

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	1	30



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

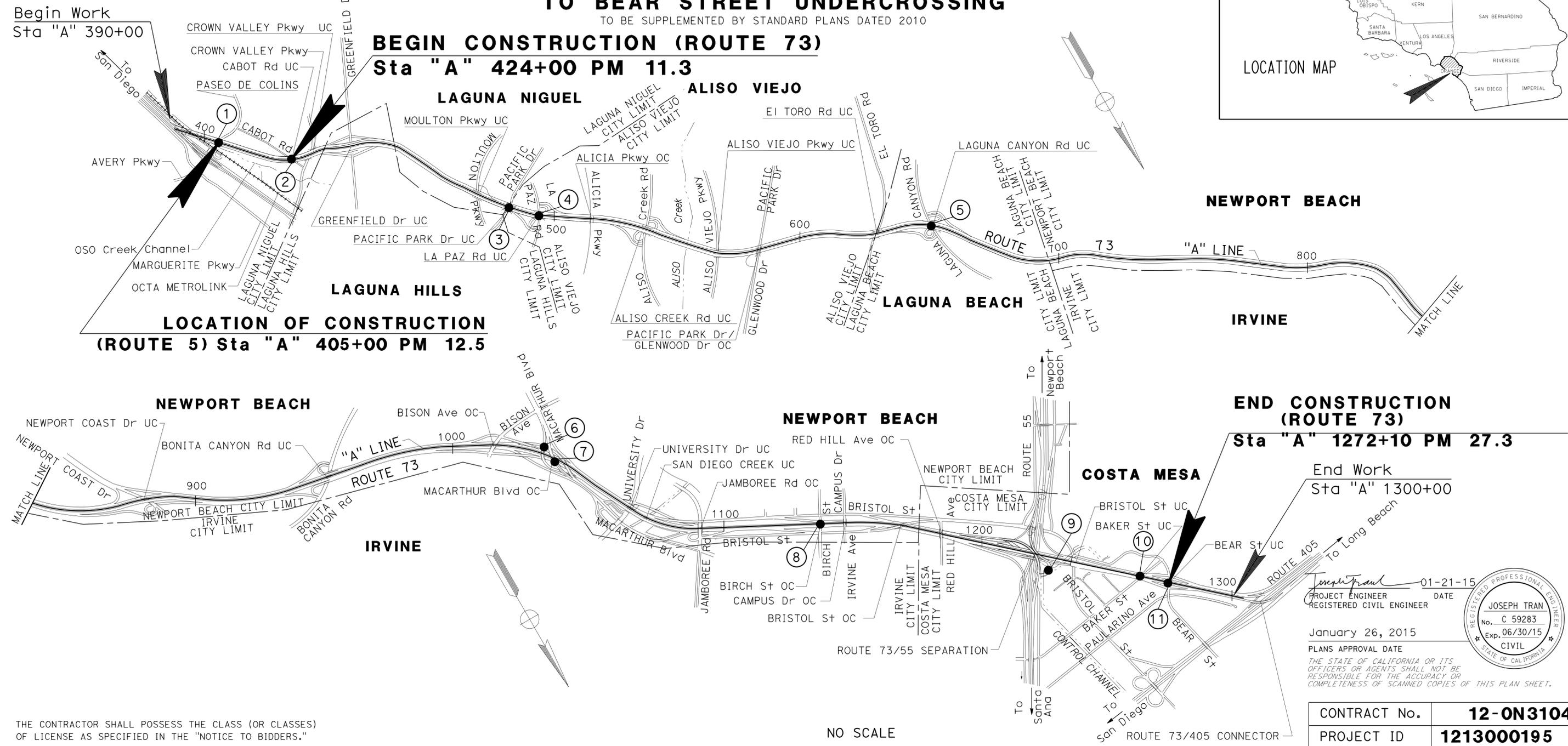
**PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN ORANGE COUNTY  
IN LAGUNA NIGUEL, ALISO VIEJO, LAGUNA BEACH,  
NEWPORT BEACH, IRVINE AND COSTA MESA  
ON ROUTE 5 AT 73/5 CONNECTOR VIADUCT  
AND ON ROUTE 73  
FROM CABOT ROAD UNDERCROSSING  
TO BEAR STREET UNDERCROSSING**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

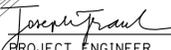
**INDEX OF PLANS**

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	LOCATION OF CONSTRUCTION
3	CONSTRUCTION AREA SIGNS
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11	TRAFFIC HANDLING QUANTITIES
12	PAVEMENT DELINEATION QUANTITIES
13-18	REVISED STANDARD PLANS
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19-25	GENERAL PLANS No.1 TO No.7
26-27	MISCELLANEOUS DETAILS
28	JOINT SEAL DETAILS
29	STRIP EXPANSION JOINT SEAL ASSEMBLY
30	TEMPORARY STEEL DECKING

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



PROJECT MANAGER	MASSOUD TAJIK
DESIGN MANAGER	MASSOUD TAJIK

 01-21-15  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
 JOSEPH TRAN  
 No. C 59283  
 Exp. 06/30/15  
 CIVIL  
 STATE OF CALIFORNIA

January 26, 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.

CONTRACT No.	<b>12-ON3104</b>
PROJECT ID	<b>1213000195</b>

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

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 MAINTENANCE

FUNCTIONAL SUPERVISOR  
 MASSOUD TAJIK

CALCULATED/DESIGNED BY  
 CHECKED BY

PHAT TRAN  
 JOSEPH TRAN

REVISOR  
 DATE REVISOR

J TRAN  
 09-01-14

LOCATIONS OF CONSTRUCTION				
No.	Br No.	Rte	PM	NAME
①	55-0719G	5	12.57	N5-N73 CONNECTOR VIADUCT
②	55-0746L	73	11.28	CABOT ROAD UC
③	55-0751T	73	13.16	PACIFIC PARK DRIVE UC
④	55-0752R	73	13.40	LA PAZ ROAD UC
⑤	55-0745L	73	16.75	LAGUNA CANYON ROAD UC
⑥	55-0735S	73	23.75	MACARTHUR NB ON-RAMP OC
⑦	55-0734	73	23.82	MACARTHUR BLVD OC
⑧	55-0636	73	25.45	BIRCH STREET OC
⑨	55-1029G	73	26.57	N73-S55 DELHI CHANNEL
⑩	55-0529R	73	27.14	BAKER STREET UC
⑪	55-0530R	73	27.28	BEAR STREET UC

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	2	30

*Joseph Tran* 01-21-15  
 REGISTERED CIVIL ENGINEER DATE

01-26-15  
 PLANS APPROVAL DATE

JOSEPH TRAN  
 No. C59283  
 Exp. 6/30/15  
 CIVIL

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.

# LOCATION OF CONSTRUCTION

## LC-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 MAINTENANCE  
 FUNCTIONAL SUPERVISOR: MASSOUD TAJIK  
 PHAT TRAN: JOSEPH TRAN  
 REVISOR: J TRAN  
 DATE: 09-01-14

**NOTE:**

1. EXACT LOCATION AND POSITION OF SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. FOR ADDITIONAL QUANTITIES OF CONSTRUCTION AREA SIGNS, SEE SHEET DEQ-1
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
4. (C) SIGN SHALL BE PLACED 10 DAYS PRIOR TO CLOSURE.
5. SIGN POST LENGTH ARE APPROXIMATE, EXACT SIZE AND LENGTH WILL BE DETERMINED BY THE ENGINEER.

**LEGEND:**

- (X) CONSTRUCTION AREA SIGN No.
- ↑ CONSTRUCTION AREA SIGN, 1-POST
- CONSTRUCTION WORK AREA

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	W20-1		48" x 48"	ROAD WORK AHEAD	1 - 4" X 4"	11
(B)	G20-2		48" x 24"	END ROAD WORK	1 - 4" x 4"	9
(C)		SC6-3	48" x 48"	RAMP CLOSED	1 - 4" X 4"	3
(D)		W11-1	36" x 36"	(BIKE SYMBOL)	1 - 4" X 4"	4
(E)		W16-1P	24" x 30"	SHARE THE ROAD	1 - 4" X 4"	4

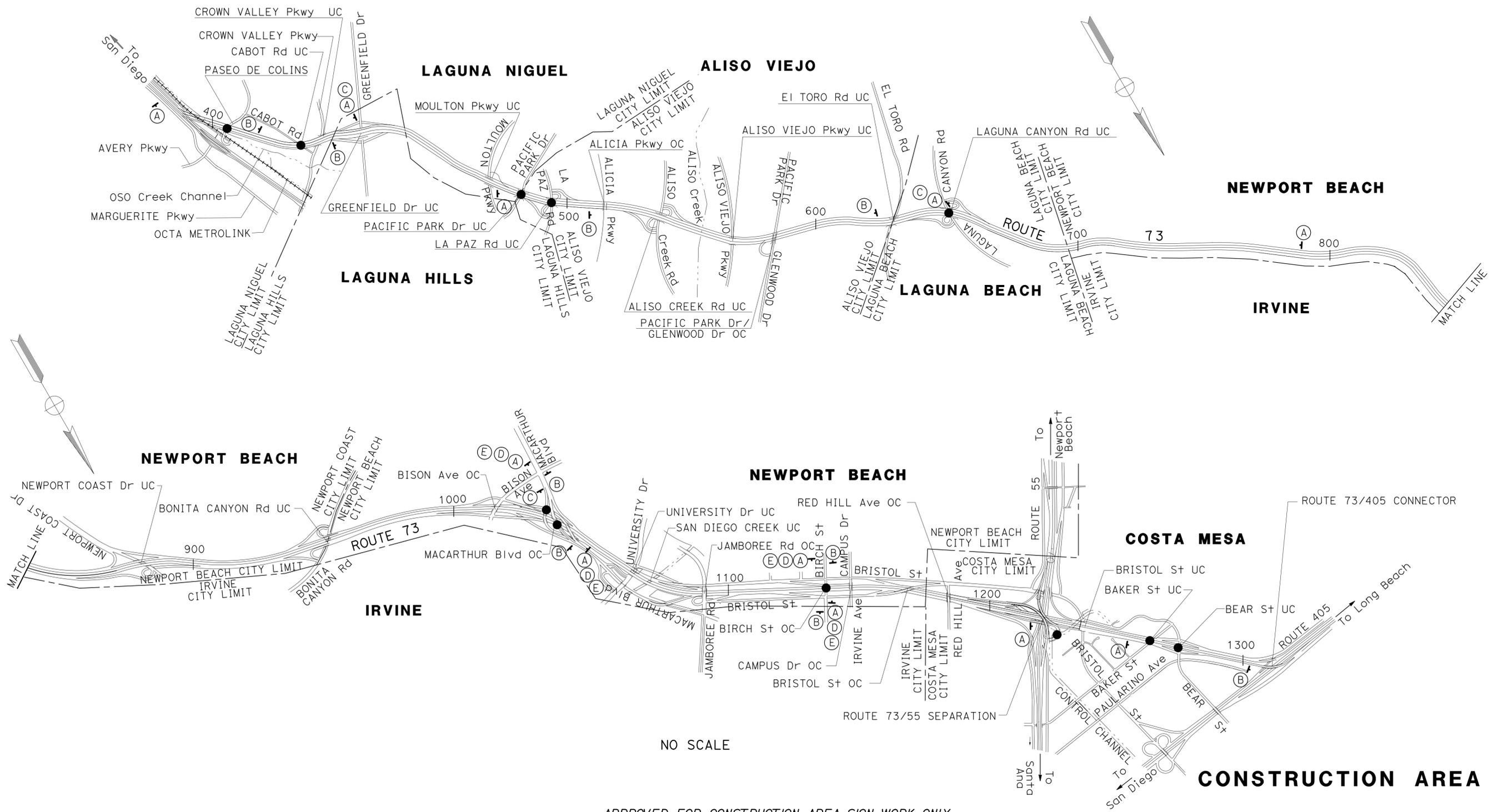
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	3	30

01-21-15  
 REGISTERED CIVIL ENGINEER DATE

01-26-15  
 PLANS APPROVAL DATE

JOSEPH TRAN  
 No. C59283  
 Exp. 6/30/15  
 CIVIL

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NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

**CONSTRUCTION AREA SIGNS  
 CS-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 MAINTENANCE  
 FUNCTIONAL SUPERVISOR MASSOUD TAJIK  
 PHAT TRAN JOSEPH TRAN  
 REVISOR J TRAN  
 DATE 09-01-14

**NOTES:**

1. LOCATIONS OF CONSTRUCTION AREA SIGNS (DETOUR) AND PCMS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. EXACT MESSAGE TO BE DISPLAYED ON THE PCMS WILL BE DETERMINED BY THE ENGINEER.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
4. FOR ADDITIONAL QUANTITIES OF CONSTRUCTION AREA SIGNS, SEE SHEETS CS-1 AND THQ-1.

**LEGEND:**

- DIRECTION OF TRAVEL THROUGH DETOUR
- ⬇ CONSTRUCTION AREA SIGN (DETOUR), 1-POST
- PCMS-1 PORTABLE CHANGEABLE MESSAGE SIGN
- X CONSTRUCTION AREA SIGN (DETOUR)
- CONNECTORS OR RAMPS CLOSURE
- CONSTRUCTION WORK AREA

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	4	30

01-21-15  
 REGISTERED CIVIL ENGINEER DATE  
 JOSEPH TRAN  
 No. C59283  
 Exp. 6/30/15  
 CIVIL  
 STATE OF CALIFORNIA

01-26-15  
 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.

**DURING THE CLOSURE, THE PCMS SHOULD READ:**

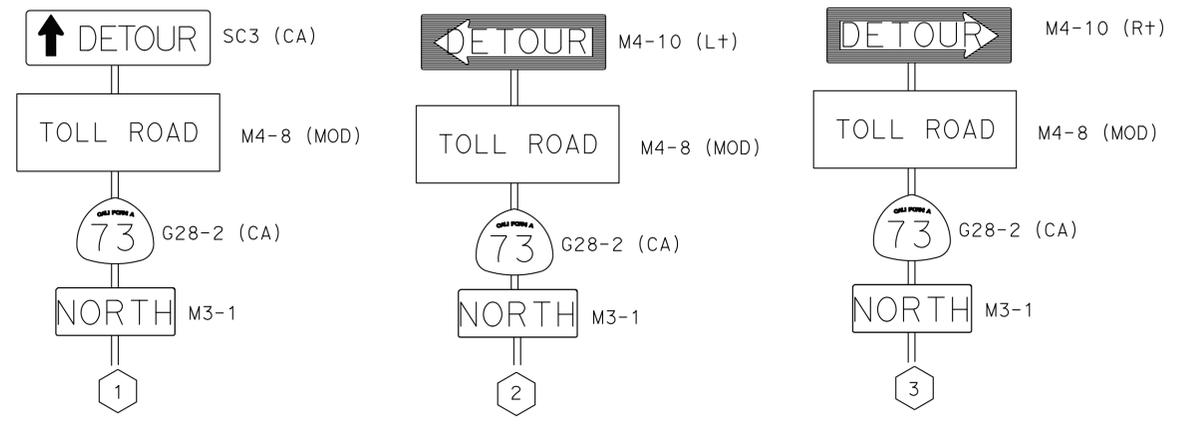
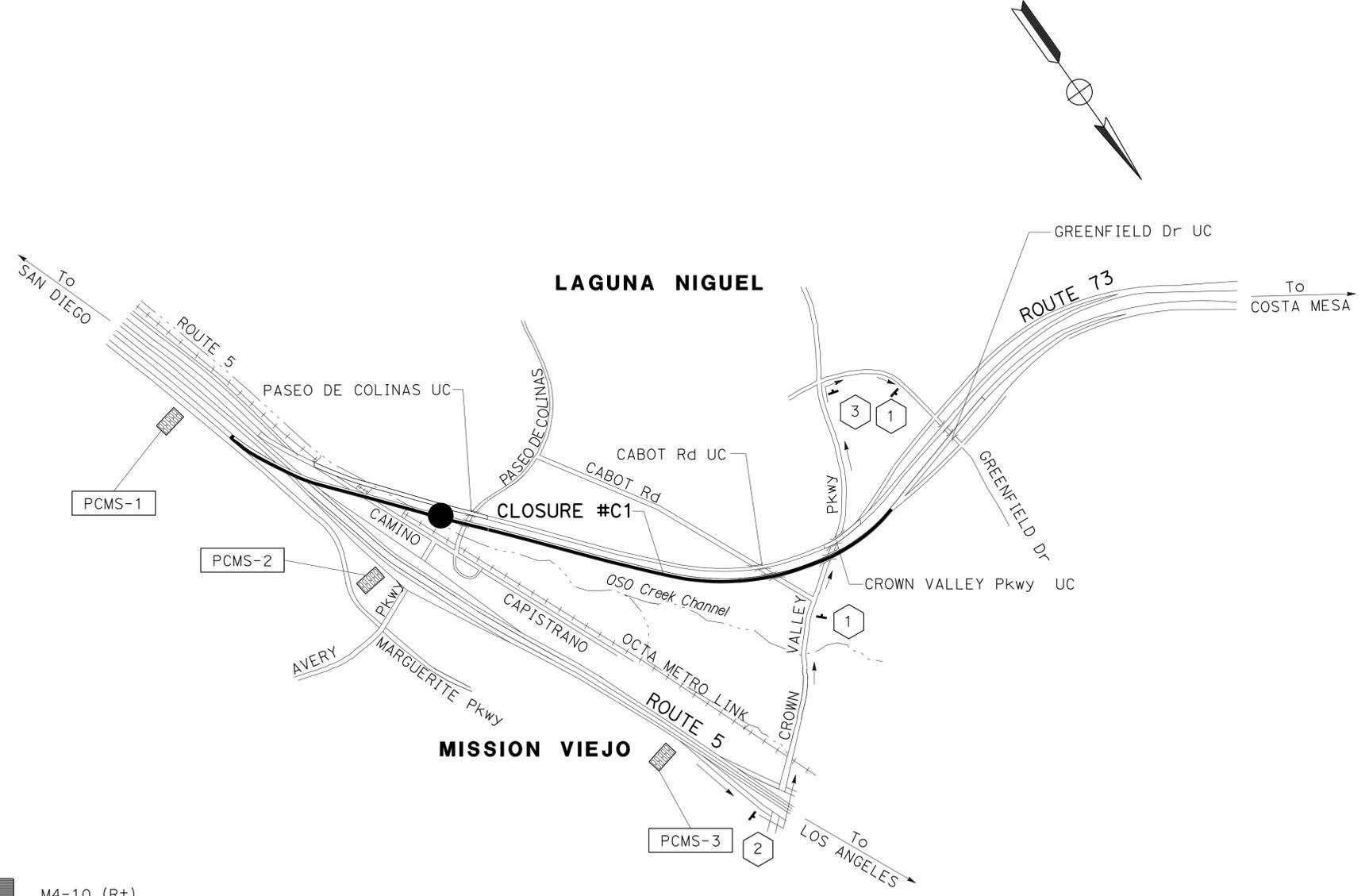
PCMS-X	MESSAGE
PCMS-1	1ST FRAME: DETOUR ROUTE 73 2ND FRAME: USE CROWN VALLEY
PCMS-2	1ST FRAME: DETOUR ROUTE 73 2ND FRAME: TAKE NEXT EXIT
PCMS-3	1ST FRAME: DETOUR ROUTE 73 2ND FRAME: EXIT HERE

**CLOSURE #C1:**

NB ROUTE 5 TO NB ROUTE 73 CONNECTOR

**DETOUR:**

Exit CROWN VALLEY Pkwy, LEFT ON CROWN VALLEY Pkwy, AND RIGHT ON GREENFIELD Dr



**TRAFFIC HANDLING PLAN  
(LOCATION 1 DETOUR)**  
NO SCALE

APPROVED FOR TRAFFIC HANDLING WORK ONLY





Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	7	30

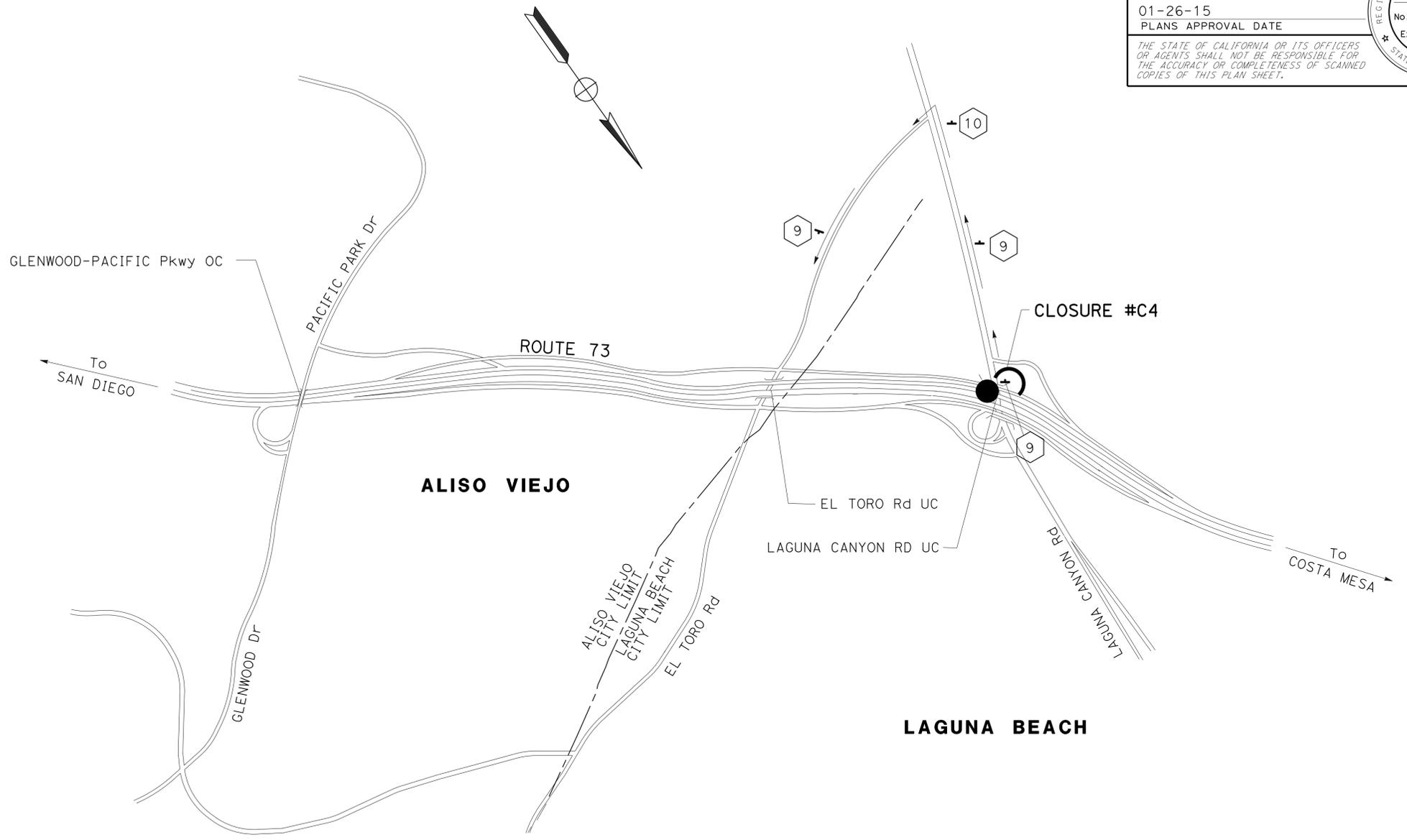
  

<i>Joseph Tran</i>	01-21-15
REGISTERED CIVIL ENGINEER	DATE
01-26-15	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
JOSEPH TRAN
No. C59283
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.

