

INDEX OF PLANS

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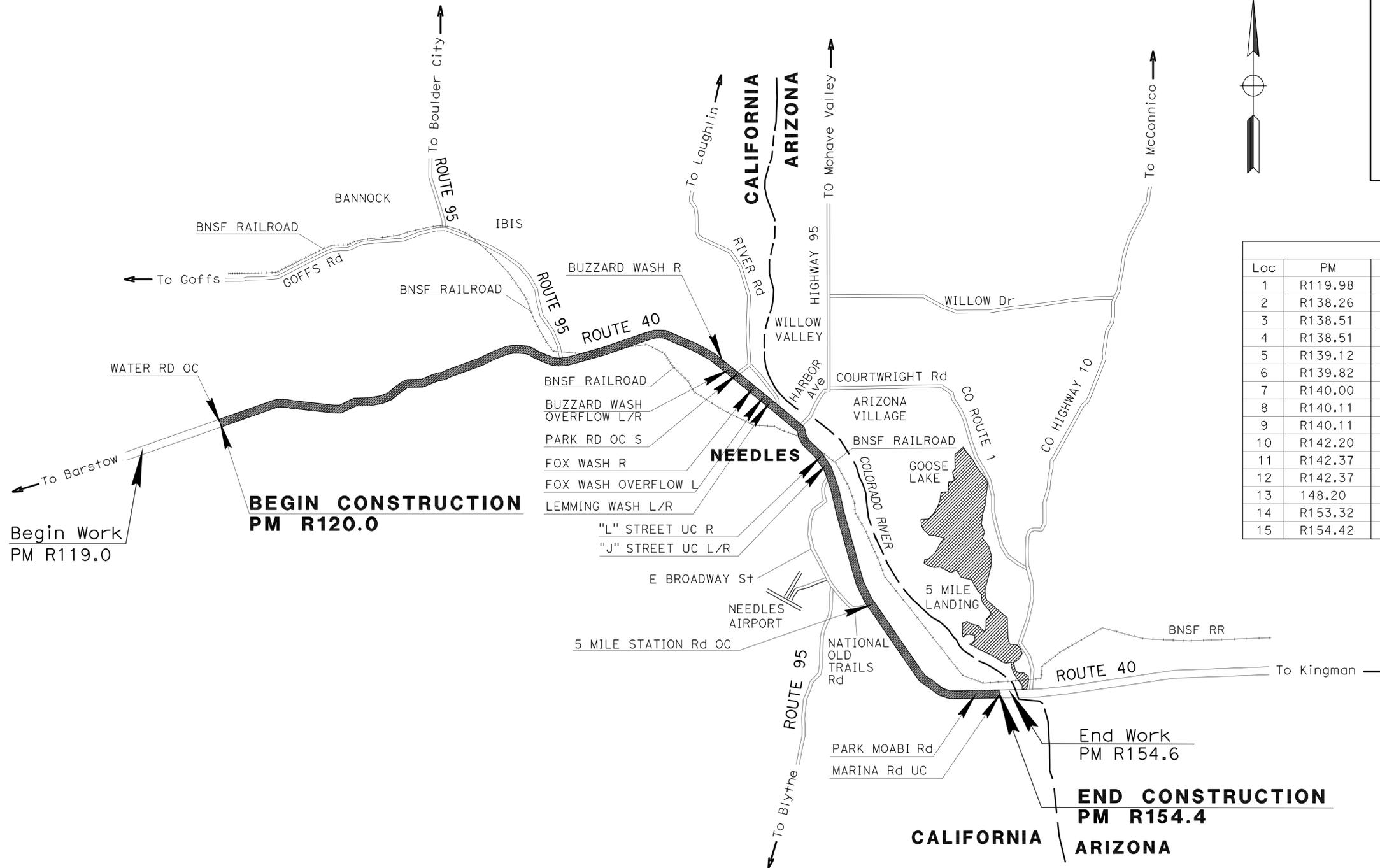
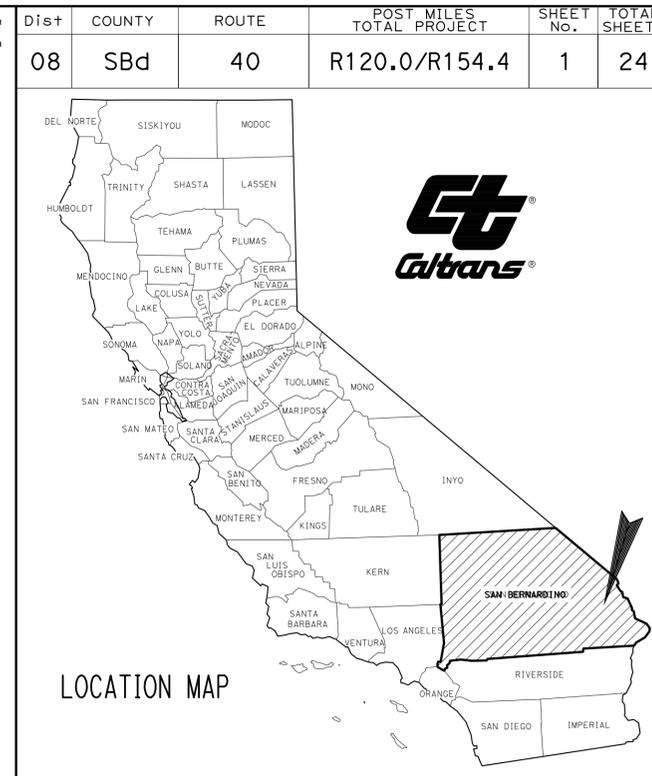
STRUCTURE PLANS

17-24	ROUTE 40 BRIDGES
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THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA BRIM-040-2(056)119E  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN SAN BERNARDINO COUNTY**  
**NEAR NEEDLES**  
**FROM WATER ROAD OVERCROSSING**  
**TO MARINA ROAD UNDERCROSSING**

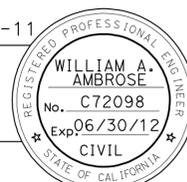
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



BRIDGE LOCATIONS			
Loc	PM	BRIDGE No.	NAME
1	R119.98	54 0856	WATER Rd OC
2	R138.26	54 0700R	BUZZARD WASH
3	R138.51	54 0701L	BUZZARD WASH OVERFLOW
4	R138.51	55 0701R	BUZZARD WASH OVERFLOW
5	R139.12	54 0702S	PARK Rd OC
6	R139.82	54 0704R	FOX WASH
7	R140.00	54 0705L	FOX WASH OVERFLOW
8	R140.11	54 0706L	LEMMING WASH
9	R140.11	54 0706R	LEMMING WASH
10	R142.20	54 0820R	"L" STREET UC
11	R142.37	54 0814L	"J" STREET UC
12	R142.37	54 0814R	"J" STREET UC
13	148.20	54 0683	5 MILE STATION Rd OC
14	R153.32	54 0669	PARK MOABI Rd
15	R154.42	54 0670	MARINA RD UC

PROJECT MANAGER  
**KEVIN CHEN**  
 DESIGN ENGINEER  
**WILLIAM AMBROSE**

*William Ambrose* 03-01-11  
 PROJECT ENGINEER DATE  
 REGISTERED CIVIL ENGINEER  
**May 2, 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.



CONTRACT No.	<b>08-OP1804</b>
PROJECT ID	<b>0800020046</b>

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

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	2	24

3-01-11  
 REGISTERED CIVIL ENGINEER DATE  
 5-2-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 CHRIS HARDIMON  
 No. C66092  
 Exp. 06/30/12  
 CIVIL  
 STATE OF CALIFORNIA

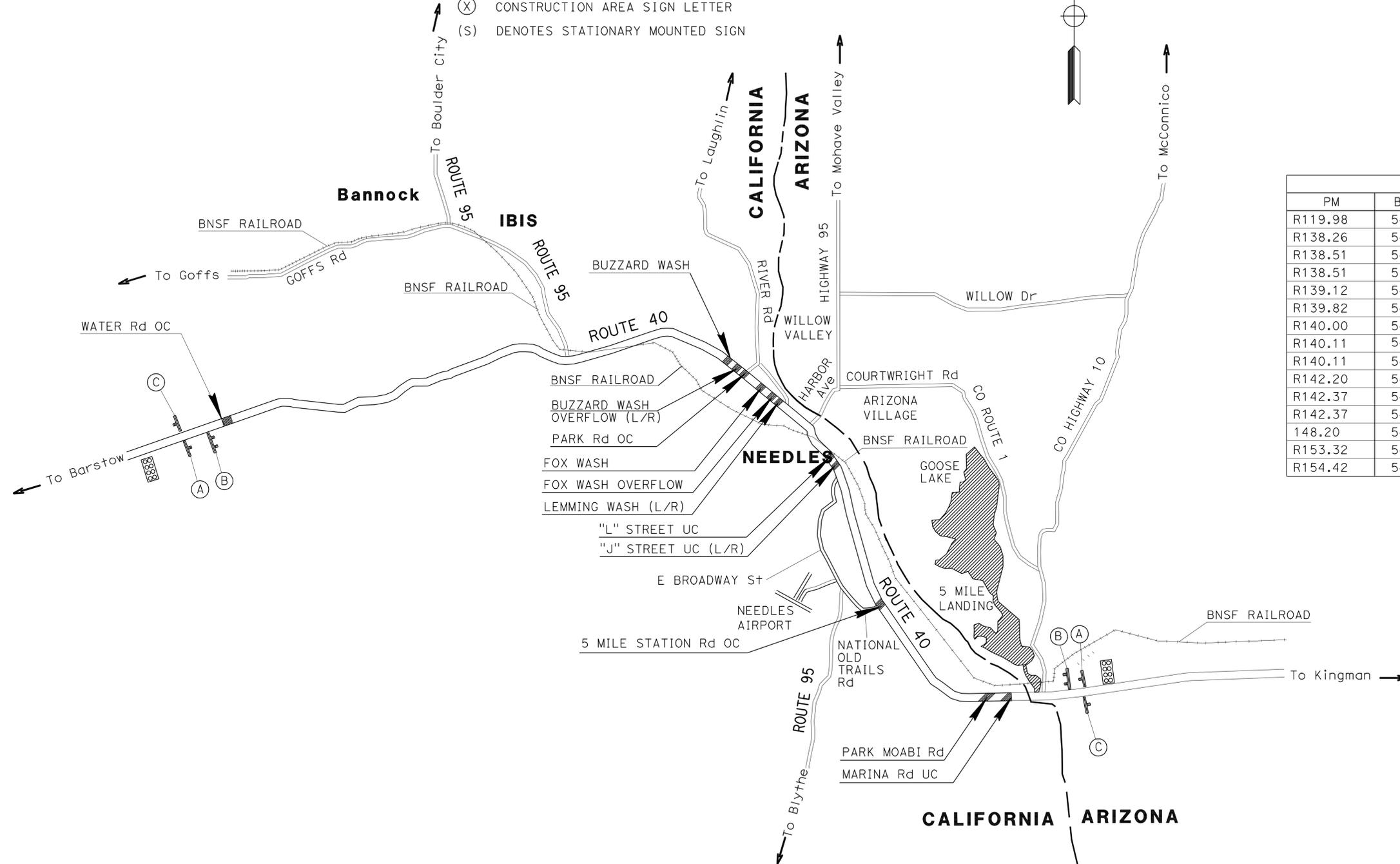
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**NOTES:**

- LOCATIONS OF CONSTRUCTION SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- REFER TO STD PLANS T10, T14 AND T15 FOR TRAFFIC CONTROL REQUIREMENTS.

