

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	1	17

INDEX OF PLANS

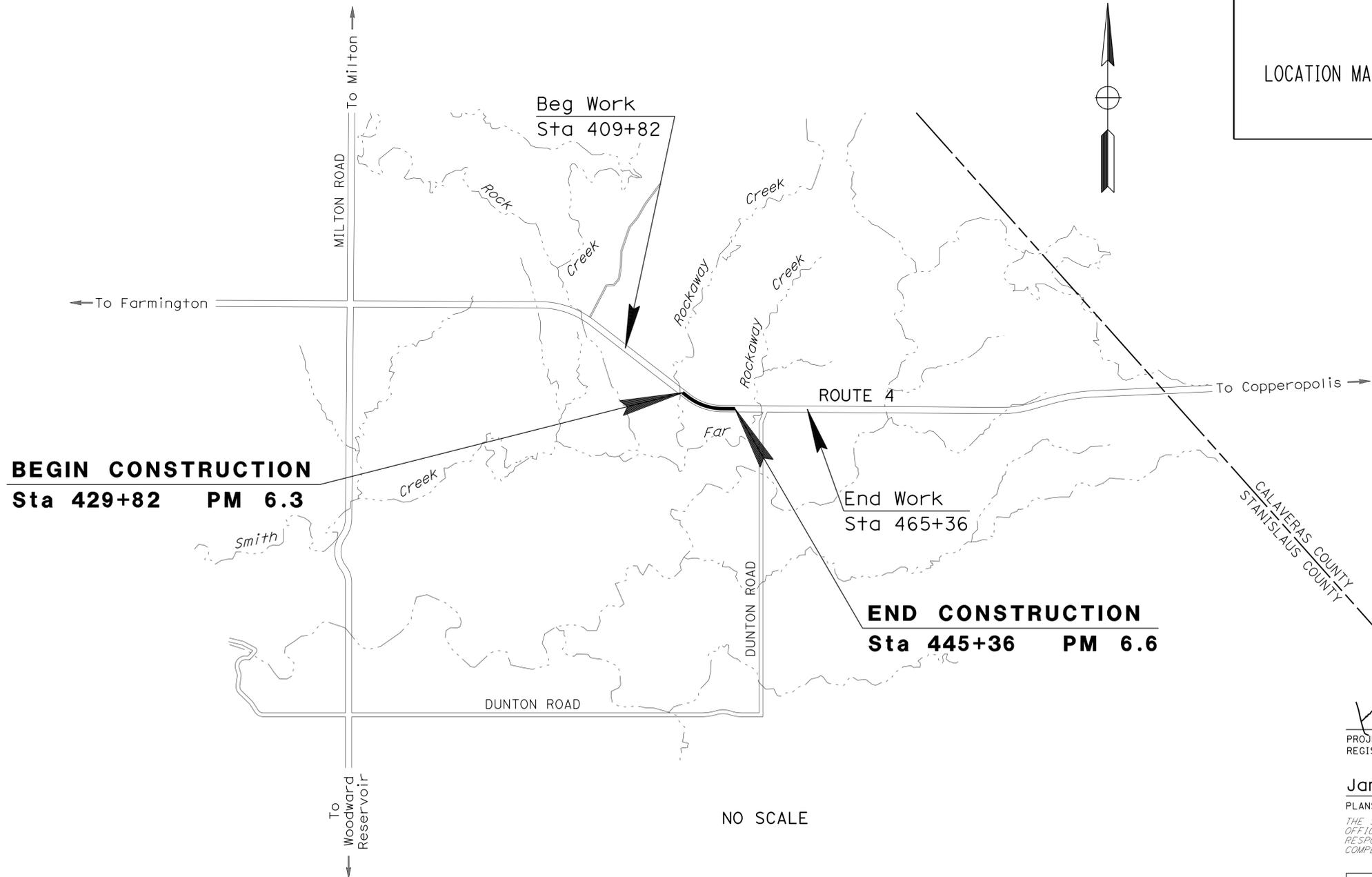
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3	LAYOUT
4	CONSTRUCTION DETAILS
5-7	DRAINAGE PROFILE, DETAILS, AND QUANTITIES
8	CONSTRUCTION AREA SIGNS
9	PAVEMENT DELINEATION PLAN AND QUANTITIES
10	SUMMARY OF QUANTITIES
11-12	EROSION CONTROL LEGEND, PLAN, AND QUANTITIES
13-17	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  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN STANISLAUS COUNTY  
ABOUT 10 MILES WEST OF COPPEROPOLIS  
FROM 0.4 MILE TO 0.1 MILE  
WEST OF DUNTON ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



NO SCALE

PROJECT MANAGER	AJAIB BRAR
DESIGN ENGINEER	NICHOLAS CHAN

  
 PROJECT ENGINEER REGISTERED CIVIL ENGINEER  
 DATE 12-26-13  
 No. 68372  
 Exp. 9/30/15  
 CIVIL  
 STATE OF CALIFORNIA

CONTRACT No.	10-0S8704
PROJECT ID	100000742

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	2	17
			12-26-13	DATE	
			1-13-14	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.					



**NOTE:**

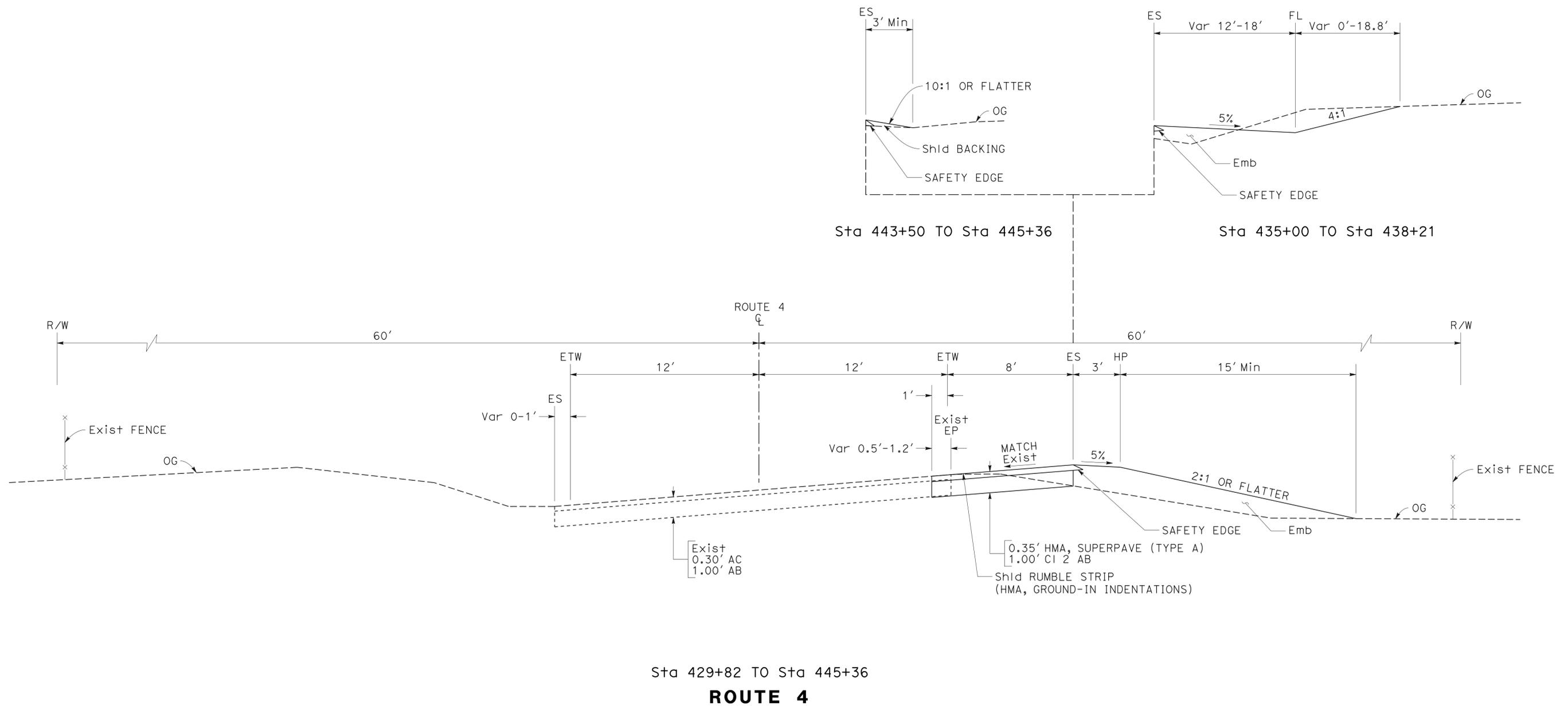
DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

