ACHSSTP-P049(154)E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	1	36

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN EL DORADO COUNTY
AT PILOT HILL
FROM 0.2 MILE SOUTH
TO 0.1 MILE NORTH OF RATTLESNAKE BAR ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
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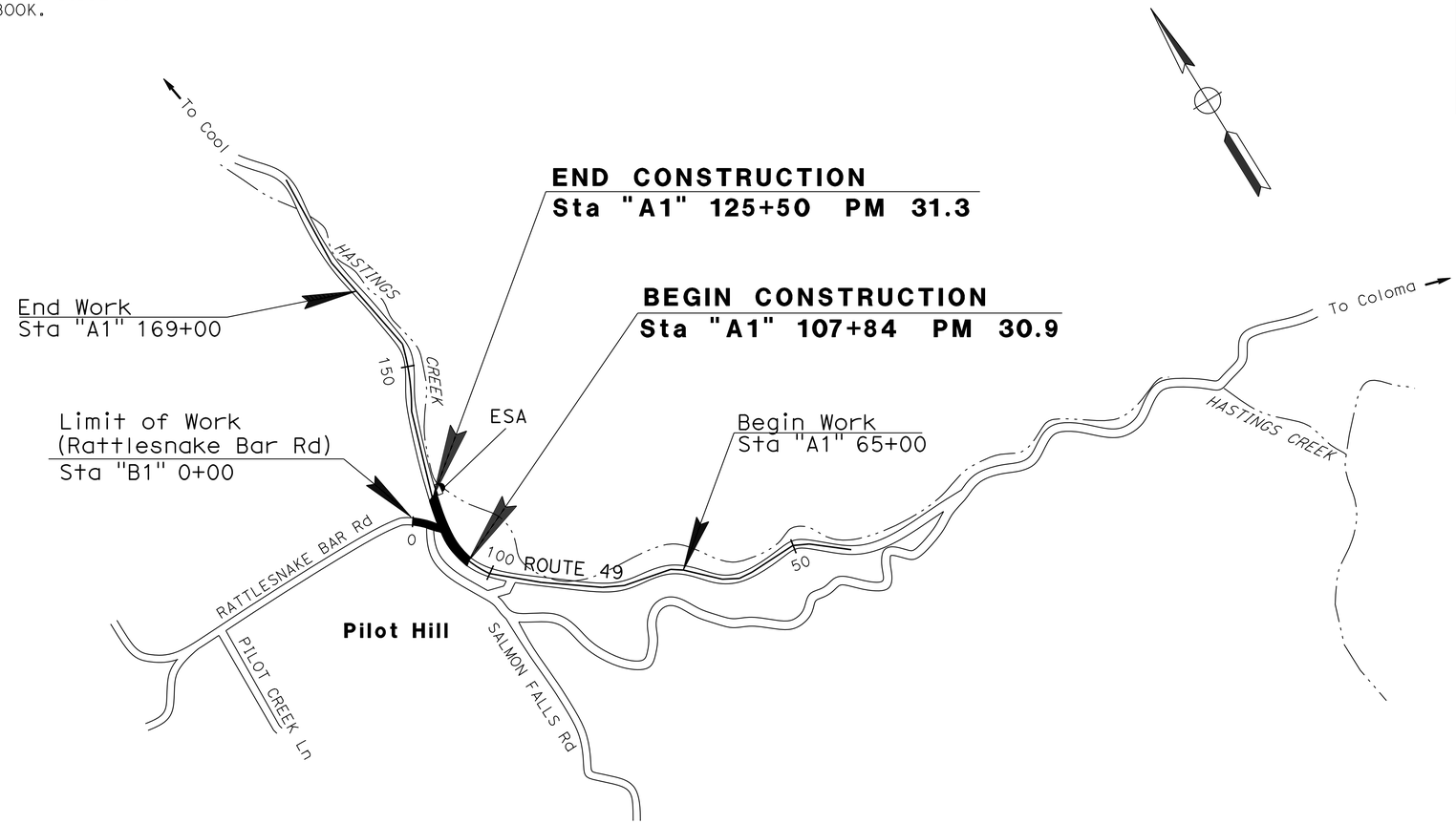
7-10	CONSTRUCTION AREA SIGNS
11-14	DRAINAGE PROFILES, DETAILS AND QUANTITIES
15	CONSTRUCTION AREA SIGNS
16	PAVEMENT DELINEATION AND SIGN PLAN
17	PAVEMENT DELINEATION QUANTITIES
18-21	SIGN DETAILS AND QUANTITIES
22-23	SUMMARY OF QUANTITIES
24-29	EROSION CONTROL LEGEND, PLANS, DETAILS AND QUANTITIES
30-36	REVISED STANDARD PLANS

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

LOCATION MAP



NO SCALE

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

PROJECT MANAGER: NAJED DAKAK

DESIGN ENGINEER: STEPHEN WRIGHT

6-7-13
PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE

June 10, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ERIC NORMAN SOUZA — No. 75706 — Exp. 6-30-14 — 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.

CONTRACT No.	03-2F1504
PROJECT ID	0300020538

LAST REVISION 03-13-13 — DATE PLOTTED => 11-JUN-2013 — TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	2	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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NOTE:

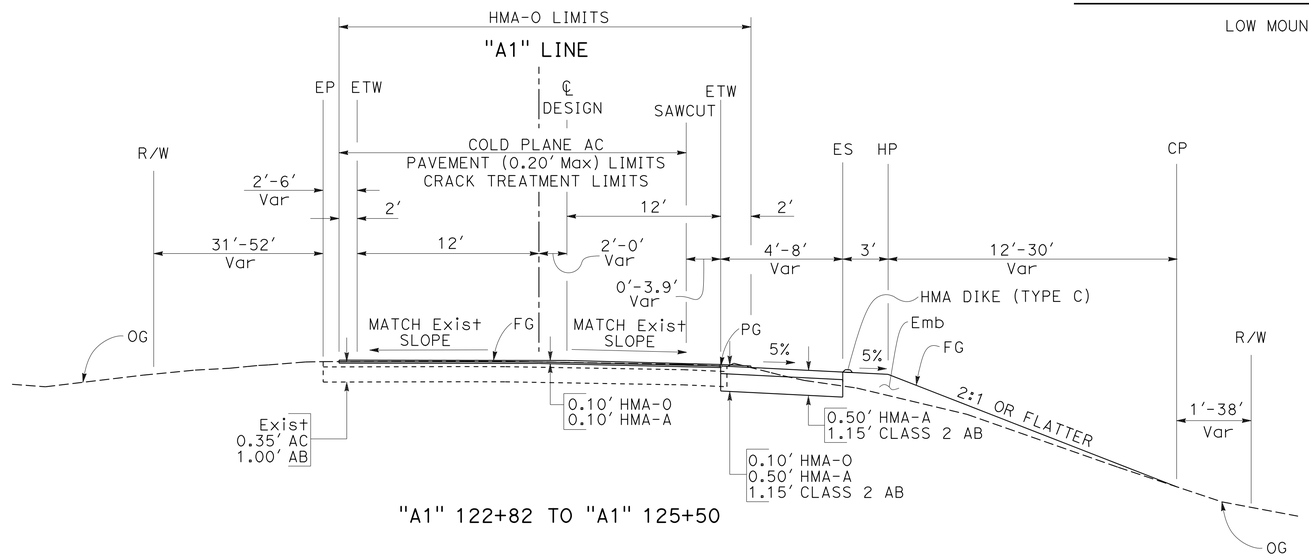
DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

ABBREVIATIONS:

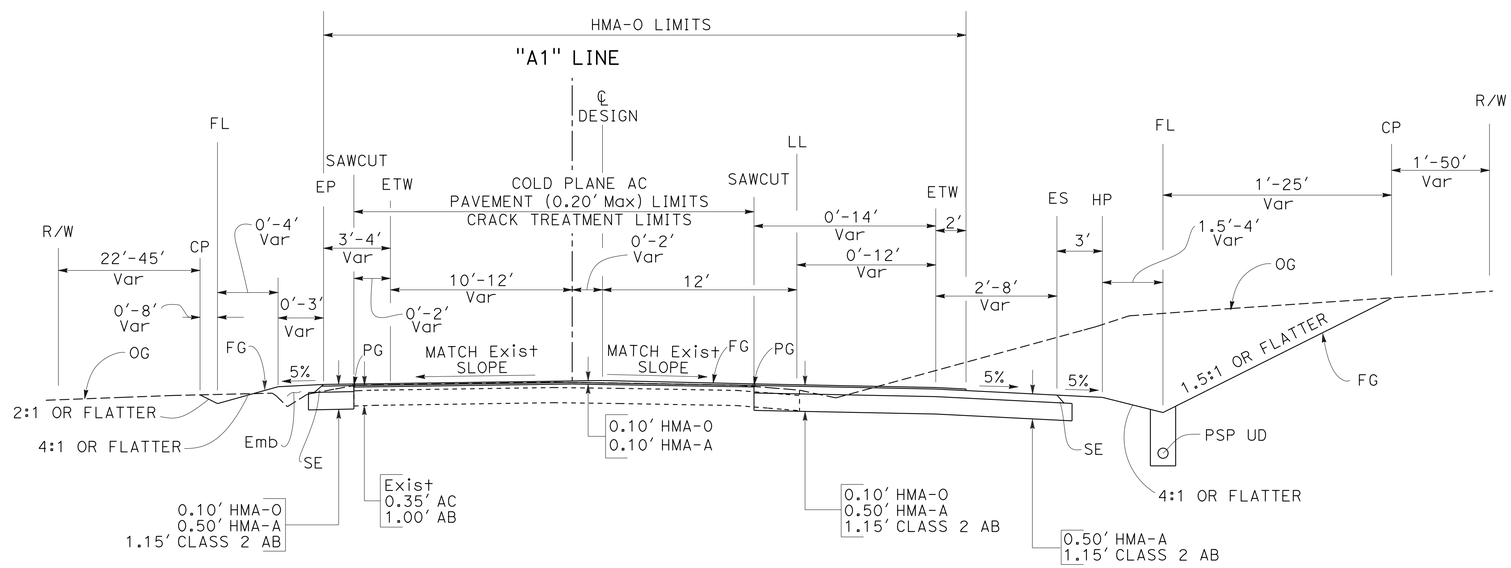
HMA-A	HOT MIX ASPHALT (TYPE A)
HMA-O	HOT MIX ASPHALT (OPEN GRADED)
LL	LANE LINE
SE	SAFETY EDGE

PAVEMENT CLIMATE REGION

LOW MOUNTAIN



"A1" 122+82 TO "A1" 125+50



"A1" 108+50 TO "A1" 122+82

ROUTE 49

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
TRAFFIC

FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
CALCULATED-DESIGNED BY: A. G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 04-02-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	3	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 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.

NOTES:

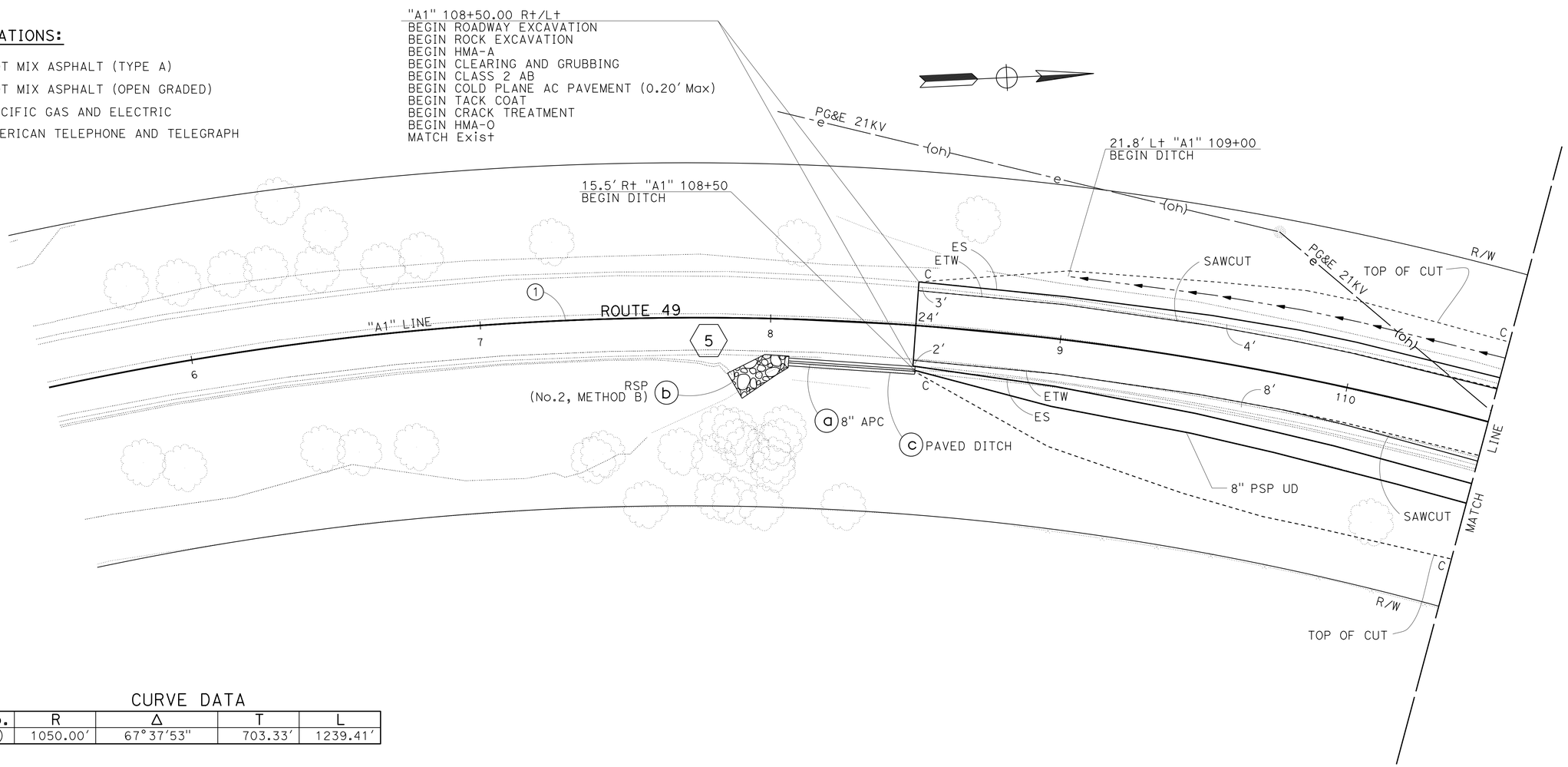
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. 85% OF ALL EXCAVATIONS ON THE JOB WILL BE CONSIDERED ROADWAY EXCAVATION AND 15% OF ALL EXCAVATIONS ON THE JOB WILL BE CONSIDERED ROCK EXCAVATION.

LEGEND:

- TCE
- COLD PLANE AC PAVEMENT (0.30' Max) AND 0.25' HMA-A LIMITS
- REPLACE AC SURFACING (0.50' Max)

ABBREVIATIONS:

HMA-A	HOT MIX ASPHALT (TYPE A)
HMA-O	HOT MIX ASPHALT (OPEN GRADED)
PG&E	PACIFIC GAS AND ELECTRIC
AT&T	AMERICAN TELEPHONE AND TELEGRAPH



CURVE DATA

No.	R	Δ	T	L
1	1050.00'	67°37'53"	703.33'	1239.41'

LAYOUT

SCALE: 1" = 20'

L-1

REVISED BY | DATE REVISED
AL G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STEPHEN WRIGHT

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

LAST REVISION 04-02-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	4	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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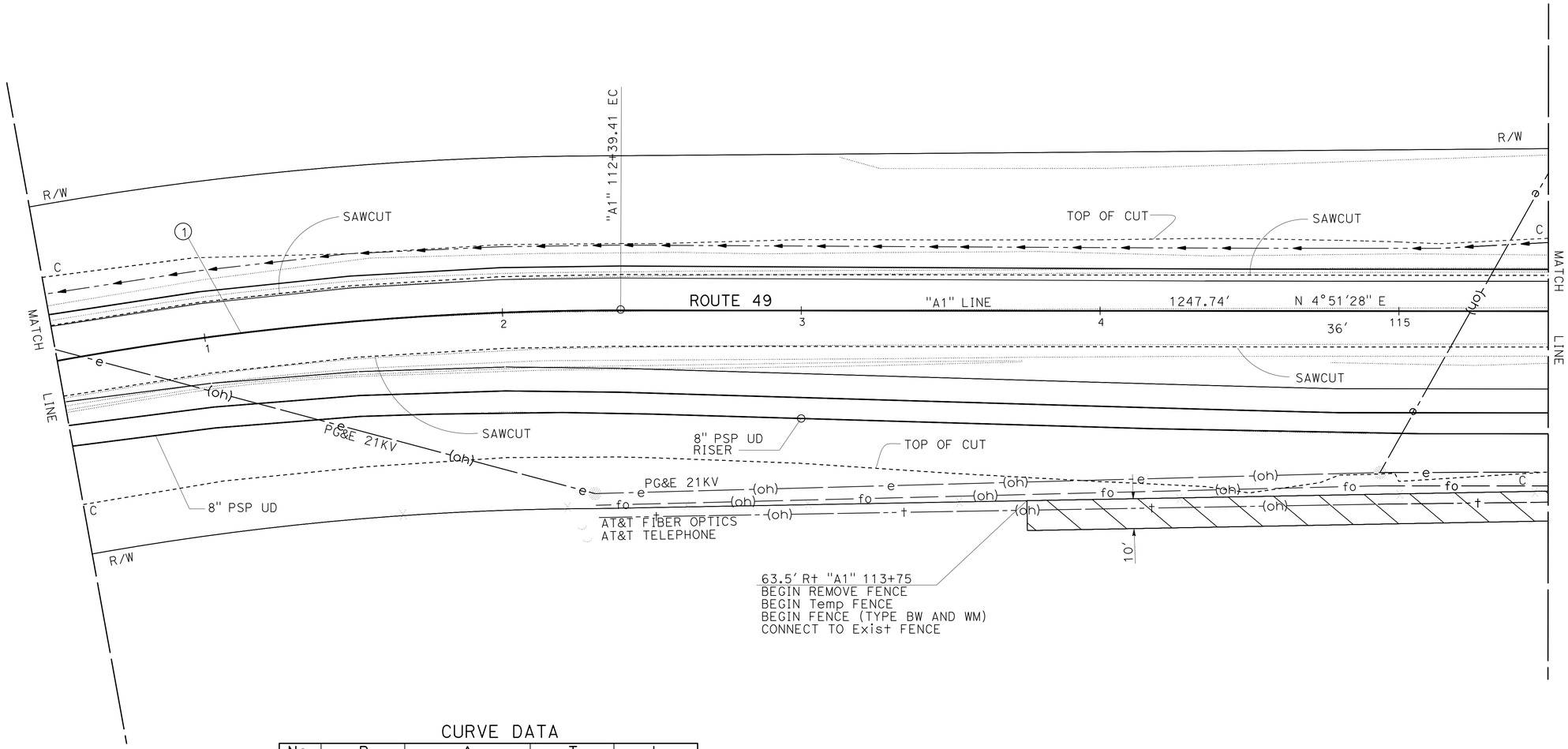
NOTE:

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



CURVE DATA

No.	R	Δ	T	L
1	1050.00'	67°37'53"	703.33'	1239.41'

LAYOUT

SCALE: 1" = 20'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
CALCULATED-DESIGNED BY: AL G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 04-02-13
DATE PLOTTED => 12-JUN-2013
TIME PLOTTED => 10:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	5	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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NOTE:

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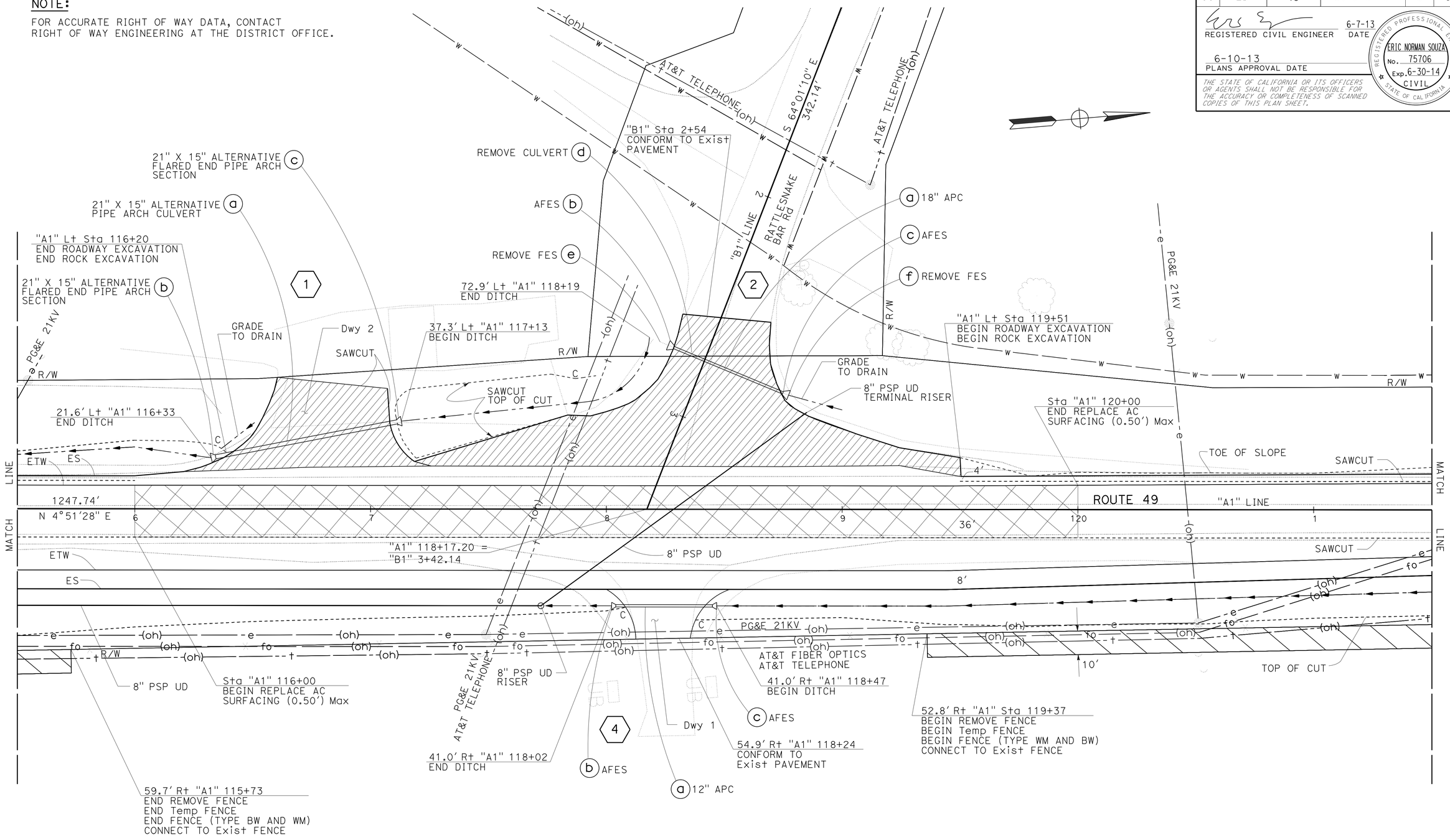

LAYOUT

SCALE: 1" = 20'

L-3

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
AL G. CHIN	ERIC SOUZA

FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

TRAFFIC

LAST REVISION 04-02-13 | DATE PLOTTED => 12-JUN-2013 | TIME PLOTTED => 11:49

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	6	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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NOTE:

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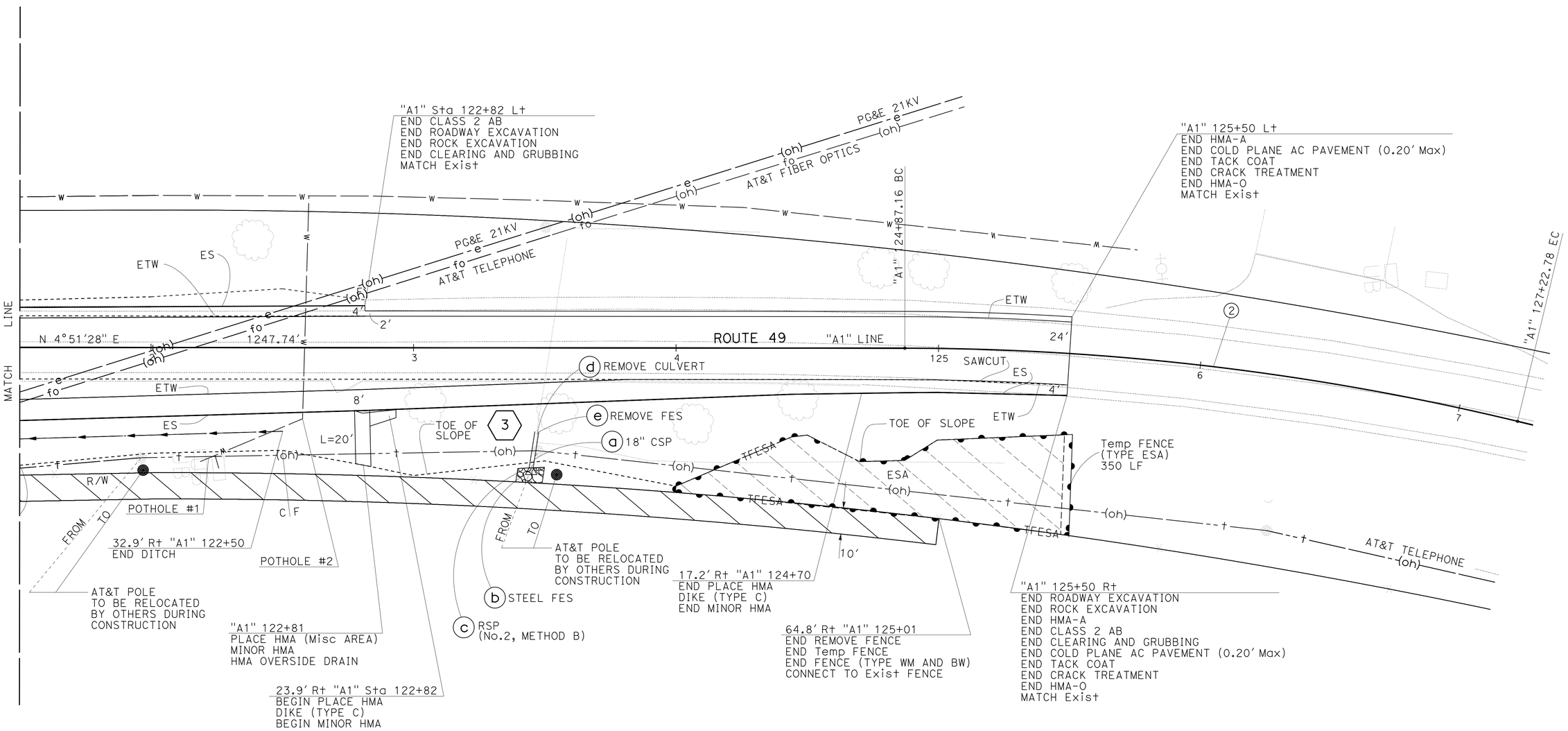

No.	STATION "A1"	OFFSET	* DEPTH	UTILITY	OWNER
POTHOLE #1	122+21.92	42.1' Rt	24"	8" PVC WATER	GEORGETOWN DIVIDE PUD
POTHOLE #2	122+57.75	27.1' Rt	28"	8" PVC WATER	GEORGETOWN DIVIDE PUD

* DEPTH IS DISTANCE FROM ORIGINAL GROUND TO TOP OF PIPE.

CURVE DATA

No.	R	Δ	T	L
(2)	1000.00'	13°30'01"	118.36'	235.62'

LAYOUT

SCALE: 1" = 20'

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
CALCULATED-DESIGNED BY: AL G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 04-02-13
DATE PLOTTED => 12-JUN-2013
TIME PLOTTED => 10:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	7	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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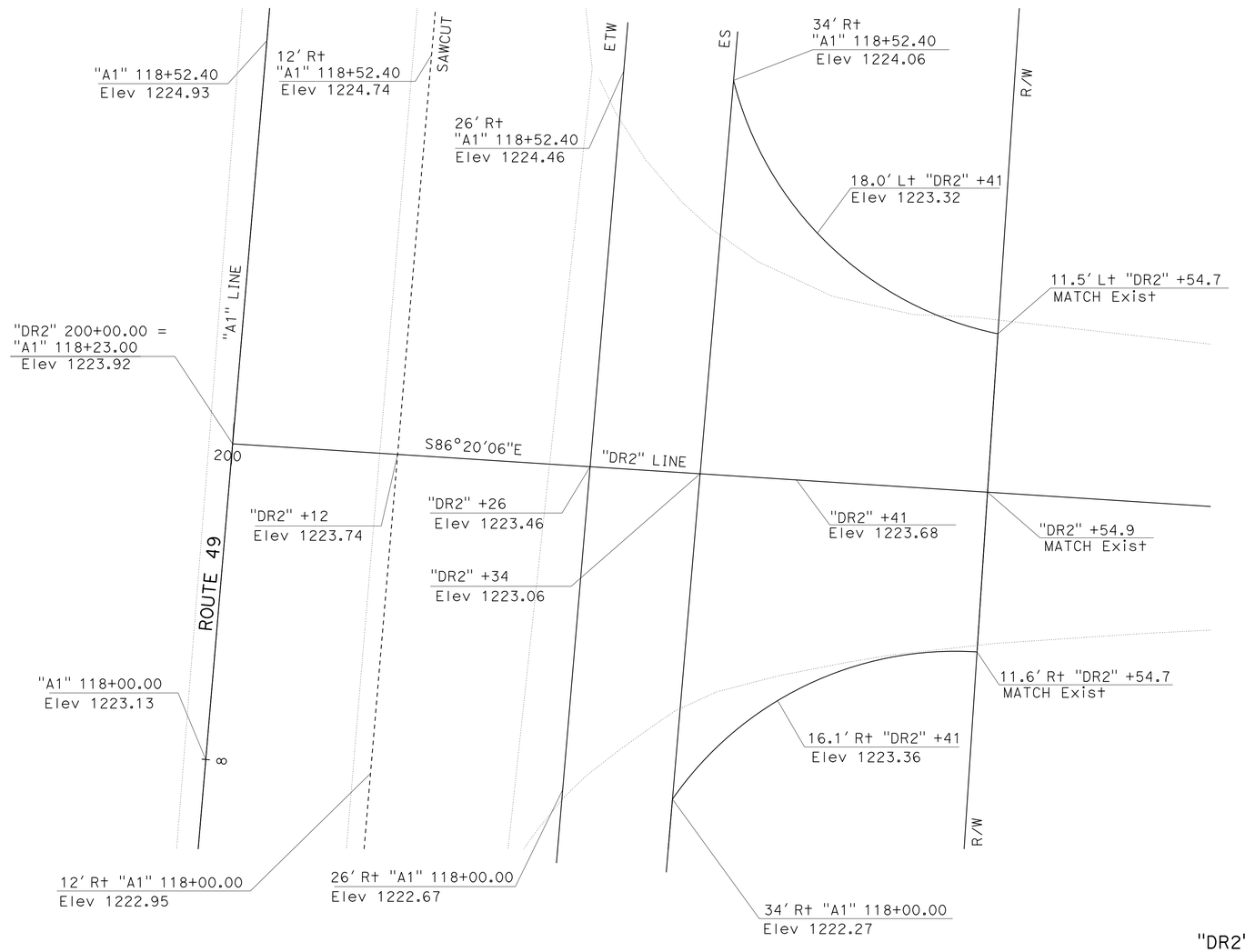
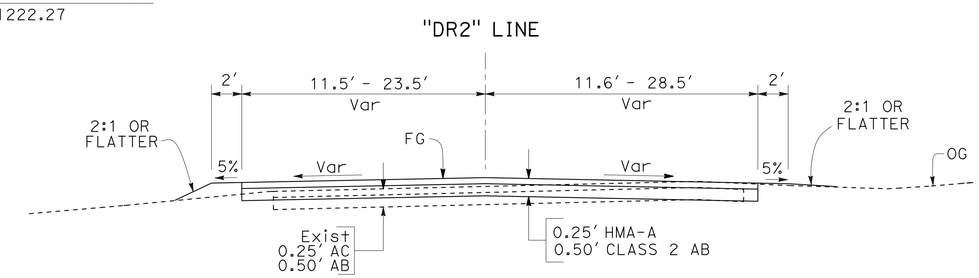
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. NO PIPE SHOWN.



PLAN



TYPICAL SECTION

DRIVEWAY 1 DETAILS

CONSTRUCTION DETAILS

NO SCALE

C-1

REVISED BY | DATE REVISED
A.G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT

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LAST REVISION 04-02-13 | DATE PLOTTED => 11-JUN-2013 | TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	8	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ERIC NORMAN SOUZA
No. 75706
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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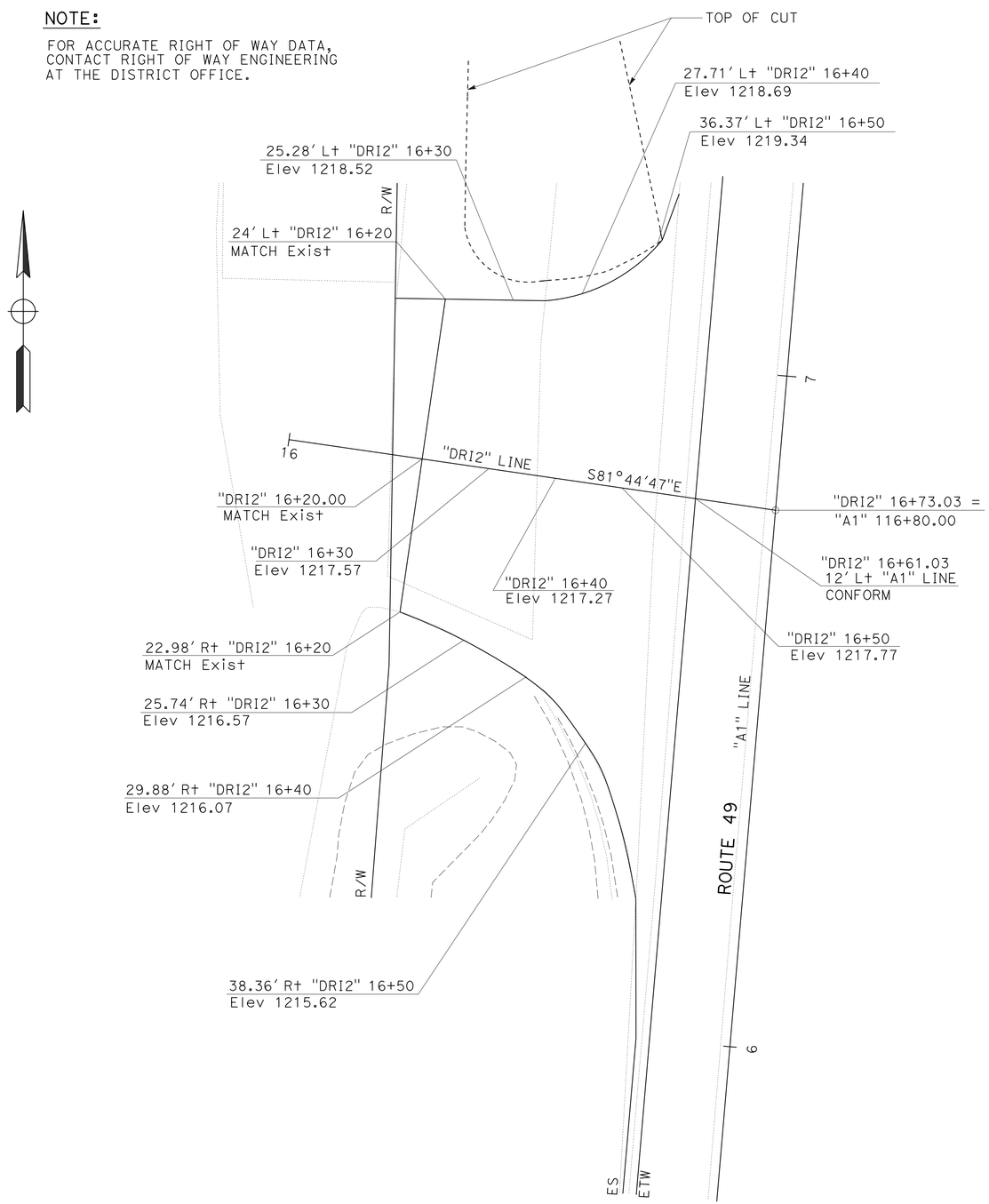
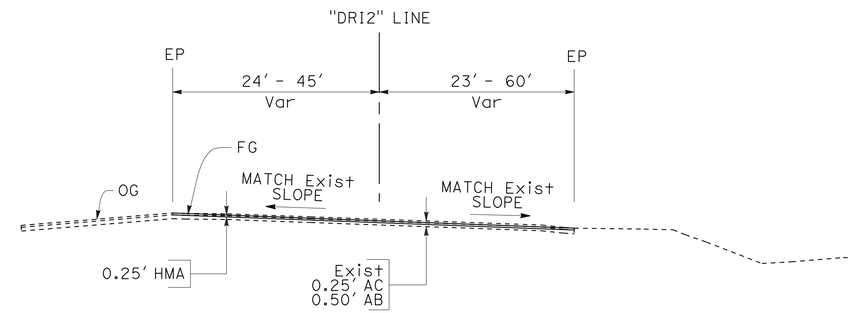