**LEGEND:**

- CONSTRUCTION AREA SIGN (ONE POST)
- CONSTRUCTION AREA SIGN (TWO POSTS)
- CONSTRUCTION AREA
- PORTABLE CHANGEABLE MESSAGE SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION AREA SIGN LETTER
- (S) DENOTES STATIONARY MOUNTED SIGN



BRIDGE LOCATIONS		
PM	BRIDGE NO	NAME
R119.98	54 0856	WATER RD OC
R138.26	54 0700R	BUZZARD WASH
R138.51	54 0701L	BUZZARD WASH OVERFLOW
R138.51	55 0701R	BUZZARD WASH OVERFLOW
R139.12	54 0702S	PARK RD OC
R139.82	54 0704R	FOX WASH
R140.00	54 0705L	FOX WASH OVERFLOW
R140.11	54 0706L	LEMMING WASH
R140.11	54 0706R	LEMMING WASH
R142.20	54 0820R	"L" STREET UC
R142.37	54 0814L	"J" STREET UC
R142.37	54 0814R	"J" STREET UC
148.20	54 0683	5 MILE STATION RD OC
R153.32	54 0669	PARK MOABI RD
R154.42	54 0670	MARINA RD UC

CONSTRUCTION AREA SIGNS (S)					
SIGN No.	SIGN CODE	PANEL SIZE	NO. OF POSTS AND SIZE	TOTAL No. OF SIGNS	SIGN MESSAGE
(A)	W 20-1	36" X 36"	1 - 4" X 6"	2	ROAD WORK AHEAD
(B)	C40(CA)	144" X 60"	2 - 6" X 8"	2	TRAFFIC FINES DOUBLES IN CONSTRUCTION ZONES
(C)	C14(CA)	48" X 24"	1 - 4" X 6"	2	END ROAD WORK
TOTAL				6	

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC DESIGN B

FUNCTIONAL SUPERVISOR  
 LARRY SARTORI

CALCULATED/DESIGNED BY  
 CHECKED BY

J. WILLIAM  
 C. HARDIMON

REVISED BY  
 DATE REVISED

x  
 x  
 x  
 x  
 x



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	4	24
			4-06-11	DATE	
REGISTERED CIVIL ENGINEER			DATE		
5-2-11			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>					

### PAVEMENT DELINEATION QUANTITIES

LOCATION ROUTE 40 BRIDGE NUMBER	DETAIL No. DETAIL No.	POST MILE	DISTANCE FT	REMOVE PAVEMENT MARKER EA	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)			PAVEMENT MARKER				REMOVE THERMO PLASTIC TRAFFIC STRIPE	REMOVE THERMOPLASTIC TRAFFIC STRIPE	
					4 In YELLOW	4 In WHITE	8 In WHITE	NON REFLECTIVE	RETROREFLECTIVE			YELLOW	WHITE	
					LF	LF	LF	TYPE A	TYPE D	TYPE G	TYPE H	4 IN	4 IN	8 IN
					EA	EA	EA	EA	EA	EA	EA	LF	LF	
54 0706L	27B	140.11	150	-	-	150	-	-	-	-	-	-	150	-
	13M	140.11	150	21	-	150	-	17	-	4	-	-	38	-
	25	140.11	150	4	150	-	-	-	-	-	4	150	-	-
54 0820R	27B	142.20	137	-	-	137	-	-	-	-	-	-	137	-
	13M	142.20	137	21	-	137	-	17	-	4	-	-	34	-
	25	142.20	137	4	137	-	-	-	-	-	4	137	-	-
54 0184L	36	142.20	548	25	-	-	1096	-	-	25	-	-	-	2192
	27B	142.37	142	-	-	142	-	-	-	-	-	-	142	-
	13M	142.37	142	21	-	142	-	17	-	4	-	-	36	-
54 0184R	25	142.37	142	4	142	-	-	-	-	-	4	142	-	-
	27B	142.37	137	-	-	137	-	-	-	-	-	-	137	-
	13M	142.37	137	21	-	137	-	17	-	4	-	-	34	-
54 0670	25	142.37	137	4	137	-	-	-	-	-	4	137	-	-
	22	148.20	226	21	226	-	-	-	21	-	-	452	-	-
	22	153.32	264	24	264	-	-	-	24	-	-	528	-	-
54 0670	27B	154.42	292	-	-	292	-	-	-	-	-	-	292	-
	25	154.42	292	7	292	-	-	-	-	-	7	292	-	-
	13M	154.42	292	35	-	292	-	28	-	7	-	-	73	-
SUBTOTAL			3612	212	1348	1716	1096	96	45	48	23	1838	1073	2192
SHEET TOTAL			3612	212	4160			96	116			1838	3265	
GRAND TOTAL			7826	397	8374			202	195			3531	5878	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN B  
 LARRY SARTORI  
 J. WILLIAM  
 C. HARDIMON  
 REVISOR BY DATE  
 REVISOR BY DATE  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 FUNCTIONAL SUPERVISOR  
 LARRY SARTORI  
 BORDER LAST REVISED 7/2/2010

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION QUANTITIES WORK ONLY.



## PAVEMENT DELINEATION QUANTITIES

NO SCALE

**PDQ-2**

LAST REVISION DATE PLOTTED => 02-MAY-2011  
 04-06-11 TIME PLOTTED => 15:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	5	24

*William Ambrose* 03-01-11  
REGISTERED CIVIL ENGINEER DATE

5-2-11  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
WILLIAM AMBROSE  
No. C72098  
Exp. 06/30/12  
CIVIL  
STATE OF CALIFORNIA

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

FUNCTIONAL SUPERVISOR  
WILLIAM AMBROSE

CALCULATED/DESIGNED BY  
CHECKED BY

WILLIAM AMBROSE  
KUANG\_H. CHEN

REVISED BY  
DATE REVISED

**TEMPORARY WATER POLLUTION CONTROL**

DESCRIPTION	UNIT	QUANTITY
CONSTRUCTION SITE MANAGEMENT	LS	LS
TEMPORARY FIBER ROLL	LF	2000

**SUMMARY OF QUANTITIES**

**Q-1**

LAST REVISION | DATE PLOTTED => 02-MAY-2011  
03-01-11 | TIME PLOTTED => 15:01

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	6	24

<i>Ferdinand De La Cruz</i>	4-06-11
REGISTERED ELECTRICAL ENGINEER	DATE
5-2-11	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
FERDINAND DE LA CRUZ
No. E 17215
Exp. 06-30-11
ELECTRICAL

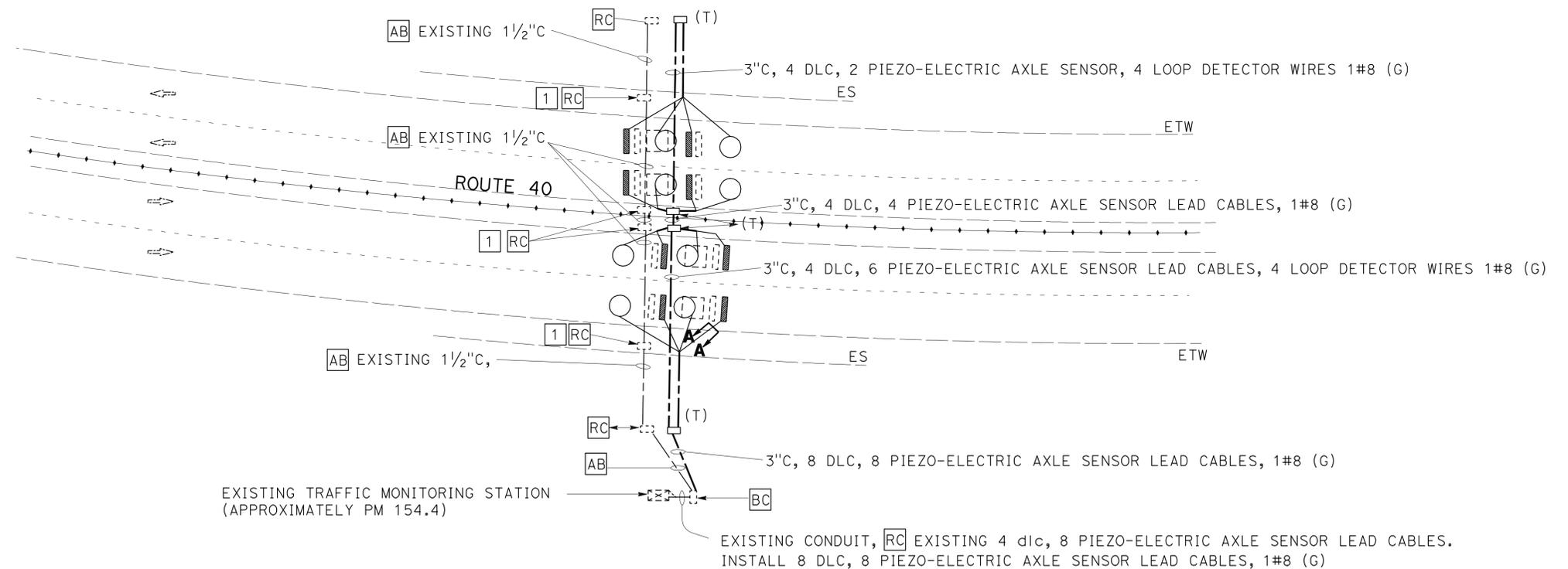
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**GENERAL NOTES (THIS SHEET ONLY):**

- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL LOCATIONS OF EXISTING PIEZO-ELECTRIC AXLE SENSORS AND INDUCTIVE LOOP DETECTORS.
- EXISTING LOOPS DETECTORS AND PIEZO-ELECTRIC AXLE SENSORS SHOWN SHALL BE ABANDONED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 3 WORKING DAYS PRIOR TO INSTALLING INDUCTIVE LOOP DETECTORS AND PIEZO-ELECTRIC AXLE SENSORS.
- FOR PIEZO-ELECTRIC AXLE SENSOR INSTALLATION DETAILS SEE SHEET E-2.
- NEW PIEZO-ELECTRIC AXLE SENSORS LEAD CABLE SHALL NOT BE SPLICED AND SHALL RUN CONTINUOUSLY TO THE EXISTING CABINET.
- FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- TYPE 1 CONDUIT SHALL BE USED FOR SHOULDER TERMINATIONS ONLY.

**PROJECT NOTE (THIS SHEET ONLY):**

- AFTER THE EXISTING PULL BOX IN THE SHOULDER ARE REMOVED, THE CONTRACTOR SHALL FILL THE VOID WITH A 3 SACK SLURRY. THE LAST 4" SHALL BE FILLED WITH ASPHALT CONCRETE OR AS DIRECTED BY THE ENGINEER.



**LEGEND:**

- EXISTING PIEZO-ELECTRIC AXLE SENSOR
- NEW PIEZO-ELECTRIC AXLE SENSORS (SEE E-2 FOR DETAILS)

