

INDEX OF PLANS

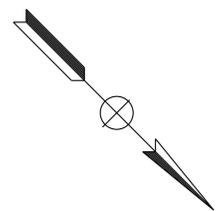
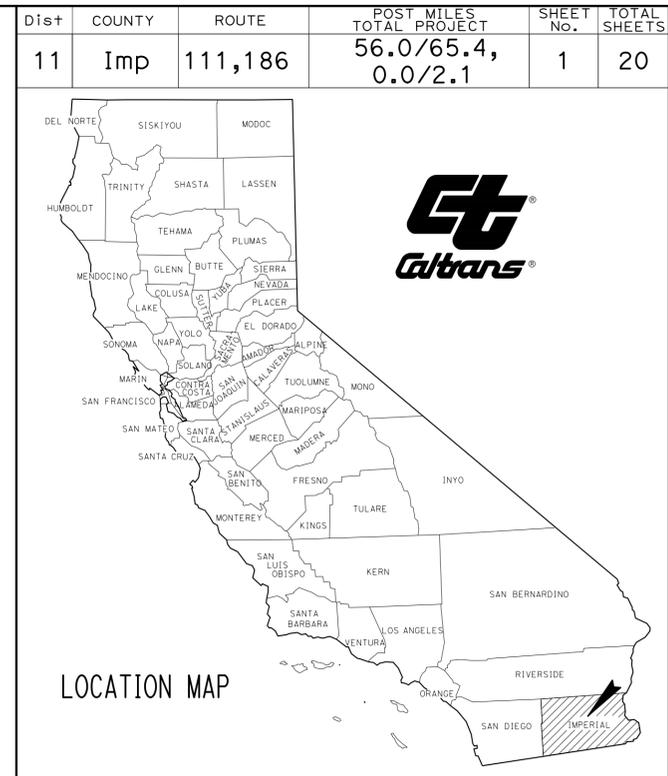
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3	CONSTRUCTION DETAILS
4	CONSTRUCTION AREA SIGNS
5-8	TRAFFIC HANDLING PLANS
9-11	PAVEMENT DELINEATION DETAILS AND QUANTITIES
12	SUMMARY OF QUANTITIES
13-20	REVISED STANDARD PLANS

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

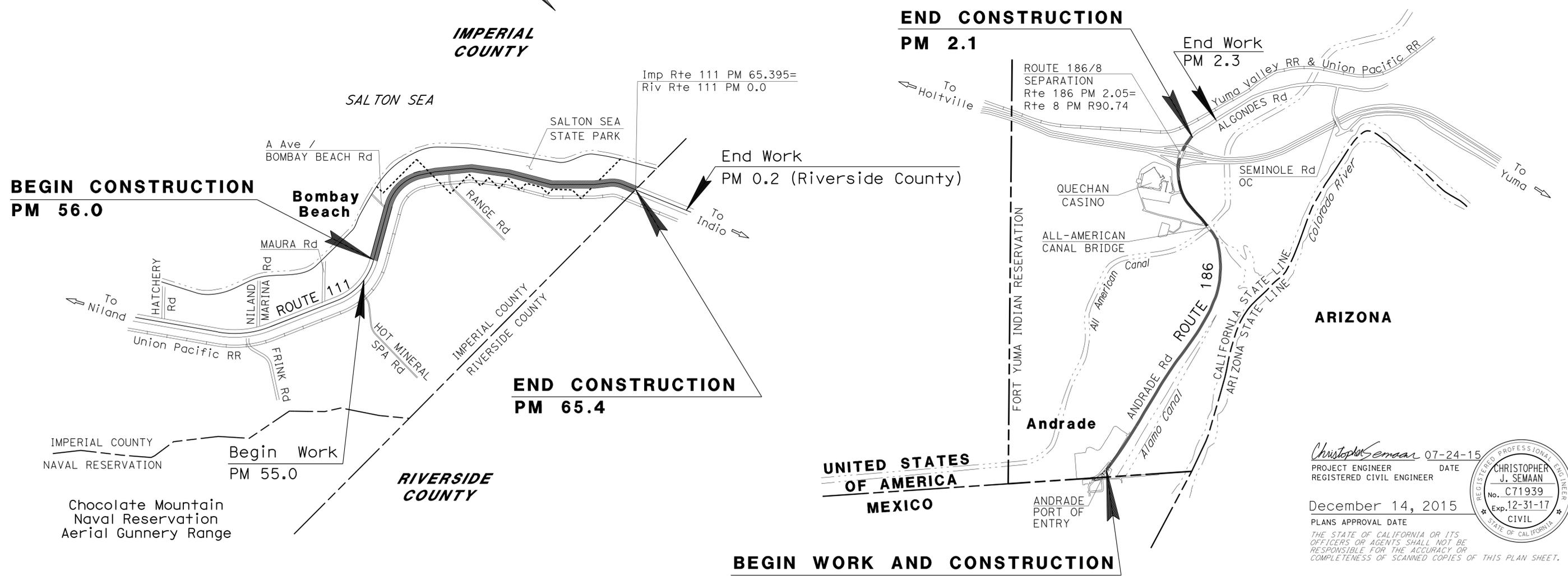
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN IMPERIAL COUNTY
NEAR BOMBAY BEACH ON ROUTE 111
FROM 9.4 MILES SOUTH OF IMPERIAL COUNTY LINE
TO IMPERIAL COUNTY LINE
AND AT ANDRADE ON ROUTE 186 FROM MEXICO BORDER
TO ROUTE 186/8 SEPARATION

To be supplemented by Standard Plans dated 2010



IMPERIAL COUNTY



PROJECT MANAGER
ALBERTO GAYON

DESIGN ENGINEER
CHRISTOPHER SEMAAN

Christopher Semaan 07-24-15
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

December 14, 2015
PLANS APPROVAL DATE

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

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

NO SCALE

BEGIN WORK AND CONSTRUCTION
PM 0.0

CONTRACT No. 11-2M8404
PROJECT ID 1115000114

DATE PLOTTED => 08-DEC-2015 TIME PLOTTED => 14:05

NOTES:

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

ABBREVIATIONS:

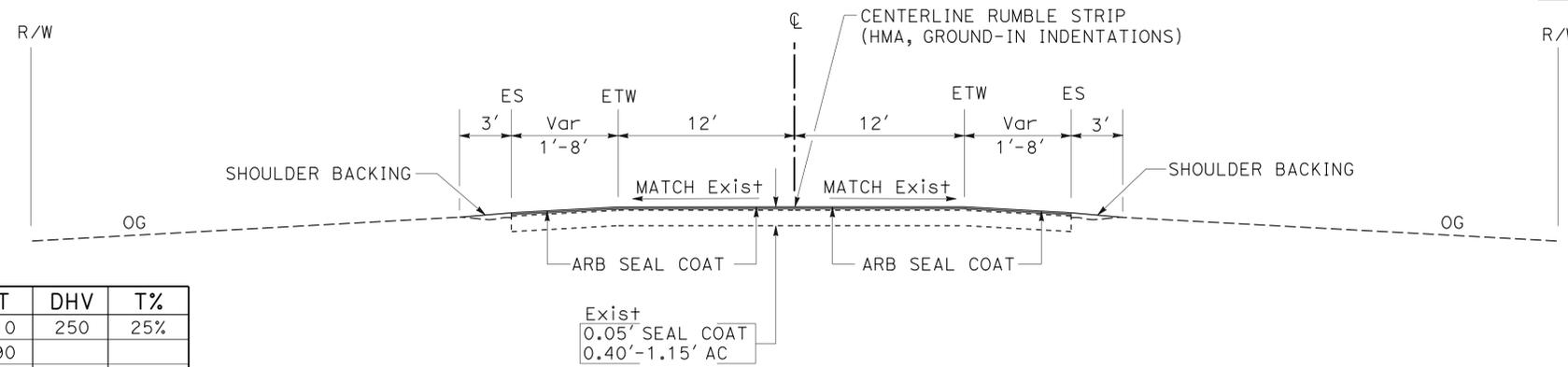
ARB = ASPHALT-RUBBER BINDER

PAVEMENT CLIMATE REGION:

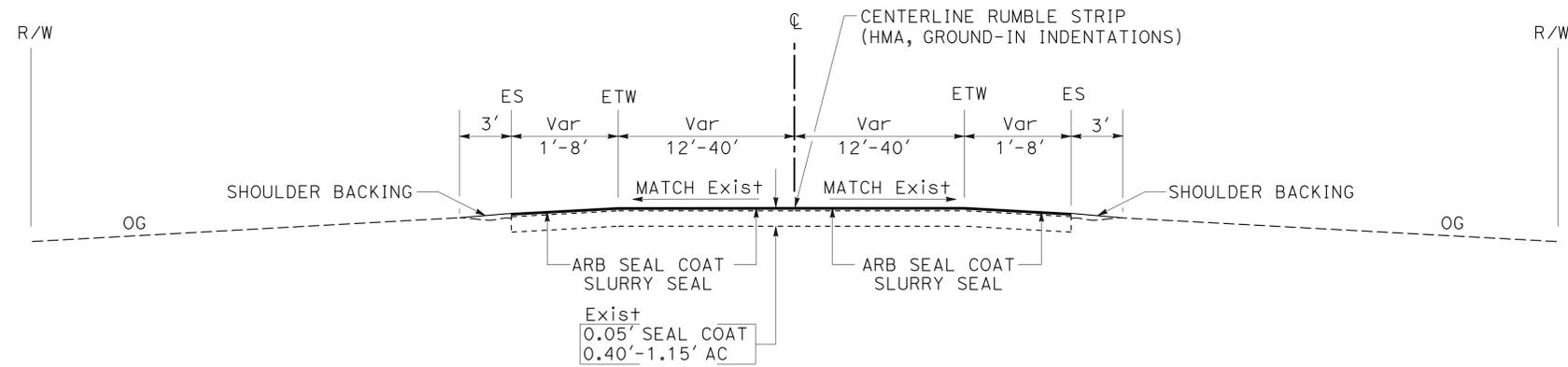
DESERT

DESIGN DESIGNATION

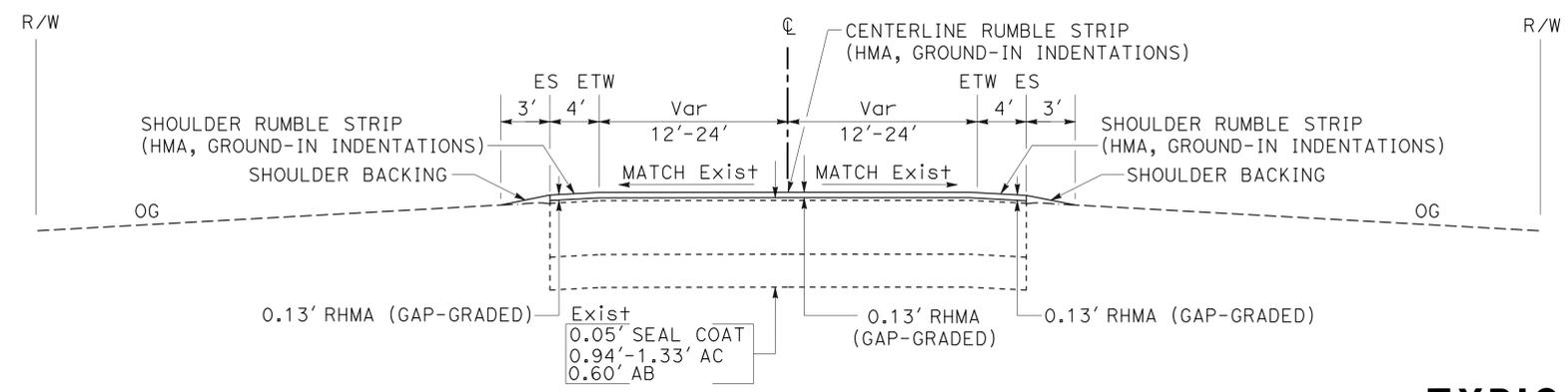
YEAR	ROUTE	DIRECTION	FROM PM	TO PM	ADT	DHV	T%
2015	111	NB	56.0	65.4	910	250	25%
2015	111	SB	56.0	65.4	890		
2025	111	NB	56.0	65.4	1,660		
2025	111	SB	56.0	65.4	1,640		
2015	186	NB	0.0	2.1	4,320	750	6.6%
2015	186	SB	0.0	2.1	4,270		
2025	186	NB	0.0	2.1	5,000		
2025	186	SB	0.0	2.1	5,100		



ROUTE 186
PM 0.30 - 1.70



ROUTE 186
PM 0.00 - 0.30
PM 1.70 - 2.13



ROUTE 111
PM 56.00 - PM 65.40

TYPICAL CROSS SECTIONS
NO SCALE
X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 FUNCTIONAL SUPERVISOR: ALBERTO GAYON
 CHECKED BY: ALBERTO GAYON
 CALCULATED/DESIGNED BY: CHRISTOPHER SEMAAN
 REVISOR: ALBERTO GAYON
 DATE: 7/2/2010

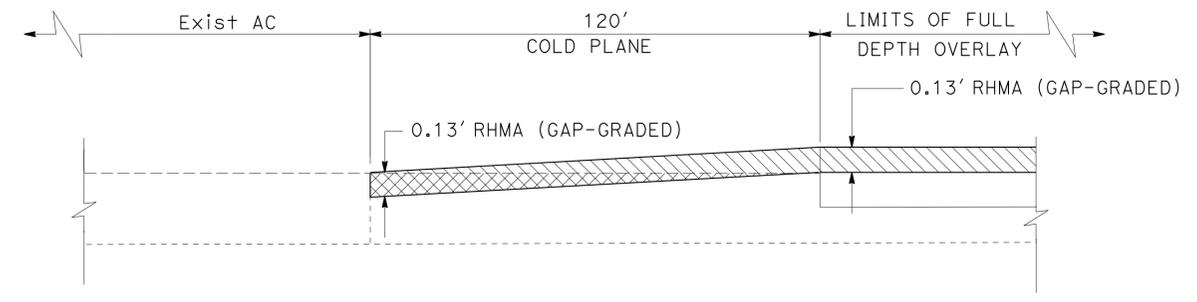
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	3	20

Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE
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 COPIES OF THIS PLAN SHEET.

