

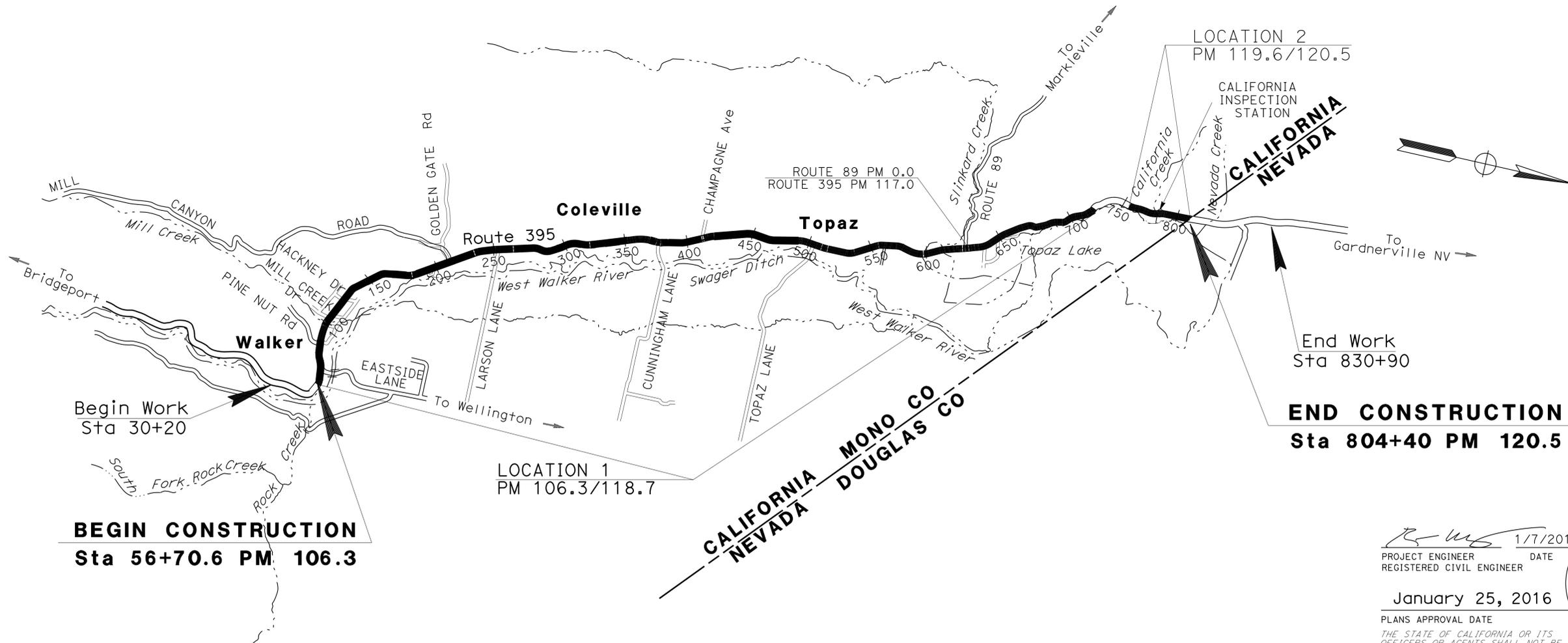
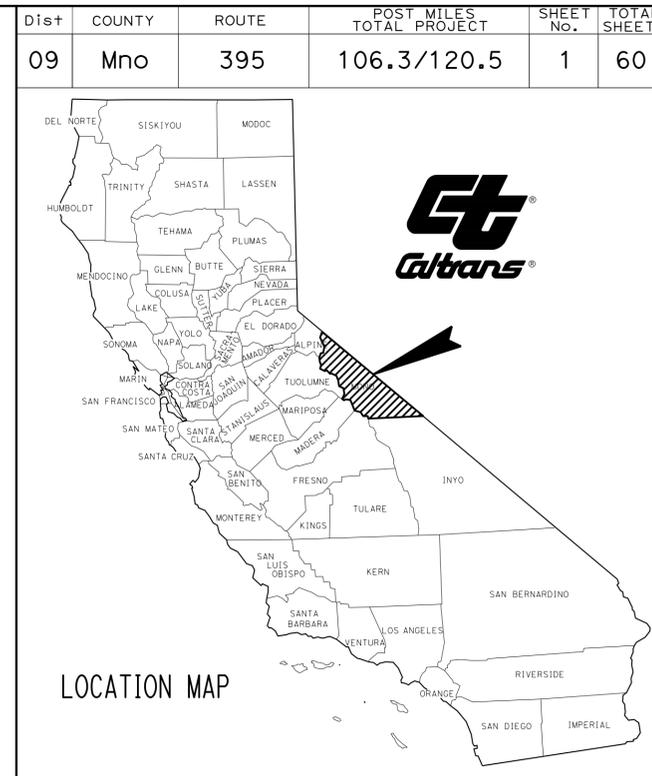
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-6	TYPICAL CROSS SECTIONS
7-17	CONSTRUCTION DETAILS
18	TEMPORARY WATER POLLUTION CONTROL DETAILS
19	TEMPORARY WATER POLLUTION CONTROL QUANTITIES
20	CONSTRUCTION AREA SIGNS
21	PAVEMENT DELINEATION DETAILS
22	PAVEMENT DELINEATION QUANTITIES
23-25	SUMMARY OF QUANTITIES
26	INDUCTIVE LOOP DETECTOR
27-60	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACNHP-P395(261)E
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN MONO COUNTY AT
AND NEAR COLEVILLE
FROM EAST SIDE LANE
TO NEVADA STATE LINE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



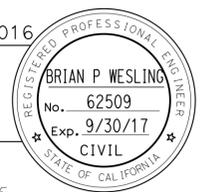
PROJECT MANAGER
BRIAN MCELWAIN

DESIGN ENGINEER
BRIAN WESLING

PROJECT ENGINEER DATE 1/7/2016
 REGISTERED CIVIL ENGINEER

January 25, 2016
 PLANS APPROVAL DATE

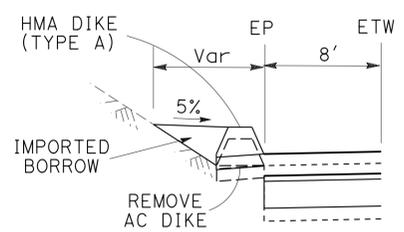
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



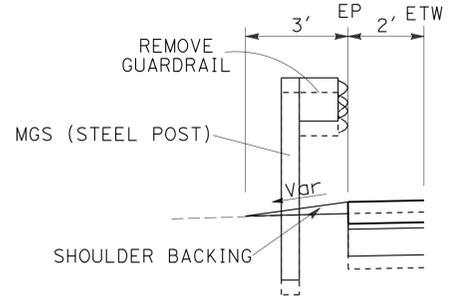
CONTRACT No.	09-364304
PROJECT ID	0914000038

DATE PLOTTED => 17-FEB-2016 TIME PLOTTED => 11:56

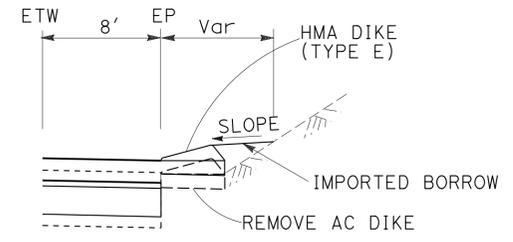
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	3	60
			1/7/2016	REGISTERED CIVIL ENGINEER DATE	
			1-25-16	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
				REGISTERED PROFESSIONAL ENGINEER BRIAN P. WESLING No. 62509 Exp. 9/30/17 CIVIL STATE OF CALIFORNIA	



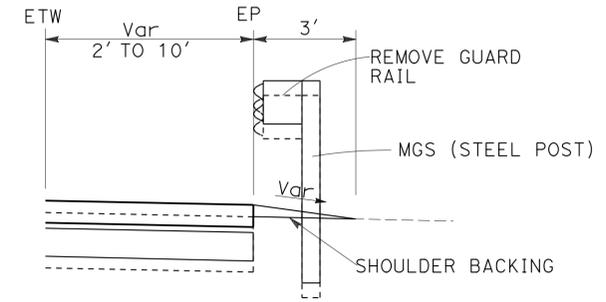
Sta 213+12.0 TO 218+65.0
 482+20.0 TO 485+63.0
 574+00.0 TO 581+23.0



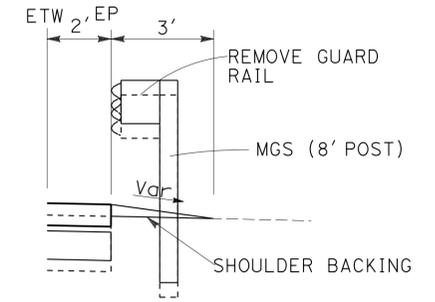
Sta 565+41.5 TO 570+91.5



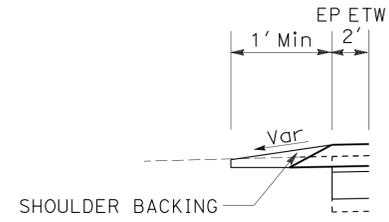
Sta 369+42.0 TO 374+00.0
 412+00.0 TO 423+00.0



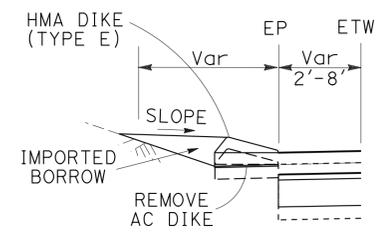
Sta 161+44.5 TO 162+94.5 244+82.5 TO 247+32.5
 165+81.5 TO 172+56.5 253+40.5 TO 261+78.0
 173+88.5 TO 183+26.0 384+55.5 TO 396+18.0
 237+17.5 TO 238+42.5 496+55.5 TO 497+35.5



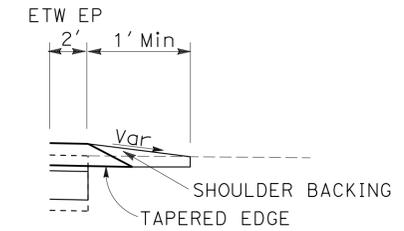
Sta 672+95.5 TO 679+45.5
 682+42.5 TO 690+05.0
 691+37.5 TO 697+87.5
 700+09.5 TO 709+72.0



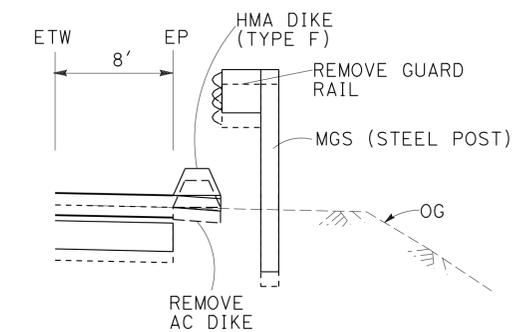
Sta 146+32.4 TO 187+67
 302+58 TO 323+28.0
 412+48 TO 416+00
 562+00 TO 571+64



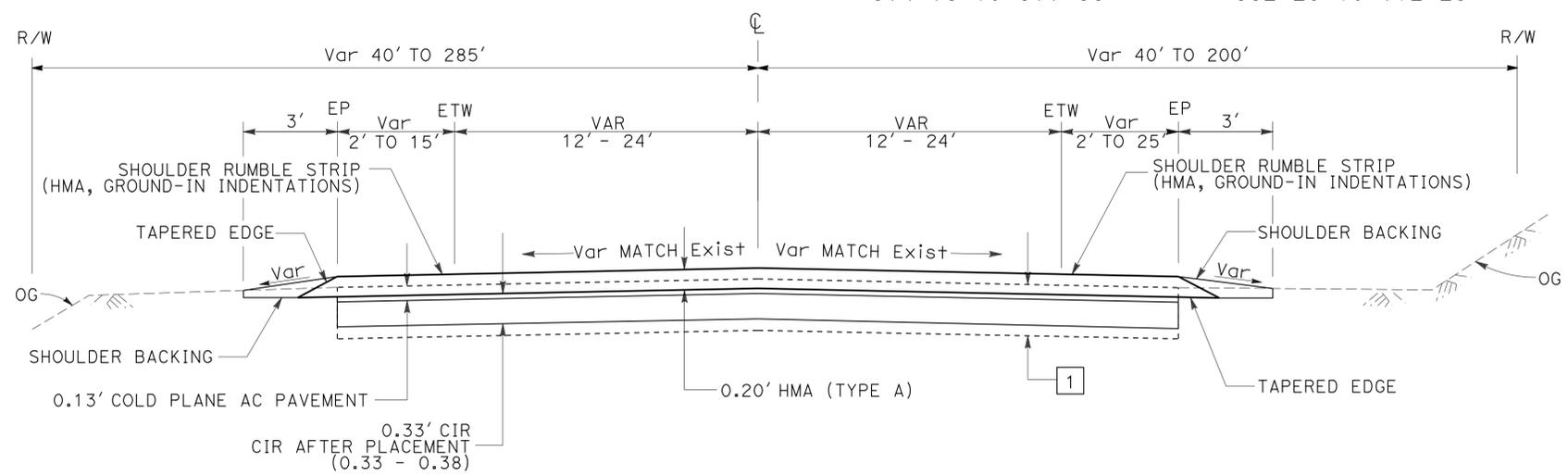
Sta 412+41.0 TO 412+81.0
 581+23.0 TO 581+93.0
 632+63.0 TO 644+82.0



Sta 166+00 TO 172+82 509+00 TO 532+65
 235+00 TO 261+80 565+54 TO 588+00
 299+63 TO 323+28 654+70 TO 680+00
 374+78 TO 377+88 682+20 TO 712+25



Sta 384+91.0 TO 393+62.0



Sta 146+32.4 TO 327+17.4 480+00.0 TO 712+25
 351+00.0 TO 423+00.0

**LOCATION 1
 ROUTE 395**

TYPICAL CROSS SECTIONS

NO SCALE **X-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DELIVERY

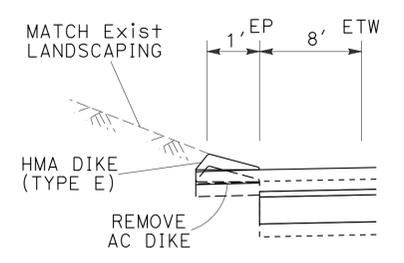
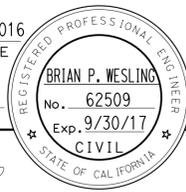
REVISED BY
 DATE REVISED

KAMI BAYER
 BRIAN WESLING

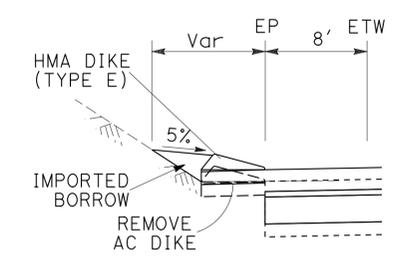
CALCULATED/DESIGNED BY
 CHECKED BY

FUNCTIONAL SUPERVISOR
 BRIAN WESLING

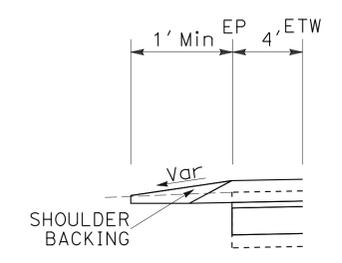
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09	Mno	395	106.3/120.5	4	60
			1/7/2016	REGISTERED CIVIL ENGINEER DATE	
			1-25-16	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



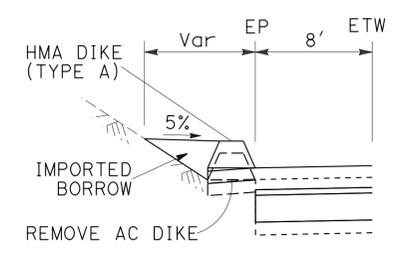
Sta 337+33.0 TO 339+42.0



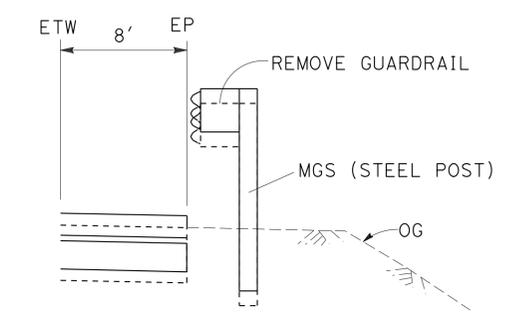
Sta 349+80.0 TO 350+38.0



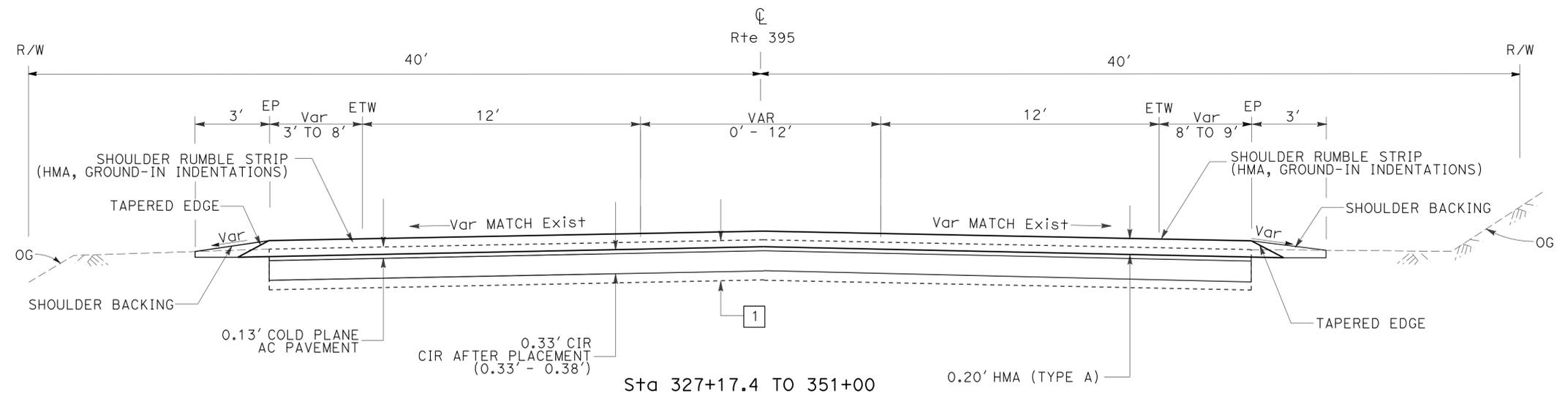
Sta 331+32 TO 333+14



Sta 347+80.0 TO 349+80



Sta 330+12.5 TO 332+68.5



Sta 327+17.4 TO 351+00

**LOCATION 1
ROUTE 395**

TYPICAL CROSS SECTIONS

NO SCALE **X-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DELIVERY

REVISED BY
KAMI BAYER
DATE
BRIAN WESLING

CALCULATED/DESIGNED BY
BRIAN WESLING
CHECKED BY

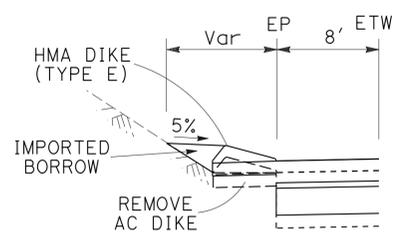
FUNCTIONAL SUPERVISOR
BRIAN WESLING

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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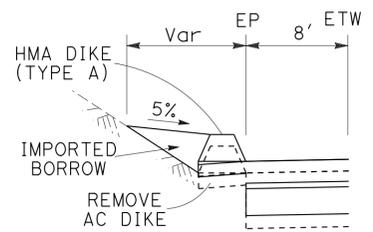
1/7/2016
 REGISTERED CIVIL ENGINEER DATE
 1-25-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 BRIAN P. WESLING
 No. 62509
 Exp. 9/30/17
 CIVIL
 STATE OF CALIFORNIA

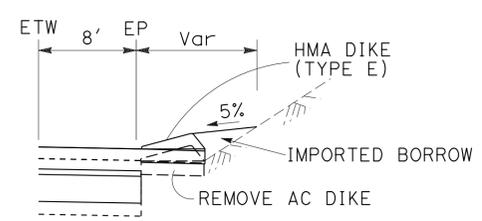
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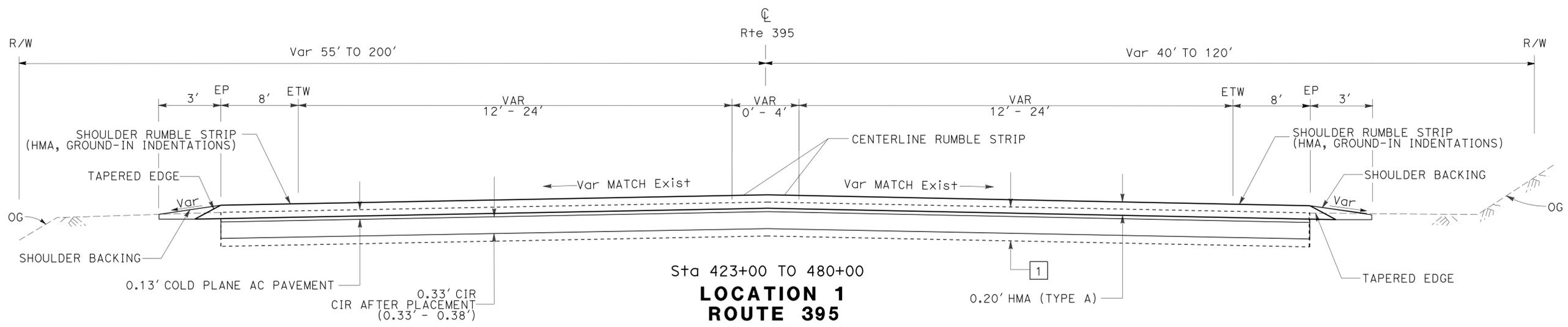
Sta 461+72.0 TO 463+45.0



Sta 456+63.0 TO 461+72.0
463+45.0 TO 470+95.0



Sta 423+00.0 TO 425+70.0
450+05.0 TO 459+20.0
468+46.0 TO 480+80.0



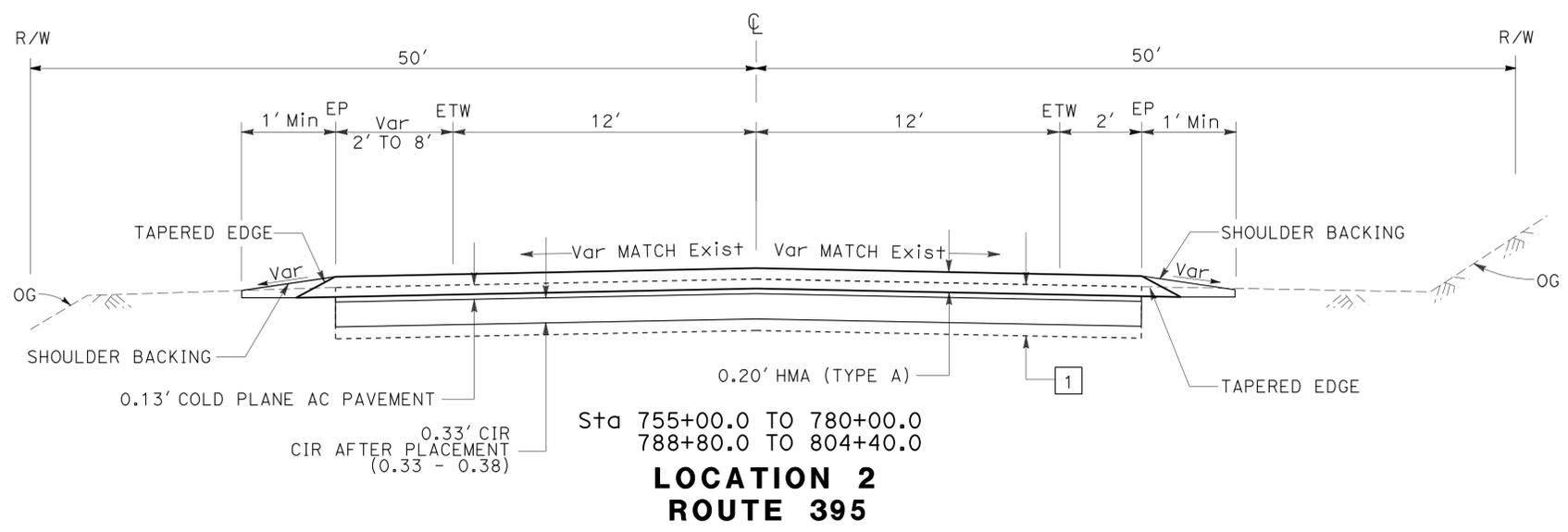
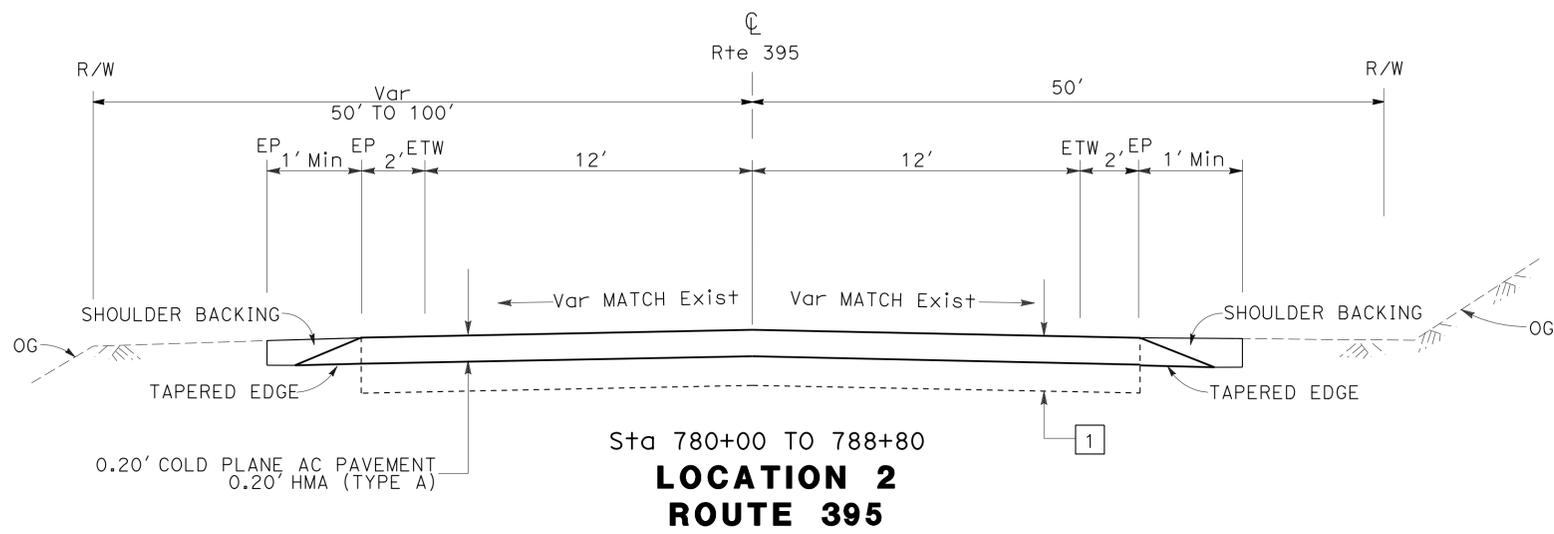
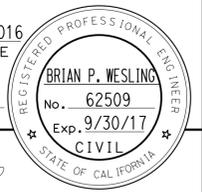
Sta 423+00 TO 480+00
LOCATION 1
ROUTE 395

TYPICAL CROSS SECTIONS

NO SCALE **X-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: BRIAN WESLING
 CHECKED BY:
 REVISOR: KAMI BAYER, BRIAN WESLING
 DATE: 1/7/2016

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	6	60
			1/7/2016	REGISTERED CIVIL ENGINEER DATE	
			1-25-16	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.		



TYPICAL CROSS SECTIONS

NO SCALE X-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY

REVISOR: KAMI BAYER, BRIAN WESLING
 CHECKED BY: BRIAN WESLING

LAST REVISION DATE PLOTTED => 20-JAN-2016
 12-18-15 TIME PLOTTED => 08:11

NOTES:

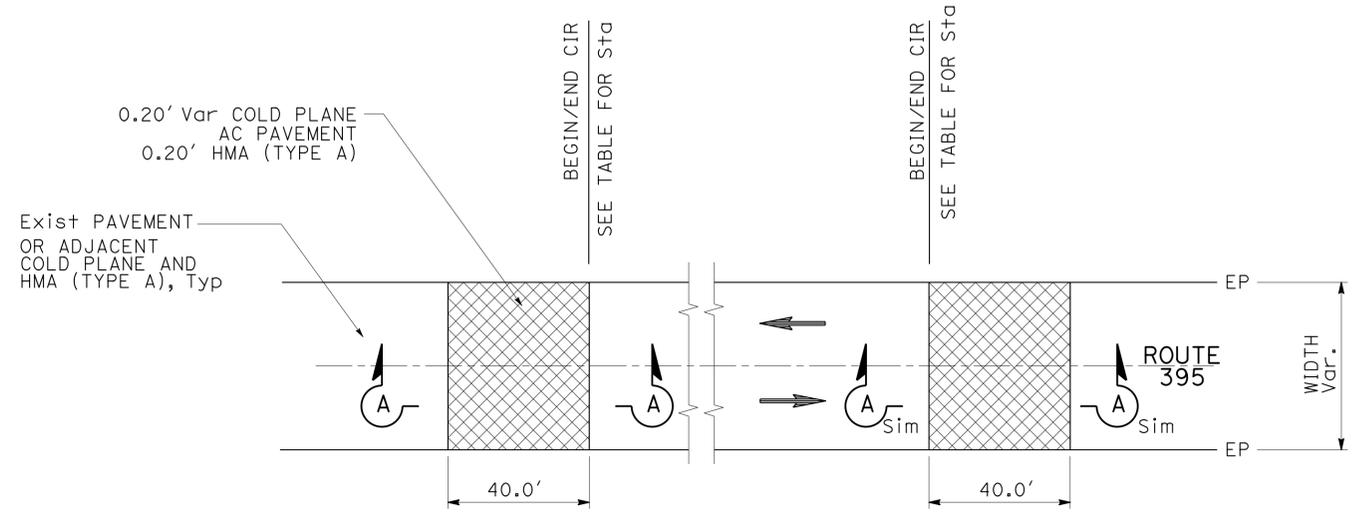
- PLACE ONE COAT OF DETAIL 22 OR DETAIL 28 TRAFFIC STRIPE PRIOR TO GRINDING CENTERLINE RUMBLESTRIP.
- FOR MGS, USE 15'-7 1/2" LENGTH RAIL.
- CRT POST TO BE WOOD ONLY.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

ABBREVIATIONS:

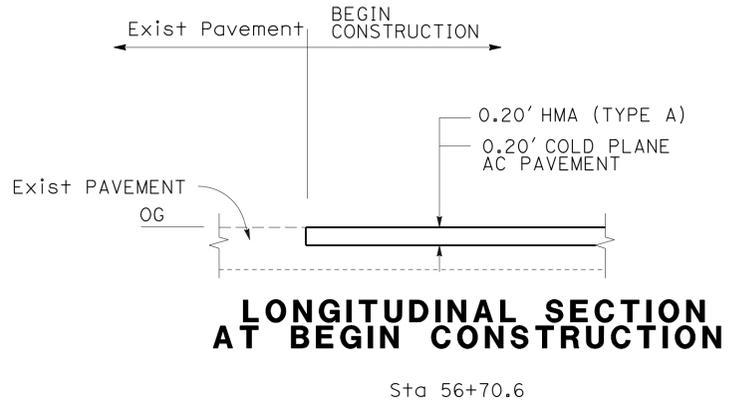
- CIR - COLD IN PLACE RECYCLING
 CRT - CONTROLLED RELEASING TERMINAL
 EqI - EQUAL
 O.C. - ON CENTER
 SCSPD - SLOTTED CORRUGATED STEEL PIPE DRAIN

LEGEND:

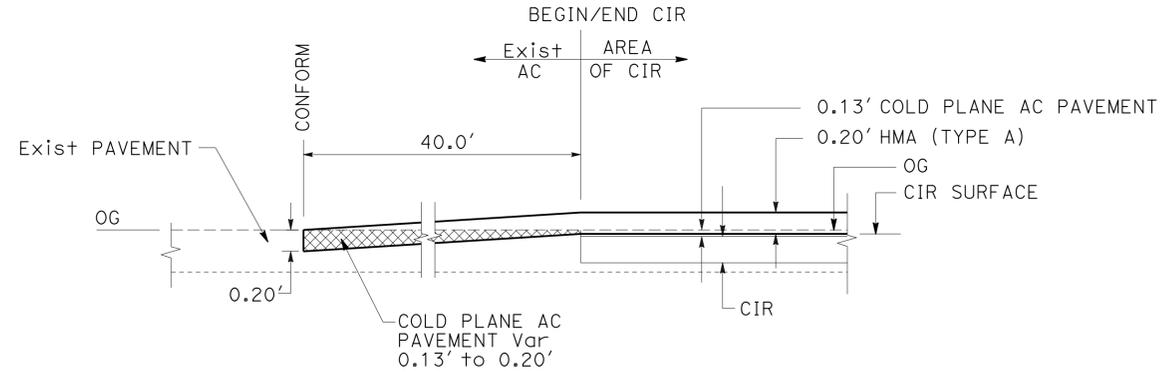
- DIRECTION OF TRAFFIC
 - COLD PLANE AREA
 - 0.20' COLD PLANE ASPHALT PAVEMENT
 - 0.20' HMA (TYPE A)
 - Exist AC PAVEMENT



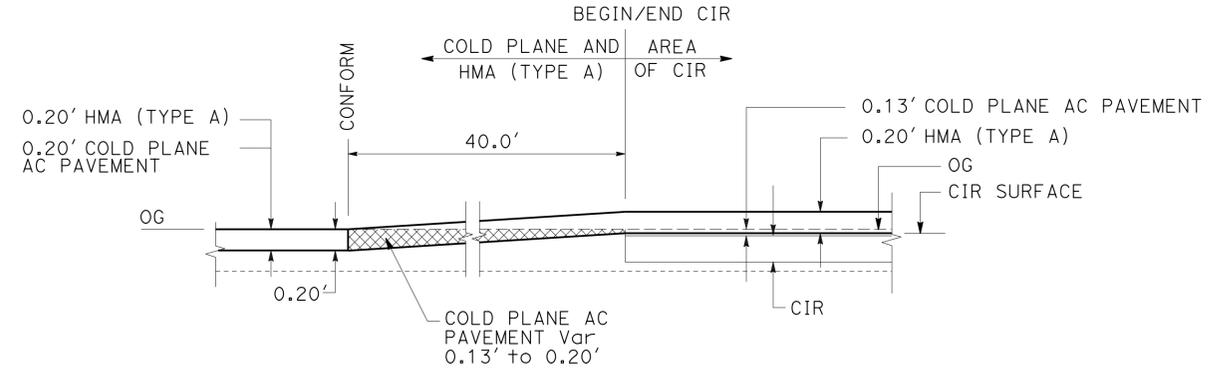
TYPICAL LONGITUDINAL CONFORM DETAIL



LONGITUDINAL SECTION AT BEGIN CONSTRUCTION



SECTION A-A
CONFORMS AT EXISTING PAVEMENT



SECTION A-A
CONFORMS AT ADJACENT COLD PLANE/CIR

LOCATION	Sta	LENGTH	WIDTH	DEPTH	NOTES
1	712+25	40'	40'	0.20'	END CIR/CONFORM PAST Exist CONFORM
2	755+00	40'	40'	0.20'	BEGIN CIR/CONFORM PAST Exist CONFORM
	804+40	40'	34'	0.20'	END CONSTRUCTION

LOCATION	Sta	LENGTH	WIDTH	DEPTH	NOTES
1	146+32.40	40'	57'	0.20'	END COLD PLANE & HMA (TYPE A) / BEGIN CIR
2	780+00	40'	28'	0.20'	END CIR/ BEGIN COLD PLANE & HMA (TYPE A)
	788+80	40'	28'	0.20'	END COLD PLANE & HMA (TYPE A) / BEGIN CIR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY

FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 CORY FREEMAN
 BRIAN WESLING
 REVISED BY: [blank]
 DATE REVISED: [blank]

CONSTRUCTION DETAILS

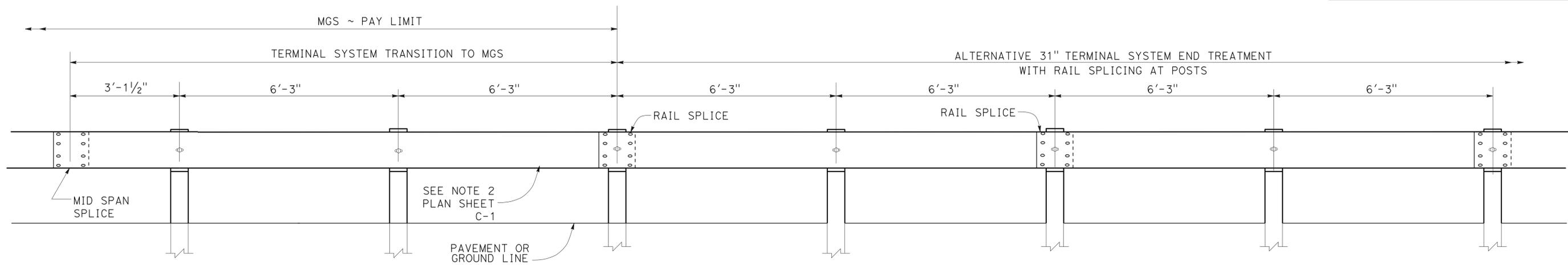
NO SCALE **C-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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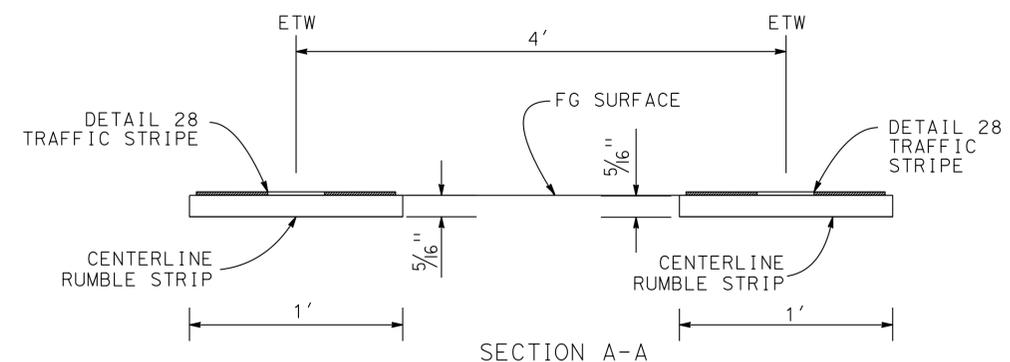
1/7/2016
 REGISTERED CIVIL ENGINEER DATE
 1-25-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 BRIAN P. WESLING
 No. 62509
 Exp. 9/30/17
 CIVIL
 STATE OF CALIFORNIA

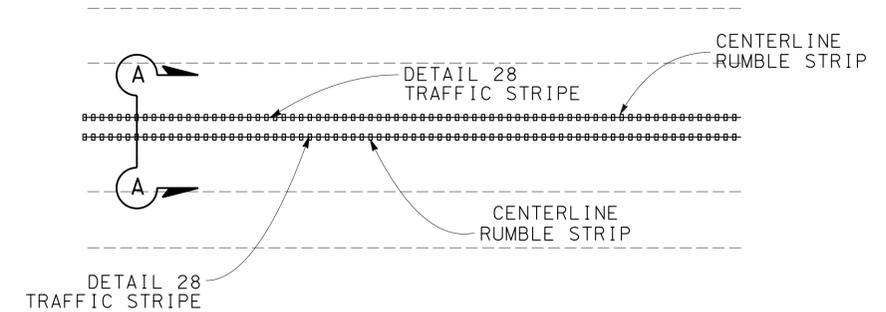
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**TRANSITION DETAIL FOR 31" TERMINAL SYSTEM END TREATMENT
WITH RAIL SPLICING AT POSTS TO MIDWEST GUARDRAIL SYSTEM**



**CENTERLINE RUMBLE STRIP
LOCATION 1**
Sta 430+00 TO 478+00
SEE NOTE 1 SHEET C-1



PLAN VIEW CENTERLINE RUMBLE STRIP
SEE NOTE 1 SHEET C-1

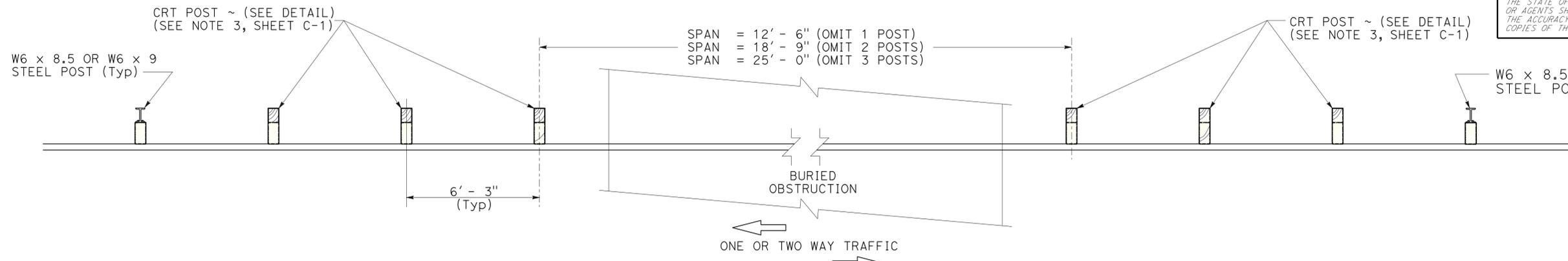
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: BRIAN WESLING
 CHECKED BY:
 KAMI BAYER
 BRIAN WESLING
 REVISED BY: DATE REVISIONS:
 x
 x
 x
 x
 x
 x

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	9	60

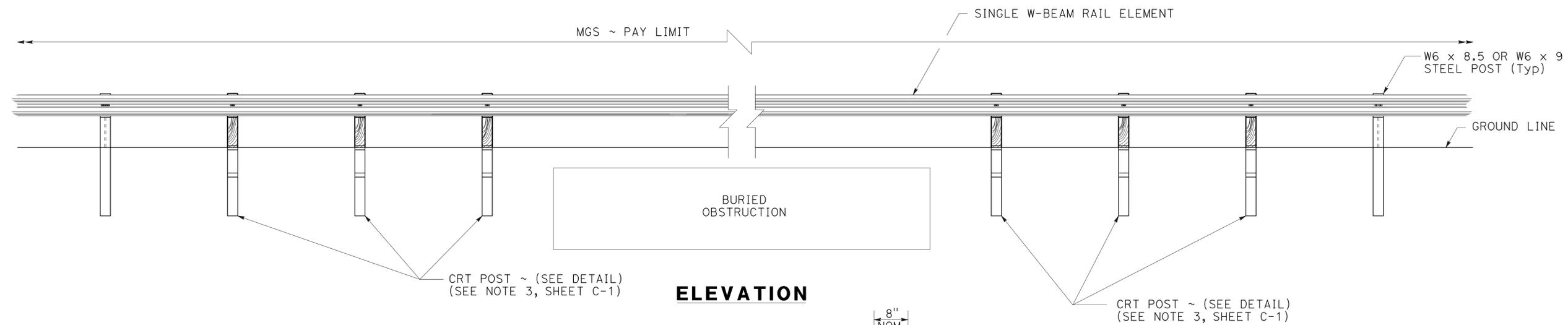
1/7/2016	
REGISTERED CIVIL ENGINEER	DATE
1-25-16	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
BRIAN P. WESLING
No. 62509
Exp. 9/30/17
CIVIL
STATE OF CALIFORNIA

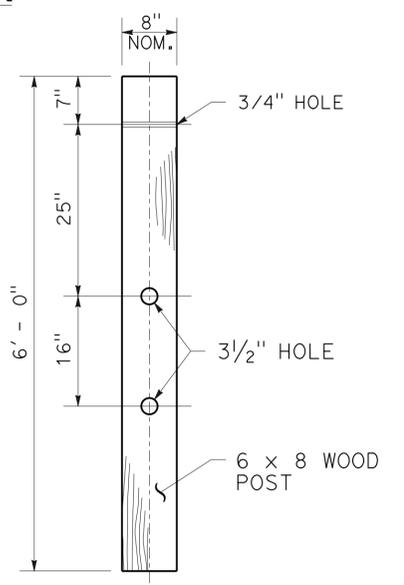
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



PLAN



ELEVATION



**CONTROLLED RELEASING
TERMINAL POST DETAIL**

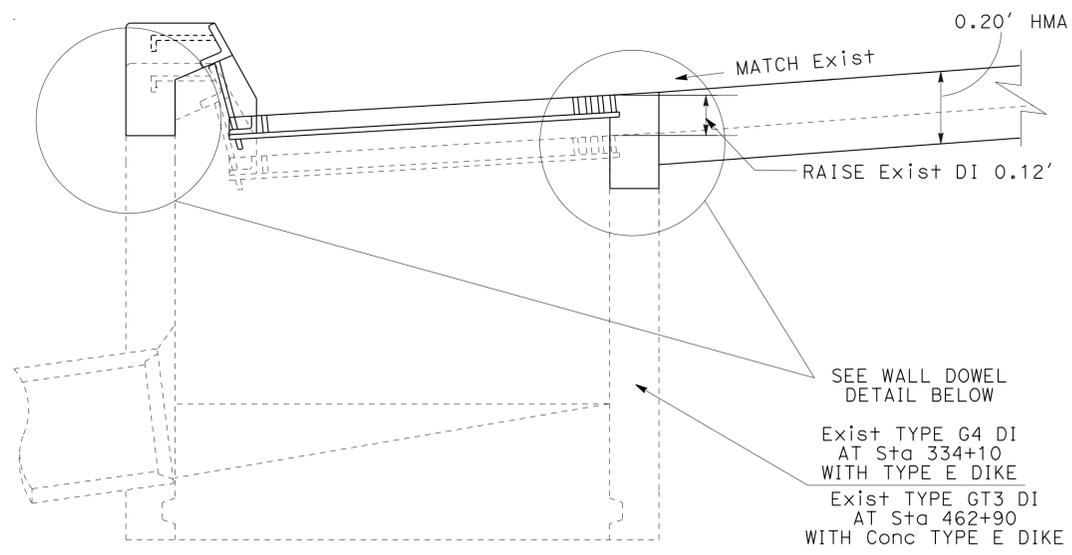
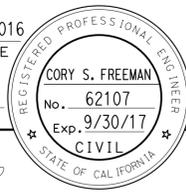
CONSTRUCTION DETAILS

NO SCALE **C-3**

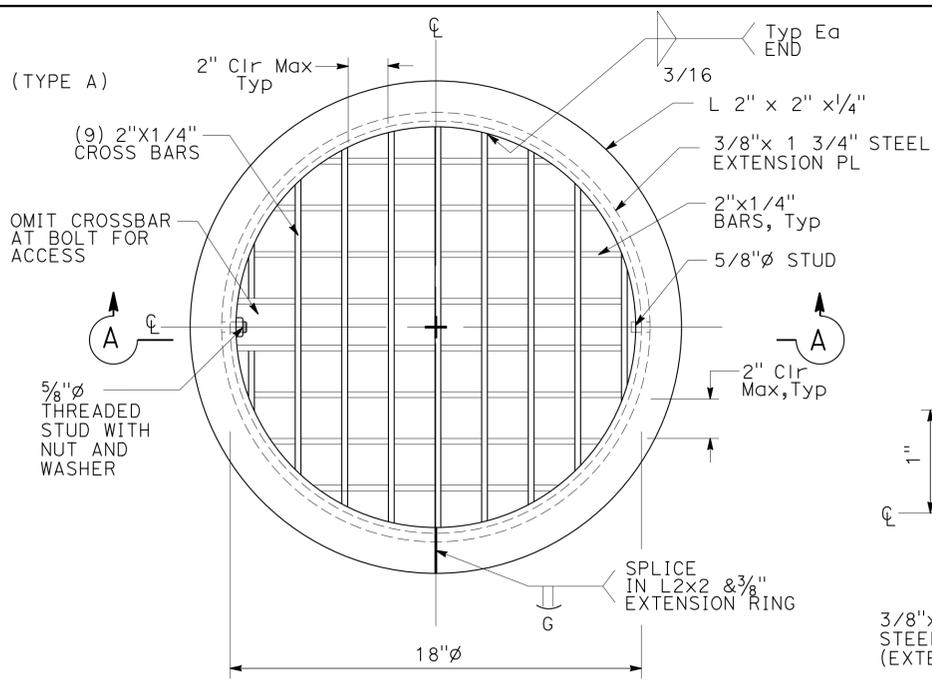
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY

REVISOR: KAMI BAYER, BRIAN WESLING
 DATE: [REDACTED]
 CALCULATED/DESIGNED BY: BRIAN WESLING
 CHECKED BY: [REDACTED]
 FUNCTIONAL SUPERVISOR: BRIAN WESLING

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	10	60
			1/7/2016	REGISTERED CIVIL ENGINEER DATE	
			1-25-16	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



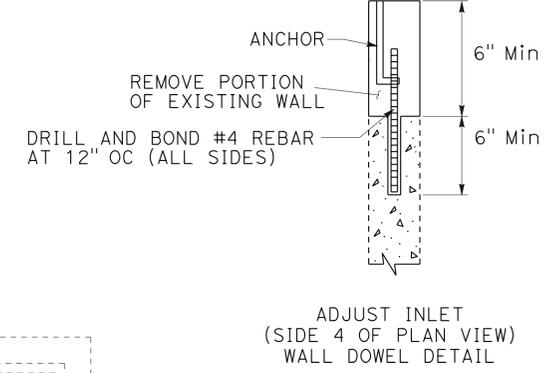
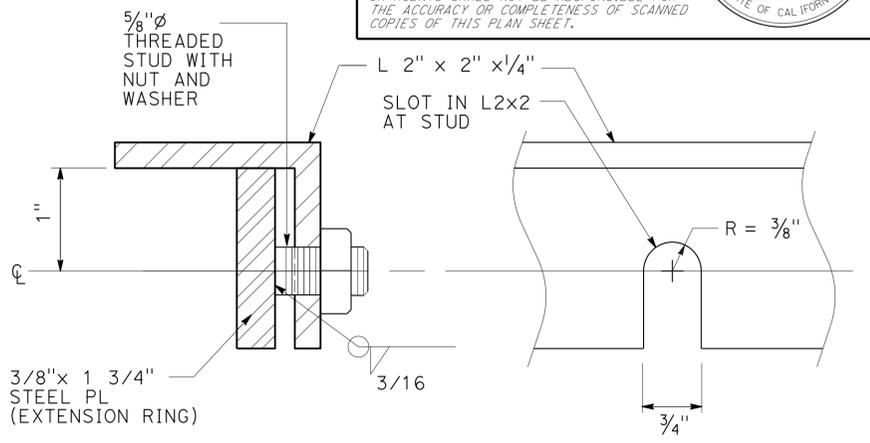
SECTION D-D



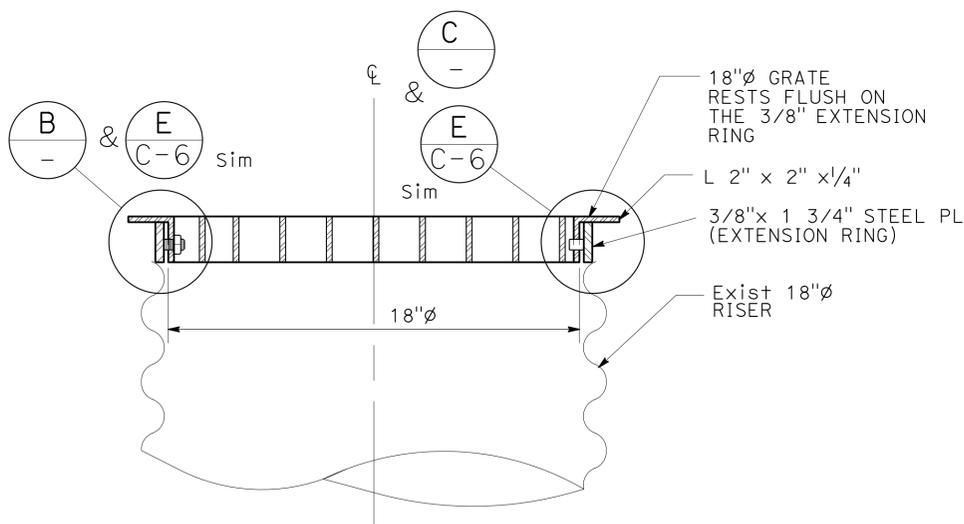
PLAN VIEW

SEE SHEET Q-3 FOR QUANTITIES & LOCATIONS.

