

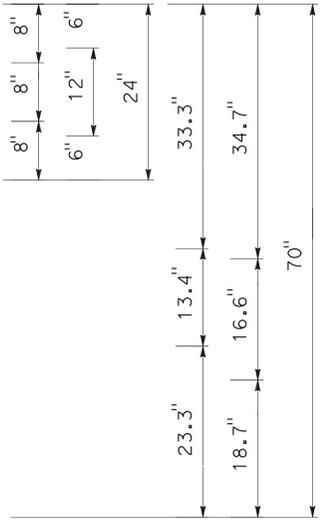
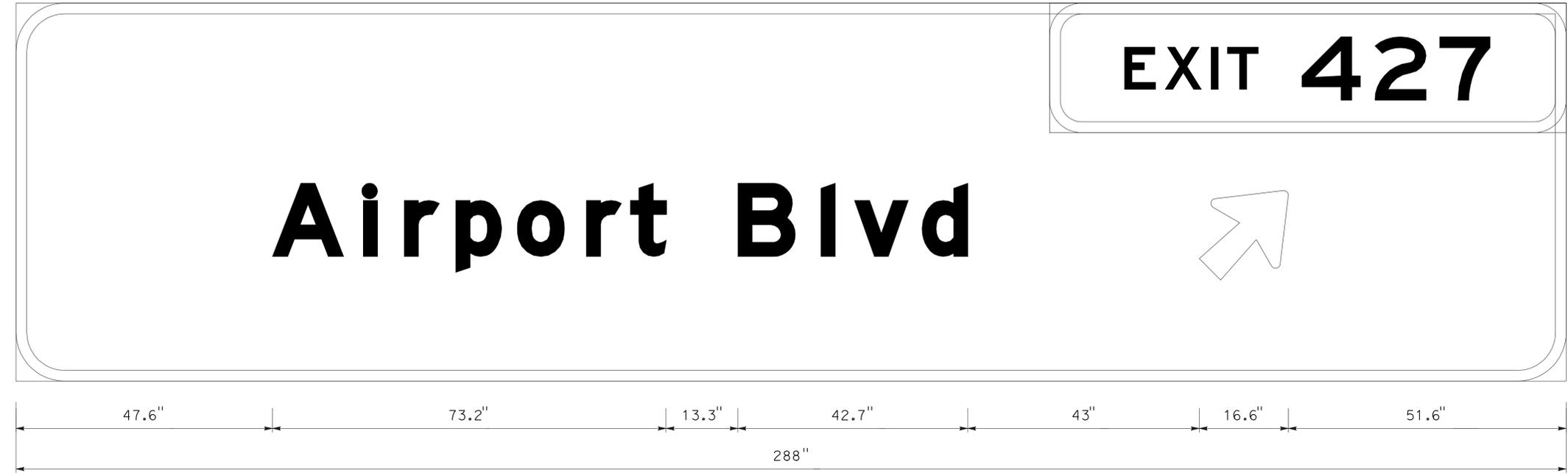
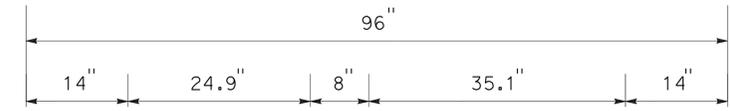
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCr	1	RO.0/10.2	101	157

06-20-11
REGISTERED CIVIL ENGINEER DATE
6-20-11
PLANS APPROVAL DATE

FANZI YAGHMOUR
No. C-54750
Exp. 12/31/11
CIVIL
STATE OF CALIFORNIA

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

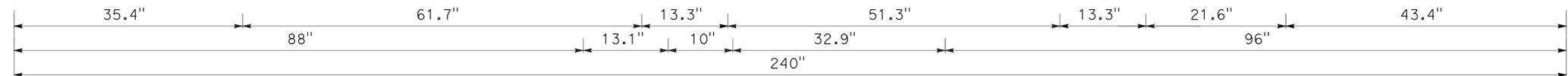
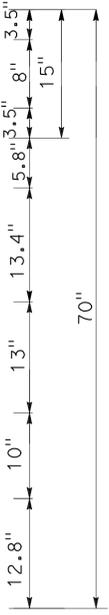
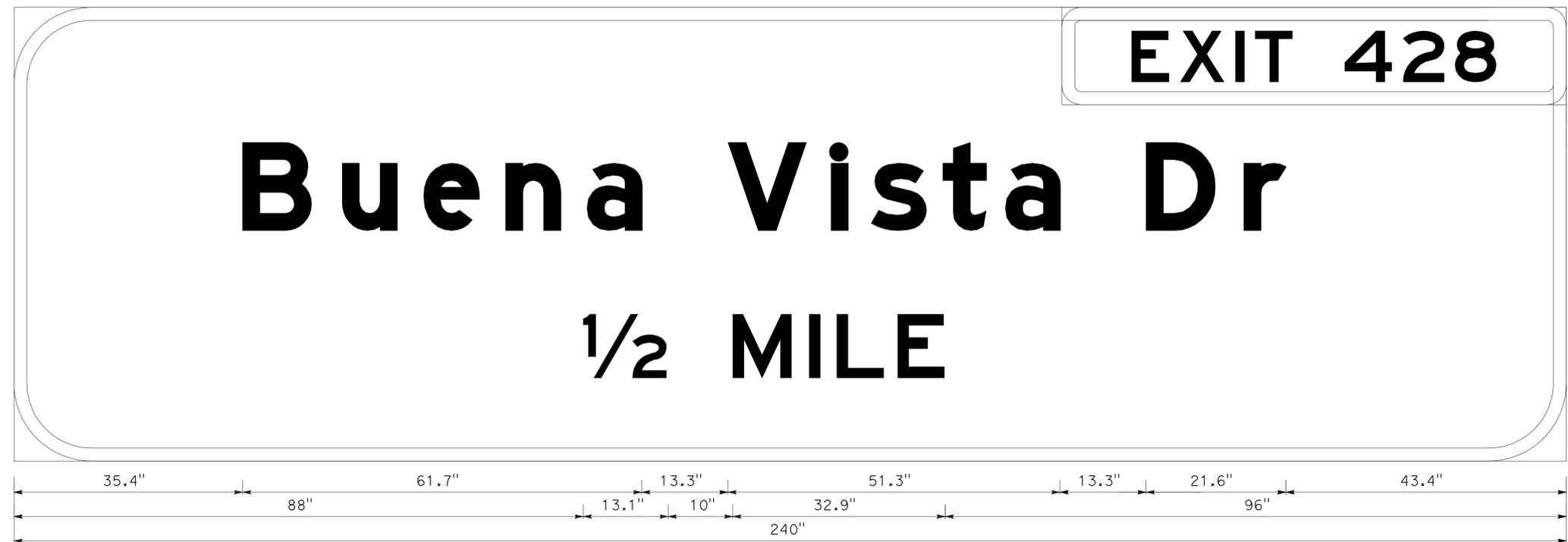
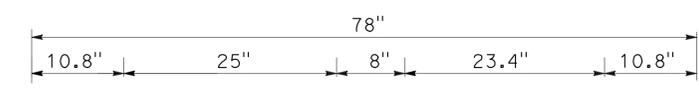
6.0" Radius, 2.0" Border, White on Green;
[EXIT 427] E;



10

G85-11(CA) 9.0" Radius, 2.0" Border, White on Green;
[Airport Blvd] E Mod; Arrow 13.33UC-1L - 20.3" 45{;

3.0" Radius, 2.0" Border, White on Green;
[EXIT 428] E;



**SIGN DETAILS
SD-9**

NO SCALE

11

G83-1(CA); 12.0" Radius, 2.0" Border, White on Green;
[Buena Vista Dr] E Mod; [5/8" MILE] E;

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

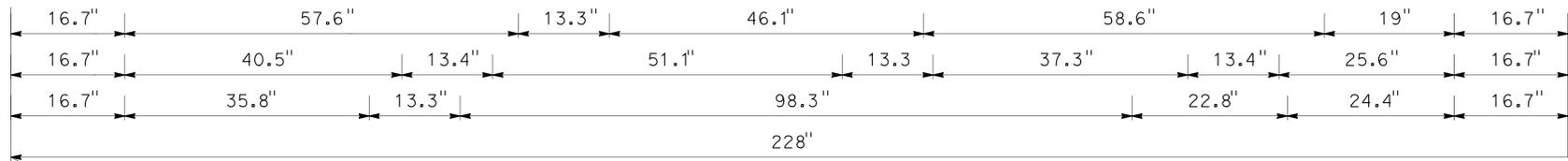
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	ScR	1	RO.0/10.2	102	157

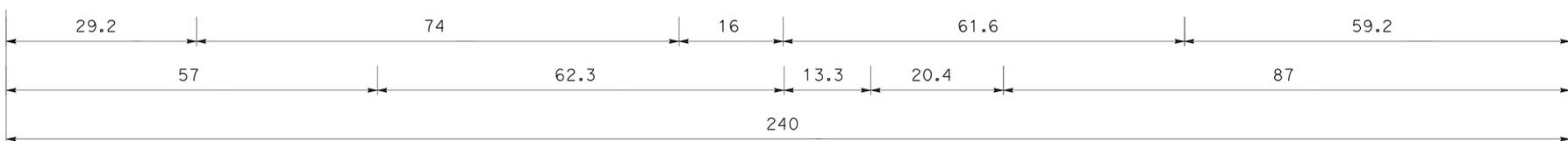
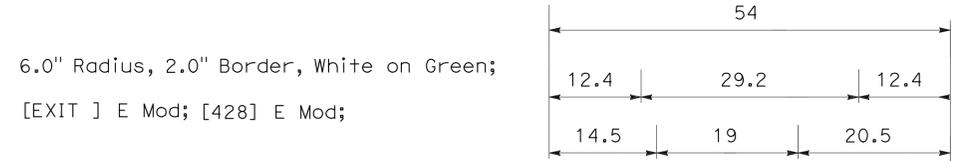
06-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

FAWZI YAGHMOUR
 No. C-54750
 Exp. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

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



12 ● G5 (CA) 12.0" Radius, 2.0" Border, White on Green;
 [Santa Cruz] E Mod; [14] E Mod; [Half moon Bay] E Mod; [64] E Mod; [San Francisco] E Mod; [90] E Mod;



13 14 ● G85-11(CA); 9.0" Radius, 2.0" Border, White on Green;
 [Buena Vista] E Mod; [Drive] E Mod; Arrow 16CAP-1L - 25.0" 45°;

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

**SIGN DETAILS
SD-10**

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans TRAFFIC DESIGN	MOHAMMED OATAMI	DAVID BLACK	
		FAWZI YAGHMOUR	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI
 CALCULATED/DESIGNED BY: CHECKED BY:
 DAVID BLACK FAWZI YAGHMOUR
 REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCr	1	RO.0/10.2	103	157

06-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 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.



⑮ ● G83-5 (CA); 12.0" Radius, 2.0" Border, White on Green;
 [Airport Blvd] E Mod; [5/8" MILE] E;

**SIGN DETAILS
 SD-11**

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

NO SCALE

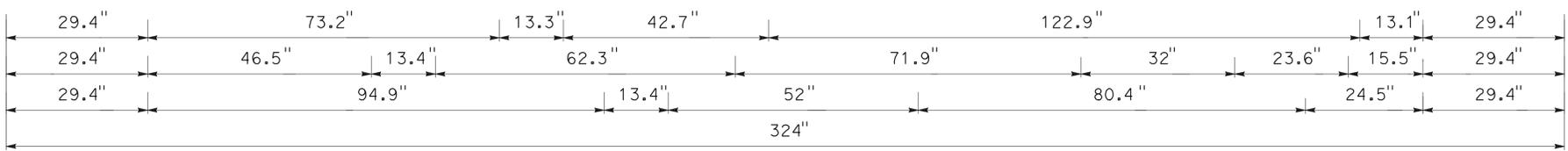
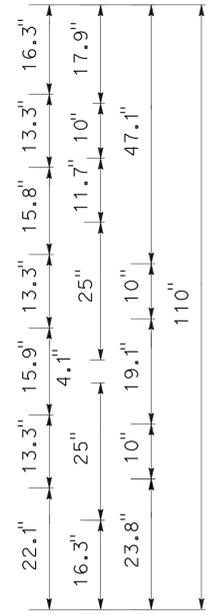
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN
 FUNCTIONAL SUPERVISOR: MOHAMMED QATAMI
 CALCULATED/DESIGNED BY: DAVID BLACK
 CHECKED BY: FAWZI YAGHMOUR
 REVISED BY: DATE REVISIONS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	R0.04/10.2	104	157

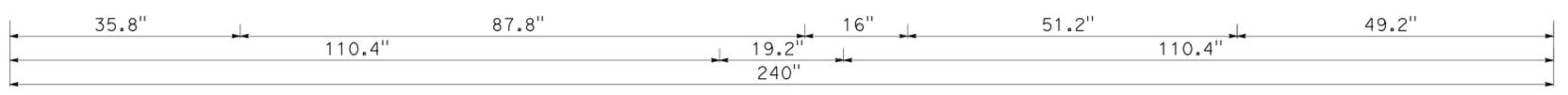
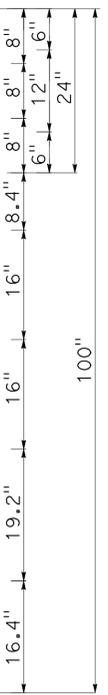
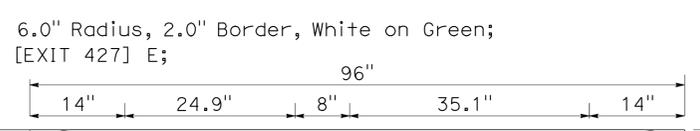
06-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

FANZI YAGHMOUR
 No. C-54750
 Exp. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

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



16 ● G23(CA); 12.0" Radius, 2.0" Border, White on Green;
 [Airport Blvd] E Mod; [57/64] E Mod; [Main Street] E Mod; [61/64] E Mod; [Riverside Drive] E Mod; [2 59/64] E Mod;



17 ● G85-11(CA); 6.0" Radius, 2.0" Border, White on Green;
 [Airport Blvd] E Mod; Standard Arrow Custom 24.5" X 15.0" 45{;

**SIGN DETAILS
 SD-12**

NO SCALE

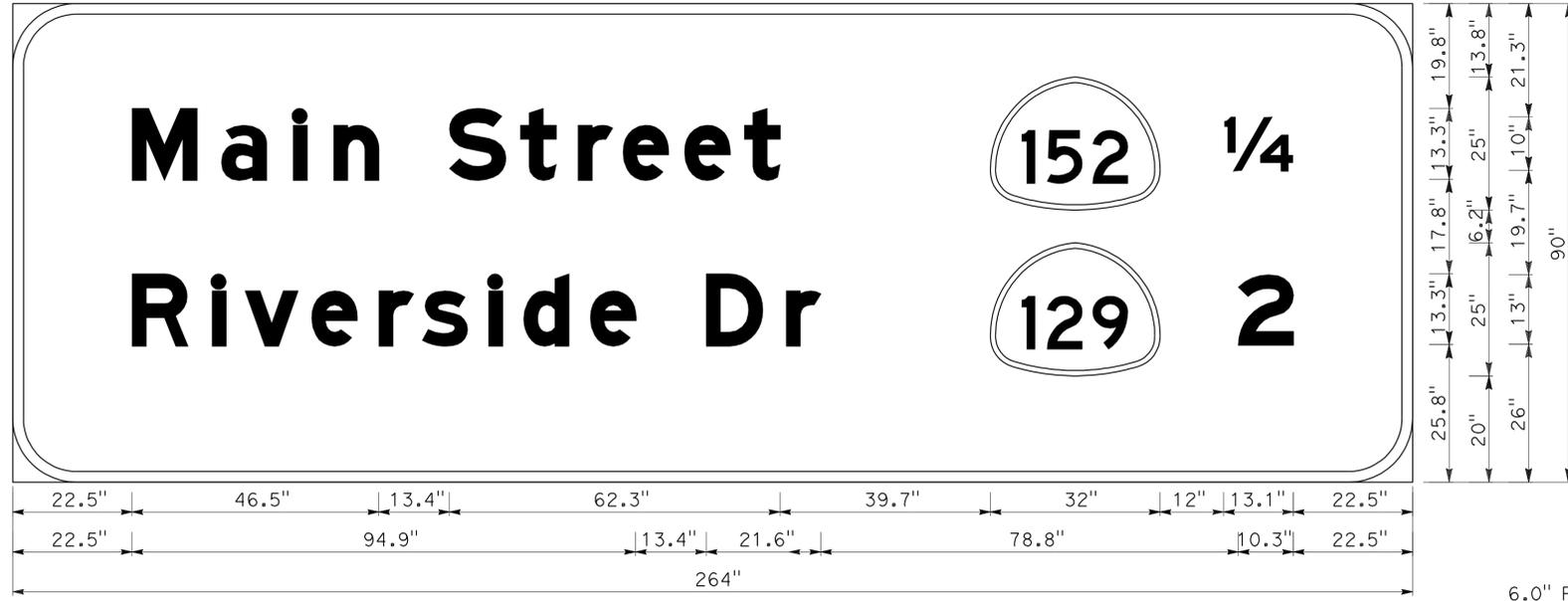
THIS PLAN ACCURATE FOR SIGN PLAN ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	ScR	1	RO.0/10.2	105	157

06-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

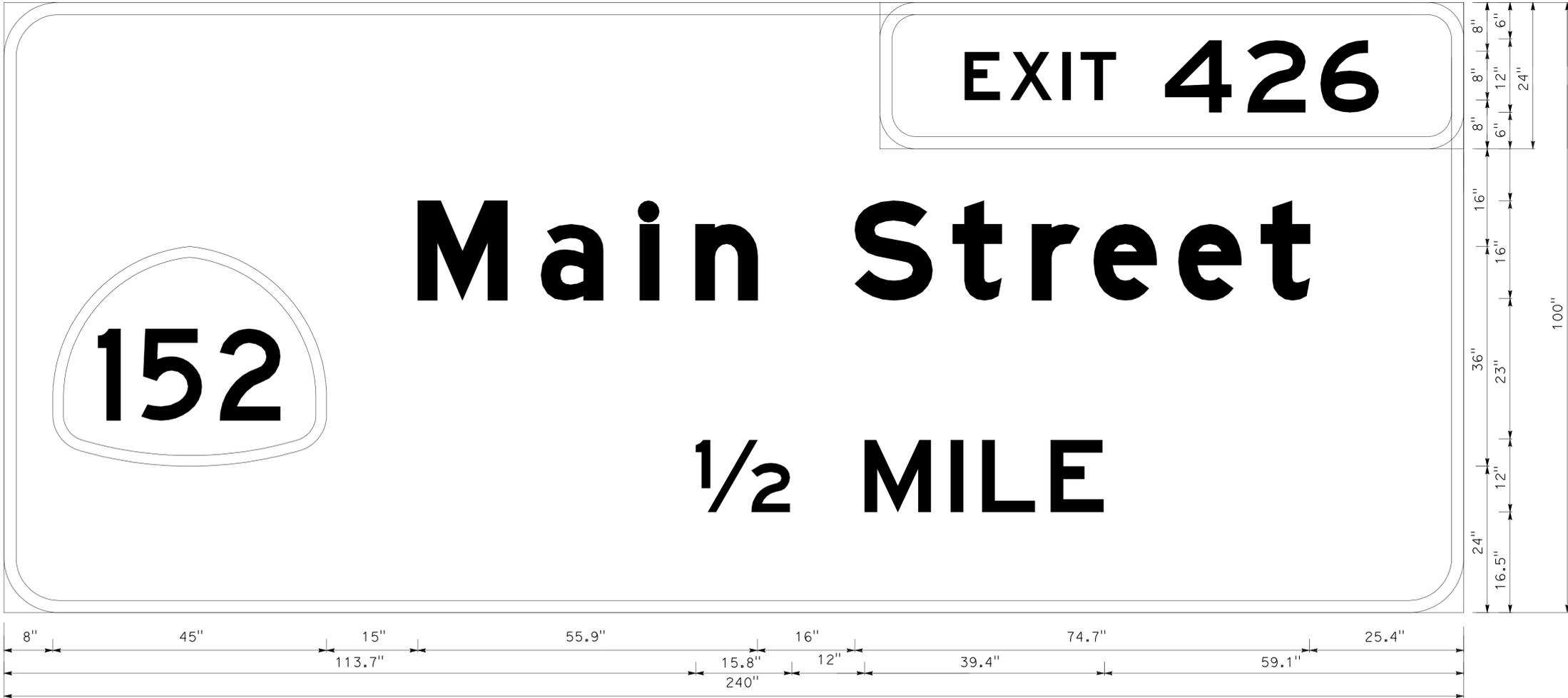
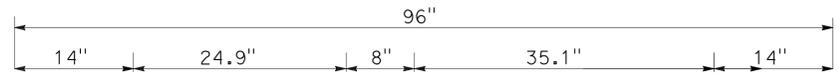
FAWZI YAGHMOUR
 No. C-54750
 Exp. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

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



G23-5(CA); 12.0" Radius, 2.0" Border, White on Green;
 [Main Street] E Mod; [⁵/₄] E Mod; [Riverside Dr] E Mod; [2] E Mod;

6.0" Radius, 2.0" Border, White on Green;
 [EXIT 426] E;



G83-5 (CA); 9.0" Radius, 2.0" Border, White on Green;
 [Main Street] E Mod; [⁵/₄] MILE] E;

SIGN DETAILS
SD-13

NO SCALE

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DAVID BLACK	REVISOR
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	FAWZI YAGHMOUR	DATE
			REVISED BY
			DATE

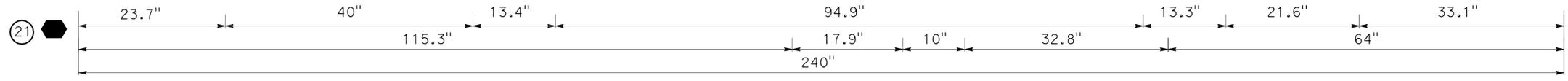
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	ScR	1	RO.0/10.2	106	157

<i>[Signature]</i>	06-20-11
REGISTERED CIVIL ENGINEER	DATE
6-20-11	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	
FANZI YAGHMOUR	
No. C-54750	Exp. 12/31/11
CIVIL	

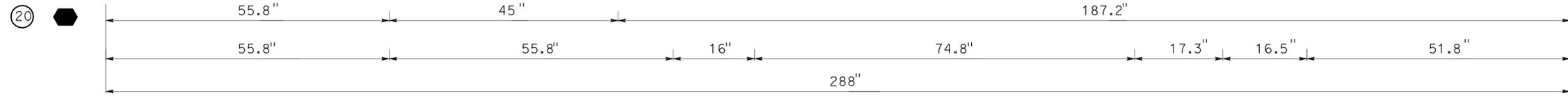
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

3.0" Radius, 1.5" Border, White on Green;
[EXIT 425] E;



G83-5(CA); 9.0" Radius, 1.5" Border, White on Green;
[Riverside Dr] E Mod; [1 1/4 MILE] E;

3.0" Radius, 1.5" Border, White on Green;
[EXIT 426] E;



G85-11(CA); 9.0" Radius, 1.5" Border, White on Green;
[Main Street] E Mod; Arrow 12CAP-1L - 20.3" 45;

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

**SIGN DETAILS
SD-14**

NO SCALE

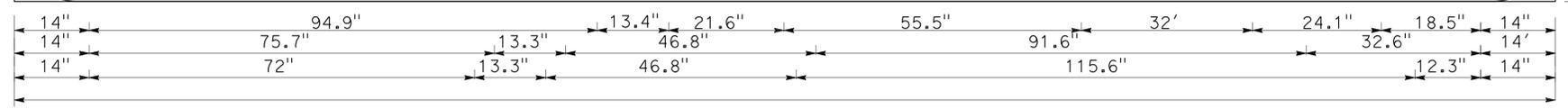
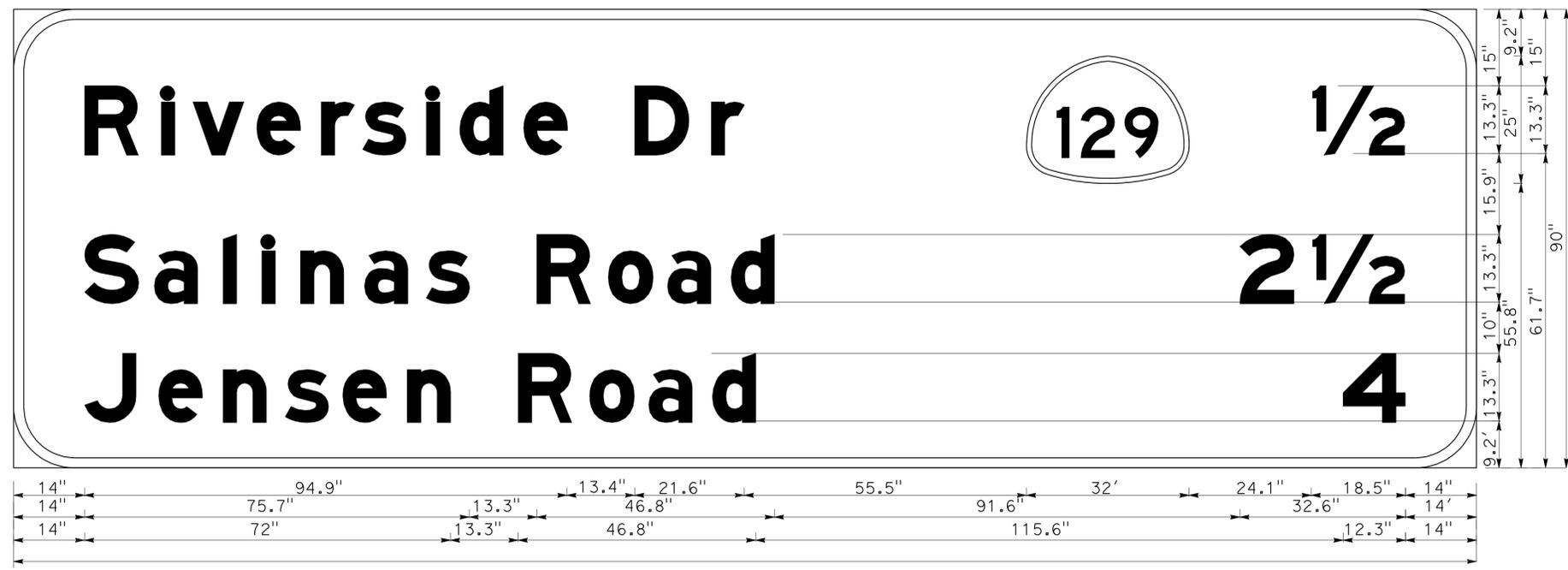
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	DAVID BLACK
			FAWZI YAGHMOUR
			DATE REVISOR

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCr	1	RO.0/10.2	107	157

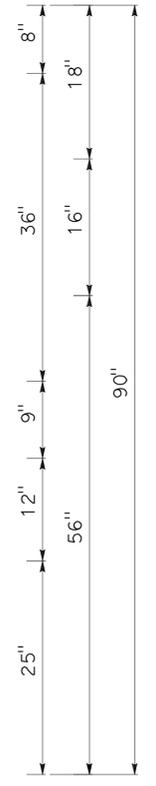
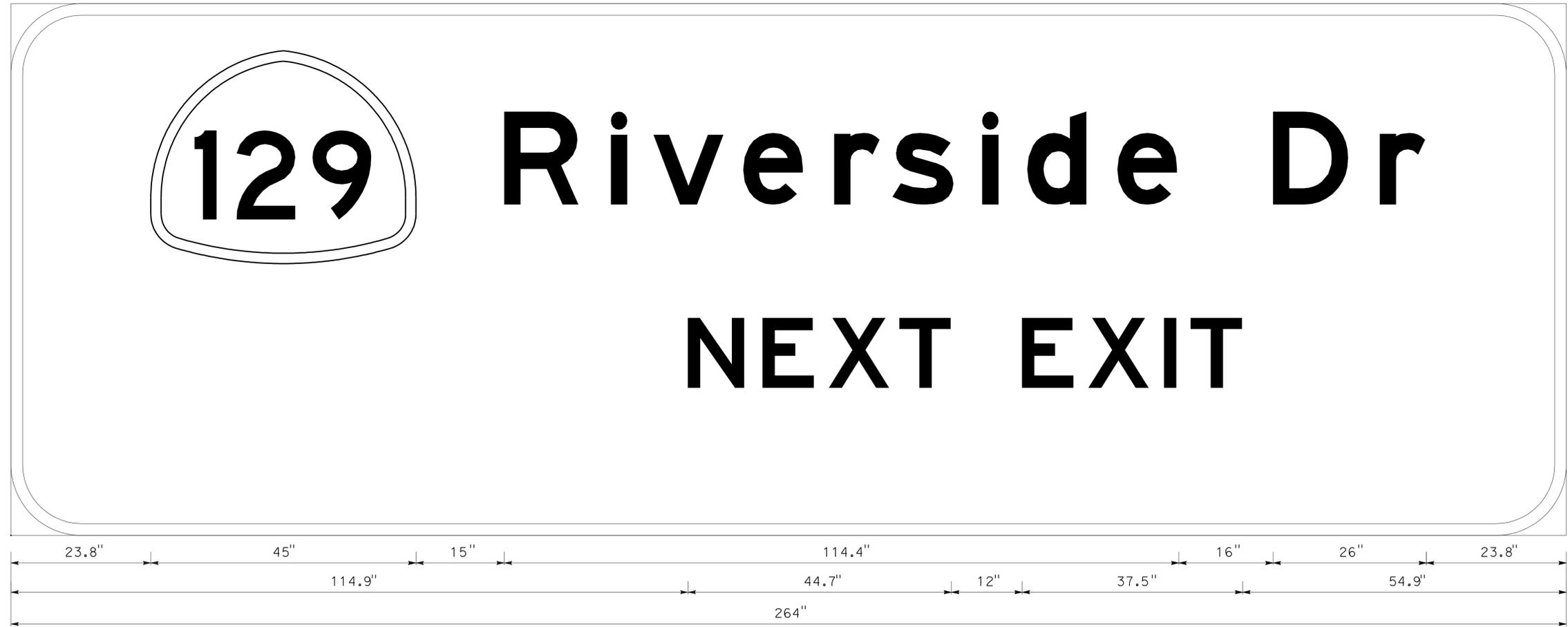
<i>[Signature]</i>	06-20-11
REGISTERED CIVIL ENGINEER	DATE
6-20-11	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	
FANZI YAGHMOUR	
No. C-54750	Exp. 12/31/11
CIVIL	
STATE OF CALIFORNIA	

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



22 ● G23-2(CA); 12.0" Radius, 2.0" Border, White on Green;
 [Riverside Dr] E Mod; E Mod; [Salinas Road] E Mod; [2 59/64] E Mod; [Jensen Road] E Mod; [4] E Mod;



23 ● G86-3(CA); 12.0" Radius, 2.0" Border, White on Green;
 [Riverside Dr] E; [NEXT EXIT] E;

SIGN DETAILS
SD-15

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	DAVID BLACK	REVISOR BY	
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	FAWZI YAGHMOUR	DATE REVISED	

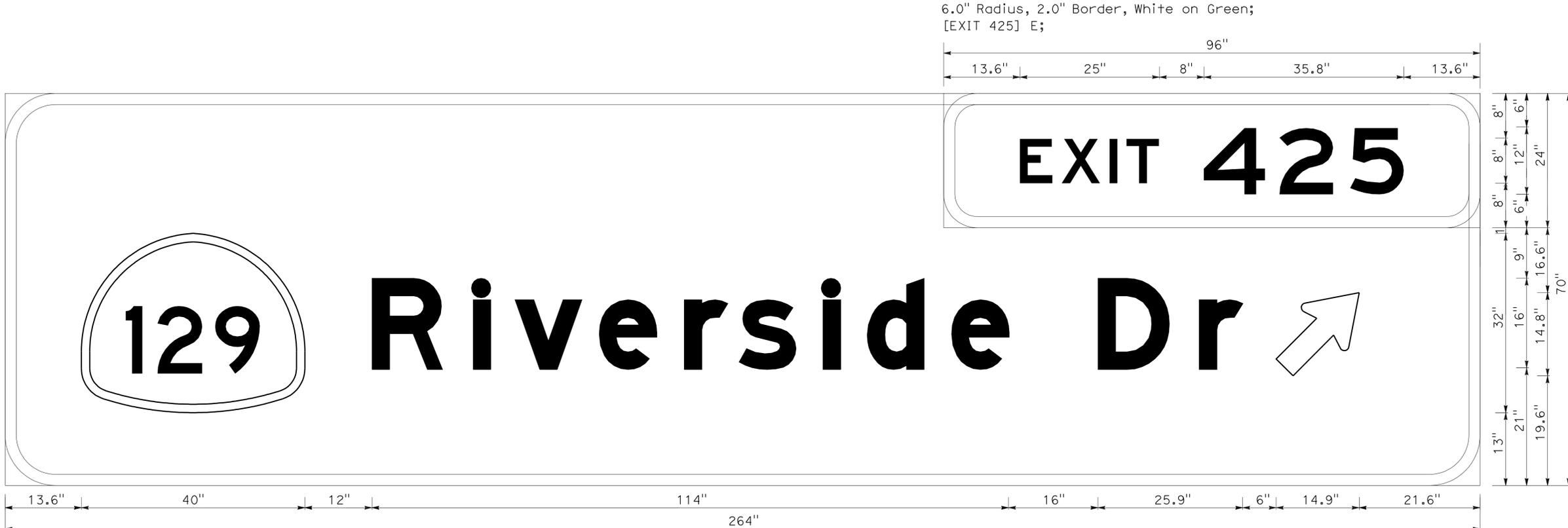
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCr	1	RO.0/10.2	108	157

06-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

FAWZI YAGHMOUR
 No. C-54750
 Exp. 12/31/11
 CIVIL
 STATE OF CALIFORNIA

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR
Caltrans TRAFFIC DESIGN	MOHAMMED QATAMI	CHECKED BY	DAVID BLACK
			FAWZI YAGHMOUR
			REVISOR
			DATE
			REVISED



- (24) G85-11(CA); 9.0" Radius, 2.0" Border, White on Green; [Riverside Dr] E Mod; Standard Arrow Custom 18.9" X 11.4" 45;

**SIGN DETAILS
SD-16**

NO SCALE

THIS PLAN ACCURATE FOR SIGN PLAN ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	109	157

06-20-11
REGISTERED CIVIL ENGINEER DATE
6-20-11
PLANS APPROVAL DATE

FANZI YAGHMOUR
No. C-54750
Exp. 12/31/11
CIVIL
STATE OF CALIFORNIA

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OVERHEAD SIGN AND ROADSIDE SIGN QUANTITIES

SHEET No.	SIGN No.	PM	CODE	POST SIZE (inch x inch)	PANEL SIZE (L x D)	AREA SQFT	ROUTE, DIRECTION	SINGLE FACED	BACK-GROUND SHEETING COLOR	LEGEND SHEETING	RETROREFLECTIVITY ASTM TYPE	GRAFFITI FLOW PREMIUM	FURNISH LAMINATED SIGN PANEL OVERHEAD (1" TYPE A)	FURNISH FORMED PANEL SIGN (OVERHEAD)	FURNISH LAMINATED PANEL SIGN (2.5" THICK TYPE B)	INSTALL PANEL SIGN ON EXISTING FRAME	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063" UNFRAMED)	ROADSIDE SIGN - ONE POST	INSTALL ROADSIDE SIGN (LAMINATED WOOD BOX POSTS) (TYPE M)	REMOVE ROADSIDE SIGN (WOOD POST)	REMARKS
													SQFT		SQFT	SQFT	SQFT	EA	EA	EA	
1	1	0.09	G86-5(CA)	288 x 90	180.00	FNBT	X	GREEN	WHITE	IV	X		180.00		180.00						SR129/152 RIVERSIDE-NEXT EXIT
2	2	0.45	G85-11(CA)	336 x 70	163.33	FNBT	X	GREEN	WHITE	IV	X		163.33		163.33						SR129/152 RIVESIDE WITH EXIT 425
3	3	0.71	G83-5(CA)	288 x 100	200.00	FNBT	X	GREEN	WHITE	IV	X		200.00		200.00						GREEN V. Rd & HARKINS SLOUGH Rd 1.25 MILES EXIT 426
4	4	1.36	G23-1(CA)	264 x 90	165.00	FNBT	X	GREEN	WHITE	IV	X		165.00		165.00						GREEN V-AIRPORT Blvd AND BUENA VISTA, WITH DISTANCE
5	5	1.55	G86-5(CA)	288 x 90	180.00	FNBT	X	GREEN	WHITE	IV	X		180.00		180.00						GREEN V. Rd & HARKINS SLOUGH Rd-1 NEXT EXIT
6	6	2.03	G83-5(CA)	336 x 70	163.33	FNBT	X	GREEN	WHITE	IV	X		163.33		163.33						GREEN V. Rd & HARKINS SLOUGH Rd-1 EXIT 426 AND ARROW
7	7	2.24	G23-1(CA)	264 x 90	165.00	FNBT	X	GREEN	WHITE	IV	X		165.00		165.00						AIRPORT Blvd, BUENA EXIT & ROADSIDE Dr WITH DISTANCE
8	8	2.45	G83-5(CA)	264 x 100	183.33	FNBT	X	GREEN	WHITE	IV	X		183.33		183.33						AIRPORT, 3/4 MILE,EXIT 427
9	9	2.77	G86-5(CA)	246 x 90	153.75	FNBT	X	GREEN	WHITE	IV	X		153.75		153.75						FREEDOM, NEXT EXIT
10	10	3.18	G85-11(CA)	288 x 70	140.00	FNBT	X	GREEN	WHITE	IV	X		140.00		140.00						AIRPORT, EXIT 427 AND ARROW
10	11	3.18	G83-1(CA)	240 x 70	116.66	FNBT	X	GREEN	WHITE	IV	X		116.66		116.66						BUENA VISTA DRIVE 1/2 MILE, EXIT 428
10	12	3.62	G5CA)	LAMINATED POST	228 x 84		FNBT		GREEN	WHITE	IV	X			133.00						SANTA CRUZ,HALF MOON BAY, SAN FRANCISCO WITH DISTANCE
10	13	3.80	G85-11(CA)	240 x 70	116.66	FNBT	X	GREEN	WHITE	IV	X		116.66		116.66						BUENA VISTA DRIVE WITH EXIT 428 AND ARROW
10	14	4.52	G85-11(CA)	240 x 70	116.66	FSBT	X	GREEN	WHITE	IV	X		116.66		116.66						BUENA VISTA DRIVE WITH EXIT428 AND ARROW
11	15	4.12	G83-5(CA)	204 x 100	141.66	FSBT	X	GREEN	WHITE	IV	X		141.66		141.66						AIRPORT Blvd 1/2 MILE EXIT 427
12	16	3.75	G23(CA)	324 x 110	247.50	FSBT	X	GREEN	WHITE	IV	X		247.50		247.50						AIRPORT Blvd, MAIN St 152, RIVERSIDE Dr 129 WITH Dist
12	17	3.46	G85-11(CA)	240 x 100	166.66	FSBT	X	GREEN	WHITE	IV	X		166.66		166.66						AIRPORT, EXIT 427 AND ARROW
12	18	3.46	G83-5(CA)	240 x 100	166.66	FSBT	X	GREEN	WHITE	IV	X		166.66		166.66						MAIN St AND 152, 1/2 MILE, EXIT 426
13	19	3.22	G23-5(CA)	264 x 90	165.00	FSBT	X	GREEN	WHITE	IV	X		165.00		165.00						MAIN St AND RIVERSIDE Dr, 152, 129 WITH DISTANCE
14	20	3.02	G85-11(CA)	288 x 70	140.00	FSBT	X	GREEN	WHITE	IV	X		140.00		140.00						MAIN STREET, 152 AND EXIT 426 WITH ARROW
14	21	2.27	G83-5(CA)	240 x 70	116.66	FSBT	X	GREEN	WHITE	IV	X		116.66		116.66						RIVERSIDE Dr, Jct 1 1/4 MILE EXIT 425
15	22	1.61	G23-2(CA)	288 x 90	180.00	FSBT	X	GREEN	WHITE	IV	X		180.00		180.00						RIVERSIDE Dr, SALINAS Rd & JENSEN Rd, 129 WITH DISTANCE
15	23	1.44	G86-3(CA)	264 x 90	153.75	FSBT	X	GREEN	WHITE	IV	X		153.75		153.75						RIVERSIDE DRIVE, NEXT EXIT, 129
16	24	0.99	G85-11(CA)	264 x 70	128.33	FSBT	X	GREEN	WHITE	IV	X		128.33		128.33						RIVERSIDE DRIVE, 129 WITH ARROW EXIT 425
S-1	25		R5-1 R5-1a	1-4 x 6	36 x 36 36 x 24		X	RED	WHITE	IV	X						15.0	1			DO NOT ENTER WRONG WAY
						3649.9							1300.8	2349.1	133.0	3649.9	15.0	1	1	1	

**SIGN QUANTITY
SQ-1**

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC DESIGN

DATE PLOTTED => 15-AUG-2011
TIME PLOTTED => 10:44

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	110	157

Peter Chander 5-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 PETER A CHANDER
 No. 63988
 Exp. 09-30-12
 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.

