR OH
NEW ENGLAND OH
ELEVATION VIEW



CONFORM - MAINLINE
PM 33.3
ELEVATION VIEW



SEAL RANDOM CRACKS



CONFORM - RAMPS
ELEVATION VIEW

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
MAINTENANCE

FUNCTIONAL SUPERVISOR: BRIAN TOEPFER

CALCULATED/DESIGNED BY: JIM FERREIRA

CHECKED BY: BRIAN TOEPFER

REVISOR: JIM FERREIRA

DATE: 9-25-10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	24.5/33.3	7	22

James M. Ferreira 9-25-10
REGISTERED CIVIL ENGINEER DATE

9-25-10
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.

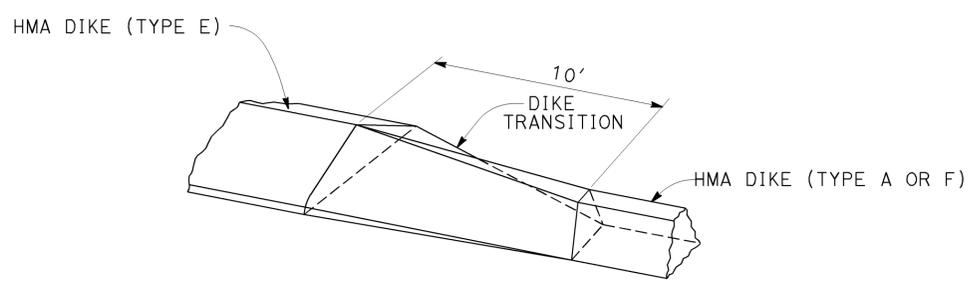
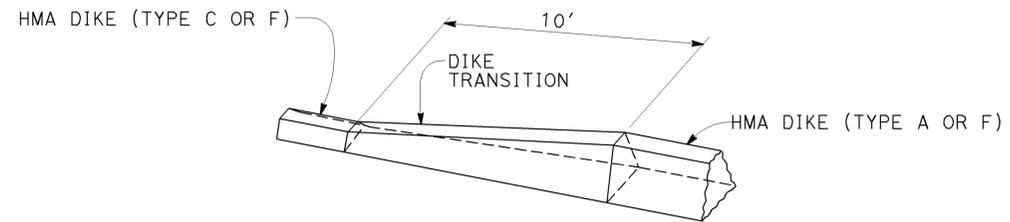
REGISTERED PROFESSIONAL ENGINEER
JIM FERREIRA
No. 48257
Exp. 6-30-12
CIVIL
STATE OF CALIFORNIA

NOTES:

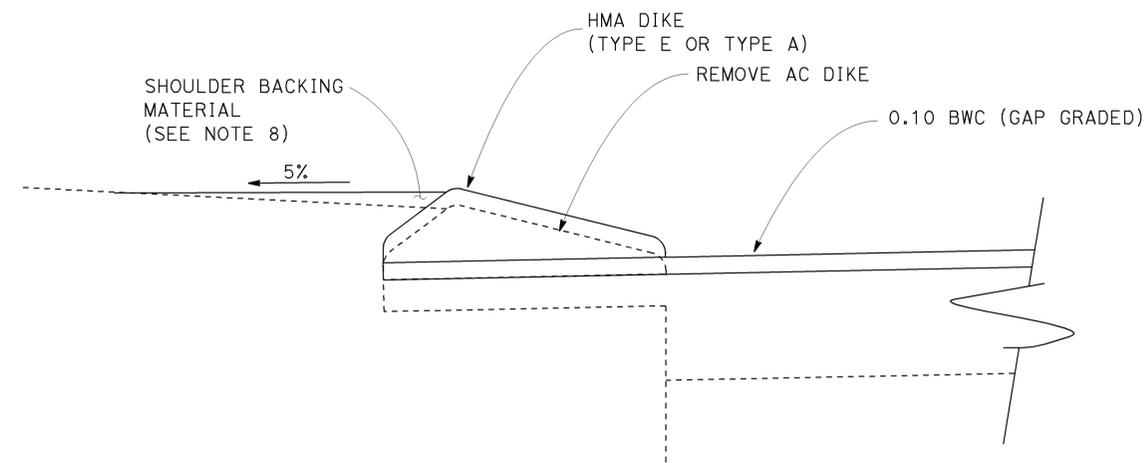
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- FOR COMPLETE RIGHT OF WAY, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

LEGEND

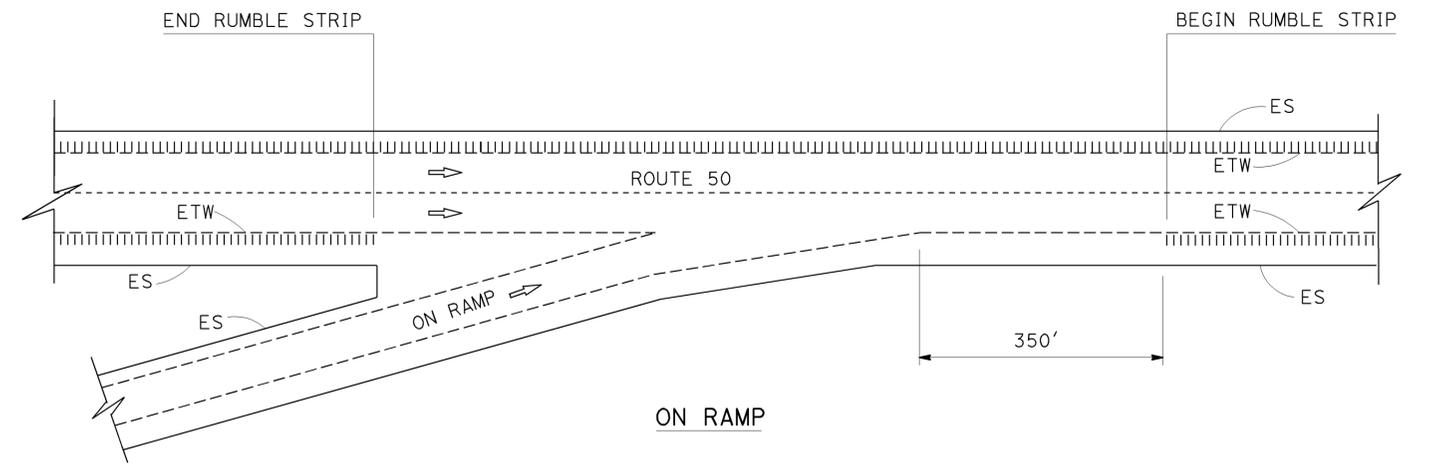
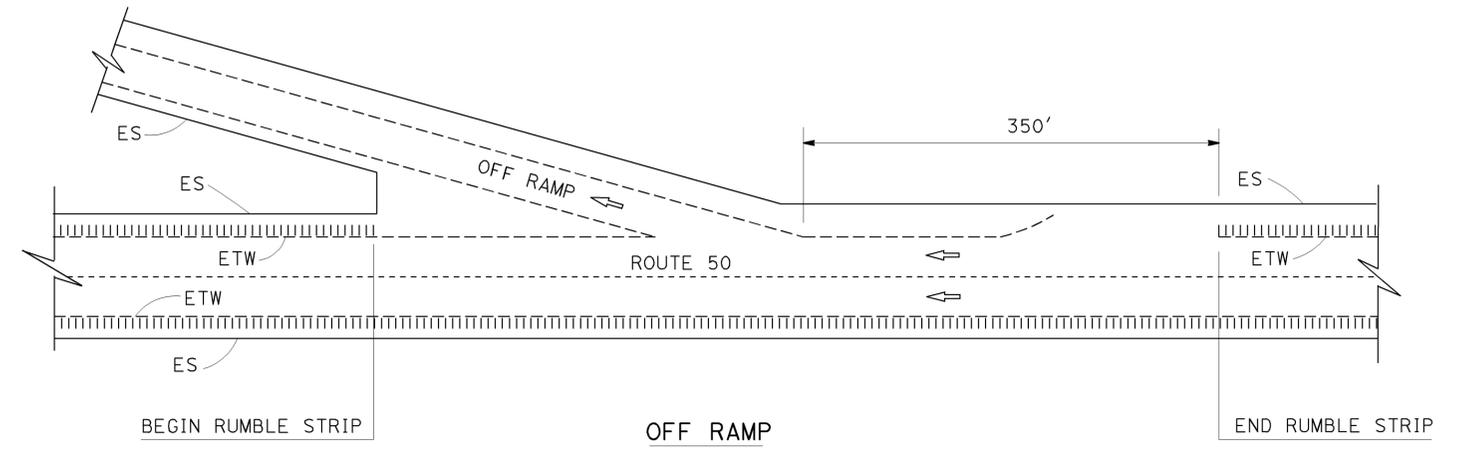
- DIRECTION OF TRAFFIC
- SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)
- COLD PLANE AC PAVEMENT