**DESIGN DESIGNATION**

ADT (2015)	9,300	D	88%
ADT (2035)	21,000	T	4%
DHV	2,800	V	60 mph
		TI	11.5

**PAVEMENT CLIMATE REGION**

INLAND VALLEY



**TYPICAL CROSS SECTIONS**  
NO SCALE  
**X-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
06-DESIGN  
FUNCTIONAL SUPERVISOR: NICHOLAS CHAN  
REVISOR: LOREN E. VINSON  
CHECKER: TRIGONIO F. LEYVA  
DESIGNER: LOREN E. VINSON  
DATE: 12-26-13



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

FUNCTIONAL SUPERVISOR  
 NICHOLAS CHAN

CALCULATED-DESIGNED BY  
 CHECKED BY

LOREN E. VINSON  
 TRIGONIO F. LEYVA

REVISED BY  
 DATE REVISED

DATE

**LEGEND:**

① CURVE No.

**CURVE DATA**

No. (X)	R	Δ	T	L
1	35.00'	83°55'02.2"	31.47'	51.26'
2	35.00'	83°55'02.2"	31.47'	51.26'

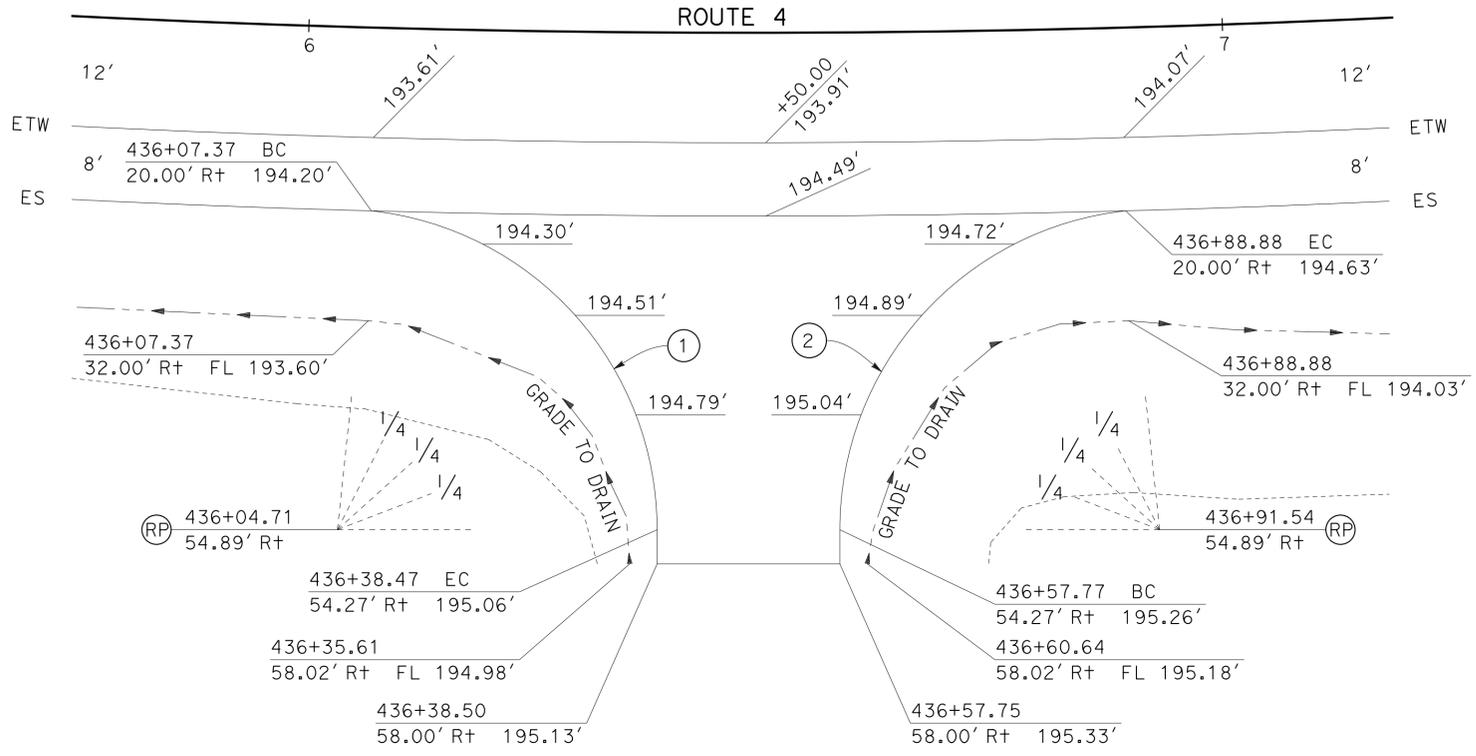
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	4	17

12-26-13  
 REGISTERED CIVIL ENGINEER DATE

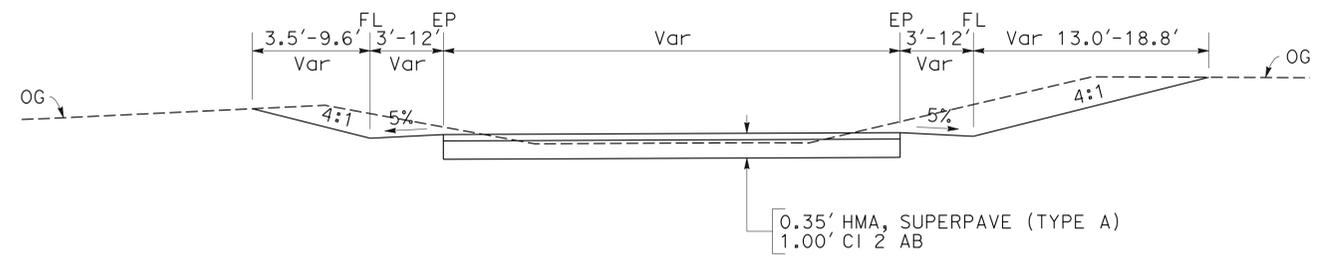
1-13-14  
 PLANS APPROVAL DATE

LOREN EUGENE VINSON  
 No. 68372  
 Exp. 9/30/15  
 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  
 SCALE: 1"=10'



