

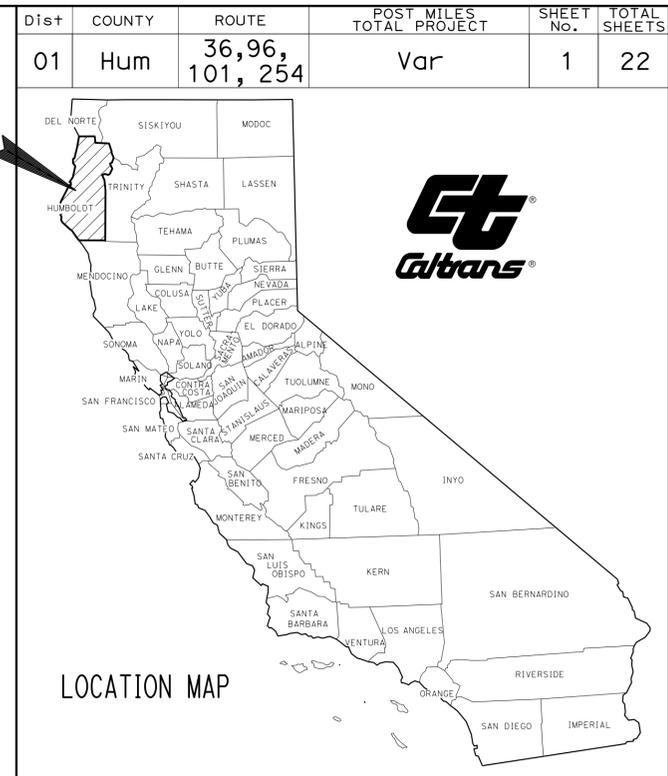
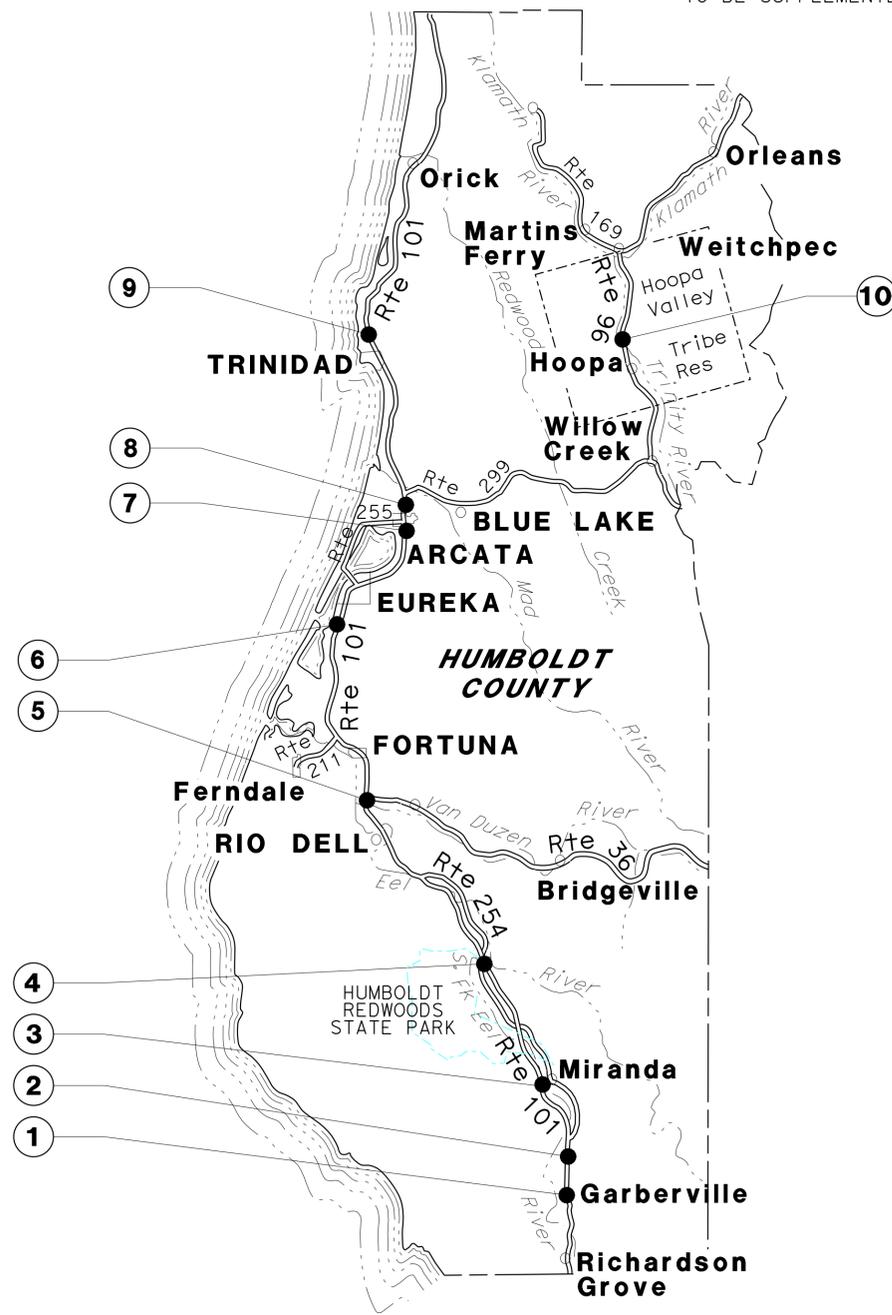
INDEX OF PLANS

SHEET No	DESCRIPTION
1	TITLE AND LOCATION MAP
2	CONSTRUCTION DETAILS
3-6	CONSTRUCTION AREA SIGNS
7	TRAFFIC HANDLING PLAN
8	SUMMARY OF QUANTITIES
9-15	REVISED STANDARD PLANS
STRUCTURE PLANS	
16-22	ROUTE 36, 96, 101 AND 254 BRIDGES GENERAL PLAN AND DETAILS

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 HUMBOLDT COUNTY
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATIONS OF CONSTRUCTION

LOCATION	COUNTY	ROUTE	PM	BRIDGE NAME	BRIDGE No.
1	Hum	101	R11.12	SPROWL CREEK ROAD OC	04-0195
2	Hum	101	R14.31	DEAN CREEK	04-0006
3	Hum	101	R22.44	FRENCH ROAD UC	04-0174
4	Hum	254	19.94	FEDERATION GROVE SEPARATION	04-0114
5	Hum	36	0.01	ROUTE 36/101 SEPARATION	04-0301
6	Hum	101	67.87	SALMON CREEK	04-0020
7	Hum	101	86.10	SEVENTH STREET OC	04-0054
8	Hum	101	87.84	ARCATA OH	04-0079R
9	Hum	101	R103.38	SEAWOOD DRIVE UC	04-0209
10	Hum	96	R14.55	MILL CREEK	04-0139

PROJECT MANAGER
Tom Fitzgerald

DESIGN MANAGER
Tom Fitzgerald

3-26-15
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
March 27, 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

DATE PLOTTED => 30-MAR-2015 TIME PLOTTED => 12:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	2	22

REGISTERED CIVIL ENGINEER *Brenda Harwell* DATE 3-26-15
March 27, 2015
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 BRENDA HARWELL
 No. 64471
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

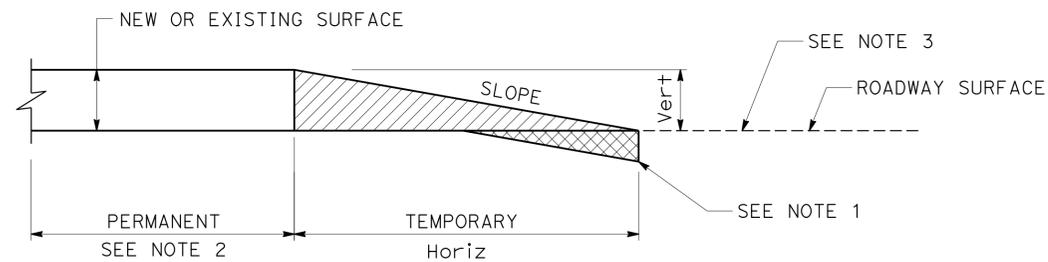
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

- GRIND EXISTING SURFACES TO ACCOMMODATE A MINIMUM TAPER THICKNESS OF 0.10' WHEN EITHER:
 - HMA MATERIAL SUCH AS RUBBERIZED, POLYMER MODIFIED OR OPEN GRADED IS UNSUITABLE FOR RAKING TO A MAXIMUM 0.02' THICKNESS AT THE CONFORM.
 - TEMPORARY TAPER WILL BE IN PLACE FOR MORE THAN 14 DAYS.
- PERMANENT SURFACE MAY BE EXISTING OR NEW PAVEMENT.
- ROADWAY SURFACE IS THE TOP OF EXISTING SURFACE OR THE TOP OF THE PLANED SURFACE.
- FOR TEMPORARY TAPERS ON BRIDGE DECKS AND APPROACH SLABS, CONSTRUCT TEMPORARY TAPERS WITH POLYESTER CONCRETE.
- IF AUTHORIZED, YOU MAY USE ALTERNATIVE MATERIALS OR METHODS TO PRODUCE THE REQUIRED TAPER.

LEGEND

-  HMA MATERIAL (TEMPORARY TAPER) (SEE NOTE 4)
-  IF NECESSARY, COLD PLANE ASPHALT CONCRETE PAVEMENT AND PLACE HMA MATERIAL (SEE NOTE 1)



Vert	SLOPE RATIO Horiz/Vert
0-0.10'	70:1
GREATER THAN 0.10'	160:1

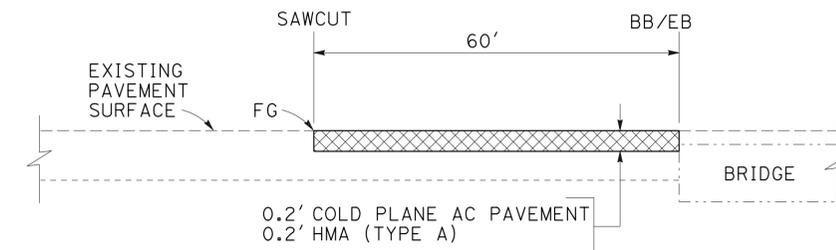
TYPICAL PAVING CONFORM FOR TEMPORARY CONSTRUCTION TAPERS

NOTE:

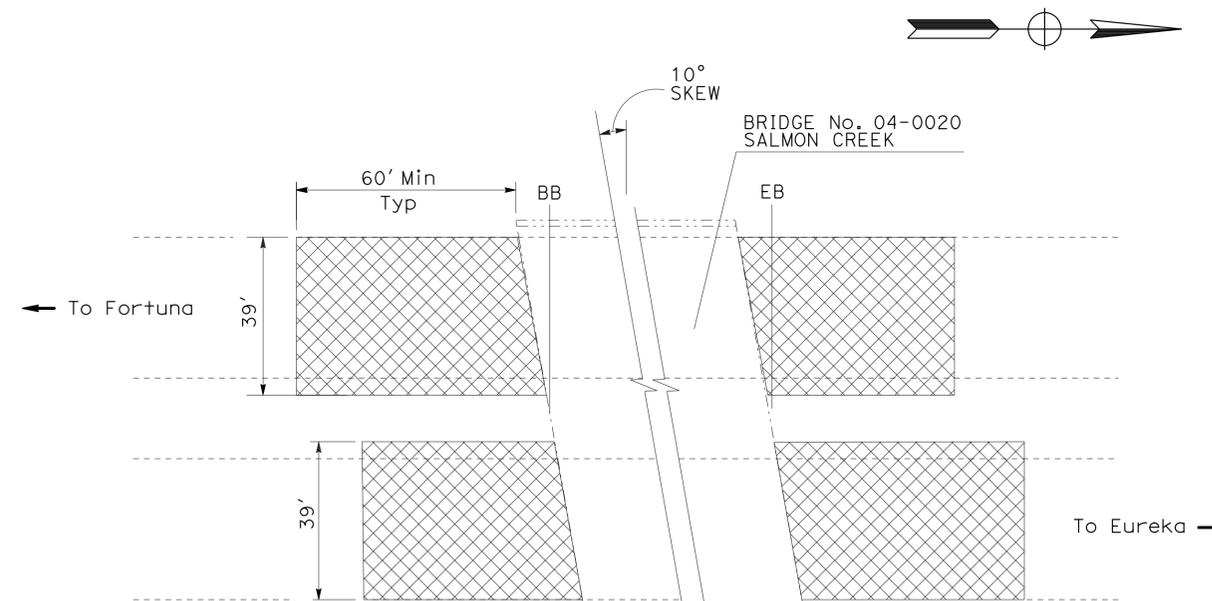
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THIS SHEET.