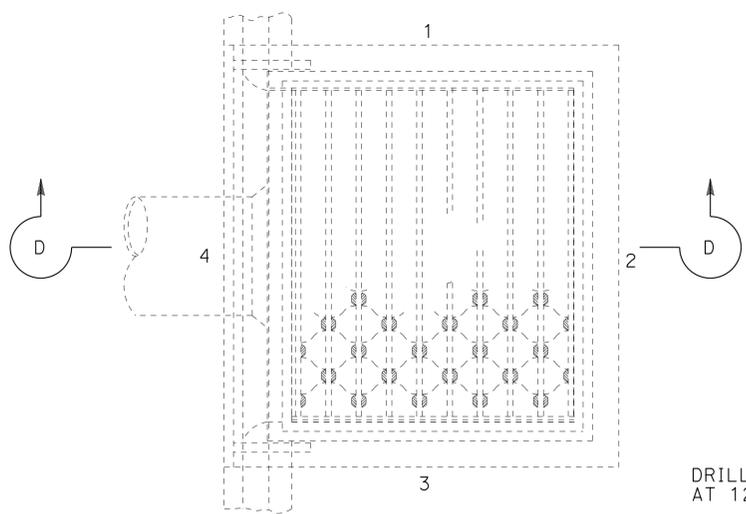
TYPICAL REMOVABLE 18" CLEANOUT GRATE AND FRAME



ADJUST INLET (SIDE 4 OF PLAN VIEW) WALL DOWEL DETAIL



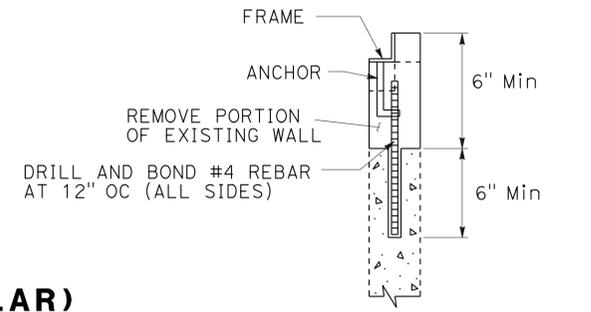
SECTION A-A INSTALLED GRATE



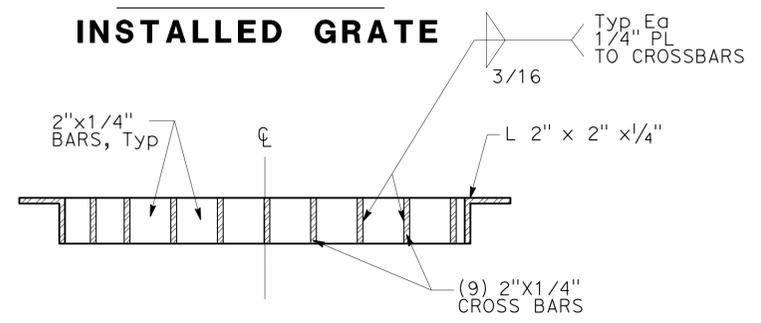
PLAN VIEW

ADJUST INLET (RECTANGULAR)

LOCATION 1
Sta 334+10
Sta 462+90



ADJUST INLET (SIDE 1, 2, AND 3 OF PLAN VIEW) WALL DOWEL DETAIL



SECTION A-A GRATE ONLY

CONSTRUCTION DETAILS

NO SCALE **C-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DELIVERY

REVISOR	DATE	REVISION
KAMI BAYER		
BRIAN WESLING		
FUNCTIONAL SUPERVISOR	BRIAN WESLING	
CALCULATED/DESIGNED BY	CHECKED BY	

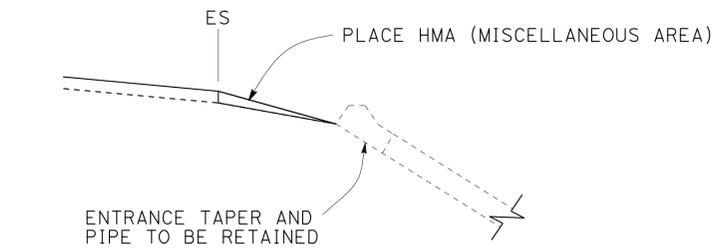
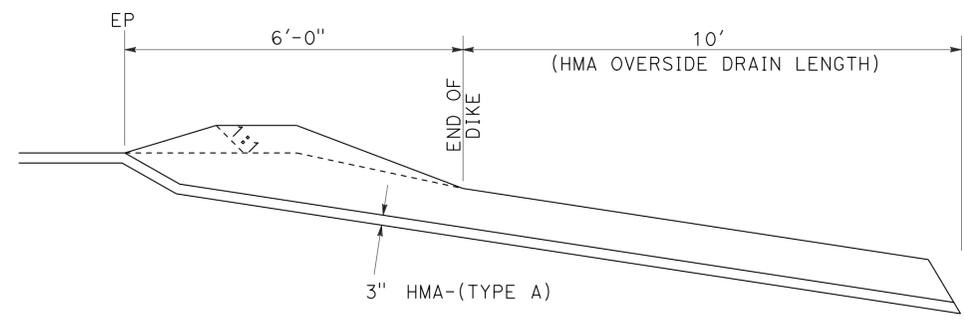
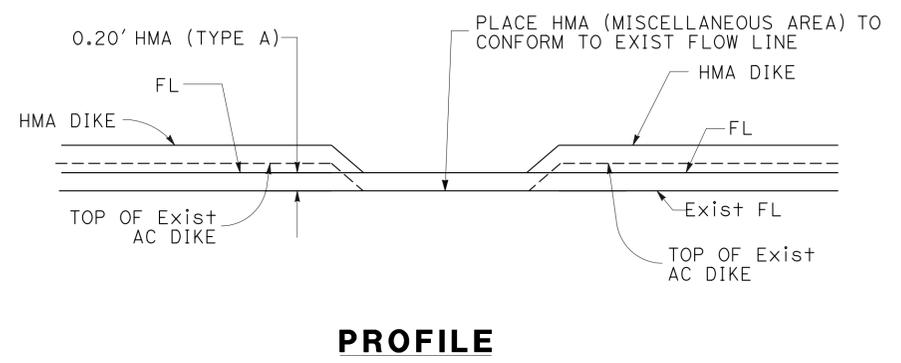
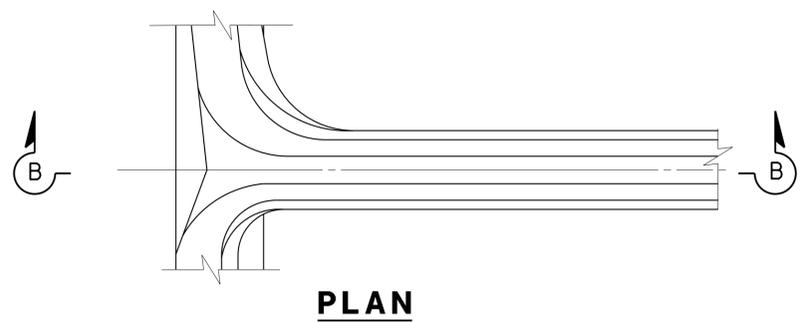
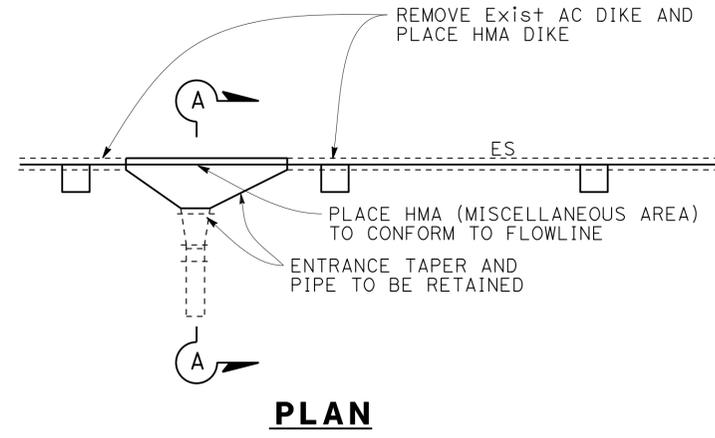


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	11	60

1/7/2016
 REGISTERED CIVIL ENGINEER DATE
 1-25-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 BRIAN P. WESLING
 No. 62509
 Exp. 9/30/17
 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.



HMA OVERSIDE DRAIN PAVING DETAIL

LOCATION 1

Sta	218+65	412+81
	350+38	581+93
	369+42	644+82

HMA CONFORM AT DOWN DRAINS

LOCATION 1	LOCATION 2
Sta 387+44	Sta 785+00
420+06	786+00
459+20	
480+70	

CONSTRUCTION DETAILS

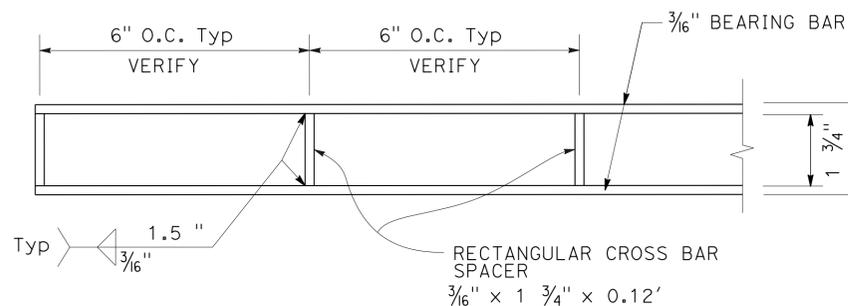
NO SCALE **C-5**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 DESIGNED BY: KAMI BAYER
 CHECKED BY: BRIAN WESLING
 REVISIONS: (None listed)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	12	60
			1/7/2016	REGISTERED CIVIL ENGINEER DATE	
			1-25-16	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
REGISTERED PROFESSIONAL ENGINEER CORY S. FREEMAN No. 62107 Exp. 9/30/17 CIVIL STATE OF CALIFORNIA					

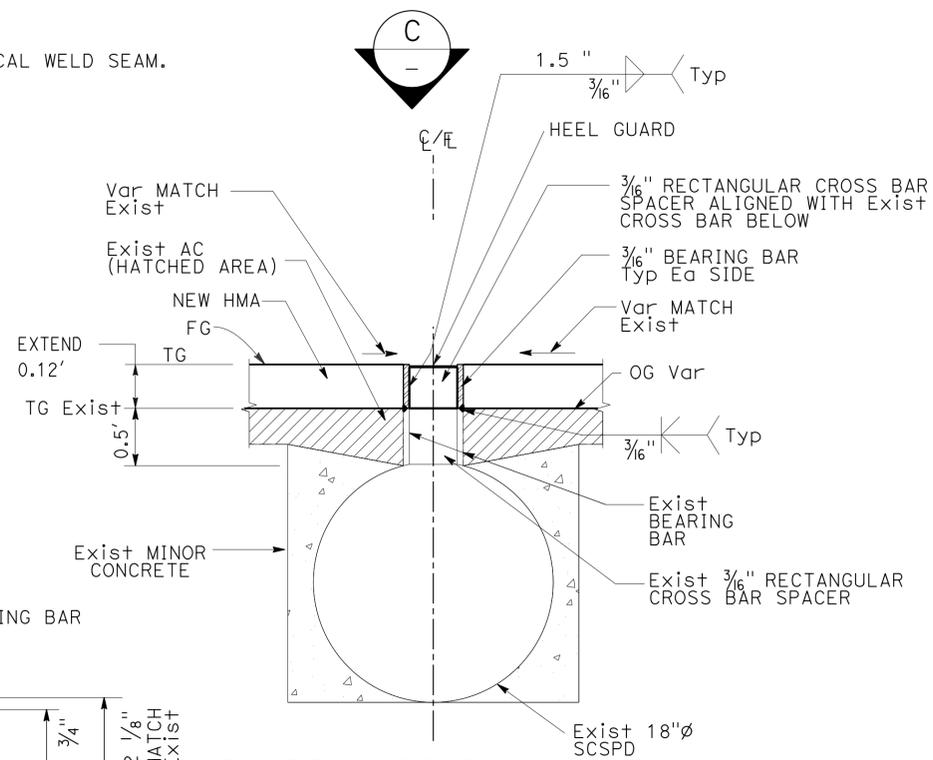
NOTES:

- DRAIN PIPE SEAMS MAY BE CONTINUOUS HELICAL LOCK SEAM OR HELICAL WELD SEAM.
- THE CROSS BAR SPACER MUST BE WELDED TO THE BEARING BARS IN SUCH A MANNER AS TO DEVELOP A MINIMUM TENSILE STRENGTH OF 12,000 LBS NORMAL TO THE LONGITUDINAL AXIS OF THE BEARING BARS.
- THE MAXIMUM VARIANCE FROM A STRAIGHT LINE BETWEEN THE EXTREME TOP CORNERS OF THE BEARING BARS IS 1/2" IN 20'-0".
- SPOT WELDS MUST DEVELOP MINIMUM REQUIRED STRENGTH OF STRAP.
- CONTRACTOR TO PROVIDE AN ADEQUATE METHOD OF KEEPING THE HOT MIX ASPHALT OUT OF PIPE DURING PAVING OPERATIONS.
- BOTTOM EDGE OF CROSS BAR SPACER OFFSET IN DIRECTION OF FLOW.



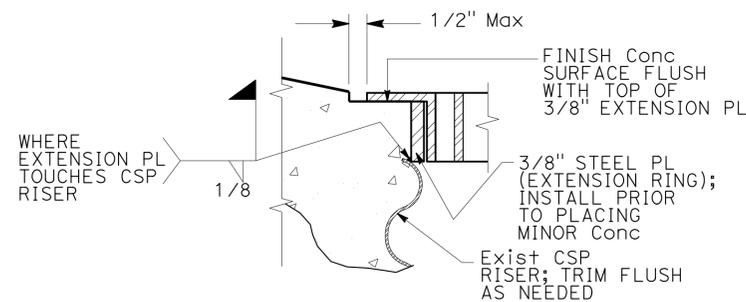
PLAN VIEW

TYPICAL RECTANGULAR SLOTTED GRATE DETAIL

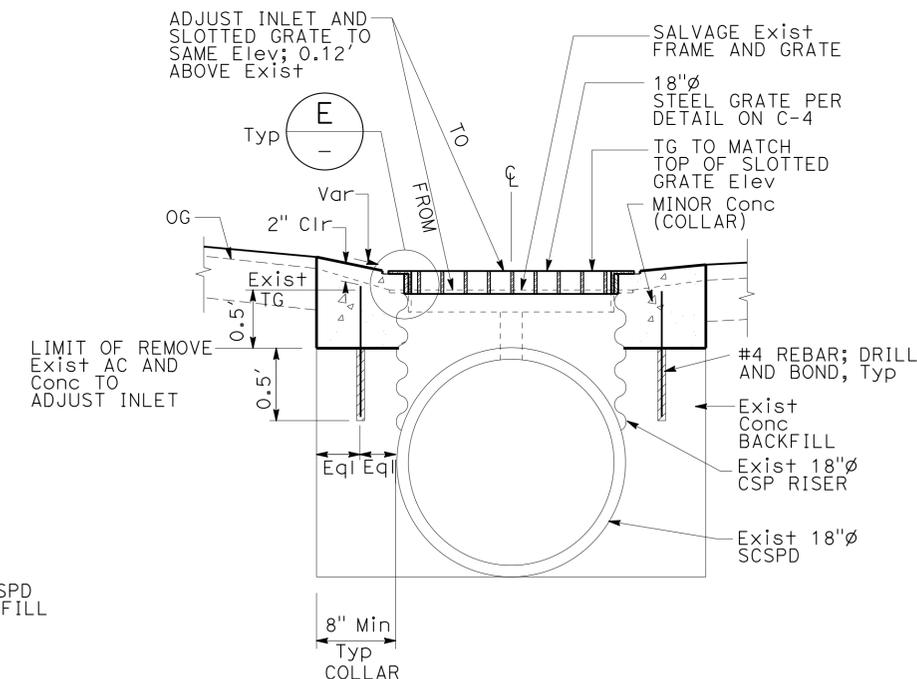


SEE SHEET C-12 FOR DRIVEWAY CONFORMS & PAVING LIMITS

**SECTION B-B
TYPICAL MODIFY SLOTTED PIPE GRATE DETAIL**



SEE SHEET C-4 FOR TYP CLEANOUT GRATE DETAIL FOR INFO NOT SHOWN HERE

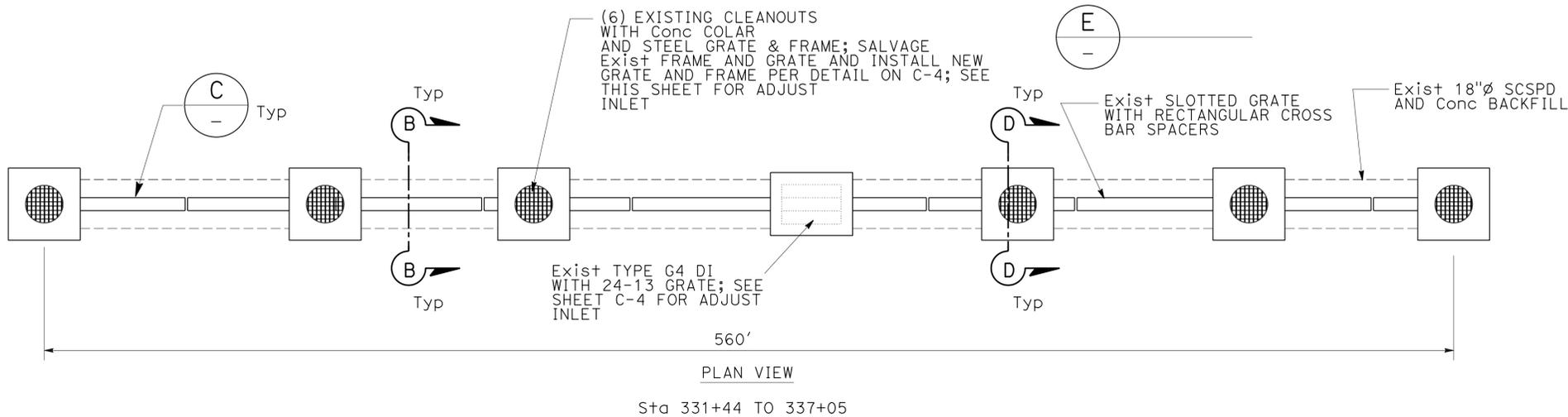


**SECTION D-D
TYPICAL ADJUST PIPE INLET TO GRADE DETAIL**

LOCATION 1

Sta 331+51.08	Sta 335+08.13
Sta 332+48.62	Sta 336+07.16
Sta 333+46.18	Sta 336+93.94

**CONSTRUCTION DETAILS
NO SCALE C-6**



PLAN VIEW

EXISTING 18" SCSPD

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY

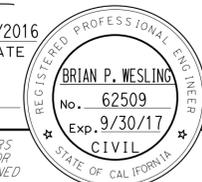
REVISOR BY DATE

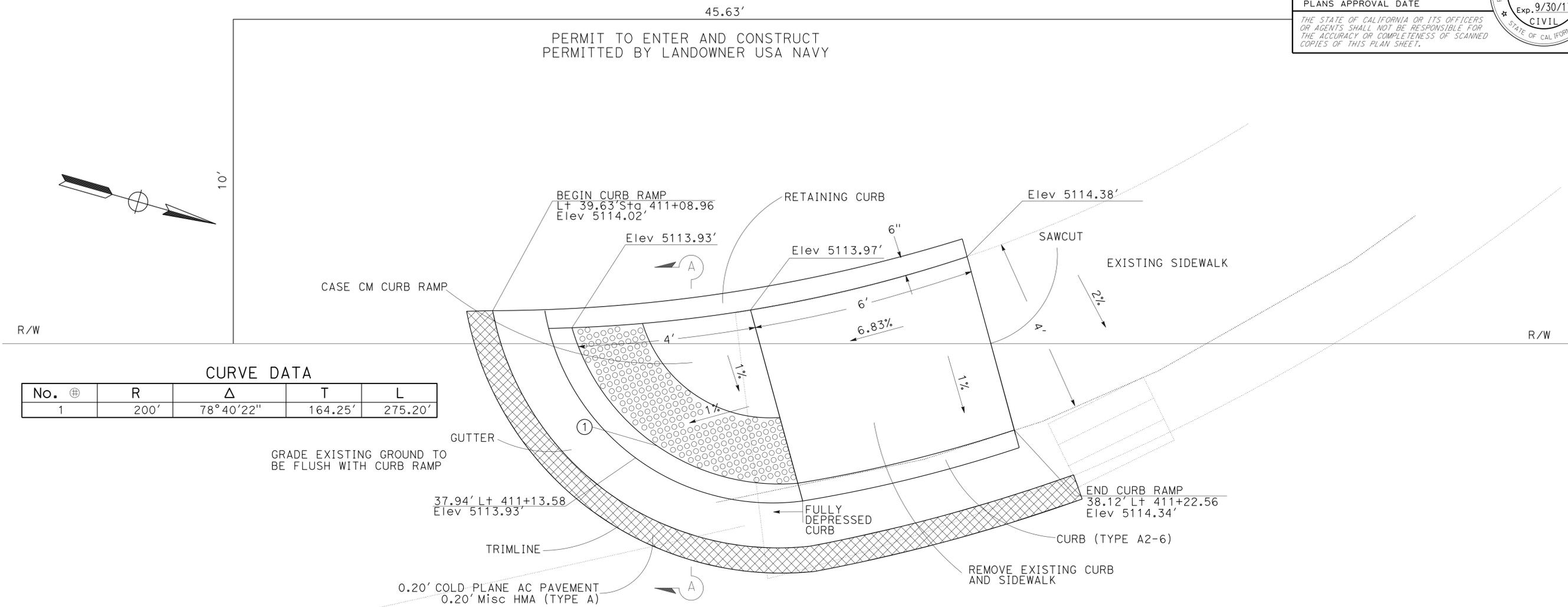
KAMI BAYER
BRIAN WESLING

CALCULATED/DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR
BRIAN WESLING

PROJECT DELIVERY

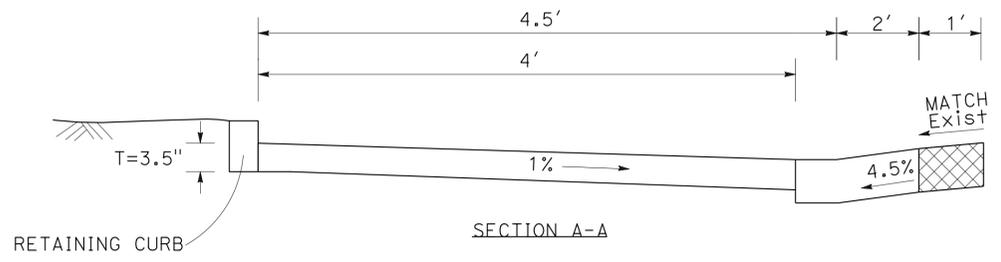
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	13	60
 REGISTERED CIVIL ENGINEER DATE 1/7/2016			1-25-16 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
					



CURVE DATA

No.	⊕	R	Δ	T	L
1		200'	78°40'22"	164.25'	275.20'

CURB RAMP CONSTRUCTION ON EXISTING SIDEWALK AT CHAMPAGNE AVENUE



CONSTRUCTION DETAILS

NO SCALE **C-7**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DELIVERY
 KAMI BAYER
 BRIAN WESLING
 BRIAN WESLING
 KAMI BAYER
 BRIAN WESLING
 BRIAN WESLING

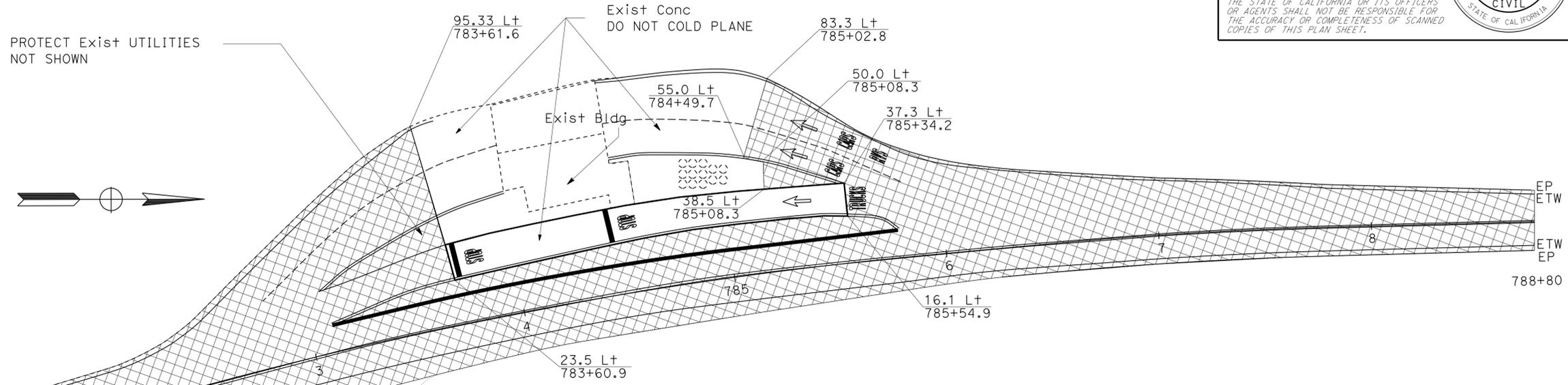
LAST REVISION DATE PLOTTED => 20-JAN-2016
 12-18-15 TIME PLOTTED => 08:11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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	1/7/2016
REGISTERED CIVIL ENGINEER	DATE
1-25-16	
PLANS APPROVAL DATE	

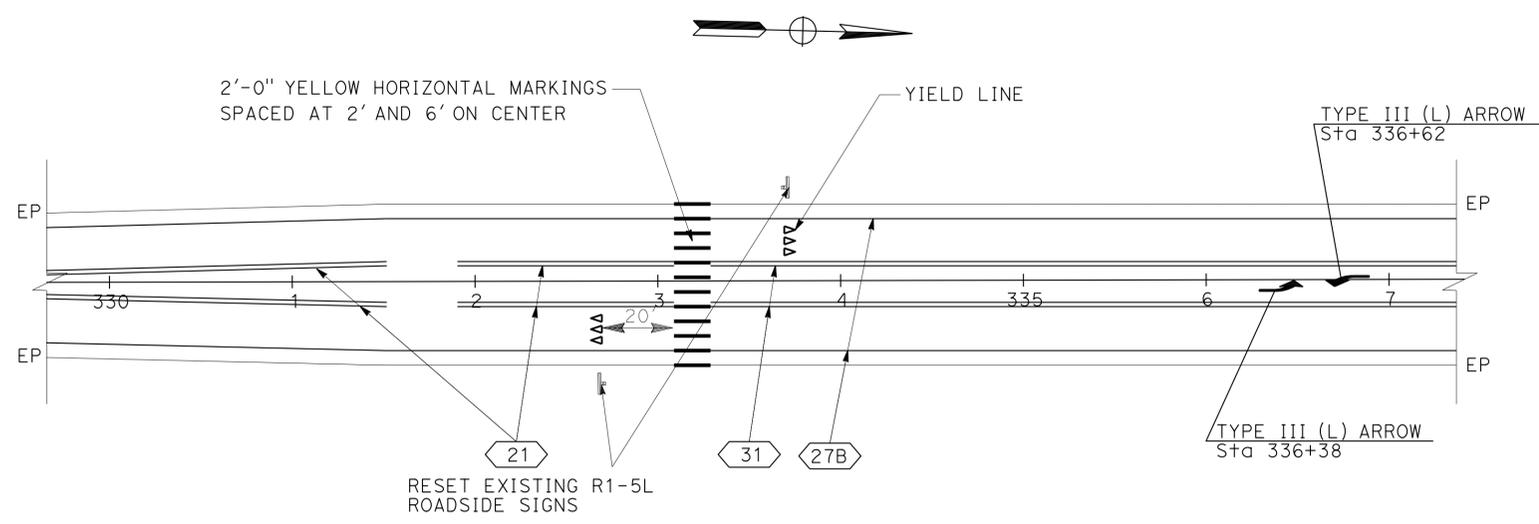
REGISTERED PROFESSIONAL ENGINEER
BRIAN P. WESLING
No. 62509
Exp. 9/30/17
CIVIL
STATE OF CALIFORNIA

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.



LIMITS OF COLD PLANE AT CALIFORNIA INSPECTION STATION

LOCATION 2
STA 784+00 PM 120.1



COLEVILLE SCHOOL CROSSWALK STRIPING DETAIL

LOCATION 1
STA 333+10

CONSTRUCTION DETAILS

NO SCALE **C-8**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY

REVISOR BY DATE

KAMI BAYER
BRIAN WESLING

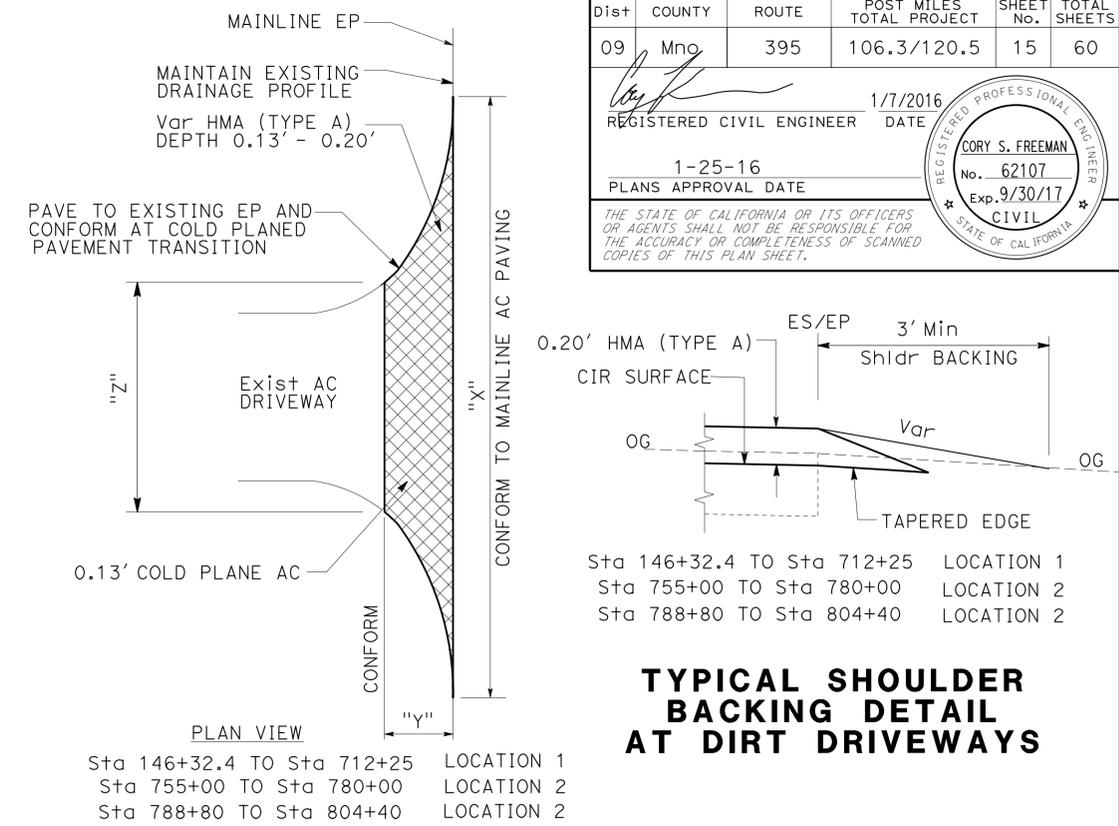
CALCULATED-DESIGNED BY CHECKED BY

FUNCTIONAL SUPERVISOR
BRIAN WESLING

DRIVEWAY - PAVING LIMITS & QUANTITIES

LOCATION	STATION LIMITS	L+	R+	DIMENSION			COLD PLANE ASPHALT CONCRETE SQYD	HMA (TYPE A) TON	DESCRIPTION
				X	Z	Y			
	196+48 TO 197+06		X	58'	50'	4'	24.2	3.2	RESIDENTIAL DRIVEWAY
	198+73 TO 199+31		X	73'	51.5'	4'	24.6	3.2	RESIDENTIAL DRIVEWAY
	211+15.6 TO 211+42.8		X	27.2'	22.8'	4'	11.1	1.5	RESIDENTIAL DRIVEWAY
	220+45.5 TO 220+81.3		X	35.8'	29.8'	4'	14.6	1.9	RESIDENTIAL DRIVEWAY
	223+37.6 TO 223+61.7		X	24'	19.4'	4'	9.7	1.3	RESIDENTIAL DRIVEWAY
	227+80 TO 228+06		X	23'	17.5'	4'	9	1.2	RESIDENTIAL DRIVEWAY
	243+09 TO 243+50	X		41'	38'	4'	17.4	2.3	RESIDENTIAL DRIVEWAY
	250+80.3 TO 251+36.8	X		56.5'	43'	4'	20.9	2.7	RESIDENTIAL DRIVEWAY
	251+36.8 TO 251+93.3	X		56.5'	43'	4'	21	2.7	RESIDENTIAL DRIVEWAY
	254+61.4 TO 255+22	X		60.6'	34'	4'	19	2.5	RESIDENTIAL DRIVEWAY
	272+06 TO 276+18.3	X		412.4'	395'	4'	179.8	23.5	MEADOW CLIFF DRIVEWAY
	319+71 TO 320+19.5		X	48.7'	44.2'	4'	20.7	2.7	RESIDENTIAL DRIVEWAY
	320+90 TO 321+08		X	18.3'	10.9'	4'	6.4	.8	RESIDENTIAL DRIVEWAY
	321+46 TO 321+70		X	24.6'	17'	4'	9	1.2	RESIDENTIAL DRIVEWAY
	321+75.5 TO 322+28		X	53.7'	35.7'	4'	19.9	2.6	RESIDENTIAL DRIVEWAY
	327+94 TO 328+01	X		22.8'	18.1'	4'	9.1	1.2	RESIDENTIAL DRIVEWAY
	328+88 TO 329+18.6	X		30.7'	25.7'	4'	12.5	1.7	RESIDENTIAL DRIVEWAY
	329+63.4 TO 330+01	X		37.2'	35.4'	4'	13.7	1.8	RESIDENTIAL DRIVEWAY
	331+12.5 TO 333+13.1	X		200.7'	197.1'	6	132.8	17.3	COLEVILLE SCHOOL DRIVEWAY
	335+78.8 TO 337+33.7	X		155'	145'	8	129.1	16.9	COLEVILLE SCHOOL DRIVEWAY
	339+41.6 TO 340+35.8	X		94.2'	87.4'	4'	40.3	5.3	COLEVILLE SCHOOL DRIVEWAY
	334+85.6 TO 335+20.7		X	35.1'	18.6'	4'	10.5	1.4	RESIDENTIAL DRIVEWAY
	339+43.5 TO 339+72.6		X	29'	20.4'	4'	11	1.4	RESIDENTIAL DRIVEWAY
1	341+84.9 TO 342+28.8	X		43.9'	43.9'	4'	19.6		CONFORM GRIND AT CONCRETE DRIVEWAY; UNITED METHODIST CHURCH
	342+73.8 TO 343+06.4	X		32.6'	25.1'	4'	12.8	1.7	RESIDENTIAL DRIVEWAY
	345+66 TO 346+14		X	48'	30.3'	4'	16.5	2.2	RESIDENTIAL DRIVEWAY
	347+15.5 TO 347+65.9	X		50.2'	36.5'	4'	18.6	2.4	US POST OFFICE DRIVEWAY
	360+50 TO 362+35	X		186.4'	109'	4'	65.4	8.5	RESIDENTIAL DRIVEWAY
	404+37 TO 405+14	X		77'	56.6'	4'	29.5	3.9	OUR LADY OF THE VALLEY CHAPEL DRIVEWAY
	411+60.8 TO 412+11.6		X	50.8'	34'	4'	18	2.4	RESIDENTIAL DRIVEWAY
	424+22.5 TO 424+95	X		72.6'	36.7'	4'	20.4	2.7	RESIDENTIAL DRIVEWAY
	427+58 TO 428+46		X	86'	81'	4'	37.6	4.9	RESIDENTIAL DRIVEWAY
	436+84 TO 438+96.6		X	212.6'	205.3'	4'	92.9	12.1	RESIDENTIAL DRIVEWAY
	446+77.6 TO 447+04	X		25.9'	21.3'	4'	10.5	1.37	RESIDENTIAL DRIVEWAY
	451+04 TO 451+70.9	X		70.9'	64.1'	4'	30	3.9	RESIDENTIAL DRIVEWAY
	448+30 TO 449+37.5		X	107'	75.8'	4'	38.2	5	RESIDENTIAL DRIVEWAY
	481+23.4 TO 481+87.9	X		64.5'	50'	4'	25.1	3.3	RESIDENTIAL DRIVEWAY
	488+63.8 TO 489+10.4	X		47.4'	36.3'	4'	18.3	2.4	RESIDENTIAL DRIVEWAY
	489+18.1 TO 489+86		X	66.2'	41.7'	4'	22.3	2.9	RESIDENTIAL DRIVEWAY
	490+47 TO 491+04	X		58'	40.7'	4'	21.2	2.8	RESIDENTIAL DRIVEWAY
	498+63.9 TO 499+08	X		44.1'	36.1'	4'	17.8	2.3	RESIDENTIAL DRIVEWAY
	500+11 TO 500+54.5	X		44'	34'	4'	17.2	2.2	RESIDENTIAL DRIVEWAY
	502+81.3 TO 503+47.2	X		65.9'	38.8'	4'	21.2	2.8	RESIDENTIAL DRIVEWAY
	506+10 TO 506+71.6	X		61.6'	34.1'	4'	19	2.5	RESIDENTIAL DRIVEWAY
	553+62.3 TO 554+34	X		72.9'	67'	4'	31.1	4.1	ANTELOPE VALLEY FIRE STATION
	557+62.8 TO 558+60	X		97.2'	97.2'	4'	43.2		CONFORM GRIND AT CONCRETE DRIVEWAY
	586+42.9 TO 587+08	X		63.3'	38.3'	4'	21	2.7	RESIDENTIAL DRIVEWAY
	590+40.6 TO 591+36.5		X	93.3'	88.5'	4'	40.4	5.3	RESIDENTIAL DRIVEWAY
	613+51.2 TO 615+93.2		X	242'	129'	4'	80.7	10.5	RESIDENTIAL DRIVEWAY
	625+22.8 TO 625+90		X	67.1'	54.5'	4'	27.1	3.5	RESIDENTIAL DRIVEWAY

FOR COLD PLANE ASPHALT CONCRETE PAVEMENT AND HMA TOTAL QUANTITIES SEE SHEET Q-1.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	15	60

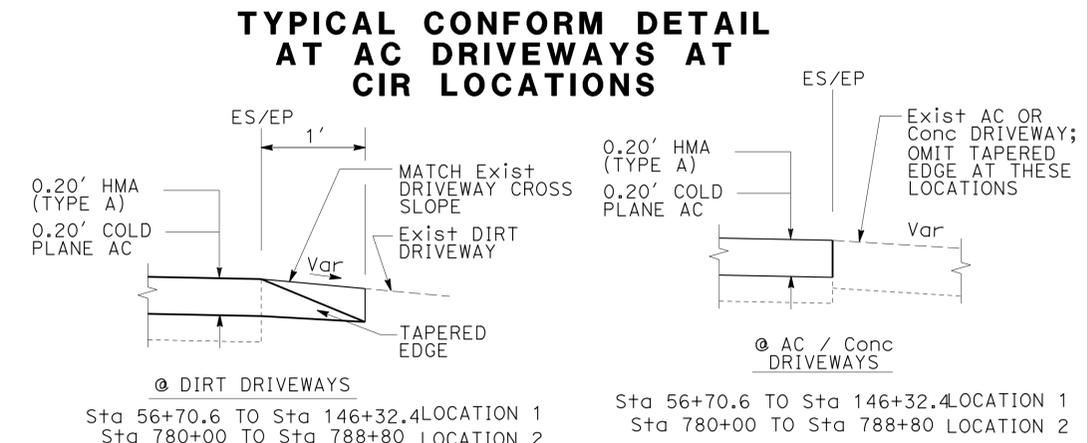
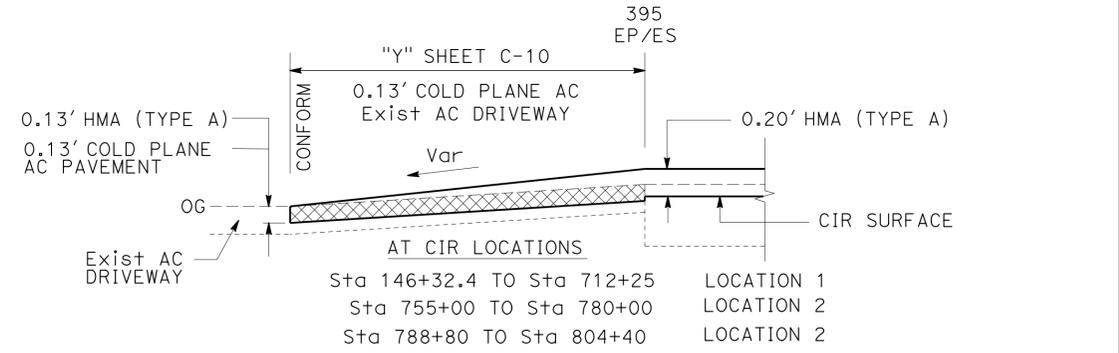
1/7/2016
REGISTERED CIVIL ENGINEER DATE

1-25-16
PLANS APPROVAL DATE

CORY S. FREEMAN
No. 62107
Exp. 9/30/17
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.