ROADWAY QUANTITIES

LOCATION/ POST MILE/ DESCRIPTION	DIRECTION	ROADWAY EXCAVATION CY	IMPORTED MATERIAL (SHOULDER BACKING) TON	IMPORTED BORROW CY	HOT MIX ASPHALT (TYPE A) TON	HOT MIX ASPHALT (OPEN GRADED) TON	COLD PLANE AC PAVEMENT			TACK COAT TON	MINOR CONCRETE (Misc CONSTRUCTION) CY	Conc ANCHOR BLOCK CY	REMOVE AC SURFACING SQFT	CLEAN Exp JT LF	JOINT SEAL (ASPHALTIC PLUG) LF	REMOVE Conc CY	CI 2 AGGREGATE BASE CY	PLACE HMA (Misc AREA) SQYD	ASPHALTIC EMULSION (FOG SEAL COAT) TON
							0.08' Max SQYD	0.20' Max SQYD	0.30' Max SQYD										
REPAIR FAILED AREA. NB AND SB Rte 1, AND RAMPS	NB/SB				5,540				28,370	8									
PM R0.04 TO 10.2 HMA OVERLAY	NB		2035		34,550			31,800		76									
PM R0.04 TO 10.2 HMA OVERLAY	SB		2035		33,130			31,800		73									
RAMPS AND VISTA POINT PARKING AREA OVERLAY	NB/SB		460		19,180			12,500		43									
OPEN GRADED HMA SURFACING R3.0 TO R4.3	NB					1490		42,000		9									
OPEN GRADED HMA SURFACING R5.0 TO R6.1	SB					1150		19,000		7									
HMA DIKE (TYPE A AND E) NB AND SB Rte 1, AND RAMPS	NB/SB				2,488														
HMA DIKE (TYPE C AND F) AT MBGR LOCATIONS	NB/SB				284														
RECONSTRUCT EMBANKMENT	NB/SB			906															
RECONSTRUCT GORE AREA. FROM Sht Q-2	NB/SB	956			445						271.0					392	105	0.3	
MBGR AND Conc ANCHOR BLOCK	NB/SB							70			35.2								
RECONSTRUCT TBB CONNECTION TO Br RAILING	NB/SB										10.6								
APTOS Cr Br PM 10.01	NB/SB											15,600	180	180					
FROM "REMOVE CONCRETE" TABLE Sht Q-3	NB/SB														7.5				
COLD PLANE SIDE GUTTER (Sht X-1)	NB/SB							2,000											
SUB TOTAL		956	4530	906	95,617	2950	61,000	78,170	28,370	216	271.0	45.8	15,600	180	180	7.5	392	105	0.3
TOTAL		956	4530	906	95,617	2950	167,540			216	271.0	45.8	15,600	180	180	7.5	392	105	0.3

SURVEY MONUMENTS

PM	DESIGNATION	ADJUST MONUMENT TO GRADE	SURVEY MONUMENT (TYPE A)
		EA	EA
R 0.45	SCR-1 r-89		1
R 1.58	SCR-1 pmr-1.58	1	
R 1.59	SCR-1 r-97	1	
R 2.84	SCR-1 r-104		1
R 3.00	SCR-1 r-105		1
R 3.18	SCR-1 r-106	1	
R 3.18	SCR-1 r-107	1	
R 3.27	SCR-1 r-108	1	
R 3.37	SCR-1 r-109	1	
R 4.14	SCR-1 r-118	1	
R 5.84	SCR-1 hpgn d ca 04 ak	1	
R 7.73	SCR-1 r-122	1	
R 8.12	SCR-1 r-124	1	
TOTAL		10	3

RUMBLE STRIP

LOCATION	NORTHBOUND PM R0.0/ 10.2		SOUTHBOUND PM R0.0/ 10.2	
	INSIDE SHOULDER	OUTSIDE SHOULDER	INSIDE SHOULDER	OUTSIDE SHOULDER
	STA	STA	STA	STA
ROUTE 1	535	385	535	380
TOTAL	1835			

SUMMARY OF QUANTITIES Q-1

REPAIR FAILED PAVEMENT

DIRECTION	BEGIN PM	LOCATION DESCRIPTION	LANE No. (N)	LENGTH (N)	WIDTH (N)	COLD PLANE * AC Pvm+ 0.30'		TACK COAT *
						SQYD	TON	
NB1	R0.04	R0.04-R1.01 VARIOUS LOCATIONS. (TO BE MARKED)	1 & 2	Var	Var	4440	860	1.25
NB1	R0.48	OFF RAMP TO EB 129. FULL LENGTH	1 & 2	2540'	12'	3560	690	1.00
NB1	R0.9	ON RAMP FROM WB 129. FULL LENGTH	1 & 2	2055'	12'	2880	560	0.81
NB1	R6.45	OFF RAMP TO MAR MONTE Ave. FULL LENGTH	1 & 2	1710'	12'	2390	470	0.67
NB1	R7.0	ON RAMP FROM MAR MONTE Ave. FULL LENGTH	1 & 2	2100'	12'	2940	570	0.83
SB1	R0.38	SB1 R0.38-R0.4	2	100'	12'	140	30	0.04
SB1	R3.30	SB1 R3.30-R3.40	1	500'	12'	700	140	0.20
SB1	R7.97	SB1 R7.97-R8.0	2	150'	12'	210	40	0.06
SB1	R0.5	ON RAMP FROM WB129. FROM Rte 129 Br TO RAMP END	1	1350'	12'	1890	370	0.53
SB1	R0.72	ON RAMP FROM WB129. AT THE BEGINNING OF RAMP	1	200'	13'	300	60	0.09
SB1	R0.95	OFF RAMP TO Rte 129. FULL LENGTH	1 & 2	1928'	12'	2700	530	0.76
SB1	R2.97	OFF RAMP TO EB 152. UPTO Rte 1/Rte152 Sep Br	1 & 2	1736'	24'	4860	950	1.37
SB1	8.27	ON RAMP FROM FREEDOM Blvd. FULL LENGTH	1 & 2	972'	12'	1360	270	0.38
TOTAL						28370	5540	7.99

RECONSTRUCT EMBANKMENT

DIRECTION	FROM PM	TO PM	(N) LENGTH		SIDE	IMPORTED BORROW *
			LF	CY		
NB1 & Rte 129 E EXIT RAMP	R0.33	R0.51	970		R+	97
NB1	R0.65	R0.7	264		R+	26
NB1	R1.19	R1.34	792		R+	79
NB1	R5.1	R5.15	264		R+	26
NB1	R5.9	R5.96	317		R+	32
NB1	R6.09	R6.1	53		R+	5
NB1	R7.4	R7.45	264		R+	26
SB1	R0.33	R0.46	686		R+	69
SB1	R3.44	R3.46	106		R+	11
SB1	R6.06	R6.13	370		R+	37
SB1	R6.87	R7.01	739		R+	74
SB1	R7.15	R7.2	264		R+	26
NB1 ON RAMP FROM MAR MONTE Ave			725		R+	73
NB1 ON RAMP FROM LARKIN VALLEY Rd			750		R+	75
NB1 OFF RAMP TO FREEDOM Blvd			580		R+	58
NB1 ON RAMP FROM FREEDOM Blvd			100		R+	10
NB1 OFF RAMP TO RIO DEL MAR Blvd			400		R+	40
SB1 OFF RAMP TO FREEDOM Blvd			700		R+	70
SB1 OFF RAMP TO LARKIN VALLEY Rd			150		R+	15
SB1 ON RAMP FROM LARKIN VALLEY Rd			300		R+	30
SB1 ON RAMP FROM MAR MONTE Ave			265		R+	27
TOTAL						906

* - QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE, SEE SHEET Q-1.
(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

ADJUST MANHOLE TO GRADE

Sht	DIRECTION	PM	Qty	
			EA	
C-11	NB Rte 1	R6.44	1	
TOTAL			1	

RECONSTRUCT GORE AREA

LOCATION	DIRECTION	PM	DESCRIPTION	ROADWAY EXCAVATION *		MINOR Conc (Misc Const) *		MINOR CONCRETE ** (MINOR STRUCTURE)	RESET ROADSIDE SIGN (ONE POST)	HMA (TYPE A) *	HMA (TYPE A) *	PLACE HMA * (MISC AREA)	ASPHALTIC EMULSION (FOG SEAL COAT) *
				CY	CI 2 AB *	ISLAND PAVING	CURB						
G-1	NB	R0.48	OFF RAMP TO EB RTE 129	22	10	5.0			1				
G-2	NB	R2.8	ON RAMP FROM WB RTE 152	43	18	9.5	11.0		1				
G-3	NB	R7.0	ON RAMP FROM MAR MONTE	83	32	16.0			1	68			
G-4	NB	8.23	OFF RAMP TO FREEDOM	167	108	55.0			1				
G-5	NB	8.48	ON RAMP FROM FREEDOM	86	31	15.5			1	76			
G-6	NB	9.0	OFF RAMP TO RIO DEL MAR	22	10	5.0			1				
G-7	NB	9.26	ON RAMP FROM RIO DEL MAR	18			8.0						
G-7	NB	9.26	CURB RETAINING WALL					1.5					
G-7	NB	9.26	SLOPE PAVING TREATMENT								5	70	0.2
G-8	SB	R0.51	ON RAMP FROM RTE 129	21						41			
G-9	SB	R0.58	BETWEEN ON RAMPS FROM RTE 129	71	34	17.0	14.0		1				
G-10	SB	R2.14	ON RAMP FROM HARKINS SLOUGH	49	20	10.0	14.0		1				
G-11	SB	R2.98	OFF RAMP TO EB RTE 152	22	10	5.0			1				
G-12	SB	R3.93	ON RAMP FROM BUENA VISTA	43	22	11.0			1	19			
G-13	SB	R5.77	ON RAMP FROM VISTA POINT	83	31	16.0			1	68			
G-14	SB	R6.4	ON RAMP FROM MAR MONTE AVE	35						67	3	35	0.1
G-14	SB	R6.4	SLOPE PAVING TREATMENT										
G-15	SB	R7.48	ON RAMP FROM LARKIN VALLEY Rd	83	31	16.0			1	68			
G-16	SB	8.3	ON RAMP FROM FREEDOM	50	20	10.0	15.0		1				
G-17	SB	9	ON RAMP FROM RIO DEL MAR	58	15	7.0	11.0		1	30			
SUB TOTAL				956	392	198.0	73.0	1.5	14	437	8	105	0.3
TOTAL				956	392	271.0		1.5	14	445	105	0.3	

* - QUANTITY INCLUDED IN ROADWAYS Qty TABLE, SEE Sht Q-1.
** - QUANTITY INCLUDED IN DRAINAGE Qty TABLE, SEE Sht DQ-1.

SUMMARY OF QUANTITIES Q-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	R0.0/10.2	111	157

Peter A. Chander 5-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 PETER A. CHANDER
 No. 63988
 Exp. 09-30-12
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 06-DESIGN
 FUNCTIONAL SUPERVISOR: ROBERTO BANDA
 PETER CHANDER
 HAL KENYON
 CALCULATED/DESIGNED BY: CHECKED BY:

LAST REVISION: DATE PLOTTED => 12-AUG-2011 TIME PLOTTED => 11:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	113	157

Peter Chander
 REGISTERED CIVIL ENGINEER DATE: 5-20-11
 6-20-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
PETER A CHANDER
 No. 63988
 Exp. 09-30-12
 CIVIL
 STATE OF CALIFORNIA

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METAL BEAM GUARD RAILING

DIRECTION	LOCATION	POSTMILE	DESCRIPTION	REMOVE CRASH CUSHION (SAND FILLED)	REMOVE MBGR	REMOVE AND ** RECONSTRUCT MBGR (N)	NEW OR ** RECONSTRUCTED MBGR (N)	DOUBLE MBGR (STEEL POST)	MBGR STRENGTHENED RAILING SECTION (N)	MBGR NARROW ROAD INSTALLATION (N)	ALTERNATIVE FLARED END TERMINAL SYSTEM	ALTERNATIVE IN-LINE TERMINAL SYSTEM	ALTERNATIVE CRASH CUSHION SYSTEM (TEST LEVEL 3)	TRANSITION RAILING (TYPE WB)	END ANCHOR Assy (TYPE SFT)	BURIED POST END ANCHOR (N)	END CAP (TYPE A)	END CAP (TYPE TC) (N)	REMOVE Conc	Conc ANCHOR BLOCK *	MBGR (SPECIAL)	(N)	MBGR (CIDH)	24" CIDH CONCRETE PILING (GUARD RAILING)	VEGETATION CONTROL (ASPHALT COMPOSITE)	MBGR LAYOUT TYPE	Sht No.	LOCATION
				EA	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	CY	CY	LF	LF	LF	SOYD	
NB	1	R0.01	NEW MBGR PAJARO Rv Br DEPARTURE END				1200.0								1		1								412.5	12DD	C-16	1
	2	R0.42	OFFRAMP TO Rte 129 E, OH SIGN		37.5	187.5	187.5					1			1										75.0		C-17	2
	3	R0.72	Rte 1/129 Sep, Br COLUMN		50.0	25.0	12.5					1			1			1		1.60					16.7	12B	C-17	3
	4	R1.01	BEACH Rd UC, Br RAILING		62.5	37.5	75.0					1			1			1		8.70					37.5	12B	C-17	4
	5	R1.14	W WATSONVILLE OH, Br RAILING		62.5		462.5								1			1	1	1.60					166.7	12D	C-18	5
	6	R1.35	WATSONVILLE SLOUGH Br, Br RAILING		62.5		775.0								1			1	1	1.60					270.8	12D	C-18	6
	7	R1.59	STRUVE SLOUGH Br, Br RAILING		50.0	12.5	50.0								1		1	1		8.70					29.2	12C	C-18	7
	8	R2.40	AIRPORT Blvd OH SIGN		25.0	50.0	100.0			25						1	1								45.8	16C	C-18	8
	9	R3.20	OFF RAMP TO AIRPORT Blvd			170.0		125.0					1			1									54.2	11B	C-19	9
	10	R3.25	ON RAMP FROM AIRPORT Blvd			44.0	144.0	162.5						1		1									60.5		C-19	10
	11	R3.88	OFF RAMP TO BUENA VISTA Ave			37.5	900.0	900.0				1				1									312.5		C-20	11
	12	R4.07	BUENA VISTA Dr UC, Br RAILING			62.5						1			1										12.5	12B	C-20	12
	13	R4.19	PM 4.19 TO 4.35 Exist MBGR			37.5	787.5	787.5				1				1									275.0		C-21	13
	14	R4.44	PM 4.44 TO 4.48 Exist MBGR			37.5	237.5	237.5				1				1									91.7		C-21	14
	15	R5.03	NEW MBGR					237.5								1	1								91.7	11C	C-21	15
	16	R5.84	REPLACE Exist MBGR PM R5.84			500.0		475.0								1	1								170.8	11C	C-21	16
	17	R6.82	ON RAMP FROM MAR MONTE Ave			712.5		712.5				1				1									250.0		C-22	17
	18	R7.42	REPLACE Exist MBGR			375.0		375.0								1	1								137.5	11C	C-22	18
	19	R7.67	LARKIN VALLEY Rd UC, Br RAILING			25.0	37.5	50.0							1		1								29.2	12C	C-23	19
	20	R7.70	ON RAMP FROM LARKIN VALLEY Rd				1150.0	1150.0								1									395.8		C-23	20
	21	8.15	OFF RAMP TO FREEDOM Blvd				550.0	550.0								1									195.8		C-24	21
	22	8.39	ON RAMP FROM FREEDOM Blvd			50.0	100.0	112.5					1			1									50.0		C-24	22
	23	8.77	STATE PARK Dr Exist OH SIGN			75.0		75.0								1	1								37.5	16C	C-25	23
	24	9.00	OFF RAMP TO RIO DEL MAR Blvd				75.0	75.0								1									37.5		C-25	24
	25	9.24	ON RAMP FROM RIO DEL MAR Blvd			50.0	700.0	750.0			75		1												262.5		C-26	25
	26	9.29	ON RAMP FROM RIO DEL MAR Blvd, EXTENSION			50.0	25.0	1012.5			37.5					1						100			350.0	16B	C-26	26
	SB	27	R0.04	PAJARO RIVER Br			62.5	787.5				1			1			1		1.60					275.0	12B	C-27	27
		28	R0.72	Rte 1/Rte 129 Sep, Br COLUMN	1	130.0		200.0	25						1				2	2	1.60				79.2	15A	C-27	28
		29	R0.72	HOOK RAMP FROM Rte 129 W			37.5	212.5	212.5				1			1									83.3		C-28	29
		30	R0.97	OFF RAMP TO Rte 129, OH SIGN			37.5	112.5	112.5				1			1									50.0		C-28	30
SUB TOTAL				1	2844.0	5344.0	11,962.5	25	25	112.5	10	4	2	10	20		3		2	25.4	100			4,356.4				

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.
 * QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE, SEE Sht Q-1.
 ** ADJUSTED FOR PAY ITEM IN MBGR (STEEL POST) TABLE, SEE Sht Q-5.

SUMMARY OF QUANTITIES Q-4

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	114	157

Peter Chander 5-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

PETER A CHANDER
 No. 63988
 Exp. 09-30-12
 CIVIL
 STATE OF CALIFORNIA

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METAL BEAM GUARD RAILING

DIRECTION	LOCATION	POSTMILE	DESCRIPTION	REMOVE CRASH CUSHION (SAND FILLED)	REMOVE MBGR	REMOVE AND ** RECONSTRUCT MBGR (N)	NEW OR ** RECONSTRUCTED MBGR (N)	DOUBLE MBGR (STEEL POST)	MBGR STRENGTHENED RAILING SECTION (N)	MBGR NARROW ROAD INSTALLATION (N)	ALTERNATIVE FLARED END TERMINAL SYSTEM	ALTERNATIVE IN-LINE TERMINAL SYSTEM	ALTERNATIVE CRASH CUSHION SYSTEM (TEST LEVEL 3)	TRANSITION RAILING (TYPE WB)	END ANCHOR Assy (TYPE SFT)	BURIED POST END ANCHOR (N)	END CAP (TYPE A)	END CAP (TYPE TC) (N)	REMOVE Conc	Conc ANCHOR BLOCK *	MBGR (SPECIAL)	(N)	MBGR (CIDH)	24" CIDH CONCRETE PILING (GUARD RAILING)	VEGETATION CONTROL (ASPHALT COMPOSITE)	MBGR LAYOUT TYPE	Sht No.	LOCATION
				EA	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	CY	CY	LF	LF	LF	SQYD		
SB	31	R1.05	BEACH Rd UC Br		62.5		475.0							1			1	1		0.7				170.8	12D	C-29	31	
	32	R1.19	W WATSONVILLE OH		62.5		775.0							1			1	1		1.6				270.8	12D	C-29	32	
	33	R1.37	WATSONVILLE SLOUGH Br		62.5		100.0				1			1			1	1		1.6				45.8	12B	C-30	33	
	34	R1.74	STRUVE SLOUGH Br		50.0	25.0	50.0							1		1	1	1		0.7				29.2	12C	C-30	34	
	35	R2.68	Rte 1/Rte 152 Sep		175.0		150.0			12.5	1				1							18.75	40	62.5	16B	C-31	35	
	36	R2.68	Rte 152 E. CONNECTOR Br Lt SIDE		62.5		937.5					1		1				1	0.5	1.8				325.0		C-31	36	
	37	R2.68	Rte 152 E. CONNECTOR Br Rt SIDE		75.0		1,087.5					1		1				1	0.5	1.8				375.0		C-31	37	
	38	R2.95	Rte 152 Exist SIGN		12.5	87.5	100.0		25						1									45.8		C-32	38	
	39	R3.18	OFF RAMP TO AIRPORT Blvd			137.5	150.0					1			1									62.5	11B	C-32	39	
	40	R3.40	PM 3.40 TO 3.79 Exist MBGR		37.5	1,925.0	1,925.0				1				1									654.2		C-33	40	
	41	R3.92	ON RAMP FROM BUENA VISTA Ave			225.0	225.0								1									87.5		C-33	41	
	42	R4.09	BUENA VISTA Dr UC Br		62.5	37.5	37.5				1			1				1						25.0	12B	C-34	42	
	43	R4.40	OFF RAMP TO BUENA VISTA Ave		37.5	387.5	387.5				1				1									141.7		C-34	43	
	44	R4.91	OH SIGN B V NEXT Exit		37.5	425.0	425.0					1			1									154.2		C-35	44	
	45	R5.25	NEW MBGR				1,112.5			1063.0					1	1								383.3	11C	C-35	45	
	46	R5.75	ON RAMP FROM VISTA POINT REST AREA		500.0		462.5					1			1									166.7	11B	C-36	46	
	47	R5.95	OFF RAMP TO VISTA POINT REST AREA		550.0		512.5				1				1									183.3	11B	C-36	47	
	48	R6.11	NEW MBGR				462.5			100.0	1				1									166.7	11B	C-36	48	
	49	R6.95	NEW MBGR PM 6.85 TO 7.01				525.0			525.0		1			1									187.5	11A	C-36	49	
	50	R7.18	MAR MONTE/BUENA VISTA OH GIGN		50.0		100.0								1	1		1						45.8	16C	C-37	50	
	51	R7.70	LARKIN VALLEY Rd UC Br		87.5	12.5	225.0			225.0		1		1										87.5	12A	C-37	51	
	52	R7.91	OFF RAMP TO LARKIN VALLEY Rd			1,475.0	1,475.0																	504.2		C-38	52	
	53	8.21	LARKIN VALLEY Exit. OH SIGN		37.5	37.5	37.5					1			1									25.0		C-38	53	
	54	8.65	FREEDOM Blvd. Exit. OH SIGN		75.0		37.5				1				1									25.0	16B	C-39	54	
	55	9.01	FREEDOM Blvd. NEXT Exit. OH SIGN		37.5	37.5	37.5				1				1									25.0		C-39	55	
	56	9.08	ON RAMP FROM RIO DEL MAR Blvd			250.0	250.0								1									95.8		C-40	56	
	57	9.15	RIO DEL MAR Br APPROACH, Rt SIDE		110.0																			0.0		C-40	57	
	58	9.26	OFF RAMP TO RIO DEL MAR Blvd		50.0		62.5							1		1		1		1.6				33.3	12C	C-41	58	
	59	9.57	RIO DEL MAR Blvd Exit. OH SIGN		37.5	37.5	500.0			350.0					1	1								179.2	11B	C-41	59	
			SUB TOTAL (THIS SHEET)		2272.5	5,100.0	12,625.0		25	2,275.5	9	8		9	18		2		1.0	9.8			40	4,558.3				
			SUB TOTAL (Sht Q-4)	1	2844.0	5,344.0	11,962.5	25	25	112.5	10	4	2	10	20		3		2.0	25.4	100			4,356.4				
			TOTAL	1	5116.5	10,444.0	24,587.5	25	50	2,388.0	19	12	2	19	38		5		3.0	35.2	100		40	8,914.7				

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.
 * QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE, SEE SHEET Q-1.
 ** ADJUSTED FOR PAY ITEM IN MBGR (STEEL POST) TABLE

MBGR (STEEL POST)

DESCRIPTION	RECONSTRUCT MBGR	MBGR (STEEL POST)
	LF	LF
REMOVE AND RECONSTRUCT MBGR	10,444.0	(-10,444.0)
NEW OR RECONSTRUCTED MBGR		24,587.5
TOTAL	10,444.0	14,143.5

SUMMARY OF QUANTITIES

Q-5

LAST REVISION: 06-20-11 DATE PLOTTED => 12-AUG-2011 TIME PLOTTED => 11:21

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	R0.0/10.2	115	157

Peter Chander 5-20-11
 REGISTERED CIVIL ENGINEER DATE
 6-20-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 PETER A CHANDER
 No. 63988
 Exp. 09-30-12
 CIVIL
 STATE OF CALIFORNIA

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CONCRETE MEDIAN BARRIER

STATION	REMOVE CB	CB (TYPE 60)	CB (TYPE 60A Mod)	CB (TYPE 60C)	CB (TYPE 60R)	MEDIAN BARRIER YELLOW MARKER (N)
	LF	LF	LF	LF	LF	
692+00 - 693+00	100			100		88
693+00 - 709+81	1681	1681				
709+81 - 710+45	64				64	
710+45 - 713+65	320	320				
715+52 - 716+50	98	98				
716+50 - 724+00	750			750		
724+00 - 726+11	211	211				
726+11 - 728+71	260		260			
728+71 - 729+50	79	79				
729+50 - 733+55	405			405		
TOTAL	3968	2389	260	1255	64	

GUARD RAIL DELINEATOR

DIRECTION	LOCATION	POSTMILE	DESCRIPTION	GUARDRAIL DELINEATOR	
				TYPE F	TYPE G
NB	2	R0.42	OFF RAMP TO Rte 129 E	6	
	9	R3.20	OFF RAMP TO AIRPORT Blvd		6
	10	R3.25	ON RAMP FROM AIRPORT Blvd		7
	11	R3.88	OFF RAMP TO BUENA VISTA Ave	6	
	12	R4.07	ON RAMP FROM BUENA VISTA Ave		
	17	R6.82	ON RAMP FROM MAR MONTE Ave		
	19	R7.67	OFF RAMP TO LARKIN VALLEY Rd		
	20	R7.70	ON RAMP FROM LARKIN VALLEY Rd	6	
	21	8.15	OFF RAMP TO FREEDOM Blvd	3	
	22	8.39	ON RAMP FROM FREEDOM Blvd		3
	24	9.00	OFF RAMP TO RIO DEL MAR Blvd	3	
	25	9.24	ON RAMP FROM RIO DEL MAR Blvd	5	
SB	30	R0.97	OFF RAMP TO Rte 129	6	
	38	R2.95	OFF RAMP TO 152 E	3	
	40	R3.40	OFF RAMP TO AIRPORT Blvd	6	
	41	R3.92	ON RAMP FROM BUENA VISTA Ave	3	
	43	R4.40	OFF RAMP TO BUENA VISTA Ave	3	
	46	R5.75	ON RAMP FROM VISTA POINT REST AREA	3	
	47	R5.95	OFF RAMP TO VISTA POINT REST AREA	3	
	52	R7.91	OFF RAMP TO LARKIN VALLEY Rd	15	
	56	9.08	ON RAMP FROM RIO DEL MAR Blvd	3	
	58	9.26	OFF RAMP TO RIO DEL MAR Blvd	3	
SUB TOTAL				77	16
TOTAL				93	

RECONSTRUCT THRIE BEAM BARRIER CONNECTION TO BRIDGE RAILING

Br DESCRIPTION	PM	DIRECTION	REMOVE TBB		TRANSITION RAILING		TBB		Conc ANCHOR BLOCK *
			STBB	DTBB	STB	DTB	STBB	DTBB	
			LF	LF	EA	EA	LF	LF	
PAJARO RIVER BRIDGE	R0.0	SB	125		1		100		1.60
BEACH Rd UC	R1.0	NB	125		1		100		0.65
		SB	132.5		1		112.5		0.65
WEST WATSONVILLE OH	R1.1	NB	125		1		100		1.60
		SB	125		1		100		1.60
WATSONVILLE SLOUGH Br	R1.4	NB	125		1		100		1.60
		SB	125		1		100		1.60
STRUVE SLOUGH Br	R1.6	NB	125		1		100		0.65
		SB	150		1		125		0.65
BUENA VISTA DRIVE U/C	R4.1	NB	75		1		50		0
		SB	75		1		50		0
LARKIN VALLEY Rd U/C	R7.7	NB	75		1		50		0
		SB	25	50	0	1	0	50	0
TOTAL			1407.5	50	12	1	1087.5	50	10.60

* QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE, SEE SHEET Q-1.

* - QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE, SEE SHEET Q-1.

SUMMARY OF QUANTITIES Q-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 06-DESIGN
 PETER CHANDER
 HAL KENYON
 CALCULATED/DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 ROBERTO BANDA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

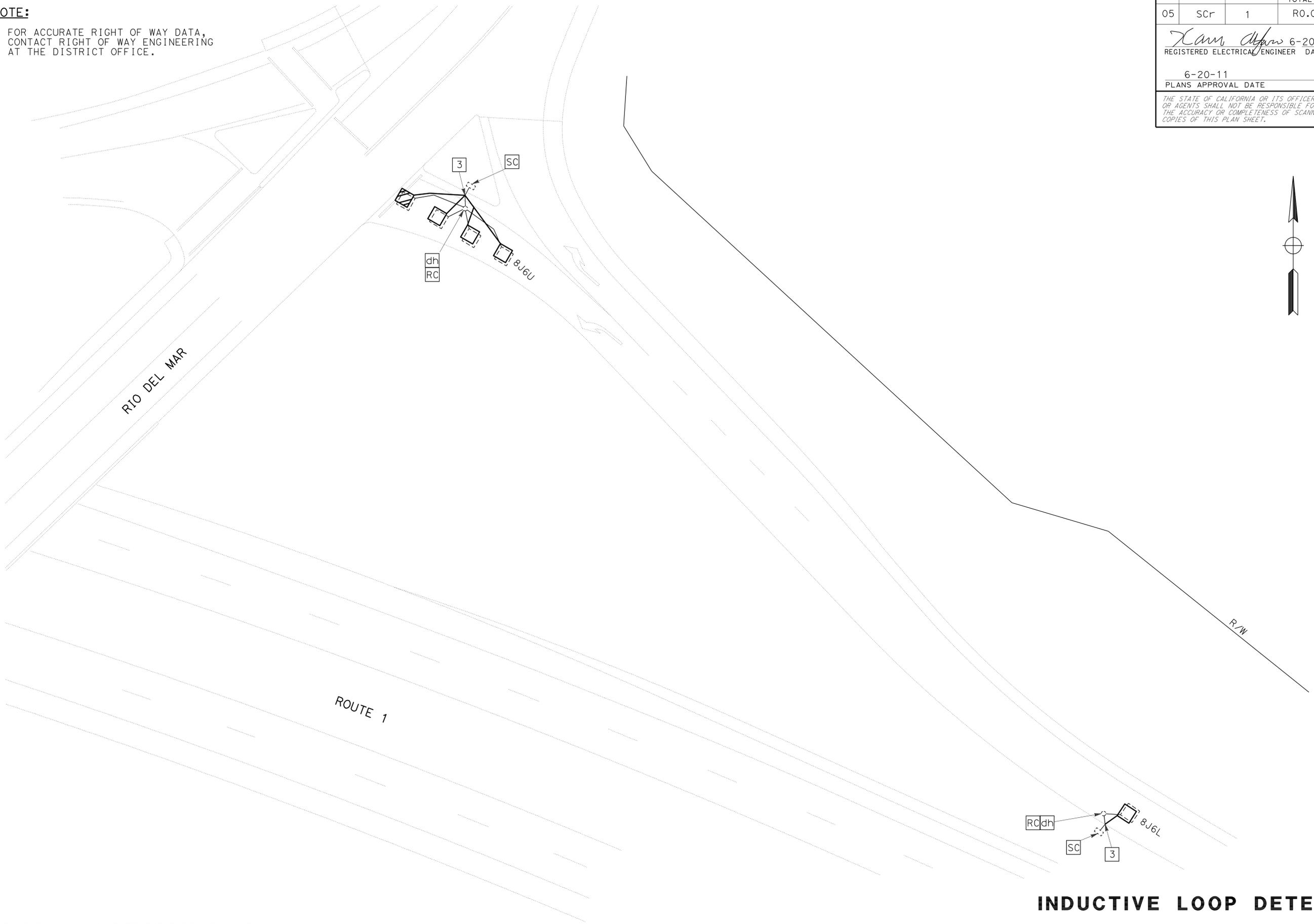
FUNCTIONAL SUPERVISOR
 ALI BAKHDOUD

CALCULATED/DESIGNED BY
 CHECKED BY

XAVIER ALFARO
 PAUL MATOS

REVISED BY
 DATE REVISED

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



INDUCTIVE LOOP DETECTORS
E-3

NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCr	1	RO.0/10.2	118	157

Xavier Alfaro 6-20-11
 REGISTERED ELECTRICAL ENGINEER DATE

6-20-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 XAVIER I. ALFARO
 No. E17488
 Exp. 6-30-11
 ELECTRICAL
 STATE OF CALIFORNIA

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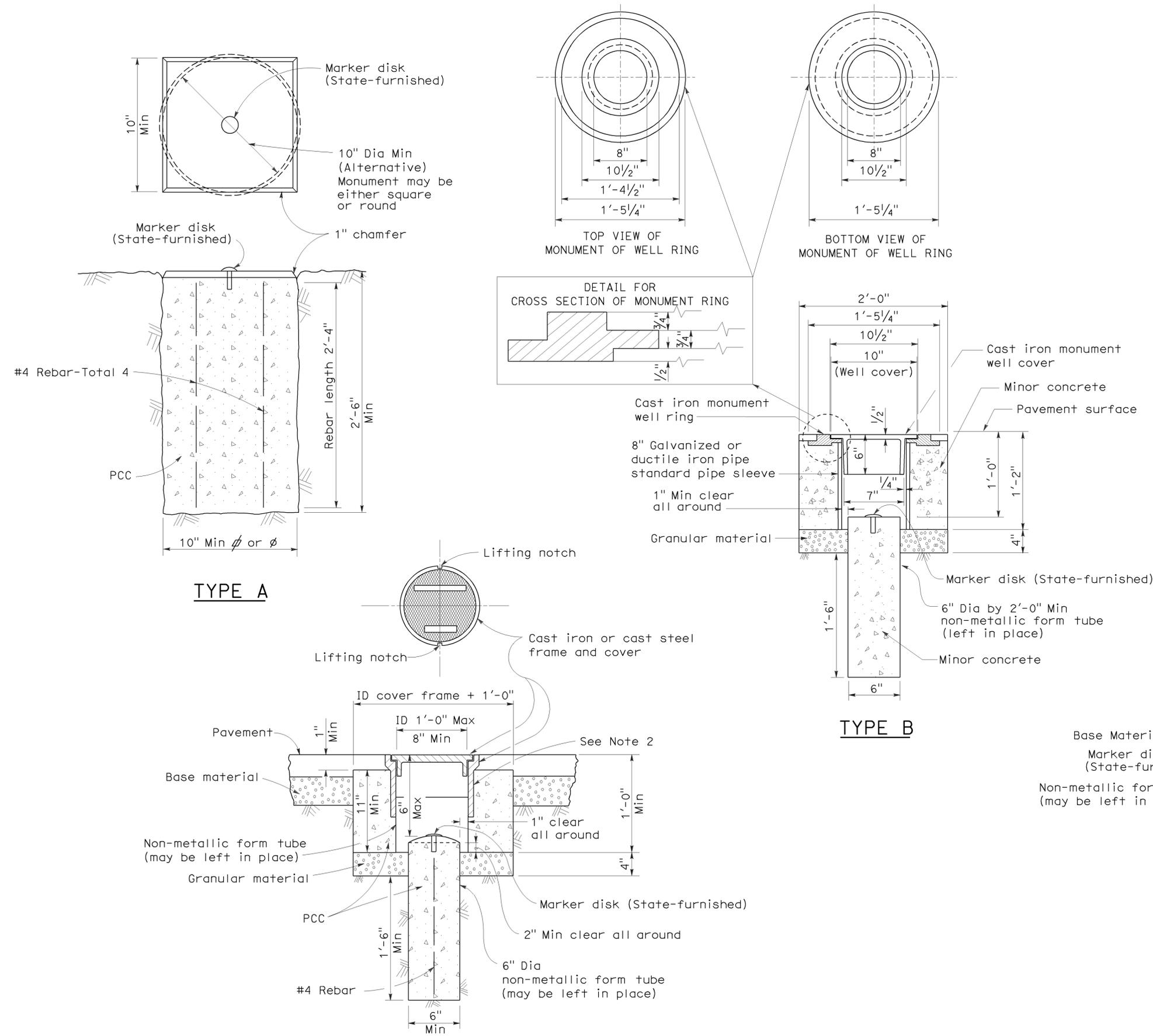
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	120	157

Mark S. Turner
 PROFESSIONAL LAND SURVEYOR
 June 30, 2006
 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.

LICENSED LAND SURVEYOR
 Mark S. Turner
 No. 6228
 Exp. 3-31-08
 STATE OF CALIFORNIA

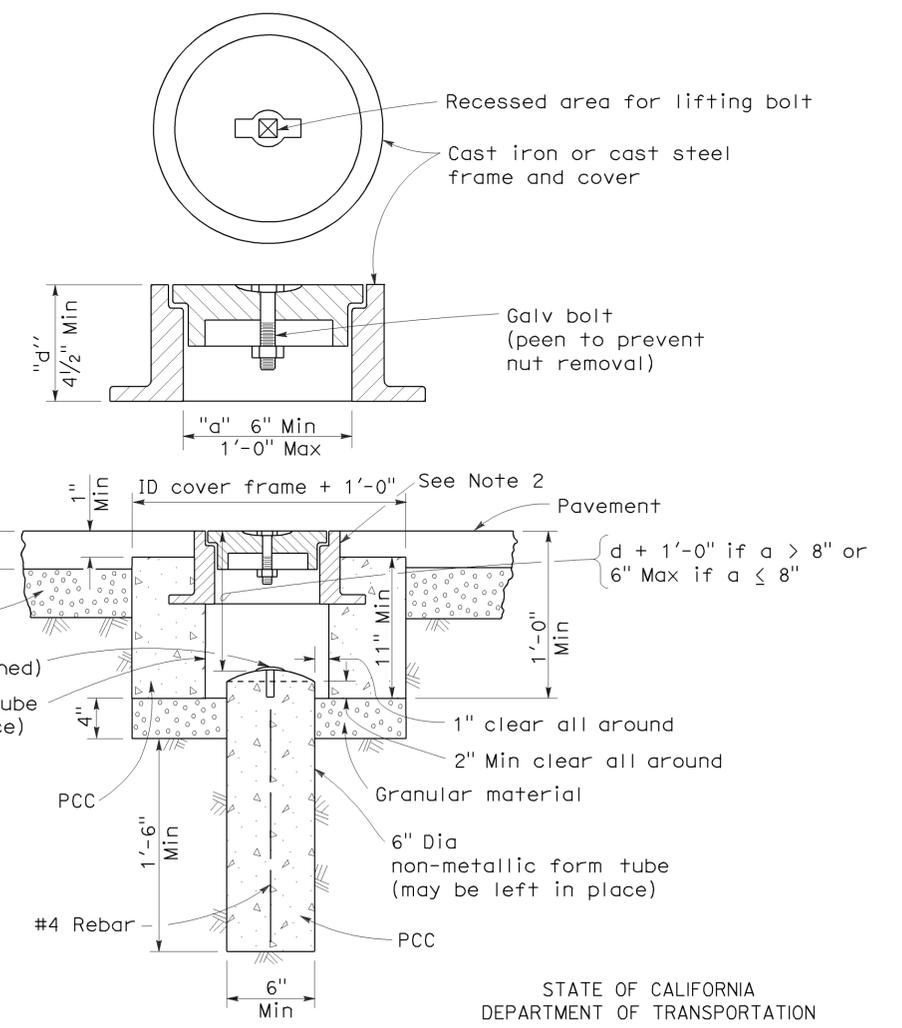
To accompany plans dated 6-20-11

2006 REVISED STANDARD PLAN RSP A74



NOTES:

1. The configuration of the cast iron or cast steel frame and cover may vary from that shown.
2. Frame shall be embedded in the concrete a minimum of 3".
3. Type D monument shall be either Alternative No. 1 or Alternative No. 2 at the contractor's option.
4. All portland cement concrete shall be Class 2 or minor concrete with 1" maximum aggregate.



TYPE D SURVEY MONUMENTS
 Alternative No. 2
 NO SCALE

RSP A74 DATED JUNE 30, 2006 SUPERSEDES STANDARD PLAN DATED MAY 1, 2006 - PAGE 28 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A74

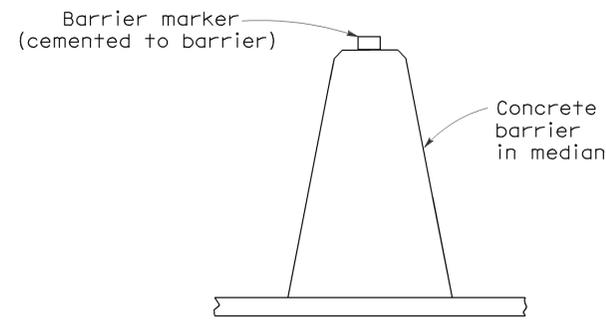
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	121	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

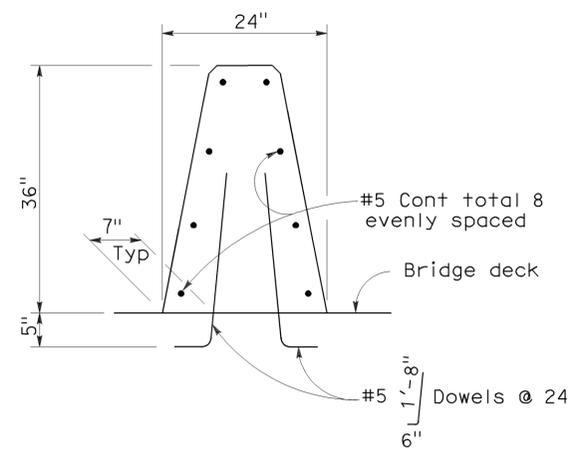
June 6, 2008
PLANS APPROVAL DATE

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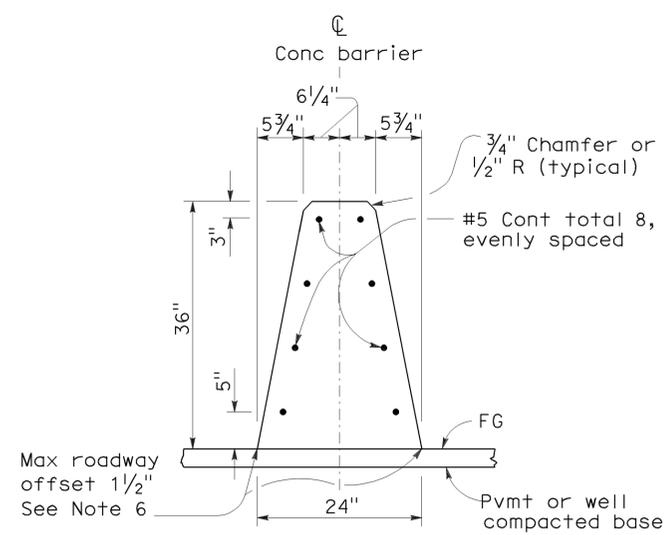
To accompany plans dated 6-20-11



CONCRETE BARRIER TYPE 60 DELINEATION
See Notes 7 and 8



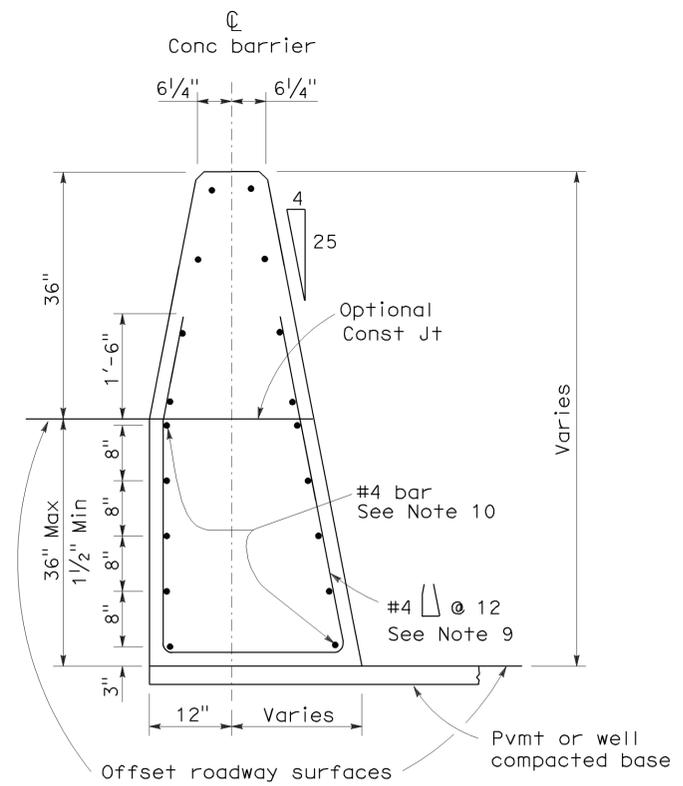
CONCRETE BARRIER TYPE 60A
Details similar to Type 60 except as noted.