DIKE TRANSITIONS



HMA DIKE DETAIL



RUMBLE STRIP DETAIL AT RAMPS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 FUNCTIONAL SUPERVISOR: BRIAN TOEPFER
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 JIM FERREIRA
 BRIAN TOEPFER
 REVISED BY: [blank]
 DATE REVISED: [blank]

CONSTRUCTION DETAILS

NO SCALE

C-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	24.5/33.3	8	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

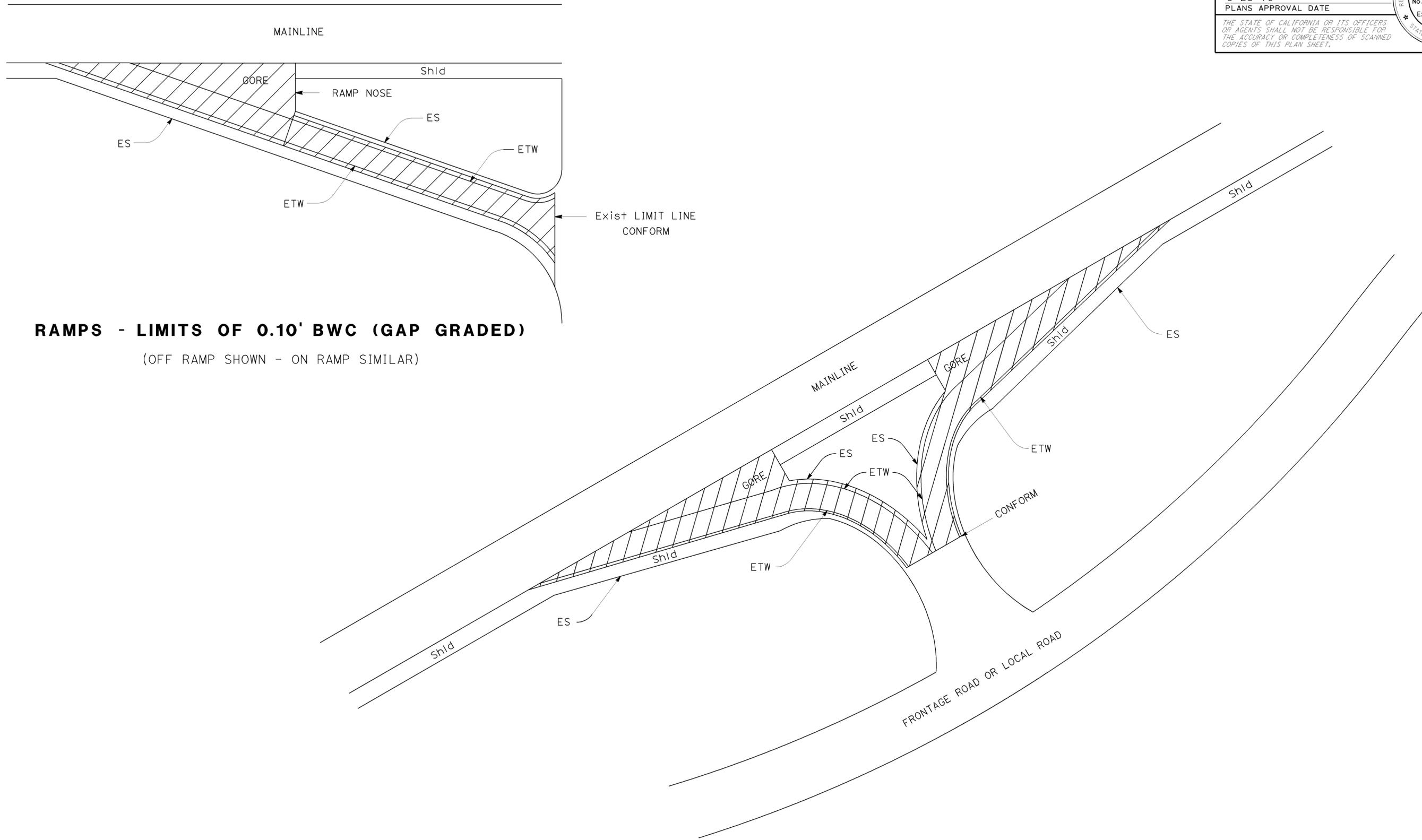
9-25-10
 PLANS APPROVAL DATE

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
JIM FERREIRA
 No. 48257
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

NOTES:

- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- FOR COMPLETE RIGHT OF WAY, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RAMPS - LIMITS OF 0.10' BWC (GAP GRADED)
 (OFF RAMP SHOWN - ON RAMP SIMILAR)

RAMPS - LIMITS OF 0.10' BWC (GAP GRADED)

CONSTRUCTION DETAILS

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
Caltrans	
FUNCTIONAL SUPERVISOR	BRIAN TOEPFER
CALCULATED/DESIGNED BY	CHECKED BY
JIM FERREIRA	BRIAN TOEPFER
REVISOR BY	DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	24.5/33.3	10	22

Jeffrey Jewett 9-25-10
 REGISTERED CIVIL ENGINEER DATE
 9-25-10
 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.

PAVEMENT DELINEATION QUANTITIES

DESCRIPTION	4" THERMOPLASTIC TRAFFIC STRIPE			4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)		8" THERMOPLASTIC TRAFFIC STRIPE			PAVEMENT MARKER (RETROREFLECTIVE-RECESSED)	
	DETAIL NUMBER			DETAIL NUMBER	DETAIL NUMBER		DETAIL NUMBER			TYPE C (EA)	TYPE G (EA)
	21 (LF)	24 (LF)	27B (LF)	8 (LF)	12 (LF)	14A (LF)	36 (LF)	36A (LF)	38A (LF)		
EB MAINLINE ROUTE 80		46,822	47,916	998	57,155	2,736	3,774	1,215	106	76	1,192
WB MAINLINE ROUTE 80		46,681	47,816	593	52,478	2,160	3,950	1,135		60	1,094
WB ENTRANCE RAMP FROM APPELEGATE		761	761								
WB EXIT RAMP TO APPELEGATE		805	805								
EB EXIT RAMP TO HEATHER GLEN		892	878								
WB ENTRANCE RAMP FROM HEATHER GLEN		584	584								
EB ENTRANCE RAMP FROM HEATHER GLEN		373	373								
WB EXIT RAMP TO HEATHER GLEN		535	526								
EB EXIT RAMP TO W PAOLI LANE		145	124								
EB ENTRANCE RAMP FROM W PAOLI LANE		133	110								
WB ENTRANCE RAMP FROM W PAOLI LANE		93	108								
WB EXIT RAMP TO W PAOLI LANE		105	97								
EB EXIT RAMP TO WEIMAR CROSS ROAD		160	158						100		
EB ENTRANCE RAMPS FROM WEIMAR CROSS ROAD		296	231				118				
WEIMAR CROSS ROAD	223		426								
WB ENTRANCE RAMP FROM WEIMAR CROSS ROAD		610	578								
WB EXIT RAMP TO WEIMAR CROSS ROAD		675	687								55
EB EXIT RAMP TO CANYON WAY/PLACER HILLS Rd	50	364	367								
EB ENTRANCE RAMP FROM CANYON WAY/PLACER HILLS Rd	52	250	253								
WB ENTRANCE RAMP FROM CANYON WAY/PLACER HILLS Rd	50	308	322								
WB EXIT RAMP TO CANYON WAY/PLACER HILLS Rd	55	375	405								
WB ENTRANCE RAMP FROM ROUTE 174		266	379								158
WB EXIT RAMP TO ROUTE 174		272	265								320
EB EXIT RAMP TO ROUTE 174		219	196								
EB ENTRANCE RAMP FROM ROUTE 174		167	162								
CANYON WAY/PLACER HILLS Rd	173		263						64		
SUBTOTAL	603	101,891	104,790	1,591	109,633	4,896	7,842	2,350	803	136	2,286
TOTAL		207,284		1,591	114,529		10,995				2,422

NOTE: DETAILS 36 AND 36A ARE TO BE PLACED WITHOUT THE RETROREFLECTIVE PAVEMENT MARKERS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 TRAFFIC

PAVEMENT DELINEATION QUANTITIES

PDQ-1

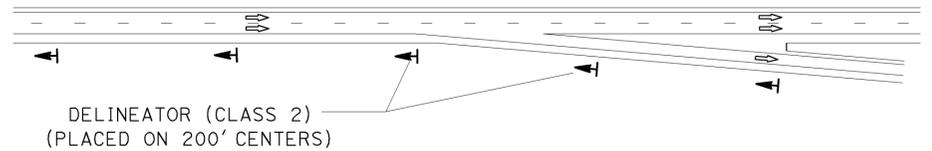


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80	24.5/33.3	12	22

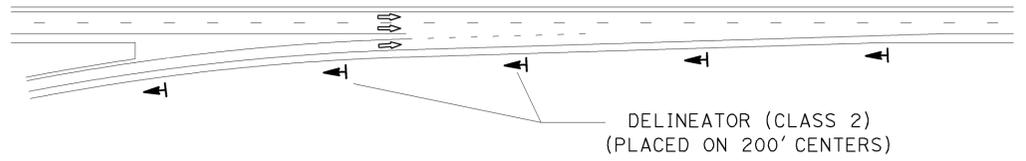
Jeffrey S. Jewett 9-25-10
 REGISTERED CIVIL ENGINEER DATE
 9-25-10
 PLANS APPROVAL DATE

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.