**MODIFY TRAFFIC MONITORING STATION**

NO SCALE

**E-1**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

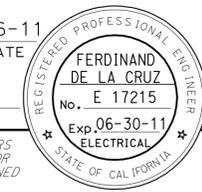


UNIT 2292

PROJECT NUMBER & PHASE

08000200461

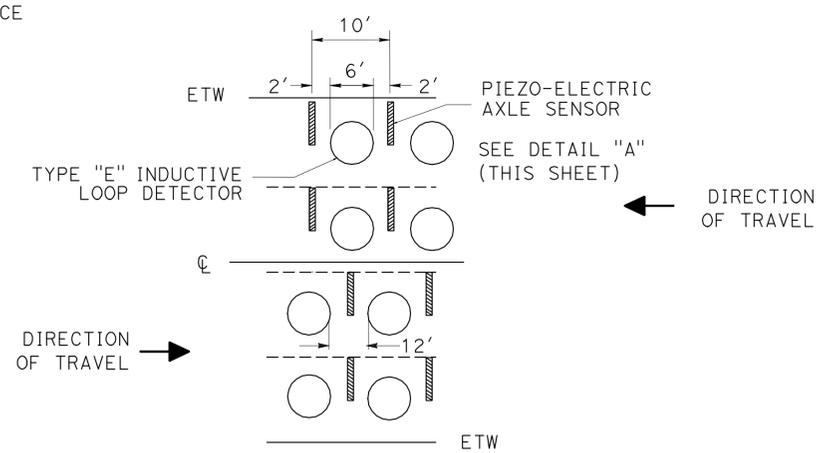
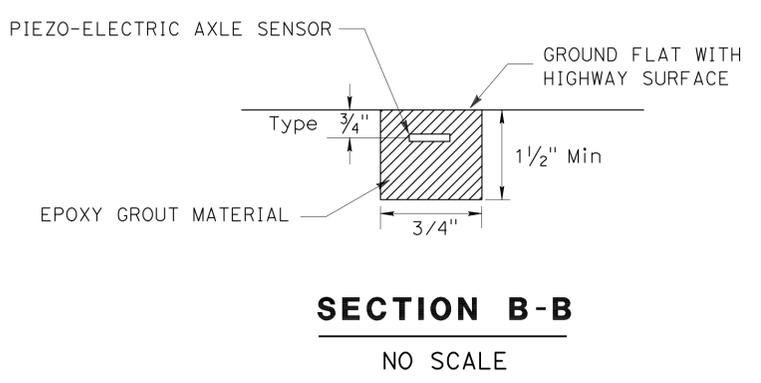
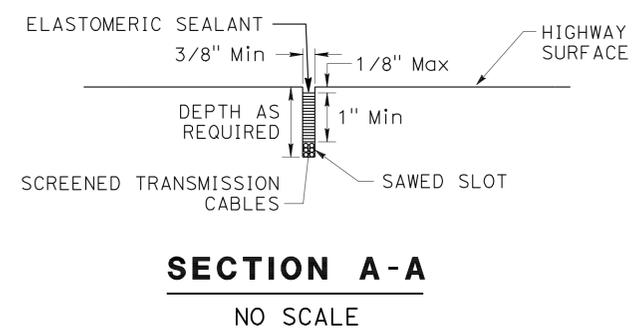
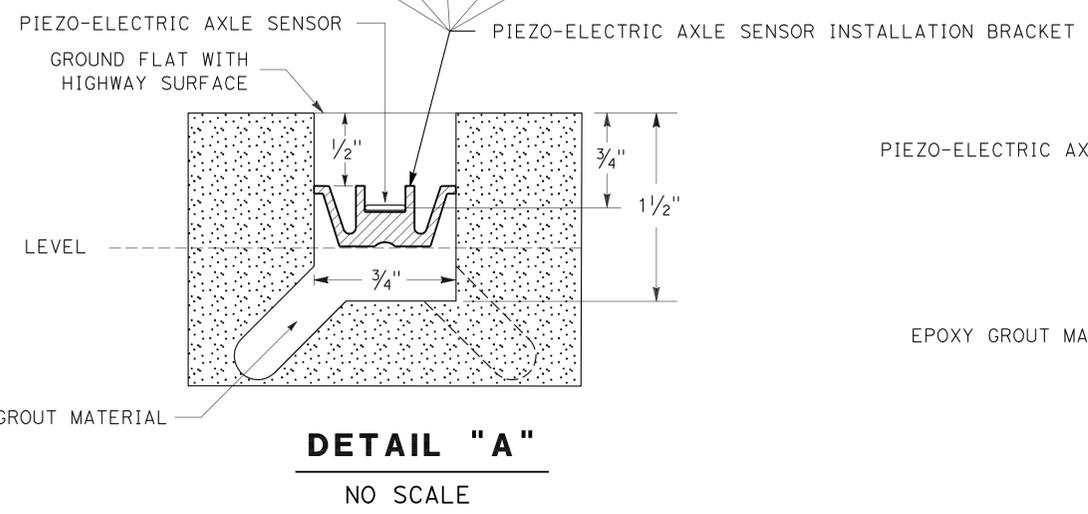
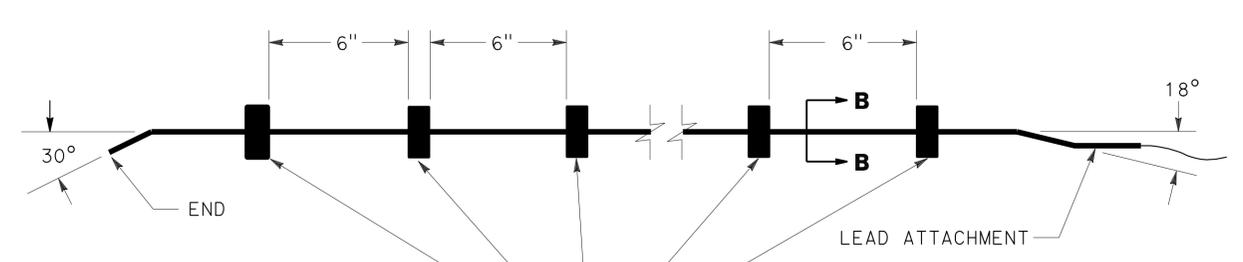
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** ELECTRICAL DESIGN  
FUNCTIONAL SUPERVISOR: FERDINAND DELACRUZ  
CALCULATED/DESIGNED BY: MOHAMMED ELEIWAAT  
CHECKED BY: FERDINAND DE LA CRUZ  
REVISOR: ME (07-21-10)  
ME (03-16-11)  
ME (03-28-11)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	7	24
			4-06-11		
REGISTERED ELECTRICAL ENGINEER			DATE		
5-2-11			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>					

**PIEZO-ELECTRIC AXLE SENSOR INSTALLATION PROCEDURE:**

- MARK THE POSITION OF THE PIEZO-ELECTRIC AXLE SENSORS AS DIRECTED BY THE ENGINEER. PIEZO-ELECTRIC AXLE SENSOR CHANNELS MUST BE PERPENDICULAR TO TRAFFIC.
- MARK THE HOME RUN CUTS AS SHOWN IN THE PIEZO-ELECTRIC AXLE SENSOR INSTALATION DETAIL.
- USING A CONCRETE SAW, CUT THE PIEZO-ELECTRIC AXLE SENSOR CHANNELS 3/4" WIDE BY 1 1/2" DEEP IN A SINGLE PASS. CUTS SHALL BE STRAIGHT AND TRUE.
- DRILL 1/2" Dia HOLES 1" DEEP AT A 45 DEGREE ANGLE AT THE BOTTOM OF EACH PIEZO-ELECTRIC AXLE SENSOR CHANNEL. HOLES SHALL BE 12" APART AND ON ALTERNATING SIDES OF THE CHANNEL.
- WASH OUT THE CHANNELS AND ALL SAW CUTS THOROUGHLY WITH HIGH PRESSURE WATER. DRY COMPLETELY WITH AN AIR COMPRESSOR. IN PCC PAVEMENT ONLY, WIPE OUT THE CHANNELS WITH LACQUER THINNER AND CLEAN COTTON RAGS.
- PLACE 4" DUCT TAPE STRIPS ON THE PAVEMENT AROUND THE CHANNELS.
- ENSURE THAT EACH PIEZO-ELECTRIC AXLE SENSOR IS STRAIGHT AND FLAT. BEND EACH END DOWN SLIGHTLY AND PLACE THE INSTALLATION CLIPS ON THE PIEZO-ELECTRIC AXLE SENSOR EVERY 6" ALONG THE LENGTH. SEE SECTION B-B BELOW.
- BLOCK OFF THE CABLE END OF THE CHANNEL WITH DUCT TAPE TO PREVENT THE EPOXY GROUT FROM FLOWING OUT OF THE CHANNEL.
- ATTACH STATIC MIXING TUBE ONTO CARTRIDGE.
- HALF FILL THE CHANNEL WITH EPOXY GROUT. ENSURE THAT THE BOTTOM OF THE CHANNEL IS COMPLETELY COVERED, AND THAT THE HOLES DRILLED IN STEP 4 ARE FILLED.
- PLACE THE PIEZO-ELECTRIC AXLE SENSOR IN THE CHANNEL 3/4" BELOW THE ROAD SURFACE (AS SHOWN IN SECTION B-B BELOW), WITH NO VOIDS BENEATH THE PIEZO-ELECTRIC AXLE SENSOR.
- COMPLETELY FILL THE CHANNEL WITH EPOXY GROUT. SMOOTH OUT THE EPOXY GROUT ON TOP OF THE PIEZO-ELECTRIC AXLE SENSOR TO ROAD LEVEL, WITH NO TROUGH ON TOP.
- WHEN EPOXY GROUT HAS BEGUN TO SET, REMOVE THE DUCT TAPE FROM THE PAVEMENT. REMOVE THE DUCT SEAL FROM THE END OF THE CHANNEL.
- SEAL ALL SAW CUTS. ELASTOMERIC SEALANT SHALL BE USED ONLY IN ALL CUTS CONTAINING SCREENED TRANSMISSION CABLE.
- REMOVE ANY HIGH SPOTS IN THE EPOXY GROUT WITH A HAND GRINDER.
- CLEAN UP THE SITE. WHEN ALL SEALANTS ARE COMPLETELY CURED, LANES MAY BE OPENED TO TRAFFIC.

**DETAILED PIEZO SENSOR INSTALLATION - ELEVATION**



**MODIFY TRAFFIC MONITORING STATION (INSTALLATION DETAILS)**  
NO SCALE **E-2**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

ME 03-28-11  
 ME 03-16-11  
 ME 07-21-10  
 REVISED BY DATE REVISED  
 MOHAMMED ELEIWAAT  
 FERDINAND DE LA CRUZ  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 FERDINAND DELACRUZ  
 FUNCTIONAL SUPERVISOR  
 DEPARTMENT OF TRANSPORTATION  
 ELECTRICAL DESIGN  
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 Caltrans

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	8	24

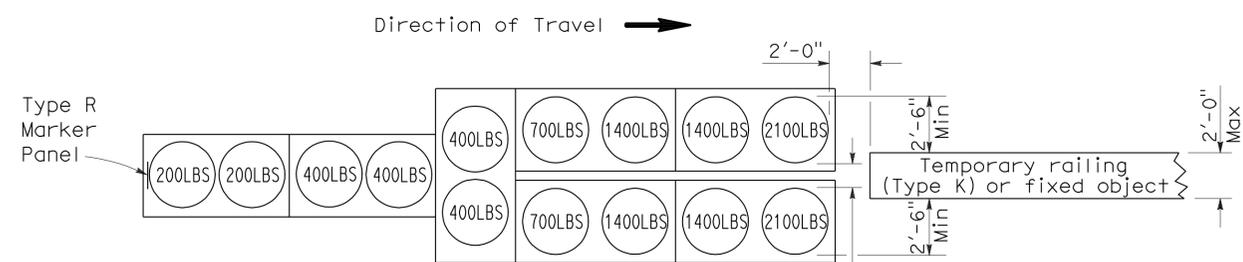
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

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

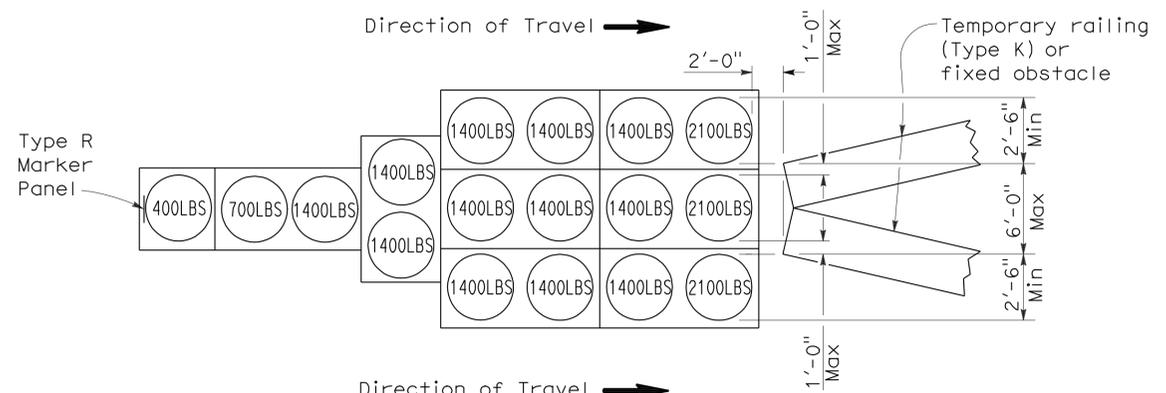
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To accompany plans dated 5-2-11