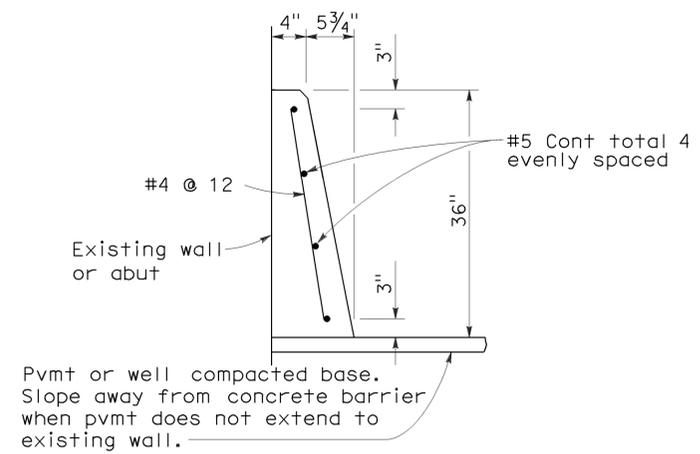
CONCRETE BARRIER TYPE 60

NOTES:

- See Standard Plan A76B for details of Concrete Barrier Type 60 end anchors, connection to structures and transitions to Concrete Barrier Type 50 and Concrete Barrier Type 60S.
- See Standard Plan A76C for Concrete Barrier Type 60 transitions at bridge column and sign pedestals.
- Where glare screen is required on Concrete Barrier Type 60, use Concrete Barrier Type 60G.
- Where the concrete barrier is added to the face of existing concrete structure, match existing weep holes.
- Expansion joints in concrete barrier shall be located at all deck, pavement and principal wall joints. Expansion joint filler material shall be the same size as joint or 1/2" minimum.
- Where roadway offset is greater than 1 1/2", see Concrete Barrier Type 60C.
- Barrier delineation to be used when required by the Special Provisions.
- Spacing of barrier markers to match spacing of raised pavement markers on the adjacent median edgeline pavement delineation.
- Reinforcing stirrup not required for roadway offsets less than 1'-0".
- For roadway surfaces offset greater than 1 1/2" to 3", no rebars required. For roadway surfaces offset greater than 3" to 8" use two #4 rebars at 3" above the lower roadway surface. For roadway surfaces offset greater than 8" to 12", use two #4 rebars at 3" above the lower roadway surface and two #4 rebars at 8" above the lower roadway surface. For roadway surfaces offset greater than 12" to 36", use two #4 rebars at 3" above the lower roadway surface and two #4 rebars at every 8" increment vertical spacing above the first two #4 rebars.



CONCRETE BARRIER TYPE 60C
Details similar to Type 60 except as noted. Concrete barrier end anchor when necessary. 36" roadway surfaces offset shown.



CONCRETE BARRIER TYPE 60D

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CONCRETE BARRIER TYPE 60
NO SCALE

2006 REVISED STANDARD PLAN RSP A76A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	122	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

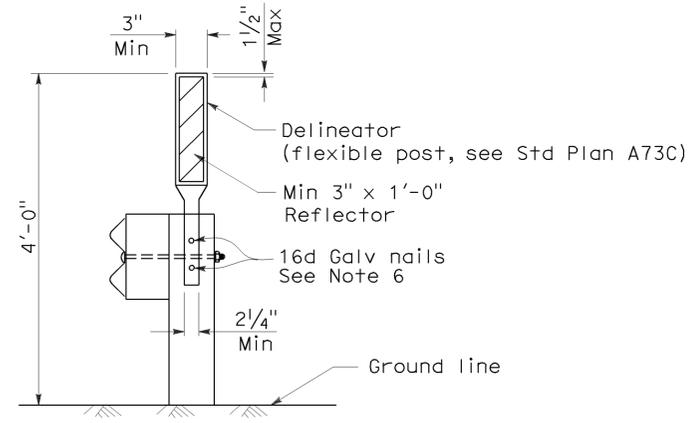
May 20, 2011
PLANS APPROVAL DATE

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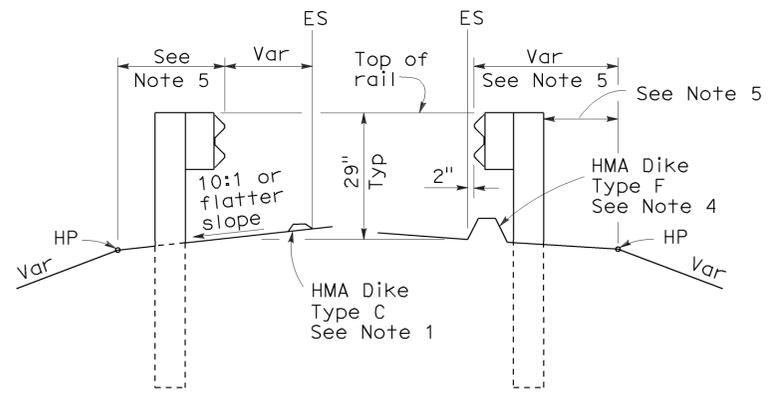
To accompany plans dated 6-20-11

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 Standard Plans A87A and A87B.
5. For details of typical distance between the face of rail and hinge point, see Standard Plan A77C3.
6. For steel line posts, use 1/4" - 20 self-tapping screws in 0.22" diameter holes or 1/4" bolts in 3/32" diameter holes.



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 MAY 20, 2011 SUPERSEDES RSP A77C4 DATED JUNE 6, 2008 AND 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

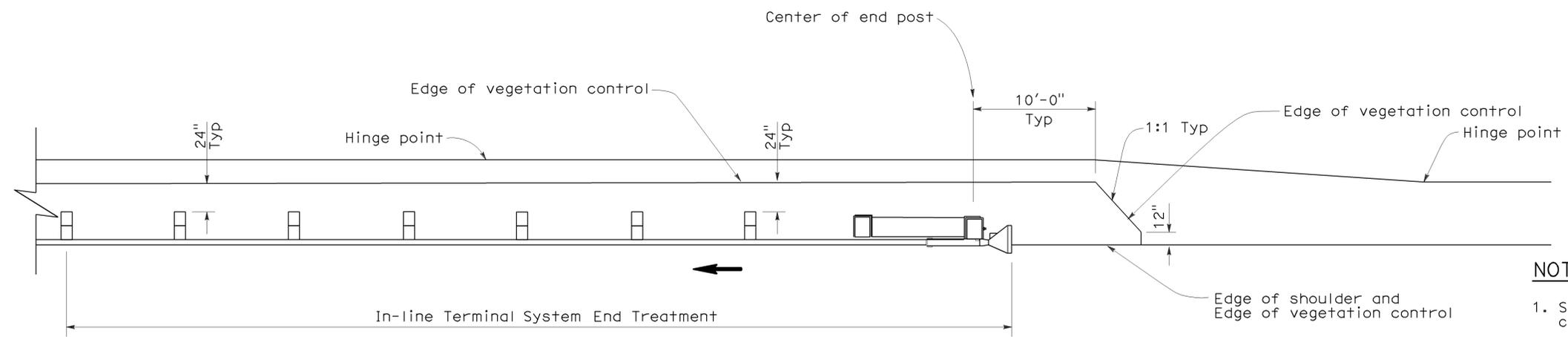
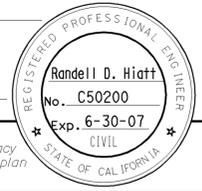
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	123	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

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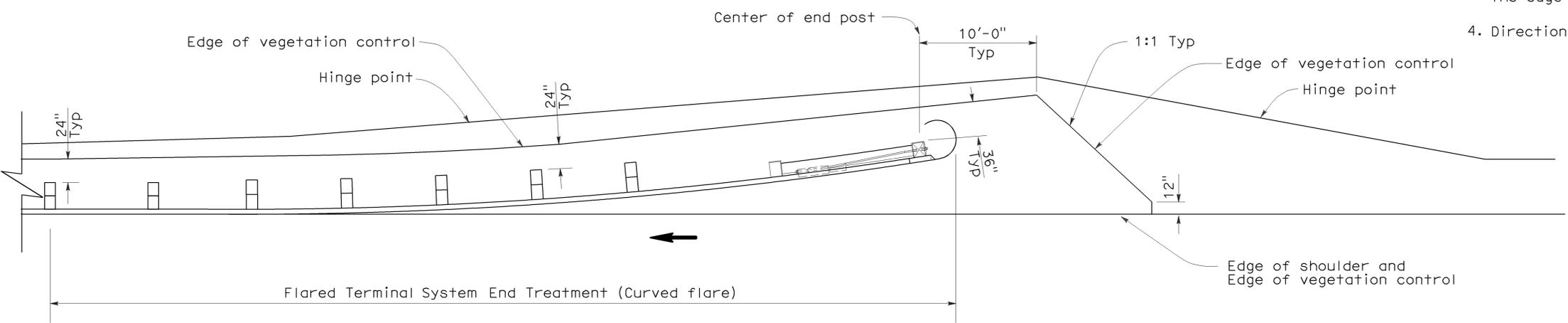
To accompany plans dated 6-20-11



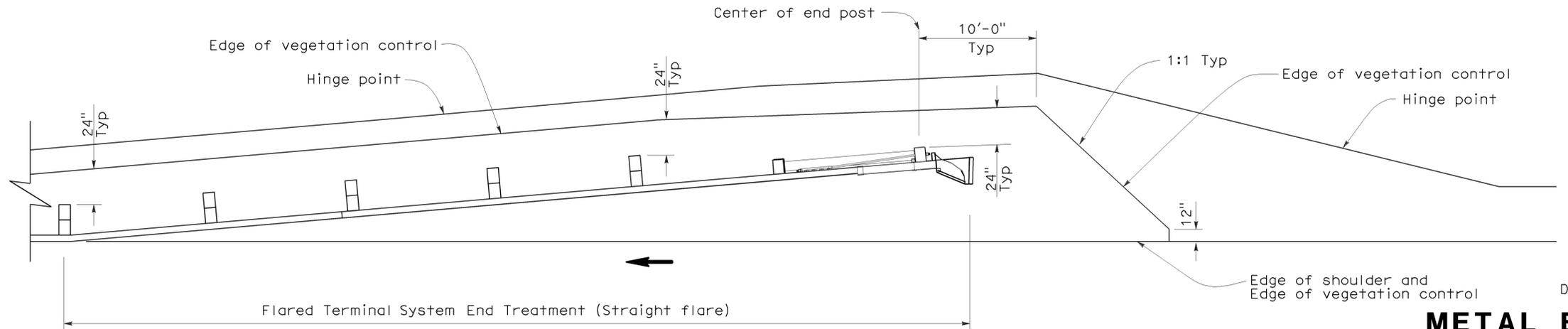
PLAN

NOTES:

1. See New Standard Plan NSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 24", vegetation control to be constructed flush with the back edge of the post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
4. Direction of adjacent traffic indicated by ←.



PLAN



PLAN

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
FOR TERMINAL SYSTEM END TREATMENTS**

NO SCALE
NSP A77C6 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A77C6

2006 NEW STANDARD PLAN NSP A77C6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	124	157

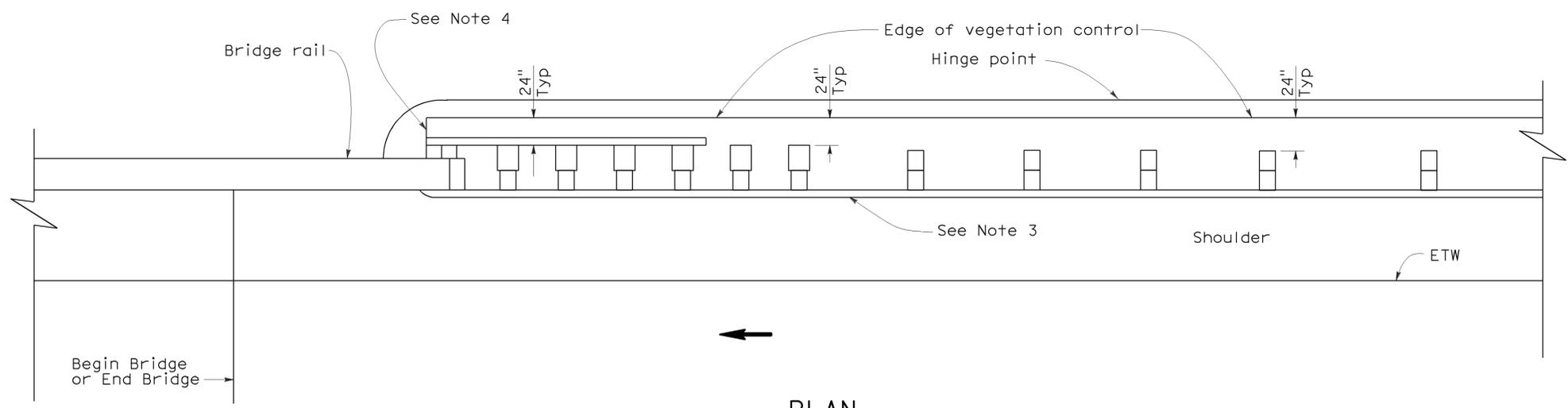
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

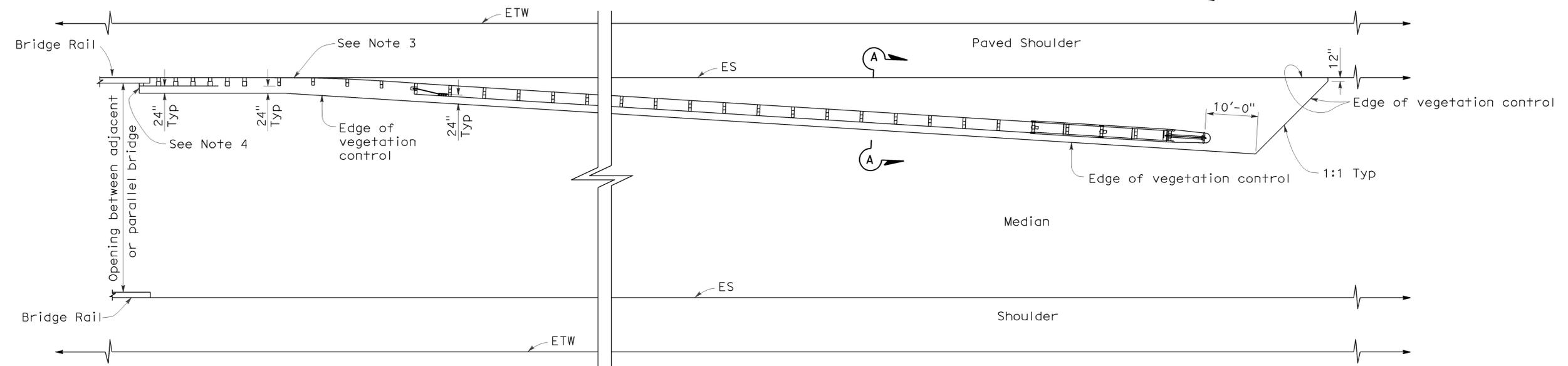
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To accompany plans dated 6-20-11

2006 NEW STANDARD PLAN NSP A77C7



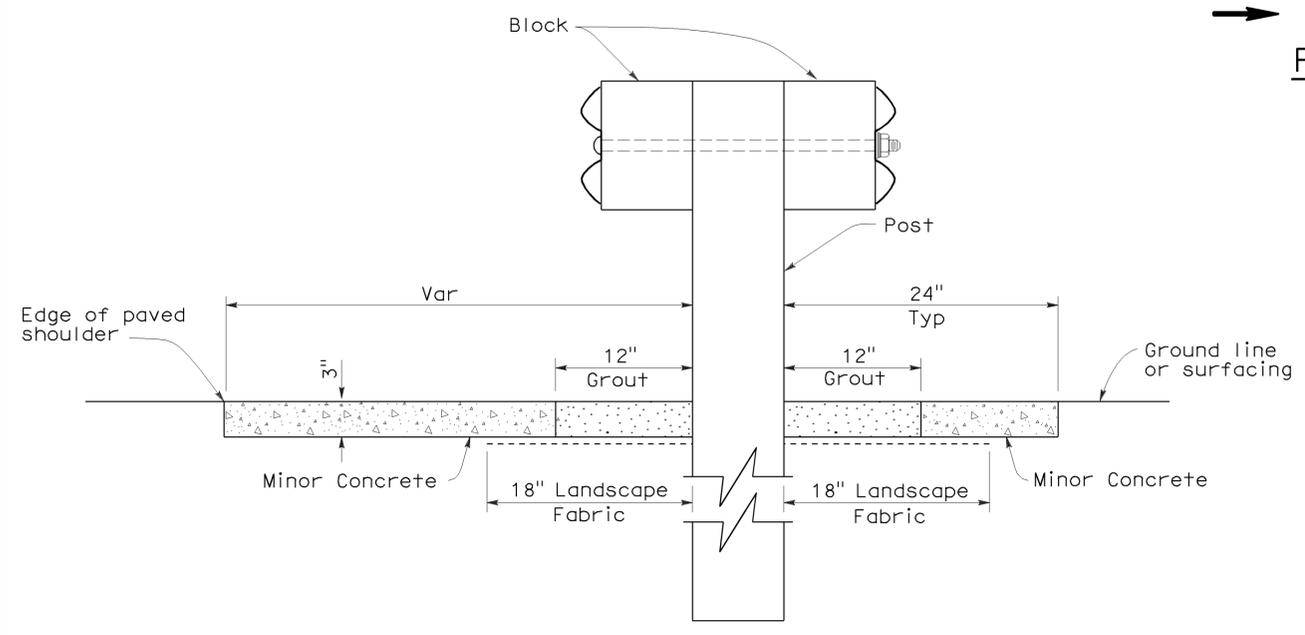
PLAN



PLAN

NOTES:

1. See New Standard Plan NSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 24", vegetation control to be constructed flush with the back edge of the post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
4. End vegetation control at end of backside rail element.
5. Direction of adjacent traffic indicated by ←.



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
AT STRUCTURE APPROACH
AND DEPARTURE**

NO SCALE
NSP A77C7 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A77C7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	1	R0.0/10.2	125	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

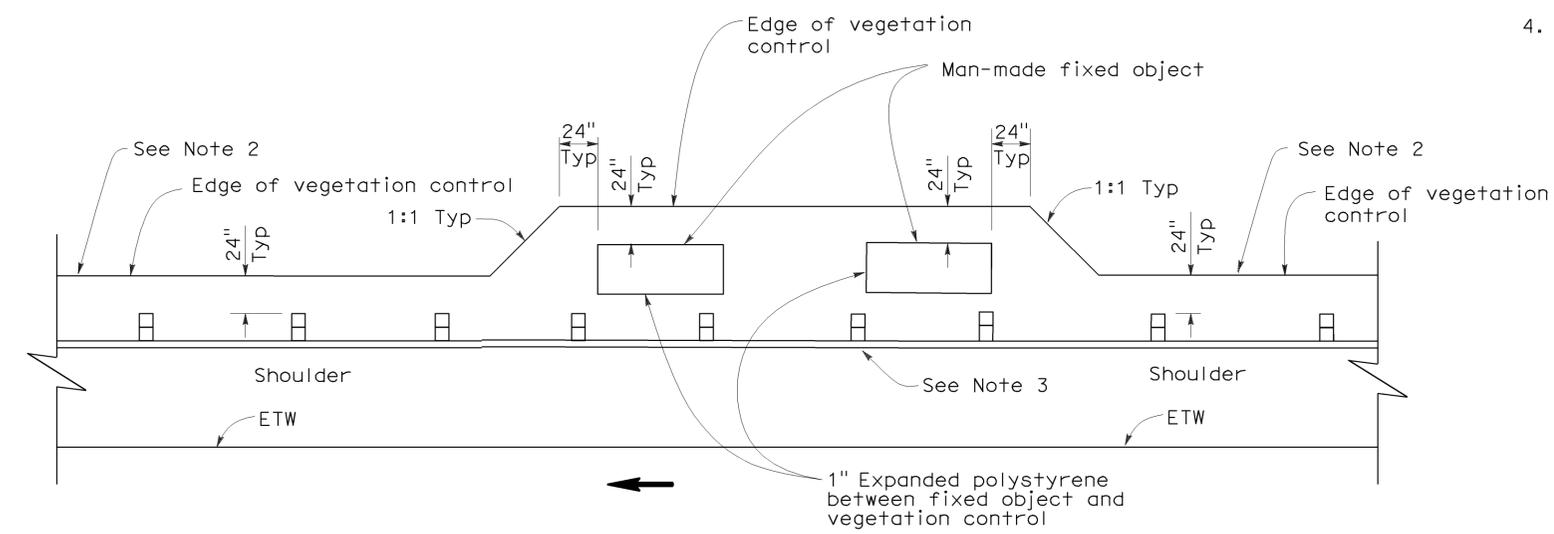
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REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 6-20-11

NOTES:

1. See New Standard Plan NSP A77C5 for additional vegetation control details.
2. Where the distance between back of post and hinge point is less than 24", vegetation control to be constructed flush with the back edge of the post.
3. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
4. Direction of adjacent traffic indicated by ←.



PLAN
FIXED OBJECT(S) ON SHOULDER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
AT FIXED OBJECT**

NO SCALE
NSP A77C8 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP A77C8

NOTES:

1. See New Standard Plan NSP A77C5 for additional vegetation control details.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
3. Direction of adjacent traffic indicated by ← .

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	1	RO.0/10.2	126	157

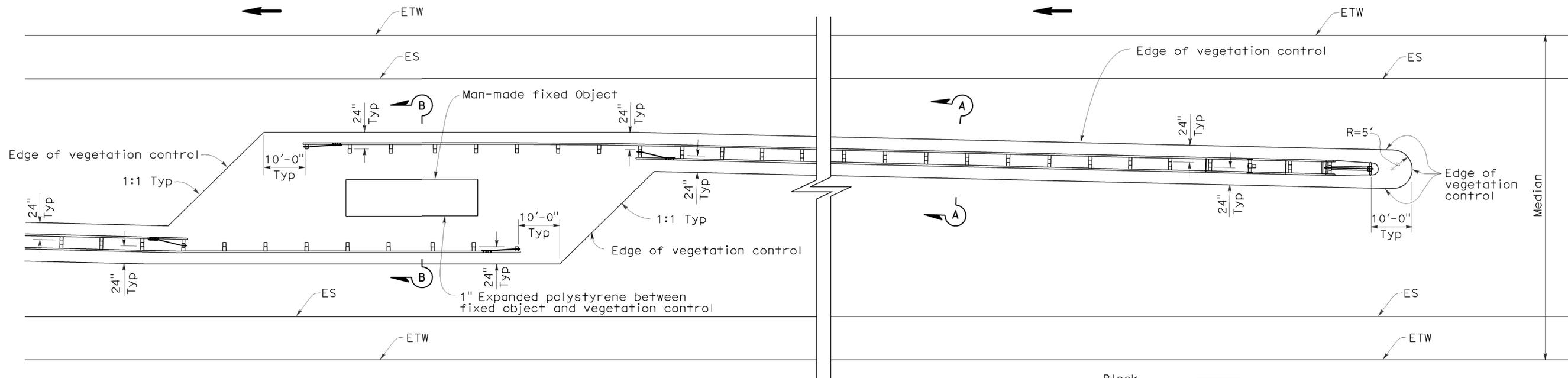
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

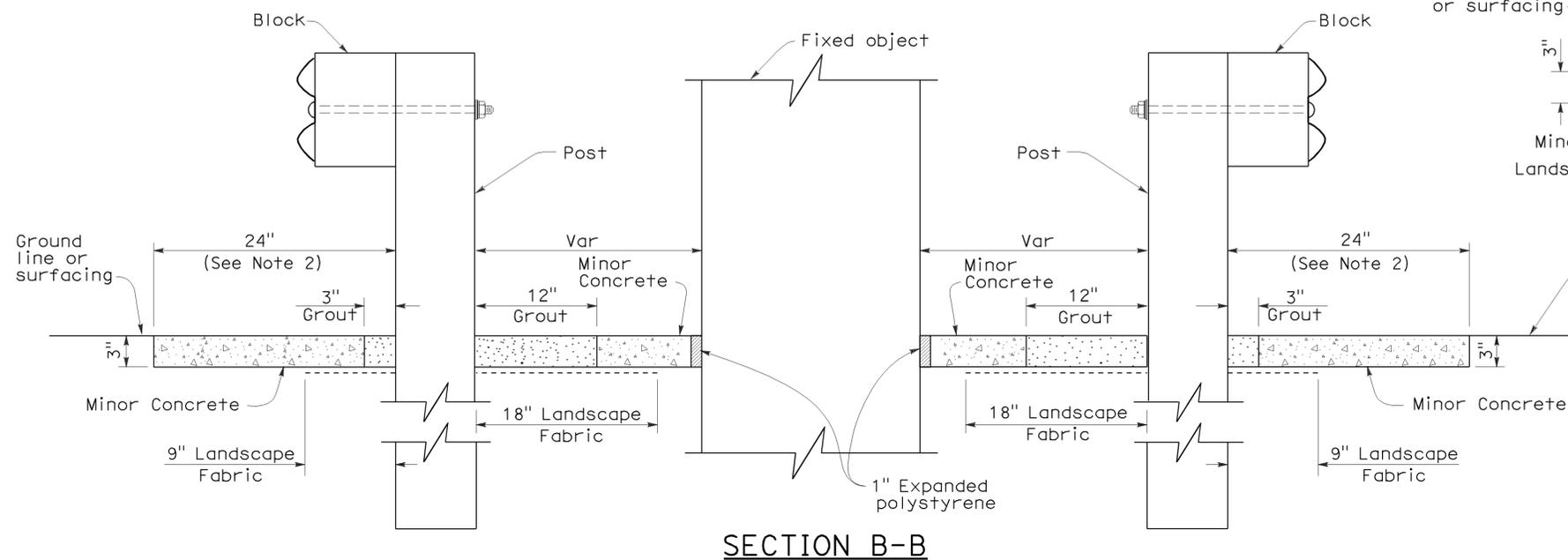
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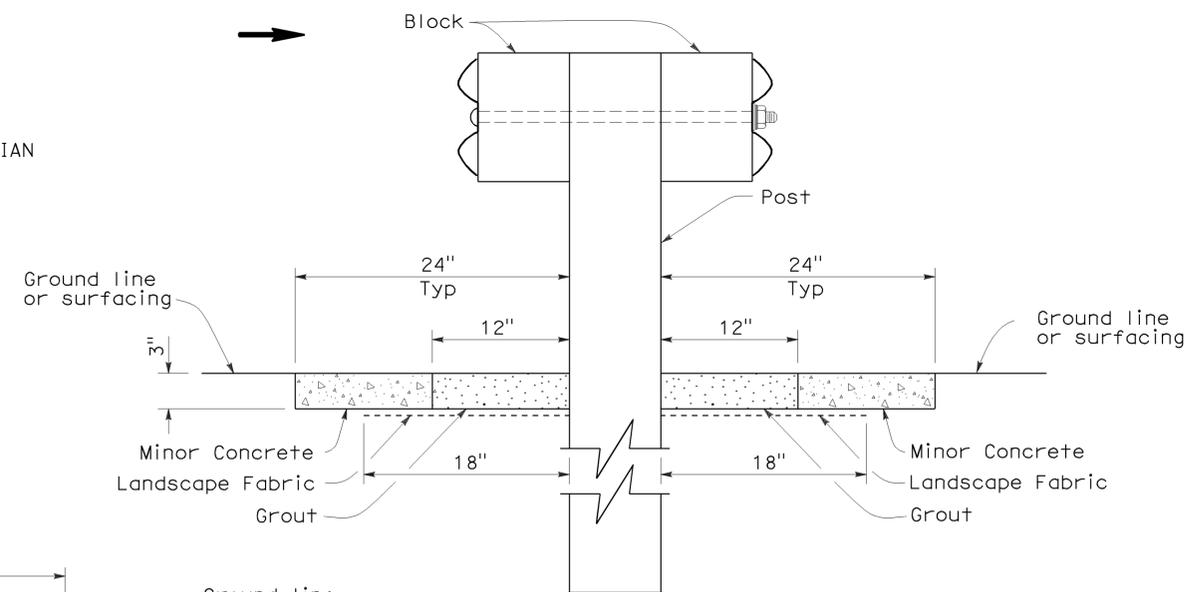


PLAN

FIXED OBJECT(S) IN MEDIAN



SECTION B-B



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
AT FIXED OBJECT**

NO SCALE

NSP A77C9 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP A77C9

2006 NEW STANDARD PLAN NSP A77C9

NOTES:

1. See New Standard Plan NSP A77C5 for additional vegetation control details.
2. Where dike is constructed under railing, construct vegetation control to back edge of dike. Where paved shoulder is constructed within 24" in front of the post, construct vegetation control to the edge of paved shoulder.
3. Direction of adjacent traffic indicated by ←.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	1	RO.0/10.2	127	157

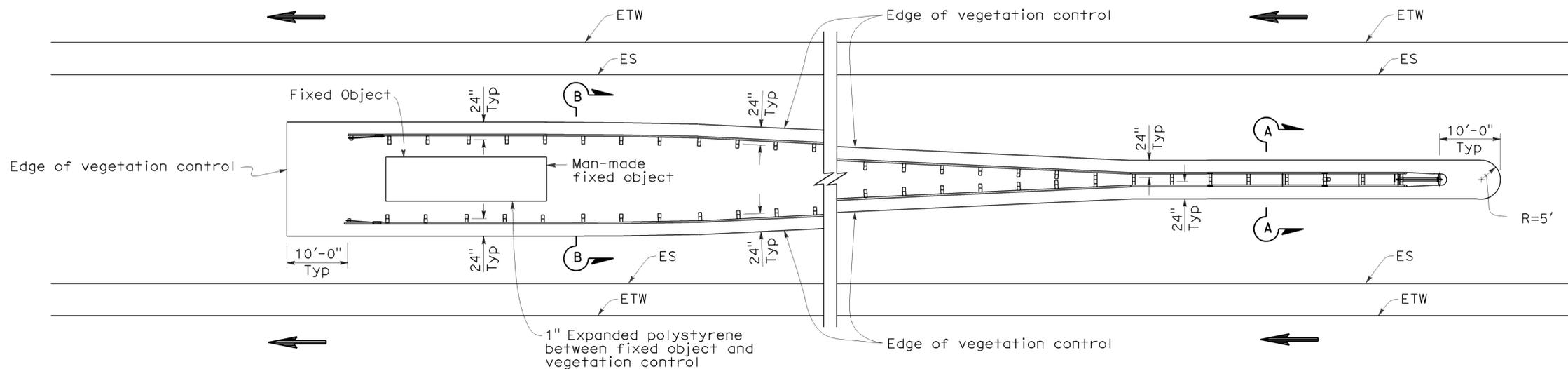
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

October 20, 2006
PLANS APPROVAL DATE

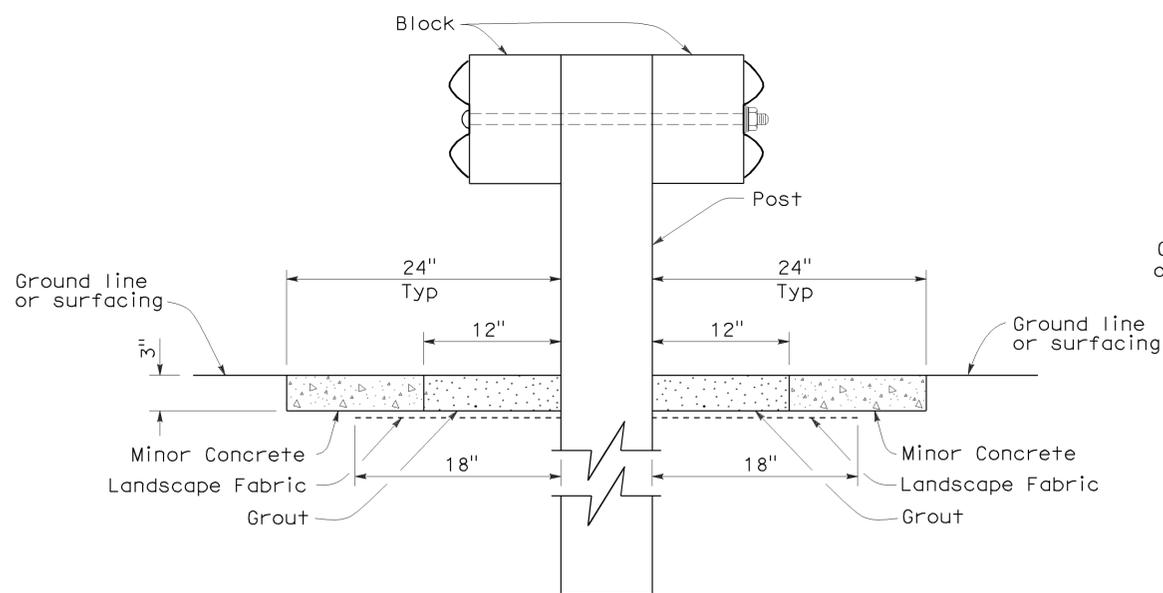
Randell D. Hiatt
No. C50200
Exp. 6-30-07
CIVIL
STATE OF CALIFORNIA

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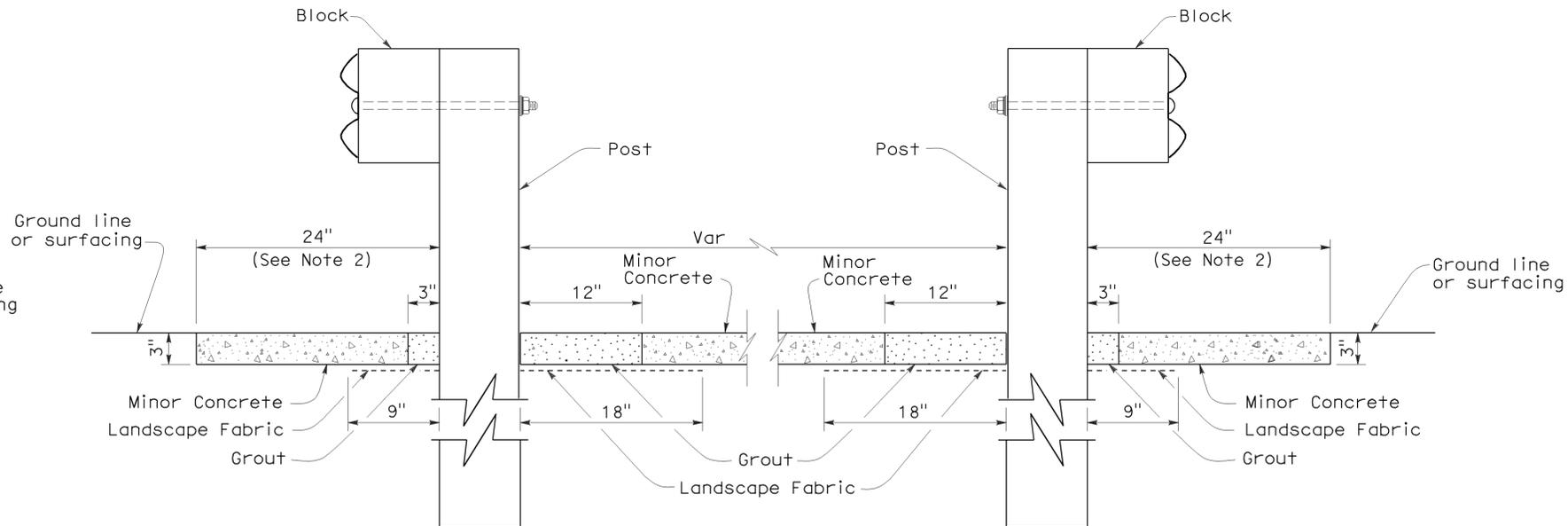
To accompany plans dated 6-20-11



PLAN
FIXED OBJECT(S) BETWEEN SEPARATE ROADBEDS
(ONE-WAY TRAFFIC)



SECTION A-A



SECTION B-B

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TYPICAL VEGETATION CONTROL
AT FIXED OBJECT**

NO SCALE

NSP A77C10 DATED OCTOBER 20, 2006 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	128	157

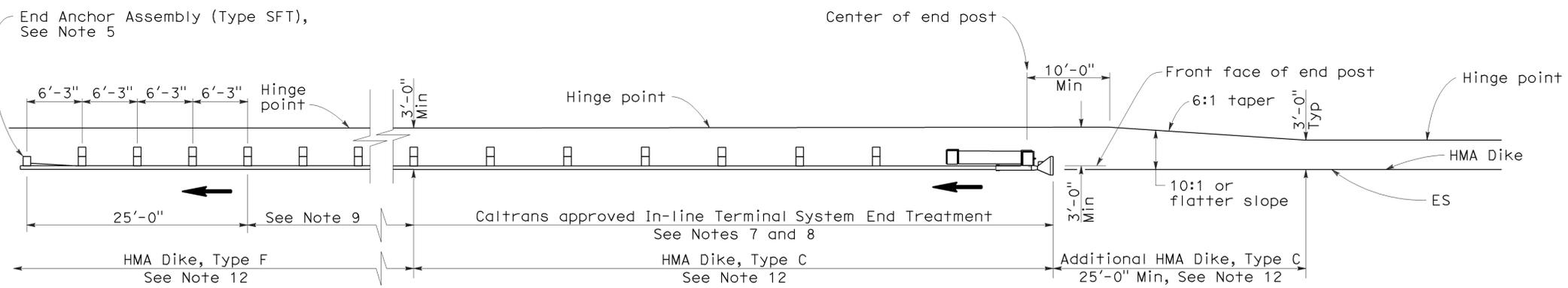
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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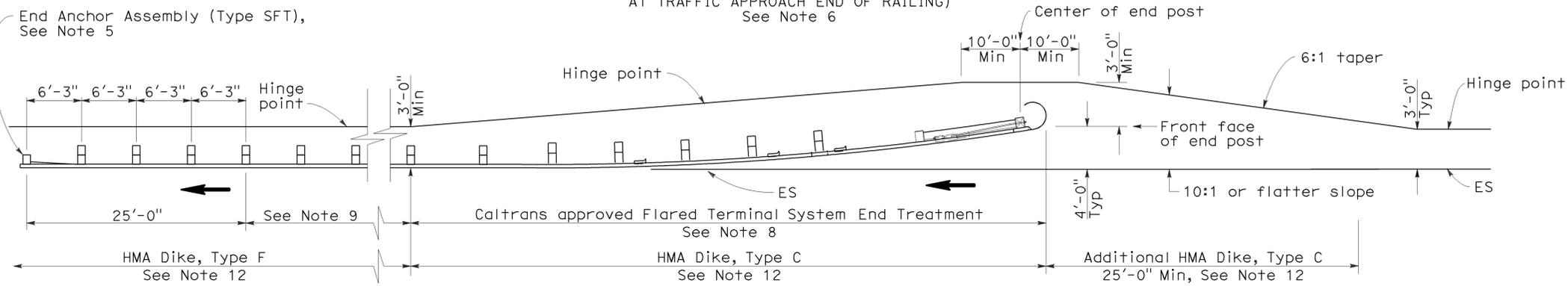
To accompany plans dated 6-20-11

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



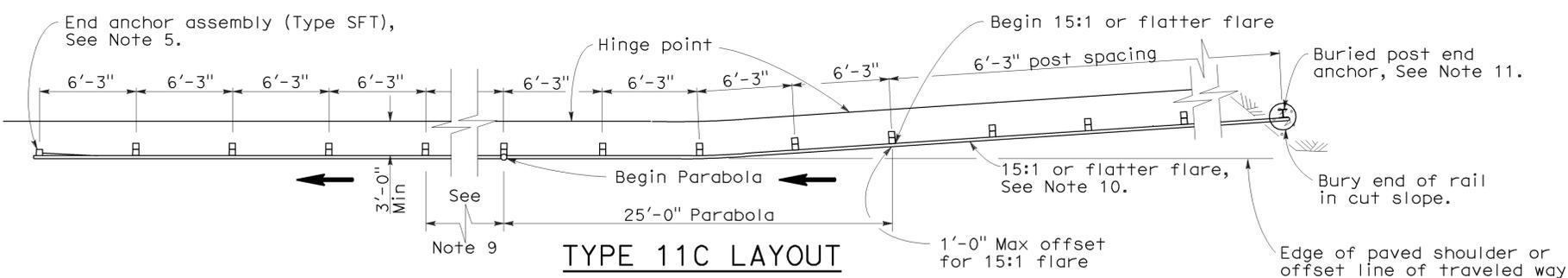
TYPE 11A LAYOUT

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



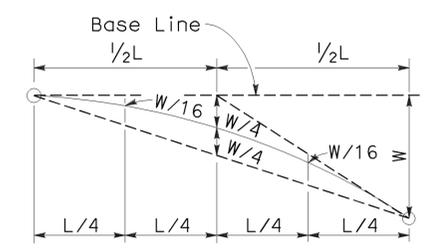
TYPE 11B LAYOUT

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

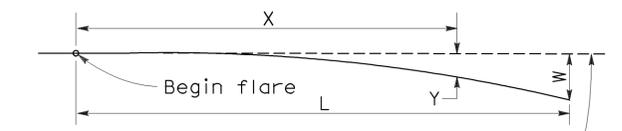


TYPE 11C LAYOUT

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



TYPICAL PARABOLIC LAYOUT

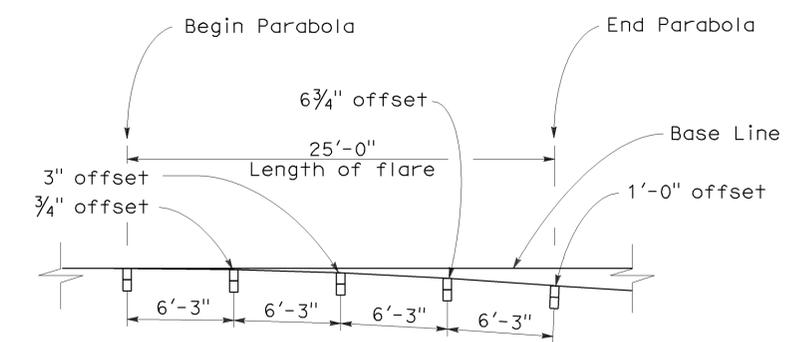


Base Line (Edge of paved shoulder or offset line of edge of traveled way)

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

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
05	Scr	1	RO.0/10.2	129	157

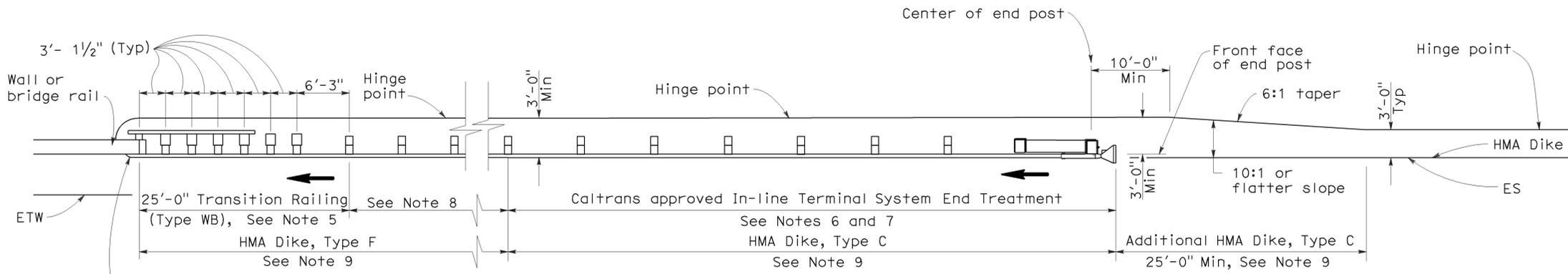
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

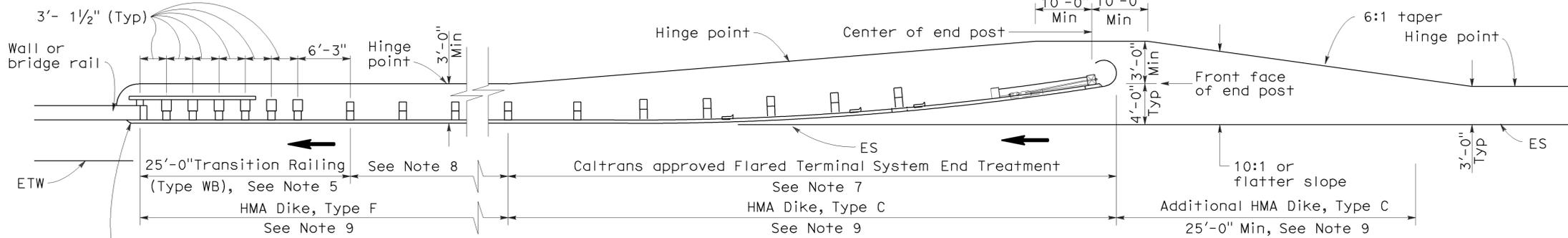
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To accompany plans dated 6-20-11



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 \rightarrow .
- 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

NOTES:

1. Line post, blocks and hardware to be used are shown on Standard Plans A77A1, A77A2, A77B1, A77C1 and A77C2.
2. Guard railing post spacing to be 6'-3" center to center, except as otherwise noted.
3. 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.
4. 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 section 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).
5. Direction of adjacent traffic indicated by \rightarrow .