TYPICAL PRIVATE DRIVEWAY ASPHALT CONCRETE PAVING LIMITS



TYPICAL DRIVEWAY DETAIL WITHIN MILL AND FILL AREAS CONSTRUCTION DETAILS C-9
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY

REVISOR: CORY FREEMAN, BRIAN WESLING

CALCULATED/DESIGNED BY: CORY FREEMAN, BRIAN WESLING

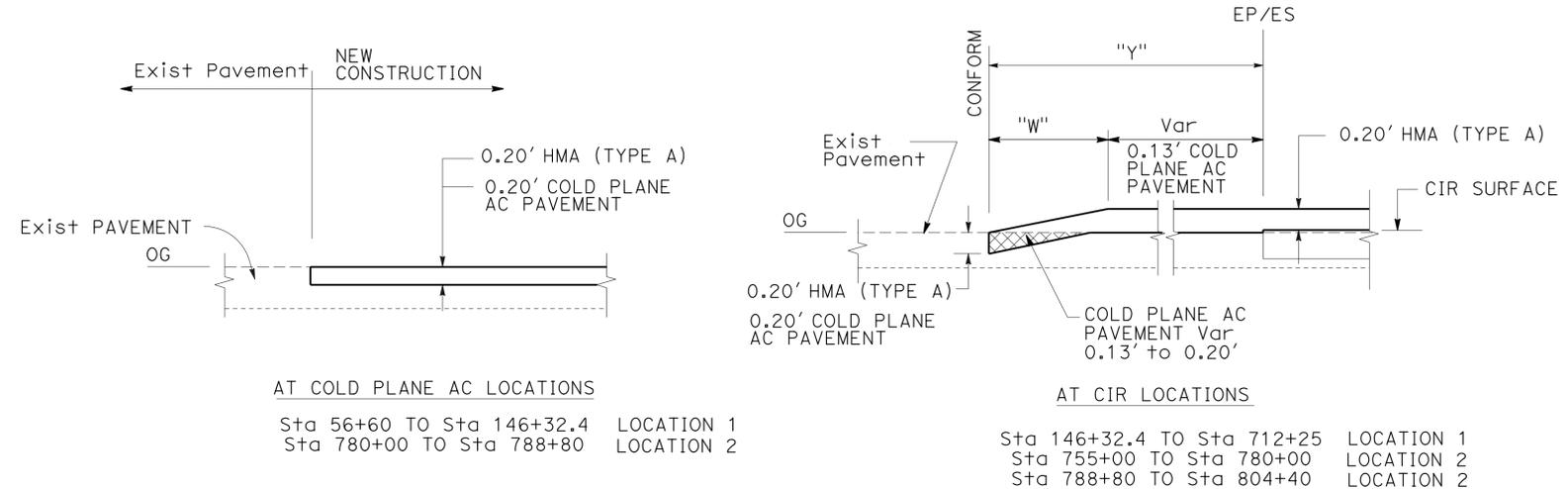
CHECKED BY: BRIAN WESLING

FUNCTIONAL SUPERVISOR: BRIAN WESLING

ROAD CONNECTIONS - PAVING LIMITS & QUANTITIES

LOCATION	POST MILE	STATION LIMITS	L+	R+	DIMENSION				COLD PLANE ASPHALT CONCRETE SQYD	SHOULDER BACKING TON	HMA (TYPE A) TON	DESCRIPTION
					X	Z	Y	W				
1	106.34	59+25 TO 60+18		X	93'	27'	51'		12.9		30.6	EASTSIDE LANE
	106.78	82+76.8 TO 83+37.4	X		61'	24'	44'		21		21.6	PINE NUT Rd
	107.14	101+37.9 to 102+83.7	X		84.2'	26.8'	37.7'		170.5		22.2	MILL CREEK Dr
	107.51	120+05 TO 120+92	X		87'	25'	23.5'		103.8		13.5	HACKNEY Dr
	109.25	212+18.7 to 213+29	X		110.2'	23.5'	43.9'	15'	252.8	5.5	33	MILL CANYON Rd
	109.98	249+77 TO 251+29.2		X	152.1'	21'	146.4'	20'	791.6	14.9	103.3	LARSON LANE
	112.37	375+90.7 TO 377+53.4		X	167.3'	52.9'	40.5'	20'	427.8	5.8	55.8	CUNNINGHAM LANE
	113.04	410+97.3 TO 412+62.7	X		164.8'	47.6'	42'	20'	350.9		45.8	CHAMPAGNE Ave
	114.70	498+20 TO 499+49.8		X	130'	41.9'	81.6'	20'	529.5	8.9	69.1	TOPAZ LANE
	116.96	619+14 TO 620+79.5	X		165.5'	29'	77.5'	20'	452.3	10.1	59	ROUTE 89

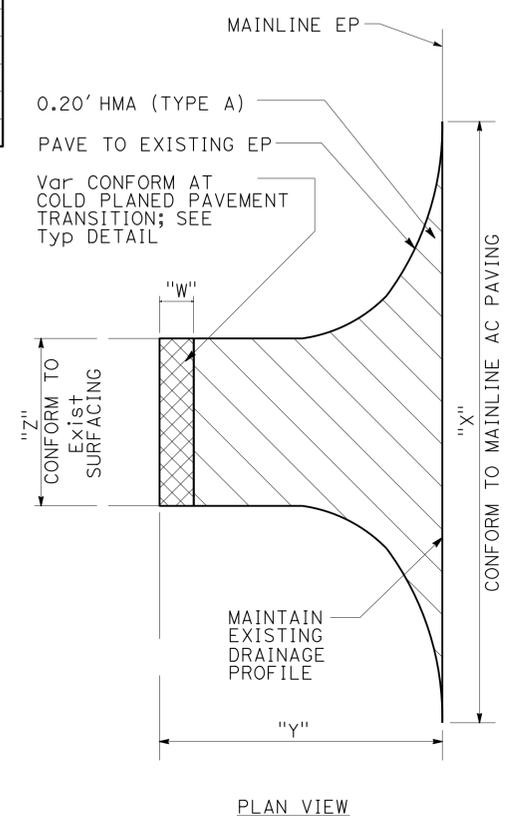
FOR COLD PLANE ASPHALT CONCRETE PAVEMENT AND HMA TOTAL QUANTITIES SEE SHEET Q-1. 395 EP/ES



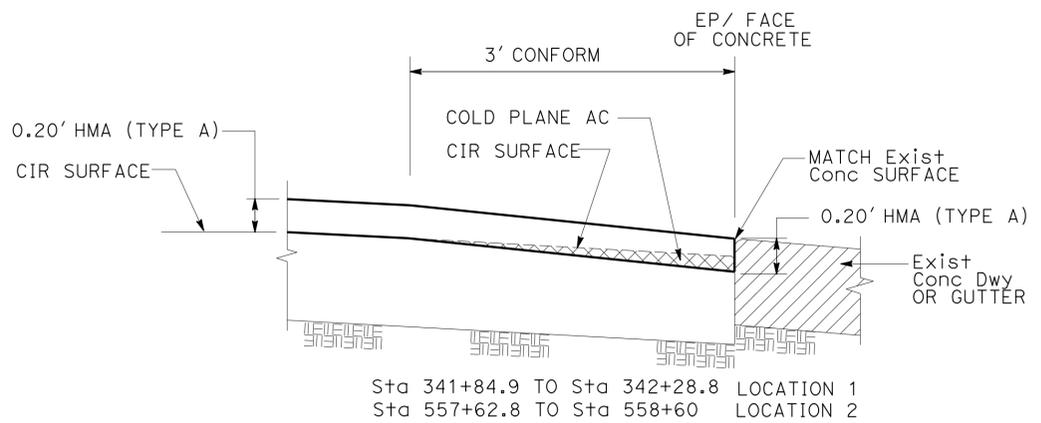
AT COLD PLANE AC LOCATIONS
Sta 56+60 TO Sta 146+32.4 LOCATION 1
Sta 780+00 TO Sta 788+80 LOCATION 2

AT CIR LOCATIONS
Sta 146+32.4 TO Sta 712+25 LOCATION 1
Sta 755+00 TO Sta 780+00 LOCATION 2
Sta 788+80 TO Sta 804+40 LOCATION 2

TYPICAL LONGITUDINAL CONFORM DETAILS AT ROAD CONNECTIONS

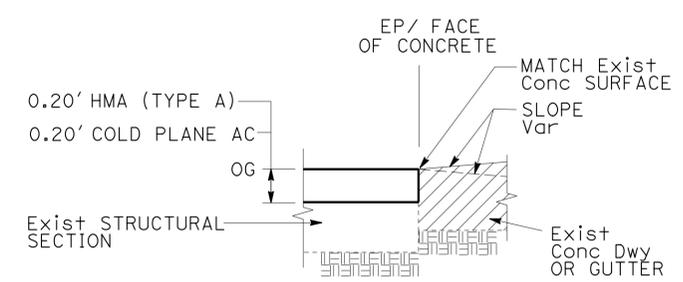


TYPICAL AC PAVING LIMITS AT ROAD CONNECTIONS



Sta 341+84.9 TO Sta 342+28.8 LOCATION 1
Sta 557+62.8 TO Sta 558+60 LOCATION 2

PAVING CONFORM TO CONCRETE WHERE CIR IS PERFORMED (TYPICAL)



Sta Rt 108+39 TO Sta Rt 109+33
Sta Lt 411+09 TO Sta Lt 411+53 (CHAMPAGNE Ave GUTTER)
Sta Lt 412+01 TO Sta Lt 412+40 (CHAMPAGNE Ave GUTTER)
Sta Lt 783+61 TO Sta Lt 785+32.6 (INSPECTION STA)

LOCATION 1
LOCATION 1
LOCATION 1
LOCATION 2

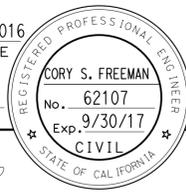
PAVING CONFORM TO CONCRETE AT NON CIR LOCATIONS (TYPICAL)

CONSTRUCTION DETAILS

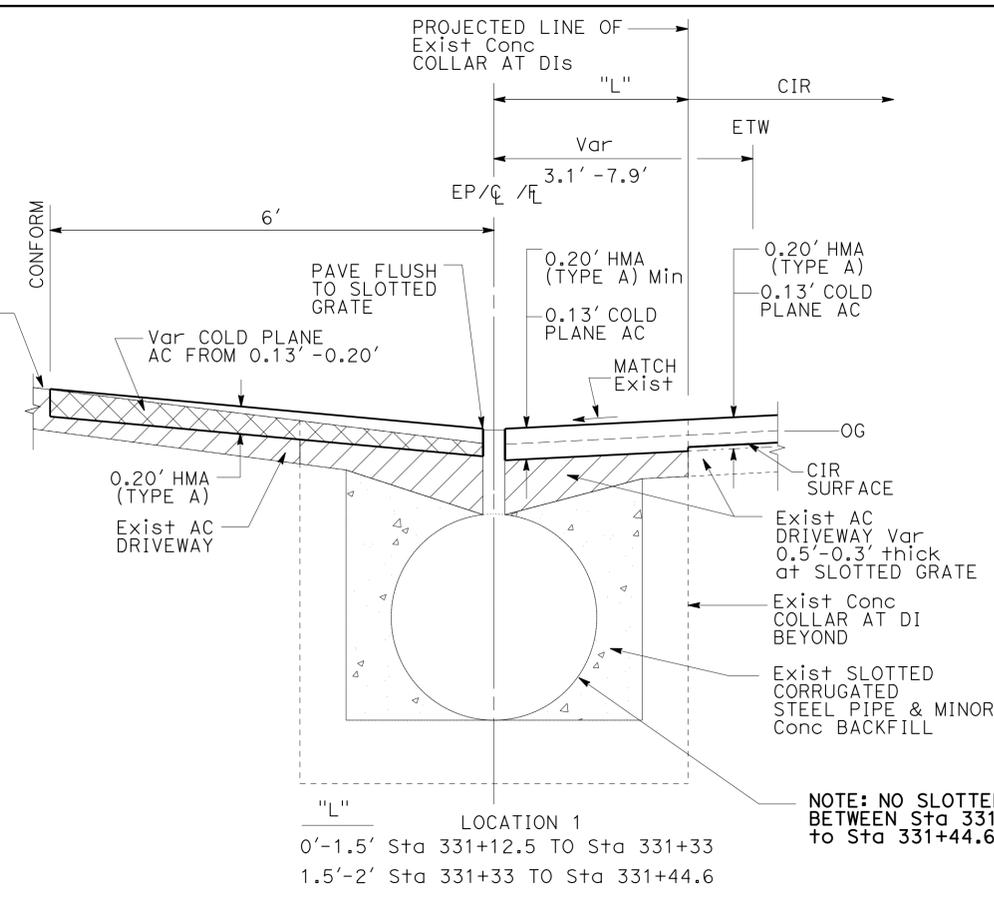
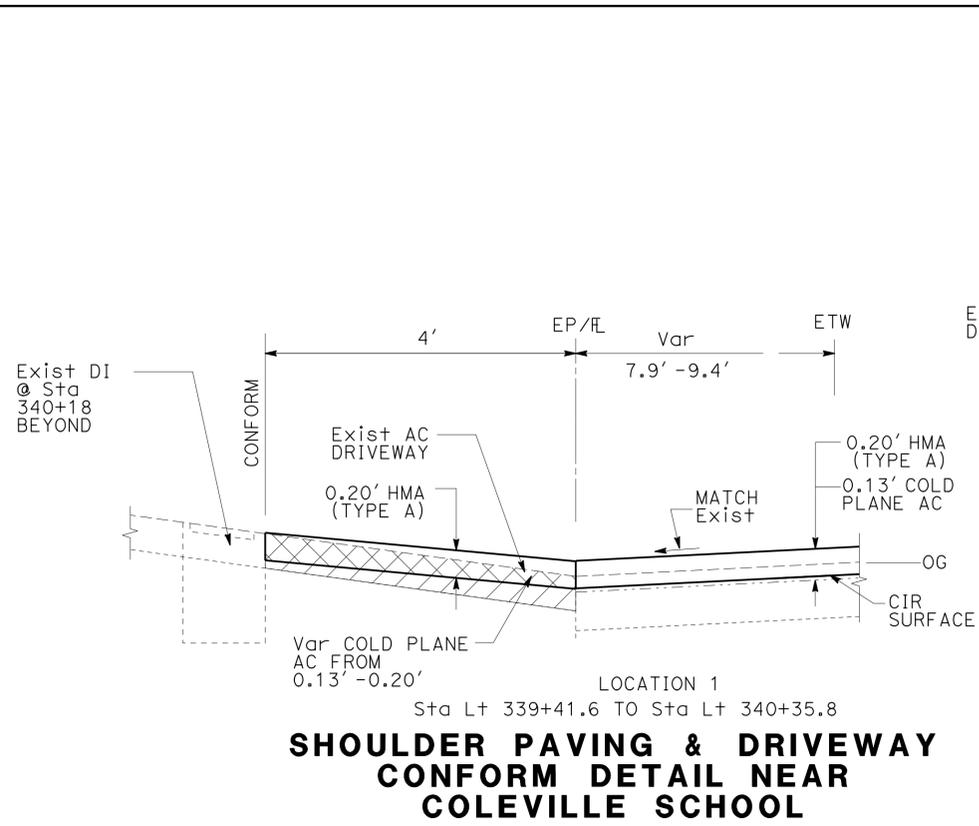
NO SCALE C-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY
CORY FREEMAN
BRIAN WESLING
BRIAN WESLING

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	17	60
REGISTERED CIVIL ENGINEER			DATE	1/7/2016	
1-25-16			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

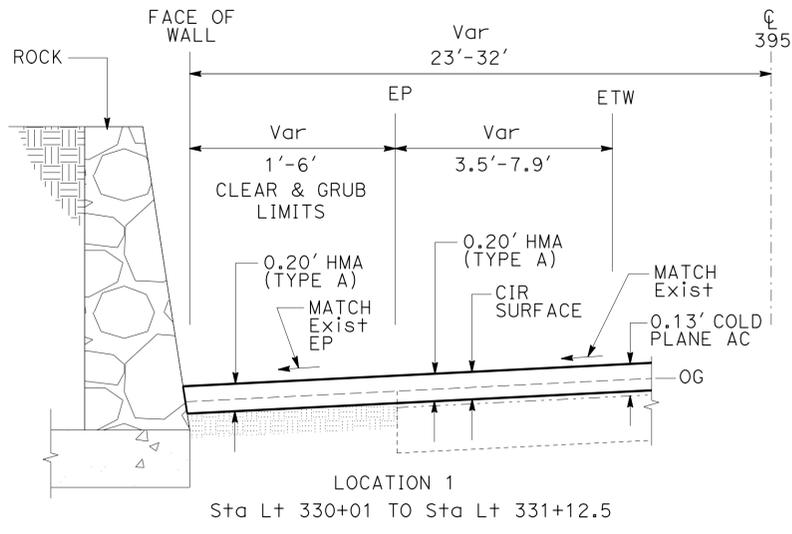
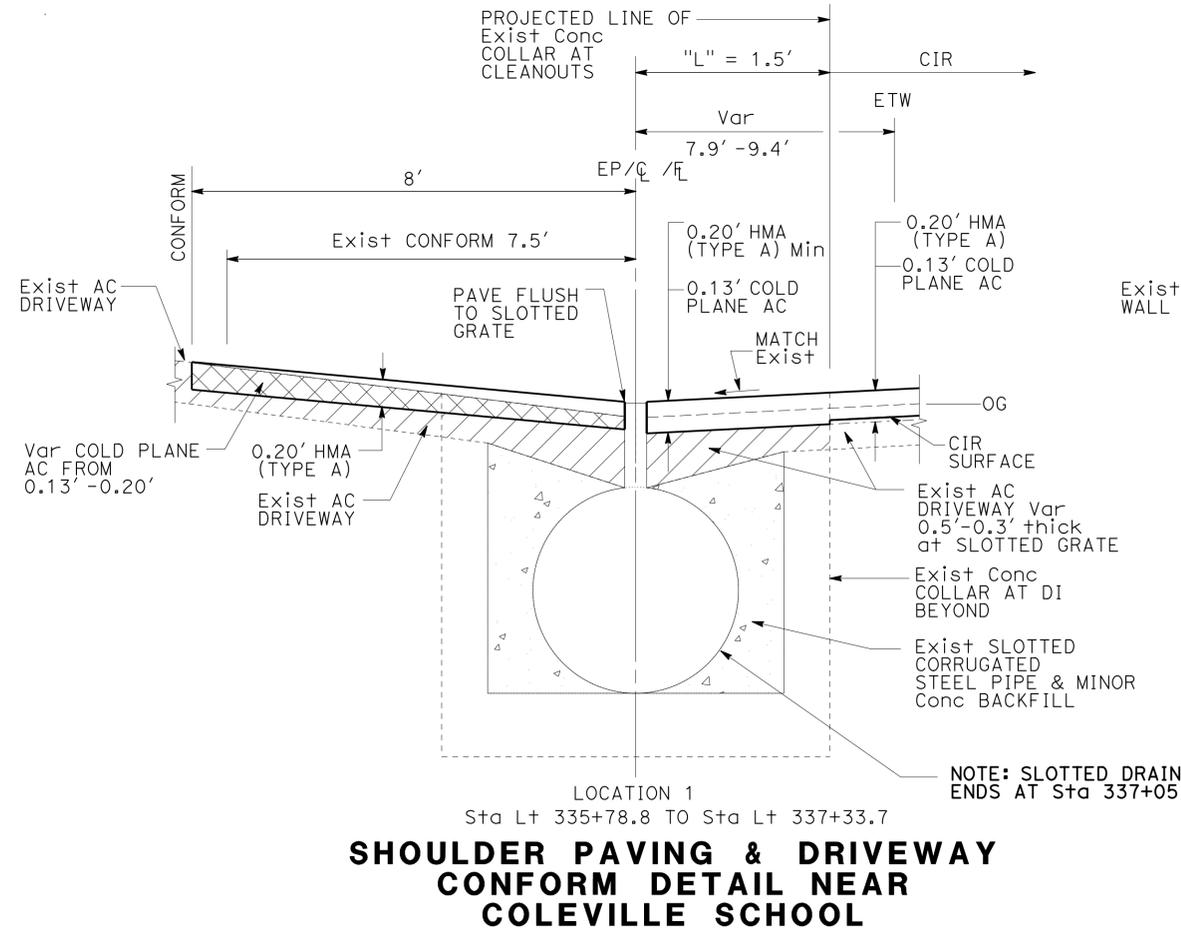


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - PROJECT DELIVERY
 Et Caltrans
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: BRIAN WESLING
 CHECKED BY:
 CORY FREEMAN
 BRIAN WESLING
 REVISED BY: DATE REVISIONS
 CORY FREEMAN
 BRIAN WESLING
 DATE REVISIONS

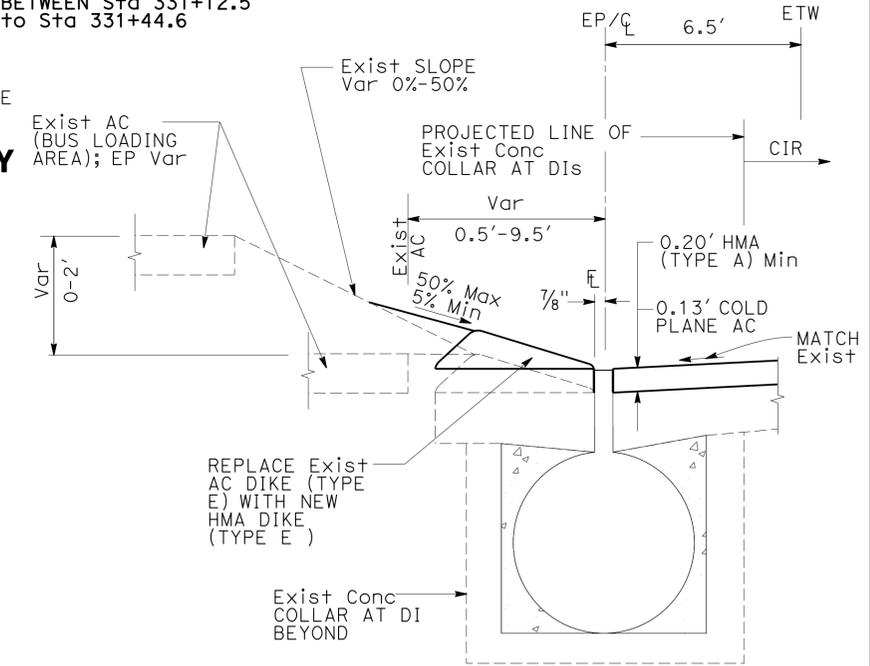


SEE SHEET C-6 FOR ADJUSTING SLOTTED PIPE GRATE TO GRADE
 Sta Lt 331+12.5 TO Sta Lt 333+13.1

SHOULDER PAVING & DRIVEWAY CONFORM DETAIL NEAR COLEVILLE SCHOOL



SHOULDER PAVING DETAIL AT EXISTING ROCK WALL

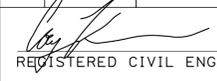
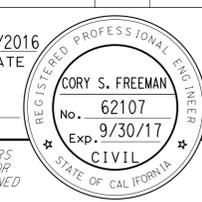


SEE SHEET C-6 FOR ADJUSTING SLOTTED PIPE GRATE TO GRADE

SHOULDER PAVING AND SLOTTED GRATE DETAIL NEAR COLEVILLE SCHOOL

SEE SHEET C-6 FOR ADJUSTING SLOTTED PIPE GRATE TO GRADE

CONSTRUCTION DETAILS C-11
 NO SCALE

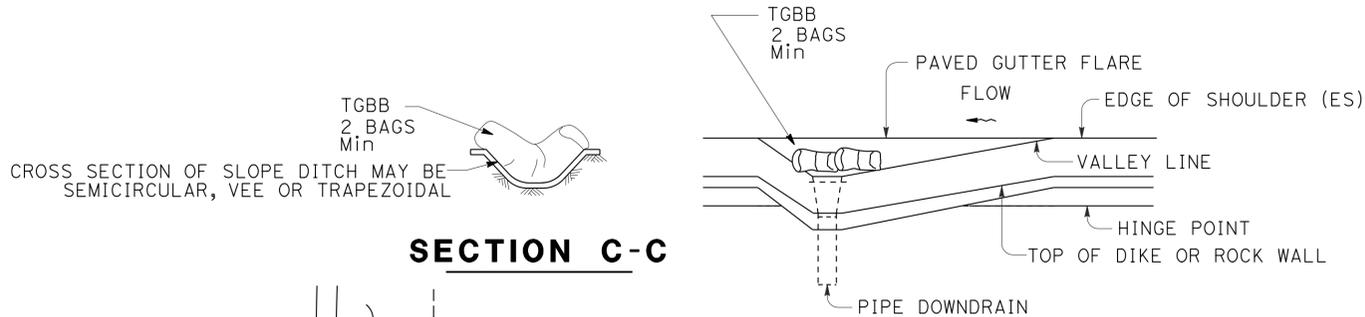
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	18	60
 REGISTERED CIVIL ENGINEER DATE 1/7/2016					
1-25-16					
PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

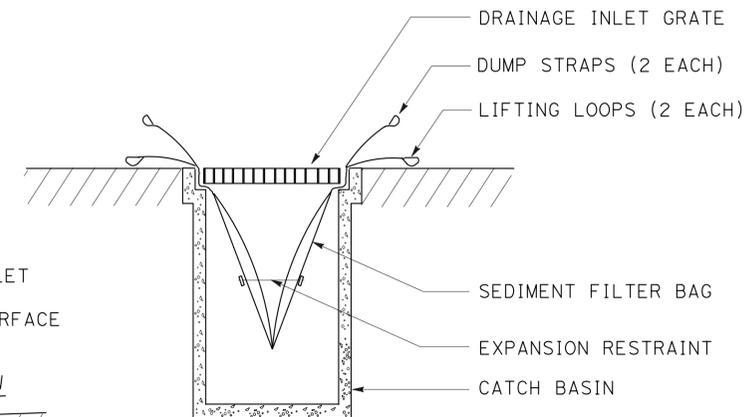
1. EXACT LOCATION AND POSITION OF TEMPORARY DRAINAGE PROTECTION TO BE DETERMINED BY THE ENGINEER.
2. UNLESS OTHERWISE SHOWN OR NOTED REFER TO STANDARD PLAN DETAILS FOR INSTALLATION OF TEMPORARY STORMWATER ITEMS.

ABBREVIATIONS:

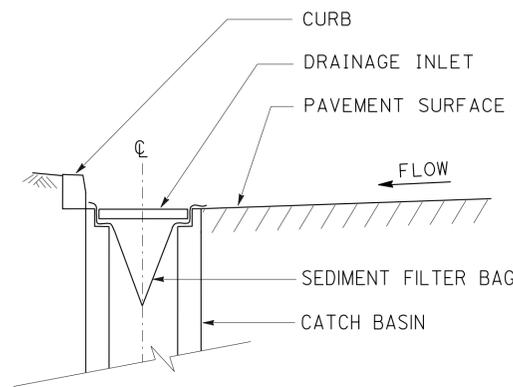
TFR - Temp FIBER ROLL
 TGBB - Temp GRAVEL BAG BERM



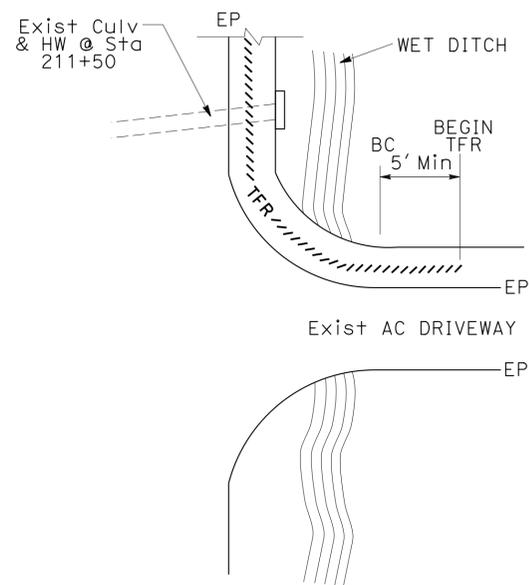
TEMPORARY GRAVEL BAG BERM AT PIPE DOWNDRAIN (TYPICAL)



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

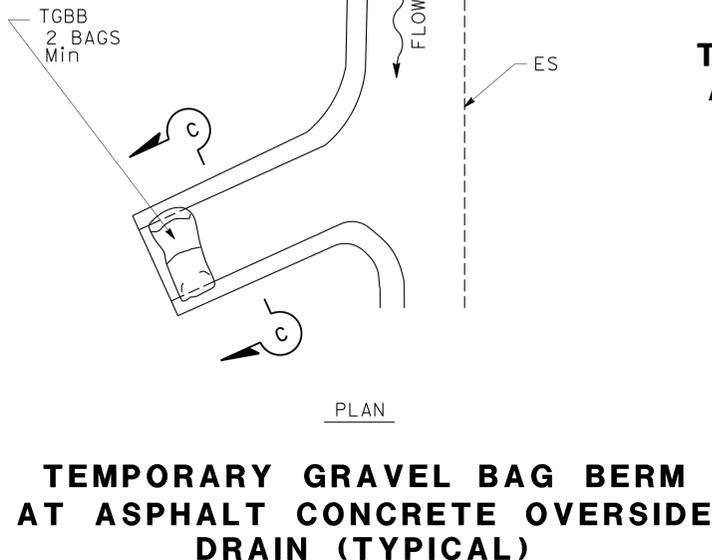


SECTION A-A

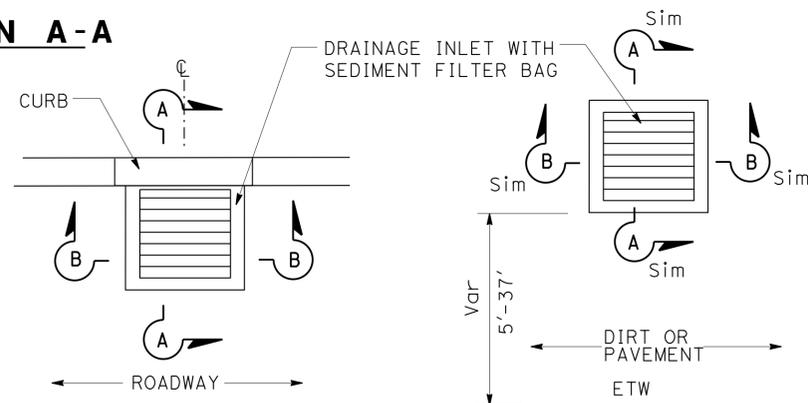


TEMPORARY FIBER ROLL PLACEMENT

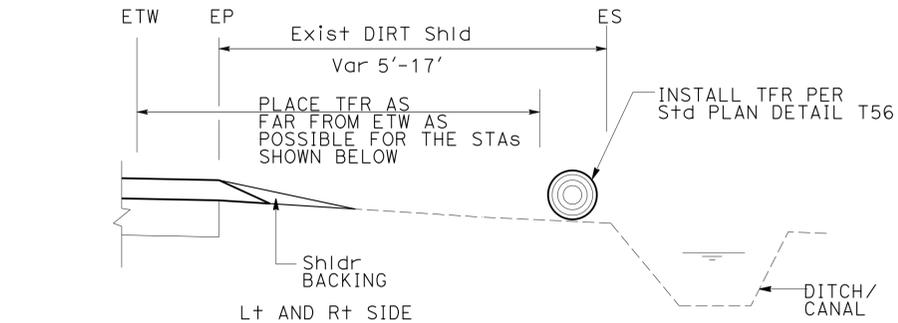
Sta 211+22
 LOCATION 1



TEMPORARY GRAVEL BAG BERM AT ASPHALT CONCRETE OVERSIDE DRAIN (TYPICAL)

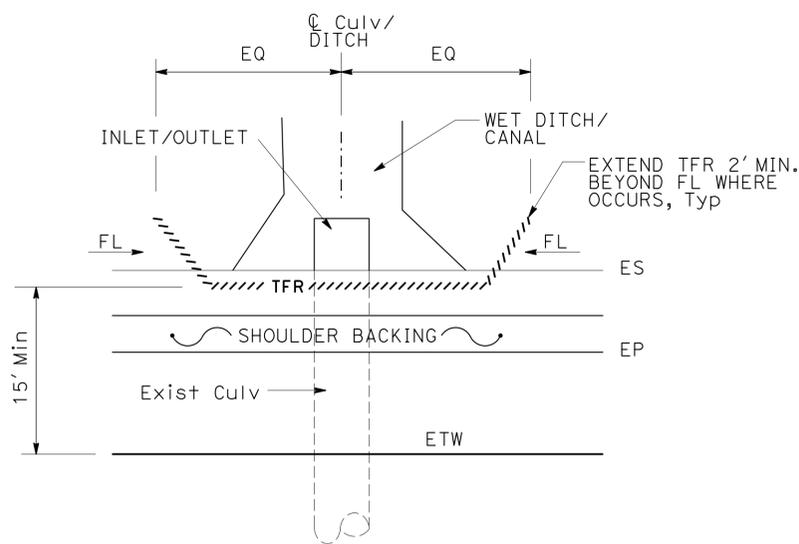


TEMPORARY DRAINAGE INLET PROTECTION (SEDIMENT FILTER BAG)



Typ TEMPORARY FIBER ROLL (TYPE 2) PLACEMENT

Sta 210+00 TO Sta 212+00 Lt
 Sta 211+38 TO Sta 218+60 Rt



TEMPORARY FIBER ROLL PLACEMENT @ STA 195+66.6

INLET & OUTLET

**TEMPORARY WATER POLLUTION CONTROL DETAILS
 NO SCALE WPCD-1**

THIS PLAN ACCURATE FOR TEMPORARY WATER POLLUTION CONTROL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY

FUNCTIONAL SUPERVISOR
 BRIAN WESLING

CALCULATED/DESIGNED BY
 CHECKED BY

CORY FREEMAN
 BRIAN WESLING

REVISED BY
 DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY

FUNCTIONAL SUPERVISOR
 BRIAN WESLING

CALCULATED-DESIGNED BY
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CORY FREEMAN
 BRIAN WESLING

REVISED BY
 DATE REVISED

TEMPORARY DRAINAGE INLET PROTECTION

LOCATION	STATION	L+	EA	TYPE
1	71+10	X	1	4A
	76+60	X	1	SEDIMENT FILTER BAG
	82+74	X	1	SEDIMENT FILTER BAG
	143+33	X	1	SEDIMENT FILTER BAG
	155+07	X	1	SEDIMENT FILTER BAG
	176+09	X	1	SEDIMENT FILTER BAG
	250+28	X	1	SEDIMENT FILTER BAG
	251+32	X	1	SEDIMENT FILTER BAG
	340+18	X	1	SEDIMENT FILTER BAG
	388+37	X	1	SEDIMENT FILTER BAG
	399+12	X	1	4A
	411+28	X	1	SEDIMENT FILTER BAG
	412+37	X	1	SEDIMENT FILTER BAG
	424+74	X	1	4A
	456+27	X	1	4A
	462+90	X	1	SEDIMENT FILTER BAG
	532+83	X	1	4A
679+06	X	1	SEDIMENT FILTER BAG	
686+12	X	1	SEDIMENT FILTER BAG	
709+79	X	1	SEDIMENT FILTER BAG	
2	793+16	X	1	SEDIMENT FILTER BAG
	798+32	X	1	SEDIMENT FILTER BAG
TOTAL			22	

TEMPORARY FIBER ROLL

LOCATION	STATION	LF	L+	R+	DESCRIPTION
1	99+46 TO 101+08	160	X		MILL CREEK BRIDGE; PLACE IN FRONT OF MBGR/Conc BARRIER
	99+46 TO 101+08	160		X	MILL CREEK BRIDGE; PLACE IN FRONT OF MBGR/Conc BARRIER
	195+66.6	60	X		PROTECT WET DITCH; SEE DETAIL BELOW
	195+66.6	60		X	PROTECT WET DITCH; SEE DETAIL BELOW
	210+00 TO 212+00	200	X		PLACE AT END OF CUT TO MILL CANYON Rd
	211+22 TO 218+60	732		X	DRIVEWAY TO NORTH OF Exist Culv
	461+60	80		X	SWAGER DITCH; PLACE ALONG & IN FRONT OF HW
	462+80	60	X		SWAGER DITCH; PLACE ALONG & IN FRONT OF HW
TOTAL		1512			

TEMPORARY GRAVEL BAG BERM

LOCATION	STATION	LF	L+	R+	NOTES
1	228+36	4	X		OVERSIDE DRAIN
	350+62	4	X		OVERSIDE DRAIN
	369+44	4		X	PIPE DOWN DRAIN
	387+40	4		X	PIPE DOWN DRAIN
	413+00	4	X		OVERSIDE DRAIN
	420+15	4		X	PIPE DOWN DRAIN
	459+22	4		X	PIPE DOWN DRAIN
	480+70	4		X	PIPE DOWN DRAIN
	581+84	4	X		OVERSIDE DRAIN
	644+81	4	X		OVERSIDE DRAIN
2	804+71	4		X	PIPE DOWN DRAIN
TOTAL		44			

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	19	60

REGISTERED CIVIL ENGINEER DATE 1/7/2016

1-25-16
PLANS APPROVAL DATE

CORY S. FREEMAN
No. 62107
Exp. 9/30/17
CIVIL

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TEMPORARY WATER POLLUTION CONTROL QUANTITIES

NO SCALE WPCQ-1



NOTES:

- EXACT LOCATION OF CONSTRUCTION AREA SIGNS TO BE DETERMINED BY THE ENGINEER.
- FIBER OPTIC LINE LOCATIONS WITHIN THE PROJECT LIMITS MUST BE VERIFIED PRIOR TO INSTALLING SIGNS.

LEGEND:

(X) - PLACEMENT TYPE

PM	PLACEMENT	REMARKS
105.8	A	BEGIN WORK
106.33	B	EASTSIDE LANE, R+
106.8	B	PINE NUT ROAD, Lt
107.13	B	MILL CREEK DRIVE, Lt
107.5	B	HACKNEY DRIVE, Lt
109.26	B	MILL CANYON ROAD, Lt
109.98	B	LARSON LANE, R+
112.36	B	CUNNINGHAM LANE, R+
113.04	B	CHAMPAGNE AVENUE, Lt
114.69	B	TOPAZ LANE, R+
116.96	B	Rte 89, Lt
0.5	A	END WORK, NEVADA, DOUGLAS Co, Rte 395

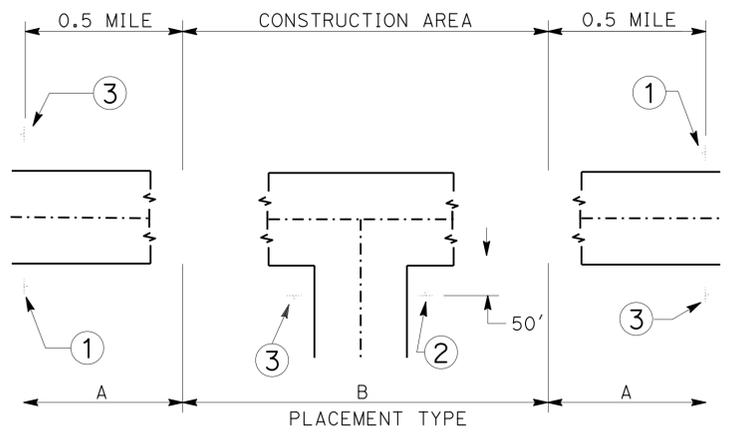
LOCATION	PM	STATION	REMARKS
1	111.46 - 111.75	328+90 - 344+25	FLASHING SCHOOL BEACONS WARNING SYSTEM
	117.0	620+00	COUNT STATION ON SR 89, 568' WEST OF THE EASTBOUND STOP BAR
2	120.1	781+50	ELECTRICAL ELEMENTS FOR CHANGEABLE MESSAGE SIGN (CMS)
	120.21	789+53	FLASHING 'STOP AHEAD' TURNABLE SIGN

LAYOUT	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF SIGNS	No. OF POST AND SIZE
1	A	48" x 48"	ROAD WORK AHEAD	2	1 - 6" x 6"
		60" x 24"	PAVEMENT MAINTENANCE		
2	B	36" x 36"	ROAD WORK AHEAD	10	1 - 4" x 6"
3	C	36" x 18"	END ROAD WORK	12	1 - 4" x 4"

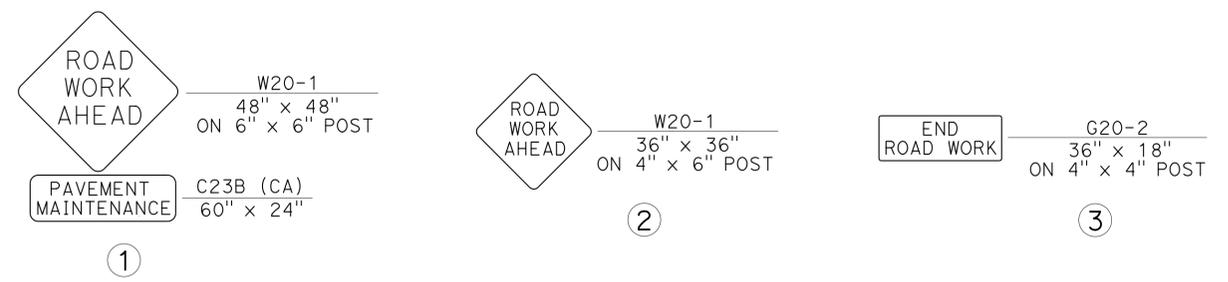
PORTABLE CHANGEABLE MESSAGE SIGNS

USE CAUTION	REDUCE SPEED	LANE CLOSED AHEAD
-------------	--------------	-------------------

- PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS TO BE CONFIRMED BY THE ENGINEER BEFORE THE ACTUAL CLOSURE.
- ALTERNATE MESSAGES MUST BE APPROVED BY THE ENGINEER.
- MESSAGE MAY BE ALTERED BY THE ENGINEER.
- WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVELY IN PROGRESS, PORTABLE CHANGEABLE MESSAGE SIGNS SHALL NOT DISPLAY A MESSAGE UNLESS DIRECTED BY THE ENGINEER.



TYPICAL SIGN PLACEMENT FOR UNDIVIDED HIGHWAY



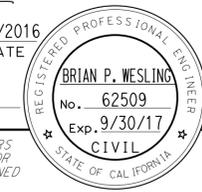
TYPICAL SIGN LAYOUT

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

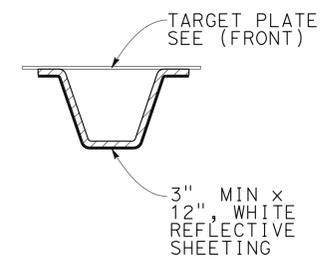
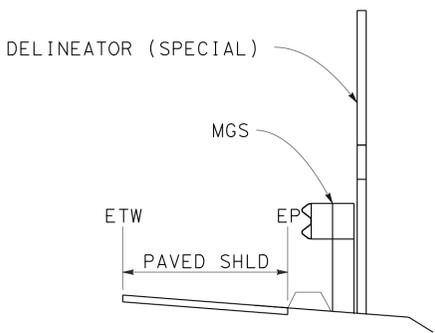
NO SCALE **CS-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY
 KAMI BAYER
 BRIAN WESLING
 REVISOR BY DATE
 CALCULATED/DESIGNED BY CHECKED BY
 FUNCTIONAL SUPERVISOR
 BRIAN WESLING

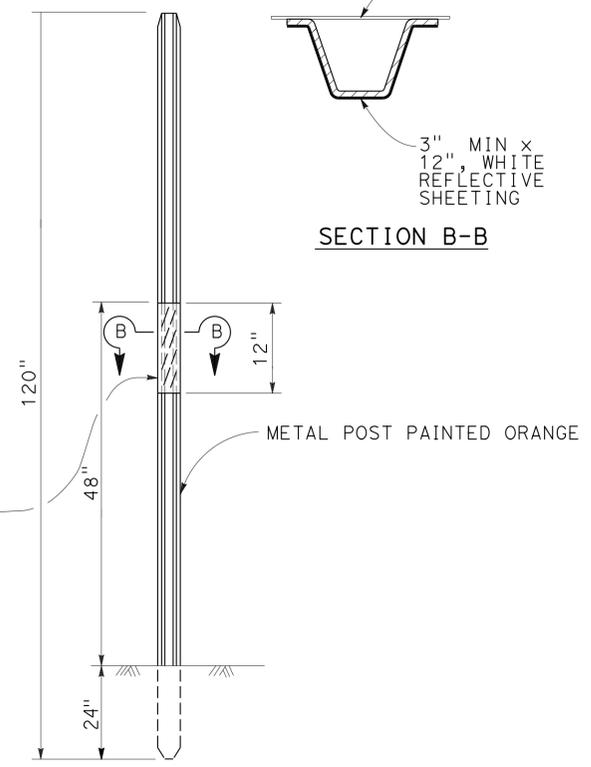
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	21	60
 REGISTERED CIVIL ENGINEER DATE 1/7/2016					
1-25-16 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

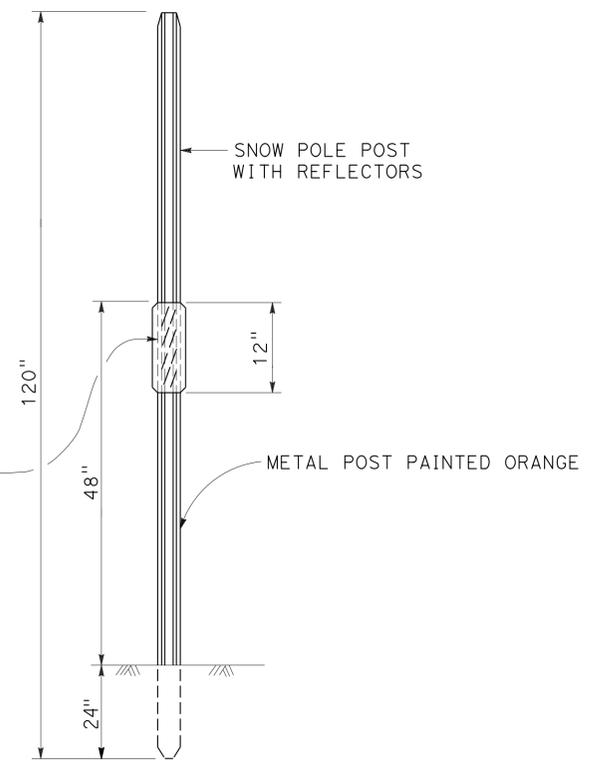
- FOR ADDITIONAL DELINEATOR DETAILS, SEE STD PLAN A73C.
- HARDWARE FOR ATTACHING THE TARGET PLATES SHALL CONSIST OF 3/16" BLIND ALUMINUM RIVETS AND WASHERS.
- EXACT LOCATION OF MARKERS AND DELINEATORS SHALL BE DETERMINED BY THE ENGINEER.



SECTION B-B

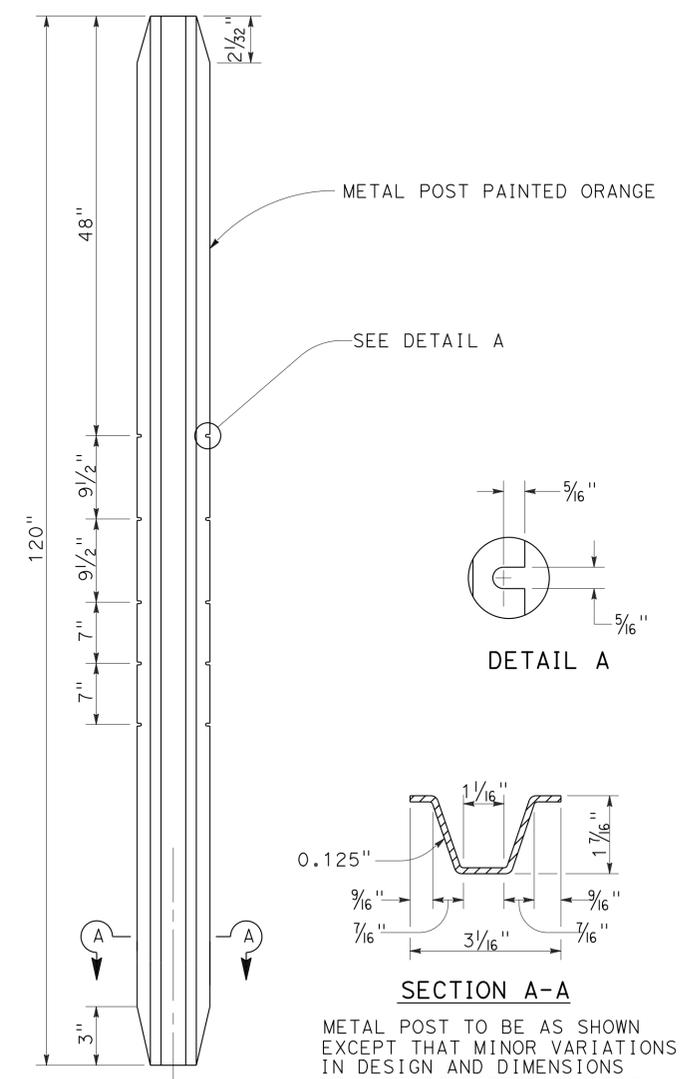


(BACK)



(FRONT)

DELINEATOR (SPECIAL)



DETAIL A

SECTION A-A

METAL POST TO BE AS SHOWN EXCEPT THAT MINOR VARIATIONS IN DESIGN AND DIMENSIONS WILL BE PERMITTED TO MEET MANUFACTURER'S STANDARDS

**DELINEATOR (SPECIAL)
METAL POST DETAIL**

PAVEMENT DELINEATION DETAILS

NO SCALE **PDD-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: CHECKED BY:
 KAMI BAYER BRIAN WESLING
 REVISED BY: DATE REVISED:
 USERNAME => s136805
 DGN FILE => 936430nb001.dgn

APPROVED FOR PAVEMENT DELINEATION WORK ONLY



UNIT 4210

PROJECT NUMBER & PHASE

09140000381

LAST REVISION | DATE PLOTTED => 20-JAN-2016
 12-18-15 TIME PLOTTED => 08:12

PAINT TRAFFIC STRIPE (2-COAT)

LOCATION	STATION	DETAIL NUMBER										REMARK
		5	8	11	18	21	22	27B	28	31	38A	
		LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	
1	56+70.6 TO 712+25	3716		9079	8064	25,966	8583	129,845	18,438	9439	3584	MAINLINE
	59+67					56		168				EASTSIDE LANE
	83+00					46						PINE NUT Rd
	101+78					32						MILL CREEK Dr
	120+48					19						HACKNEY Dr
	212+87					61						MILL CANYON Rd
	250+72					141		57				LARSON LANE
	376+75					42		75				CUNNINGHAM LANE
	411+77					80		83				CHAMPAGNE AVE
	499+00					82		55				TOPAZ LANE
2	620+10					73		289				SR 89
	755+00 TO 804+40					4,897		8,914				MAINLINE
	784+50		156			356		1,029				INSPECTION STATION
SUBTOTAL		3716	156	9079	8064	31,851	8583	140,515	18,438	9439	3584	
TOTAL		233,425										

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	22	60

1/7/2016
REGISTERED CIVIL ENGINEER DATE

1-25-16
PLANS APPROVAL DATE

BRIAN P. WESLING
No. 62509
Exp. 9/30/17
CIVIL

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PAINT TRAFFIC STRIPE (1-COAT)

LOCATION	STATION	DETAIL NUMBER	
		22	28
		LF	LF
1	430+00 TO 478+00		9,600
	625+00 TO 710+83	8,583	
TOTAL		18,183	

NOTE: PLACE TRAFFIC STRIPE (1-COAT) PRIOR TO GRINDING CENTERLINE RUMBLESTRIP.

RESET ROADSIDE SIGN

LOCATION	STATION	L+	R+	EA	DESCRIPTION
1	246+50		X	1	SIDE ROAD
	332+80		X	1	PEDESTRIAN SYMBOL, AHEAD
	333+00		X	1	YIELD HERE TO PEDS
	673+60		X	1	SPEED LIMIT
	679+42		X	1	ONE DIRECTION LARGE ARROW (RIGHT)
	682+50		X	1	WINDING ROAD, GRADE / MILES
	690+30		X	1	SPEED LIMIT
	700+00		X	1	SPEED LIMIT
2	763+20		X	1	SPEED LIMIT
	771+80	X		1	OVERSIZE LOAD INFORMATION (2 POSTS)
	782+30	X		1	YIELD
TOTAL				11	

TEMPORARY TRAFFIC STRIPE (PAINT)

LOCATION	STATION	DETAIL NUMBER									
		5	11	18	21	22	27B	28	31	38A	
		LF	LF	LF	LF	LF	LF	LF	LF	LF	
1	56+70 TO 712+25	3716	9079	8064	25,966	8583	129,845	18,438	9439	3584	
2	755+43 TO 804+40				4,897		8,914				
SUBTOTAL		3716	9079	8064	30,863	8583	138,759	18,438	9439	3584	
TOTAL		230,525									

NOTE: PLACE TEMPORARY TRAFFIC STRIPE (PAINT) ON COLD IN-PLACE RECYCLED MATERIAL.