TYPICAL CROSS SECTION  
 NO SCALE

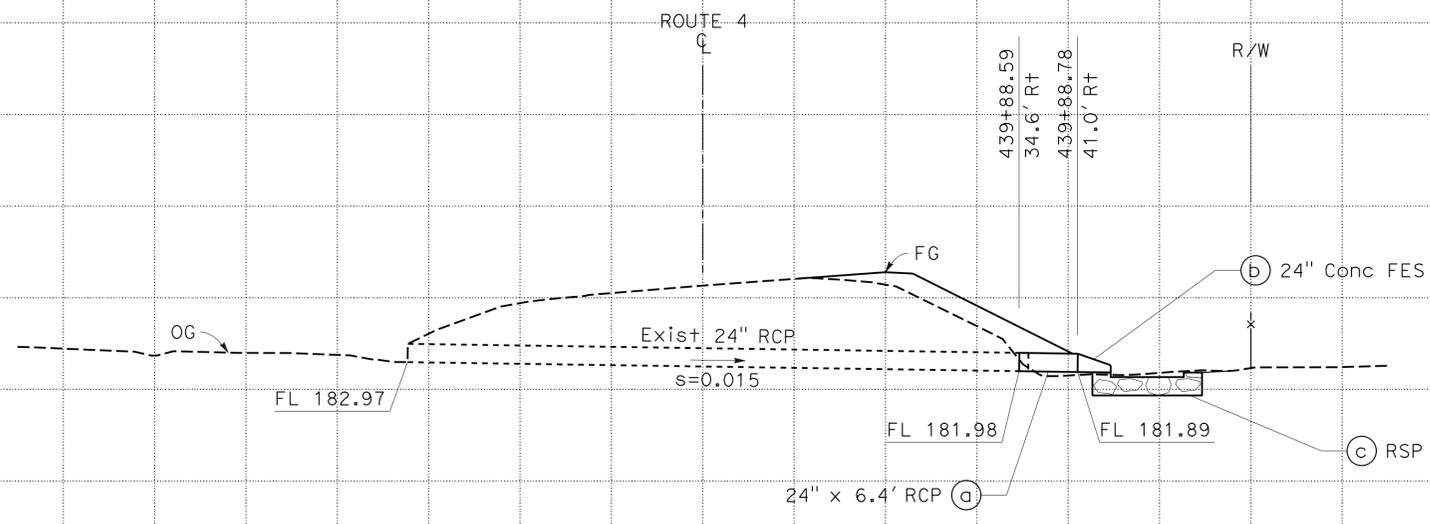
Sta 436+48.12  
**PRIVATE DRIVEWAY**

**CONSTRUCTION DETAILS**  
 SCALE AS SHOWN  
**C-1**

01-06-14 10:53

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 06 - DESIGN  
 FUNCTIONAL SUPERVISOR: NICHOLAS CHAN  
 CALCULATED/DESIGNED BY: 200  
 CHECKED BY: 190  
 LOREN E. VINSON  
 TRIGONIO F. LEYVA  
 REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	5	17
			12-26-13		
REGISTERED CIVIL ENGINEER			DATE		
			1-13-14		
			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>					



**DRAINAGE SYSTEM No. 1**

Sta 439+87.54

**DRAINAGE PROFILE**

SCALE: Horiz 1"=10'  
 Vert 1"=10' **DP-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 06 - DESIGN  
 FUNCTIONAL SUPERVISOR: NICHOLAS CHAN  
 CALCULATED-DESIGNED BY: LOREN E. VINSON  
 CHECKED BY: TRIGONIO F. LEYVA  
 REVISED BY: LOREN E. VINSON  
 DATE REVISED: TRIGONIO F. LEYVA

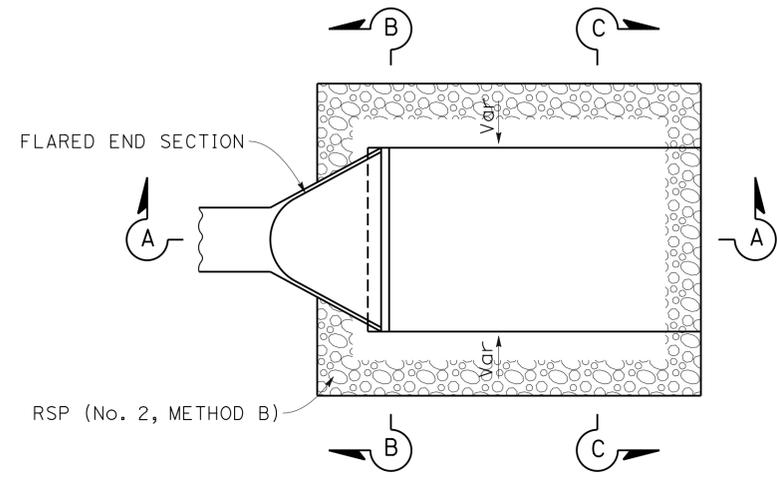
**NOTE:**  
 VERIFY ALL FIELD DIMENSIONS AND CONDITIONS BEFORE ORDERING OR FABRICATING MATERIALS.

**LEGEND:**  
 d DIAMETER  
 \* SEE S+D PLANS FOR "E" AND "B"

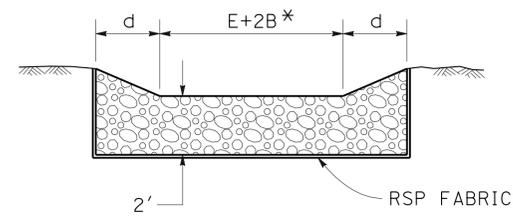
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	S+D	4	6.3/6.6	6	17
			REGISTERED CIVIL ENGINEER	DATE	
			12-26-13		
			PLANS APPROVAL DATE		
			1-13-14		

REGISTERED PROFESSIONAL ENGINEER  
 LOREN EUGENE VINSON  
 No. 68372  
 Exp. 9/30/15  
 CIVIL  
 STATE OF CALIFORNIA

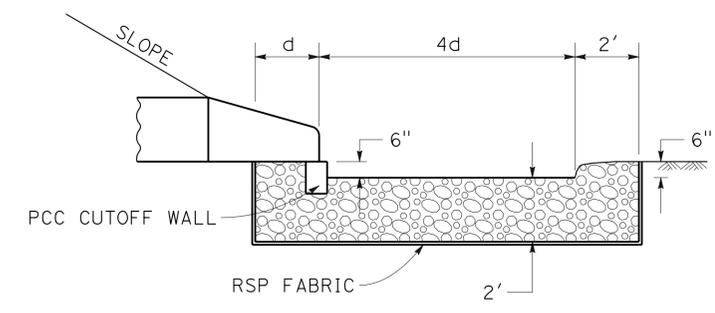
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



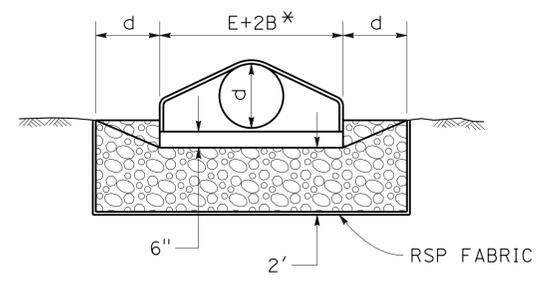
PLAN



SECTION C-C



SECTION A-A

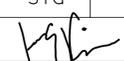


SECTION B-B

**ROCK SLOPE PROTECTION WITH FLARED END SECTION**

**DRAINAGE DETAILS DD-1**  
 NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	7	17

 12-26-13  
 REGISTERED CIVIL ENGINEER DATE

1-13-14  
 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.



