Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	1	13

INDEX OF PLANS

SHEET No	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3-4	CONSTRUCTION DETAILS
5	CONSTRUCTION AREA SIGNS
6-7	PAVEMENT DELINEATION QUANTITIES
8	SUMMARY OF QUANTITIES
9-10	TRAFFIC CONTROL SYSTEMS
11-13	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

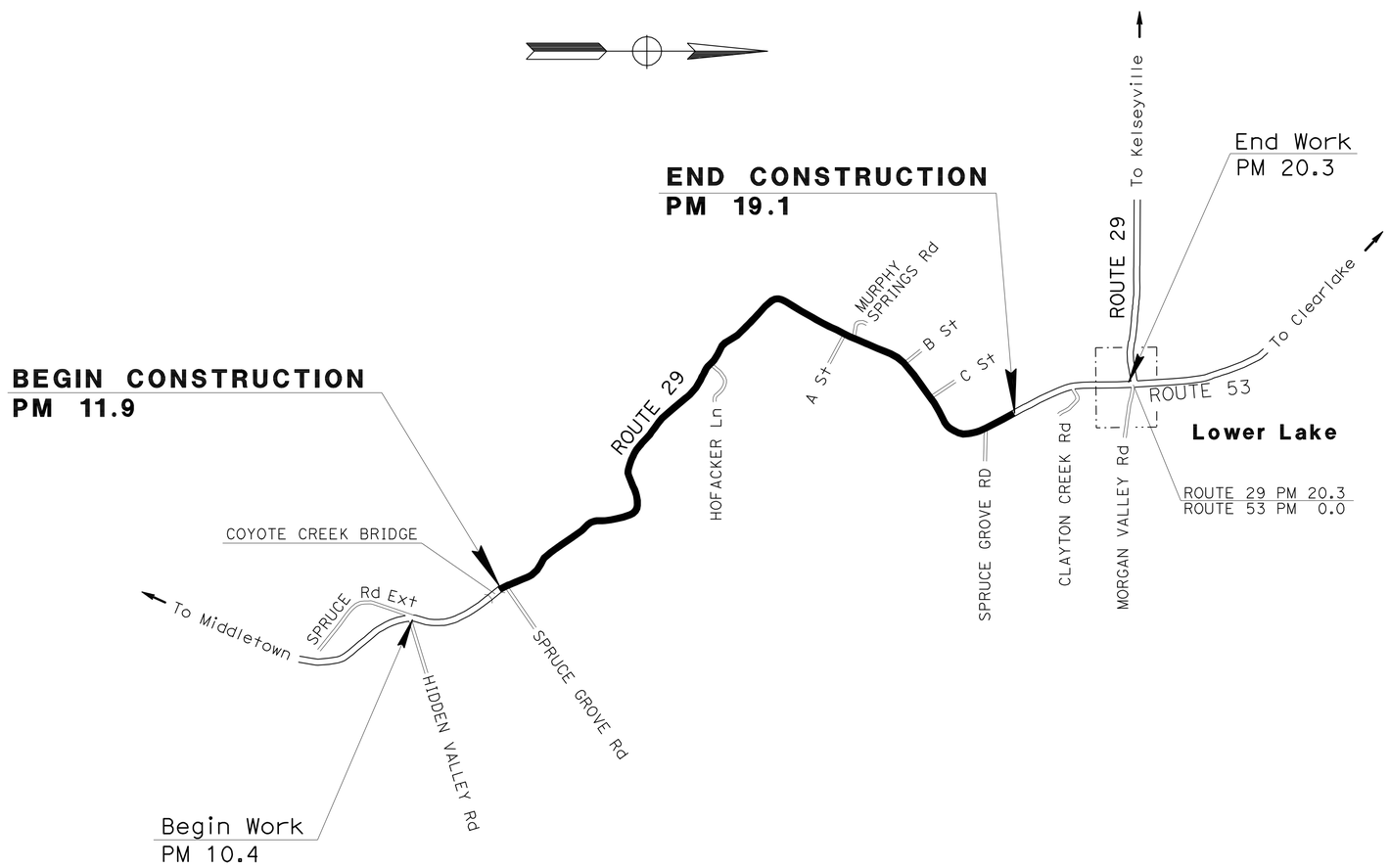
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN LAKE COUNTY NEAR LOWER LAKE FROM COYOTE CREEK BRIDGE TO 1.2 MILES SOUTH OF ROUTE 53

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

LOCATION MAP



PROJECT MANAGER: Royal B. McCarthy

DESIGN ENGINEER: Royal B. McCarthy

Chris Ghidinelli 2/21/13
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Chris Ghidinelli No. 77294 Exp. 6/30/13 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.

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

NO SCALE

CONTRACT No.	01-491214
PROJECT ID	0100000675

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2013 | TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	2	13

Chris Ghidinelli 2/21/13
REGISTERED CIVIL ENGINEER DATE

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Chris Ghidinelli No. 77294 Exp. 6/30/13 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:

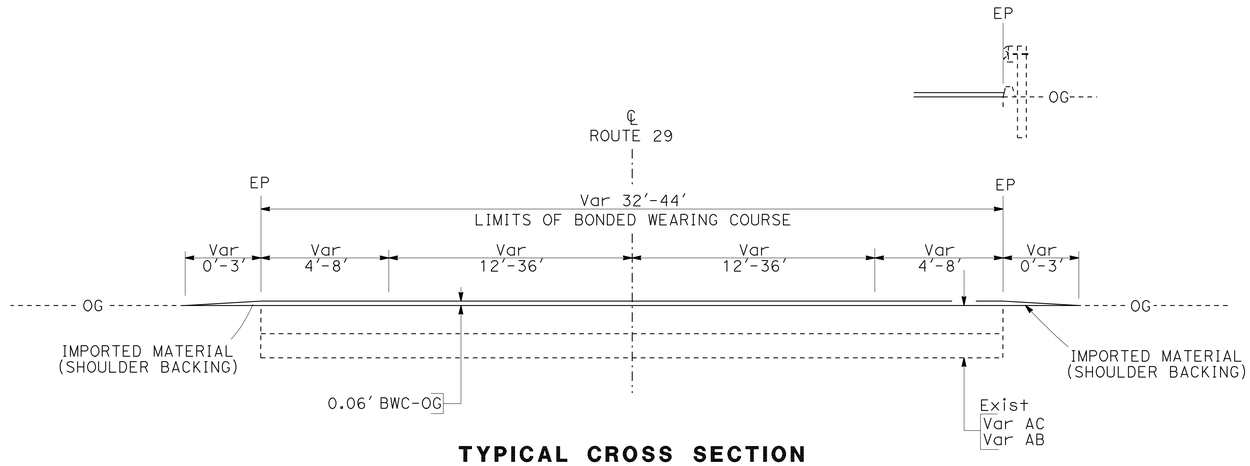
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

LEGEND

BWC-OG = HOT MIX ASPHALT (BONDED WEARING COURSE - OPEN GRADED)

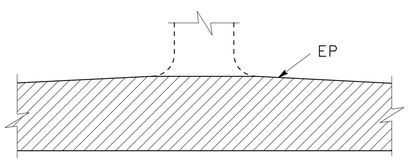
COLD PLANE AC PAVEMENT

LIMITS OF SURFACING

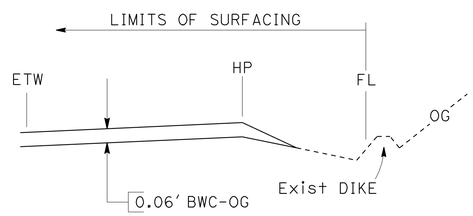


TYPICAL CROSS SECTION

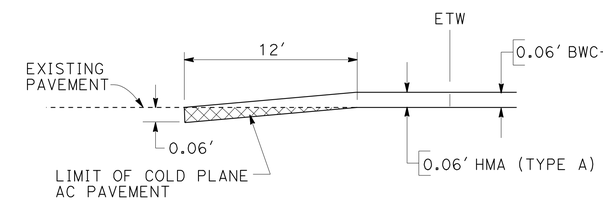
PM 11.9 TO PM 19.1



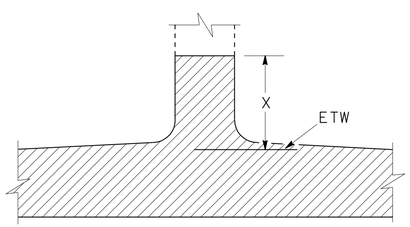
PRIVATE ROAD CONNECTION



HMA CONFORM TO EXISTING PAVED DITCH



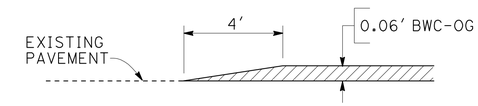
CONFORM GRIND AT PUBLIC ROAD CONNECTION



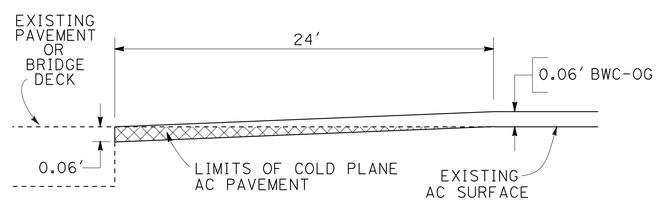
PUBLIC ROAD CONNECTION

LOCATION	PM	X FT
SPRUCE GROVE Rd	11.93	24
HOFACKER Ln	14.87	26
A St	16.83	25
MURPHY SPRINGS Rd	16.99	24
B St	17.51	25
C St	17.85	25
SPRUCE GROVE Rd	18.75	23