PAINT PAVEMENT MARKING (2-COAT)

LOCATION	STATION	TYPE I 10' ARROW		TYPE III ARROW (RIGHT)		TYPE III ARROW (LEFT)		TYPE VI ARROW (RIGHT)		TYPE VI ARROW (LEFT)		LIMIT LINE	CROSSWALK		YIELD LINE		"STOP"		"SLOW"		"SCHOOL"		"XING"		"CARS"		"RVS"		"TRUCKS"		REMARK	
		EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT		EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT	EA(N)	SQFT		
1	56+70.6 TO 712+25			12	504	38	1596	6	252	3	126		264	264	2	18			2	46	2	70	2	42							MAINLINE	
	59+67											24					1	22													EASTSIDE LANE	
	83+00											24					1	22													PINE NUT Rd	
	101+78											27					1	22													MILL CREEK Dr	
	120+48											23					1	22													HACKNEY Dr	
	212+87											42					1	22													MILL CANYON Rd	
	250+72											39					1	22													LARSON LANE	
	347+41											19																			POST OFFICE	
	376+75											45					1	22														CUNNINGHAM LANE
	411+77											39					1	22														CHAMPAGNE AVE
2	499+00										32					1	22														TOPAZ LANE	
	620+10										51					1	22														SR 89	
	755+00 TO 804+40																														MAIN LINE	
	784+50	2	28																					2	48	1	18	1	34		INSPECTION STATION	
SUBTOTAL		2	28	12	504	38	1596	6	252	3	126	365	264	264	2	18	10	220	2	46	2	70	2	42	2	48	1	18	1	34		
TOTAL		3,631																														

PAVEMENT MARKERS

LOCATION	STATION	L+	R+	REMOVE PAVEMENT MARKER	PAVEMENT MARKER (RETROREFLECTIVE-RECESSED) *	REMOVE DELINEATOR	DELINEATOR (SPECIAL)
				EA	(TYPE D) EA	EA	EA
1	243+00.0		X			1	
	331+12.5		X			1	1
	384+37 TO 395+50		X			7	7
	625+00 TO 712+25				715		715
TOTAL					715	9	8

* PAVEMENT MARKERS MUST BE PLACED ON THE FINAL COAT OF DETAIL 22 AND ON NO PRIOR OR TEMPORARY COATS

PAVEMENT DELINEATION QUANTITIES
NO SCALE **PDQ-1**

REVISOR: KAMI BAYER, BRIAN WESLING, FUNCTIONAL SUPERVISOR, BRIAN WESLING, PROJECT DELIVERY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	23	60

1/7/2016
REGISTERED CIVIL ENGINEER DATE

1-25-16
PLANS APPROVAL DATE

BRIAN P. WESLING
No. 62509
Exp. 9/30/17
CIVIL

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ROADWAY QUANTITIES

LOCATION	STATION	COLD IN-PLACE RECYCLING	EMULSIFIED RECYCLING AGENT (COLD IN-PLACE RECYCLING)	ASPHALTIC EMULSION (COLD IN-PLACE RECYCLING)	CEMENT (COLD IN-PLACE RECYCLING)	SAND COVER (COLD IN-PLACE RECYCLING)	HMA (TYPE A)	TACK COAT	SHOULDER BACKING	COLD PLANE ASPHALT CONCRETE PAVEMENT
		SQYD	TON	TON	TON	TON	TON	TON	TON	TON
1	56+70.6 TO 146+32.4						7,731	22	819	50,816
	146+32.4 TO 712+25	256,760	2032	146	540	270	33,504	112	4217	256,760
	TAPERED EDGE						274			
	HOT MIX ASPHALT DIKE						240			
	Misc AREAS						14.5			
	ROAD CONNECTIONS & DRIVEWAYS, & MAINLINE CONFORMS						652	3.7	45	5,349
2	755+42.9 TO 780+00	7,644	61	5	16	8	998	4	159	7,644
	780+00 TO 788+80						186	1	73	1,422
	788+80 TO 804+65.7	5,304	42	3	11	5	692	2	152	5,304
	TAPERED EDGE						21			
	HOT MIX ASPHALT DIKE						6			
	Misc AREAS						0.4			
	ROAD CONNECTIONS & DRIVEWAYS, & MAINLINE CONFORMS							0.1		557
TOTAL		269,708	2135	154	567	283	44,318.9	144.8	5465	327,852

REVISED BY
KAMI BAYER

DATE REVISD
BRIAN WESLING

CALCULATED-DESIGNED BY
BRIAN WESLING

CHECKED BY

FUNCTIONAL SUPERVISOR
BRIAN WESLING

DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY

HOT MIX ASPHALT DIKE

LOCATION	STATION	L+	R+	PLACE HOT MIX ASPHALT DIKE			REMOVE ASPHALT CONCRETE DIKE	HMA (TYPE A)*	IMPORTED BORROW (CY)	REMOVE ASPHALT CONCRETE OVERSIDE DRAIN
				TYPE E	TYPE A	TYPE F				
				LF	LF	LF	LF	TON	CY	EA
1	213+12 TO 218+65	X			553		553	14.6	2.1	1
	285+00 TO 289+20	X					420			
	337+33 TO 338+00	X		67			67	1.7		
	338+00 TO 339+42	X		142			142	3.6		
	347+80 TO 349+80	X			200		200	5.3	0.7	
	349+80 TO 350+38	X		58			58	1.5	0.2	1
	369+42 TO 374+00		X	458			458	11.7	1.7	1
	384+91 TO 393+62		X			871	871	11.3	3.2	
	412+00 TO 425+70		X	1370			1,370	34.9	0.2	
	412+41 TO 412+81	X		40			40	1.0	5.1	1
	450+05 TO 459+20		X	915			915	23.3	3.4	
	456+63 TO 461+72	X			509		509	13.5	1.9	
	461+72 TO 463+45	X		173			173	4.4	0.6	
	463+45 TO 470+95	X			750		750	19.8	2.8	
	468+46 TO 480+80		X	1234			1,234	31.4	4.6	
482+20 TO 485+63	X			343		343	9.1	1.3		
574+00 TO 581+23	X			723		723	19.1	2.7		
581+23 TO 581+93	X		70			70	1.8	0.3	1	
632+63 TO 644+82	X		1219			1,219	31.0	4.5	1	
783+58 TO 786+12		X	254			254	6.5	0.9		
TOTAL				6000	3078	871	10,369	245.3	36.2	6

* THIS QUANTITY INCLUDED IN HMA (TYPE A) ROADWAY QUANTITIES

TAPERED EDGE

LOCATION	STATION TO STATION	L+	R+	TAPERED EDGE (N) LF	HOT MIX ASPHALT (TYPE A)* TON
1	56+70.6 TO 712+25	X		58,963	153
	56+70.6 TO 712+25		X	46,656	121
2	755+42.9 TO 804+40	X		4,647	12
	755+42.9 TO 804+40		X	3,481	9
TOTAL					295

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
* THIS QUANTITY INCLUDED IN HMA (TYPE A) ROADWAY QUANTITIES

CURB RAMP QUANTITIES

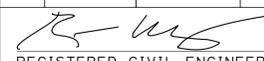
LOCATION	STATION	SIDE	MINOR CONCRETE (CURB AND CURB RAMP)	DETECTABLE WARNING SURFACE	REMOVE CURB AND SIDEWALK (LF)
			CY		
1	411+08.96 TO 411+22.56	LT	1.30	12	7

SUMMARY OF QUANTITIES

NO SCALE **Q-1**

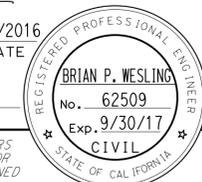


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	24	60

 1/7/2016
 REGISTERED CIVIL ENGINEER DATE

1-25-16
 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.



MIDWEST GUARDRAIL SYSTEM

LOCATION	RUN	STATION TO STATION	SIDE		REMOVE GUARDRAIL	MIDWEST GUARDRAIL SYSTEM (STEEL POST)	MIDWEST GUARDRAIL SYSTEM (8' POST)	OBJECT MARKER (TYPE L-1)	RESET MARKERS AND DELINEATORS	ALTERNATIVE IN-LINE TERMINAL SYSTEM	ALTERNATIVE FLARED TERMINAL SYSTEM	END ANCHOR ASSEMBLY (TYPE SFT)	SALVAGE GUARDRAIL (STEEL POST)	TREATED WOOD WASTE
			L+	R+	LF	LF	LF	EA	EA	EA	EA	EA	EA	LF
1	1	161+07 TO 161+44.5		X	37.5			1			1			2,025
		161+44.5 TO 162+94.5		X	150	150			2					
		162+94.5 TO 163+32		X	37.5						1			
	2	165+44 TO 165+81.5		X	37.5			1				1		6,750
		165+81.5 TO 172+56.5		X	675	675			3					
		172+56.5 TO 172+94		X	37.5						1			
	3	173+51 TO 173+88.5		X	37.5			1				1		9,113
		173+88.5 TO 183+26		X	937.5	937.5			7					
		183+26 TO 183+63.5		X	37.5						1			
	4	236+80 TO 237+17.5		X	37.5			1			1			675
		237+17.5 TO 238+42.5		X		125			1				125	
		238+42.5 TO 238+80		X							1		37.5	
		238+80 TO 244+45		X									565	
244+45 TO 244+82.5			X				1			1		37.5		
5	244+82.5 TO 247+32.5		X		250			1				250	675	
	247+32.5 TO 247+70		X	37.5						1				
	253+03 TO 253+40.5		X	37.5			1			1				
6	253+40.5 TO 261+78		X		837.5				6			837.5	675	
	261+78 TO 262+15.5		X	37.5							1			
	329+75 TO 330+12.5		X	37.5			1			1				
7	330+12.5 TO 332+68.5		X	256	256				1				2,979	
	332+68.5 TO 330+06		X	37.5						1				
	384+18 TO 384+55.5		X	37.5			1				1			
8	384+55.5 TO 396+18		X	1162.5	1162.5				2				11,138	
	396+18 TO 396+55.5		X	37.5							1			
	496+18 TO 496+55.5		X	37.5			1			1				
9	496+55.5 TO 497+35.5		X		80			2				80	675	
	497+35.5 TO 497+73		X	37.5						1				
	565+04 TO 565+41.5	X		37.5			1				1			
10	565+41.5 TO 570+91.5	X		550	550			4					5,625	
	570+91.5 TO 571+29	X		37.5							1			
	672+58 TO 672+95.5		X	37.5			1				1			
11	672+95.5 TO 679+45.5		X	650	650				6				6,525	
	679+45.5 TO 679+83		X	37.5							1			
	682+05 TO 682+42.5		X	37.5			1				1			
12	682+42.5 TO 690+05		X	762.5	762.5				5				7,538	
	690+05 TO 690+42.5		X	37.5							1			
	691+00 TO 691+37.5		X	37.5			1				1			
13	691+37.5 TO 697+87.5		X	650	650				2				6,525	
	697+87.5 TO 698+25		X	37.5							1			
	699+72 TO 700+09.5		X	37.5			1				1			
SUBTOTAL	700+09.5 TO 709+72		X	962.5	962.5				6				9,337	
	709+72 TO 710+09.5		X	37.5			1				1			
SUBTOTAL					7731	5023.5	3025	15	48	9	19	1932.5	69,580	

SUMMARY OF QUANTITIES

NO SCALE **Q-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: BRIAN WESLING
 CHECKED BY:
 KAMI BAYER
 BRIAN WESLING
 REVISED BY: DATE REVISED:

LAST REVISION | DATE PLOTTED => 20-JAN-2016
 12-18-15 TIME PLOTTED => 08:12

PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)

LOCATION	STATION	L+	R+	SQYD	HMA (TYPE A)* TON	DESCRIPTION
1	218+65	X		9.6	1.6	HMA OVERSIDE DRAIN
	330+01 TO 331+12.5	X		43.4	7.1	AREA IN FRONT OF ROCK WALL
	350+38	X		3.6	0.6	HMA OVERSIDE DRAIN
	369+42		X	3.5	0.6	HMA OVERSIDE DRAIN
	387+44		X	1.1	0.2	HMA CONFORM AT DOWN DRAIN
	411+08.96 TO 411+22.56	X		5.6	0.8	CURB RAMP CONSTRUCTION
	412+81	X		10.0	1.6	HMA OVERSIDE DRAIN
	420+06		X	1.1	0.2	HMA CONFORM AT DOWN DRAIN
	459+20		X	1.1	0.2	HMA CONFORM AT DOWN DRAIN
	480+70		X	1.1	0.2	HMA CONFORM AT DOWN DRAIN
	581+93	X		3.6	0.6	HMA OVERSIDE DRAIN
	644+82	X		4.8	0.8	HMA OVERSIDE DRAIN
	2	785+00		X	1.1	0.2
786+00			X	1.1	0.2	HMA CONFORM AT DOWN DRAIN
TOTAL				90.7	14.9	

* THIS QUANTITY INCLUDED IN HMA (TYPE A) ROADWAY QUANTITIES

MODIFY SLOTTED PIPE GRATE

LOCATION	STATION	L+	R+	LF
1	331+44 TO 337+05	X		560
TOTAL				560

RUMBLE STRIP

LOCATION	STATION	LENGTH (N)	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)		CENTERLINE RUMBLE STRIP
			L+	R+	
			Sta	Sta	
1	163+40 TO 166+00	260		2.60	
	174+50 TO 195+00	2,050		20.50	
	187+67 TO 212+00	2,433	24.33		
	200+00 TO 235+00	3,500		35.00	
	213+50 TO 222+75	925	9.25		
	223+25 TO 251+50	2,825	28.25		
	252+00 TO 254+50	200	20.00		
	252+00 TO 259+25	725		7.25	
	255+50 TO 272+00	1,650	16.50		
	261+80 TO 272+00	1,020		10.20	
	284+00 TO 302+58	1,858	18.58		
	284+00 TO 299+63	1,563		15.63	
	353+30 TO 373+50	2,020		20.20	
	353+50 TO 404+00	5,050	50.50		
	384+80 TO 404+00	1,920		19.20	
	405+50 TO 410+50	500	5.00		
	405+50 TO 427+50	2,200		22.00	
	416+50 TO 497+00	8,050	80.50		
	429+00 TO 496+00	6,700		67.00	
	430+00 TO 478+00	4,800			96.00
550+00 TO 562+00	1,200	12.00			
550+00 TO 562+50	1,250		12.50		
574+00 TO 650+90	7,690	76.90			
588+00 TO 652+00	6,400		64.00		
625+00 TO 710+83	8,583			85.83	
TOTAL			619.89		181.83

ADJUST INLET TO GRADE

LOCATION	STATION	L+	R+	ADJUST INLET (EA)	ADJUST PIPE INLET TO GRADE (EA)	SALVAGE FRAME AND GRATE (EA)	MISCELLANEOUS IRON AND STEEL (LB)
1	331+51.08	X			1	1	64
	332+48.62	X			1	1	64
	333+46.18	X			1	1	64
	334+10.00	X		1			
	335+08.13	X			1	1	64
	336+07.16	X			1	1	64
	336+93.94	X			1	1	64
	462+90.00	X		1			
TOTAL				2	6	6	384

MIDWEST GUARDRAIL SYSTEM

LOCATION	RUN	STATION TO STATION	SIDE		REMOVE GUARDRAIL LF	MIDWEST GUARDRAIL SYSTEM (STEEL POST) LF	MIDWEST GUARDRAIL SYSTEM (8' POST) LF	OBJECT MARKER (TYPE L-1) EA	RESET MARKERS AND DELINEATORS EA	ALTERNATIVE IN-LINE TERMINAL SYSTEM EA	ALTERNATIVE FLARED TERMINAL SYSTEM EA	END ANCHOR ASSEMBLY (TYPE SFT) EA	SALVAGE GUARDRAIL (STEEL POST) LF	TREATED WOOD WASTE LB	
			Lf	R+											
2	14	755+42.9 TO 767+30.4		X	1187.5		1187.5		8					11,025	
		767+30.4 TO 767+67.9		X	37.5					1					
	15	771+25 TO 771+62.5	X		37.5			1			1				
		771+62.5 TO 773+00	X		212.5	137.5								2,587	
		773+00 TO 773+37.5	X		37.5							1			
	16	780+95 TO 781+32.5	X		37.5			1			1				
		781+32.5 TO 781+95	X		62.5	62.5			1					1,238	
		781+95 TO 782+32.5	X		37.5						1				
	SUBTOTAL					1650	200	1187.5	2	9	2	2	1	0	14,850
	SUBTOTAL Q-2					7731	5023.5	3025	15	48	9	19	0	1932.5	69,580
GRAND TOTAL					9381	5223.5	4212.5	17	57	11	21	1	1932.5	84,430	

SUMMARY OF QUANTITIES

NO SCALE **Q-3**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	25	60

1/7/2016
 REGISTERED CIVIL ENGINEER DATE
 1-25-16
 PLANS APPROVAL DATE

BRIAN P. WESLING
 No. 62509
 Exp. 9/30/17
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans PROJECT DELIVERY
 FUNCTIONAL SUPERVISOR: BRIAN WESLING
 CALCULATED/DESIGNED BY: KAMI BAYER
 CHECKED BY: BRIAN WESLING
 REVISED BY: DATE REVISION
 KAMI BAYER
 BRIAN WESLING

LAST REVISION DATE PLOTTED => 17-FEB-2016
 12-18-2015 TIME PLOTTED => 1:31:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	26	60

Teresa Erlwein 1/7/2016
 REGISTERED CIVIL ENGINEER DATE
 1-25-16
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 TERESA ERLWEIN
 No. 61335
 Exp. 6/30/17
 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.

LEGEND:

1 TYPE A OR TYPE E LOOP DETECTORS MUST HAVE 4 TURNS OF LOOP WIRE.

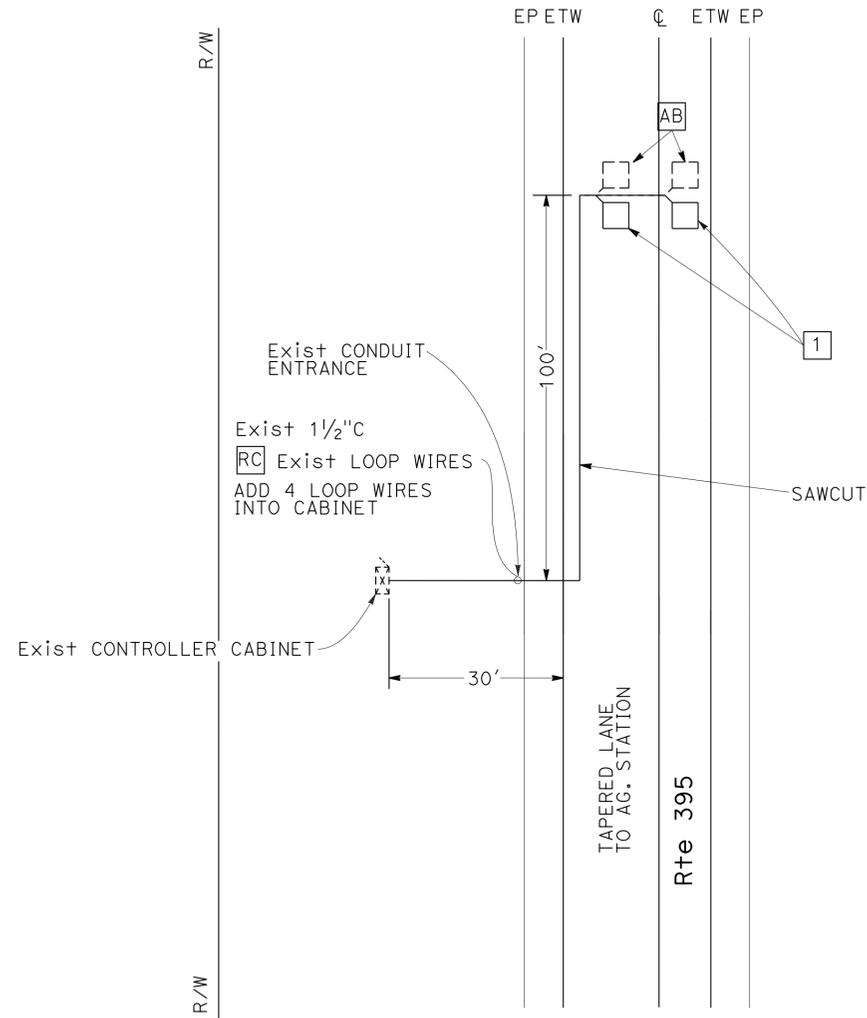
NOTES:

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

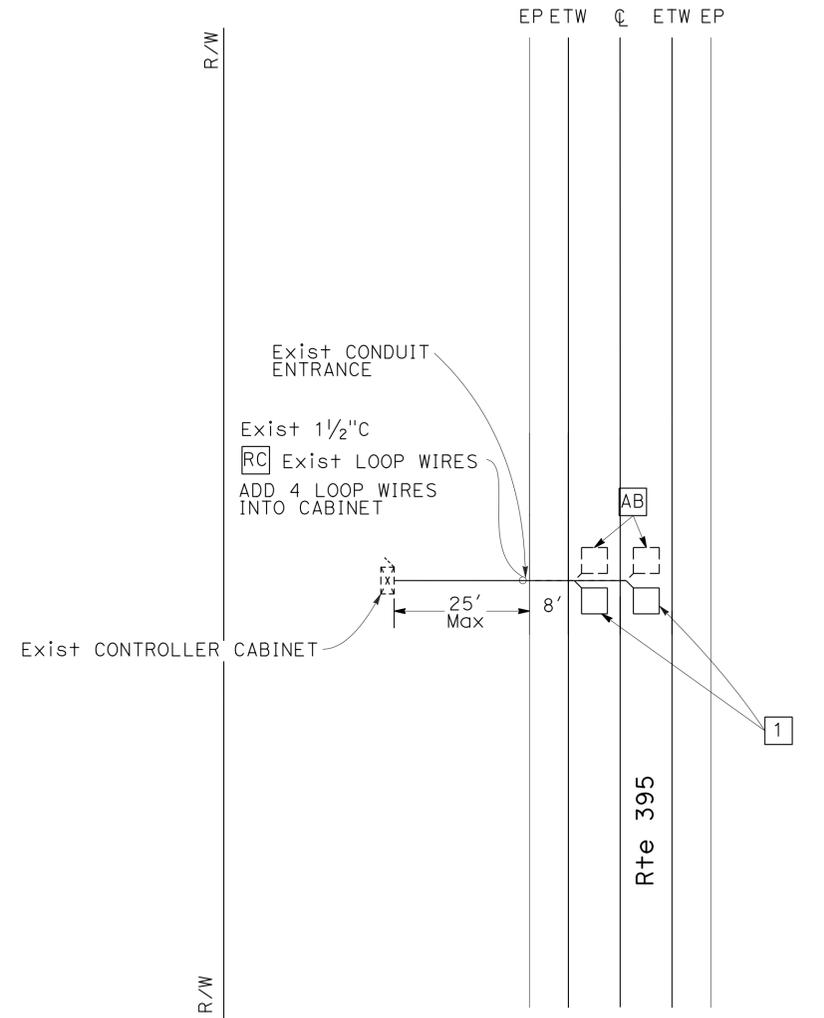
INDUCTIVE LOOP DETECTOR

SHEET No.	TYPE A LOOP DETECTOR
E-1	No 6

THE QUANTITIES SHOWN IN THE TABLE ARE NOT SEPARATE PAY ITEMS, FOR INFORMATION ONLY.



LOCATION 2
Sta 788+51 PM 120.1



LOCATION 1
Sta 98+89 PM 107.1
AND
Sta 613+59 PM 116.9

INDUCTIVE LOOP DETECTOR

NO SCALE **E-1**

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC OPERATIONS
 FUNCTIONAL SUPERVISOR: TERRY ERLWEIN
 CALCULATED/DESIGNED BY: PHIL GRAHAM
 CHECKED BY: BRAD ROCKWELL
 REVISED BY: PHIL GRAHAM
 DATE REVISED:

	M	
Maint	MAINTENANCE	
Max	MAXIMUM	
MB	METAL BEAM	
MBB	METAL BEAM BARRIER	
MBGR	METAL BEAM GUARD RAILING	
Med	MEDIAN	
MGS	MIDWEST GUARDRAIL SYSTEM	
MH	MANHOLE	
Min	MINIMUM	
Misc	MISCELLANEOUS	
Misc I & S	MISCELLANEOUS IRON AND STEEL	
Mkr	MARKER	
Mod	MODIFIED, MODIFY	
Mon	MONUMENT	
MP	METAL PLATE	
MPGR	METAL PLATE GUARD RAILING	
MR	MOVEMENT RATING	
MSE	MECHANICALLY STABILIZED EMBANKMENT	
Mt	MOUNTAIN, MOUNT	
MtI	MATERIAL	
MVP	MAINTENANCE VEHICLE PULLOUT	
	N	
N	NORTH	
NB	NORTHBOUND	
No.	NUMBER (MUST HAVE PERIOD)	
Nos.	NUMBERS (MUST HAVE PERIOD)	
NPS	NOMINAL PIPE SIZE	
NS	NEAR SIDE	
NSP	NEW STANDARD PLAN	
NTS	NOT TO SCALE	
	O	
Obir	OBLITERATE	
OC	OVERCROSSING	
OD	OUTSIDE DIAMETER	
OF	OUTSIDE FACE	
OG	ORIGINAL GROUND	
OGAC	OPEN GRADED ASPHALT CONCRETE	
OGFC	OPEN GRADED FRICTION COURSE	
OH	OVERHEAD	
OHWM	ORDINARY HIGH WATER MARK	
O-O	OUT TO OUT	
Opp	OPPOSITE	
OSD	OVERSIDE DRAIN	
	P	
p	PAGE	
PAP	PERFORATED ALUMINUM PIPE	
PB	PULL BOX	
PC	POINT OF CURVATURE, PRECAST	
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE	
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN	
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE	
PCVC	POINT OF COMPOUND VERTICAL CURVE	
PEC	PERMIT TO ENTER AND CONSTRUCT	
Ped	PEDESTRIAN	
Ped OC	PEDESTRIAN OVERCROSSING	
Ped UC	PEDESTRIAN UNDERCROSSING	
Perm MtI	PERMEABLE MATERIAL	

	P continued	
PG	PROFILE GRADE	
PI	POINT OF INTERSECTION	
PJP	PARTIAL JOINT PENETRATION	
Pkwy	PARKWAY	
PL, PL	PLATE	
P/L	PROPERTY LINE	
PM	POST MILE, TIME FROM NOON TO MIDNIGHT	
PN	PAVING NOTCH	
POC	POINT OF HORIZONTAL CURVE	
POT	POINT OF TANGENT	
POVC	POINT OF VERTICAL CURVE	
PP	PIPE PILE, PLASTIC PIPE, POWER POLE	
PPL	PREFORMED PERMEABLE LINER	
PPP	PERFORATED PLASTIC PIPE	
PRC	POINT OF REVERSE CURVE	
PRF	PAVEMENT REINFORCING FABRIC	
PRVC	POINT OF REVERSE VERTICAL CURVE	
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES	
PS, P/S	PRESTRESSED	
PSP	PERFORATED STEEL PIPE	
PT	POINT OF TANGENCY	
PVC	POLYVINYL CHLORIDE	
Pvmt	PAVEMENT	
	Q	
Qty	QUANTITY	
	R	
R	RADIUS	
R & D	REMOVE AND DISPOSE	
R & S	REMOVE AND SALVAGE	
R/C	RATE OF CHANGE	
RCA	REINFORCED CONCRETE ARCH	
RCB	REINFORCED CONCRETE BOX	
RCP	REINFORCED CONCRETE PIPE	
RCPA	REINFORCED CONCRETE PIPE ARCH	
Rd	ROAD	
Reinf	REINFORCED, REINFORCEMENT, REINFORCING	
Rel	RELOCATE	
Repl	REPLACEMENT	
Ret	RETAINING	
Rev	REVISED, REVISION	
Rdwy	ROADWAY	
RHMA	RUBBERIZED HOT MIX ASPHALT	
Riv	RIVER	
RM	ROAD-MIXED	
RP	RADIUS POINT, REFERENCE POINT	
RR	RAILROAD	
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN	
Rt	RIGHT	
Rte	ROUTE	
RW	REDWOOD, RETAINING WALL	
R/W	RIGHT OF WAY	
Rwy	RAILWAY	

	S	
S	SOUTH, SUPPLEMENT	
SAE	STRUCTURE APPROACH EMBANKMENT	
Salv	SALVAGE	
SAPP	STRUCTURAL ALUMINUM PLATE PIPE	
SB	SOUTHBOUND	
SC	SAND CUSHION	
SCSP	SLOTTED CORRUGATED STEEL PIPE	
SD	STORM DRAIN	
Sec	SECOND, SECTION	
Sep	SEPARATION	
SG	SUBGRADE	
Shld	SHOULDER	
Sht	SHEET	
Sim	SIMILAR	
SL	STATION LINE	
SM	SELECTED MATERIAL	
Spec	SPECIAL, SPECIFICATIONS	
SPP	SLOTTED PLASTIC PIPE	
SS	SLOPE STAKE	
SSBM	STRAP AND SADDLE BRACKET METHOD	
SSD	STRUCTURAL SECTION DRAIN	
SSPA	STRUCTURAL STEEL PLATE ARCH	
SSPP	STRUCTURAL STEEL PLATE PIPE	
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH	
SSRP	STEEL SPIRAL RIB PIPE	
St	STREET	
Sta	STATION	
STBB	SINGLE THRIE BEAM BARRIER	
Std	STANDARD	
Str	STRUCTURE	
Surf	SURFACING	
SW	SIDEWALK, SOUND WALL	
Swr	SEWER	
Sym	SYMMETRICAL	
S4S	SURFACE 4 SIDES	
	T	
T	SEMI-TANGENT	
Tan	TANGENT	
TBB	THRIE BEAM BARRIER	
Tbr	TIMBER	
TC	TOP OF CURB	
TCB	TRAFFIC CONTROL BOX	
TCE	TEMPORARY CONSTRUCTION EASEMENT	
TeI	TELEPHONE	
Temp	TEMPORARY	
TG	TOP OF GRADE	
Tot	TOTAL	
TP	TELEPHONE POLE	
TPB	TREATED PERMEABLE BASE	
TPM	TREATED PERMEABLE MATERIAL	
Trans	TRANSITION	

	T continued	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	
	U	
UC	UNDERCROSSING	
UD	UNDERDRAIN	
UG	UNDERGROUND	
UON	UNLESS OTHERWISE NOTED	
UP	UNDERPASS	
	V	
V	VALVE, DESIGN SPEED	
Var	VARIABLE, VARIES	
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	
	W	
W	WEST, WIDTH	
WB	WESTBOUND	
WH	WEEP HOLE	
WM	WIRE MESH	
WS	WATER SURFACE	
WSP	WELDED STEEL PIPE	
Wt	WEIGHT	
WV	WATER VALVE	
WW	WINGWALL	
WWL	WINGWALL LAYOUT LINE	
	X	
X Sec	CROSS SECTION	
Xing	CROSSING	
	Y	
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	27	60

Grace M. Tsushima
REGISTERED CIVIL ENGINEER



July 19, 2013
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.

TO ACCOMPANY PLANS DATED 1-25-16

UNIT OF MEASUREMENT SYMBOLS:

Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

TABLE A

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

TABLE B

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft ³ , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
Ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kip	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

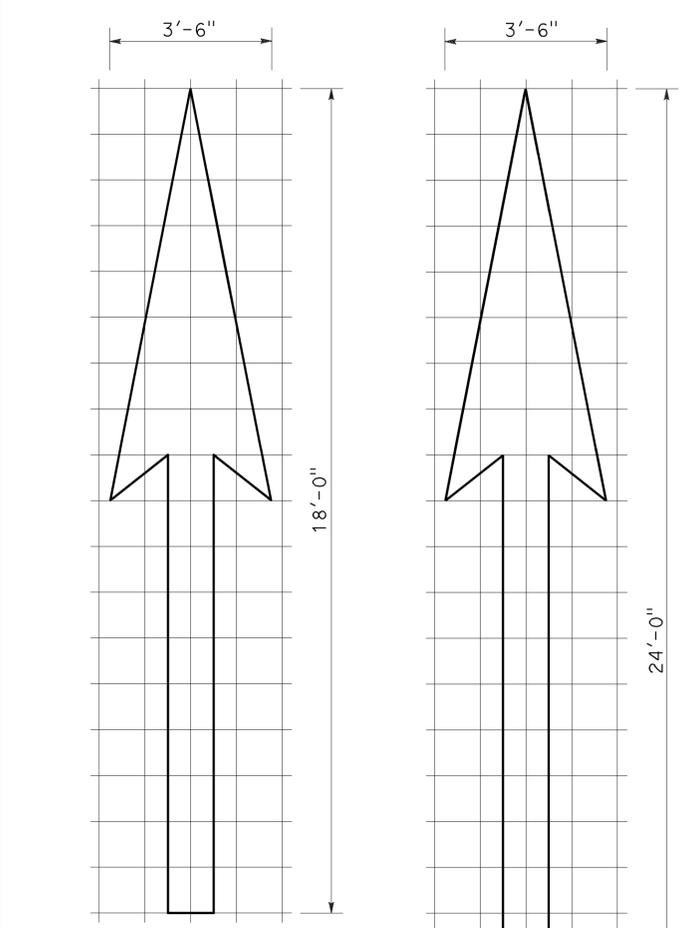
2010 REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	28	60

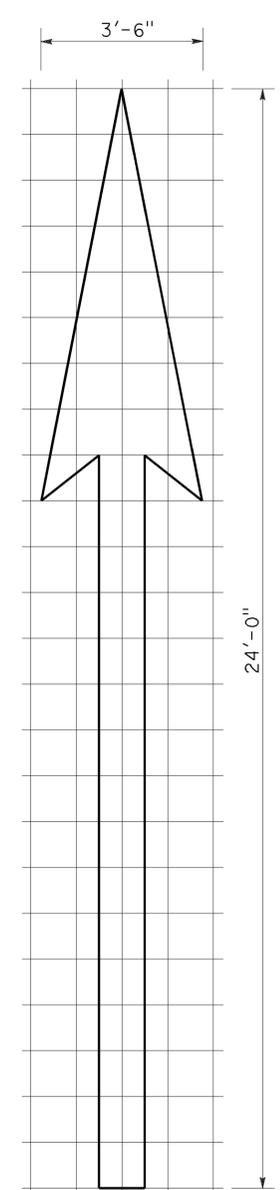
Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

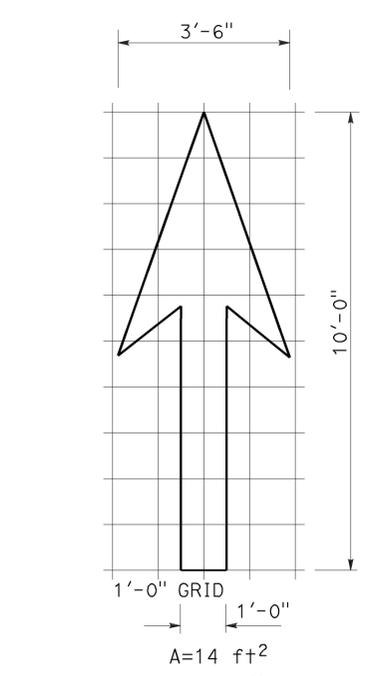
TO ACCOMPANY PLANS DATED 1-25-16



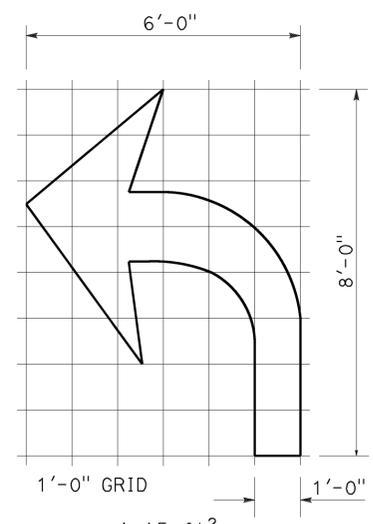
TYPE I 18'-0" ARROW



TYPE I 24'-0" ARROW

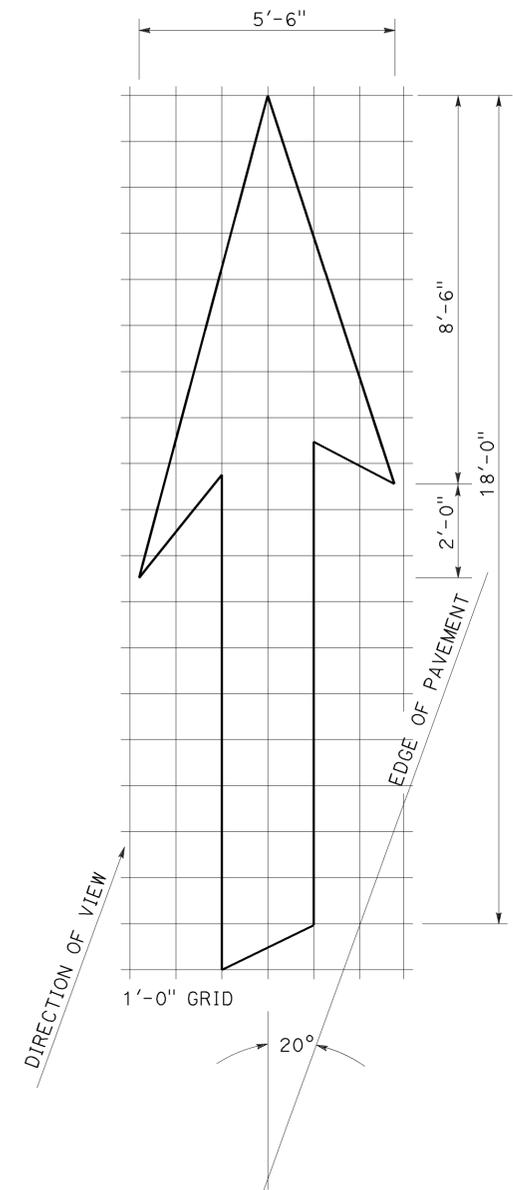


TYPE I 10'-0" ARROW



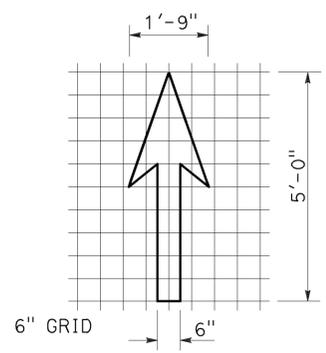
TYPE IV (L) ARROW

(For Type IV (R) arrow, use mirror image)

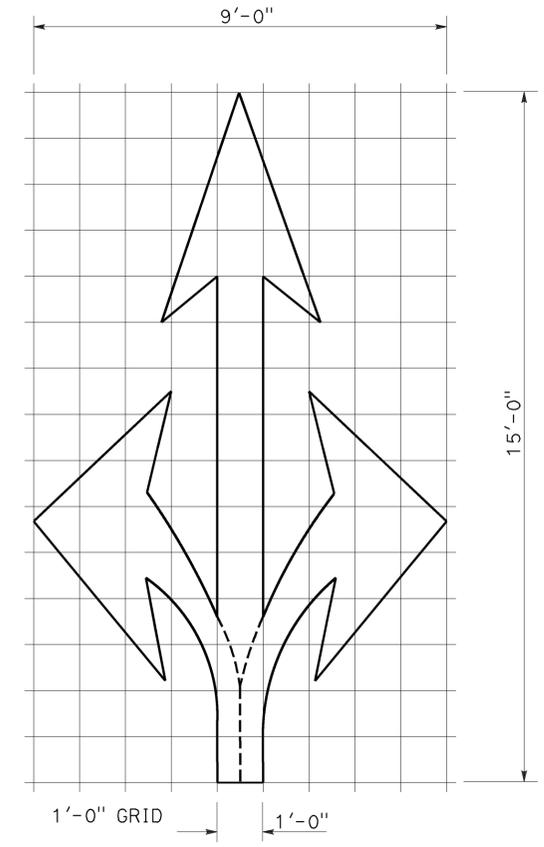


TYPE VI ARROW

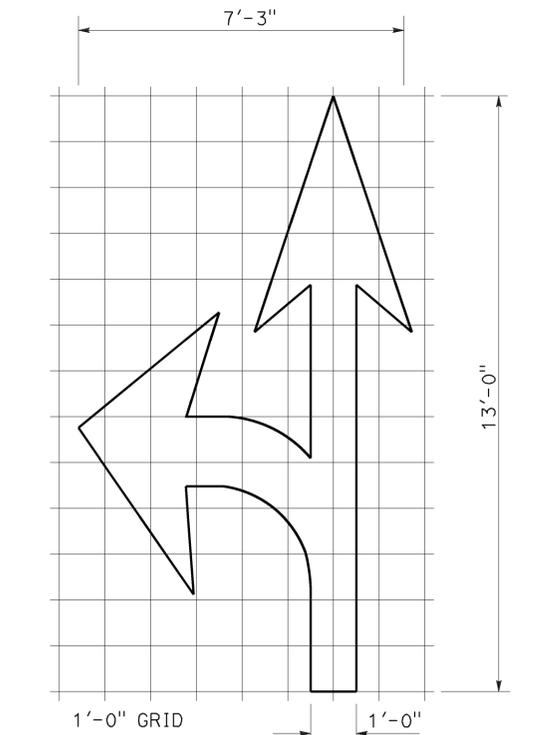
Right lane drop arrow
(For left lane, use mirror image)



BIKE LANE ARROW

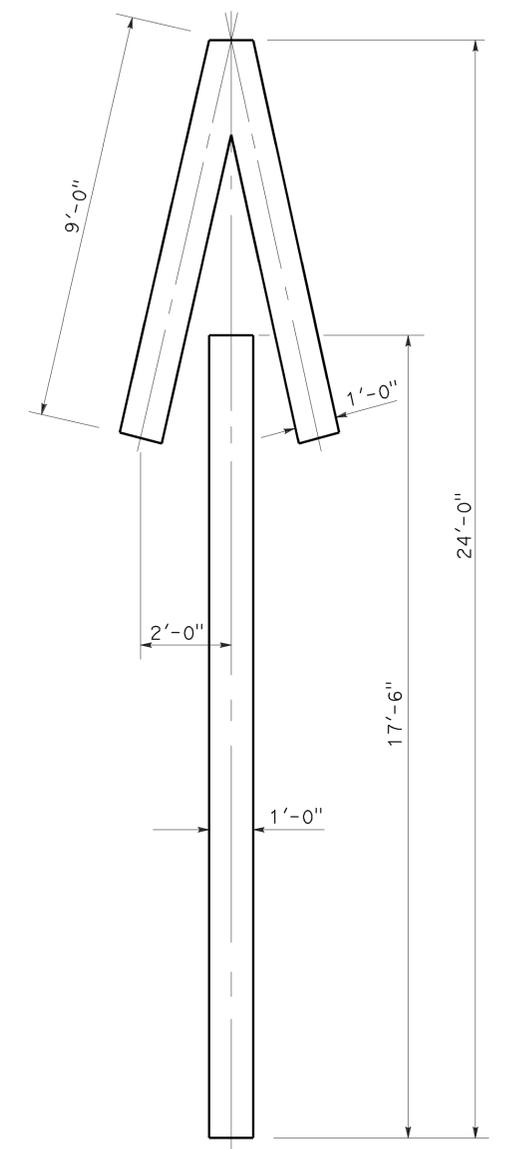


TYPE VIII ARROW



TYPE VII (L) ARROW

(For Type VII (R) arrow, use mirror image)



TYPE V ARROW

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

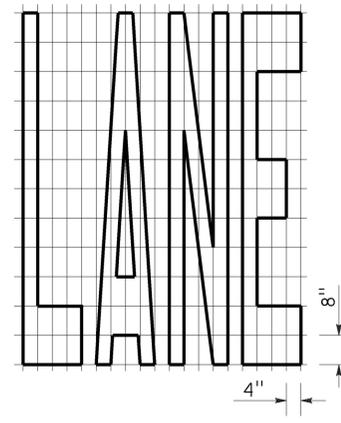
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A
DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

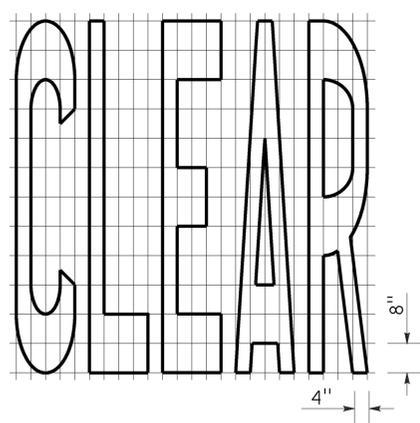
2010 REVISED STANDARD PLAN RSP A24A

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

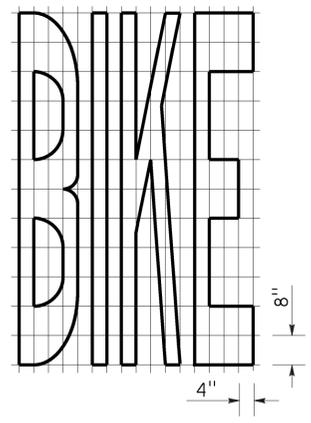
TO ACCOMPANY PLANS DATED 1-25-16



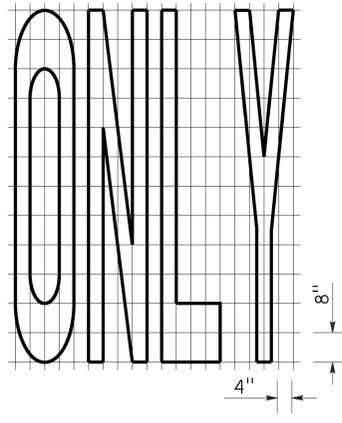
A=24 ft²



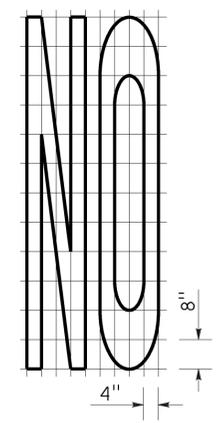
A=27 ft²



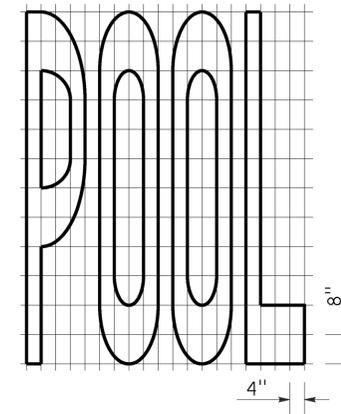
A=21 ft²



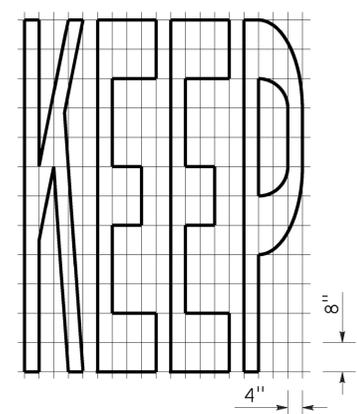
A=22 ft²



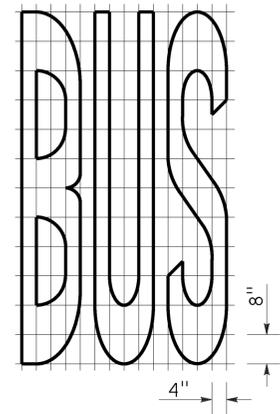
A=14 ft²



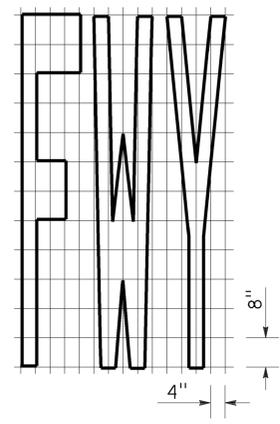
A=23 ft²



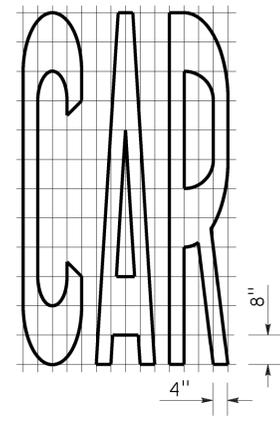
A=24 ft²



A=20 ft²

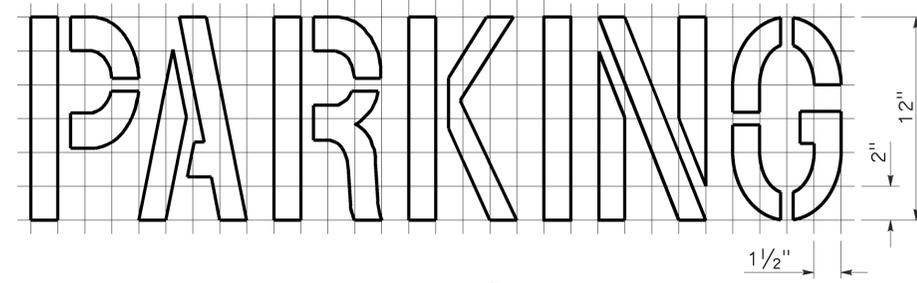
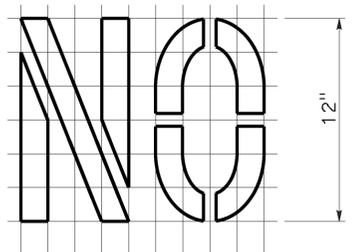