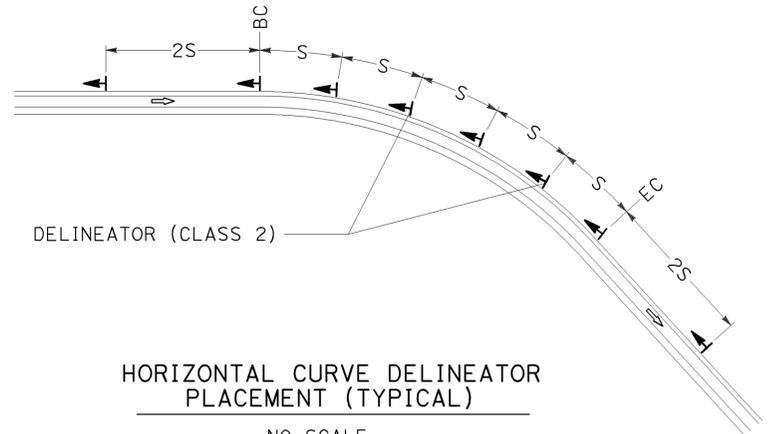
REGISTERED PROFESSIONAL ENGINEER
 Jeffrey S. Jewett
 No. 49233
 Exp. 9-30-12
 CIVIL
 STATE OF CALIFORNIA



DELINEATOR (CLASS 2)
 (PLACED ON 200' CENTERS)
 EXIT RAMP DELINEATOR
 PLACEMENT (TYPICAL)
 NO SCALE



DELINEATOR (CLASS 2)
 (PLACED ON 200' CENTERS)
 ENTRANCE RAMP DELINEATOR
 PLACEMENT (TYPICAL)
 NO SCALE



DELINEATOR (CLASS 2)
 HORIZONTAL CURVE DELINEATOR
 PLACEMENT (TYPICAL)
 NO SCALE

- LEGEND**
- S DELINEATOR SPACING
(TO BE PROVIDED BY THE ENGINEER)
 - ⇨ DIRECTION OF TRAVEL

DELINEATOR

DESCRIPTION	DELINEATOR (CLASS 2)	
	TYPE F (EACH)	TYPE G (EACH)
EB EXIT RAMP TO HEATHER GLEN	10	6
EB ENTRANCE RAMP FROM HEATHER GLEN		4
WB EXIT RAMP TO HEATHER GLEN		5
EB EXIT RAMP TO W PAOLI LANE	1	5
EB ENTRANCE RAMP FROM W PAOLI LANE	4	5
WB ENTRANCE RAMP FROM W PAOLI LANE		3
WB EXIT RAMP TO W PAOLI LANE		3
EB EXIT RAMP TO WEIMAR CROSS ROAD	2	3
EB ENTRANCE RAMP FROM WEIMAR CROSS ROAD	2	9
WB ENTRANCE RAMP FROM WEIMAR CROSS ROAD	4	
EB EXIT RAMP TO CANYON WAY/PLACER HILLS Rd	4	8
EB ENTRANCE RAMP FROM CANYON WAY/PLACER HILLS Rd		8
WB ENTRANCE RAMP FROM CANYON WAY/PLACER HILLS Rd		9
WB EXIT RAMP TO CANYON WAY/PLACER HILLS Rd		8
WB ENTRANCE RAMP FROM ROUTE 174	4	5
WB EXIT RAMP TO ROUTE 174	3	7
EB EXIT RAMP TO ROUTE 174	2	5
EB ENTRANCE RAMP FROM ROUTE 174	3	
SUBTOTAL	39	93
TOTAL	132	

NOTE: EXACT LOCATION OF DELINEATORS (CLASS 2) TO BE DETERMINED BY THE ENGINEER.

PAVEMENT DELINEATION QUANTITIES

PDQ-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Jack Kemmerly
 Functional Supervisor
 Joseph W. Horton
 Traffic

DATE PLOTTED => 16-NOV-2010
 TIME PLOTTED => 08:35

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 FUNCTIONAL SUPERVISOR
 BRIAN TOEPFER
 CALCULATED/DESIGNED BY
 CHECKED BY
 JIM FERREIRA
 BRIAN TOEPFER
 REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plac	80	24.5/33.3	13	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

9-25-10
 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
JIM FERREIRA
 No. 48257
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

ROADWAY QUANTITIES

EB/WB	PM	DESCRIPTION	ASPHALTIC EMULSION MEMBRANE (BONDED WEARING COURSE)	HOT MIX ASPHALT (BONDED WEARING COURSE-GAP GRADED)	ASPHALTIC EMULSION (FOG SEAL COAT)	COLD PLANE ASPHALT CONCRETE PAVEMENT	CRACK TREATMENT	SHOULDER RUMBLE STRIP (AC, GROUND-IN INDENTATIONS)
			TON	TON	TON	SQYD	LNMI	STA
EB	68.8 TO 69.8	MAINLINE	240	16,100	12.00	206,800	5.80	830
WB	0.0 TO R2.5	MAINLINE	230	15,600	12.00	200,900	5.70	860
EB	68.8 TO 69.8	HEATHER GLEN OFF RAMP	3.0	200	0.07	2,600	0.03	
EB	0.0 TO R2.5	HEATHER GLEN ON RAMP	2.8	170	0.02	2,290	0.01	
EB	69.0 TO 69.2	WEST PAOLI LANE OFF RAMP	1.7	120	0	1,500		
EB	69.2 TO 69.4	WEST PAOLI LANE ON RAMP	1.4	100	0	1,260		
EB	69.1 TO 69.2	WEIMAR CROSS ROAD OFF RAMP	1.6	110	0	1,420		
EB	69.2 TO 69.4	WEIMAR CROSS ROAD ON RAMP	1.3	90	0	1,110		
EB	69.2 TO 69.4	WEIMAR CROSS ROAD LOOP ON RAMP	1.3	90	0	1,140		
EB	0.0 TO R2.5	CANYON WAY/ PLACER HILLS ROAD OFF RAMP	2.0	140	0.06	1,720	0.03	
EB	68.8 TO 69.8	CANYON WAY/ PLACER HILLS ROAD ON RAMP	2.6	170	0.08	2,200	0.04	
EB	0.0 TO R2.5	ROUTE 174/80 SEPARATION OFF-RAMP	3.0	130	0	1,670		
EB	69.0 TO 69.2	ROUTE 174/80 SEPARATION ON RAMP	2.3	150	0	1,920		
WB	69.2 TO 69.4	APPLEGATE ON RAMP	4.3	280	0.12	3,860	0.07	
WB	69.1 TO 69.2	APPLEGATE OFF RAMP	2.4	170	0.08	2,100	0.04	
WB	69.2 TO 69.4	HEATHER GLEN ON RAMP	3.2	220	0.23	2,860	0.12	
WB	0.0 TO R2.5	HEATHER GLEN OFF RAMP	2.8	200	0.03	2,490	0.01	
WB	68.8 TO 69.8	WEST PAOLI LANE ON RAMP	1.0	80	0.03	860	0.01	
WB	0.0 TO R2.5	WEST PAOLI LANE OFF RAMP	1.5	120	0.04	1,330	0.02	
WB	69.0 TO 69.2	WEIMAR CROSS ROAD ON RAMP	3.0	220	0	2,700		
WB	69.2 TO 69.4	WEIMAR CROSS ROAD OFF RAMP	2.1	160	0.10	1,810	0.05	
WB	69.2 TO 69.4	CANYON WAY/ PLACER HILLS ROAD ON RAMP	2.6	180	0.08	2,330	0.04	
WB	0.0 TO R2.5	CANYON WAY/ PLACER HILLS ROAD OFF RAMP	2.0	140	0.06	1,770	0.03	
WB	68.8 TO 69.8	ROUTE 174/80 SEPARATION ON RAMP	2.5	180	0	2,260		
WB	0.0 TO R2.5	ROUTE 174/80 SEPARATION OFF RAMP	2.6	180	0	2,300		
SUBTOTAL			523	35,300	25.00	453,200	12.00	1,690
TOTAL			523	35,300	25.00	453,200	12.00	1,690

SUMMARY OF QUANTITIES

Q-1

LAST REVISION | DATE PLOTTED => 16-NOV-2010
 00-00-00 | TIME PLOTTED => 08:35

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Plq	80	24.5/33.3	14	22

James M. Ferreira 9-25-10
 REGISTERED CIVIL ENGINEER DATE

9-25-10
 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.