LEGEND

-  CONFORM



PROFILE



PLAN

CONFORM DETAILS

LOCATION 6

CONSTRUCTION DETAILS

NO SCALE

C-1

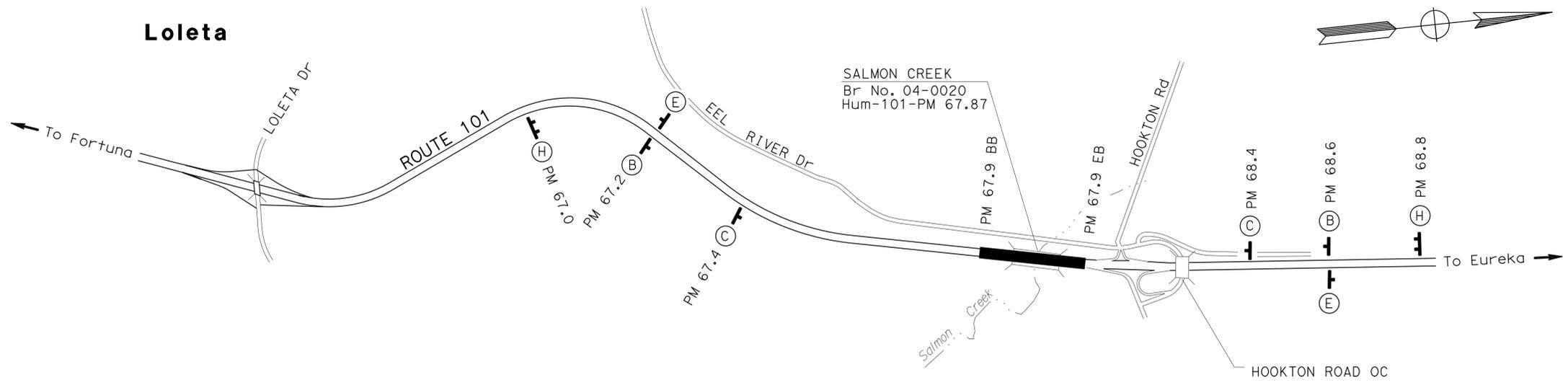
P:\PROJ\01\0E210\Drawings\sheet\0114000016ga001.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN
 FUNCTIONAL SUPERVISOR Tom Fitzgerald
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISOR Brenda Harwell
 DATE REVISED
 DATE REVISED
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	5	22

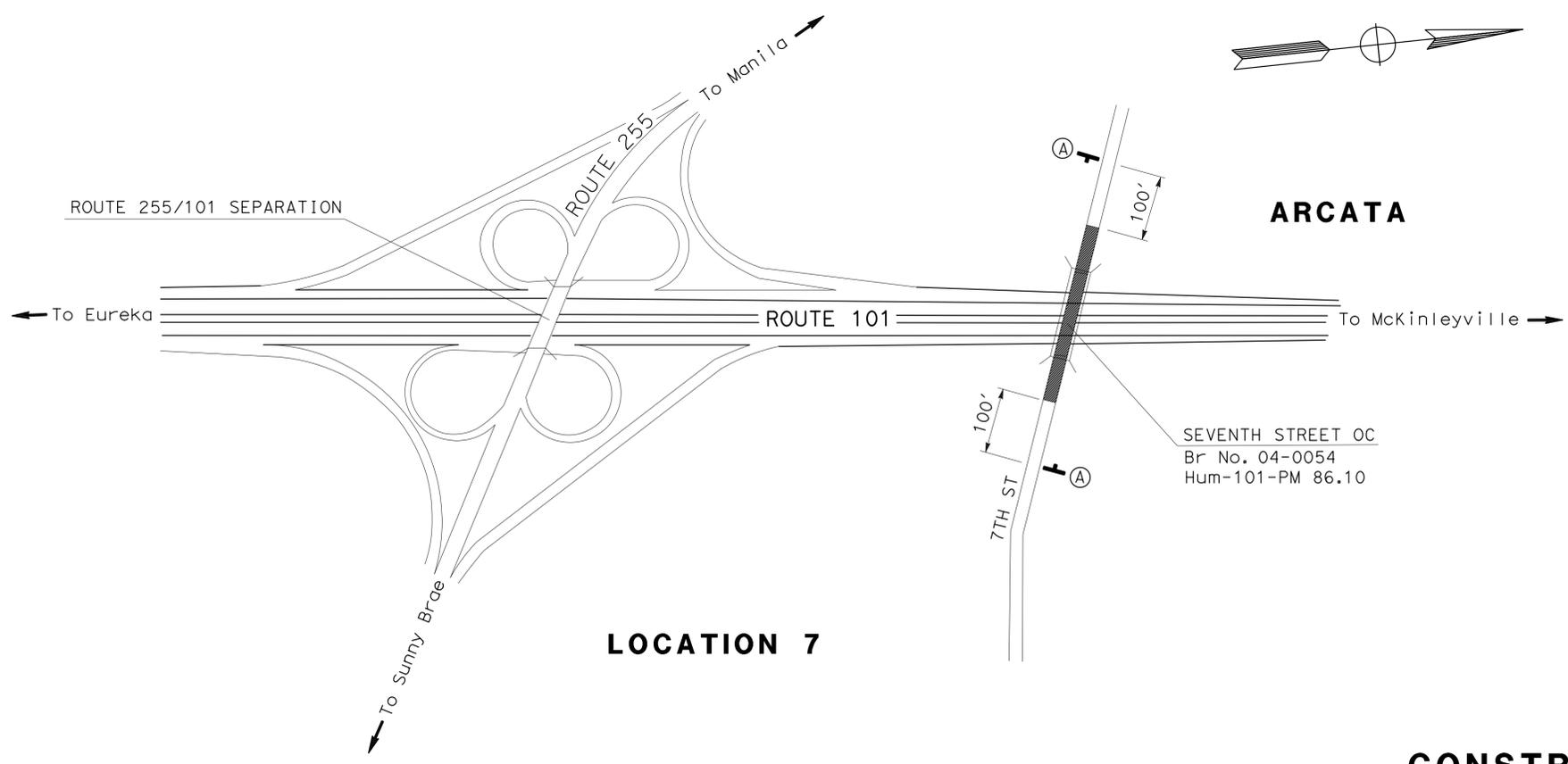
Brenda Harwell
 REGISTERED CIVIL ENGINEER DATE 3-26-15
March 27, 2015
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
 BRENDA HARWELL
 No. 64471
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA



LOCATION 6



LOCATION 7

CONSTRUCTION AREA SIGNS
NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CS-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans MAINTENANCE DESIGN	Tom Fitzgerald	Brenda Harwell	
		Johnathon Jackson	

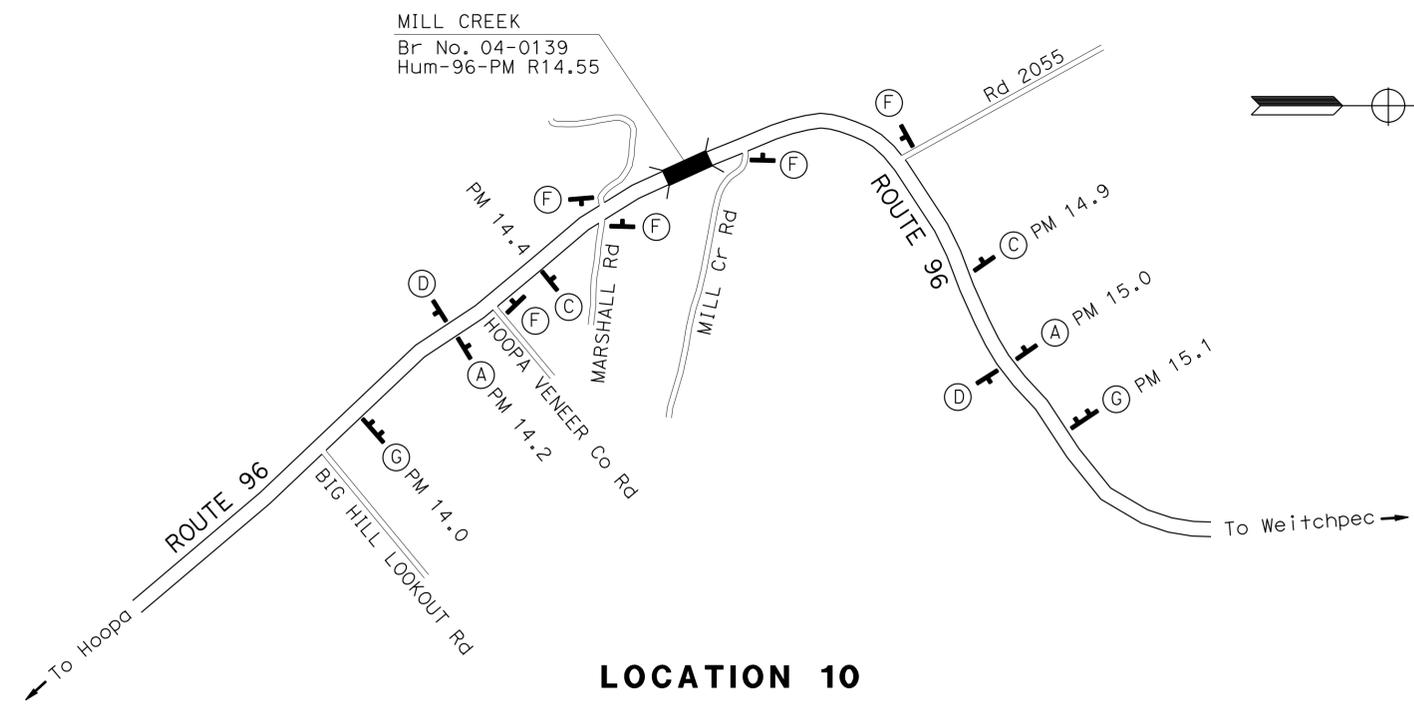
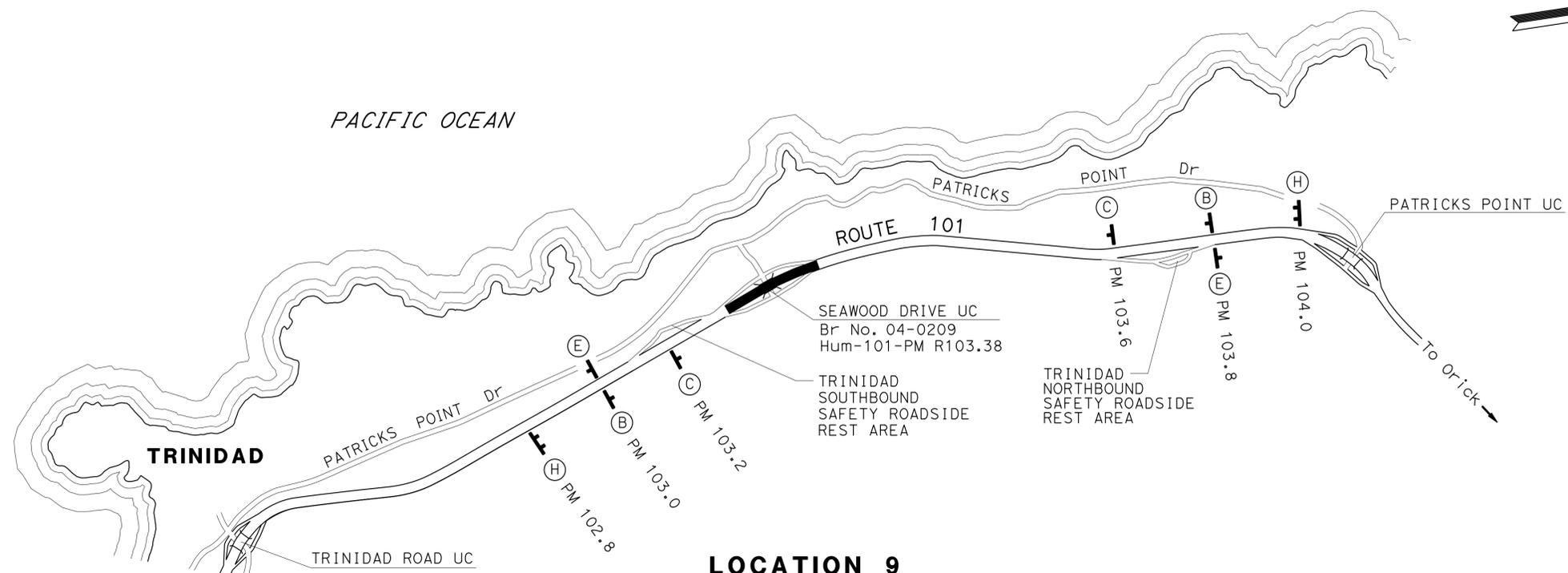
LAST REVISION | DATE PLOTTED => 30-MAR-2015
 00-00-00 | TIME PLOTTED => 12:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	6	22

REGISTERED CIVIL ENGINEER
 DATE 3-26-15
March 27, 2015
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 BRENDA HARWELL
 No. 64471
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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



CONSTRUCTION AREA SIGNS
NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

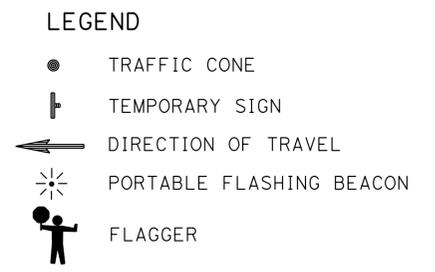
CS-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
Caltrans MAINTENANCE DESIGN	Tom Fitzgerald	Johnathon Jackson	Brenda Harwell
		CHECKED BY	DATE REVISED

LAST REVISION DATE PLOTTED => 30-MAR-2015
 00-00-00 TIME PLOTTED => 12:15

P:\PROJECTS\014000016md001.dgn
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 TRAFFIC OPERATIONS
 SHERI M. RODRIGUEZ
 TROY A. ARSENEAU
 RICHARD MULLEN
 SHERI M. RODRIGUEZ
 TROY A. ARSENEAU
 RICHARD MULLEN

- NOTES:**
- CALIFORNIA CODES ARE DESIGNATED BY (CA). OTHERWISE, FEDERAL (MUTCD) CODES ARE SHOWN.
 - ALL SIGNS SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE BACKGROUND AND SHALL BE EQUIPPED WITH AT LEAST TWO 16" x 16" ORANGE FLAGS FOR DAYTIME CLOSURE OR FLASHING BEACONS FOR LANE CLOSURE DURING HOURS OF DARKNESS.
 - ALL CONES USED FOR LANE CLOSURES DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES.
 - WHEN A PILOT CAR IS USED, PLACE A C37 (CA) SIGN AT ALL INTERSECTIONS WITHIN TRAFFIC CONTROL AREA. WHERE VEHICULAR TRAFFIC CAN NOT EFFECTIVELY SELF-REGULATE, AT LEAST ONE FLAGGER SHALL BE USED AT EACH INTERSECTION WITHIN THE TRAFFIC CONTROL AREA.
 - FLAGGER SHOULD STAND IN A CONSPICUOUS PLACE, FACING TRAFFIC AT ALL TIMES, BE VISIBLE TO APPROACHING TRAFFIC AS WELL AS APPROACHING VEHICLES AFTER THE FIRST VEHICLE HAS STOPPED.
 - ADDITIONAL ADVANCE FLAGGERS ARE REQUIRED.
 - WHEN FLAGGER IS NOT VISIBLE FROM THIS LOCATION PLACE A C29 (CA) SIGN BELOW THE C9A (CA) SIGN.