LIMITS OF SURFACING



CONFORM AT PRIVATE ROAD



PAVING CONFORM

PM 11.89
PM 19.10

TYPICAL CROSS SECTIONS AND CONSTRUCTION DETAILS X-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Chris Ghidinelli
CHECKED BY: Johnathon Jackson
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2013
TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	3	13

Ralph M. Martinelli 2/21/13
REGISTERED CIVIL ENGINEER DATE

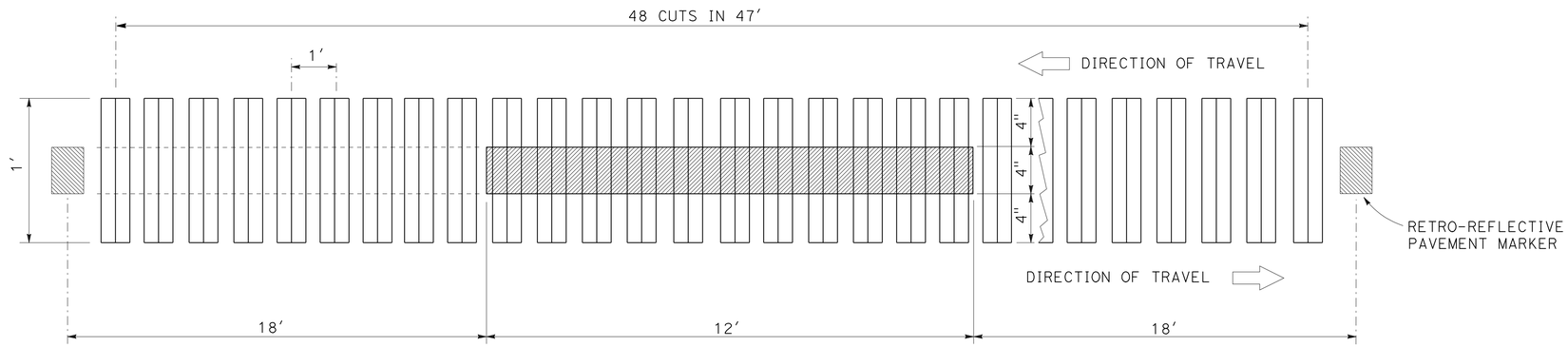
February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER R.M.MARTINELLI No. 51685 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.

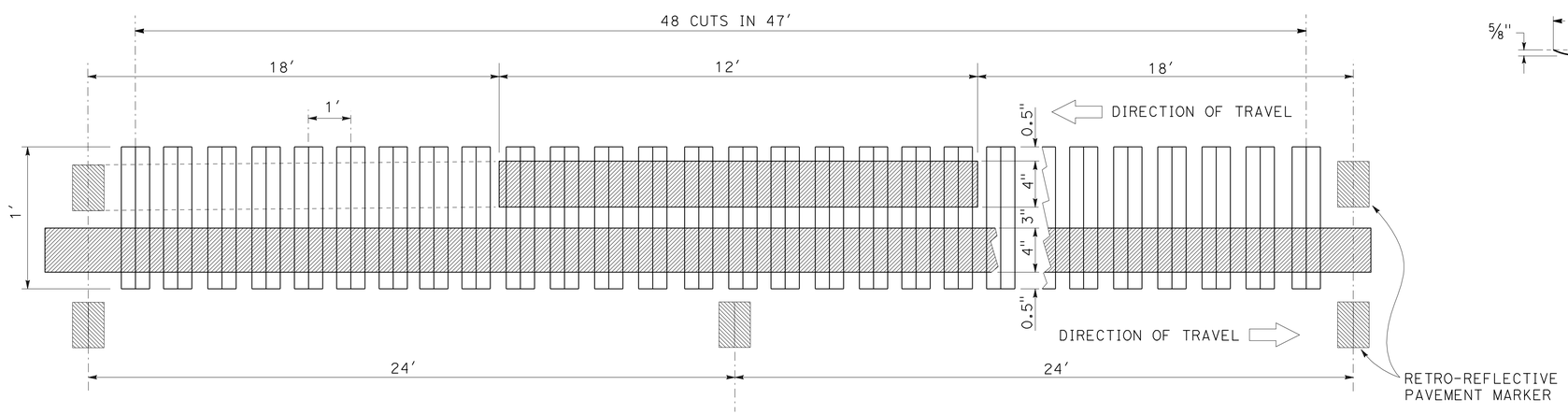
NOTES:

1. RUMBLE STRIP, AS SHOWN ON THIS PLAN SHALL NOT BE CONSTRUCTED ON BRIDGE DECKS, BRIDGE APPROACH SLABS, RAMPS, PUBLIC AND PRIVATE ROAD APPROACHES AND MINOR DRIVEWAYS.
2. FOR 'GROUND-IN RUMBLE STRIP' APPLICATIONS NOT SHOWN, SEE STANDARD PLANS 2010.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



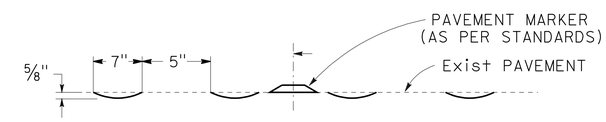
PLAN

MODIFIED GROUND-IN RUMBLE STRIP, DETAIL 6



PLAN

MODIFIED GROUND-IN RUMBLE STRIP, DETAIL 19



ELEVATION

CENTER MEDIAN AREA

CONSTRUCTION DETAILS C-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC SAFETY

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Ralph M. Martinelli
CHECKED BY: Chris Ghidinilli
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2013
TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	4	13

REGISTERED CIVIL ENGINEER DATE 2/21/13

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER R.M.MARTINELLI No. 51685 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.

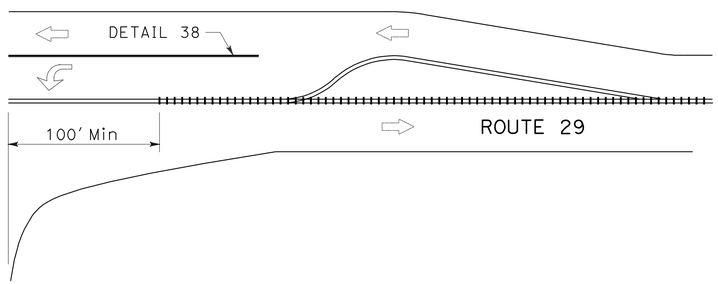
NOTES:

1. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

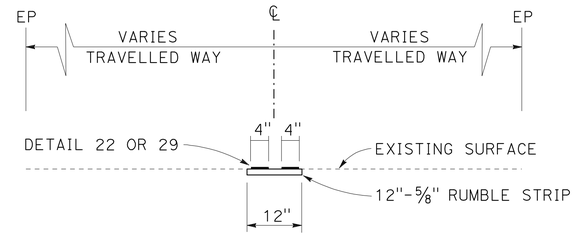
LEGEND

⇨ DIRECTION OF TRAVEL

RUMBLE STRIP (GROUND-IN)

