

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	CONSTRUCTION DETAILS
4	CONSTRUCTION AREA SIGNS
5-7	PAVEMENT DELINEATION QUANTITIES
8-13	REVISED AND NEW STANDARD PLANS

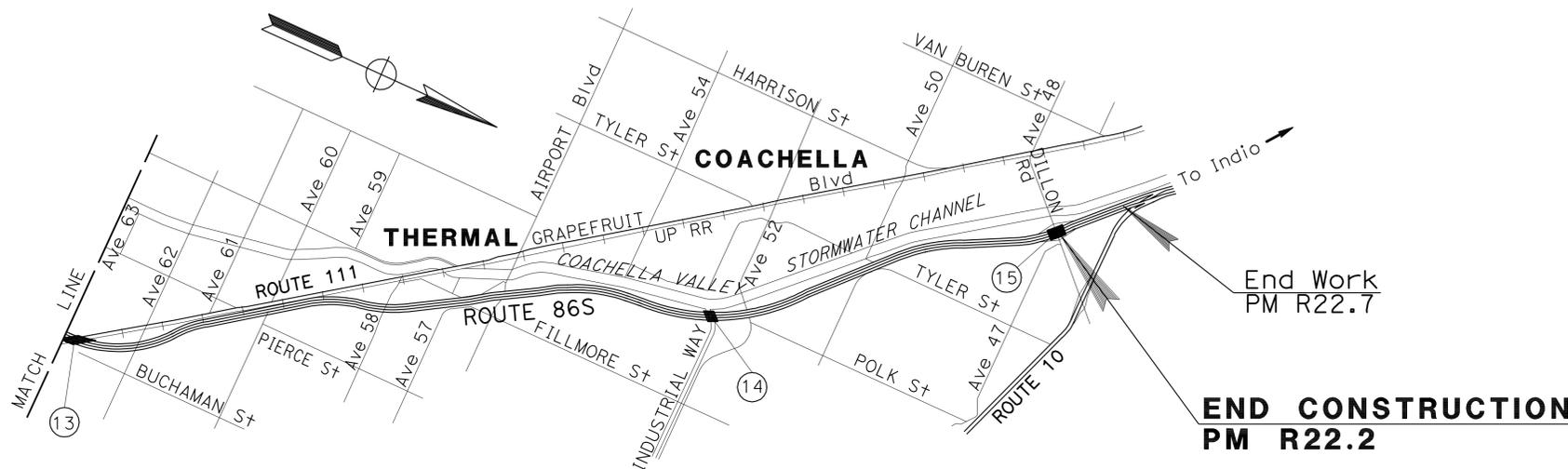
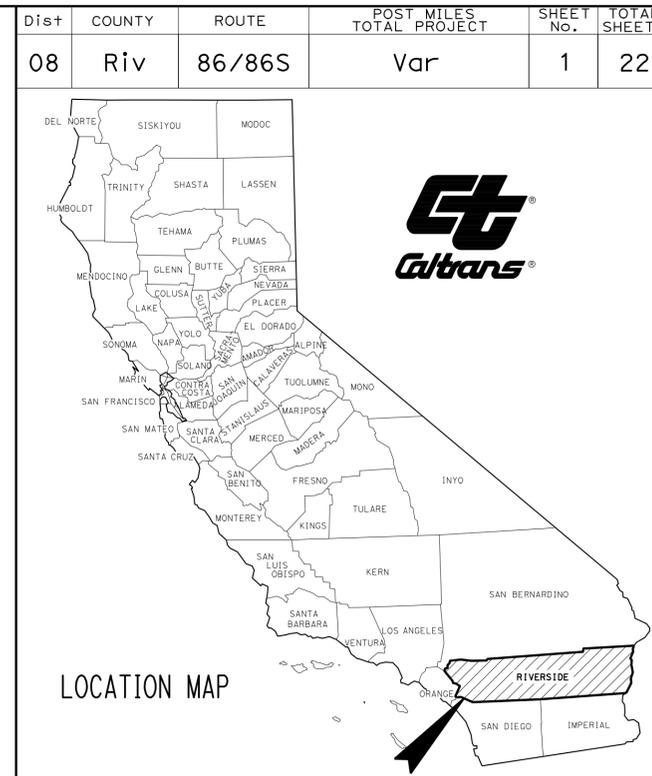
STRUCTURE PLANS

14-22 ROUTE 86 BRIDGES

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

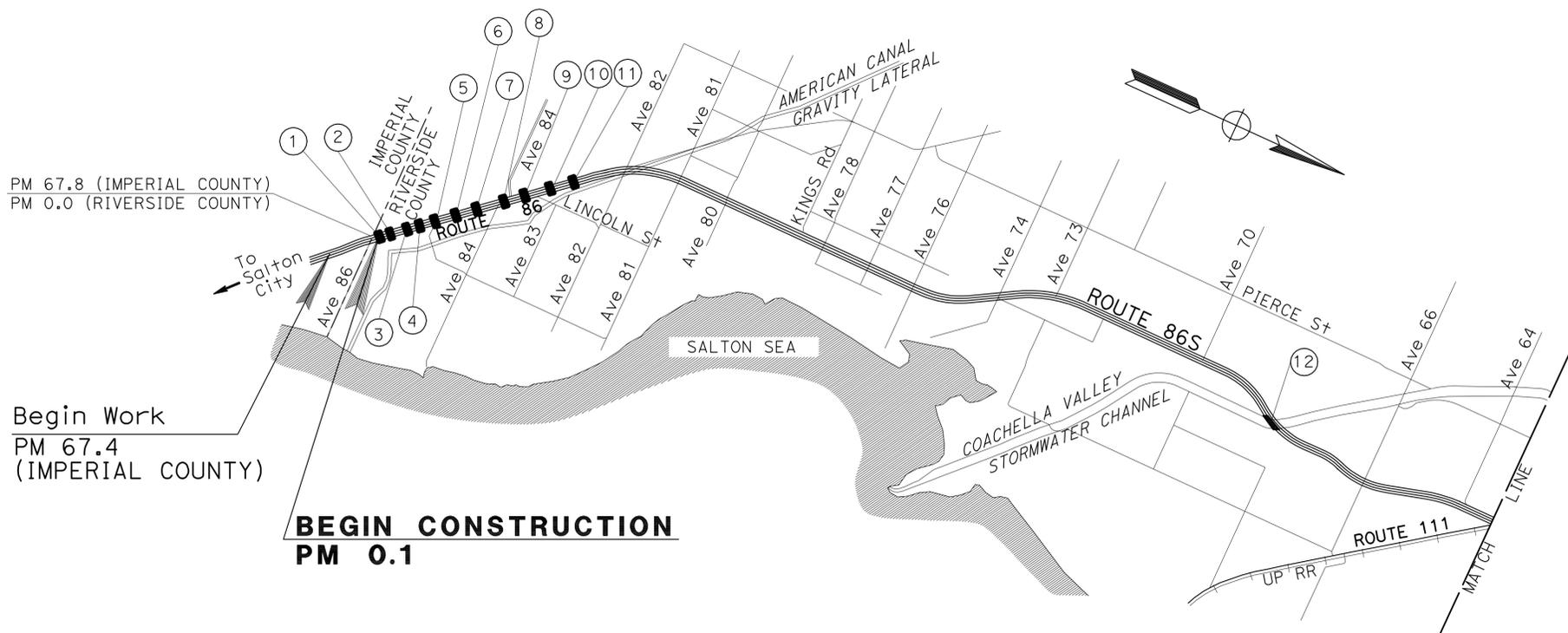
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN RIVERSIDE COUNTY  
IN AND NEAR COACHELLA  
FROM IMPERIAL COUNTY LINE  
TO DILLON ROAD UNDERCROSSING  
AT VARIOUS LOCATIONS**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



**LOCATIONS OF CONSTRUCTION**

Loc	ROUTE	PM	NAME OF BRIDGE	BRIDGE No.
①	86	0.09	TRAVERTINE DITCH	56-0163L/R
②	86	0.19	DINAL DITCH	56-0161L/R
③	86	0.36	PERONE DITCH	56-0159L/R
④	86	0.52	SOSTO DITCH	56-0158L/R
⑤	86	0.66	SUGINO DITCH	56-0156L/R
⑥	86	0.84	ANITA DITCH	56-0154L/R
⑦	86	0.99	OTAN DITCH	56-0153L/R
⑧	86	1.38	COPHY DITCH	56-0150L
	86	1.39	COPHY DITCH	56-0150R
⑨	86	1.58	MEMEL DITCH	56-0149L/R
⑩	86	1.82	TURALA DITCH	56-0148L/R
⑪	86	2.01	CALOTUS DITCH	56-0147L/R
⑫	86S	R9.51	COACHELLA VALLEY CHANNEL	56-0777R
⑬	86S	R12.10	ROUTE 86S/111 SEP & OH	56-0758L/R
⑭	86S	R18.50	WASTEWAY No. 2	56-0759L/R
⑮	86S	R22.16	DILLON ROAD UC	56-0760L/R



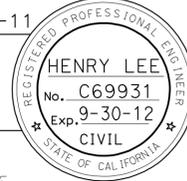
PROJECT MANAGER  
CATALINO PINING

DESIGN ENGINEER  
HENRY LEE

*Henry Lee* 11-16-11  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER

**December 27, 2011**  
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."

CONTRACT No.	<b>08-OP6804</b>
PROJECT ID	<b>0800020016</b>

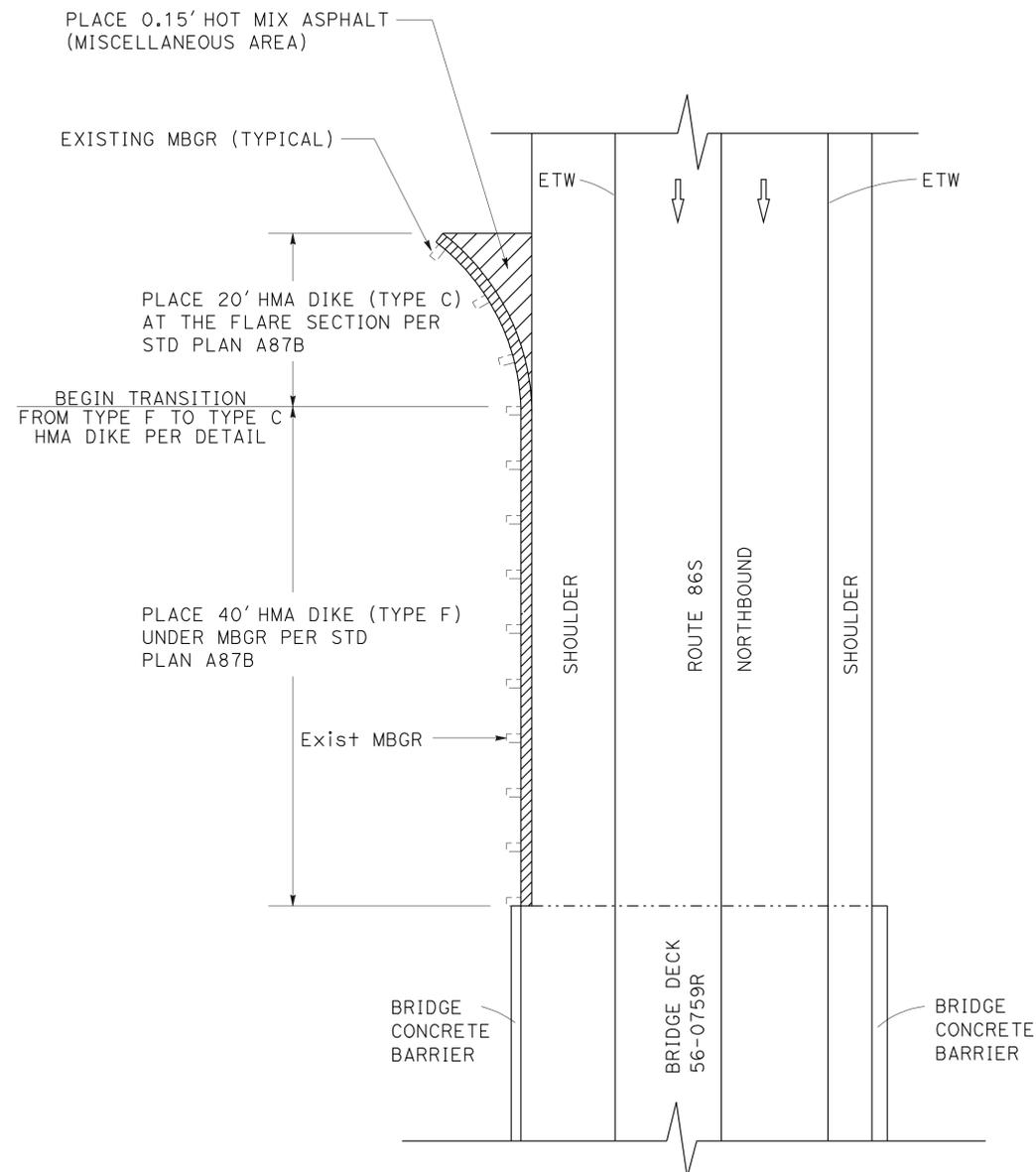
DATE PLOTTED => 27-DEC-2011 TIME PLOTTED => 10:56

**LEGEND:**

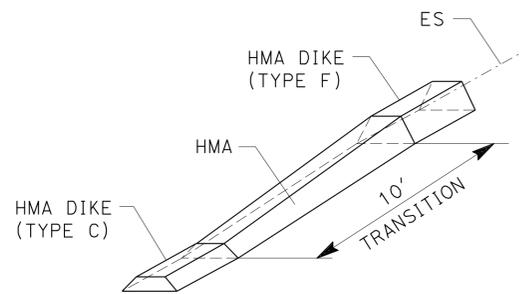
- ← DIRECTION OF TRAFFIC
-  HMA
-  HMA DIKE

**HMA DIKES AND PAVEMENT QUANTITIES**

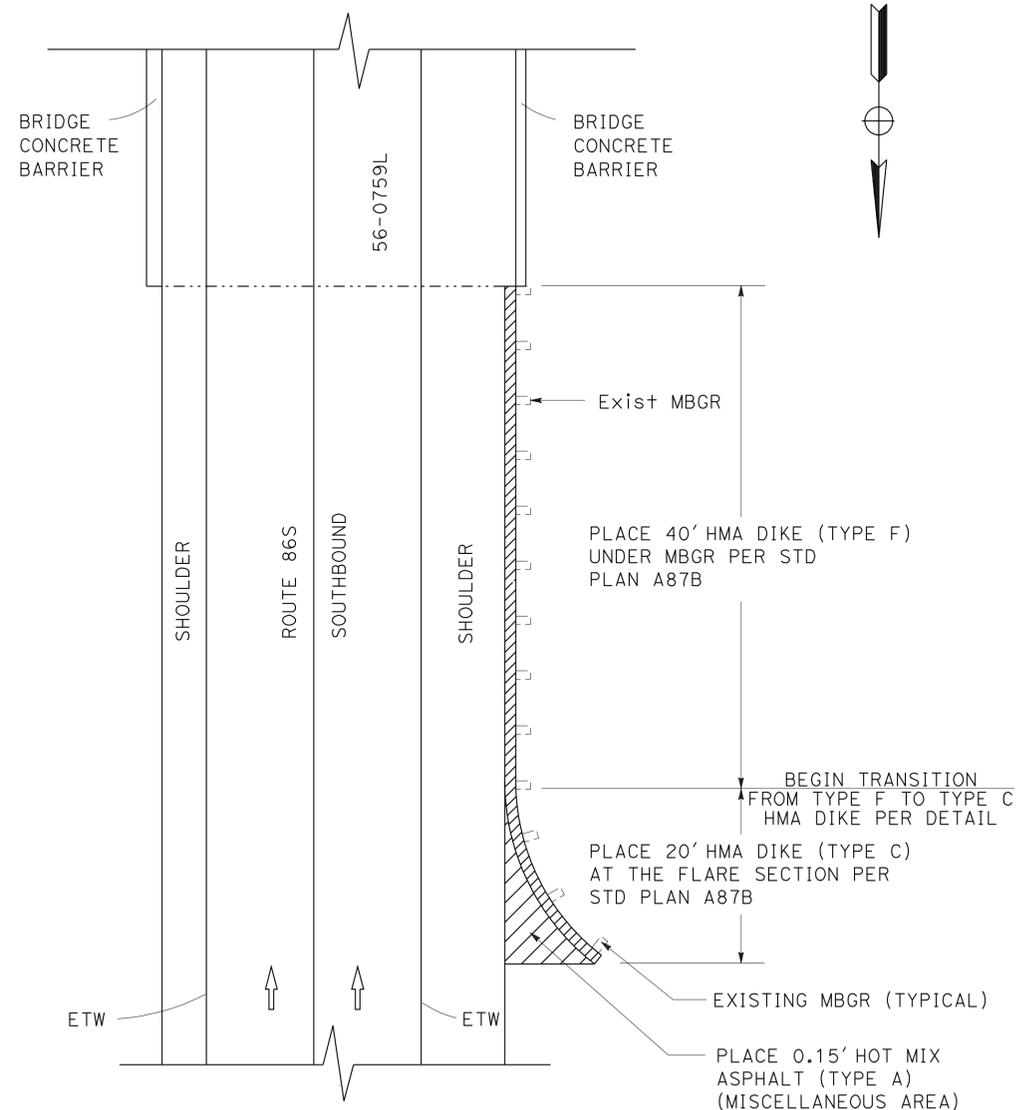
LOCATION	HOT MIX ASPHALT (TYPE A)	PLACE HOT MIX ASPHALT DIKE (TYPE F)	PLACE HOT MIX ASPHALT DIKE (TYPE C)	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)
	(TON)	(LF)	(LF)	(SQYD)
(14)	3	80	40	15