HMA DIKE

EB/WB	DESCRIPTION	POST MILE	SIDE	REMOVE ASPHALT CONCRETE DIKE	PLACE HOT MIX ASPHALT DIKE			HOT MIX ASPHALT (TYPE A)	IMPORTED MATERIAL SHOULDER BACKING
					(TYPE A)	(TYPE E)	(TYPE F)		
					LF	LF	LF		
EB	MAINLINE	26.68-26.76	RT	422			422	5.6	
EB	MAINLINE	27.32-27.45	RT	686		686		17.8	35
EB	WEST PAOLI LANE OFF RAMP		LT	157		157		4.1	8
EB	WEST PAOLI LANE OFF RAMP		RT	413		413		10.7	21
EB	WEST PAOLI LANE ON RAMP		LT	108		108		2.8	6
EB	WEST PAOLI LANE ON RAMP		RT	341	138	203		9.0	12
EB	WEIMAR CROSS ROAD OFF RAMP		LT	174		174		4.5	9
EB	WEIMAR CROSS ROAD OFF RAMP		RT	630		630		16.4	33
EB	WEIMAR CROSS ROAD ONRAMP		LT	207		207		5.4	12
EB	WEIMAR CROSS ROAD ON RAMP		RT	200		200		5.2	10
EB	WEIMAR CROSS ROAD LOOP ON RAMP		LT	184		184		4.8	10
EB	WEIMAR CROSS ROAD LOOP ON RAMP		RT	269		269		7.0	14
EB	CANYON WAY/PLACER HILLS ROAD OFF RAMP		LT	364		364		9.5	20
EB	CANYON WAY/PLACER HILLS ROAD ON RAMP		LT	256		256		6.7	13
EB	ROUTE 174/80 SEPARATION OFF RAMP		LT	184		184		4.8	10
EB	ROUTE 174/80 SEPARATION OFF RAMP		RT	328		328		8.5	17
EB	ROUTE 174/80 SEPARATION ON RAMP		RT	634	634			17.0	
WB	HEATHER GLEN OFF RAMP		LT	530		530		13.8	28
WB	WEST PAOLI LANE ON RAMP		LT	164		164		4.3	9
WB	WEST PAOLI LANE OFF RAMP		LT	125		125		3.3	7
WB	CANYON WAY/PLACER HILLS ROAD ON RAMP		LT	217		217		5.6	12
WB	CANYON WAY/PLACER HILLS ROAD OFF RAMP		RT	367		367		9.5	19
WB	ROUTE 174/80 SEPARATION OFF RAMP		RT	876		876		22.7	
WB	ROUTE 174/80 SEPARATION OFF RAMP		RT	824	778		46	21.0	45
SUBTOTAL				8,660	1,550	6,642	468	220.0	350
TOTAL				8,660	1,550	6,642	468	220.0	350

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 FUNCTIONAL SUPERVISOR
 BRIAN TOEPFER
 CALCULATED/DESIGNED BY
 CHECKED BY
 JIM FERREIRA
 BRIAN TOEPFER
 REVISED BY
 DATE REVISED

SUMMARY OF QUANTITIES

Q-2

LAST REVISION | DATE PLOTTED => 16-NOV-2010
 00-00-00 | TIME PLOTTED => 08:35

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pld	80	24.5/33.3	15	22

REGISTERED ELECTRICAL ENGINEER DATE 9-25-10
 MARY ANN HUDSPETH
 No. 17245
 Exp. 06-30-12
 ELECTRICAL
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

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

GENERAL NOTES:

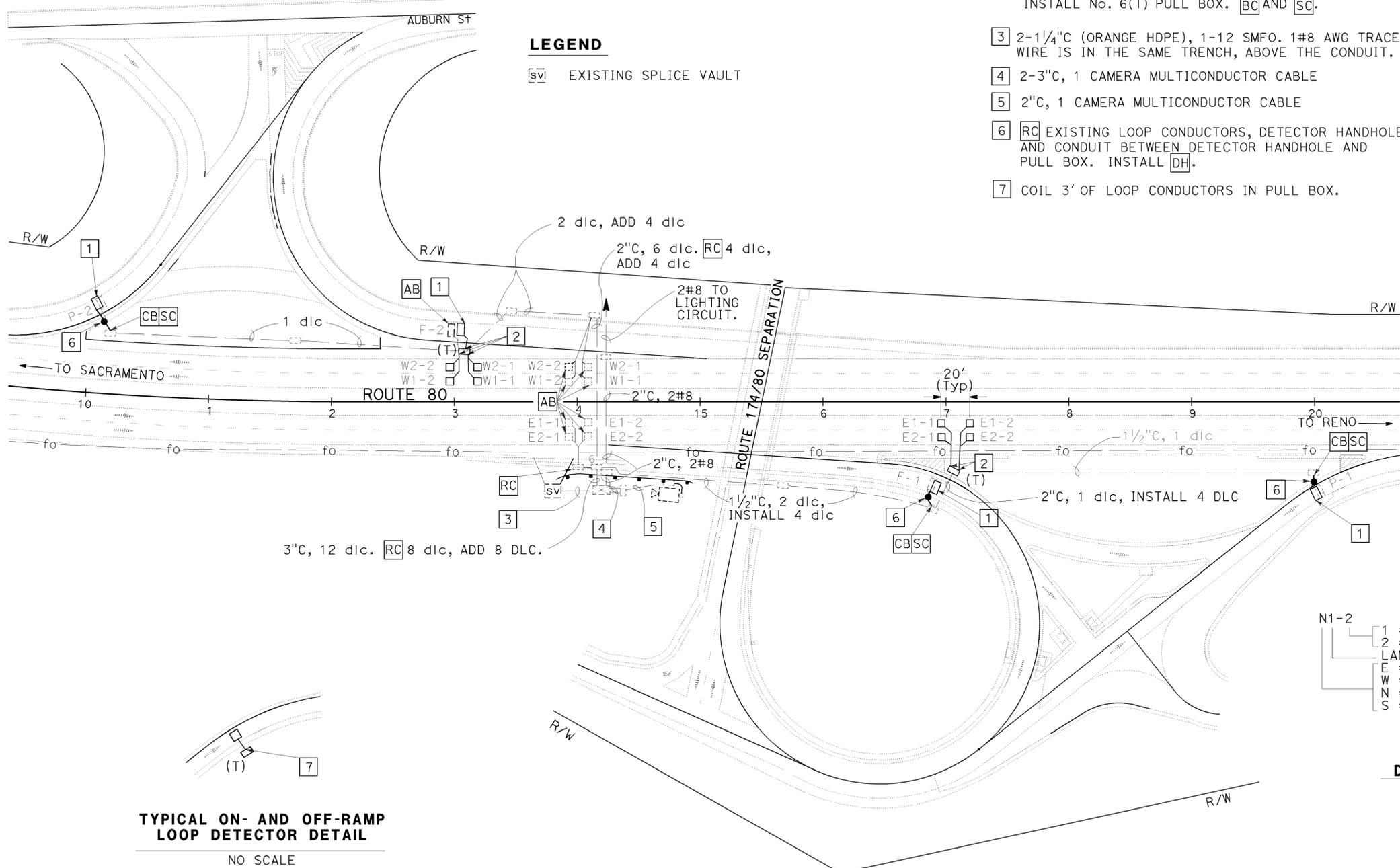
1. [FA] AND [RC] ABANDONED TRAFFIC MONITORING STATION (COUNT) CABINET AT APPROXIMATE POST MILE 26.9.

PROJECT NOTES:

- 1 INSTALL 6' x 10' TYPE A LOOP.
- 2 SHOULDER TERMINATION. [RC] EXISTING PULL BOX. INSTALL No. 6(T) PULL BOX. [BC] AND [SC].
- 3 2-1/4" (ORANGE HDPE), 1-12 SMFO. 1#8 AWG TRACER WIRE IS IN THE SAME TRENCH, ABOVE THE CONDUIT.
- 4 2-3"C, 1 CAMERA MULTICONDUCTOR CABLE
- 5 2"C, 1 CAMERA MULTICONDUCTOR CABLE
- 6 [RC] EXISTING LOOP CONDUCTORS, DETECTOR HANDHOLE, AND CONDUIT BETWEEN DETECTOR HANDHOLE AND PULL BOX. INSTALL [DH].
- 7 COIL 3' OF LOOP CONDUCTORS IN PULL BOX.