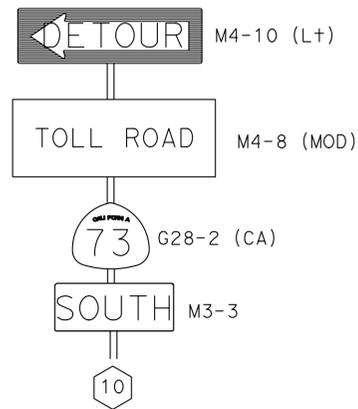
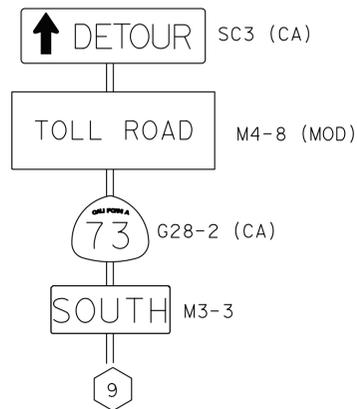


**CLOSURE #C4:**

SB ROUTE 73 LAGUNA CANYON Rd ON-RAMP

**DETOUR:**

LEFT ON EL TO Rd



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	PHAT TRAN	REVISOR	J TRAN
<b>MAINTENANCE</b>	MASSOUD TAJIK	JOSEPH TRAN	DATE	09-01-14
	CHECKED BY			
	DESIGNED BY			

APPROVED FOR TRAFFIC HANDLING WORK ONLY

**TRAFFIC HANDLING PLAN  
(LOCATION 5 DETOUR)**  
NO SCALE

**TH-4**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	8	30

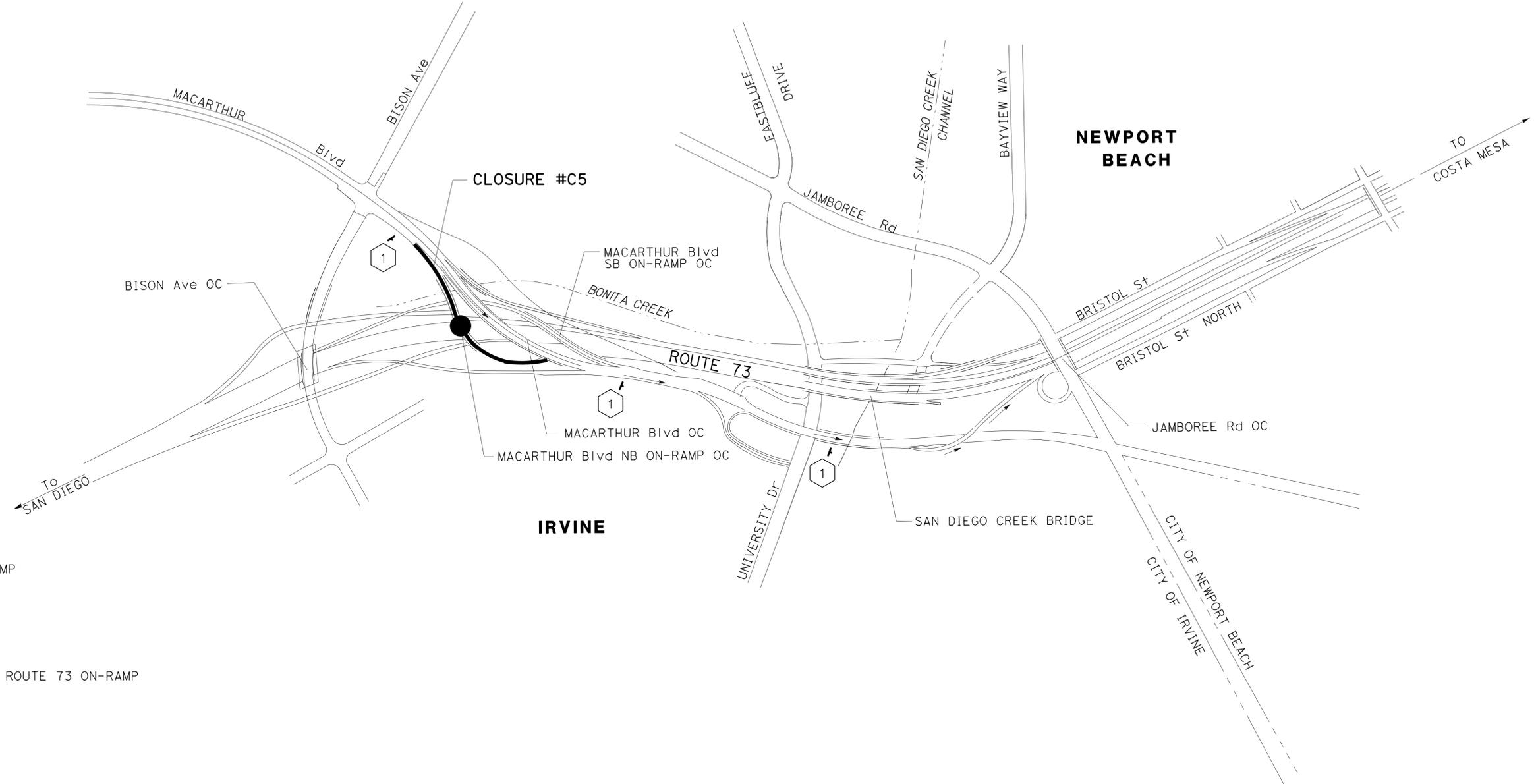
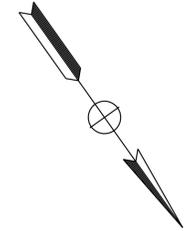
  

<i>Joseph Tran</i>	01-21-15
REGISTERED CIVIL ENGINEER	DATE
01-26-15	
PLANS APPROVAL DATE	

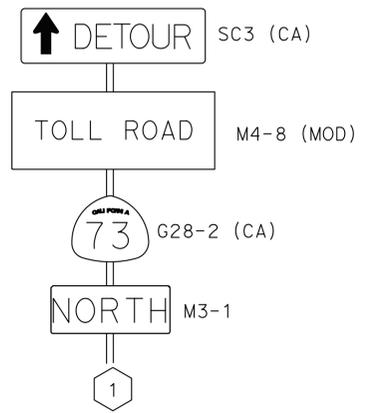
REGISTERED PROFESSIONAL ENGINEER
JOSEPH TRAN
No. C59283
Exp. 6/30/15
CIVIL
STATE OF CALIFORNIA

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.



**CLOSURE #C5:**  
NB ROUTE 73 MACATHUR Blvd ON-RAMP

**DETOUR:**  
CONTINUE ON MACATHUR Blvd TO NB ROUTE 73 ON-RAMP



**TRAFFIC HANDLING PLAN  
(LOCATION 6 DETOUR)**  
NO SCALE

**TH-5**

APPROVED FOR TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	PHAT TRAN	REVISOR	J TRAN
<b>Caltrans</b>	MASSOUD TAJIK	JOSEPH TRAN	DATE REVISED	09-01-14
	CHECKED BY			
	DESIGNED BY			

LAST REVISION DATE PLOTTED => 23-JAN-2015 10:56  
09-01-14 TIME PLOTTED => 10:56



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	10	30

<i>Joseph Tran</i>	01-21-15
REGISTERED CIVIL ENGINEER	DATE
01-26-15	
PLANS APPROVAL DATE	

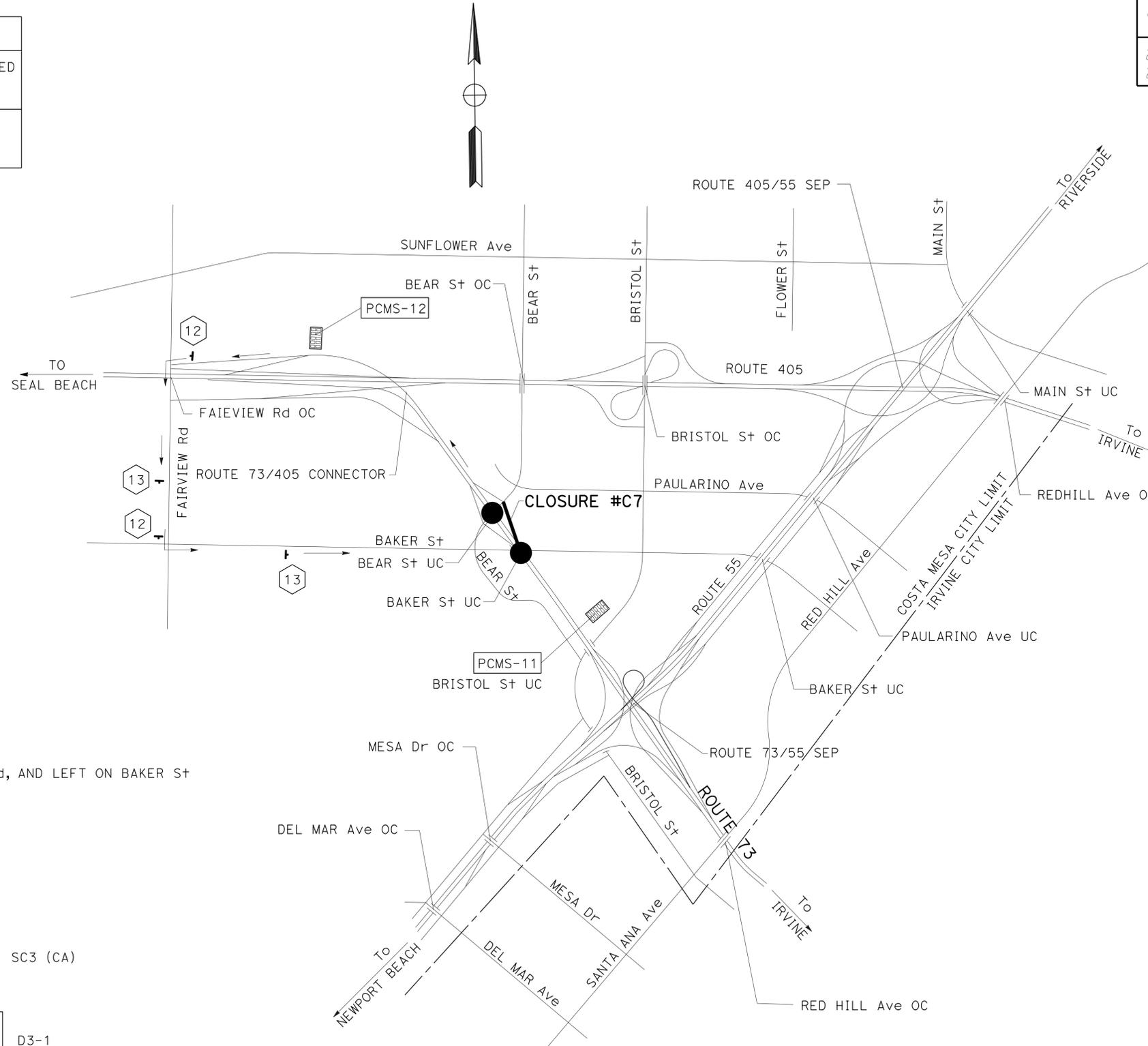
  

REGISTERED PROFESSIONAL ENGINEER
JOSEPH TRAN
No. C59283
Exp. 6/30/15
CIVIL
STATE OF CALIFORNIA

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.

DURING THE CLOSURE, THE PCMS SHOULD READ:

PCMS-X	MESSAGE
PCMS-11	1ST FRAME: BEAR ST OFF-RAMP CLOSED 2ND FRAME: USE FAIRVIEW Rd
PCMS-12	1ST FRAME: DETOUR TO BEAR ST 2ND FRAME: EXIT HERE

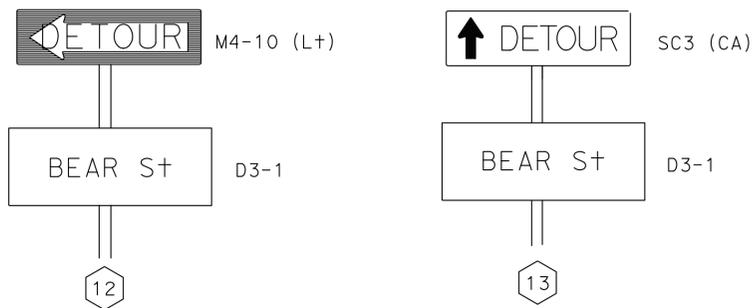


**CLOSURE #C7**

NB ROUTE 73 BEAR ST OFF-RAMP

**DETOUR:**

TO NB ROUTE 405, Exit FAIRVIEW Rd, LEFT ON FAIRVIEW Rd, AND LEFT ON BAKER St



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

**MAINTENANCE**

FUNCTIONAL SUPERVISOR

MASSOUD TAJIK

CALCULATED/DESIGNED BY

CHECKED BY

PHAT TRAN

JOSEPH TRAN

REVISED BY

DATE REVISED

J TRAN

09-01-14

APPROVED FOR TRAFFIC HANDLING WORK ONLY

**TRAFFIC HANDLING PLAN  
(LOCATION 10 DETOUR)**

NO SCALE

**TH-7**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	11	30

REGISTERED CIVIL ENGINEER DATE 01-21-15  
 JOSEPH TRAN  
 No. C59283  
 Exp. 6/30/15  
 CIVIL  
 PLANS APPROVAL DATE 01-26-15  
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:**

- ALL SIGNS ARE STATIONARY MOUNTED. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- FOR ADDITIONAL QUANTITIES OF CONSTRUCTION AREA SIGNS, SEE SHEET CS-1.
- EXISTING PAVEMENT DELINEATION SHALL BE REMOVED AND REPLACED AT THE SAME LOCATION.

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SHEET NO.	DETOUR SIGN TYPE	POST SIZE (IN)	NO. OF SIGNS	NO. OF POSTS
TH-1	1	4 x 6	2	2
	2	4 x 6	1	1
	3	4 x 6	1	1
TH-2	4	4 x 6	4	4
	5	4 x 6	2	2
	6	4 x 6	3	3
TH-3	7	4 x 6	3	3
	8	4 x 6	3	3
TH-4	9	4 x 6	3	3
	10	4 x 6	1	1
TH-5	1	4 x 6	3	3
TH-6	11	4 x 6	2	2
TH-7	12	4 x 6	2	2
	13	4 x 6	2	2

**PAVEMENT DELINEATION QUANTITIES (TEMPORARY)**

Loc	Rte	PM	BRIDGE NAME & No.	Dir	TEMPORARY TRAFFIC STRIPE (PAINT)										TEMPORARY PAVEMENT MARKING (PAINT)					
					4" SOLID WHITE	DETAIL 25, 25A 4" SOLID YELLOW	DETAIL 27 4" SOLID WHITE	DETAIL 29 4" SOLID YELLOW	DETAIL 9 4" WHITE BROKEN (17-7)	DETAIL 11 4" WHITE BROKEN (36-12)	DETAIL 13 Mod 4" WHITE BROKEN (36-12)	DETAIL 37 8" WHITE BROKEN (12-3)	8" SOLID WHITE	DETAIL 36 8" SOLID WHITE	WORDS	LIMIT LINE	ARROW			
2	73	11.28	CABOT Rd UC 55-0746L	SB		424	424							848						
3	73	13.16	PACIFIC PARK Dr UC 55-0751T	NB		296	296								241		165			
4	73	13.40	LA PAZ Rd UC 55-0752R	NB		280	280						560							
5	73	16.75	LAGUNA CANYON Rd UC 55-0745L	SB		155	155													
6	73	23.75	MACATHUR Blvd NB ON-RAMP OC 55-0735S	NB		803	803													
				SB		1469	1469			2938					378					
8	73	25.45	BIRCH St OC 55-0636	EB	100			1066	180										47	75
				WB	100				185							241				47
9	73	26.57	N 73 TO S 55 CONNECTOR 55-1029G			289	289													
10	73	27.14	BAKER St UC 55-0529R	NB		201	201						603			550				
11	73	27.28	BEAR St UC 55-0530R	NB		157	157						314							
SUB-TOTAL						200	5543	5543	1066	365	5876	2325	241	632	715	378	94	135		
TOTAL											22506						607			

**PORTABLE CHANGEABLE MESSAGE SIGN QUANTITY**

SHEET NO.	PCMS
TH-1	3
TH-2	3
TH-3	2
TH-6	2
TH-7	2
TOTAL	12

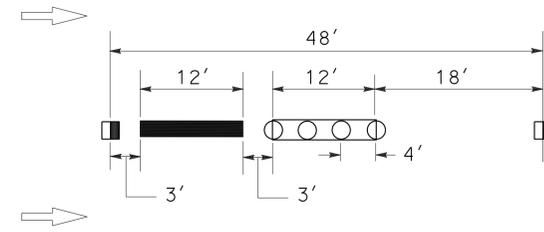
**TRAFFIC HANDLING QUANTITIES THQ-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION MAINTENANCE  
 Caltrans  
 J. TRAN  
 REVISOR BY DATE REVISOR  
 PHAT TRAN JOSEPH TRAN  
 CALCULATED/DESIGNED BY CHECKED BY  
 FUNCTIONAL SUPERVISOR MASSOUD TAJIK  
 09-01-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	12	30

01-21-15  
 REGISTERED CIVIL ENGINEER DATE  
 JOSEPH TRAN  
 No. C59283  
 Exp. 6.30.15  
 CIVIL  
 STATE OF CALIFORNIA

01-26-15  
 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.