6. For End Anchor Assembly (Type SFT) details, see Standard Plan A77H1.
7. Type of crash cushion to be used will be shown on the Project Plans.
8. Type 15A layout is typically used on multilane freeways or expressways to shield fixed objects in the area between separated one-way roadbeds.
9. For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77E1.
10. The 15:1 or flatter flare is measured off of the edge of the traveled way.
11. 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".

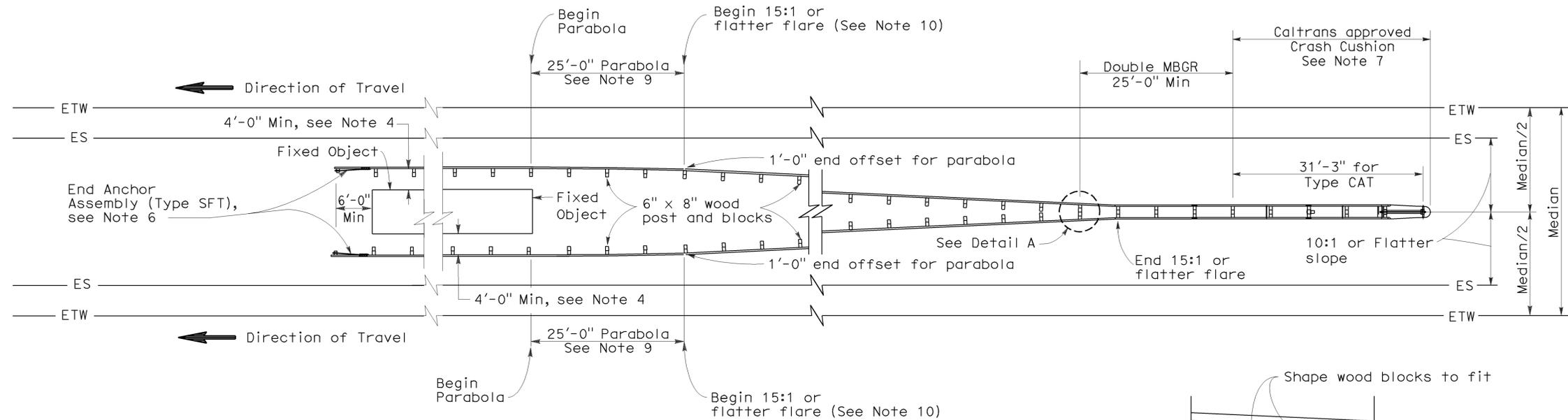
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	130	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

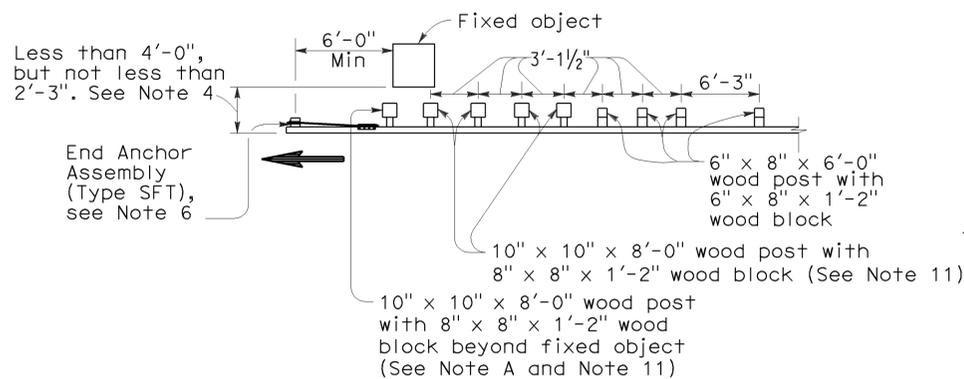
June 6, 2008
PLANS APPROVAL DATE

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To accompany plans dated 6-20-11



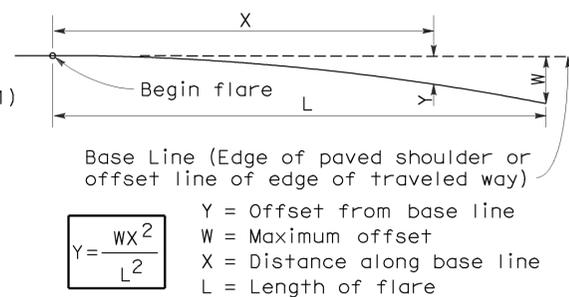
TYPE 15A LAYOUT
See Note 9



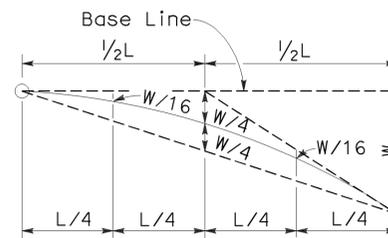
NOTE A: For a series of fixed objects (bridge columns, overhead sign supports, etc.) additional 10" x 10" x 8'-0" wood post with 8" x 8" x 1'-2" wood blocks at 3'-1/2" center to center spacing are to be used between fixed objects.

STRENGTHENED RAILING SECTIONS FOR FIXED OBJECT

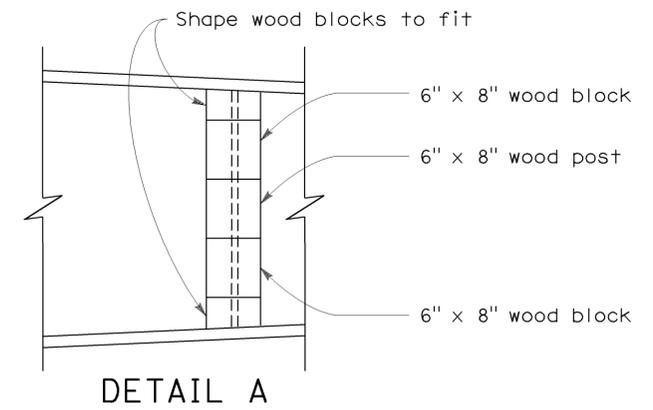
Use strengthened railing sections with Type 15A layout where minimum clearance between the face of the guard railing and the fixed object(s) is less than 4'-0", but not less than 2'-3". See Note 4.



PARABOLIC FLARE OFFSETS



TYPICAL PARABOLIC LAYOUT



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**METAL BEAM GUARD RAILING
TYPICAL LAYOUTS FOR
FIXED OBJECTS
BETWEEN SEPARATE ROADBEDS
(ONE-WAY TRAFFIC)**

NO SCALE

RSP A77G2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77G2
DATED MAY 1, 2006 - PAGE 60 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77G2

2006 REVISED STANDARD PLAN RSP A77G2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	131	157

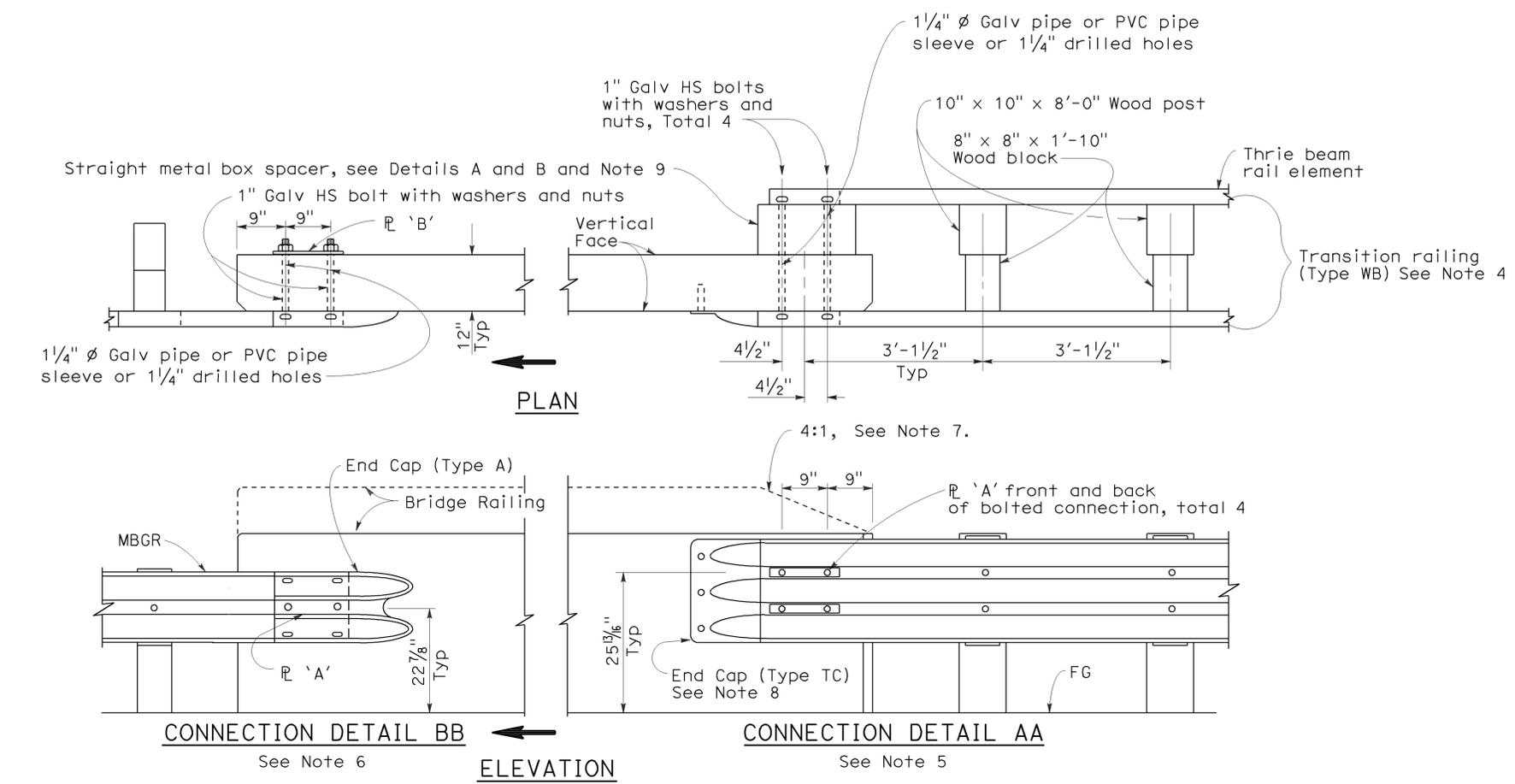
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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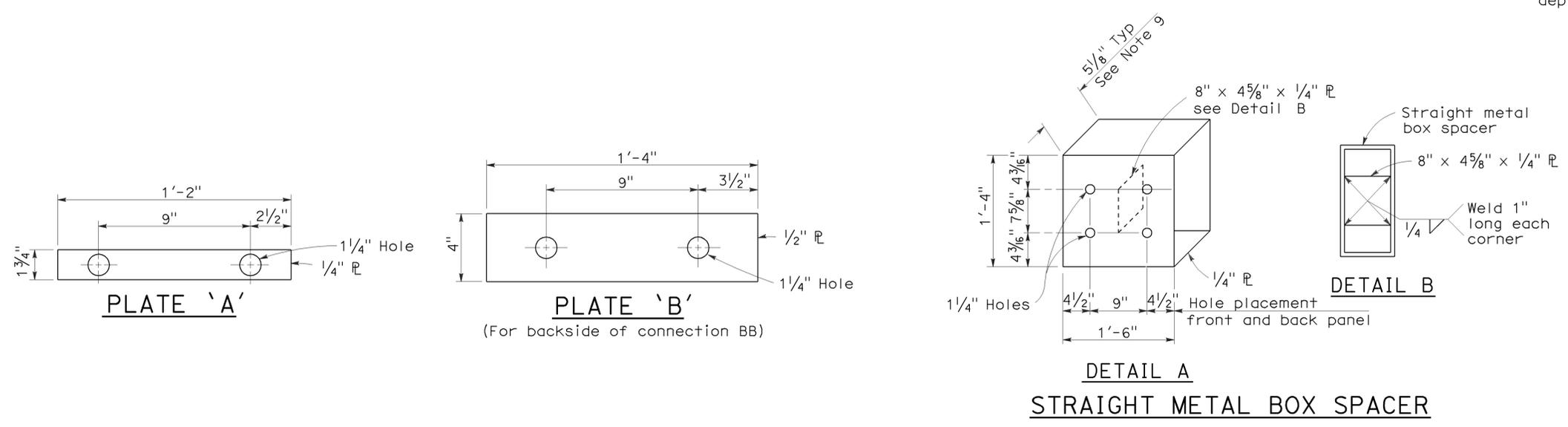
To accompany plans dated 6-20-11



NOTES:

1. See Revised Standard Plan RSP A77J2 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Standard Plan A77B1, A77C1 and A77C2.
3. Direction of adjacent traffic indicated by \rightarrow .
4. For additional details of Transition Railing (Type WB), see Standard Plan A77J4. Transition Railing (Type WB) transitions the 12 gage w-beam standard railing section of guard railing to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
5. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77F1, Layout Types 12C and 12D on Standard Plan A77F2, and Layout Type 12E on Revised Standard Plan RSP A77F3.
6. For typical use of Connection Detail BB, see Layout Type 12D (structure departure railing connection) on Standard Plan A77F2 and Layout Type 12DD on Standard Plan A77F5.
7. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam rail.
8. For details of End Cap (Type TC), see Standard Plan A77J4.
9. See Standard Plan A77J4 for additional details regarding depth dimension for straight metal box spacer.

GUARD RAILING CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
METAL BEAM GUARD RAILING CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No.1

NO SCALE

RSP A77J1 DATED MAY 20, 2011 SUPERSEDES RSP A77J1 DATED JUNE 6, 2008 AND STANDARD PLAN A77J1 DATED MAY 1, 2006 - PAGE 72 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77J1

2006 REVISED STANDARD PLAN RSP A77J1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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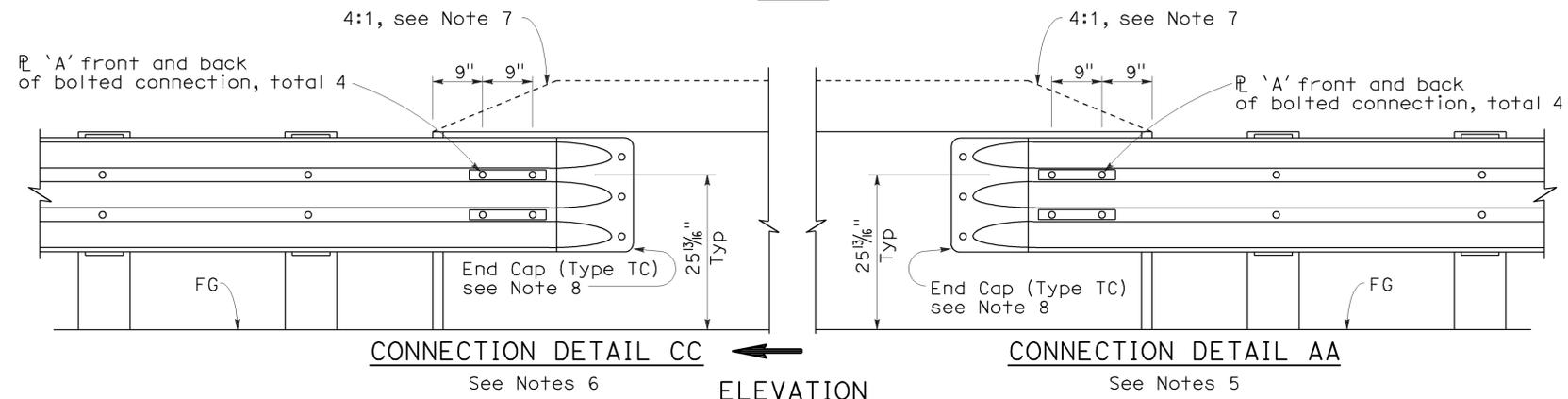
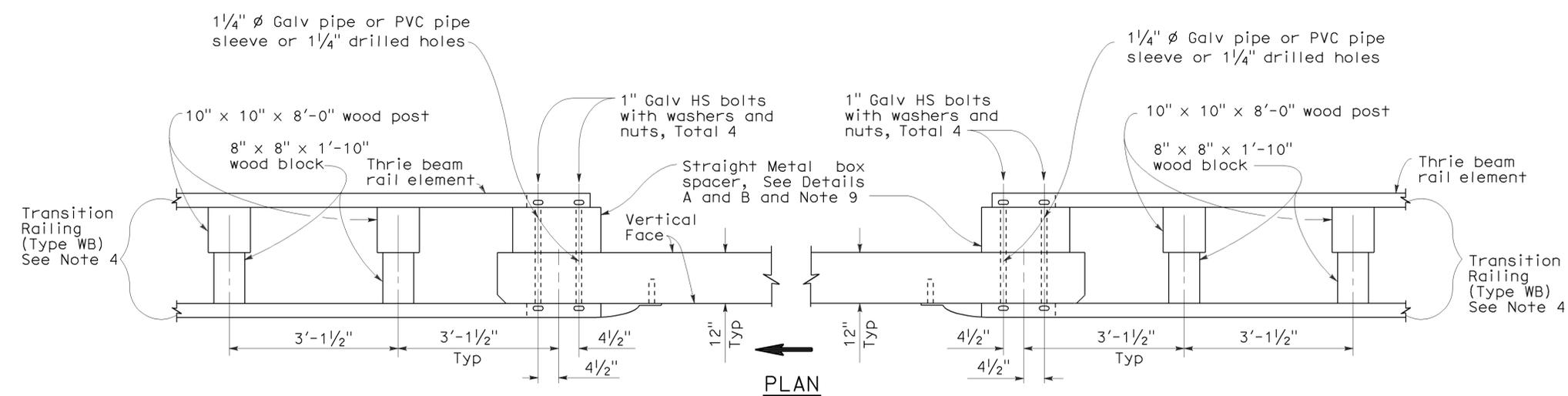
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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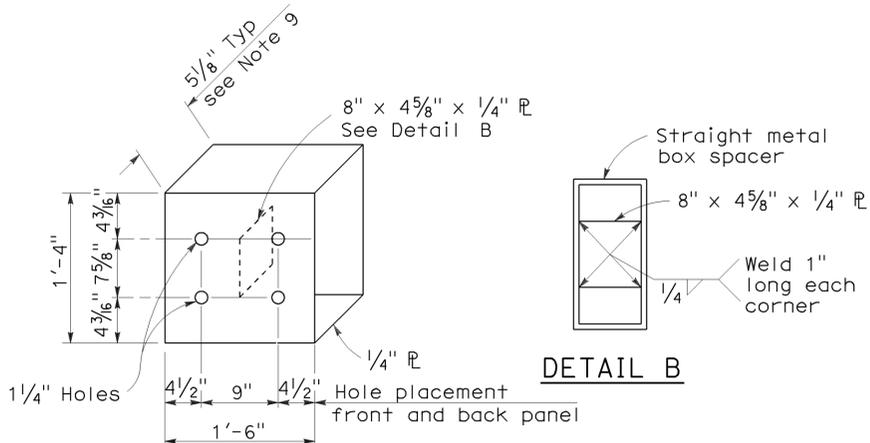
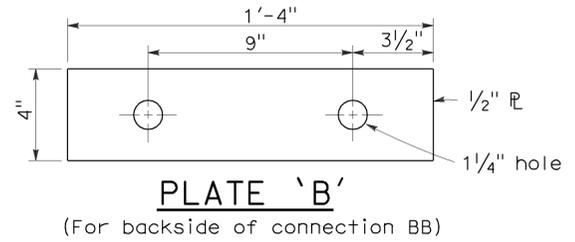
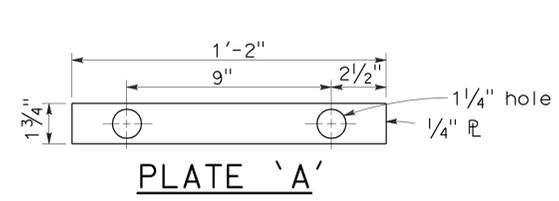
To accompany plans dated 6-20-11



GUARD RAILING CONNECTION TO BRIDGE RAILING WITHOUT SIDEWALK

NOTES:

1. See Revised Standard Plan RSP A77J1 for additional connection details to bridges without sidewalks.
2. Additional details of posts, blocks and hardware are shown on Standard Plan A77B1, A77C1 and A77C2.
3. Direction of adjacent traffic indicated by →.
4. For additional details of Transition Railing (Type WB), see Standard Plan A77J4. Transition Railing (Type WB) transitions the 12 gage w-beam standard railing section of guard railing to a heavier gage nested thrie beam railing section which is connected to the concrete bridge railing.
5. For typical use of Connection Detail AA, see Layout Types 12A and 12B on Revised Standard Plan RSP A77F1, Layout Types 12C and 12D on Standard Plan A77F2, and Layout Type 12E on Revised Standard Plan RSP A77F3.
6. For typical use of Connection Detail CC, see Layout Types 12AA and 12BB on Standard Plan A77F4 and Layout Type 12CC on Standard Plan A77F5.
7. Where the height of the bridge railing exceeds the height of the thrie beam railing by more than 1" at Connection Detail AA and connection Detail CC, taper the top of the end of the bridge railing at 4:1 to match the top elevation of the thrie beam railing.
8. For details of End Cap (Type TC), see Standard Plans A77J4.
9. See Standard Plans A77J4 for additional details regarding depth dimension for straight metal box spacer.



**DETAIL A
STRAIGHT METAL BOX SPACER**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
CONNECTIONS TO BRIDGE RAILINGS
WITHOUT SIDEWALKS DETAILS No.2**

NO SCALE
RSP A77J2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A77J2
DATED MAY 1, 2006 - PAGE 73 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A77J2

2006 REVISED STANDARD PLAN RSP A77J2

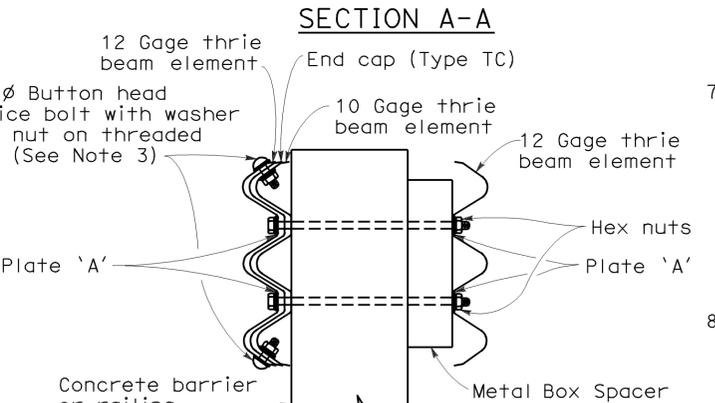
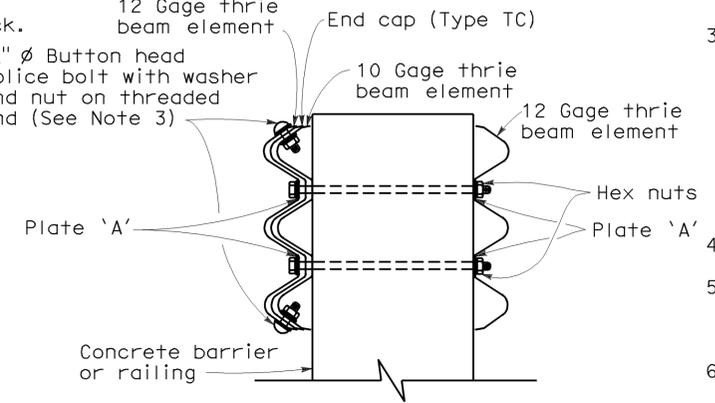
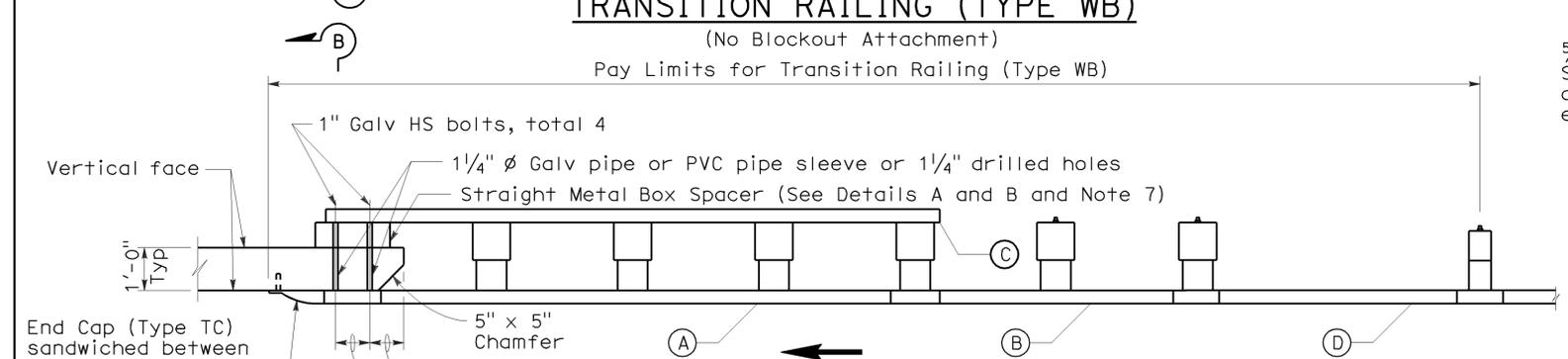
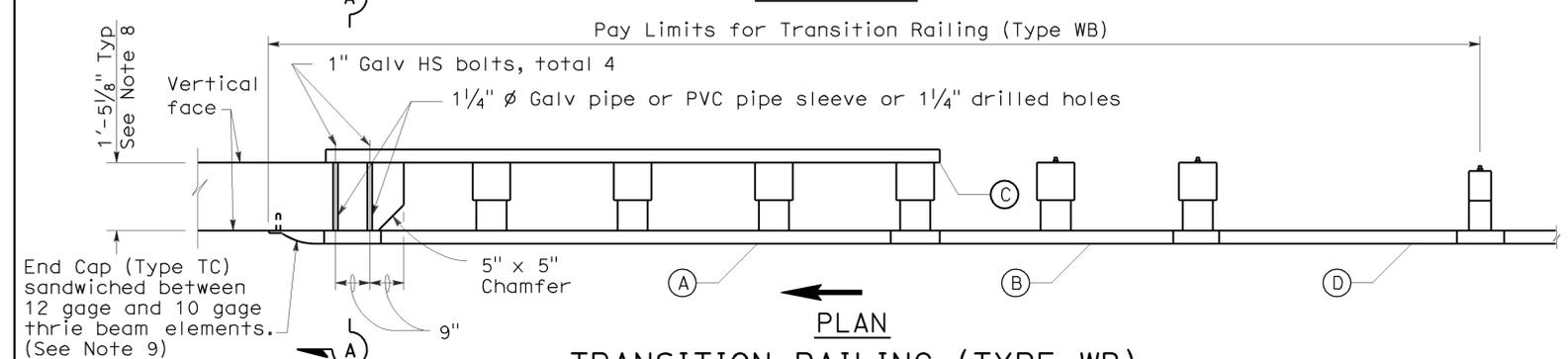
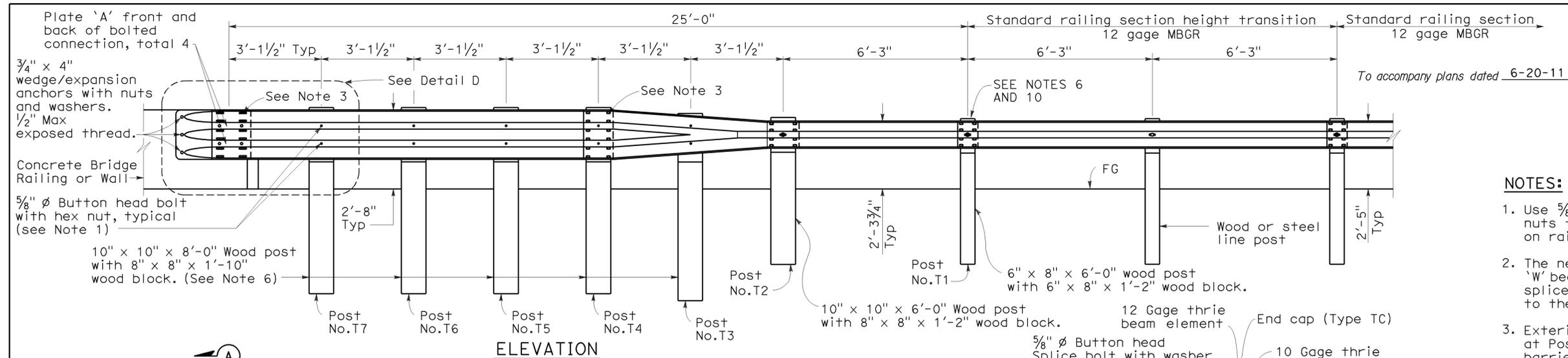
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	133	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

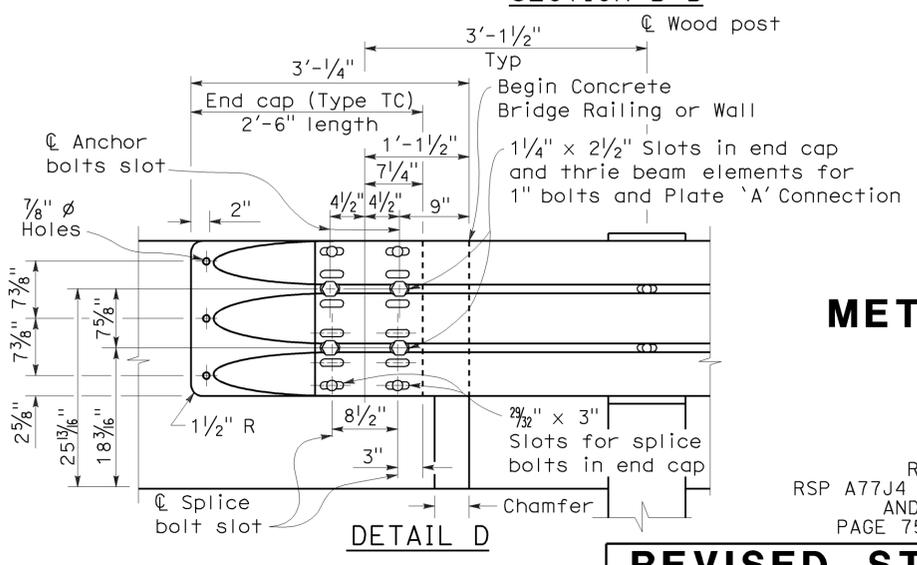
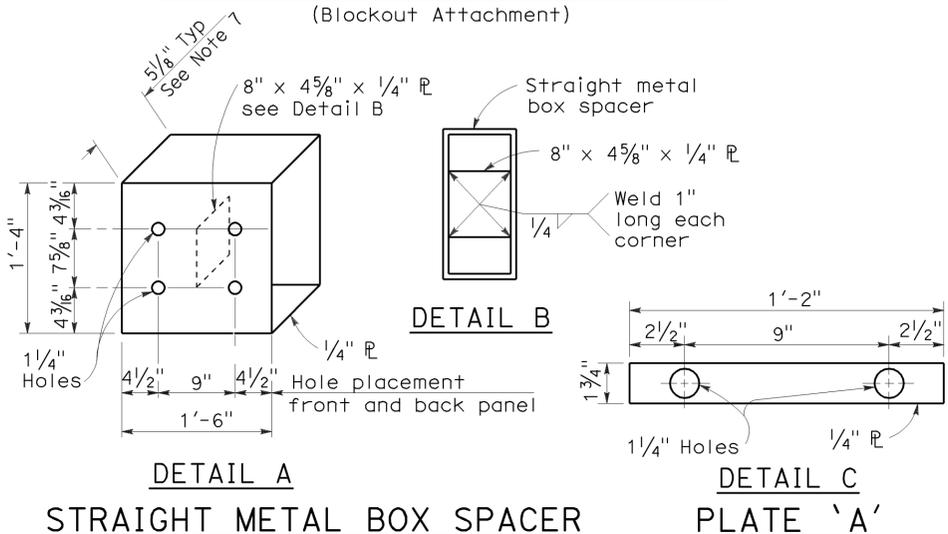
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- NOTES:**
- Use 5/8" Ø Button head bolts and hex nuts for connections to posts. No washer on rail face for bolted connections to post.
 - The nested rail elements, end cap, and "W" beam to thrie beam element may be spliced together prior to bolting the elements to the wood post and concrete barrier or railing.
 - Exterior splice bolt holes for rail element splices at Post No. T4 and the connection to the concrete barrier or railing shall be the standard 7/32" x 1/8" slot size. Interior splice bolt holes at these locations may be increased up to 1/4" Ø. Only the top 2 and the bottom 2 splice bolts with washers and nuts are required for rail splices at Post No. T4 and the connection to the concrete barrier or railing.
 - Direction of adjacent traffic indicated by →.
 - The top elevation of Posts No. T2 through No. T7 shall not project more than 1" above the top elevation of the rail element.
 - Typically, the railing connected to Transition Railing (Type WB) will be either standard railing section of metal beam guard railing with height transition ratio of 120:1 or an approved Caltrans end treatment attached to Post No. T1.
 - The depth of the metal box spacer varies from the 5/8" to 1/2" and is dependent on the width of the concrete railing or wall. The combined dimension for the depth of the metal box spacer plus the width of railing or wall is typically 17/8". Where the space between the backside of the concrete railing or wall and the rear thrie beam element is less than 1/2", metal plates similar to Plate 'A' are to be used as spacers.
 - Where the width of the concrete railing or wall is greater than 17/8", wood blocks are to be used to fill the space created between the backside of Posts No. T4 through No. T7 and the rear thrie beam element. These wood blocks shall be 8" in width and 1'-2" in length. The dimension between the front thrie beam element and the rear thrie beam element is to match the width of the concrete railing or wall.
 - End cap may be installed over 12 gage and 10 gage thrie beam elements where transition railing is installed on the departure end of bridge railing.
 - Conform standard railing section height to 2'-3 3/4" at Post No. T1 using height transition ratio of 120:1.

- LEGEND**
- (A) Nested thrie beam elements (one 12 gage element nested over one 10 gage element).
 - (B) One 10 gage "W" beam to thrie beam element.
 - (C) One 12 gage thrie beam element.
 - (D) One 10 gage "W" beam rail element (7'-3 1/2" length)
- 10 gage = 0.135" thick
12 gage = 0.108" thick



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL BEAM GUARD RAILING
TRANSITION RAILING
(TYPE WB)**

NO SCALE

RSP A77J4 DATED MAY 20, 2011 SUPERSEDES
RSP A77J4 DATED JUNE 5, 2009, RSP A77J4 DATED JUNE 6, 2008
AND STANDARD PLAN A77J4 DATED MAY 1, 2006 -
PAGE 75 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A77J4

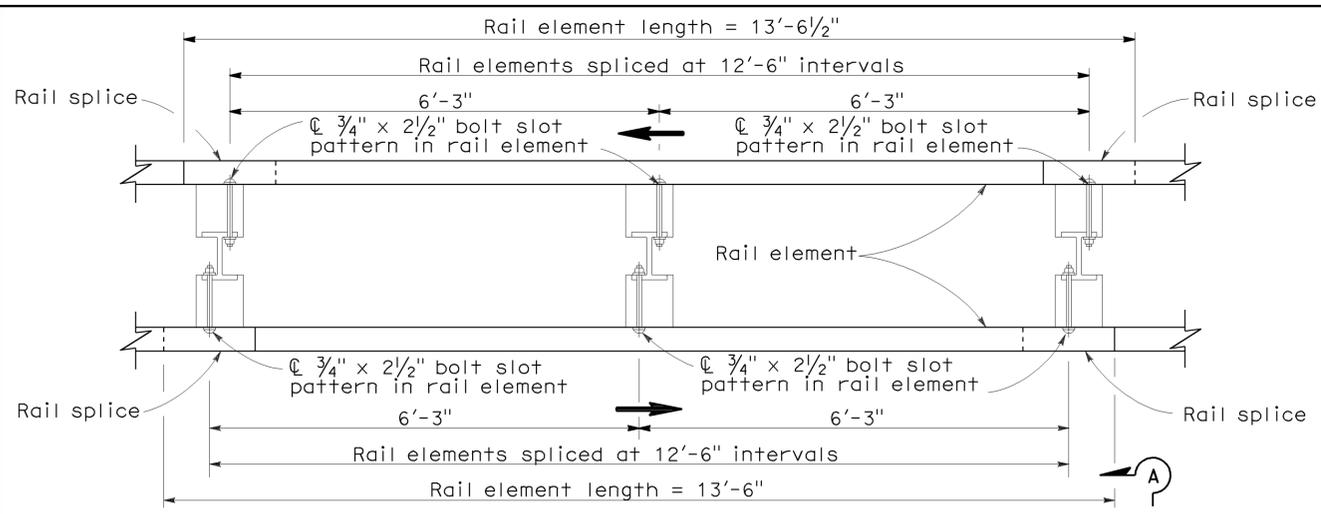
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	1	RO.0/10.2	134	157

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

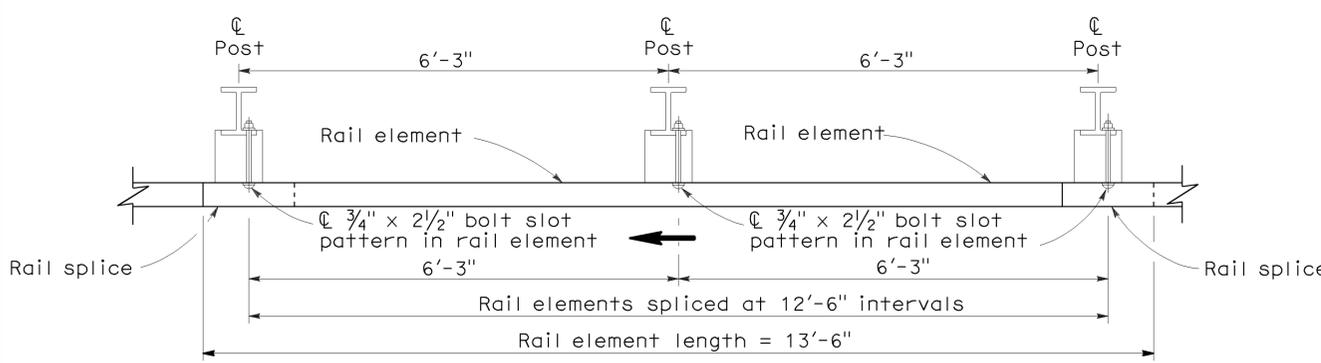
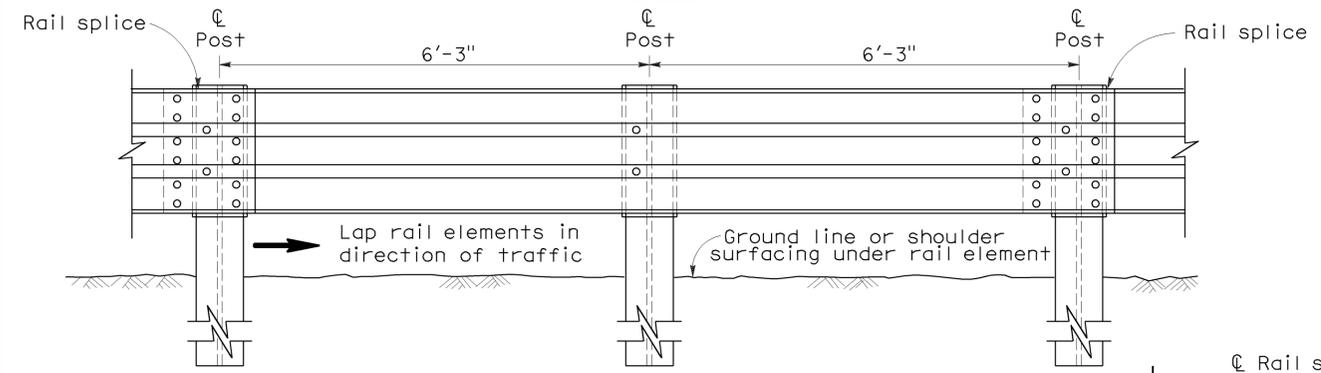
June 6, 2008
PLANS APPROVAL DATE

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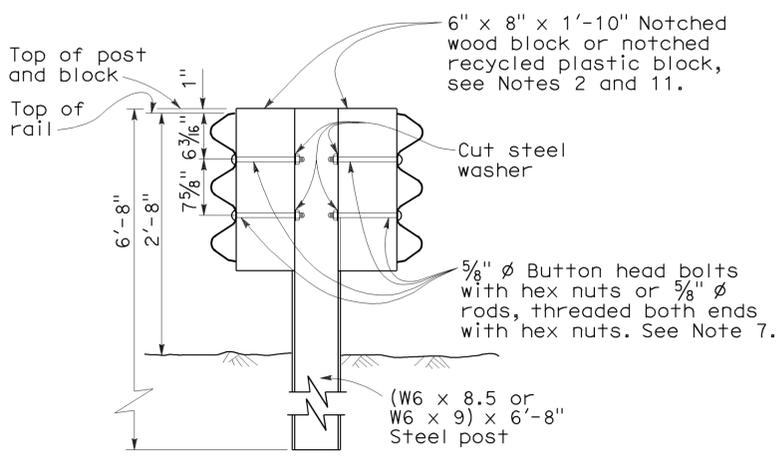
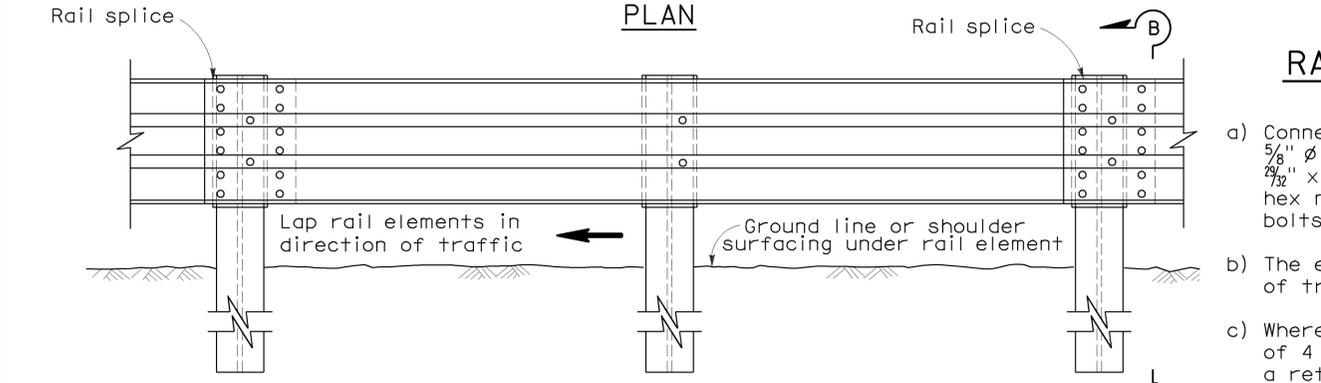
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
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STATE OF CALIFORNIA



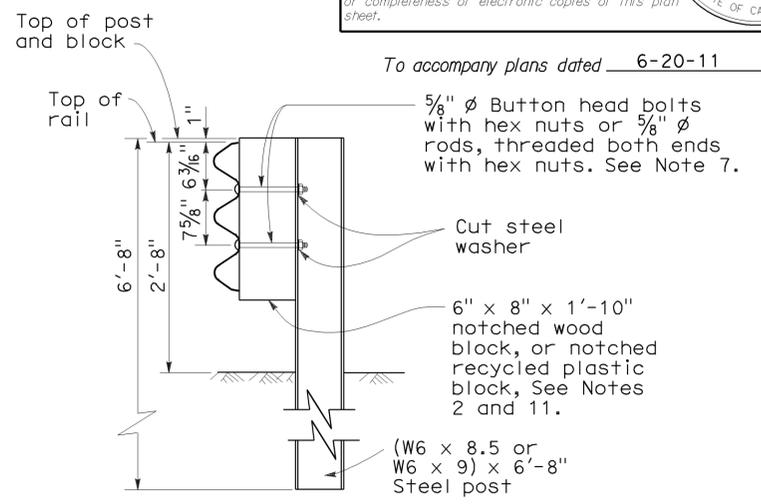
DOUBLE THRIE BEAM BARRIER
(Steel post with notched wood or notched plastic blocks)
See Note 1



SINGLE THRIE BEAM BARRIER
(Steel post with notched wood or notched plastic blocks)
See Note 1

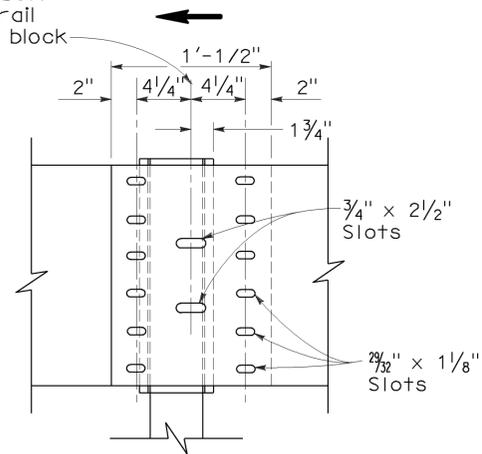


SECTION A-A
TYPICAL STEEL LINE POST INSTALLATION



SECTION B-B
TYPICAL STEEL LINE POST INSTALLATION

Center of rail splice and slots for 5/8" diameter button head bolt to connect rail to post and block



ELEVATION
RAIL ELEMENT SPLICE DETAIL

- Connect the overlapped ends of the thrie beam rail elements with 5/8" diameter x 1 1/8" button head oval shoulder bolts inserted into the 2 7/32" x 1/8" slots and bolted together with 5/8" diameter x 1/8" recessed hex nuts. Recess of hex nut points toward rail element. A total of 12 bolts and nuts are to be used at each rail splice connection.
- The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used. Where a return cap is to be attached to the ends of rail elements, a total of 8 of the above described splice bolts and nuts are to be used.