**PLACE HMA DIKE (TYPE F AND C) AND HMA PAVEMENT ON WASTEWAY No. 2 BRIDGE 56-0759R**



**HMA DIKE TRANSITION TYPE F TO TYPE C**



**PLACE HMA DIKE (TYPE F AND C) AND HMA PAVEMENT ON WASTEWAY No. 2 BRIDGE 56-0759L**

**CONSTRUCTION DETAILS**  
NO SCALE  
**C-1**

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

FUNCTIONAL SUPERVISOR: KUANG H. CHEN  
CALCULATED/DESIGNED BY: HENRY LEE  
CHECKED BY: KUANG H. CHEN  
REVISOR: HENRY LEE  
DATE: 11-16-11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	86/86S	Var	3	22

Henry Lee 11-16-11  
REGISTERED CIVIL ENGINEER DATE

12-27-11  
PLANS APPROVAL DATE

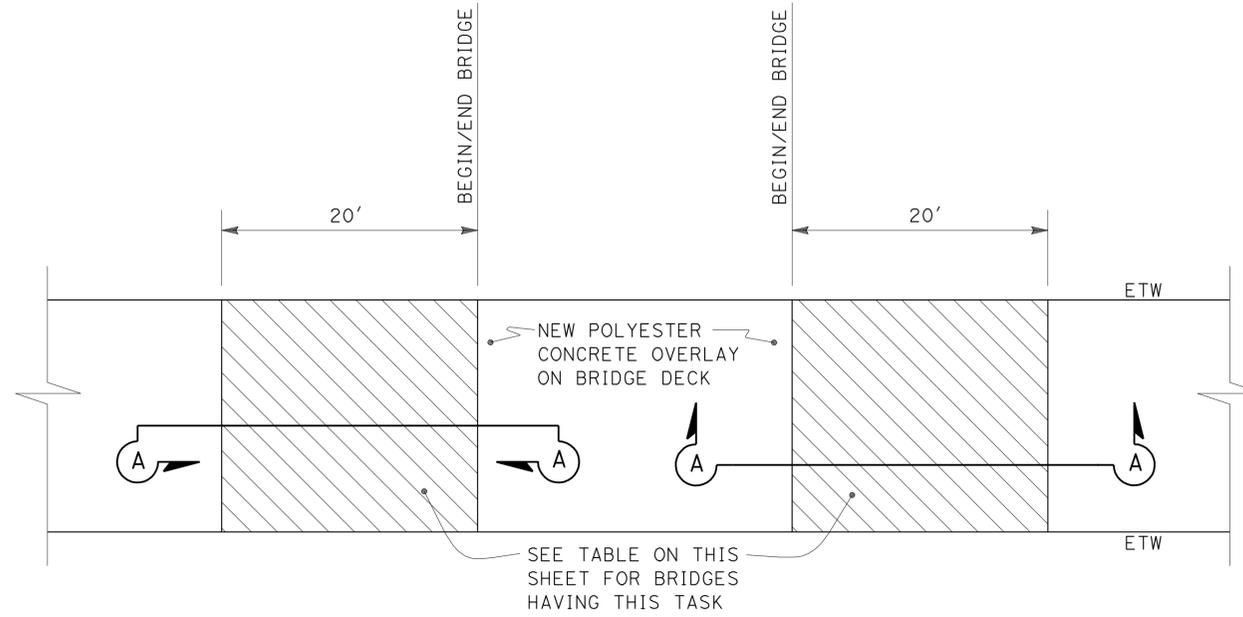
REGISTERED PROFESSIONAL ENGINEER  
HENRY LEE  
No. C69931  
Exp. 9-30-12  
CIVIL  
STATE OF CALIFORNIA

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.

**LEGEND:**



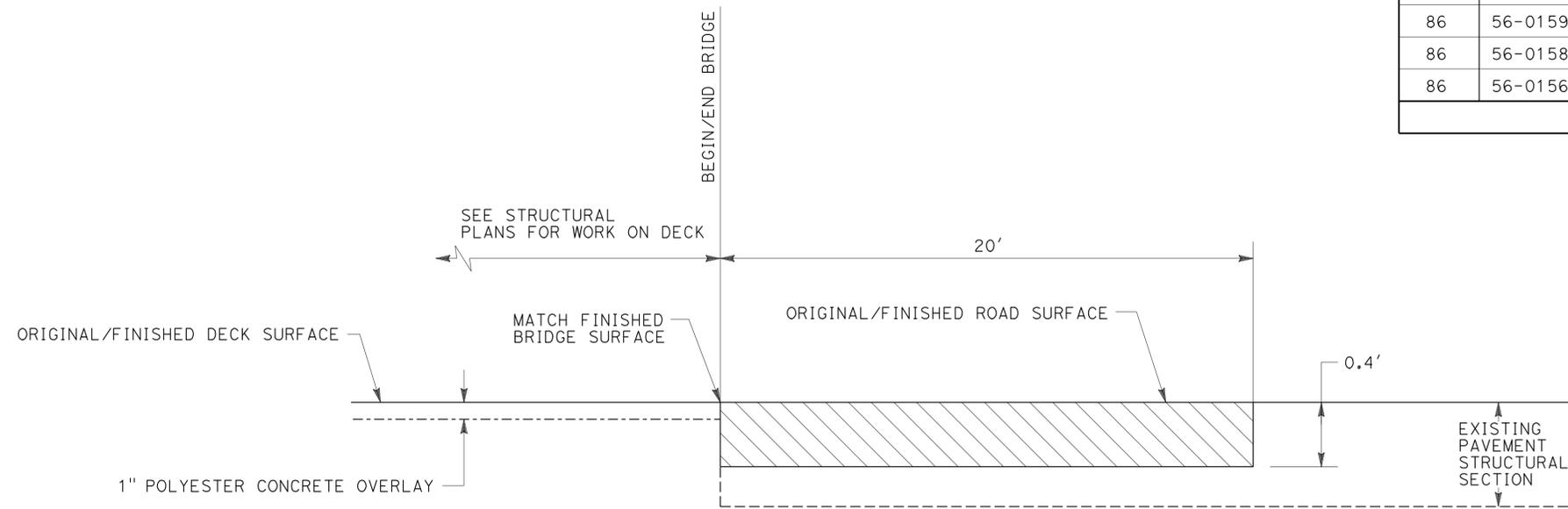
COLD PLANE AND PLACE HMA (TYPE C)



**TYPICAL PLAN**

**COLD PLANE AND HMA QUANTITIES**

ROUTE	BRIDGE No.	BRIDGE NAME	PM	HMA (TYPE C) (TON)	COLD PLANE (SQYD)
86	56-0163R	TRAVERTINE DITCH	0.09	48	174
86	56-0161R	DINAL DITCH	0.19	48	174
86	56-0159R	PERONE DITCH	0.36	48	174
86	56-0158R	SOSTO DITCH	0.52	48	174
86	56-0156R	SUGINO DITCH	0.66	48	174
<b>TOTAL</b>				240	870



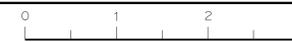
**SECTION A-A**

**CONSTRUCTION DETAILS**  
NO SCALE

**C-2**

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

FUNCTIONAL SUPERVISOR: KUANG H. CHEN  
DESIGNED BY: HENRY LEE  
CHECKED BY: KUANG H. CHEN  
REVISOR: HENRY LEE  
DATE: 11-16-11



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	86/86S	Var	4	22

11-16-11  
 REGISTERED CIVIL ENGINEER DATE  
 12-27-11  
 PLANS APPROVAL DATE

TRAN HOANG  
 No. C54996  
 Exp. 6-30-12  
 CIVIL

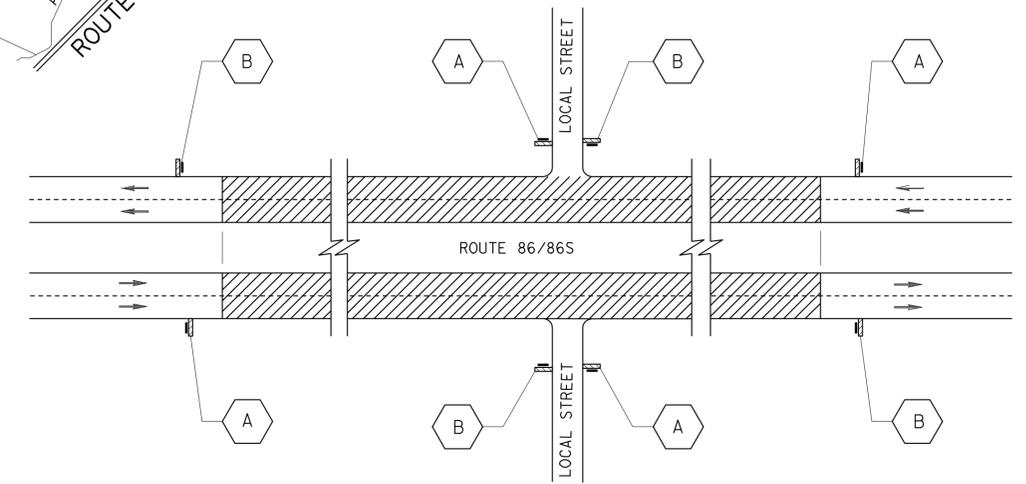
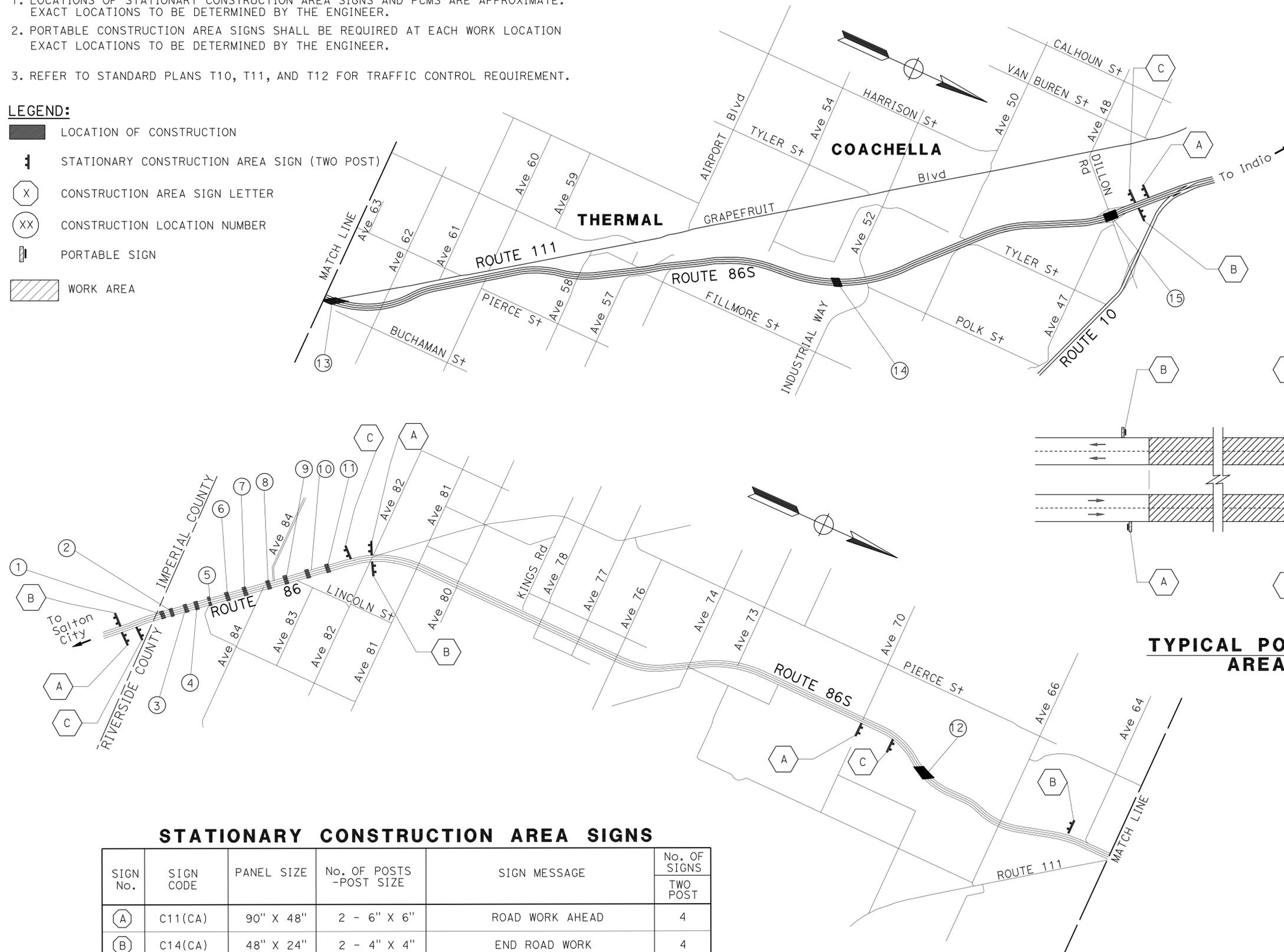
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

1. LOCATIONS OF STATIONARY CONSTRUCTION AREA SIGNS AND PCMS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. PORTABLE CONSTRUCTION AREA SIGNS SHALL BE REQUIRED AT EACH WORK LOCATION EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
3. REFER TO STANDARD PLANS T10, T11, AND T12 FOR TRAFFIC CONTROL REQUIREMENT.

**LEGEND:**

- LOCATION OF CONSTRUCTION
- STATIONARY CONSTRUCTION AREA SIGN (TWO POST)
- CONSTRUCTION AREA SIGN LETTER
- CONSTRUCTION LOCATION NUMBER
- PORTABLE SIGN
- WORK AREA



**TYPICAL PORTABLE CONSTRUCTION AREA SIGN PLACEMENT**

**STATIONARY CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE	PANEL SIZE	No. OF POSTS -POST SIZE	SIGN MESSAGE	No. OF SIGNS
					TWO POST
A	C11(CA)	90" X 48"	2 - 6" X 6"	ROAD WORK AHEAD	4
B	C14(CA)	48" X 24"	2 - 4" X 4"	END ROAD WORK	4
C	C40(CA)	72" X 36"	2 - 4" X 6"	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONE	4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: WILLIAM E. WASSER  
 CALCULATED/DESIGNED BY: [blank]  
 CHECKED BY: [blank]  
 DARYUSH NAMI  
 TRAN HOANG  
 REVISED BY: [blank]  
 DATE REVISED: [blank]

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

**CONSTRUCTION AREA SIGNS**  
NO SCALE  
**CS-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	86/86S	Var	5	22

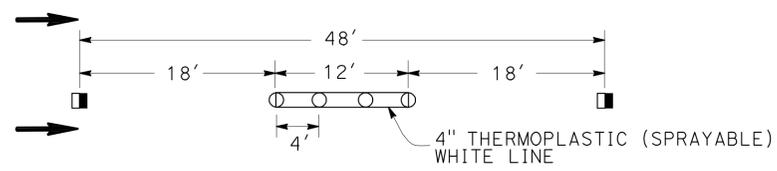
11-16-11  
 REGISTERED CIVIL ENGINEER DATE  
 12-27-11  
 PLANS APPROVAL DATE

TRAN HOANG  
 No. C54996  
 Exp. 6-30-12  
 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.

**NOTE:**  
 ADDITIONAL STRIPE IS PROVIDED BEYOND BRIDGE DECK ON BOTH SIDES.

- LEGEND:**
- TYPE A WHITE NON-REFLECTIVE MARKER
  - TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
  - ➔ DIRECTION OF TRAVEL



**DETAIL 13M**

**PAVEMENT DELINEATION QUANTITIES**

LOCATION No.	ROUTE	PM	DIRECTION	NUMBER & NAME OF BRIDGE	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER	8" THERMO-PLASTIC TRAFFIC STRIPE	THERMO-PLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)		PAVEMENT MARKER			
						LF	LF	SQFT	EA	LF	SQFT	4" YELLOW	4" WHITE	NON-REFLEC-TIVE	RETRO-REFLECTIVE TYPES		
						LF	LF	SQFT	EA	LF	SQFT	LF	LF	TYPE A	TYPE G	TYPE H	
1	Riv 86	0.09	SB	56 0163L TRAVERTINE DITCH	TYPE V ARROW			228	0		66						
	Riv 86	0.09	SB	56 0163L TRAVERTINE DITCH	TYPE III(L) ARROW			144	0		42						
	Riv 86	0.09	SB	56 0163L TRAVERTINE DITCH	25	361			9			361				9	
	Riv 86	0.09	SB	56 0163L TRAVERTINE DITCH	13M				41				361		32	9	
	Riv 86	0.09	SB	56 0163L TRAVERTINE DITCH	27B				361				361				
	Riv 86	0.09	NB	56 0163R TRAVERTINE DITCH	25	360			9			360					9
	Riv 86	0.09	NB	56 0163R TRAVERTINE DITCH	13M				41				360		32	9	
Riv 86	0.09	NB	56 0163R TRAVERTINE DITCH	27B				360				360					
2	Riv 86	0.19	SB	56 0161L DINAL DITCH	25	364			9			364				9	
	Riv 86	0.19	SB	56 0161L DINAL DITCH	13M			90				364		32	9		
	Riv 86	0.19	SB	56 0161L DINAL DITCH	27B			364				364					
	Riv 86	0.19	NB	56 0161R DINAL DITCH	25	364			9			356				9	
	Riv 86	0.19	NB	56 0161R DINAL DITCH	13M			90				356		32	9		
3	Riv 86	0.36	SB	56 0159L PERONE DITCH	27B			364				360					
	Riv 86	0.36	SB	56 0159L PERONE DITCH	TYPE V ARROW			228	0		66						
	Riv 86	0.36	SB	56 0159L PERONE DITCH	TYPE III(L) ARROW			144	0		42						
	Riv 86	0.36	SB	56 0159L PERONE DITCH	25	348			9			348				9	
	Riv 86	0.36	SB	56 0159L PERONE DITCH	13M			90				348		32	9		
	Riv 86	0.36	SB	56 0159L PERONE DITCH	27B			348				348					
	Riv 86	0.36	SB	56 0159L PERONE DITCH	38			348				348					
	Riv 86	0.36	NB	56 0159R PERONE DITCH	TYPE V ARROW			228	0		66						
	Riv 86	0.36	NB	56 0159R PERONE DITCH	25	350			9			350					9
4	Riv 86	0.52	SB	56 0158L SOSTO DITCH	25	360			9			360				9	
	Riv 86	0.52	SB	56 0158L SOSTO DITCH	13M			90				360		32	9		
	Riv 86	0.52	SB	56 0158L SOSTO DITCH	27B			360				360					
	Riv 86	0.52	NB	56 0158R SOSTO DITCH	25	360			9			360				9	
	Riv 86	0.52	NB	56 0158R SOSTO DITCH	13M			90				360		32	9		
5	Riv 86	0.66	NB	56 0156R SUGINO DITCH	27B			360				360					
	Riv 86	0.66	NB	56 0156R SUGINO DITCH	TYPE V ARROW			456	0		132						
	Riv 86	0.66	NB	56 0156R SUGINO DITCH	25	403			10			403				10	
	Riv 86	0.66	NB	56 0156R SUGINO DITCH	13M			100				403		40	10		
	Riv 86	0.66	NB	56 0156R SUGINO DITCH	27B			403				403					
	Riv 86	0.66	SB	56 0156L SUGINO DITCH	TYPE V ARROW			228	0		66						
	Riv 86	0.66	SB	56 0156L SUGINO DITCH	TYPE III(L) ARROW			144	0		42						
	Riv 86	0.66	SB	56 0156L SUGINO DITCH	25	416			9			416				9	
6	Riv 86	0.84	SB	56 0154L ANITA DITCH	13M			104				416		32	9		
	Riv 86	0.84	SB	56 0154L ANITA DITCH	27B			416				416					
	Riv 86	0.84	SB	56 0154L ANITA DITCH	25	341			9			341				9	
	Riv 86	0.84	SB	56 0154L ANITA DITCH	13M			86				341		32	9		
	Riv 86	0.84	SB	56 0154L ANITA DITCH	27B			341				341					
	Riv 86	0.84	NB	56 0154R ANITA DITCH	25	343			9			343				9	
SUB-TOTAL						4370	5814	1800	610	348	522	4362	8724	392	109	109	

**PAVEMENT DELINEATION QUANTITIES PDQ-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	86/86S	Var	6	22

11-16-11  
 REGISTERED CIVIL ENGINEER DATE  
 12-27-11  
 PLANS APPROVAL DATE

TRAN HOANG  
 No. C54996  
 Exp. 6-30-12  
 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.