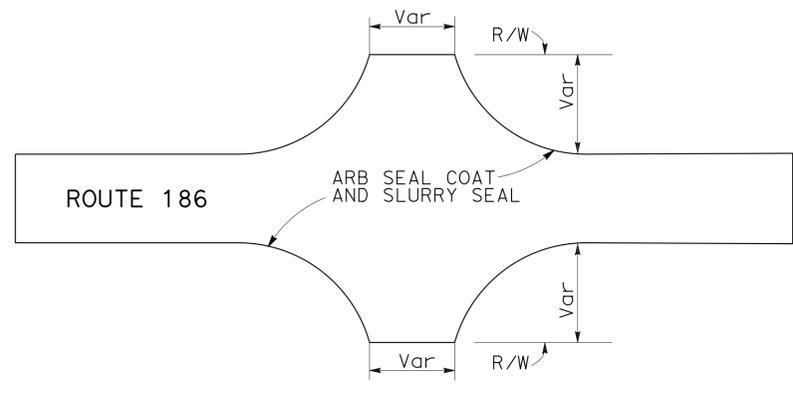
REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER
 J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

LEGEND:

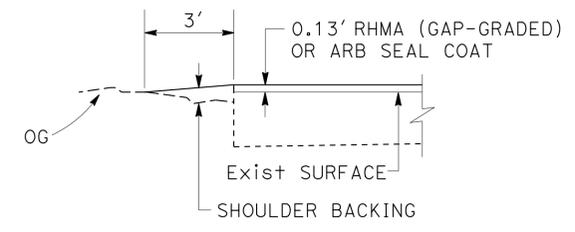
-  0.13' RHMA (GAP-GRADED)
-  COLD PLANE AC PAVEMENT



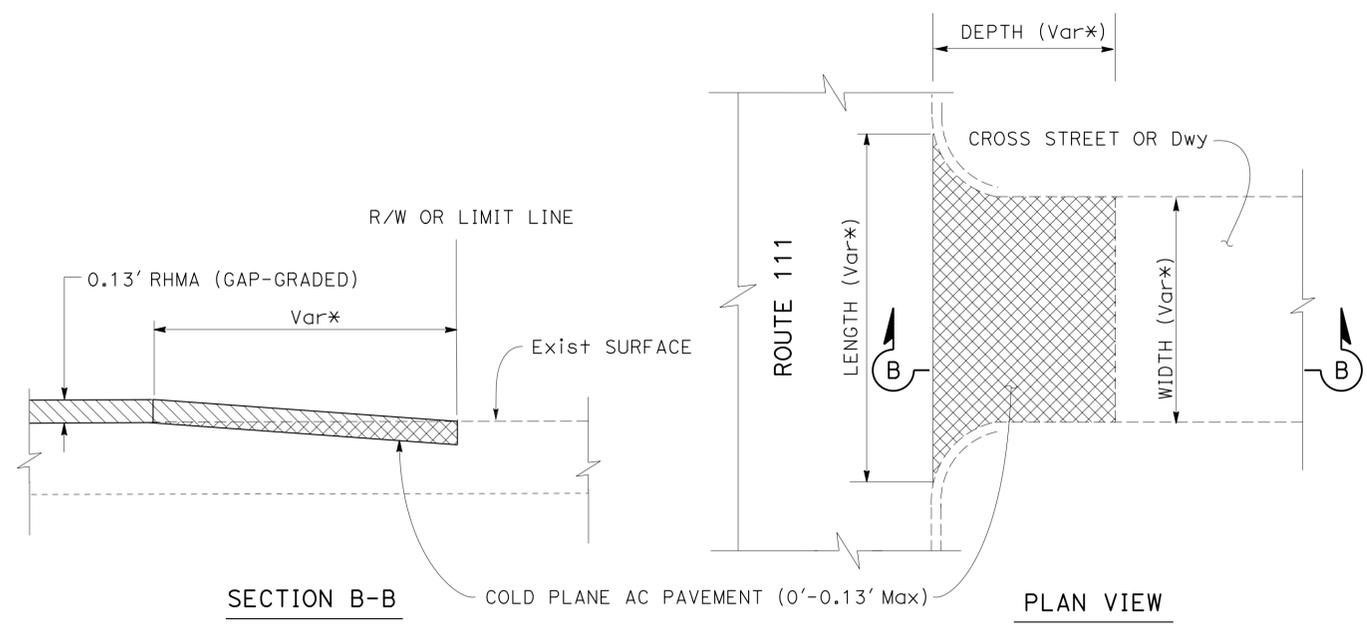
BEGIN/END WORK CONFORM DETAIL



TYPICAL LIMITS OF SEAL COAT AT CROSS STREETS AND DRIVEWAYS



SHOULDER BACKING DETAIL



* - FOR ACTUAL MEASUREMENTS SEE SUMMARY OF QUANTITIES

CROSS STREET AND DRIVEWAY CONFORM DETAIL

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
FUNCTIONAL SUPERVISOR	ALBERTO GAYON
CALCULATED/DESIGNED BY	CHECKED BY
CHRISTOPHER SEMAAN	ALBERTO GAYON
REVISOR BY	DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	4	20

Christopher Semaan 07-24-15
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 12-14-15
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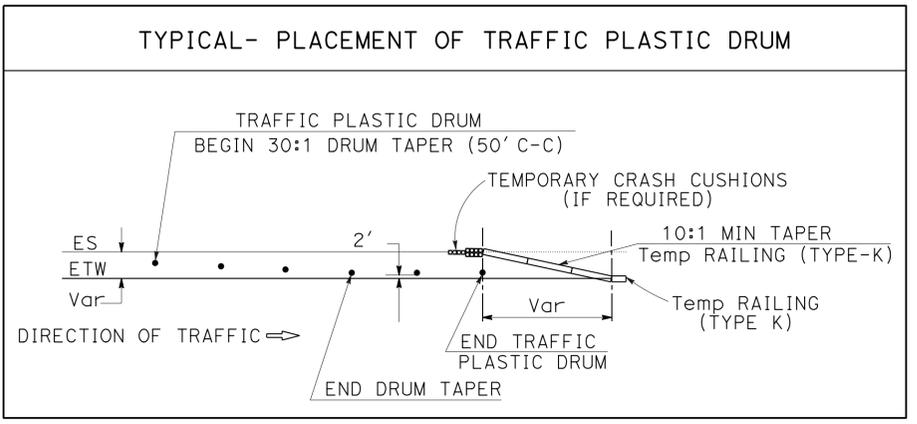
REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

NOTES:

1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA), INDICATING CALIFORNIA MUTCD.
3. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF THE SIGN POST IN CONSULTATION WITH THE ENGINEER.
4. SEE TRAFFIC HANDLING PLANS FOR ADDITIONAL CONSTRUCTION AREA SIGNS.

LEGEND:

- DIRECTION OF TRAVEL
- X CONSTRUCTION AREA SIGN



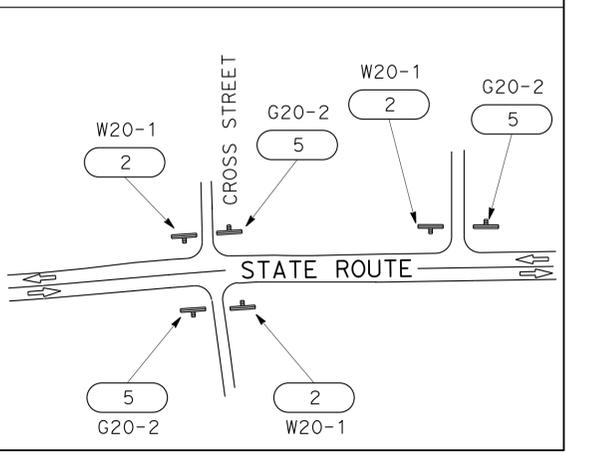
CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	No. OF POSTS AND SIZE	No. OF SIGNS
1	C40 (CA)	108" x 42"	2 - 4" X 6" (s)	4
2	W20-1	48" x 48"	1 - 6" X 6" (s)	12
3	C11 (CA) (10)	60" x 36"	2 - 4" x 6" (s)	2
4	C11 (CA) (2)	60" x 36"	2 - 4" x 6" (s)	2
5	G20-2	36" x 18"	1 - 4" X 4" (s)	12
6	SPCL-1	72" x 72"	2 - 6" x 6" (s)	2
7	SPCL-2	72" x 72"	2 - 6" x 6" (s)	2
8	SPCL-3	72" x 72"	2 - 6" x 6" (s)	2
9	M4-8a	24" x 18"	1 - 6" X 6" (s)	4
10	SC9 (CA)	36" x 36"	1 - 6" X 6" (s)	30

(s) DENOTES STATIONARY MOUNTED SIGN

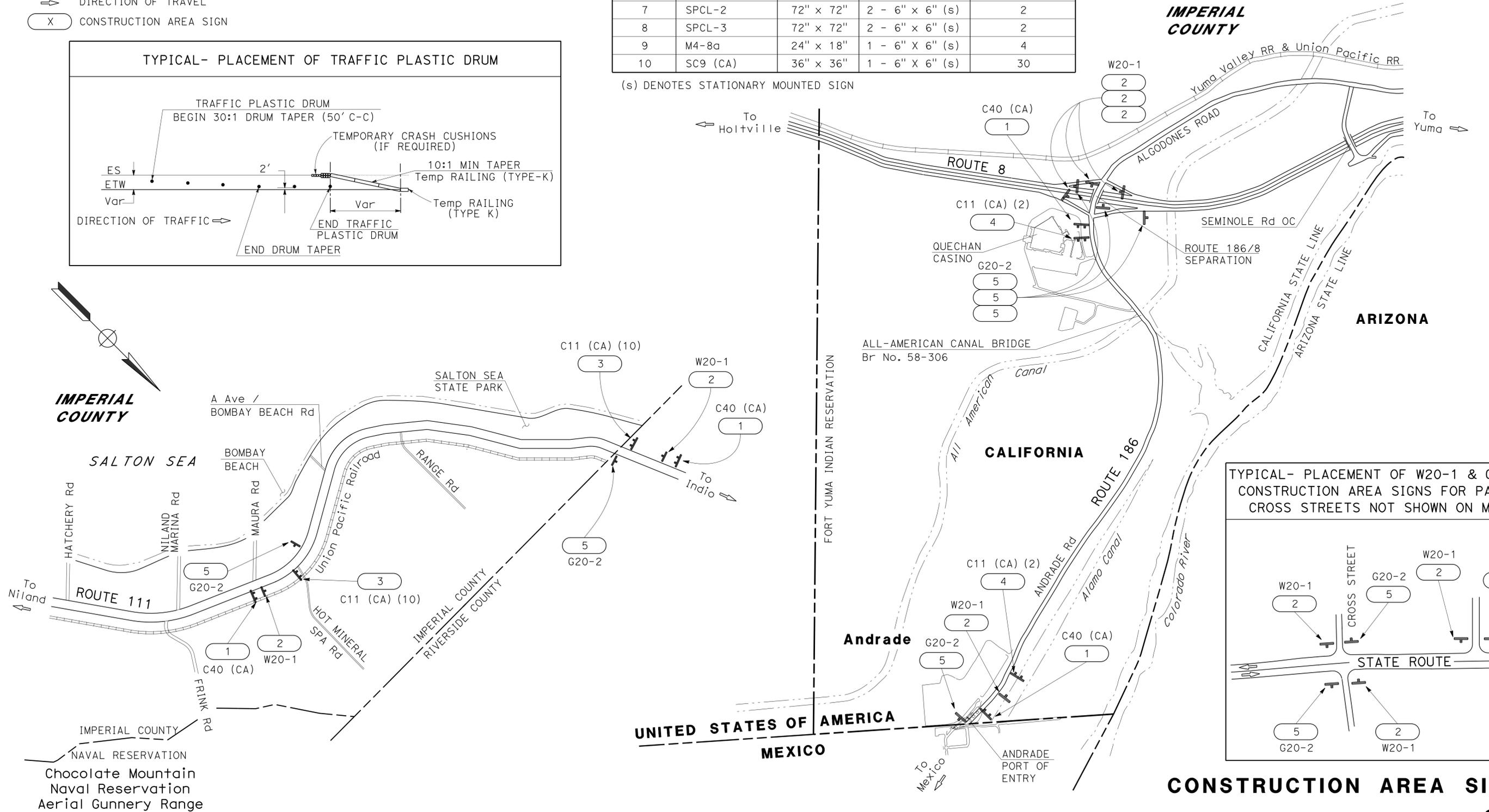
IMPERIAL COUNTY

TYPICAL- PLACEMENT OF W20-1 & G20-2 CONSTRUCTION AREA SIGNS FOR PAVED CROSS STREETS NOT SHOWN ON MAP



CONSTRUCTION AREA SIGNS
NO SCALE
CS-1

REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
 REVISION BY: CHRISTOPHER SEMAAN, ALBERTO GAYON
 DATE REVISION: 07-24-15, 12-14-15
 DESIGNED BY: CHRISTOPHER SEMAAN
 CHECKED BY: ALBERTO GAYON
 FUNCTIONAL SUPERVISOR: ALBERTO GAYON
 DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 STATE OF CALIFORNIA - CALTRANS



APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	5	20

Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE
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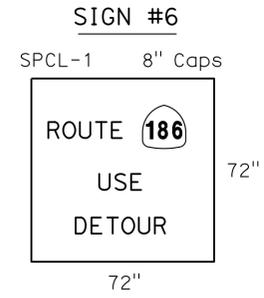
REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

NOTES:

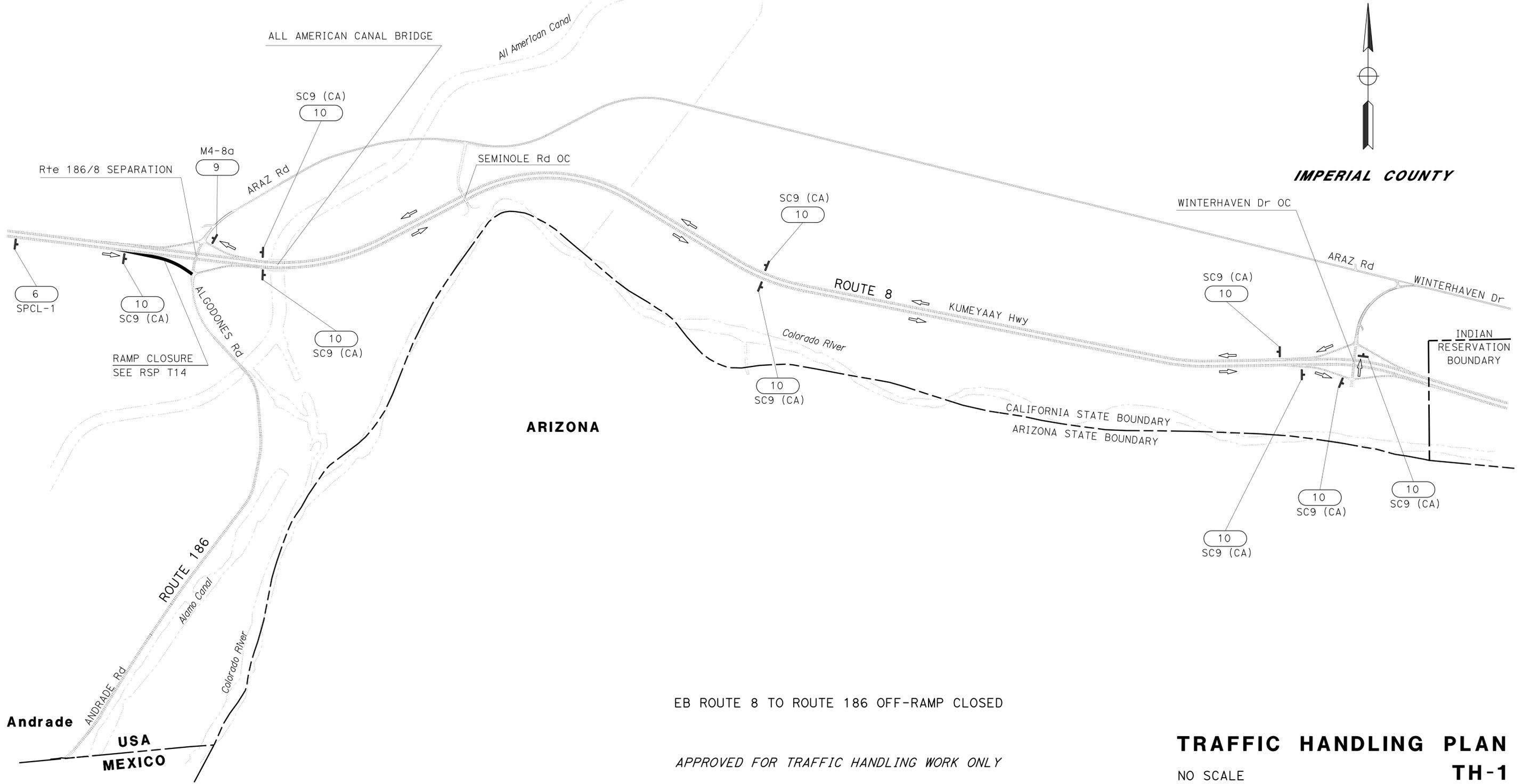
1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS WILL BE DETERMINED BY THE ENGINEER.
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3. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF THE SIGN POST IN CONSULTATION WITH THE ENGINEER.
4. SEE TRAFFIC HANDLING PLANS FOR ADDITIONAL CONSTRUCTION AREA SIGNS.
5. ROTATE ARROW ON SC9 (CA) PANEL TO REFLECT DIRECTION OF DETOUR.

LEGEND:

- ⇨ DIRECTION OF TRAVEL
- ⊥ CONSTRUCTION AREA SIGNS
- CAPS CAPITAL LETTERING
- SPCL SPECIAL CONSTRUCTION AREA SIGN



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION MAINTENANCE
 Et Caltrans®
 FUNCTIONAL SUPERVISOR ALBERTO GAYON
 CALCULATED/DESIGNED BY CHECKED BY
 CHRISTOPHER SEMAAN ALBERTO GAYON
 REVISED BY DATE REVISED
 CHRISTOPHER SEMAAN ALBERTO GAYON



EB ROUTE 8 TO ROUTE 186 OFF-RAMP CLOSED

APPROVED FOR TRAFFIC HANDLING WORK ONLY

TRAFFIC HANDLING PLAN
TH-1
NO SCALE

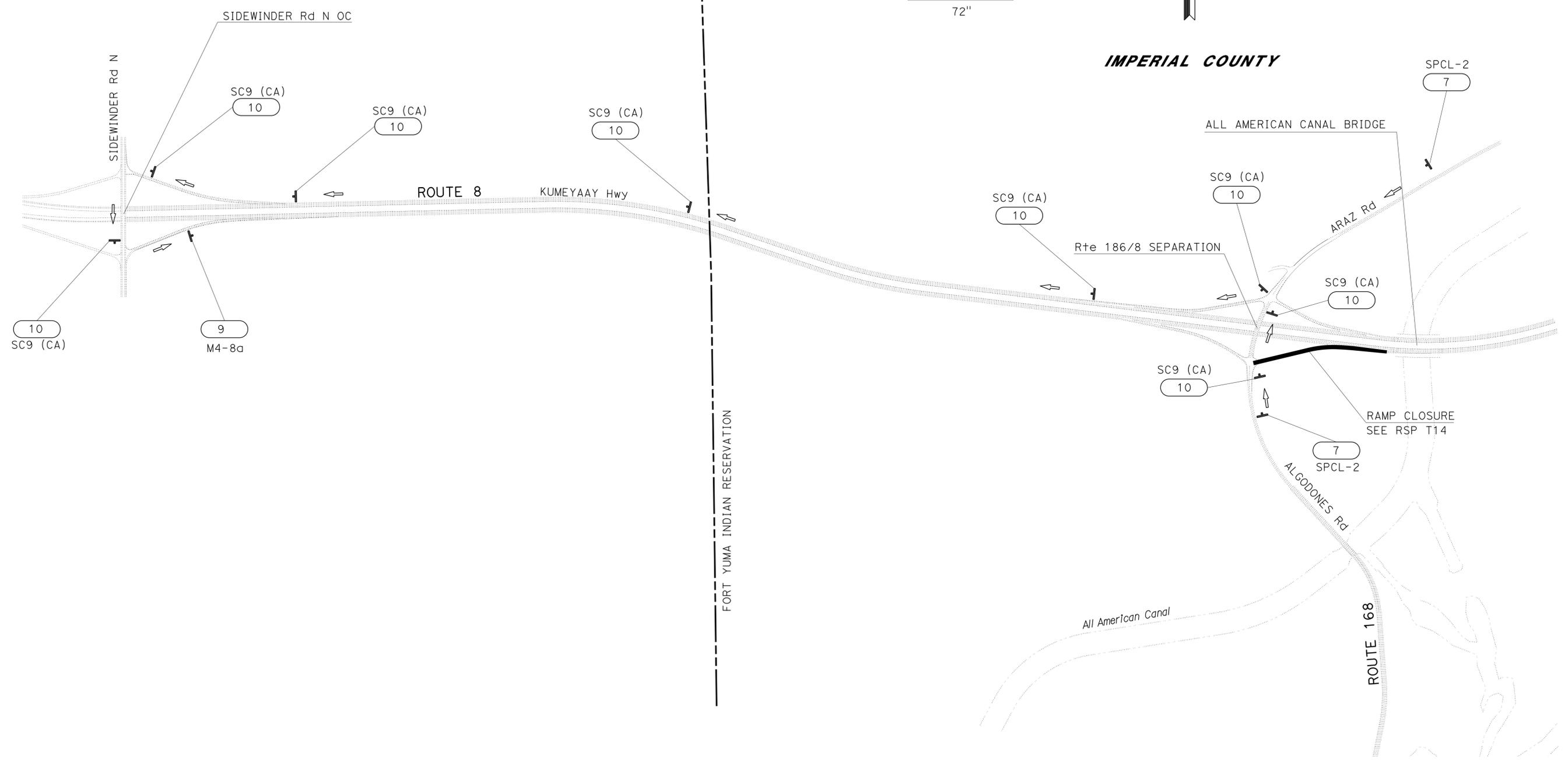
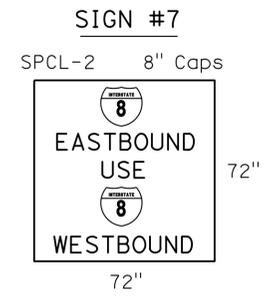
LAST REVISION | DATE PLOTTED => 08-DEC-2015
 08-11-15 | TIME PLOTTED => 14:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	6	20

Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
FUNCTIONAL SUPERVISOR	ALBERTO GAYON
CALCULATED/DESIGNED BY	CHECKED BY
CHRISTOPHER SEMAAN	ALBERTO GAYON
REVISED BY	DATE REVISED

ROUTE 186 TO EB ROUTE 8 ON-RAMP DETOUR

APPROVED FOR TRAFFIC HANDLING WORK ONLY

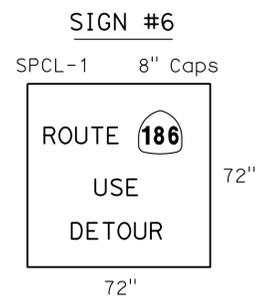
TRAFFIC HANDLING PLAN
TH-2
 NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	7	20

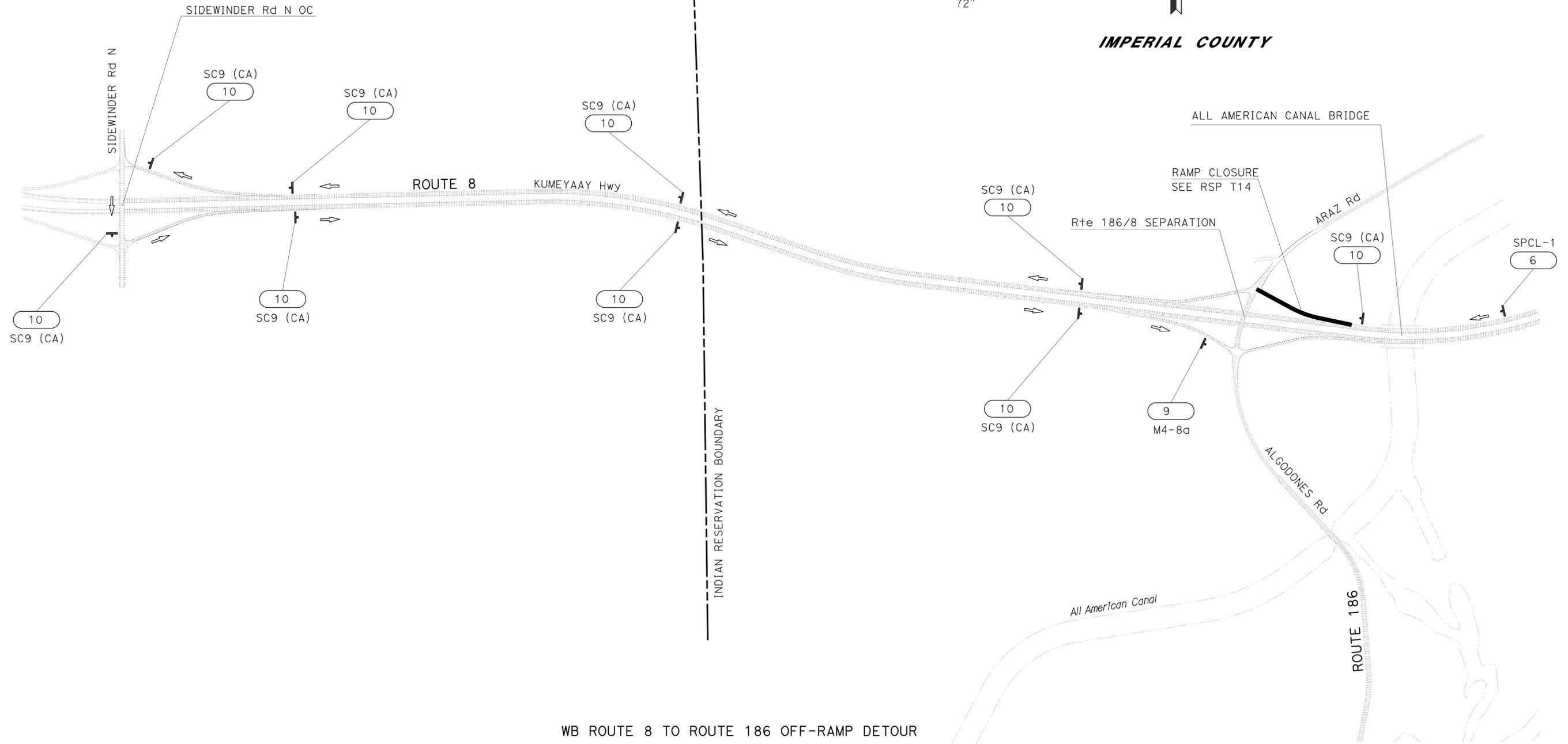
Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

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IMPERIAL COUNTY



WB ROUTE 8 TO ROUTE 186 OFF-RAMP DETOUR

APPROVED FOR TRAFFIC HANDLING WORK ONLY

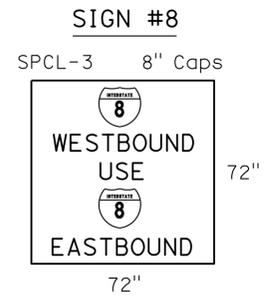
TRAFFIC HANDLING PLAN
 NO SCALE
TH-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
FUNCTIONAL SUPERVISOR	ALBERTO GAYON
CALCULATED/DESIGNED BY	CHECKED BY
CHRISTOPHER SEMAAN	ALBERTO GAYON
REVISED BY	DATE REVISED