SIGN PANEL SIZE (MINIMUM)

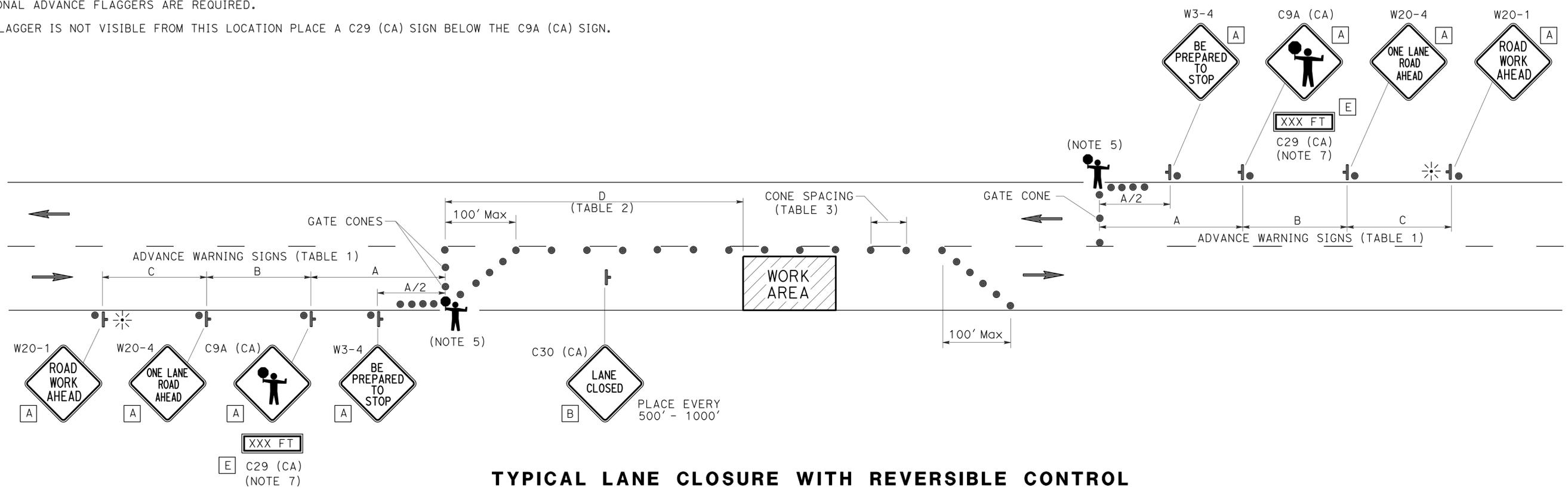
A	48" x 48" - SPEED OF 45 mph OR MORE 36" x 36" - SPEED LESS THAN 45 mph
B	30" x 30"
C	UNUSED
D	UNUSED
E	20" x 7"

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101,254	Var	7	22

Sheri M. Rodriguez
 REGISTERED CIVIL ENGINEER
 3-5-15 DATE
 March 27, 2015
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 SHERI M. RODRIGUEZ
 No. C66861
 Exp. 9-30-16
 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.



TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL

**TABLE 1
ADVANCE WARNING SIGN SPACING**

ROAD TYPE	Min A	Min B	Min C
	ft		
URBAN (25 mph OR LESS)	100	100	100
URBAN (30 mph TO 40 mph)	250	250	250
URBAN (MORE THAN 40 mph)	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

**TABLE 2
BUFFER SPACE**

APPROACH SPEED	Min D	DOWNGRADE Min D		
		-3%*	-6%*	-9%*
mph		ft		
25 & 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.

**TABLE 3
Max CONE SPACING**

POSTED SPEED	TAPER	TANGENT		CONFLICT*
		ft		
mph				
20	20	40	10	
25	25	50	12	
30	30	60	15	
35	35	70	17	
40	40	80	20	
45	45	90	22	
50	50	100	25	
55	55	110	27	
60	60	120	30	
65	65	130	32	

* USE WHERE THERE IS A CONFLICT BETWEEN EXISTING PAVEMENT MARKINGS AND CHANNELIZERS.

TRAFFIC HANDLING PLAN
NO SCALE

APPROVED FOR TRAFFIC HANDLING WORK ONLY

TH-1

LAST REVISION DATE PLOTTED => 30-MAR-2015
 00-00-00 TIME PLOTTED => 12:15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	8	22

REGISTERED CIVIL ENGINEER
 BRENDA HARWELL
 No. 64471
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

3-26-15
 DATE
 March 27, 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.

THERMOPLASTIC PAVEMENT MARKING

LOCATION			DESCRIPTION	THERMOPLASTIC PAVEMENT MARKING	REMARKS
No.	Rte	PM		SQFT	
7	101	86.10	"BIKE"	5	Br No. 04-0054 SEVENTH St OC
			"LANE"	6	
			TYPE I ARROW (10')	14	
TOTAL				25	

ROADWAY QUANTITIES

LOCATION			WIDTH	LENGTH	COLD PLANE ASPHALT CONCRETE PAVEMENT	HOT MIX ASPHALT (TYPE A)	TACK COAT	REMARKS
No.	Rte	PM			SQYD	TON	TON	
6	101	67.87	39	60	533	74	0.1	SALMON CREEK
		67.87	39	60	533	74	0.1	
TOTAL					1066	148	0.2	

THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKERS

LOCATION				BRIDGE LENGTH (N)	DETAIL NUMBER	DETAIL LENGTH (N)	THERMOPLASTIC TRAFFIC STRIPE						PAVEMENT MARKERS											
No.	Rte	PM					REMOVE			4" SOLID YELLOW	4" SOLID WHITE	4" (BROKEN 36-12) WHITE	4" (BROKEN 17-7) YELLOW	6" SOLID WHITE	REMOVE				(NON-REFLECTIVE)		(RETROREFLECTIVE)		(RETROREFLECTIVE RECESSED)	
		FROM	TO				YELLOW (HAZARDOUS WASTE)	YELLOW	WHITE			TYPE A	TYPE D	TYPE G	TYPE H	TYPE A	TYPE D	TYPE G	TYPE H	TYPE D	TYPE G			
1	101	R11.12		134'	1	134	42																	
						68			102															
2	101	R14.31	R14.38	373'	27B	373			373															
					12	373			96													9		
					29	373	1492			1492				34								34		
					12	373			96													9		
					27B	373			373															
3	101	R22.44	R22.46	100.5'	27B	100.5			161		101													
					11/13	100.5			24							8						3		
					29	100.5	402			402				12								12		
					11/13	100.5			24							8						3		
					27B	100.5			101		101													
5	36	0.01	0.04	173'	27B	173			173															
					29	173	692			692				16								16		
					27B	173			173															
6	101	67.87	67.90	156'	27B	276			156		276													
					11/13	276			48							24						7		
					25	276	156			276						4						6		
					25	276	156			276						4						6		
					11/13	276			48		276					24						7		
					27B	276			156		276					24						7		
7	101	86.10		240'	39	240			360															
					39	240			360															
					1	240	70																	
					27B	240			240															
9	101	R103.38	R103.40	99'	27B	99			99															
					11/13	99			24							8						3		
					29	99	198			198						8						3		
					29	99	198			198						5						5		
					11/13	99			24							8						3		
					27B	99			99							8						3		
10	96	R14.55	R14.58	150'	27B	150			150															
					22	150	300			300														
					27B	150			150															
SUBTOTAL							724	2982	3550	3834	2584	1698	374	548	48	78	38	18	80	28	26	22	50	18
TOTAL							724	6532		6418		1698	374	548		182		80		76				68

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

SUMMARY OF QUANTITIES Q-1

M

P continued

S

T continued

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
<p style="text-align: center;">N</p>	
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
<p style="text-align: center;">O</p>	
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 style="text-align: center;">P</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

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

R

Qty	QUANTITY
<p style="text-align: center;">R</p>	
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	SOUTH, SUPPLEMENT
SAE	STRUCTURE APPROACH EMBANKMENT
Salv	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SAND CUSHION
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
Sec	SECOND, SECTION
Sep	SEPARATION
SG	SUBGRADE
Shld	SHOULDER
Sht	SHEET
Sim	SIMILAR
SL	STATION LINE
SM	SELECTED MATERIAL
Spec	SPECIAL, SPECIFICATIONS
SPP	SLOTTED PLASTIC PIPE
SS	SLOPE STAKE
SSBM	STRAP AND SADDLE BRACKET METHOD
SSD	STRUCTURAL SECTION DRAIN
SSPA	STRUCTURAL STEEL PLATE ARCH
SSPP	STRUCTURAL STEEL PLATE PIPE
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH
SSRP	STEEL SPIRAL RIB PIPE
St	STREET
Sta	STATION
STBB	SINGLE THRIE BEAM BARRIER
Std	STANDARD
Str	STRUCTURE
Surf	SURFACING
SW	SIDEWALK, SOUND WALL
Swr	SEWER
Sym	SYMMETRICAL
S4S	SURFACE 4 SIDES

T

T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
Tel	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	9	22

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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



TO ACCOMPANY PLANS DATED 3-27-15

UNIT OF MEASUREMENT SYMBOLS:

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

TABLE A

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

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

TABLE B

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

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ABBREVIATIONS
(SHEET 2 OF 2)

NO SCALE

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

REVISED STANDARD PLAN RSP A10B

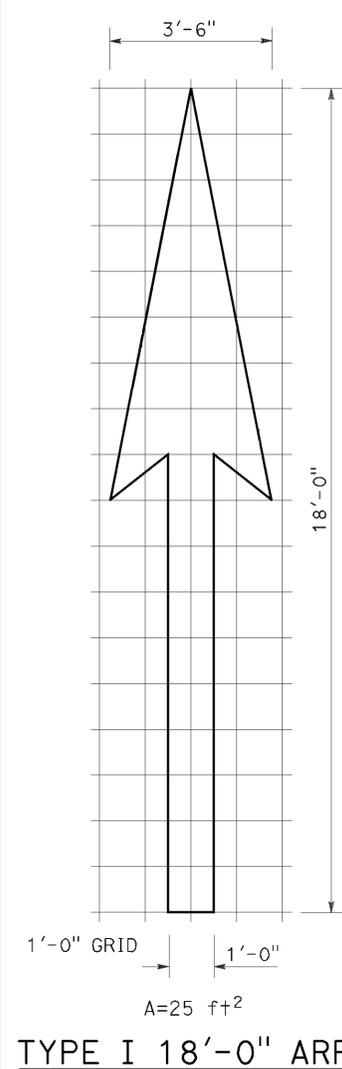
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	10	22

Registered Professional Engineer
 Roberta L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

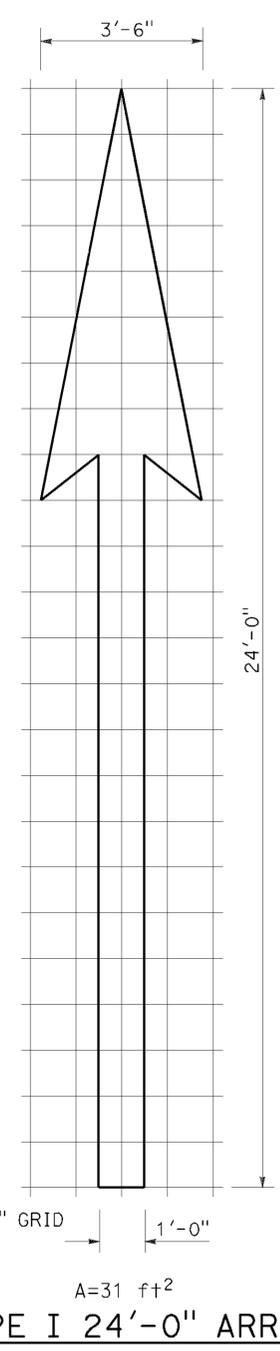
April 20, 2012
 PLANS APPROVAL DATE

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.