### PAVEMENT DELINEATION QUANTITIES

LOCATION No.	ROUTE	PM	DIRECTION	NUMBER & NAME OF BRIDGE	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER	8" THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER					
						LF	LF	SQFT	EA	LF	SQFT	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)		RETRO-REFLECTIVE TYPES			
						LF	LF	EA	EA	EA	EA	EA	EA	EA			
7	Riv 86	0.99	SB	56 0153L OTAN DITCH	25	430			10			430					10
	Riv 86	0.99	SB	56 0153L OTAN DITCH	13M			50					430	40		10	
	Riv 86	0.99	SB	56 0153L OTAN DITCH	27B			430					430				
	Riv 86	0.99	NB	56 0153R OTAN DITCH	25	427			10				427				10
	Riv 86	0.99	NB	56 0153R OTAN DITCH	13M			50					427	40		10	
	Riv 86	0.99	NB	56 0153R OTAN DITCH	27B			427					427				
8	Riv 86	1.38	SB	56 0150L COPHY DITCH	TYPE V ARROW			228	0		66						
	Riv 86	1.38	SB	56 0150L COPHY DITCH	TYPE III(L) ARROW			144	0		42						
	Riv 86	1.38	SB	56 0150L COPHY DITCH	25	396		10				396					10
	Riv 86	1.38	SB	56 0150L COPHY DITCH	13M			50					396	40		10	
	Riv 86	1.38	SB	56 0150L COPHY DITCH	27B			396					396				
	Riv 86	1.38	SB	56 0150L COPHY DITCH	38			200									10
	Riv 86	1.39	NB	56 0150R COPHY DITCH	TYPE V ARROW			456	0		132						
	Riv 86	1.39	NB	56 0150R COPHY DITCH	TYPE III(L) ARROW			144	0		42						
	Riv 86	1.39	NB	56 0150R COPHY DITCH	25	403			10				403				10
	Riv 86	1.39	NB	56 0150R COPHY DITCH	13M			50					403	40		10	
9	Riv 86	1.58	SB	56 0149L MEMEL DITCH	25	356			10			356					10
	Riv 86	1.58	SB	56 0149L MEMEL DITCH	13M			50					356	40		10	
	Riv 86	1.58	SB	56 0149L MEMEL DITCH	27B			356					356				
	Riv 86	1.58	NB	56 0149R MEMEL DITCH	25	354			10				354				10
	Riv 86	1.58	NB	56 0149R MEMEL DITCH	13M			90					354	40		10	
	Riv 86	1.58	NB	56 0149R MEMEL DITCH	27B			354					354				
10	Riv 86	1.82	SB	56 0148L TURALA DITCH	25	384			9			384					9
	Riv 86	1.82	SB	56 0148L TURALA DITCH	13M			96					384	36		9	
	Riv 86	1.82	SB	56 0148L TURALA DITCH	27B			384					384				
	Riv 86	1.82	NB	56 0148R TURALA DITCH	25	384			9				384				9
	Riv 86	1.82	NB	56 0148R TURALA DITCH	13M			96					384	36		9	
	Riv 86	1.82	NB	56 0148R TURALA DITCH	27B			384					384				
11	Riv 86	2.01	SB	56 0147L CALOTUS DITCH	TYPE V ARROW			228	0		66						
	Riv 86	2.01	SB	56 0147L CALOTUS DITCH	TYPE III(L) ARROW			144	0		42						
	Riv 86	2.01	SB	56 0147L CALOTUS DITCH	25	390			10				390				10
	Riv 86	2.01	SB	56 0147L CALOTUS DITCH	13M			98					390	40		10	
	Riv 86	2.01	SB	56 0147L CALOTUS DITCH	27B			390					390				
	Riv 86	2.01	NB	56 0147R CALOTUS DITCH	TYPE V ARROW			456	0		132						
	Riv 86	2.01	NB	56 0147R CALOTUS DITCH	25	390			10				390				10
	Riv 86	2.01	NB	56 0147R CALOTUS DITCH	13M			98					390	40		10	
12	Riv 86S	R9.51	NB	56 0777R COACHELLA VALLEY CHANNEL	25	1130			25			1130					25
	Riv 86S	R9.51	NB	56 0777R COACHELLA VALLEY CHANNEL	13M			283					1130	100		25	
	Riv 86S	R9.51	NB	56 0777R COACHELLA VALLEY CHANNEL	27B			1130					1130				
13	Riv 86S	R12.1	SB	56 0758L ROUTE 86S/111 Sep & OH	25	1200			26			1200					26
	Riv 86S	R12.1	SB	56 0758L ROUTE 86S/111 Sep & OH	13M			300					1200	104		26	
	Riv 86S	R12.1	SB	56 0758L ROUTE 86S/111 Sep & OH	27B			1200					1200				
SUB-TOTAL						6244	8228	1800	894	400	522	6244	12488	596	169	149	

## PAVEMENT DELINEATION QUANTITIES PDQ-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	86/86S	Var	7	22

 11-16-11  
 REGISTERED CIVIL ENGINEER DATE

12-27-11  
 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  
**TRAN HOANG**  
 No. C54996  
 Exp. 6-30-12  
 CIVIL  
 STATE OF CALIFORNIA

### PAVEMENT DELINEATION QUANTITIES

LOCATION No.	ROUTE	PM	DIRECTION	NUMBER & NAME OF BRIDGE	DETAIL No. OR PAVEMENT MARKING	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	REMOVE THERMOPLASTIC TRAFFIC STRIPE	REMOVE THERMOPLASTIC PAVEMENT MARKING	REMOVE PAVEMENT MARKER	8" THERMO-PLASTIC TRAFFIC STRIPE	THERMO-PLASTIC PAVEMENT MARKING	PAVEMENT MARKER				
												THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)		NON-REFLEC-TIVE	RETRO-REFLECTIVE TYPES	
												4" YELLOW	4" WHITE	TYPE A	TYPE G	TYPE H
						LF	LF	SQFT	EA	LF	SQFT	LF	LF	EA	EA	EA
13	Riv 86S	R12.1	NB	56 0758R ROUTE 86S/111 Sep & OH	25	1200			26			1200				26
	Riv 86S	R12.1	NB	56 0758R ROUTE 86S/111 Sep & OH	13M				130					104	26	
	Riv 86S	R12.1	NB	56 0758R ROUTE 86S/111 Sep & OH	27B							1200				
14	Riv 86S	R18.5	SB	56 0759L WASTEWAY No. 2	25	470			11			470				11
	Riv 86S	R18.5	SB	56 0759L WASTEWAY No. 2	13M				55				470	44	11	
	Riv 86S	R18.5	SB	56 0759L WASTEWAY No. 2	27B							470				
	Riv 86S	R18.5	NB	56 0759R WASTEWAY No. 2	25	467			11			467				11
	Riv 86S	R18.5	NB	56 0759R WASTEWAY No. 2	13M				55				467	44	11	
	Riv 86S	R18.5	NB	56 0759R WASTEWAY No. 2	27B							467				
15	Riv 86S	R22.16	SB	56 0760L DILLON ROAD UC	25	484			12			484				12
	Riv 86S	R22.16	SB	56 0760L DILLON ROAD UC	13M				60				484	48	12	
	Riv 86S	R22.16	SB	56 0760L DILLON ROAD UC	27B							484				
	Riv 86S	R22.16	NB	56 0760R DILLON ROAD UC	25	484			12			484				12
	Riv 86S	R22.16	NB	56 0760R DILLON ROAD UC	13M				60				484	48	12	
	Riv 86S	R22.16	NB	56 0760R DILLON ROAD UC	27B							484				
SUB-TOTAL SHEET PDQ-3						3105	3881	0	432	0	0	3105	6210	288	72	72
SUB-TOTAL FROM SHEET PDQ-2						6244	8228	1800	894	400	522	6244	12488	596	169	149
SUB-TOTAL FROM SHEET PDQ-1						4370	5814	1800	610	348	522	4362	8724	392	109	109
SUB-TOTAL												13711	27422		350	330
TOTAL						13719	17923	3600	1936	748	1044	41133		1276	680	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR WILLIAM E. WASSER  
 CALCULATED/DESIGNED BY CHECKED BY  
 DARYUSH NAMI TRAN HOANG  
 REVISED BY DATE REVISED

## PAVEMENT DELINEATION QUANTITIES

### PDQ-3

LAST REVISION DATE PLOTTED => 27-DEC-2011 11:21:11 TIME PLOTTED => 11:16

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	8	22

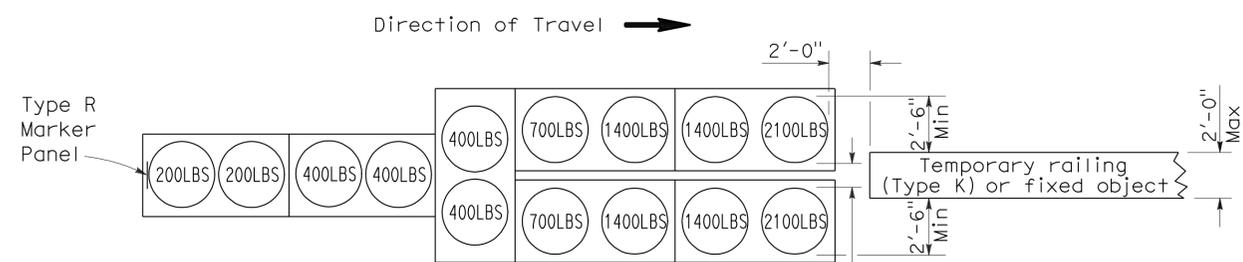
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

*Randell D. Hiatt*  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

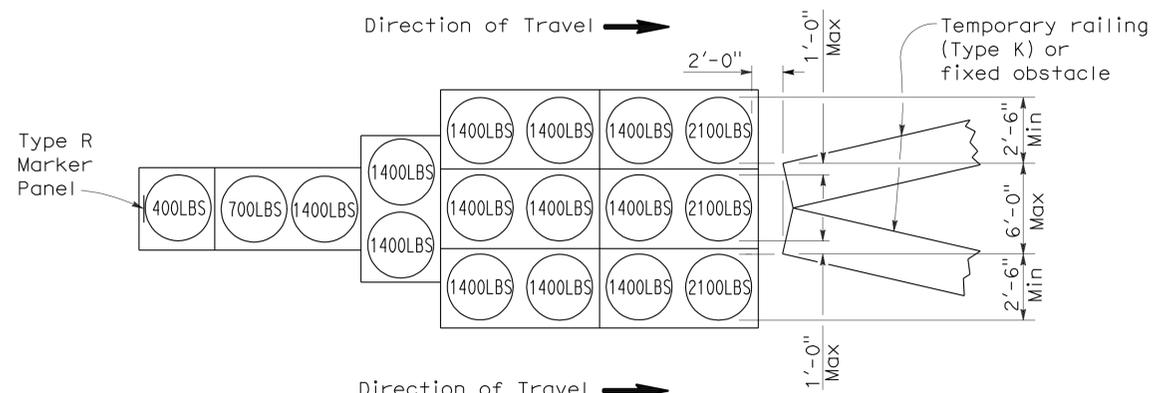
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 12-27-11



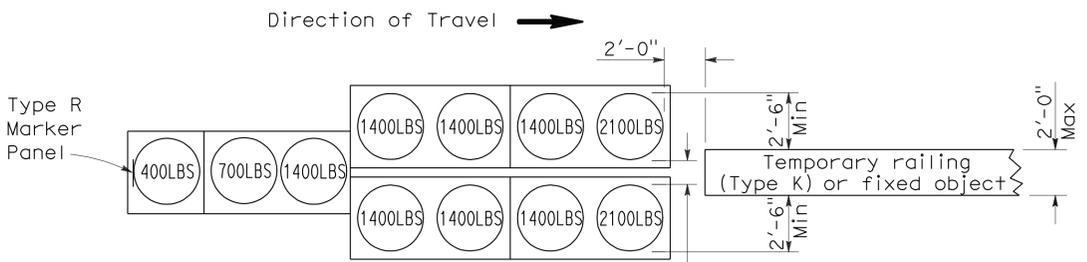
**ARRAY 'TU14'**

Approach speed 45 mph or more



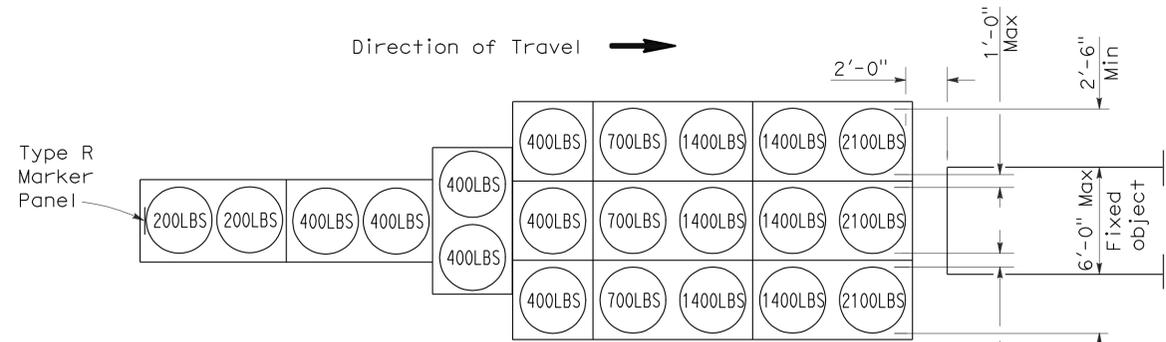
**ARRAY 'TU17'**

Approach speed less than 45 mph



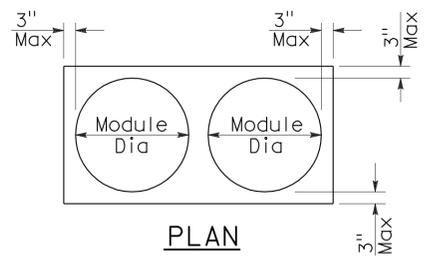
**ARRAY 'TU11'**

Approach speed less than 45 mph

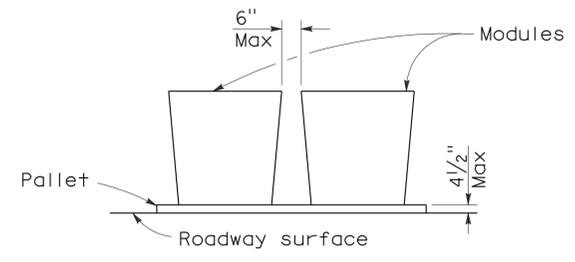


**ARRAY 'TU21'**

Approach speed 45 mph or more



**PLAN**



**ELEVATION**

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A  
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1A**