A=16 ft²

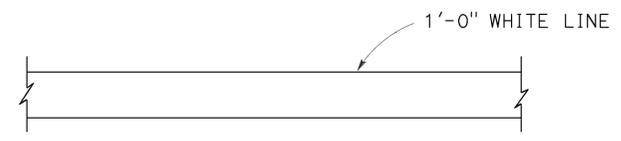


A=17 ft²

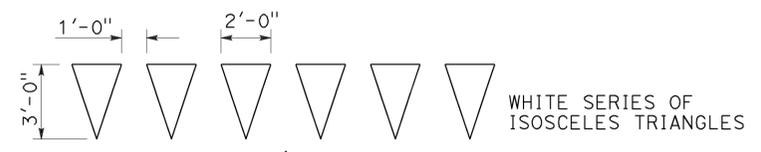
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



DIRECTION OF TRAVEL
YIELD LINE

NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

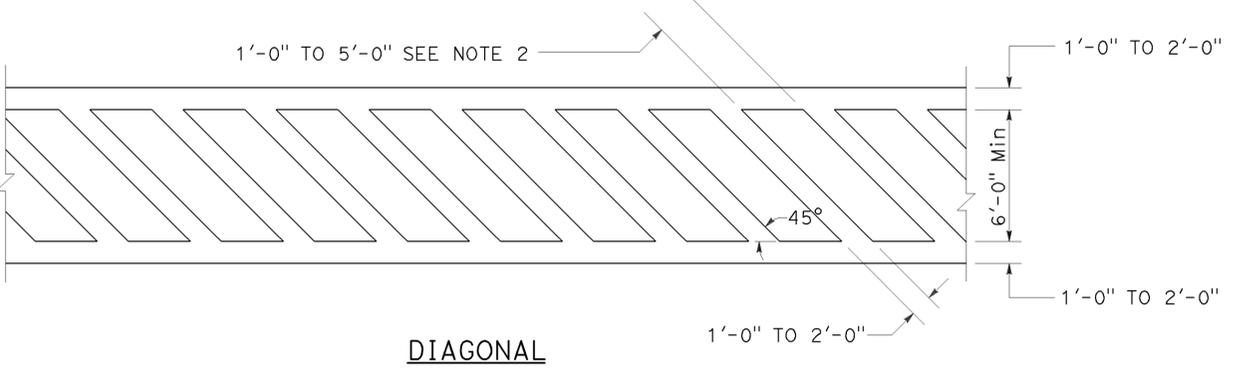
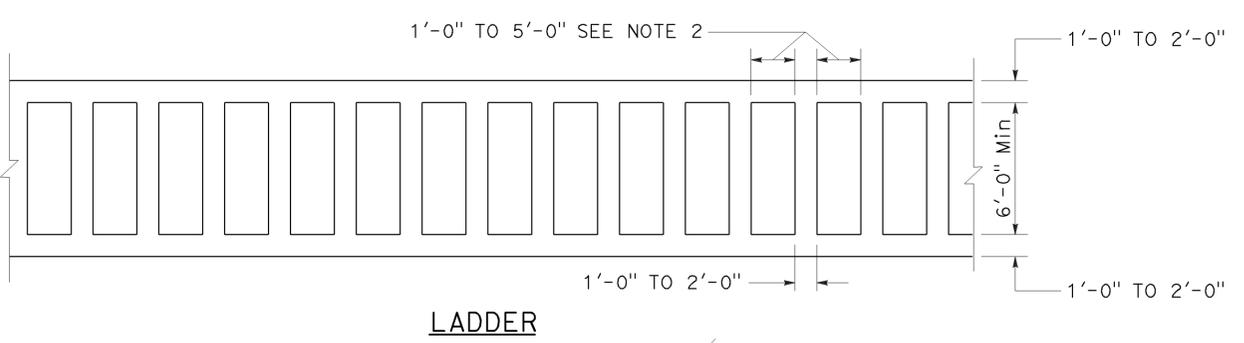
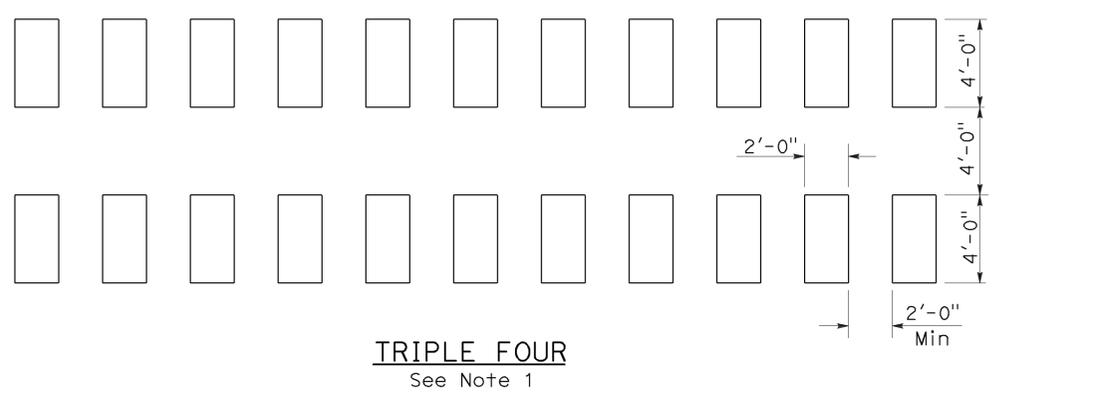
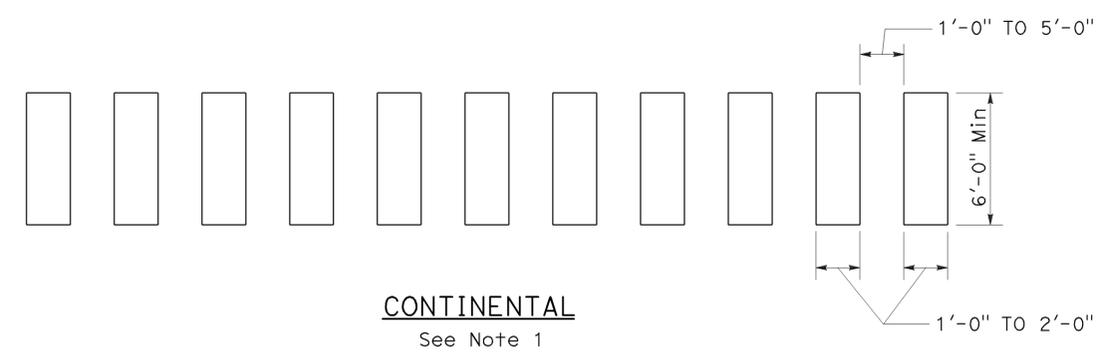
2010 REVISED STANDARD PLAN RSP A24E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	30	60

Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE

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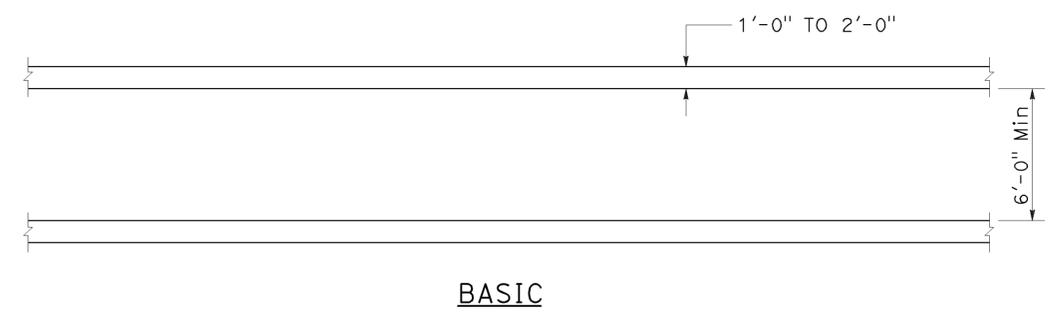
TO ACCOMPANY PLANS DATED 1-25-16



HIGHER VISIBILITY CROSSWALKS

NOTES:

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
CROSSWALKS
NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	31	60

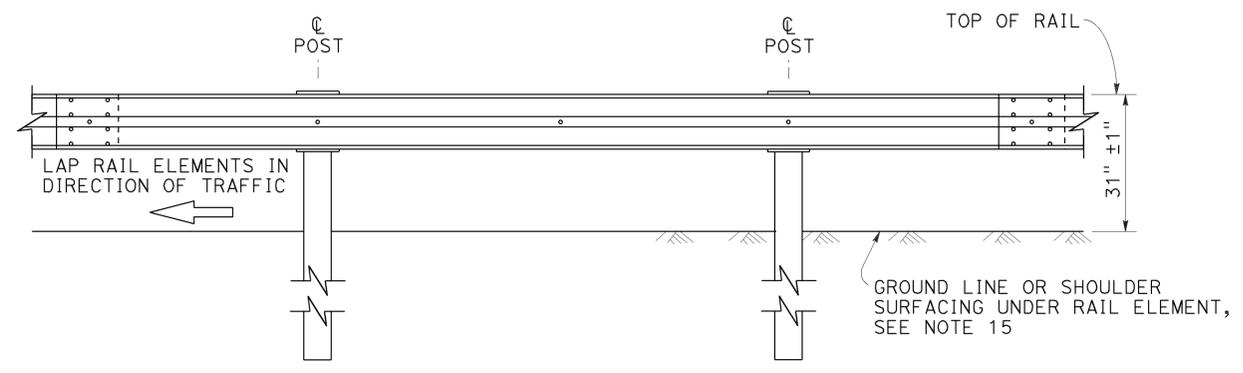
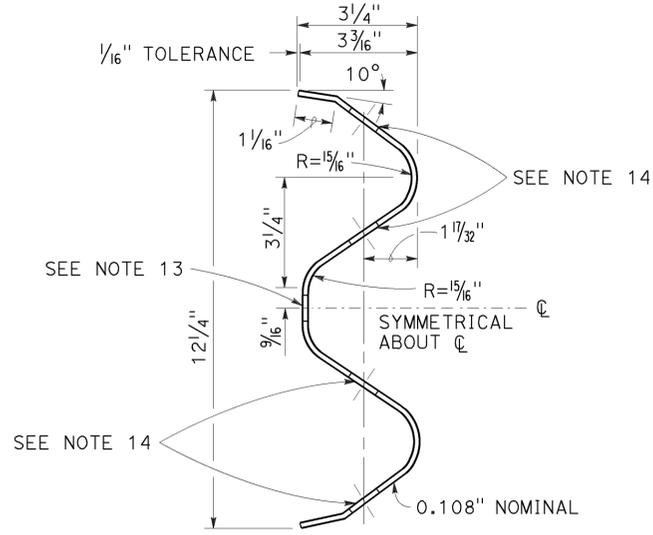
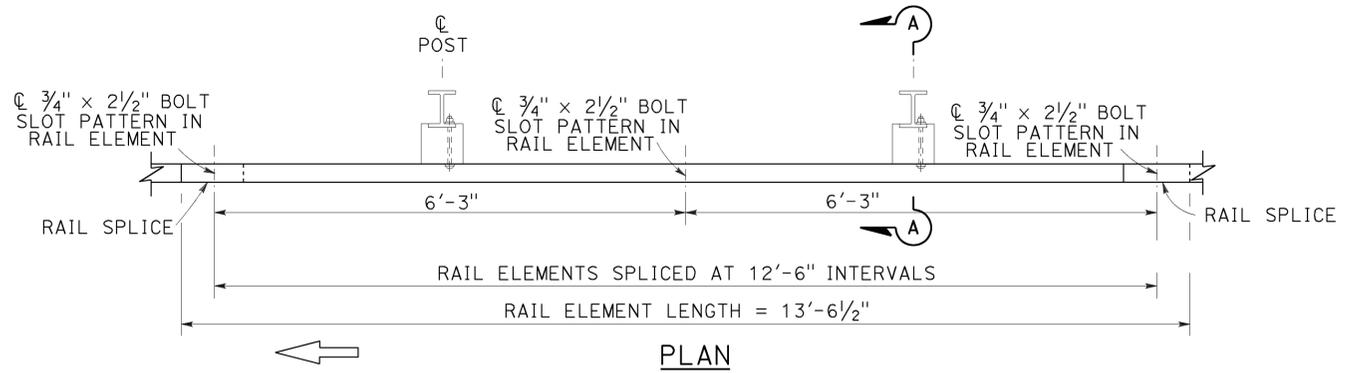
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

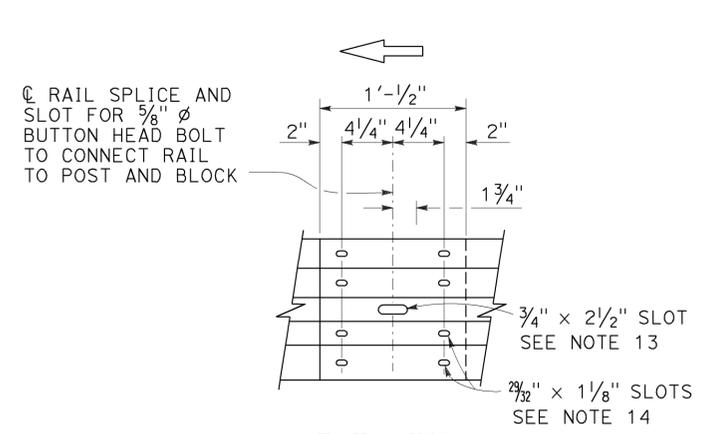
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

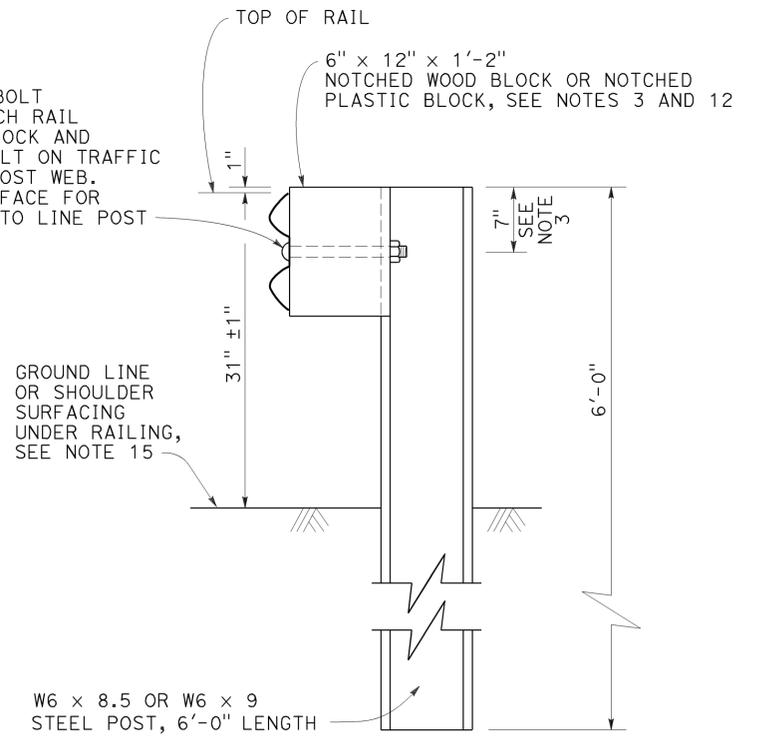
TO ACCOMPANY PLANS DATED 1-25-16



MIDWEST GUARDRAIL SYSTEM WITH STEEL POSTS AND NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCKS



- Connect the overlapped end of the rail elements with 5/8" ϕ x 1 3/8" button head oval shoulder splice bolts inserted into the 2 3/32" x 1 1/8" slots and bolted together with 5/8" ϕ recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 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.



See Note 4

NOTES:

- For details of wood post installations, see Revised Standard Plan RSP A77L1.
- For details of standard hardware used to construct MGS, see Revised Standard Plan RSP A77M1.
- For details of steel posts and notched wood blocks used to construct MGS, see Revised Standard Plan RSP A77N2.
- For additional installation details, see Revised Standard Plan RSP A77N3.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- For MGS typical layouts, see the A77P, A77Q and A77R Series of Standard Plans.
- If railing is connected to terminal system end treatment, use 31" height terminal system end treatment.
- For MGS end anchor details, see Revised Standard Plans RSP A77S1 and RSP A77T2.
- For details of MGS transition to bridge railing, see Revised Standard Plan RSP A77U4.
- For additional details of MGS connection to bridge railings, see Revised Standard Plans RSP A77U1, RSP A77U2 and RSP A77V1.
- For dike positioning and MGS delineation details, see Revised Standard Plan RSP A77N4.
- Notched face of block faces steel post.
- Slotted hole for bolted connection of rail element to block and post. See "Section Thru Rail Element".
- Slotted holes for splice bolts to overlap ends of rail element. See "Section Thru Rail Element".
- Install posts in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM STANDARD RAILING SECTION (STEEL POST WITH NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCK)

NO SCALE

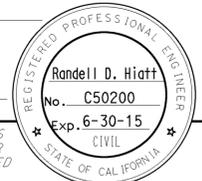
RSP A77L2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L2

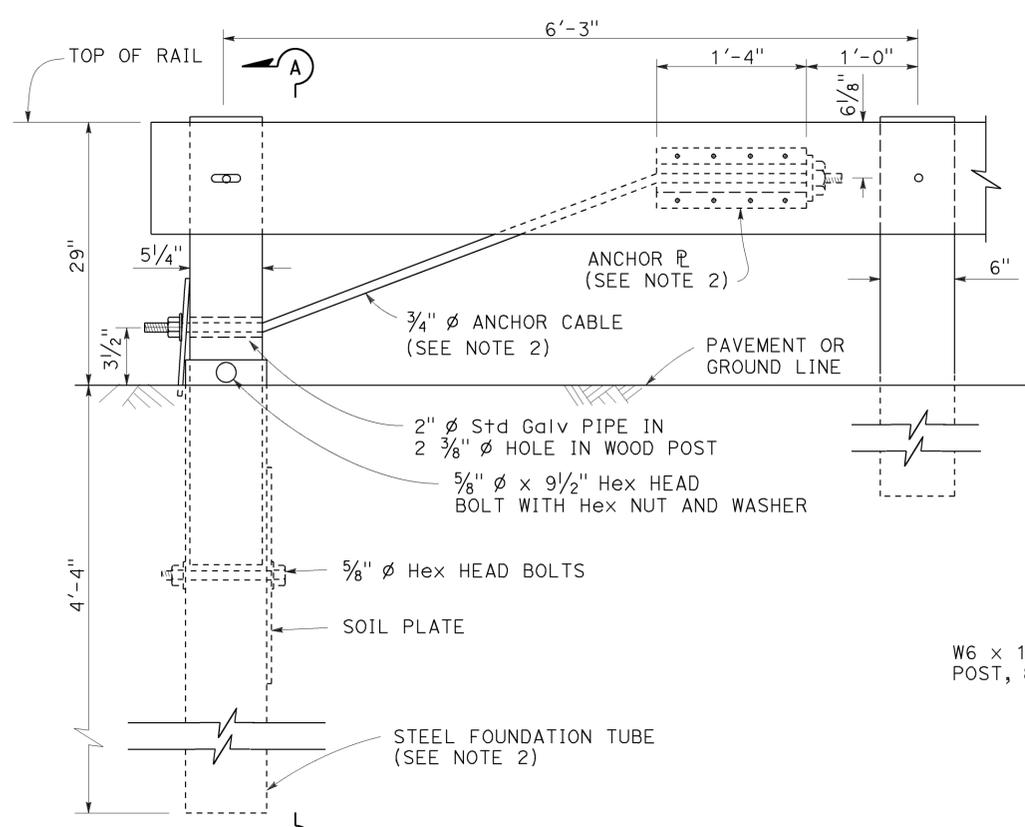
2010 REVISED STANDARD PLAN RSP A77L2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	32	60

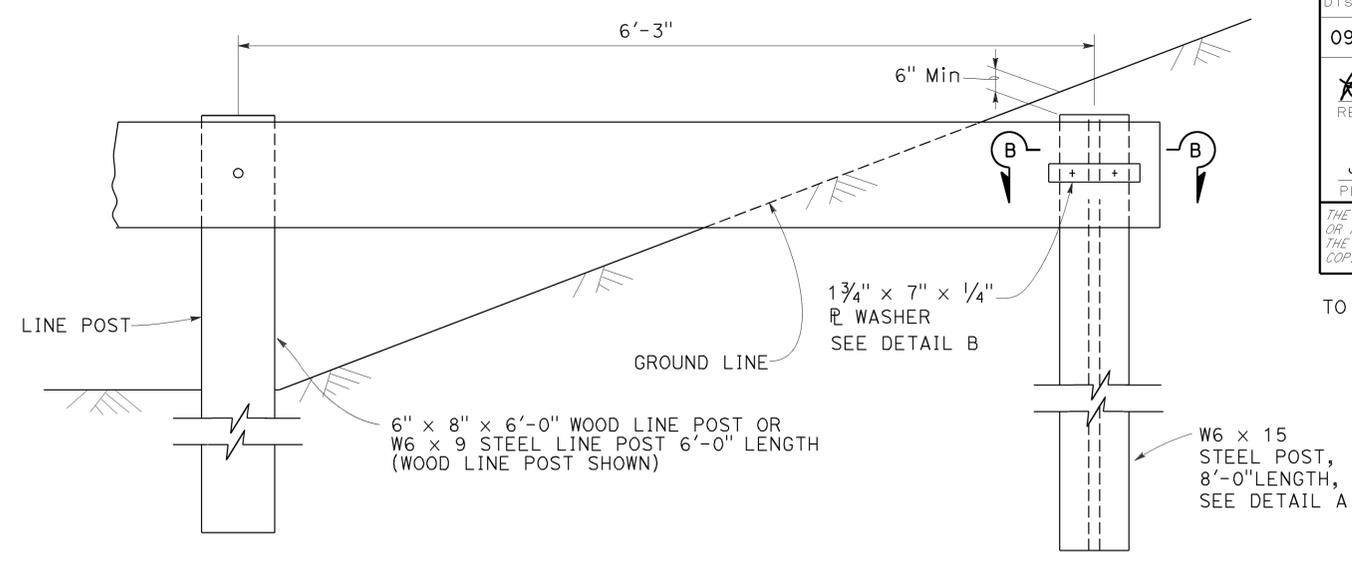
July 19, 2013
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



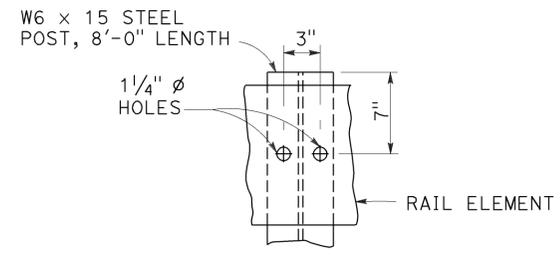
TO ACCOMPANY PLANS DATED 1-25-16



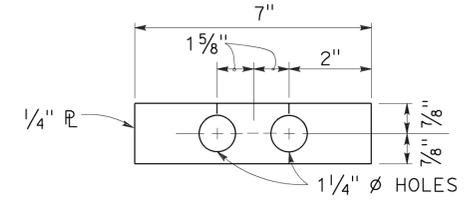
ELEVATION END ANCHOR ASSEMBLY (TYPE SFT)



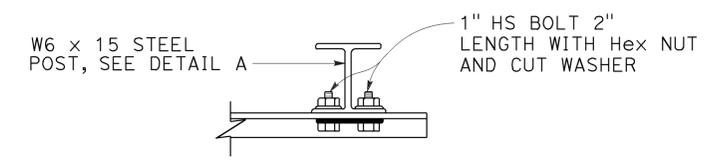
BURIED POST END ANCHOR



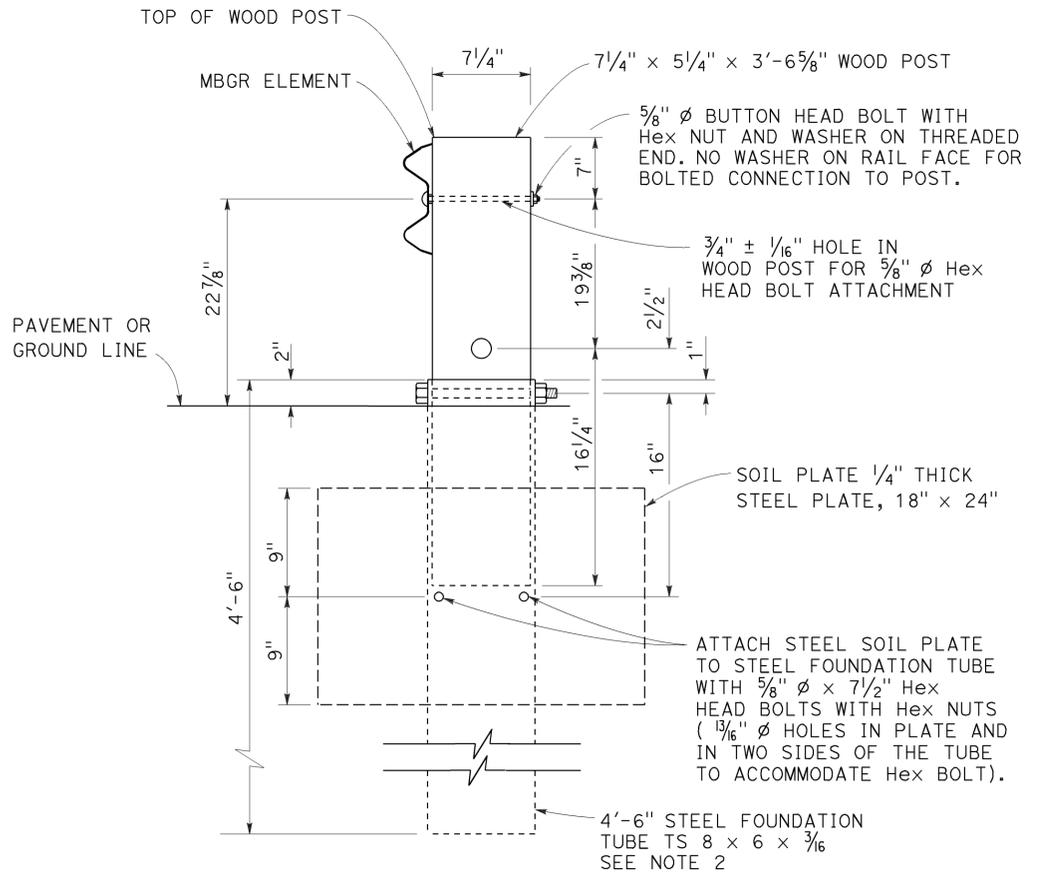
DETAIL A



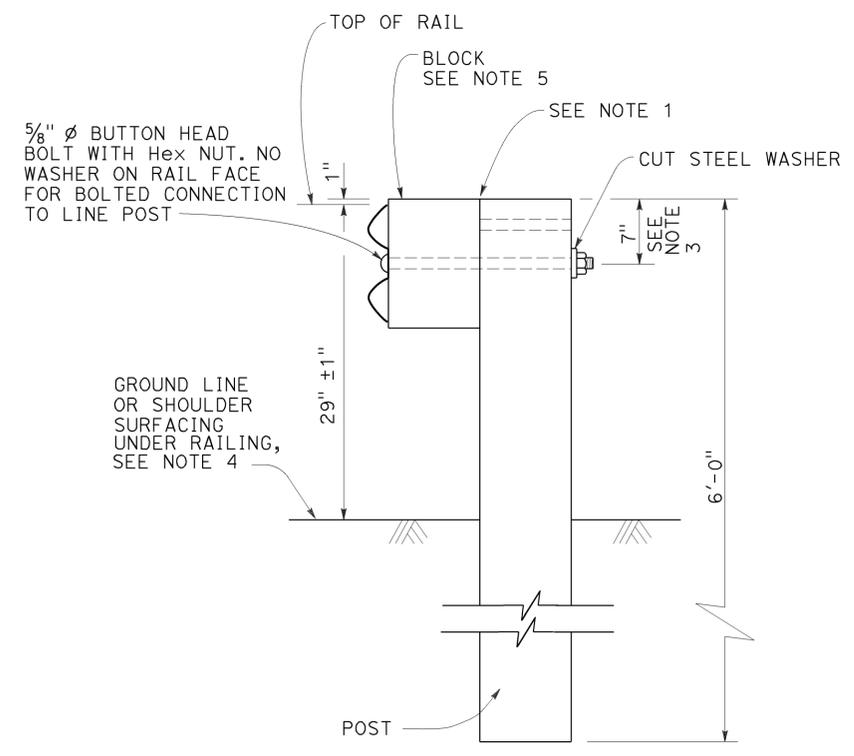
DETAIL B



SECTION B-B



SECTION A-A



TYPICAL LINE POST INSTALLATION

NOTES:

- For wood post and wood block, toenail with 2-16d Galv nails in top of block. For steel post and notched wood or plastic block, notched face of block faces steel post.
- A 6'-0" Length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" Ø Hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
- To connect railing to 27" terminal system end treatment, transition the top of railing height at a ratio of 120:1 to terminal system end treatment height plus one 12'-6" standard railing section at the transitioned height for a horizontal connection to the end treatment.
- Install posts in soil.
- See Revised Standard Plans RSP A77N1 and RSP A77N2 for details.
- Holes excavation in the slope to construct the buried post end anchor shall be backfilled with selected earth, placed in layers approximately 1'-0" thick. Each layer shall be moistened and thoroughly compacted.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING RECONSTRUCT INSTALLATION

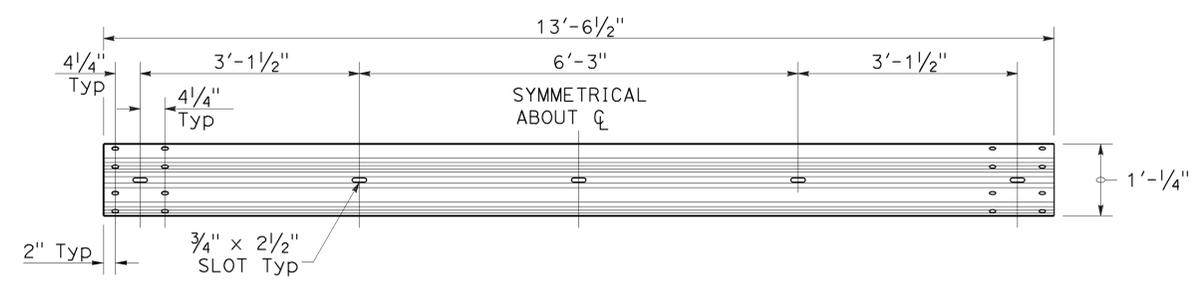
NO SCALE

RSP A77L3 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77L3

2010 REVISED STANDARD PLAN RSP A77L3

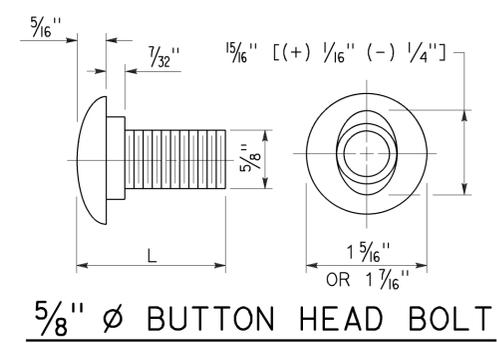
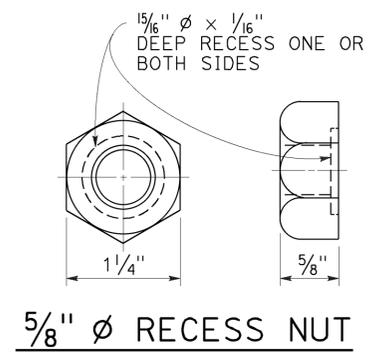
TO ACCOMPANY PLANS DATED 1-25-16



TYPICAL RAIL ELEMENT

NOTE:

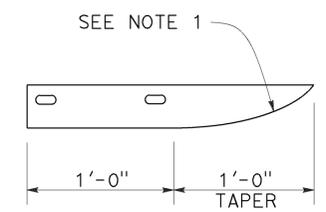
1. Slotted holes for splice bolts to overlap ends of rail element.



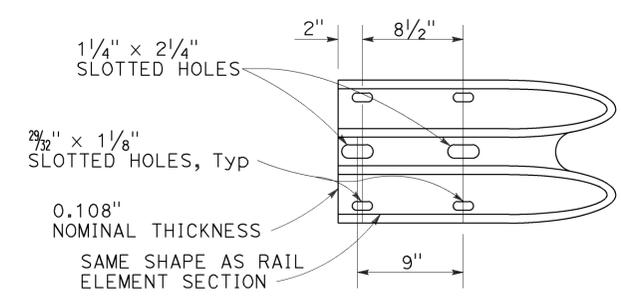
BUTTON HEAD BOLT

L	THREAD LENGTH
1 3/8"	FULL THREAD LENGTH
2"	FULL THREAD LENGTH
10"	4" Min THREAD LENGTH
18"	4" Min THREAD LENGTH
20"	4" Min THREAD LENGTH
22"	4" Min THREAD LENGTH
26"	4" Min THREAD LENGTH
36"	4" Min THREAD LENGTH
** 2 3/4"	2" Min THREAD LENGTH
** 19"	4" Min THREAD LENGTH

** For nested rail applications.



PLAN



ELEVATION
END CAP
(TYPE A)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STANDARD HARDWARE**

NO SCALE

RSP A77M1 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A77M1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	34	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

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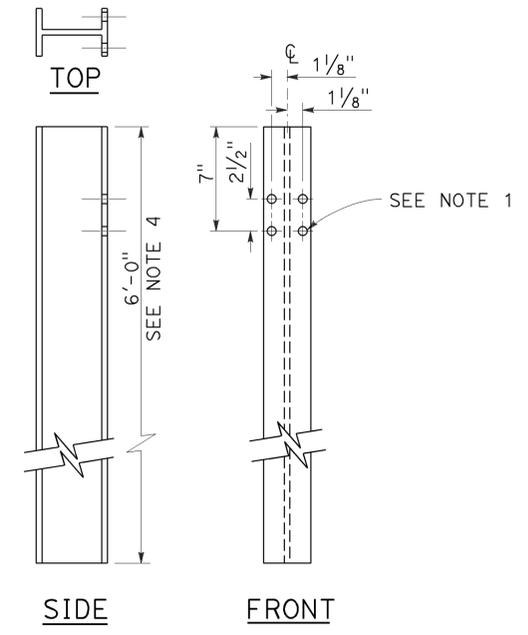
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 1-25-16

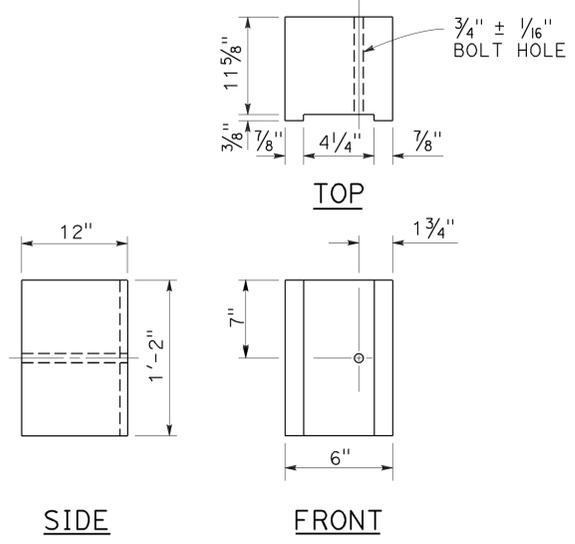
NOTES:

1. All holes in steel post shall be $\frac{13}{16}$ " Dia maximum.
2. Dimensions shown for wood block are nominal.
3. Notched face of block faces steel post.
4. 6'-0" length posts to be used for typical roadway installation. See Revised Standard Plan RSP A77N3.
5. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" notched wood blocks.
6. This post and 8" x 12" block combination to be used for line post sections of MGS on narrow roadways and where strengthened line post sections of MGS are warranted to shield fixed objects.

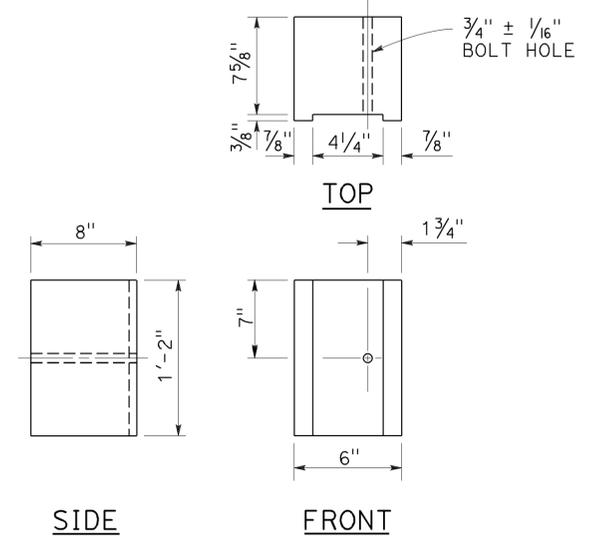
2010 REVISED STANDARD PLAN RSP A77N2



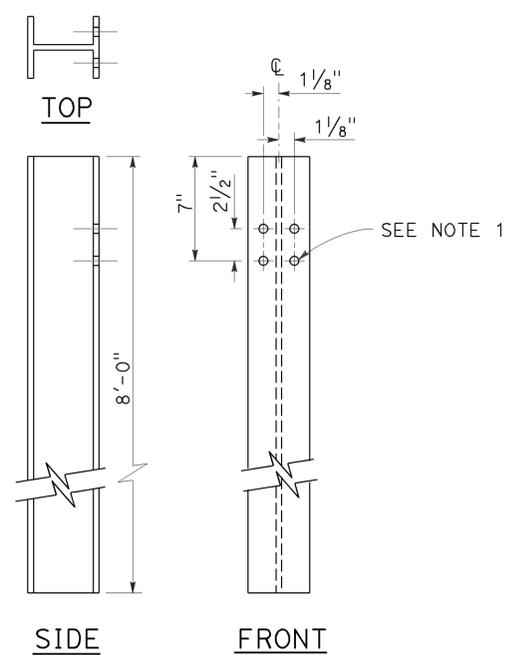
**W6 x 9 OR W6 x 8.5
STEEL POST**
See Note 4



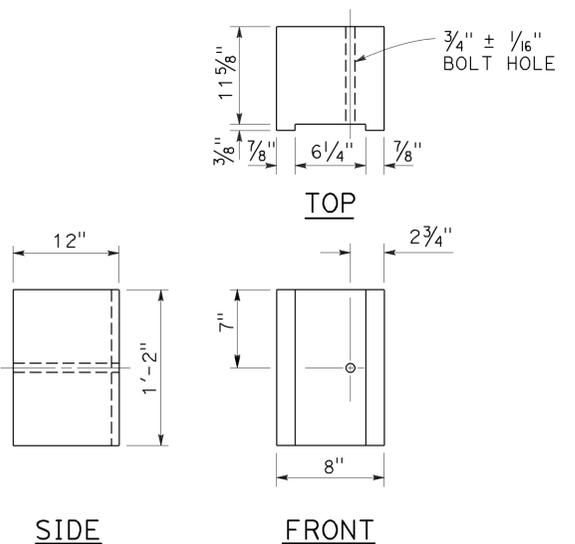
**6" x 12"
NOTCHED WOOD BLOCK**
See Notes 2 and 3



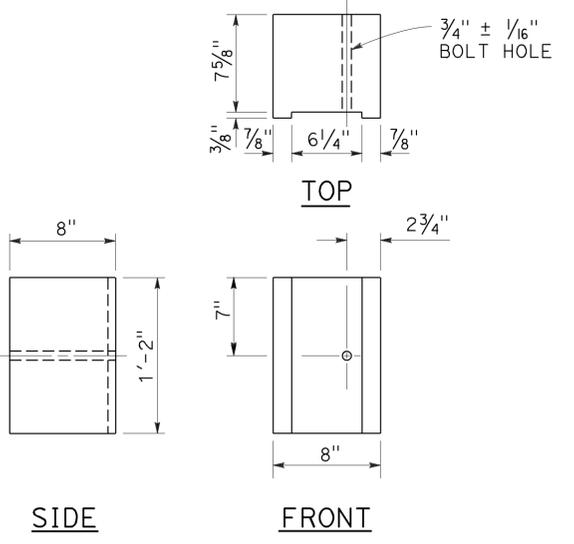
**6" x 8"
NOTCHED WOOD BLOCK**
Only for use with metal beam guard railing. See Note 5



**W6 x 15
STEEL POST**
See Note 6



**8" x 12"
NOTCHED WOOD BLOCK**
See Notes 2 and 3



**8" x 8"
NOTCHED WOOD BLOCK**
Only for use with metal beam guard railing. See Note 5

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
STEEL POST AND
NOTCHED WOOD BLOCK DETAILS**

NO SCALE

RSP A77N2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N2
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	35	60

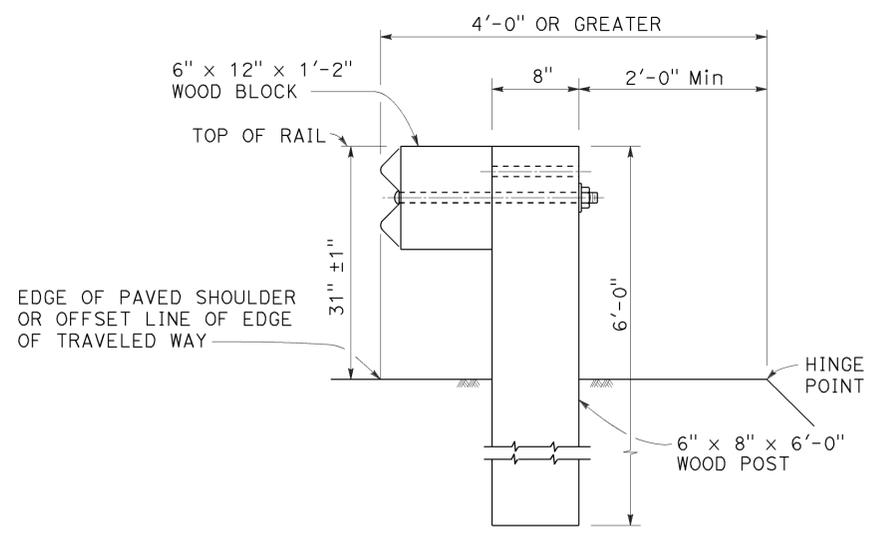
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

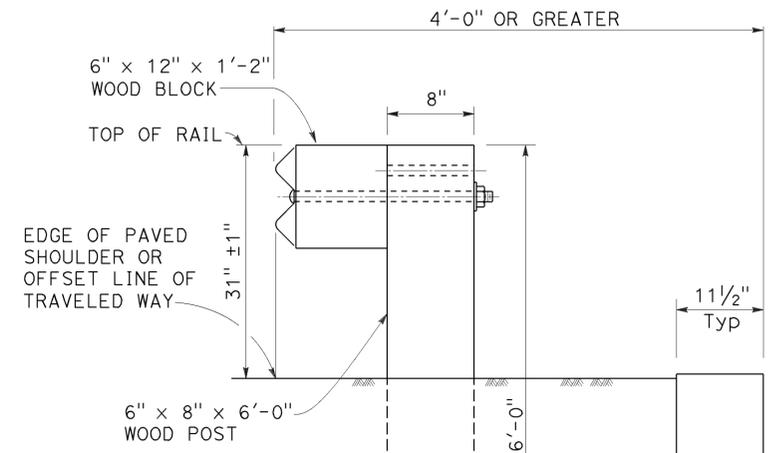
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REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

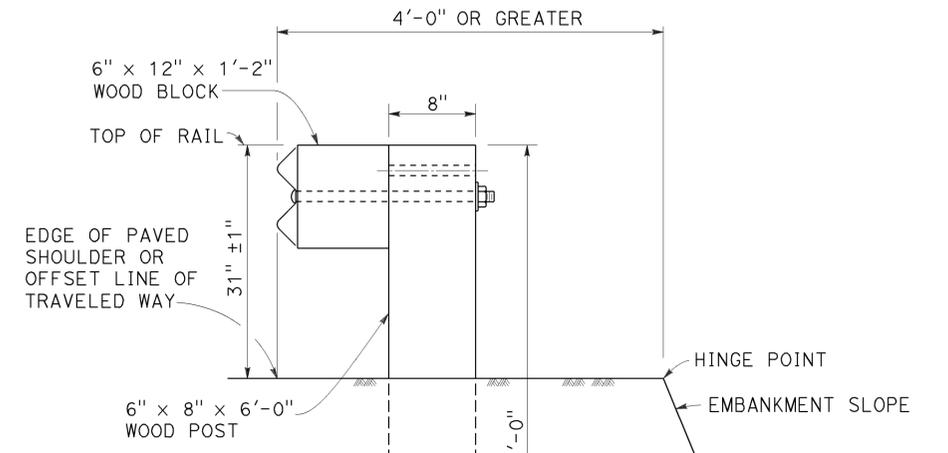
TO ACCOMPANY PLANS DATED 1-25-16



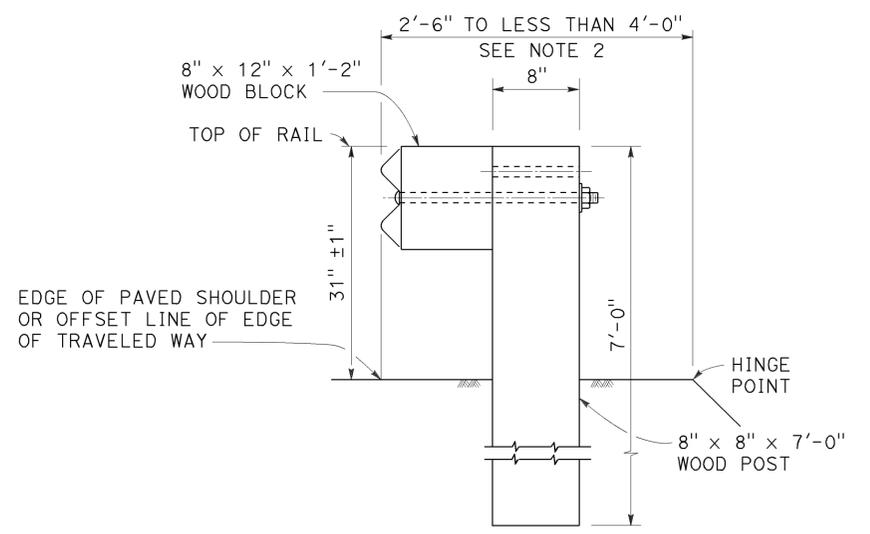
DETAIL A
TYPICAL ROADWAY
INSTALLATION
See Note 1



DETAIL C



DETAIL D



DETAIL B
NARROW ROADWAY
INSTALLATION
See Note 1

POST EMBEDMENT

INSTALLATION AT EARTH RETAINING WALLS

NOTES:

1. These installation details also applicable to steel line post installations. For Detail A, C, and D, where steel line post installations are constructed, W6 x 8.5 or W6 x 9 steel post, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For Detail B, where steel line post installations are constructed, W6 x 15 steel post, 8'-0" in length, with 8" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks are to be used in place of the size of wood post and wood block shown. For additional installation details, see Revised Standard Plan RSP A77L1 and RSP A77L2.
2. Where the distance between the face of the rail and the hinge point is less than 2'-6", see the Project Plans for special details.
3. For dike positioning with MGS installations, see Revised Standard Plan RSP A77N4.