**DETAIL 13 (Mod)**

**LEGEND**

4" BLACK PAINT TRAFFIC STRIPE (2-COAT)

**NOTES:**

- SEE STANDARD PLANS FOR PAVEMENT MARKING SYMBOL AND WORD DETAILS NOT SHOWN.
- EXISTING PAVEMENT DELINEATION SHALL BE REMOVED AND REPLACED AT THE SAME LOCATION.
- INSTALL MISSING WHITE REFLECTIVE MARKER ON THE RIGHT AND YELLOW REFLECTIVE MARKER ON THE LEFT OF EXISTING CONCRETE BARRIER IN THE DIRECTION OF TRAFFIC.

**PAVEMENT DELINEATION QUANTITIES**

Loc	Rte	PM	BRIDGE NAME & No.	Dir	PAINT TRAFFIC STRIPE (2-COAT)		THERMOPLASTIC TRAFFIC STRIPE										THERMOPLASTIC PAVEMENT MARKING			PAVEMENT MARKER				REMOVE					
					DETAIL 13 (Mod) 4" BLACK BROKEN (36-12)	4" SOLID BLACK	4" SOLID WHITE	DETAIL 25, 25A 4" SOLID YELLOW	DETAIL 27 4" SOLID WHITE	DETAIL 29 4" SOLID YELLOW	DETAIL 9 4" WHITE BROKEN (17-7)	DETAIL 10 (N*)	DETAIL 11 4" WHITE BROKEN (36-12)	DETAIL 13 Mod 4" WHITE BROKEN (36-12)	DETAIL 37 8" WHITE BROKEN (12-3)	DETAIL 38A 8" SOLID WHITE	DETAIL 36 8" SOLID WHITE	WORDS	LIMIT LINE	ARROW	NON-REFLECTIVE		RETRO-REFLECTIVE		CONCRETE BARRIER MARKER	THERMOPLASTIC TRAFFIC STRIPE	PAINTED TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER
																					EA	EA	EA	EA					
2	73	11.28	CABOT Rd UC 55-0746L	SB				424	424											71	18	9		10	1060			98	
3	73	13.16	PACIFIC PARK Dr UC 55-0751T	NB				296	296						241		165					23	12	8	3	1018			43
4	73	13.40	LA PAZ Rd UC 55-0752R	NB				280	280											47	12	6		6	700			65	
5	73	16.75	LAGUNA CANYON Rd UC 55-0745L	SB				155	155														6		310			6	
6	73	23.75	MACATHUR Blvd NB ON-RAMP OC 55-0735S	NB				803	803				803							100	17	33		5	1606			150	
7	73	23.82	MACATHUR Blvd OC 55-0734	NB				1469	1469									378						25	4407		378	31	
				SB				1469	1469															25	4407			31	
8	73	25.45	BIRCH St OC 55-0636	EB		533	100			1066	180						391		47	75		20	22		1201	533	122	42	
				WB			100				185					241		47	60		14				636		107	14	
9	73	26.57	N 73 TO S 55 CONNECTOR 55-1029G					289	289														12		12	578			12
10	73	27.14	BAKER St UC 55-0529R	NB	603			201	201								603				50	35	4		4	1651	150		89
11	73	27.28	BEAR St UC 55-0530R	NB	314			157	157								314				26	7	3		4	393	79		36
SUB-TOTAL					917	533	200	5543	5543	1066	365		5876	2325	241	632	715	378	94	135	294	146	169	8	97	17967	762	607	617
TOTAL					1450			12352			365		8201	241	1347			607			294	323			100	17967	762	607	617

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

**PAVEMENT DELINEATION QUANTITIES PDQ-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION MAINTENANCE

Caltrans

FUNCTIONAL SUPERVISOR MASSOUD TAJIK

PHAT TRAN JOSEPH TRAN

REVISOR BY J TRAN DATE REVISED 09-01-14

CALCULATED BY DESIGNED BY CHECKED BY

USERNAME => s127956 DGN FILE => 1213000195nc001.dgn

BORDER LAST REVISED 7/2/2010

RELATIVE BORDER SCALE IS IN INCHES

UNIT 3064

PROJECT NUMBER & PHASE 12130001951

LAST REVISION DATE PLOTTED => 23-JAN-2015 09-01-14 TIME PLOTTED => 10:56

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,73	12.5 11.3/27.3	13	30

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

July 19, 2013  
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 01-26-15

**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 <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

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

**REVISED STANDARD PLAN RSP A10B**

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	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
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	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

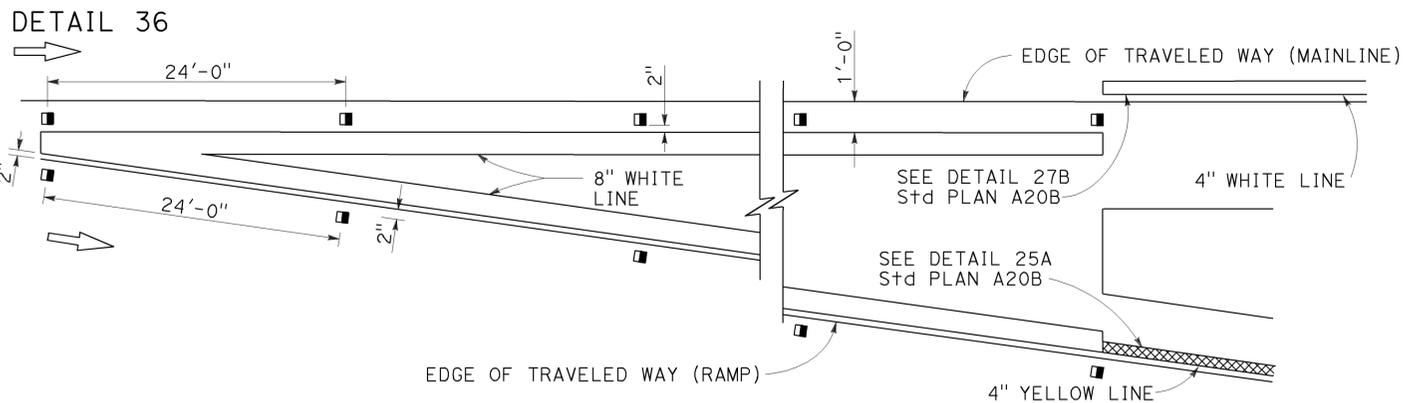
Maint	MAINTENANCE
Max	MAXIMUM
MB	METAL BEAM
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PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

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
Qty	QUANTITY
R	RADIUS
R & D	REMOVE AND DISPOSE
R & S	REMOVE AND SALVAGE
R/C	RATE OF CHANGE
RCA	REINFORCED CONCRETE ARCH
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
Rd	ROAD
Reinf	REINFORCED, REINFORCEMENT, REINFORCING
Rel	RELOCATE
Repl	REPLACEMENT
Ret	RETAINING
Rev	REVISED, REVISION
Rdwy	ROADWAY
RHMA	RUBBERIZED HOT MIX ASPHALT
Riv	RIVER
RM	ROAD-MIXED
RP	RADIUS POINT, REFERENCE POINT
RR	RAILROAD
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN
Rt	RIGHT
Rte	ROUTE
RW	REDWOOD, RETAINING WALL
R/W	RIGHT OF WAY
Rwy	RAILWAY

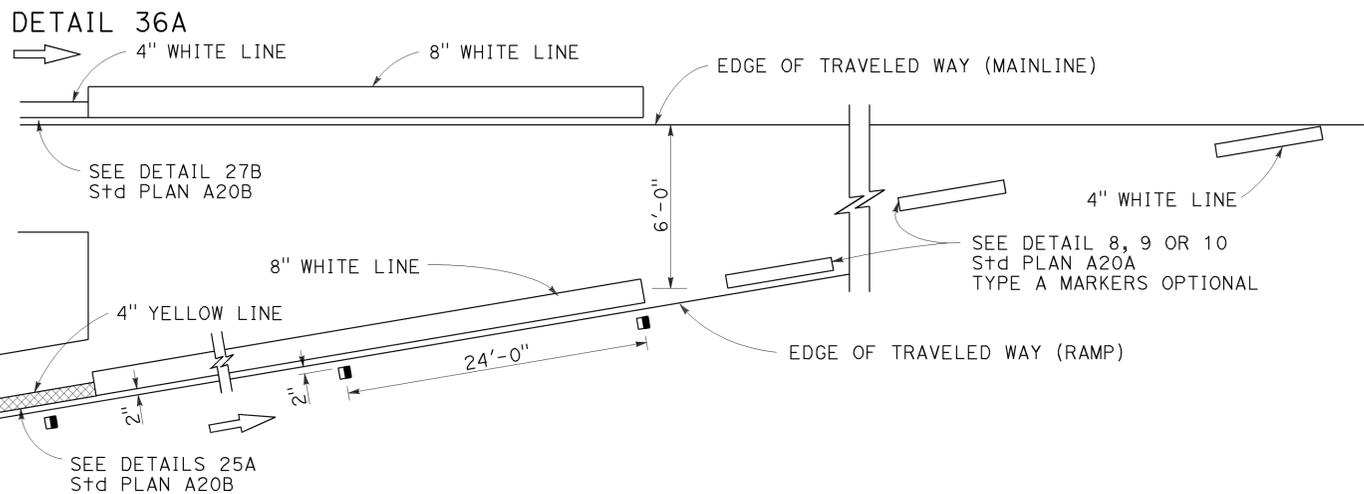
S	SOUTH, SUPPLEMENT
SAE	STRUCTURE APPROACH EMBANKMENT
Salv	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SAND CUSHION
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
Sec	SECOND, SECTION
Sep	SEPARATION
SG	SUBGRADE
Shld	SHOULDER
Sht	SHEET
Sim	SIMILAR
SL	STATION LINE
SM	SELECTED MATERIAL
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	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

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

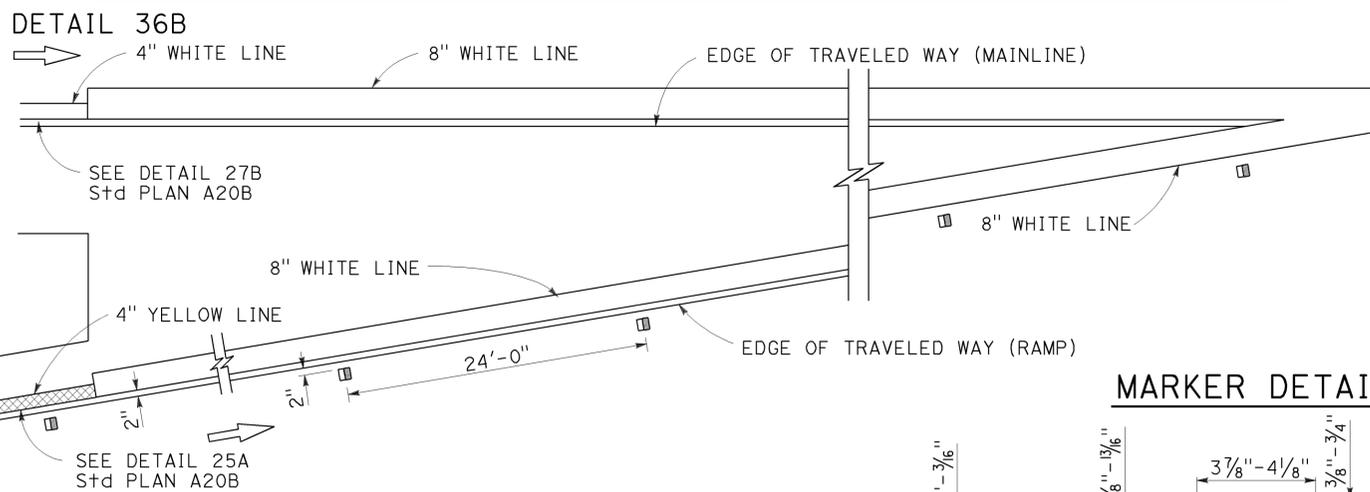
### EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



### ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



### ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

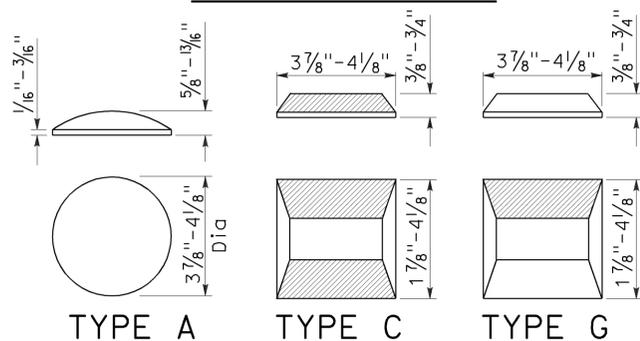


### MARKER DETAILS

#### LEGEND:

#### MARKERS

- TYPE A WHITE NON-REFLECTIVE
- ◻ TYPE C RED-CLEAR RETROREFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE



RETROREFLECTIVE FACE

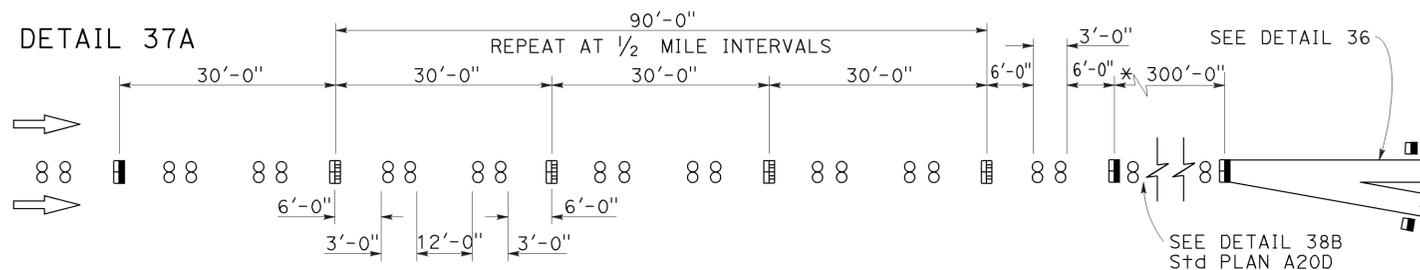
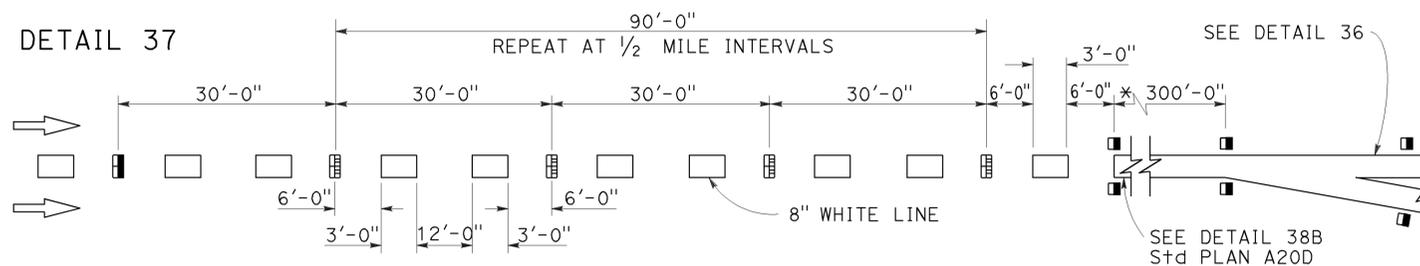
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,73	12.5 11.3/27.3	14	30

*Roberta L. McLaughlin*  
 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.

REGISTERED PROFESSIONAL ENGINEER  
 Roberta L. McLaughlin  
 No. C40375  
 Exp. 3-31-15  
 CIVIL  
 STATE OF CALIFORNIA

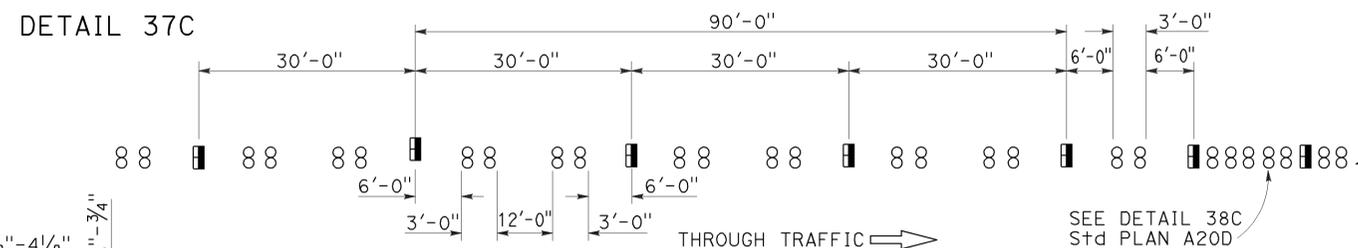
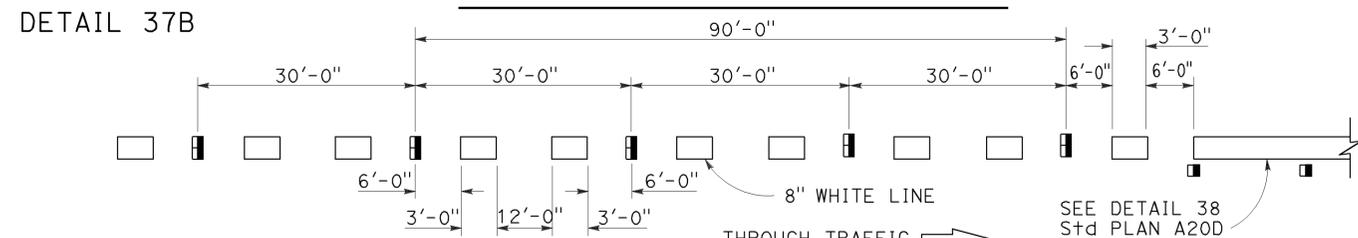
TO ACCOMPANY PLANS DATED 01-26-15

### LANE DROP AT EXIT RAMP



\* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

### LANE DROP AT INTERSECTIONS



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

## REVISED STANDARD PLAN RSP A20C

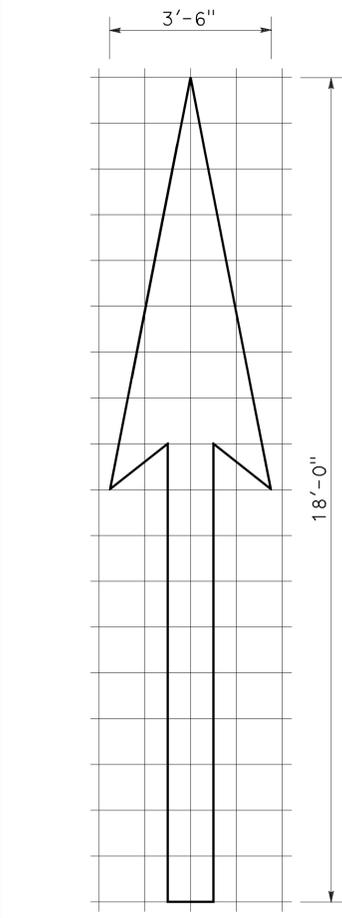
2010 REVISED STANDARD PLAN RSP A20C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	15	30

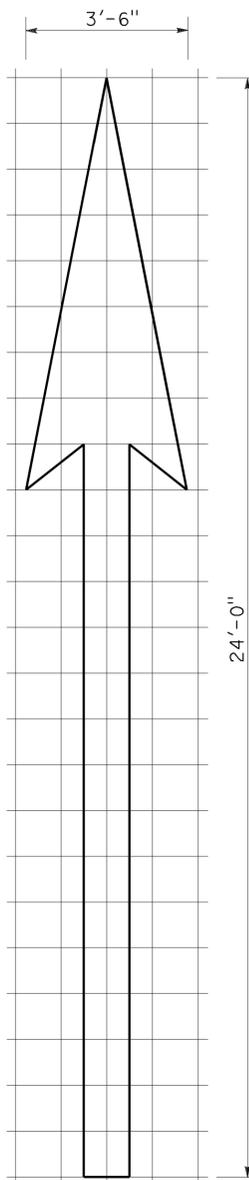
Robert L. McLaughlin  
 REGISTERED CIVIL ENGINEER  
 April 20, 2012  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

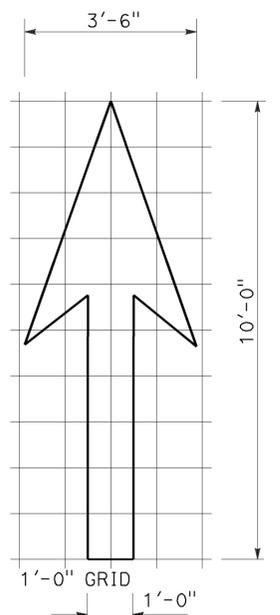
TO ACCOMPANY PLANS DATED \_\_\_\_\_



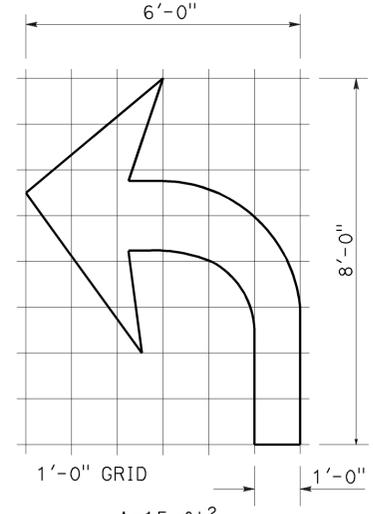
1'-0" GRID  
A=25 ft<sup>2</sup>  
**TYPE I 18'-0" ARROW**