PLAN



TYPICAL SECTION

DRIVEWAY 2 DETAILS

CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
CALCULATED-DESIGNED BY: A.G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 03-13-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	9	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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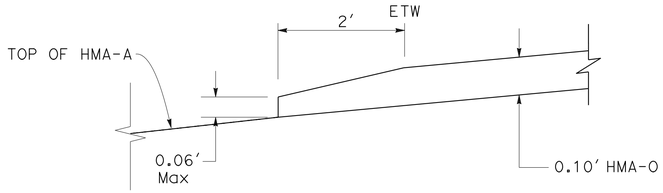
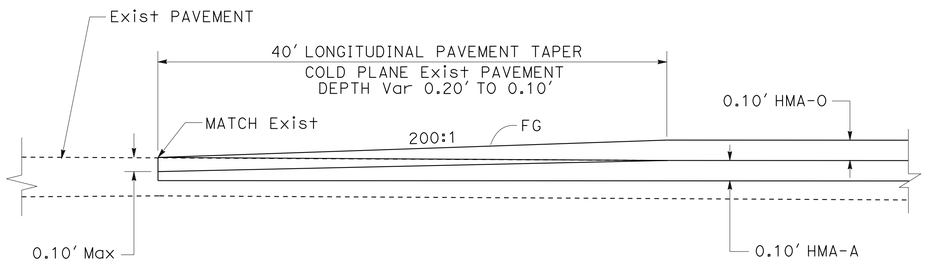
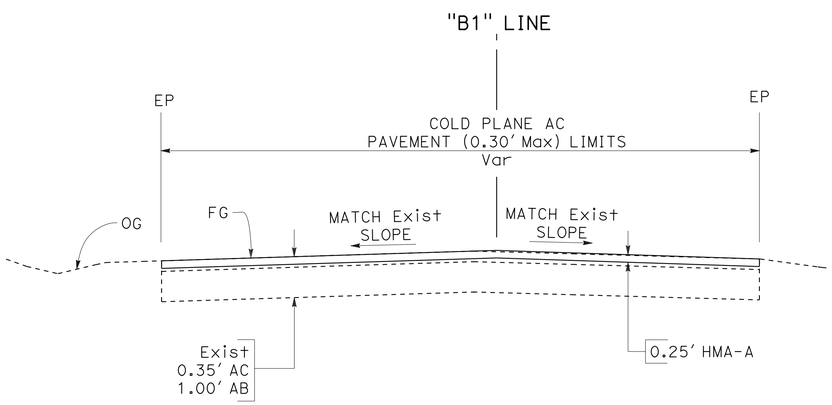


TAPER DETAIL 1 - HMA-O

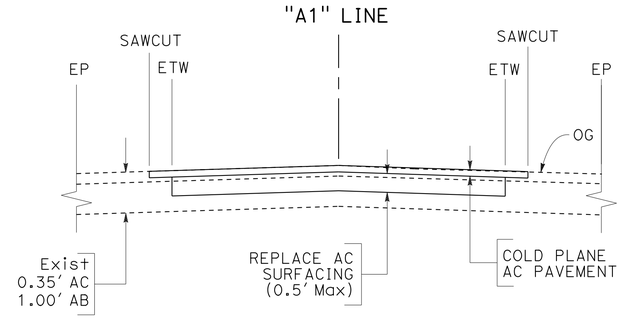


TAPER DETAIL 2 - HMA-O



Sta "B1" 2+54 TO "B1" 3+22

RATTLESNAKE BAR Rd

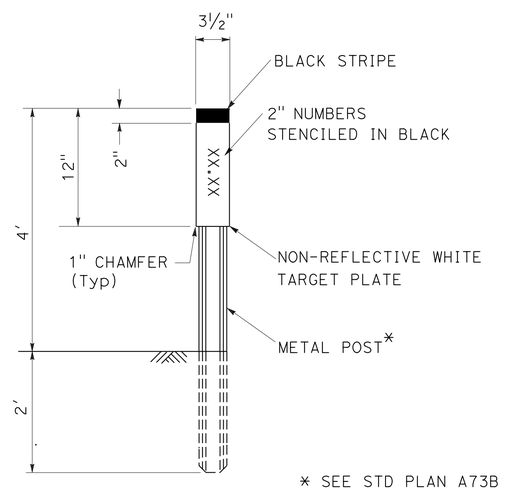


Sta "A1" 116+00 TO "A1" 120+00

REPLACE AC SURFACING

MARKER (CULVERT) STENCILED NUMBERS

DRAINAGE SYSTEM No.	Sta	XX.XX
1	"A1" 116+20 Lt	31.08
1	"A1" 117+20 Lt	31.09
2	"A1" 118+00 Lt	31.11
2	"A1" 119+00 Lt	31.13
3	"A1" 123+50 Lt	31.20
3	"A1" 123+50 Rt	31.20
4	"A1" 118+00 Rt	31.11
4	"A1" 118+50 Rt	31.12
5	"A1" 108+00 Rt	30.91



* SEE STD PLAN A73B
FOR METAL POST DETAILS

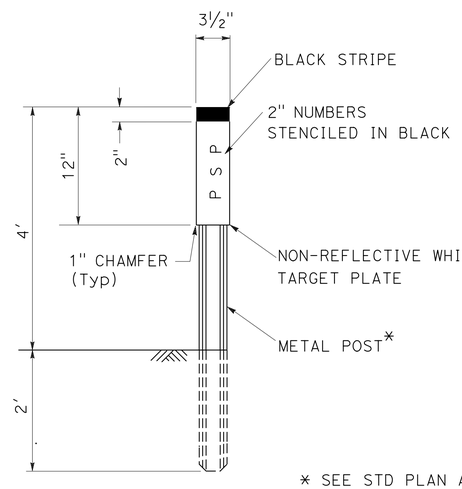
MARKER (CULVERT)

MARKER (CULVERT) NOTES:

1. PLACE MINIMUM 2' FROM EDGE OF PAVEMENT.
2. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.

UNDERDRAIN MARKER

DRAINAGE SYSTEM No.	Sta
5	"A1" 108+50 Rt
5	"A1" 118+80 Lt



* SEE STD PLAN A73B
FOR METAL POST DETAILS

UNDERDRAIN MARKER

UNDERDRAIN MARKER NOTES:

1. PLACE MINIMUM 2' FROM EDGE OF PAVEMENT.
2. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION DETAILS

NO SCALE

C-3

REVISED BY | DATE REVISED
A.G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STEPHEN WRIGHT

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION 02-05-13 | DATE PLOTTED => 11-JUN-2013 | TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	10	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ERIC NORMAN SOUZA
No. 75706
Exp. 06/30/14
CIVIL
STATE OF CALIFORNIA

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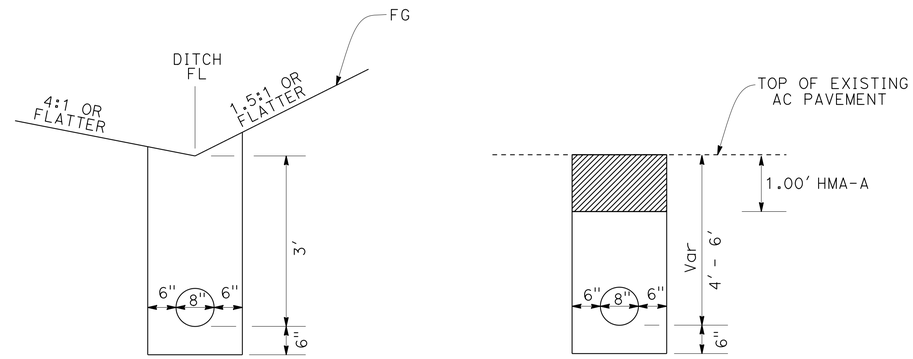
UNDERDRAIN PIPE DATA

STATION	BEARING	DISTANCE	PIPE Inv	SLOPE
15.50′ Rt "A1" 108+50.00			1171.50	
	N06°08′24"W	50.39′		4.1 %
			1173.57	
	N09°35′19"W	48.88′		4.1 %
			1175.59	
	N07°16′57"W	48.77′		5.8 %
			1178.40	
	N05°10′22"W	48.67′		4.9 %
			1180.80	
	N02°26′32"W	48.60′		5.3 %
			1183.36	
	N00°17′17"E	48.53′		5.5 %
			1186.01	
	N03°01′10"E	48.47′		5.9 %
			1188.88	
	N05°41′11"E	48.79′		5.9 %
			1191.74	
	N06°29′04"E	50.02′		5.9 %
			1194.67	
	N06°29′04"E	50.02′		5.8 %
			1197.55	
	N06°29′04"E	50.02′		5.6 %
			1200.37	
	N06°24′44"E	50.02′		4.8 %
			1202.71	
	N06°13′38"E	50.01′		5.7 %
			1205.54	
	N04°18′08"E	50.00′		4.9 %
			1207.97	
	N04°51′32"E	50.00′		4.7 %
			1210.30	
	N04°51′28"E	50.00′		4.3 %
			1212.47	
	N04°51′27"E	50.00′		4.0 %
			1214.48	
	N04°51′28"E	50.00′		4.1 %
			1216.52	
	N05°18′51"E	25.02′		3.9 %
			1217.50	
	N31°57′53"W	137.39′		1.8 %
41.15′ Lt "A1" 118+85.00			1220.00	



OUTSIDE PAVEMENT AREA

INSIDE PAVEMENT AREA

EXCAVATION AND BACKFILL FOR UNDERDRAIN

CONSTRUCTION DETAILS

NO SCALE

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
CALCULATED-DESIGNED BY: A.G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 04-02-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	11	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ERIC NORMAN SOUZA
No. 75706
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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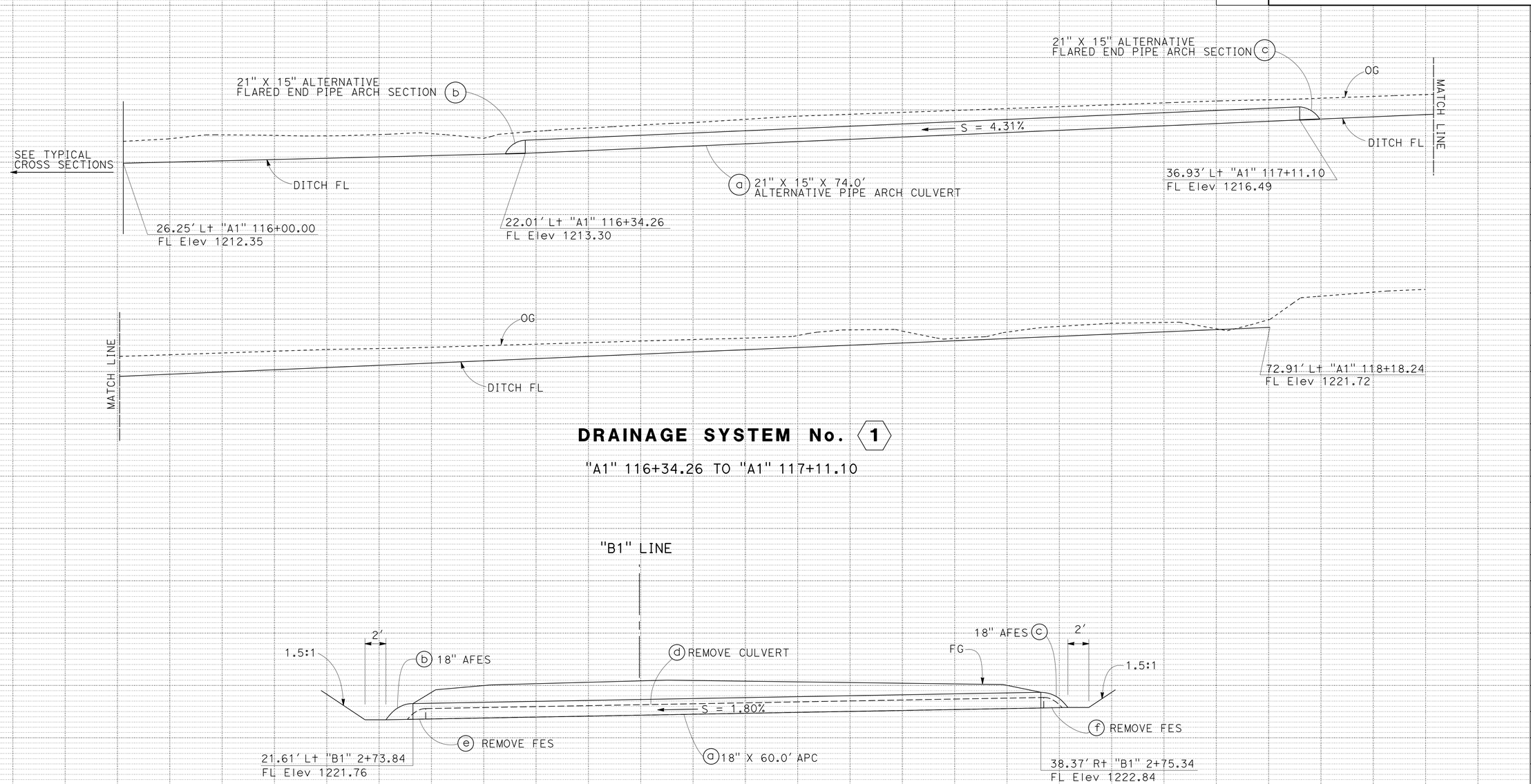

DRAINAGE PROFILES

SCALE: 1" = 5' Horiz
1" = 5' Vert

DP-1

REVISED BY | DATE REVISED
A.G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39
LAST REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	12	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ERIC NORMAN SOUZA
No. 75706
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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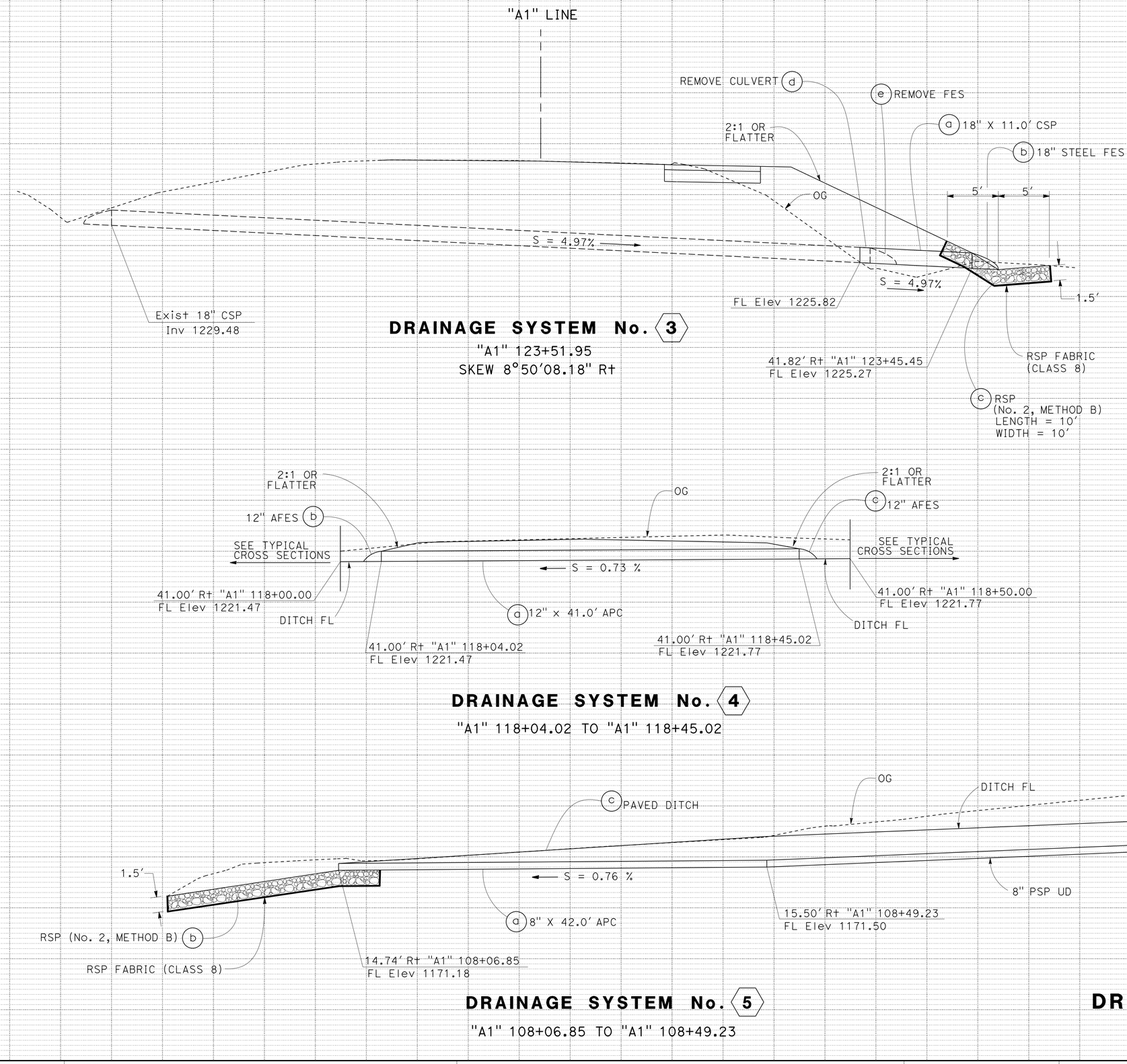

DRAINAGE PROFILES

SCALE: 1" = 5' Horiz
1" = 5' Vert

DP-2

REVISED BY | DATE REVISED
A.G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR | STEPHEN WRIGHT
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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DATE PLOTTED => 12-JUN-2013
TIME PLOTTED => 11:16
LAST REVISION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	13	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ERIC NORMAN SOUZA
No. 75706
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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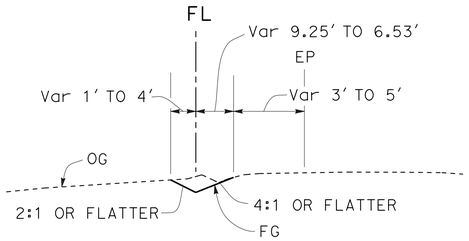
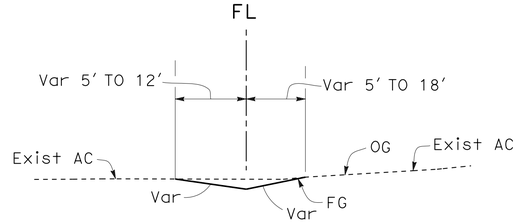
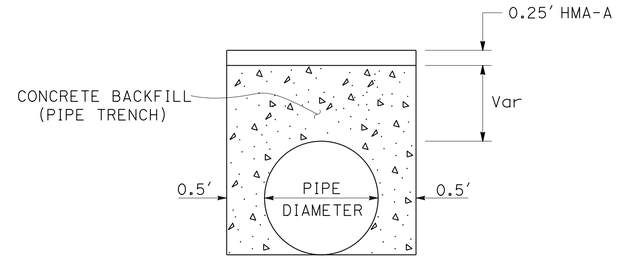


L+ "A1" 116+00.00 TO L+ "A1" 116+38.32



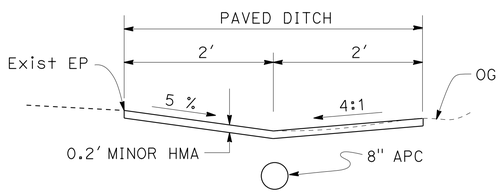
L+ "A1" 117+11.10 TO L+ "A1" 118+18.24

TYPICAL CROSS SECTIONS

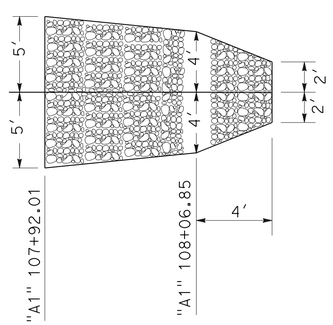


TRENCH EXCAVATION AND BACKFILL DETAIL

DRAINAGE SYSTEM Nos. 1, 2, AND 4



TYPICAL SECTION
"A1" 108+06.85 TO "A1" 108+49.23



ROCK SLOPE PROTECTION DETAIL

DRAINAGE DETAILS

NO SCALE

DD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: STEHPEN WRIGHT
CALCULATED-DESIGNED BY: A.G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	14	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ERIC NORMAN SOUZA
No. 75706
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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APC ALLOWABLE PIPE MATERIALS

DESCRIPTION	TYPE		
	RCP CLASS IV	HDPE (TYPE S) **	SSRP (0.109" THICK)
	SIZE	SIZE	SIZE
8" APC	8"	8"	8"
12" APC	12"	12"	12"
18" APC	18"	18"	18"

** HDPE = HIGH DENSITY POLYETHYLENE CORRUGATED PIPE, SMOOTH INTERIOR.

ALL CULVERT JOINTS SHALL BE STANDARD JOINTS.