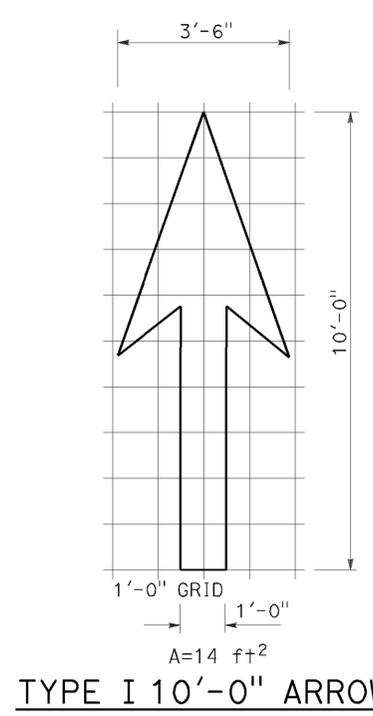
TO ACCOMPANY PLANS DATED 3-27-15



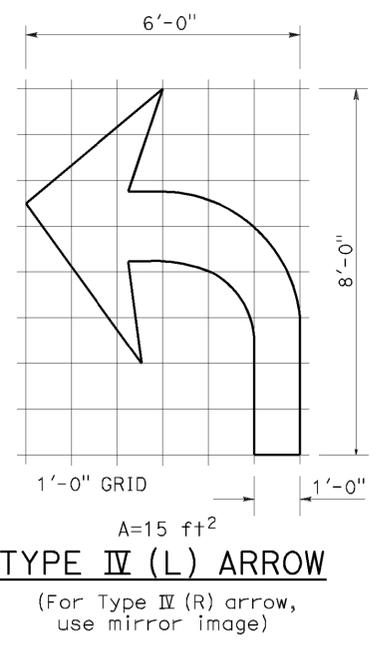
TYPE I 18'-0" ARROW



TYPE I 24'-0" ARROW

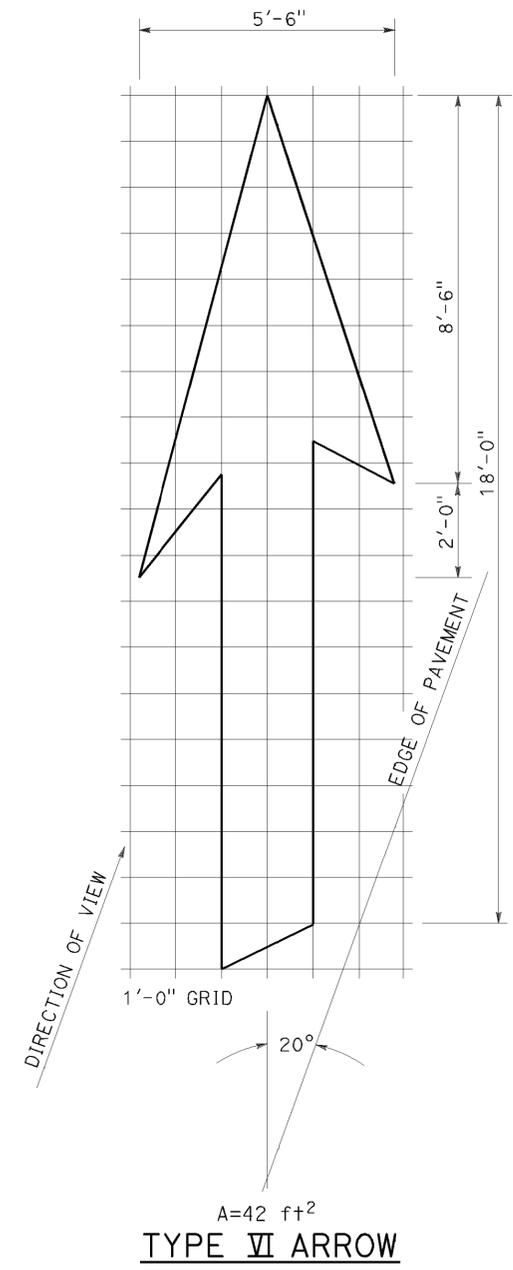


TYPE I 10'-0" ARROW



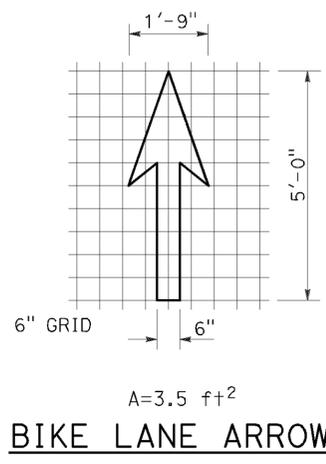
TYPE IV (L) ARROW

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

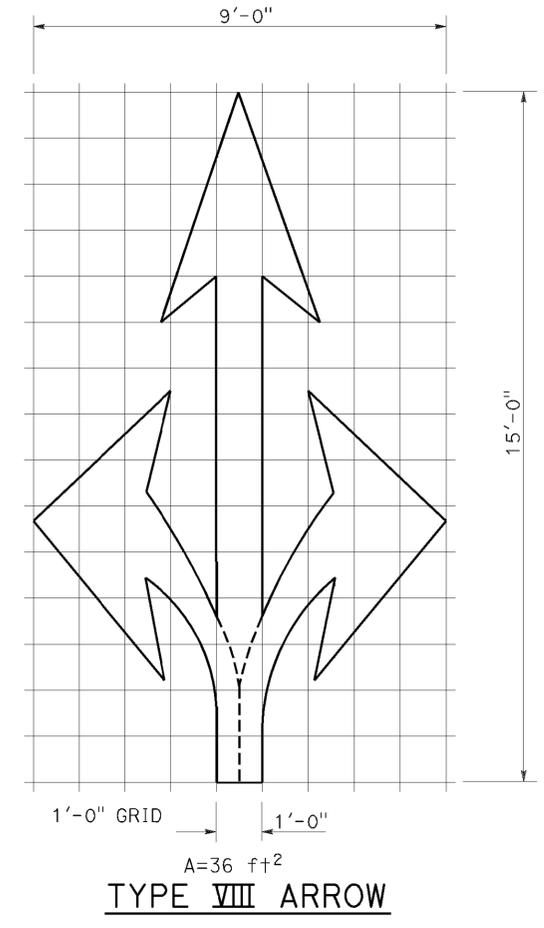


TYPE VI ARROW

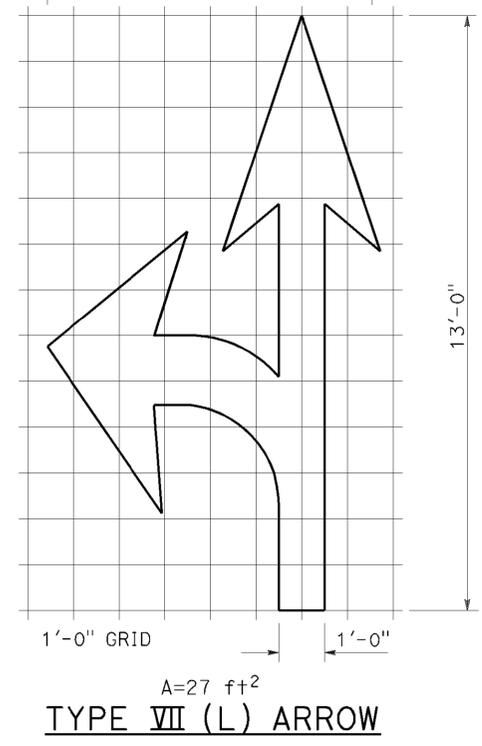
Right lane drop arrow
(For left lane, use mirror image)



BIKE LANE ARROW

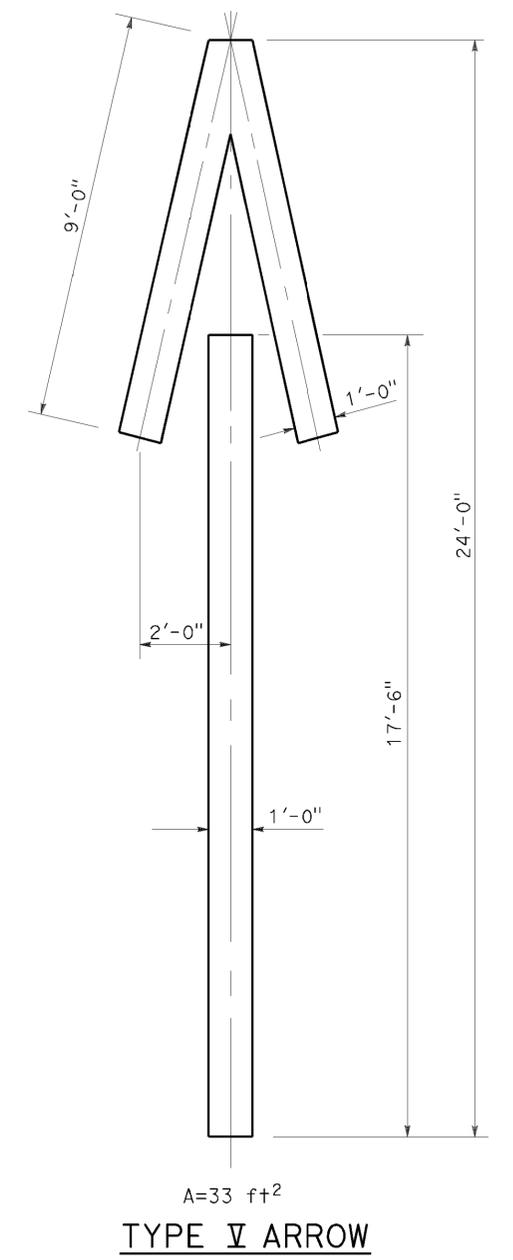


TYPE VIII ARROW



TYPE VII (L) ARROW

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



TYPE V ARROW

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

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

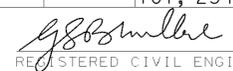
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

P:\PROJ\01\0E210\drft\ing\sheet\va002.dgn

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	11	22


 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 3-27-15

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	12	22

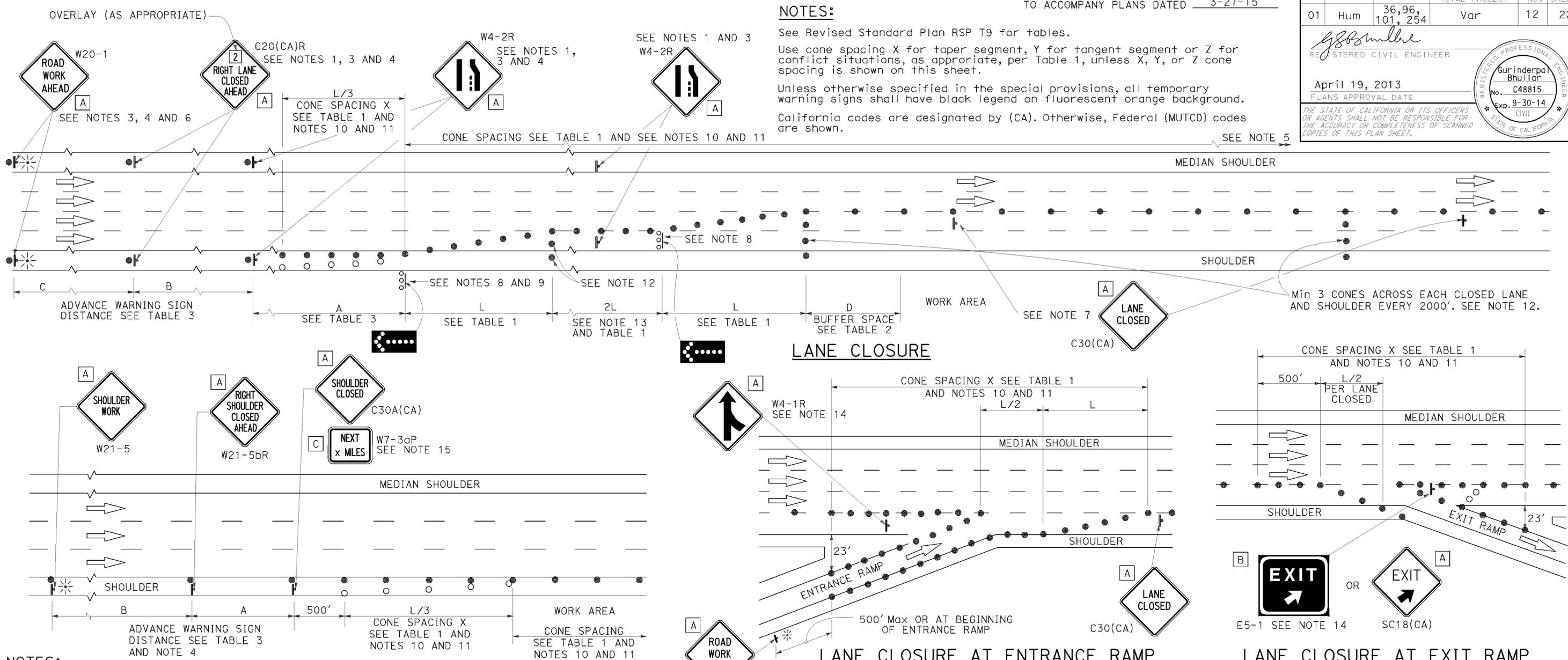
REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

TO ACCOMPANY PLANS DATED 3-27-15

NOTES:

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



NOTES:

- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
- Duplicate sign installations are not required:
 - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
- Each advance warning sign on each side of the roadway 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, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

SHOULDER CLOSURE

- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA)L and W4-2L signs shall be used.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
- 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.

LANE CLOSURE

- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
- A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

LANE CLOSURE AT ENTRANCE RAMP

- Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.

LANE CLOSURE AT EXIT RAMP

LEGEND

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

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 72" x 60"
- C 36" x 30"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 FREEWAYS AND EXPRESSWAYS**
 NO SCALE

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

P:\PROJ\01\02\210\drft\fig\sheet\sv0004.dgn

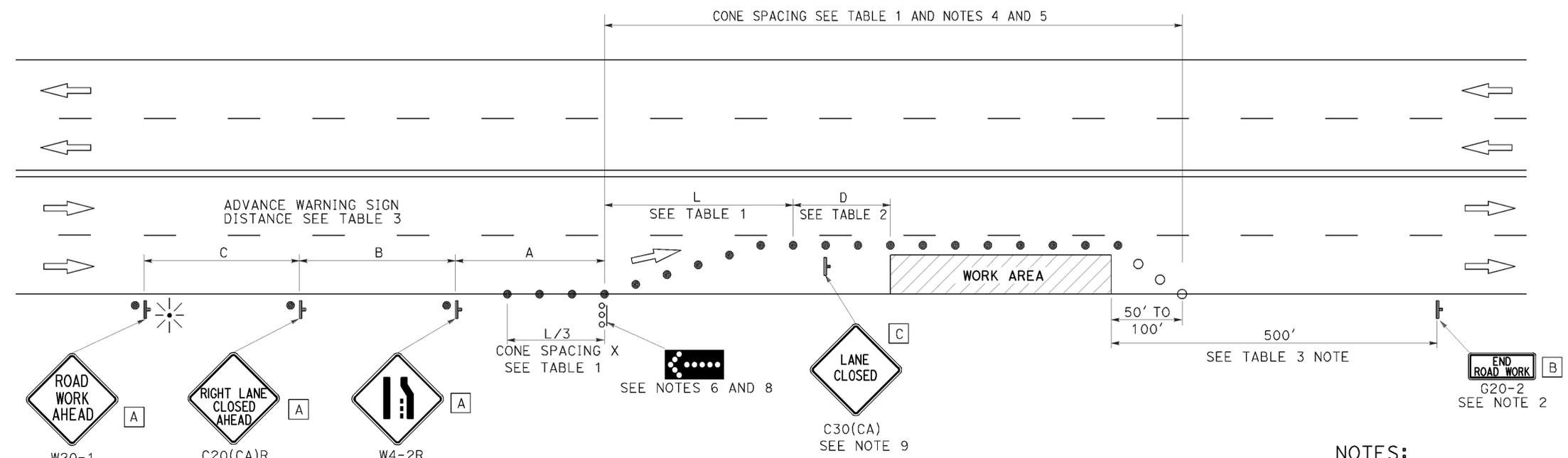
2010 REVISED STANDARD PLAN RSP T10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	13	22

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 3-27-15



TYPICAL LANE CLOSURE

NOTES:

See Revised Standard Plan RSP T9 for tables.