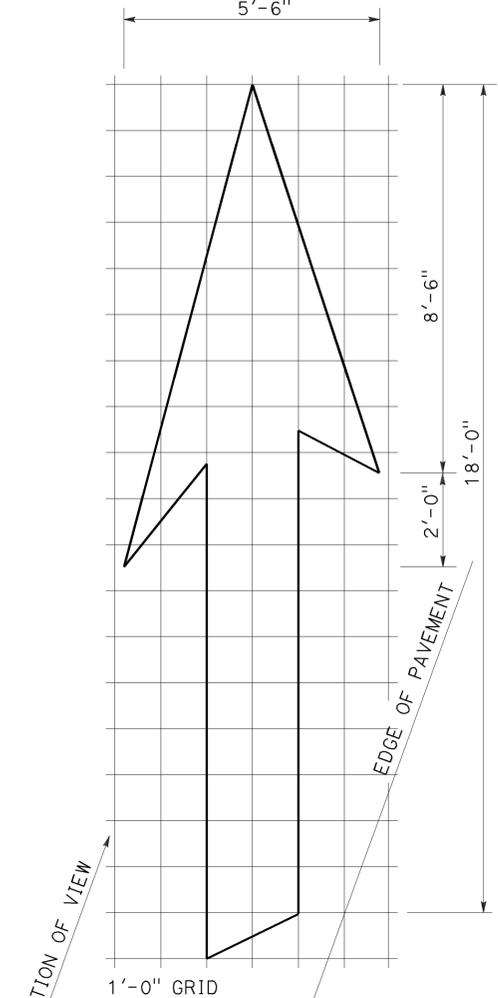
1'-0" GRID  
A=31 ft<sup>2</sup>  
**TYPE I 24'-0" ARROW**



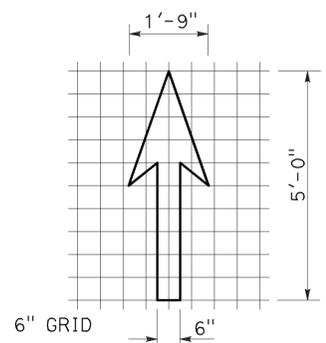
1'-0" GRID  
A=14 ft<sup>2</sup>  
**TYPE I 10'-0" ARROW**



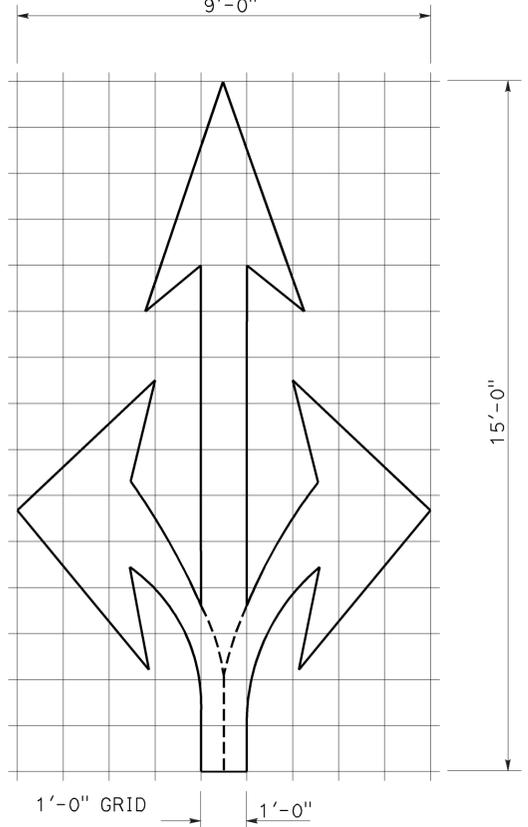
1'-0" GRID  
A=15 ft<sup>2</sup>  
**TYPE IV (L) ARROW**  
(For Type IV (R) arrow, use mirror image)



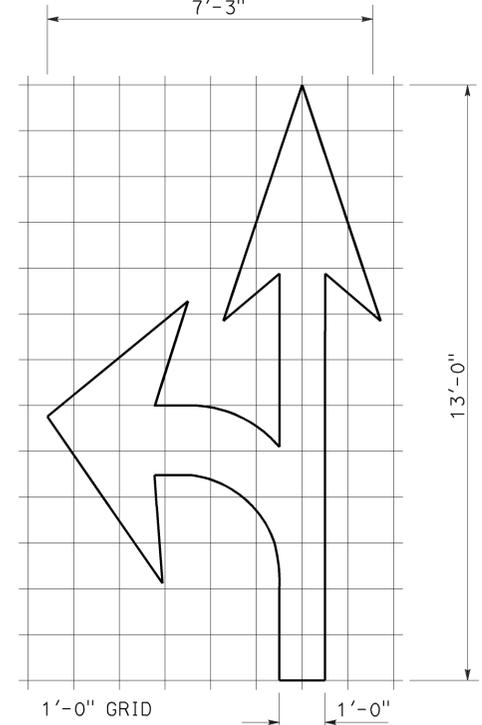
A=42 ft<sup>2</sup>  
**TYPE VI ARROW**  
Right lane drop arrow  
(For left lane, use mirror image)



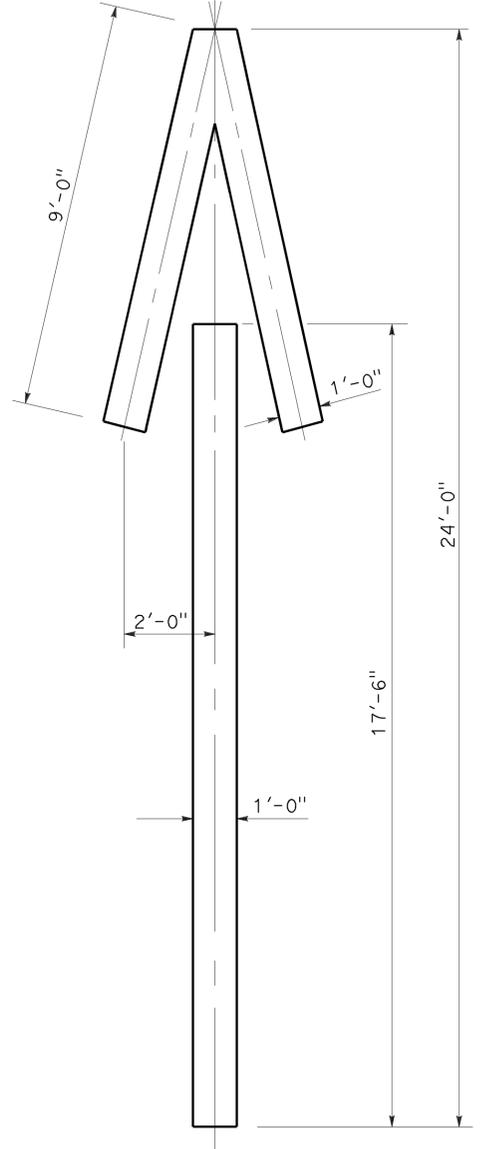
A=3.5 ft<sup>2</sup>  
**BIKE LANE ARROW**



1'-0" GRID  
A=36 ft<sup>2</sup>  
**TYPE VIII ARROW**



1'-0" GRID  
A=27 ft<sup>2</sup>  
**TYPE VII (L) ARROW**  
(For Type VII (R) arrow, use mirror image)



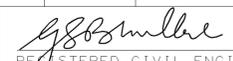
A=33 ft<sup>2</sup>  
**TYPE V ARROW**

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

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,73	12.5 11.3/27.3	16	30

  
 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 01-26-15

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
12	Ora	5,73	12.5 11.3/27.3	17	30

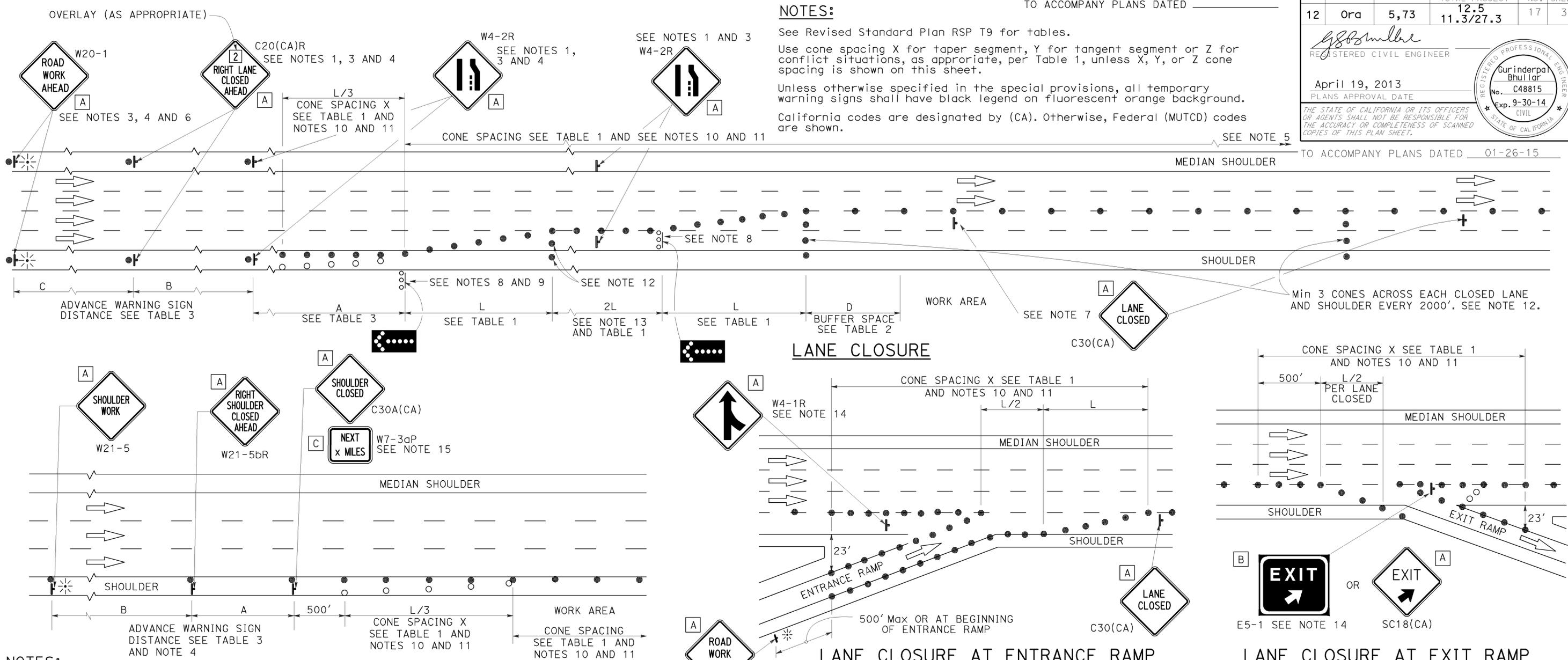
REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

TO ACCOMPANY PLANS DATED \_\_\_\_\_

**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.
- 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.
- 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.

- 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.

**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"

**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**

2010 REVISED STANDARD PLAN RSP T10

# TYPICAL RAMP CLOSURES

## SIGN PANEL SIZE (Min)

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

## LEGEND

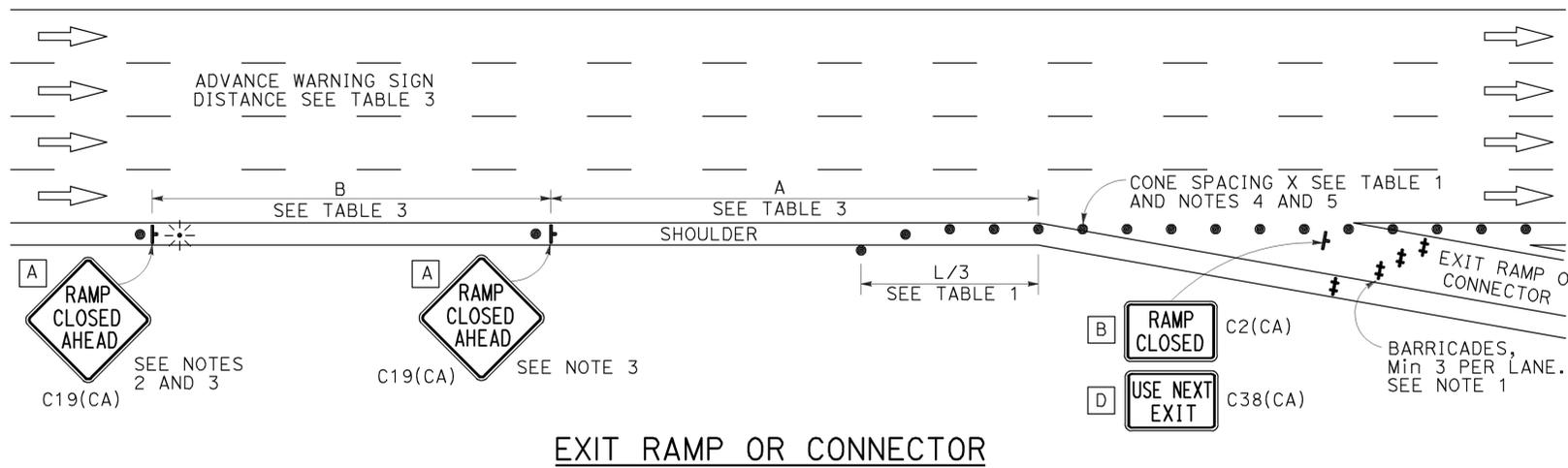
- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ‡ BARRICADES
- ⚡ PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5,73	12.5 11.3/27.3	18	30

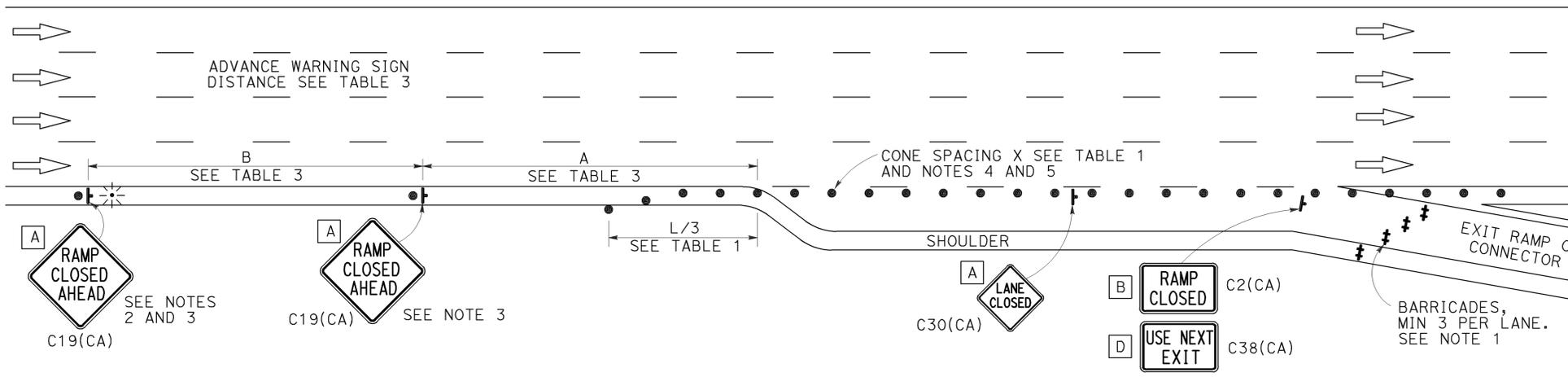
*Gurinderpal Bhullar*  
 REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

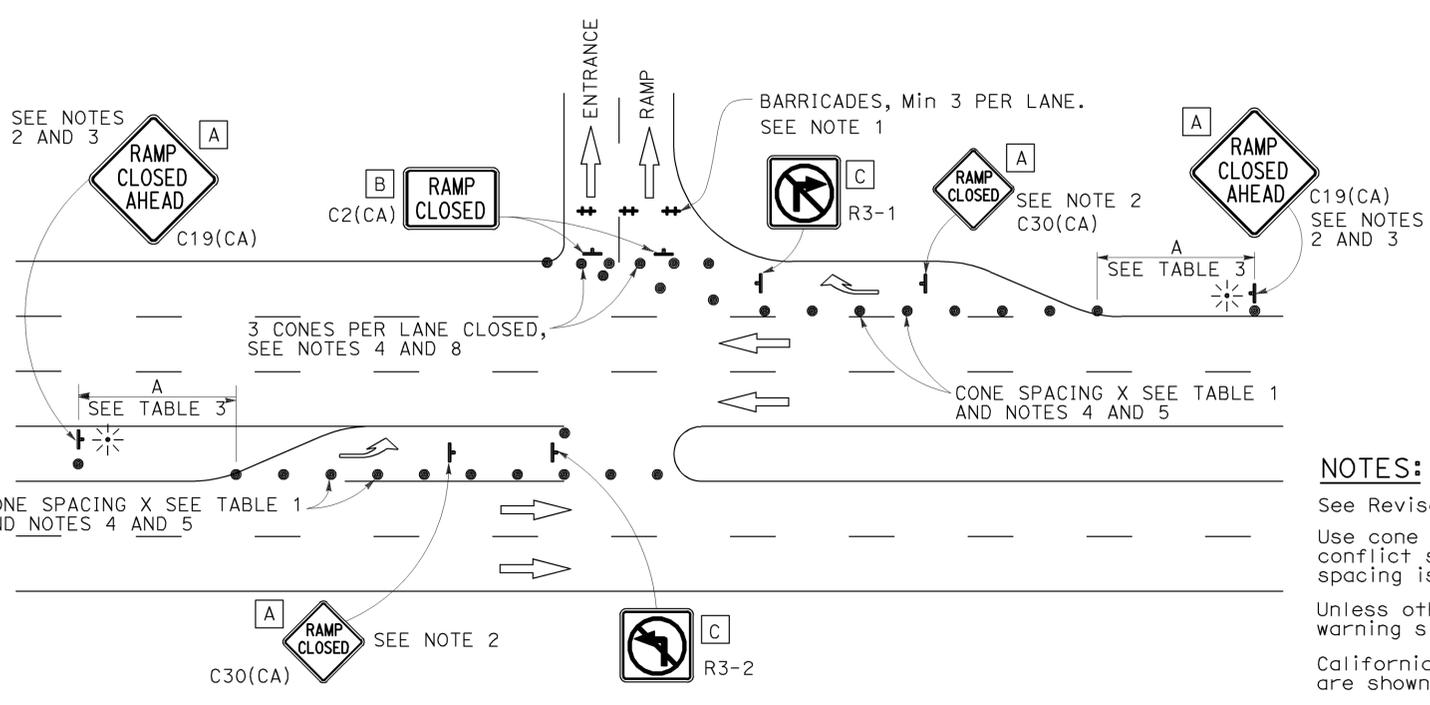
TO ACCOMPANY PLANS DATED 01-26-15



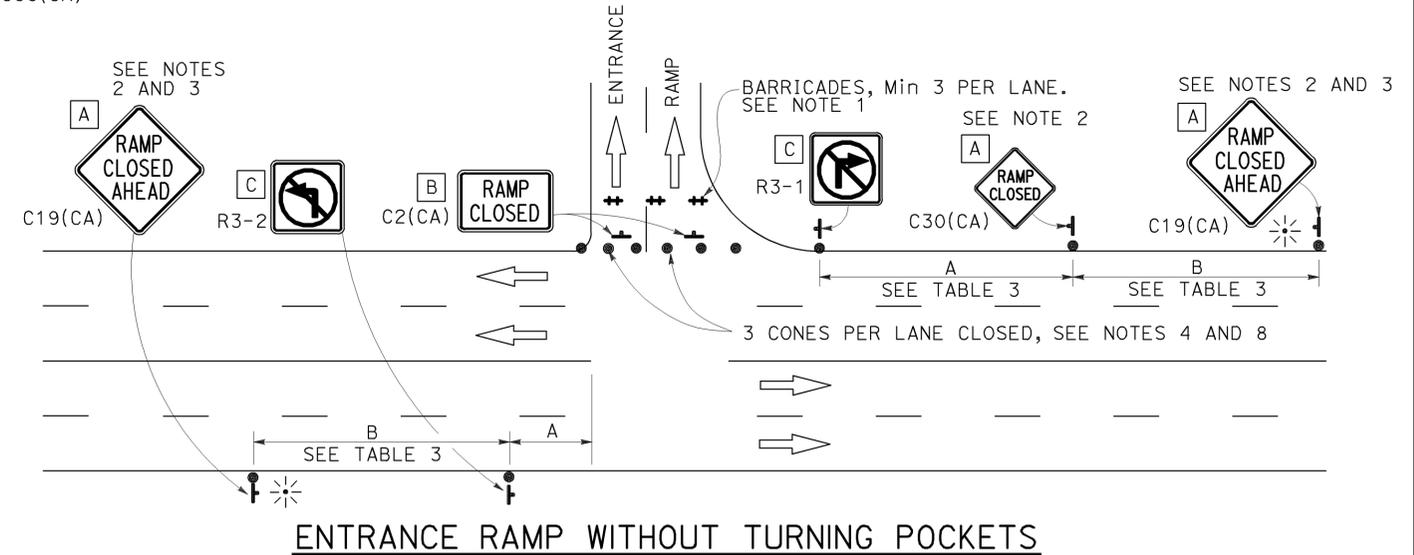
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