2006 REVISED STANDARD PLAN RSP T1A

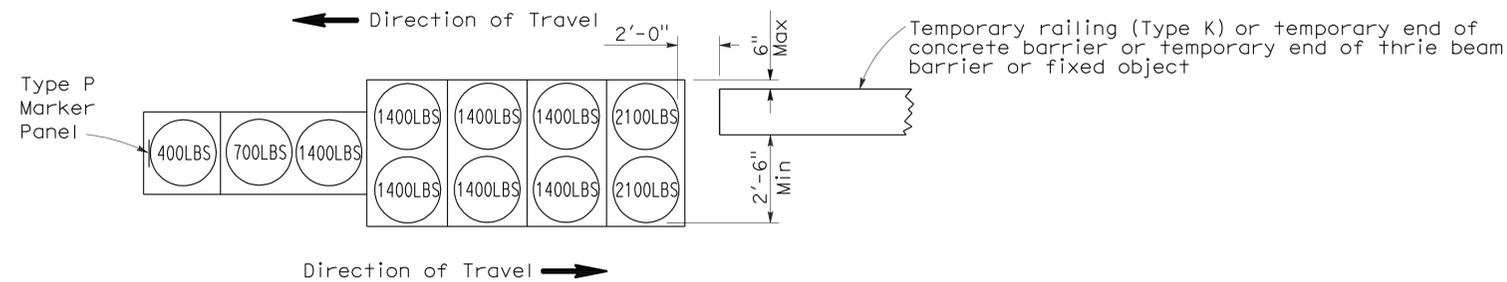
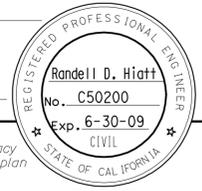
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	9	22

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

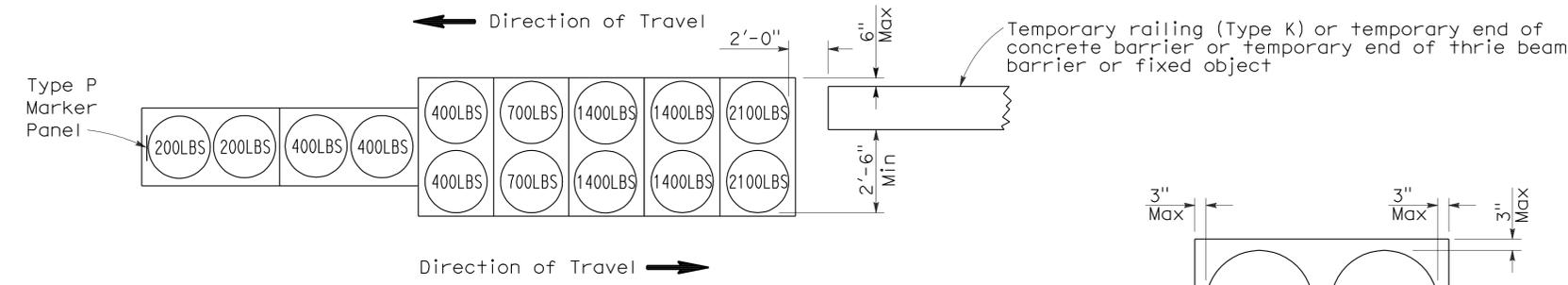
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 12-27-11



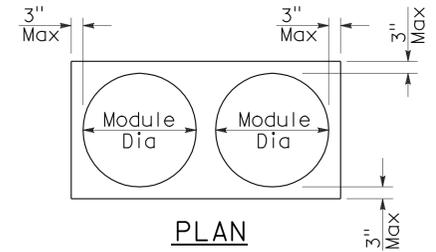
**ARRAY 'TB11'**

Approach speed less than 45 mph

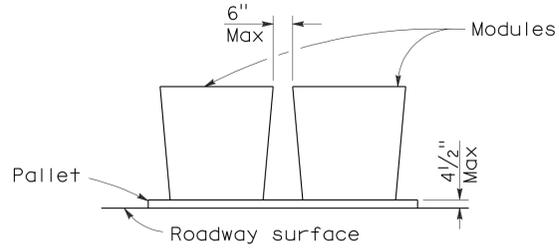


**ARRAY 'TB14'**

Approach speed 45 mph or more



PLAN



ELEVATION

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B  
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	10	22

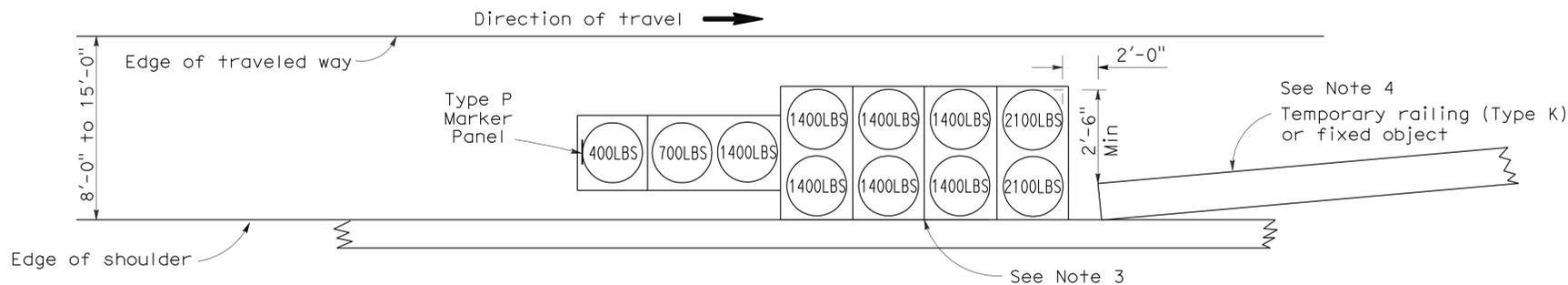
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

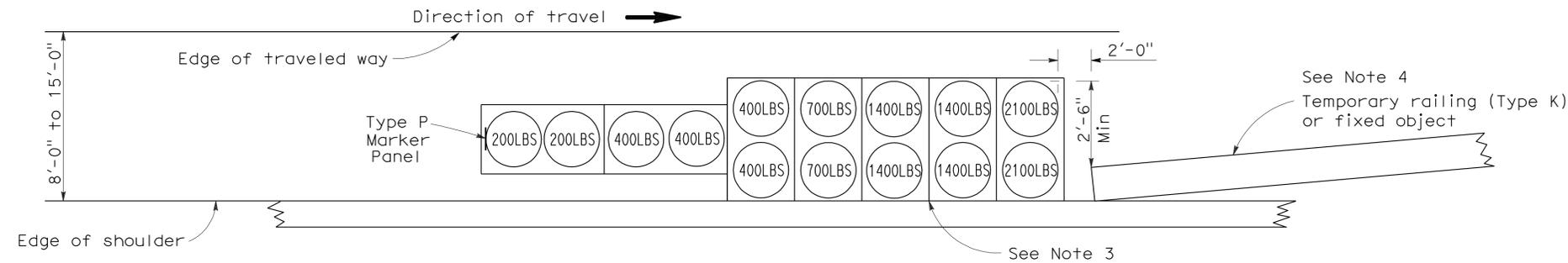
*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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.

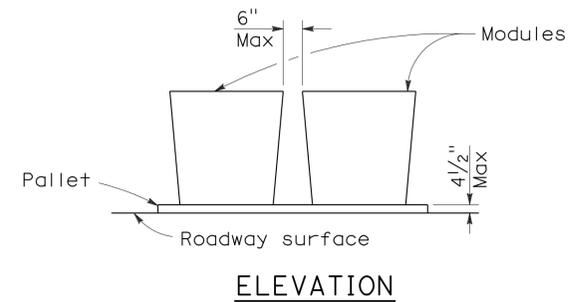
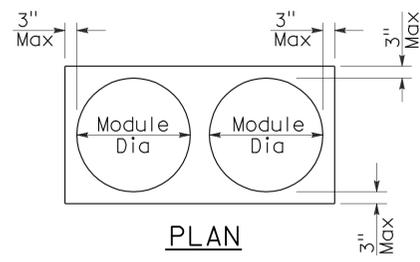
To accompany plans dated 12-27-11



**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



**ARRAY 'TS14'**  
Approach speed 45 mph or more  
See Note 9



**CRASH CUSHION PALLET DETAIL**  
See Note 11

**NOTES:**

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE  
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

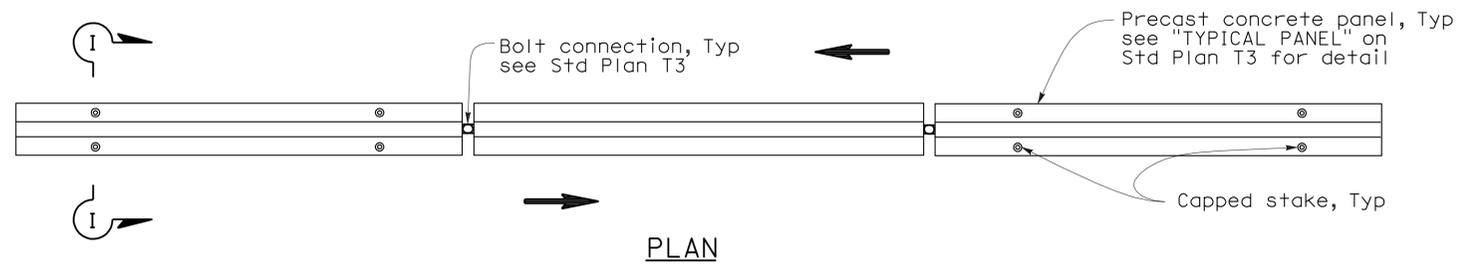
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	86/86S	Var	11	22

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

May 20, 2011  
PLANS APPROVAL DATE

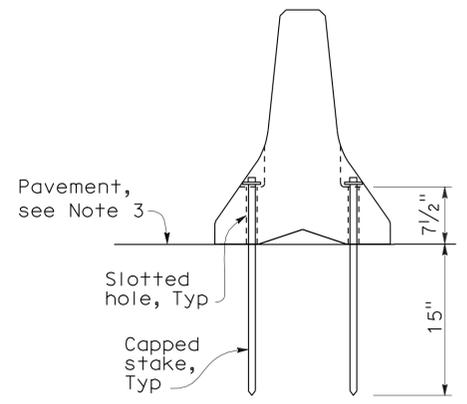
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 12-27-11



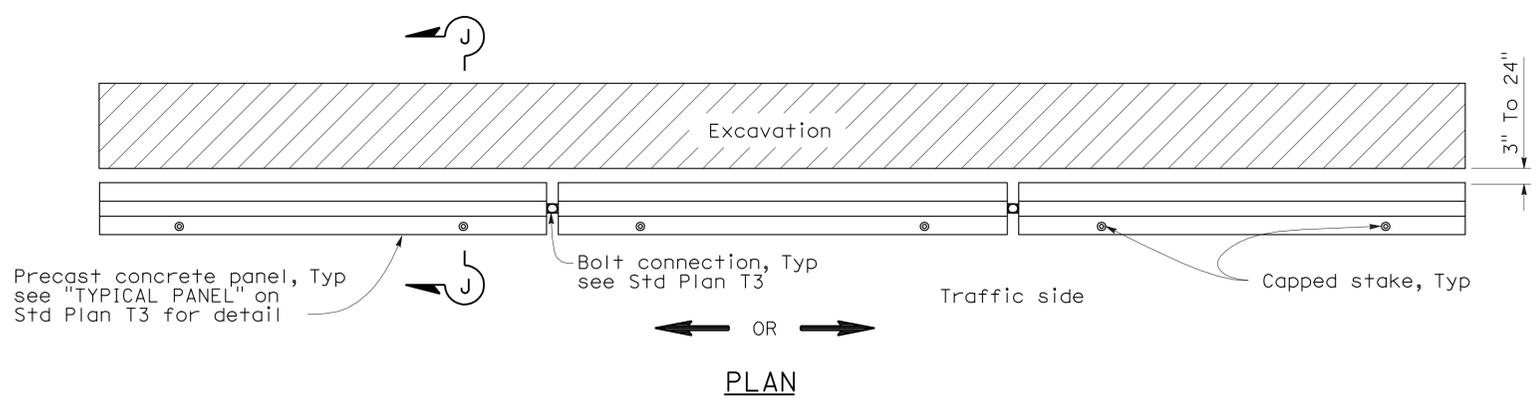
**RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC**

See Note 1



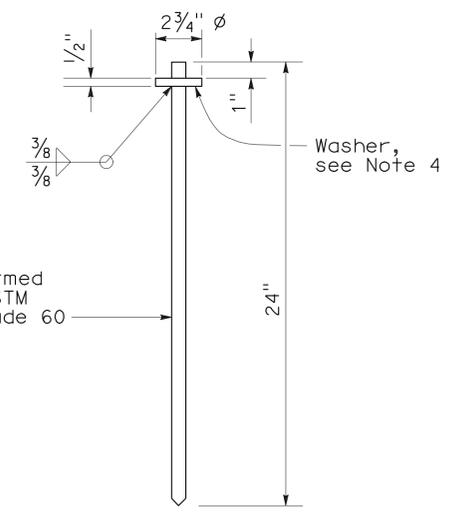
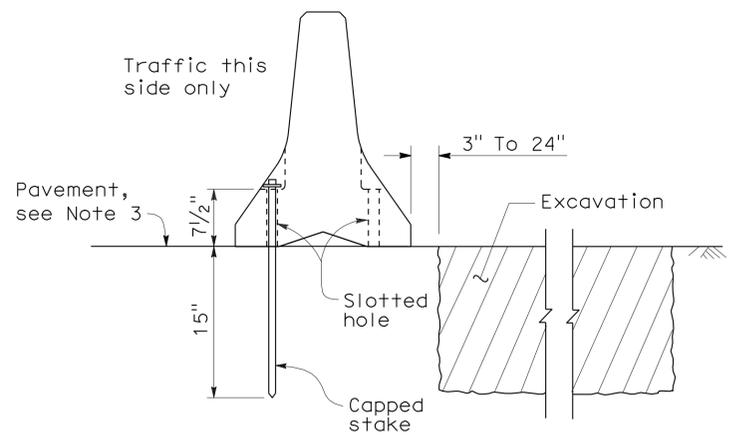
**NOTES:**

1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by  $\Rightarrow$ .



**RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION**

See Note 2



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

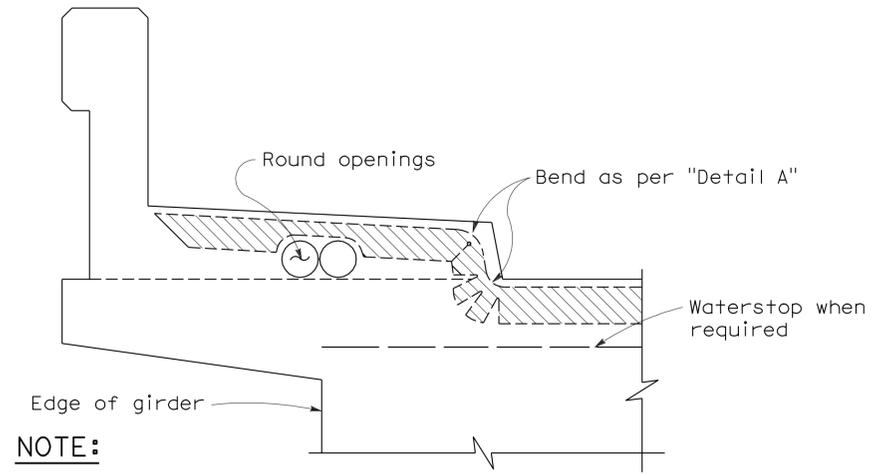
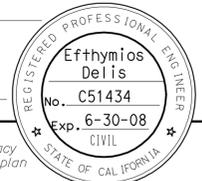
**TEMPORARY RAILING  
(TYPE K)**

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

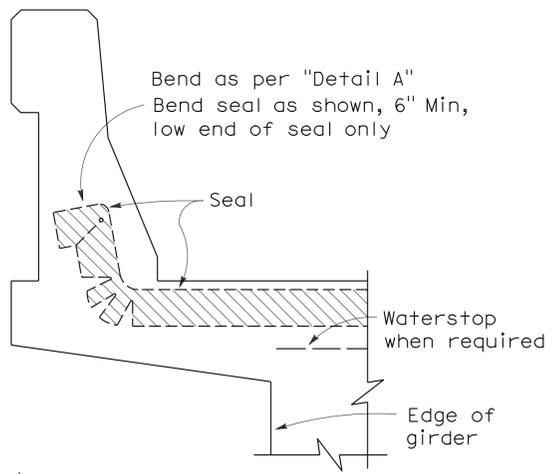
2006 NEW STANDARD PLAN NSP T3A



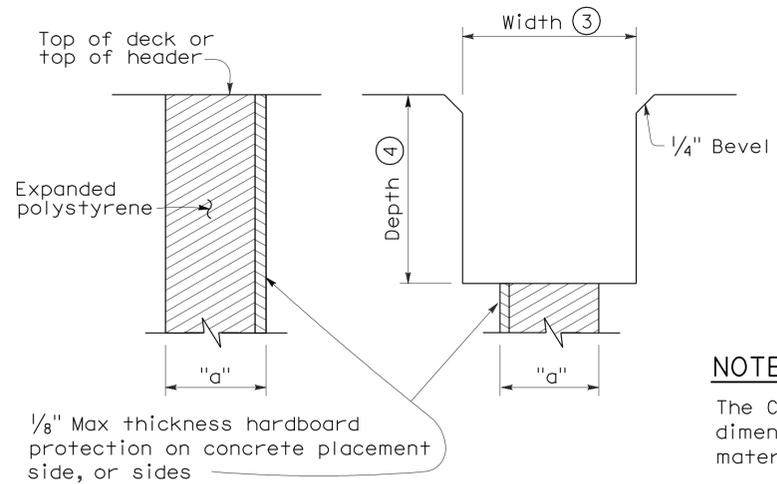


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



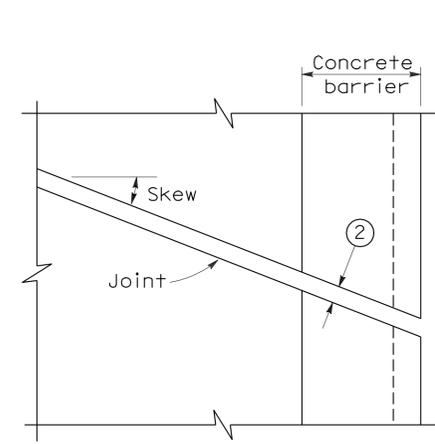
**CONCRETE BARRIER**



**FORMING DETAIL SAWCUT DETAIL**

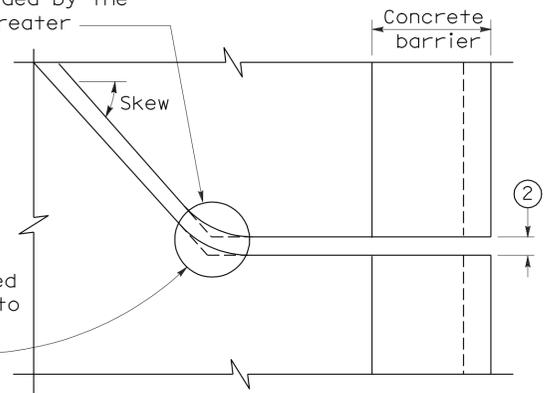
**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**JOINT SEALS DETAILS**



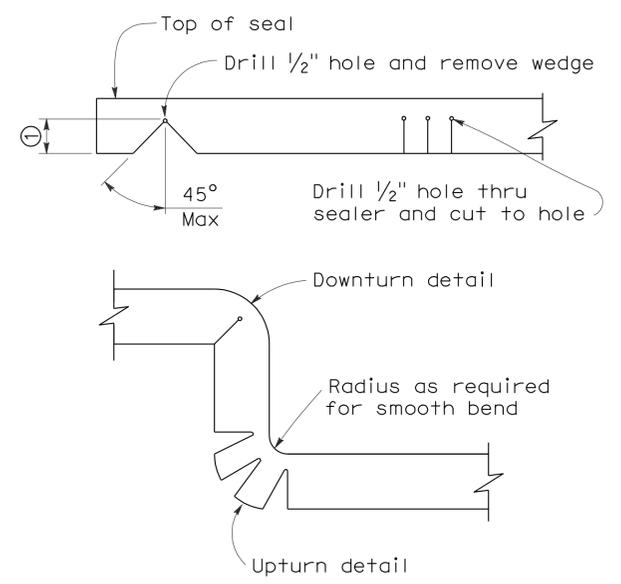
**PLAN OF JOINT (SKEW ≤ 20°)**

Min  $\phi$  radius to be 4 times uncompressed width of seal or as recommended by the manufacturer, whichever is greater



**PLAN OF JOINT (SKEW > 20°)**

In lieu of saw cutting, this area may be blocked out and reconstructed to match saw cutting on both sides.