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

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

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

NOTES:

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

LEGEND

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

SIGN PANEL SIZE (Min)

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

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

NO SCALE

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

REVISED STANDARD PLAN RSP T11

P:\PROJ\01\0210\drft\ing\sheet5\va005.dgn

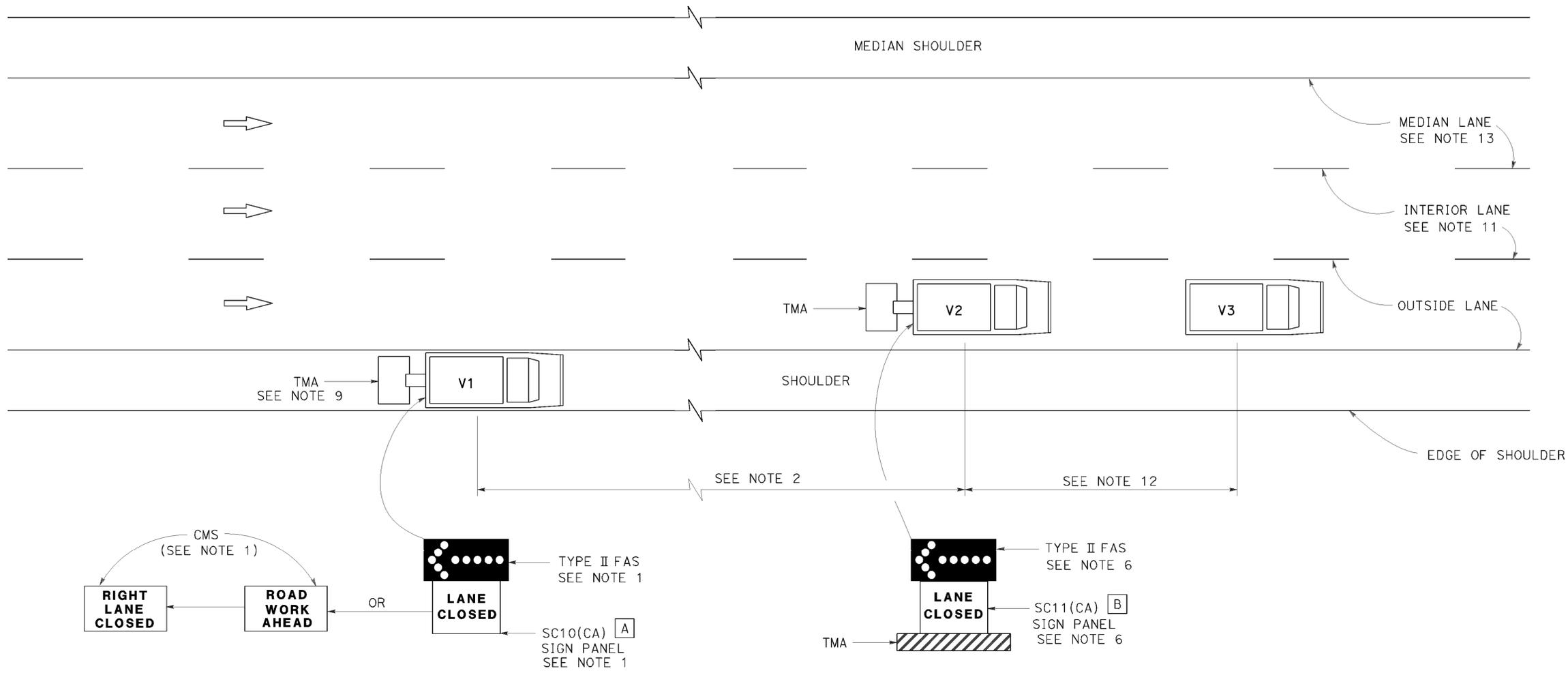
2010 REVISED STANDARD PLAN RSP T11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36,96, 101, 254	Var	14	22

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.



TO ACCOMPANY PLANS DATED 3-27-15



SIGN PANEL SIZE (Min)

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

LEGEND

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

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

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

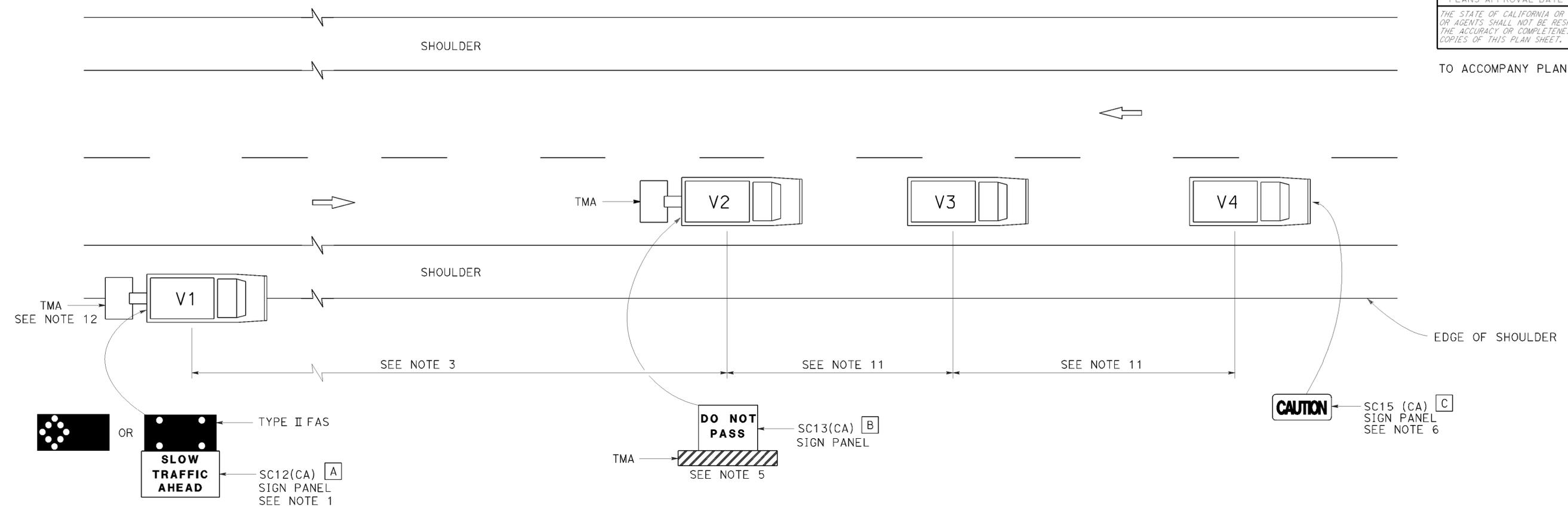
RSP T15 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T15 DATED MAY 20, 2011 - PAGE 243 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T15

2010 REVISED STANDARD PLAN RSP T15

P:\PROJ\01\0210\dr\aff\ing\sheet\sva006.dgn

TO ACCOMPANY PLANS DATED 3-27-15



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)

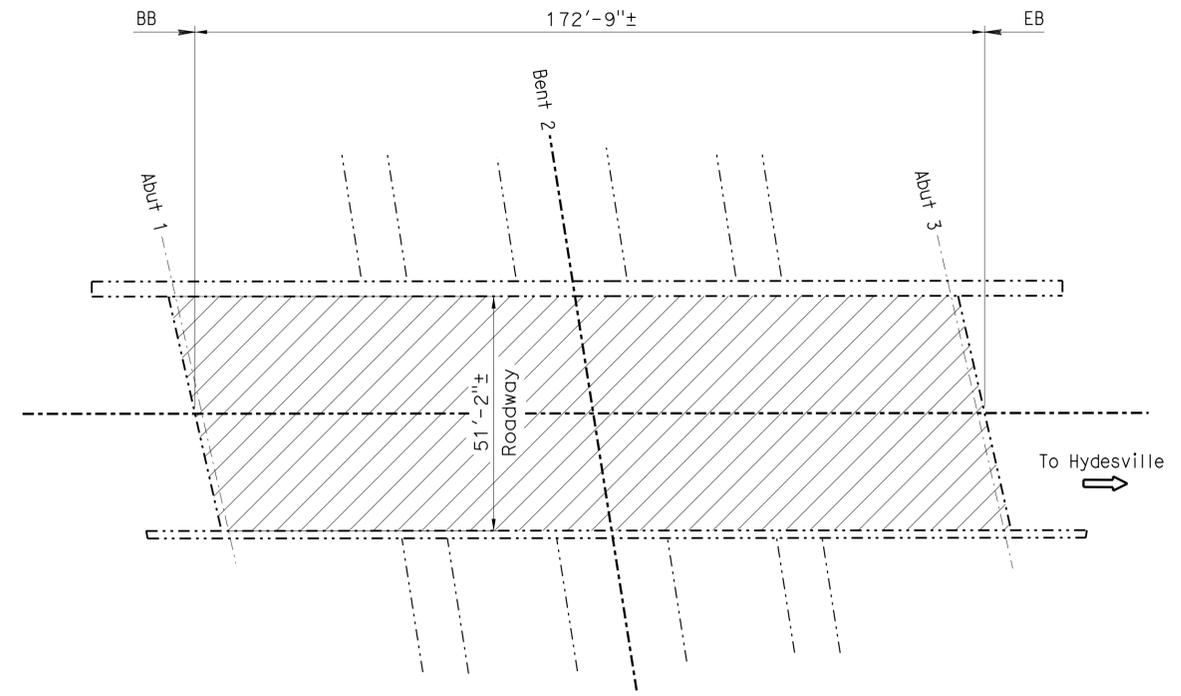
- A 72" x 42"
- B 54" x 42"
- C 54" x 24"

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	16	22
			3-19-15		
REGISTERED CIVIL ENGINEER			DATE		
			March 27, 2015		
PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>					



ROUTE 36/101 SEPARATION

Br No. 04-0301, HUM, ROUTE 36, PM 0.01
1" = 20'

ROUTE 36/101 SEPARATION	BR NO 04-0301
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	8,983 SQFT
TREAT BRIDGE DECK	8,983 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	100 GAL

MILL CREEK BRIDGE	BR NO 04-0139
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	6,000 SQFT
TREAT BRIDGE DECK	6,000 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	67 GAL

NOTES: (APPLY TO ALL SHEETS)
 ----- Indicates existing.
 STANDARD PLAN SHEET NUMBER
 DETAIL NUMBER

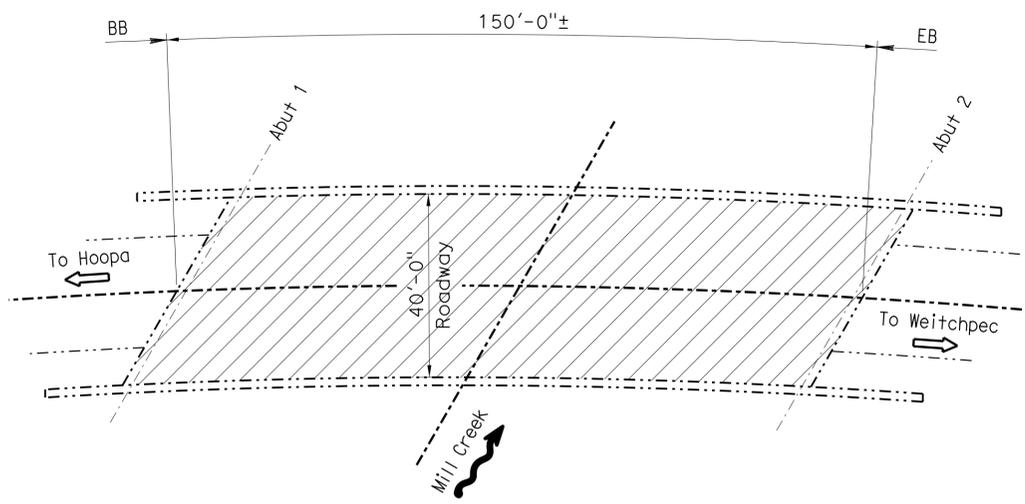
LEGEND: (APPLY TO THIS SHEET ONLY)
 Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN NO. 1
2	GENERAL PLAN NO. 2
3	GENERAL PLAN NO. 3
4	GENERAL PLAN NO. 4
5	GENERAL PLAN NO. 5
6	JOINT SEAL DETAILS NO. 1
7	JOINT SEAL DETAILS NO. 2

STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING=2")



MILL CREEK

Br No. 04-0139, HUM, ROUTE 96, PM 14.54
1" = 20'

DESIGN ENGINEER
 3-19-15

DESIGN	BY D. Acoba	CHECKED P. Kang
DETAILS	BY M. Hallstrom	CHECKED P. Kang
QUANTITIES	BY D. Acoba	CHECKED P. Kang

LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
LAYOUT	BY M. Hallstrom CHECKED D. Acoba
SPECIFICATIONS	BY J. Ramirez CHECKED J. Ramirez

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
 POST MILE VARIES
ROUTE 36, 96, 101 & 254 BRIDGES
GENERAL PLAN NO. 1

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3488
 PROJECT NUMBER & PHASE: 0114000016

CONTRACT NO.: 01-0E2101

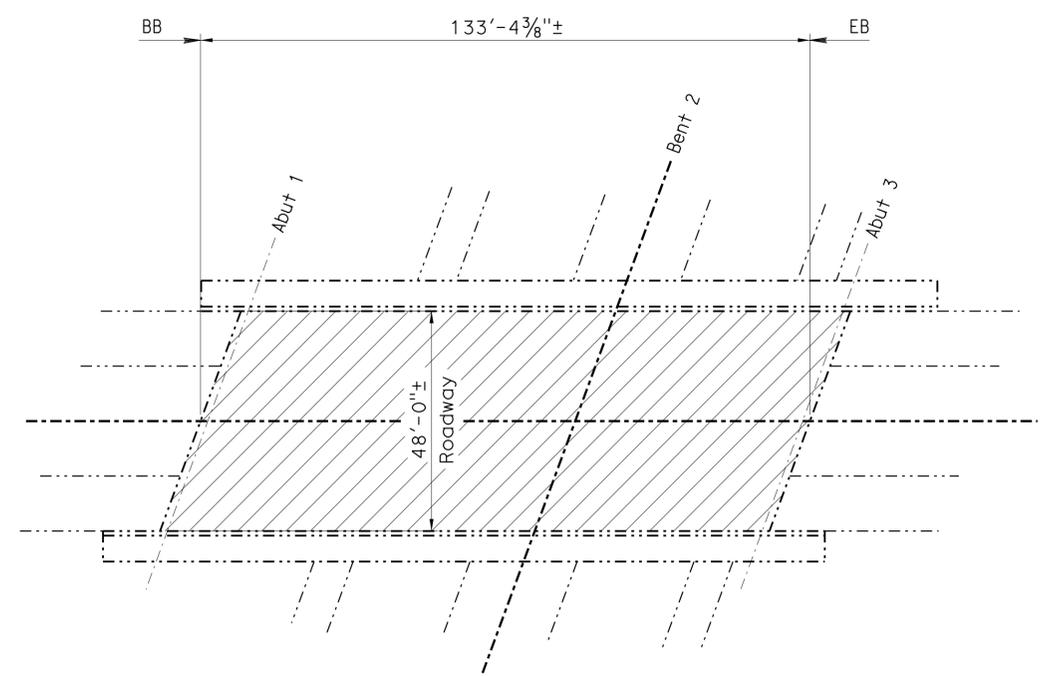
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
	1	7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	17	22

3-19-15
 REGISTERED CIVIL ENGINEER DATE
 March 27, 2015
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER
 DIOSDADO ACOPA
 No. 52003
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA



SPROWL CREEK ROAD UC BR NO 04-0195

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE 6,402 SQFT
 TREAT BRIDGE DECK 6,402 SQFT
 FURNISH BRIDGE DECK TREATMENT MATERIAL 71 GAL