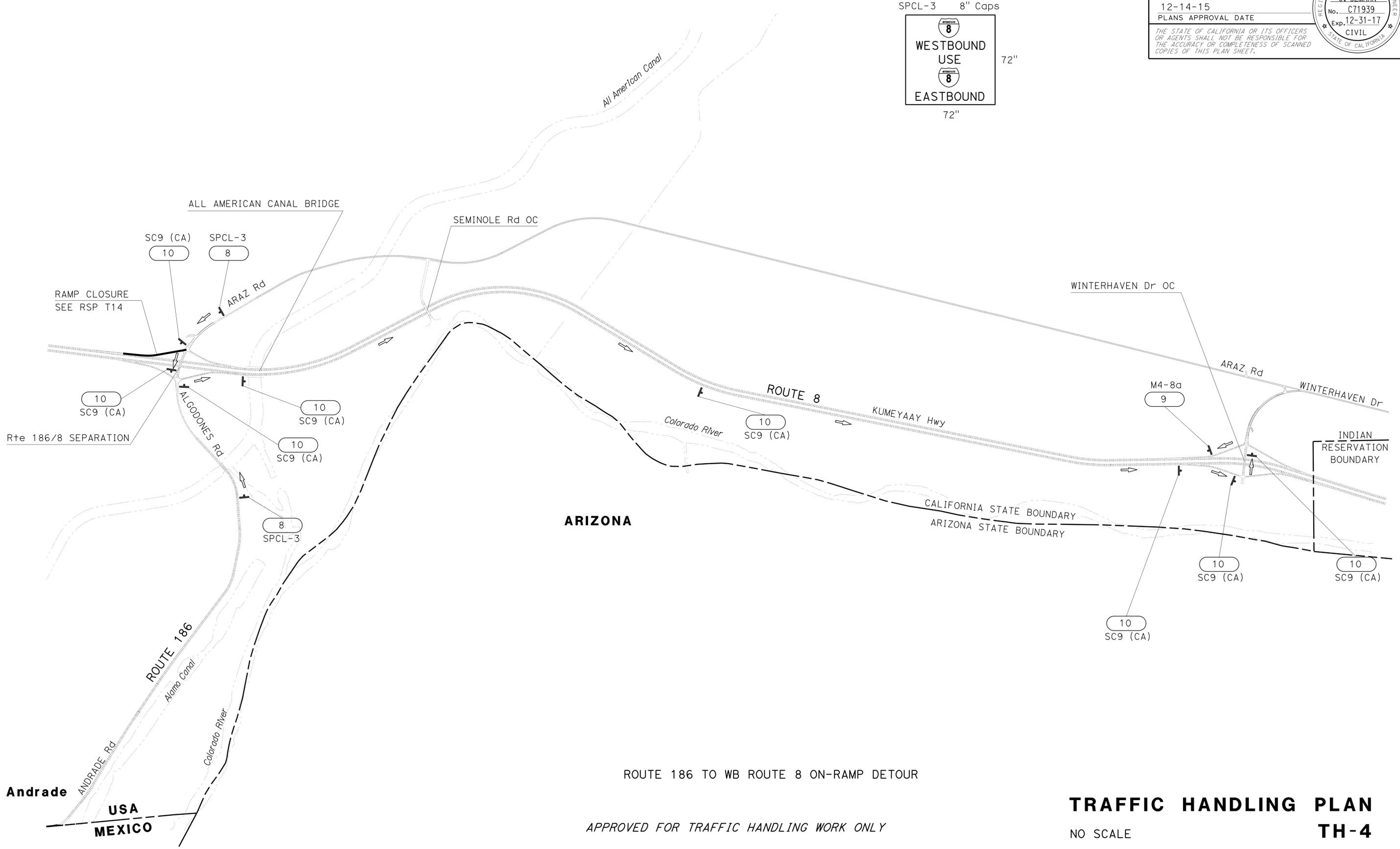
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	8	20

Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
MAINTENANCE
 FUNCTIONAL SUPERVISOR: ALBERTO GAYON
 CALCULATED/DESIGNED BY: CHRISTOPHER SEMAAN
 CHECKED BY: ALBERTO GAYON
 REVISED BY: ALBERTO GAYON
 DATE REVISION:



ROUTE 186 TO WB ROUTE 8 ON-RAMP DETOUR

APPROVED FOR TRAFFIC HANDLING WORK ONLY

TRAFFIC HANDLING PLAN
TH-4
NO SCALE

LAST REVISION DATE PLOTTED => 08-DEC-2015
 08-11-15 TIME PLOTTED => 14:05

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	9	20

Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS
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 COPIES OF THIS PLAN SHEET.

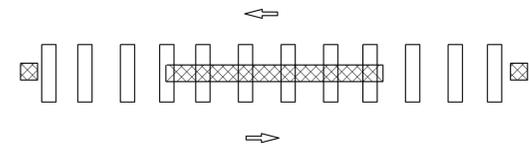
REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER
 J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

NOTES:

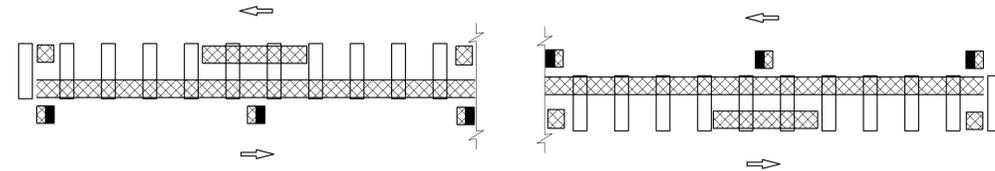
1. TRAFFIC STRIPE SHALL BE PLACED OVER CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS).
2. SEE STANDARD PLAN A40B FOR RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS).
3. RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS) SHALL NOT BE PLACED AT INTERSECTIONS, TURN LOCATIONS AND BRIDGES.
4. ALL PAVEMENT DELINEATION SHALL BE REPLACED IN KIND, UNLESS OTHERWISE INDICATED.
5. SEE QUANTITIES SHEET FOR LOCATIONS AND TYPES OF TRAFFIC LINE DETAILS.

LEGEND:

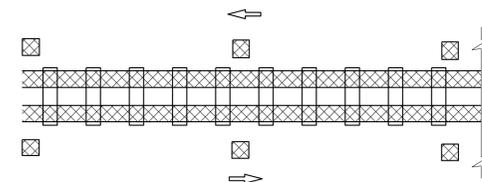
 = CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)



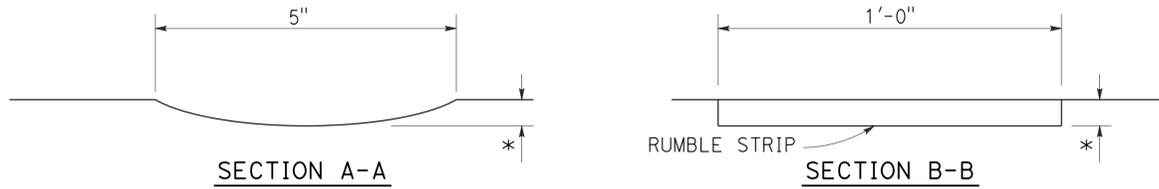
DETAIL 6 WITH CENTERLINE RUMBLE STRIP



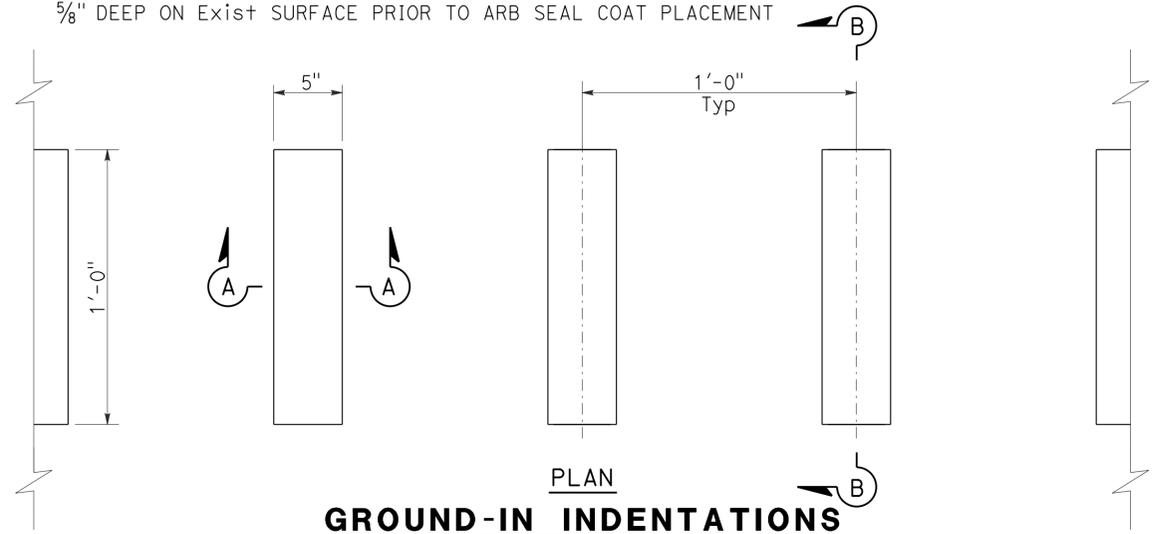
DETAIL 19 (Mod) WITH CENTERLINE RUMBLE STRIP



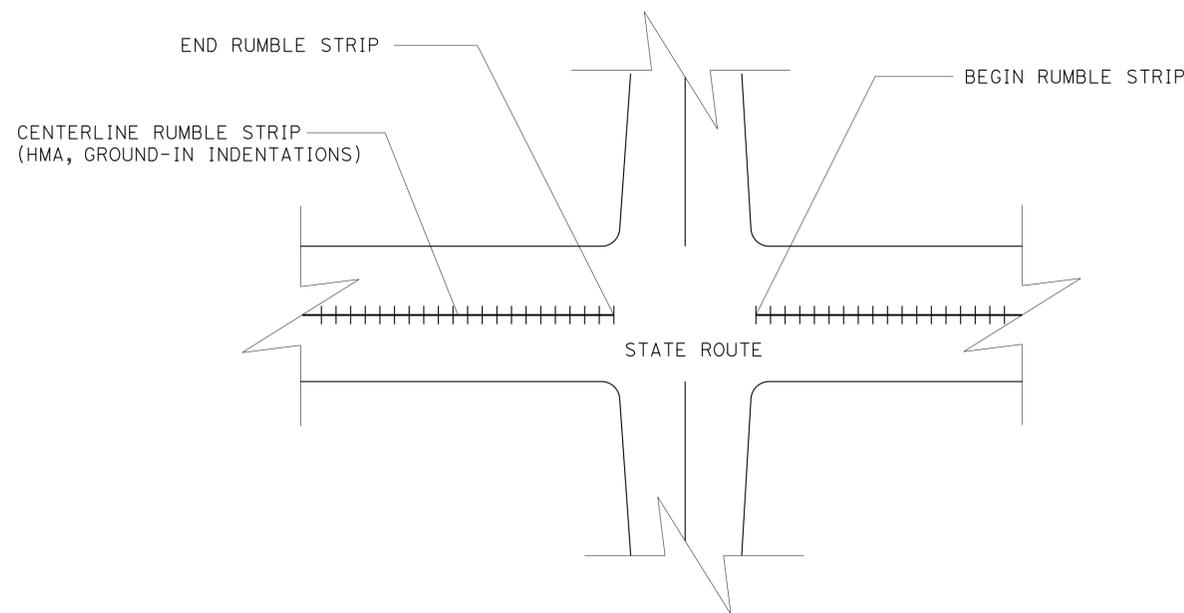
DETAIL 22 (Mod) WITH CENTERLINE RUMBLE STRIP



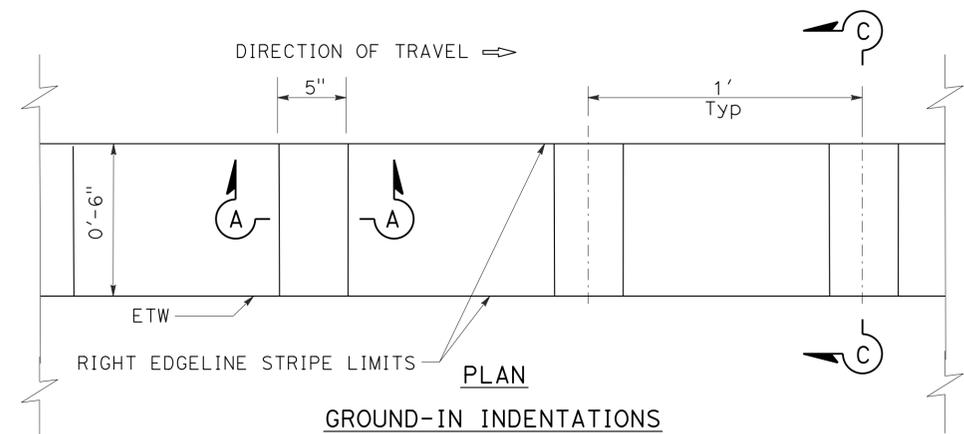
* 5/16" DEEP ON RHMA SURFACE
 * 5/8" DEEP ON Exist SURFACE PRIOR TO ARB SEAL COAT PLACEMENT