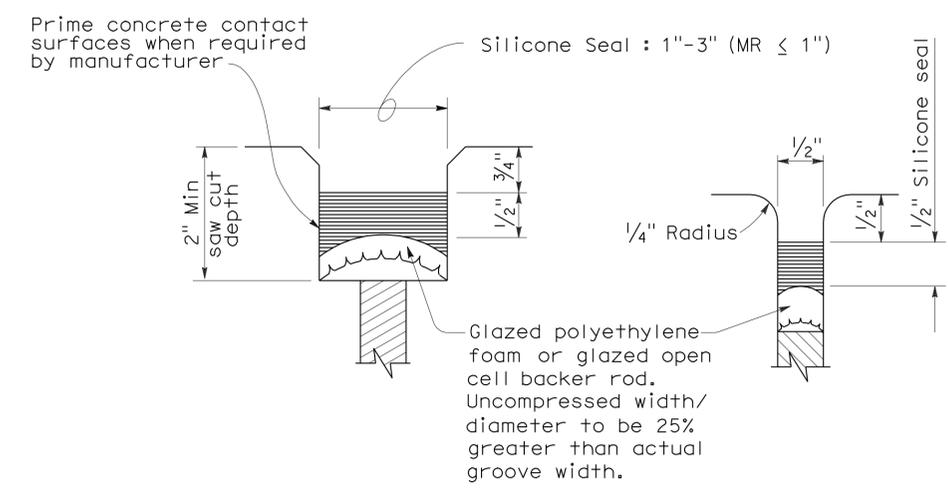
**DETAIL A**

**NOTES:**

- Make smooth cuts from the bottom of seal to 1 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
- Opening in barrier to match width of sawn deck joint.
- Sawcut groove widths shall be as ordered by the Engineer.
- Depth of sawcut: Type A - Depth to be 2" minimum.  
 Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W<sub>2</sub>) plus dimensions shown.
- MR (movement rating) as shown on other plan sheets.
- Other depths must be approved by the Engineer.

**DIMENSIONS "a" OF JOINT REQUIRED**

Movement Rating (MR) ⑤	Bridge Type	"a" Dimension		
		Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	All except CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	All except CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	All except CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

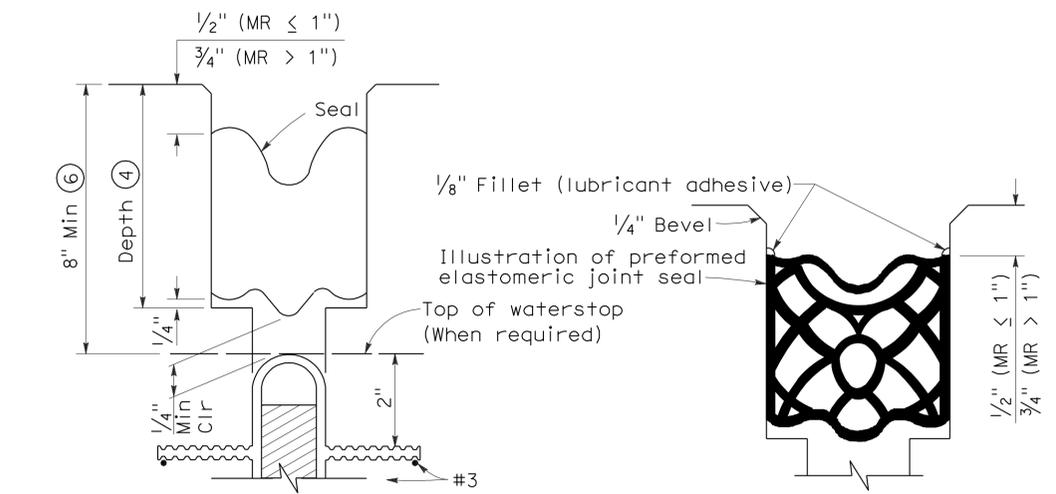


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W<sub>2</sub>)**

**TYPE B SEAL**

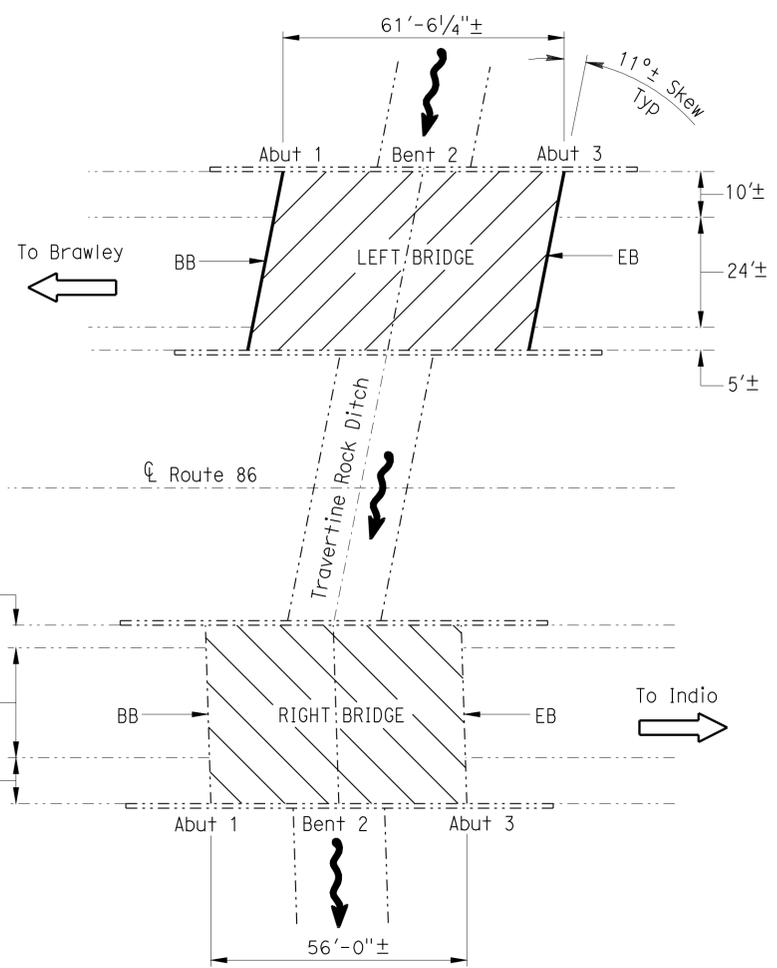
Movement Rating ≤ 2"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINT SEALS**  
**(MAXIMUM MOVEMENT RATING = 2")**  
 NO SCALE

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

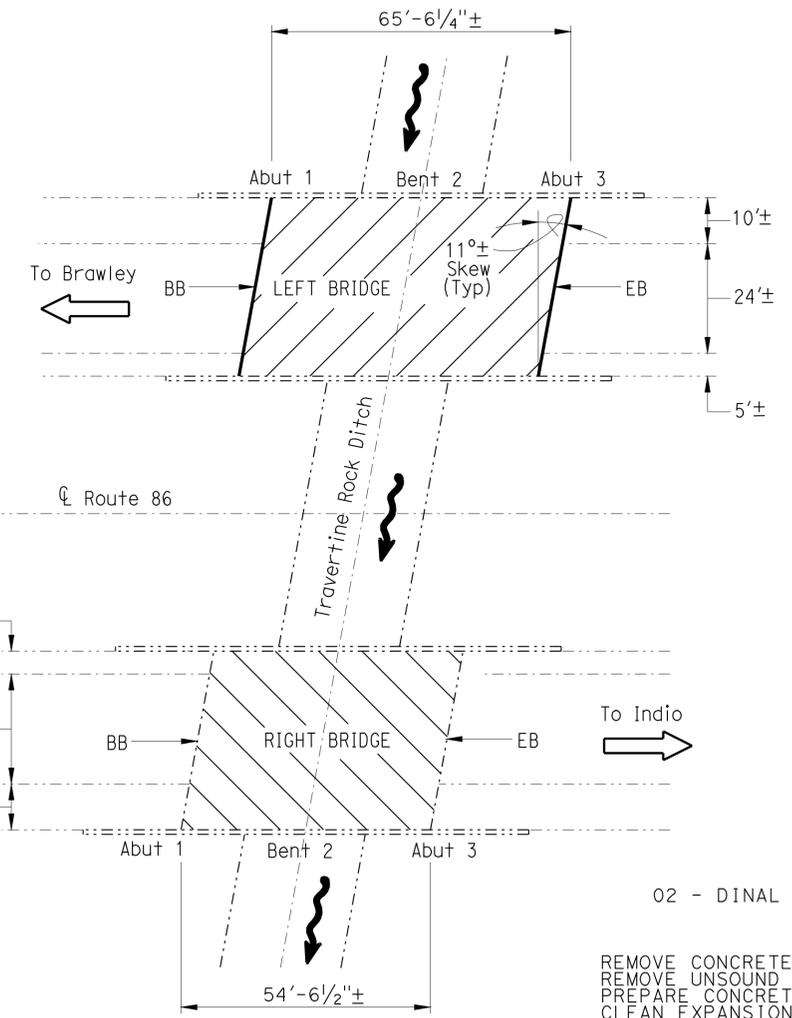
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	14	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
12-27-11			PLANS APPROVAL DATE		
DIOSDADO ACOBA			No. 52003		
Exp. 12-31-12			CIVIL		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.					

- NOTES:**
- Indicates existing.
  - Indicates location of existing joint seal removal and placement of new joint seal.
  - Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
  - Indicates limits of removal of existing 1"± concrete deck surface, prepare bridge deck surface, furnish and place new 1" min depth polyester concrete overlay.



**TRAVERTINE DITCH**

Br No. 56-0163L/R, Riv, ROUTE 86, PM 0.09  
1" = 20'



**DINAL DITCH**

Br No. 56-0161L/R, Riv, ROUTE 86, PM 0.19  
1" = 20'

**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	JOINT SEAL DETAILS NO. 1
9	JOINT SEAL DETAILS NO. 2

**STANDARD PLANS DATED MAY 2006**

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

**01 - TRAVERTINE DITCH**

**Br No. 56-0163L/R**

**QUANTITIES**

REMOVE CONCRETE DECK SURFACE	2,184	SQFT
REMOVE UNSOUND CONCRETE	5.5	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	4,583	SQFT
CLEAN EXPANSION JOINT	82	LF
RAPID SETTING CONCRETE (PATCH)	5.5	CF
FURNISH POLYESTER CONCRETE OVERLAY	218	CF
PLACE POLYESTER CONCRETE OVERLAY	2,184	SQFT
JOINT SEAL (MR 1/2")	82	LF
TREAT BRIDGE DECK	2,399	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	27	GAL

**02 - DINAL DITCH**

**Br No. 56-0161L/R**

**QUANTITIES**

REMOVE CONCRETE DECK SURFACE	2,127	SQFT
REMOVE UNSOUND CONCRETE	5.3	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	4,682	SQFT
CLEAN EXPANSION JOINT	80.5	LF
RAPID SETTING CONCRETE (PATCH)	5.3	CF
FURNISH POLYESTER CONCRETE OVERLAY	213	CF
PLACE POLYESTER CONCRETE OVERLAY	2,127	SQFT
JOINT SEAL (MR 1/2")	80.5	LF
TREAT BRIDGE DECK	2,555	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	28	GAL

**NOTE:**  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

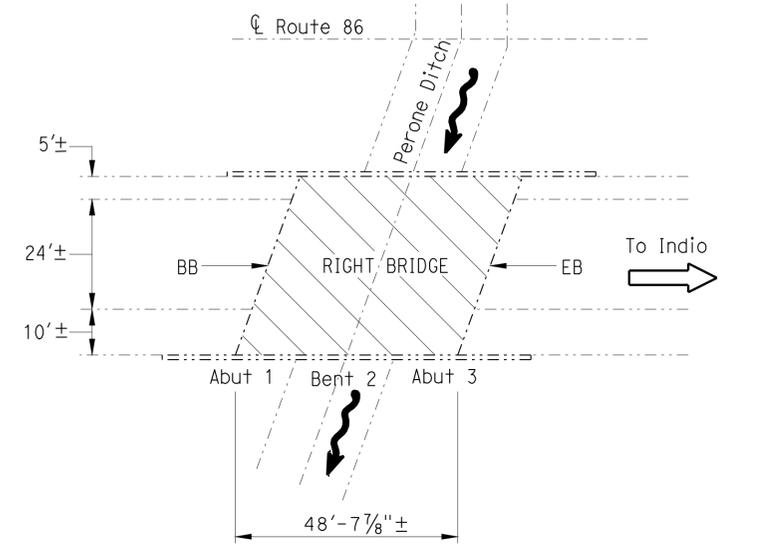
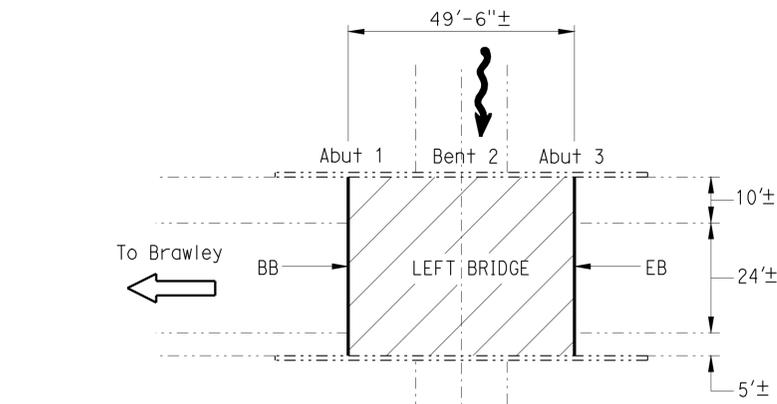
PROJECT NUMBER & PHASE 0800020016

 DESIGN ENGINEER 9-6-11	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>DIVISION OF MAINTENANCE</b> <b>STRUCTURE MAINTENANCE DESIGN</b>	BRIDGE NO.	Varies		<b>ROUTE 86 BRIDGES</b> <b>GENERAL PLAN NO. 1</b>	
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	CHECKED J. Choi			POST MILE	Various			
	QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba										
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)							ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 4-27-11 5-17-11 8-31-11 9-14-11	SHEET 1 OF 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	15	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
PLANS APPROVAL DATE			12-27-11		
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.					

**NOTES:**

- Indicates existing.
- Indicates location of existing joint seal removal and placement of new joint seal.
- Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
- Indicates limits of removal of existing 1"± concrete deck surface, prepare bridge deck surface, furnish and place new 1" min depth polyester concrete overlay.