DEAN CREEK BRIDGE BR NO 04-0006

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE 20,888 SQFT
 TREAT BRIDGE DECK 20,888 SQFT
 FURNISH BRIDGE DECK TREATMENT MATERIAL 279 GAL
 REMOVE CHIP SEAL 20,888 SQFT
 CLEAN EXPANSION JOINT 128 LF
 JOINT SEAL (MR 1 1/2") 64 LF
 JOINT SEAL (MR 2") 64 LF

FRENCH CREEK UC BR NO 04-0174

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE 6,030 SQFT
 TREAT BRIDGE DECK 6,030 SQFT
 FURNISH BRIDGE DECK TREATMENT MATERIAL 80 GAL
 REMOVE CHIP SEAL 6,030 SQFT

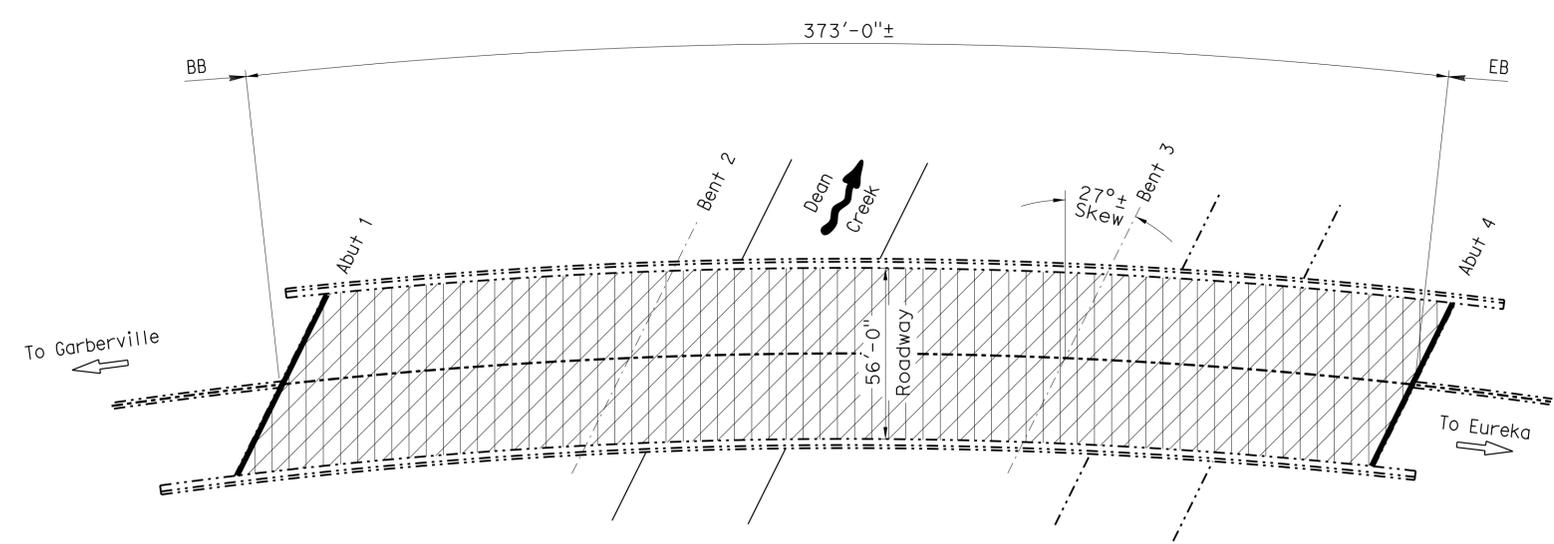
LEGEND: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.

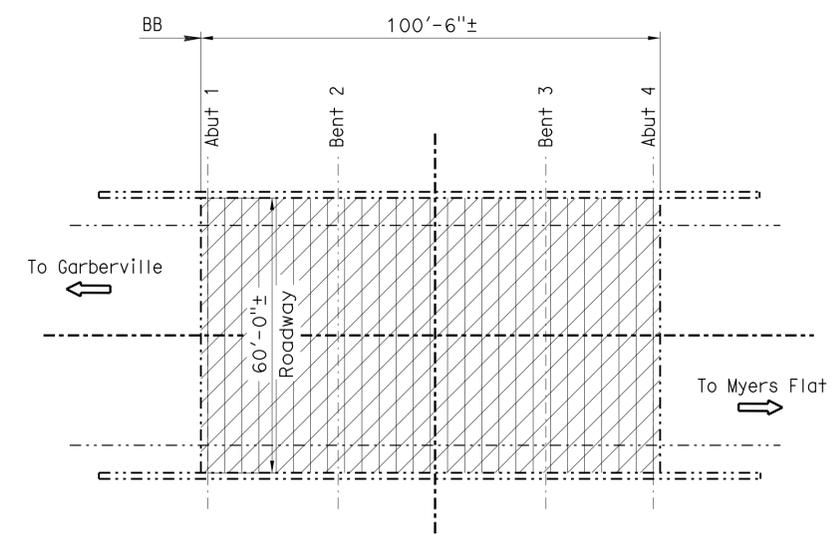
Indicates limits of remove 1/4"± chip seal.

Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.

SPROWL CREEK ROAD UNDERCROSSING
 Br No. 04-0195, HUM, ROUTE 101, PM R11.12
 1" = 20'



DEAN CREEK
 Br No. 04-0006, HUM, ROUTE 101, PM 14.31
 1" = 30'



FRENCH ROAD UNDERCROSSING
 Br No. 04-0174, HUM, ROUTE 101, PM R22.44
 1" = 20'

 DESIGN ENGINEER 3-19-15	DESIGN	BY D. Acoba	CHECKED P. Kang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. VARIOUS POST MILE VARIES	ROUTE 36, 96, 101 & 254 BRIDGES GENERAL PLAN NO. 2	
	DETAILS	BY M. Hallstrom	CHECKED P. Kang	LAYOUT	BY M. Hallstrom				CHECKED D. Acoba
	QUANTITIES	BY D. Acoba	CHECKED P. Kang	SPECIFICATIONS	BY J. Ramirez				CHECKED J. Ramirez

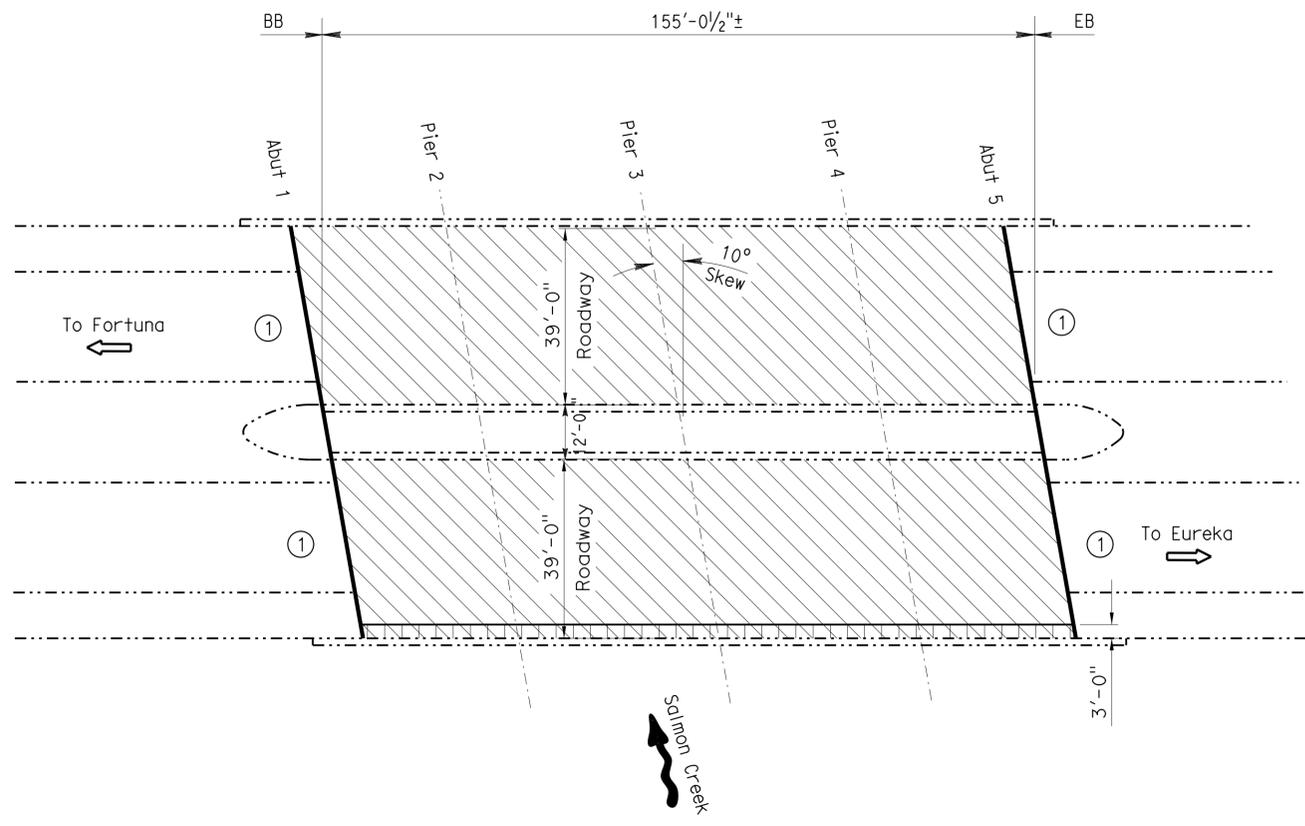
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3488 PROJECT NUMBER & PHASE: 0114000016 CONTRACT NO.: 01-0E2101 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
	2	7

FILE => z01-0e2101_02gp_02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	18	22

3-19-15
 REGISTERED CIVIL ENGINEER DATE
 March 27, 2015
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 DIOSDADO ACOBA
 No. 52003
 Exp. 12-31-16
 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.



SALMON CREEK BRIDGE BR NO 04-0020

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	30	CF
REMOVE ASPHALT CONCRETE SURFACING	468	SQFT
REMOVE UNSOUND CONCRETE	30	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	12,093	SQFT
FURNISH POLYESTER CONCRETE OVERLAY	907	CF
PLACE POLYESTER CONCRETE OVERLAY	12,093	SQFT
CLEAN EXPANSION JOINT	185	LF
JOINT SEAL (MR 1")	185	LF

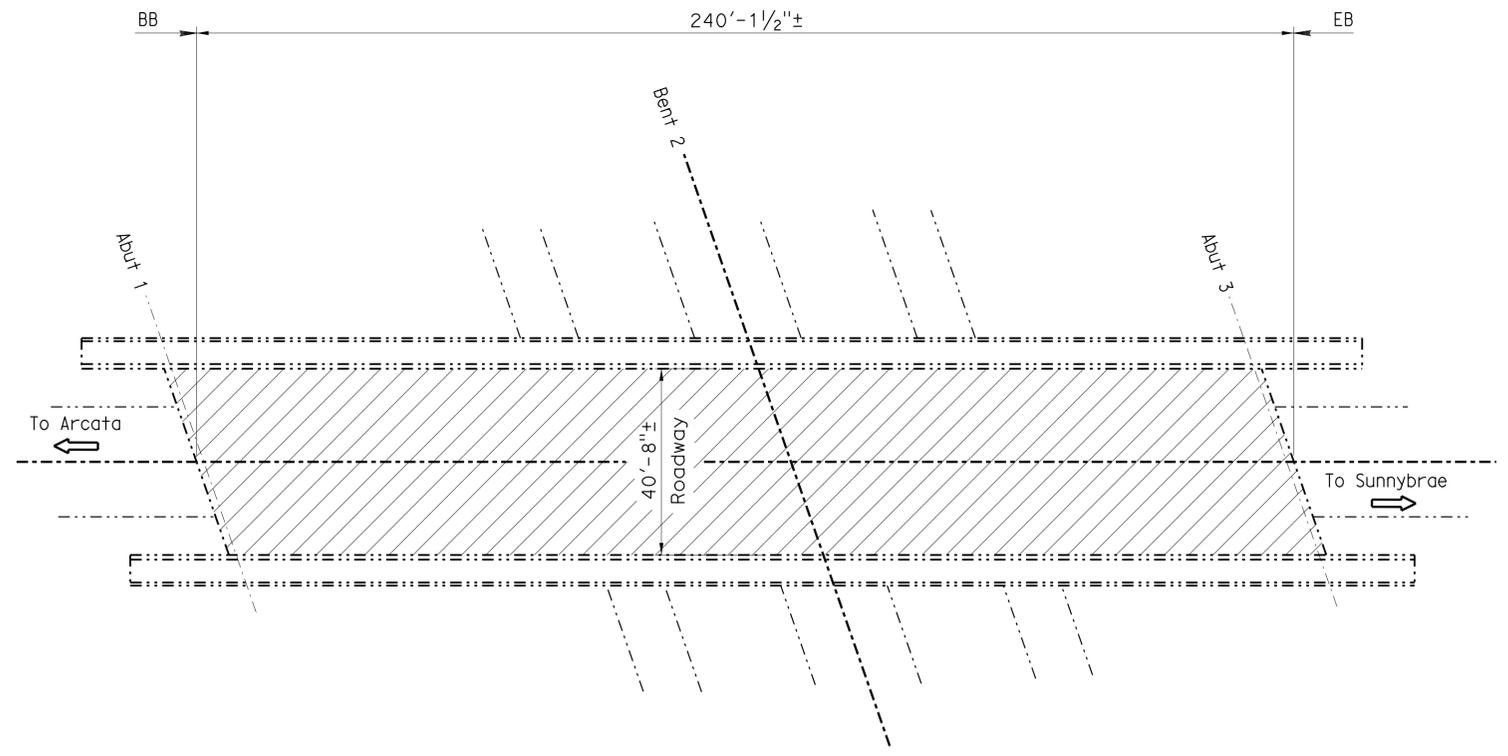
- LEGEND: (APPLY TO THIS SHEET ONLY)
- Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.
 - Indicates limits of prepare concrete bridge deck surface and place new 3/4" polyester concrete overlay. Remove unsound concrete and patch with rapid setting concrete.
 - Indicates limits of AC surfacing removal.
 - Indicates limits of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
 - See "Roadway Plans" to conform to new deck grades.