21" X 15" ALTERNATIVE PIPE ARCH ALLOWABLE MATERIALS

TYPE	METAL THICKNESS (in)	MINIMUM CORNER RADIUS (in)
CSPA	0.079	4 1/8
CAPA	0.060	4 1/8

ALTERNATIVE PIPE ARCH CULVERT ALLOWABLE END SECTIONS

ALTERNATIVE PIPE ARCH CULVERT TYPE	TYPE	
	STEEL FLARED END PIPE ARCH SECTION	CONCRETE FLARED END PIPE ARCH SECTION
CSPA	ALL	ALL
CAPA	ALL	ALL

AFES ALLOWABLE END SECTIONS

APC TYPES	TYPE	
	STEEL FLARED END SECTIONS	CONCRETE FLARED END SECTIONS
RCP	NONE	ALL
HDPE	ALL	ALL
SSRP	ALL	ALL

DRAINAGE QUANTITIES

LAYOUT SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT	REMOVE FLARED END SECTION	ALTERNATIVE PIPE CULVERT 18"	ALTERNATIVE PIPE CULVERT 12"	ALTERNATIVE PIPE CULVERT 8"	ALTERNATIVE FLARED END SECTION 18"	ALTERNATIVE FLARED END SECTION 12"	21" X 15" ALTERNATIVE PIPE ARCH CULVERT	21" X 15" ALTERNATIVE FLARED END PIPE ARCH SECTION	18" CSP (.064" THICK)	18" STEEL FLARED END SECTION	ROCK SLOPE PROTECTION (No. 2, METHOD B)	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	CONCRETE BACKFILL (PIPE TRENCH)	MINOR HOT MIX ASPHALT *	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) *	DESCRIPTION	STATION	LAYOUT SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT
			LF	EA	LF	LF	LF	EA	EA	LF	EA	LF	EA	CY	SQYD	CY	TON	SQYD					
L-3	1	a								74.0						11			21" X 15" ALTERNATIVE PIPE ARCH CULVERT		L-3	1	a
		b									1								21" X 15" ALTERNATIVE FLARED END PIPE ARCH SECTION	22.01' L+ "A1" 116+34.26			b
		c									1								21" X 15" ALTERNATIVE FLARED END PIPE ARCH SECTION	36.93' L+ "A1" 117+11.10			c
L-3	2	a			60.0											20			18" APC	"B1" 2+74.38	L-3	2	a
		b						1											18" AFES				b
		c						1											18" AFES				c
		d	59.0																REMOVE 12" CULVERT				d
		e		1															REMOVE 12" FES				e
		f		1															REMOVE 12" FES				f
L-4	3	a										11.0							18" CSP	"A1" 123+51.95	L-4	3	a
		b											1						18" STEEL FES				b
		c												6	18				RSP (No. 2, METHOD B)				c
		d	1.0																REMOVE 18" CULVERT				d
		e		1															REMOVE 18" FES				e
L-3	4	a				41.0										5			12" APC		L-3	4	a
		b							1										12" AFES	41.00' R+ "A1" 118+04.02			b
		c							1										12" AFES	41.00' R+ "A1" 118+45.02			c
L-1	5	a					42.0												8" APC	14.74' R+ "A1" 108+06.85	L-1	5	a
		b												10	30				RSP (No. 2, METHOD B)				b
		c															3	20	PAVED DITCH				c
TOTAL			60.0	3	60.0	41.0	42.0	2	2	74.0	2	11.0	1	16	48	36	3	20					

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

* SEE SUMMARY OF QUANTITIES FOR TOTAL MINOR HMA AND PLACE HMA (Misc AREA).

DRAINAGE QUANTITIES

DQ-1

REVISED BY | DATE REVISED
A.G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	15	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
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.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN LETTER	SIGN CODE FEDERAL	SIGN CODE CALIFORNIA	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
A	W20-1	C23	48" X 48"	ROAD WORK AHEAD	1 - 6" X 6"	3
B		C40(MOD)	48" X 36"	TRAFFIC FINES DOUBLED IN WORK ZONES	2 - 4" X 6"	2
C	G20-2	C14	36" X 18"	END ROAD WORK	1 - 4" X 4"	3

NOTES:

1. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA <CA> SIGN CODES.

SIGN DETAILS

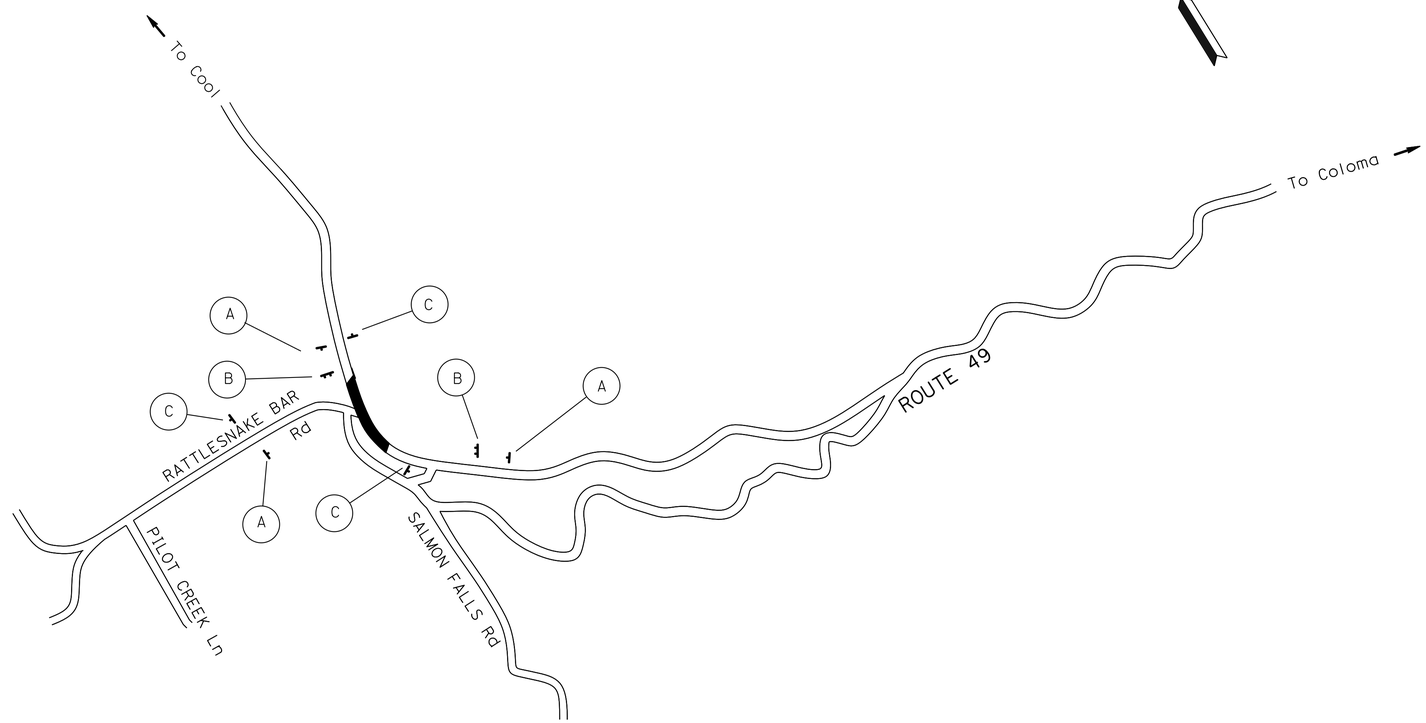
B C40(Mod)<CA>

TRAFFIC FINES
DOUBLED IN
WORK ZONES

4" D SERIES LETTERS

48"X36"

RETROREFLECTIVE WHITE BACKGROUND WITH BLACK LEGEND AND BORDER.



APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: SERGIO ACEVES
CALCULATED-DESIGNED BY: KRIS ALBERS
CHECKED BY: JACK KEMMERLY
REVISED BY
DATE REVISED

LAST REVISION 01-28-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	16	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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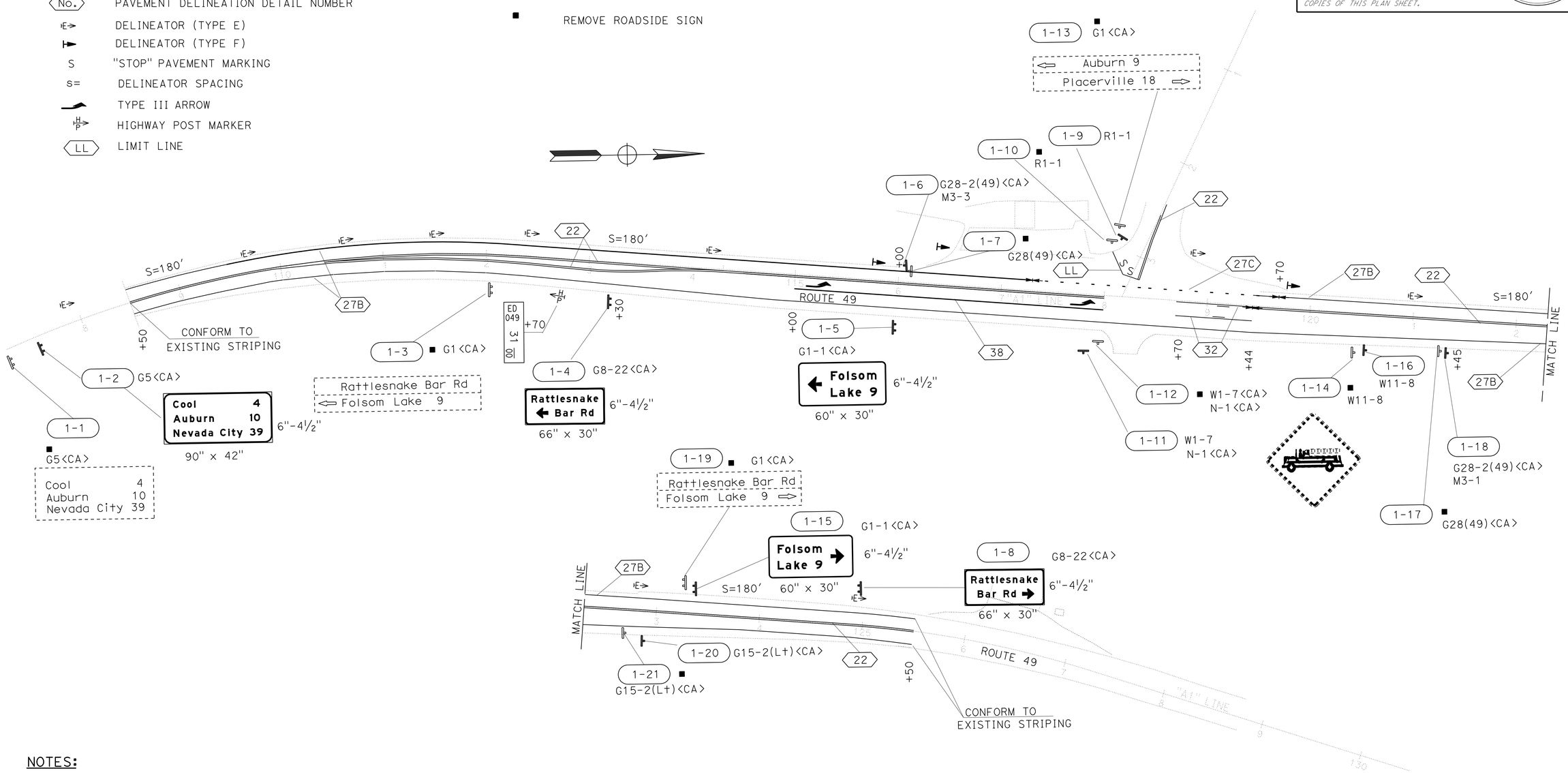
LEGEND

- CHANGE IN STRIPING PATTERN
- (No.) PAVEMENT DELINEATION DETAIL NUMBER
- DELINEATOR (TYPE E)
- DELINEATOR (TYPE F)
- S "STOP" PAVEMENT MARKING
- s= DELINEATOR SPACING
- TYPE III ARROW
- HIGHWAY POST MARKER
- (LL) LIMIT LINE
- (Sht-No.) ROADSIDE SIGN NUMBER
- <CA> CALIFORNIA SIGN CODE
- ■ REMOVE ROADSIDE SIGN



NOTES:

1. ALL LANES SHALL BE 12' WIDE UNLESS OTHERWISE SHOWN.
2. ALL EXISTING SIGNS NOT SHOWN FOR REMOVAL SHALL REMAIN IN PLACE
3. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
4. ALL DELINEATORS (CLASS 1) SHALL BE PLACED ON 90' CENTERS UNLESS OTHERWISE SHOWN.

PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1"=50'

PD-1

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: SERGIO ACEVES
CALCULATED-DESIGNED BY: KRIS ALBERS
CHECKED BY: JACK KEMMERLY
REVISED BY
DATE REVISED

LAST REVISION 03-29-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	17	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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4" THERMOPLASTIC TRAFFIC STRIPE

DETAIL NUMBER	LINEAR FEET
22	3856
27B	2878
32	360
TOTAL	7094

THERMOPLASTIC PAVEMENT MARKING

DESCRIPTION	NUMBER	SQUARE FEET
STOP	2 @ 22 SQFT	44
TYPE III ARROW	2 @ 42 SQFT	84
LIMIT LINE	1	40
TOTAL		168

4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)

DETAIL NUMBER	LINEAR FEET
27C	370
TOTAL	370

4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)

DETAIL NUMBER	LINEAR FEET
32	360
TOTAL	360

DELINEATOR

SHEET NUMBER	DELINEATOR (CLASS 1)	
	TYPE E (EACH)	TYPE F (EACH)
PD-1	10	3
SUBTOTAL	10	3
TOTAL	13	

8" THERMOPLASTIC TRAFFIC STRIPE

DETAIL NUMBER	LINEAR FEET
38	300
TOTAL	300

HIGHWAY POST MARKER

	(EACH)
TOTAL	1

PAVEMENT MARKER (RETROREFLECTIVE)

DETAIL NUMBER	TYPE D (EACH)	TYPE G (EACH)
22	164	
32	17	
38		18
SUBTOTAL	181	18
TOTAL	199	

PAVEMENT DELINEATION QUANTITIES

PDQ-1

REVISED BY | DATE REVISED
KRIS ALBERS | JACK KEMMERLY
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
SERGIO ACEVES

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LAST REVISION 03-27-13 | DATE PLOTTED => 11-JUN-2013 TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	18	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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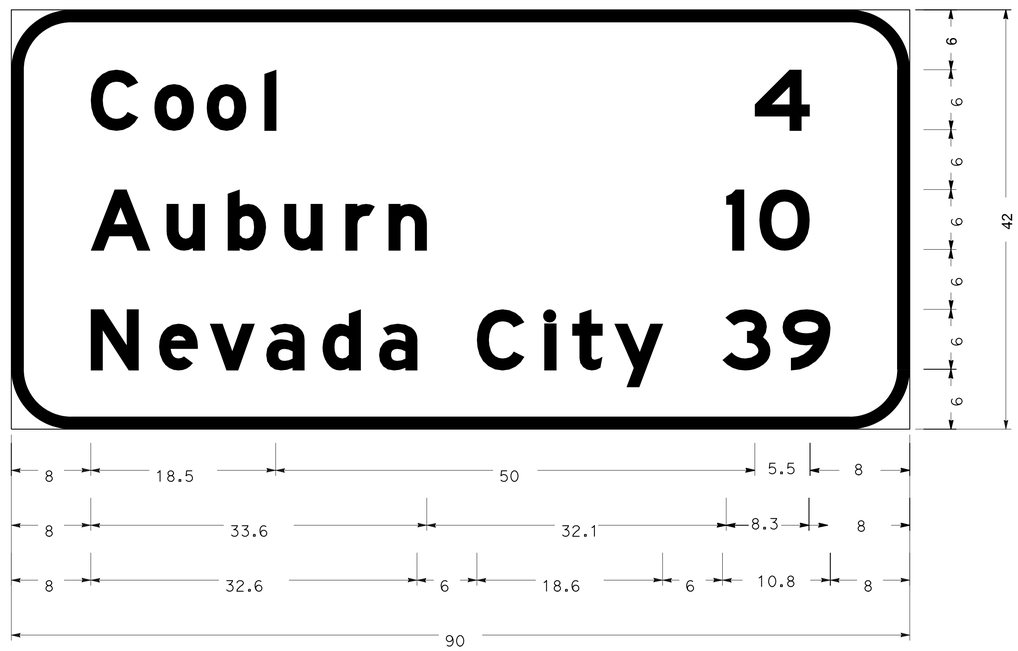
G5<CA>



6" RADIUS, 1.25" BORDER

[Cool 4] E Mod; [Auburn 10] E Mod; [Nevada City 39]E Mod;

NOTE: ALL SIGN PANEL DIMENSIONS ARE IN INCHES

SIGN DETAILS

NO SCALE

SD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: SERGIO ACEVES
CALCULATED-DESIGNED BY: KRIS ALBERS
CHECKED BY: JACK KEMMERLY
REVISED BY
DATE REVISED