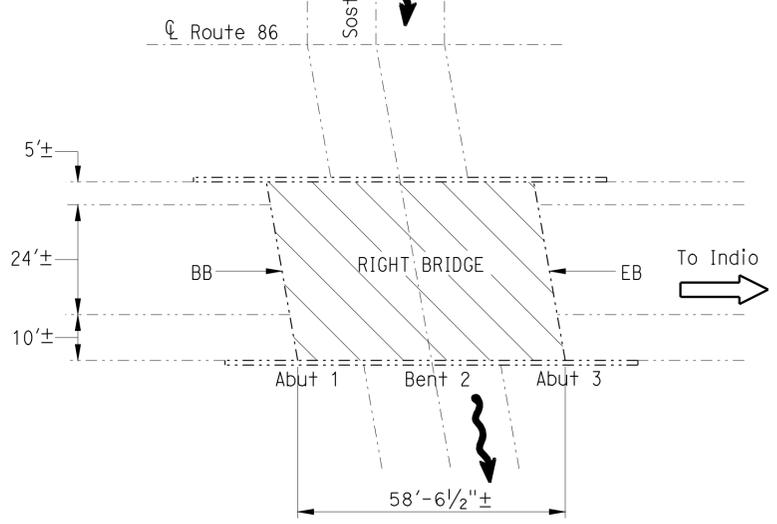
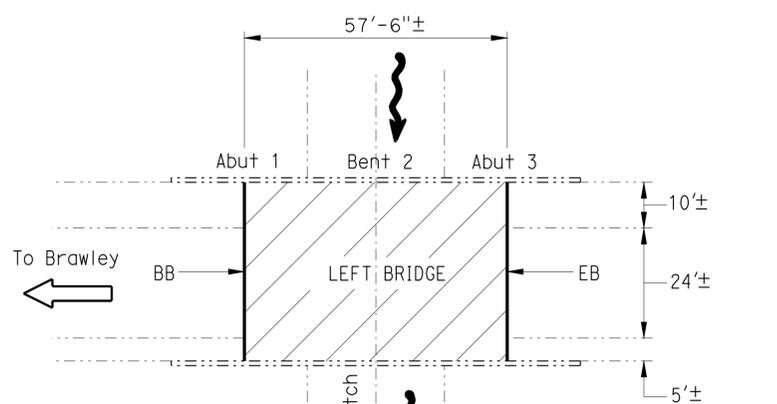
**PERONE DITCH**  
 Br No. 56-0159L/R, Riv, ROUTE 86, PM 0.36  
 1" = 20'

03 - PERONE DITCH Br No. 56-0159L/R

QUANTITIES

REMOVE CONCRETE DECK SURFACE	1,898	SQFT
REMOVE UNSOUND CONCRETE	4.7	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	3,829	SQFT
CLEAN EXPANSION JOINT	79	LF
RAPID SETTING CONCRETE (PATCH)	4.7	CF
FURNISH POLYESTER CONCRETE OVERLAY	190	CF
PLACE POLYESTER CONCRETE OVERLAY	1,898	SQFT
JOINT SEAL (MR 1/2")	79	LF
TREAT BRIDGE DECK	1,931	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	21.5	GAL

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

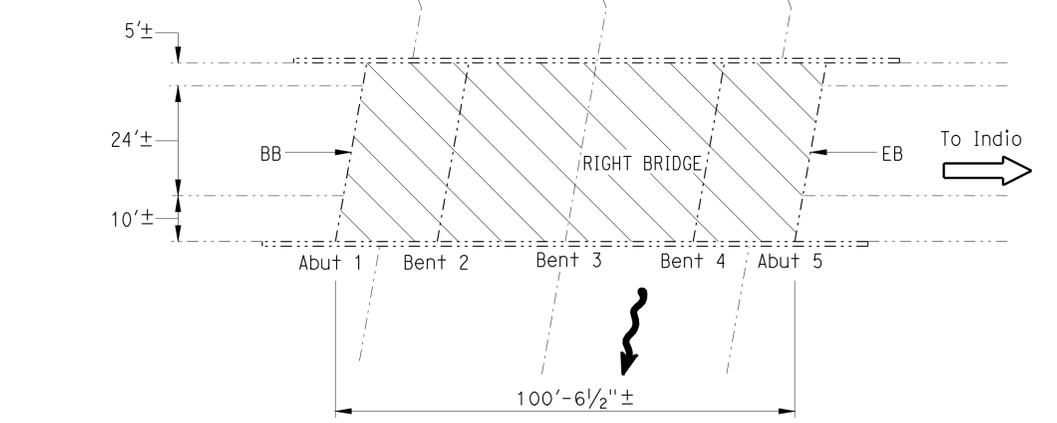
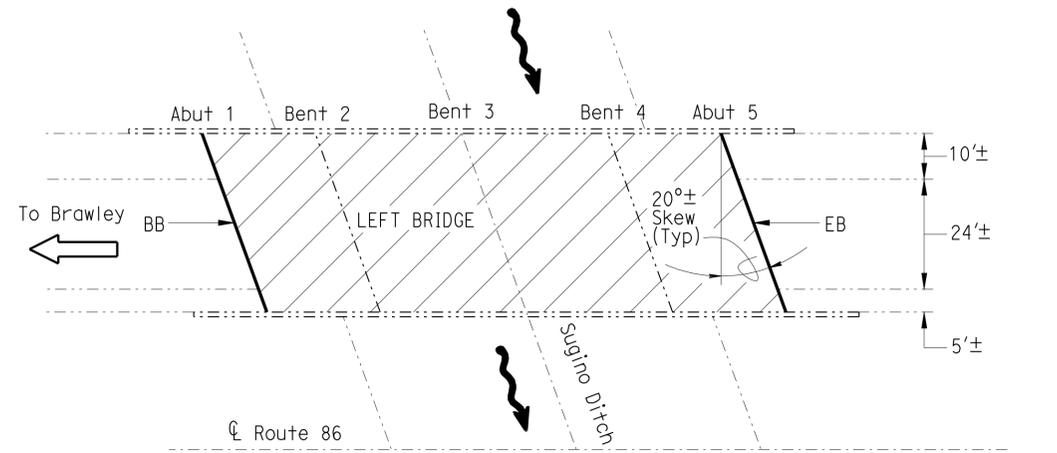


**SOSTO DITCH**  
 Br No. 56-0158L/R, Riv, ROUTE 86, PM 0.52  
 1" = 20'

04 - SOSTO DITCH Br No. 56-0158L/R

QUANTITIES

REMOVE CONCRETE DECK SURFACE	2,283	SQFT
REMOVE UNSOUND CONCRETE	5.7	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	4,526	SQFT
CLEAN EXPANSION JOINT	78	LF
RAPID SETTING CONCRETE (PATCH)	5.7	CF
FURNISH POLYESTER CONCRETE OVERLAY	228	CF
PLACE POLYESTER CONCRETE OVERLAY	2,283	SQFT
JOINT SEAL (MR 1/2")	78	LF
TREAT BRIDGE DECK	2,243	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	25	GAL



**SUGINO DITCH**  
 Br No. 56-0156L/R, Riv, ROUTE 86, PM 0.66  
 1" = 20'

05 - SUGINO DITCH Br No. 56-0156L/R

QUANTITIES

REMOVE CONCRETE DECK SURFACE	3,921	SQFT
REMOVE UNSOUND CONCRETE	9.8	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	7,842	SQFT
CLEAN EXPANSION JOINT	84	LF
RAPID SETTING CONCRETE (PATCH)	9.8	CF
FURNISH POLYESTER CONCRETE OVERLAY	392	CF
PLACE POLYESTER CONCRETE OVERLAY	3,921	SQFT
JOINT SEAL (MR 1/2")	84	LF
TREAT BRIDGE DECK	3,921	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	44	GAL

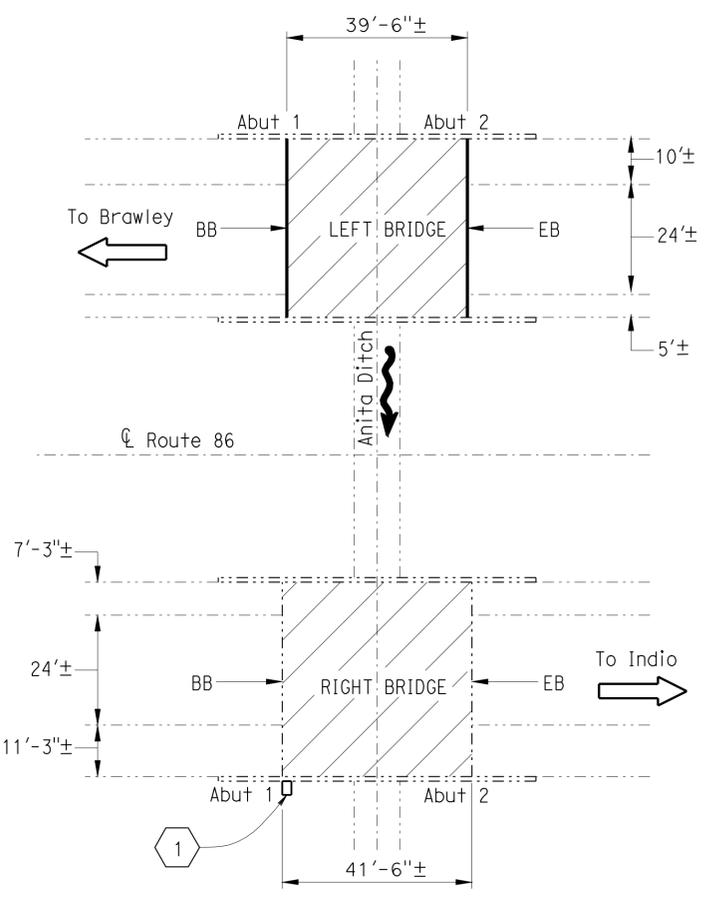
PROJECT NUMBER & PHASE 0800020016

 DESIGN ENGINEER	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> GENERAL PLAN NO. 2			
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	PLANS AND SPECIFICATIONS COMPARED			J. Choi		VARIES		
	QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba								POST MILE	VARIOUS	
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)								ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 2 OF 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	16	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
12-27-11			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER DIOSDADO ACOPA No. 52003 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA					
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.					

**NOTES:**

- Indicates existing.
- Indicates location of existing joint seal removal and placement of new joint seal.
-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
-  Indicates limits of back - fill with slurry mix (7'D x 3'L x 2'W).



**ANITA DITCH**

Br No. 56-0154L/R, Riv, ROUTE 86, PM 0.84  
1" = 20'

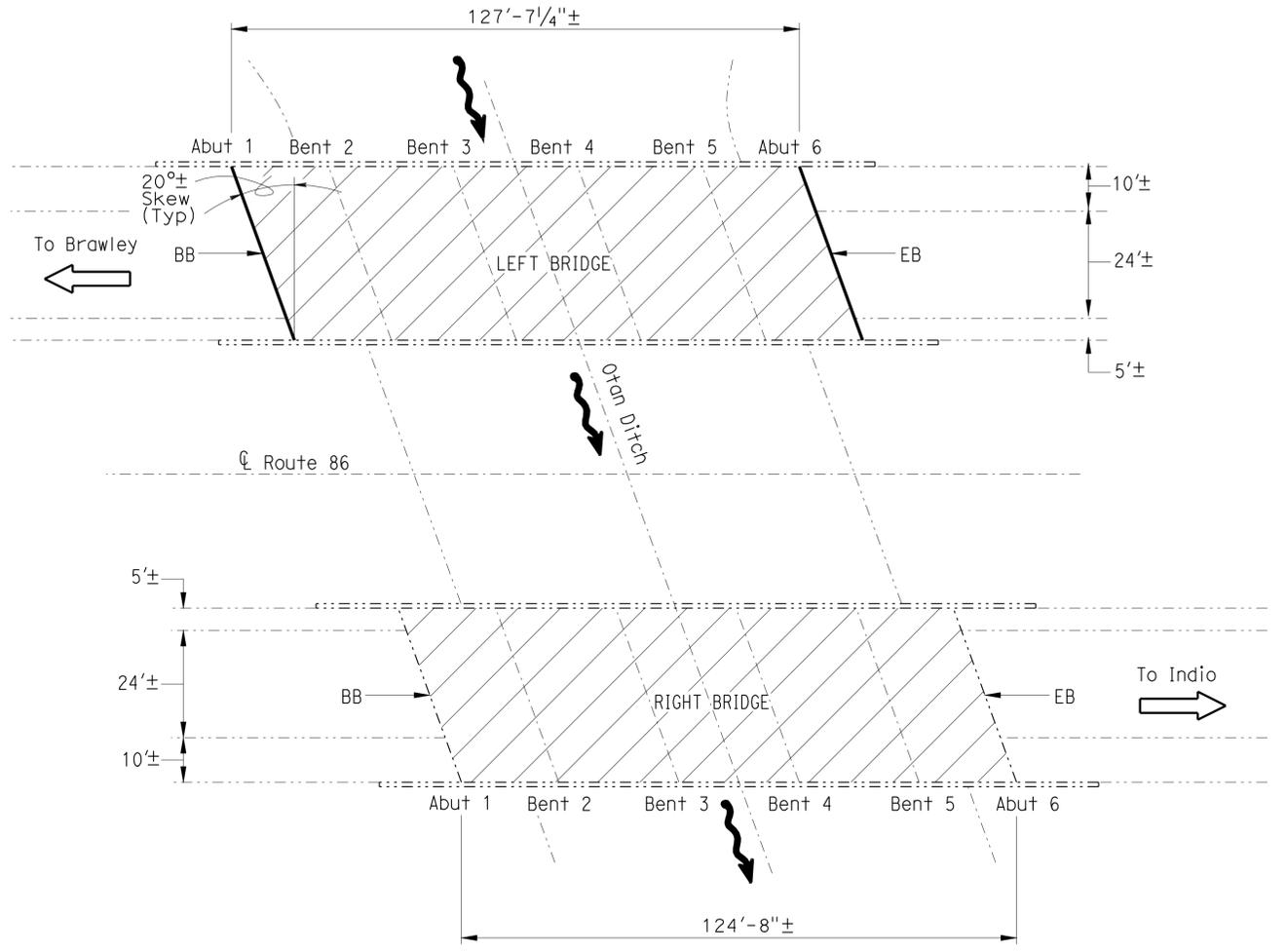
06 - ANITA DITCH

Br No. 56-0154L/R

**QUANTITIES**

PREPARE CONCRETE BRIDGE DECK SURFACE	3,304	SQFT
STRUCTURE BACKFILL (SLURRY CEMENT)	1.6	CY
CLEAN EXPANSION JOINT	79	LF
JOINT SEAL (MR 1/2")	79	LF
TREAT BRIDGE DECK	3,304	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	37	GAL

NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



**OTAN DITCH**

Br No. 56-0153L/R, Riv, ROUTE 86, PM 0.99  
1" = 20'

07 - OTAN DITCH

Br No. 56-0153L/R

**QUANTITIES**

PREPARE CONCRETE BRIDGE DECK SURFACE	9,839	SQFT
CLEAN EXPANSION JOINT	84	LF
JOINT SEAL (MR 1")	84	LF
TREAT BRIDGE DECK	9,839	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	109	GAL

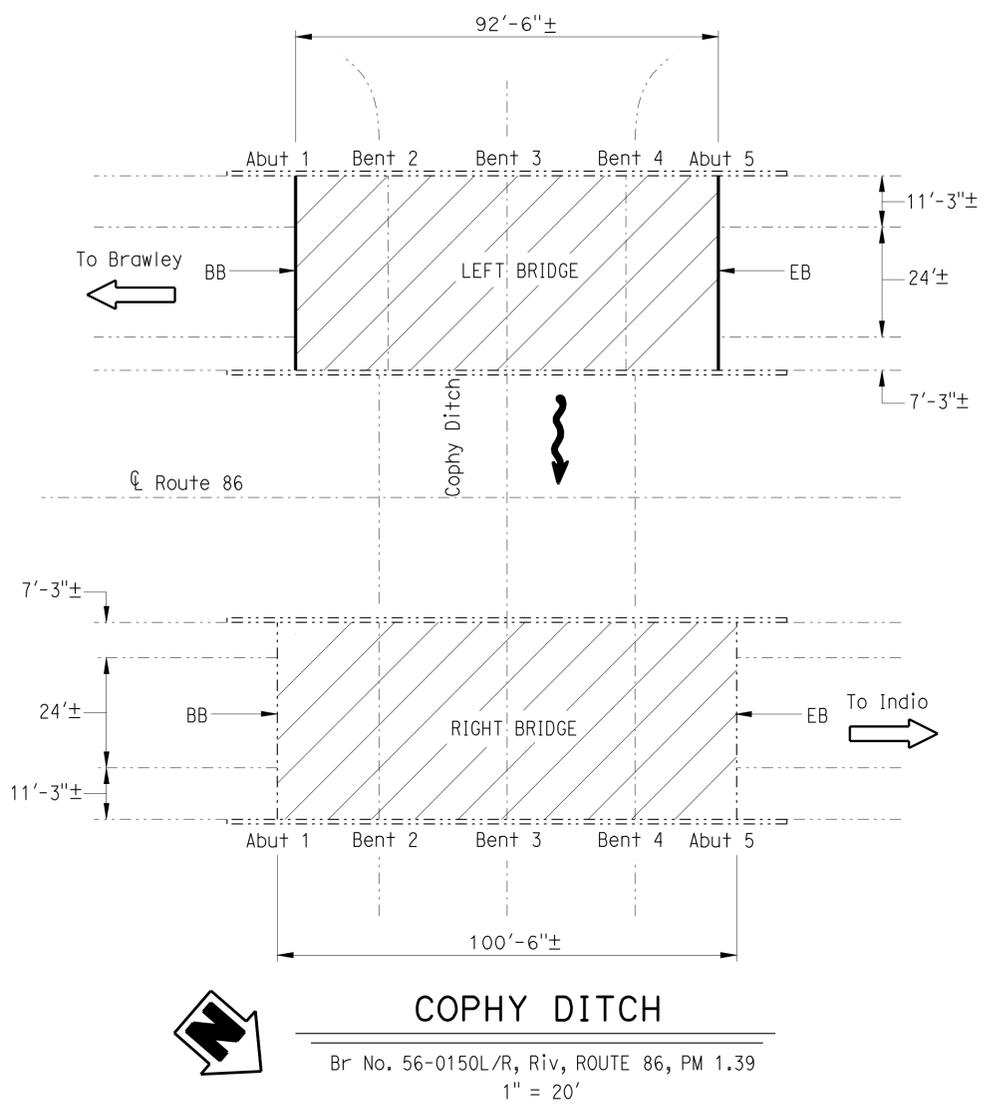
PROJECT NUMBER & PHASE 0800020016

 DESIGN ENGINEER 9-6-11	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> GENERAL PLAN NO. 3
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	CHECKED J. Choi			POST MILE	
QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba					ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3		CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES 4-27-11 5-17-11 6-17-11 8-31-11 9-6-11 9-14-11										
										SHEET 3 OF 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	17	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
12-27-11			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER DIOSDADO ACOPA No. 52003 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA					
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.					