NOTES:

- For details of the cross section of the thrie beam rail element and details for wood post with wood block installations, see Standard Plan A78A.
- For details of standard hardware, posts and blocks used to construct thrie beam barrier, see Revised Standard Plan RSP A78C1 and Standard Plan A78C2.
- Thrie beam barrier post spacing to be 6'-3" center to center, except as otherwise noted.
- Top of barrier rail to be 2'-8" above ground line or shoulder surfacing under the rail element.
- For barrier end treatments and barrier connections, see Standard Plans A78E1, A78E2 and A78E3, Revised Standard Plans RSPs A78F1 and A78F2, Standard Plan A78G and Revised Standard Plan RSP A78H.
- For connection to Concrete Barrier, see Revised Standard Plan RSP A78I.
- Attach rail element to block and steel post with 2 bolts or rods on approaching traffic side of block and post web. No washer on rail face for rod or bolted connections to line post.
- For details of thrie beam barrier on bridges, see Standard Plan A78D2. For details of thrie beam barrier at fixed objects, see Standard Plan A78D1.
- Direction of traffic indicated by →.
- Notched face of block faces steel post.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

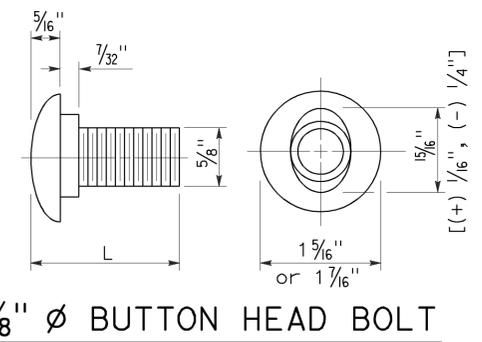
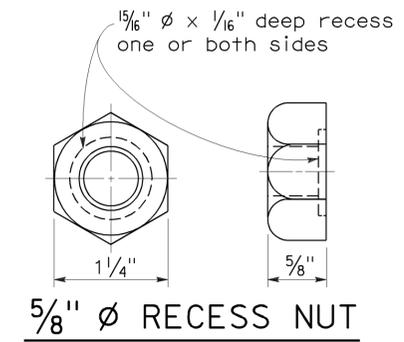
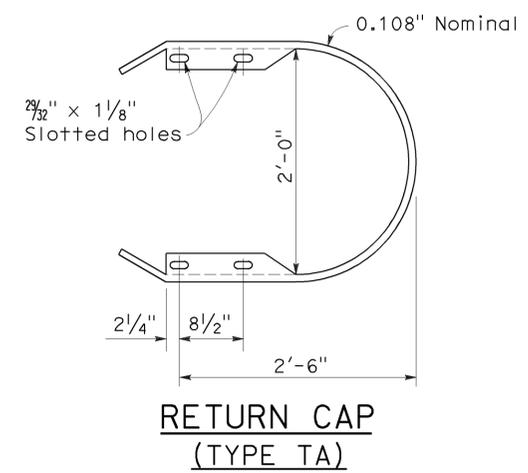
THRIE BEAM BARRIER
STANDARD BARRIER RAILING
SECTION (STEEL POST
WITH NOTCHED WOOD BLOCK
OR NOTCHED RECYCLED
PLASTIC BLOCK)
NO SCALE

RSP A78B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A78B
DATED MAY 1, 2006 - PAGE 84 OF THE STANDARD PLANS BOOK DATED MAY 2006.

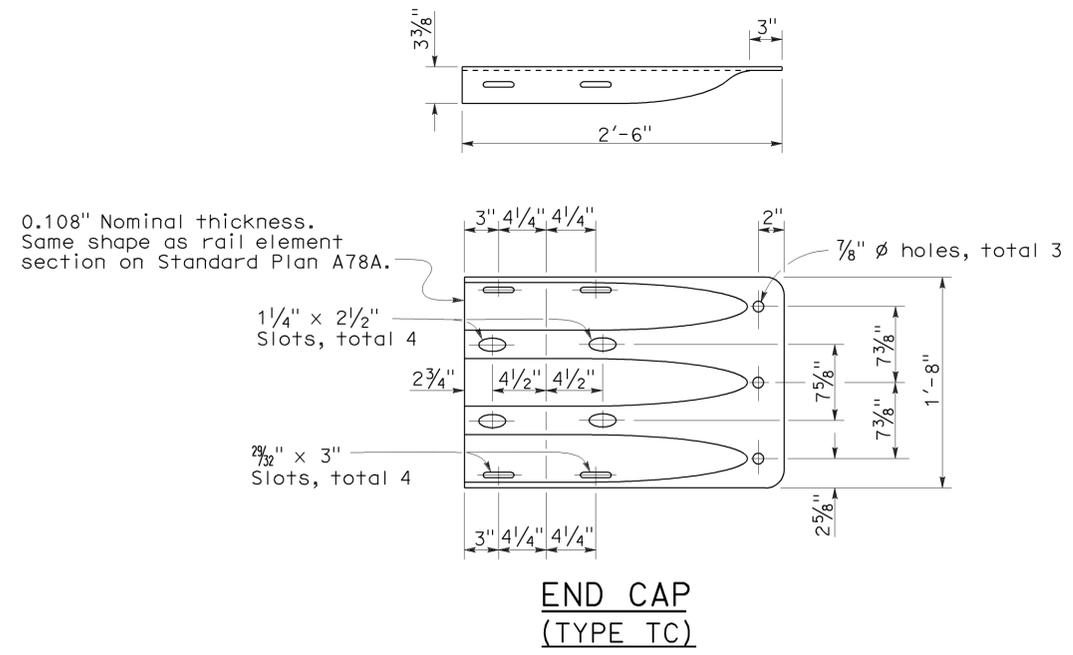
REVISED STANDARD PLAN RSP A78B

2006 REVISED STANDARD PLAN RSP A78B

To accompany plans dated 6-20-11



L	THREAD LENGTH
1 1/4"	full thread length
2"	full thread length
9/2"	4" Min thread length
18"	4" Min thread length



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**THRIE BEAM BARRIER
STANDARD HARDWARE DETAILS**

NO SCALE

RSP A78C1 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A78C1
DATED MAY 1, 2006 - PAGE 85 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP A78C1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	136	157

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.

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

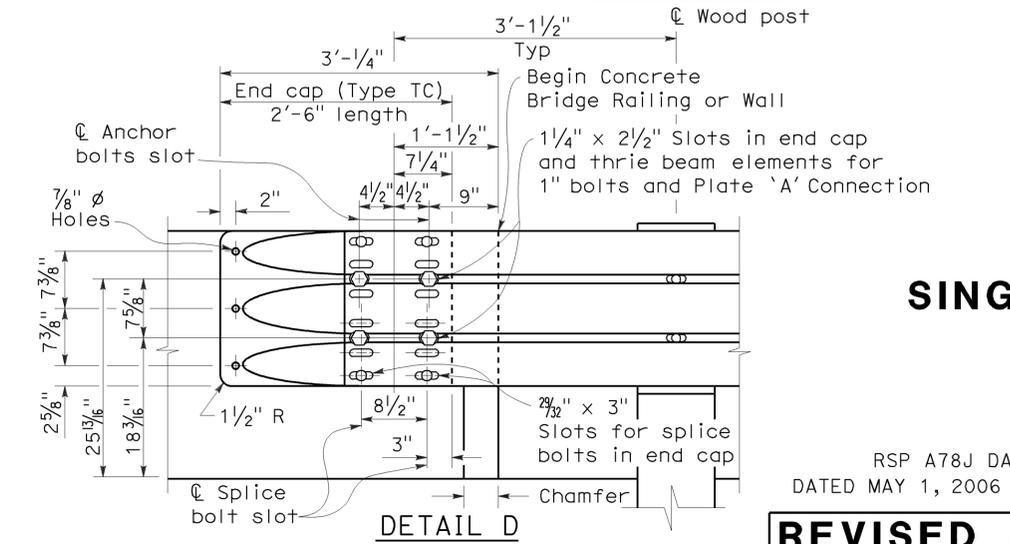
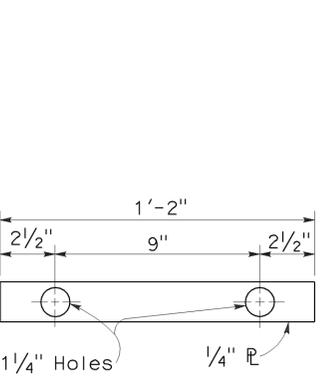
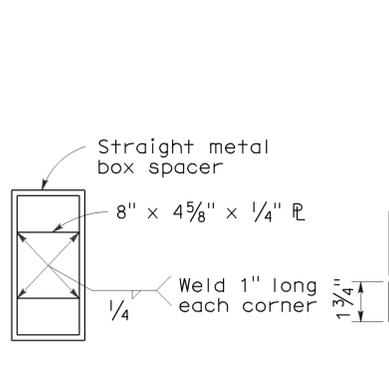
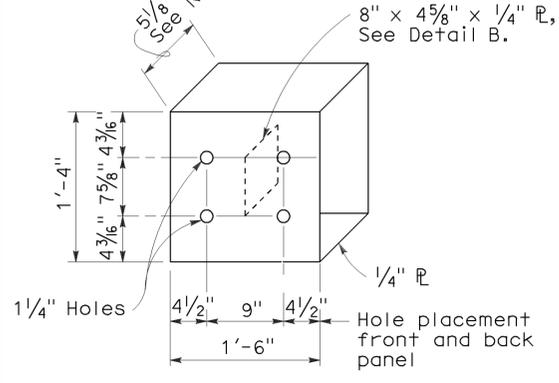
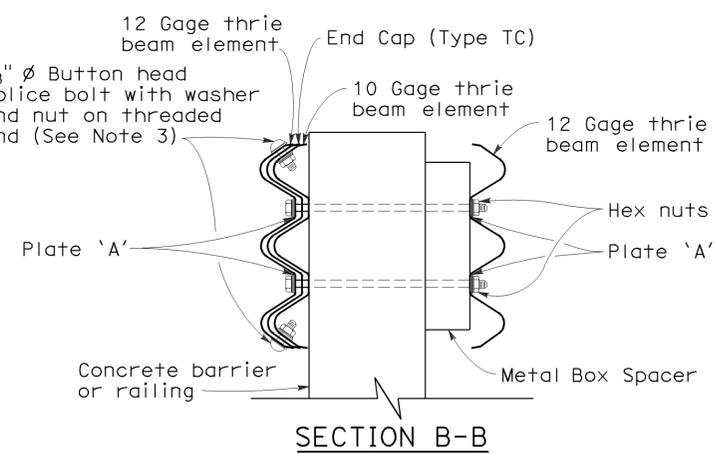
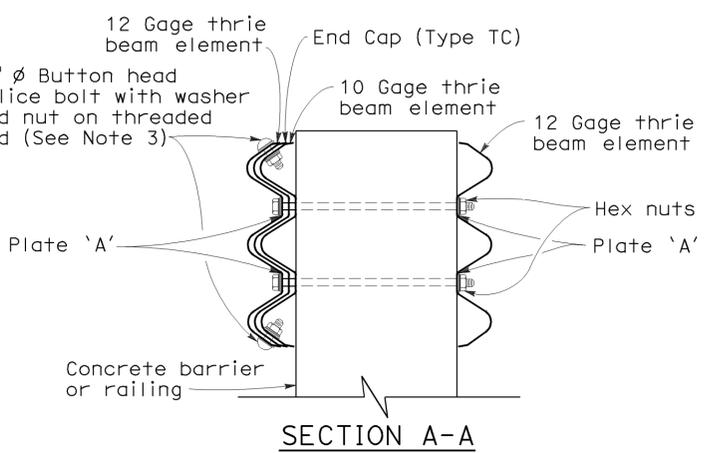
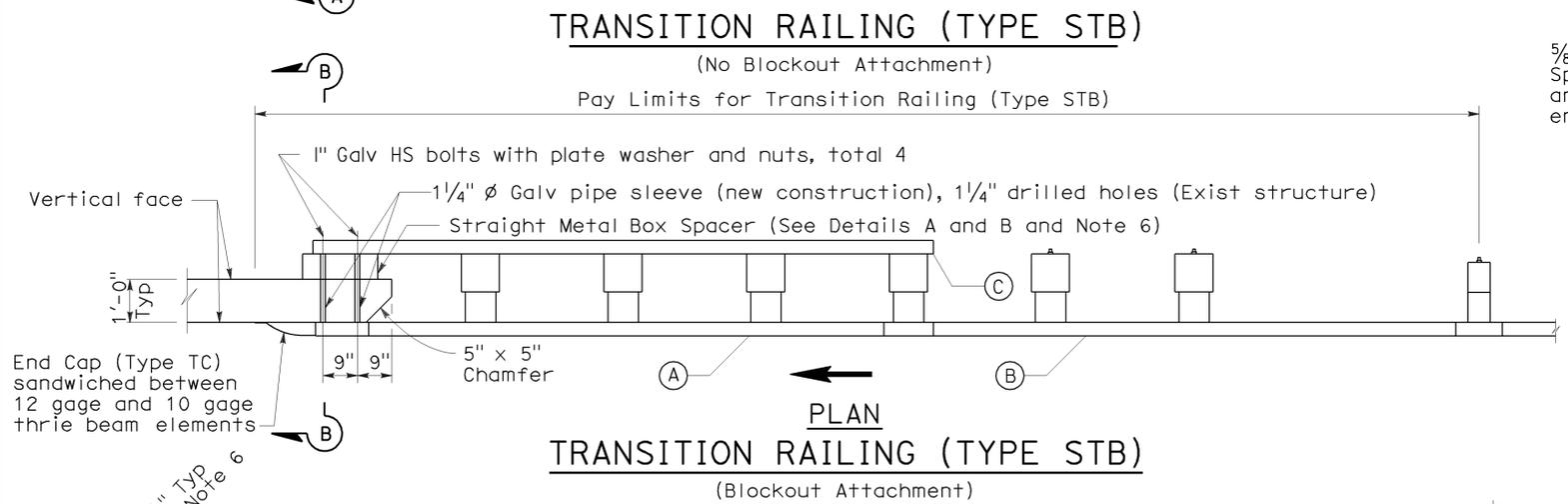
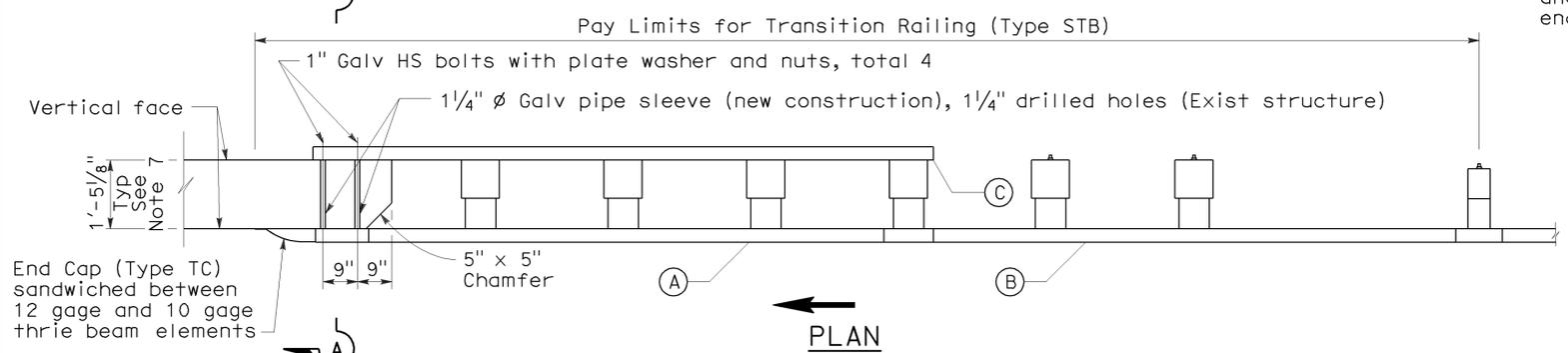
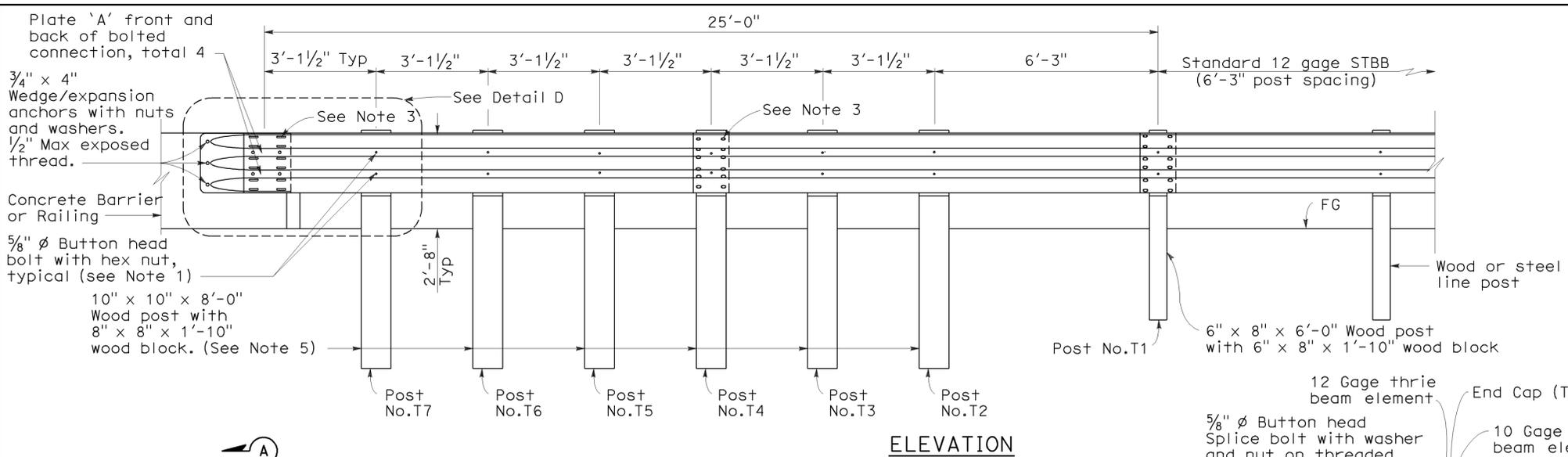
To accompany plans dated 6-20-11

LEGEND

- (A) Nested thrie beam elements (one 12 gage element nested over one 10 gage element).
 - (B) One 10 gage thrie beam element.
 - (C) One 12 gage thrie beam element.
- 10 gage = 0.135" thick
12 gage = 0.108" thick

NOTES:

1. Use 5/8" ø Button head bolts and hex nuts for connection to posts. No washer on rail face for bolted connections to post.
2. The nested rail elements, end cap and single 10 gage thrie beam element, may be spliced together prior to bolting the elements to the wood post and concrete barrier or railing.
3. Exterior splice bolt holes for rail element splices at Post No.T4 and the connection to the concrete barrier or railing shall be the standard 3/32" x 1 1/8" slot size. Interior splice bolt holes at these locations may be increased up to 1/4" ø. Only the top 2 and the bottom 2 splice bolts with washers and nuts are required for rail splices at Post No.T4 and the connection to the concrete barrier or railing.
4. Direction of adjacent traffic indicated by →.
5. The top elevation of Post Nos.T2 through T7 shall not project more than 1" above the top elevation of the rail element.
6. The depth of the metal box spacer varies from the 5/8" to 1/2" and is dependent on the width of the concrete railing or wall. The combined dimension for the depth of the metal box spacer plus the width of railing or wall is typically 17 1/8". Where the space between the backside of the concrete railing or wall and the rear thrie beam element is less than 1/2" metal plates similar to Plate 'A' are to be used as spacers.
7. Where the width of the concrete railing or wall is greater than 17 1/8", wood blocks are to be used to fill the space created between the backside of Post No.4 through No.7 and the rear thrie beam element. These wood blocks shall be 8" in width and 1'-2" in length. The dimension between the front thrie beam element and the rear thrie beam element is to match the width of the concrete railing or wall.
8. For details of End Cap (Type TC), see Revised Standard Plan RSP A78C1.



SINGLE THRIE BEAM BARRIER TRANSITION RAILING (TYPE STB)

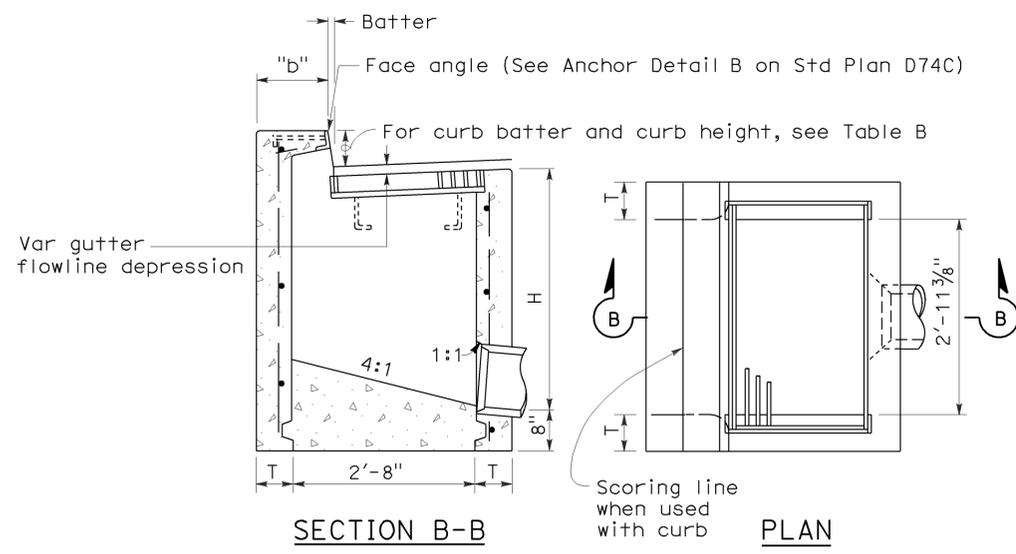
NO SCALE

RSP A78J DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A78J DATED MAY 1, 2006 - PAGE 97 OF THE STANDARD PLANS BOOK DATED MAY 2006.

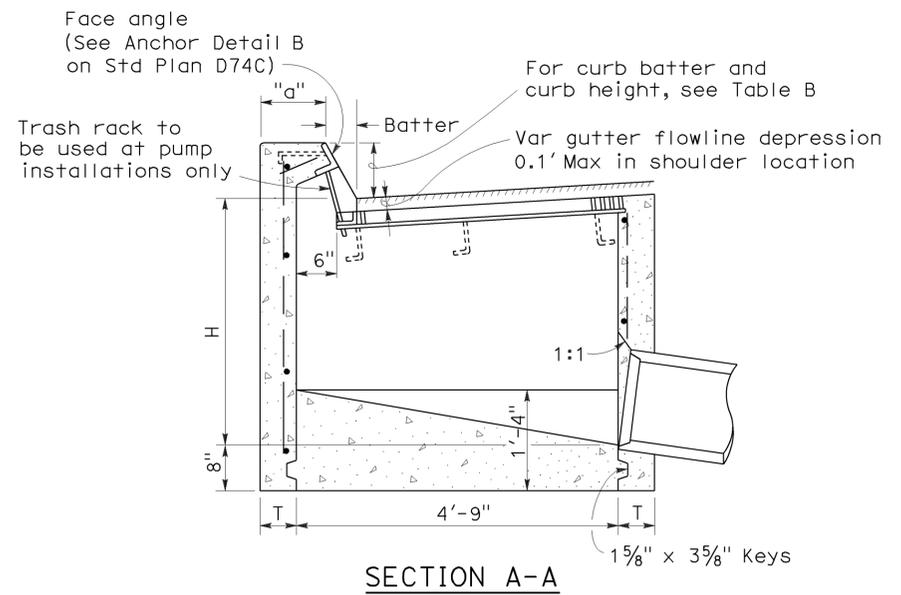
REVISED STANDARD PLAN RSP A78J

2006 REVISED STANDARD PLAN RSP A78J

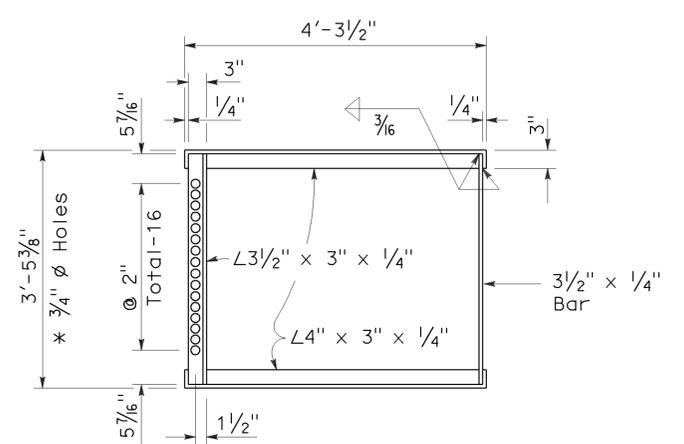
2006 REVISED STANDARD PLAN RSP D74B



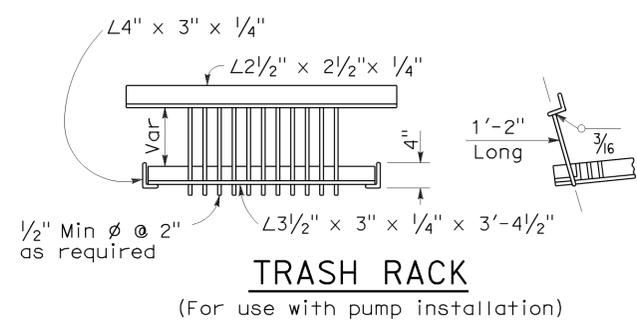
TYPE GO



SECTION A-A



GRATE FRAME FOR TYPE GDO INLET



TRASH RACK

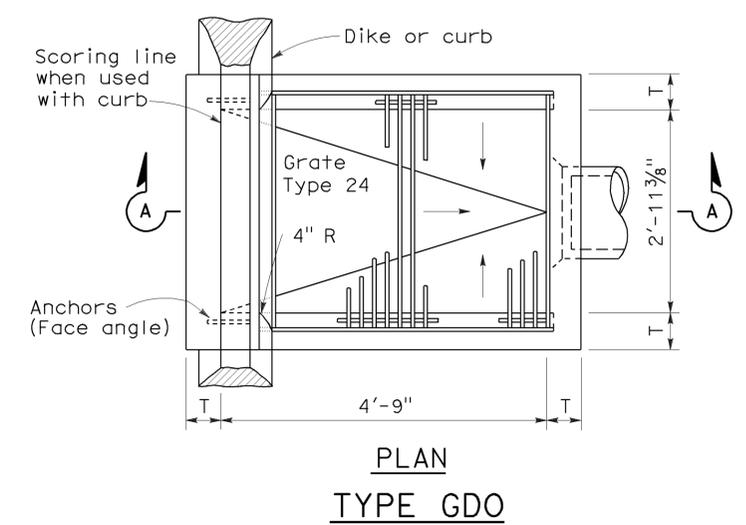
TABLE A
CONCRETE QUANTITIES

TYPE	H=3'-0" TO 8'-0" (T=6")	H=8'-1" TO 20'-0" (T=8")	
	ADDITIONAL PCC PER FOOT (CY)	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)
GO	1.24	3.39	0.346
GDO	1.62	4.36	0.446

Table based on 8" floor slab, no deduction for pipe openings, and curb type giving highest quantity of concrete. No deductions or adjustments are to be made to these quantities because of pipe openings, different floor alternatives or different curb type.

NOTES:

- "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undepressed.
- For "T" wall thickness, see Table A below.
- Wall reinforcing not required when "H" is 8'-0" or less and the unsupported width or length is 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 @ 18"± centers placed 1/2" clear to inside of box unless otherwise shown.
- Inlet bottom reinforcing not required. See Standard Plan D74C for alternative reinforced bottom.
- Steps - None required where "H" is less than 2'-6". Where "H" is 2'-6" or more, install steps with lowest rung 1'-0" above the floor and highest rung not more than 6" below top of inlet. The distance between steps shall not exceed 1'-0" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Step inserts may be substituted for the bar steps. Step Inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
- When shown on the project plans, place a 3/4" plain round protection bar horizontally across the length of the opening and bend back 4" into the inlet wall on each side.
- Pipe(s) can be placed in any wall.
- Curb section shall match adjacent curb.
- Basin floors shall have wood trowel finish and shall slope toward the outlet pipe as shown.
- Galvanizing - See Standard Specifications or Special Provisions.
- See Standard Plan D77A and D77B for grate and frame details and weights of miscellaneous iron and Steel.
- See Standard Plan D78A for gutter depression details.
- Full penetration butt welds may be substituted for the fillet welds on all anchors.
- Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
- Cast-in-place or precast alternative is optional with contractor. See Standard Specifications.
- Cast-in-place inlets to be formed around all pipes/stubs intersecting the inlet and concrete poured in one continuous operation. Precast inlets shall have mortared pipe connections conforming to details for Type GCP inlets on Standard Plan D75B. See Standard Specifications for mortar composition.

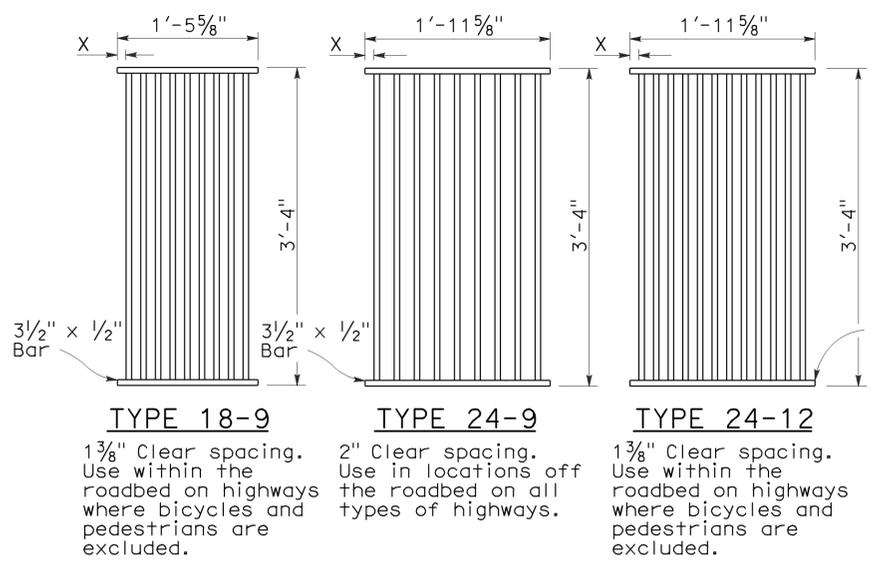


PLAN TYPE GDO

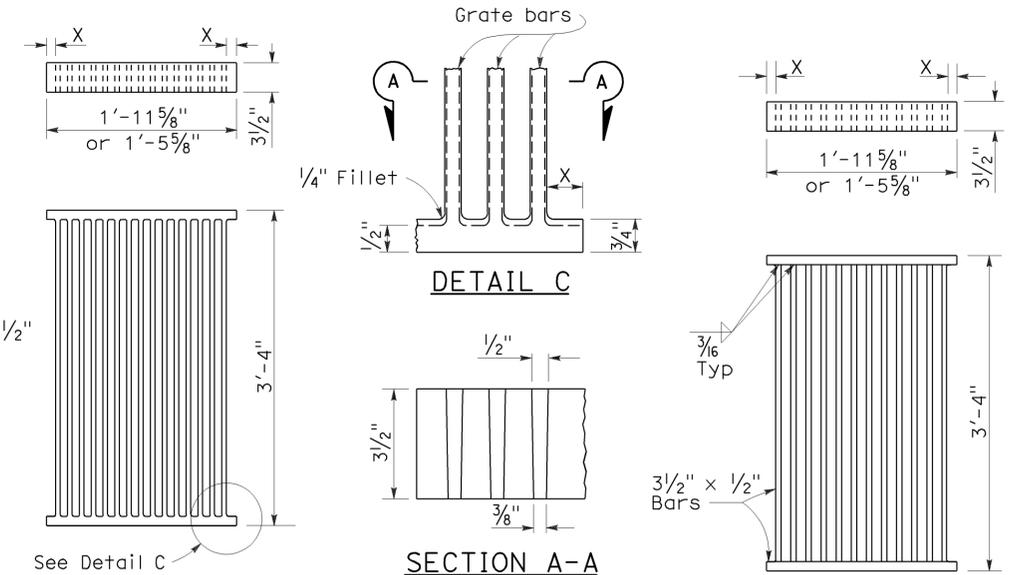
TABLE B

CURB TYPE	NORMAL CURB HEIGHT	CURB BATTER	"a" DIMENSION	"b" DIMENSION
A1-6	6"	1 1/2"	T+7 1/2"	T+6 1/2"
A1-8	8"	2"	T+7"	T+6"
B1-6	6"	4"	T+5"	T+4"
Type A Dike	6"	3"	T+6"	T+5"

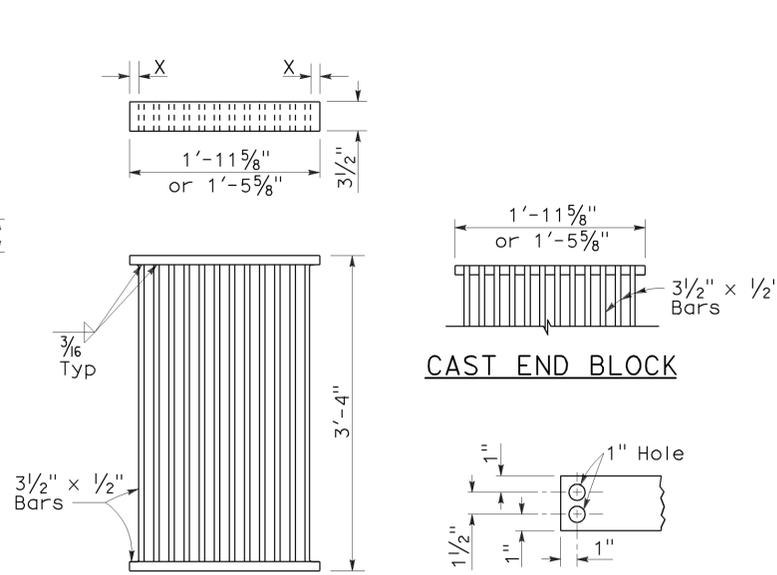
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DRAINAGE INLETS
NO SCALE



RECTANGULAR GRATE DETAILS
(See table below)



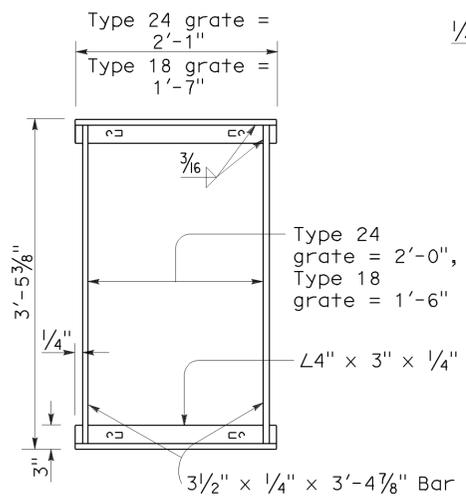
ALTERNATIVE CAST NODULAR IRON GRATE OR CAST STEEL GRATE



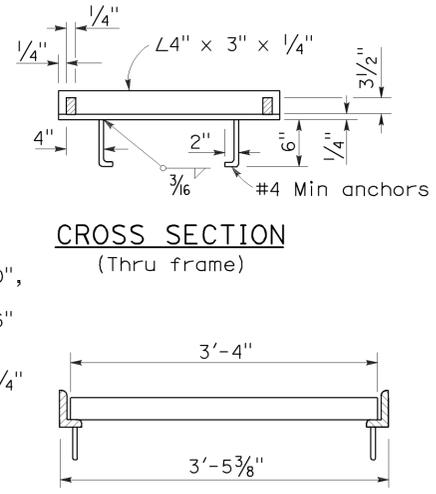
ALTERNATIVE WELDED GRATE

NOTES:

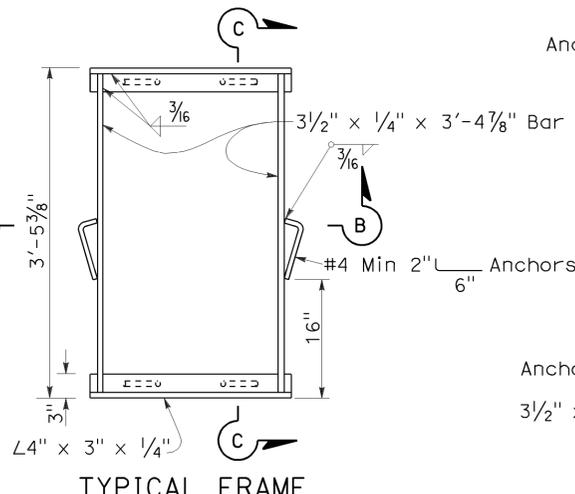
1. Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
2. Contractor has the option of using cast nodular iron, cast steel, welded, bolted, or cast end block grate.
3. See Special Provisions for requirements pertaining to galvanizing or asphalt dipping of grates and frames.
4. Rounded top of bars optional on all grates.
5. Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
6. Full penetration butt welds may be substituted for the fillet welds on all anchors.
7. Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
8. Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).