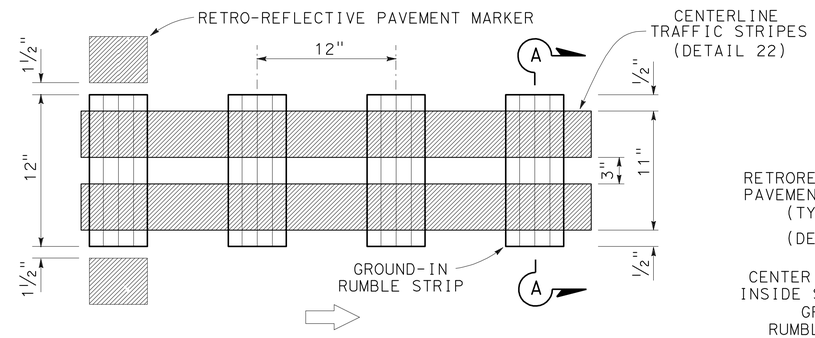


CENTERLINE RUMBLE STRIP AT LEFT TURN POCKET



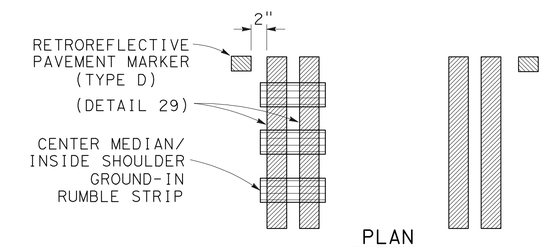
SECTION A-A

ELEVATION



PLAN

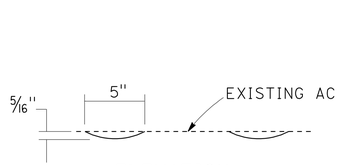
DETAIL 22



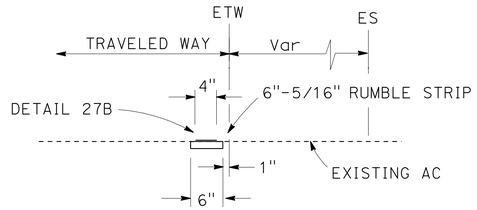
PLAN

DETAIL 29

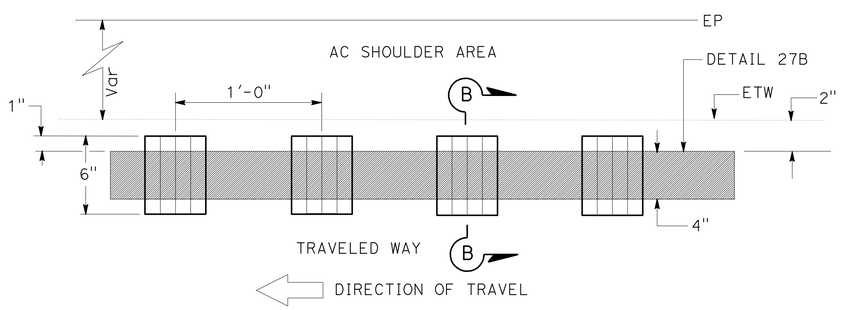
MODIFIED GROUND-IN RUMBLE STRIP, DETAIL 22 & 29



ELEVATION

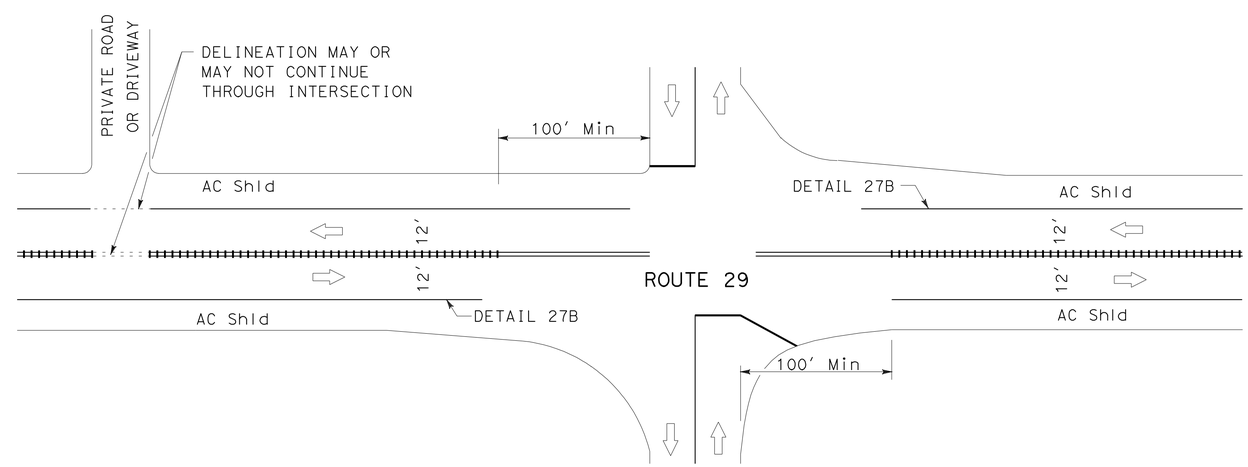


SECTION B-B



PLAN

OUTSIDE/RIGHT SHOULDER GROUND IN RUMBLE STRIP



INTERSECTING ROADS AND DRIVEWAYS

CONSTRUCTION DETAILS
C-2

NO SCALE

REVISED BY | DATE REVISED
Ralph M. Martinelli | Chris Ghidinilli
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC SAFETY

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2013 | TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	5	13

Chris Ghidinelli 2/21/13
REGISTERED CIVIL ENGINEER DATE

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Chris Ghidinelli No. 77294 Exp. 6/30/13 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

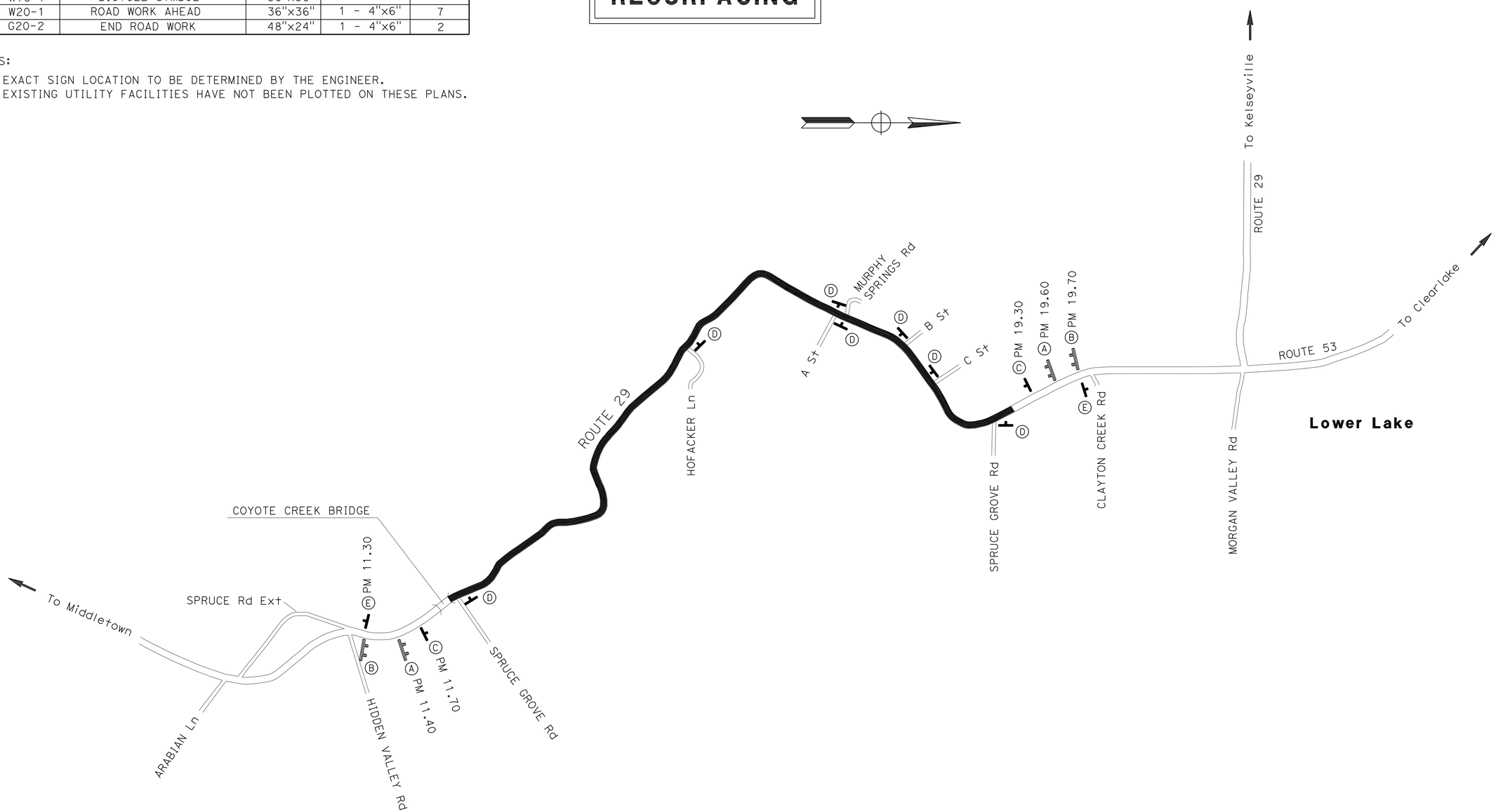
SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE	No.OF POSTS AND SIZE	No.OF SIGNS
A	G20-1	ROAD WORK NEXT 13 MILES	90"x48"	2 - 6"x6"	2
	C23B(CA)	RESURFACING	60"x18"		
B	C40(CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	144"x60"	2- 6"x8"	2
C	W11-1	SHARE THE ROAD	24"x30"	1 - 4"x6"	2
	W16-1	BICYCLE SYMBOL	36"x36"		
D	W20-1	ROAD WORK AHEAD	36"x36"	1 - 4"x6"	7
E	G20-2	END ROAD WORK	48"x24"	1 - 4"x6"	2