## NOTES:

1. See Revised Standard Plan RSP T9 for tables.
2. 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.
3. Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.
4. California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

## NOTES:

1. 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.
2. 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.
3. 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.
4. All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
6. At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
7. The existing "EXIT" signs shall be covered during ramp closures.
8. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	19	30

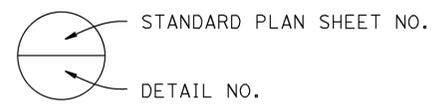
12/08/14  
 REGISTERED CIVIL ENGINEER DATE  
 01-26-15  
 PLANS APPROVAL DATE  
 No. C65380  
 Exp. 09/30/15  
 CIVIL  
 STATE OF CALIFORNIA  
 REGISTERED PROFESSIONAL ENGINEER  
 GERALD D. JOO  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

### 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	GENERAL PLAN NO. 6
7	GENERAL PLAN NO. 7
8	MISCELLANEOUS DETAILS NO. 1
9	MISCELLANEOUS DETAILS NO. 2
10	JOINT SEAL DETAILS
11	STRIP EXPANSION JOINT SEAL ASSEMBLY
12	TEMPORARY STEEL DECKING

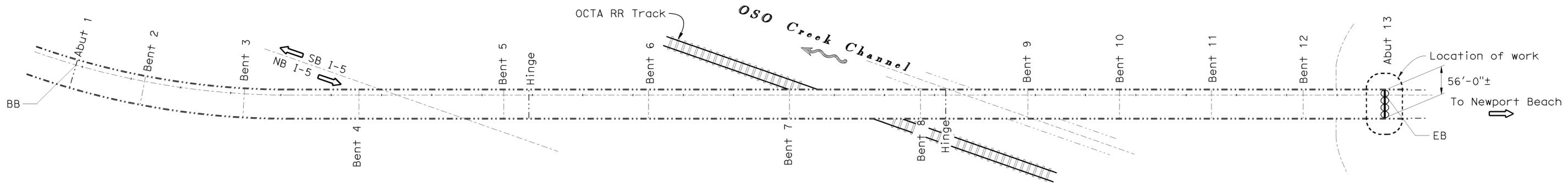
### STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



### LEGEND:

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ⊗⊗⊗ Indicates location of existing strip joint seal assembly removal and placement with new strip joint seal assembly, see "JOINT SEAL DETAILS" sheet.



**N5-N73 CONNECTOR VIADUCT**  
 Br No. 55-0719G Rte 5, PM 12.57  
 1" = 100'

N5-N73 CONNECTOR VIADUCT  
 BRIDGE NO. 55-0719G

QUANTITIES

BRIDGE REMOVAL (PORTION)	LUMP SUM
TEMPORARY DECKING	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE	6 CY
JOINT SEAL ASSEMBLY (MR 4")	56 LF
BAR REINFORCING STEEL (BRIDGE)	900 LB

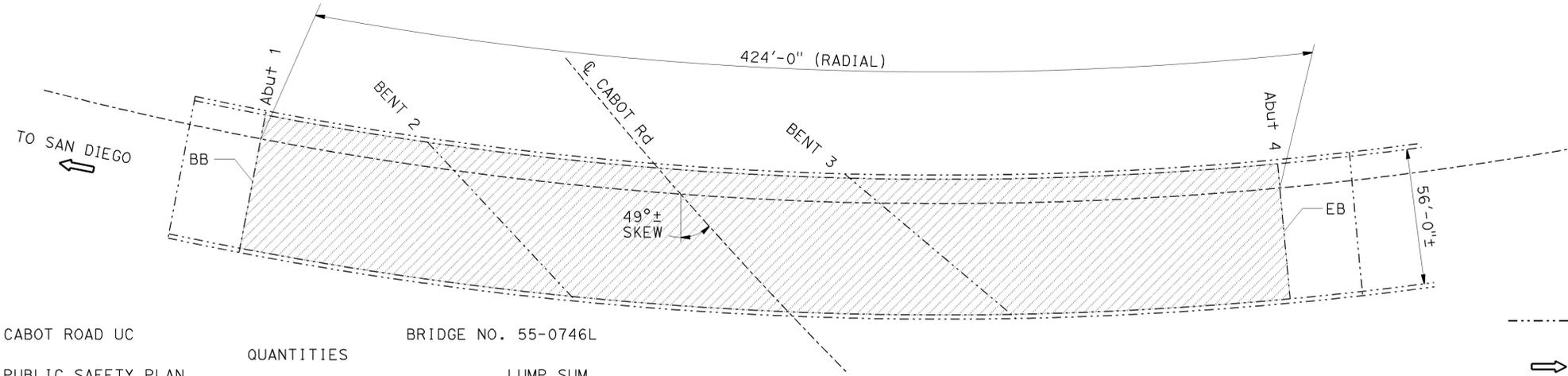
NOTE:  
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO.	55-0719G
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang		POST MILE	12.57
	QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson		PLANS AND SPECS COMPARED	Kevin Ellingson

**N5-N73 CONNECTOR VIADUCT**  
**ROUTE 5,73 BRIDGES**  
**GENERAL PLAN NO. 1**

USERNAME => s129239 DATE PLOTTED => 09-DEC-2014 TIME PLOTTED => 10:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	20	30
 REGISTERED CIVIL ENGINEER DATE 12/08/14					
01-26-15 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>					



CABOT ROAD UC BRIDGE NO. 55-0746L

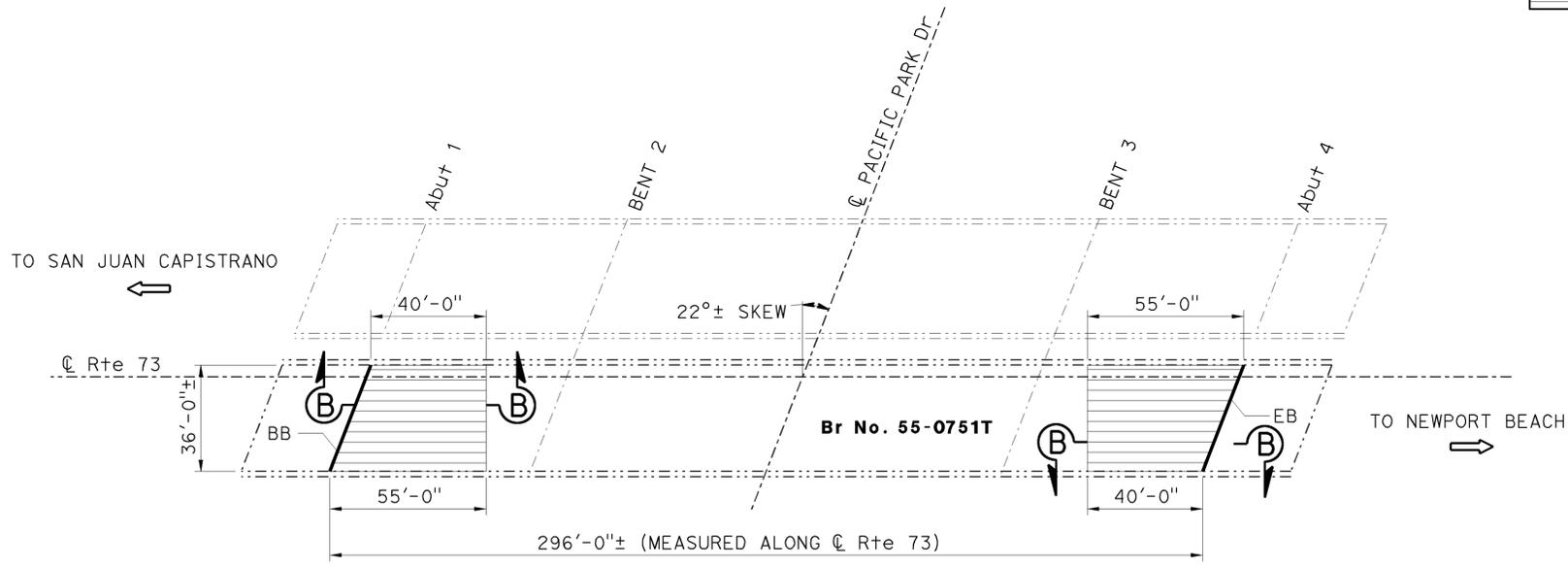
QUANTITIES	LUMP SUM
PUBLIC SAFETY PLAN	24,000 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	24,000 SQFT
TREAT BRIDGE DECK	300 GAL
FURNISH BRIDGE DECK TREATMENT MATERIAL	

**CABOT ROAD UC**  
 Br No. 55-0746L, Rte 73, PM 11.28  
 NO SCALE



**LEGEND:**

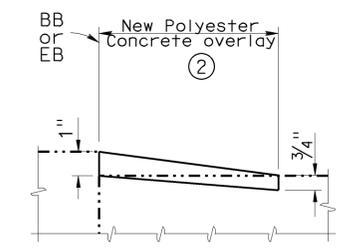
- Indicates existing.
- ➔ Indicates direction of traffic.
-  Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.
- Indicates location of clean expansion joint and placement of new joint seal.
-  Indicates limits of prepare concrete bridge deck surface, furnish and place new polyester concrete taper. Prior to placing new polyester concrete taper, remove unsound concrete and patch with rapid setting concrete patch. Polyester concrete must be placed in one lift.



PACIFIC PARK DRIVE UC BRIDGE NO. 55-0751T

QUANTITIES	LUMP SUM
PUBLIC SAFETY PLAN	9 CF
RAPID SETTING CONCRETE (PATCH)	3,420 SQFT
REMOVE CONCRETE DECK SURFACE	9 CF
REMOVE UNSOUND CONCRETE	3,420 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	215 CF
FURNISH POLYESTER CONCRETE OVERLAY	3,420 SQFT
PLACE POLYESTER CONCRETE OVERLAY	78 LF
CLEAN EXPANSION JOINT	78 LF
JOINT SEAL (MR 1 1/2")	

**PACIFIC PARK DRIVE UC**  
 Br No. 55-0751T, Rte 73, PM 13.16  
 NO SCALE



**SECTION B-B**  
NO SCALE

② Limits of Remove Concrete Deck Surface  
 0 inch min to 3/4 inch maximum full width.  
 Grind flush to conform with existing profile.

DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCH)
PACIFIC PARK DRIVE UC	55-0751T	1	3

NOTE:  
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang
QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
 POST MILE Varies

ROUTE 5,73 BRIDGES  
 GENERAL PLAN NO. 2

UNIT: 3489  
 PROJECT NUMBER & PHASE: 1213000195-1 CONTRACT NO.: 12-0N3104

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET 02 OF 12
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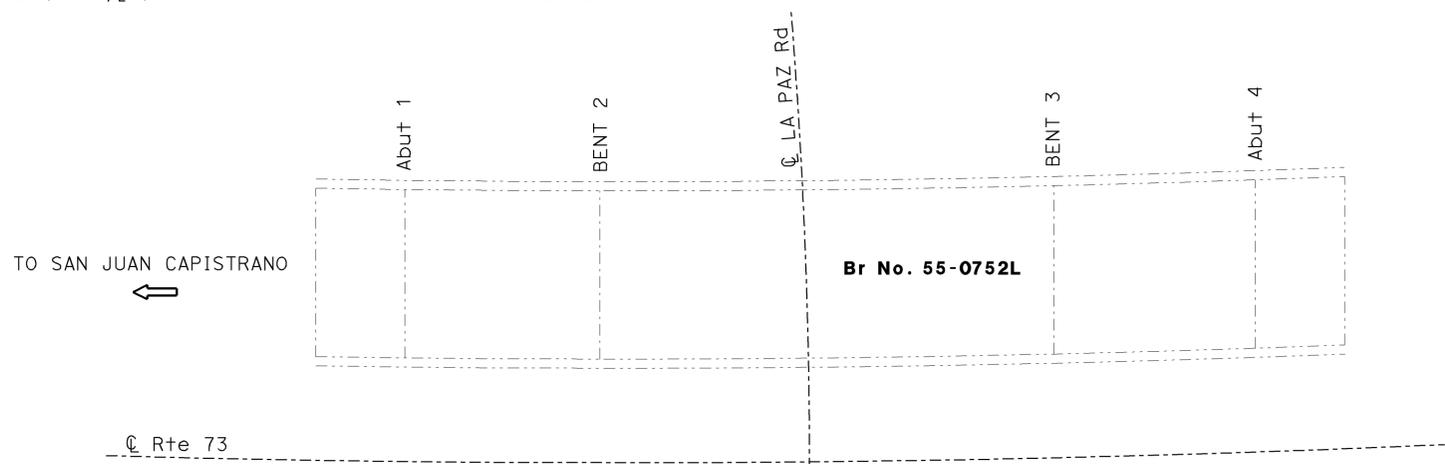
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	21	30
 REGISTERED CIVIL ENGINEER DATE 12/08/14					
01-26-15			PLANS APPROVAL DATE		
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**LEGEND:**

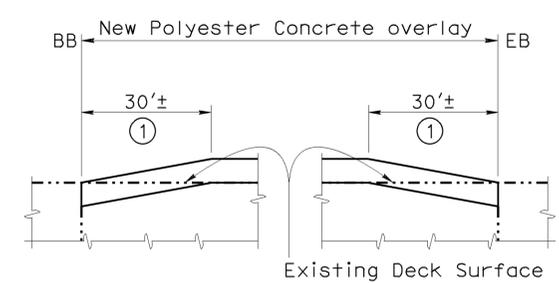
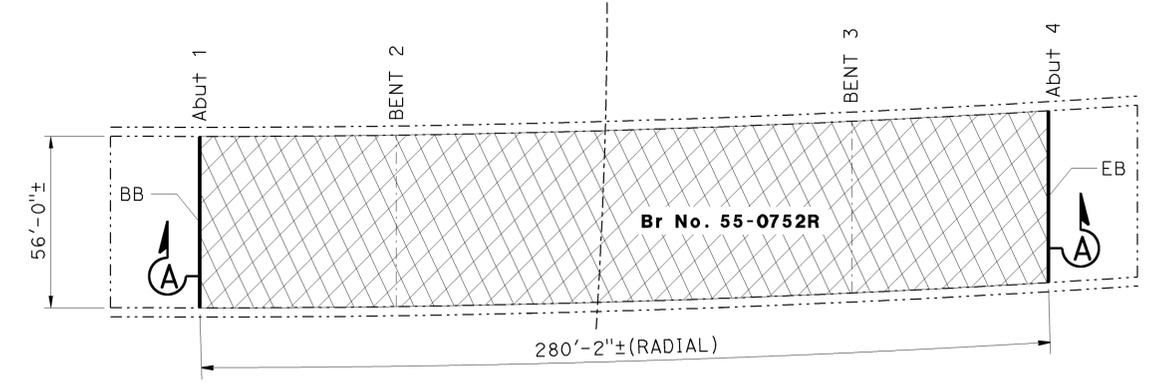
- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface, furnish and place new ¾" thick min polyester concrete overlay. Prior to placing new polyester concrete overlay, remove unsound concrete and patch with rapid setting concrete patch. Polyester concrete must be placed in one lift.
- Indicates location of clean expansion joint and placement of new joint seal.

LA PAZ ROAD UC BRIDGE NO. 55-0752R

QUANTITIES	LUMP SUM
PUBLIC SAFETY PLAN	40 CF
RAPID SETTING CONCRETE (PATCH)	15,700 SQFT
REMOVE CONCRETE DECK SURFACE	40 CF
REMOVE UNSOUND CONCRETE	15,700 SQFT
PREPARE CONCRETE BRIDGE DECK SURFACE	990 CF
FURNISH POLYESTER CONCRETE OVERLAY	15,700 SQFT
PLACE POLYESTER CONCRETE OVERLAY	112 LF
CLEAN EXPANSION JOINT	112 LF
JOINT SEAL (MR 1½")	



DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCH)
LA PAZ ROAD UC	55-0752R	1	3



① Limits of Remove Concrete Deck Surface  
0 inch min to ¾ inch maximum full width.  
Grind flush to conform with existing profile.

**LA PAZ ROAD UC**  
Br No. 55-0752R, Rte 73, PM 13.40  
NO SCALE

NOTE:  
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Various	ROUTE 5,73 BRIDGES GENERAL PLAN NO. 3
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang			POST MILE	Varies	
	QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson			PLANS AND SPECS COMPARED	Kevin Ellingson	
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3489	PROJECT NUMBER & PHASE: 1213000195-1	CONTRACT NO.: 12-0N3104	DISREGARD PRINTS BEARING EARLIER REVISION DATES
								REVISION DATES	SHEET 03	OF 12

USERNAME => s129239 DATE PLOTTED => 09-DEC-2014 TIME PLOTTED => 10:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	22	30

01-26-15  
 PLANS APPROVAL DATE

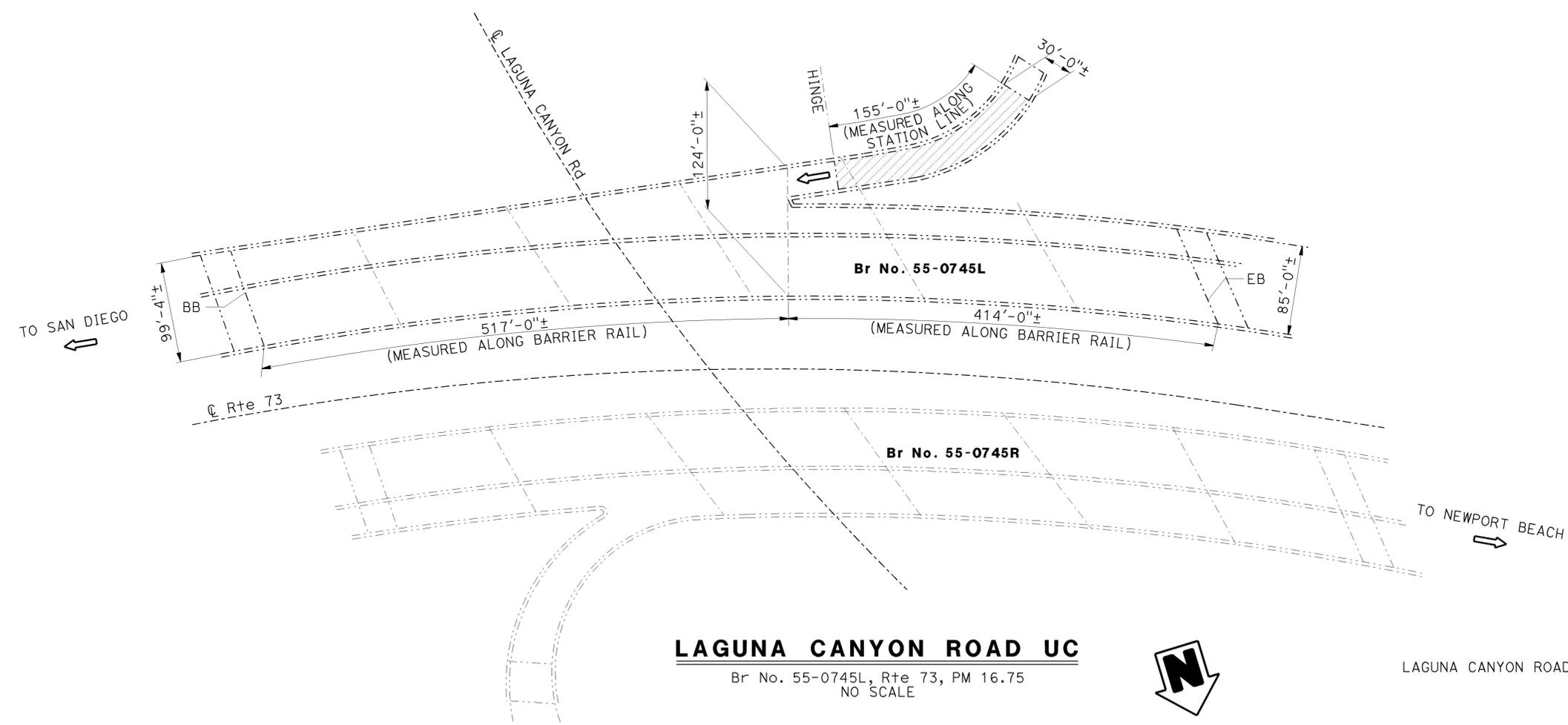
2/08/14  
 REGISTERED CIVIL ENGINEER DATE

No. C65380  
 Exp. 09/30/15  
 CIVIL

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**LEGEND:**

- Indicates existing.
- Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.