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MIDWEST GUARDRAIL SYSTEM
TYPICAL LINE POST
EMBEDMENT AND
HINGE POINT OFFSET DETAILS

NO SCALE

RSP A77N3 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77N3
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N3

2010 REVISED STANDARD PLAN RSP A77N3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	36	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

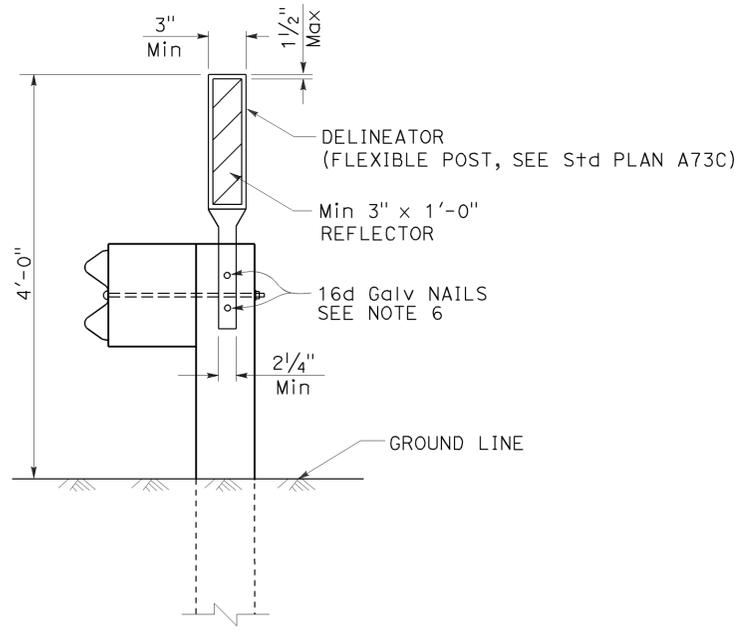
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REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
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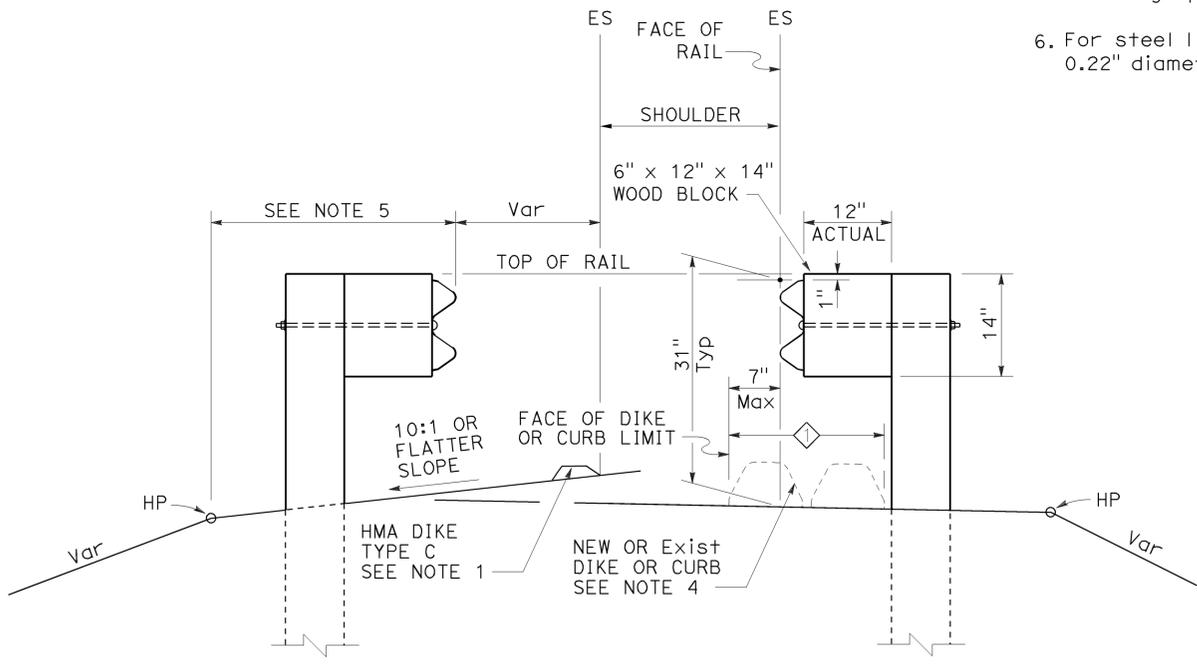
TO ACCOMPANY PLANS DATED 1-25-16

NOTES:

- When necessary to place dike more than 7" in front of face of MGS, only Type C dike may be used. For dike details, see Revised Standard Plan RSP A87B.
- For standard railing post embedment, see Revised Standard Plan RSP A77N3.
- MGS delineation to be used where shown on the Project Plans.
- When dike or curb is placed under MGS, the maximum height of the dike or curb shall be 6". Mountable dike should not be used. For dike and curb details, see Revised Standard Plans RSP A87A and RSP A87B.
- For details of typical distance between the face of rail and hinge point, see Revised Standard Plan RSP A77N3.
- 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.



MGS DELINEATION
See Note 3



DIKE POSITIONING
See Note 1

◇ PERMISSIBLE DIKE OR CURB PLACEMENT AREA

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL RAILING DELINEATION
AND DIKE POSITIONING DETAILS**

NO SCALE

RSP A77N4 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77N4

2010 REVISED STANDARD PLAN RSP A77N4

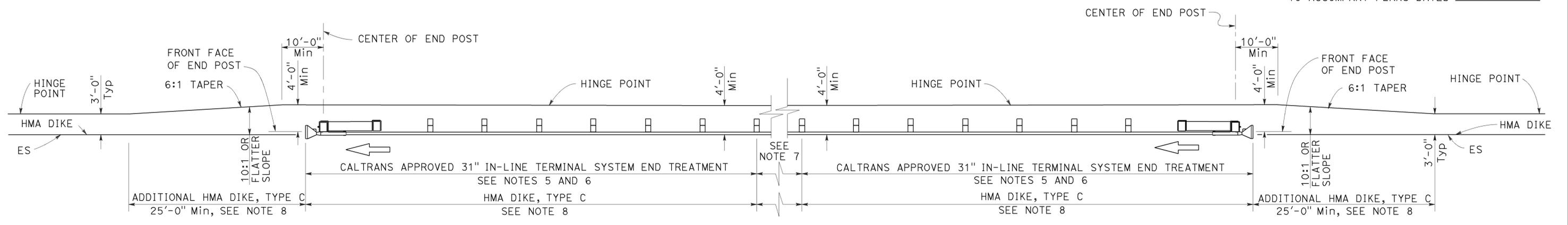
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	38	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

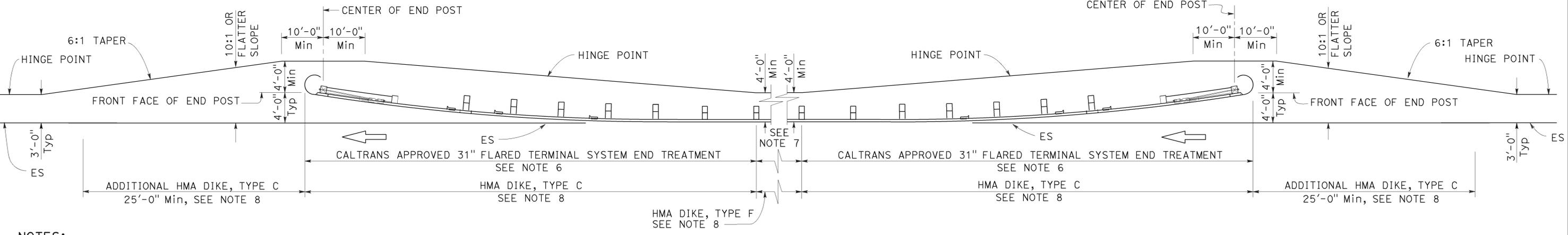
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TO ACCOMPANY PLANS DATED 1-25-16



TYPE 11D LAYOUT

(Embankment MGS installation with 31" in-line end treatment at each end of railing)
See Note 4



TYPE 11E LAYOUT

(Embankment MGS installation with 31" flared end treatment at each end of railing)
See Note 4

NOTES:

1. Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
2. MGS 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 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
4. Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
5. 31" in-line terminal system end treatments are used where site conditions will not accommodate a flared end treatment.
6. The type of 31" terminal system end treatment to be used will be shown on the Project Plans.
7. Dependent on site conditions (embankment height and side slope), construction of additional MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
8. Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77P2 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P2

2010 REVISED STANDARD PLAN RSP A77P2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	39	60

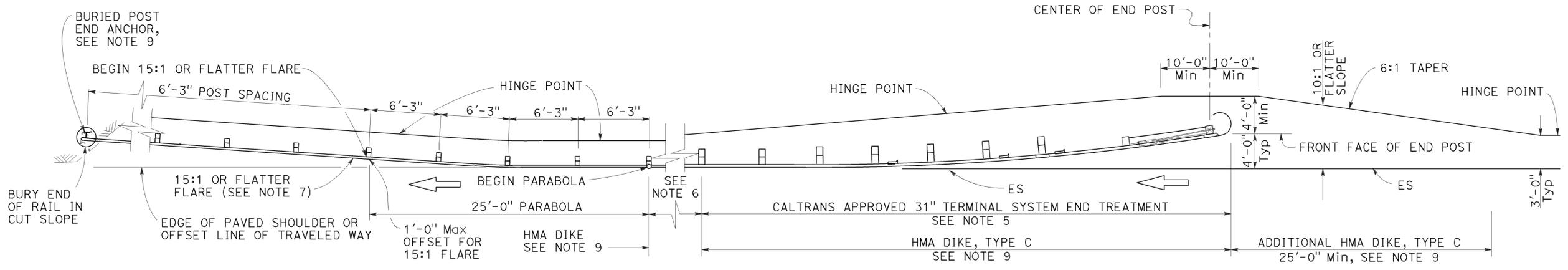
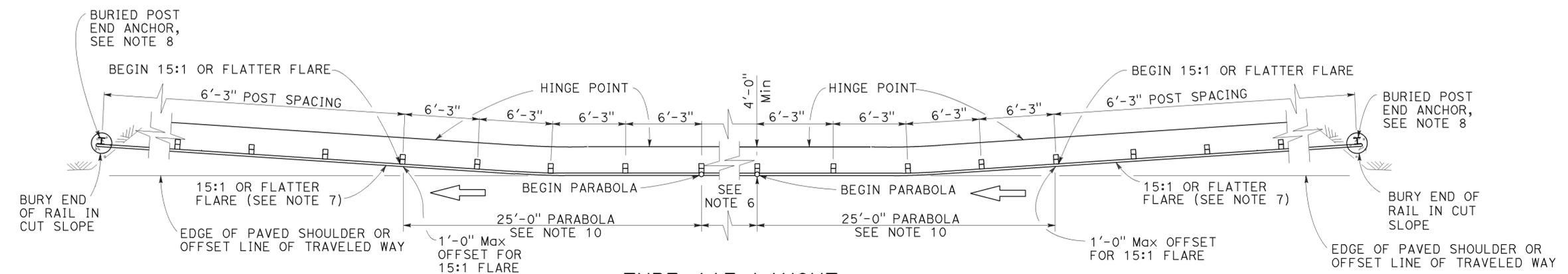
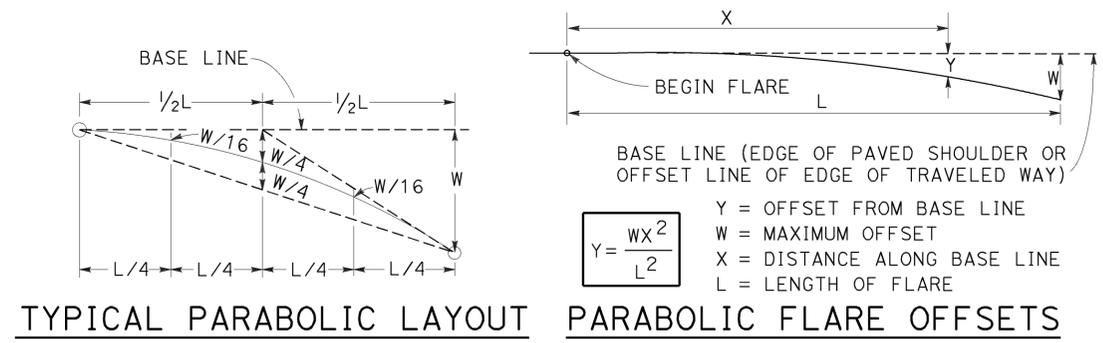
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July 19, 2013
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TO ACCOMPANY PLANS DATED 1-25-16



NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS 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 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
- The type of 31" 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 MGS (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 MGS 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 11F and 11G Layouts, see Revised Standard Plan RSP A77T2.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77P3 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77P3

2010 REVISED STANDARD PLAN RSP A77P3

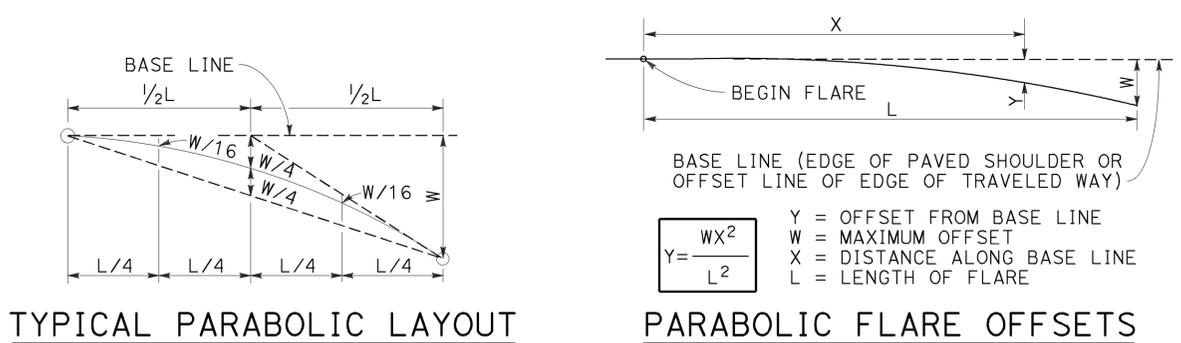
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	40	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

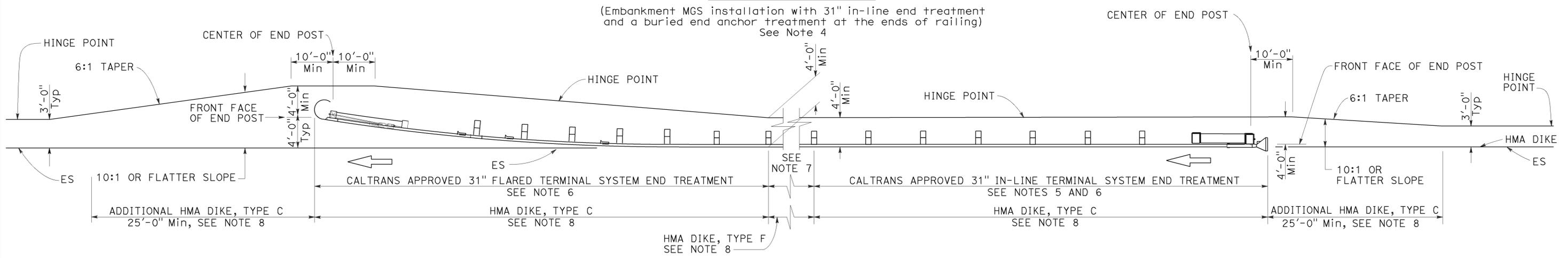
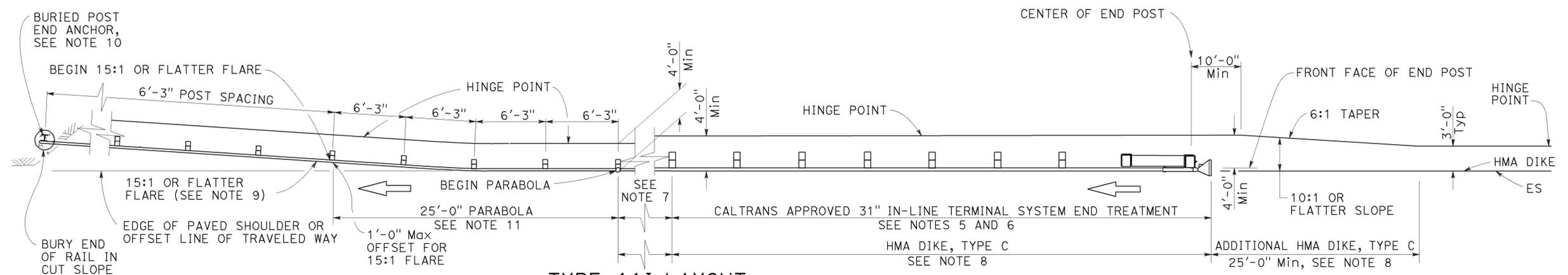
July 19, 2013
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TO ACCOMPANY PLANS DATED 1-25-16



NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS 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 12" x 1'-2" wood blocks, W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or plastic blocks may be used for 6" x 8" x 6'-0" wood post with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- Layout Types 11D through 11L, shown on the A77P Series of Standard Plans, are typically used where MGS is recommended to shield embankment slopes and a crashworthy 31" end treatment is required for both directions of traffic.
- 31" in-line terminal system end treatments are used where site conditions will not accommodate a 31" flared end treatment.
- The type of 31" 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 MGS (length equal to multiples of 12'-6" with 6'-3" post spacing) may be advisable.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- 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 MGS 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 11I Layout, see Revised Standard Plan RSP A77T2.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
EMBANKMENTS**

NO SCALE

RSP A77P5 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A77P5

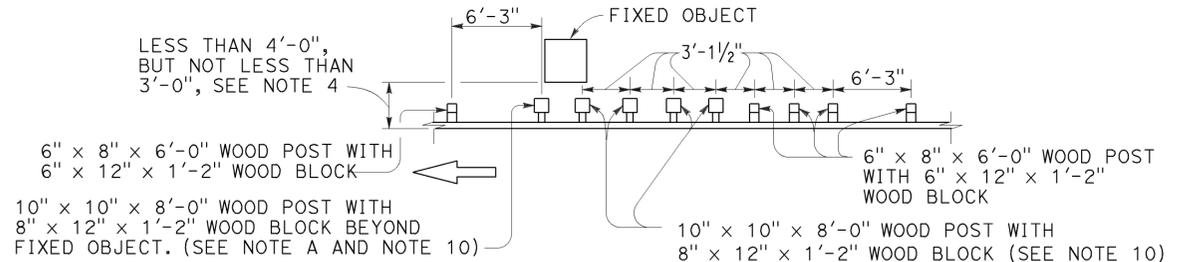
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	41	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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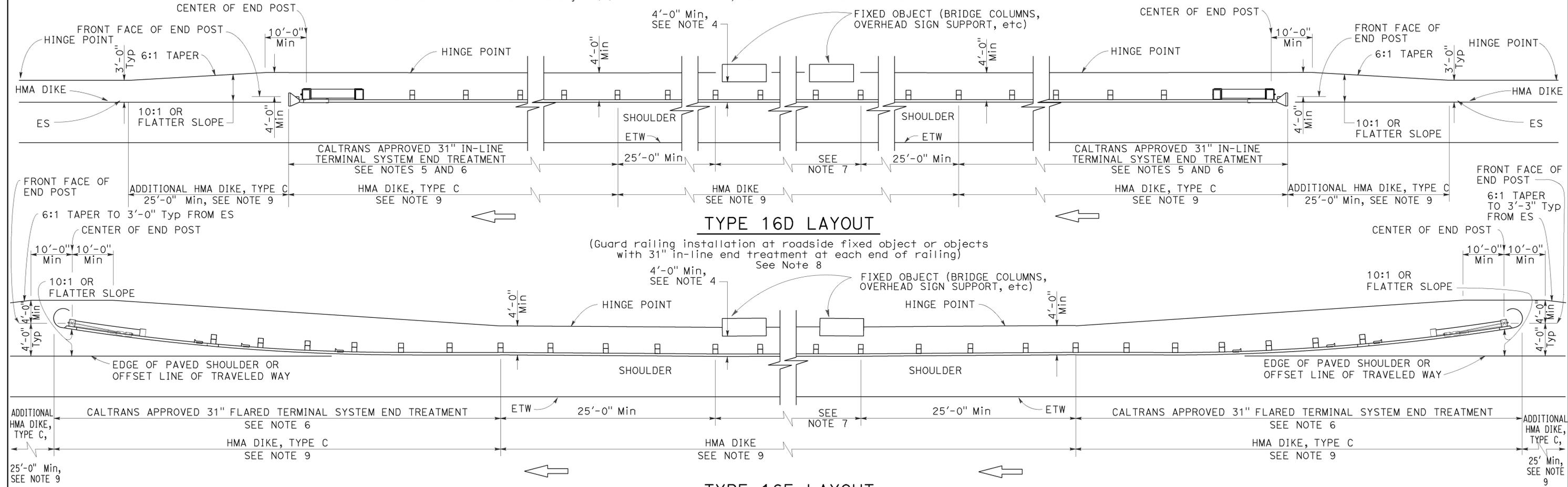
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NOTE A: For a series of fixed objects (bridge columns, overhead sign supports, etc.) additional 10" x 10" x 8'-0" wood post with 8" x 12" x 1'-2" wood blocks at 3'-1/2" center to center spacing are to be used between fixed object(s).

STRENGTHENED MIDWEST GUARDRAIL SYSTEM SECTIONS FOR FIXED OBJECT

Use strengthened MGS sections with layout Types 16D or 16E where minimum clearance between the face of the MGS and fixed object(s) is less than 4'-0", but not less than 3'-0". See Note 4.



- NOTES:**
- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
 - MGS 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 12" x 1'-2" wood blocks. W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" 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 12" x 1'-2" wood blocks where applicable and when specified.
 - A 4'-0" minimum clearance is required between the face of the railing and the face of a fixed object located directly behind MGS sections with post spacing at 6'-3". Construct MGS as shown in the detail "Strengthened Midwest Guardrail System Sections for Fixed Object", 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 3'-0". Where the clearance is less than 3'-0", a concrete wall or barrier should be constructed to shield the fixed object(s).
 - 31" in-line terminal system end treatments are used where site conditions will not accommodate a 31" flared end treatment.
 - The type of 31" terminal system to be used will be shown on the Project Plans.
 - As site conditions dictate, construct additional MGS to shield fixed object(s). Additional MGS length equal to multiples of 12'-6". Post spacing at 6'-3", except as specified in Note 4.
 - Layout Types 16D through 16L, shown on the A77R Series of Standard Plans, are typically used where MGS is recommended to shield roadside fixed object(s) and a crashworthy 31" end treatment is required for both directions of traffic.
 - Where placement of dike is required with MGS, see Revised Standard Plan RSP A77N4 for dike positioning details.
 - W6 x 15 steel post, 8'-0" in length, with 8" x 12" x 1'-2" notched wood block or notched recycled plastic block may be used in place of the 10" x 10" x 8'-0" wood post with 8" x 12" x 1'-2" wood block shown in the detail "Strengthened Midwest Guardrail System Sections for Fixed Object".

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MIDWEST GUARDRAIL SYSTEM TYPICAL LAYOUTS FOR ROADSIDE FIXED OBJECTS

NO SCALE

RSP A77R4 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77R4

2010 REVISED STANDARD PLAN RSP A77R4

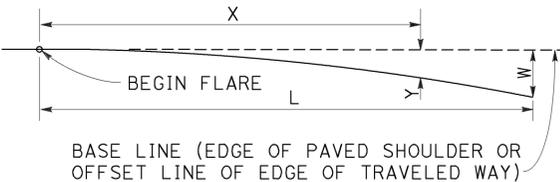
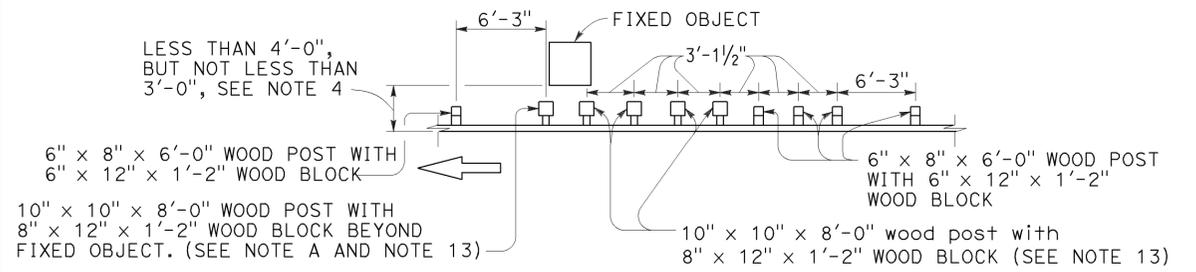
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	42	60

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July 19, 2013
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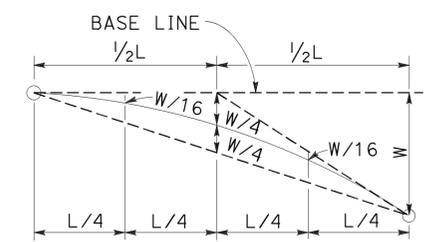
TO ACCOMPANY PLANS DATED 1-25-16



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

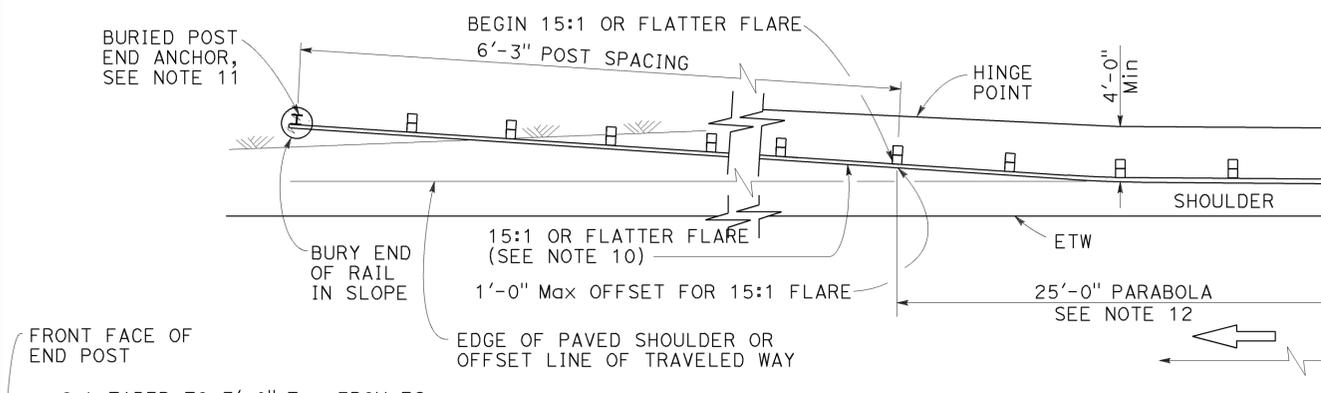


TYPICAL PARABOLIC LAYOUT

STRENGTHENED MIDWEST GUARDRAIL SYSTEM SECTIONS FOR FIXED OBJECT

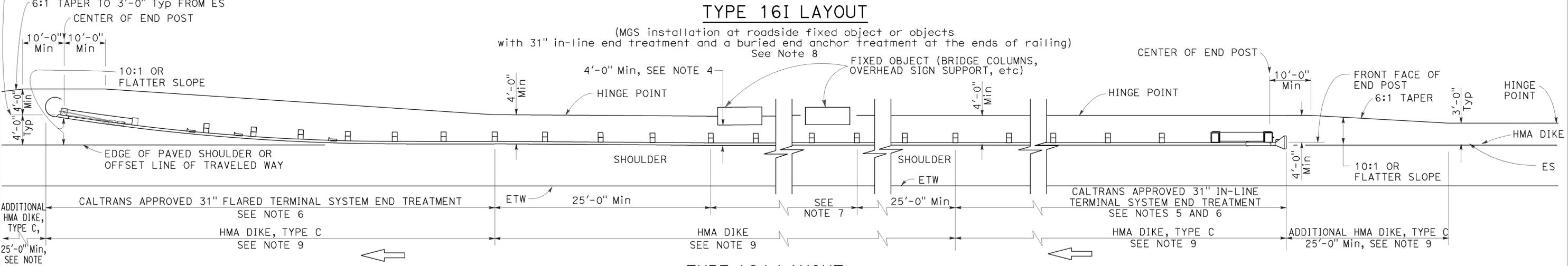
PARABOLIC FLARE OFFSETS

Use strengthened MGS sections with layout Types 16I or 16J Layouts where minimum clearance between the face of the MGS and fixed object(s) is less than 4'-0", but not less than 3'-0". See Note 4.



TYPE 16I LAYOUT

(MGS installation at roadside fixed object or objects with 31" in-line end treatment and a buried end anchor treatment at the ends of railing) See Note 8



TYPE 16J LAYOUT

(MGS installation at roadside fixed object or objects With a 31" in-line end treatment and a 31" flared end treatment at the ends of railing) See Note 8

NOTES:

- Line post, blocks and hardware to be used are shown on Revised Standard Plans RSP A77L1, RSP A77L2, RSP A77M1, RSP A77N1 and RSP A77N2.
- MGS 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 12" x 1'-2" wood blocks, W6 x 8.5 or W6 x 9 steel posts, 6'-0" in length, with 6" x 12" x 1'-2" notched wood blocks or notched recycled plastic blocks may be used for 6" x 8" x 6'-0" wood posts with 6" x 12" x 1'-2" wood blocks where applicable and when specified.
- A 4'-0" minimum clearance is required between the face of the railing and the face of a fixed object located directly behind MGS sections with post spacing at 6'-3". Construct MGS as shown in the detail "Strengthened Midwest Guardrail System 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 3'-0". Where the clearance is less than 3'-0", a concrete wall or barrier should be constructed to shield the fixed object(s).

- 31" in-line terminal system end treatments are used where site conditions will not accommodate a 31" flared end treatment.
- The type of 31" terminal system to be used will be shown on the Project Plans.
- As site conditions dictate, construct additional MGS to shield fixed object(s). Additional MGS length equal to multiples of 12'-6". Post spacing at 6'-3", except as specified in Note 4.
- Layout Types 16D through 16L, shown on the A77R Series of Standard Plans, are typically used where MGS is recommended to shield roadside fixed object(s) and a crashworthy 31" end treatment is required for both directions of traffic.
- Where placement of dike is required with guard railing, see Revised Standard Plan RSP A77N4 for dike positioning details.
- The 15:1 or flatter flare for the buried post anchor is based on the edge of the paved shoulder or offset line of edge of the traveled way. The length of MGS 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 Buried Post End Anchor, see Revised Standard Plan RSP A77T2.
- For typical flare offsets for 25'-0" length parabola with maximum offset of 1'-0", see Revised Standard Plan RSP A77P1.
- W6 x 15 steel post, 8'-0" in length, with 8" x 12" 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 12" x 1'-2" wood block shown in the detail "Strengthened Midwest Guardrail System Sections for Fixed Object".

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
ROADSIDE FIXED OBJECTS**

NO SCALE

RSP A77R7 DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77R7

2010 REVISED STANDARD PLAN RSP A77R7

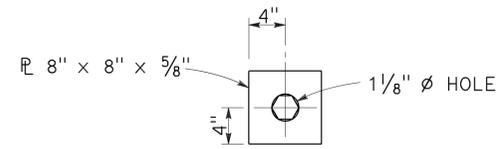
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	43	60

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

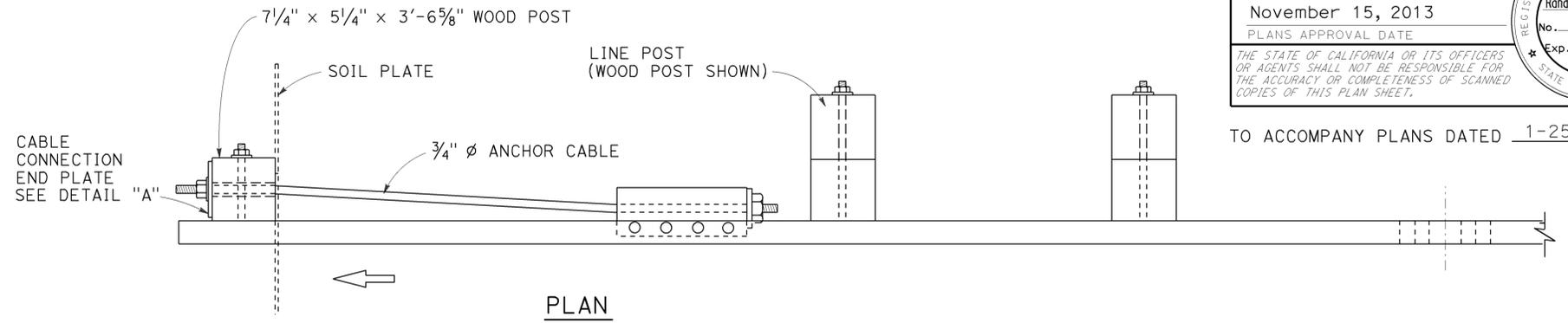
November 15, 2013
PLANS APPROVAL DATE

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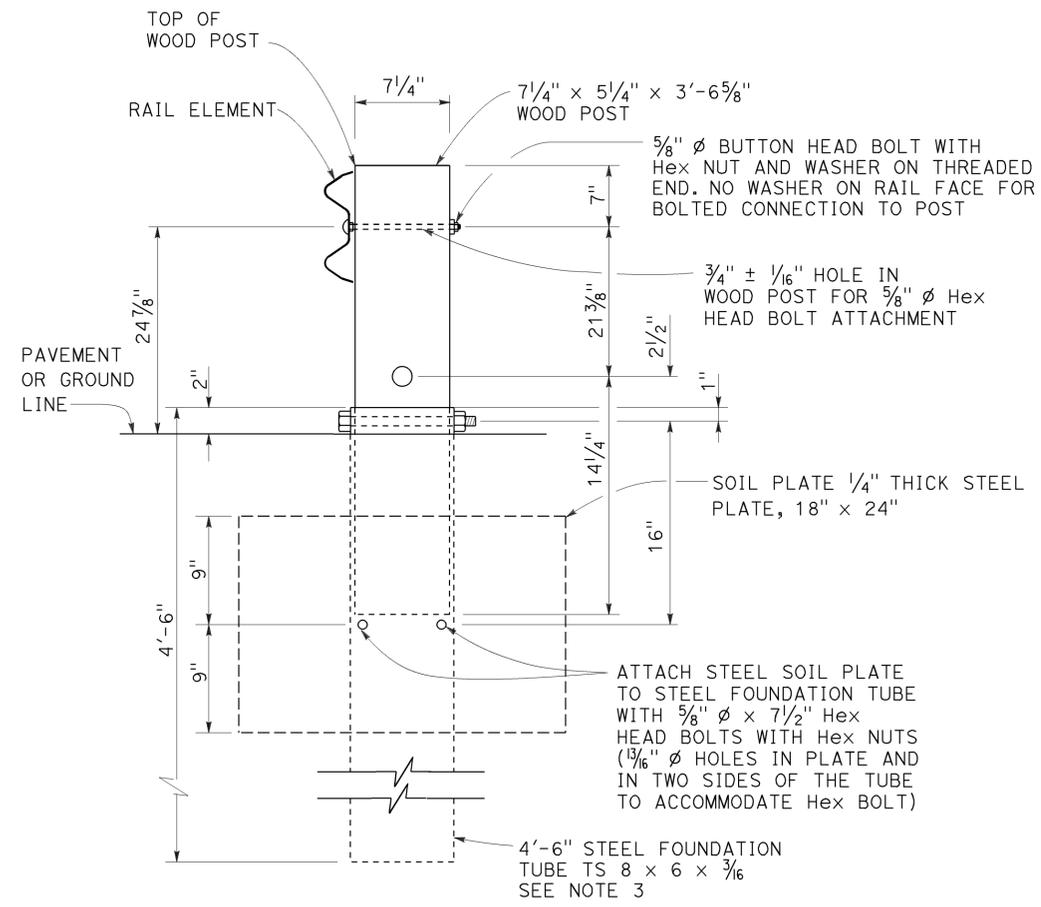
TO ACCOMPANY PLANS DATED 1-25-16



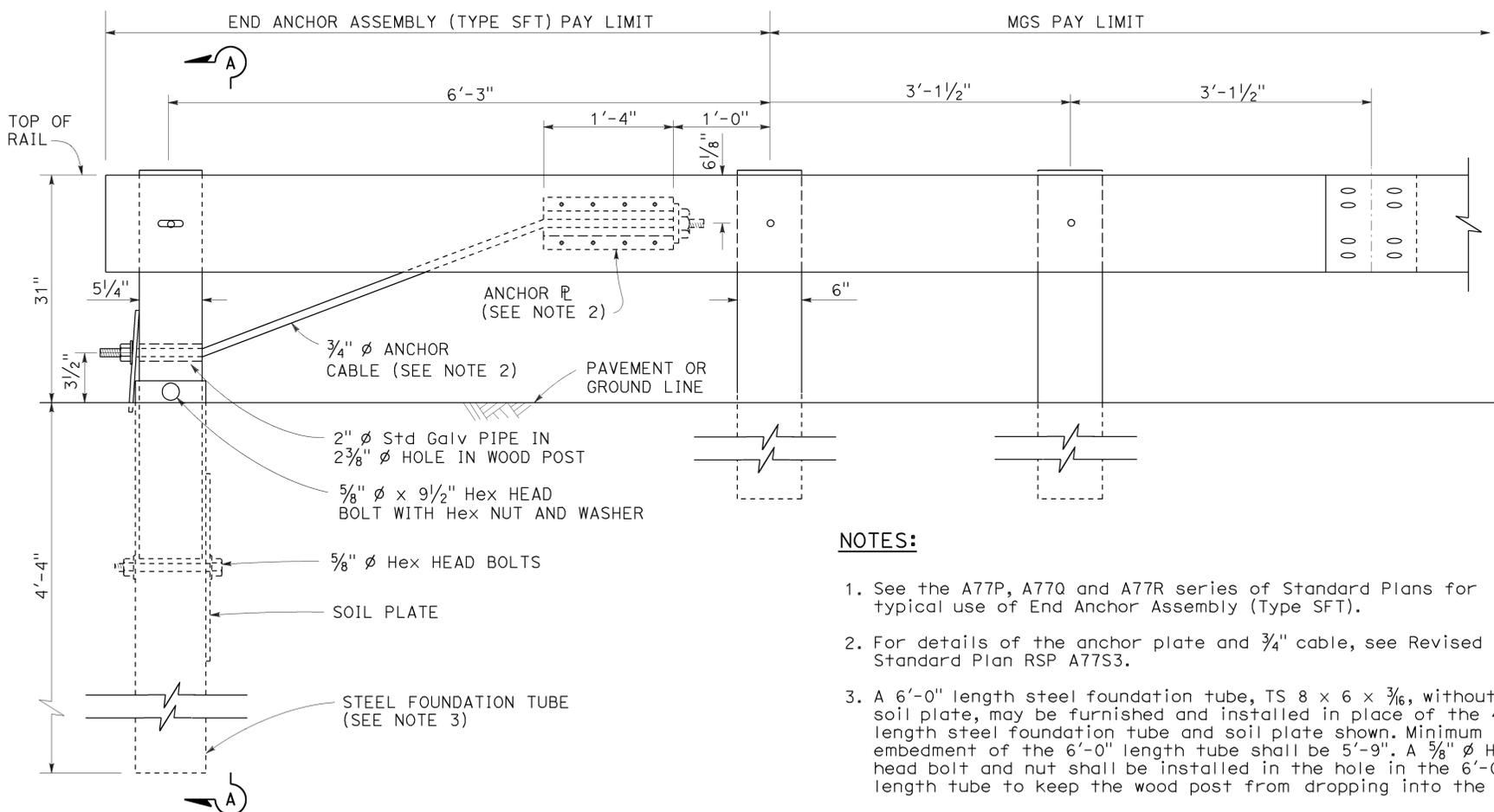
DETAIL "A"
CABLE CONNECTION
END PLATE



PLAN



SECTION A-A



ELEVATION

END ANCHOR
ASSEMBLY (TYPE SFT)
See Note 1

NOTES:

1. See the A77P, A77Q and A77R series of Standard Plans for typical use of End Anchor Assembly (Type SFT).
2. For details of the anchor plate and 3/4" cable, see Revised Standard Plan RSP A77S3.
3. A 6'-0" length steel foundation tube, TS 8 x 6 x 3/16, without a soil plate, may be furnished and installed in place of the 4'-6" length steel foundation tube and soil plate shown. Minimum embedment of the 6'-0" length tube shall be 5'-9". A 5/8" diameter hex head bolt and nut shall be installed in the hole in the 6'-0" length tube to keep the wood post from dropping into the tube.
4. Install line post, steel foundation tube and soil plate in soil.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM
END ANCHOR ASSEMBLY
(TYPE SFT)

NO SCALE

RSP A77S1 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77S1 DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A77S1

2010 REVISED STANDARD PLAN RSP A77S1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	44	60

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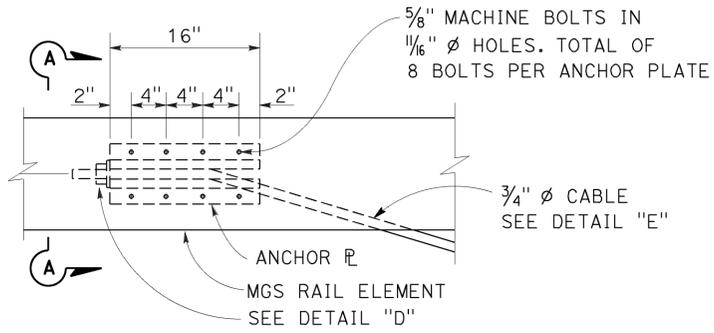
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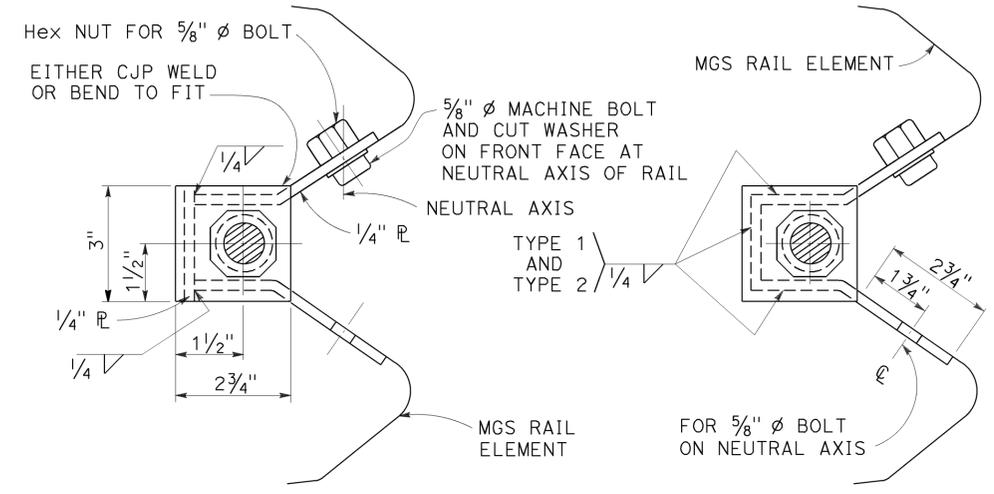
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 1-25-16

NOTE:
See Revised Standard Plans RSP A77S1, RSP A77S2 and RSP A77T1 for typical use of anchor cable and anchor plate.

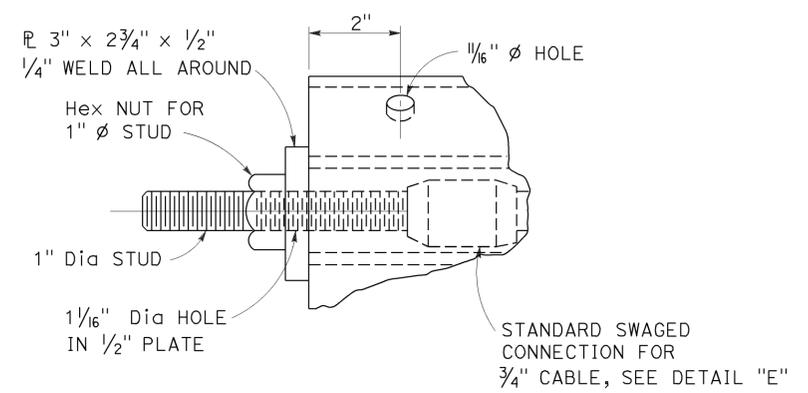


ANCHOR PLATE DETAIL
(MGS shown, TBB similar)

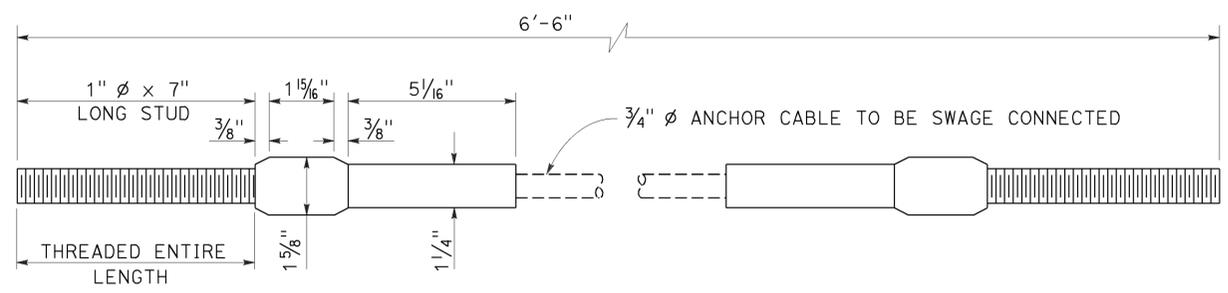


NOTE:
Dimensioning applies to both types.

SECTION A-A (ALTERNATIVE TYPE 1) **SECTION A-A (ALTERNATIVE TYPE 2)**



DETAIL "D"



ANCHOR CABLE WITH SWAGED FITTING AND STUD
DETAIL "E"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**METAL RAILING
ANCHOR CABLE AND
ANCHOR PLATE DETAILS**

NO SCALE
RSP A77S3 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77S3
DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A77S3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	45	60

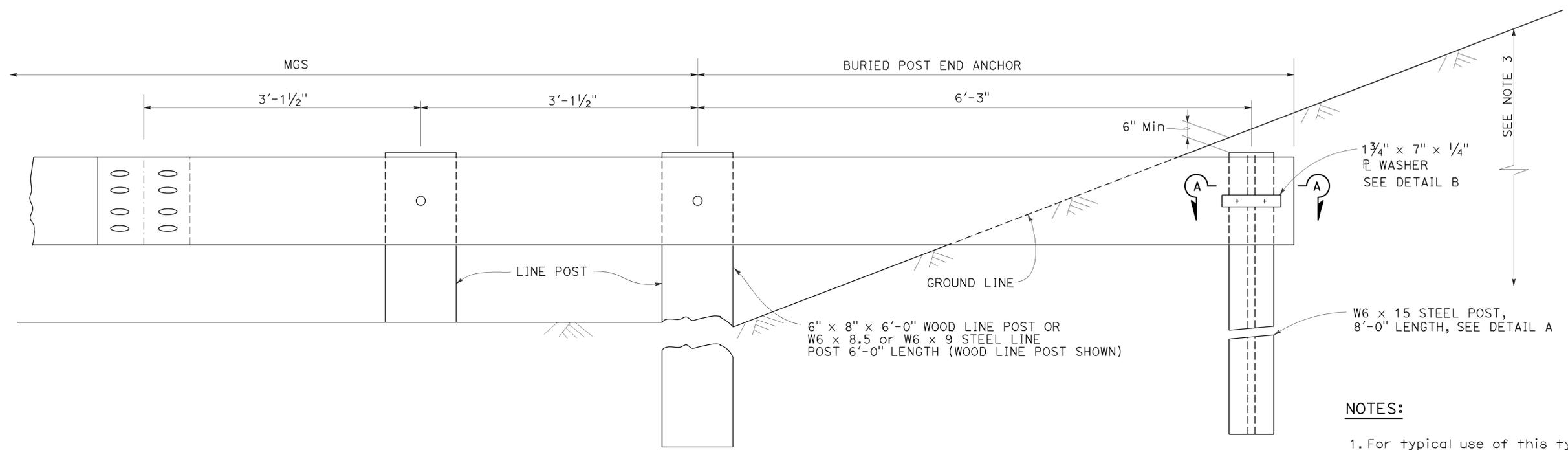
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

November 15, 2013
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 1-25-16

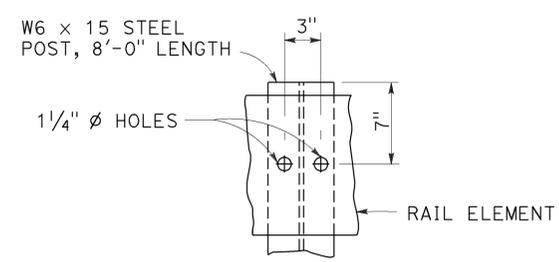


NOTES:

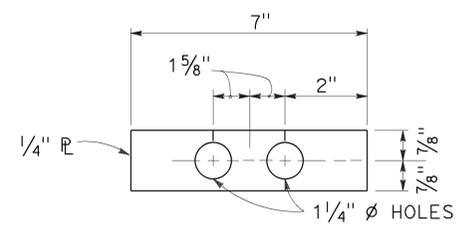
1. For typical use of this type of end anchor with MGS see the A77P, A77Q and A77R Series of the Standard Plans.
2. Holes excavation in the slope to construct the buried post end anchor shall be backfilled with selected earth, placed in layers approximately 1'-0" thick. Each layer shall be moistened and thoroughly compacted.
3. The buried post end anchor shall only be constructed at those locations where the slope perpendicular to the roadway is non-traversable.