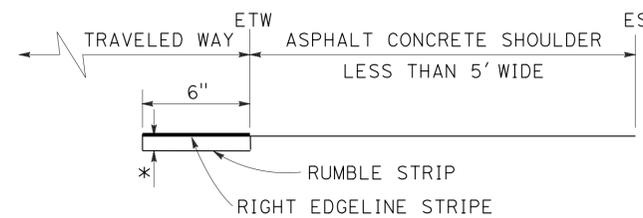
GROUND-IN INDENTATIONS



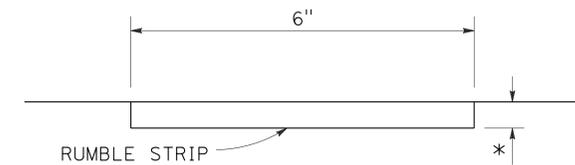
TYPICAL CENTERLINE RUMBLE STRIP PLACEMENT AT INTERSECTIONS



GROUND-IN INDENTATIONS



ALTERNATIVE RUMBLE STRIP PLACEMENT RIGHT OF DIRECTION OF TRAVEL



SECTION C-C

PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	10	20

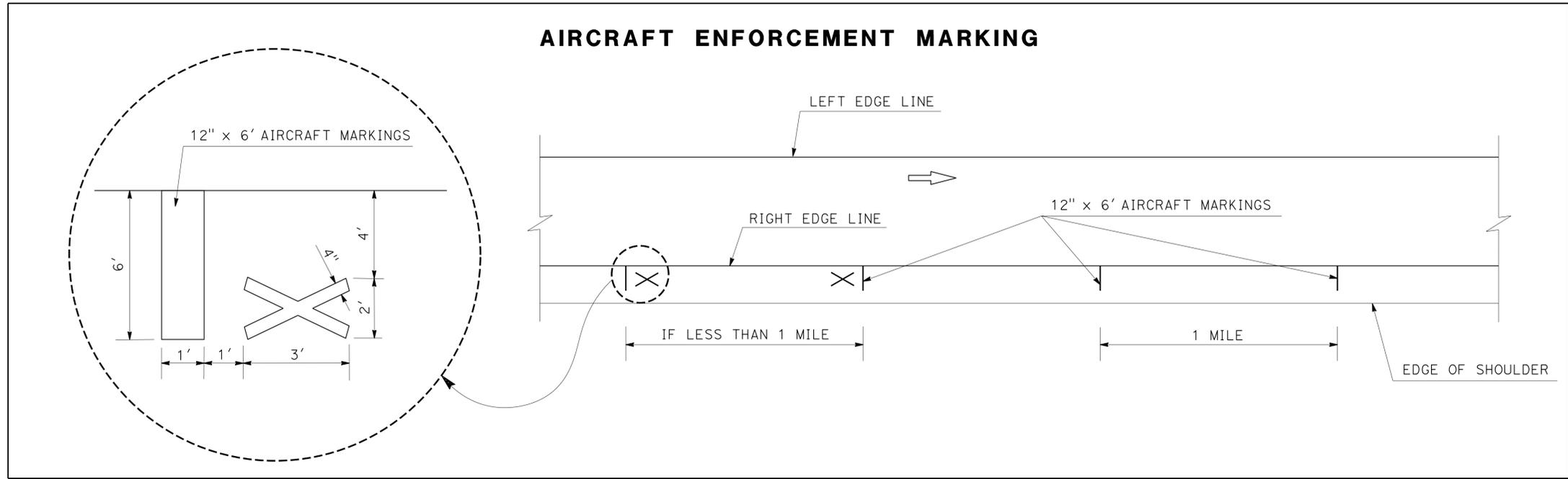
Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE

12-14-15
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
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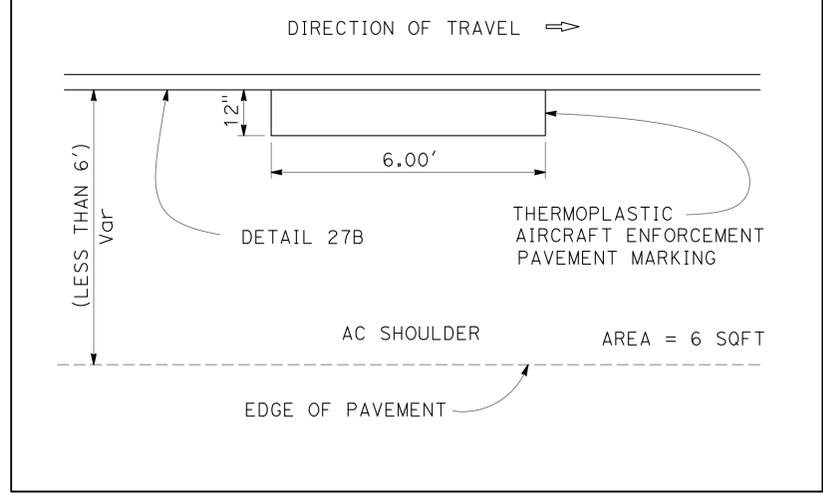
REGISTERED PROFESSIONAL ENGINEER
 CHRISTOPHER
 J. SEMAAN
 No. C71939
 Exp. 12-31-17
 CIVIL
 STATE OF CALIFORNIA

AIRCRAFT ENFORCEMENT MARKING

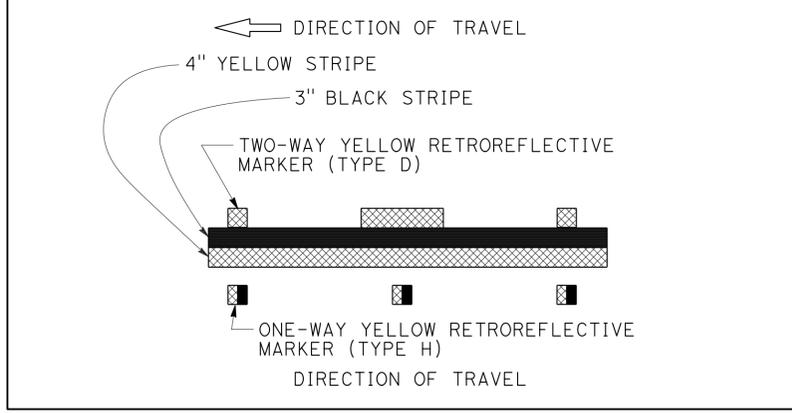


AIRCRAFT ENFORCEMENT MARKING

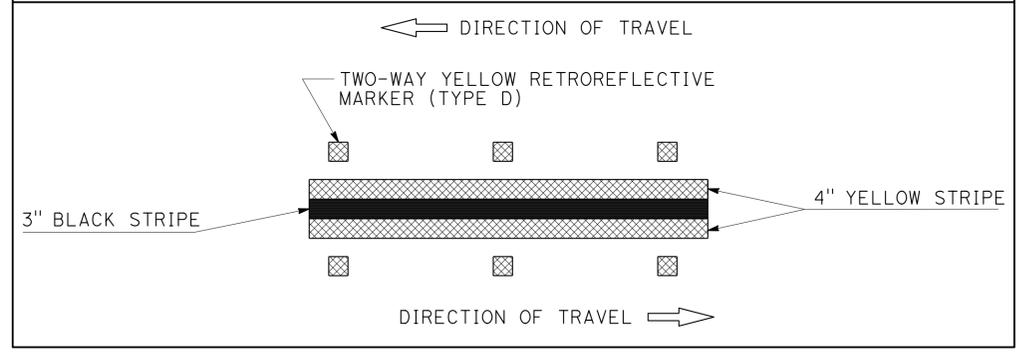
TYPE 2
 (FOR NARROW SHld APPLICATIONS)



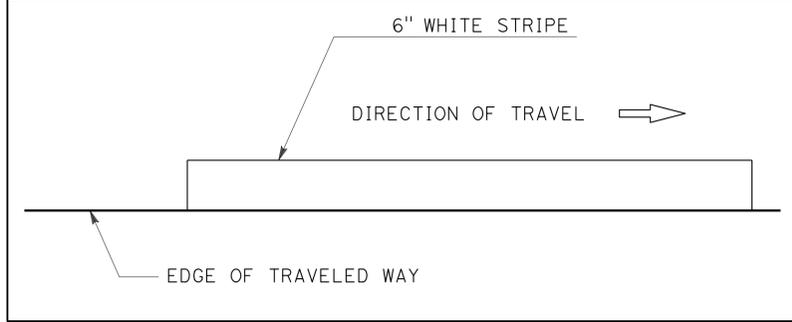
DETAIL 19 (Mod)



DETAIL 22 (Mod)



DETAIL 27B (6Mod)



PAVEMENT DELINEATION DETAILS

NO SCALE

PDD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 FUNCTIONAL SUPERVISOR: ALBERTO GAYON
 CHECKED BY: ALBERTO GAYON
 CALCULATED/DESIGNED BY: ALBERTO GAYON
 REVISIONS: CHRISTOPHER SEMAAN, ALBERTO GAYON
 REVISOR: CHRISTOPHER SEMAAN, ALBERTO GAYON
 DATE: 07-24-15, 12-14-15

LAST REVISION DATE PLOTTED => 08-DEC-2015 08-11-15 TIME PLOTTED => 14:05

PAVEMENT CONFORMS

LOCATION			LENGTH	WIDTH	DEPTH	COLD PLANE AC PAVEMENT	TACK COAT	RHMA (GAP-GRADED)	DESCRIPTION
ROUTE	DIRECTION	POSTMILE	LF [N]	LF [N]	LF [N]	SQYD	TON	TON	
111	NB/SB	56.00	120	32	-	426.67	0.11	36.24	BEGIN WORK CONFORM
111	SB	57.63	200	30	72	920.00	0.23	78.14	CROSS STREET CONFORM (BOMBAY BEACH Rd)
111	NB/SB	65.40	120	32	-	426.67	0.11	36.24	END WORK CONFORM
TOTAL						1,773.34	0.45*	150.62*	

[N] - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.
 * QUANTITY INCLUDED IN ROADWAY QUANTITIES TABLE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4, 0.0/2.1	12	20

Christopher Semaan 07-24-15
 REGISTERED CIVIL ENGINEER DATE
 12-14-15
 PLANS APPROVAL DATE

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

ROADWAY QUANTITIES

LOCATION				LENGTH	TRAVELED WAY WIDTH	TRAVELED WAY AREA	SHOULDER WIDTH	SHOULDER AREA	TOTAL AREA	DEPTH	TOTAL AREA	TACK COAT	RHMA (GAP-GRADED)	DESCRIPTION
ROUTE	DIRECTION	FROM PM	TO PM	LF [N]	LF [N]	SQFT [N]	LF [N]	SQFT [N]	SQFT [N]	LF [N]	SQYD [N]	TON	TON	
Rte 111	NB/SB	56.00	57.50	7,920.00	24	190,080.00	8	63,360.00	253,440.00	0.13	28,160.00	7.04	2,391.72	
		57.50	57.63	686.40	24-36	20,592.00	8	5,491.20	26,083.20	0.13	2,898.13	0.72	246.15	BOMBAY BEACH Rd
		57.63	57.67	211.20	36-24	6,336.00	8	1,689.60	8,025.60	0.13	891.73	0.22	75.74	BOMBAY BEACH Rd
		57.67	65.40	40,814.40	24	979,545.60	8	326,515.20	1,306,060.80	0.13	145,117.87	36.28	12,325.34	
SUBTOTAL												44.26	15,038.95	
PAVEMENT CONFORMS												0.45	150.62	
TOTAL												44.71	15,189.57	

[N] - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

ASPHALT-RUBBER BINDER SEAL COAT AND SLURRY SEAL

LOCATION				LENGTH	TRAVELED WAY WIDTH	TRAVELED WAY AREA	SHOULDER WIDTH	SHOULDER AREA	TOTAL AREA	TOTAL AREA	ASPHALT-RUBBER BINDER		PRECOATED SCREENINGS	ASPHALTIC EMULSION (FOG SEAL COAT)	SAND COVER (SEAL)	SLURRY SEAL	DESCRIPTION
ROUTE	DIRECTION	FROM PM	TO PM	LF [N]	LF [N]	SQFT [N]	LF [N]	SQFT [N]	SQFT [N]	SQYD [N]	TRAVELED WAY	SHOULDER	TON	TON	TON	TON	
186	NB/SB	0.00	0.04	211.20	66	13,939.20	0	0.00	13,939.20	1,548.80	3.36	0.00	30.98	0.32	3.10	22.26	
	NB/SB	0.04	0.08	211.20	24	5,068.80	10	2,112.00	7,180.80	797.87	1.22	0.56	15.96	0.17	1.60	11.47	
	NB/SB	0.08	0.10	105.60	24-80	5,491.20	10	1,056.00	6,547.20	727.47	1.33	0.28	14.55	0.15	1.45	10.46	
	NB/SB	0.10	0.30	1,056.00	24	25,344.00	8	8,448.00	33,792.00	3,754.67	6.12	2.22	75.09	0.78	7.51	53.97	
	NB/SB	0.30	0.69	2,059.20	24	49,420.80	8	16,473.60	65,894.40	7,321.60	11.93	4.34	146.43	1.53	14.64		
	NB/SB	0.69	1.70	5,332.80	24	127,987.20	2	10,665.60	138,652.80	15,405.87	30.89	2.81	308.12	3.21	30.81		
	NB/SB	1.70	1.95	1,320.00	24	31,680.00	2	2,640.00	34,320.00	3,813.33	7.65	0.70	76.27	0.79	7.63	54.82	
	NB/SB	1.95	2.05	528.00	24	12,672.00	16	8,448.00	21,120.00	2,346.67	3.06	2.22	46.93	0.49	4.69	33.73	
	NB/SB	2.05	2.10														NO WORK AT Rte 186/8 Sep
	NB/SB	2.10	2.13	158.40	24	3,801.60	16	2,534.40	6,336.00	704.00	0.92	0.67	14.08	0.15	1.41	10.12	
	NB	0.14	0.37														NO WORK AT WEIGH STATION
SUBTOTAL											66.48	13.80	728.41	7.59	72.84	196.83	
RUMBLE STRIP														4.15			
TOTAL											80.28		728.41	11.74	72.84	196.83	

[N] - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

RUMBLE STRIP

SHOULDER BACKING

LOCATION				SHOULDER BACKING
ROUTE	DIRECTION	FROM PM	TO PM	TON
111	NB	56.00	65.40	1,080
111	SB	56.00	65.40	1,080
186	NB	0.00	2.10	241
186	SB	0.00	2.10	241
TOTAL				2,642

LOCATION				CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)	ASPHALTIC EMULSION (FOG SEAL COAT)
ROUTE	DIRECTION	FROM PM	TO PM	STA	STA	TON
111	NB/SB	56.0	65.4	497	994	4.15
186	NB/SB	0.0	2.1	111		
TOTAL				608	994	4.15**

** QUANTITY INCLUDED IN ASPHALT-RUBBER BINDER SEAL COAT AND SLURRY SEAL TABLE

SUMMARY OF QUANTITIES
Q-1

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

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

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4 0.0/2.1	13	20

Grace M. Tsushima
 REGISTERED CIVIL ENGINEER
 No. C49814
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

July 19, 2013
 PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 12-14-15

UNIT OF MEASUREMENT SYMBOLS:

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

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

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

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

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

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

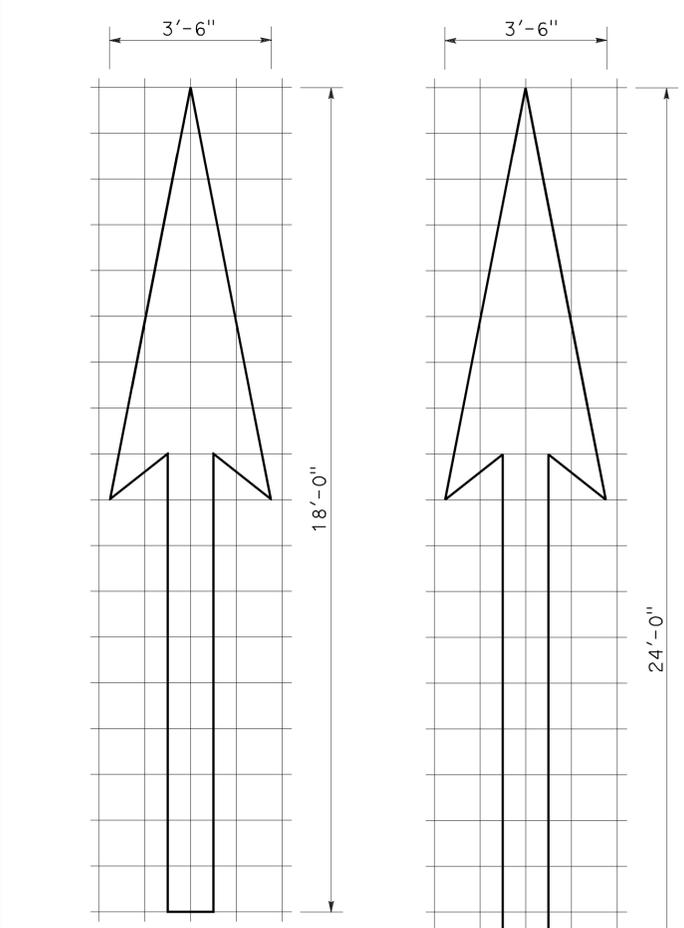
2010 REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4 0.0/2.1	14	20

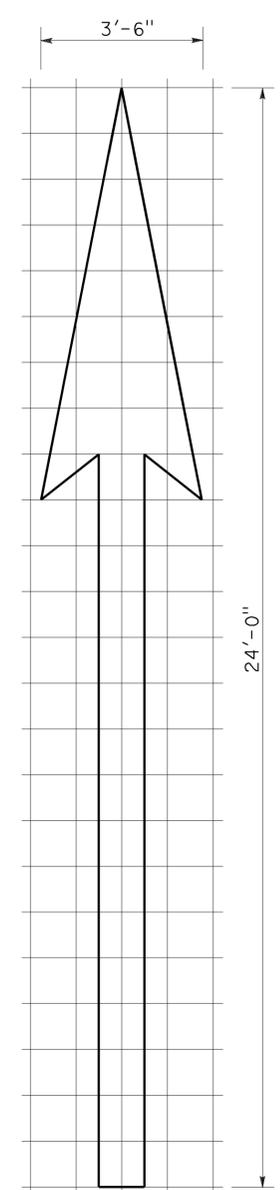
Robert L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

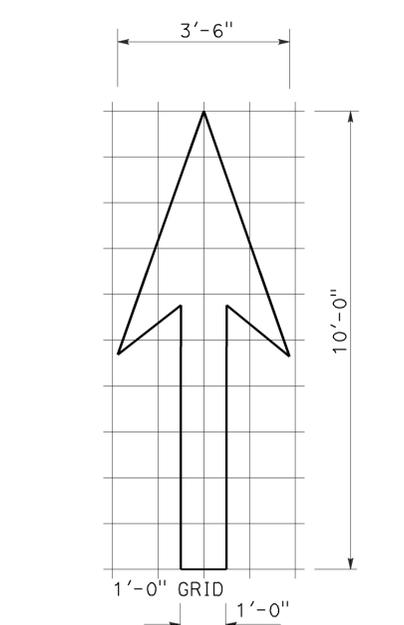
TO ACCOMPANY PLANS DATED 12-14-15



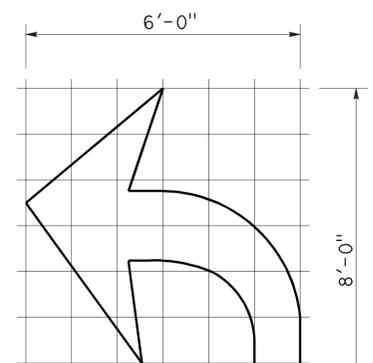
TYPE I 18'-0" ARROW
A=25 ft²



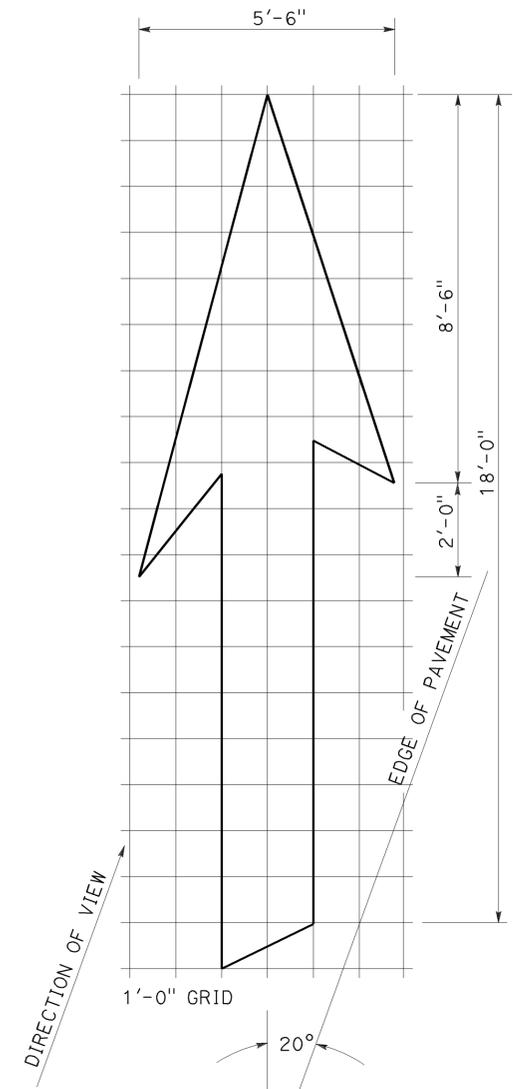
TYPE I 24'-0" ARROW
A=31 ft²



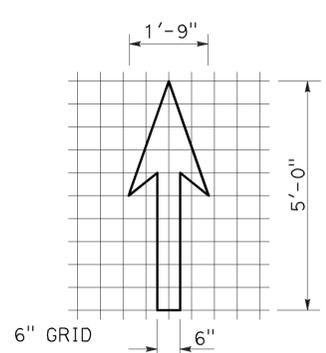
TYPE I 10'-0" ARROW
A=14 ft²



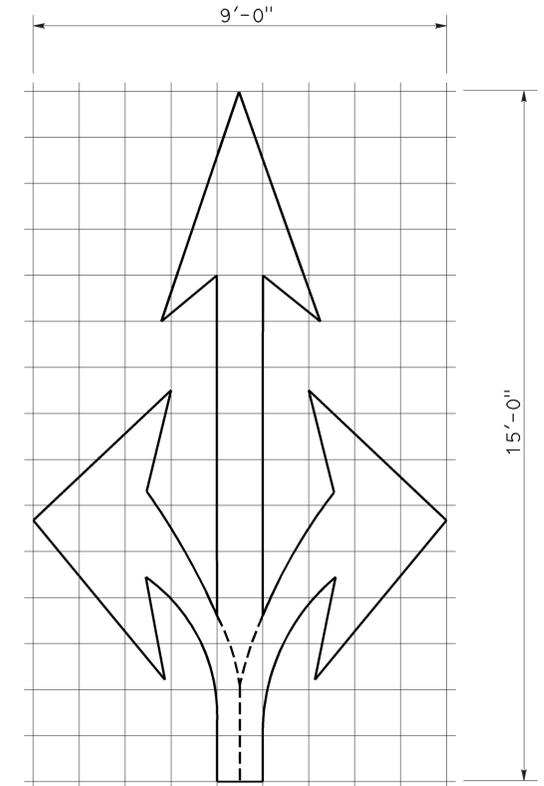
TYPE IV (L) ARROW
A=15 ft²
(For Type IV (R) arrow, use mirror image)



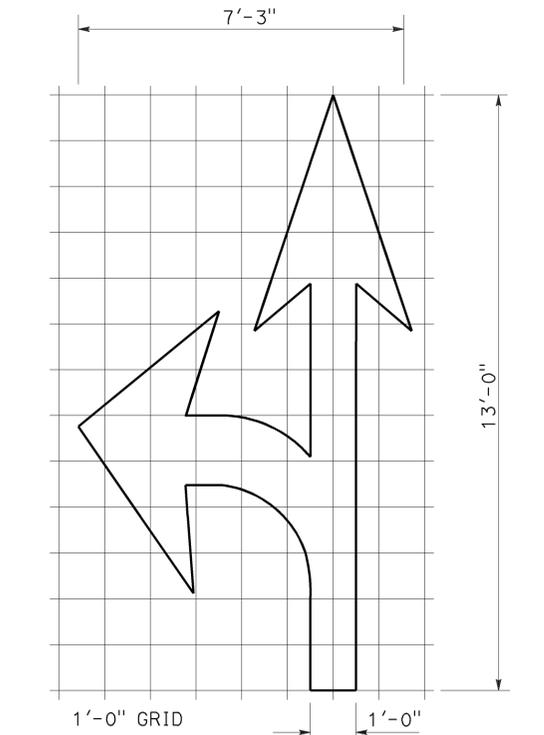
TYPE VI ARROW
A=42 ft²
Right lane drop arrow
(For left lane, use mirror image)



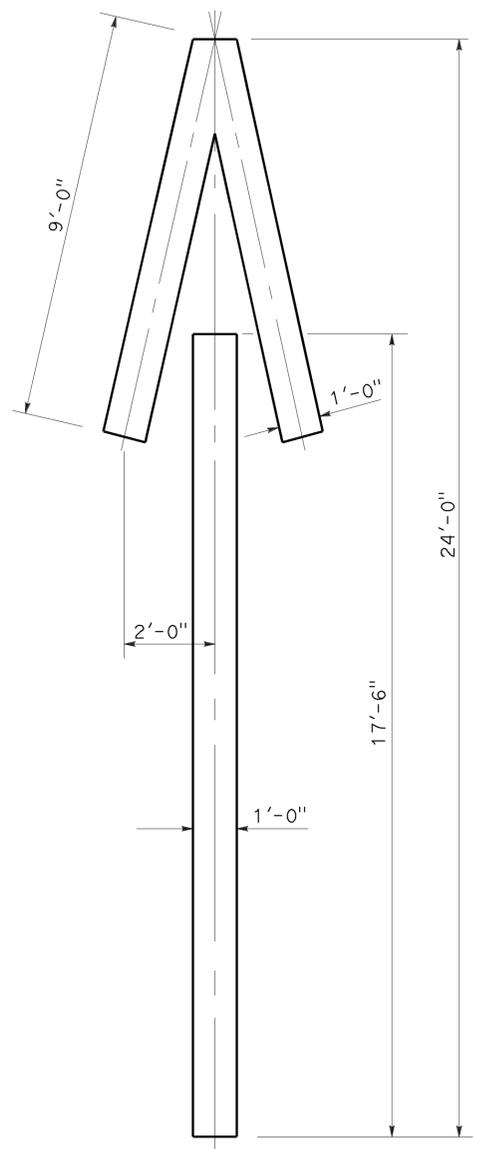
BIKE LANE ARROW
A=3.5 ft²



TYPE VIII ARROW
A=36 ft²



TYPE VII (L) ARROW
A=27 ft²
(For Type VII (R) arrow, use mirror image)



TYPE V ARROW
A=33 ft²

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

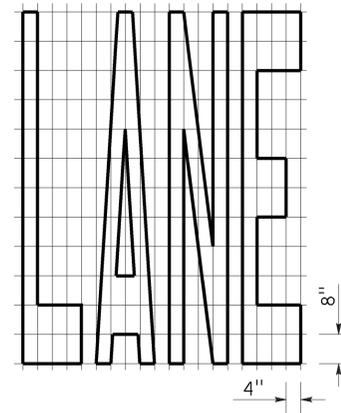
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

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

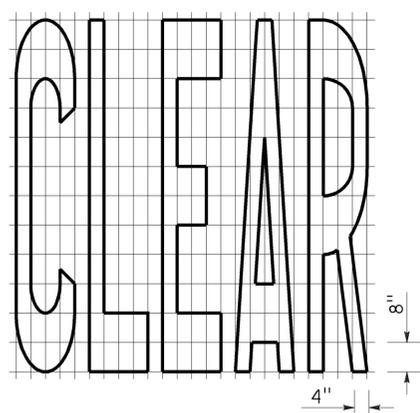
REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