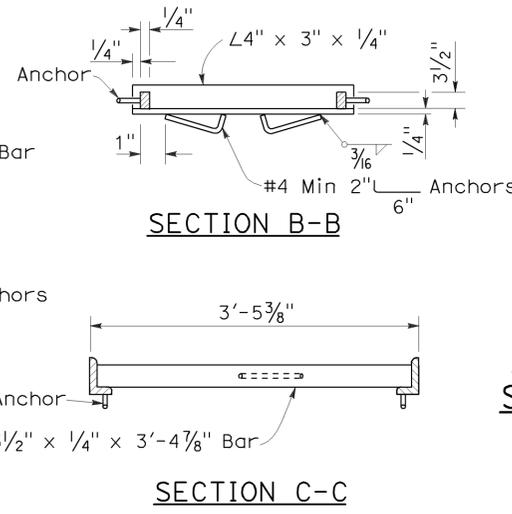
TYPICAL FRAME



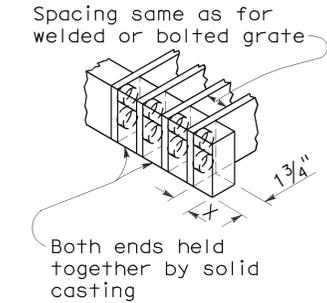
LONGITUDINAL SECTION
(Thru frame and grate)



TYPICAL FRAME



ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME
(For details not shown, See Rectangular Frame Details)



ALTERNATIVE CAST NODULAR IRON OR CAST STEEL END BLOCK GRATE

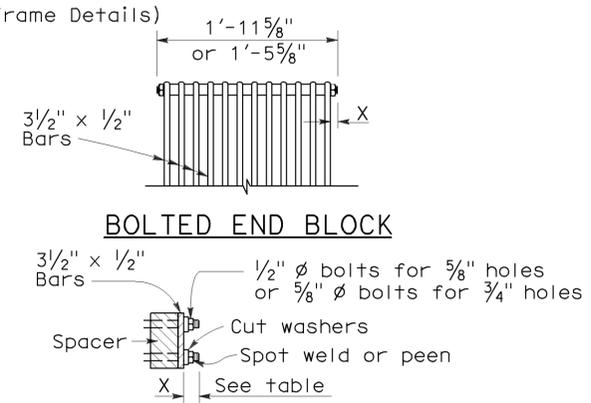
RECTANGULAR FRAME DETAILS
(For all rectangular grates)

GRATE BAR SPACING TABLE

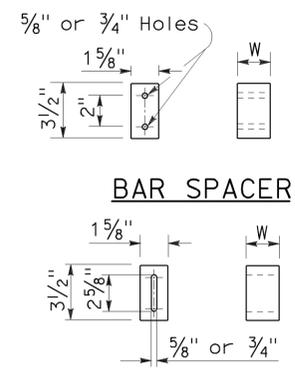
TYPE	NO. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 3/8"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1 3/8"	1 1/4"

INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	REDWOOD	42
OMP	PLATE	177
OMPI	PLATE	177

INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
G0,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22



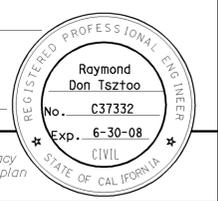
BOLTING DETAIL
ALTERNATIVE BOLTED GRATE



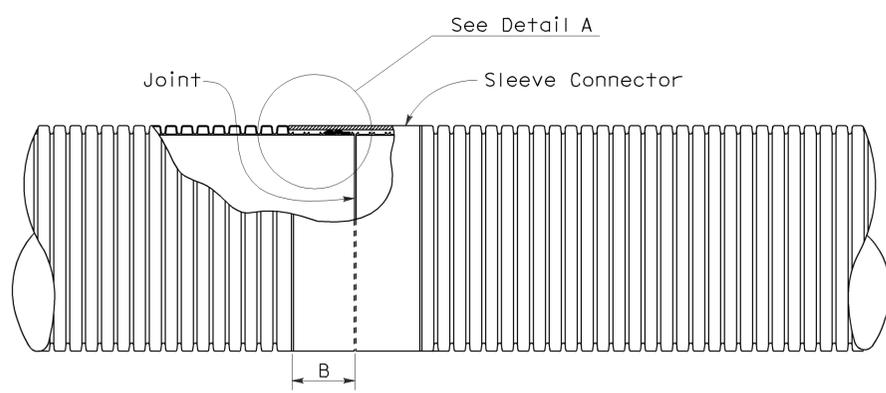
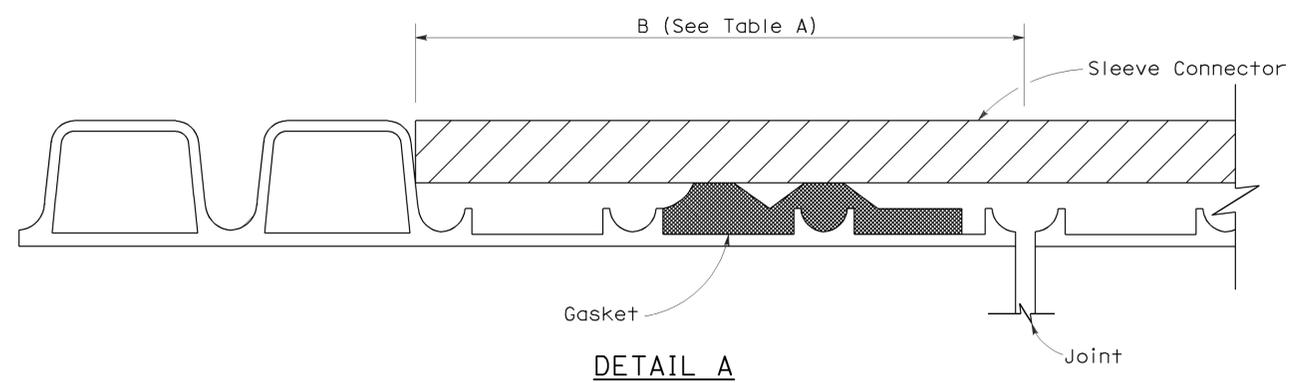
ALTERNATIVE SPACER
W = 1 3/8" or 2"

BASIS FOR MISC IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS

(See General Notes, No 8)



To accompany plans dated 6-20-11



- NOTES:**
- For pipe sections installed on straight alignment, the pipe sections shall be joined to achieve maximum joint overlap at all points on the periphery as indicated in Table A where the plans call for positive or watertight joints. Maximum joint overlap is recommended where the plans call for standard joints, but in no case shall the joint overlap be less than 3/2".
 - For pipe sections installed on curved alignment, the maximum angle of deflection from straight alignment at any joint shall not exceed two degrees. Where the plans call for watertightness, field testing for compliance is required. Where plans call for positive joints, the pipe sections shall be joined to achieve Table A Dimensions on one side of the joint. Joints classified as standard shall have no less than 3/2" joint overlap at any point on the periphery.
 - Factory applied insertion line limit shall be placed on spigot.
 - Liner insert to be used inside of existing pipe.

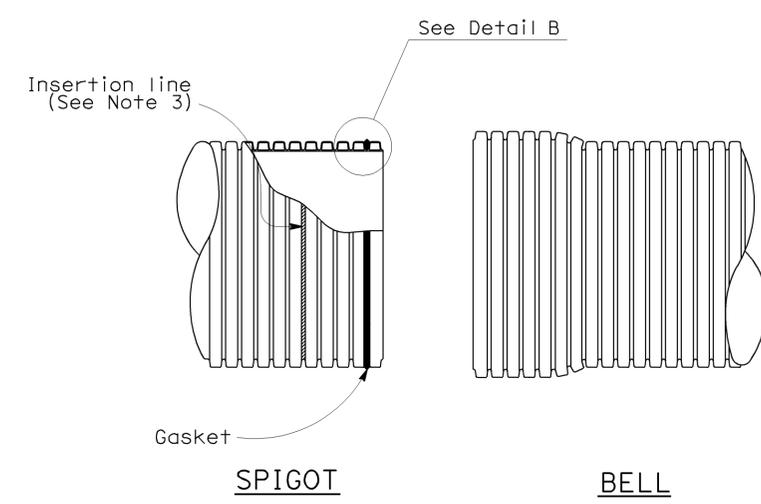
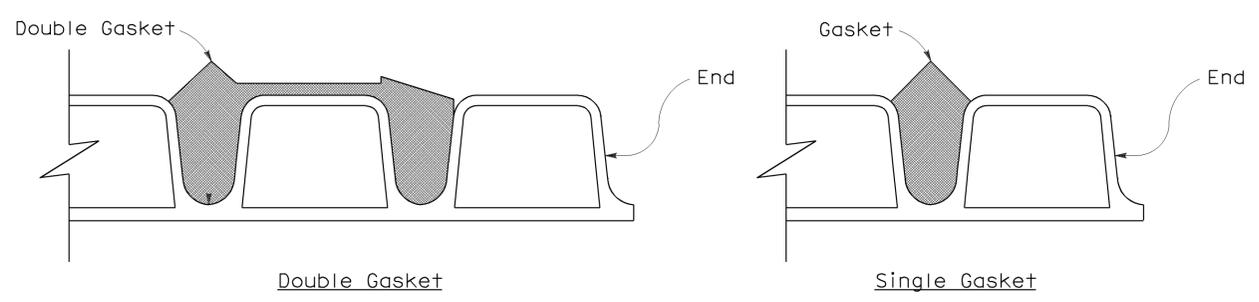
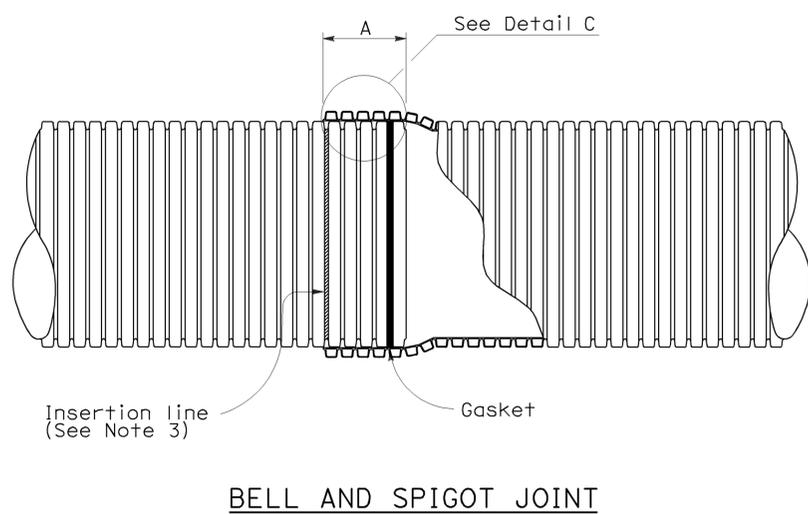
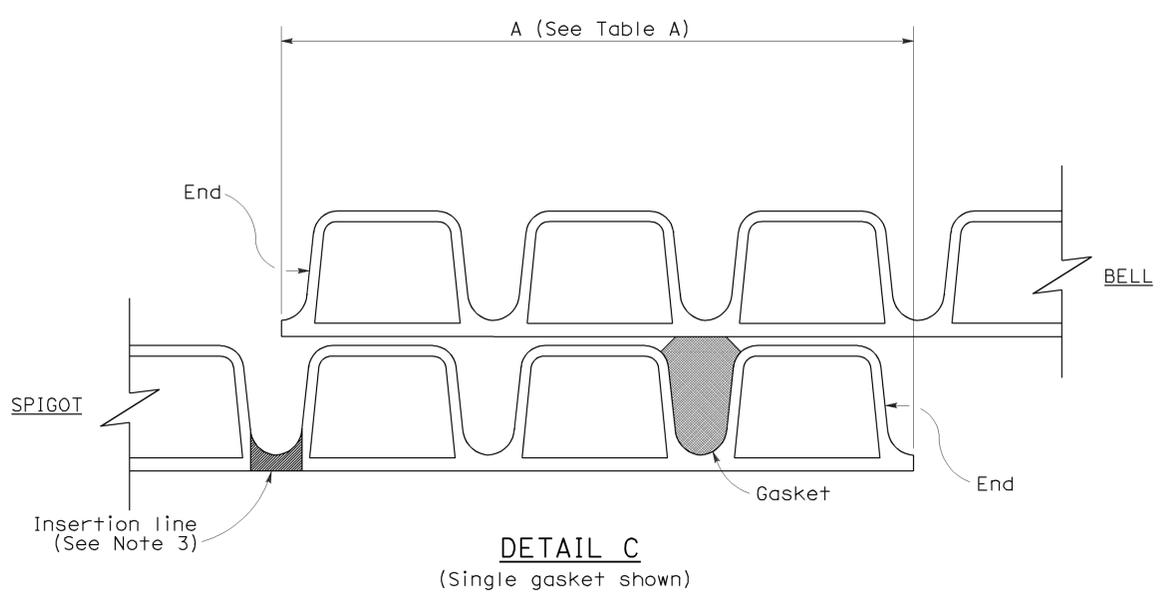


TABLE A

JOINT OVERLAP DIMENSIONS		
PIPE Dia (NOMINAL)	A	B
12"	5 3/4"	4 1/4"
15"	6 3/4"	5 5/8"
18"	6 3/4"	5 5/8"
21"	8 1/2"	5 5/8"
24"	8 1/2"	6 1/8"
30"	8 1/2"	7 1/8"
36"	8 1/2"	8 1/8"



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CORRUGATED POLYVINYL CHLORIDE PIPE
WITH SMOOTH INTERIOR
STANDARD AND POSITIVE JOINTS**

NO SCALE
NSP D97I DATED MARCH 7, 2008 SUPPLEMENTS THE STANDARD
PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP D97I

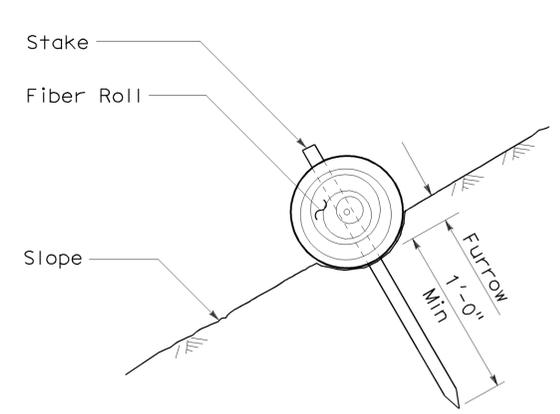
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	1	RO.0/10.2	140	157

Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 PLANS APPROVAL DATE
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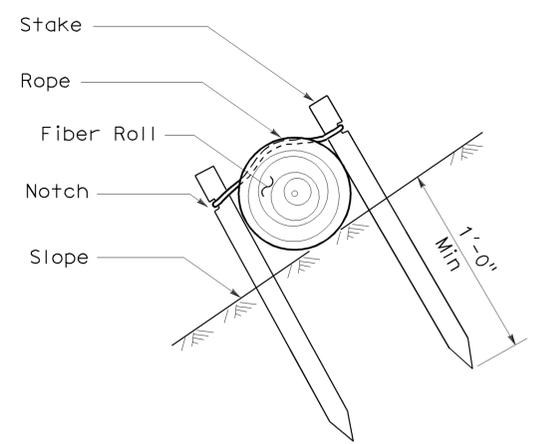
To accompany plans dated 6-20-11

NOTES:

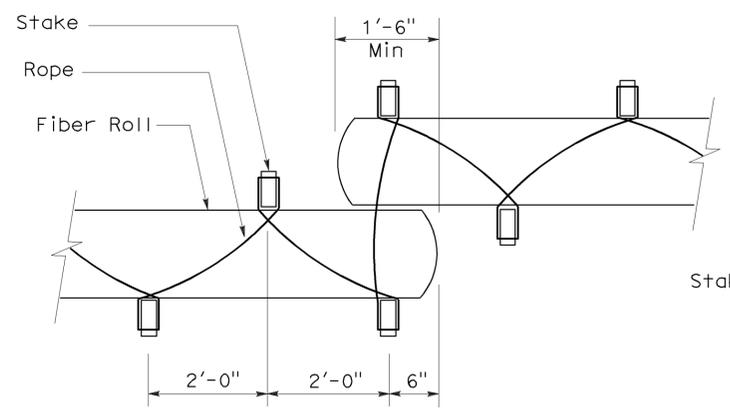
1. Fiber roll spacing varies depending upon slope inclination.
2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



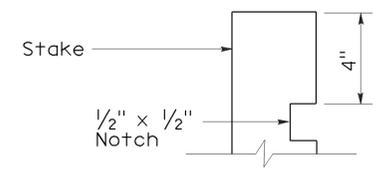
SECTION
FIBER ROLL
(TYPE 1)



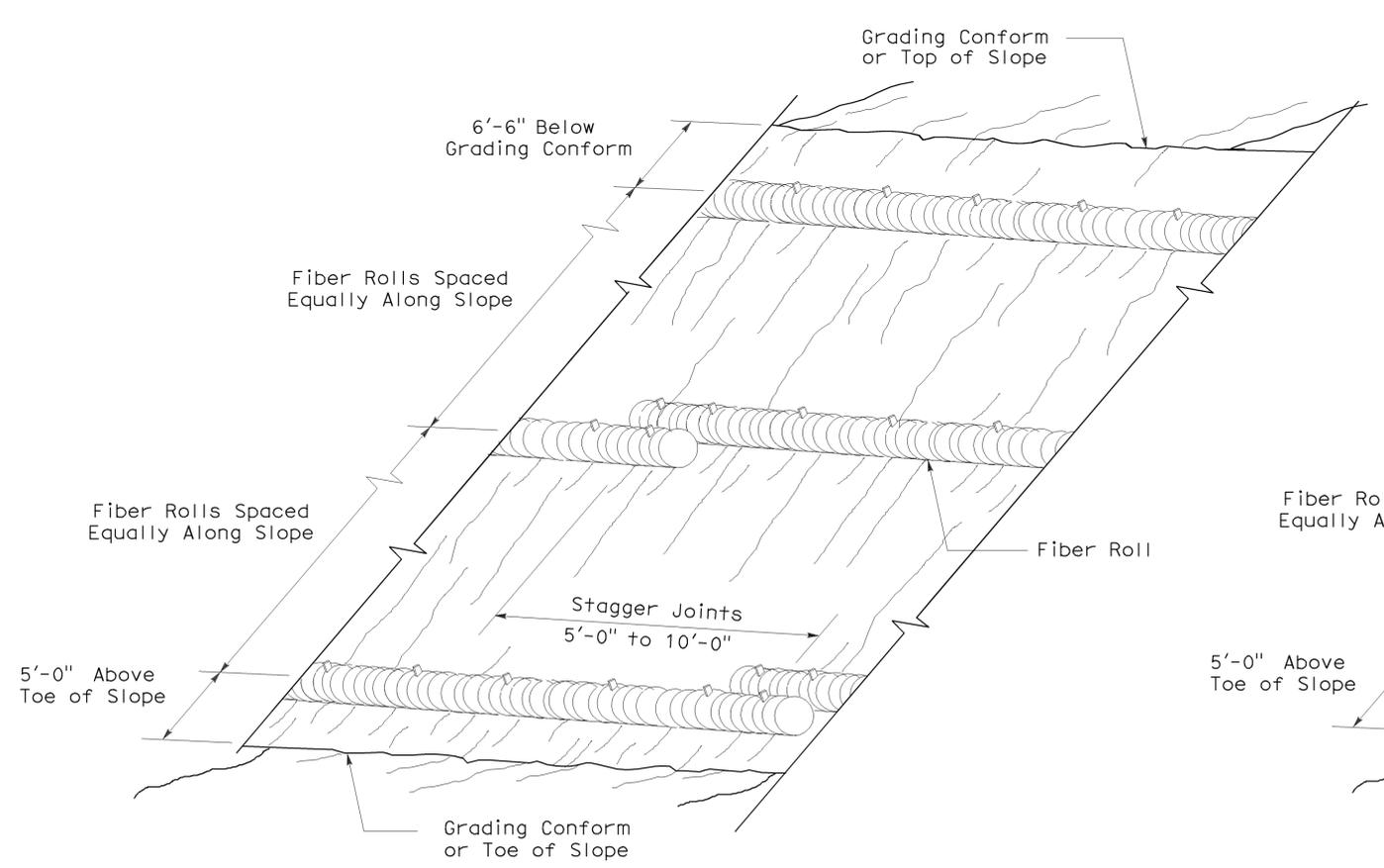
SECTION



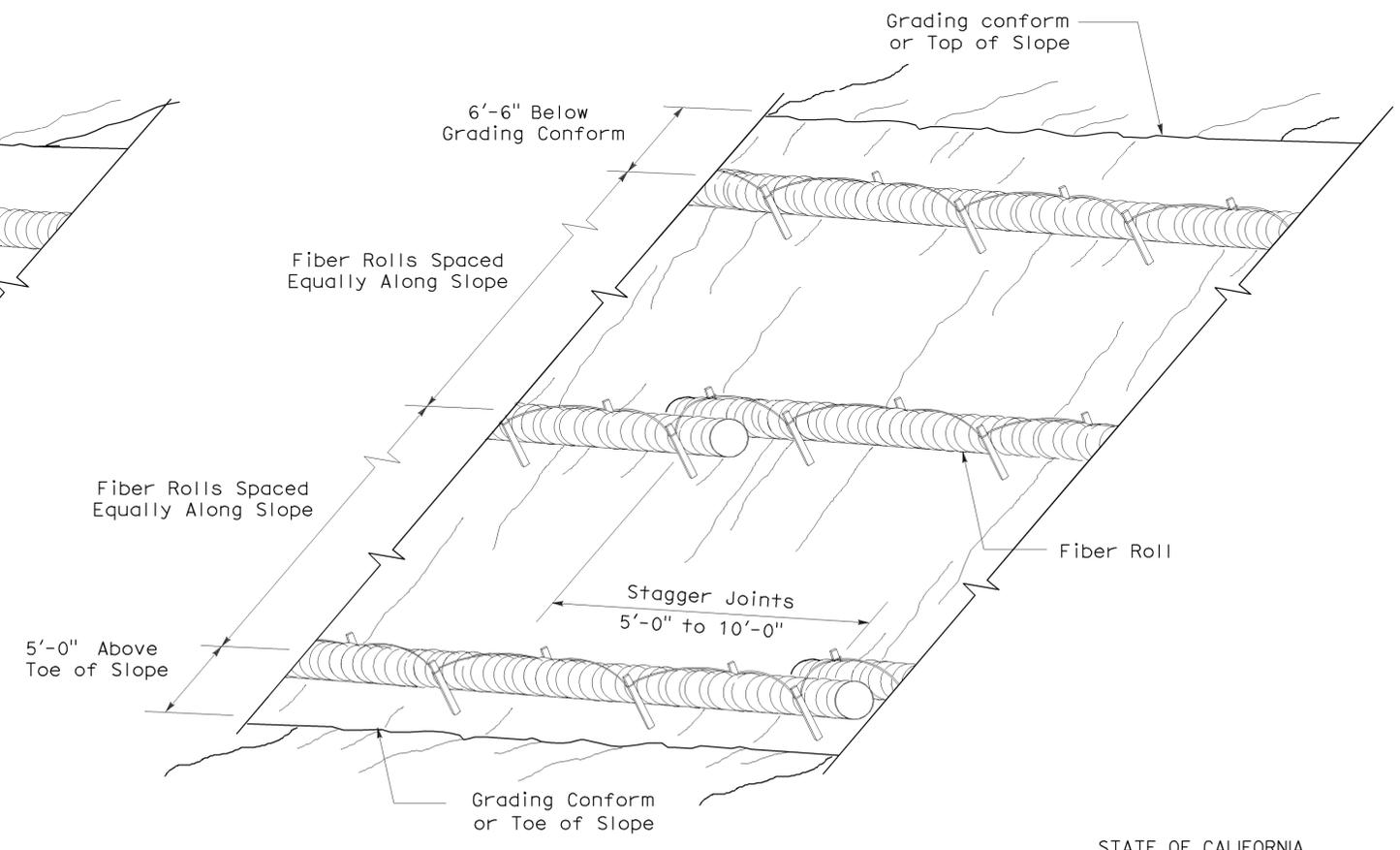
PLAN



ELEVATION
STAKE NOTCH DETAIL



PERSPECTIVE
FIBER ROLL (TYPE 1)



PERSPECTIVE
FIBER ROLL (TYPE 2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
EROSION CONTROL DETAILS
(FIBER ROLL)

NO SCALE

RNSP H51 DATED APRIL 3, 2009 SUPERSEDES NSP H51 DATED DECEMBER 1, 2006 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED NEW STANDARD PLAN RNSP H51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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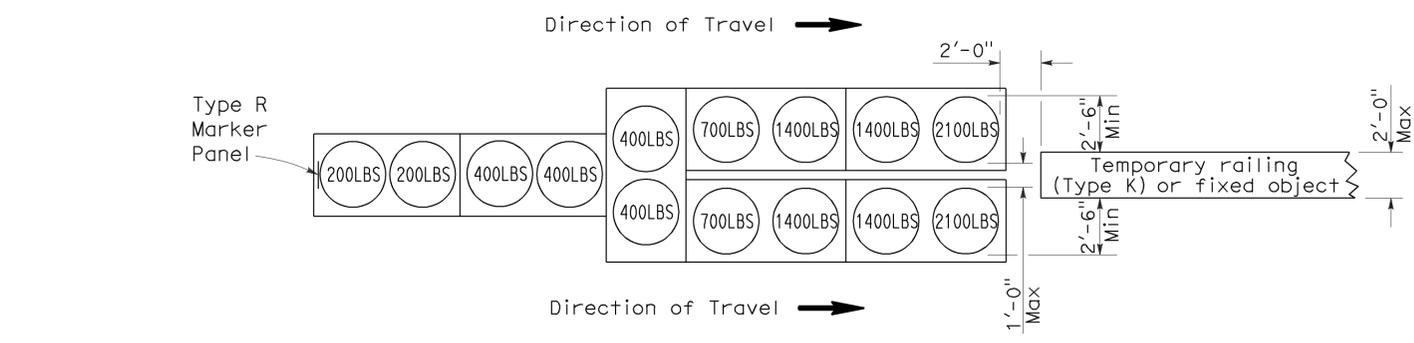
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

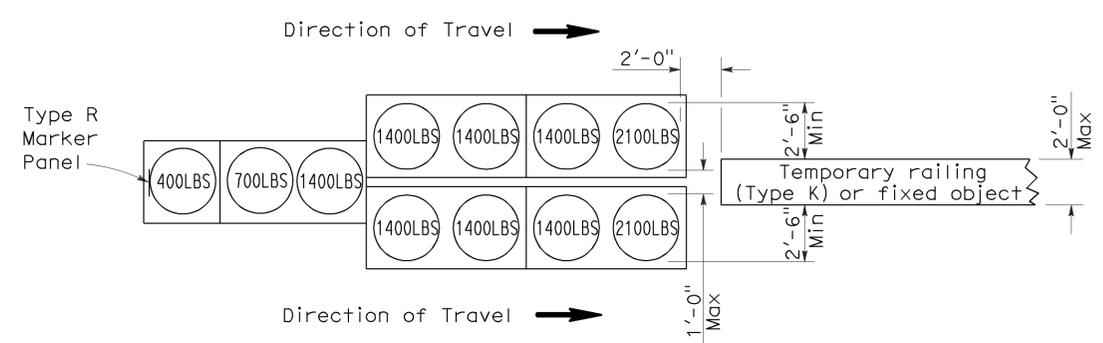
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To accompany plans dated 6-20-11



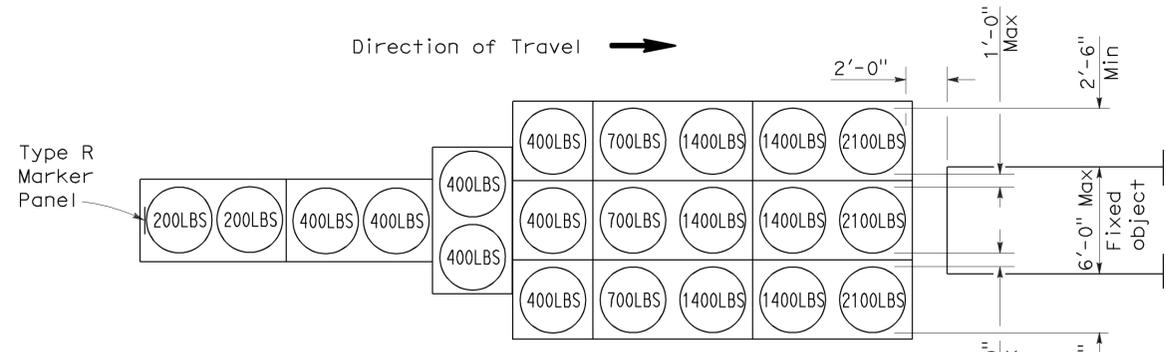
ARRAY 'TU14'

Approach speed 45 mph or more



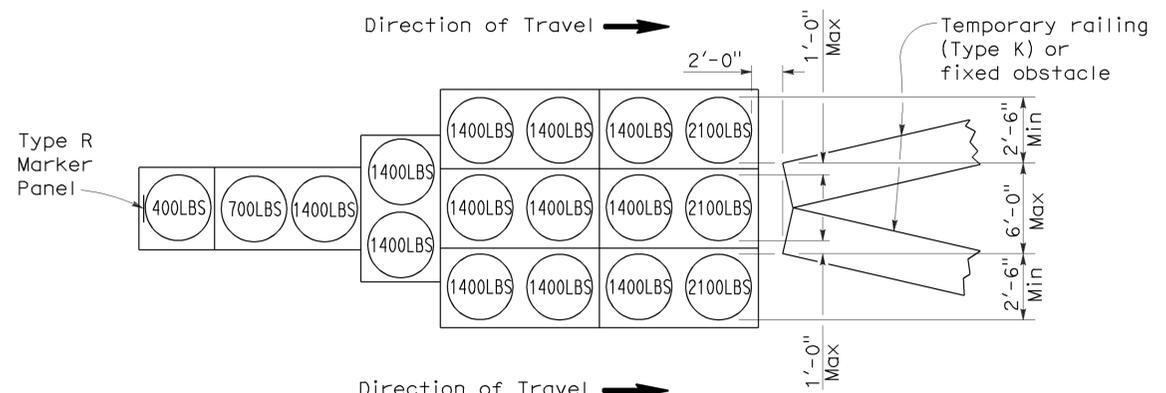
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more

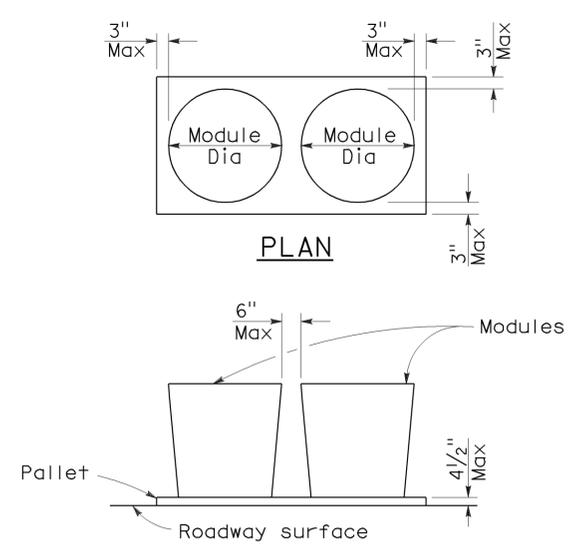


ARRAY 'TU17'

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
05	Scr	1	RO.0/10.2	142	157

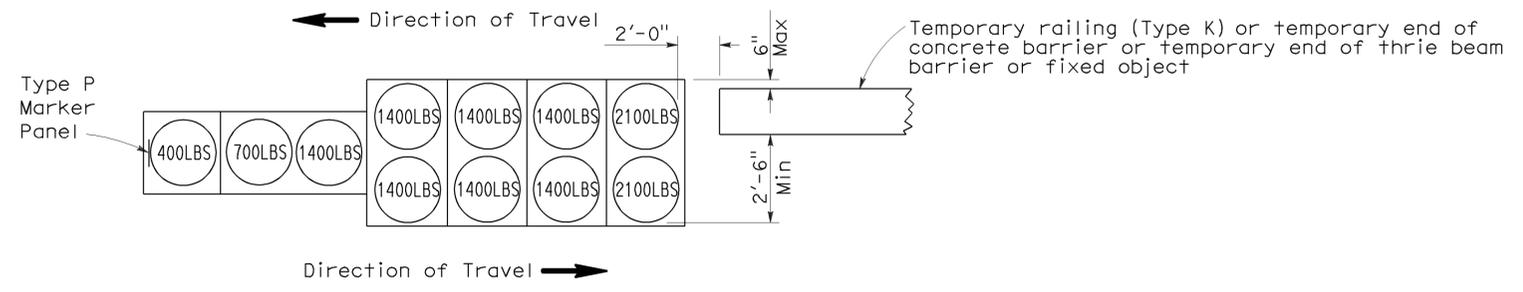
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

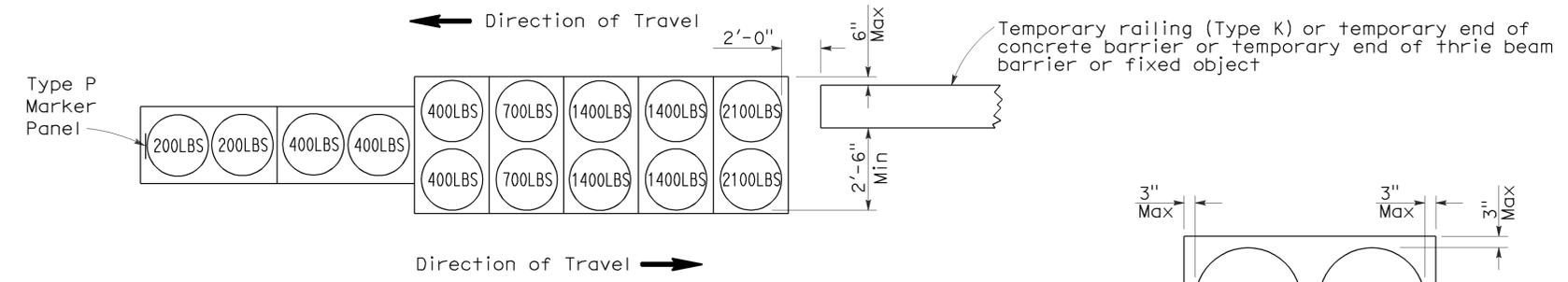
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 6-20-11



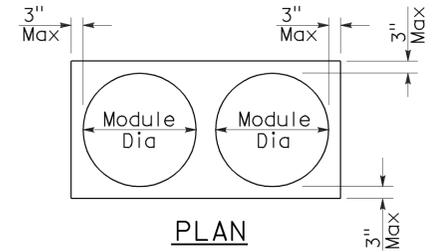
ARRAY 'TB11'

Approach speed less than 45 mph

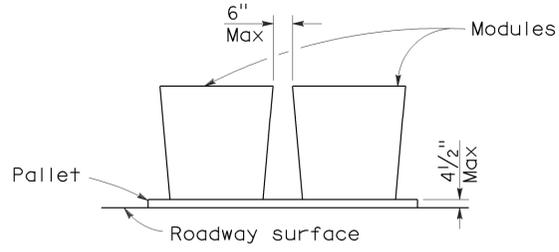


ARRAY 'TB14'

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
05	Scr	1	RO.0/10.2	143	157

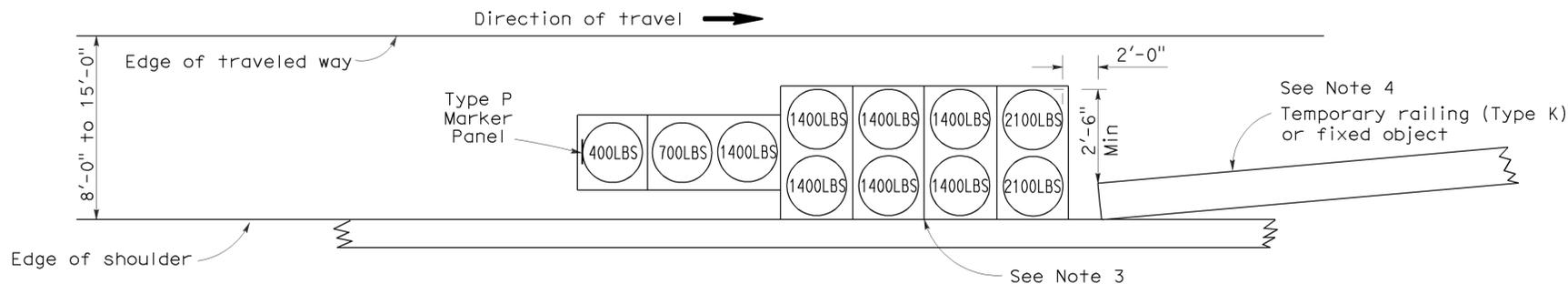
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

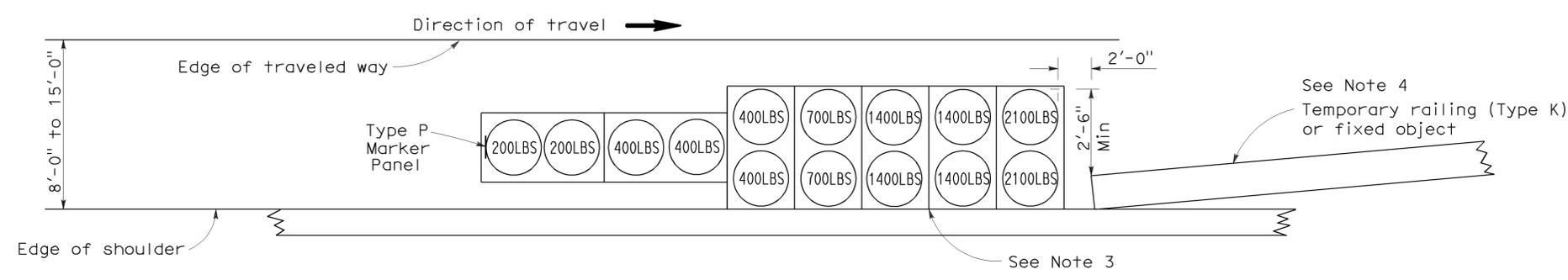
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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

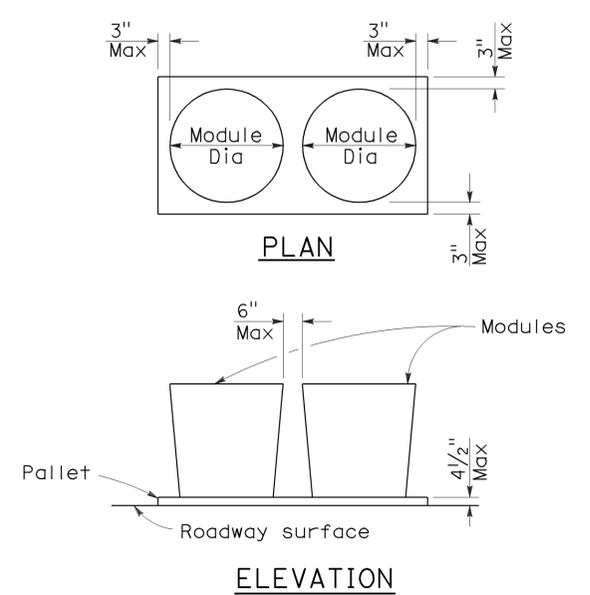
To accompany plans dated 6-20-11



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:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SCR	1	RO.0/10.2	145	157

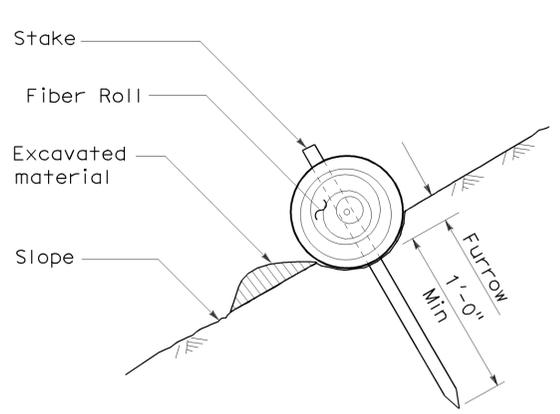
Robert B. Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

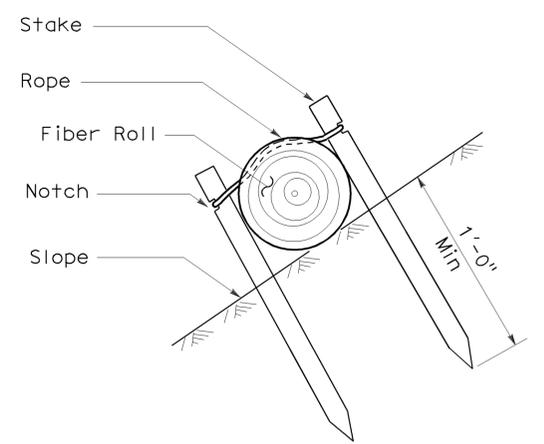
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

STATE OF CALIFORNIA
LICENSED LANDSCAPE ARCHITECT
Robert B. Schott
11-30-10
2-25-09
Date

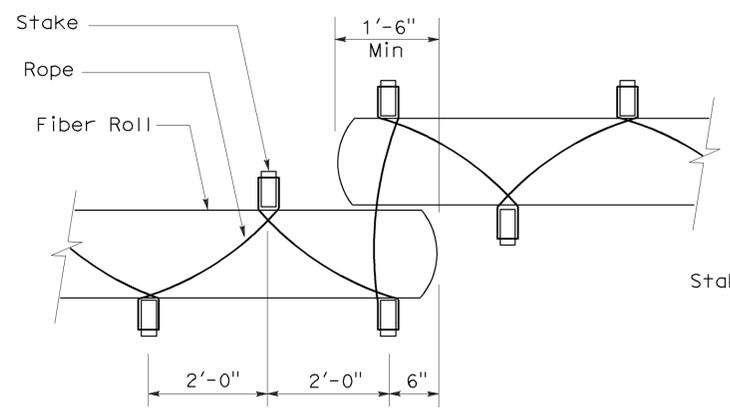
To accompany plans dated 6-20-11



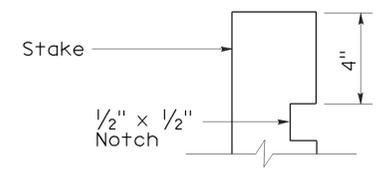
SECTION
TEMPORARY FIBER ROLL (TYPE 1)



SECTION
TEMPORARY FIBER ROLL (TYPE 2)

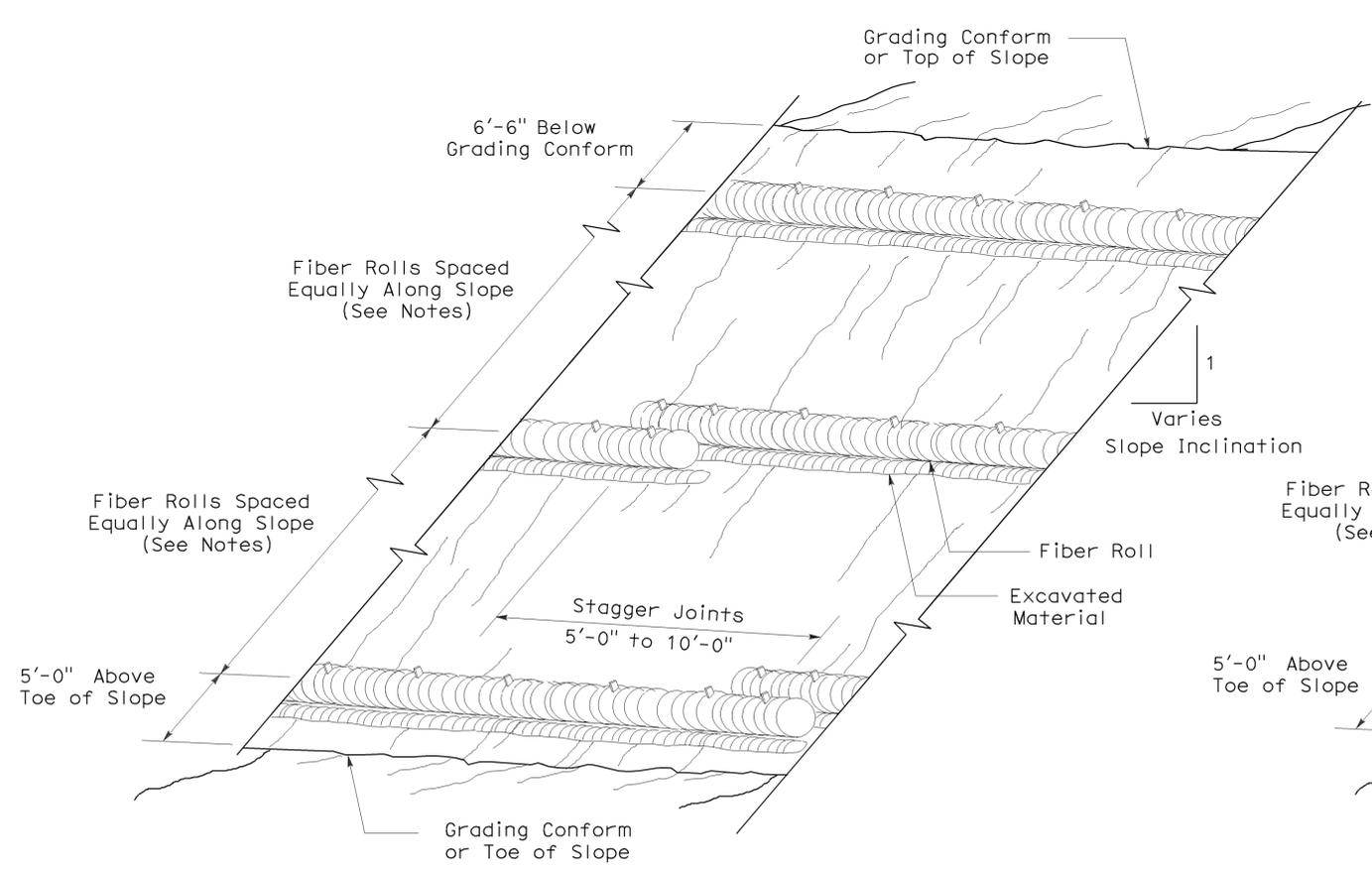


PLAN
TEMPORARY FIBER ROLL (TYPE 2)