### DRAINAGE QUANTITIES

LAYOUT SHEET No.	DRAINAGE SYSTEM No.		24" RCP	24" CONCRETE FES	RSP (No. 2, METHOD B)	RSP FABRIC (CLASS 8)	DESCRIPTION	LOCATION	DRAINAGE SYSTEM No.	
	DRAINAGE UNIT	DRAINAGE UNIT							DRAINAGE UNIT	DRAINAGE UNIT
L-1	1	a	LF	EA	CY	SQYD			L-1	1
		b	6.4				24" RCP	Sta 439+87.54		a
		c		1			24" Conc FES			b
					8.4	25.4	RSP			c
<b>TOTAL</b>			6.4	1	8.4	25.4				

### DRAINAGE QUANTITIES DQ-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	8	17

*nhl* 10-02-13  
 REGISTERED CIVIL ENGINEER DATE  
 1-13-14  
 PLANS APPROVAL DATE

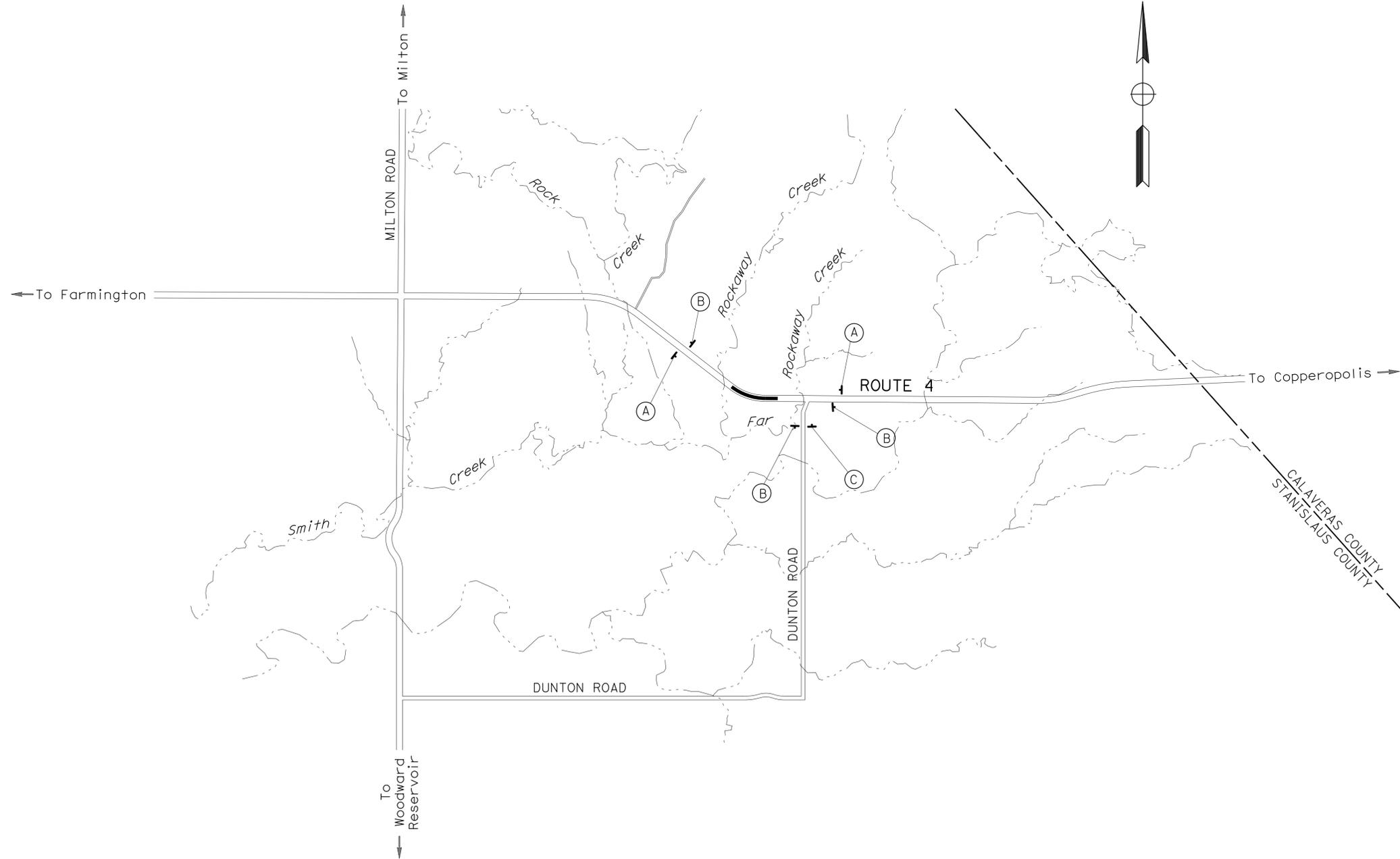
REGISTERED PROFESSIONAL ENGINEER  
 HUE NGUYEN  
 No. 74484  
 Exp. 12/31/15  
 CIVIL  
 STATE OF CALIFORNIA

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.

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN	SIGN CODE FEDERAL	PANEL SIZE	No. OF POST AND SIZE	SIGN MESSAGE	QUANTITY
(A)	W20-1	48" x 48"	1 - 6" x 6"	ROAD WORK AHEAD	2
(B)	G20-2	36" x 18"	1 - 4" x 4"	END ROAD WORK	3
(C)	W20-1	36" x 36"	1 - 4" x 6"	ROAD WORK AHEAD	1

NOTE: EXACT SIGN LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

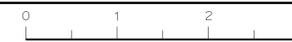


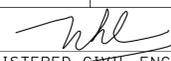
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06 - TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CALCULATED/DESIGNED BY: HUE NGUYEN  
 CHECKED BY: RAJINI TEKALKOTE  
 REVISED BY: HUE NGUYEN  
 DATE REVISED:

**CONSTRUCTION AREA SIGNS**  
**CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

NO SCALE



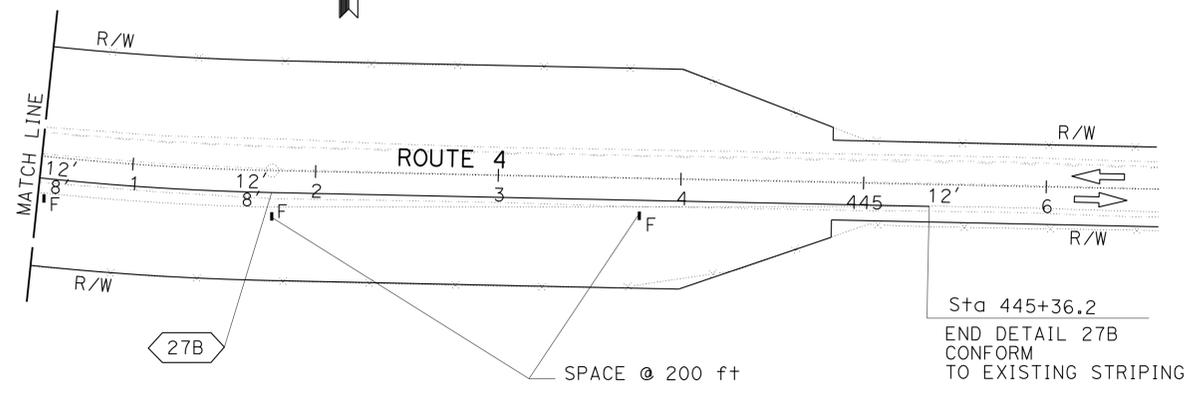
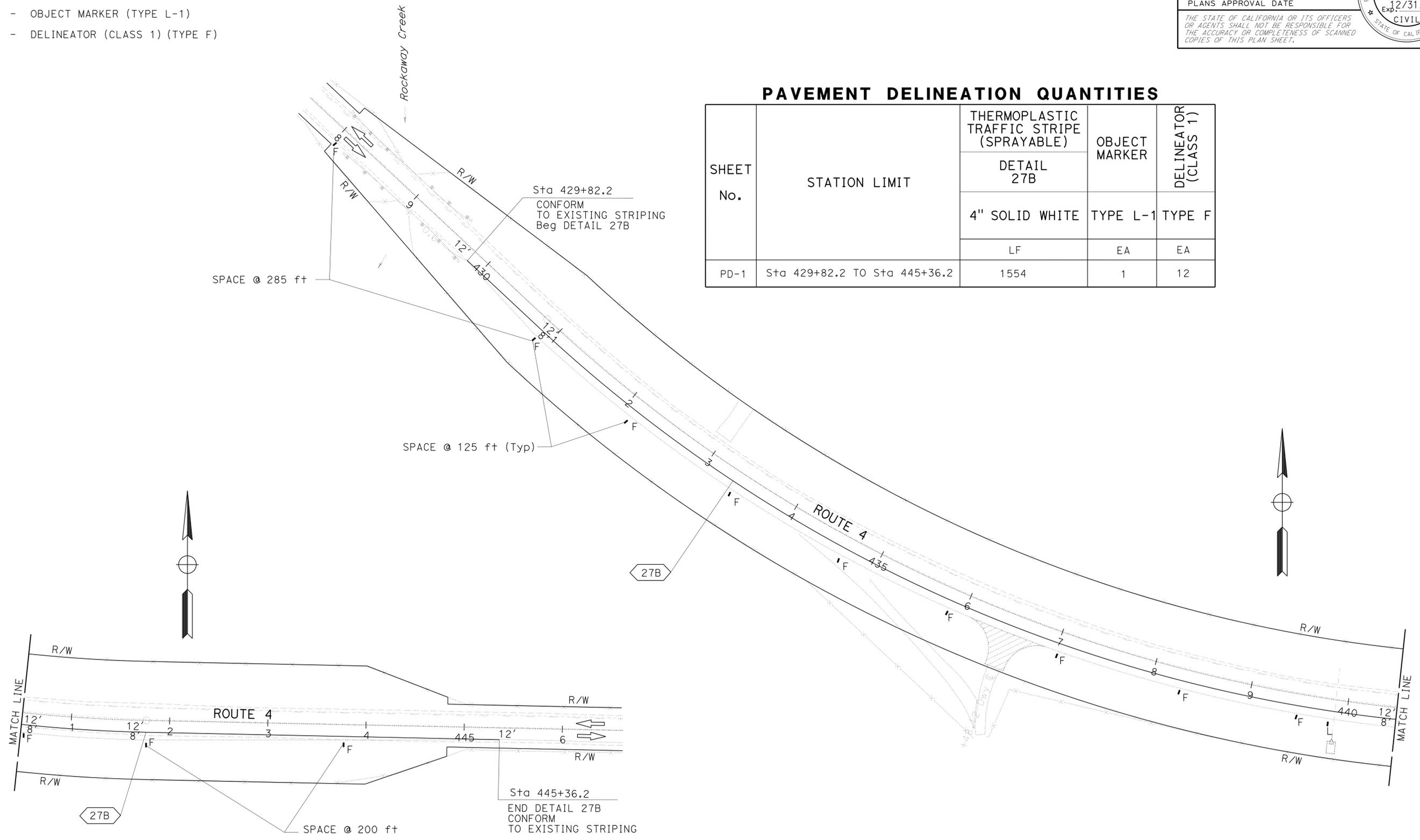
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	9	17
 REGISTERED CIVIL ENGINEER			10-02-13	DATE	
1-13-14 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

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

- LEGEND:**
- 'L - OBJECT MARKER (TYPE L-1)
  - 'F - DELINEATOR (CLASS 1) (TYPE F)

**PAVEMENT DELINEATION QUANTITIES**

SHEET No.	STATION LIMIT	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)	OBJECT MARKER	DELINEATOR (CLASS 1)
		DETAIL 27B		
		4" SOLID WHITE	TYPE L-1	TYPE F
PD-1	Sta 429+82.2 TO Sta 445+36.2	1554	1	12



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: MOHAMMED OATAMI  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 HUE NGUYEN RAJINI TEKALKOTE  
 REVISED BY: DATE REVISED:

APPROVED FOR PAVEMENT DELINEATION WORK ONLY

**PAVEMENT DELINEATION PLAN AND QUANTITIES**

SCALE: 1"=50'

**PD-1**

LAST REVISION: DATE PLOTTED => 22-JAN-2014  
 01-06-14 TIME PLOTTED => 10:54

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** 06-DESIGN  
 FUNCTIONAL SUPERVISOR: NICHOLAS CHAN  
 CALCULATED/DESIGNED BY: LOREN E. VINSON  
 CHECKED BY: TRIGONIO F. LEYVA  
 REVISED BY: DATE REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	10	17

12-26-13  
 REGISTERED CIVIL ENGINEER DATE  
 1-13-14  
 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.

**ROADWAY QUANTITIES**

LOCATION	HMA, SUPERPAVE (TYPE A)	CLASS 2 AGGREGATE BASE	ROADWAY EXCAVATION	TACK COAT	SHOULDER BACKING	EMBANKMENT (N)	IMPORTED BORROW
	TON	CY	CY	TON	TON	CY	CY
Sta 429+82.19 TO Sta 445+36.18	316	451	627	0.2	8.6	584	13
PRIVATE DRIVEWAY		48	132				
PLACE HMA (Misc AREA)	34						
SAFETY EDGE	12						
<b>TOTAL</b>	<b>362</b>	<b>499</b>	<b>759</b>	<b>0.2</b>	<b>8.6</b>		<b>13</b>

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

**SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)**

LOCATION	STA
Sta 430+82.19 TO Sta 441+76.18	10.9

**SAFETY EDGE (N)**

LOCATION	LF
Sta 429+82 TO Sta 436+04	622
Sta 436+92 TO Sta 445+36	844

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

**TEMPORARY WATER POLLUTION CONTROL**

LOCATION	Temp SILT FENCE	Temp FENCE (TYPE ESA)	Temp CONSTRUCTION ROADWAY
	LF	LF	SQYD
Sta 443+50			150
Sta 428+92 TO Sta 432+88		410	
Sta 429+07 TO Sta 435+34	655		
Sta 433+11 TO Sta 444+97		1190	
Sta 437+71 TO Sta 445+54	805		
Sta 439+70 TO Sta 440+09		50	
<b>TOTAL</b>	<b>1460</b>	<b>1650</b>	<b>150</b>

**PLACE HMA (Misc AREA)**

DESCRIPTION	AREA	HMA, SUPERPAVE (TYPE A)
	SQYD	TON
PRIVATE DRIVEWAY (Sta 436+48.12)	143	34*

\* QUANTITY IS INCLUDED IN ROADWAY QUANTITIES.