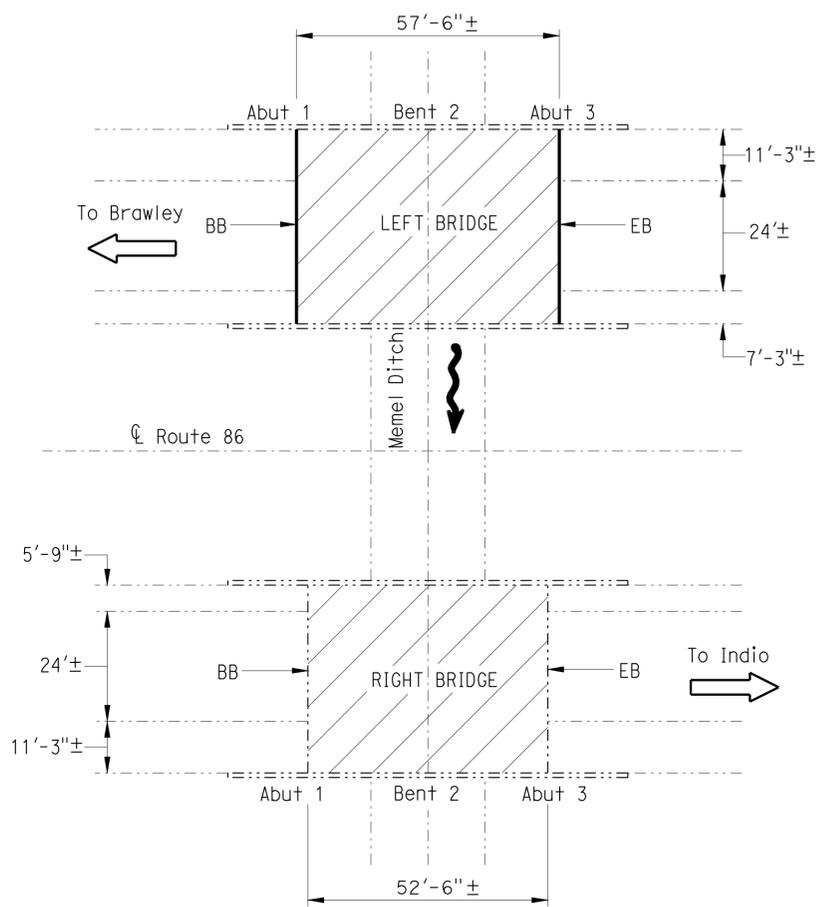
**NOTES:**

- Indicates existing.
- Indicates location of existing joint seal removal and placement of new joint seal.
- Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.



**COPHY DITCH**  
 Br No. 56-0150L/R, Riv, ROUTE 86, PM 1.39  
 1" = 20'

08 - COPHY DITCH	Br No. 56-0150L/R
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	8,203 SQFT
CLEAN EXPANSION JOINT	86 LF
JOINT SEAL (MR 1/2")	86 LF
TREAT BRIDGE DECK	8,203 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	91 GAL



**MEMEL DITCH**  
 Br No. 56-0149L/R, Riv, ROUTE 86, PM 1.58  
 1" = 20'

09 - MEMEL DITCH	Br No. 56-0149L/R
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	4,801 SQFT
CLEAN EXPANSION JOINT	86 LF
JOINT SEAL (MR 1/2")	86 LF
TREAT BRIDGE DECK	4,801 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	53 GAL

**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PROJECT NUMBER & PHASE 0800020016

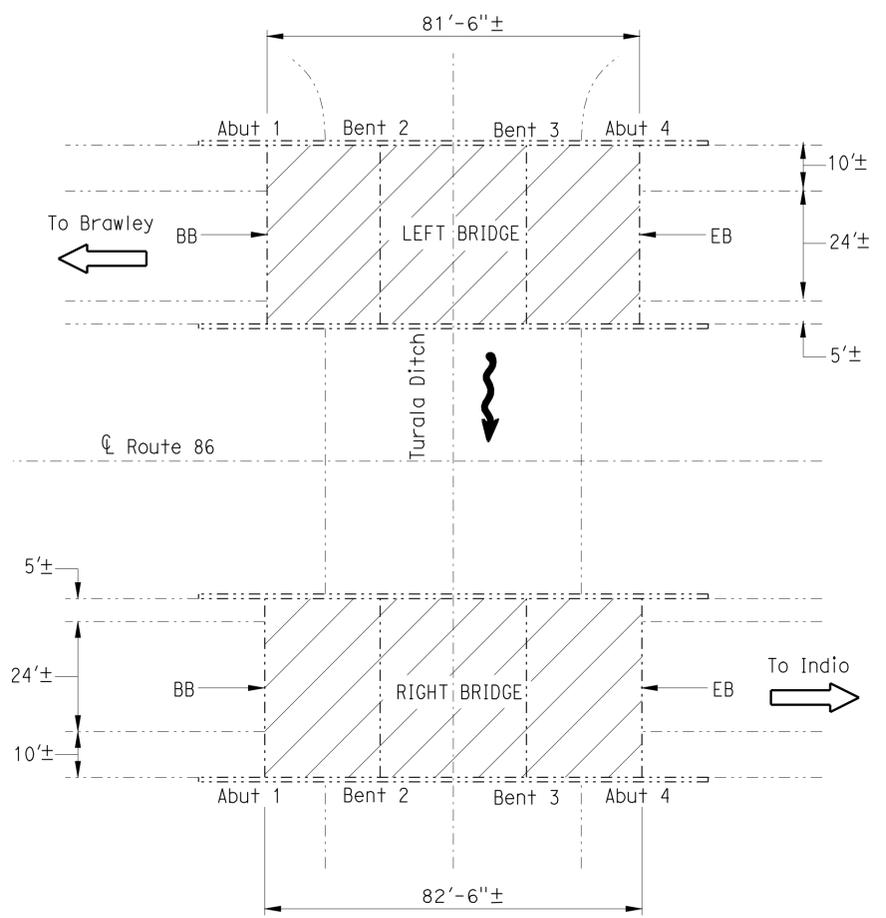
 DESIGN ENGINEER	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> GENERAL PLAN NO. 4		
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	CHECKED J. Choi			Varies			
	QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba			J. Choi			Various			
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)								ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 4 OF 9

USERNAME => s128843 DATE PLOTTED => 27-DEC-2011 TIME PLOTTED => 11:13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	18	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
12-27-11			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER DIOSDADO ACOBA No. 52003 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA					
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.					

**NOTES:**

- Indicates existing.
-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
-  Indicates limits of back - fill with slurry mix (4'D x 2'L x 2'W).

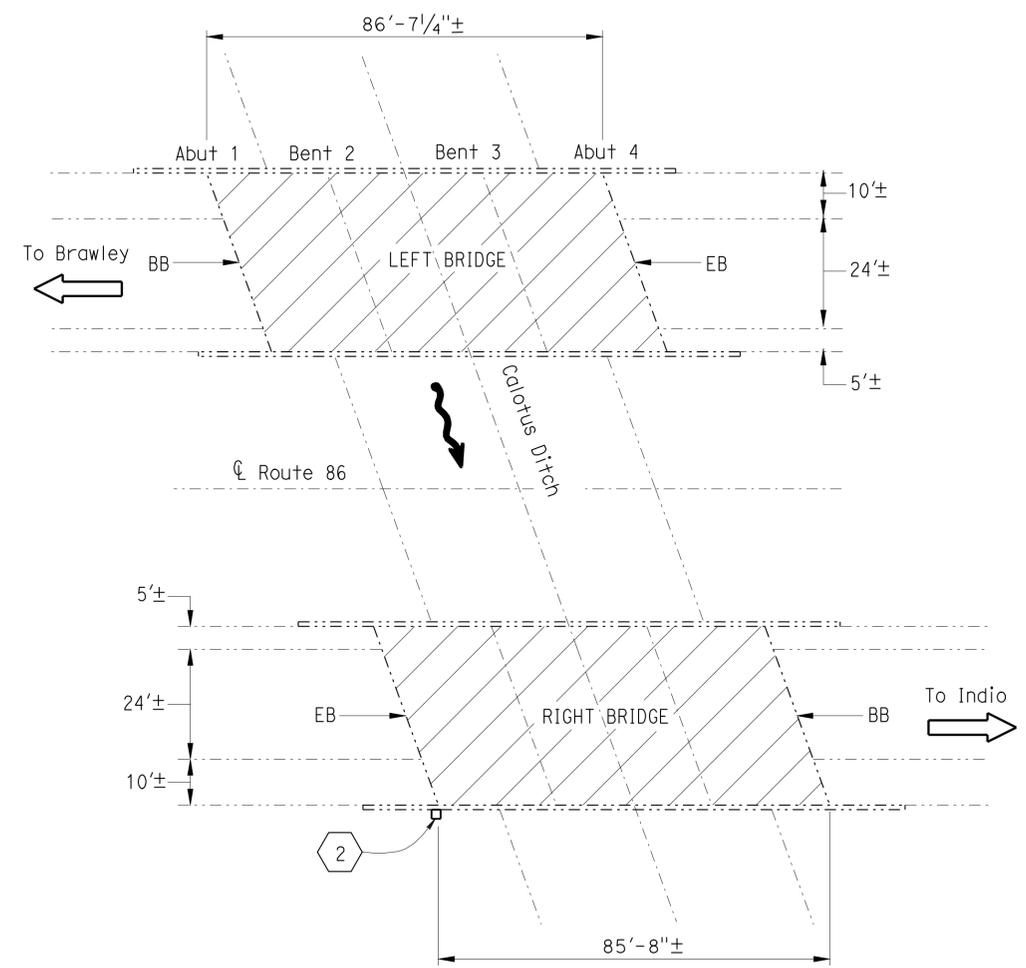


**TURALA DITCH**

Br No. 56-0148L/R, Riv, ROUTE 86, PM 1.82  
1" = 20'

10 - TURALA DITCH Br No. 56-0148L/R

QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	6,396 SQFT
TREAT BRIDGE DECK	6,396 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	71 GAL



**CALOTUS DITCH**

Br No. 56-0147L/R, Riv, ROUTE 86, PM 2.01  
1" = 20'

11 - CALOTUS DITCH Br No. 56-0147L/R

QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	6,719 SQFT
STRUCTURE BACKFILL (SLURRY CEMENT)	0.6 CY
TREAT BRIDGE DECK	6,719 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	75 GAL

**NOTE:**  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PROJECT NUMBER & PHASE 0800020016

 DESIGN ENGINEER 9-6-11	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>DIVISION OF MAINTENANCE</b> <b>STRUCTURE MAINTENANCE DESIGN</b>	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> <b>GENERAL PLAN NO. 5</b>								
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	CHECKED J. Choi			Varies									
QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba						POST MILE	Various									
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)							ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1"> <tr> <td>4-27-11</td> <td>5-18-11</td> <td>6-17-11</td> <td>8-3-11</td> <td>9-7-11</td> <td>9-14-11</td> </tr> </table>	4-27-11	5-18-11	6-17-11	8-3-11	9-7-11	9-14-11	SHEET 5 OF 9
4-27-11	5-18-11	6-17-11	8-3-11	9-7-11	9-14-11													

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	19	22

REGISTERED CIVIL ENGINEER	DATE
12-27-11	9-6-11
PLANS APPROVAL DATE	

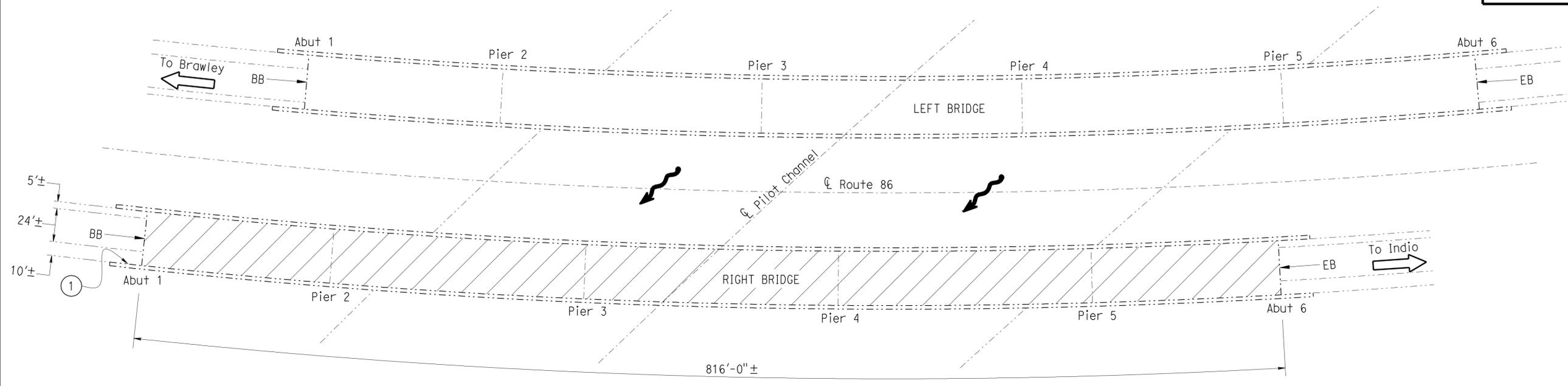
REGISTERED PROFESSIONAL ENGINEER
DIOSDADO ACOPA
No. 52003
Exp. 12-31-12
CIVIL

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.

**NOTES:**

- Indicates existing.
-  Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
-  Indicates limits of back - fill with 3 sack rock slurry mix (5'D x 12'L x 3'W).
-  Indicates limits of back - fill with 3 sack rock slurry mix (2'D x 6'L x 4'W).

- ① Paint "Br No. 56-0777R" and paint "COACHELLA VALLEY CHANNEL BRIDGE".
- ② Paint "Br No. 56-0758L" and paint "ROUTE 86/111 SEPARATION OH".
- ③ Paint "Br No. 56-0758R" and paint "ROUTE 86/111 SEPARATION OH".



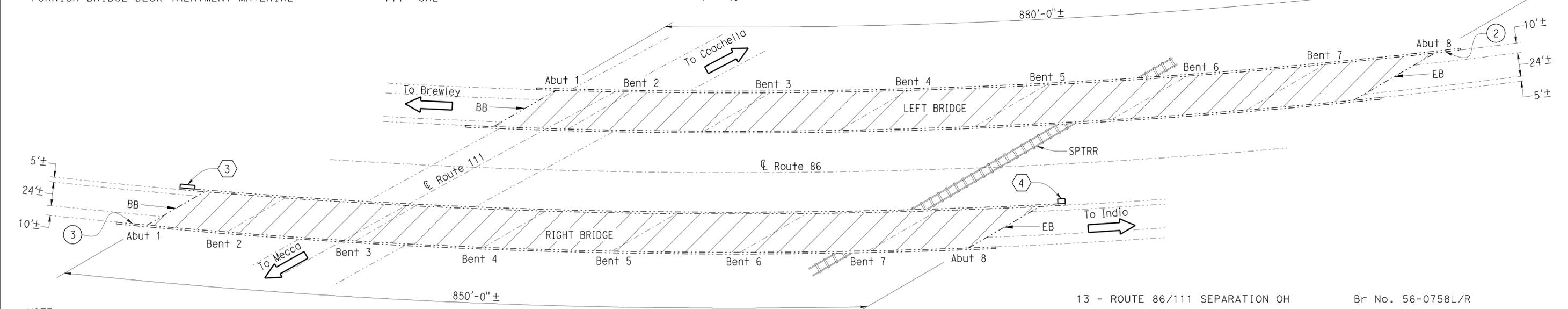
12 - COACHELLA VALLEY CHANNEL  
 Br No. 56-0777R

**QUANTITIES**

PREPARE CONCRETE BRIDGE DECK SURFACE	15,912	SQFT
TREAT BRIDGE DECK	15,912	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	177	GAL

**COACHELLA VALLEY CHANNEL**

Br No. 56-0777R, Riv, ROUTE 86, PM R9.51  
 1" = 40'



13 - ROUTE 86/111 SEPARATION OH  
 Br No. 56-0758L/R

**QUANTITIES**

PREPARE CONCRETE BRIDGE DECK SURFACE	67,111	SQFT
STRUCTURE BACKFILL (SLURRY CEMENT)	8.4	CY
TREAT BRIDGE DECK	67,111	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	746	GAL

**ROUTE 86/111 SEPARATION OH**

Br No. 56-0758L/R, Riv, ROUTE 86, PM R12.10  
 1" = 50'

**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

 DESIGN ENGINEER	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> GENERAL PLAN NO. 6
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	PLANS AND SPECIFICATIONS COMPARED			J. Choi	
	QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba					Various		