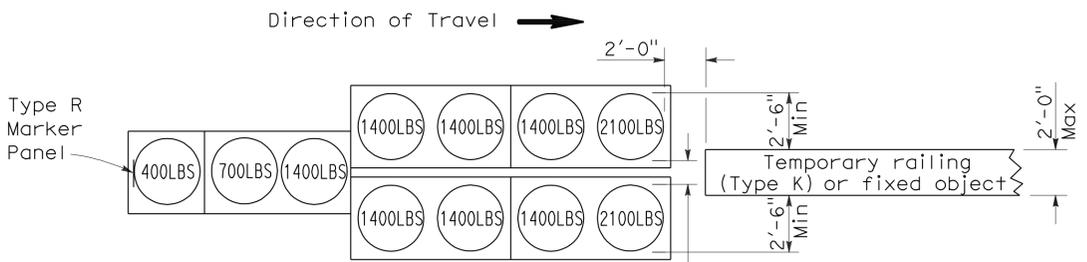
**ARRAY 'TU14'**

Approach speed 45 mph or more



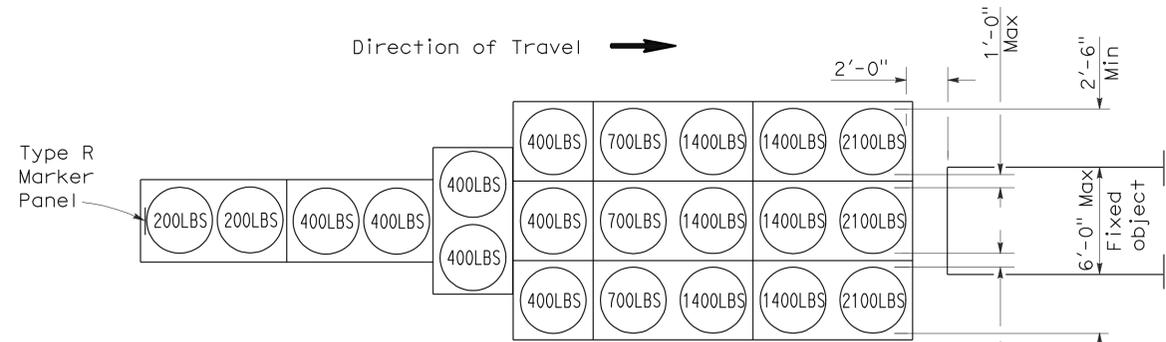
**ARRAY 'TU17'**

Approach speed less than 45 mph



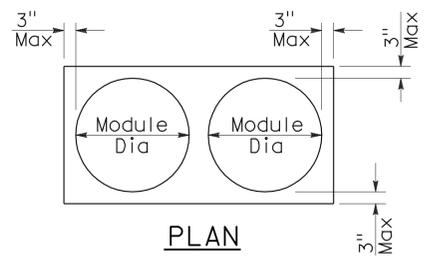
**ARRAY 'TU11'**

Approach speed less than 45 mph

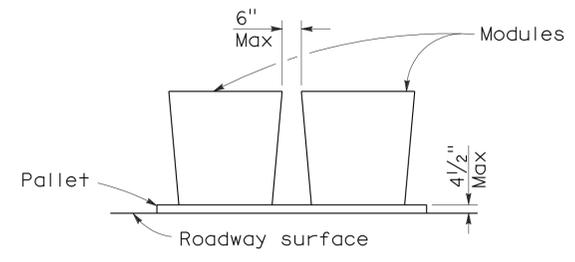


**ARRAY 'TU21'**

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

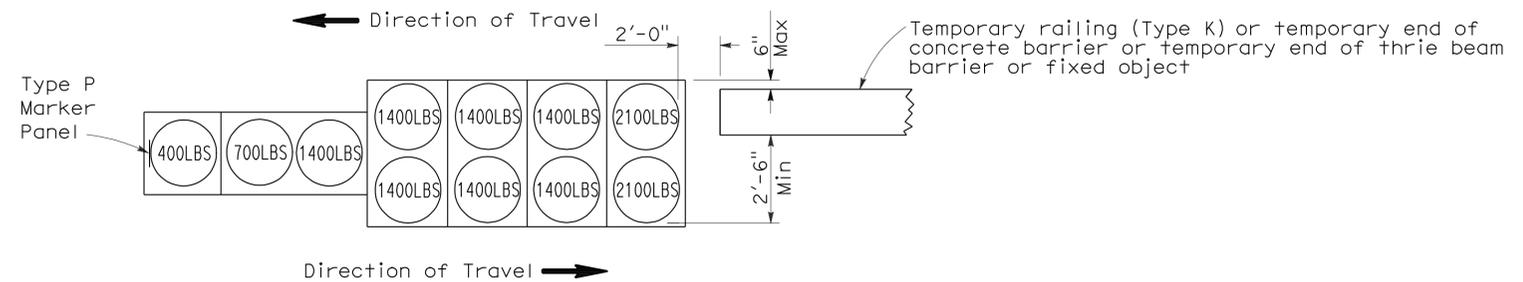
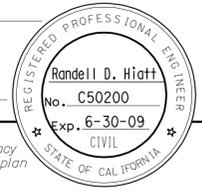
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	9	24

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

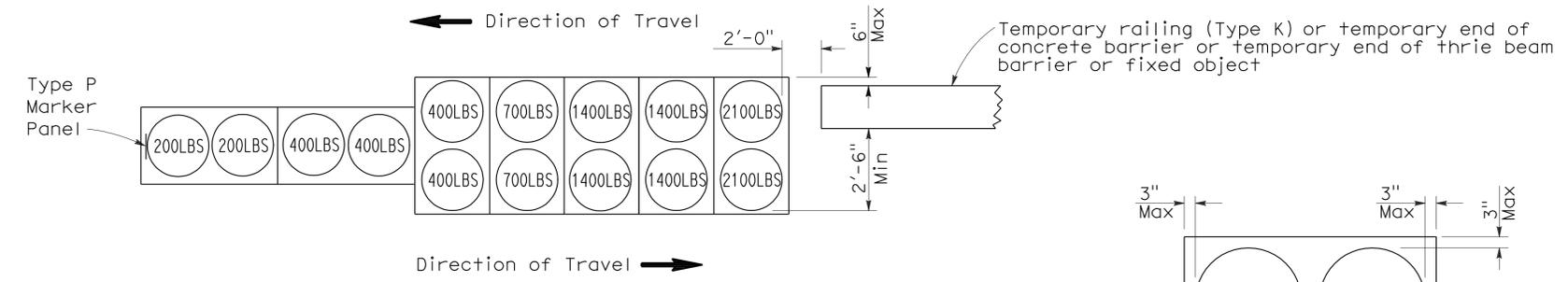
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To accompany plans dated 5-2-11



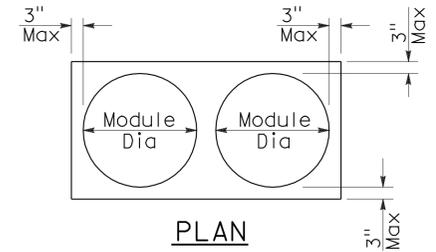
**ARRAY 'TB11'**

Approach speed less than 45 mph

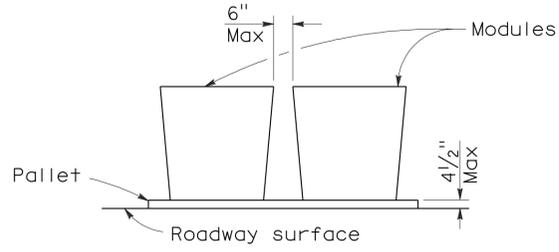


**ARRAY 'TB14'**

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	SBd	40	R120.0/R154.4	10	24

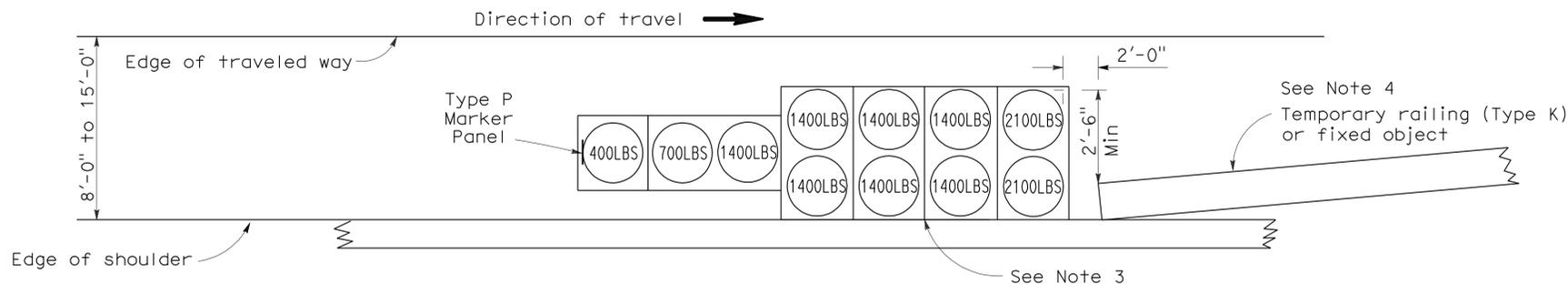
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

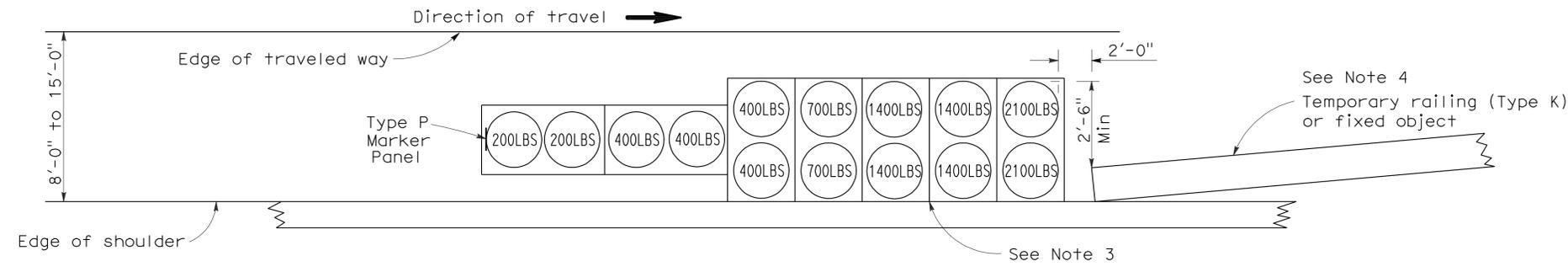
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REGISTERED PROFESSIONAL ENGINEER  
Randell D. Hiatt  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

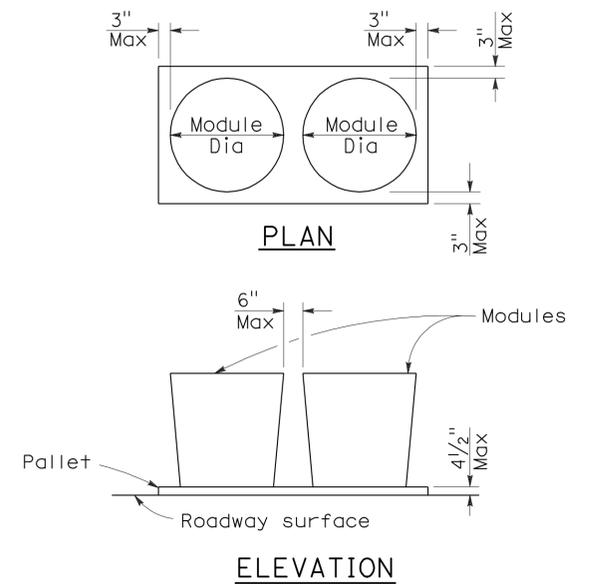
To accompany plans dated 5-2-11



**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.

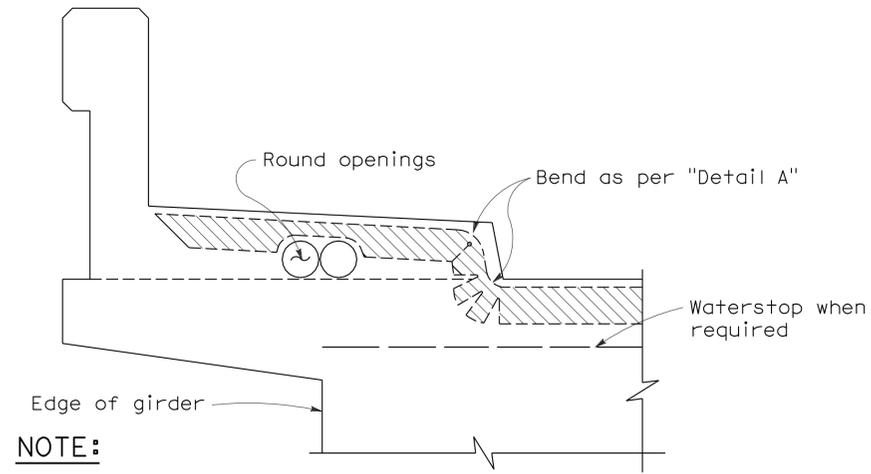
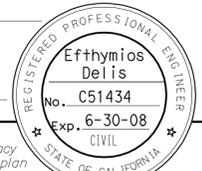
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