LAST REVISION 3-27-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	19	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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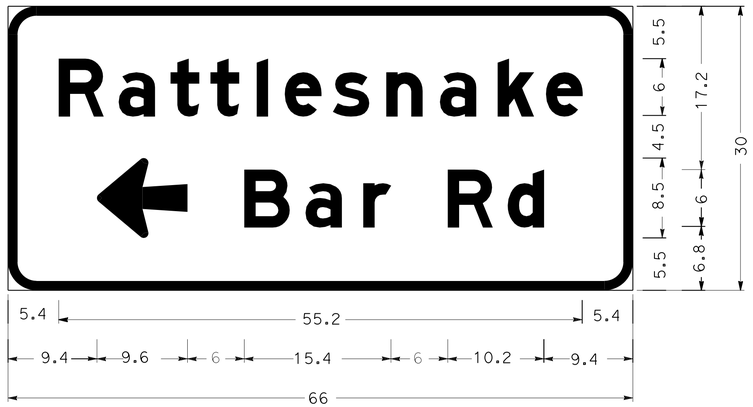
G8-22<CA>

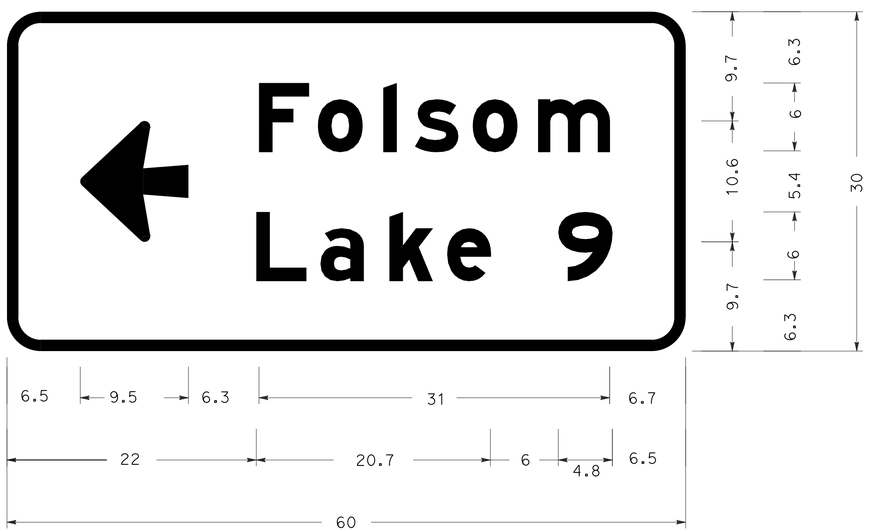


3" RADIUS, 1" BORDER
ARROW 6UC-1L - 9.6" 180°
[Rattlesnake Bar Rd] E Mod;

G8-22<CA>

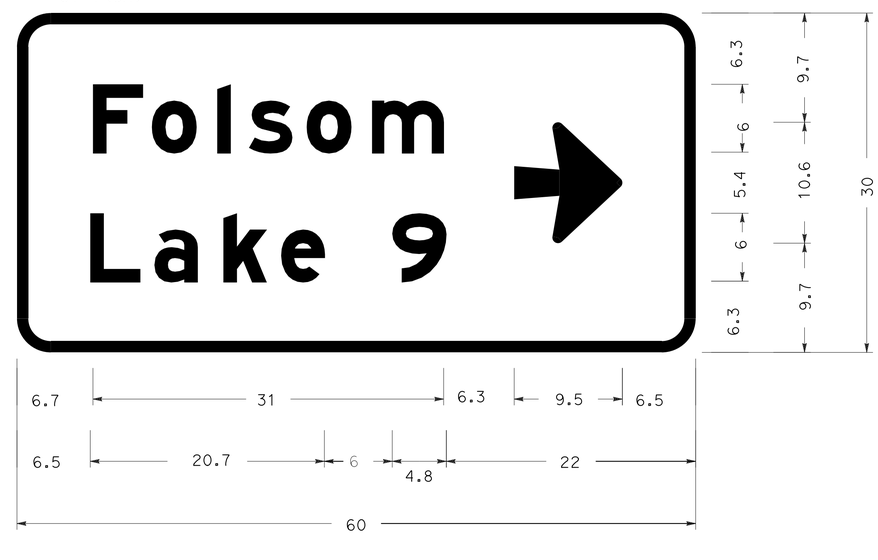
3" RADIUS, 1" BORDER
[Rattlesnake Bar Rd] E Mod;
ARROW 6UC-1L - 9.6" 0°

G1-1<CA>



3" RADIUS, 1.0" BORDER
Arrow 6UC-2LH - 9.6" 180°
[Folsom] E Mod; [Lake 9] E Mod;

G1-1<CA>



3" RADIUS, 1.0" BORDER
[Folsom] E Mod; [Lake 9] E Mod;
Arrow 6UC-2LH - 9.6" 0°

NOTE: ALL SIGN PANEL DIMENSIONS ARE IN INCHES

SIGN DETAILS
NO SCALE

SD-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: KRIS ALBERS
CHECKED BY: JACK KEMMERLY
FUNCTIONAL SUPERVISOR: SERGIO ACEVES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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TRAFFIC

LAST REVISION 04-02-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	20	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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ROADSIDE SIGN QUANTITIES

SIGN NUMBER (SHT-NO.)	SIGN CODE		PANEL SIZE	"C" DIM IN FEET	POST SIZE AND LENGTH			ROADSIDE SIGN		REMOVE ROADSIDE SIGN
					METAL POST	4"x4"	4"x6"	ONE POST	TWO POST	
	FEDERAL	CALIFORNIA	INCHES		2½"x2½"			EACH	EACH	EACH
1-1		G5								1
1-2		G5	90 X 42	5			14′		1	
1-3		G1								1
1-4		G8-22	66 X 30	5		12′			1	
1-5		G1-1	60 X 30	5		10′			1	
1-6		G28-2(49)	24 X 25	5	10′			1		
		M3-3	24 X 12							
1-7		G28(49)								1
1-8		G8-22	66 X 30	5		12′			1	
1-9	R1-1		30 X 30	5	10′			1		
1-10	R1-1									1
1-11	W1-7		48 X 24	5	10′			1		
		N-1	18 x 18	4						
1-12	W1-7									1
		N-1								
1-13		G1								1
1-14	W11-8									1
1-15		G1-1	60 X 30	5		10′			1	
1-16	W11-8		36 X 36	5				1		
1-17		G28(49)								1
1-18		G28-2(49)	24 X 25	5	10′			1		
		M3-1	24 X 12							
1-19		G1								1
1-20		G15-2 (L+)	36 X 20	5	8′			1		
1-21		G15-2 (L+)								1
							TOTAL	6	5	10

NOTES:

1. EXACT LOCATION AND POSITION OF ROADSIDE SIGNS TO BE DETERMINED BY THE ENGINEER.
2. POST LENGTHS GIVEN ARE APPROXIMATE.
3. "C" DIM = VERTICAL CLEARANCE EP TO BOTTOM OF SIGN PANEL.

SIGN QUANTITIES

SQ-1

REVISED BY | DATE REVISED
KRIS ALBERS | JACK KEMMERLY
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
SERGIO ACEVES
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

LAST REVISION 04-02-13 | DATE PLOTTED => 11-JUN-2013 | TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	21	36

Kris M. Albers 5-23-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

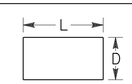
REGISTERED PROFESSIONAL ENGINEER
KRIS M. ALBERS
No. 49986
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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.

ROADSIDE SIGN PANEL QUANTITIES

SIGN CODE	SIGN MESSAGE/DESCRIPTION	SIGN SIZE L X D (INCHES)	SIGN AREA (SQFT)	NUMBER OF SIGNS	BACKGROUND SHEETING COLOR	BACKGROUND RETROREFLECTIVE ASTM TYPE	LEGEND SHEETING COLOR	LEGEND RETROREFLECTIVE ASTM TYPE	PROTECTIVE-FILM OVERLAY PREMIUM	FURNISH SINGLE SHEET ALUMINUM SIGN UNFRAMED 0.063" SQFT	FURNISH SINGLE SHEET ALUMINUM SIGN UNFRAMED 0.080" SQFT	FURNISH SINGLE SHEET ALUMINUM SIGN FRAMED 0.063" SQFT	FURNISH SINGLE SHEET ALUMINUM SIGN FRAMED 0.080" SQFT
G5<CA>	DESTINATION	90 X 42	26.25	1	GREEN	III	WHITE	IX	X				26.25
G8-22<CA>	STREET NAME	66 X 30	13.75	2	GREEN	III	WHITE	IX	X			27.50	
G1-1<CA>	DESTINATION WITH ARROW	60 X 30	12.50	2	GREEN	III	WHITE	IX	X				25.00
G28-2(49)<CA>	STATE ROUTE MARKER	24 X 25	4.17	2	GREEN	III	WHITE	III	X	8.34			
W1-7	TWO DIRECTION ARROW	48 X 24	8.00	1	YELLOW	IX	BLACK		X		8.00		
N-1<CA>	OBJECT MARKER	18 X 18	2.25	1	YELLOW	III				2.25			
W11-8	FIRE STATION SYMBOL	36 X 36	9.00	1	YELLOW	III	BLACK		X	9.00			
G15-2 L+<CA>	POINT OF HISTORICAL INTEREST	36 X 20	5.00	1	BROWN	III	WHITE	III	X	5.00			
R1-1	STOP	30 X 30	6.25	1	RED	IX	WHITE	IX	X	6.25			
M3-1	NORTH	24 X 12	2.00	1	GREEN	III	WHITE	III	X	2.00			
M3-3	SOUTH	24 X 12	2.00	1	GREEN	III	WHITE	III	X	2.00			
TOTAL										34.84	8.00	27.50	51.25

NOTE: ALL SIGN CODES ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA <CA> SIGN CODES.



L = LENGTH OF SIGN
D = DEPTH OF SIGN

SIGN QUANTITIES

SQ-2

REVISED BY | DATE REVISED
KRIS ALBERS | JACK KEMMERLY
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: SERGIO ACEVES
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC

LAST REVISION 04-02-13 | DATE PLOTTED => 11-JUN-2013 | TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	22	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 CIVIL STATE OF CALIFORNIA

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

ROADWAY QUANTITIES

STATION	ROADWAY EXCAVATION	ROCK EXCAVATION	(N) EMBANKMENT	HOT MIX ASPHALT (TYPE A) STRUCTURAL SECTION	HOT MIX ASPHALT (TYPE A) ROUTE 49	HOT MIX ASPHALT (TYPE A) DRIVEWAY 2 AND RATTLESNAKE BAR Rd	HOT MIX ASPHALT (TYPE A) DRIVEWAY 1	HOT MIX ASPHALT (TYPE A) UD TRENCH BACKFILL	HOT MIX ASPHALT (TYPE A) SAFETY EDGE	COLD PLANE ASPHALT CONCRETE PAVEMENT ROUTE 49	COLD PLANE ASPHALT CONCRETE PAVEMENT DRIVEWAY 2 AND RATTLESNAKE BAR Rd	CLASS 2 AGGREGATE BASE	HOT MIX ASPHALT (OPEN GRADED)	TACK COAT	(N) SAFETY EDGE	CRACK TREATMENT
	CY	CY	CY	TON						SQYD		CY	TON	TON	LF	LNMI
"A1" 108+50 TO "A1" 125+50	4,760	840	525	1,200	340					5,300		1,255	320	5.2		0.6
L+ "A1" 116+20 TO L+ "A1" 119+79	70		2			170					920			1.2		
R+ "A1" 118+24	20						14					13		0.6		
FROM SHEET Q-2								17								
L+ "A1" 108+50 TO L+ "A1" 116+00									18			28			750	
R+ "A1" 108+50 TO R+ "A1" 118+00									22			35			950	
R+ "A1" 118+70 TO R+ "A1" 122+80									10			16			410	
L+ "A1" 119+50 TO L+ "A1" 122+80									8			13			330	
SUBTOTAL	4,850	840	527	1,200	340	170	14	17	58	5,300	920	1,360	320	7.0	2,440	0.6
TOTAL	4,850	840	—	1,799						6,220		1,360	320	7.0	—	0.6

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

MINOR HOT MIX ASPHALT

DESCRIPTION	TON
FROM PLACE HOT MIX ASPHALT DIKE TABLE	2
FROM PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) TABLE	7
TOTAL	9

PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)

STATION	DESCRIPTION	MINOR HOT MIX ASPHALT	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)
		TON	SQYD
FROM SHEET DQ-1	PAVED DITCH	3	20
R+ "A1" 122+81	OVERSIDE DRAIN	4	38
	TOTAL	7*	58

* QUANTITY INCLUDED IN MINOR HOT MIX ASPHALT TABLE.

PLACE HOT MIX ASPHALT DIKE

STATION	MINOR HOT MIX ASPHALT	TYPE C
	TON	LF
R+ "A1" 122+82 TO R+ "A1" 124+70	2	188
TOTAL	2*	188

* QUANTITY INCLUDED IN MINOR HOT MIX ASPHALT TABLE.

REPLACE ASPHALT CONCRETE SURFACING

STATION	CY
"A1" 116+00 TO "A1" 120+00	163
TOTAL	163

SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
A.G. CHIN | ERIC SOUZA
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

LAST REVISION 03-13-13 | DATE PLOTTED => 11-JUN-2013 | TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	23	36

REGISTERED CIVIL ENGINEER 6-7-13 DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ERIC NORMAN SOUZA No. 75706 Exp. 6-30-14 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.

UNDERDRAIN QUANTITIES

STATION	REMOVE UNDERDRAIN	8" PERFORATED STEEL PIPE UNDERDRAIN	HOT MIX ASPHALT (TYPE A)	(N) 8" PERFORATED STEEL PIPE UNDERDRAIN TERMINAL RISER	(N) 8" PERFORATED STEEL PIPE UNDERDRAIN RISER	UNDERDRAIN MARKER
	LF	LF	TON	EA	EA	EA
15.50' Rt "A1" 108+50.00 TO 41.15' Lt "A1" 118+85.00	200	1,054	17	1	2	2
TOTAL	200	1,054	17*			2

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

FENCE

STATION	REMOVE FENCE	TEMPORARY FENCE	FENCE (TYPE WM AND BW)
	LF	LF	LF
Rt "A1" 113+75 TO Rt "A1" 115+73	218	218	218
Rt "A1" 119+37 TO Rt "A1" 125+01	584	584	584
SUBTOTAL	802	802	802
TOTAL	802	802	802

TEMPORARY WATER POLLUTION CONTROL QUANTITIES

	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	TEMPORARY COVER	TEMPORARY FIBER ROLL	TEMPORARY LARGE SEDIMENT BARRIER	TEMPORARY SILT FENCE	RAIN EVENT ACTION PLAN	STORM WATER SAMPLING AND ANALYSIS DAY	STORM WATER ANNUAL REPORT
	EA	SQYD	SQYD	LF	LF	LF	EA	EA	EA
TOTAL	6	2,500	2,500	5,400	2,700	2,700	4	2	1

TEMPORARY FENCE (TYPE ESA)

STATION	LF
Rt "A1" 124+00 TO Rt "A1" 125+52	350
TOTAL	350

MARKER (CULVERT)

DRAINAGE SYSTEM No.	EA
1	2
2	2
3	2
4	2
5	1
TOTAL	9

TREATED WOOD WASTE

	TREATED WOOD WASTE
	LB
TOTAL	500

SUMMARY OF QUANTITIES

Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC

FUNCTIONAL SUPERVISOR: STEPHEN WRIGHT
CALCULATED-DESIGNED BY: A.G. CHIN
CHECKED BY: ERIC SOUZA
REVISED BY
DATE REVISED

LAST REVISION 03-13-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	24	36

LICENSED LANDSCAPE ARCHITECT

6-10-13
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT JAMES G. WILLIAMSON No. 5415 Signature 02-28-14 Renewal Date 05-23-13 Date 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.

FIBER ROLLS

SEQUENCE	ITEM DESCRIPTION	MATERIAL		REMARKS
		DESCRIPTION	TYPE	
IN EC (TYPE 1) AREAS FIBER ROLLS MUST BE INSTALLED BEFORE COMPOST	FIBER ROLLS	FIBER ROLL	TYPE "A" OR "B" 8" TO 10" Dia	TYPE 1 FIBER ROLL INSTALLATION

EROSION CONTROL (TYPE 1)

SEQUENCE	ITEM DESCRIPTION	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	270 CY/ACRE
		SEED	--	45 LB/ACRE

EROSION CONTROL (TYPE 2)

SEQUENCE	ITEM DESCRIPTION	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	EROSION CONTROL (DRY SEED)	SEED	--	45 LB/ACRE
		FERTILIZER	ORGANIC	1200 LB/ACRE
STEP 2	ROLLED EROSION CONTROL PRODUCT (BLANKET)	BLANKET	TYPE A	--

SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
BROMUS CARINATUS[1] (CALIFORNIA BROME)	80	15
ESCHSCHOLZIA CALIFORNICUM (CALIFORNIA POPPY)	75	3
ELYMUS GLAUCUS[1] (BLUE WILDRYE)	80	9
LUPINUS BICOLOR[1] (PIGMY-LEAVED LUPINE)	80	9
NASSELLA PULCHRA[1] (PURPLE NEEDLEGRASS)	70	9

[1] SEED PRODUCTED IN NORTHERN CALIFORNIA CENTRAL VALLEY/SIERRA FOOTHILL ONLY.

EROSION CONTROL LEGEND

ECL-1

REVISED BY | DATE REVISED
J. WILLIAMSON | T. C. JOHNSON
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT
T CHRIS JOHNSON
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

LAST REVISION 03-12-13 | DATE PLOTTED => 11-JUN-2013 TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	25	36

LICENSED LANDSCAPE ARCHITECT

6-10-13
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
JAMES G. WILLIAMSON
No. 5415
Signature
02-28-14
Renewal Date
05-23-13
Date
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.