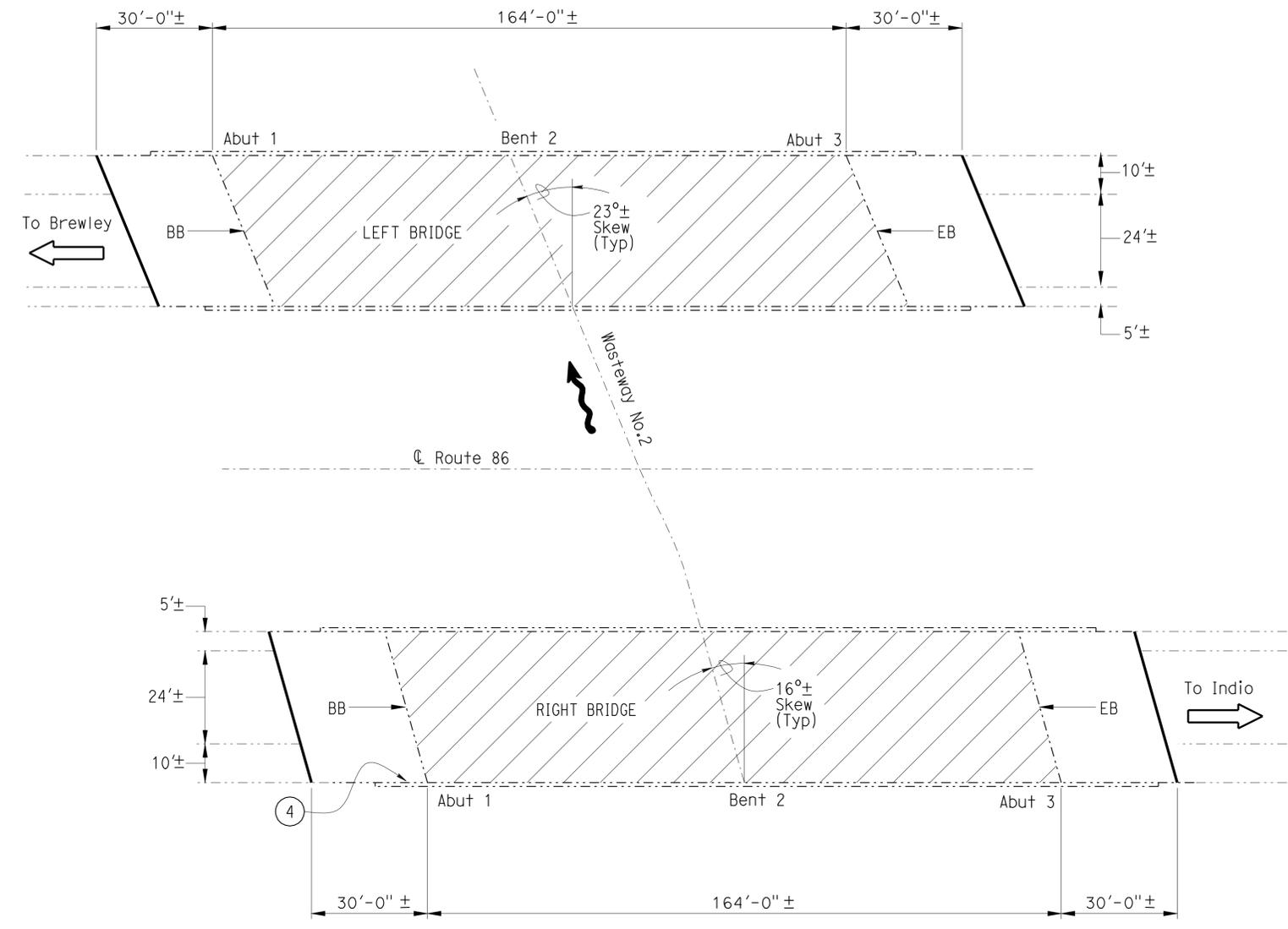
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 4-27-11 4-28-11 5-18-11 6-13-11 8-3-11 9-7-11 9-14-11	SHEET 6 OF 9
--	--	---------	-----------------------	---	---	--------------

FILE => 08\_0p6801\_fg.p.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	20	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
PLANS APPROVAL DATE			12-27-11		
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.					



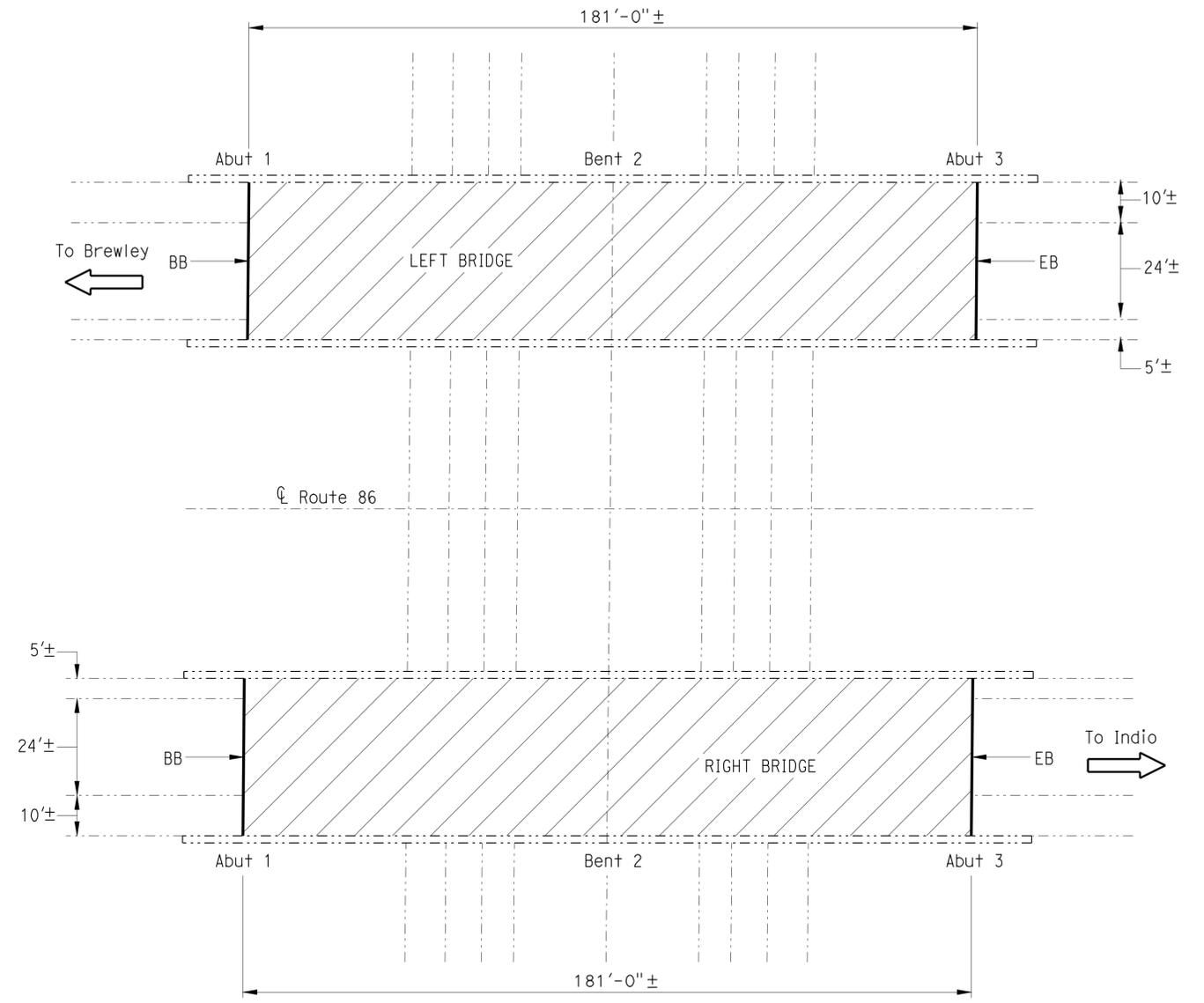
- NOTES:
- Indicates existing.
  - Indicates location of existing joint seal removal and placement of new joint seal.
  - Indicates limits of prepare and treat bridge deck with high molecular weight methacrylate.
  - ④ Paint "Br. No. 56-07589R" and paint "WASTEWAY NO.2".



**WASTEWAY NO.2**  
 Br No. 56-0759L/R, RIV, Route 86, PM R18.50  
 1" = 20'

14 - WASTEWAY NO.2	BR. NO. 56-0759L/R
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	12,792 SQFT
CLEAN EXPANSION JOINT	168 LF
JOINT SEAL (MR 1")	168 LF
TREAT BRIDGE DECK	12,792 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	142 GAL

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



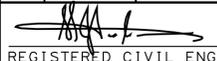
**DILLON ROAD UC**  
 Br No. 56-0760L/R, RIV, Route 86, PM R22.16  
 1" = 20'

15 - DILLON ROAD UC	BR. NO. 56-0760L/R
QUANTITIES	
PREPARE CONCRETE BRIDGE DECK SURFACE	14,118 SQFT
CLEAN EXPANSION JOINT	150 LF
JOINT SEAL (MR 1")	150 LF
TREAT BRIDGE DECK	14,118 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	157 GAL

PROJECT NUMBER & PHASE 0800020016

 DESIGN ENGINEER 9-6-11	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	LAYOUT	BY N. Kelley	CHECKED M. Hashimoto	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> GENERAL PLAN NO. 7					
	DETAILS	BY N. Kelley	CHECKED D. Acoba	SPECIFICATIONS	BY J. Choi	CHECKED J. Choi			VARIES	POST MILE	REVISION DATES 4-27-11 4-28-11 5-31-11 6-13-11 8-3-11 9-7-11 9-14-11				
	QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba						J. Choi	VARIOUS		SHEET 7 OF 9			

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	21	22


 REGISTERED CIVIL ENGINEER DATE 9-6-11

PLANS APPROVAL DATE 12-27-11

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

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.

JOINT SEAL TABLE							
BRIDGE NUMBER	BRIDGE NAME	LOCATION		MINIMUM "MR" (in)	APPROXIMATE LENGTH (ft)	EXISTING WATERSTOP	APPROX DEPTH TO CLEAN EXP JOINT (in)
		Abut	BB				
56-0163L	TRAVERTINE DITCH	Abut 1	BB	1/2	40.8	No	12
		Abut 3	EB	1/2	40.8	No	12
56-0161L	DINAL DITCH	Abut 1	BB	1/2	40.2	No	12
		Abut 3	EB	1/2	40.2	No	12
56-0159L	PERONE DITCH	Abut 1	BB	1/2	39.5	No	12
		Abut 3	EB	1/2	39.5	No	12
56-0158L	SOSTO DITCH	Abut 1	BB	1/2	39.0	No	12
		Abut 3	EB	1/2	39.0	No	12
56-0156L	SUGINO DITCH	Abut 1	BB	1/2	42.0	No	12
		Abut 5	EB	1/2	42.0	No	12
56-0154L	ANITA DITCH	Abut 1	BB	1/2	39.5	No	12
		Abut 2	EB	1/2	39.5	No	12
56-0153L	OTAN DITCH	Abut 1	BB	1	42.0	No	12
		Abut 6	EB	1	42.0	No	12
56-0150L	COPHY DITCH	Abut 1	BB	1/2	43.0	No	12
		Abut 5	EB	1/2	43.0	No	12
56-0149L	MEMEL DITCH	Abut 1	BB	1/2	43.0	No	12
		Abut 3	EB	1/2	43.0	No	12
56-0759L	WASTEWAY NO. 2	Abut 1	AS	1	42.9	Yes	8
		Abut 3	AS	1	42.9	Yes	8
56-0759R	WASTEWAY NO. 2	Abut 1	AS	1	41.1	Yes	8
		Abut 3	AS	1	41.1	Yes	8
56-0760L	DILLON ROAD UC	Abut 1	BB	1	39.5	No	45
		Abut 3	EB	1	39.5	No	45
56-0760R	DILLON ROAD UC	Abut 1	BB	1	39.5	No	45
		Abut 3	EB	1	39.5	No	45

DECK REPAIR TABLE			
REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NUMBER	BRIDGE NAME	APPROXIMATE AREA DAMAGED (PERCENT)	APPROXIMATE DEPTH DAMAGE (INCHES)
TRAVERTINE DITCH	56-0163R	1	3
DINAL DITCH	56-0161R	1	3
PERONE DITCH	56-0159R	1	3
SOSTO DITCH	56-0158R	1	3
SUGINO DITCH	56-0156R	1	3

**LEGEND:**

AS - Joint seal location between approach slab and sleeper slab  
 BB - Paving Notch at beginning of bridge  
 EB - Paving Notch at end of bridge

**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PROJECT NUMBER & PHASE 0800020016

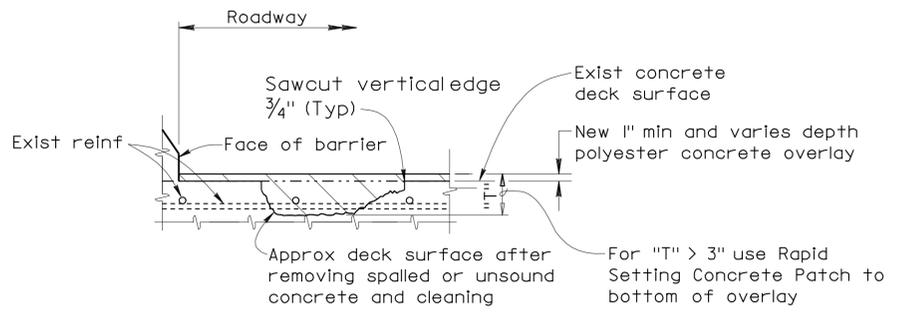
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)	DESIGN	BY M. Hashimoto	CHECKED D. Acoba	<b>STATE OF CALIFORNIA</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>DIVISION OF MAINTENANCE</b> <b>STRUCTURE MAINTENANCE DESIGN</b>	BRIDGE NO.	<b>ROUTE 86 BRIDGES</b> <b>JOINT SEAL DETAILS NO. 1</b>	
	DETAILS	BY N. Kelley	CHECKED D. Acoba			Varies		
	QUANTITIES	BY M. Hashimoto	CHECKED D. Acoba			Various		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 4-27-11 5-18-11 8-31-11 9-7-11 9-14-11	SHEET 8 OF 9

FILE => 08\_0p6801\_hjset1.dgn

USERNAME => s123631 DATE PLOTTED => 27-DEC-2011 TIME PLOTTED => 10:53

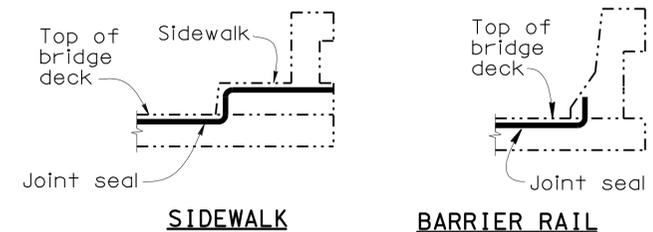
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	86/86S	Var	22	22
REGISTERED CIVIL ENGINEER			DATE	9-6-11	
12-27-11			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER DIOSDADO ACOBA No. 52003 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.					

NOTES:  
 ----- Indicates existing.  
 Indicates limits of new polyester concrete.



**DECK REPAIR DETAIL-OVERLAY**

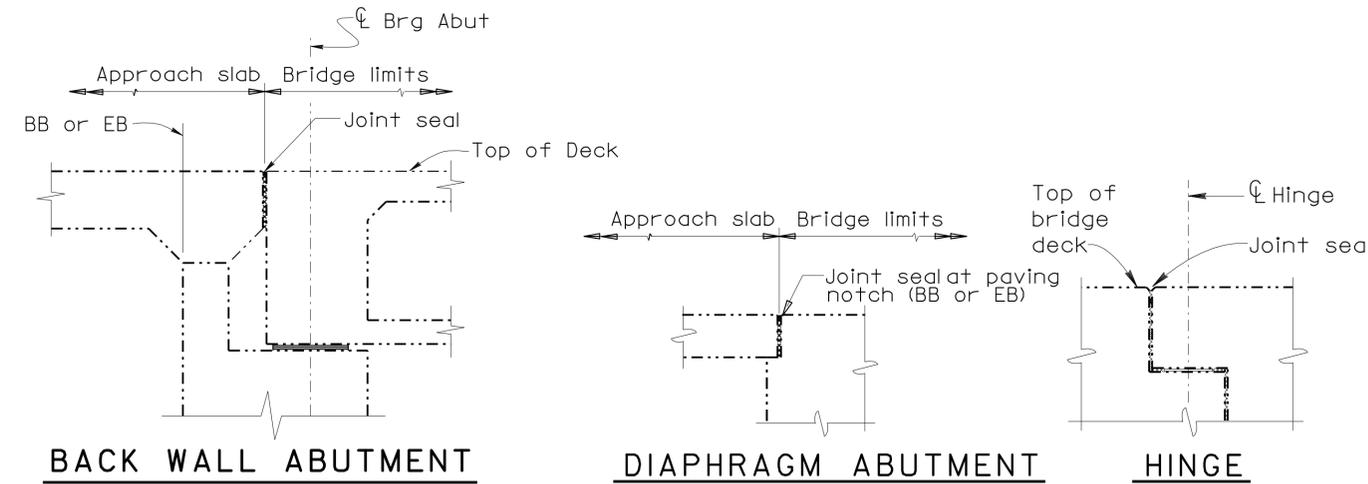
Note: Reinforcement may be encountered during deck concrete removal.



**JOINT SEAL AT LOW SIDE OF DECK**

Notes: Details shown for illustration purposes only.  
 For use only where deck joint matches the sidewalk, curb or barrier rail joint.

- 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.
  - 5) For details not shown, see 



- The following notes apply to JOINT SEAL TYPE A:
- 1) Install Type A joint seal 3" up into rail on the low side of deck where joint matches curb or rail joint.
  - 2) For details not shown, see 

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PROJECT NUMBER & PHASE 0800020016

DESIGN	BY	M. Hashimoto	CHECKED	D. Acoba	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Varies		ROUTE 86 BRIDGES JOINT SEAL DETAILS NO. 2		
	DETAILS	BY	N. Kelley	CHECKED			D. Acoba	POST MILE	Various			
	QUANTITIES	BY	M. Hashimoto	CHECKED			D. Acoba					
STRUCTURES MAINTENANCE GENERAL PLAN & DETAIL SHEET (ENGLISH) (REV. 10/17/07)					ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 08608 EA 0P6801	DISREGARD PRINTS BEARING EARLIER REVISION DATES			REVISION DATES	SHEET 9 OF 9

USERNAME => s123631 DATE PLOTTED => 27-DEC-2011 TIME PLOTTED => 10:53