LEGEND

[svi] EXISTING SPLICE VAULT



N1-2
 1 = ENTERING
 2 = LEAVING
 LANE NUMBER
 E = EASTBOUND
 W = WESTBOUND
 N = NORTHBOUND
 S = SOUTHBOUND
 1 = 1ST LANE FROM THE LEFT
 2 = 2ND LANE FROM THE LEFT

FREEWAY MAINLINE DETECTOR IDENTIFICATION
NO SCALE



RAMP LOOP DETECTORS (SEE TYPICAL ON- AND OFF- RAMP LOOP DETECTOR DETAIL THIS SHEET)

LOCATION	EB OFF-RAMP (No. OF LOOPS)	EB ON-RAMP (No. OF LOOPS)	EB LOOP RAMP (No. OF LOOPS)	WB OFF-RAMP (No. OF LOOPS)	WB ON-RAMP (No. OF LOOPS)
CROTHER Rd OC				1	1
HEATHER GLEN OC	1	1		1	1
WEIMAR OC (WEST PAOLI EXIT)	1	1		1	1
WEIMAR CROSS Rd OC	1	1	1	1	1
ILLINOISTOWN OC	1	1		1	1

F1
 LOOP NUMBER
 D = DEMAND
 P = PASSAGE
 Q = QUEUE
 F = OFF-RAMP

RAMP DETECTOR IDENTIFICATION
NO SCALE

MODIFY TRAFFIC MONITORING STATION (COUNT)
SCALE: 1" = 50'

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

\\sv03s01\cadd\proj\4\03\vm040\dr\cft\ing\0300001135\da001.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 TRAFFIC ELECTRICAL DESIGN, MARYSVILLE
 Et-trans

LAST REVISION DATE PLOTTED => 16-NOV-2010
 07-28-10 TIME PLOTTED => 08:35

ELECTROLIERS

STANDARD TYPES	Symbol	Description
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

PROPOSED	EXISTING	Description
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	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4C	mas-4C	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	24.5/33.3	16	22

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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

To accompany plans dated October 25, 2010

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)

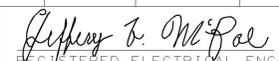
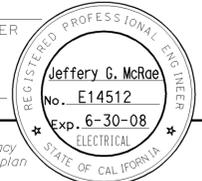
NO SCALE

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

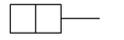
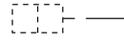
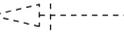
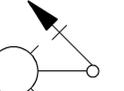
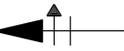
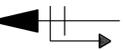
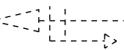
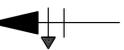
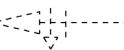
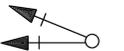
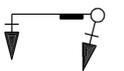
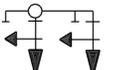
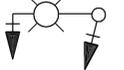
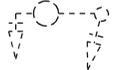
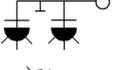
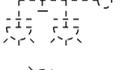
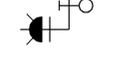
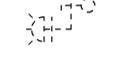
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	24.5/33.3	17	22


 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.

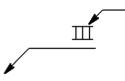
CONDUIT

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

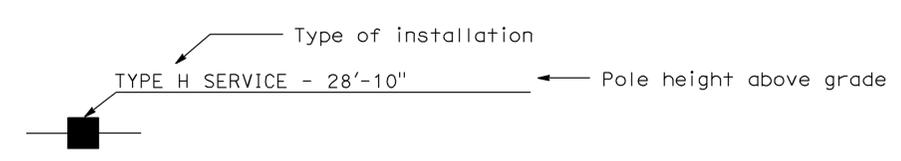
SIGNAL EQUIPMENT

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 lowered "LG" Indicates lowered green section only "PV" Indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		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

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

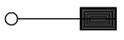
POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

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.

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

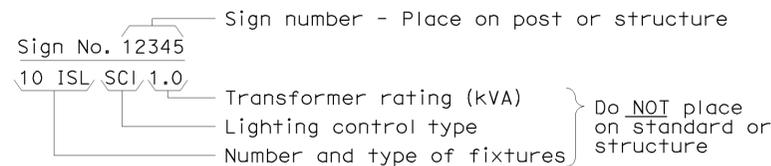
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

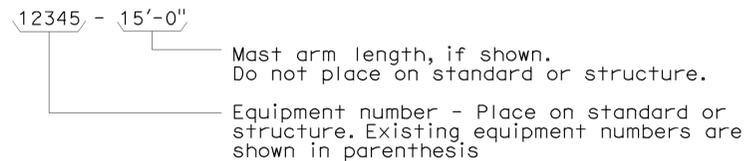
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

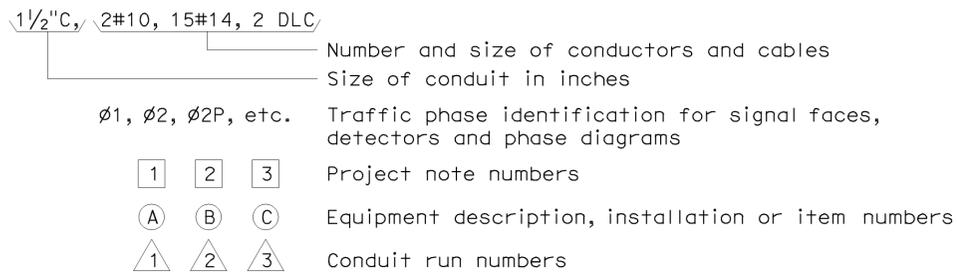
ILLUMINATED SIGN IDENTIFICATION NUMBER:



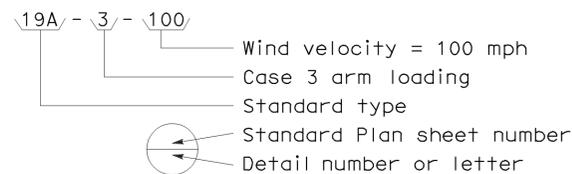
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



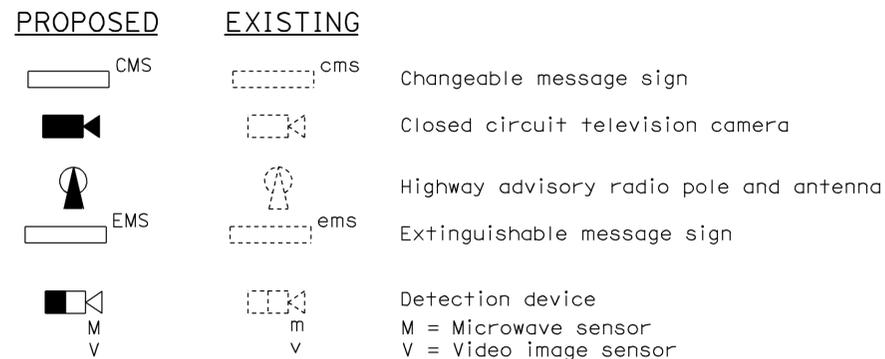
CONDUIT AND CONDUCTOR IDENTIFICATION:



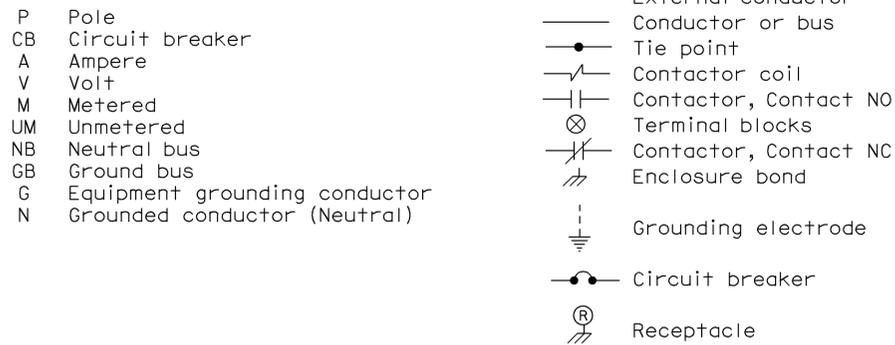
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