NOTE:

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

LEGEND:

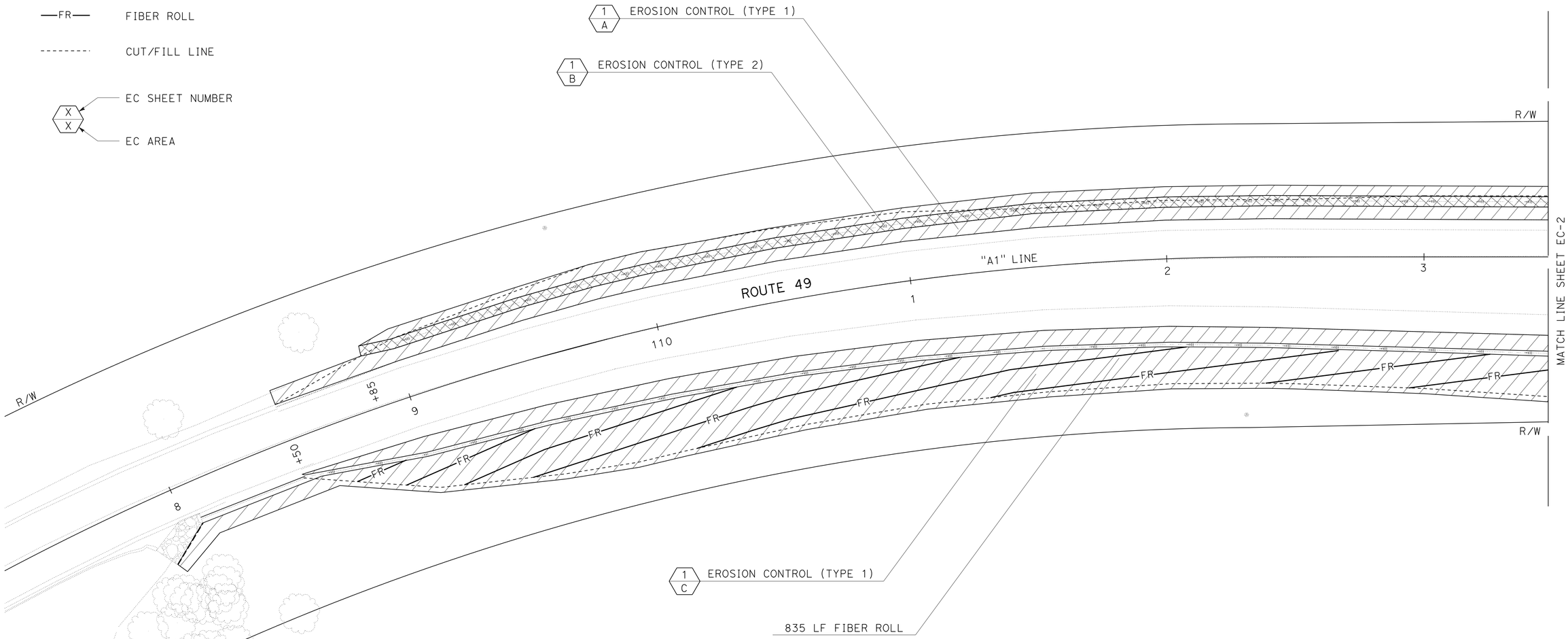
EROSION CONTROL (TYPE 1)
- COMPOST

EROSION CONTROL (TYPE 2)
- EROSION CONTROL (DRY SEED)
- ROLLED EROSION CONTROL PRODUCT (BLANKET)

—FR— FIBER ROLL

--------- CUT/FILL LINE

X/X EC SHEET NUMBER / EC AREA



EROSION CONTROL PLAN

SCALE: 1" = 20'

EC-1

APPROVED FOR EROSION CONTROL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: T CHRIS JOHNSON

CALCULATED-DESIGNED BY: J. WILLIAMSON
CHECKED BY: T. C. JOHNSON

REVISED BY / DATE REVISED

LAST REVISION 04-09-13 | DATE PLOTTED => 11-JUN-2013 | TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	26	36

LICENSED LANDSCAPE ARCHITECT

6-10-13
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT JAMES G. WILLIAMSON No. 5415 Signature 02-28-14 Renewal Date 05-23-13 Date STATE OF CALIFORNIA

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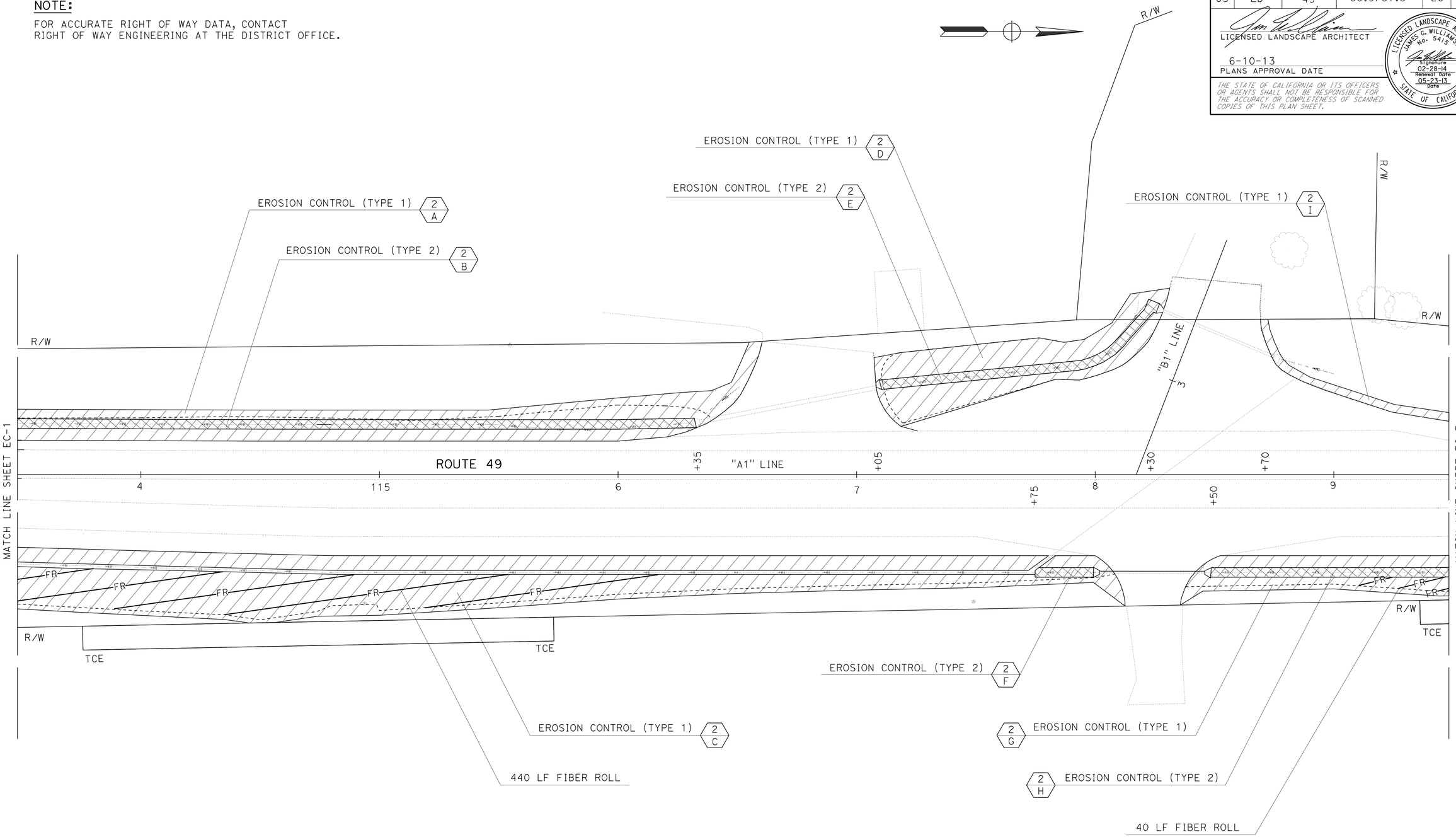
NOTE:

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



APPROVED FOR EROSION CONTROL WORK ONLY

EROSION CONTROL PLAN

SCALE: 1" = 20'

EC-2

REVISED BY	DATE REVISED
J. WILLIAMSON	
T. C. JOHNSON	

CALCULATED-DESIGNED BY: J. WILLIAMSON
CHECKED BY: T. C. JOHNSON

SENIOR LANDSCAPE ARCHITECT: T CHRIS JOHNSON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION 04-09-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	27	36

LICENSED LANDSCAPE ARCHITECT

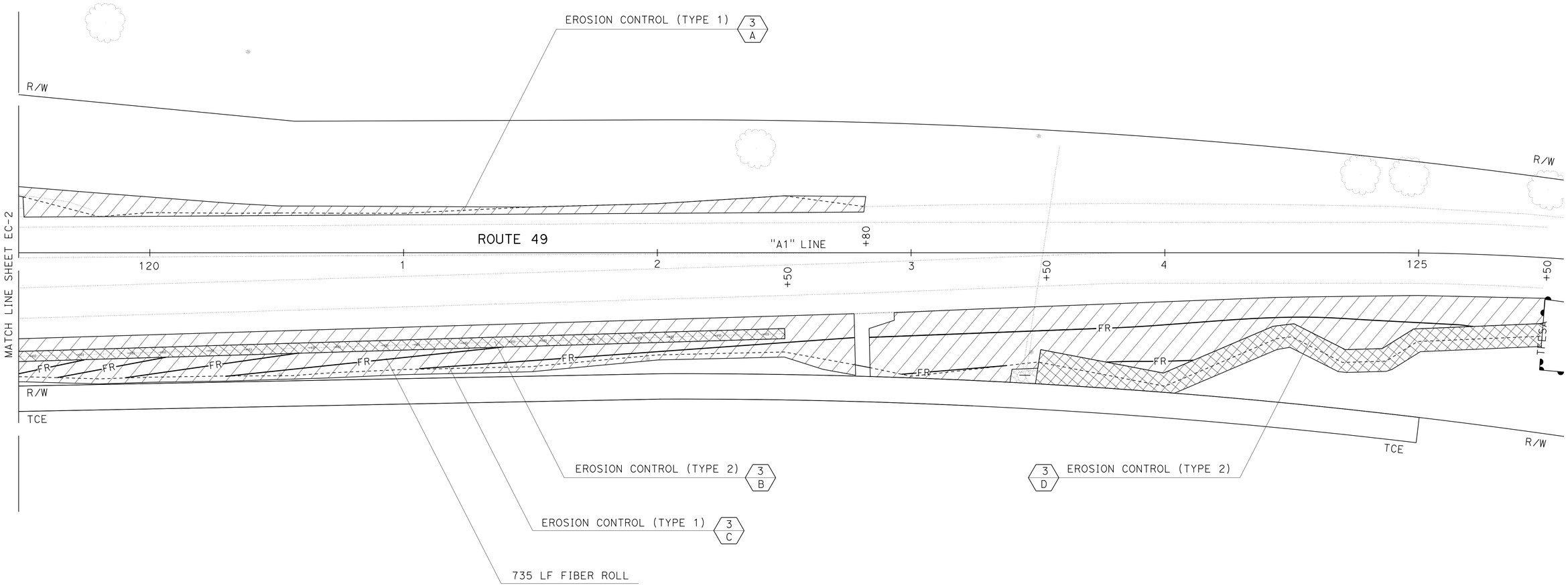
6-10-13
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
JAMES G. WILLIAMSON
No. 5415
Signature
02-28-14
Renewal Date
05-23-13
Date
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.

NOTE:

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



EROSION CONTROL PLAN

SCALE: 1" = 20'

EC-3

APPROVED FOR EROSION CONTROL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: T CHRIS JOHNSON

CALCULATED-DESIGNED BY: J. WILLIAMSON
CHECKED BY: T. C. JOHNSON

REVISED BY
DATE REVISED

LAST REVISION 12-07-12
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	28	36

LICENSED LANDSCAPE ARCHITECT

6-10-13
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT JAMES G. WILLIAMSON No. 5415 Signature 02-28-14 Renewal Date 05-23-13 Date STATE OF CALIFORNIA

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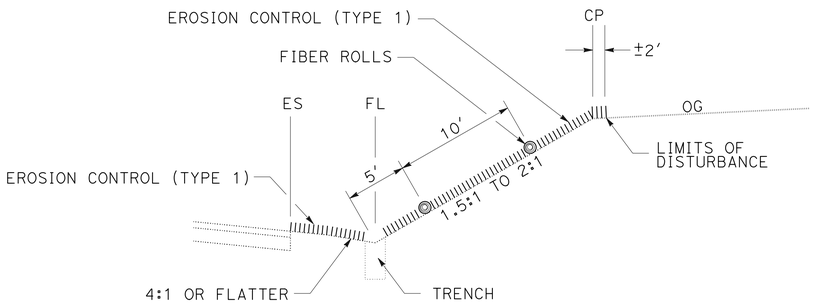
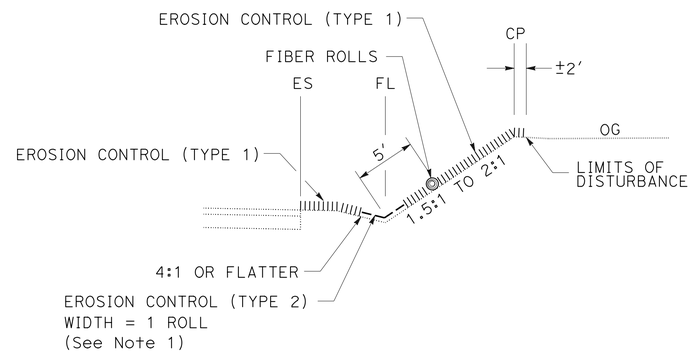


ROUTE 49

STA "A1" LINE 108+50 TO "A1" 117+75

NORTHBOUND



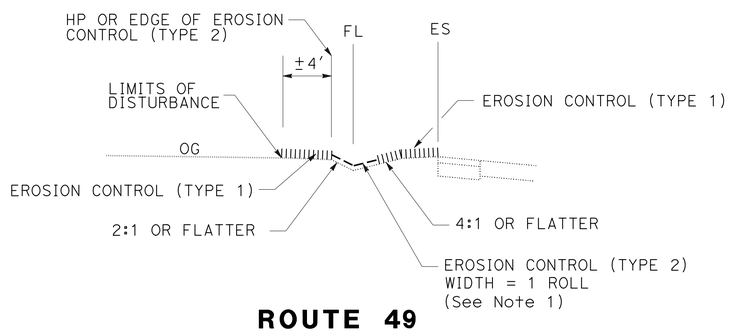
ROUTE 49

STA "A1" LINE 117+75 TO "A1" 118+00
STA "A1" LINE 118+50 TO "A1" 122+50

NORTHBOUND

NOTE:

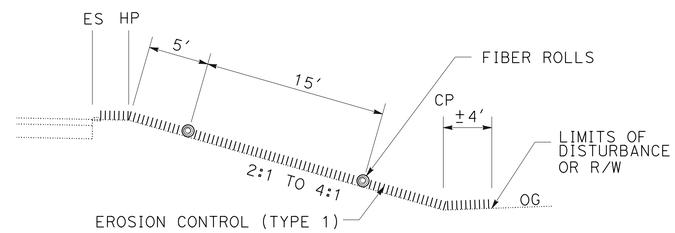
1. REFER TO STANDARD PLAN T55 FOR INSTALLATION OF ROLLED EROSION CONTROL PRODUCT (BLANKET) IN A FLOW LINE



ROUTE 49

STA "A1" LINE 108+85 TO "A1" 116+35

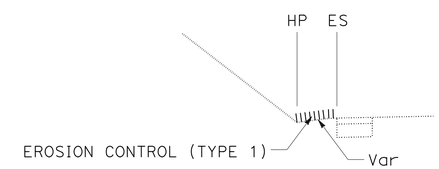
SOUTHBOUND



ROUTE 49

STA "A1" LINE 122+50 TO "A1" 123+50

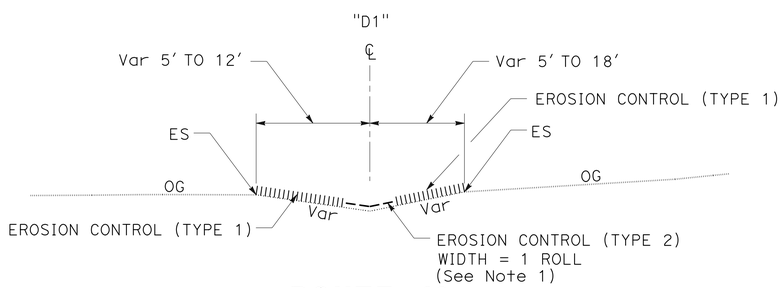
NORTHBOUND



ROUTE 49

STA "A1" LINE 118+70 TO "A1" 122+80

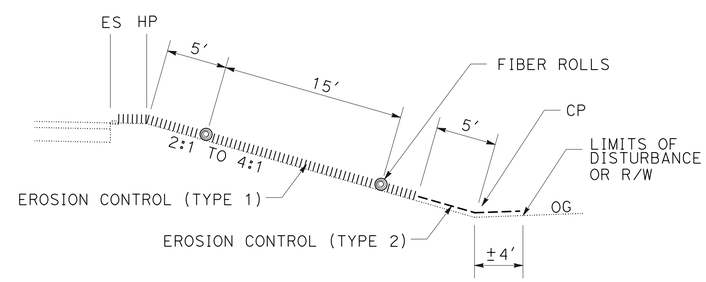
SOUTHBOUND



ROUTE 49

STA "A1" LINE 117+05 TO "A1" 118+30

SOUTHBOUND



ROUTE 49

STA "A1" LINE 123+50 TO "A1" 125+50

NORTHBOUND

EROSION CONTROL DETAILS

NO SCALE

ECD-1

REVISED BY	DATE REVISED
J. WILLIAMSON	T. C. JOHNSON

CALCULATED-DESIGNED BY	CHECKED BY

SENIOR LANDSCAPE ARCHITECT
T CHRIS JOHNSON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION 04-24-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	29	36

LICENSED LANDSCAPE ARCHITECT

6-10-13
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT JAMES G. WILLIAMSON No. 5415 Signature 02-28-14 Renewal Date 05-23-13 Date 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.