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**

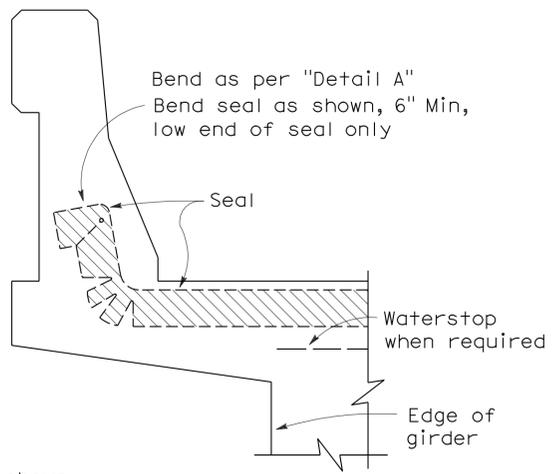
2006 REVISED STANDARD PLAN RSP T2



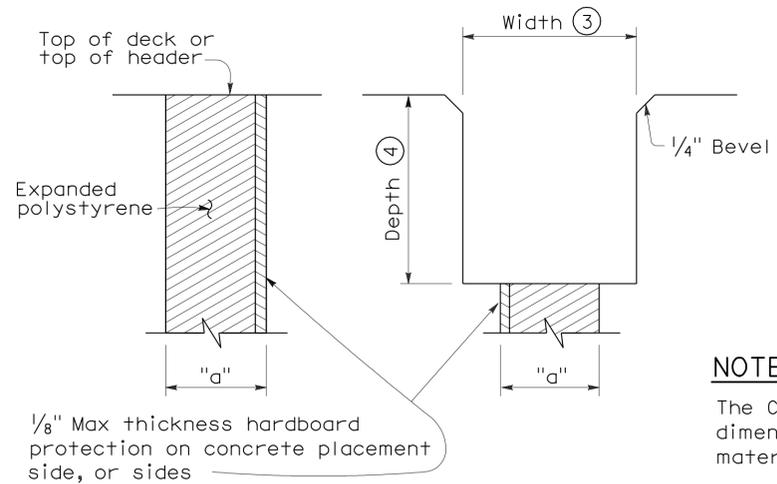


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



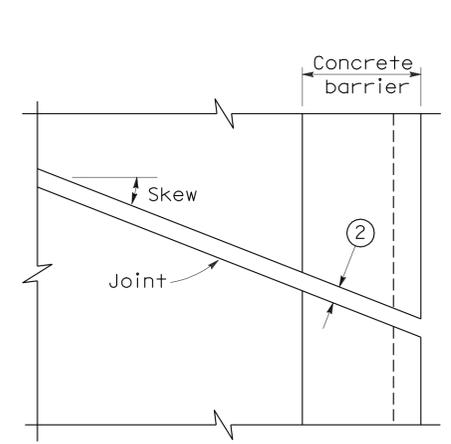
**CONCRETE BARRIER**



**FORMING DETAIL SAWCUT DETAIL**

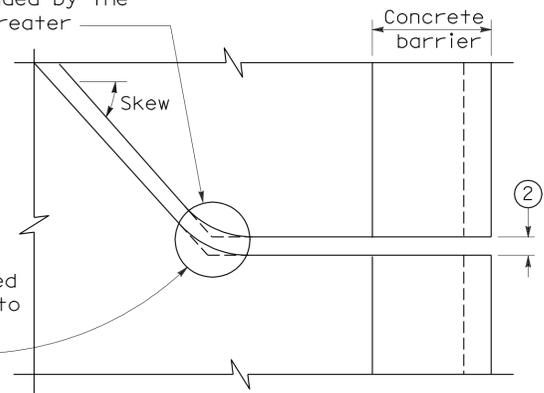
**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**JOINT SEALS DETAILS**



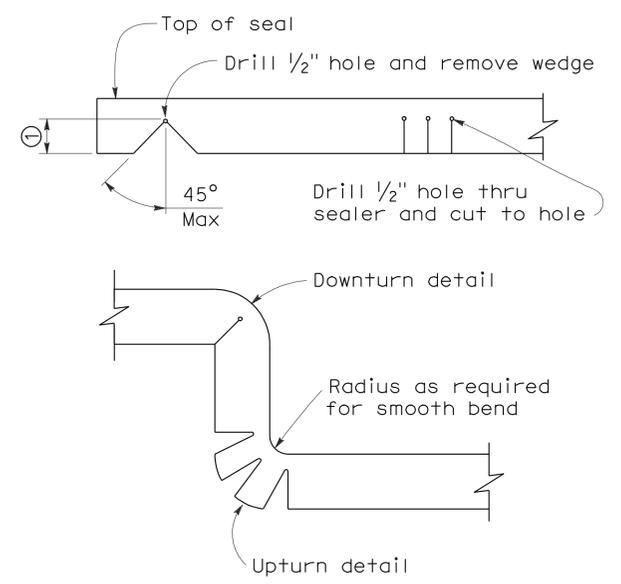
**PLAN OF JOINT (SKEW ≤ 20°)**

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.

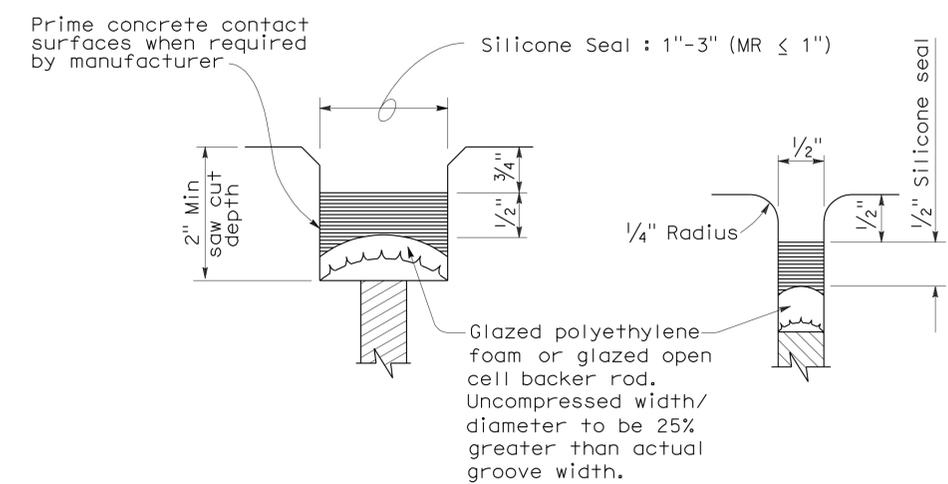


**DETAIL A**

- 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"

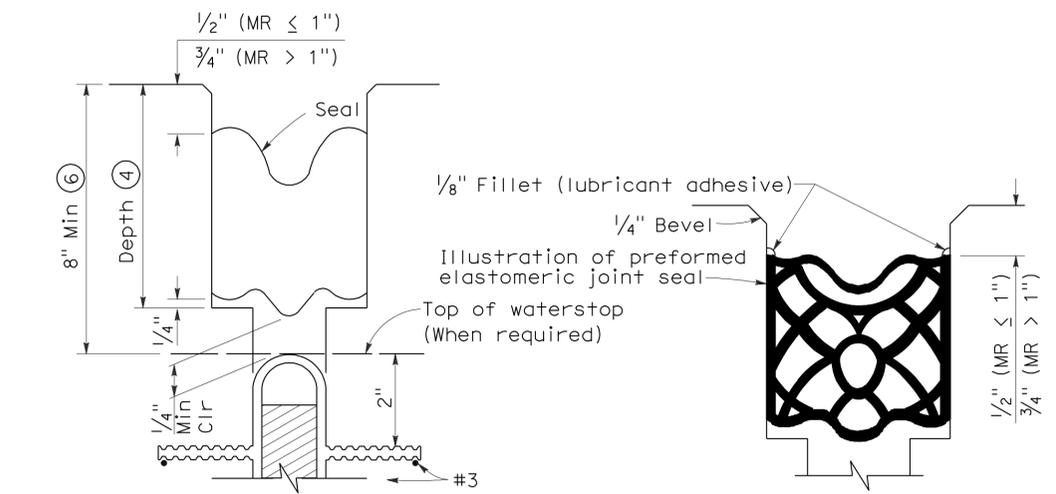


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



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

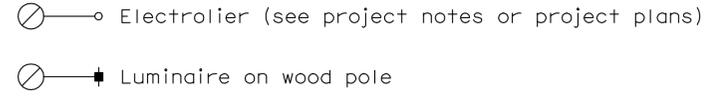
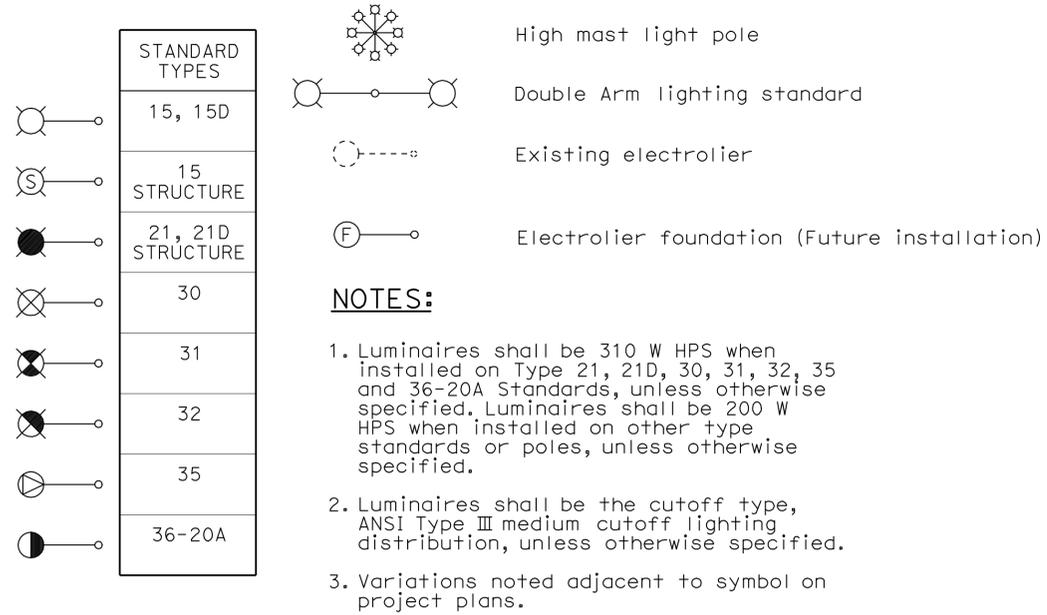
**TYPE B SEAL**

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.

# ELECTROLIERS



## STANDARD NOTES:

- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF** Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH** Detector handhole.
- FA** Foundation to be abandoned.
- IS** Install sign on signal mast arm.
- NS** No slip base on standard.
- PEC** Photoelectric control.
- PEU** Photoelectric unit.
- RC** Equipment or material to be removed and become the property of the Contractor.
- RE** Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL** Relocate equipment.
- RR** Remove and reuse equipment.
- RS** Remove and salvage equipment.
- SC** Splice new to existing conductors.
- SD** Service disconnect.
- SF** Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP** Telephone service point.

# ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

## PROPOSED EXISTING

BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4B	mas-4B	
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	13	24

*Jeffery G. McRae*  
REGISTERED ELECTRICAL ENGINEER

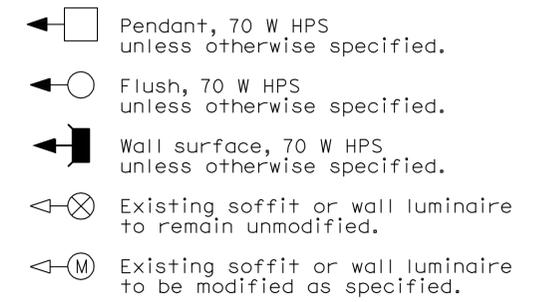
October 5, 2007  
PLANS APPROVAL DATE

Jeffery G. McRae  
No. E14512  
Exp. 6-30-08  
ELECTRICAL  
STATE OF CALIFORNIA

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To accompany plans dated 5-2-11

## SOFFIT AND WALL MOUNTED LUMINAIRES



**NOTE:**  
Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

### ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

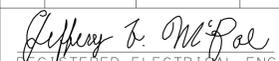
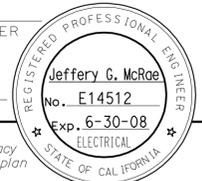
NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1A**

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	14	24

  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 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.

### CONDUIT

PROPOSED	EXISTING	
		Lighting Conduit, unless otherwise indicated or noted
		Traffic signal conduit
		Communication conduit
		Telephone conduit
		Fire alarm conduit
		Fiber optic conduit
		Conduit termination 
		Conduit riser in/on structure or service pole

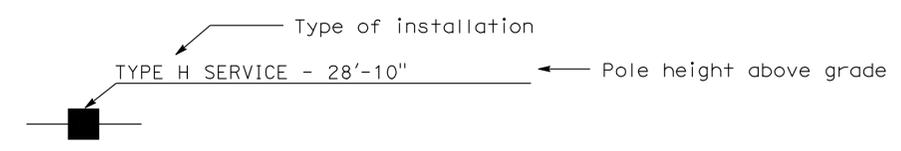
### SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
		Modifications of basic symbols: "L" indicates all non-arrow sections louvered "LG" indicates louvered green section only "PV" indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

### SERVICE EQUIPMENT

PROPOSED	EXISTING	
		Overhead lines
		Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
		Telephone demarcation cabinet

### POLE-MOUNTED SERVICE DESIGNATION



### ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

### SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

### NOTES:

1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. Signal indication shall be LED.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
 (SYMBOLS AND ABBREVIATIONS)**  
 NO SCALE

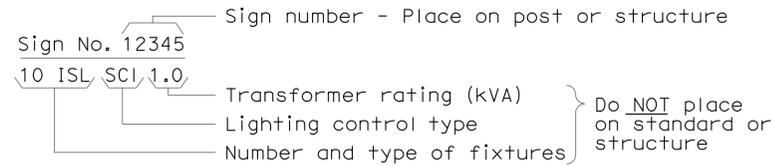
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B  
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1B**