NOTES:

1. EXACT SIGN LOCATION TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

C23B(CA)
60"x18"
4" CAPS
BLACK/ORANGE

RESURFACING



CONSTRUCTION AREA SIGNS
CS-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Chris Ghidinelli
CHECKED BY: Johnathon Jackson
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2013
TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	6	13

Chris Ghidinelli 2/21/13
REGISTERED CIVIL ENGINEER DATE

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Chris Ghidinelli No. 77294 Exp. 6/30/13 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.

THERMOPLASTIC PAVEMENT MARKING

LOCATION (PM)	ORIENTATION	TYPE/LEGEND	AREA SQFT	REMARKS
11.93	FWBT	LIMIT LINE	36	SPRUCE GROVE Rd
11.93	FWBT	2-STOP	44	
11.95	FSBT	TYPE III (L)	42	
12.00	FSBT	TYPE III (L)	42	
14.27	FNBT	TYPE VI ARROW (R+)	42	
14.31	FNBT	TYPE VI ARROW (R+)	42	
14.35	FNBT	TYPE VI ARROW (R+)	42	
14.87	FWBT	LIMIT LINE	41	HOFACKER Ln
14.87	FWBT	STOP	22	
16.80	FWBT	LIMIT LINE	40	A St
16.83	FWBT	STOP	22	
16.99	FEBT	LIMIT LINE	32	MURPHY SPRINGS Rd
16.99	FEBT	STOP	22	
17.51	FEBT	LIMIT LINE	34	B St
17.51	FEBT	STOP	22	
17.85	FEBT	LIMIT LINE	34	C St
17.85	FEBT	STOP	22	
18.75	FWBT	LIMIT LINE	43	SPRUCE GROVE Rd
18.75	FSBT	TYPE III (L)	42	
18.75	FWBT	2-STOP	44	
18.76	FSBT	TYPE III (L)	42	
		TOTAL	752	

REMOVE THERMOPLASTIC PAVEMENT MARKING

LOCATION (PM)	ORIENTATION	TYPE/LEGEND	AREA SQFT	REMARKS
11.93	FWBT	LIMIT LINE	36	SPRUCE GROVE Rd
11.93	FWBT	2-STOP	44	
11.95	FSBT	TYPE III (L)	42	
12.00	FSBT	TYPE III (L)	42	
14.27	FNBT	TYPE VI ARROW (L+)	42	
14.31	FNBT	TYPE VI ARROW (L+)	42	
14.35	FNBT	TYPE VI ARROW (L+)	42	
14.87	FWBT	LIMIT LINE	41	HOFACKER Ln
14.87	FWBT	STOP	22	
16.80	FWBT	LIMIT LINE	40	A St
16.83	FWBT	STOP	22	
16.99	FEBT	LIMIT LINE	32	MURPHY SPRINGS Rd
16.99	FEBT	STOP	22	
17.51	FEBT	LIMIT LINE	34	B St
17.51	FEBT	STOP	22	
17.85	FEBT	LIMIT LINE	34	C St
17.85	FEBT	STOP	22	
18.75	FWBT	LIMIT LINE	43	SPRUCE GROVE Rd
18.75	FSBT	TYPE III (L)	42	
18.75	FWBT	2-STOP	44	
18.76	FSBT	TYPE III (L)	42	
		TOTAL	752	

REMOVE THERMOPLASTIC TRAFFIC STRIPE

LOCATION (PM)		DETAIL NUMBER	DETAIL LENGTH	8" SOLID WHITE
FROM	TO		FT	
11.94	11.99	38	264	528
18.75	18.75	38	370	740
			TOTAL	1268

PAVEMENT DELINEATION QUANTITIES
PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Chris Ghidinelli
CHECKED BY: Johnathon Jackson
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2013
TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	7	13

Chris Ghidinelli 2/21/13
REGISTERED CIVIL ENGINEER DATE

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Chris Ghidinelli No. 77294 Exp. 6/30/13 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.

TRAFFIC STRIPE AND PAVEMENT MARKER QUANTITIES

LOCATION (PM) FROM	LOCATION (PM) TO	DETAIL NUMBER	DETAIL LENGTH	THERMOPLASTIC TRAFFIC STRIPE 8"SOLID WHITE	4"SOLID WHITE	4" SOLID YELLOW	4" YELLOW (BROKEN 36'-12')	4" WHITE (BROKEN 36'-12')	4" WHITE (BROKEN 12'-3')	PAVEMENT MARKER RETROREFLECTIVE TYPE D YELLOW (TWO WAY)	TYPE G CLEAR (ONE WAY)	TYPE H CLEAR (ONE WAY)	RECESSED TYPE D YELLOW (TWO WAY)	RECESSED TYPE G CLEAR (ONE WAY)	RECESSED TYPE H YELLOW (ONE WAY)	REMARKS
			LF							EA						
11.88R+	11.91R+	27B	158	158												
11.88	11.93	29	264			1056							22			
11.88L+	16.97L+	27B	26875		26875											
11.93R+		22	24			48				4						SPRUCE GROVE Rd
11.94L+	11.99L+	38	264	264							12					
11.94	12.00	22	317			634				28						
11.91R+	11.97R+	27C	317						317							
11.97R+	14.87R+	27B	15312		15312											
12.00	12.10	29	528			2112							46			
12.10	12.27	19L	898			898	898						20		38	
12.27	12.39	6	634				634						14			
12.39	12.60	19R	1109			1109	1109						24		47	
12.60	14.36	22	9293			18586							776			
12.80R+	14.36R+	12	8237					8237						174		
14.36	14.46	19L	528			528	528						12		23	
14.46	14.78	6	1690				1690						36			
14.78	14.86	19R	422			422	422						10		19	
14.87R+		22	26			52				4						HOFACKER Ln
14.87R+	14.92R+	27C	264						264							
14.87	14.94	22	370			740							33			
14.92R+	16.81R+	27B	9979		9979											
14.94	15.00	19L	317			317	317						7		14	
15.00	15.17	19L	898			898	898			19		38				
15.17	15.27	6	528				528			12						
15.27	15.48	19R	1109			1109	1109			24		47				
15.48	16.82	22	7075			14150				592						
16.81R+	16.88R+	27C	370						370							
16.83R+		22	25			50				4						A St
16.83	16.98	22	792			1584				68						
16.88R+	17.00R+	27B	634		634											
16.97L+	17.03L+	27C	317						317							
16.99L+		22	24			48				4						MURPHY SPRINGS Rd
16.99	17.11	19L	634			634	634			14		27				
17.00R+	17.02R+	27C	106						106							
17.02R+	18.75R+	27B	9134		9134											
17.03L+	17.51L+	27B	2534		2534											
17.11	17.39	6	1478				1478			32						
17.39	17.50	19R	581			581	581			13		25				
17.51L+		22	25			50				4						B St
17.51L+	17.57L+	27C	317						317							
17.51	17.74	19L	1214			1214	1214			26		52				
17.57L+	17.85L+	27B	1478		1478											
17.74	17.84	22	528			1056				46						
17.85L+		22	25			50				4						C St
17.85L+	17.90L+	27C	264						264							
17.85	17.95	19L	528			528	528			12		23				
17.90L+	19.10L+	27B	6336		10138											
17.95	18.13	6	950				950			21						
18.13	18.33	19R	1056			1056	1056			23		45				
18.33	18.49	22	845			1690				72						
18.49	18.64	19L	792			792	792			18		34				
18.64	18.69	22	264			528				24						
18.69	18.74	29	264			528				24						
18.75	18.83	38	370								17					
18.75R+		22	23			46				4						SPRUCE GROVE Rd
18.75R+	18.81R+	27C	317						317							
18.75	18.84	22	475			950				42						
18.81R+	19.10R+	27B	1531		4805											
18.84	19.00	29	845			3380				72						
19.00	19.10	6	528				528			12						
SUBTOTAL					80889	57424	15894	8237		1222	29	291	1000	174	141	
TOTAL				422	138313		24131		2272		1542			1315		