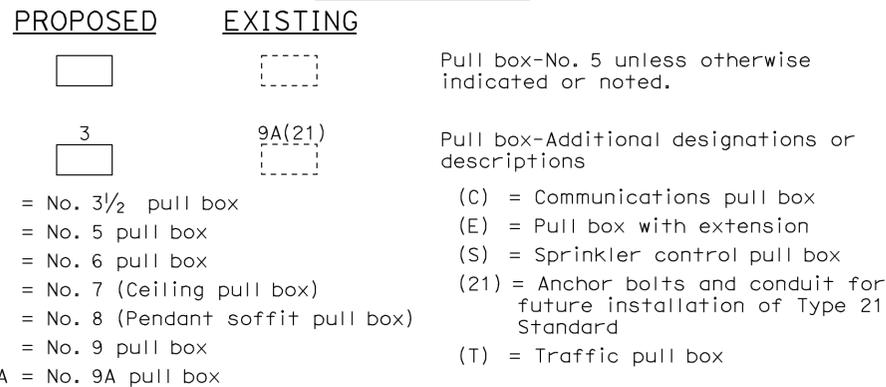
MISCELLANEOUS EQUIPMENT



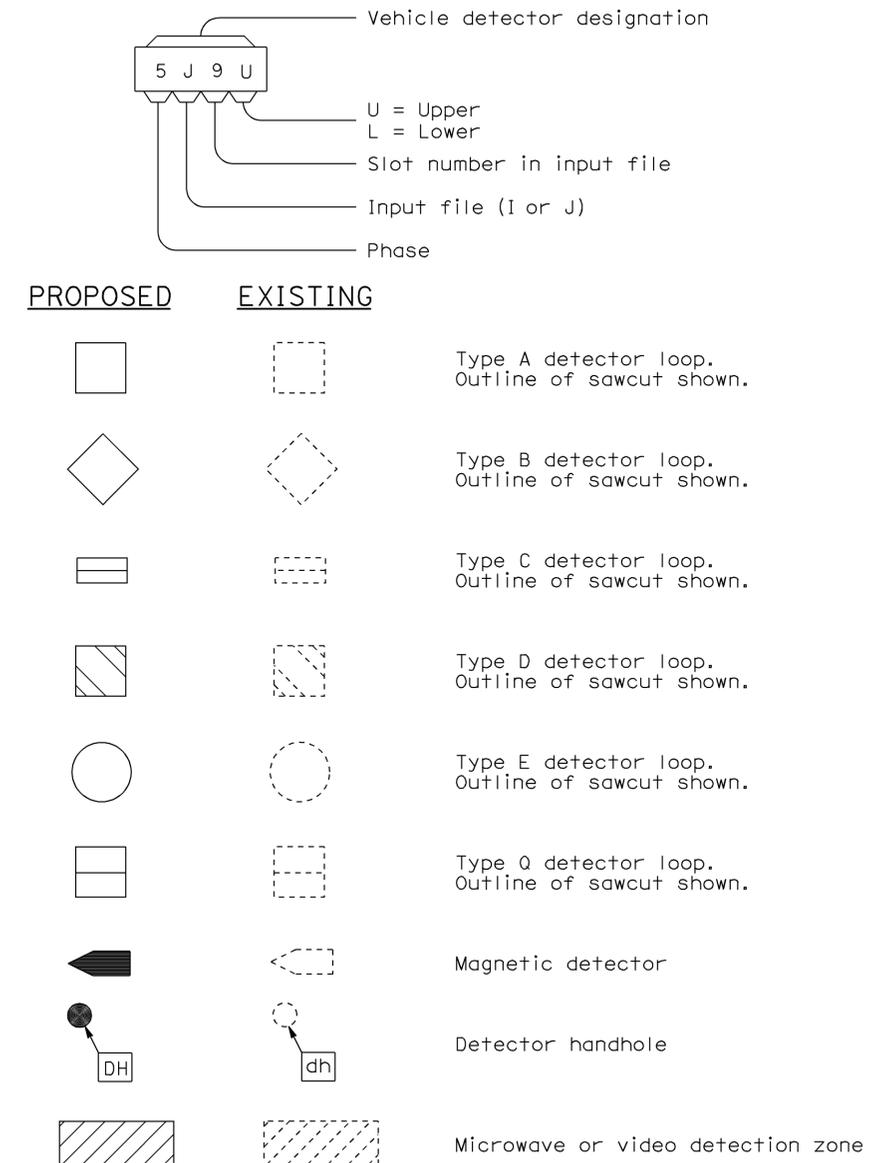
WIRING DIAGRAM LEGEND



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
03	Pla	80	24.5/33.3	19	22

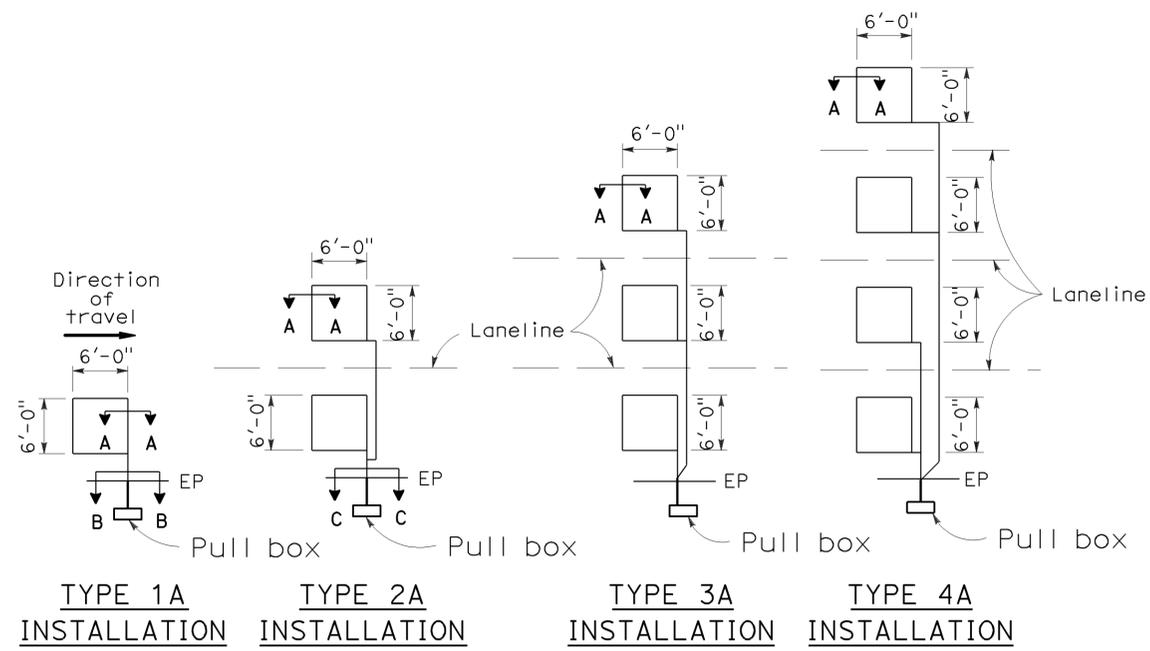
REGISTERED ELECTRICAL ENGINEER
 REGISTERED PROFESSIONAL ENGINEER
 Jeffery G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

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.

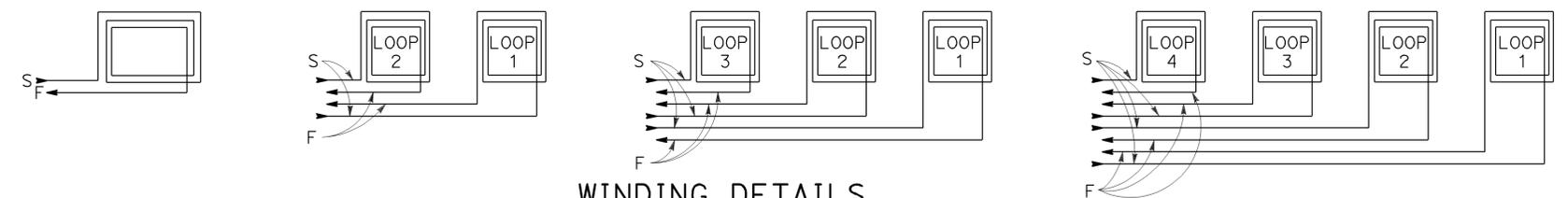
LOOP INSTALLATION PROCEDURE

- 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.