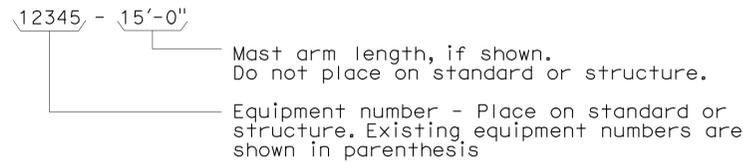
2006 REVISED STANDARD PLAN RSP ES-1B

### EQUIPMENT IDENTIFICATION

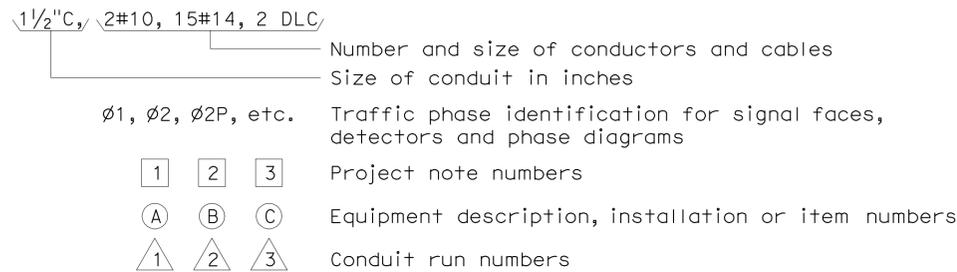
#### ILLUMINATED SIGN IDENTIFICATION NUMBER:



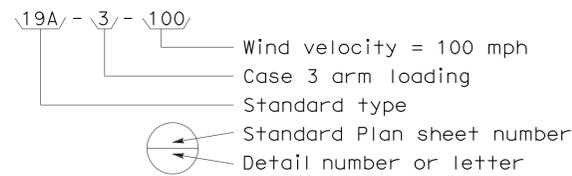
#### ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



#### CONDUIT AND CONDUCTOR IDENTIFICATION:



#### SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



### MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
EMS	ems	Highway advisory radio pole and antenna
		Extinguishable message sign
M V	m v	Detection device M = Microwave sensor V = Video image sensor

### WIRING DIAGRAM LEGEND

P	Pole	----	External conductor
CB	Circuit breaker	—	Conductor or bus
A	Ampere	—•—	Tie point
V	Volt	—/—	Contactor coil
M	Metered	— —	Contactor, Contact NO
UM	Unmetered	—X—	Terminal blocks
NB	Neutral bus	—/—	Contactor, Contact NC
GB	Ground bus	—/—	Enclosure bond
G	Equipment grounding conductor	— —	Grounding electrode
N	Grounded conductor (Neutral)	— —	Circuit breaker
		Ⓜ	Receptacle

### PULL BOXES

PROPOSED	EXISTING	
		Pull box-No. 5 unless otherwise indicated or noted.
		Pull box-Additional designations or descriptions
3		(C) = Communications pull box
5		(E) = Pull box with extension
6		(S) = Sprinkler control pull box
7		(21) = Anchor bolts and conduit for future installation of Type 21 Standard
8		(T) = Traffic pull box
9		
9A		

### VEHICLE DETECTORS

PROPOSED	EXISTING	
		Vehicle detector designation
		U = Upper L = Lower
		Slot number in input file
		Input file (I or J)
		Phase
		Type A detector loop. Outline of sawcut shown.
		Type B detector loop. Outline of sawcut shown.
		Type C detector loop. Outline of sawcut shown.
		Type D detector loop. Outline of sawcut shown.
		Type E detector loop. Outline of sawcut shown.
		Type Q detector loop. Outline of sawcut shown.
		Magnetic detector
		Detector handhole
		Microwave or video detection zone

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
(SYMBOLS AND ABBREVIATIONS)**

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C  
DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1C**

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	16	24

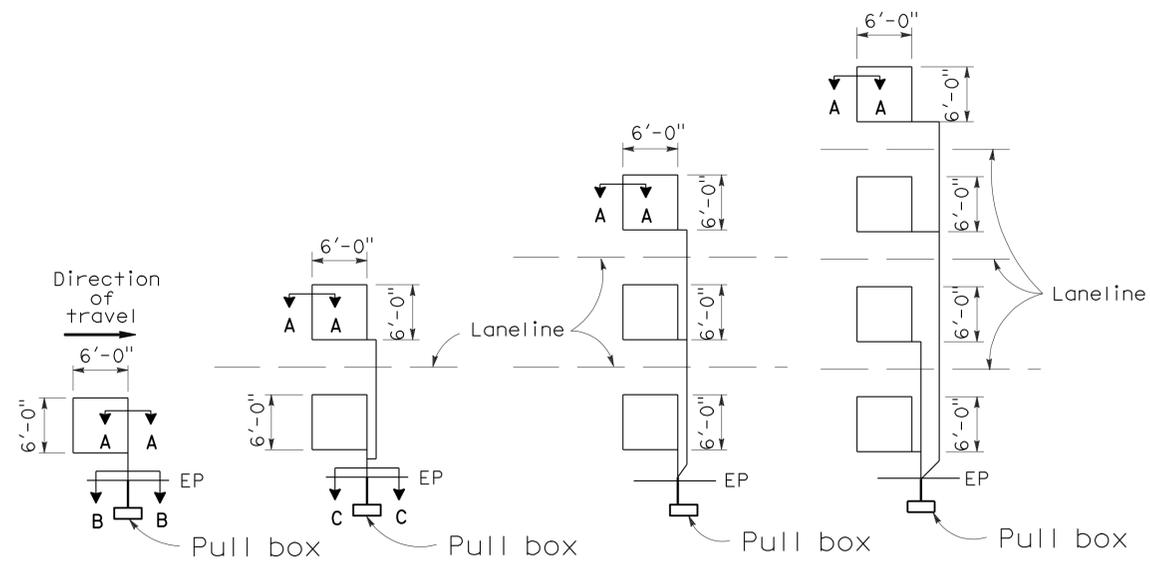
*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 No. E14512  
 Exp. 6-30-08  
 ELECTRICAL  
 STATE OF CALIFORNIA

October 5, 2007  
 PLANS APPROVAL DATE

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## LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.

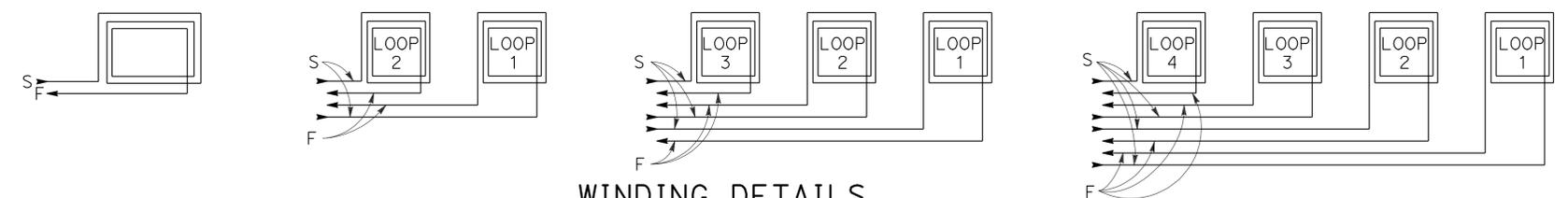


TYPE 1A INSTALLATION    TYPE 2A INSTALLATION    TYPE 3A INSTALLATION    TYPE 4A INSTALLATION

### SAWCUT DETAILS

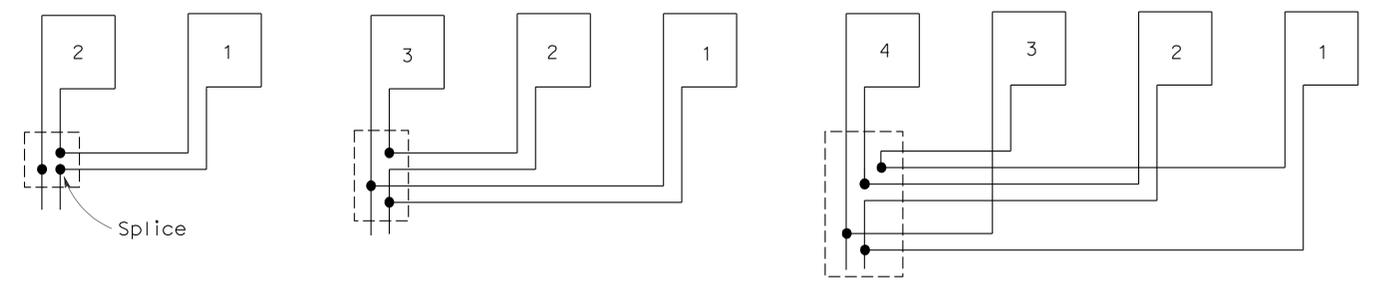
(Type A loop detector configurations illustrated)

- 1A thru 4A = 1 Type A loop configuration in each lane.
  - 1B thru 4B = 1 Type B loop configuration in each lane.
  - 1C = 1 Type C loop configuration entering lanes as required.
  - 1D thru 4D = 1 Type D loop configuration in each lane.
  - 1E thru 4E = 1 Type E loop configuration in each lane.
  - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



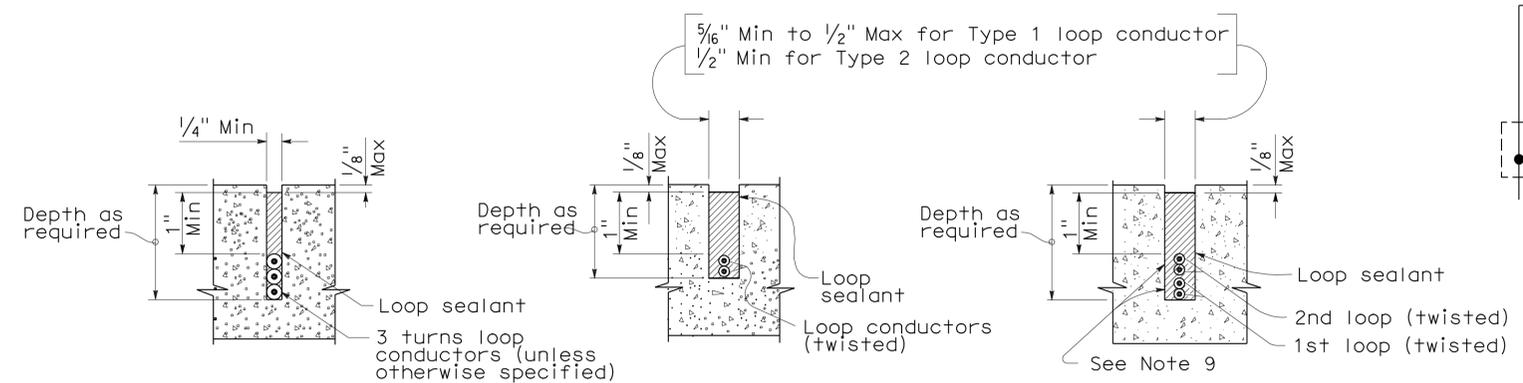
### WINDING DETAILS

See Notes 6 and 7



### TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)



SECTION A-A    SECTION B-B    SECTION C-C  
 SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

## ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP ES-5A

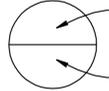
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	17	24
Edward Li		08-05-10		REGISTERED CIVIL ENGINEER DATE	
5-2-11		PLANS APPROVAL DATE		REGISTERED PROFESSIONAL ENGINEER	
				No. C56706	
				Exp. 06/30/11	
				CIVIL	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

**LEGEND:**

- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
-  INDICATES LIMITS OF CLEAN AND TREAT BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE. PRIOR TO BRIDGE DECK TREATMENT, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.
-  INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE, FURNISH AND PLACE NEW MINIMUM 3/4" DEPTH POLYESTER CONCRETE OVERLAY. PRIOR TO PLACING NEW POLYESTER CONCRETE OVERLAY, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.