**LAGUNA CANYON ROAD UC**  
 Br No. 55-0745L, Rte 73, PM 16.75  
 NO SCALE

LAGUNA CANYON ROAD UC BRIDGE NO. 55-0745L

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
PREPARE CONCRETE BRIDGE DECK SURFACE	4,650 SQFT
TREAT BRIDGE DECK	4,650 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	60 GAL

NOTE:  
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 5,73 BRIDGES</b> <b>GENERAL PLAN NO. 4</b>			
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang			CHECKED G. JOO		POST MILE		
	QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson			PLANS AND SPECS COMPARED Kevin Ellingson		Varies		
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3489	PROJECT NUMBER & PHASE: 1213000195-1	CONTRACT NO.: 12-0N3104	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 04 OF 12

USERNAME => s129239 DATE PLOTTED => 09-DEC-2014 TIME PLOTTED => 10:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	23	30

12/08/14  
 REGISTERED CIVIL ENGINEER DATE  
 01-26-15  
 PLANS APPROVAL DATE  
 No. C65380  
 Exp. 09/30/15  
 CIVIL  
 STATE OF CALIFORNIA  
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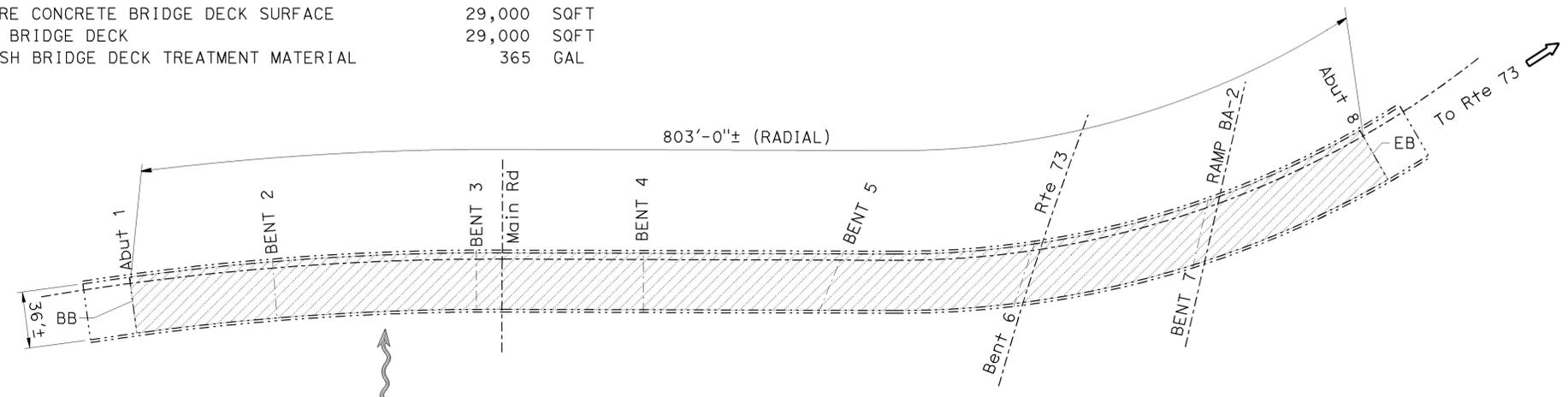
**LEGEND:**

- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.

MACARTHUR NB ON-RAMP OC BRIDGE NO. 55-0735S

**QUANTITIES**

PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	29,000	SQFT
TREAT BRIDGE DECK	29,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	365	GAL



**MACARTHUR NB ON-RAMP OC**

Br No. 55-0735S, Rte 73, PM 23.75  
NO SCALE

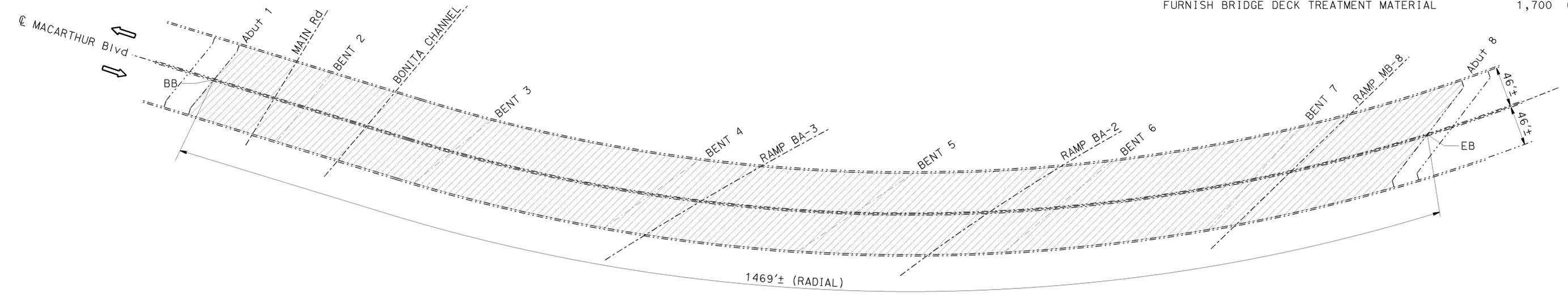


MACARTHUR BLVD OC

BRIDGE NO. 55-0734

**QUANTITIES**

PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	135,500	SQFT
TREAT BRIDGE DECK	135,500	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	1,700	GAL



**MACARTHUR BLVD OC**

Br No. 55-0734, Rte 73, PM 23.82  
NO SCALE



NOTE:  
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang
QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
POST MILE Varies

**ROUTE 5,73 BRIDGES**  
**GENERAL PLAN NO. 5**

UNIT: 3489  
PROJECT NUMBER & PHASE: 1213000195-1  
CONTRACT NO.: 12-0N3104

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
10-23-14	05	12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	24	30

2/08/14  
 REGISTERED CIVIL ENGINEER DATE  
 01-26-15  
 PLANS APPROVAL DATE  
 No. C65380  
 Exp. 09/30/15  
 CIVIL  
 STATE OF CALIFORNIA

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**LEGEND:**

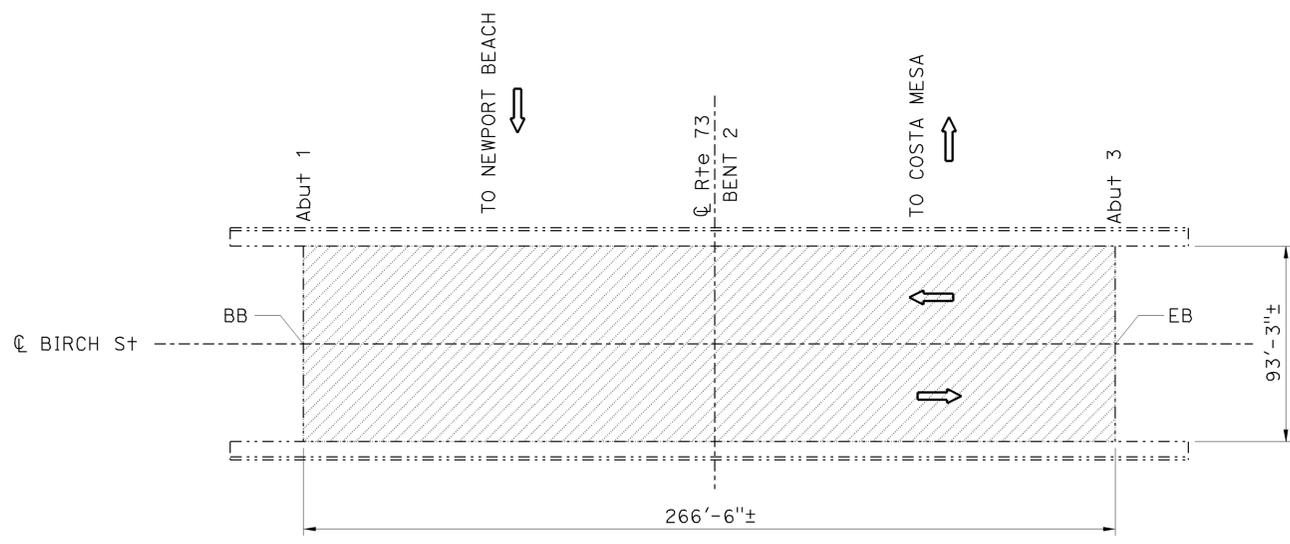
- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.

BIRCH STREET OC

BRIDGE NO. 55-0636

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	25,000 SQFT	
TREAT BRIDGE DECK	25,000 SQFT	
FURNISH BRIDGE DECK TREATMENT MATERIAL	315 GAL	



**BIRCH STREET OC**  
 Br No. 55-0636, Rte 73, PM R25.45  
 NO SCALE

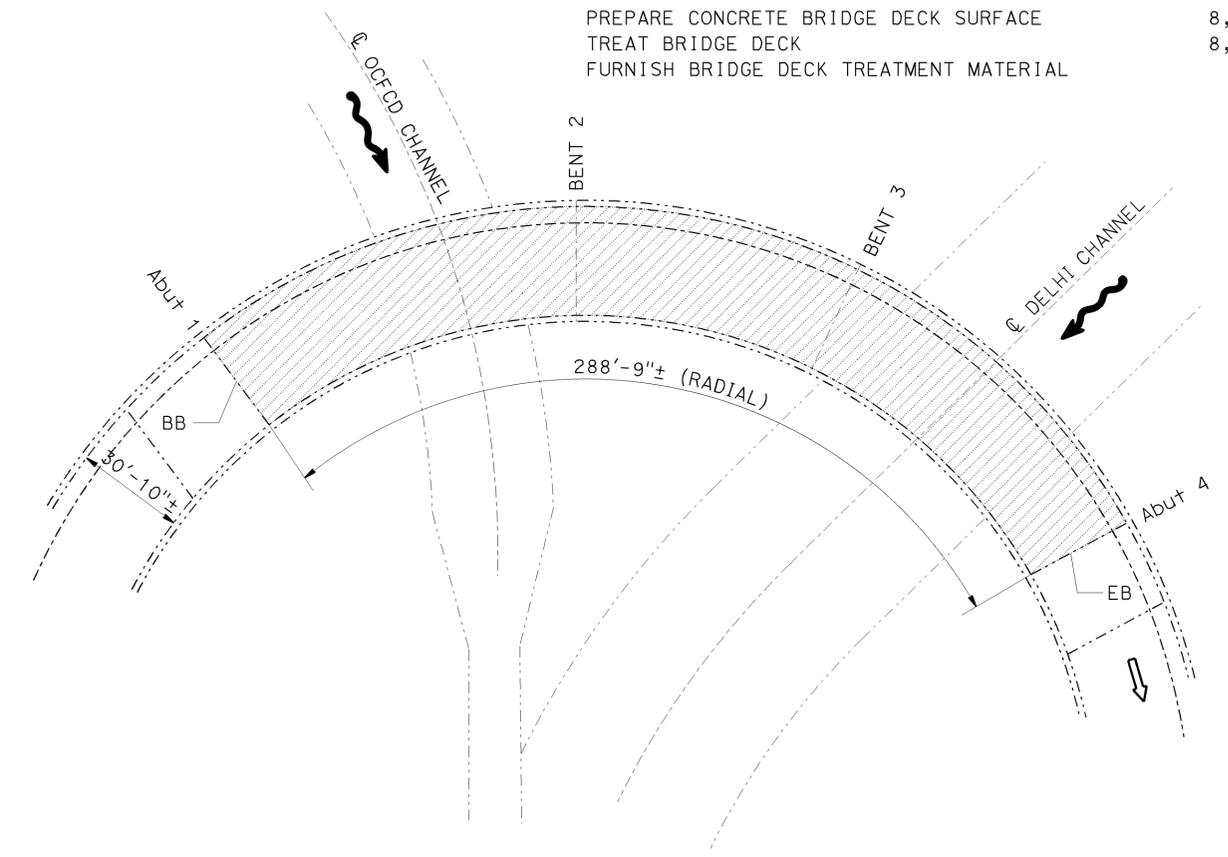


N73-S55/DELHI CHANNEL

BRIDGE NO. 55-1029G

QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	8,950 SQFT	
TREAT BRIDGE DECK	8,950 SQFT	
FURNISH BRIDGE DECK TREATMENT MATERIAL	115 GAL	



**N73-S55/DELHI CHANNEL**  
 Br No. 55-1029G, Rte 73, PM R26.57  
 NO SCALE



NOTE:  
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Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Various	ROUTE 5,73 BRIDGES GENERAL PLAN NO. 6
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang			POST MILE	Varies	
	QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson			PLANS AND SPECS COMPARED	Kevin Ellingson	

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3489  
 PROJECT NUMBER & PHASE: 1213000195-1  
 CONTRACT NO.: 12-0N3104

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
10-23-14	06	12

FILE => 12-0N3104-a-gp06.dgn

USERNAME => s129239 DATE PLOTTED => 09-DEC-2014 TIME PLOTTED => 10:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	25	30

2/08/14  
 REGISTERED CIVIL ENGINEER DATE  
 01-26-15  
 PLANS APPROVAL DATE  
 No. C65380  
 Exp. 09/30/15  
 CIVIL  
 STATE OF CALIFORNIA  
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**LEGEND:**

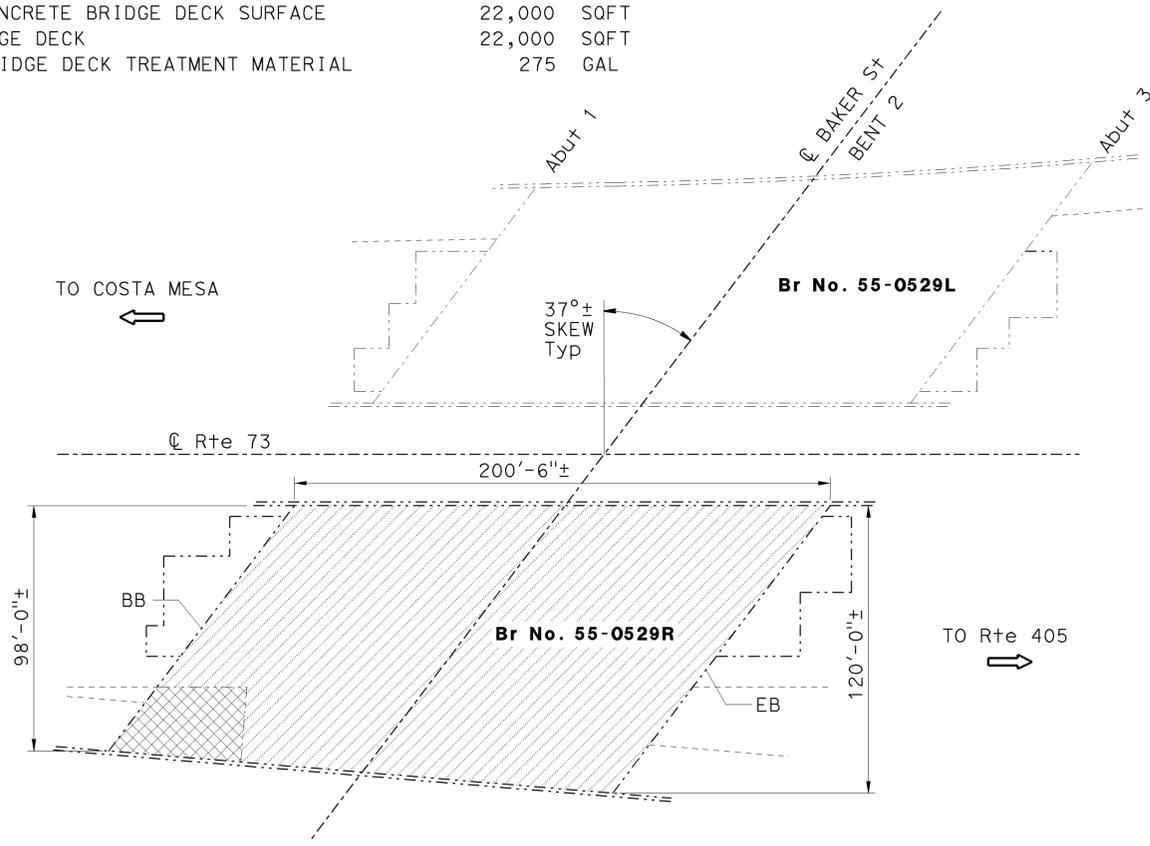
- Indicates existing.
- ⇒ Indicates direction of traffic.
- ▨ Indicates limits of prepare concrete bridge deck surface and treat existing bridge deck with high molecular weight methacrylate.
- ▩ Indicates limits of existing asphalt concrete not to be treated with high molecular weight methacrylate.