PAVEMENT DELINEATION QUANTITIES
PDQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Chris Ghidinelli
CHECKED BY: Johnathon Jackson
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2013
TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	8	13

Chris Ghidinelli 2/21/13
REGISTERED CIVIL ENGINEER DATE

February 22, 2013
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Chris Ghidinelli No. 77294 Exp. 6/30/13 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

LOCATION (PM) FROM	LOCATION (PM) TO	AVERAGE WIDTH	LENGTH	ASPHALTIC EMULSION MEMBRANE (BONDED WEARING COURSE)	HOT MIX ASPHALT (BONDED WEARING COURSE)	HOT MIX ASPHALT (TYPE A)	TACK COAT	COLD PLANE	REMARKS
FROM	TO	LF		TON				SQ YD	
11.89	12.08	44	1003	4.49	223.42			117.33	
11.93		159	24			23.49	0.18	50.67	SPRUCE GROVE Rd
12.08	12.78	32	3696	12.05	598.75				
12.78	13.10	44	1690	7.57	376.45				
13.10	14.10	44	5280	23.66	1176.12				
14.10	14.56	44	2429	10.89	541.06				
14.56	19.10	32	25,555	83.29	4139.91				
14.87		158	26			25.29	0.19	88.00	HOFACKER Ln
16.83		172	25			26.47	0.20	78.67	A St
16.99		155	24			22.90	0.17	65.33	MURPHY SPRINGS Rd
17.51		142	25			21.85	0.16	65.33	B St
17.85		151	25			23.24	0.17	76.00	C St
18.75		159	23			22.51	0.17	70.67	SPRUCE GROVE Rd
19.40								85.33	
			TOTAL	141.95	7055.71	165.75	1.24	697.33	

SHOULDER BACKING

LOCATION FROM	LOCATION TO	ORIENTATION	LENGTH	IMPORTED MATERIAL (SHOULDER BACKING)
FROM	TO		LF	TON
11.89	11.96	NB	369.60	7.98
12.12	12.50	NB	2006.40	43.34
12.72	12.80	NB	422.40	9.12
12.93	13.05	NB	633.60	13.69
13.38	13.43	NB	264.00	5.70
13.46	13.55	NB	475.20	10.26
13.88	13.91	NB	158.40	3.42
14.55	15.12	NB	3009.60	65.01
15.22	15.99	NB	4065.60	87.82
16.10	16.30	NB	1056.00	22.81
16.40	16.43	NB	158.40	3.42
16.60	18.20	NB	8448.00	182.48
18.29	18.45	NB	844.80	18.25
18.55	19.40	NB	4488.00	96.94
11.96	12.21	SB	1320.00	28.51
12.47	12.94	SB	2481.60	53.60
13.03	13.18	SB	792.00	17.11
13.32	13.37	SB	264.00	5.70
13.47	13.49	SB	105.60	2.28
13.62	13.65	SB	158.40	3.42
13.80	13.84	SB	211.20	4.56
14.03	14.09	SB	316.80	6.84
14.18	14.43	SB	1320.00	28.51
14.49	15.64	SB	6072.00	131.16
15.77	16.18	SB	2164.80	46.76
16.30	16.63	SB	1742.40	37.64
16.74	19.40	SB	14044.80	303.37
			TOTAL	1240.00

FOG SEAL

ORIENTATION	TONS	REMARKS
NB	0.2	DIKE
SB	0.1	DIKE
TOTAL	0.3	

RUMBLE STRIP (GROUND-IN)

LOCATION (PM) FROM	LOCATION (PM) TO	CENTERLINE	SHOULDER
FROM	TO	STA	
12.00 Lt	12.11 Lt		5.8
12.00 Rt	12.11 Rt		5.8
12.17	19.10	366	
18.80 Rt	18.98 Rt		9.5
	TOTAL	366	21.1

SUMMARY OF QUANTITIES
Q-1

REVISED BY | DATE REVISED
Chris Ghidinelli | Johnathon Jackson
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2013 | TIME PLOTTED => 09:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	9	13

REGISTERED CIVIL ENGINEER 12-7-12 DATE

February 22, 2013
PLANS APPROVAL DATE

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

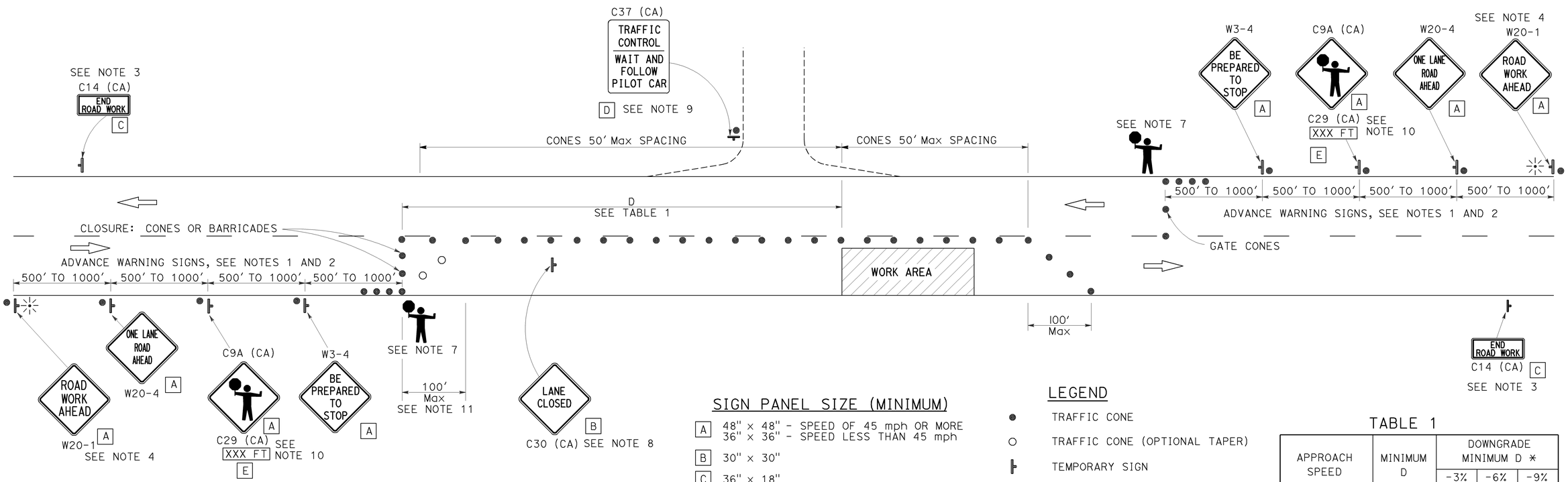
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

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

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

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

A	48" x 48" - SPEED OF 45 mph OR MORE 36" x 36" - SPEED LESS THAN 45 mph
B	30" x 30"
C	36" x 18"
D	36" x 42"
E	36" x 9"

LEGEND

- ● TRAFFIC CONE
- ○ TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

TABLE 1

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	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

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
2. 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.
3. A C14 (CA) "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.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____MILES", use a W20-4 sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. 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.
8. 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.
9. When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
10. An optional C29 (CA) sign may be placed below the C9A (CA) sign.
11. Traffic cones or barricades may be placed on the optional taper as shown, 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

TCS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | CHECKED BY | REVISED BY | DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 10-DEC-2012 | TIME PLOTTED => 09:45