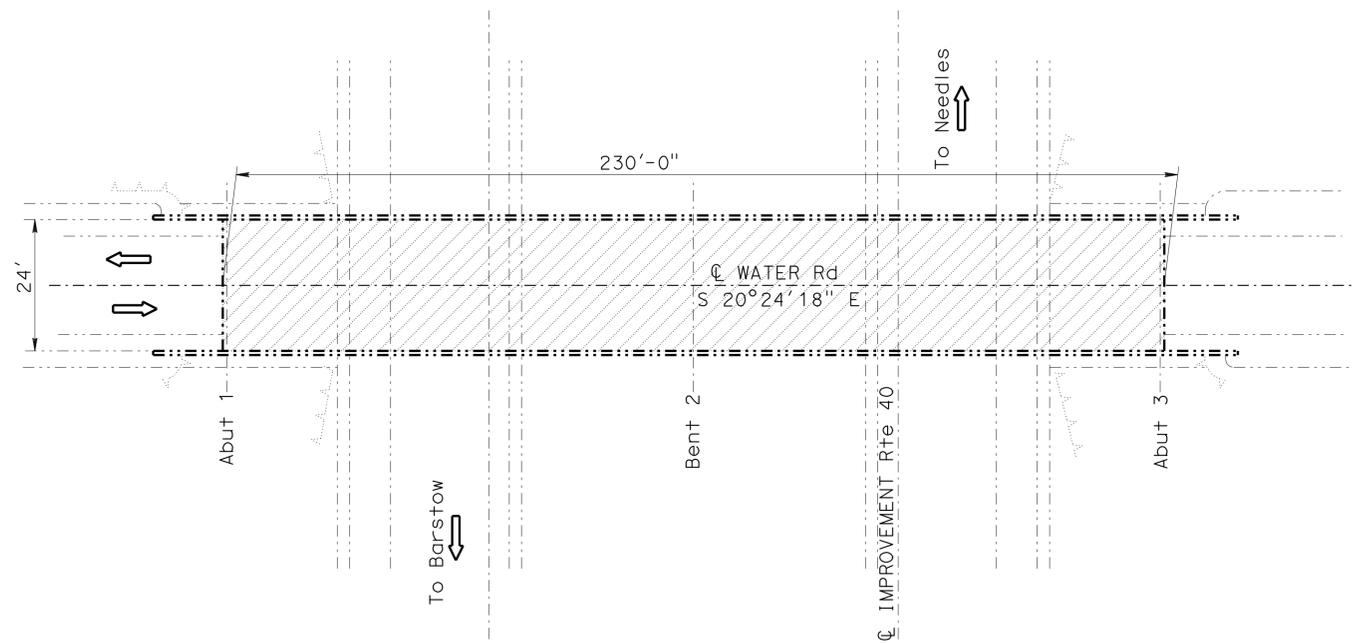
**STANDARD PLANS DATED MAY 2006**

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

 STANDARD PLAN SHEET No.  
 DETAIL No.

**INDEX TO PLANS**

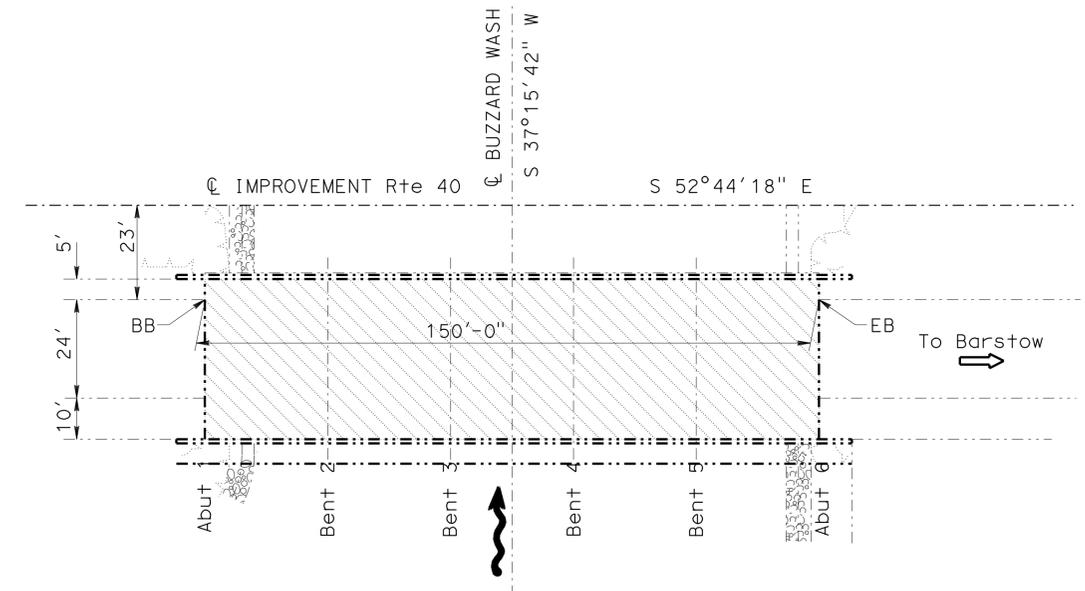
SHEET NO.	TITLE
1	GENERAL PLAN No. 1
2	GENERAL PLAN No. 2
3	GENERAL PLAN No. 3
4	GENERAL PLAN No. 4
5	GENERAL PLAN No. 5
6	GENERAL PLAN No. 6
7	MISCELLANEOUS DETAILS No. 1
8	MISCELLANEOUS DETAILS No. 2



**WATER ROAD OC**

Br No. 54-0856, Rte 40, PM 119.98  
 SCALE: 1" = 20'  
 WATER ROAD OC No. 54-0856  
 QUANTITIES

REMOVE UNSOUND CONCRETE	14 CF
CLEAN BRIDGE DECK	5,520 SQFT
RAPID SETTING CONCRETE (PATCH)	14 CF
TREAT BRIDGE DECK	5,520 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	69 GAL



**BUZZARD WASH BRIDGE**

Br No. 54-0700R, Rte 40, PM 138.26  
 SCALE: 1" = 20'  
 BUZZARD WASH BRIDGE No. 54-0700R  
 QUANTITIES

REMOVE UNSOUND CONCRETE	15 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	5,850 SQFT
RAPID SETTING CONCRETE (PATCH)	15 CF
FURNISH POLYESTER CONCRETE OVERLAY	366 CF
PLACE POLYESTER CONCRETE OVERLAY	5,850 SQFT

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

**TONY D. BRAKE**  
 DESIGN ENGINEER

DESIGN	BY	CHECKED	LOAD FACTOR DESIGN	LIVE LOADING: AND PERMIT DESIGN LOAD
DESIGN	Edward Li	Mazin Ibrahim	HS20-44 AND ALTERNATIVE	HS20-44 AND ALTERNATIVE
DETAILS	Clayton Tom	Edward Li	LAYOUT	BY Clayton Tom
QUANTITIES	Edward Li	Mazin Ibrahim	SPECIFICATIONS	BY Mingxia Pan

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO.  
 Various  
 POST MILE  
 Varies

**ROUTE 40 BRIDGES  
 GENERAL PLAN No. 1**

STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 2/4/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

CU 08  
 EA OP1801

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES

SHEET 1 OF 8

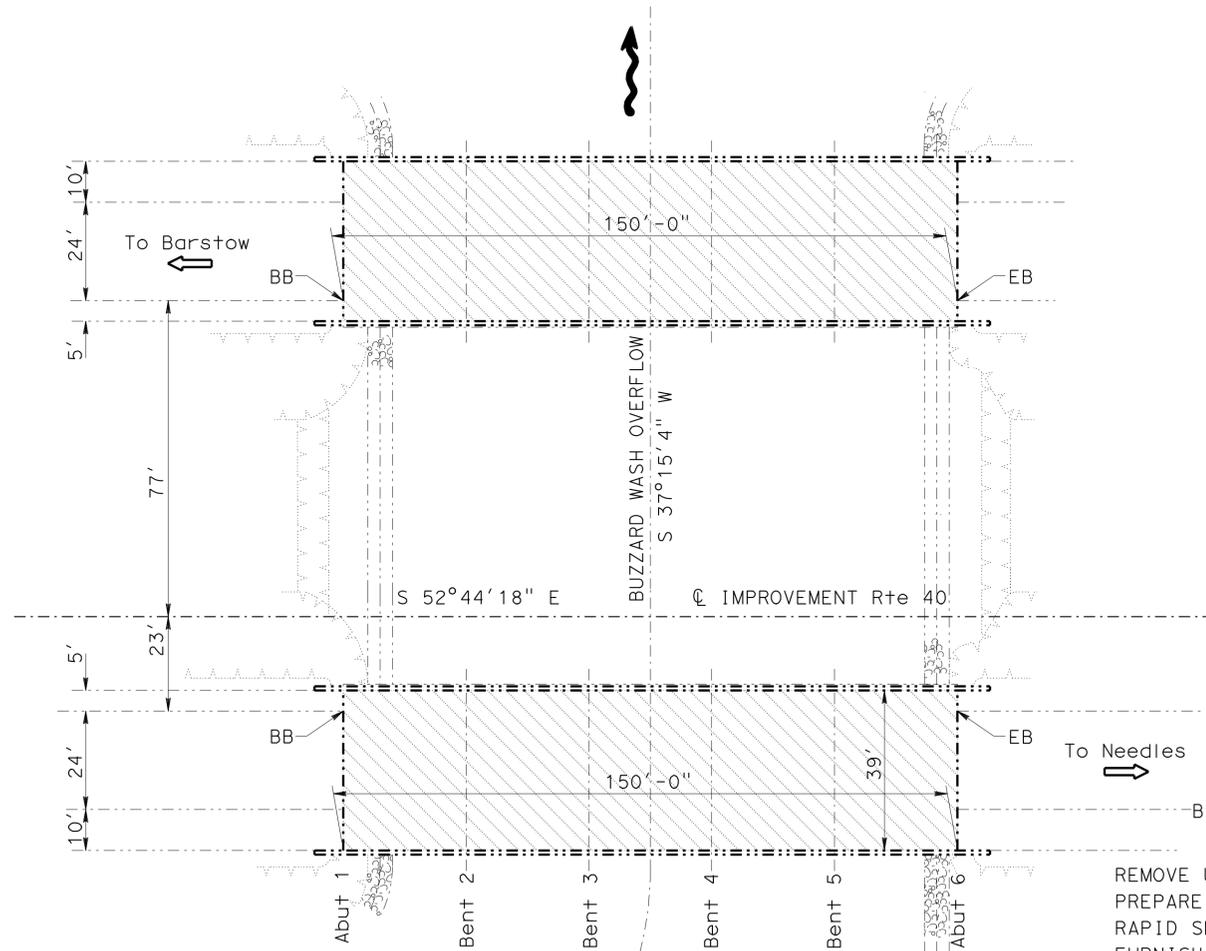
FILE => 08-0P1801-a-gp01.dgn

USERNAME => HSTFK DATE PLOTTED => 02-MAY-2011 TIME PLOTTED => 15:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	18	24
Edward Li		08-05-10		REGISTERED CIVIL ENGINEER DATE	
5-2-11		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.					

**LEGEND:**

- INDICATES EXISTING.
- ➔ INDICATES DIRECTION OF TRAFFIC.
- INDICATES LIMITS OF CLEAN AND TREAT BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE. PRIOR TO BRIDGE DECK TREATMENT, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.
- INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE, FURNISH AND PLACE NEW MINIMUM 3/4" DEPTH POLYESTER CONCRETE OVERLAY. PRIOR TO PLACING NEW POLYESTER CONCRETE OVERLAY, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.



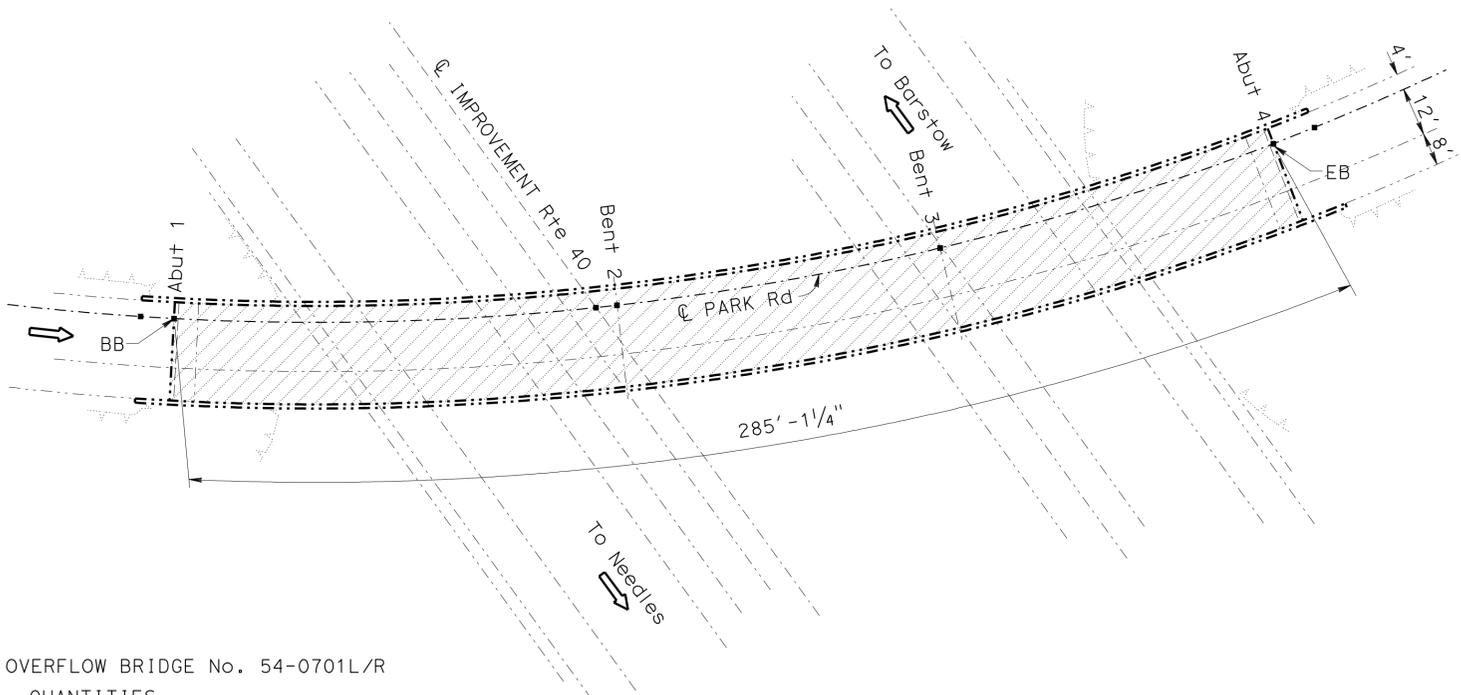
**BUZZARD WASH OVERFLOW BRIDGE**

Br No. 54-0701R/L, Rte 40, PM 138.51  
SCALE: 1" = 20'