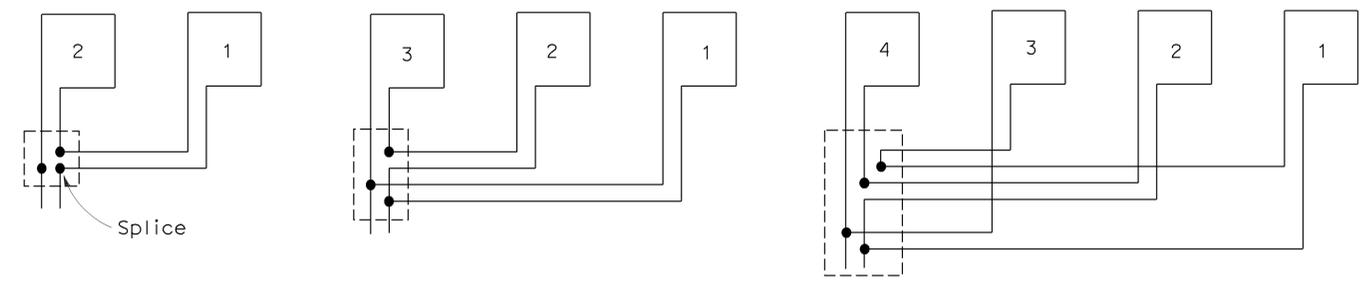
SAWCUT DETAILS

- (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)



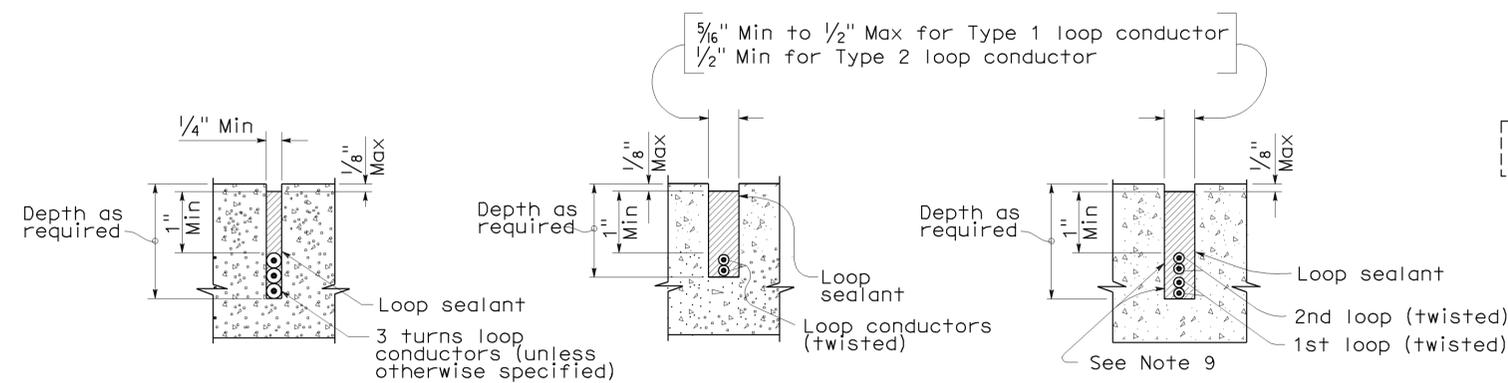
WINDING DETAILS

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

ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

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.

2006 REVISED STANDARD PLAN RSP ES-5A

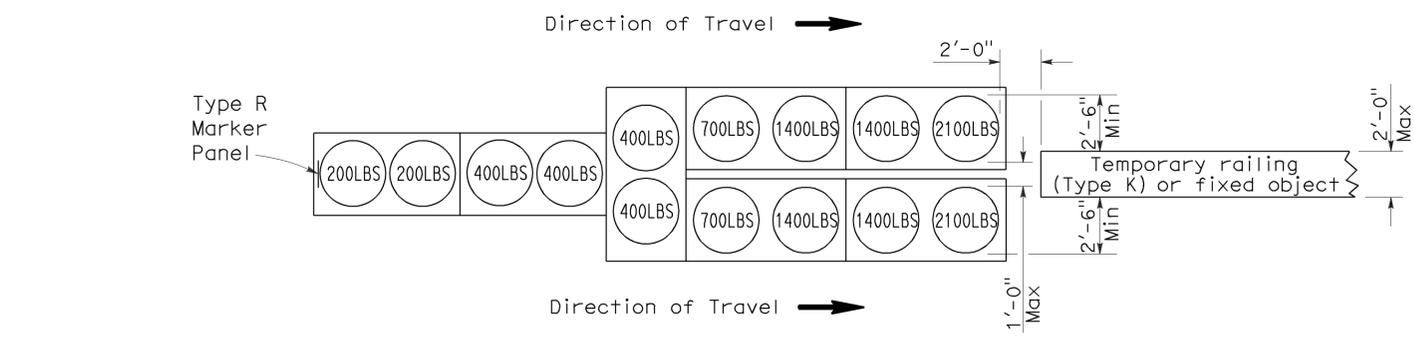
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	24.5/33.3	20	22

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

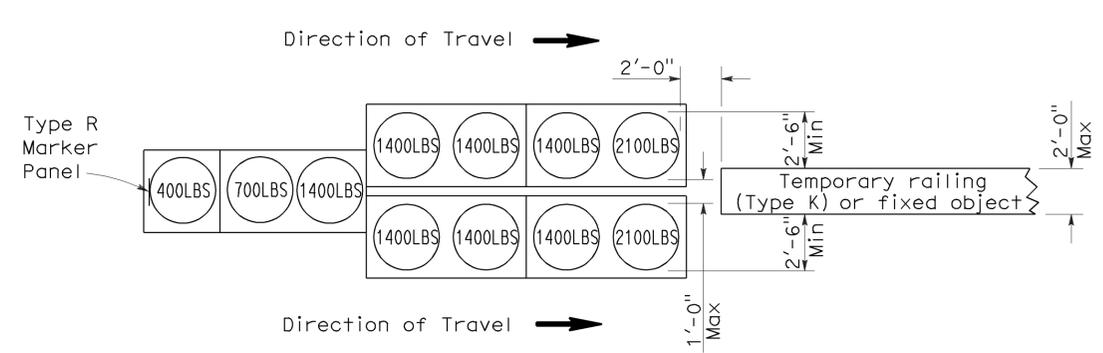
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated October 25, 2010



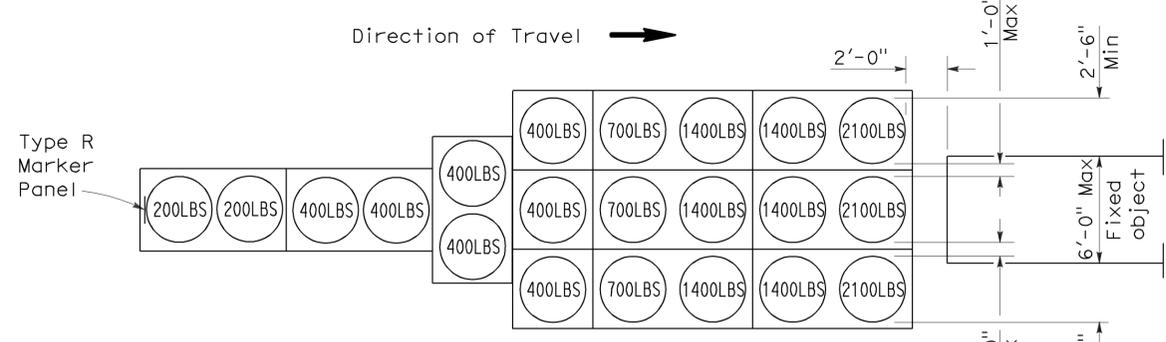
ARRAY 'TU14'

Approach speed 45 mph or more



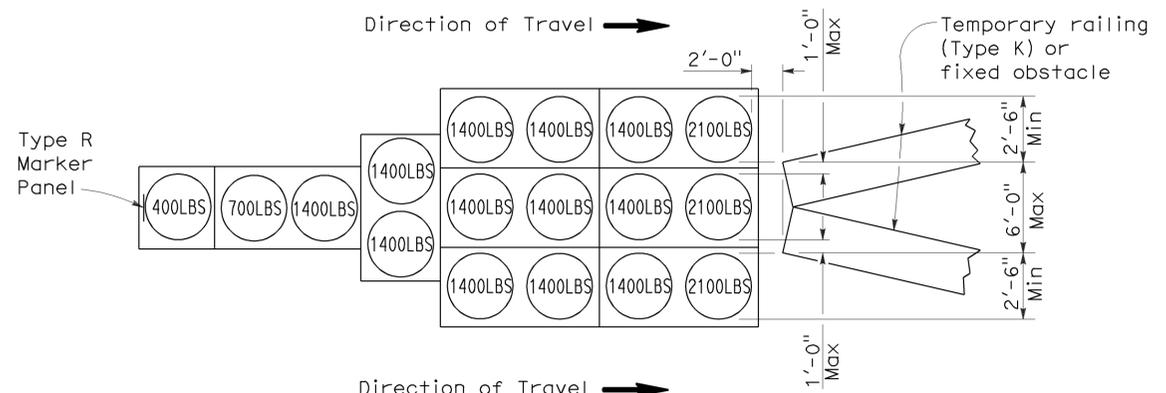
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more

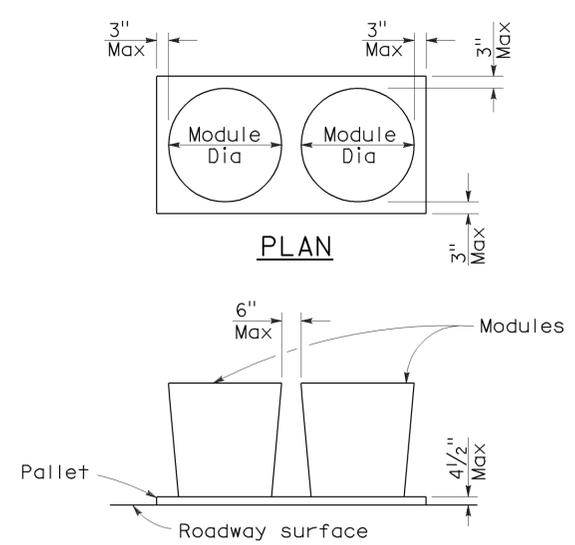


ARRAY 'TU17'

Approach speed less than 45 mph

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.