**SUMMARY OF QUANTITIES Q-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	11	17

*R. Brad Cole*  
 LICENSED LANDSCAPE ARCHITECT

1-13-14  
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
 BRAD COLE

CALCULATED/DESIGNED BY  
 CHECKED BY  
 BRAD COLE

ROBYN FONG  
 BRAD COLE

REVISED BY  
 DATE REVISED

RF  
 07/12/13

**EROSION CONTROL**

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE	DEPTH
		DESCRIPTION	TYPE		
STEP 1	COMPOST	COMPOST	MEDIUM	130 CY/ACRE	
STEP 2	INCORPORATE MATERIALS	COMPOST	-	-	4"
STEP 3	HYDROSEED	SEED	MIX	20 LB/ACRE	-
		FIBER	CELLULOSE	400 LB/ACRE	-
		FERTILIZER	ORGANIC	100 LB/ACRE	-
STEP 4	HYDROMULCH	FIBER	CELLULOSE	800 LB/ACRE	-
		TACKIFIER	PSYLLIUM	400 LB/ACRE	-
		ALTERNATE FIBER	STRAW	1000 LB/ACRE	-

**SEED MIX**

BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
ELYMUS GLAUCUS* (BLUE WILDRYE)	85	6
ESCHSCHOLZIA CALIFORNICA* (CALIFORNIA POPPY)	80	3
HORDEUM VULGARE* (COMMON BARLEY)	85	3
NASSELLA PULCHRA* (PURPLE NEEDLE GRASS)	85	1
TRIFOLIUM HIRTUM* (ROSE CLOVER)	80	1
VULPIA MICROSTACHYS* (SMALL FESCUE)	90	6

\*SEED PRODUCED IN CALIFORNIA ONLY.

**EROSION CONTROL LEGEND  
 ECL-1**

LAST REVISION | DATE PLOTTED => 22-JAN-2014  
 01-07-14 | TIME PLOTTED => 10:54



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	13	17

*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 1-13-14

**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 <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	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.

**REVISED STANDARD PLAN RSP A10B**

**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	PERFORMED 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**

**R**

Qty	QUANTITY
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
UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME
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
WWLOL	WINGWALL LAYOUT LINE
X Sec	CROSS SECTION
Xing	CROSSING
Yr	YEAR
Yrs	YEARS

**U**

**V**

**W**

**X**

**Y**

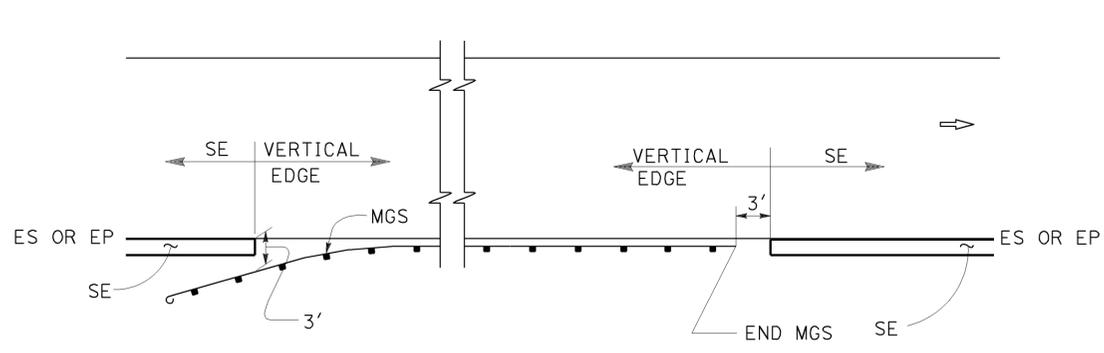
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	14	17

REGISTERED CIVIL ENGINEER  
 November 15, 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.

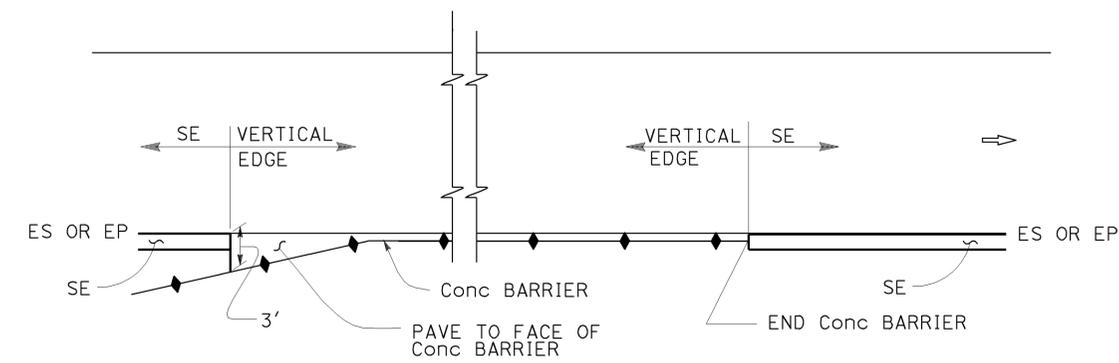
REGISTERED PROFESSIONAL ENGINEER  
 Cornelis M. Hakim  
 No. C55610  
 Exp. 12-31-14  
 CIVIL  
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 1-13-14