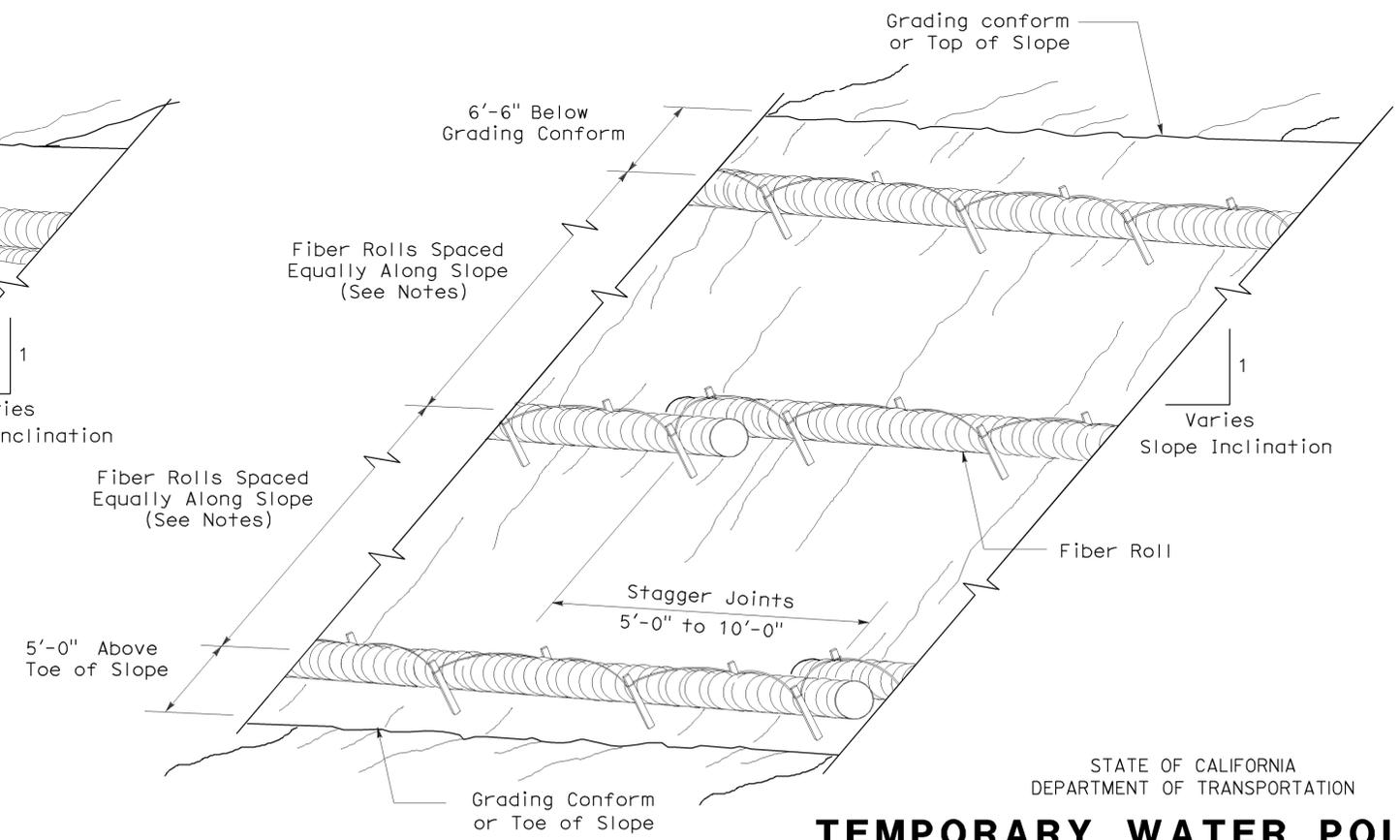


ELEVATION
STAKE NOTCH DETAIL

- 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

232

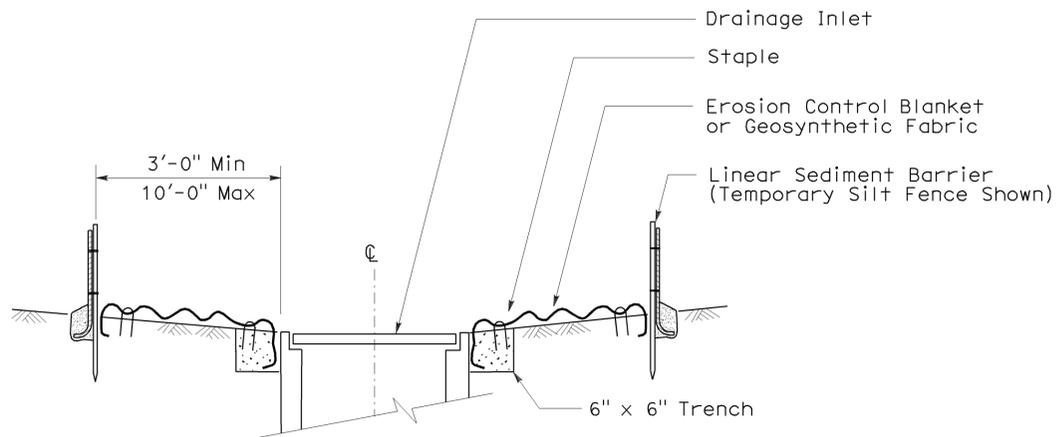
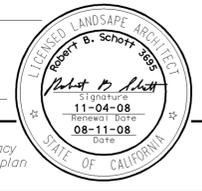
2006 REVISED STANDARD PLAN RSP T56

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	146	157

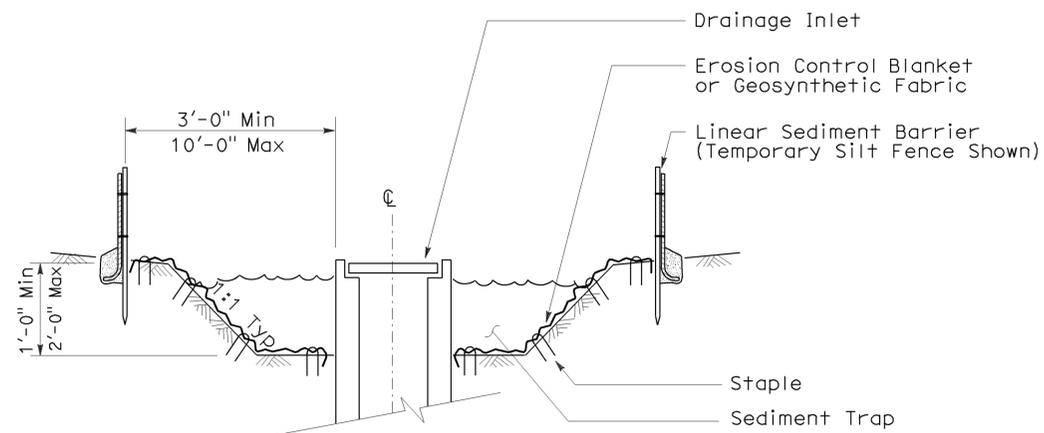
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS Approval DATE

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To accompany plans dated 6-20-11



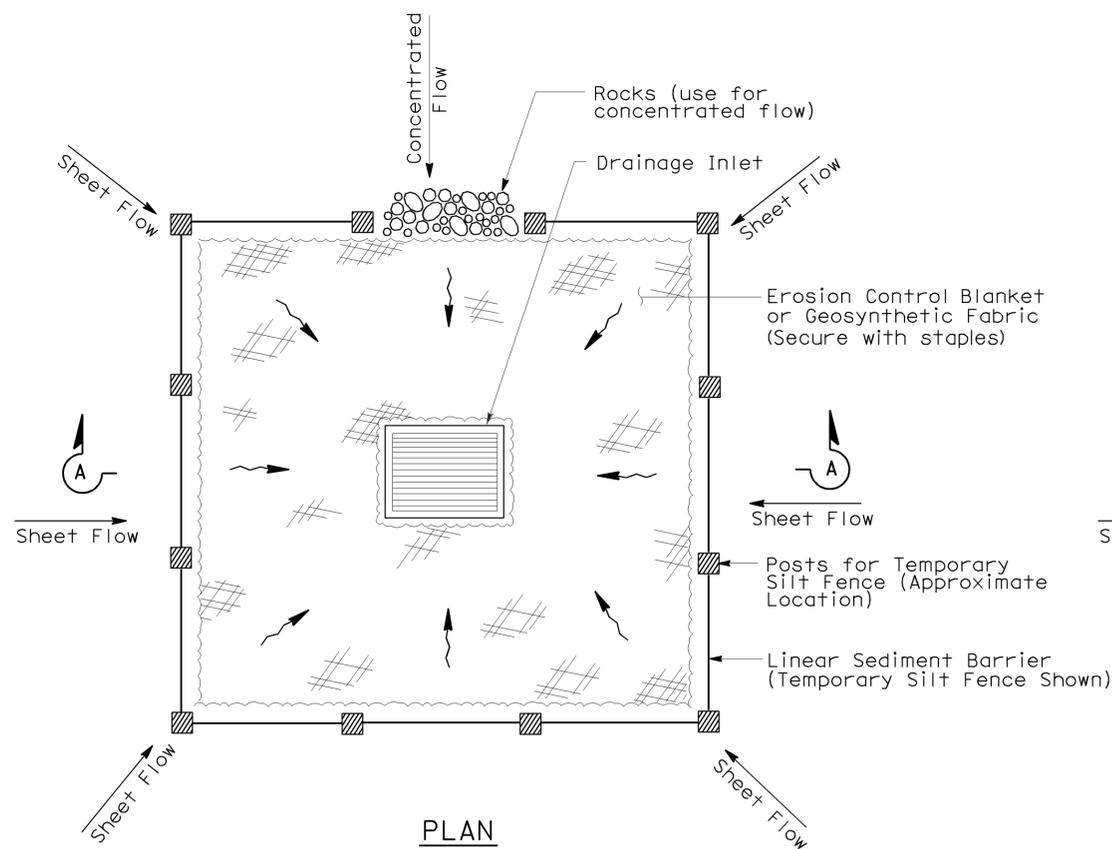
SECTION A-A



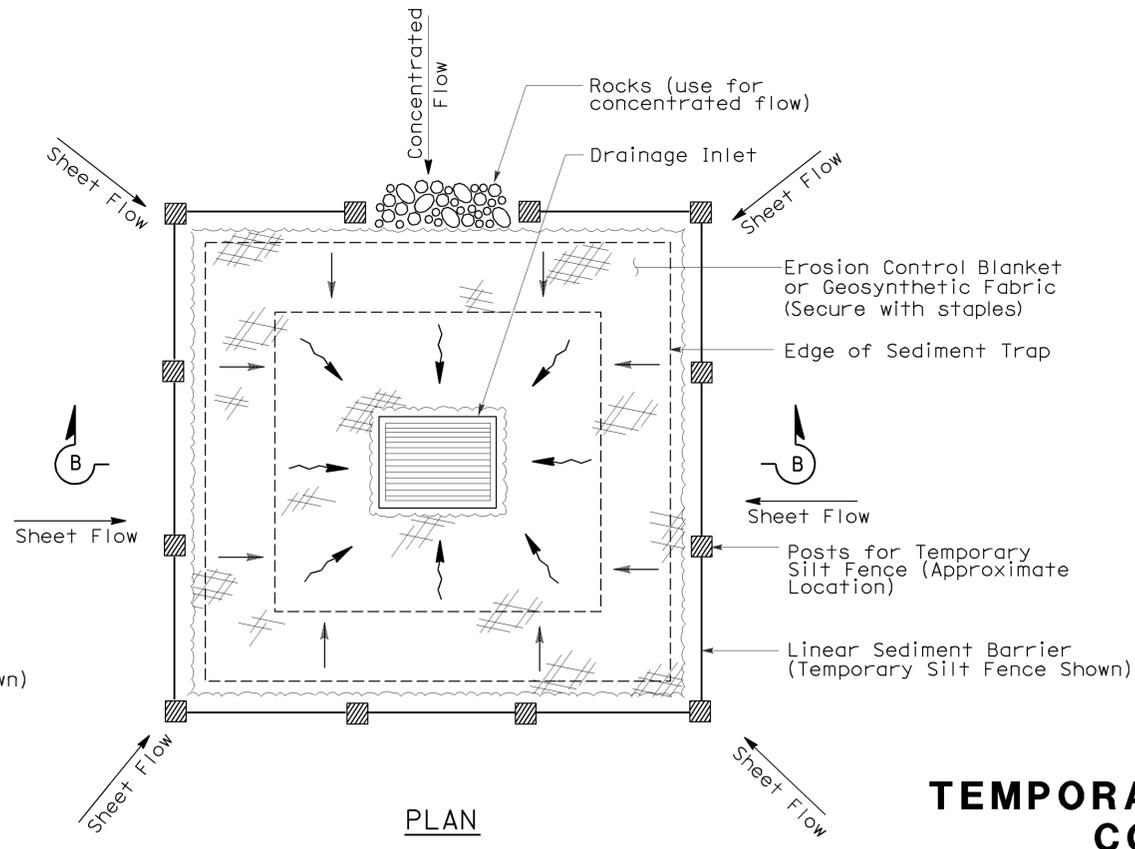
SECTION B-B

NOTES:

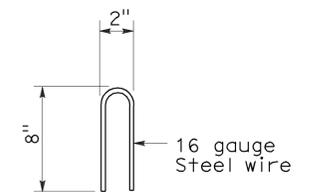
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



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

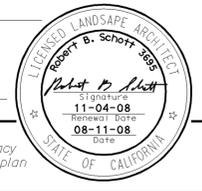


STAPLE DETAIL

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

NO SCALE

Nsp +61 dated august 15, 2008 supplements the standard plans book dated may 2006.

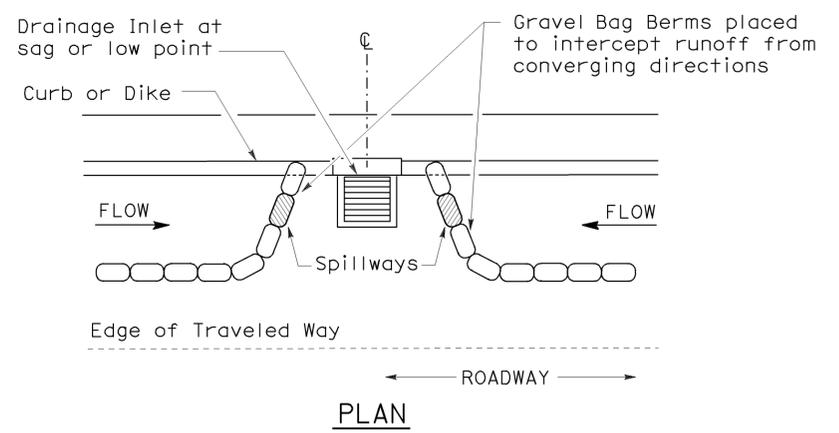


To accompany plans dated 6-20-11

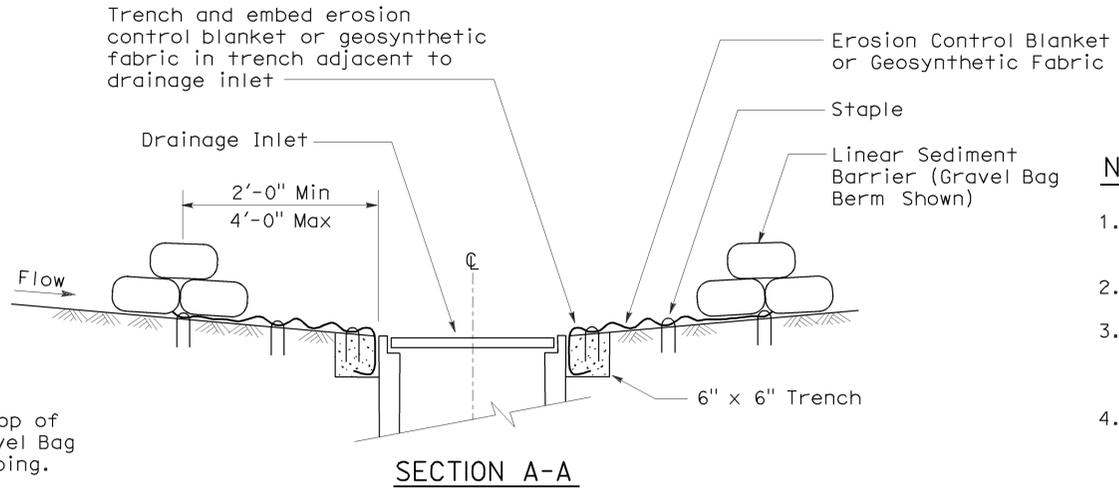
GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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



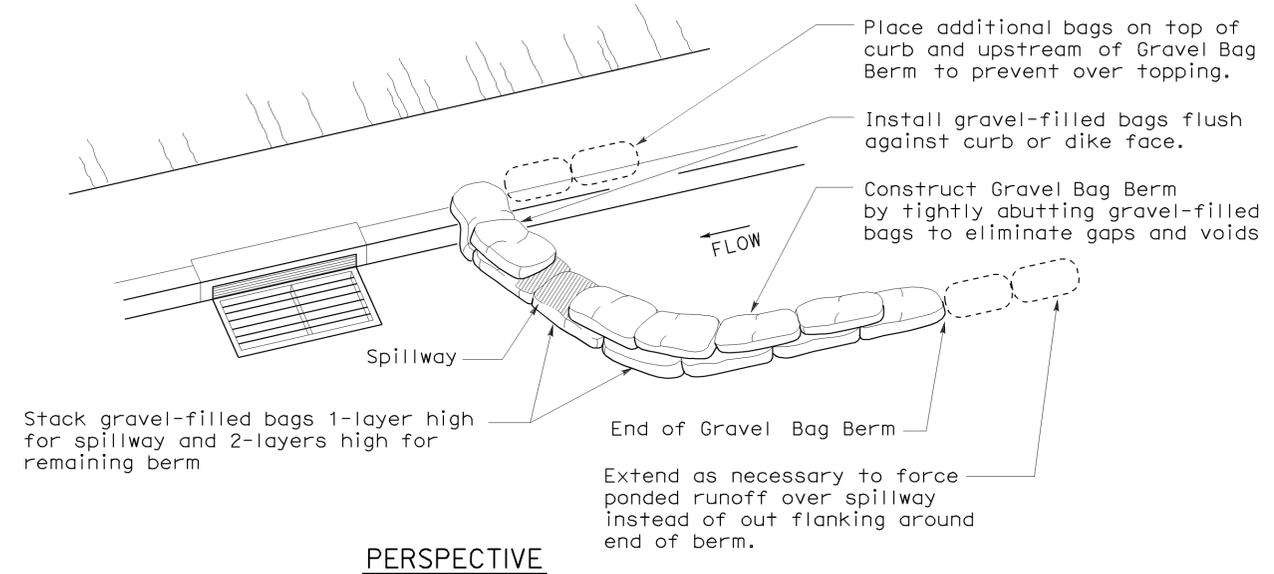
PLAN
CONFIGURATION FOR SAG POINT INLET
(GRAVEL BAG BERM)



SECTION A-A

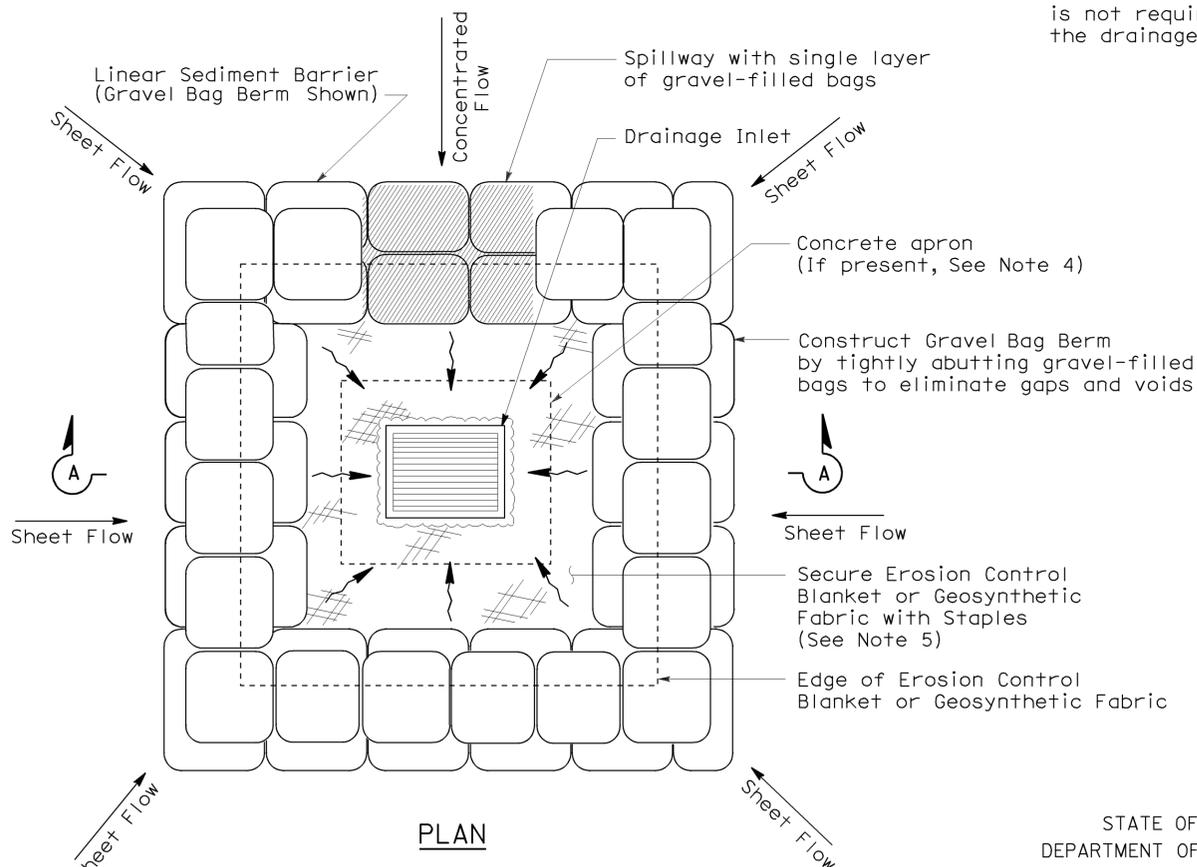
NOTES:

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.

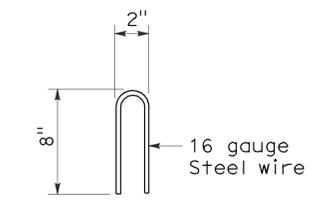


PERSPECTIVE

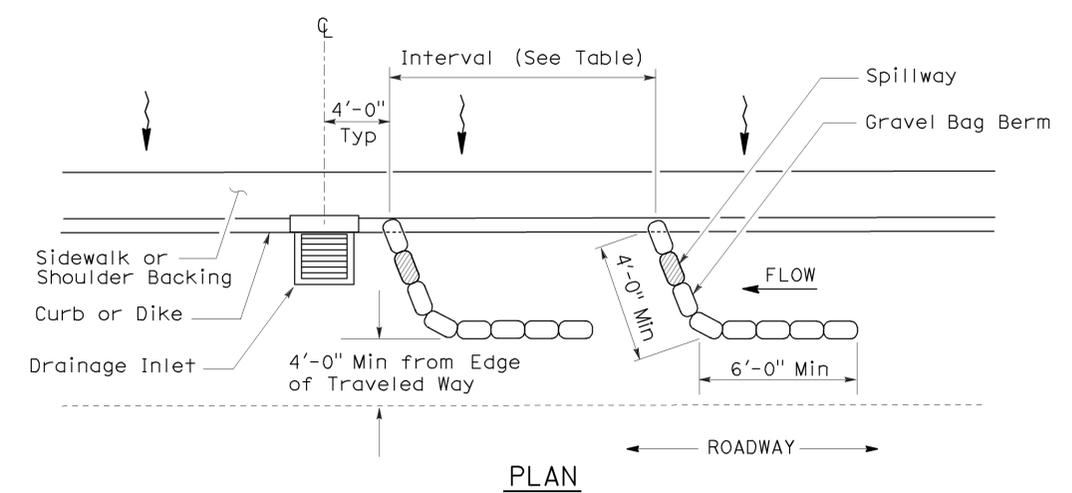
Stack gravel-filled bags 1-layer high for spillway and 2-layers high for remaining berm



PLAN
TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 3B)



STAPLE DETAIL



PLAN
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.

2006 NEW STANDARD PLAN NSP T62

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
05	Scr	1	RO.0/10.2	148	157

Robert B. Schott
LICENSED LANDSCAPE ARCHITECT

August 15, 2008
PLANS APPROVAL DATE

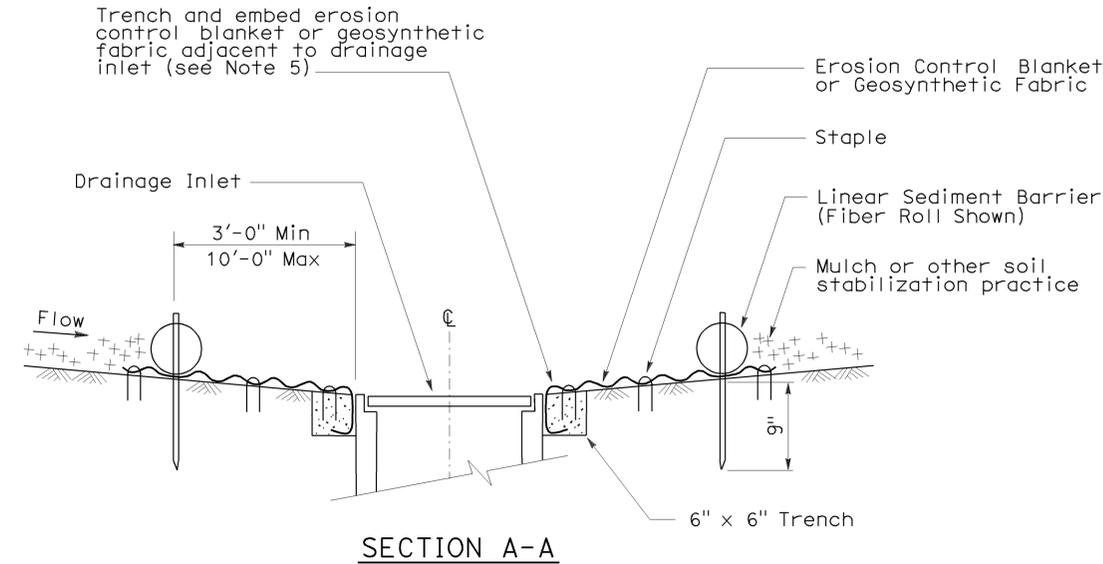
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

STATE OF CALIFORNIA
LICENSED LANDSCAPE ARCHITECT
Robert B. Schott
Signature: 11-04-08
Renewal Date: 08-11-08
Date

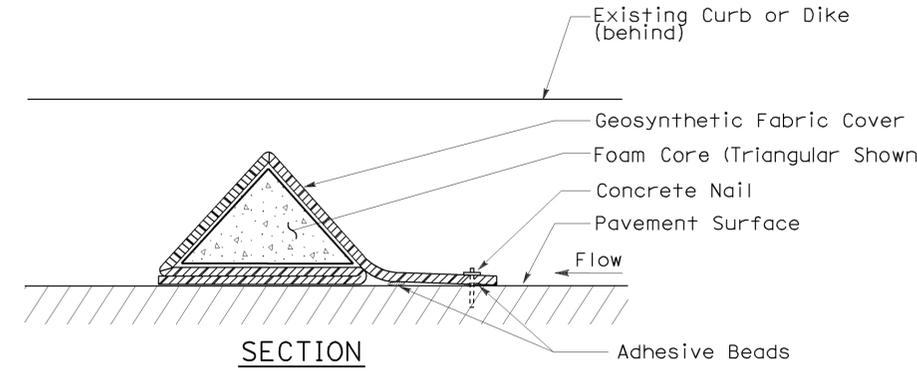
To accompany plans dated 6-20-11

NOTES:

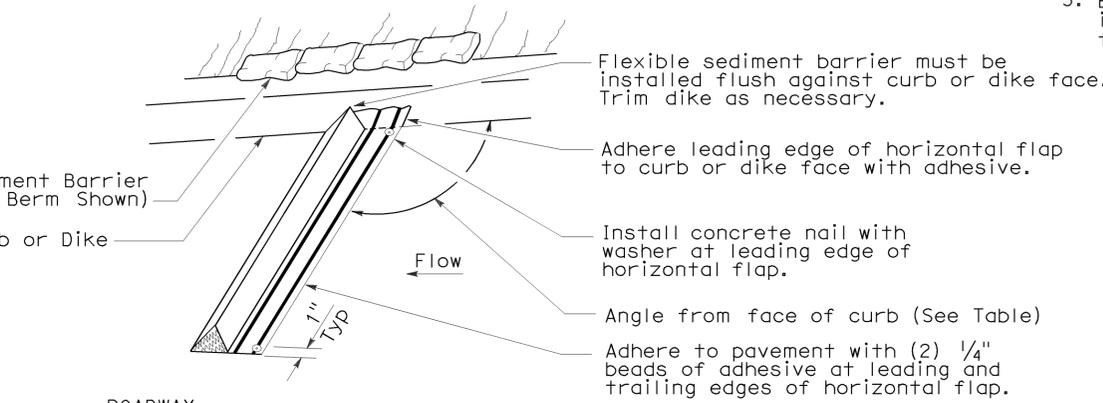
- See Standard Plan T51 for Temporary Silt Fence.
- Dimensions may vary to fit field conditions.
- Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
- Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.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



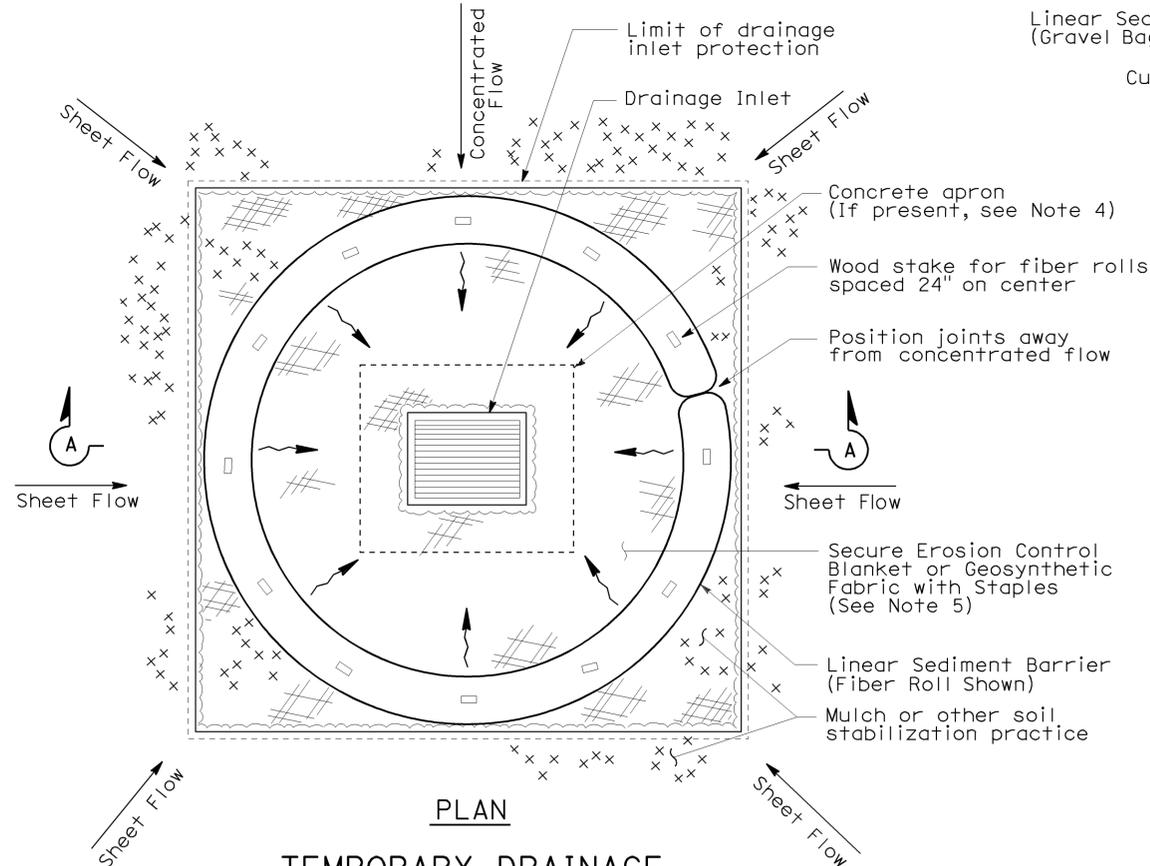
SECTION A-A



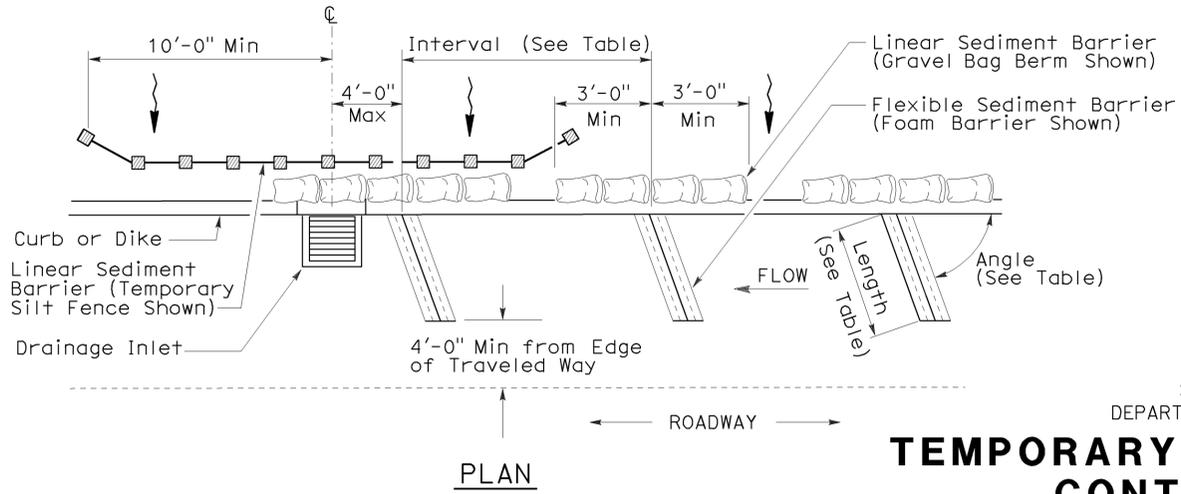
SECTION
FLEXIBLE SEDIMENT BARRIER DETAIL
(FOAM BARRIER SHOWN)



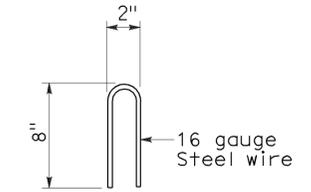
PERSPECTIVE



PLAN
TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 4A)



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



STAPLE DETAIL

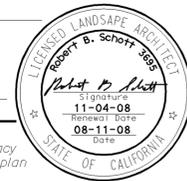
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY WATER POLLUTION
CONTROL DETAILS
(TEMPORARY DRAINAGE
INLET PROTECTION)**

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

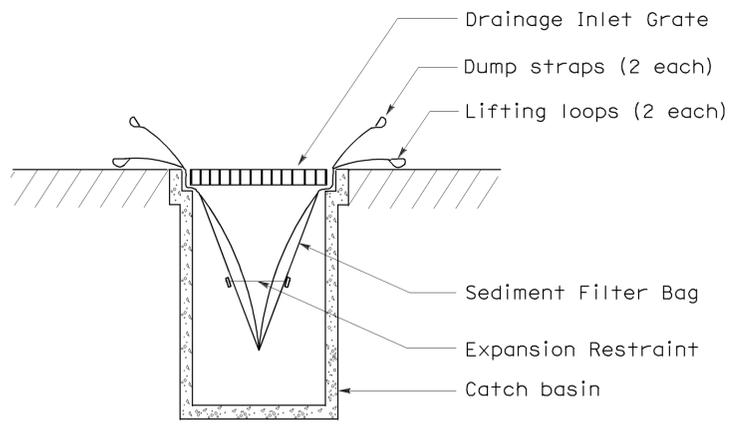
2006 NEW STANDARD PLAN NSP T63

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	R0.0/10.2	149	157

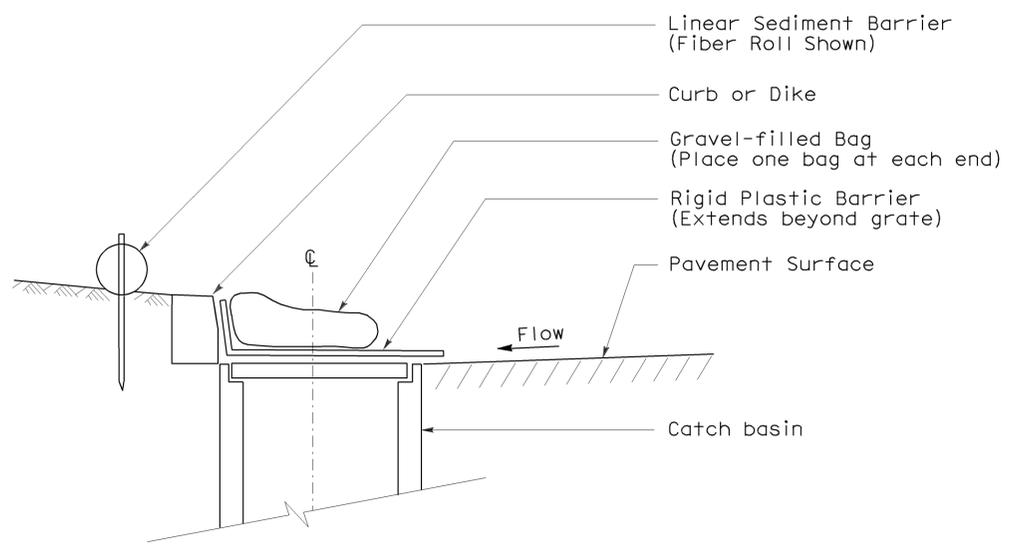
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS APPROVAL DATE
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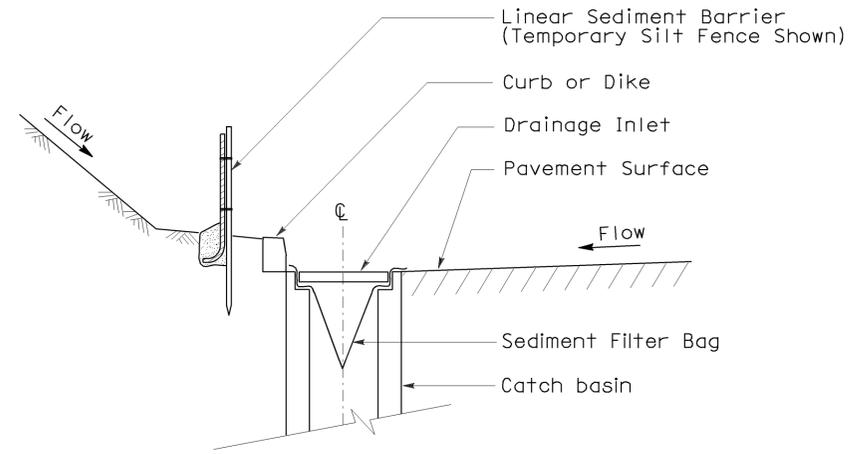
To accompany plans dated 6-20-11



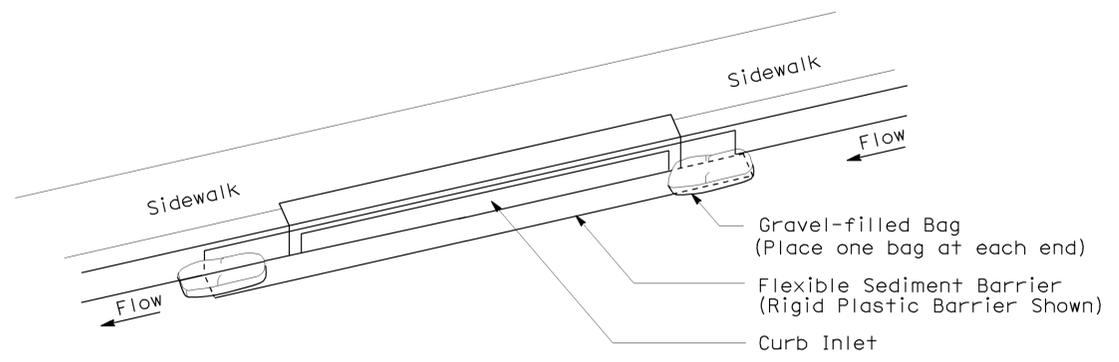
SECTION B-B
SEDIMENT FILTER BAG DETAIL



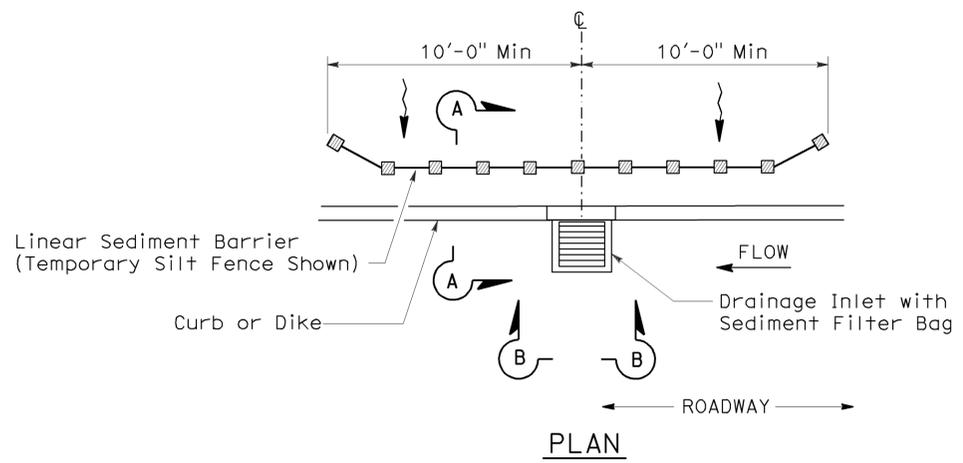
SECTION
TEMPORARY DRAINAGE
INLET PROTECTION (TYPE 6A)
(CATCH BASIN WITH GRATE)



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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
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.