CRASH CUSHION PALLET DETAIL
See Note 7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

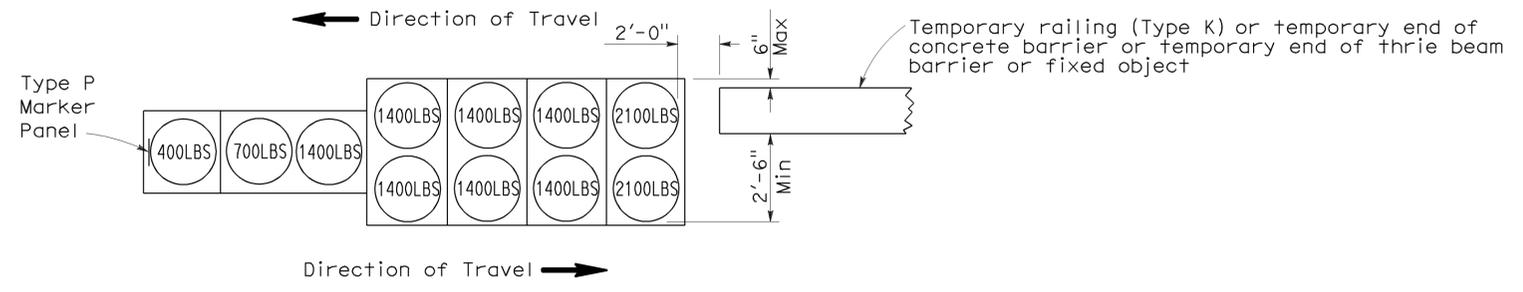
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	24.5/33.3	21	22

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

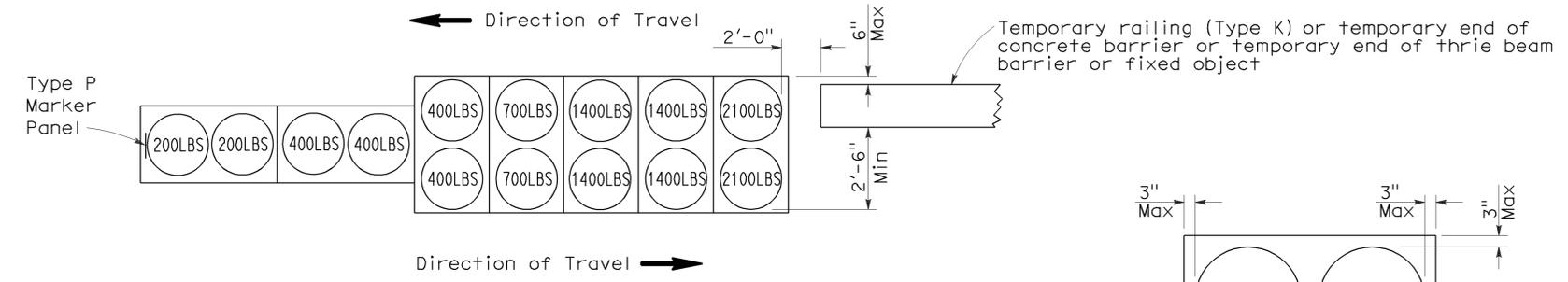
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated October 25, 2010



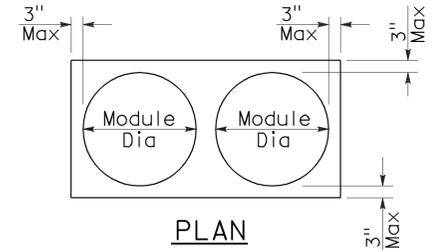
ARRAY 'TB11'

Approach speed less than 45 mph

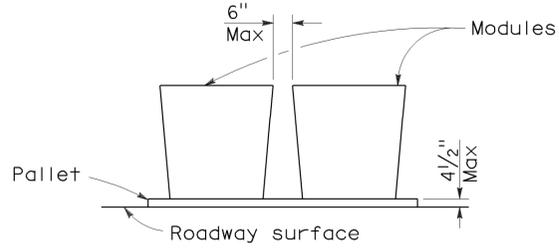


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

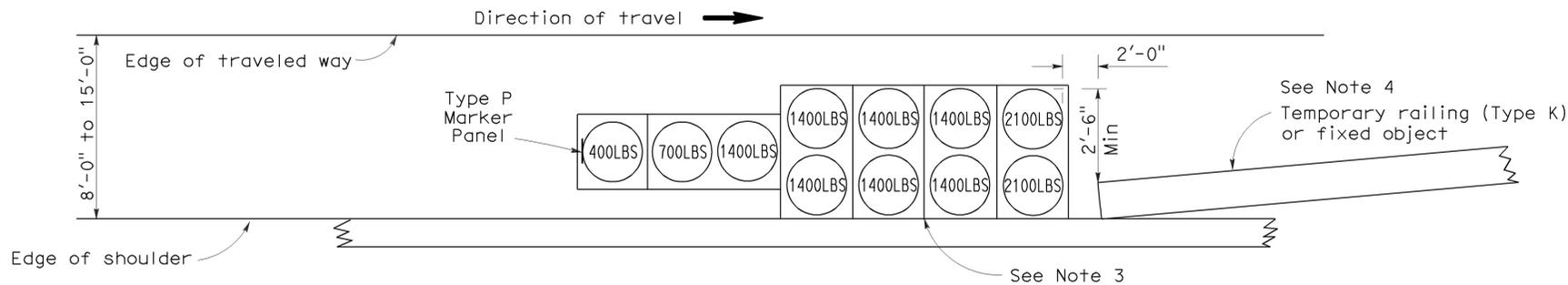
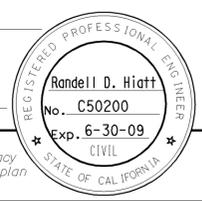
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Pla	80	24.5/33.3	22	22

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

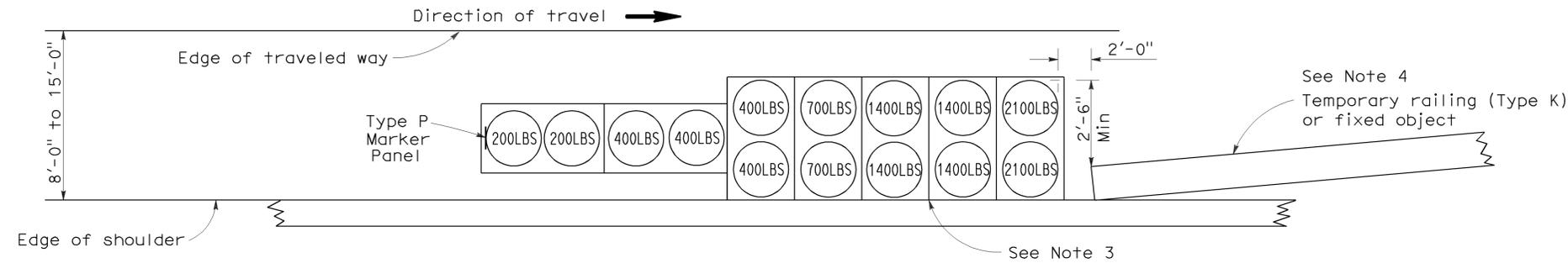
June 6, 2008
PLANS APPROVAL DATE

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.

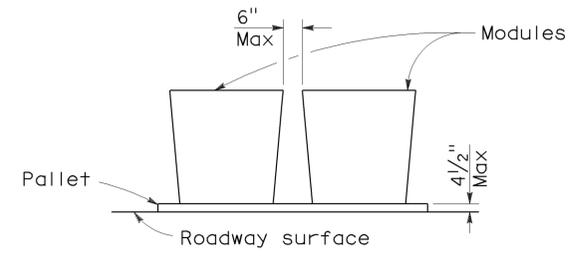
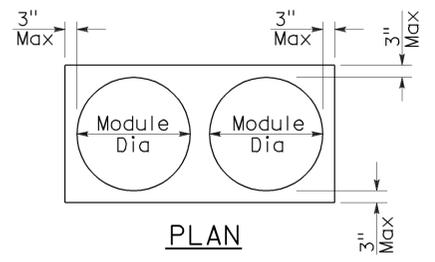
To accompany plans dated October 25, 2010



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



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



CRASH CUSHION PALLET DETAIL
See Note 11

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.

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