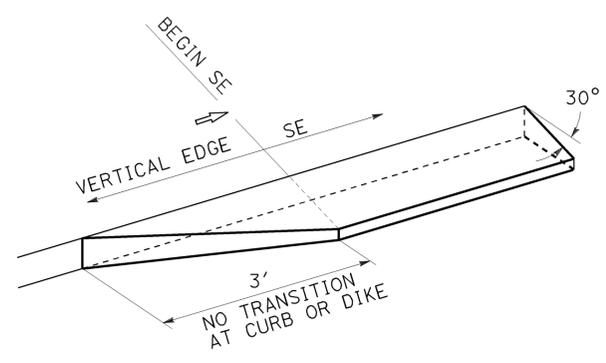
**ABBREVIATIONS:**  
SE SAFETY EDGE



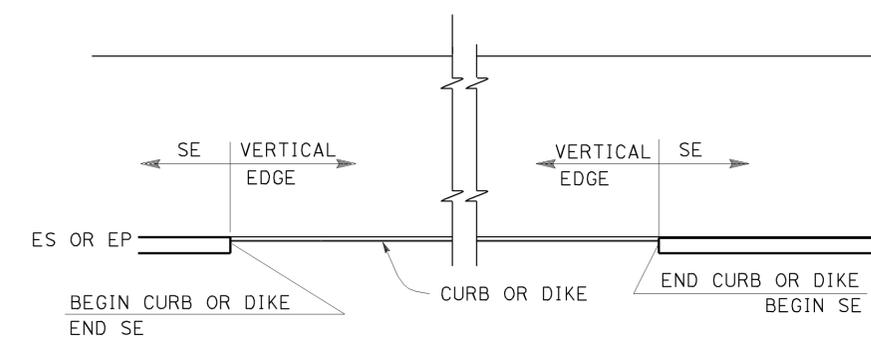
**MGS**



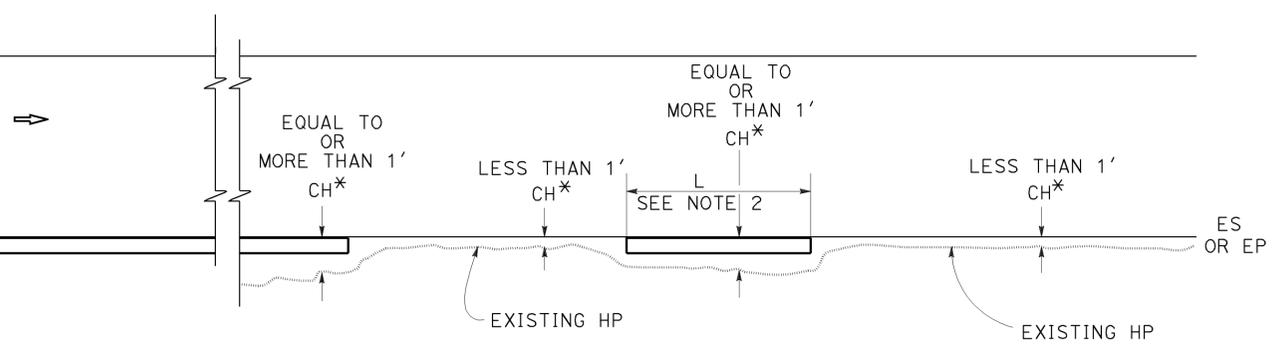
**CONCRETE BARRIER**



**TRANSITION DETAIL FOR CONCRETE ONLY**

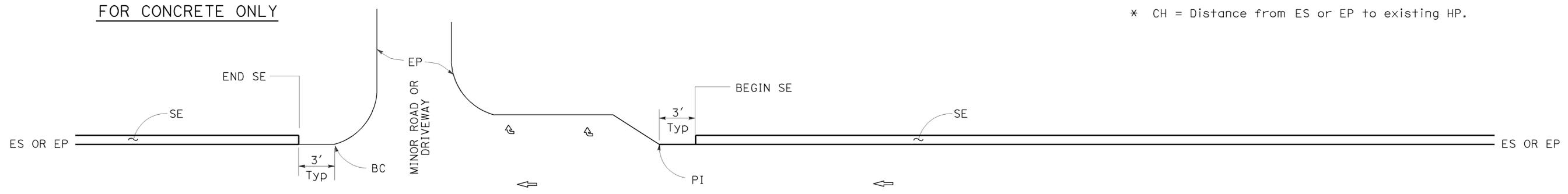


**CURB OR DIKE**



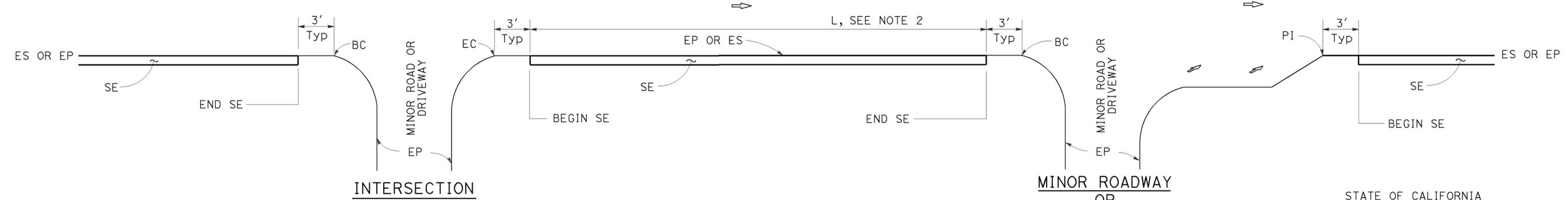
**NARROW SIDE SLOPE**

\* 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:**
- For details not shown, see Revised Standard Plans RSP P75 and RSP P76.
  - Safety edge is optional when L is less than 30'.

RSP P74 DATED NOVEMBER 15, 2013 SUPERSEDES 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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	4	6.3/6.6	15	17

 REGISTERED CIVIL ENGINEER		
November 15, 2013 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>		

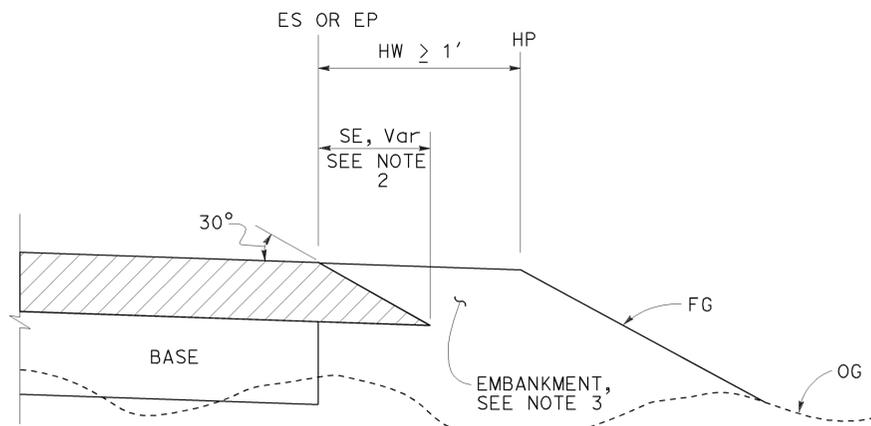
**LEGEND:**

-  HMA PAVEMENT
-  HMA OR CONCRETE PAVEMENT
-  CONCRETE PAVEMENT

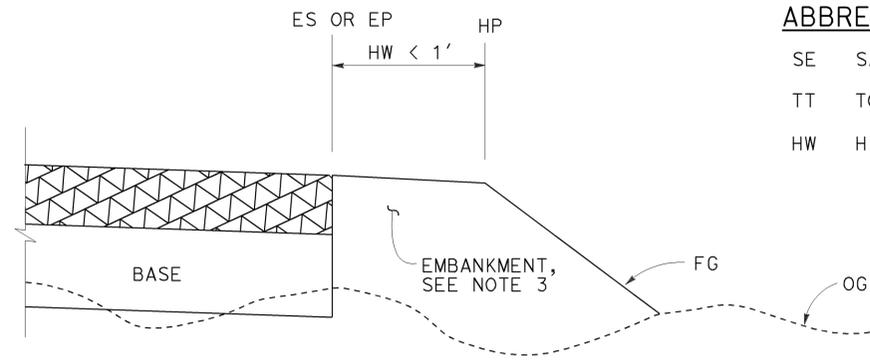
**ABBREVIATIONS:**

- SE SAFETY EDGE
- TT TOTAL THICKNESS OF SE
- HW HINGE WIDTH, DISTANCE FROM ES OR EP TO HP

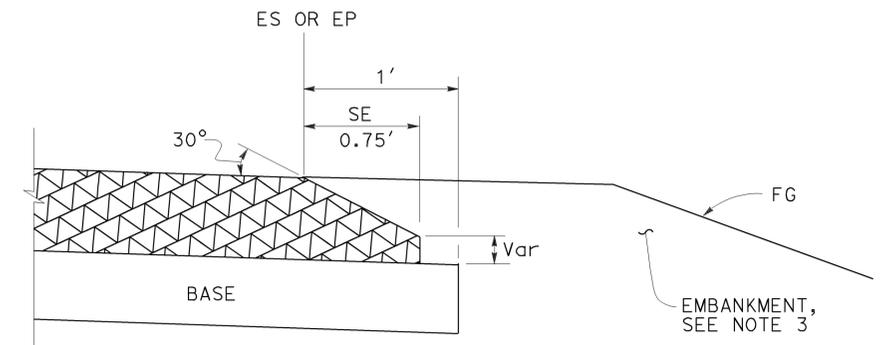
TO ACCOMPANY PLANS DATED 1-13-14



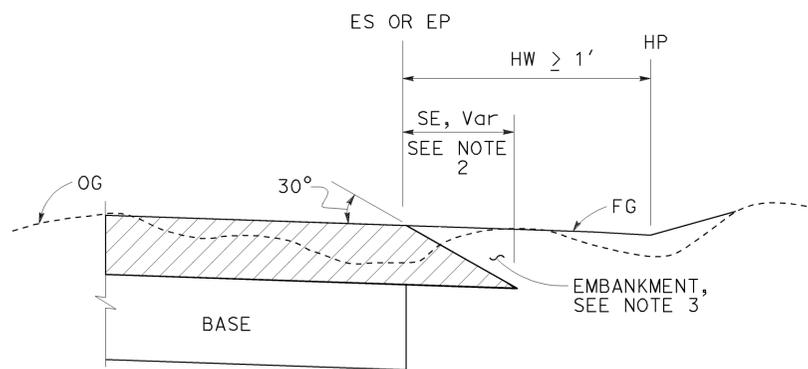
**CASE K**  
Safety Edge - Fill Section, HW  $\geq 1'$