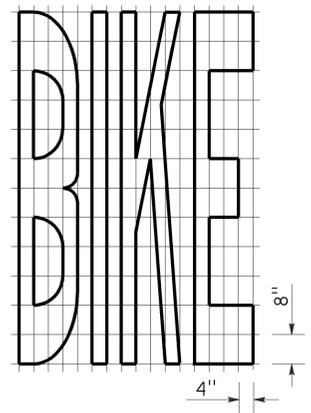
TO ACCOMPANY PLANS DATED 12-14-15



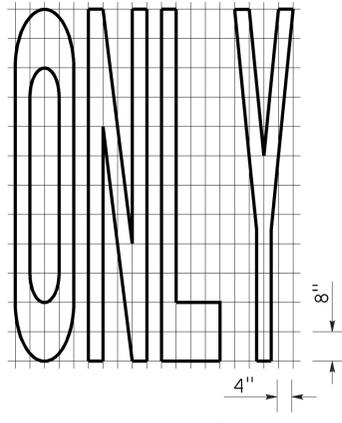
A=24 ft²



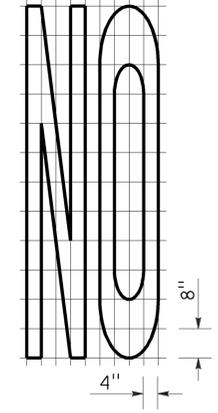
A=27 ft²



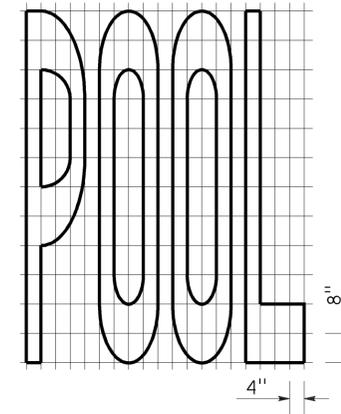
A=21 ft²



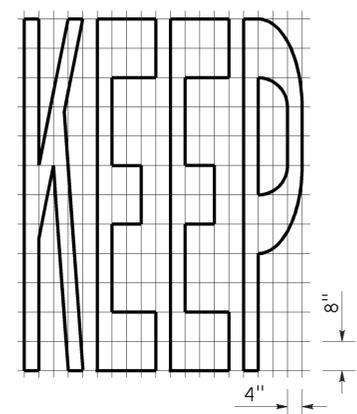
A=22 ft²



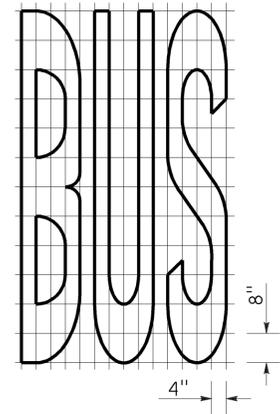
A=14 ft²



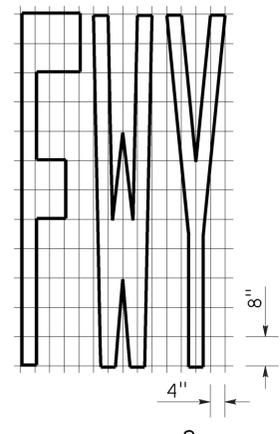
A=23 ft²



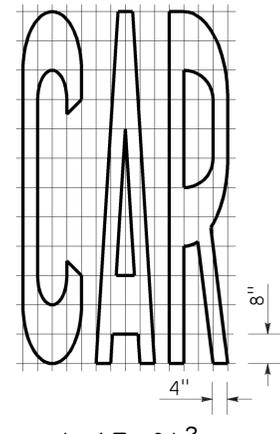
A=24 ft²



A=20 ft²

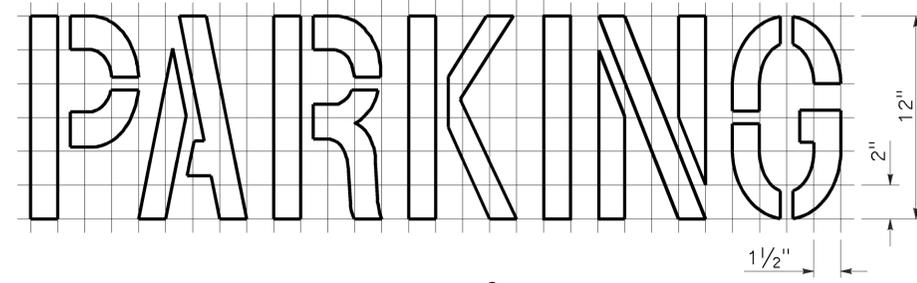
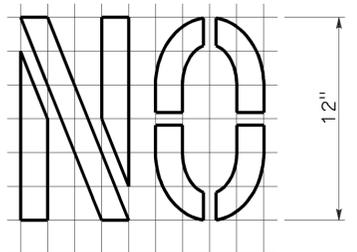


A=16 ft²

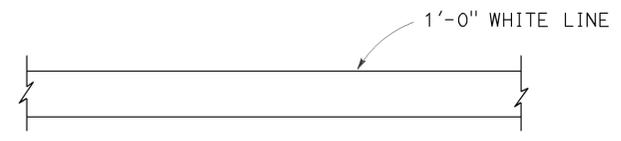


A=17 ft²

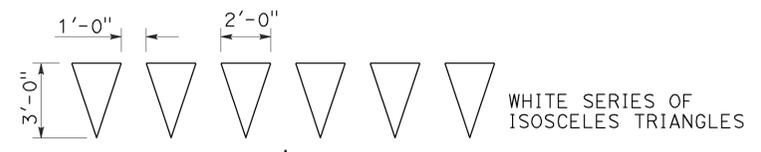
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

NOTES:

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

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

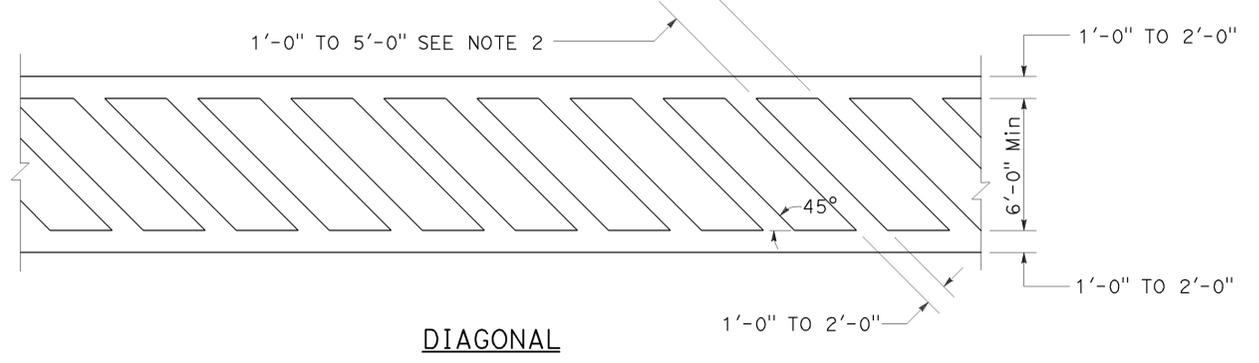
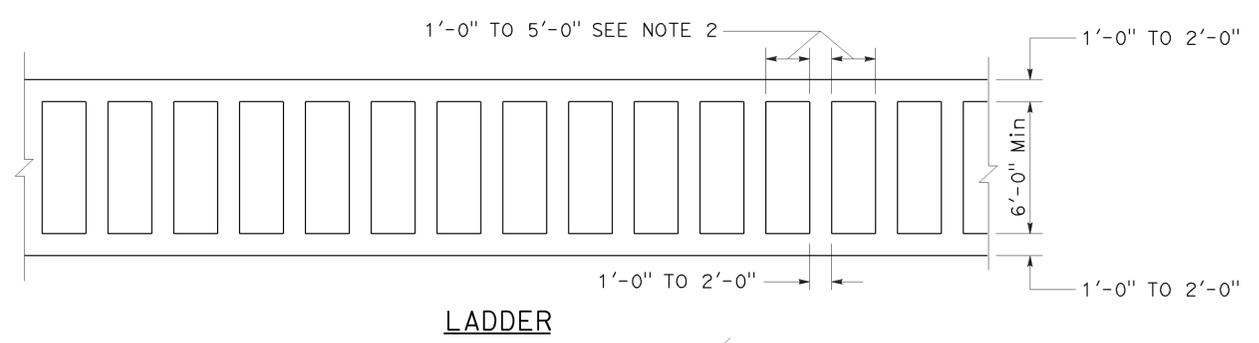
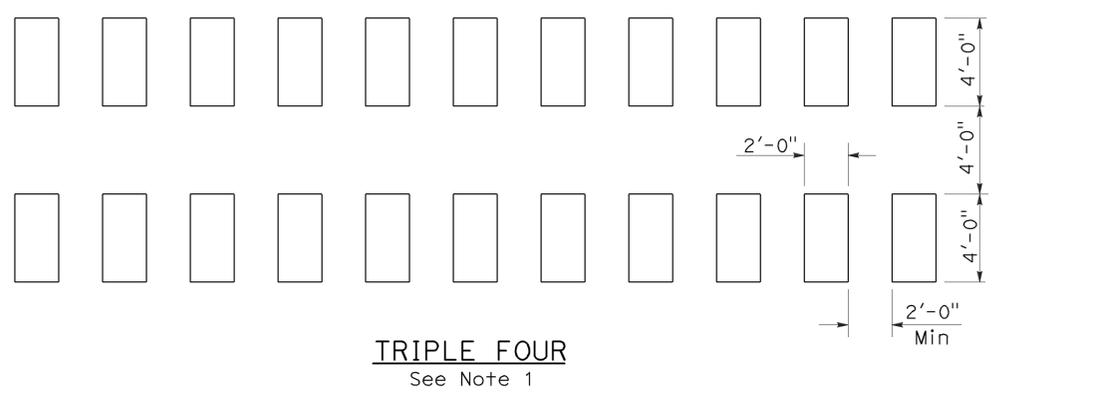
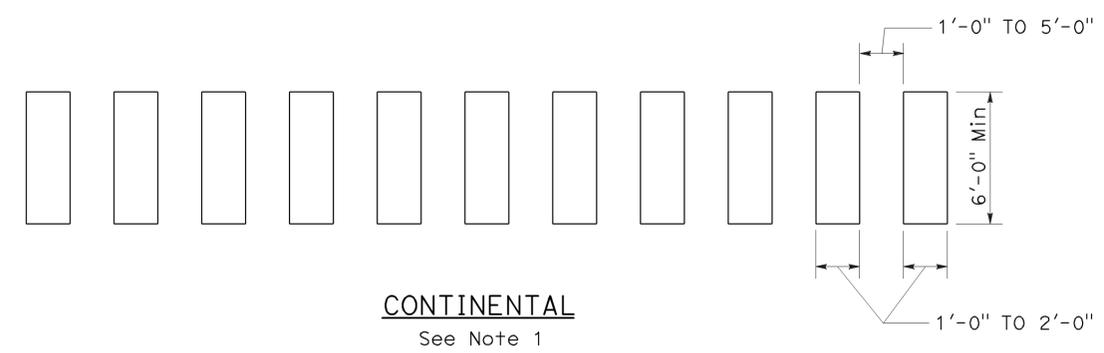
RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A24E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4 0.0/2.1	16	20

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

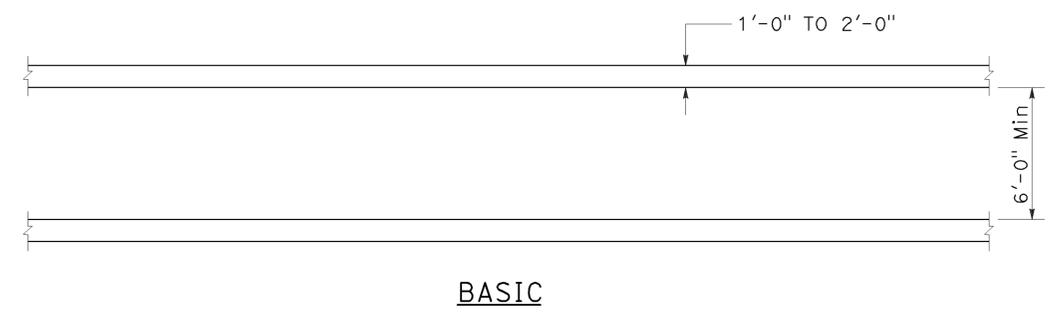
TO ACCOMPANY PLANS DATED 12-14-15



HIGHER VISIBILITY CROSSWALKS

NOTES:

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



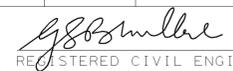
BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**

NO SCALE
RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE
STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A24F

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4 0.0/2.1	17	20


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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

TO ACCOMPANY PLANS DATED 12-14-15

TABLE 1

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

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

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

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

TABLE 2

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

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

TABLE 3

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

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**

NO SCALE

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

REVISED STANDARD PLAN RSP T9

2010 REVISED STANDARD PLAN RSP T9

NOTES:

See Revised Standard Plan RSP T9 for tables.

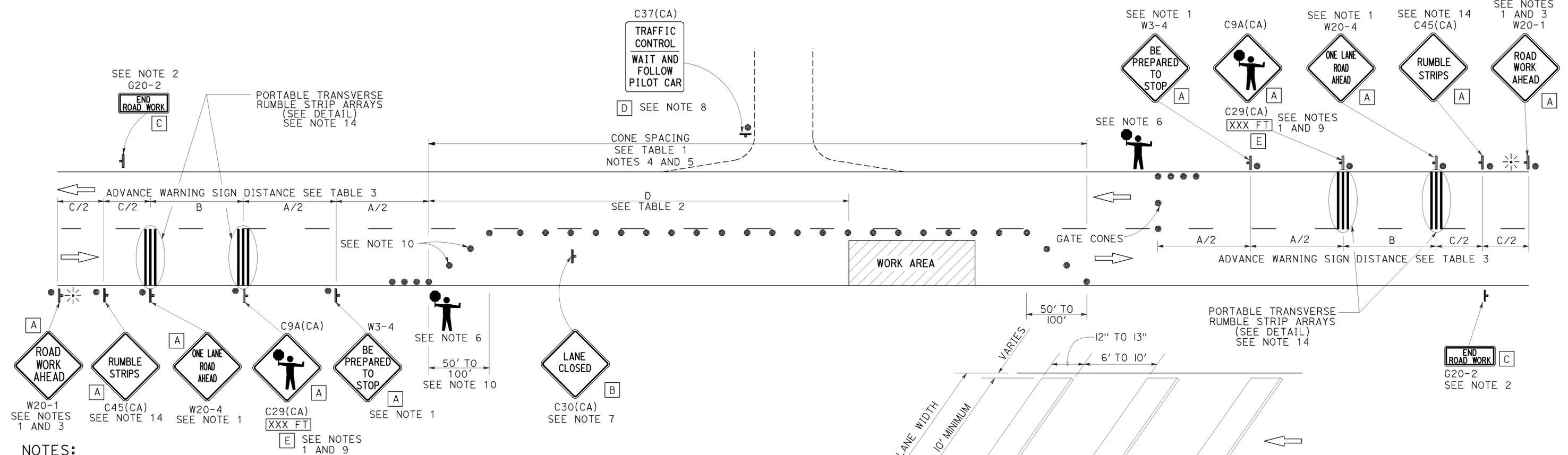
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

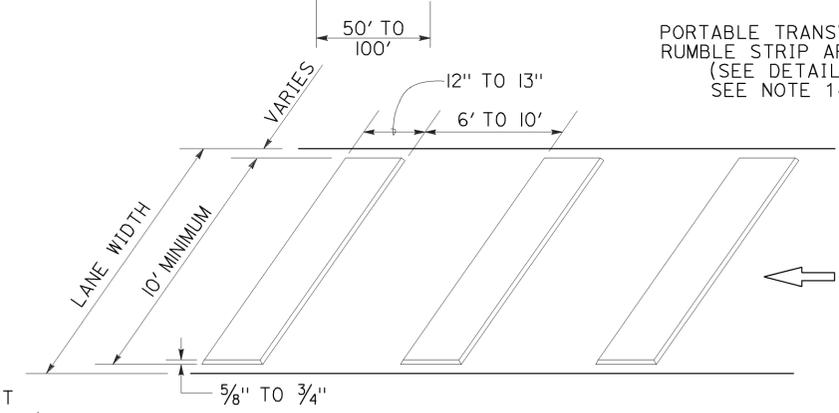
TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

TO ACCOMPANY PLANS DATED 12-14-15



- NOTES:**
- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
 - If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
 - All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
 - Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
 - Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.

- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions



SIGN PANEL SIZE (Min)

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

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 👤 FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

2010 REVISED STANDARD PLAN RSP T13

TYPICAL RAMP CLOSURES

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 36" x 36"
- D 48" x 36"

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ‡ BARRICADES
- ⚡ PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	111,186	56.0/65.4 0.0/2.1	19	20

G. S. Miller
 REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

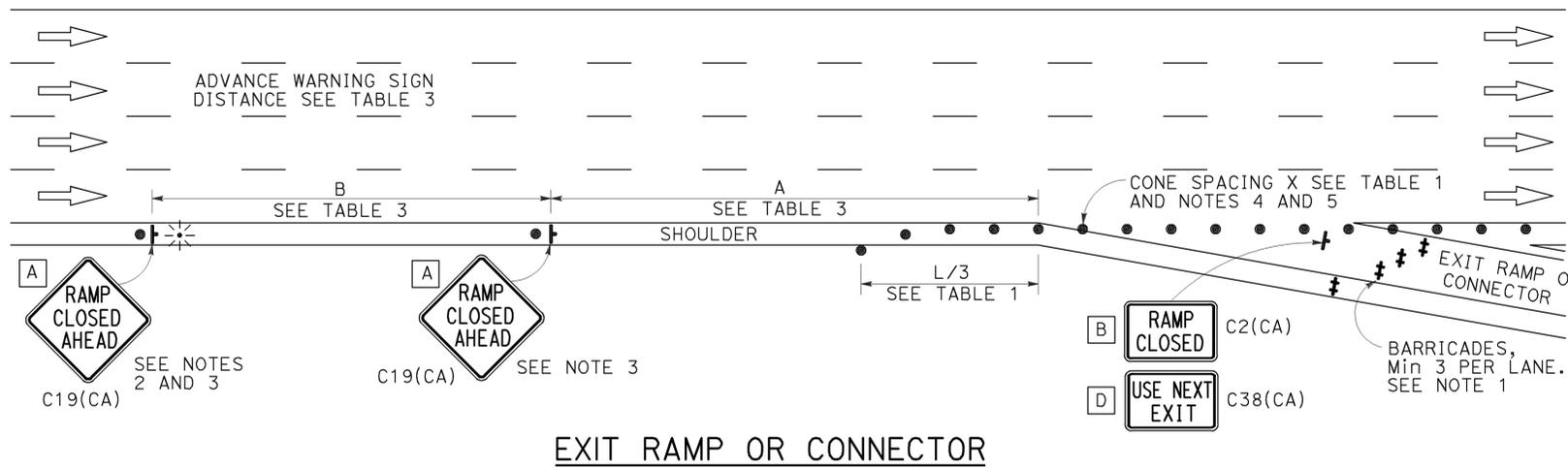
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

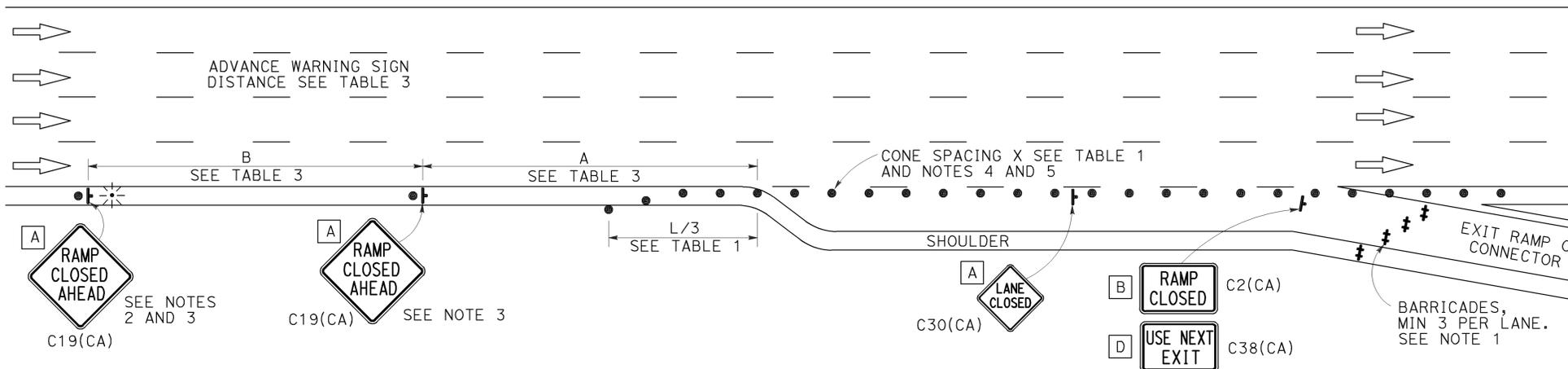
TO ACCOMPANY PLANS DATED 12-14-15

NOTES:

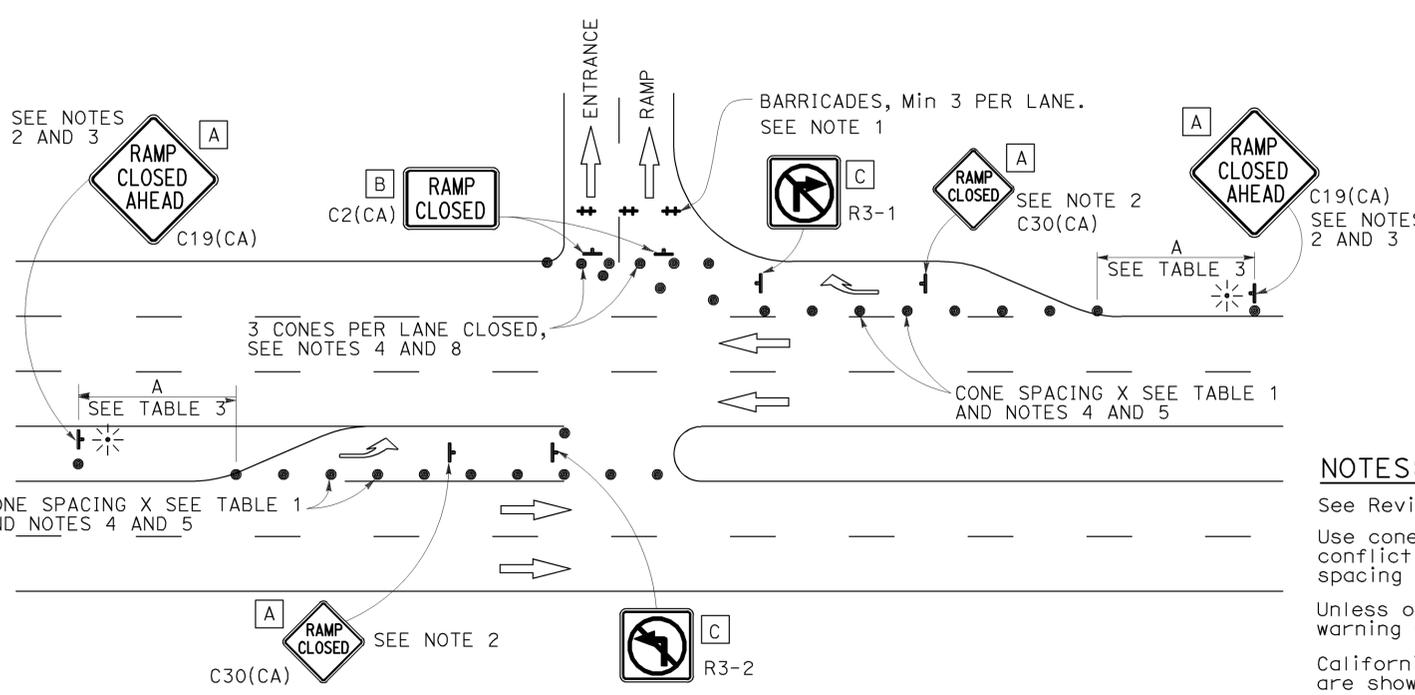
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
- Each advance C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
- All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
- At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
- The existing "EXIT" signs shall be covered during ramp closures.
- A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.



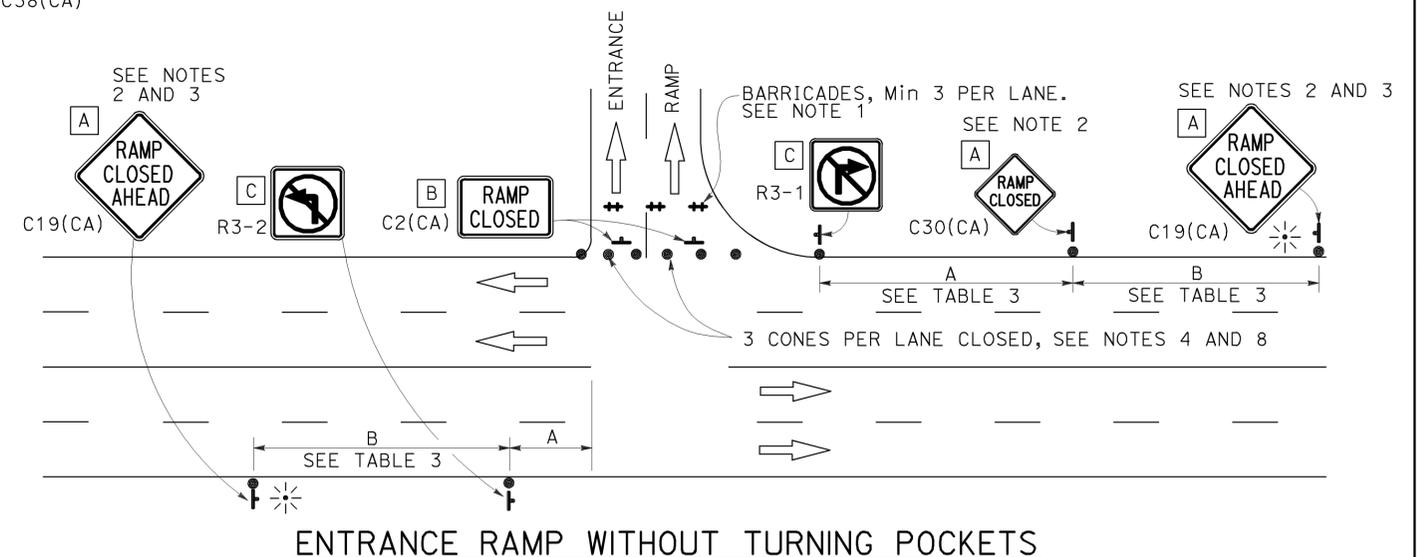
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES:

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR RAMP CLOSURE**
 NO SCALE

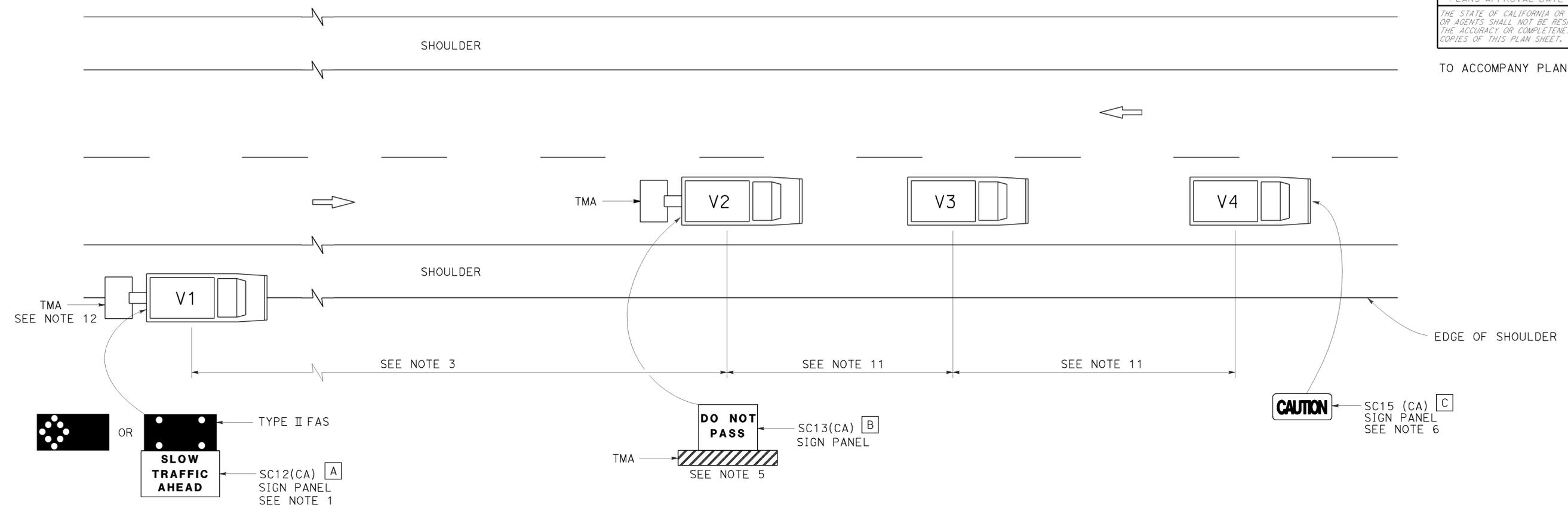
RSP T14 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T14
 DATED MAY 20, 2011 - PAGE 242 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T14

2010 REVISED STANDARD PLAN RSP T14



TO ACCOMPANY PLANS DATED 12-14-15



NOTES:

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.

7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Revised Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.

LEGEND

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

SIGN PANEL SIZE (Min)

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
FOR MOVING LANE CLOSURE
ON TWO LANE HIGHWAYS**

NO SCALE

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

REVISED STANDARD PLAN RSP T17

2010 REVISED STANDARD PLAN RSP T17