BURIED POST END ANCHOR

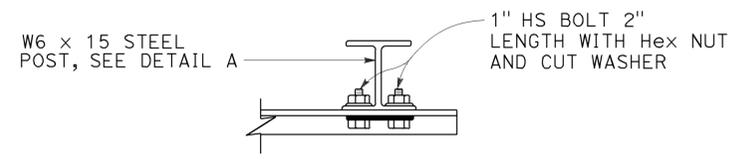
See Note 3



DETAIL A



DETAIL B



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**MIDWEST GUARDRAIL SYSTEM
BURIED POST END ANCHOR**

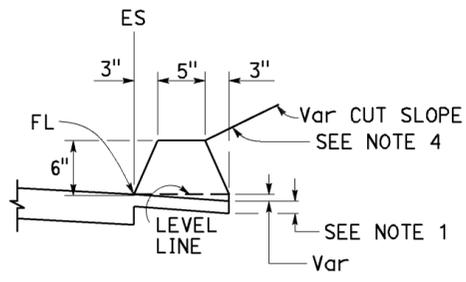
NO SCALE

RSP A77T2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP A77T2 DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

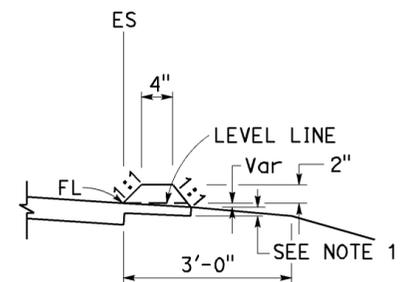
REVISED STANDARD PLAN RSP A77T2

2010 REVISED STANDARD PLAN RSP A77T2

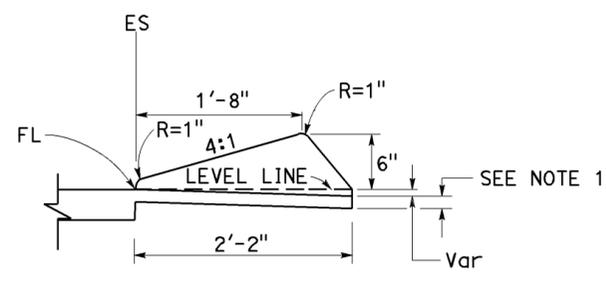
TO ACCOMPANY PLANS DATED 1-25-16



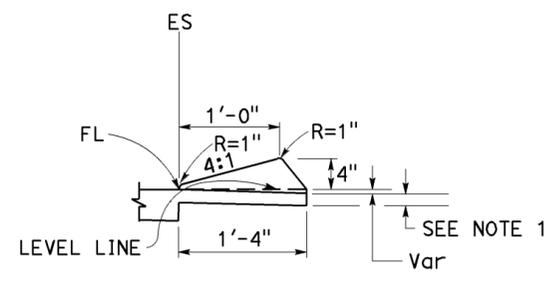
TYPE A
See Notes 3 and 5



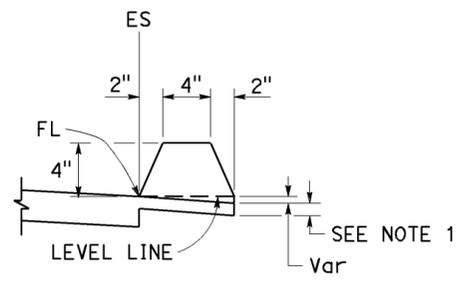
TYPE C



TYPE D

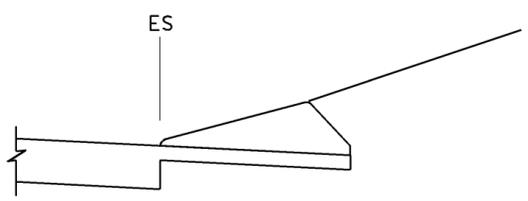


TYPE E

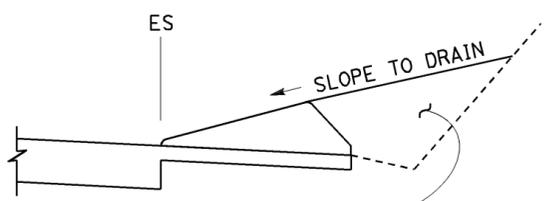


TYPE F
See Note 5

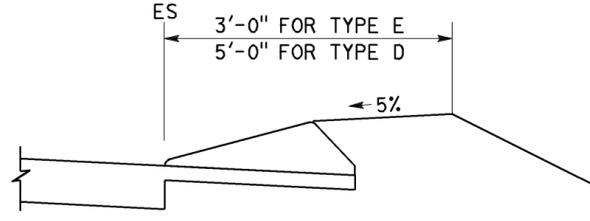
DIKES



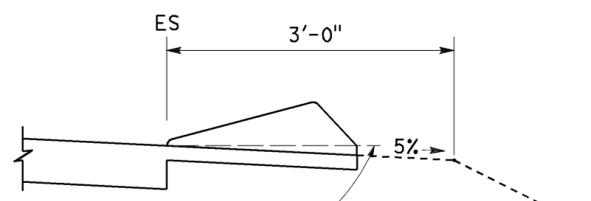
CASE C-1
Cut Slope



CASE C-2
Cut Slope



CASE F



CASE R
See Note 2

TYPE D AND E BACKFILL DETAILS

NOTES:

- For HMA shoulders only, extend top layer of HMA placed on the shoulder under dike with no joint at the ES. For projects with OGFC shoulders, do not extend OGFC under dike. See project plans for modified dike detail.
- Case R applies to retrofit only projects where restrictive conditions do not provide enough width for Case F backfill.
- Type A dike only to be used where restrictive slope conditions do not provide enough width to use Type D or Type E dike.
- Fill and compact with excavated material to top of dike.
- Use Type A or F dike, where dike is required with guardrail installations. See Revised Standard Plan RSP A77N4 for dike positioning details. See Revised Standard Plan RSP A77N3 for hinge point offsets with guardrail.

DIKE QUANTITIES

TYPE	CUBIC YARDS PER LINEAR FOOT
A	0.0135
C	0.0038
D	0.0293
E	0.0130
F	0.0066

Quantities based on 5% cross slope.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

HOT MIX ASPHALT DIKES

NO SCALE

RSP A87B DATED JANUARY 15, 2016 SUPERSEDES RSP A87B DATED JULY 19, 2013 AND STANDARD PLAN A87B DATED MAY 20, 2011 - PAGE 120 OF THE STANDARD PLANS BOOK DATED 2010.

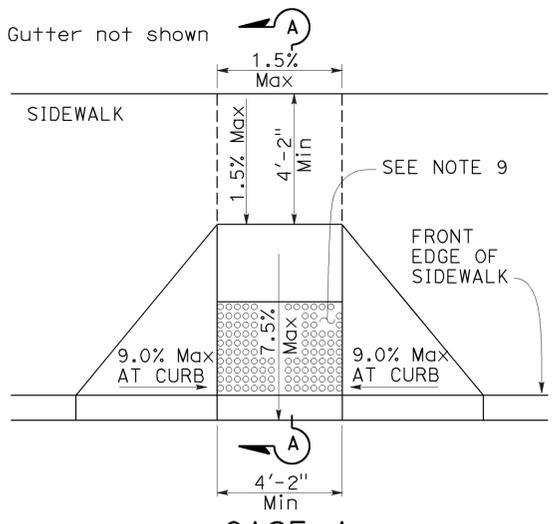
REVISED STANDARD PLAN RSP A87B

2010 REVISED STANDARD PLAN RSP A87B

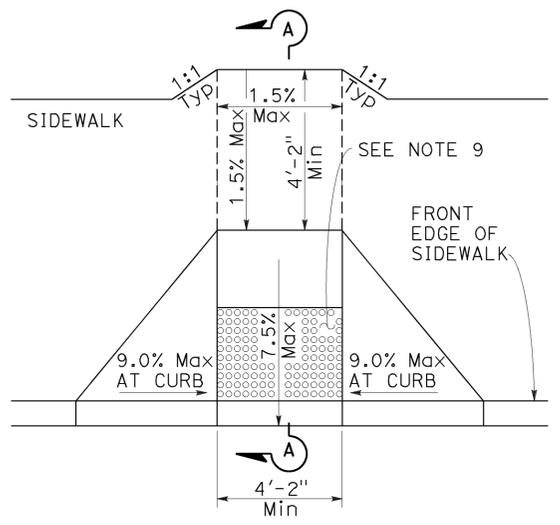
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	47	60

H. David Cordova
 REGISTERED CIVIL ENGINEER
 No. C41957
 Exp. 3-31-16
 CIVIL
 STATE OF CALIFORNIA

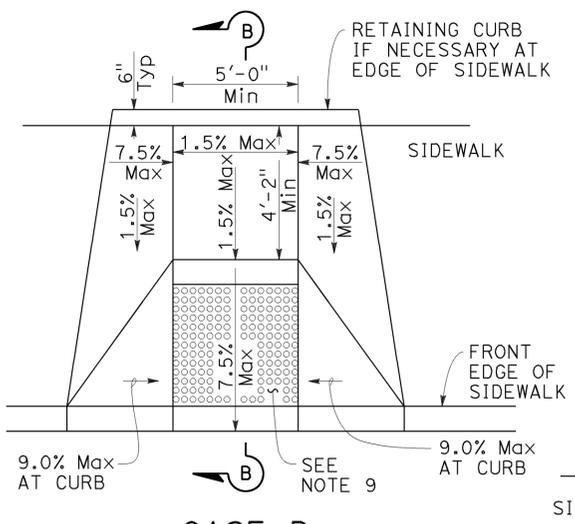
July 3, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



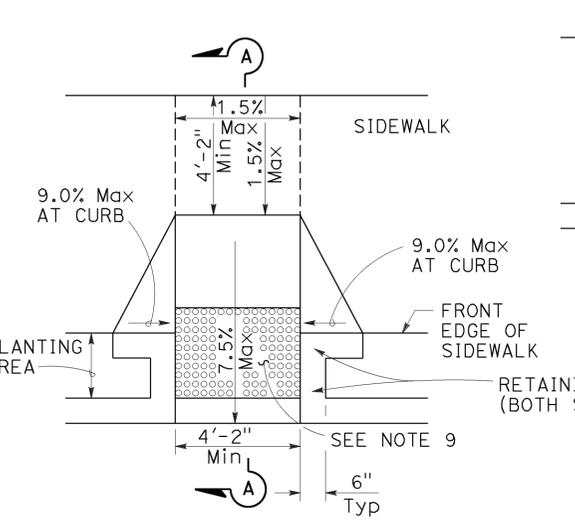
CASE A



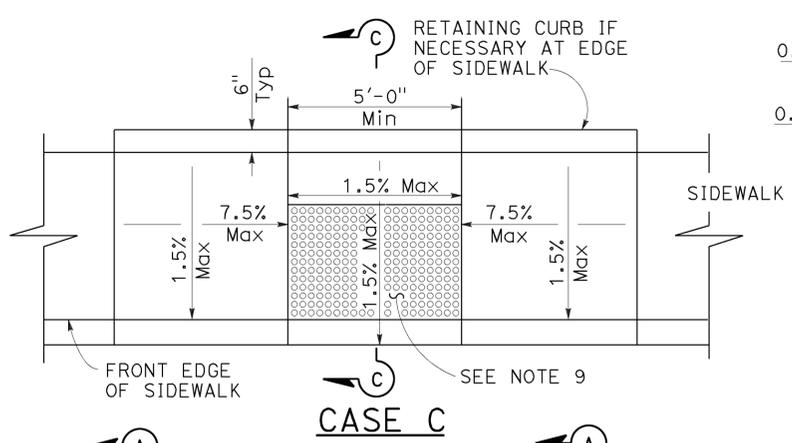
CASE D



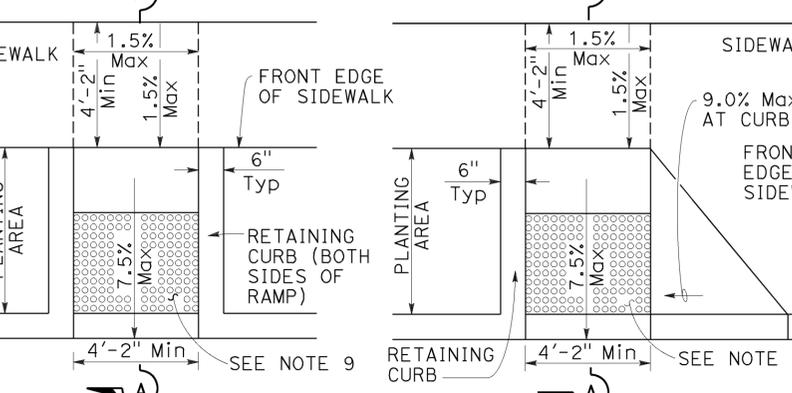
CASE B



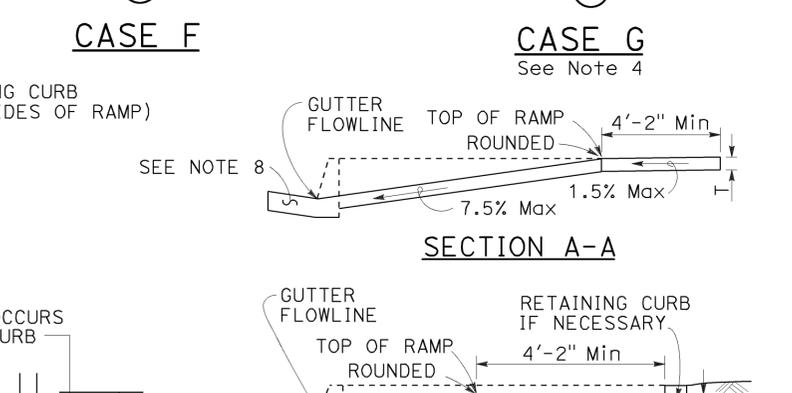
CASE E



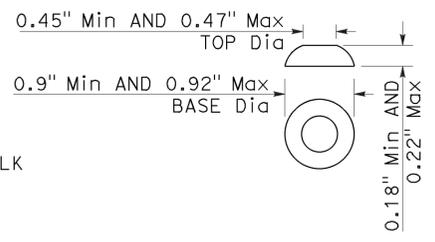
CASE C



CASE F



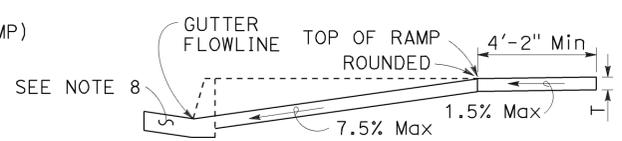
CASE G



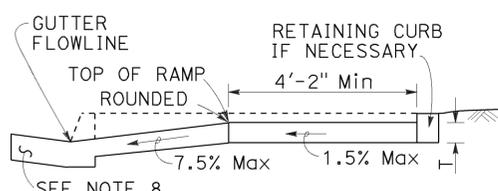
RAISED TRUNCATED DOME

NOTES:

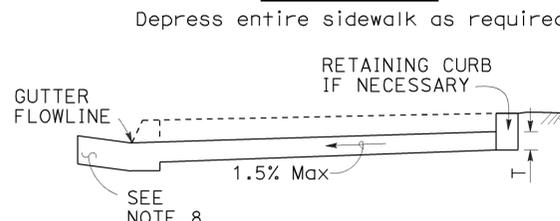
- As site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate.
- If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-2" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B, or C or may be widened as in Case D.
- When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
- As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
- If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4'-2".
- Side slope of ramp flares vary uniformly from a maximum of 9.0% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
- Transitions from ramps and landing to walks, gutters or streets shall be flush (no lip) and free of abrupt changes.
- Counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches of the curb ramp shall not be steeper than 1:20 (5.0%). Gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.
- Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. A 4'-0" wide detectable warning surface may be used on a 4'-2" wide curb ramp. Detectable Warning Surfaces shall conform to the requirements in the Standard Specifications.
- Sidewalk and ramp thickness, "T", shall be 3 1/2" minimum.
- Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
- Detectable warning surface may have to be cut to allow removal of utility covers while maintaining full detectable warning width and depth.



SECTION A-A



SECTION B-B

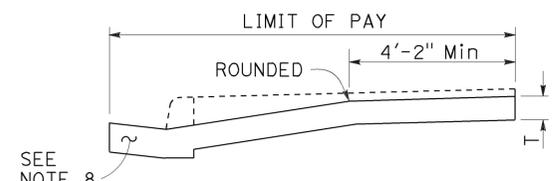


SECTION C-C

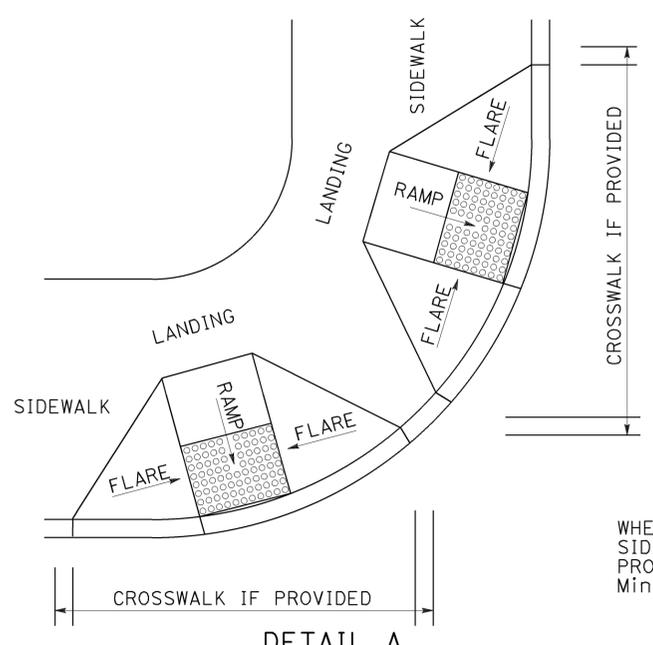


RAISED TRUNCATED DOME PATTERN (IN-LINE) DETECTABLE WARNING SURFACE

See Note 9



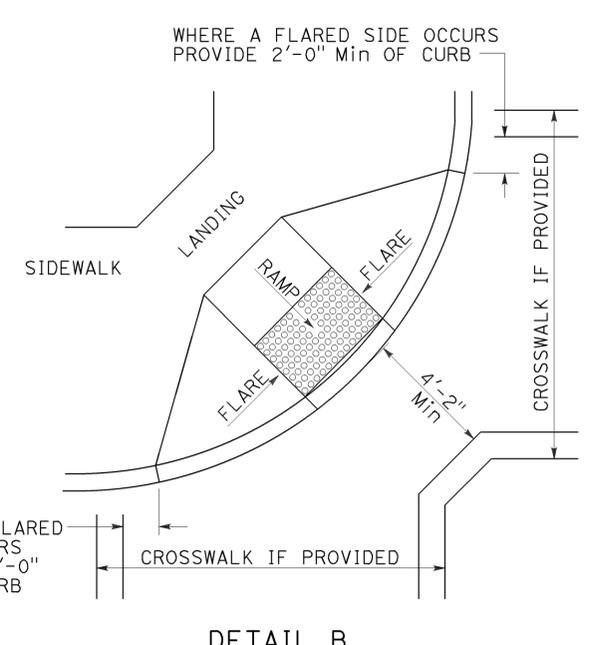
RETROFIT PAY LIMITS



DETAIL A

TYPICAL TWO-RAMP CORNER INSTALLATION

See Note 1



DETAIL B

TYPICAL ONE-RAMP CORNER INSTALLATION

See Notes 1 and 3

CURB RAMP DETAILS
NO SCALE

RSP A88A DATED JULY 3, 2015 SUPERSEDES RSP A88A DATED MARCH 21, 2014 AND RSP A88A DATED JULY 19, 2013 AND STANDARD PLAN A88A DATED MAY 20, 2011 - PAGE 121 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A88A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	48	60

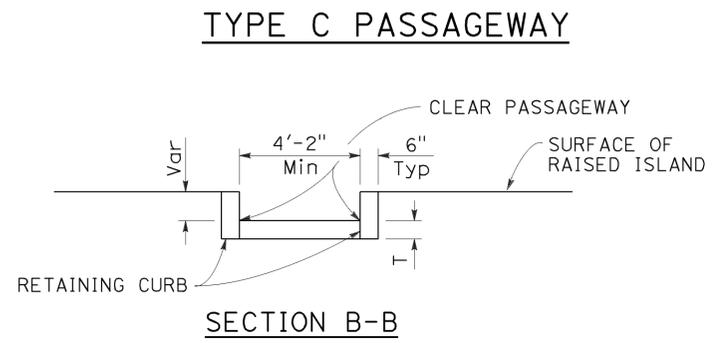
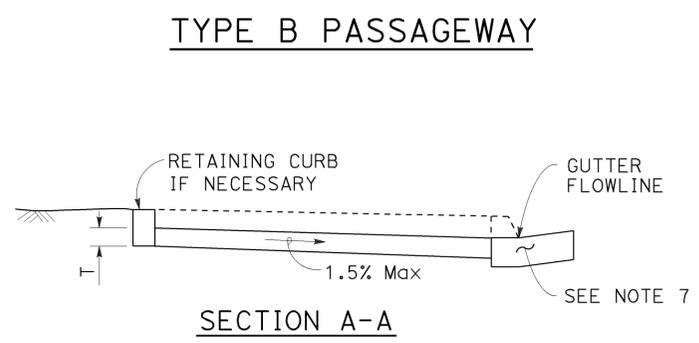
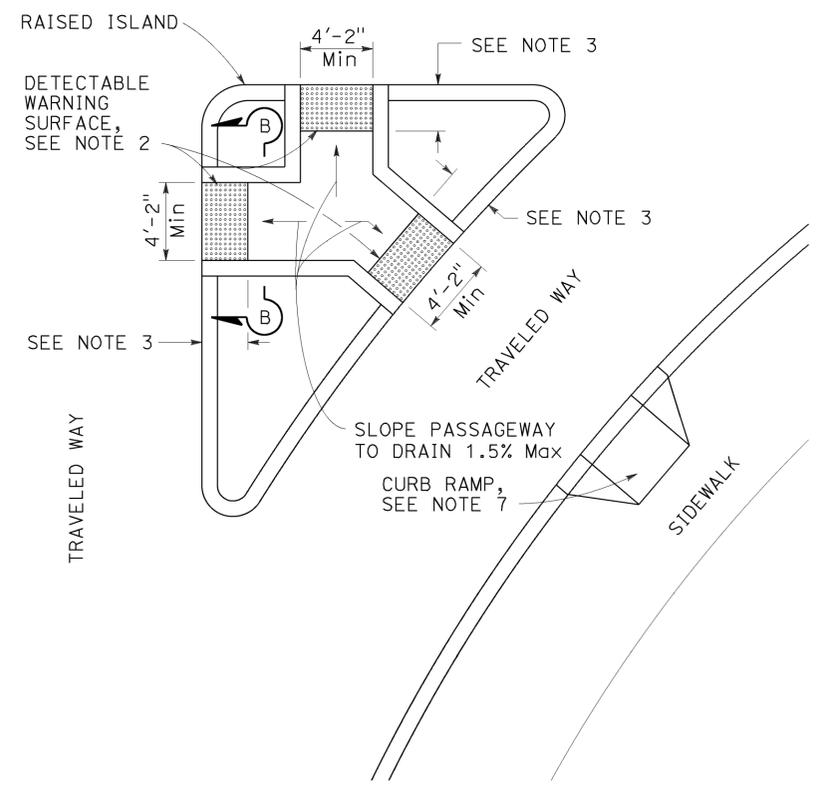
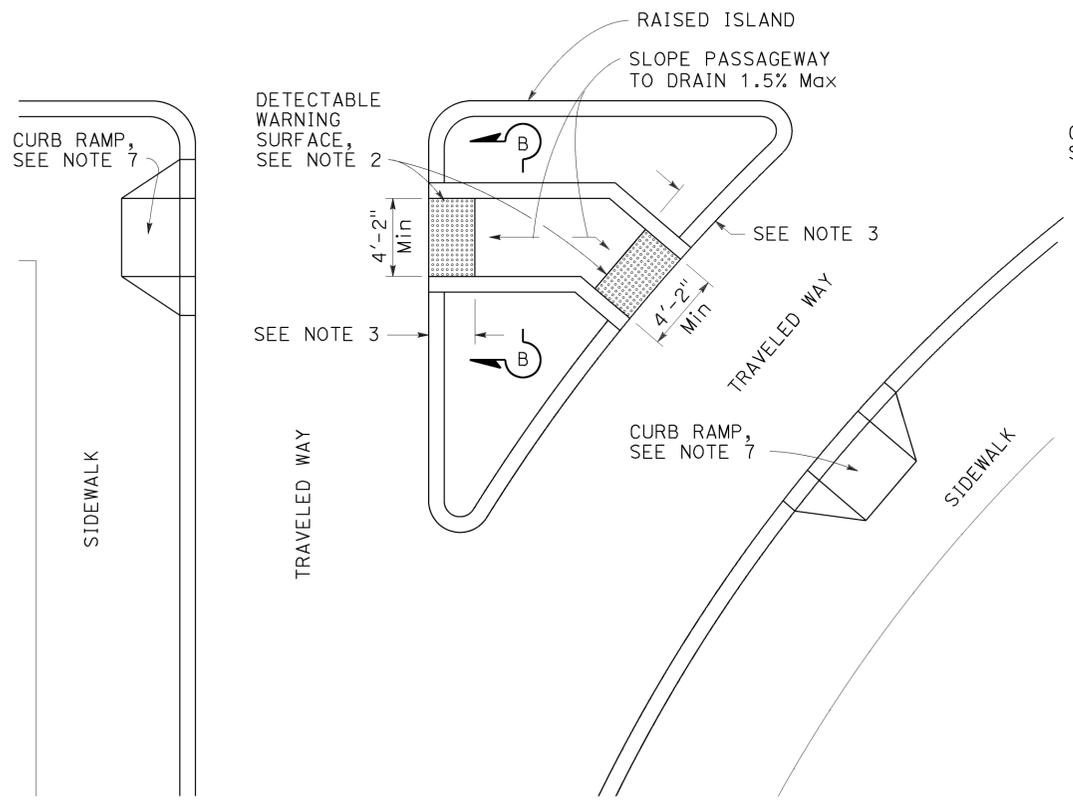
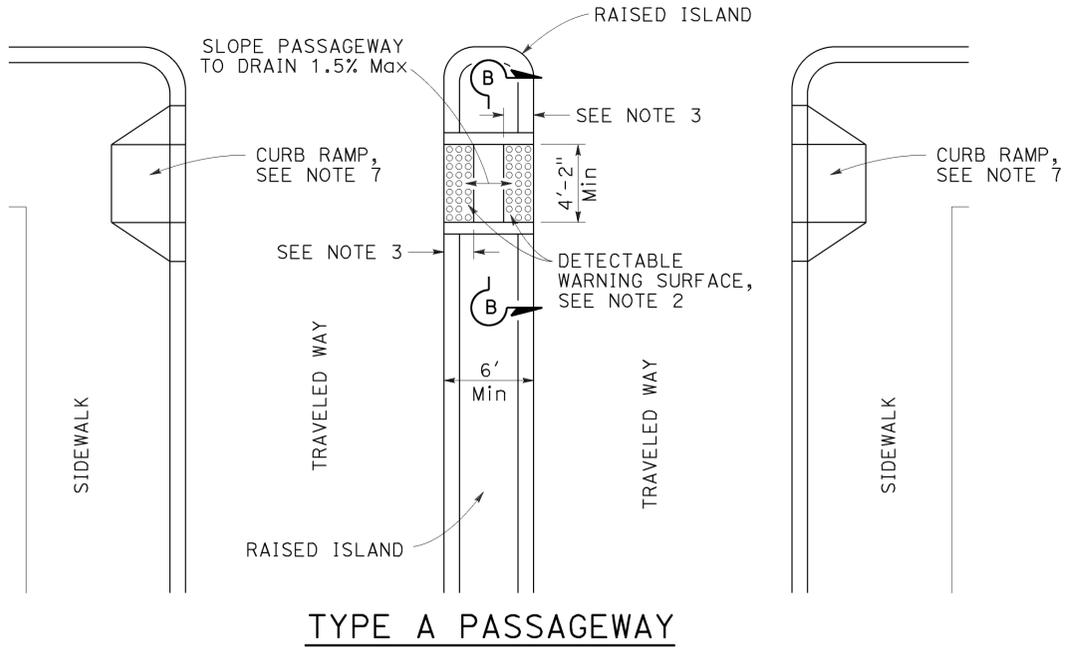
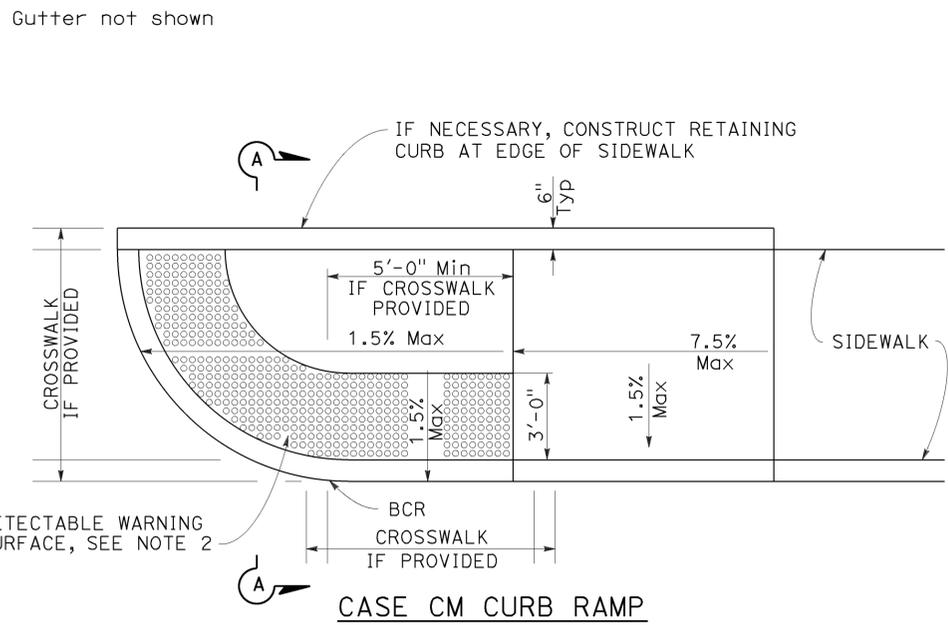
H. David Cordova
 REGISTERED CIVIL ENGINEER
 July 3, 2015
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Hector David Cordova
 No. C41957
 Exp. 3-31-16
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 1-25-16

NOTES:

- Sidewalk, ramp and passageway thickness, "t", shall be 3 1/2" minimum.
- For details of detectable warning surfaces, see Revised Standard Plan RSP A88A.
- Where an island passageway length is greater than or equal to 6'-0", but less than 8'-0", each detectable warning surface shall extend the full width and 2'-0" depth of the passageway length. Where an island passageway length is greater than or equal to 8'-0", each detectable warning surface shall extend the full width and 3'-0" depth of the passageway length. A 4'-0" wide detectable warning surface may be used on a 4'-2" wide island passageway.
- Transitions from ramps to walks, gutters or streets shall be flush (no lip) and free of abrupt changes.
- Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
- Detectable warning surface may have to be cut to allow removal of utility covers while maintaining full detectable warning width and depth.
- For additional curb ramp details, see Revised Standard Plan RSP A88A.



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CURB RAMP AND ISLAND PASSAGEWAY DETAILS
 NO SCALE

RSP A88B DATED JULY 3, 2015 SUPERSEDES RSP A88B DATED MARCH 21, 2014 AND RSP A88B DATED JULY 19, 2013 AND STANDARD PLAN A88B DATED MAY 20, 2011 - PAGE 122 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A88B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	49	60

Srikanth N. Balasubramanian
REGISTERED CIVIL ENGINEER

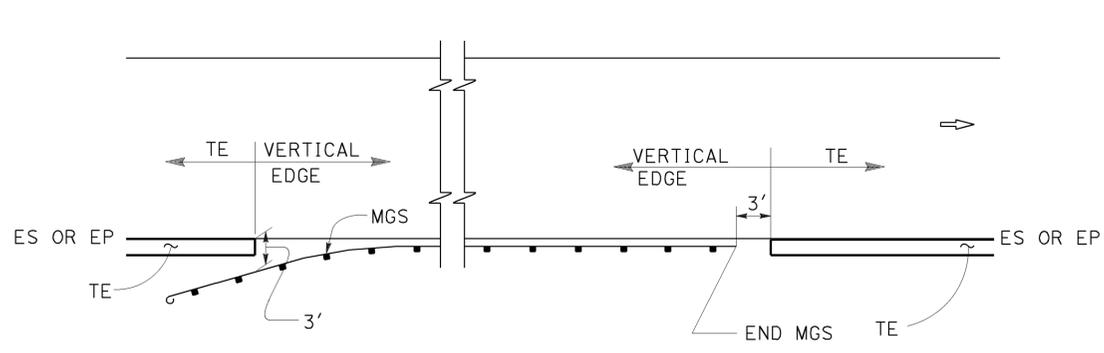
October 30, 2015
PLANS APPROVAL DATE

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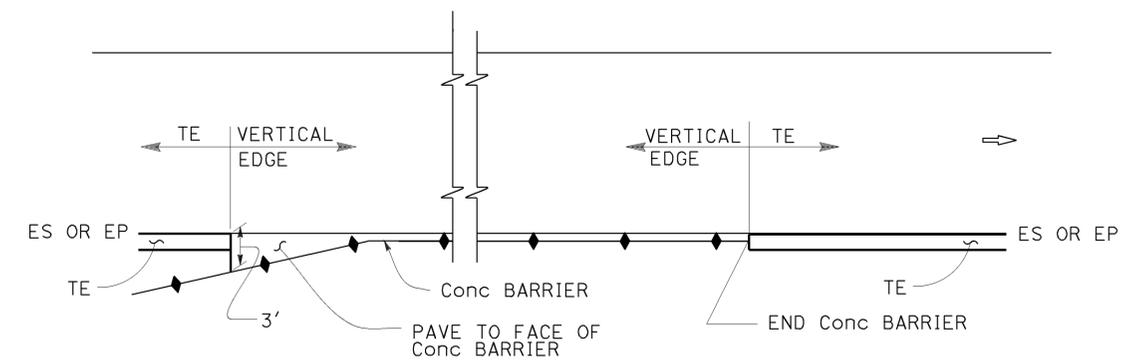
REGISTERED PROFESSIONAL ENGINEER
Srikanth N. Balasubramanian
No. C56426
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 1-25-16

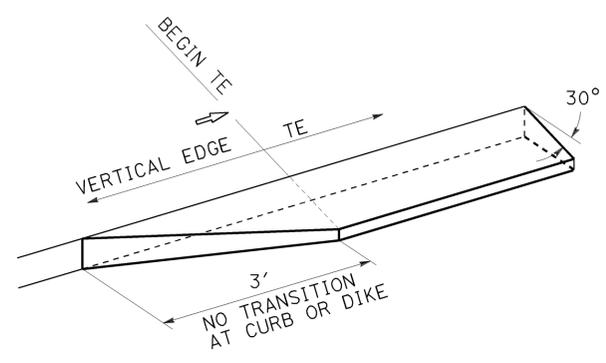
ABBREVIATIONS:
TE TAPERED EDGE



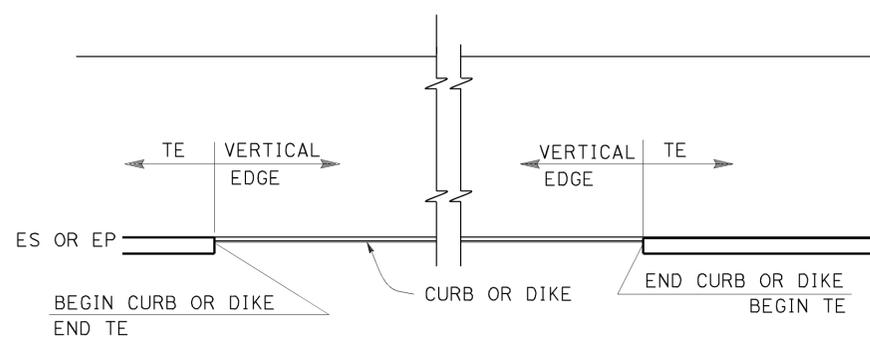
MGS



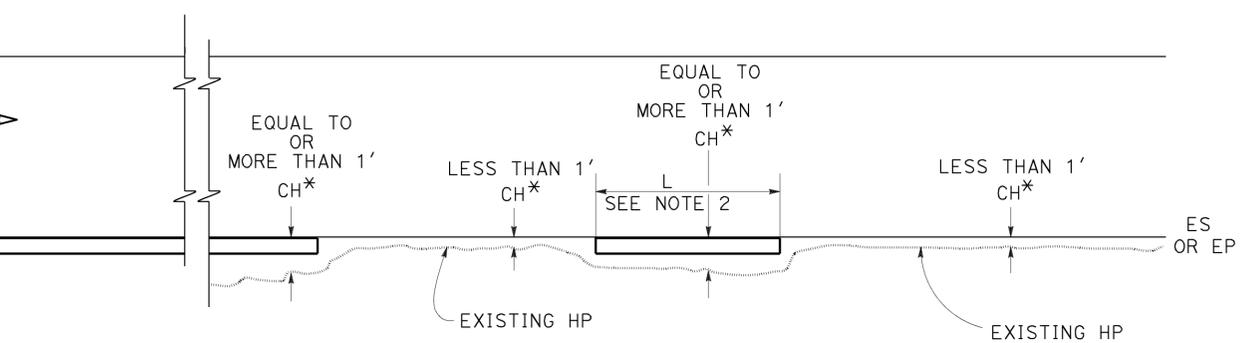
CONCRETE BARRIER



TRANSITION DETAIL FOR CONCRETE ONLY

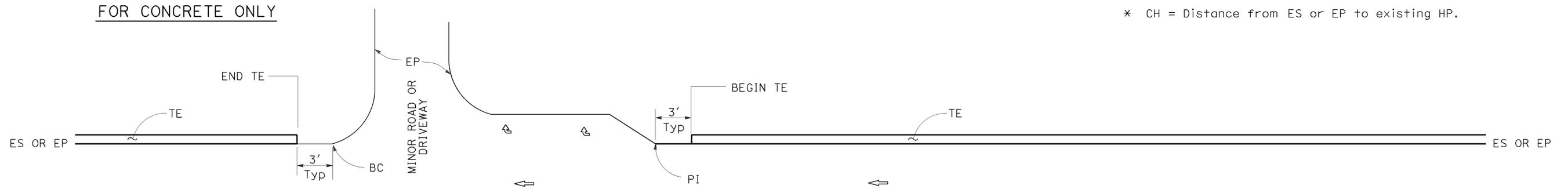


CURB OR DIKE



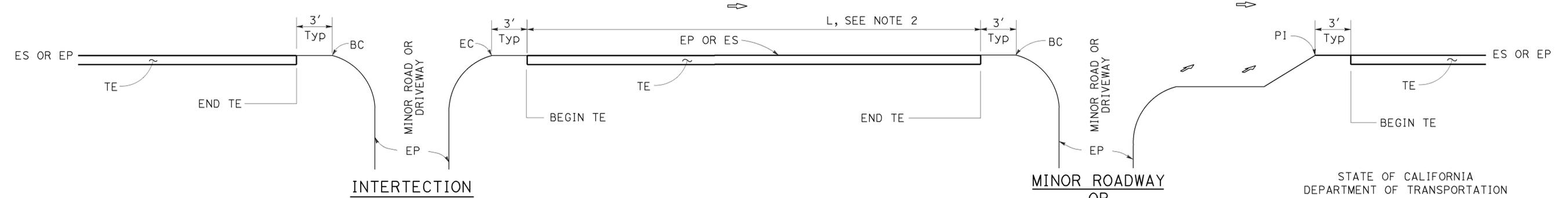
NARROW SIDE SLOPE

* CH = Distance from ES or EP to existing HP.



STATE ROUTE

STATE ROUTE



INTERSECTION

DRIVEWAY AND INTERSECTION

MINOR ROADWAY OR DRIVEWAY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS

NO SCALE

NOTES:

1. For details not shown, see Revised Standard Plans RSP P75 and RSP P76.
2. Tapered edge is optional when L is less than 30'.

RSP P74 DATED OCTOBER 30, 2015 SUPERSEDES RSP P74 DATED NOVEMBER 15, 2013 AND RSP P74 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P74

2010 REVISED STANDARD PLAN RSP P74

TO ACCOMPANY PLANS DATED 1-25-16

ADDITIONAL HMA OR CONCRETE QUANTITIES FOR TE/SIDE/MILE

TYPICAL CROSS SECTION	TT	TOTAL ADDITIONAL MATERIAL FOR TE/SIDE/MILE		
		HMA (TON)	CONCRETE (CY)*	CONCRETE (CY)**
	0.15'	7.7	NA	NA
	0.20'	13.7	NA	NA
	0.30'	30.9	NA	NA
	0.40'	54.9	NA	NA
	0.45'	69.4	NA	NA
	0.50'	84.2	NA	NA
	0.60'	113.9	NA	NA
	0.70'	143.6	70.9	94.2
	0.80'	173.3	85.6	112.2
	0.90'	203.0	100.3	130.2
	1.00'	232.7	114.9	148.2
	1.10'	262.4	129.6	166.2
1.20'	292.1	144.3	184.2	

* For Detail "A"
** For Optional Detail "A"

LEGEND:

HMA OVERLAY

HMA OR CONCRETE OVERLAY

CONCRETE OVERLAY

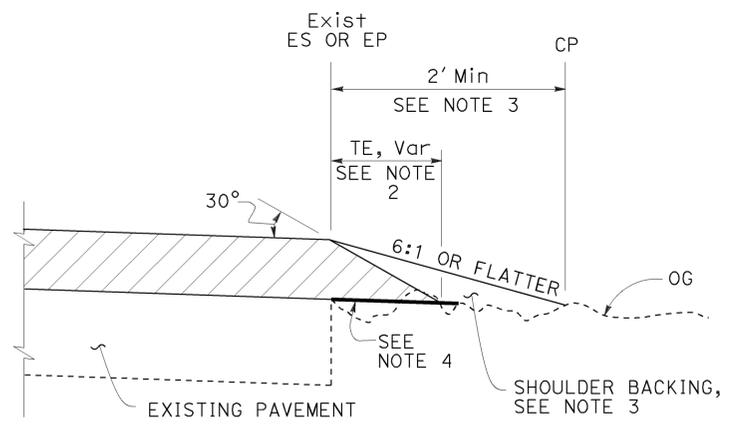
ABBREVIATIONS:

TE TAPERED EDGE

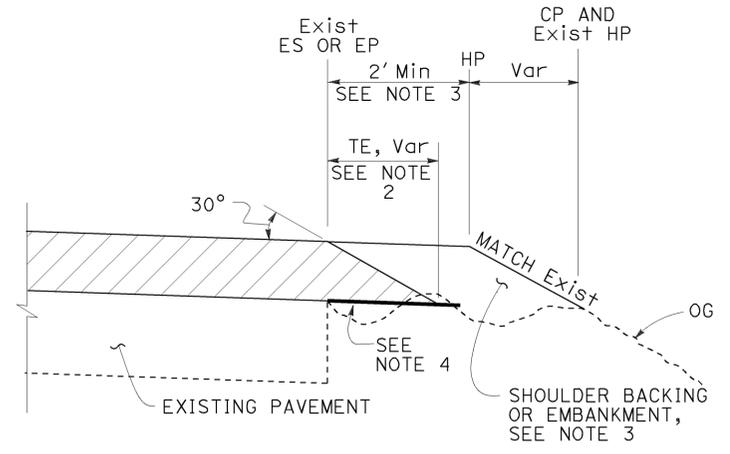
TT TOTAL THICKNESS OF TE

TABLE A
EDGE TREATMENT FOR VARIOUS OVERLAY THICKNESS AND CONDITIONS

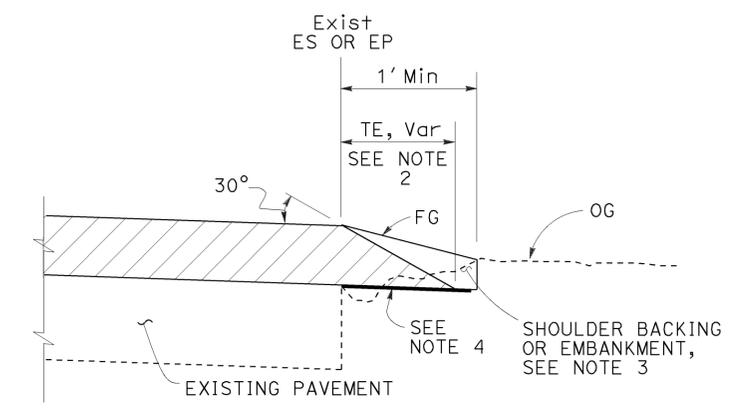
FIELD CONDITION	OVERLAY THICKNESS	
	LESS THAN 0.15'	0.15' OR MORE
Exist SLOPE 6:1 OR FLATTER	CASE E	CASE A
Exist SLOPE 3:1 TO 6:1	CASE E	CASE B
Exist SLOPE STEEPER THAN 3:1	CASE F	CASE F
CUT SECTION (REPLACE, COLD PLANE, MILL PAVEMENT)	CASE D	CASE C



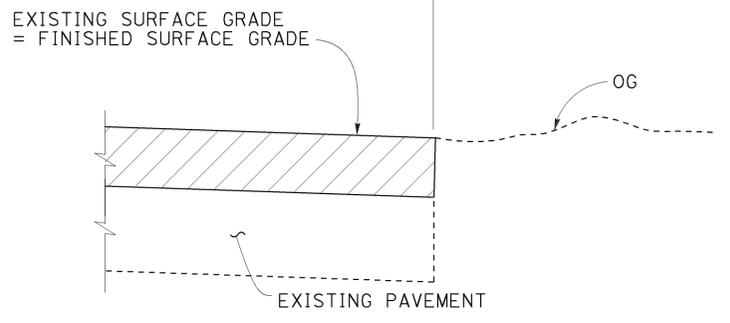
CASE A
Tapered Edge



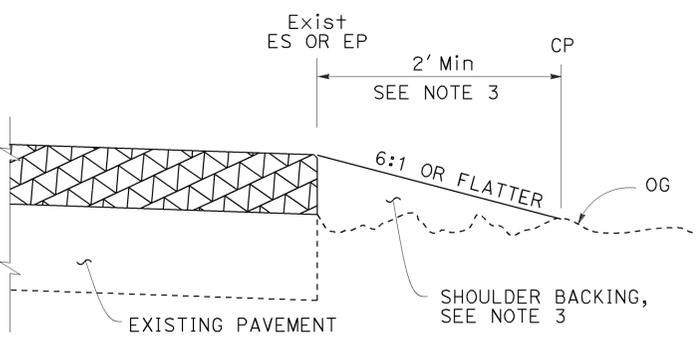
CASE B
Tapered Edge



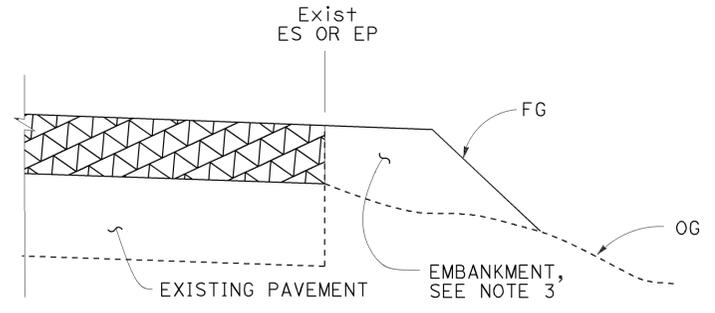
CASE C
Tapered Edge



CASE D
Vertical Edge



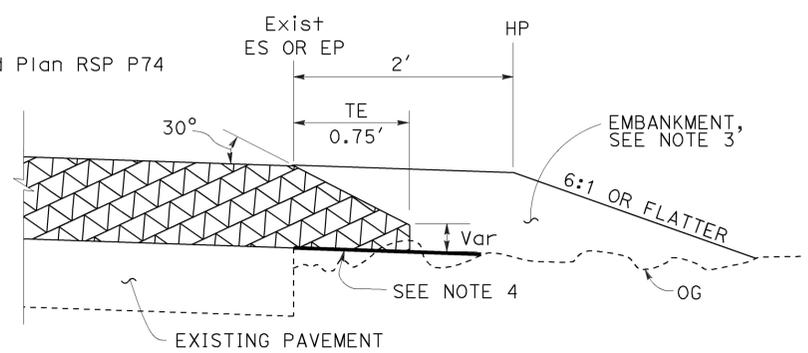
CASE E
Vertical Edge



CASE F
Vertical Edge

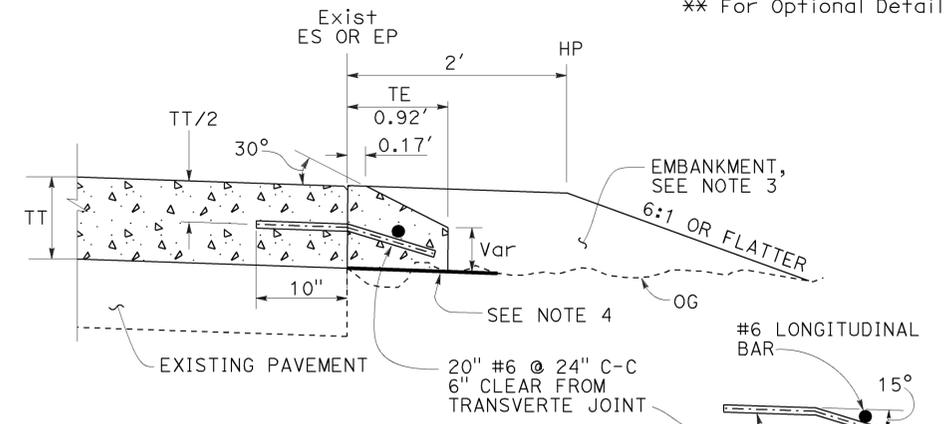
* See Table A and Revised Std Plan RSP P74

- NOTES:**
1. For limits of tapered edge and vertical edge treatments, see Revised Standard Plan RSP P74.
 2. Details shown for HMA overlay thickness less than 0.43'. See Detail "A" for HMA overlay thickness more than 0.43' or concrete overlay.
 3. For locations and limits of shoulder backing or embankment see project plans.
 4. Grade existing ground to place tapered edge. 1' minimum width
 5. Tapered edge transverse joint must match overlay transverse joint. End of #6 longitudinal bar must be 2" ± 1/2" clear from transverse joint.
 6. Tapered edge is not needed in the area of MGS, barrier, right turn lane and acceleration lane. See Revised Standard Plan RSP P74.