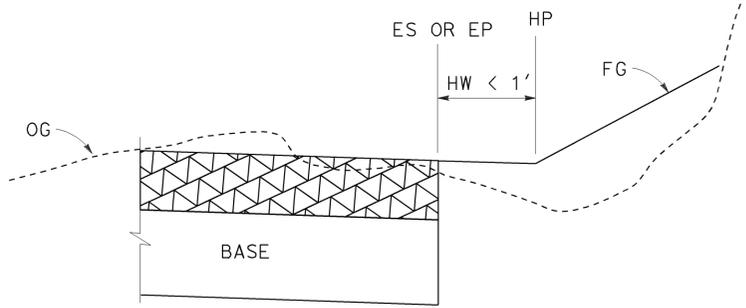
**CASE L**  
Vertical Edge - Fill Section, HW  $< 1'$



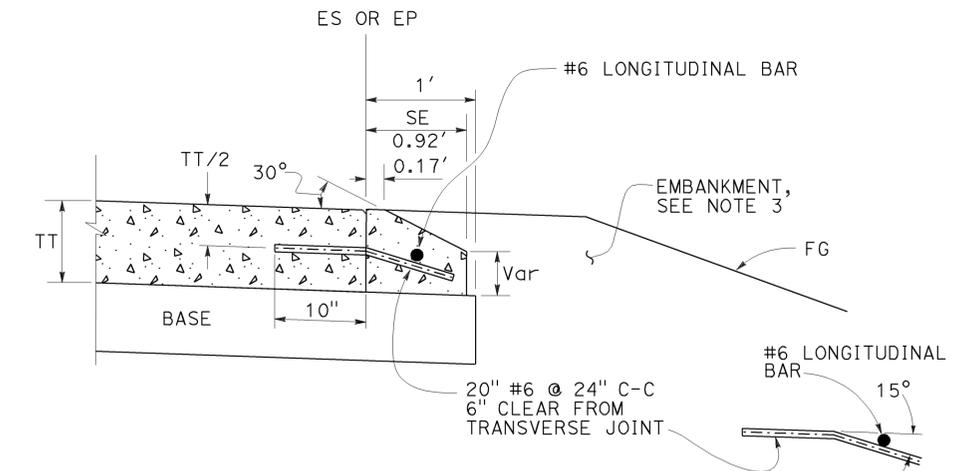
**DETAIL "B"**  
For HMA pavement thickness more than 0.43' or concrete pavement



**CASE M**  
Safety Edge - Cut Section, HW  $\geq 1'$



**CASE N**  
Vertical Edge - Cut Section, HW  $< 1'$



**OPTIONAL DETAIL "B"**  
For concrete pavement  
See Note 4

**FILL SECTION**

**CUT SECTION**

**NOTES:**

- For limits of safety edge and vertical edge treatments, see Revised Standard Plan RSP P74
- Details shown for HMA pavement thickness less than 0.43'. See Detail "B" for HMA pavement thickness more than 0.43' or concrete pavement.
- For locations and limits of embankment see project plans.
- Safety edge transverse joint must match pavement transverse joint. End of #6 longitudinal bar must be 2"  $\pm 1/2$ " clear from transverse joint.
- Safety edge is not needed in the area of MGS, barrier, right turn lane and acceleration lane. See Revised Standard Plan RSP P74.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT EDGE TREATMENTS-  
NEW CONSTRUCTION**  
NO SCALE

RSP P76 DATED NOVEMBER 15, 2013 SUPERSEDES RSP P76 DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.  
**REVISED STANDARD PLAN RSP P76**

2010 REVISED STANDARD PLAN RSP P76

TO ACCOMPANY PLANS DATED 1-13-14

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.

2010 REVISED STANDARD PLAN RSP T9

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

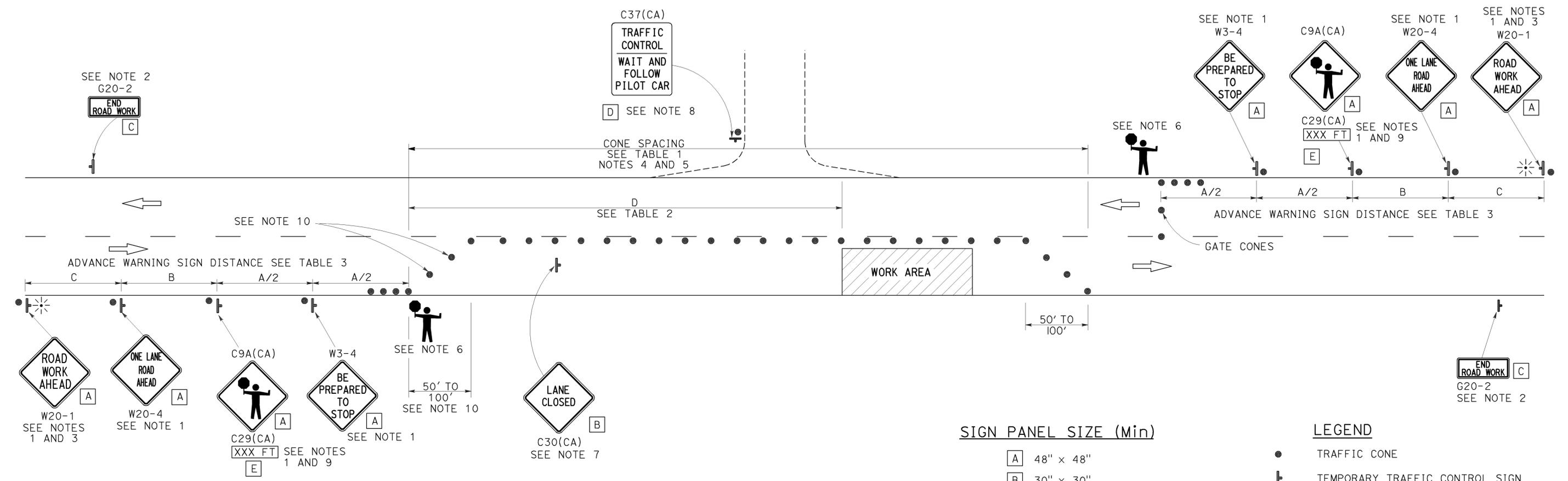
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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.

**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**

TO ACCOMPANY PLANS DATED 1-13-14



**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.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
FOR LANE CLOSURE ON  
TWO LANE CONVENTIONAL  
HIGHWAYS**

NO SCALE

RSP T13 DATED APRIL 19, 2013 SUPERSEDES 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