NEW STANDARD PLAN NSP T64

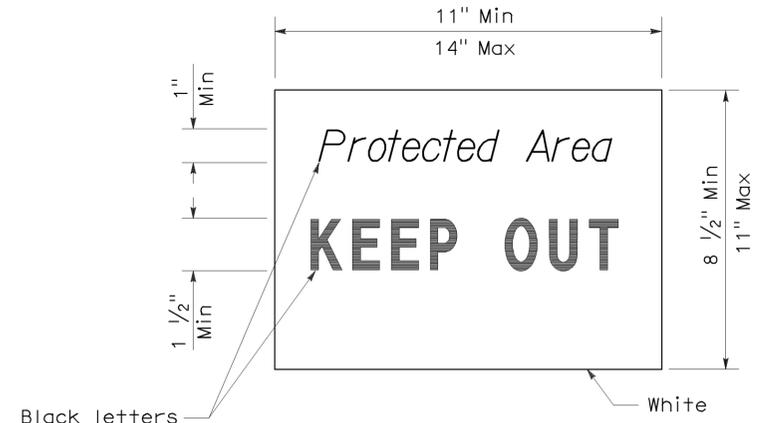
2006 NEW STANDARD PLAN NSP T64

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	150	157

Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 PLANS APPROVAL DATE
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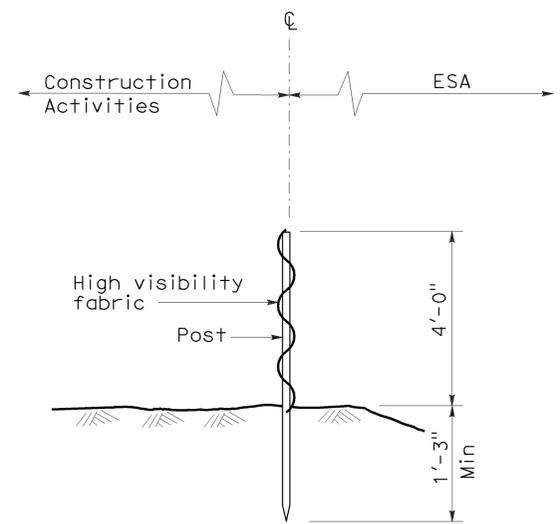
To accompany plans dated 6-20-11



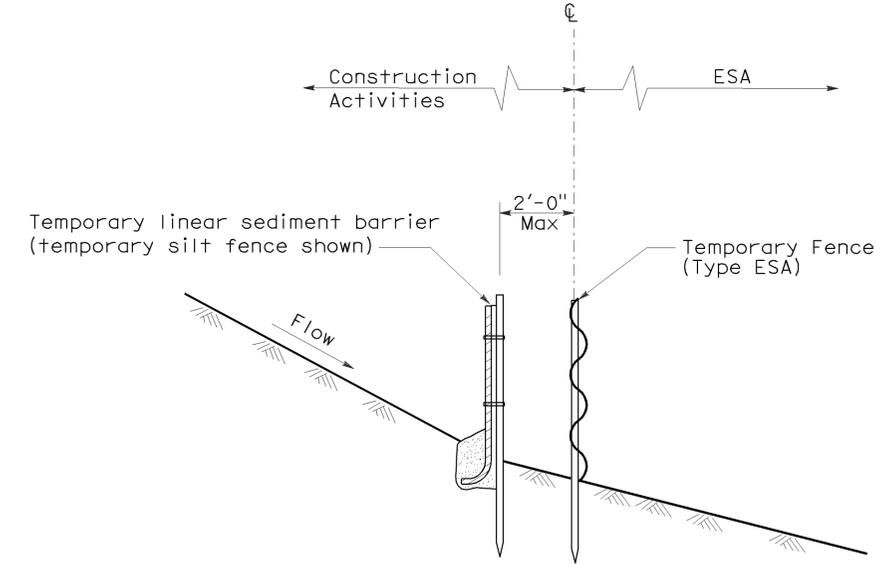
SIGN DETAIL

NOTE:

1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.

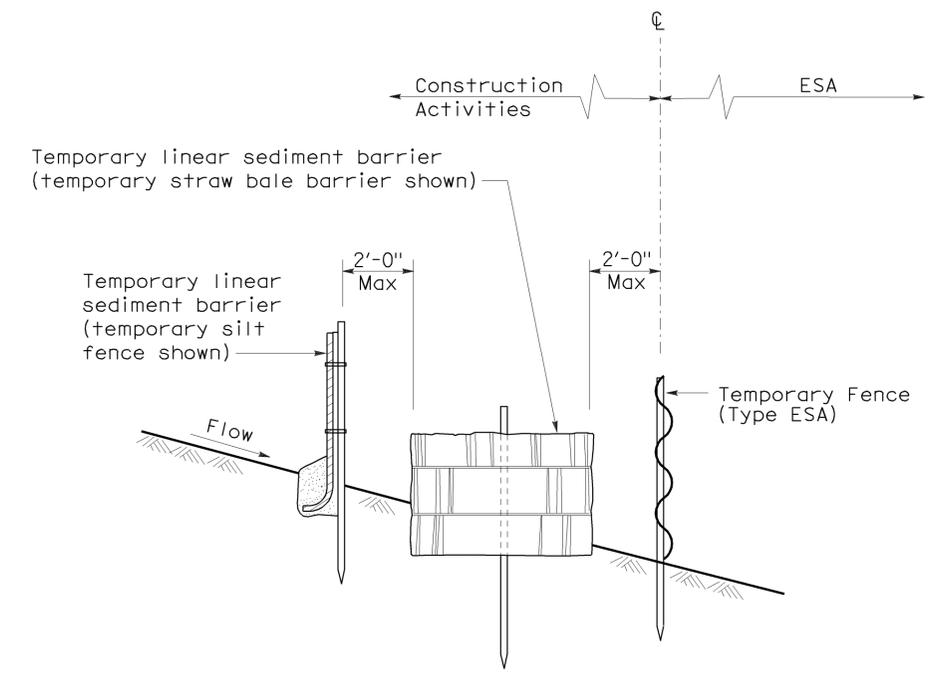


SECTION
TEMPORARY FENCE (TYPE ESA)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)

(See Note 1)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
AND TEMPORARY STRAW BALE BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)

(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS
[TEMPORARY FENCE (TYPE ESA)]
NO SCALE

NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T65

2006 NEW STANDARD PLAN NSP T65

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
05	SCR	1	RO.0/10.2	151	157

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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 6-20-11

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
05	Scr	1	RO.0/10.2	152	157

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

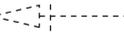
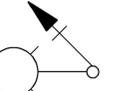
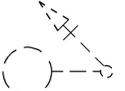
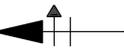
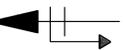
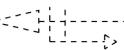
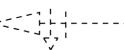
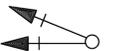
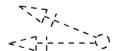
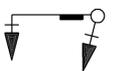
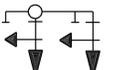
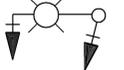
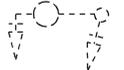
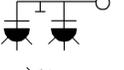
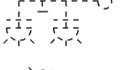
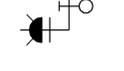
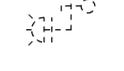
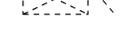
October 5, 2007
 PLANS APPROVAL DATE

To accompany plans dated 6-20-11

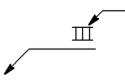
CONDUIT

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

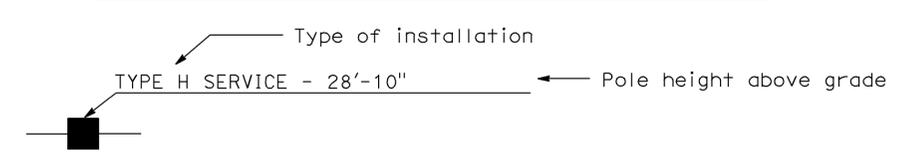
SIGNAL EQUIPMENT

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
		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

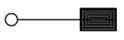
POLE-MOUNTED SERVICE DESIGNATION



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

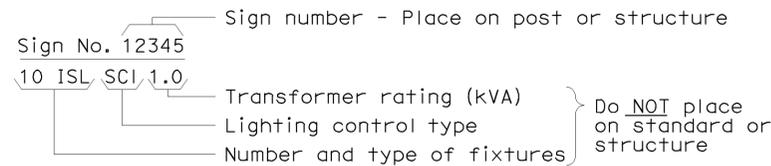
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

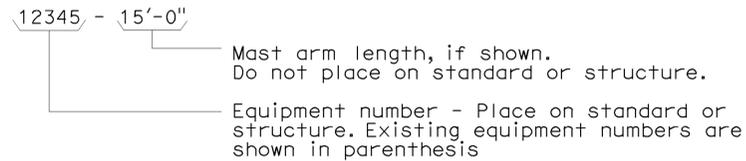
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

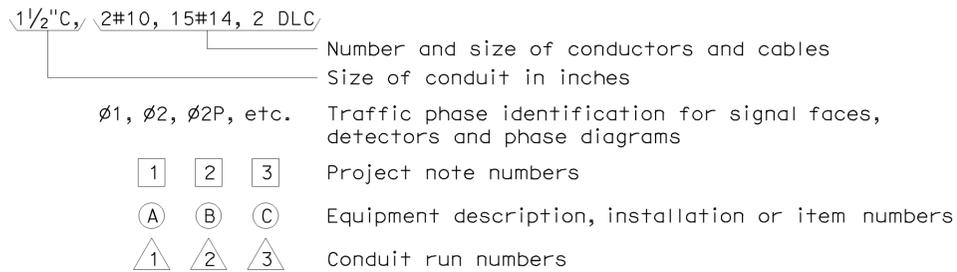
ILLUMINATED SIGN IDENTIFICATION NUMBER:



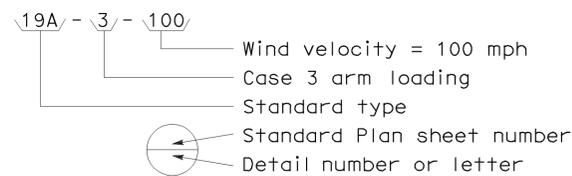
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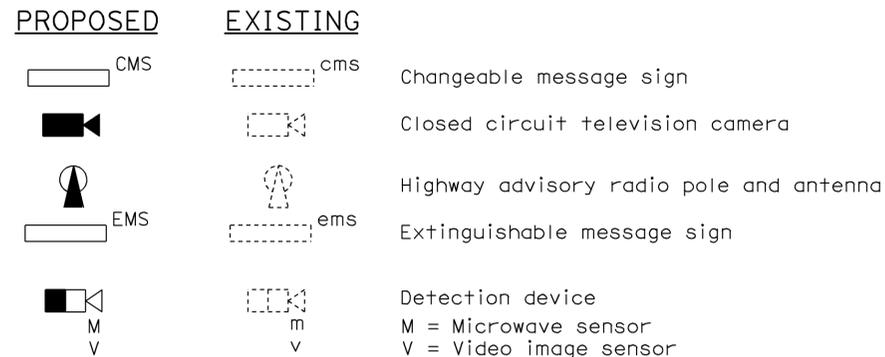
CONDUIT AND CONDUCTOR IDENTIFICATION:



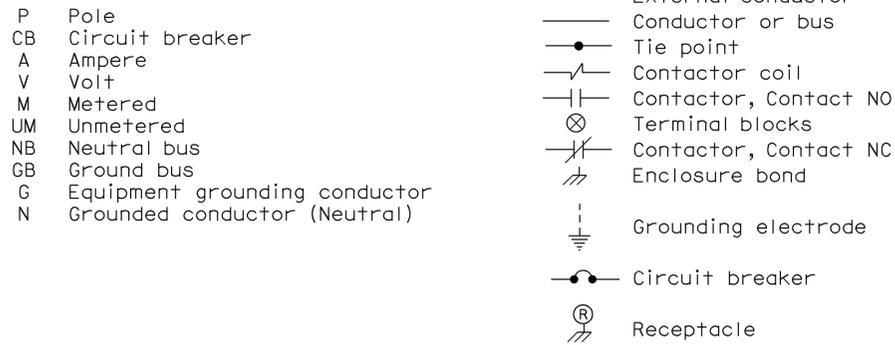
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



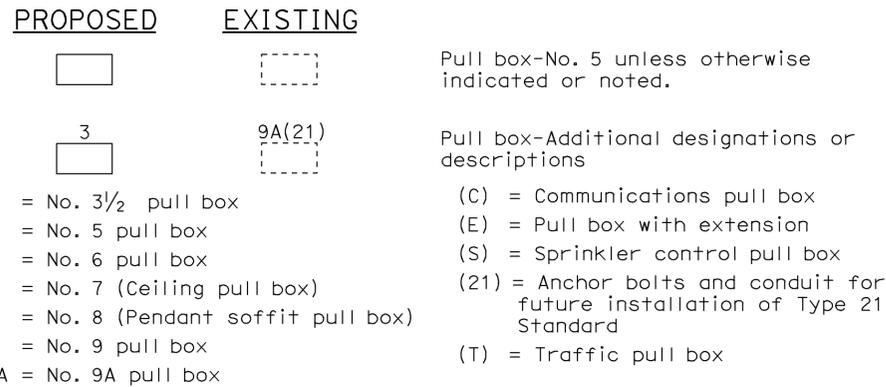
MISCELLANEOUS EQUIPMENT



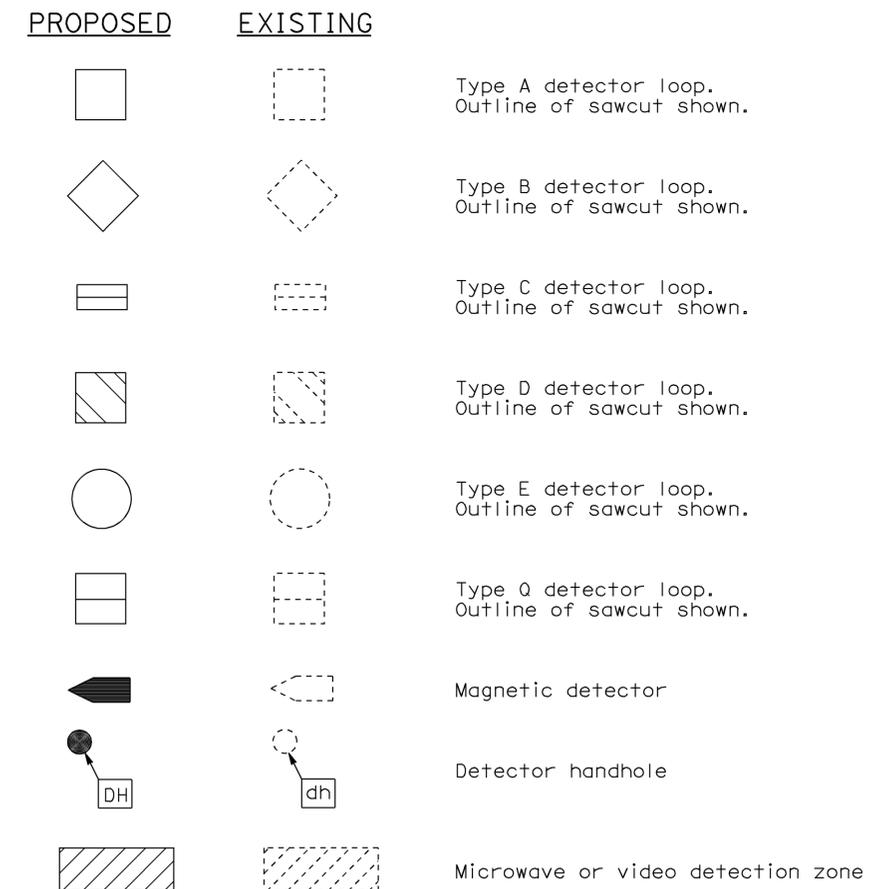
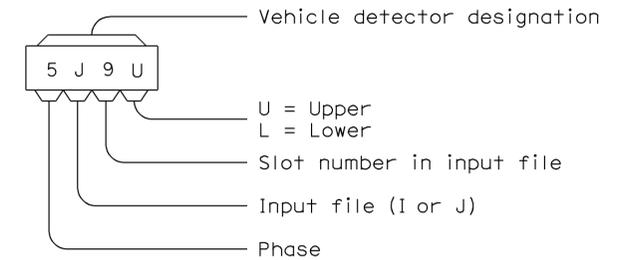
WIRING DIAGRAM LEGEND



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.

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	154	157

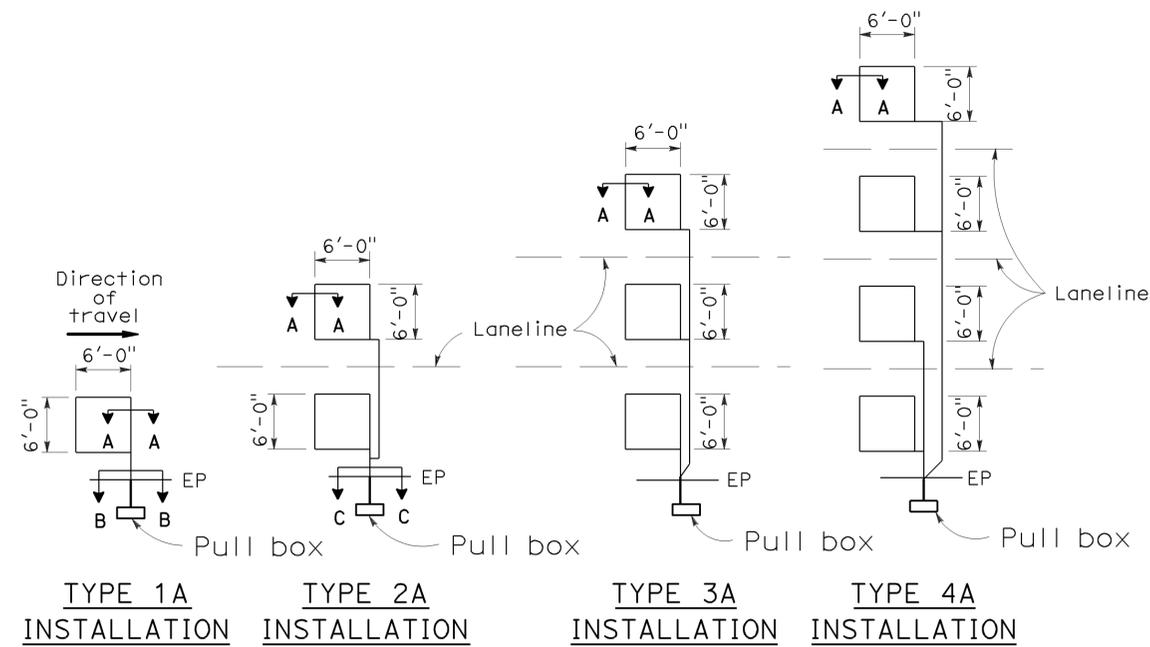
Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

October 5, 2007
 PLANS APPROVAL DATE

To accompany plans dated 6-20-11

LOOP INSTALLATION PROCEDURE

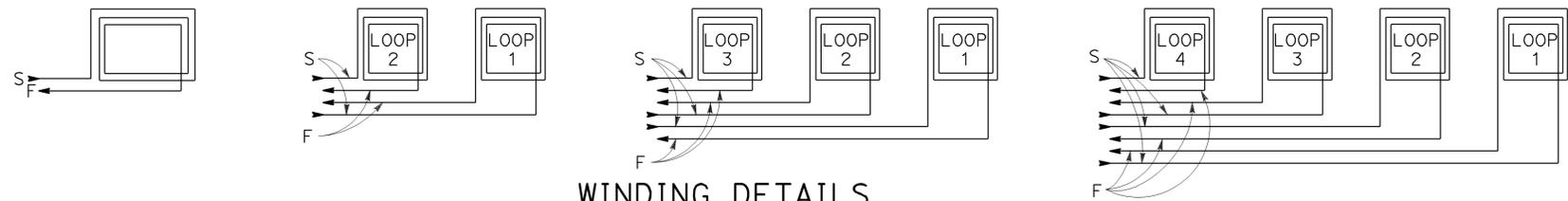
- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no 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

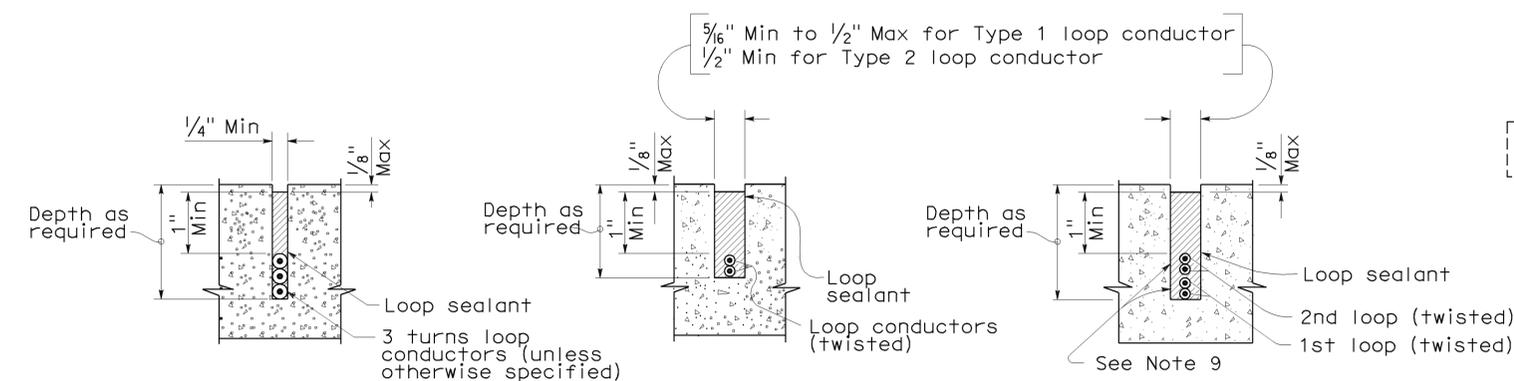
(Type A loop detector configurations illustrated)

- 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)

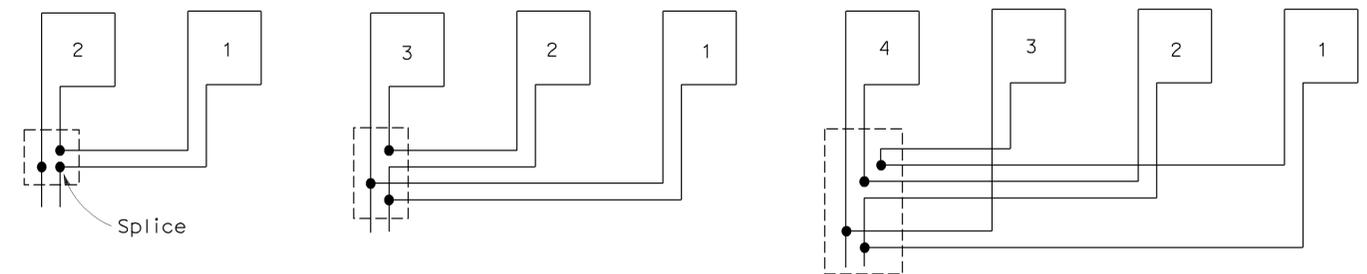


WINDING DETAILS

See Notes 6 and 7



SECTION A-A SECTION B-B SECTION C-C
 SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

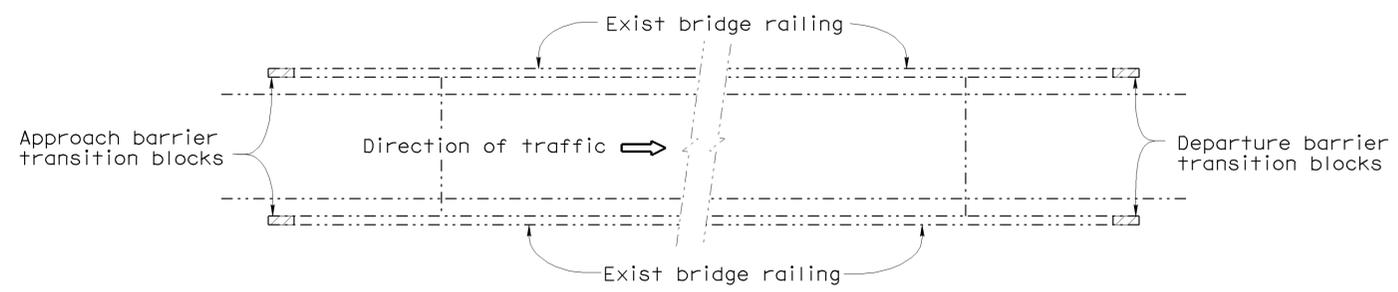
NO SCALE

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

REVISED STANDARD PLAN RSP ES-5A

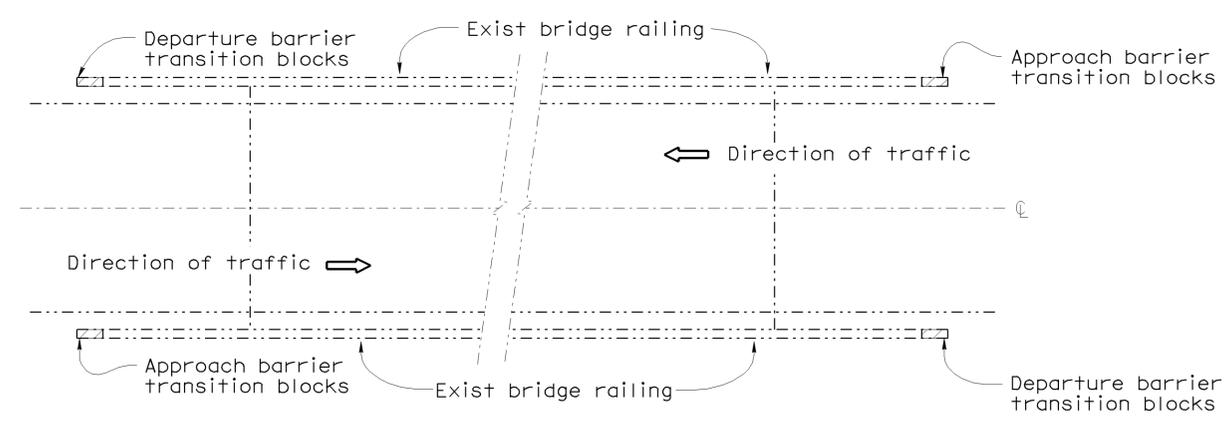
2006 REVISED STANDARD PLAN RSP ES-5A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCr	1	RO.0/10.2	155	157
			6-20-11	REGISTERED CIVIL ENGINEER DATE	
			6-20-11	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>					



**ONE WAY BRIDGES
(PLAN A)
NO SCALE**

Note:
For MBGR see ROADWAY PLANS



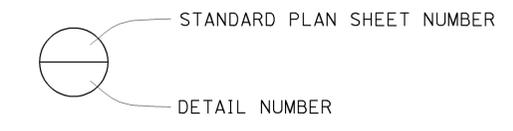
**TWO WAY BRIDGES
(PLAN B)
NO SCALE**

INDEX TO PLANS

Sheet No.	Title
1.	RTE 152/1 CONNECTOR O.C. GENERAL PLAN
2.	TYPE 2 (RIGHT APPROACH) BARRIER TRANSITION BLOCK DETAILS
3.	TYPE 2 (LEFT APPROACH) BARRIER TRANSITION BLOCK DETAILS

STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
RSP A77J2	METAL BEAM GUARD RAILING CONNECTIONS TO BRIDGE RAILING DETAILS
RSP A77J3	METAL BEAM GUARD RAILING CONNECTIONS TO BRIDGE RAILING DETAILS



LEGEND:

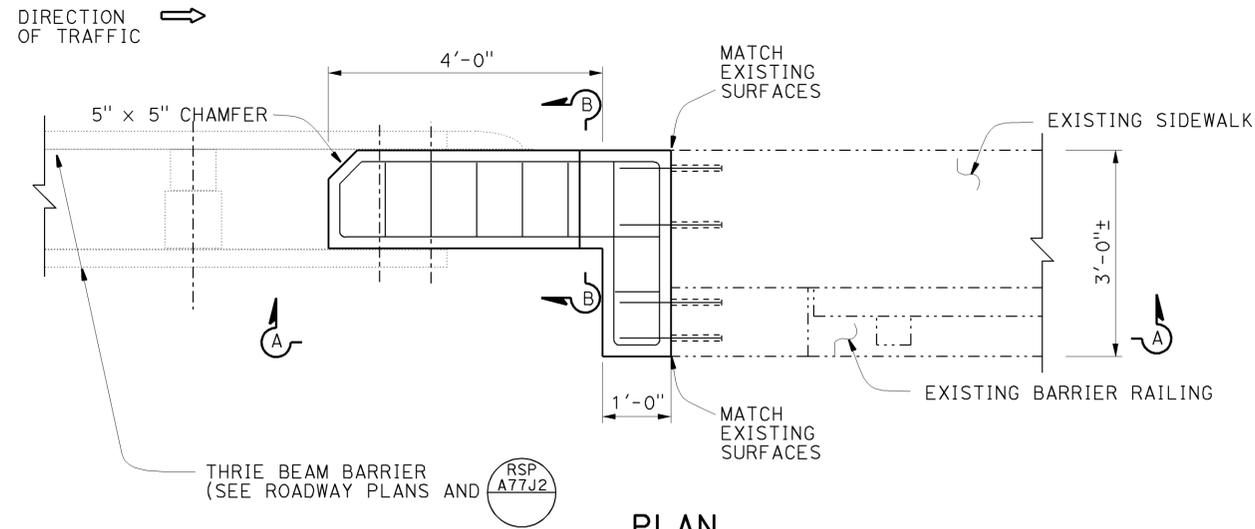
- INDICATES EXISTING STRUCTURE
- INDICATES NEW STRUCTURE
- ▨▨▨▨▨ INDICATES CONCRETE REMOVAL

X DESIGN ENGINEER	DESIGN	BY J MAGANA	CHECKED N KANEPATHIPILLAI	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH B	BRIDGE NO.	RTE 152/1 CONNECTOR O.C. GENERAL PLAN				
	DETAILS	BY H NGUYEN	CHECKED J MAGANA	LAYOUT	BY J MAGANA			CHECKED N KANEPATHIPILLAI		36-0084F			
	QUANTITIES	BY J MAGANA	CHECKED N KANEPATHIPILLAI	SPECIFICATIONS	BY P CHANDER		PLANS AND SPECS COMPARED P CHANDER	POST MILE					
								2.68					
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3619 PROJECT NUMBER & PHASE: 0500020234		CONTRACT NO.:		DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 2/8/11	SHEET 1	OF 3

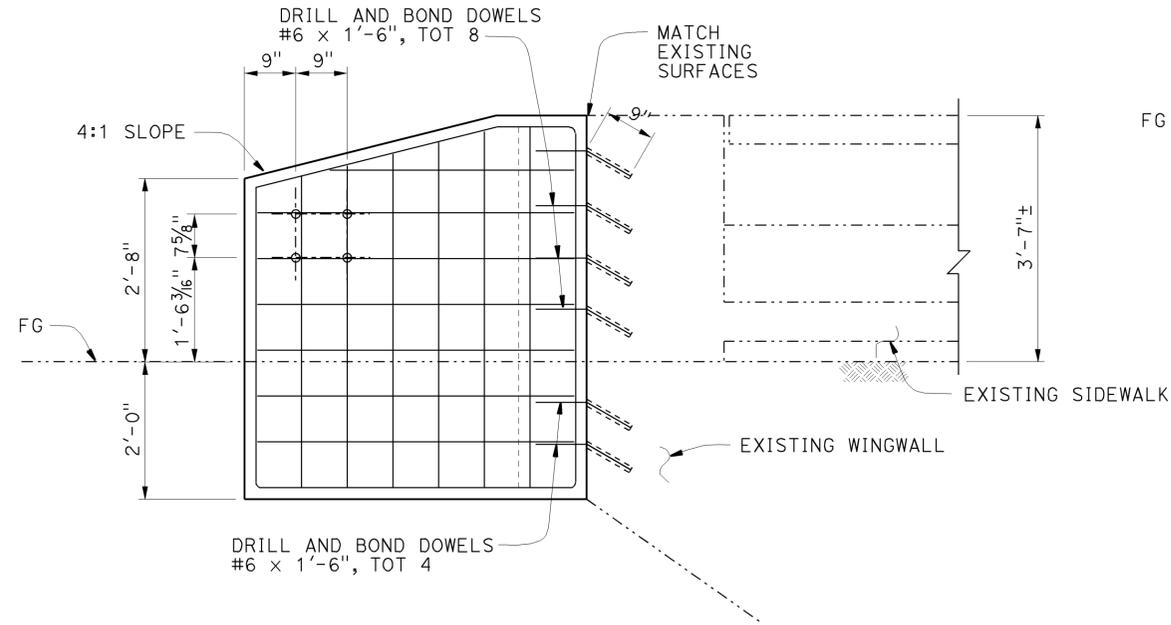
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	156	157

REGISTERED CIVIL ENGINEER DATE 6-20-11
 PLANS APPROVAL DATE 6-20-11
 No. C61500
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

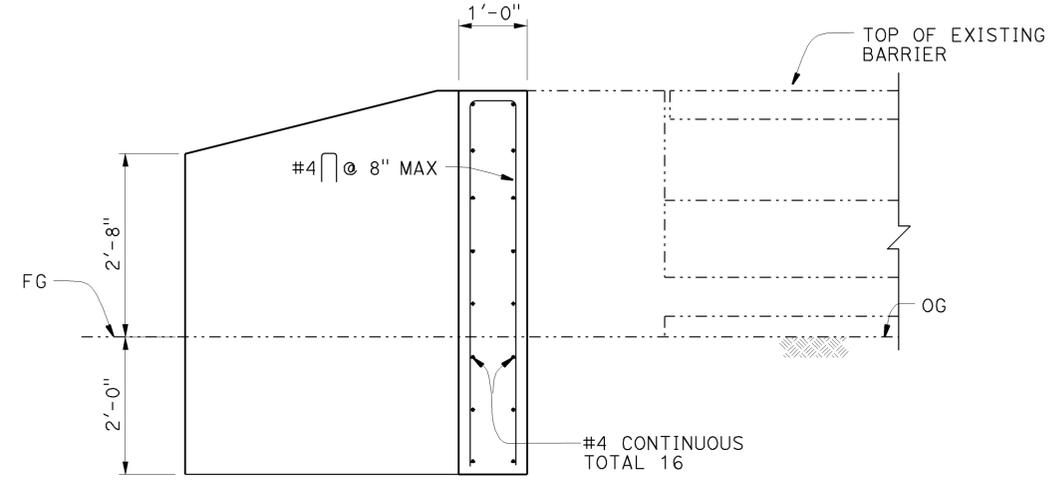
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



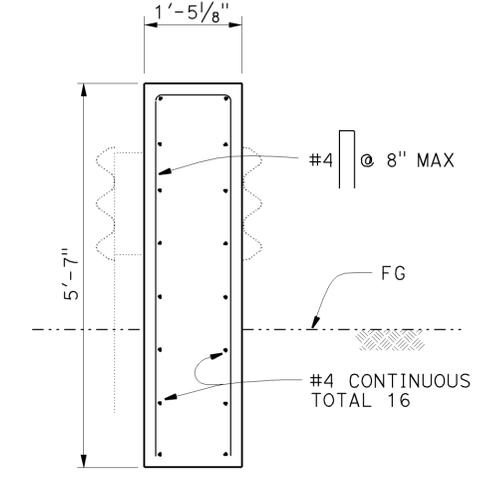
PLAN
3/4" = 1'-0"



ELEVATION
3/4" = 1'-0"



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



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

NOTES:

1. See "General Plan" (GP) for identification of GP Type.
2. For limits of excavation and backfill, see A62C SECTION E-E.
3. See "ROADWAY PLANS" for site locations.
4. Minimum 2" cover, typical.
5. For details not shown, see A77J4.

LOCATION TABLE

Bridge No.	Bridge Name	Route	Post Mile	Direction	Approach	Departure	GP Type
36-0084F	Rte 152/1 CONN OC	1	2.68	EB	1		A

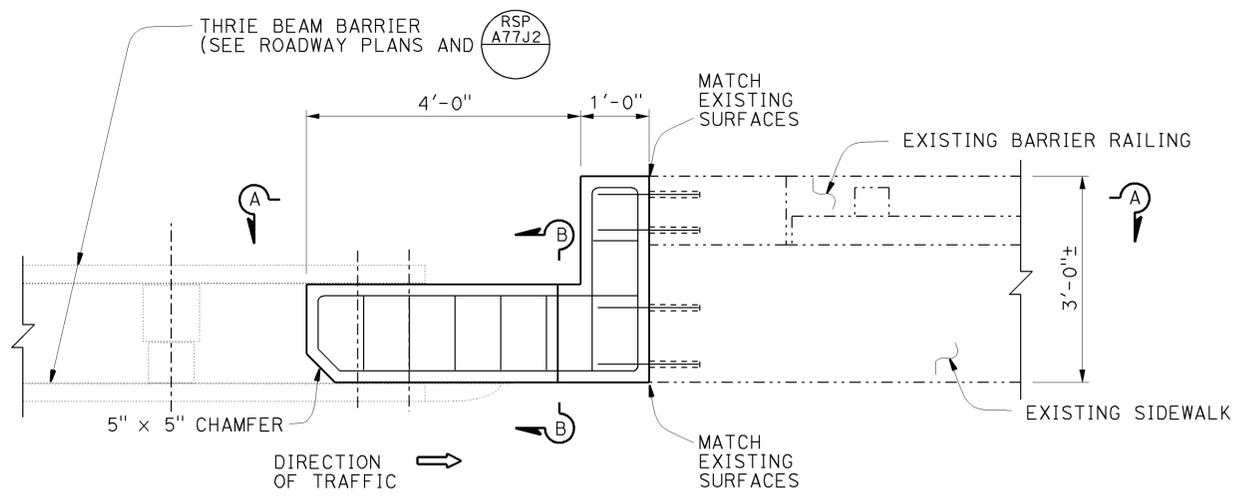
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY J MAGANA	CHECKED N KANEPATHIPILLAI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH B	BRIDGE NO.	TYPE 2 (RIGHT APPROACH) BARRIER TRANSITION BLOCK DETAILS					
DETAILS	BY H NGUYEN	CHECKED J MAGANA			36-0084F						
QUANTITIES	BY J MAGANA	CHECKED N KANEPATHIPILLAI			POST MILE 2.68						
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3619 PROJECT NUMBER & PHASE: 0500020234	CONTRACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 2	OF 3

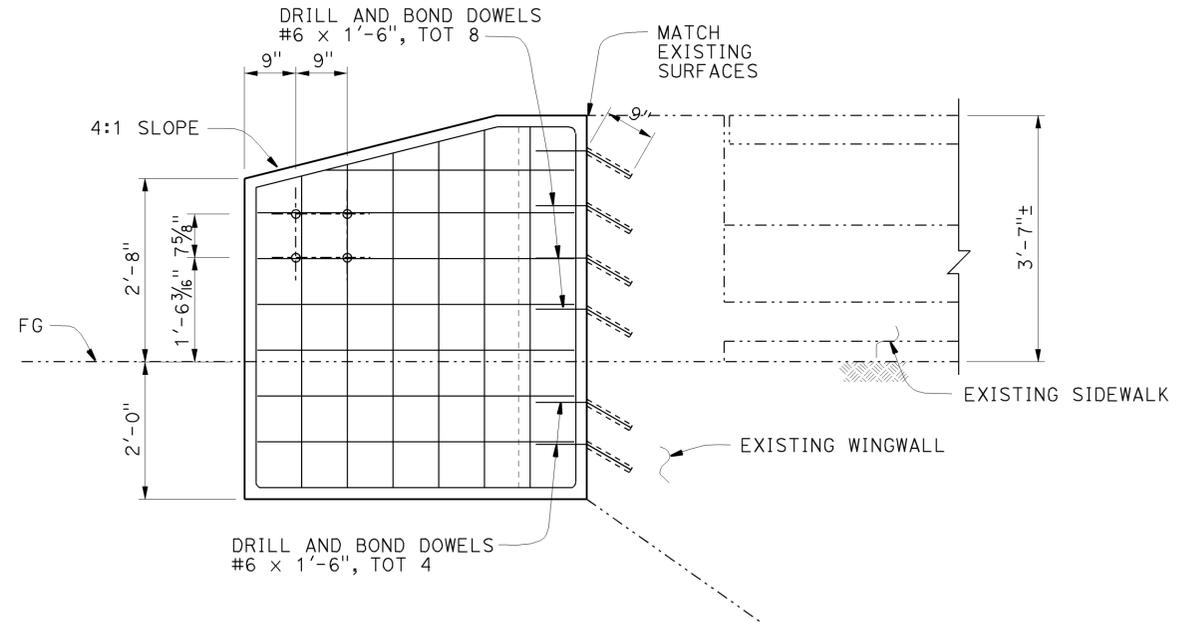
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	Scr	1	RO.0/10.2	157	157

REGISTERED CIVIL ENGINEER: **Joel Magana**
 DATE: 6-20-11
 PLANS APPROVAL DATE: 6-20-11
 No. C61500
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

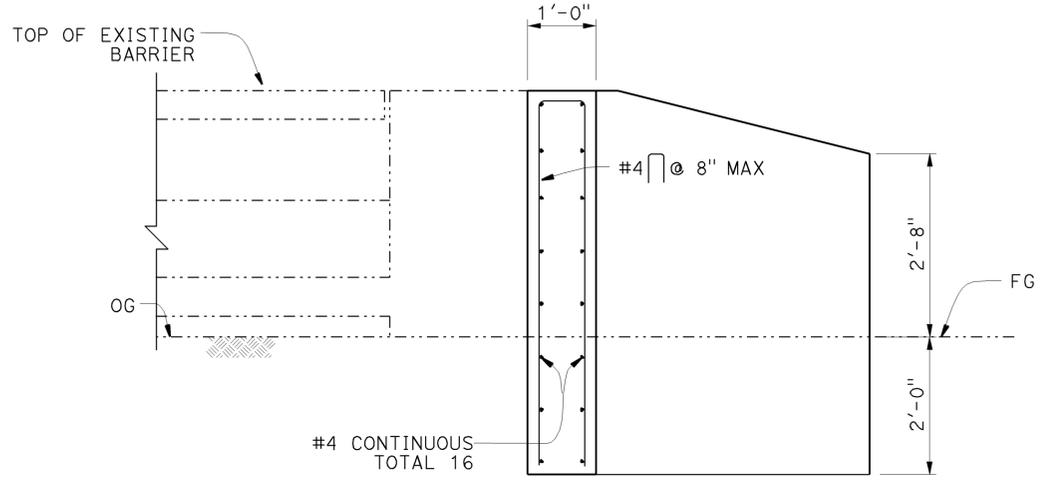
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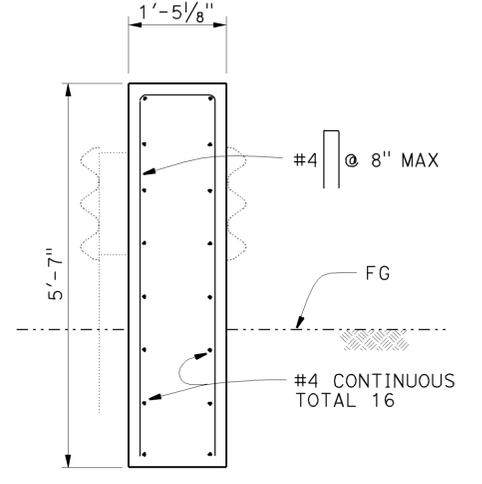
PLAN
3/4" = 1'-0"



ELEVATION
3/4" = 1'-0"



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



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

NOTES:

1. See "General Plan" (GP) for identification of GP Type.
2. For limits of excavation and backfill, see **A62C SECTION E-E**.
3. See "ROADWAY PLANS" for site locations.
4. Minimum 2" cover, typical.
5. For details not shown, see STANDARD PLANS **A77J4**.

LOCATION TABLE

Bridge No.	Bridge Name	Route	Post Mile	Direction	Approach	Departure	GP Type
36-0084F	Rte 152/1 CONN OC	1	2.68	EB	1		A

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

DESIGN	BY J MAGANA	CHECKED N KANEPATHIPILLAI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO. 36-0084F	TYPE 2 (LEFT APPROACH) BARRIER TRANSITION BLOCK DETAILS
	DETAILS	BY H NGUYEN			CHECKED J MAGANA	
QUANTITIES	BY J MAGANA	CHECKED N KANEPATHIPILLAI	UNIT: 3619 PROJECT NUMBER & PHASE: 0500020234	CONTRACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 2/9/11

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 050m7501typ2barcase2.dgn

REVISION DATES SHEET OF
2/9/11 3 3