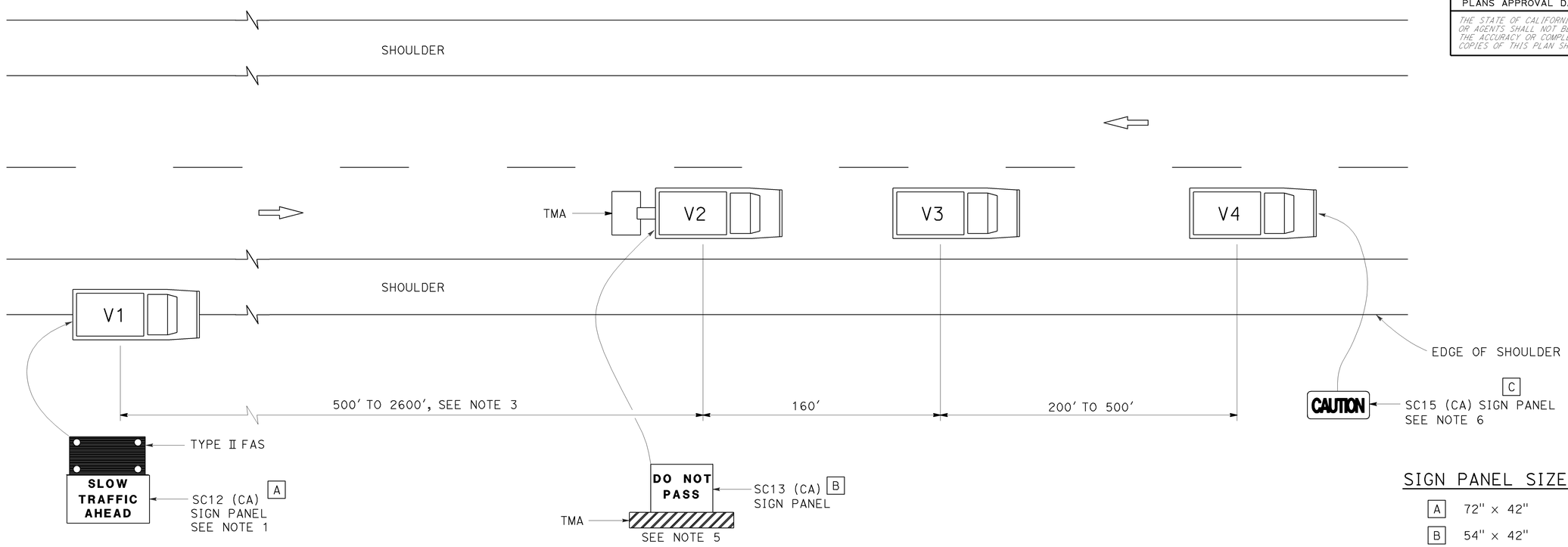
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	10	13

REGISTERED CIVIL ENGINEER 12-7-12 DATE

February 22, 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.



SIGN PANEL SIZE (Min)

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

LEGEND

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

NOTES:

1. Either a changeable message sign or a SC12 (CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. A Type II flashing arrow sign may be used with the SC12 (CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall be Type III, IV VII, VIII or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Gross Vehicle Weight of shadow vehicle shall be a minimum of 20,000 pounds and shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON TWO LANE HIGHWAYS

NO SCALE

TCS-2

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 10-DEC-2012 TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	11	13

REGISTERED CIVIL ENGINEER

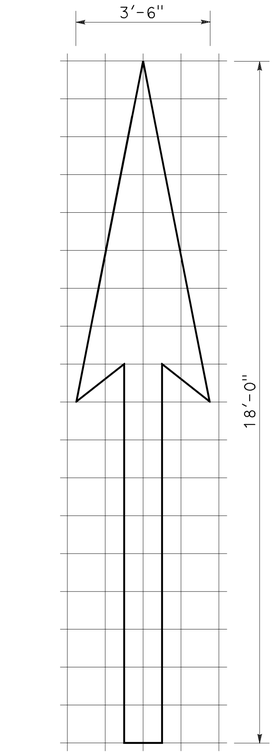
April 20, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
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.

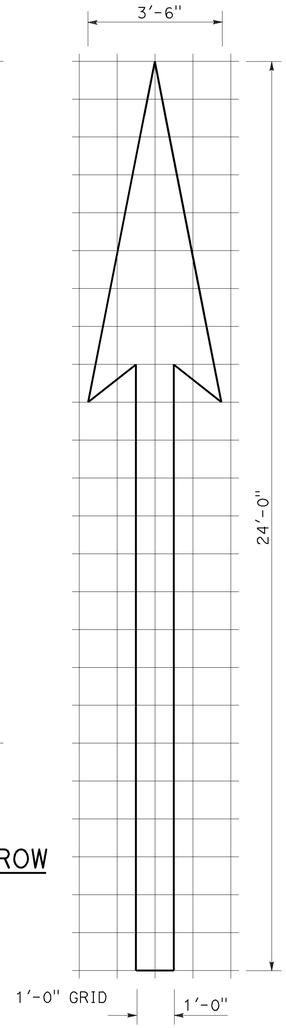
TO ACCOMPANY PLANS DATED February 22, 2013

2010 REVISED STANDARD PLAN RSP A24A



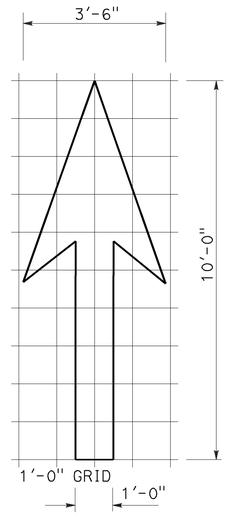
A=25 ft^2

TYPE I 18'-0" ARROW



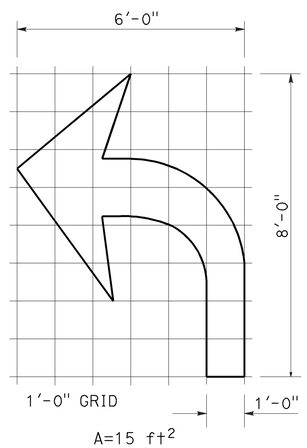
A=31 ft^2

TYPE I 24'-0" ARROW



A=14 ft^2

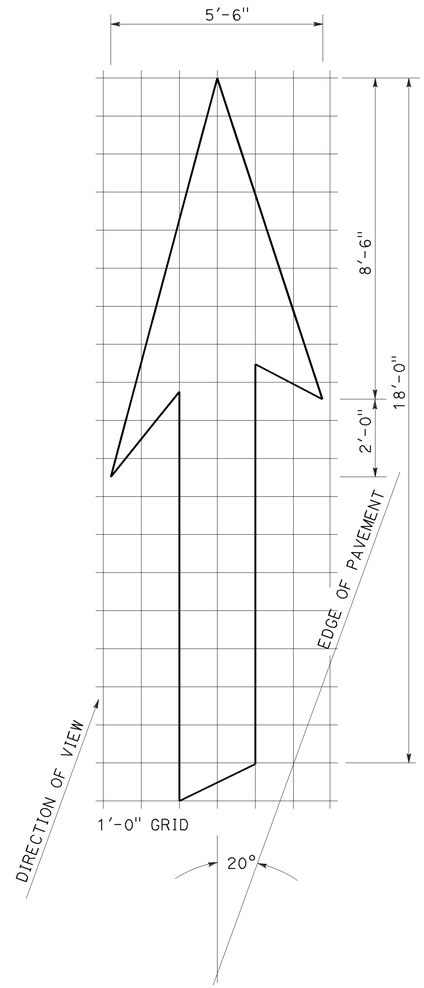
TYPE I 10'-0" ARROW



A=15 ft^2

TYPE IV (L) ARROW

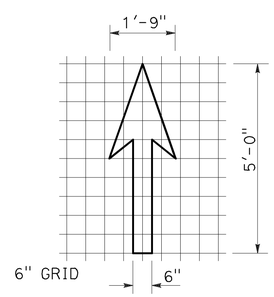
(For Type IV (R) arrow, use mirror image)