FIBER ROLLS

SHEET	STATION	LOCATION	FIBER ROLLS
			LF
EC-1	"A" LINE 108+65 TO 113+50	R†	835
EC-2	"A" LINE 113+50 TO 116+20	R†	440
EC-2	"A" LINE 119+00 TO 119+50	R†	40
EC-3	"A" LINE 119+50 TO 125+50	R†	735
		TOTAL	2,050

EROSION CONTROL

SHEET	EROSION CONTROL LOCATION	DESCRIPTION	COMPOST	EROSION CONTROL (DRY SEED)	ROLLED EROSION CONTROL PRODUCT (BLANKET)
			SQFT	SQFT	SQFT
EC-1	A	EC (TYPE 1)	4,650	--	--
	B	EC (TYPE 2)	--	1,870	1,870
	C	EC (TYPE 1)	13,210	--	--
EC-2	A	EC (TYPE 1)	3,275	--	--
	B	EC (TYPE 2)	--	1,135	1,135
	C	EC (TYPE 1)	9,370	--	--
	D	EC (TYPE 1)	2,275	--	--
	E	EC (TYPE 2)	--	505	505
	F	EC (TYPE 2)	--	100	100
	G	EC (TYPE 1)	1,330	--	--
	H	EC (TYPE 2)	--	400	400
	I	EC (TYPE 1)	330	--	--
EC-3	A	EC (TYPE 1)	1,775	--	--
	B	EC (TYPE 2)	--	1,210	1,210
	C	EC (TYPE 1)	10,385	--	--
	D	EC (TYPE 2)	--	1,940	1,940
		TOTAL	46,600	7,160	7,160

EROSION CONTROL QUANTITIES

ECQ-1

REVISED BY | DATE REVISED
J. WILLIAMSON | T. C. JOHNSON
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT
T CHRIS JOHNSON

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION 03-12-13
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 16:39

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	30	36

REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

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

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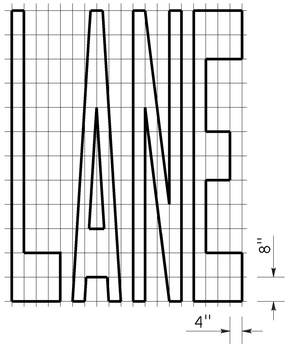
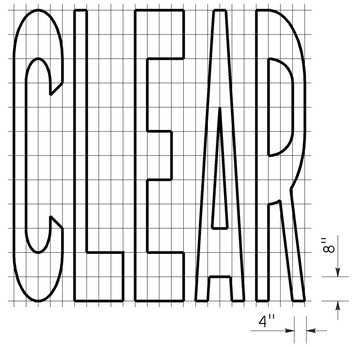
TO ACCOMPANY PLANS DATED 6-10-13



A=24 ft²



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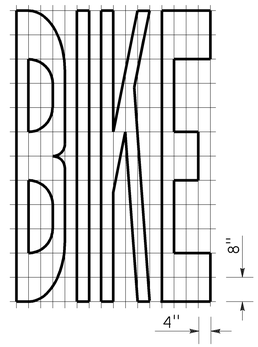

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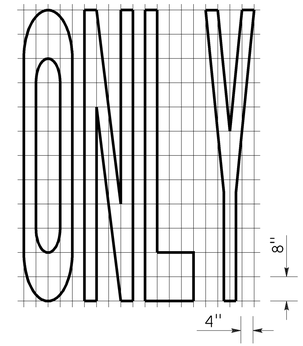

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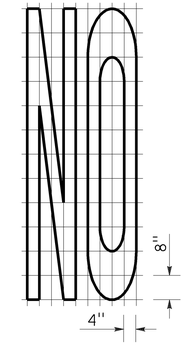

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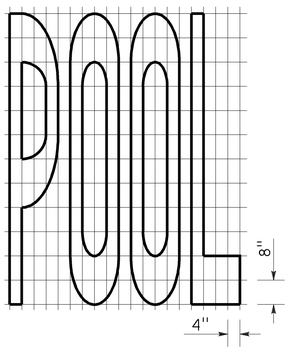

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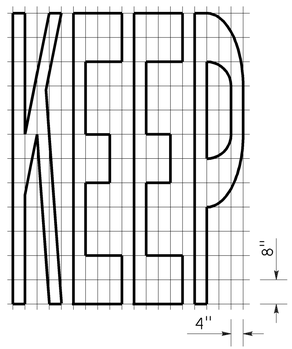

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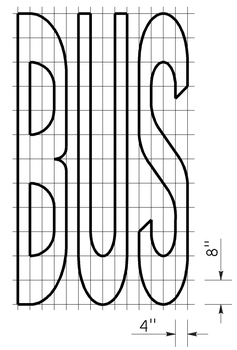
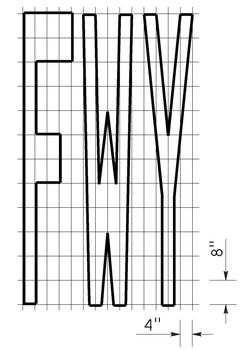
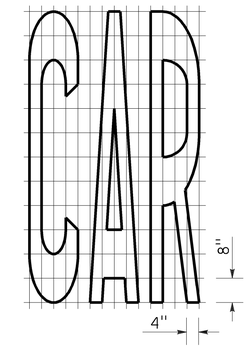


A=20 ft²

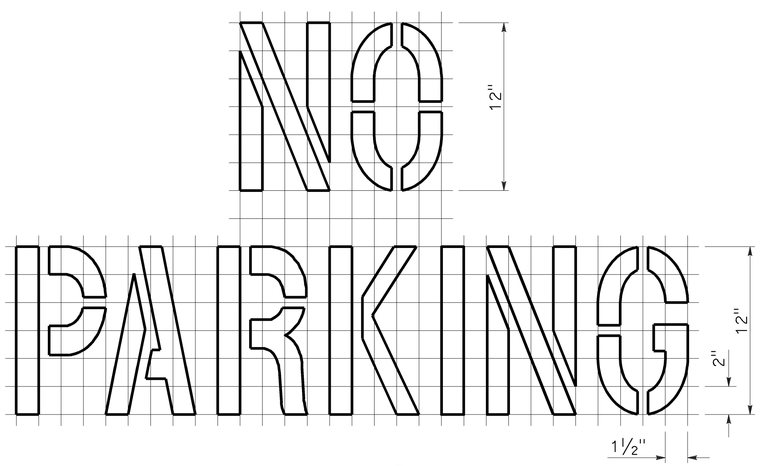


A=16 ft²

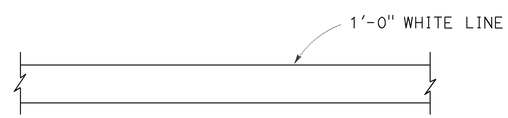


A=17 ft²

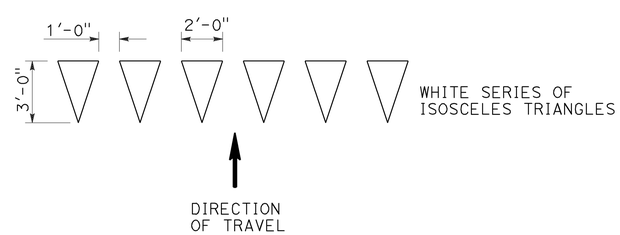
WORD MARKINGS			
ITEM	ft²	ITEM	ft²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



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.

REVISED STANDARD PLAN RSP A24E

2010 REVISED STANDARD PLAN RSP A24E

6-12-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	31	36

Raymond Don Tsztoo
REGISTERED CIVIL ENGINEER

October 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Raymond Don Tsztoo
No. C37332
Exp. 6-30-14
CIVIL
STATE OF CALIFORNIA

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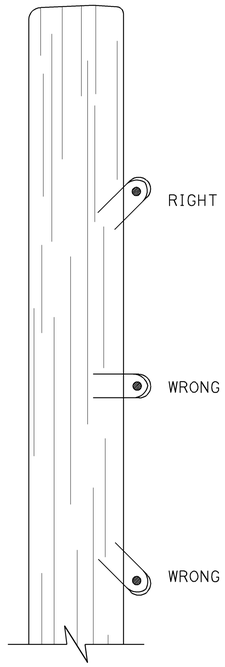
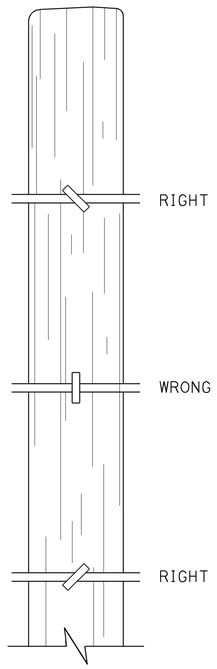
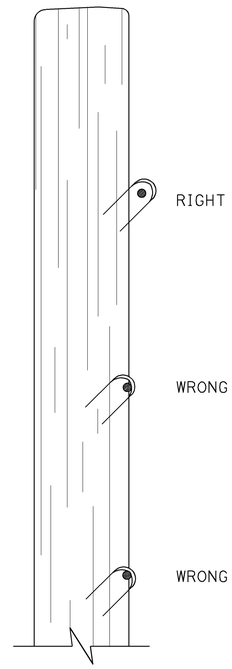
TO ACCOMPANY PLANS DATED 6-10-13



DRIVE STAPLES AT ANGLE



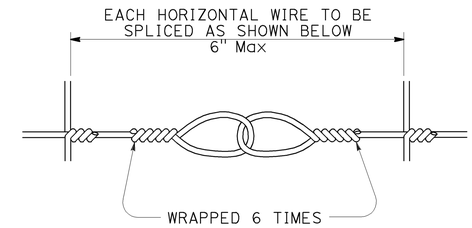
DO NOT DRIVE STAPLES PARALLEL TO SIDE OF POST



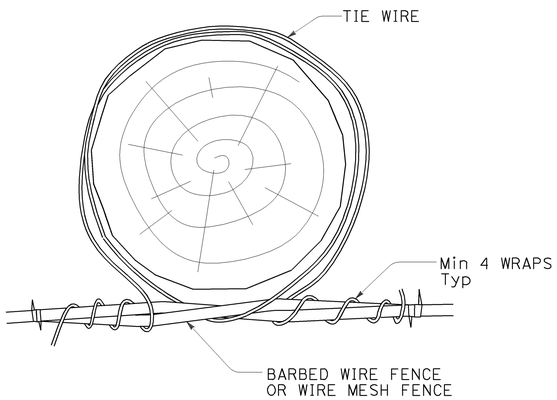
LEAVE WIRE LOOSE IN STAPLE

LINE POST STAPLING DETAILS

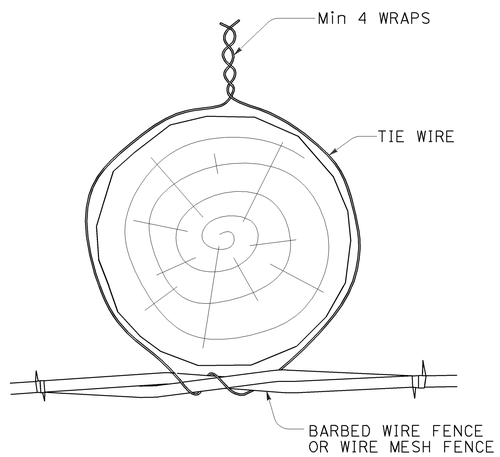
(Apply to rectangular/square and round posts)
Do not staple vertical wire in wire mesh.



SPLICE DETAIL FOR BARBED WIRE/WIRE MESH FENCE



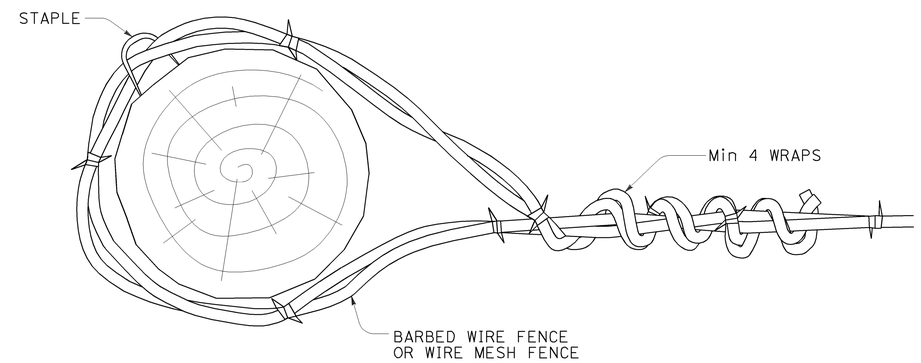
OPTION A



OPTION B

LINE POST WIRE TIE OPTION DETAILS

(Option details also apply to rectangular/square posts)



END, LATCH, PULL, AND CORNER POST DETAIL

(Also applies to rectangular/square posts)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

BARBED WIRE AND WIRE MESH FENCE - MISCELLANEOUS DETAILS

NO SCALE

RSP A86D DATED OCTOBER 19, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A86D

2010 REVISED STANDARD PLAN RSP A86D

10-9-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	32	36

REGISTERED CIVIL ENGINEER

January 20, 2012
PLANS APPROVAL DATE

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

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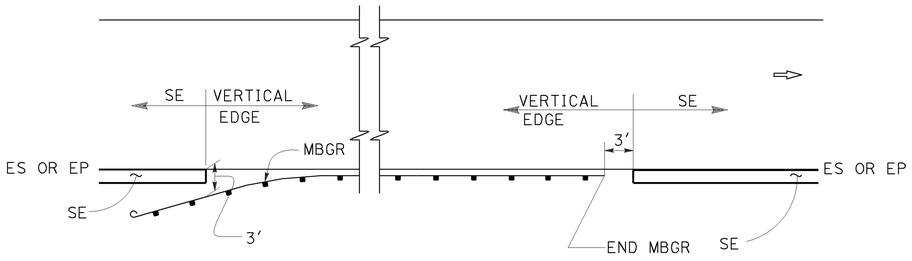
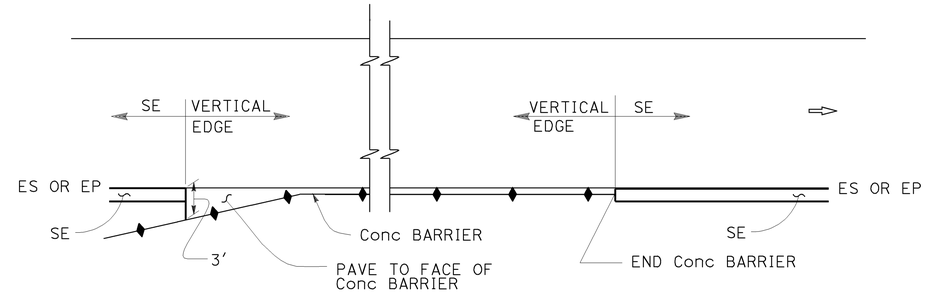
TO ACCOMPANY PLANS DATED 6-10-13



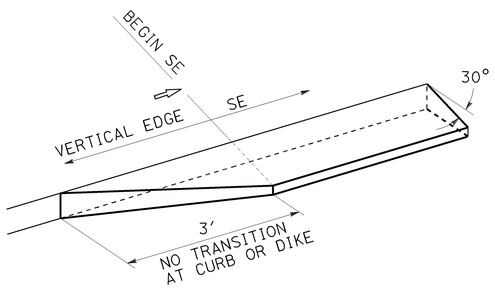
MBGR



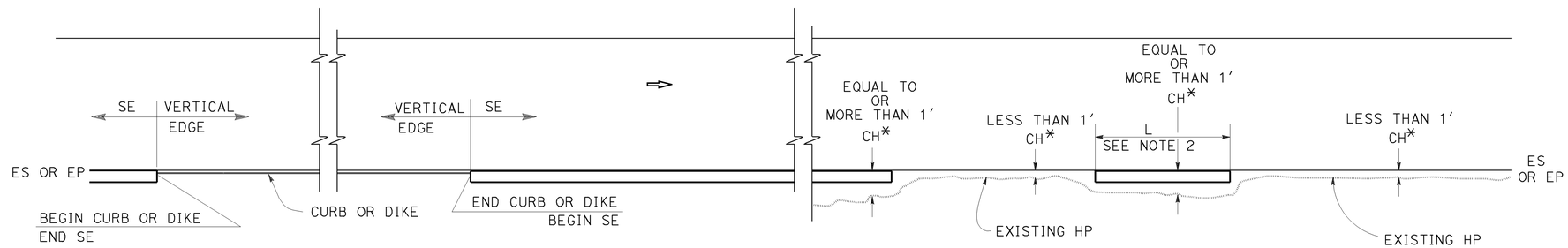
CONCRETE BARRIER

ABBREVIATIONS:

SE SAFETY EDGE



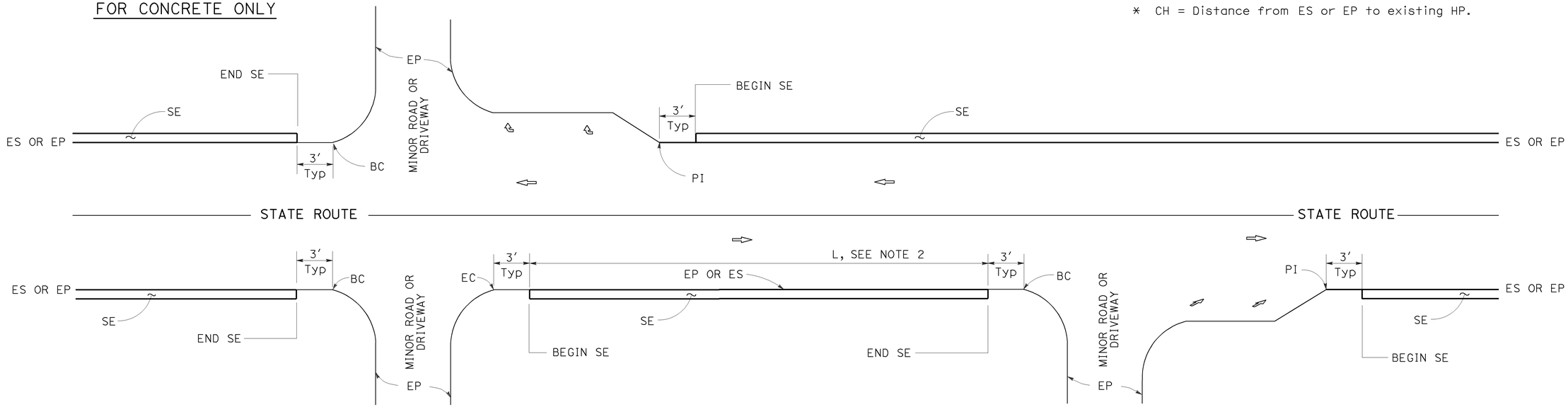
TRANSITION DETAIL FOR CONCRETE ONLY



CURB OR DIKE

NARROW SIDE SLOPE

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



INTERSECTION

DRIVEWAY AND INTERSECTION

MINOR ROADWAY OR DRIVEWAY

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS

NO SCALE

RSP P74 DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P74

2010 REVISED STANDARD PLAN RSP P74

01-05-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	33	36

REGISTERED CIVIL ENGINEER

January 20, 2012
PLANS APPROVAL DATE

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

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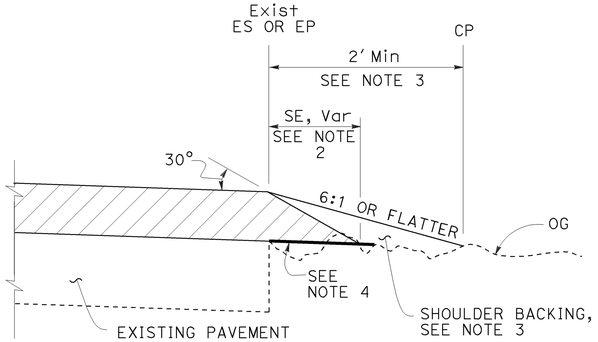
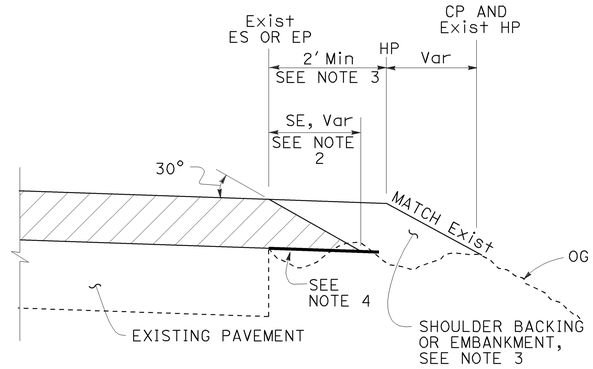
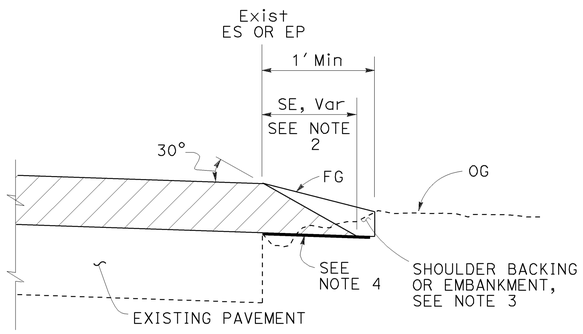
TO ACCOMPANY PLANS DATED 6-10-13