SEVENTH STREET OC BR NO 04-0054

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	9,765	SQFT
TREAT BRIDGE DECK	9,765	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	109	GAL

SALMON CREEK
 Br No. 04-0020, HUM, ROUTE 101, PM 67.87
 1" = 20'



SEVENTH STREET OVERCROSSING
 Br No. 04-0054, HUM, ROUTE 101, PM 86.1
 1" = 20'

 DESIGN ENGINEER 3-19-15	DESIGN	BY D. Acoba	CHECKED P. Kang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
	DETAILS	BY M. Hallstrom	CHECKED P. Kang	LAYOUT	BY M. Hallstrom
	QUANTITIES	BY D. Acoba	CHECKED P. Kang	SPECIFICATIONS	BY J. Ramirez

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE	BRIDGE NO.	ROUTE 36, 96, 101 & 254 BRIDGES GENERAL PLAN NO. 3
	STRUCTURE MAINTENANCE DESIGN	VARIOUS	
		VARIES	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	19	22

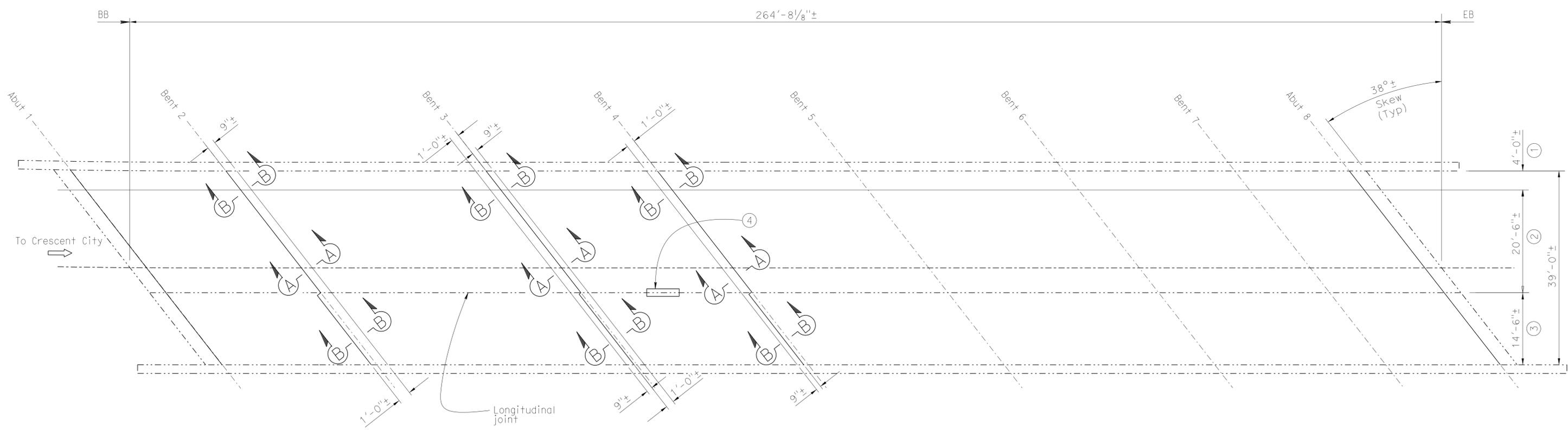
REGISTERED CIVIL ENGINEER *[Signature]* DATE 3-19-15
 PLANS APPROVAL DATE **March 27, 2015**
 REGISTERED PROFESSIONAL ENGINEER
 DIOSDADO ACOBA
 No. 52003
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

ARCATA OVERHEAD BR NO 04-0079R

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	1	CF
REMOVE UNSOUND CONCRETE	1	CF
POLYESTER CONCRETE EXPANSION DAM	14	CF
CLEAN EXPANSION JOINT	255	LF
JOINT SEAL (MR $\frac{1}{2}$ ")	255	LF
CONCRETE EXPANSION DAM	84	CF

- LEGEND: (APPLY TO THIS SHEET ONLY)
- Indicates location of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS" sheet.
 - ① Indicates limits of remove 1"± to 4"± AC surfacing and construct 1"± to 4"± polyester expansion dam. For "SECTION B-B", see "JOINT SEAL DETAILS NO. 2" sheet.
 - ② Indicates limits of remove 4"± to 18"± AC surfacing and construct concrete expansion dam. For "Section A-A", see "JOINT SEAL DETAILS NO. 2" sheet.
 - ③ Indicates limits of remove 1"± AC surfacing and construct 1"± polyester expansion dam. For "SECTION B-B", see "JOINT SEAL DETAILS NO. 2" sheet.
 - ④ Remove 6' x 1' x 3" unsound concrete and place rapid setting concrete (patch).



N

ARCATA OVERHEAD
 Br No. 04-0079R, HUM, ROUTE 101, PM 87.84
 1" = 10'

 DESIGN ENGINEER 3-19-15	DESIGN	BY D. Acoba	CHECKED P. Kang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	ROUTE 36, 96, 101 & 254 BRIDGES GENERAL PLAN NO. 4	
	DETAILS	BY M. Hallstrom	CHECKED P. Kang	LAYOUT	BY M. Hallstrom		CHECKED D. Acoba		VARIOUS
	QUANTITIES	BY D. Acoba	CHECKED P. Kang	SPECIFICATIONS	BY J. Ramirez		CHECKED J. Ramirez		VARIES

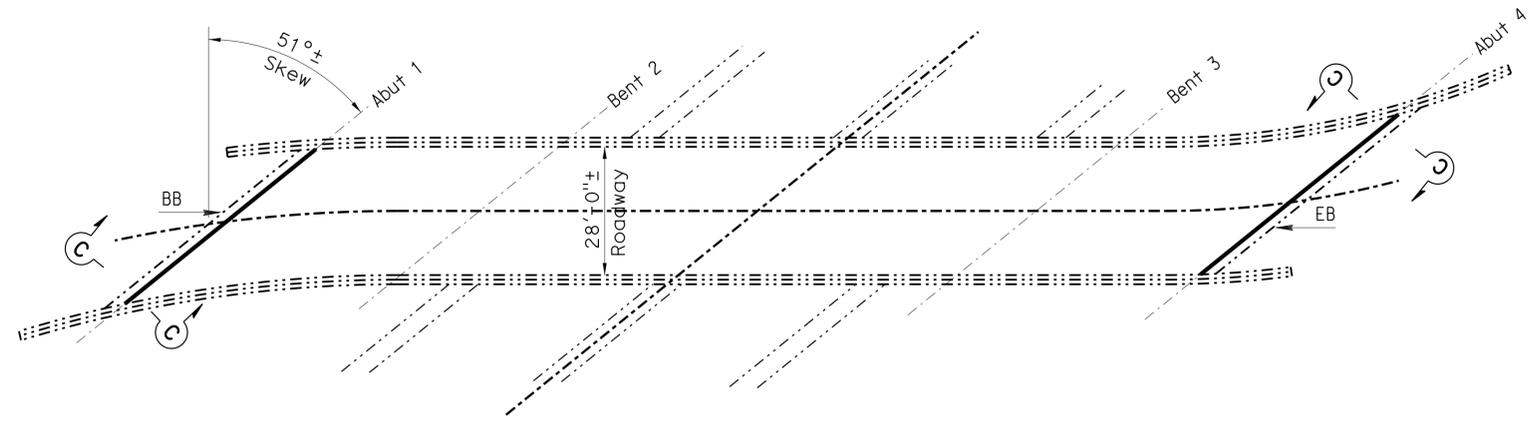
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3
 UNIT: 3488 PROJECT NUMBER & PHASE: 0114000016 CONTRACT NO.: 01-0E2101 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 FILE => z01-0e2101_04gp_04.dgn

REVISION DATES	SHEET	OF
	4	7

USERNAME => s120115 DATE PLOTTED => 30-MAR-2015 TIME PLOTTED => 12:16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	20	22

REGISTERED CIVIL ENGINEER *[Signature]* DATE 3-19-15
 PLANS APPROVAL DATE **March 27, 2015**
 REGISTERED PROFESSIONAL ENGINEER
 DIOSDADO ACOBA
 No. 52003
 Exp. 12-31-16
 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.



FEDERATION GROVE SEPARATION
 Br No. 04-0114, HUM, ROUTE 254, PM 19.94
 1" = 20'

FEDERATION GROVE SEPARATION BR NO 04-0114

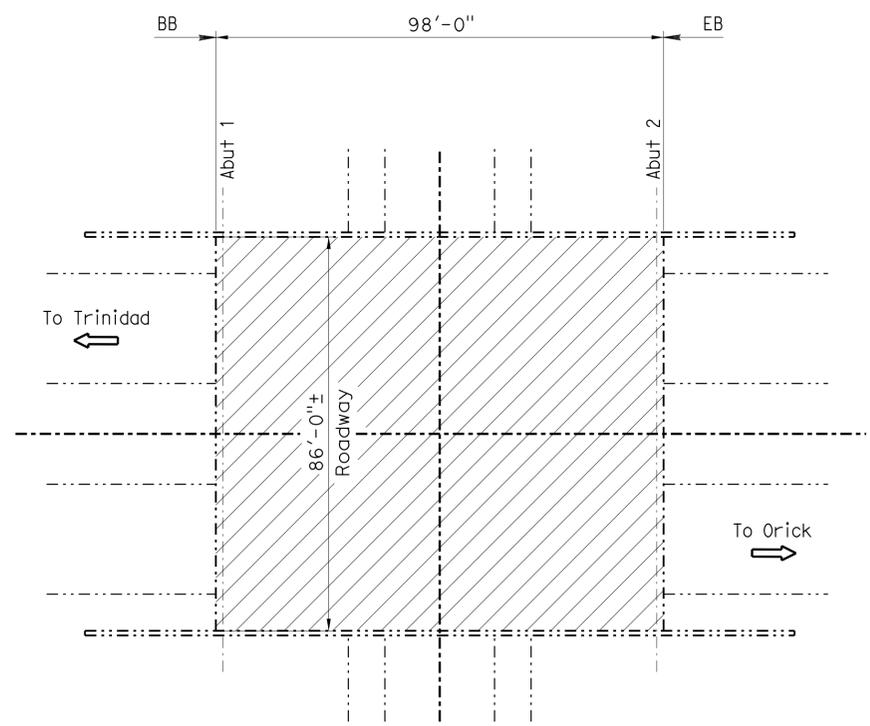
QUANTITIES

CLEAN EXPANSION JOINT	92 LF
BONDED JOINT SEAL (MR 1")	92 LF
POLYESTER CONCRETE EXPANSION DAM	30 CF

LEGEND: (APPLY TO THIS SHEET ONLY)

Indicates limits of prepare concrete bridge deck surface and treat bridge deck with high molecular weight methacrylate.

Indicates location of clean expansion joint and install new joint seal. For details, see "JOINT SEAL DETAILS NO. 1" sheet.



SEAWOOD DRIVE UNDERCROSSING
 Br No. 04-0209, HUM, ROUTE 101, PM R103.38
 1" = 20'

SEAWOOD DRIVE UC BR NO 04-0209

QUANTITIES

PREPARE CONCRETE BRIDGE DECK SURFACE	8,428 SQFT
TREAT BRIDGE DECK	8,428 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	94 GAL

[Signature]
 DESIGN ENGINEER 3-19-15

DESIGN	BY D. Acoba	CHECKED P. Kang	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY M. Hallstrom	CHECKED P. Kang	LAYOUT	BY M. Hallstrom
QUANTITIES	BY D. Acoba	CHECKED P. Kang	SPECIFICATIONS	BY J. Ramirez

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. VARIOUS
 POST MILE VARIES
ROUTE 36, 96, 101 & 254 BRIDGES
GENERAL PLAN NO. 5

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3488
 PROJECT NUMBER & PHASE: 0114000016
 CONTRACT NO.: 01-0E2101

DISREGARD PRINTS BEARING EARLIER REVISION DATES

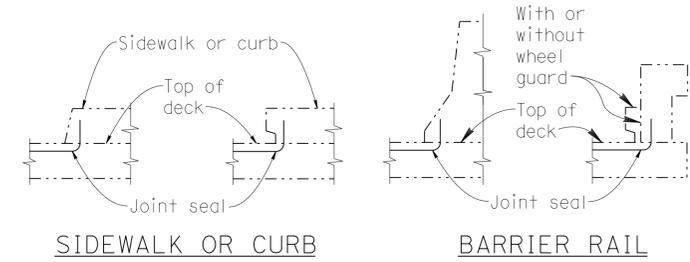
REVISION DATES	SHEET	OF
	5	7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	21	22

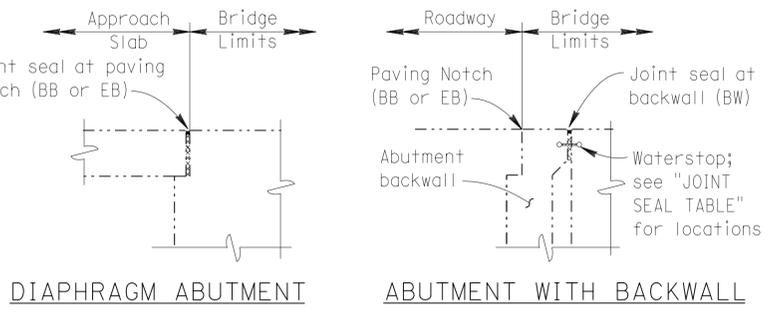
REGISTERED CIVIL ENGINEER
 DATE: 3-19-15
 March 27, 2015
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 DIOSDADO ACOPA
 No. 52003
 Exp. 12-31-16
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

JOINT SEAL TABLE							
BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (inches)	APPROXIMATE LENGTH (feet)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXPANSION JOINT (inches)
		Abutment	Backwall				
DEAN CREEK	04-0006	Abut 1	BW	1 1/2	64	No	12.0
		Abut 4	BW	2	64	No	12.0
SALMON CREEK	04-0020	Abut 1	BB	1*	88	No	12.0
		Abut 5	BB	1*	88	No	12.0
ARCATA OVERHEAD	04-0079R	Abut 1	BW	1/2	51	No	12.0
		Bent 2	BW	1/2	51	No	12.0 ***
		Bent 3	BW	1/2	51	No	12.0 ***
		Bent 4	BW	1/2	51	No	12.0 ***
		Abut 8	BW	1/2	51	No	12.0
FEDERATION GROVE SEPARATION	04-0114	Abut 1	BW	1**	46	No	12.0
		Abut 4	BW	1**	46	No	12.0

LEGEND:
 BW = Backwall
 BB = Paving Notch at Beginning of the Bridge
 EB = Paving Notch at End of the Bridge
 PN = Paving Notch
 * = Use Type B Seal only
 ** = Use Bonded Joint Seal
 *** = Clean expansion joint from the original deck surface.
 = Indicates limits of remove 2"± AC surfacing and construct 2" polyester concrete expansion dam.