TO ACCOMPANY PLANS DATED 01-26-15

BAKER STREET UC BRIDGE NO. 55-0529R

**QUANTITIES**

PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	22,000	SQFT
TREAT BRIDGE DECK	22,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	275	GAL



**BAKER STREET UC**

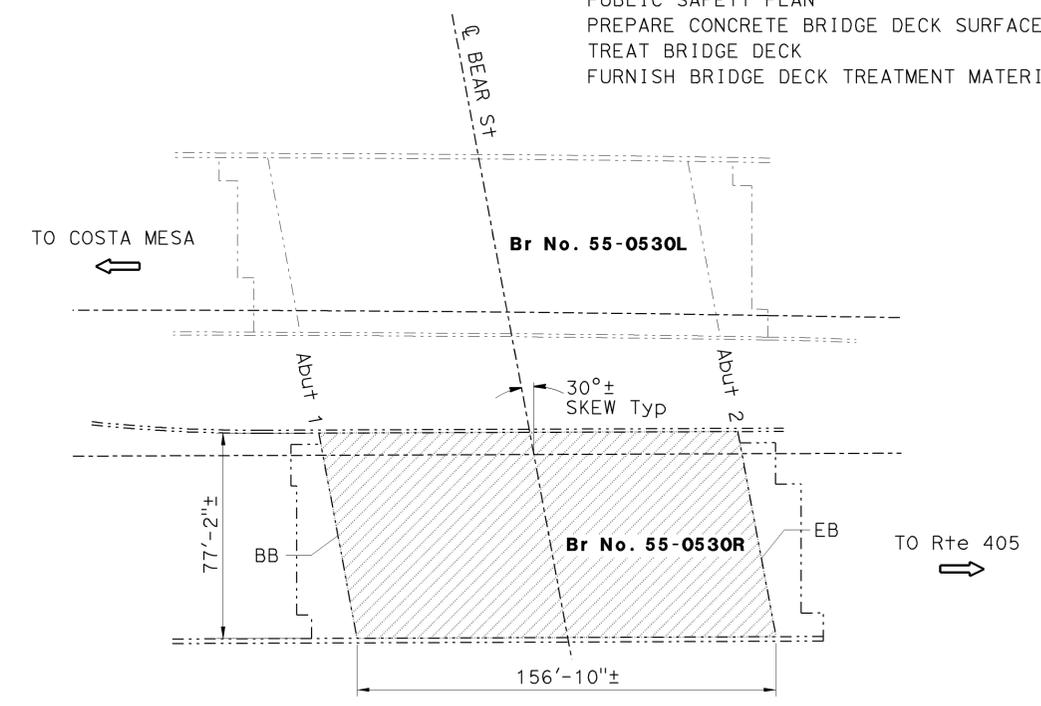
Br No. 55-0529R, Rte 73, PM R27.14  
NO SCALE



BEAR STREET UC BRIDGE NO. 55-0530R

**QUANTITIES**

PUBLIC SAFETY PLAN	LUMP SUM	
PREPARE CONCRETE BRIDGE DECK SURFACE	12,500	SQFT
TREAT BRIDGE DECK	12,500	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	160	GAL



**BEAR STREET UC**

Br No. 55-0530R, Rte 73, PM R27.28  
NO SCALE



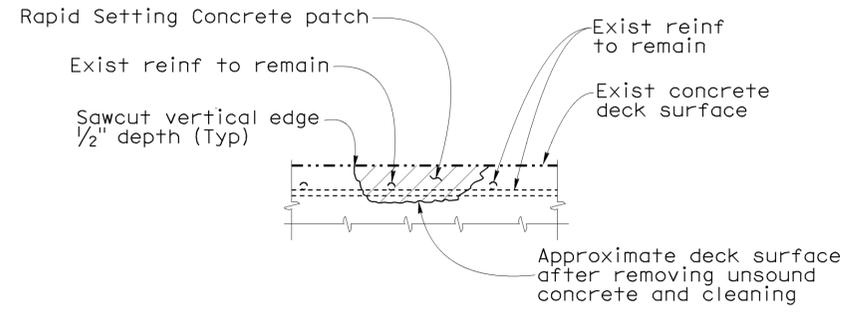
NOTE:  
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

Tony Brake DESIGN ENGINEER	DESIGN	BY G. Joo	CHECKED T. Brake	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	ROUTE 5,73 BRIDGES GENERAL PLAN NO. 7	
	DETAILS	BY T. Dang	CHECKED G. JOO	LAYOUT	BY T. Dang			CHECKED G. JOO		POST MILE
	QUANTITIES	BY G. Joo	CHECKED T. Tran	SPECIFICATIONS	BY Kevin Ellingson			PLANS AND SPECS COMPARED Kevin Ellingson		Varies
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3489 PROJECT NUMBER & PHASE: 1213000195-1 CONTRACT NO.: 12-0N3104	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 4-08-14 10-25-14 12-03-14 SHEET 07 OF 12	

USERNAME => s129239 DATE PLOTTED => 15-JAN-2015 TIME PLOTTED => 08:54

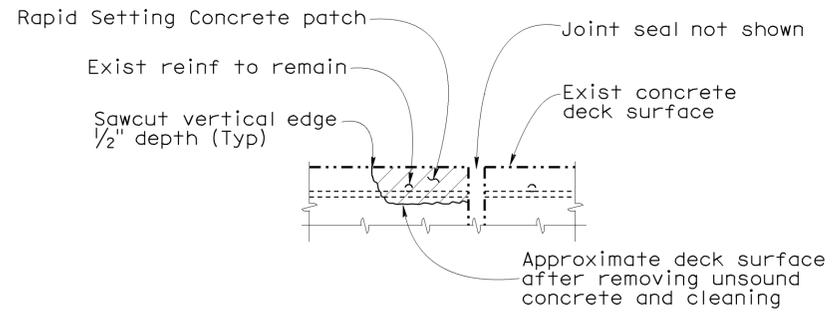
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	26	30
 REGISTERED CIVIL ENGINEER DATE 12/08/14					
01-26-15 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

- CONSTRUCTION NOTES:**
- Existing reinforcement shall be protected in place during unsound concrete removal and patching operations.
  - It is responsibility of the Contractor to repair any reinforcement that is accidentally cut by saw cutting operations.
  - When existing transverse reinforcement is exposed in the deck surface, saw cutting may be waived with the approval of the Engineer.
  - The saw cut depth shall not exceed 1/2 inch or the concrete cover over the top steel reinforcing bars, whichever is less.
  - Remove unsound Portland Cement concrete and unsound concrete patches to expose sound, hard concrete substrate. Replace original spall surface with rapid setting concrete patch.



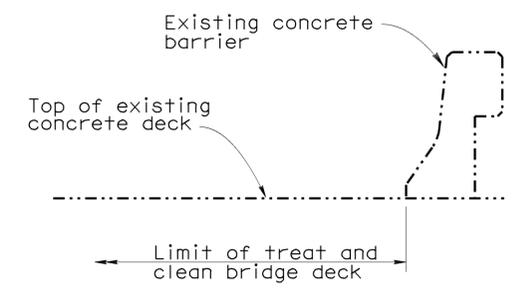
**DECK DAMAGE REPAIR DETAIL**

Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.

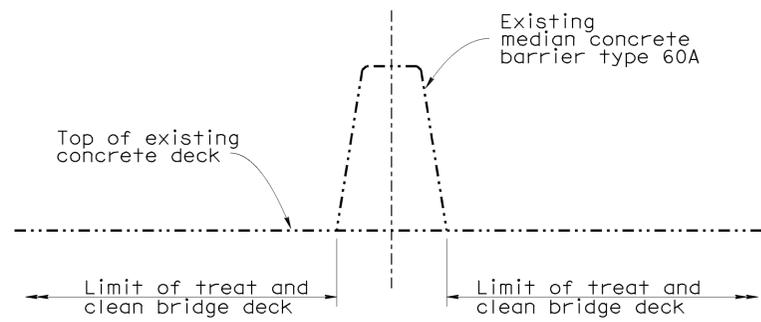


**JOINT REPAIR DETAIL**

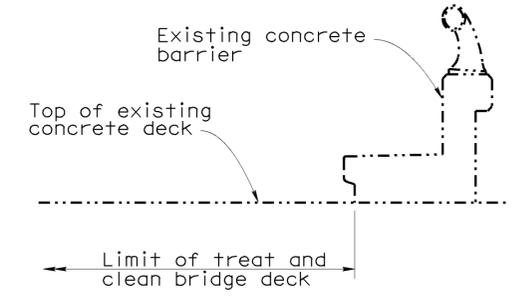
Location will be determined by the Engineer. Reinforcement may be encountered during deck concrete removal and is to remain undamaged.



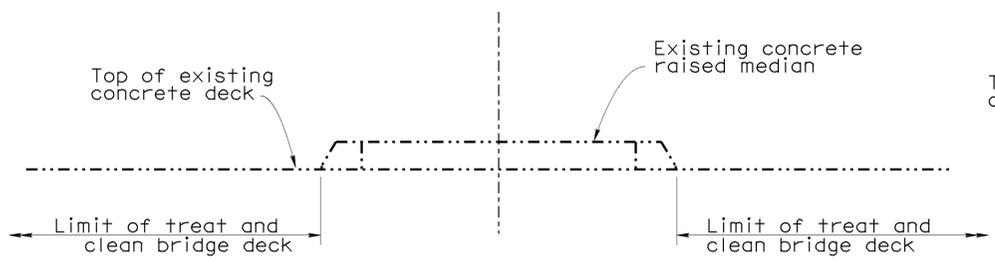
**EOD BARRIER**



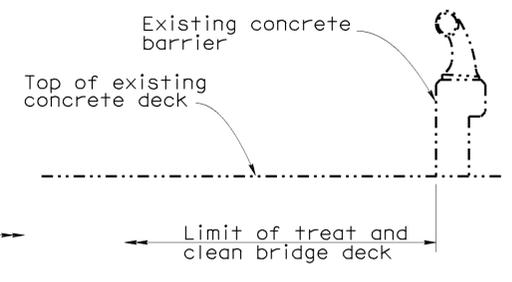
**MEDIAN BARRIER**



**SIDEWALK BARRIER TYPE 2**



**RAISED MEDIAN**



**SIDEWALK BARRIER TYPE 1**

**TYPICAL LIMITS OF DECK WORK**

NO SCALE

NOTE: THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

DESIGN	BY G. Joo	CHECKED T. Brake
DETAILS	BY T. Dang	CHECKED G. Joo
QUANTITIES	BY G. Joo	CHECKED T. Tran

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Various
POST MILE	Varies

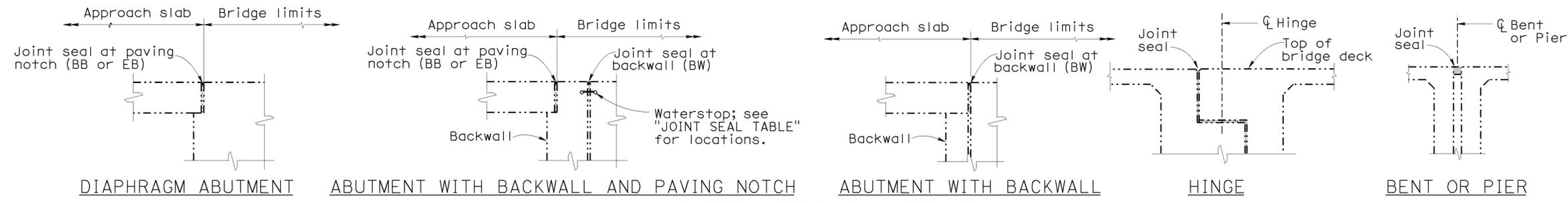
ROUTE 5,73 BRIDGES  
MISCELLANEOUS DETAILS NO. 1

USERNAME => s1282939 DATE PLOTTED => 09-DEC-2014 TIME PLOTTED => 10:51

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	27	30

REGISTERED CIVIL ENGINEER DATE 12/08/14  
 PLANS APPROVAL DATE 01-26-15  
 No. C65380 Exp. 09/30/15  
 CIVIL  
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 01-26-15



**JOINT SEAL LOCATION**

NO SCALE  
 Abutment joint seal is not required with AC roadway pavement transverse contact joint.

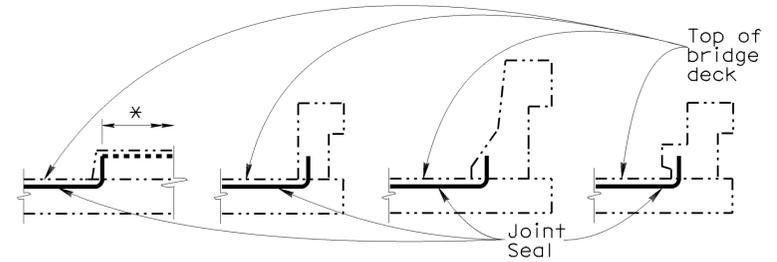
**NOTES:**

- 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 recalculated 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 3.0 PSI.
  - 4) Bend Type B joint seal 6 inches 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 Standard Plan B6-21.

JOINT SEAL TABLE								
BRIDGE NAME	BRIDGE NUMBER	LOCATION		MINIMUM "MR" (INCHES)	APPROX LENGTH (LF)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (INCHES)	LENGTH TO CLEAN EXP JOINT (LF)
N5-N73 CONNECTOR VIADUCT	55-0719G	ABUT 13	BW	4	56	NO	--	--
PACIFIC PARK DRIVE UC	55-0751T	ABUT 1	BW	1 1/2	39	NO	9	39
		ABUT 4	BW	1 1/2	39	NO	9	39
LA PAZ ROAD UC	55-0752R	ABUT 1	BW	1 1/2	56	NO	9	56
		ABUT 4	BW	1 1/2	56	NO	9	56

BW = BACKWALL



**JOINT SEAL AT LOW SIDE OF DECK**

Note: Details shown for illustration purposes only.

For use only where deck joint matches the sidewalk, curb or barrier rail joint.  
 \* Extension of joint seal will be determined by the Engineer if necessary.

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DESIGN	BY G. Joo	CHECKED T. Brake
DETAILS	BY T. Dang	CHECKED G. Joo
QUANTITIES	BY G. Joo	CHECKED T. Tran

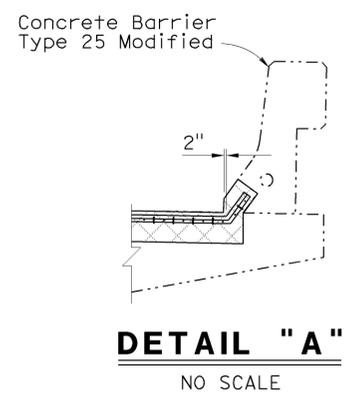
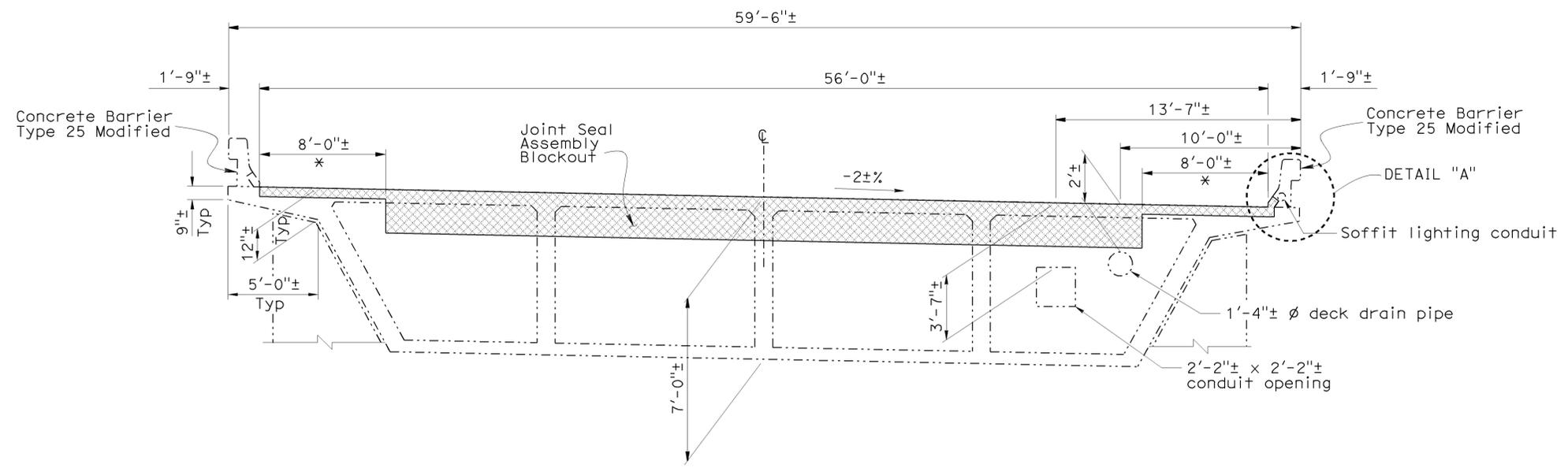
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	Varies
POST MILE	Varies

ROUTE 5,73 BRIDGES  
 MISCELLANEOUS DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	28	30
 REGISTERED CIVIL ENGINEER DATE 12/08/14					
01-26-15			PLANS APPROVAL DATE		
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**TYPICAL SECTION**

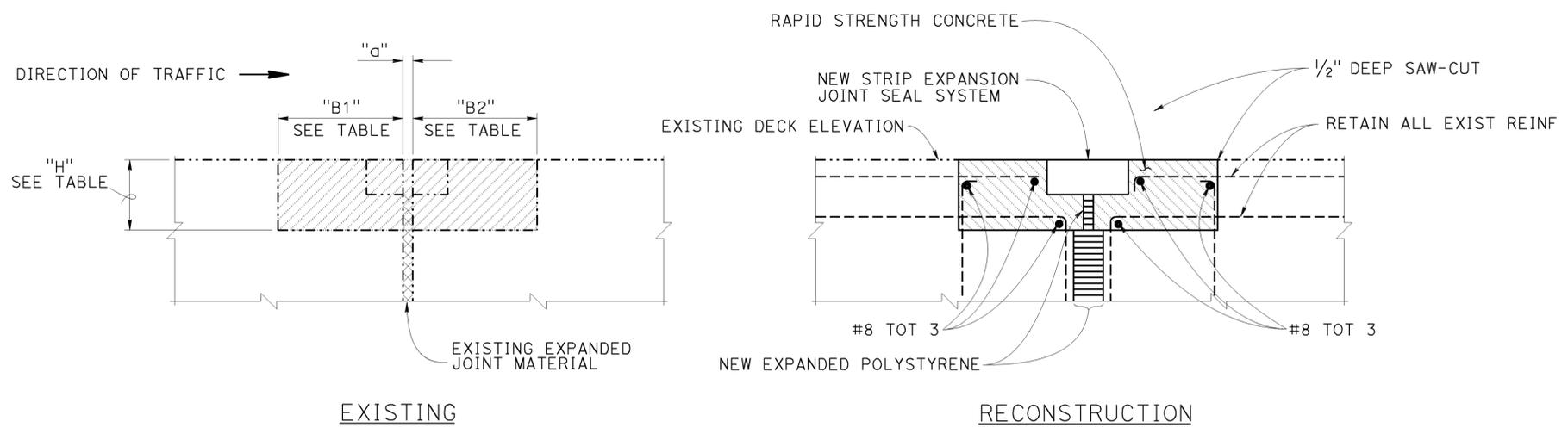
NO SCALE  
Br No. 55-0719G, Abut 13  
\* LIMIT OF EXTERIOR SECTION, SEE NOTE 1

**LEGEND:**

- Indicates existing.
- Indicates new structure.
-  Indicates concrete removal limits. Preserve existing reinf.
-  Indicates new PCC.
- Indicates existing reinf.

**NOTES:**

1. Use 6" long angle anchor studs at 8'-0" exterior section.
2. Shop drawing for strip seal expansion joint system shall be submitted for approval by the Engineer.
3. Caution must be taken during concrete removal operation to prevent overhang collapse at exterior section.
4. For "a" dimension, see "STRIP EXPANSION JOINT SEAL ASSEMBLY" sheet.



**JOINT SEAL ASSEMBLY REPLACEMENT**

NO SCALE

JOINT SEAL ASSEMBLY DIMENSIONS					
BRIDGE NUMBER	JOINT SEAL LOCATION	"B1"	"B2"	"H"	Skew
55-0719G	Abut 13 INTERIOR	23"	13 3/4"	10"	0°
	Abut 13 EXTERIOR	23"	13 3/4"	6"	0°

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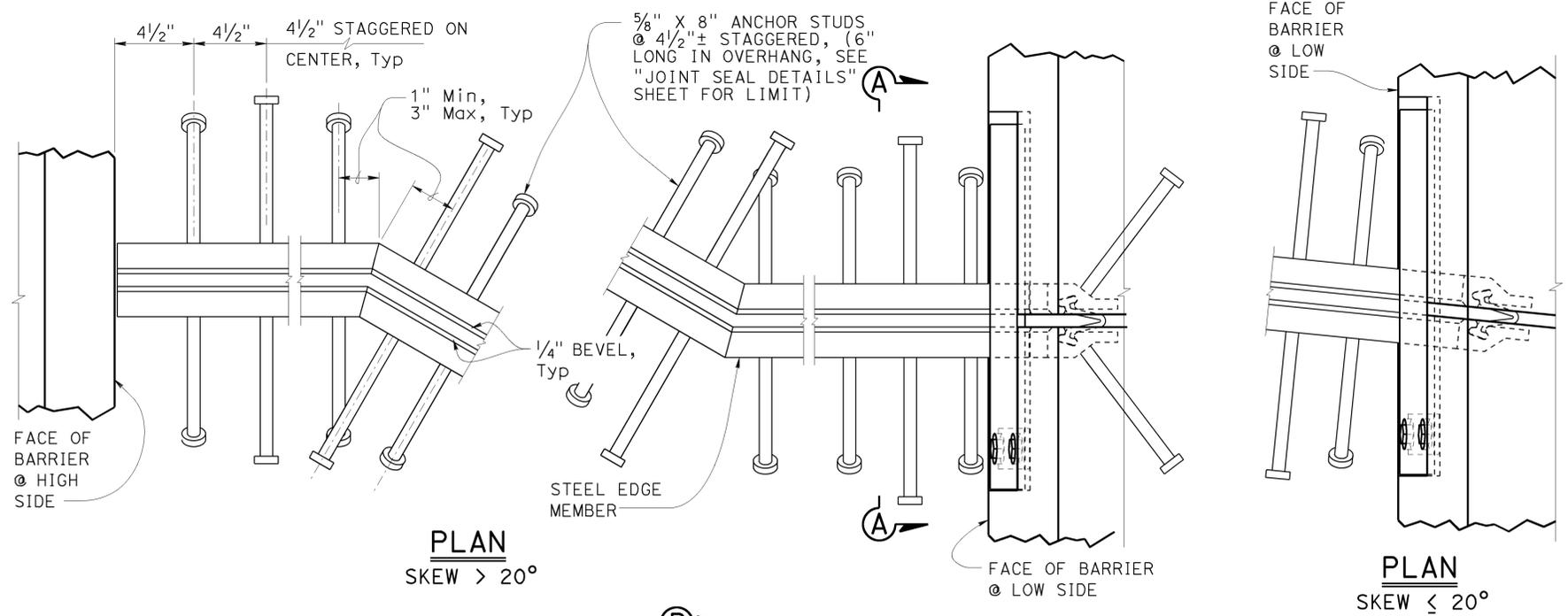
DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.	55-0719G
POST MILE	12.57