A=42 ft^2

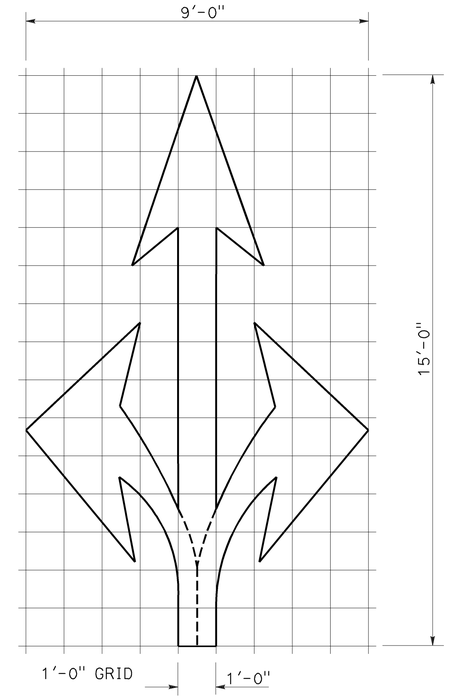
TYPE VI ARROW

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



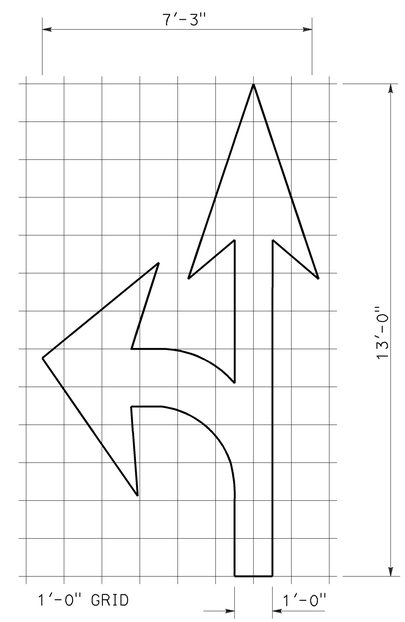
A=3.5 ft^2

BIKE LANE ARROW



A=36 ft^2

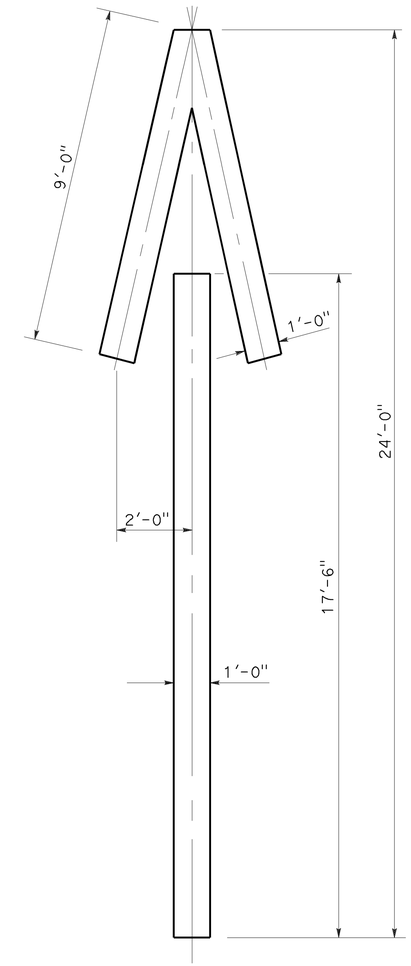
TYPE VIII ARROW



A=27 ft^2

TYPE VII (L) ARROW

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



A=33 ft^2

TYPE V ARROW

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS ARROWS

NO SCALE

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

REVISED STANDARD PLAN RSP A24A

3-14-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	12	13

REGISTERED CIVIL ENGINEER

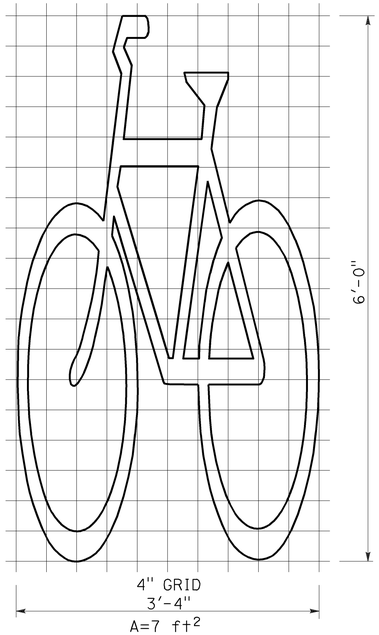
October 19, 2012
PLANS APPROVAL DATE

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

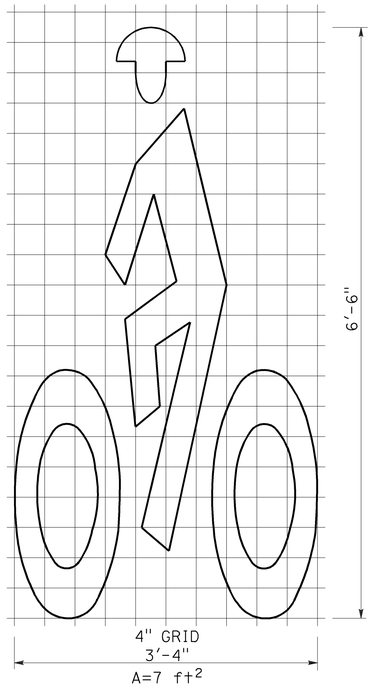
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE: TO ACCOMPANY PLANS DATED February 22, 2013

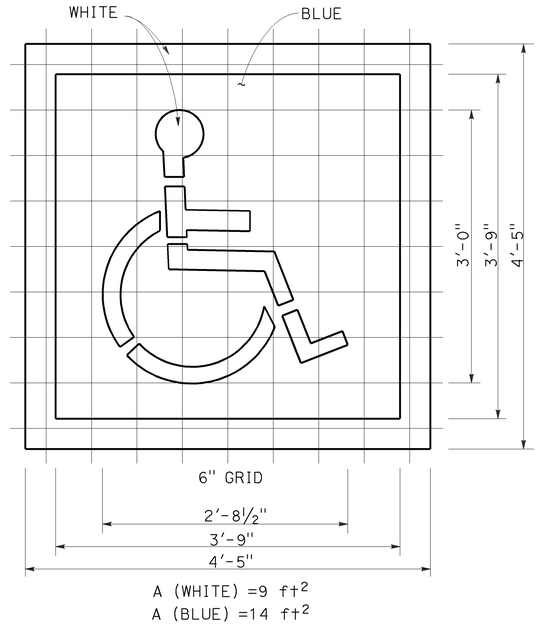
Minor variations in dimensions may be accepted by the Engineer.



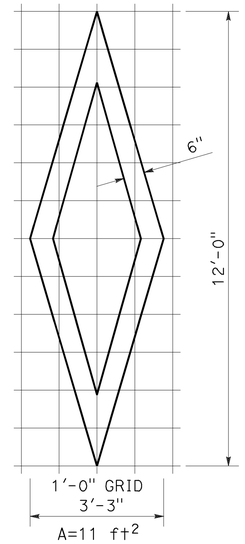
BIKE LANE SYMBOL WITHOUT PERSON



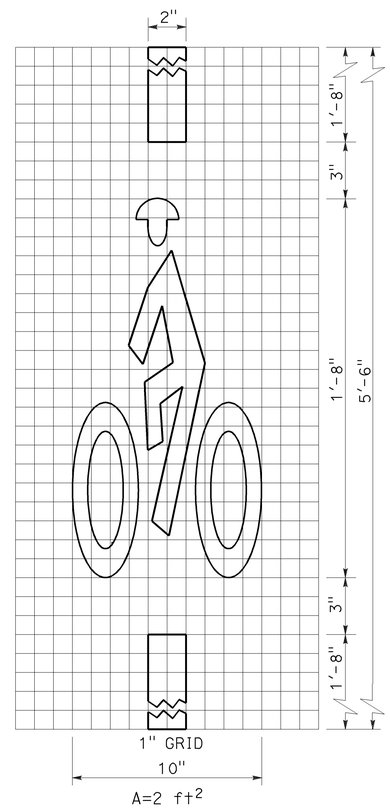
BIKE LANE SYMBOL WITH PERSON



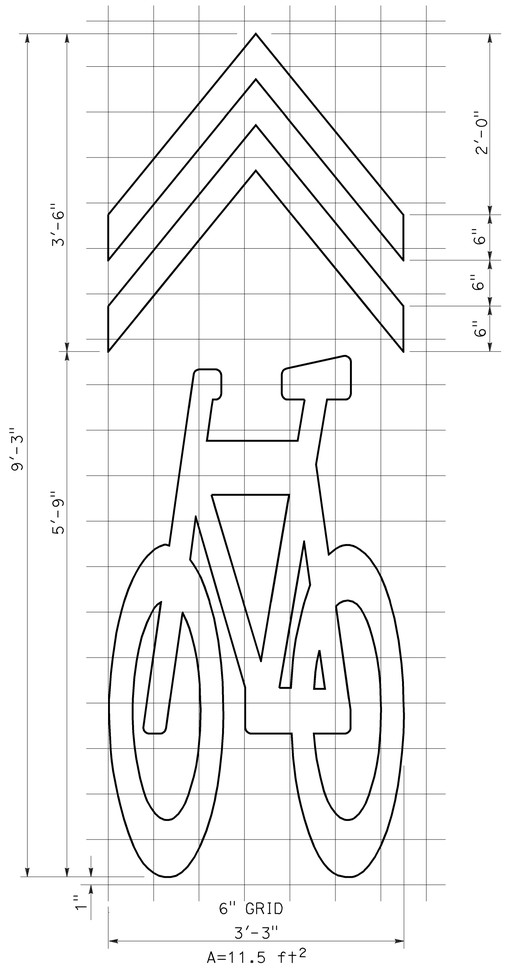
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING



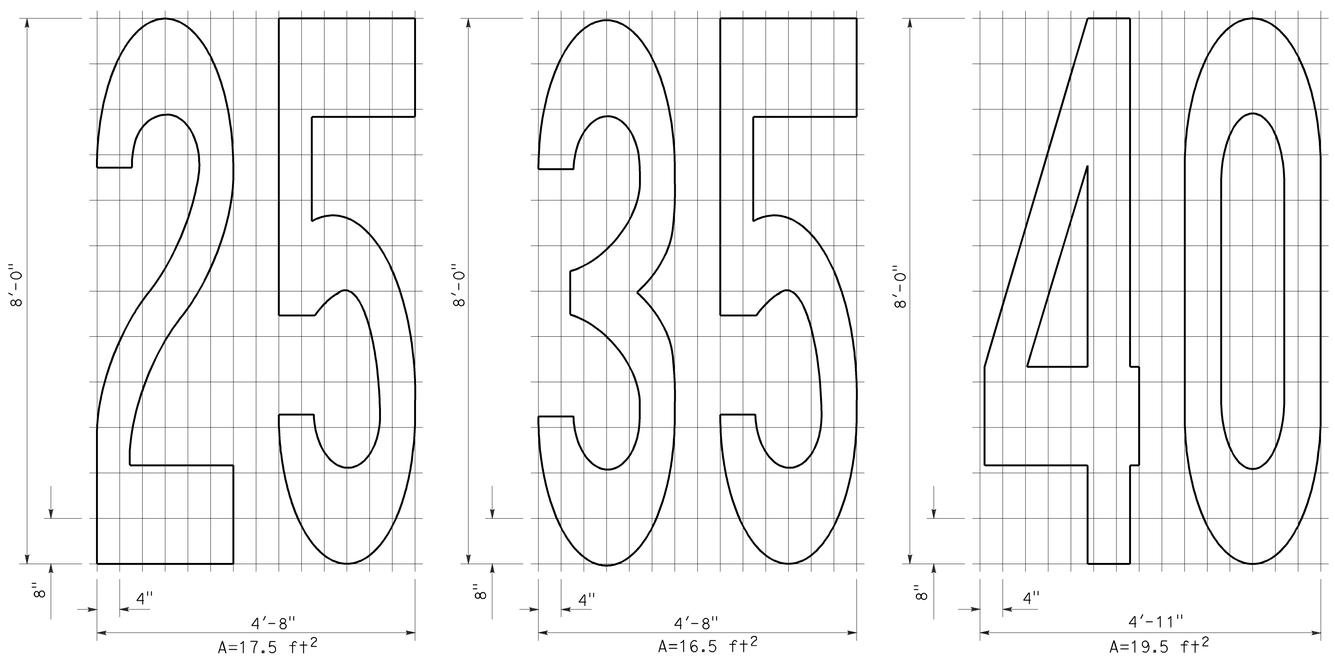
DIAMOND SYMBOL



BICYCLE LOOP DETECTOR SYMBOL



SHARED ROADWAY BICYCLE MARKING



NUMERALS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

RSP A24C DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A24C DATED MAY 20, 2011 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24C

2010 REVISED STANDARD PLAN RSP A24C

6-28-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Lak	29	11.9/19.1	13	13

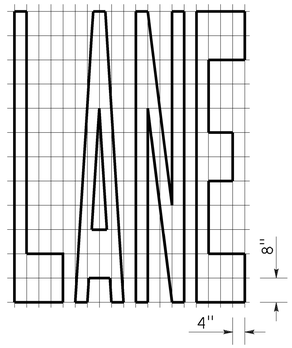
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

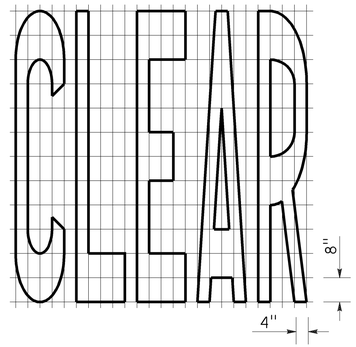
REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

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.

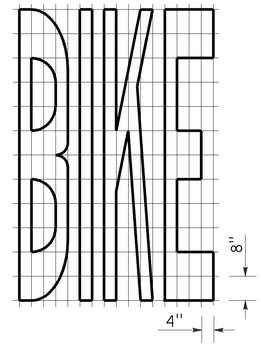
TO ACCOMPANY PLANS DATED February 22, 2013



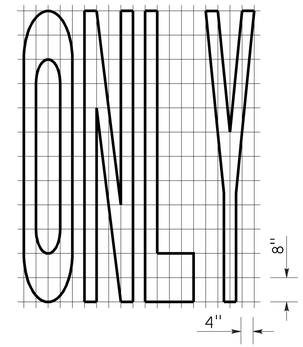
A=24 ft^2



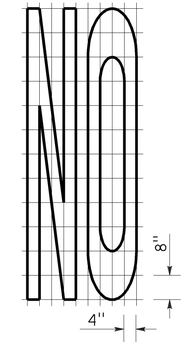
A=27 ft^2



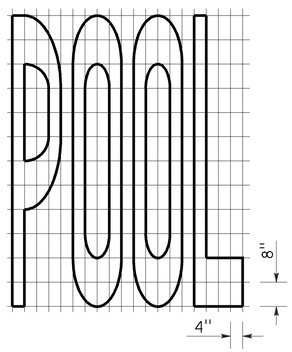
A=21 ft^2



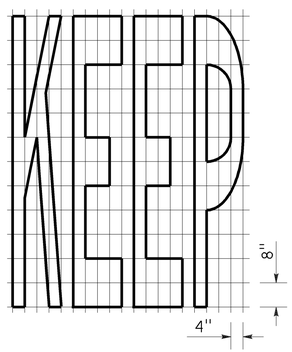
A=22 ft^2



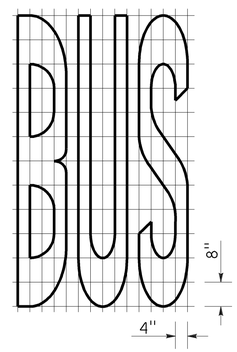
A=14 ft^2



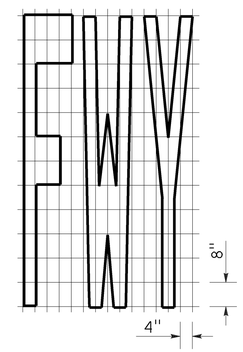
A=23 ft^2



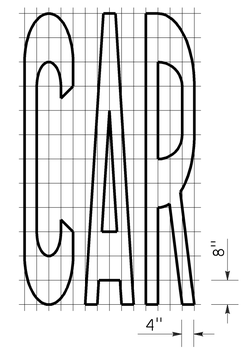
A=24 ft^2



A=20 ft^2

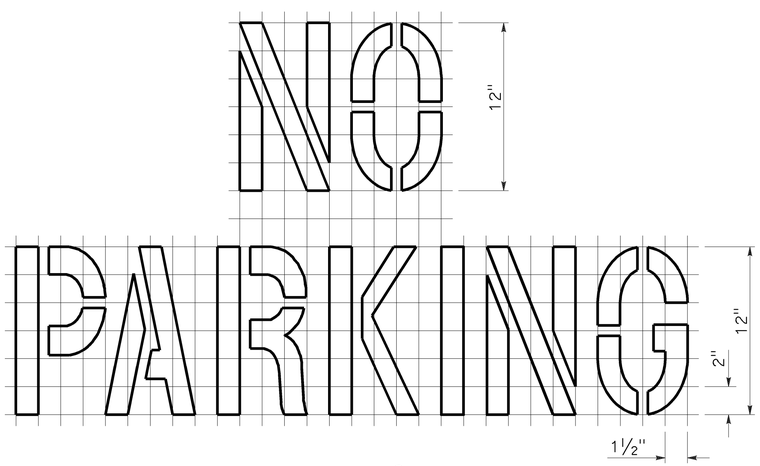


A=16 ft^2



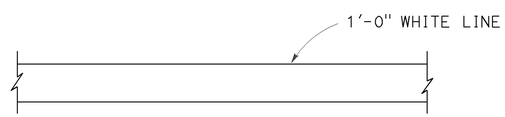
A=17 ft^2

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

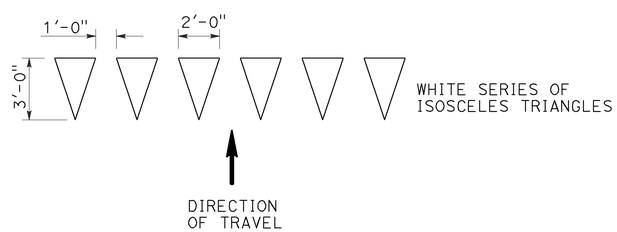


A=2 ft^2

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