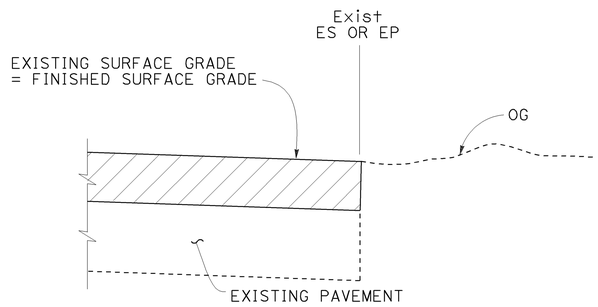
CASE A
Safety Edge



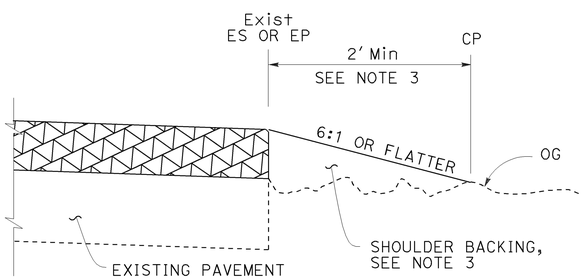
CASE B
Safety Edge



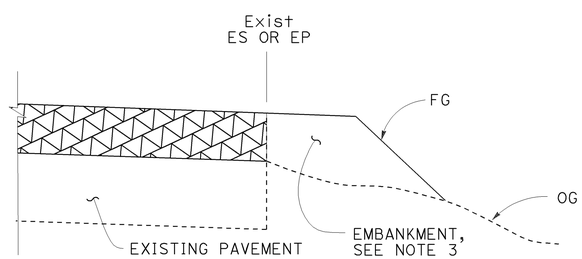
CASE C
Safety Edge



CASE D
Vertical Edge



CASE E
Vertical Edge



CASE F
Vertical Edge
* See Table A and Revised Std Plan RSP P74

LEGEND:

- HMA OVERLAY
- HMA OR CONCRETE OVERLAY
- CONCRETE OVERLAY

ABBREVIATIONS:

SE SAFETY EDGE
TT TOTAL THICKNESS OF SE

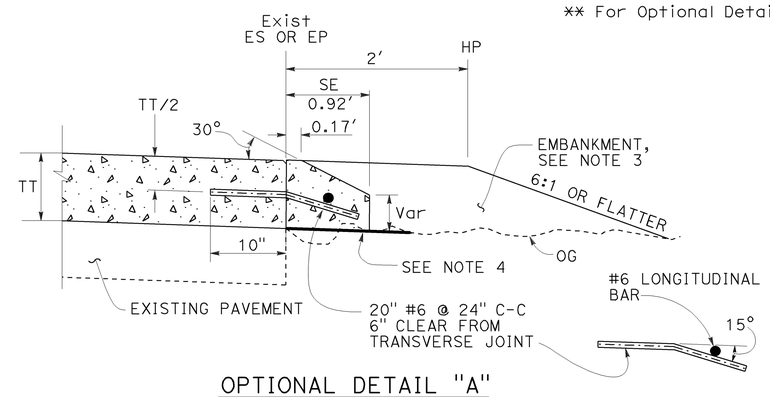
TABLE A
EDGE TREATMENT FOR VARIOUS OVERLAY THICKNESS AND CONDITIONS

	OVERLAY THICKNESS	
FIELD CONDITION	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

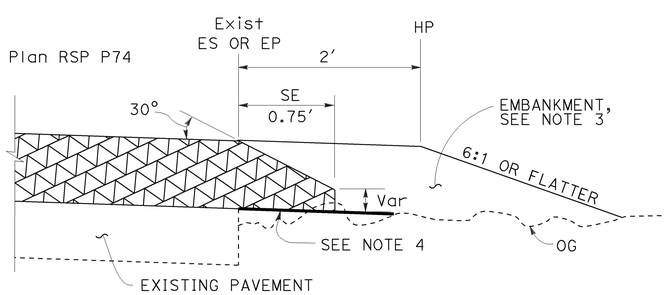
ADDITIONAL HMA OR CONCRETE QUANTITIES FOR SE/SIDE/MILE

TYPICAL CROSS SECTION	TT	TOTAL ADDITIONAL MATERIAL FOR SE/SIDE/MILE		
		HMA (TON)	CONCRETE (CY)*	CONCRETE (CY)**
TT	0.15′	NA	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
TT 0.43′	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"



OPTIONAL DETAIL "A"
For concrete overlay
See Note 5



DETAIL "A"
For HMA overlay thickness more than 0.43′ or concrete overlay

NOTES:

1. For limits of safety 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 safety edge. 1′ minimum width
5. Safety edge transverse joint must match overlay transverse joint. End of #6 longitudinal bar must be 2" ±½" clear from transverse joint.
6. Safety edge is not needed in the area of MBGR, barrier, right turn lane and acceleration lane. See Revised Standard Plan RSP P74.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE TREATMENTS-OVERLAYS

NO SCALE

RSP P75 DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P75

2010 REVISED STANDARD PLAN RSP P75

01-09-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	34	36

REGISTERED CIVIL ENGINEER

January 20, 2012
PLANS APPROVAL DATE

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

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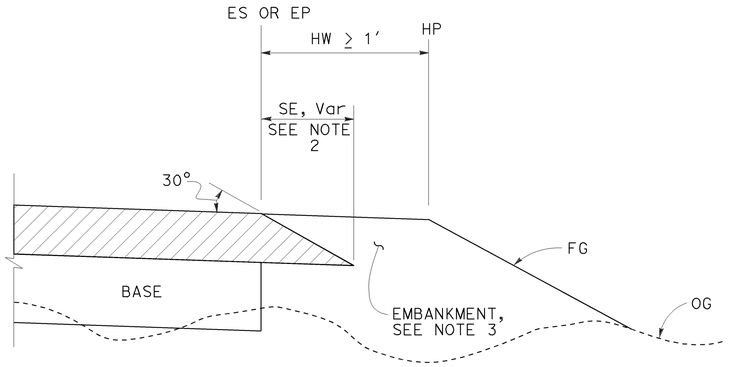
TO ACCOMPANY PLANS DATED 6-10-13

LEGEND:

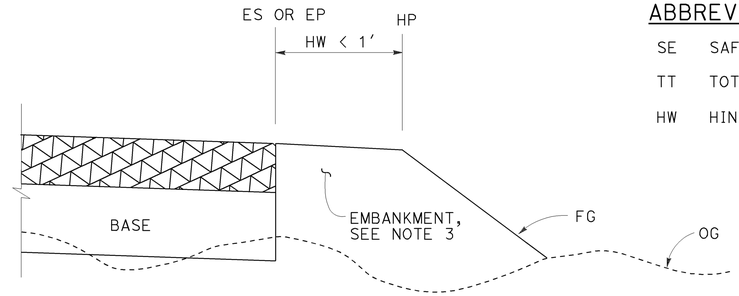
- HMA PAVEMENT
- HMA OR CONCRETE PAVEMENT
- CONCRETE PAVEMENT

ABBREVIATIONS:

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

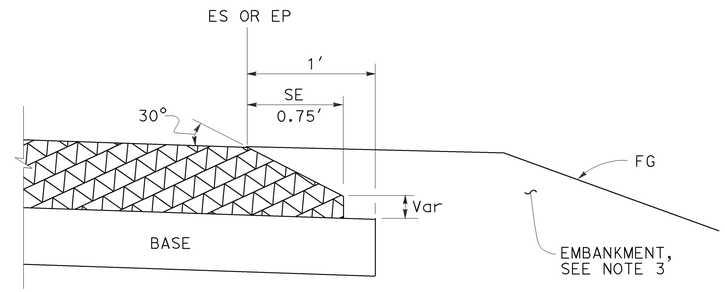


CASE K
Safety Edge - Fill Section, HW ≥ 1′

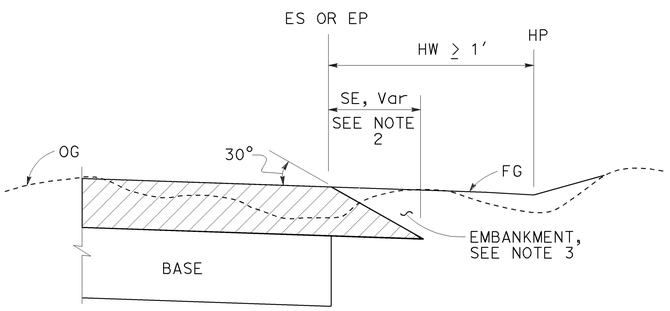


CASE L
Vertical Edge - Fill Section, HW < 1′

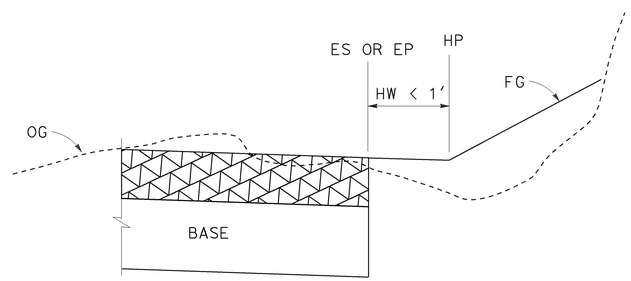
FILL SECTION



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

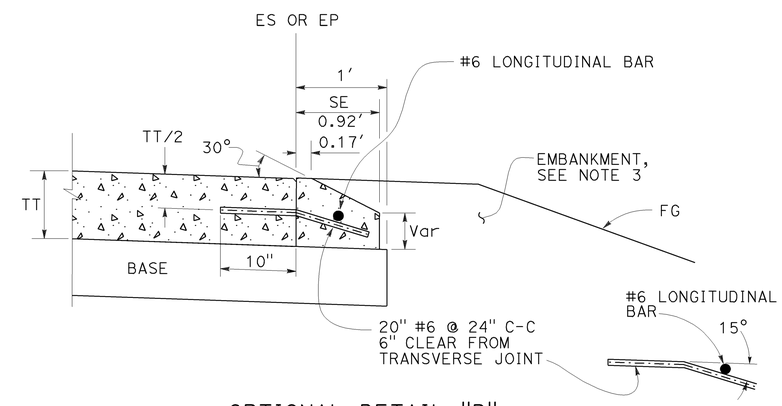


CASE M
Safety Edge - Cut Section, HW ≥ 1′



CASE N
Vertical Edge - Cut Section, HW < 1′

CUT SECTION



OPTIONAL DETAIL "B"
For concrete pavement
See Note 4

NOTES:

1. For limits of safety edge and vertical edge treatments, see Revised Standard Plan RSP P74
2. Details shown for HMA pavement thickness less than 0.43′. See Detail "B" for HMA pavement thickness more than 0.43′ or concrete pavement.
3. For locations and limits of embankment see project plans.
4. Safety edge transverse joint must match pavement transverse joint. End of #6 longitudinal bar must be 2" ±½" clear from transverse joint.
5. Safety edge is not needed in the area of MBGR, 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 JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P76

2010 REVISED STANDARD PLAN RSP P76

01-09-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	35	36

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Gurinderpal Bhullar No. C48815 Exp. 9-30-14 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.

TO ACCOMPANY PLANS DATED 6-10-13

NOTES:

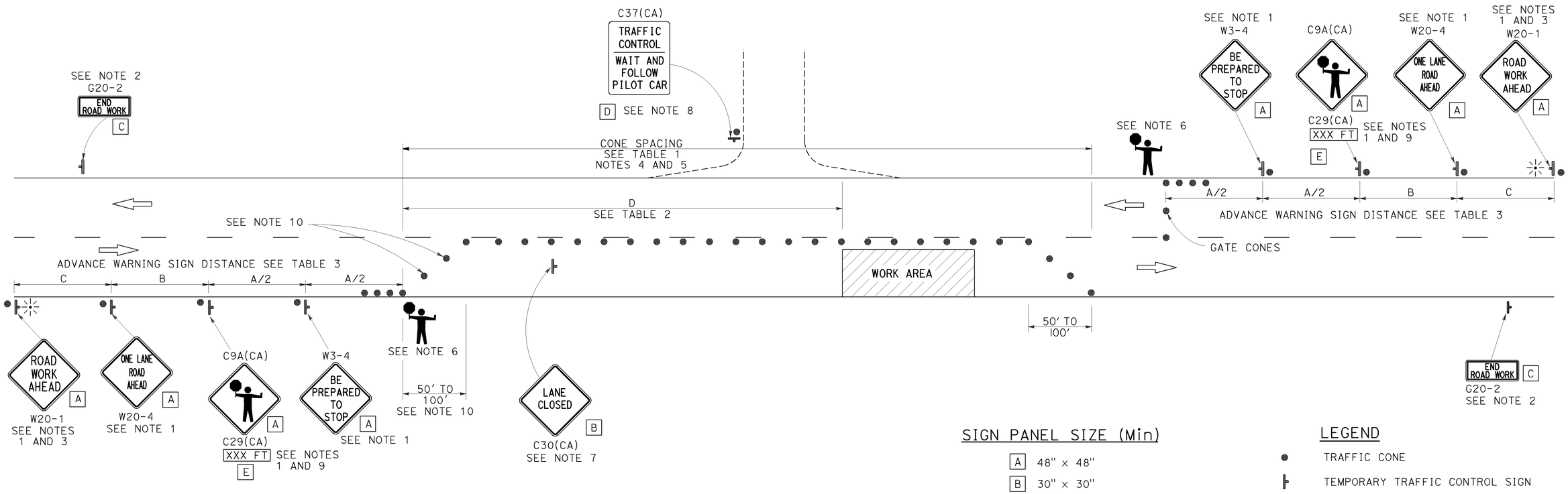
See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as approriate, 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



SIGN PANEL SIZE (Min)

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

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

NOTES:

1. 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.
2. 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.
3. 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.
4. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
6. 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.
7. 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.
8. 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.
9. An optional C29(CA) sign may be placed below the C9A(CA) sign.
10. 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

4-2-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	49	30.9/31.3	36	36

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Gurinderpal Bhullar
No. C48815
Exp. 9-30-14
CIVIL
STATE OF CALIFORNIA

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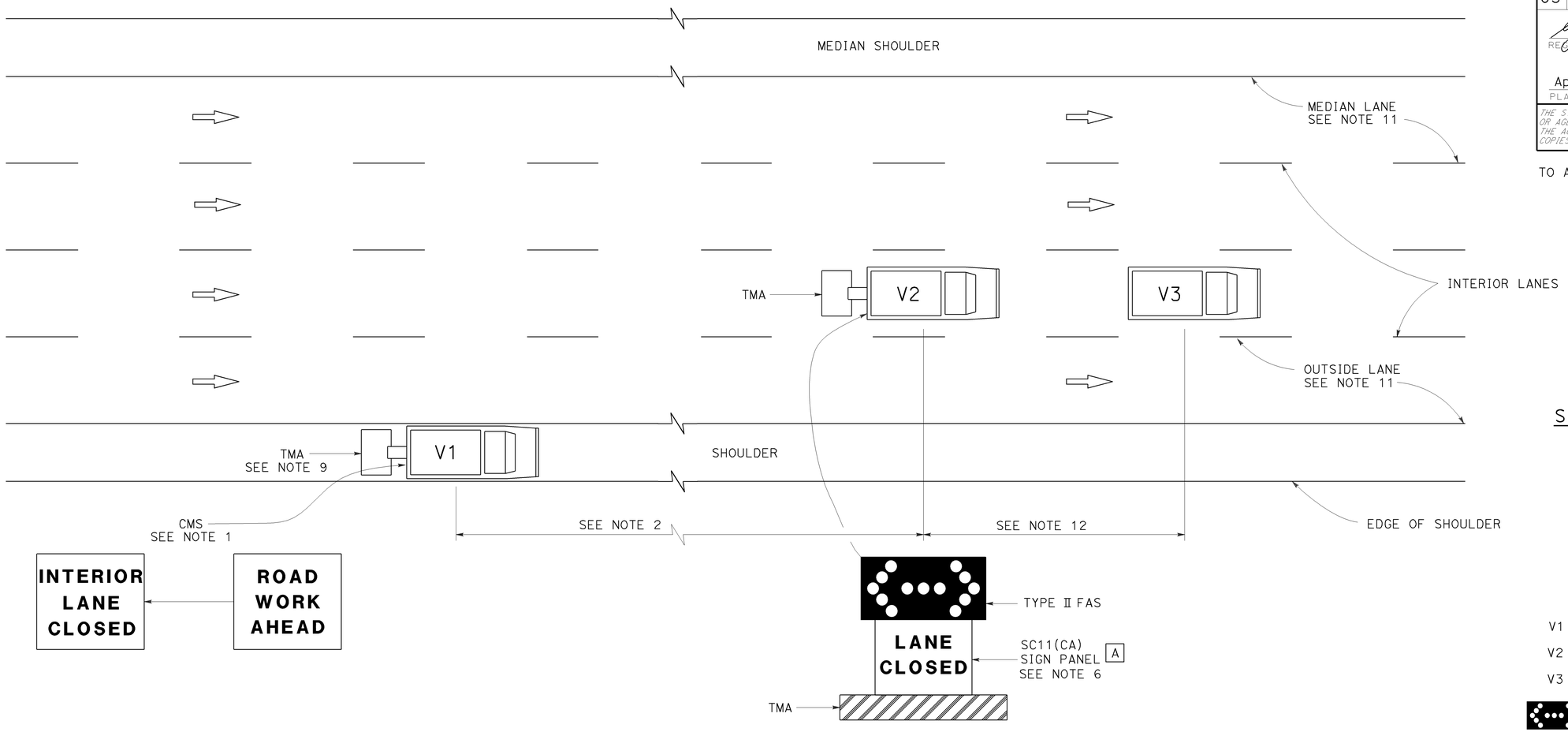
TO ACCOMPANY PLANS DATED 6-10-13



MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

SIGN PANEL SIZE (Min)

A 54" x 42"

LEGEND

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

NOTES:

1. A changeable message 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 "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.
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.
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 median lane or outside lane of multilane highways, use Revised Standard Plan T15.
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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

RSP T16 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T16
DATED MAY 20, 2011 - PAGE 244 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T16

2010 REVISED STANDARD PLAN RSP T16

12-18-12