**N5-N73 CONNECTOR VIADUCT**

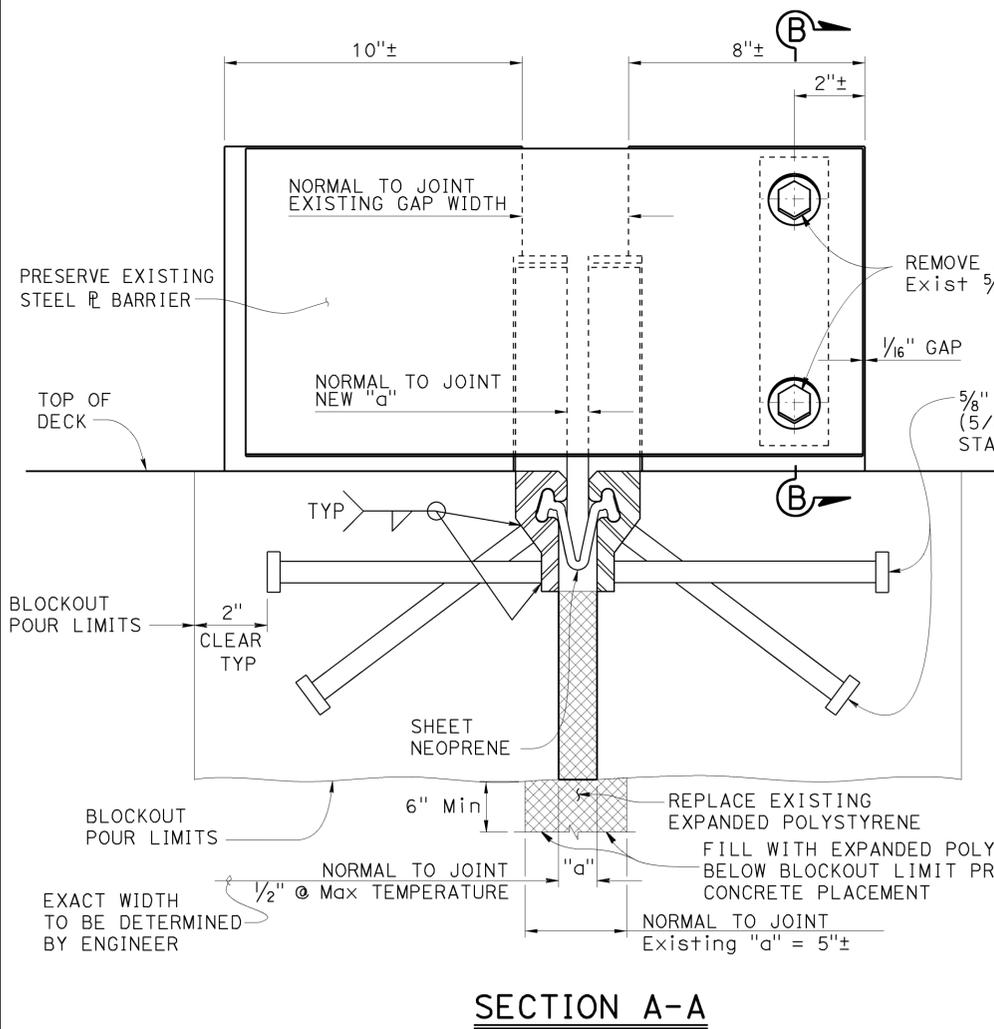
**ROUTE 5,73 BRIDGES**

**JOINT SEAL DETAILS**



- NOTES:
- Full penetration butt welds may be substituted for fillet welds at anchor studs
  - Alternate types of anchor studs may be permitted subject to the approval by the Engineer
  - Use joint at crown of roadway, at any change in traverse slope in deck and at changes in horizontal direction. Place other joints at or near lanes. All metal parts to be painted or galvanized after fabrication
  - Sheet Neoprene shall be fabricated in one continuous piece and shall be fabricated to bend around corners. Field splices of the neoprene are not allowed.
  - Insert assembly or expansion anchorage for 5/8" x 1 3/4" bolts. Use installation bolts extended 1/2" minimum past nut and coat with bond breaker, after concrete has cured, remove installation bolts, install HS bolts and sheet neoprene
  - Sidewalk Detail similar to Barrier Detail on low side at both sides if the roadway is crowned or if the difference in elevation between the ends of the seal is 0.5' or less
  - Anchor studs shall conform to ASTM 108.

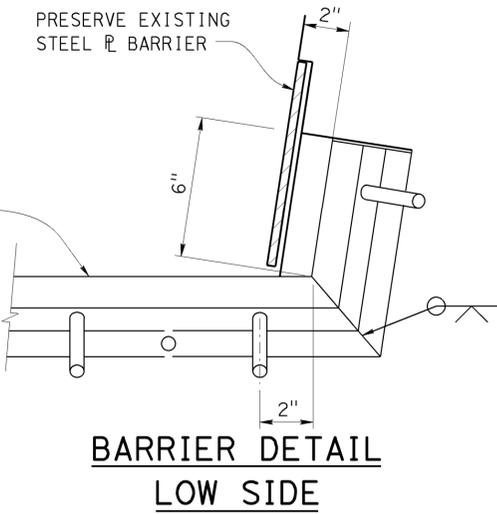
JOINT INFORMATION			"a" DIMENSIONS		
LOCATION	MOVEMENT RATING (MR)	SKEW	WINTER	SPRING & FALL	SUMMER
55-0719G	4"	0°	2 1/4"	1 3/4"	1 1/4"



REMOVE AND REPLACE Exist 5/8" Dia anchor bolts

5/8" x 8" ANCHOR STUDS (5/8" x 6" IN OVERHANG AREA) STAGGER AS SHOWN

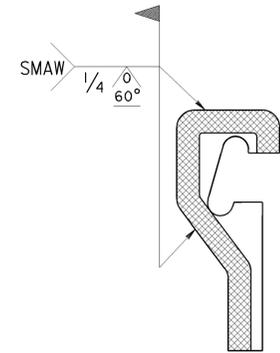
BARRIER DETAIL HIGH SIDE



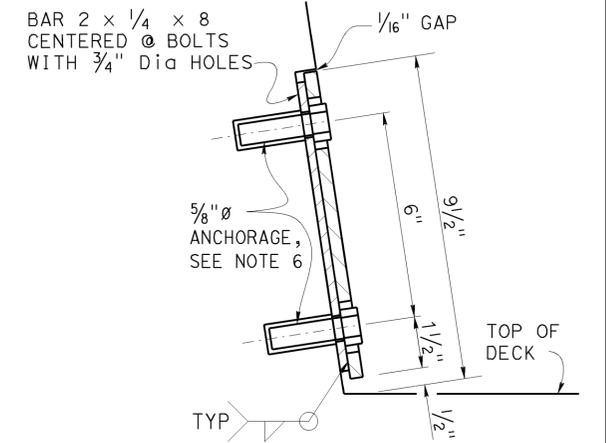
SECTION CUT-TRANSVERSE



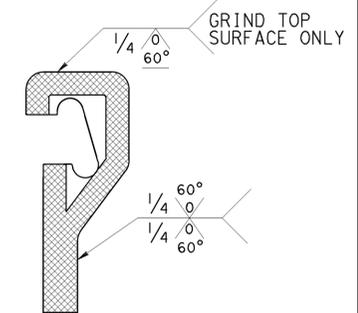
SCHMATIC STEEL EDGE MEMBER



SCHMATIC FIELD WELD DETAIL



SECTION B-B



SCHMATIC SHOP WELD DETAIL

NOTE: THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL. EXISTING UTILITY FACILITIES ARE NOT INCLUDED ON THESE PLANS.

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DETAILS	BY T. Dang	CHECKED G. Joo
QUANTITIES	BY G. Joo	CHECKED T. Tran

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.  
55-0719G  
POST MILE  
12.57

**N5-N73 CONNECTOR VIADUCT**  
**ROUTE 5,73 BRIDGES**  
**STRIP EXPANSION JOINT SEAL ASSEMBLY**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	5, 73	12.5 11.3/27.3	30	30

01-26-15  
 PLANS APPROVAL DATE

2/08/14  
 REGISTERED CIVIL ENGINEER DATE

No. C65380  
 Exp. 09/30/15  
 CIVIL

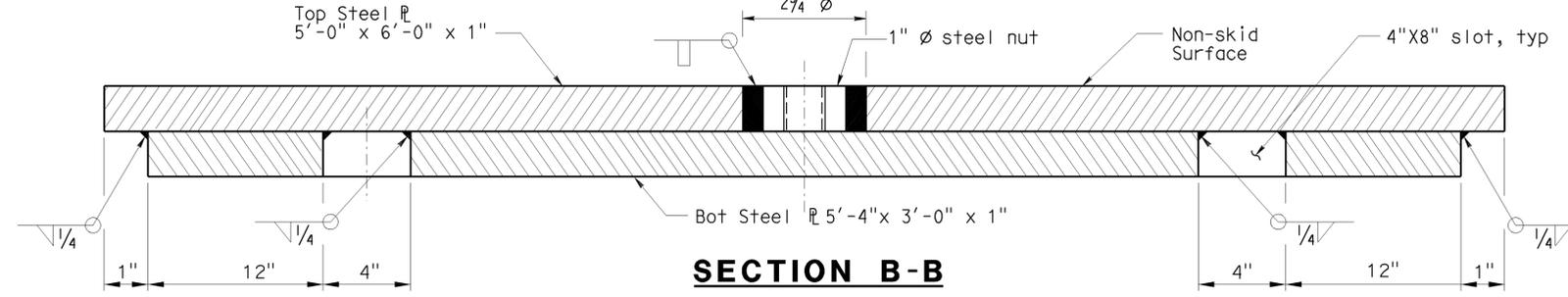
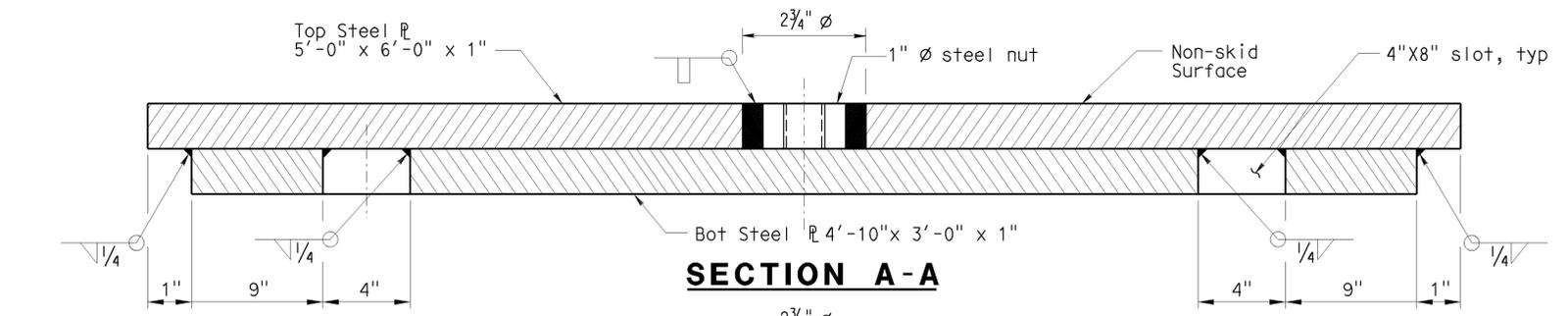
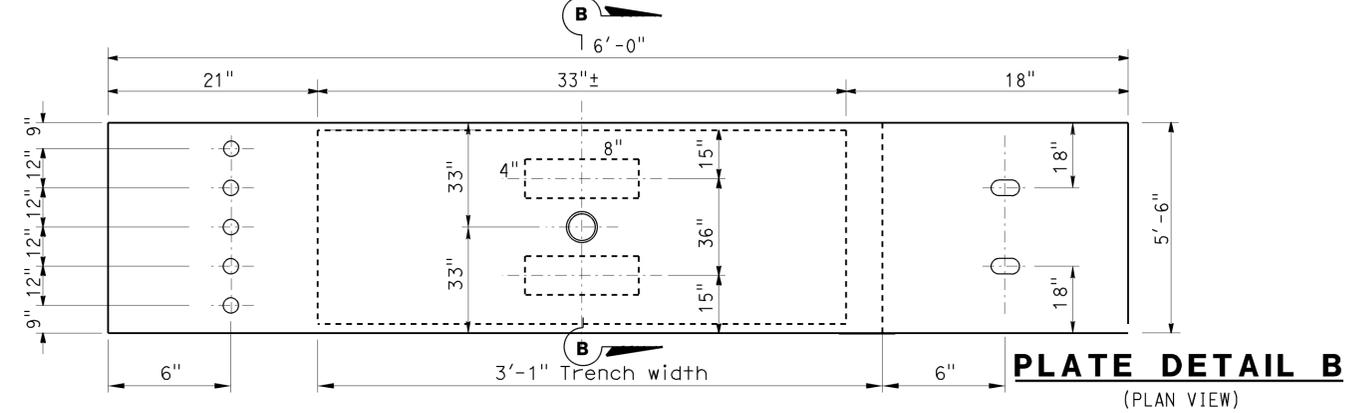
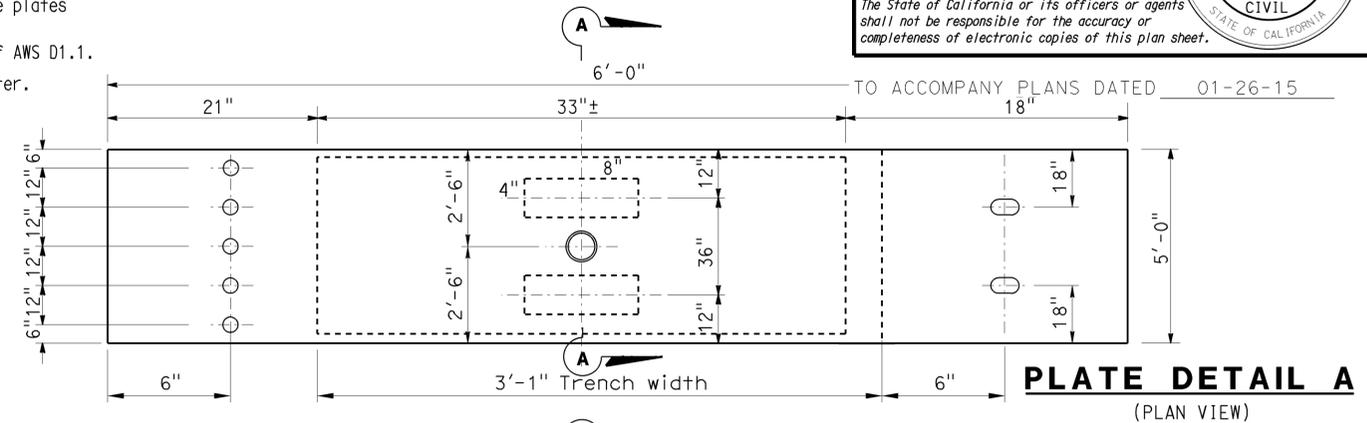
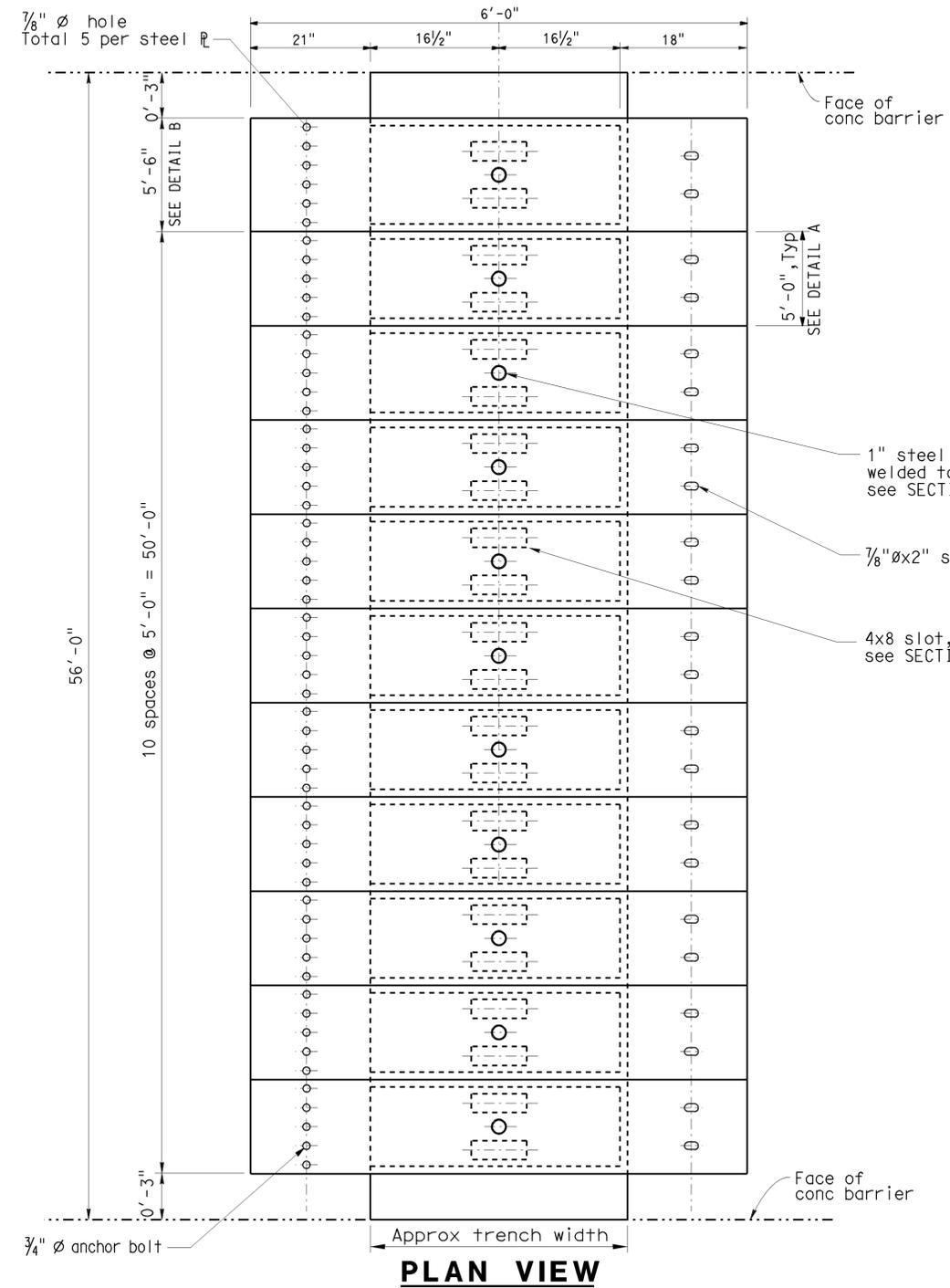
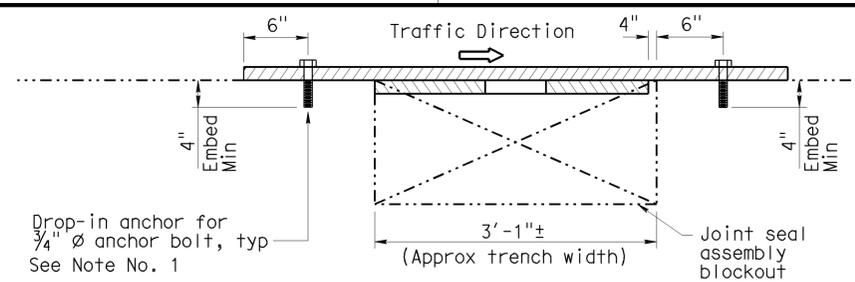
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**LEGEND:**

----- Indicates existing

**NOTES:**

1. Use Simpson, Hilti, Redheads, or equivalent drop-in anchor systems. Refer to manufacturers' catalogs for specifications and installation procedures.
2. Appropriate warning signs shall be placed before the steel decking to warn approaching traffic of a bump and slippery surface.
3. Temporary steel decking shall be placed on a flat surface to prevent vertical movement of the plates during use.
4. Welding shall conform to the requirement of AWS D1.1.
5. All steel members shall be ASTM A36 or better.



NOT TO SCALE

**N5-N73 CONNECTOR VIADUCT**

**ROUTE 5,73 BRIDGES**

**TEMPORARY STEEL DECKING**

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DESIGN	BY G. Joo	CHECKED T. Brake
DETAILS	BY T. Dang	CHECKED G. Joo
QUANTITIES	BY G. Joo	CHECKED T. Tran

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. 55-0719G  
POST MILE 12.57

UNIT: 3489  
PROJECT NUMBER & PHASE: 1213000195-1  
CONTRACT NO.: 12-0N3104

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 12 OF 12
	5-28-12 10-25-14 12-01-14	