DETAIL "A"

For HMA overlay thickness more than 0.43' or concrete overlay



OPTIONAL DETAIL "A"
For concrete overlay
See Note 5

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

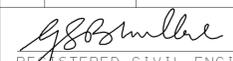
**PAVEMENT EDGE TREATMENTS-
OVERLAYS**

NO SCALE

RSP P75 DATED OCTOBER 30, 2015 SUPERSEDES RSP P75 DATED NOVEMBER 15, 2013 AND RSP P75 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP P75

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	51	60


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 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.

TO ACCOMPANY PLANS DATED 1-25-16

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

* - For other offsets, use the following merging taper length formula for L:
 For speed of 40 mph or less, $L = WS^2/60$
 For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
 W = Width of offset in feet
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
 ** - Longitudinal buffer space or flagger station spacing
 *** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**

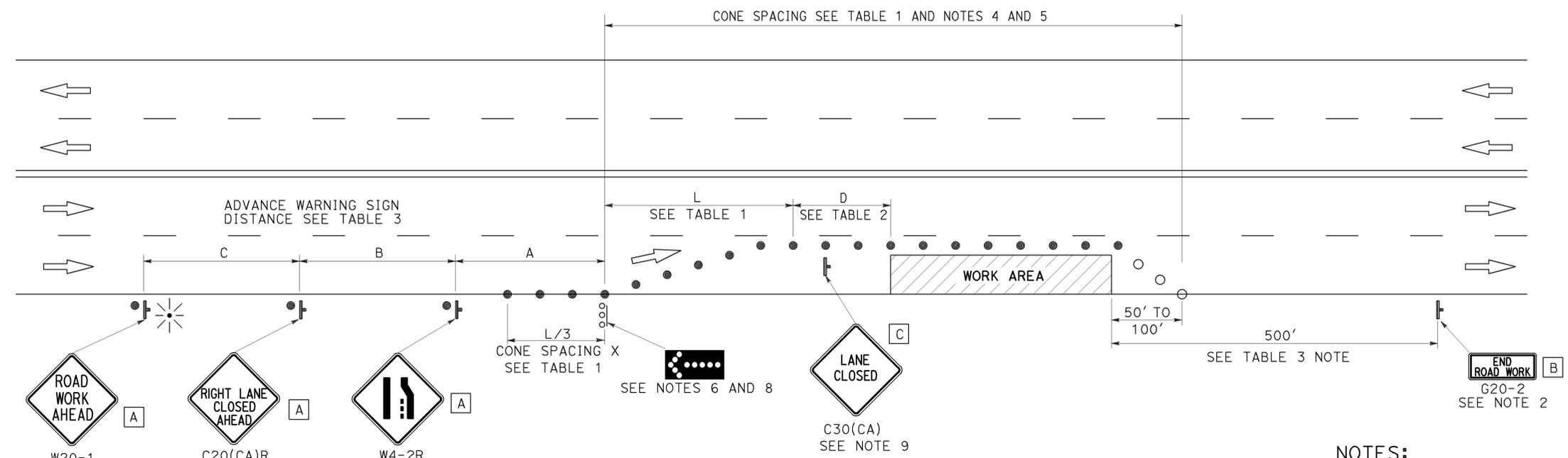
NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T9

2010 REVISED STANDARD PLAN RSP T9

TO ACCOMPANY PLANS DATED 1-25-16



TYPICAL LANE CLOSURE

NOTES:

See Revised Standard Plan RSP T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
 California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

NOTES:

- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA) sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.

LEGEND

-  TRAFFIC CONE
-  TRAFFIC CONE (OPTIONAL TAPER)
-  TEMPORARY TRAFFIC CONTROL SIGN
-  FLASHING ARROW SIGN (FAS)
-  FAS SUPPORT OR TRAILER
-  PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- A** 48" x 48"
- B** 36" x 18"
- C** 30" x 30"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS**

NO SCALE

RSP T11 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T11
 DATED MAY 20, 2011 - PAGE 239 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T11

2010 REVISED STANDARD PLAN RSP T11

NOTES:

See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	53	60

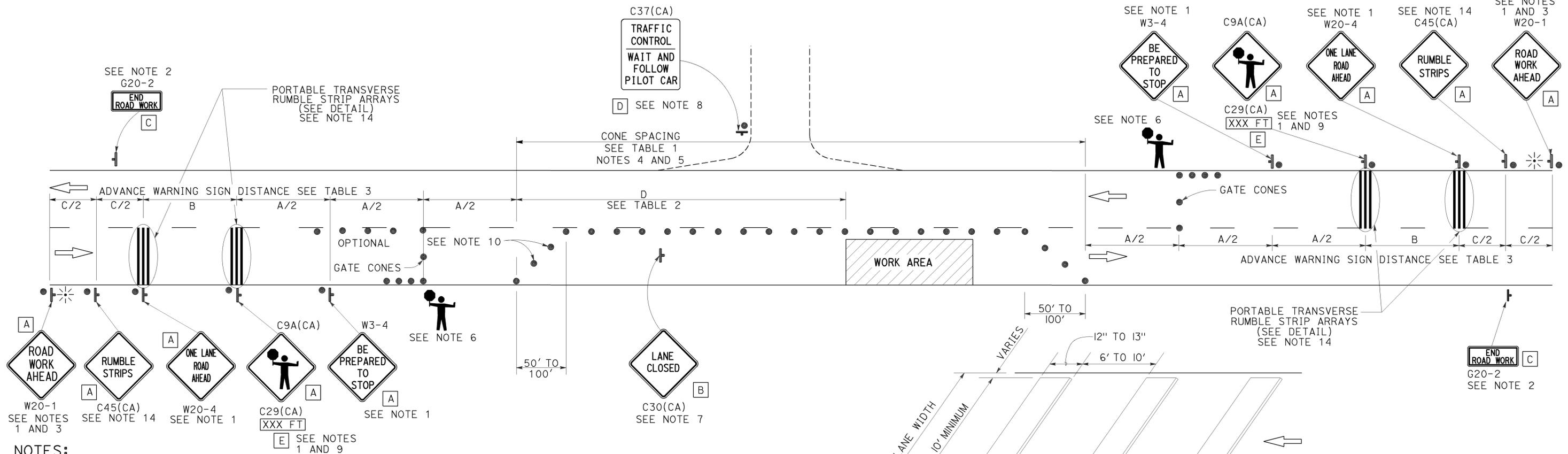
Devinder Singh
 REGISTERED CIVIL ENGINEER
 No. C50470
 Exp. 6-30-17
 CIVIL
 STATE OF CALIFORNIA

October 30, 2015
 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.

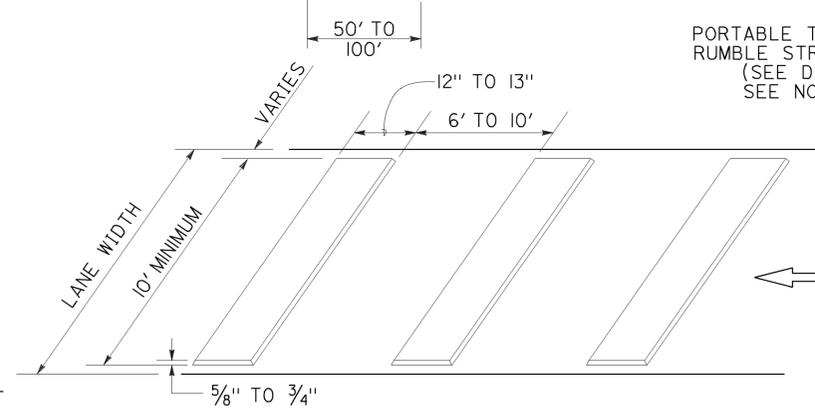
TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 1-25-16



NOTES:

- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions



PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 🚧 FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

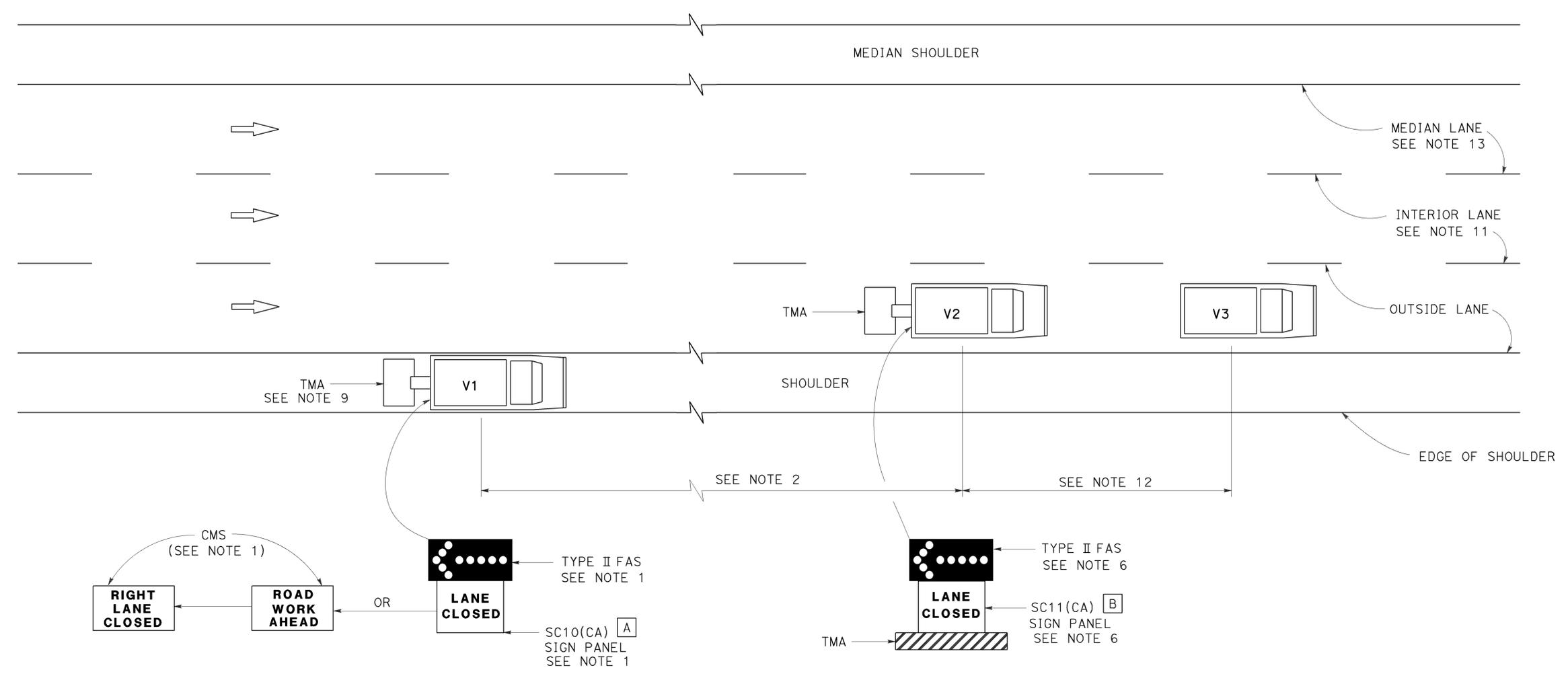
NO SCALE

RSP T13 DATED OCTOBER 30, 2015 SUPERSEDES RSP T13 DATED OCTOBER 17, 2014, RSP T13 DATED JULY 18, 2014 AND RSP T13 DATED APRIL 19, 2013 AND STANDARD PLAN T13 DATED MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T13

2010 REVISED STANDARD PLAN RSP T13

TO ACCOMPANY PLANS DATED 1-25-16



SIGN PANEL SIZE (Min)

- A 66" x 36"
- B 54" x 42"

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- FLASHING ARROW SIGN (FAS)
- CMS CHANGEABLE MESSAGE SIGN
- TMA TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

NOTES:

1. Either a changeable message sign or a SC10(CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "RIGHT LANE CLOSED" message. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right and the changeable message sign shall show "LEFT LANE CLOSED".
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Revised Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on interior lane of multilane highways, use Revised Standard Plan T16.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
13. When the work/application vehicle V3 occupies the median lane, sign vehicle V1 should drive in the median shoulder and indicate left lane closed ahead.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

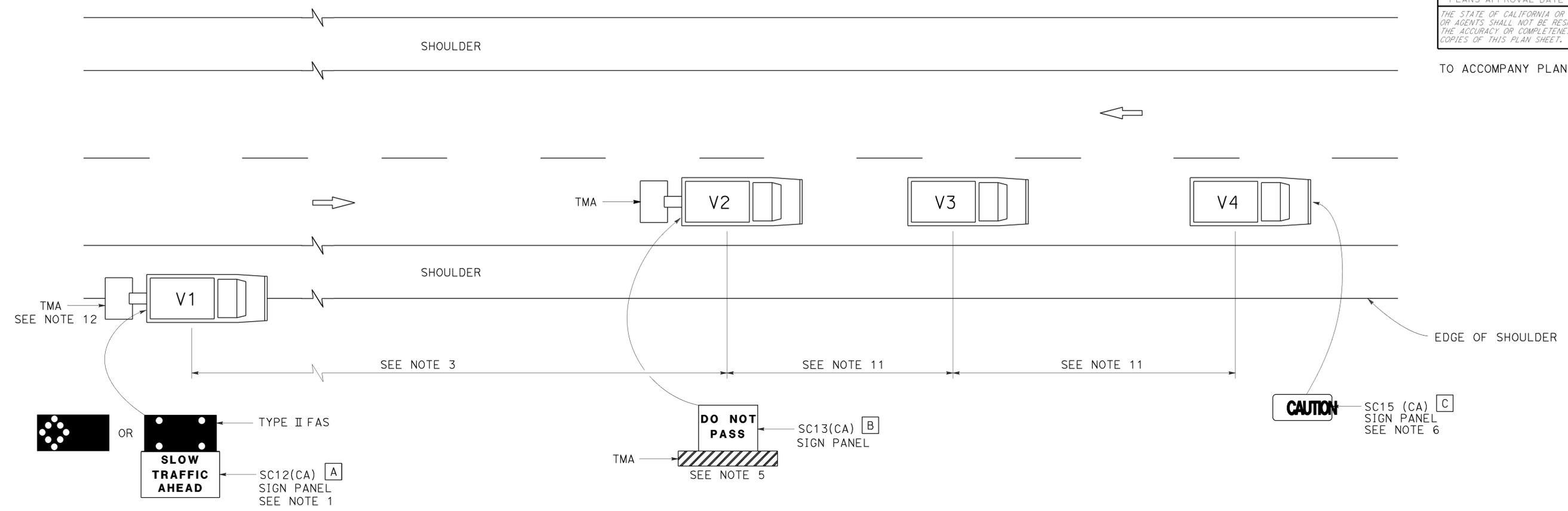
TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS
NO SCALE

RSP T15 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T15 DATED MAY 20, 2011 - PAGE 243 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T15

2010 REVISED STANDARD PLAN RSP T15

TO ACCOMPANY PLANS DATED 1-25-16



NOTES:

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Revised Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- V4 SIGN VEHICLE
- TMA TRUCK-MOUNTED ATTENUATOR
-  FLASHING ARROW SIGN (FAS) IN FLASHING CAUTION MODE
-  FLASHING ARROW SIGN (FAS) IN ALTERNATING DIAMOND CAUTION

SIGN PANEL SIZE (Min)

- A** 72" x 42"
- B** 54" x 42"
- C** 54" x 24"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR MOVING LANE CLOSURE
 ON TWO LANE HIGHWAYS**
 NO SCALE

RSP T17 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T17
 DATED MAY 20, 2011 - PAGE 245 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17

LEGEND:

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 TAPE
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
TSP	TELEPHONE SERVICE POINT

ABBREVIATIONS

AC+	UNDERGROUNDED CONDUCTOR	MAT	MAST ARM MOUNTING TOP ATTACHMENT
APS	ACCESSIBLE PEDESTRIAN SIGNAL	MAS	MAST ARM MOUNTING SIDE ATTACHMENT
Batt	BATTERY	MBPS	MANUAL BYPASS SWITCH
BBS	BATTERY BACKUP SYSTEM	M/M	MULTIPLE TO MULTIPLE TRANSFORMER
BC	BOLT CIRCLE	Mtg	MOUNTING
BIK	BLACK	MV	MERCURY VAPOR LIGHTING FIXTURE
BP	BYPASS	MVDS	MICROWAVE VEHICLE DETECTION SYSTEM
BPB	BICYCLE PUSH BUTTON	N	NEUTRAL (GROUNDED CONDUCTOR)
C	CONDUIT	NB	NEUTRAL BUS
CB	CIRCUIT BREAKER	NC	NORMALLY CLOSE
CCTV	CLOSED CIRCUIT TELEVISION	NO	NORMALLY OPEN
Ckt	CIRCUIT	P	CIRCUIT BREAKER'S POLE
CMS	CHANGEABLE MESSAGE SIGN	PB	PULL BOX
Ctid	CALTRANS IDENTIFICATION	PBA	PUSH BUTTON ASSEMBLY
Comm	COMMUNICATION	PEC	PHOTOELECTRIC CONTROL
Cntl	CONTROL	Ped	PEDESTRIAN
DF	DEPARTMENT-FURNISHED	PEU	PHOTOELECTRIC UNIT
DLC	LOOP DETECTOR LEAD-IN CABLE	PT	CONDUIT WITH PULL TAPE
EMS	EXTINGUISHABLE MESSAGE SIGN	PTR	POWER TRANSFER RELAY
EVUC	EMERGENCY VEHICLE UNIT CABLE	RE	RELOCATED EQUIPMENT
EVUD	EMERGENCY VEHICLE UNIT DETECTOR	RM	RAMP METERING
FB	FLASHING BEACON	RWIS	ROADSIDE WEATHER INFORMATION SYSTEM
FBCA	FLASHING BEACON CONTROL ASSEMBLY	SB	SLIP BASE
FBS	FLASHING BEACON WITH SLIP BASE	SIC	SIGNAL INTERCONNECT CABLE
FO	FIBER OPTIC	Sig	SIGNAL
G	EQUIPMENT GROUNDING CONDUCTOR	SMA	SIGNAL MAST ARM
GB	GROUND BUS	SNS	STREET NAME SIGN
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SP	SERVICE POINT
Grn	GREEN	TB	TERMINAL BOARD
HAR	HIGHWAY ADVISORY RADIO	TDC	TELEPHONE DEMARCATION CABINET
Hex	HEXAGONAL	Temp	TEMPERATURE
HPS	HIGH PRESSURE SODIUM	TMS	TRAFFIC MONITORING STATION
IISNS	INTERNALLY ILLUMINATED STREET NAME SIGN	TOS	TRAFFIC OPERATIONS SYSTEM
ISL	INDUCTION SIGN LIGHTING	UPS	UNINTERRUPTABLE POWER SUPPLY
LED	LIGHT EMITTING DIODE	UPSC	UNINTERRUPTABLE POWER SUPPLY CONTROLLER
LMA	LUMINAIRE MAST ARM	Veh	VEHICLE
LPS	LOW PRESSURE SODIUM	VIVDS	VIDEO IMAGE VEHICLE DETECTION SYSTEM
Ltg	LIGHTING	Wht	WHITE
Lum	LUMINAIRE	WIM	WEIGH-IN-MOTION
M	METERED	Xfmr	TRANSFORMER

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	56	60

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
STATE OF CALIFORNIA

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

TO ACCOMPANY PLANS DATED 1-25-16

SOFFIT AND WALL-MOUNTED LUMINAIRES

- PENDANT SOFFIT LUMINAIRE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- FLUSH-MOUNTED SOFFIT LUMINAIRE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- WALL-MOUNTED LUMINAIRE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- EXISTING SOFFIT OR WALL-MOUNTED LUMINAIRE TO REMAIN UNMODIFIED
- EXISTING SOFFIT OR WALL-MOUNTED LUMINAIRE TO BE MODIFIED AS SPECIFIED

NOTE:
Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

SYMBOL	DEFINITIONS
Ω	OHMS
min	MINUTE
s	SECOND
bps	BITS PER SECOND
Bps	BYTES PER SECOND
A	AMPERE
V	VOLT
V(ac)	VOLT (DIRECT CURRENT)
V(ac)	VOLT (ALTERNATING CURRENT)
FC	FOOT - CANDLE
W	WATTS
VA	VOLT-AMPERE
M	MEGA
k	KILO
m	MILLI
μ	MICRO
P	PICO
Hz	HERTZ

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-1A DATED JULY 19, 2013 AND STANDARD PLAN ES-1A DATED MAY 20, 2011 - PAGE 425 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1A

MISCELLANEOUS ELECTROLIERS

NEW	EXISTING	
		LUMINAIRE ON WOOD POLE
		NON-STANDARD ELECTROLIER (SEE PROJECT LEGEND)
		CITY ELECTROLIER
		ELECTROLIER FOUNDATION (FUTURE INSTALLATION)

NOTES:

- LED luminaires shall be 235 W when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. LED luminaires shall be 165 W 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.

STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
		15 STRUCTURE
		15D STRUCTURE
		21
		21D
		21 STRUCTURE
		21D STRUCTURE
		30
		31
		32

2010 REVISED STANDARD PLAN RSP ES-1A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	57	60

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Theresa
Aziz Gabriel
No. E15129
Exp. 6-30-16
ELECTRICAL
STATE OF CALIFORNIA

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TO ACCOMPANY PLANS DATED 1-25-16

CONDUIT

NEW	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 ATTACHED TO THE STRUCTURE OR SERVICE POLE

SIGNAL EQUIPMENT

NEW	EXISTING	
		PEDESTRIAN SIGNAL HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
		MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)
		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

SERVICE EQUIPMENT

NEW	EXISTING	
---OH---	---oh---	OVERHEAD LINES
		WOOD POLE, "U" INDICATES UTILITY OWNED
		POLE GUY WITH ANCHOR
		UTILITY TRANSFORMER - GROUND MOUNTED
		SERVICE EQUIPMENT ENCLOSURE TYPE. DOOR INDICATES FRONT OF ENCLOSURE
		TELEPHONE DEMARCATION CABINET

POLE-MOUNTED SERVICE DESIGNATION

	TYPE H SERVICE, 28'-10"	TYPE OF INSTALLATION AND POLE HEIGHT ABOVE GRADE
--	-------------------------	--

FLASHING BEACON

NEW	EXISTING	
		FLASHING BEACON (ONE VEHICLE SIGNAL HEAD WITH BACKPLATE AND VISOR) "R" INDICATES RED INDICATION, "Y" INDICATES YELLOW INDICATION
		FLASHING BEACON WITH TYPE 15-FBS STANDARD AND A SIGN.
		FLASHING BEACON WITH TYPES 9, 9A OR 9B SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED

SIGNAL EQUIPMENT Cont

NEW	EXISTING	
		GUARD POST
		TYPE 1 STANDARD WITH RAMP METERING SIGN
		OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION

NOTES:

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

ILLUMINATED OVERHEAD SIGN

NEW	EXISTING	
		SINGLE POST, SINGLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, DOUBLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, SINGLE ILLUMINATED SIGN, FULL CANTILEVER
		DOUBLE POST, SINGLE ILLUMINATED SIGN
		SINGLE ILLUMINATED SIGN MOUNTED ON STRUCTURE
		DOUBLE POST, SINGLE ILLUMINATED SIGN WITH ELECTROLIER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(LEGEND AND ABBREVIATIONS)**

NO SCALE

RSP ES-1B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-1B DATED JULY 19, 2013 AND STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

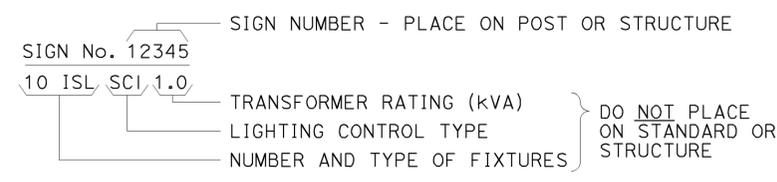
2010 REVISED STANDARD PLAN RSP ES-1B



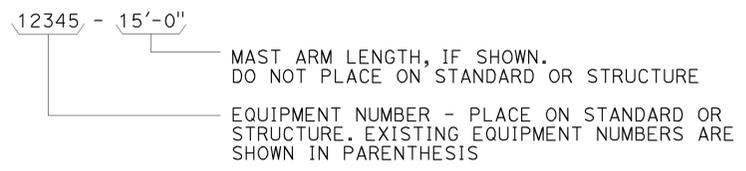
TO ACCOMPANY PLANS DATED 1-25-16

EQUIPMENT IDENTIFICATION

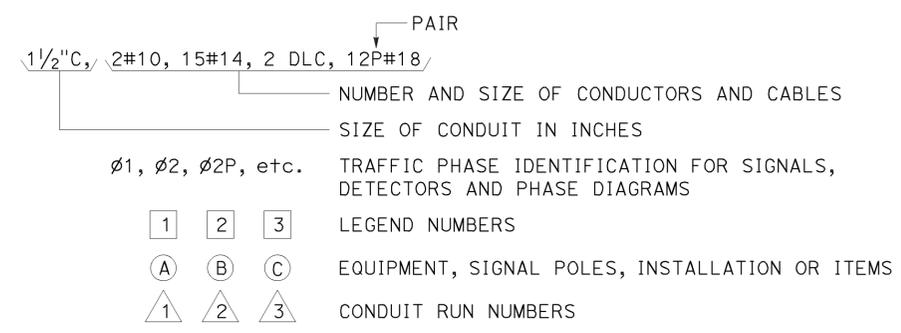
ILLUMINATED SIGN IDENTIFICATION NUMBER:



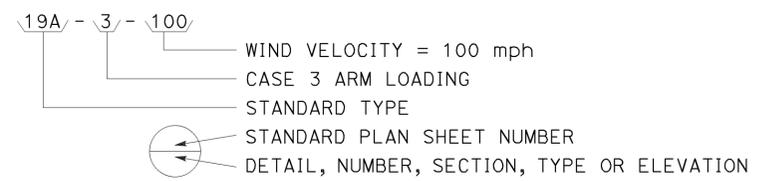
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



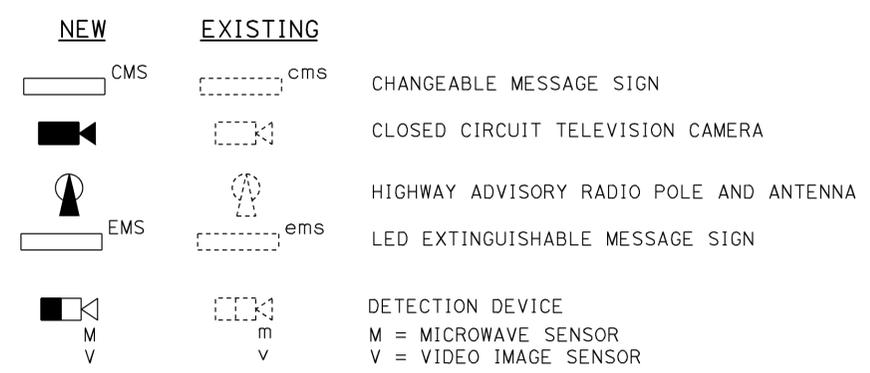
CONDUIT AND CONDUCTOR IDENTIFICATION:



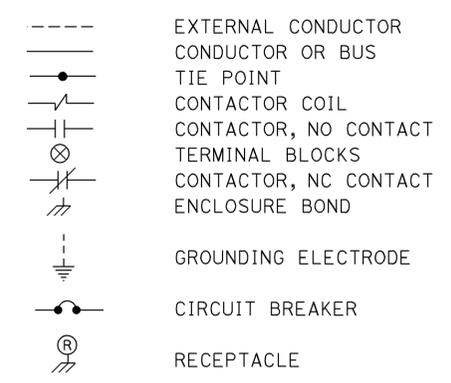
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



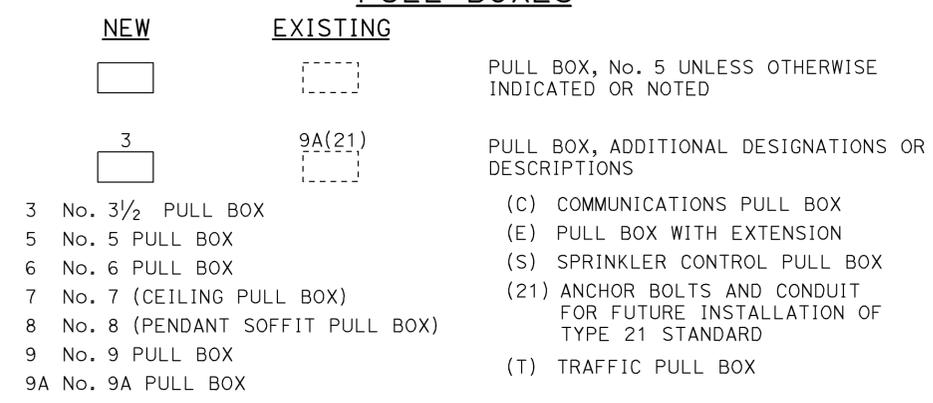
MISCELLANEOUS EQUIPMENT



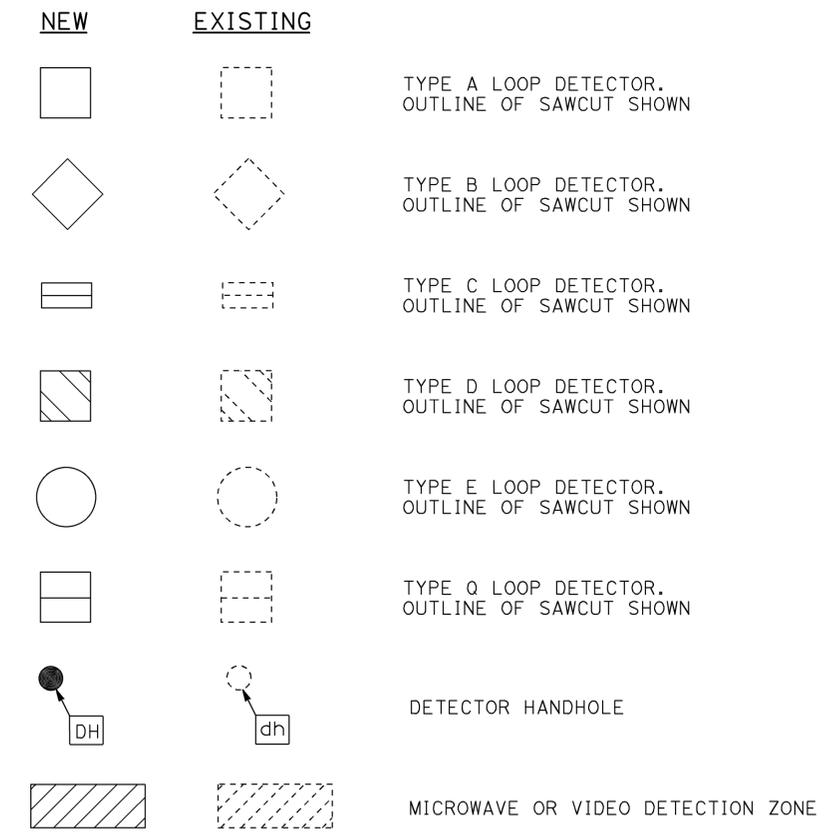
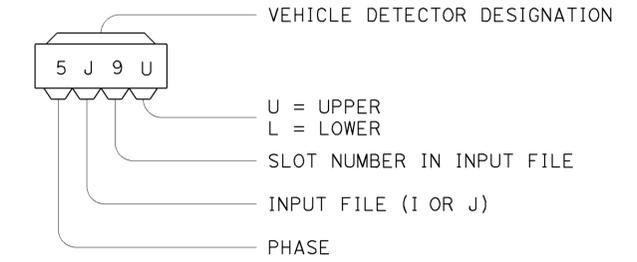
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-1C DATED JULY 19, 2013 AND STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-1C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	59	60

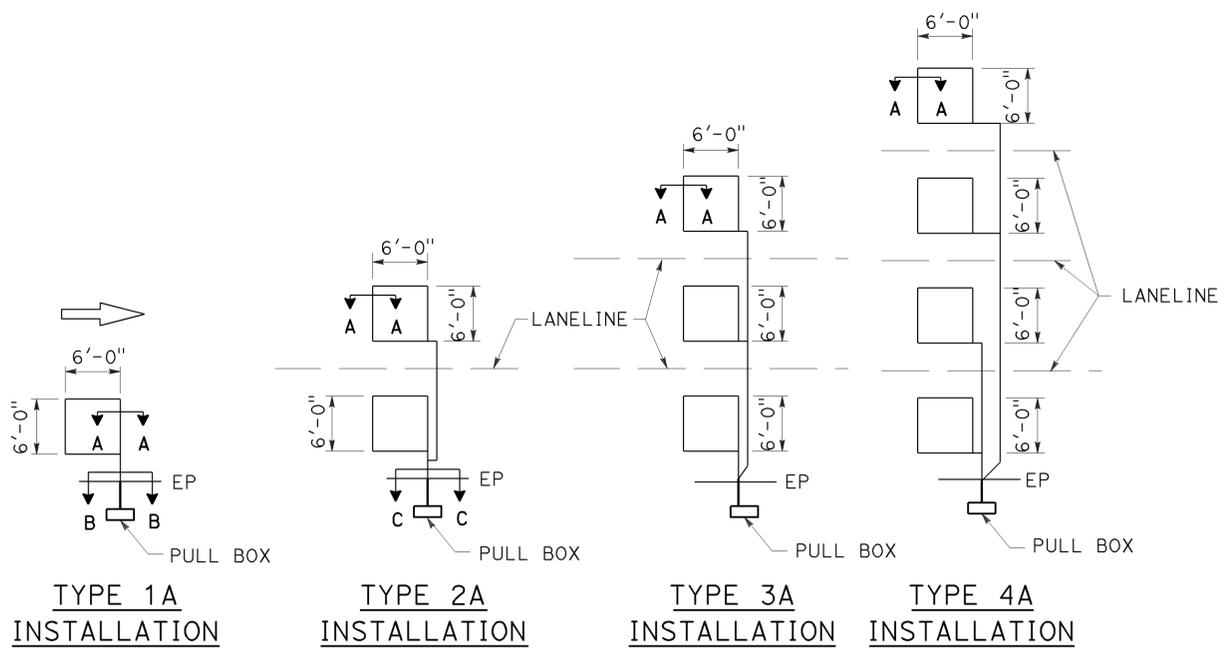
Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

Theresa
Aziz Gabriel
No. E15129
Exp. 6-30-16
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
STATE OF CALIFORNIA

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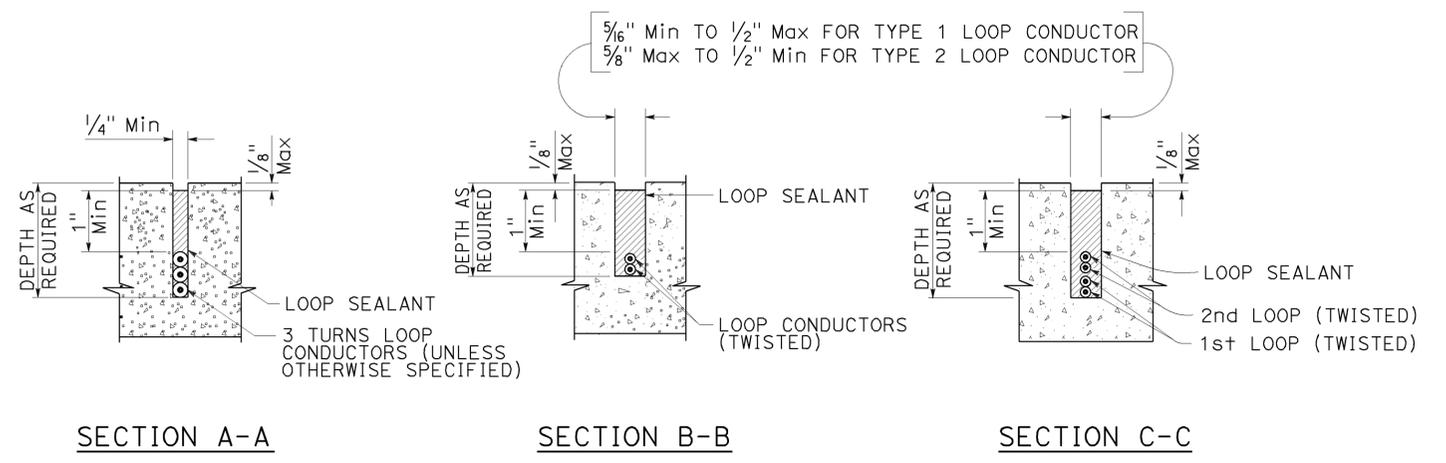
TO ACCOMPANY PLANS DATED 1-25-16



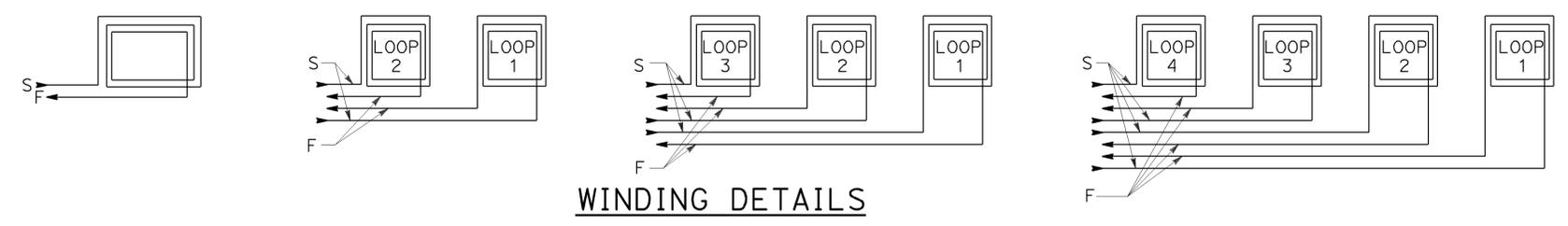
SAWCUT DETAILS

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.



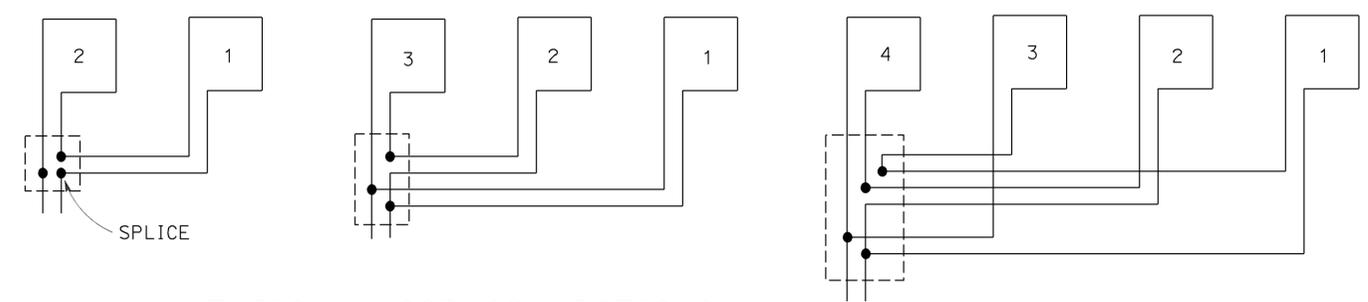
SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



WINDING DETAILS

ABBREVIATIONS:

- S - START
- F - FINISH



TYPICAL LOOP CONNECTIONS

Dashed lines represent the pull box

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(LOOP DETECTORS)**

NO SCALE

RSP ES-5A DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-5A DATED MAY 20, 2011 - PAGE 448 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-5A

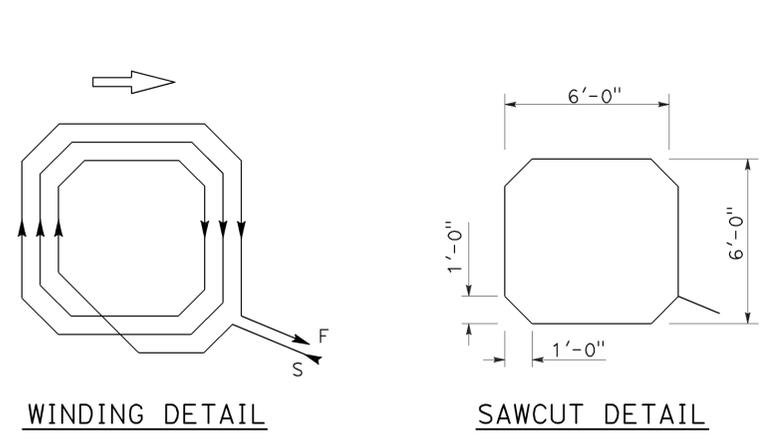
2010 REVISED STANDARD PLAN RSP ES-5A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
09	Mno	395	106.3/120.5	60	60

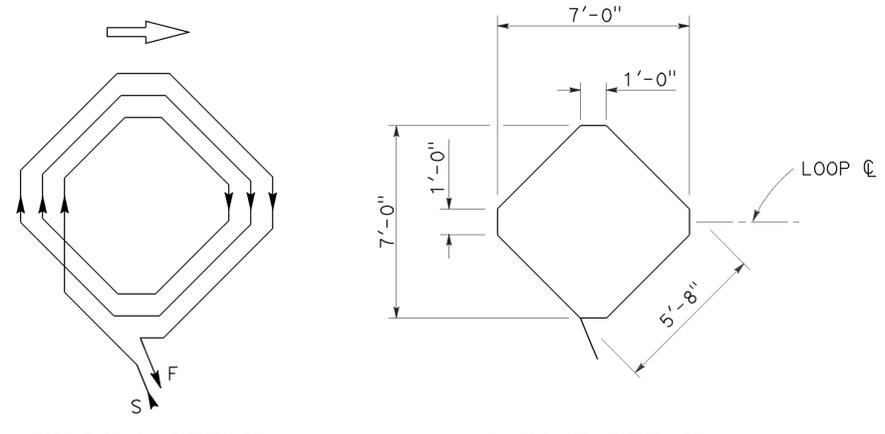
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 October 30, 2015
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-16
 ELECTRICAL
 STATE OF CALIFORNIA

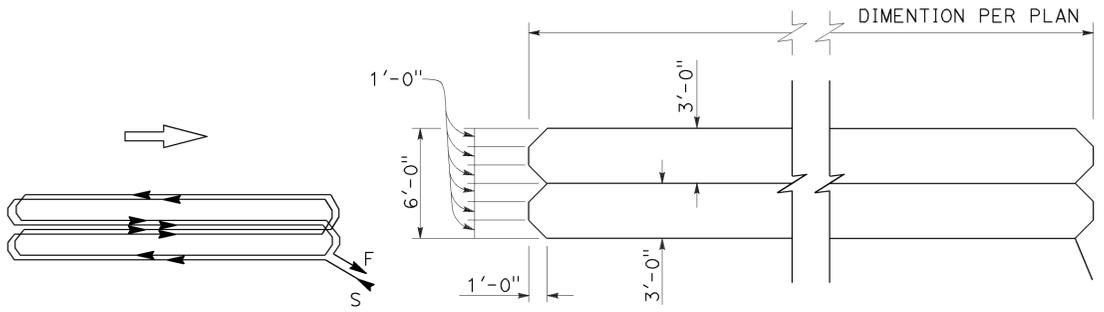
TO ACCOMPANY PLANS DATED 1-25-16



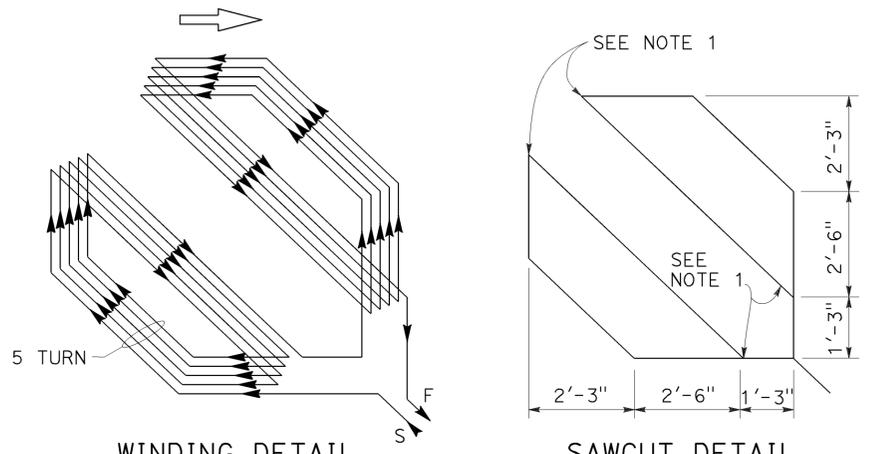
WINDING DETAIL
SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



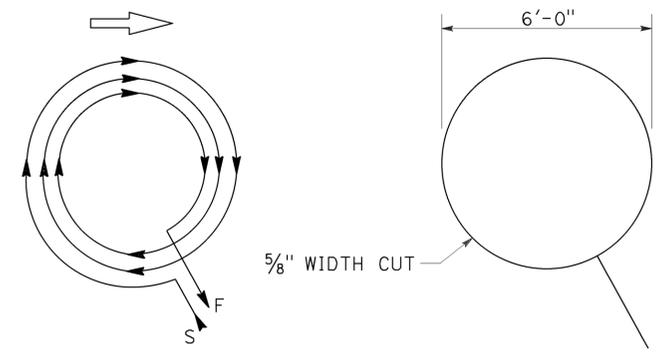
WINDING DETAIL
SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



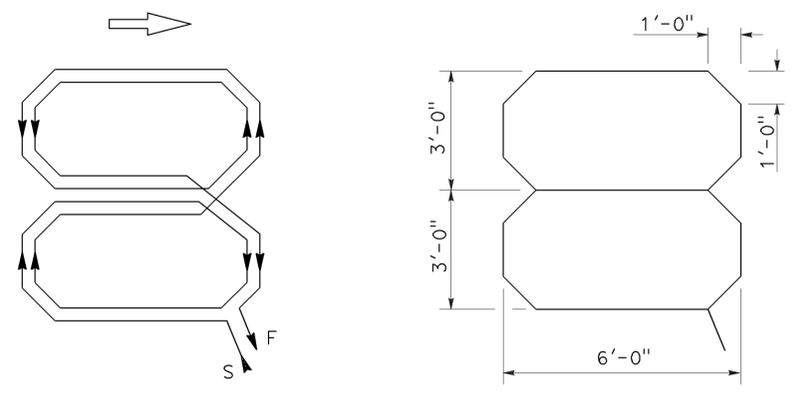
WINDING DETAIL
SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



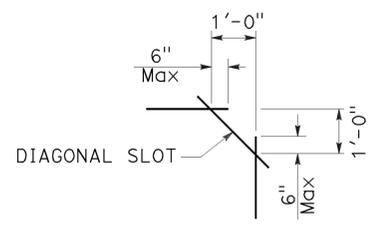
WINDING DETAIL
SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL
SAWCUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION



**PLAN VIEW OF
DIAGONAL SLOT
AT CORNERS**

- NOTES:**
1. Round corners of acute angle sawcuts to prevent damage to conductors.
 2. Typical distance separating loops from edge to edge is 10' for Type A, B, D and E installation in single lane.
 3. Use Type D loops for limit line detector installations in left turn and bicycle lanes.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(DETECTORS)**
NO SCALE

RSP ES-5B DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-5B DATED JULY 19, 2013 AND
STANDARD PLAN ES-5B DATED MAY 20, 2011 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-5B