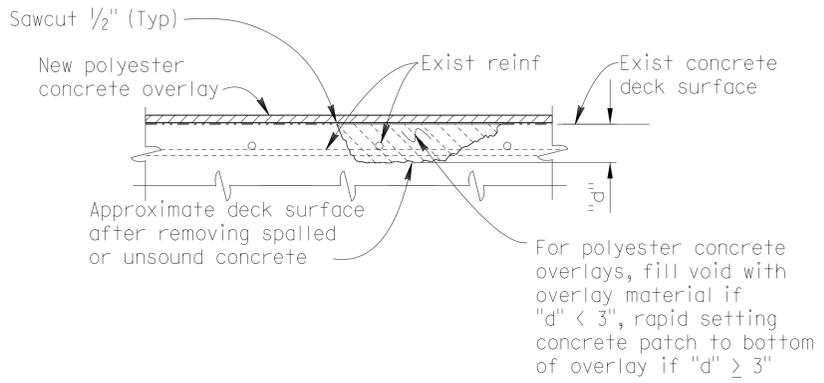


SIDEWALK OR CURB
BARRIER RAIL
JOINT SEAL AT LOW SIDE OF DECK
 Details shown for illustration purposes only. For use only where deck joint matches the barrier rail joint.
 NO SCALE



DIAPHRAGM ABUTMENT
ABUTMENT WITH BACKWALL
JOINT SEAL LOCATION
 NO SCALE

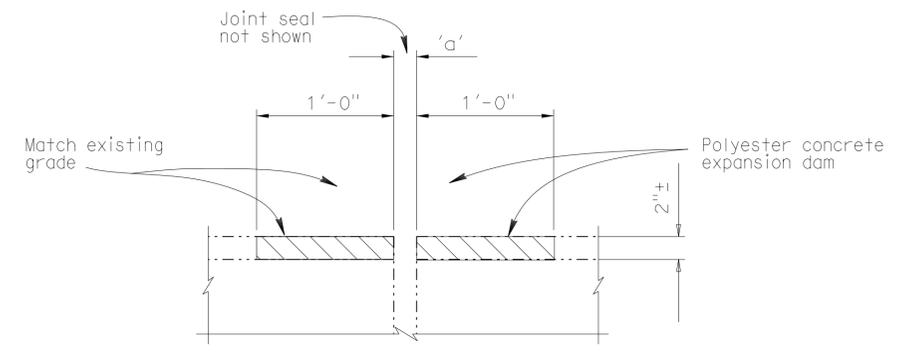
The following notes apply to JOINT SEAL TYPE B:
 1) Seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
 2) Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be calculated by the Engineer.
 3) W1 shall be the smaller of the values determined as follows:
 A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
 B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3 psi.
 4) Bend Type B joint seal 6" up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.
 For details not shown see 



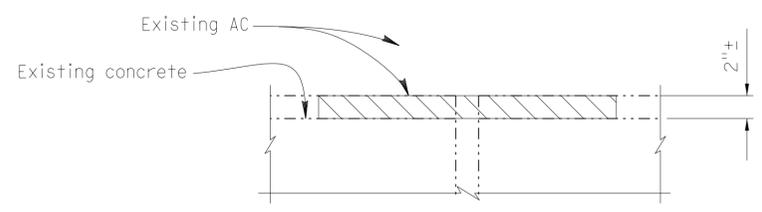
DECK REPAIR DETAIL
 Reinforcement may be encountered during deck concrete removal.
 NO SCALE

DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH (INCHES)
SALMON CREEK	04-0020	1	3

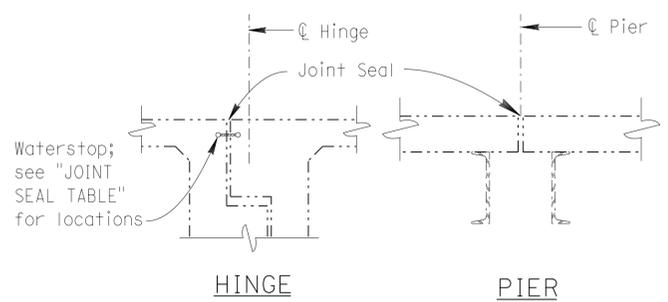
Locations to be determined by the engineer. For details see "DECK REPAIR DETAIL".



RECONSTRUCTION

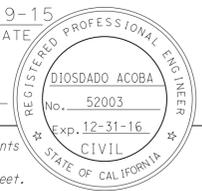


EXISTING
SECTION C-C
 1 1/2" = 1'-0"
 Br. No. 04-0114



HINGE
PIER

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	36, 96, 101, 254	Var	22	22
REGISTERED CIVIL ENGINEER			DATE	3-19-15	
PLANS APPROVAL DATE			March 27, 2015		
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>					



GENERAL NOTES
LOAD FACTOR DESIGN

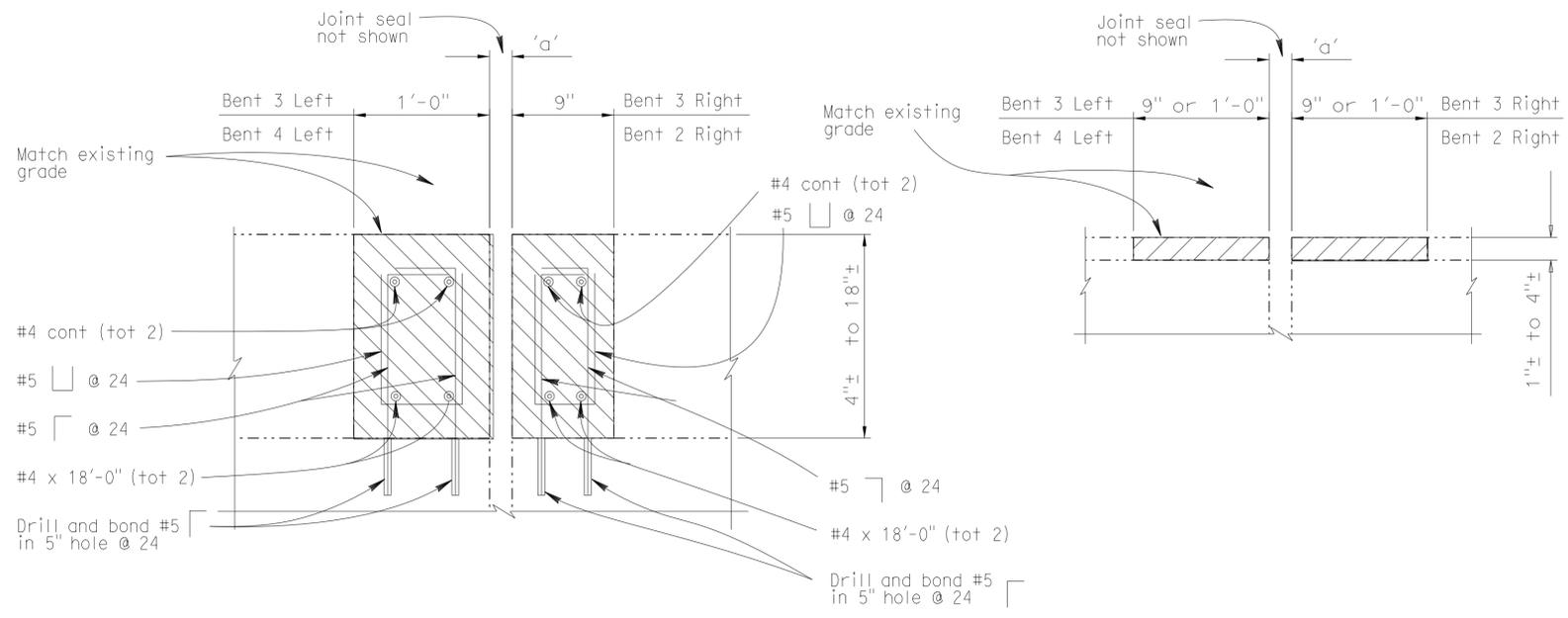
DESIGN: BRIDGE DESIGN SPECIFICATIONS (1996 AASHTO with Interims and Revisions by CALTRANS)

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 and permit design load.

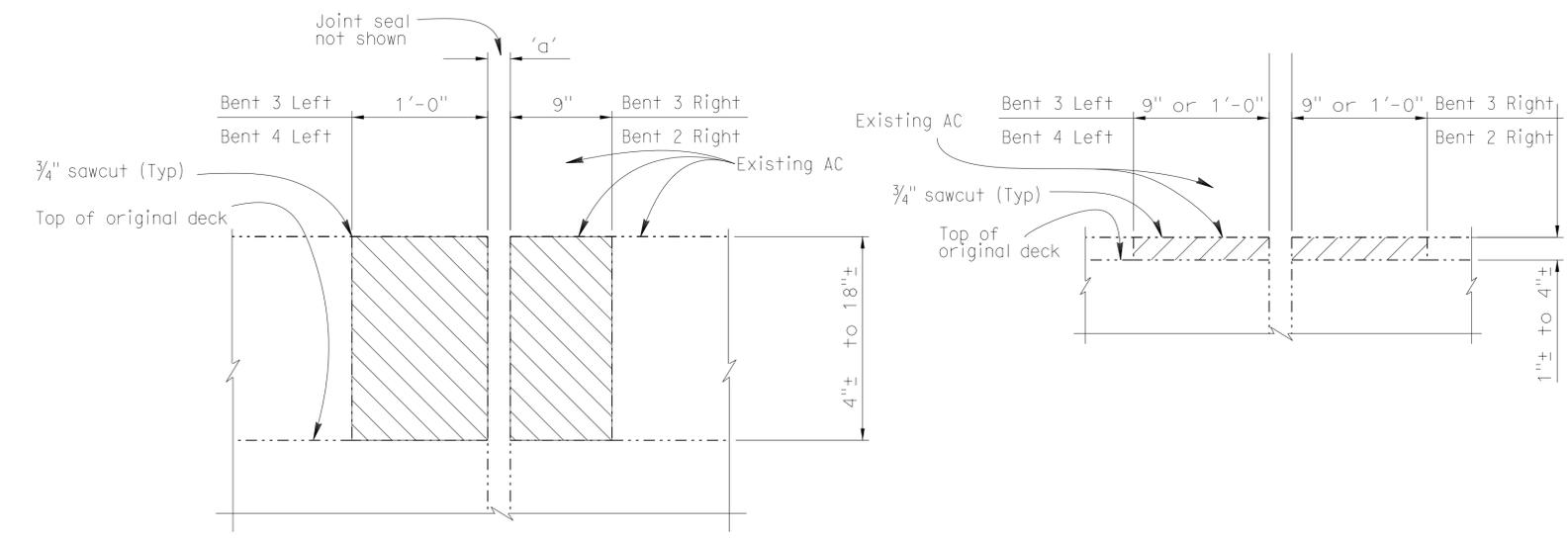
REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 3.6$ ksi
 $n = 8$

- LEGEND: (APPLY TO THIS SHEET ONLY)**
- ①  Indicates limits of remove 1"± to 4"± AC surfacing and construct 1"± to 4"± polyester concrete expansion dam. For other details, see, "GENERAL PLAN NO. 4" sheet.
 - ②  Indicates limits of remove 4"± to 18"± AC surfacing and construct 4"± to 18"± polyester concrete expansion dam. For other details, see, "GENERAL PLAN NO. 4" sheet.
 - ③  Indicates limits of remove 1"± AC surfacing and construct 1"± polyester concrete expansion dam. For other details, see "GENERAL PLANS NO. 4" sheet.



RECONSTRUCTION

RECONSTRUCTION



EXISTING

EXISTING

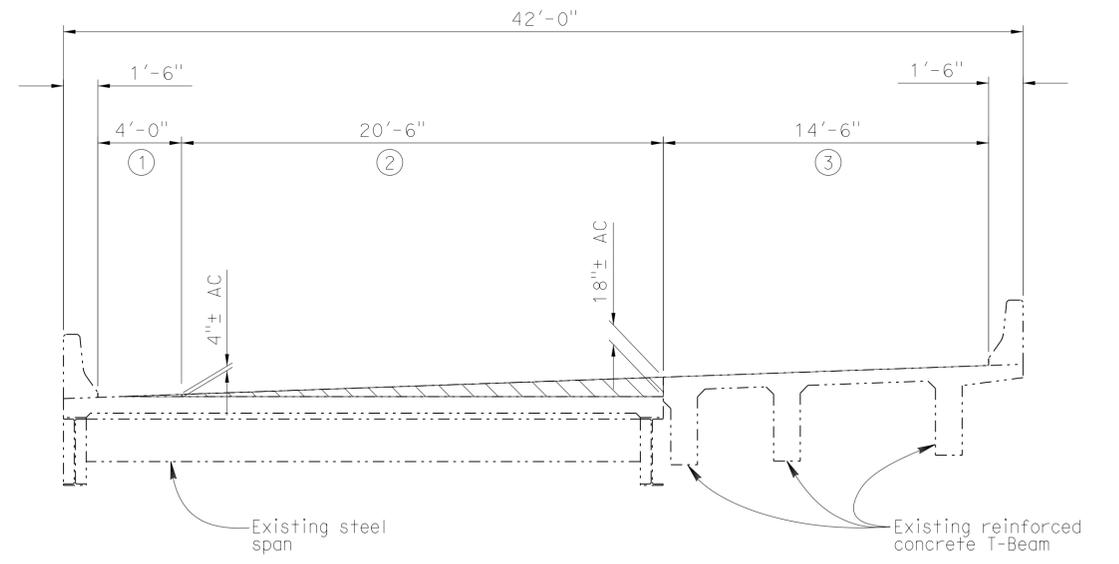
SECTION A-A

1 1/2" = 1'-0"
Br. No. 04-0079R

SECTION B-B

1 1/2" = 1'-0"
Br. No. 04-0079R

Bent 3 Shown, Bents 2 and 4 similar.



SECTION AT SPANS 2 & 3

1/4" = 1'-0"
Br. No. 04-0079R

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY D. Acoba	CHECKED P. Kang	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. VARIOUS POST MILE VARIOUS	ROUTE 36, 96, 101 & 254 BRIDGES JOINT SEAL DETAILS NO. 2	UNIT: 3488 PROJECT NUMBER & PHASE: 0114000016 CONTRACT NO.: 01-0E2101	REVISION DATES	SHEET	OF
	DETAILS	BY M. Hallstrom	CHECKED P. Kang						7	7
	QUANTITIES	BY D. Acoba	CHECKED P. Kang							

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FILE => z01-0e2101_07_joint-seal-de+s02.dgn

USERNAME => s120115 DATE PLOTTED => 30-MAR-2015 TIME PLOTTED => 12:16