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

QUANTITIES

REMOVE UNSOUND CONCRETE	30 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	11,700 SQFT
RAPID SETTING CONCRETE (PATCH)	30 CF
FURNISH POLYESTER CONCRETE OVERLAY	732 CF
PLACE POLYESTER CONCRETE OVERLAY	11,700 SQFT



**PARK ROAD OC**

Br No. 54-0702S, Rte 40, PM R139.12  
SCALE: 1" = 20'  
PARK ROAD OC No. 54-0702S

QUANTITIES

REMOVE UNSOUND CONCRETE	17 CF
CLEAN BRIDGE DECK	6,840 SQFT
RAPID SETTING CONCRETE (PATCH)	17 CF
TREAT BRIDGE DECK	6,840 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	86 GAL

TONY D. BRAKE  
DESIGN ENGINEER

DESIGN	BY Edward Li	CHECKED Mazin Ibrahim	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
DETAILS	BY Clayton Tom	CHECKED Edward Li	LAYOUT	BY Clayton Tom
QUANTITIES	BY Edward Li	CHECKED Mazin Ibrahim	SPECIFICATIONS	BY Mingxia Pan
				PLANS AND SPECS COMPARED Mingxia Pan

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
POST MILE Varies

**ROUTE 40 BRIDGES  
GENERAL PLAN No. 2**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	19	24

*Edward Li* 08-05-10  
REGISTERED CIVIL ENGINEER DATE

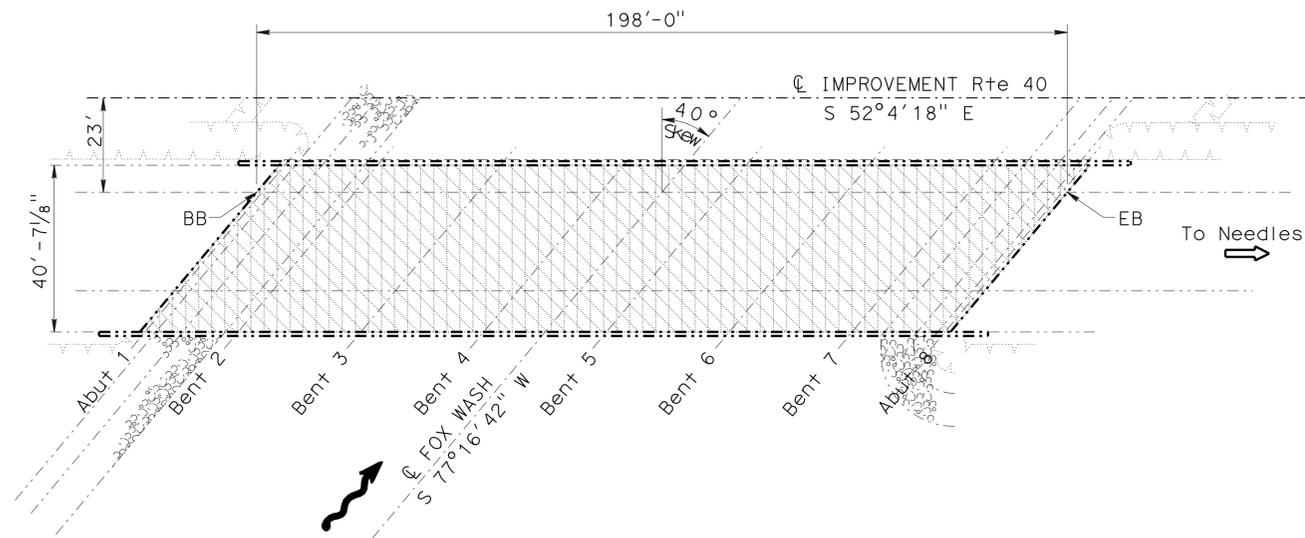
5-2-11  
PLANS APPROVAL DATE

*Edward Li*  
REGISTERED PROFESSIONAL ENGINEER  
No. C56706  
Exp. 06/30/11  
CIVIL  
STATE OF CALIFORNIA

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**LEGEND:**

- INDICATES EXISTING.
- ➔ INDICATES DIRECTION OF TRAFFIC.
-  INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE, FURNISH AND PLACE NEW MINIMUM 3" DEPTH POLYESTER CONCRETE OVERLAY. PRIOR TO PLACING NEW POLYESTER CONCRETE OVERLAY, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.
-  REMOVE EXISTING AC OVERLAY



**FOX WASH BRIDGE**

Br No. 54-0704R, Rte 40, PM R139.82  
SCALE: 1" = 20'

FOX WASH BRIDGE No. 54-0704R  
QUANTITIES

REMOVE ASPHALT CONCRETE SURFACING	8,038 SQFT
REMOVE UNSOUND CONCRETE	20 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	8,038 SQFT
RAPID SETTING CONCRETE (PATCH)	20 CF
FURNISH POLYESTER CONCRETE OVERLAY	2,010 CF
PLACE POLYESTER CONCRETE OVERLAY	8,038 SQFT

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

<b>TONY D. BRAKE</b> DESIGN ENGINEER	DESIGN	BY Edward Li	CHECKED Mazin Ibrahim	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF MAINTENANCE</b> <b>STRUCTURE MAINTENANCE DESIGN</b>	BRIDGE NO.	<b>ROUTE 40 BRIDGES</b> <b>GENERAL PLAN No. 3</b>													
	DETAILS	BY Clayton Tom	CHECKED Edward Li	LAYOUT	BY Clayton Tom			CHECKED Edward Li		POST MILE												
	QUANTITIES	BY Edward Li	CHECKED Mazin Ibrahim	SPECIFICATIONS	BY Mingxia Pan			PLANS AND SPECS COMPARED Mingxia Pan		VARIES												
STRUCTURES MAINTENANCE GENERAL PLAN SHEET (ENGLISH) (REV. 2/4/05)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 08 EA OP1801	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1"> <tr> <th colspan="6">REVISION DATES</th> </tr> <tr> <td>03-11-10</td> <td>03-17-10</td> <td>04-08-10</td> <td>01-21-10</td> <td>08-09-10</td> <td>09-16-10</td> </tr> </table>	REVISION DATES						03-11-10	03-17-10	04-08-10	01-21-10	08-09-10	09-16-10	SHEET 3 OF 8
REVISION DATES																						
03-11-10	03-17-10	04-08-10	01-21-10	08-09-10	09-16-10																	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	20	24

Edward Li 08-05-10  
 REGISTERED CIVIL ENGINEER DATE

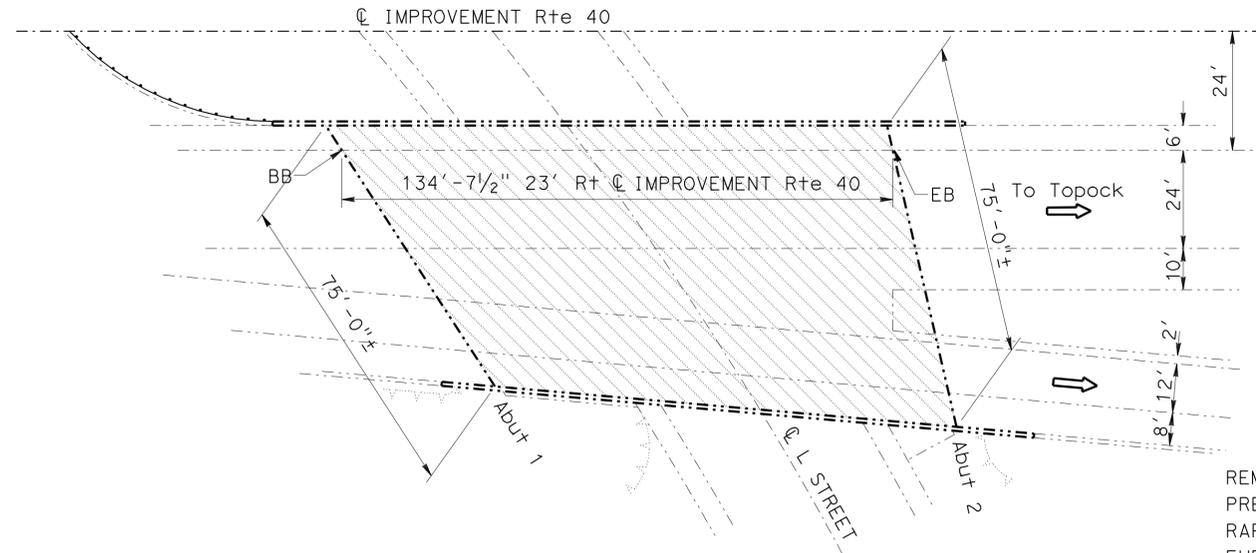
5-2-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 EDWARD GUOJUN LI  
 No. C56706  
 Exp. 06/30/11  
 CIVIL  
 STATE OF CALIFORNIA

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**LEGEND:**

- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
- [Hatched Box] INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE, FURNISH AND PLACE NEW MINIMUM 3/4" DEPTH POLYESTER CONCRETE OVERLAY. PRIOR TO PLACING NEW POLYESTER CONCRETE OVERLAY, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.

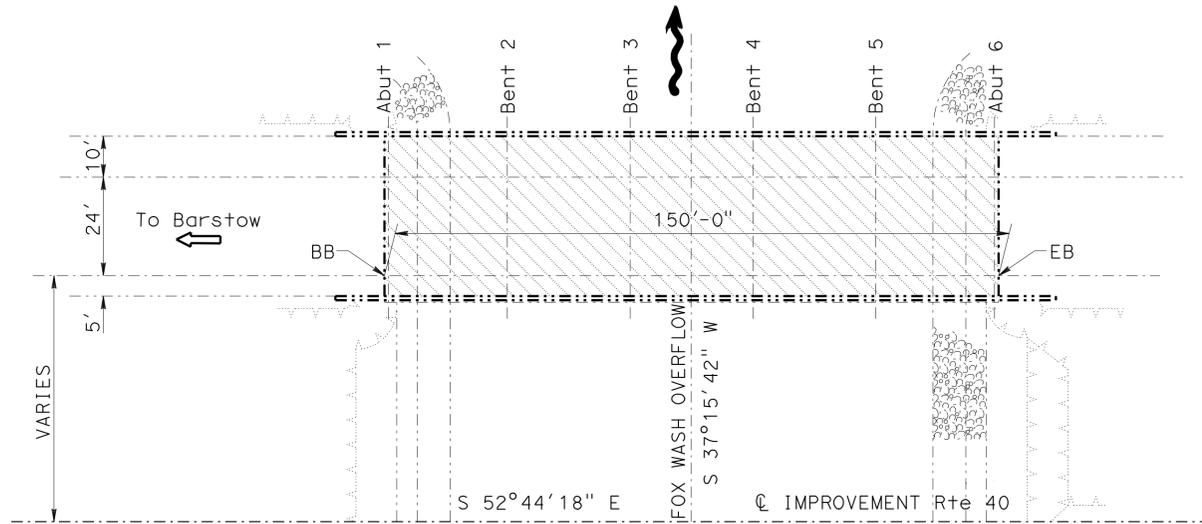


**"L" STREET UC No. 54-0820R**  
 QUANTITIES

REMOVE UNSOUND CONCRETE	21 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	8,418 SQFT
RAPID SETTING CONCRETE (PATCH)	21 CF
FURNISH POLYESTER CONCRETE OVERLAY	526 CF
PLACE POLYESTER CONCRETE OVERLAY	8,418 SQFT

**"L" STREET UC**

Br No. 54-0820R, Rte 40, PM R142.2  
 SCALE: 1" = 20'

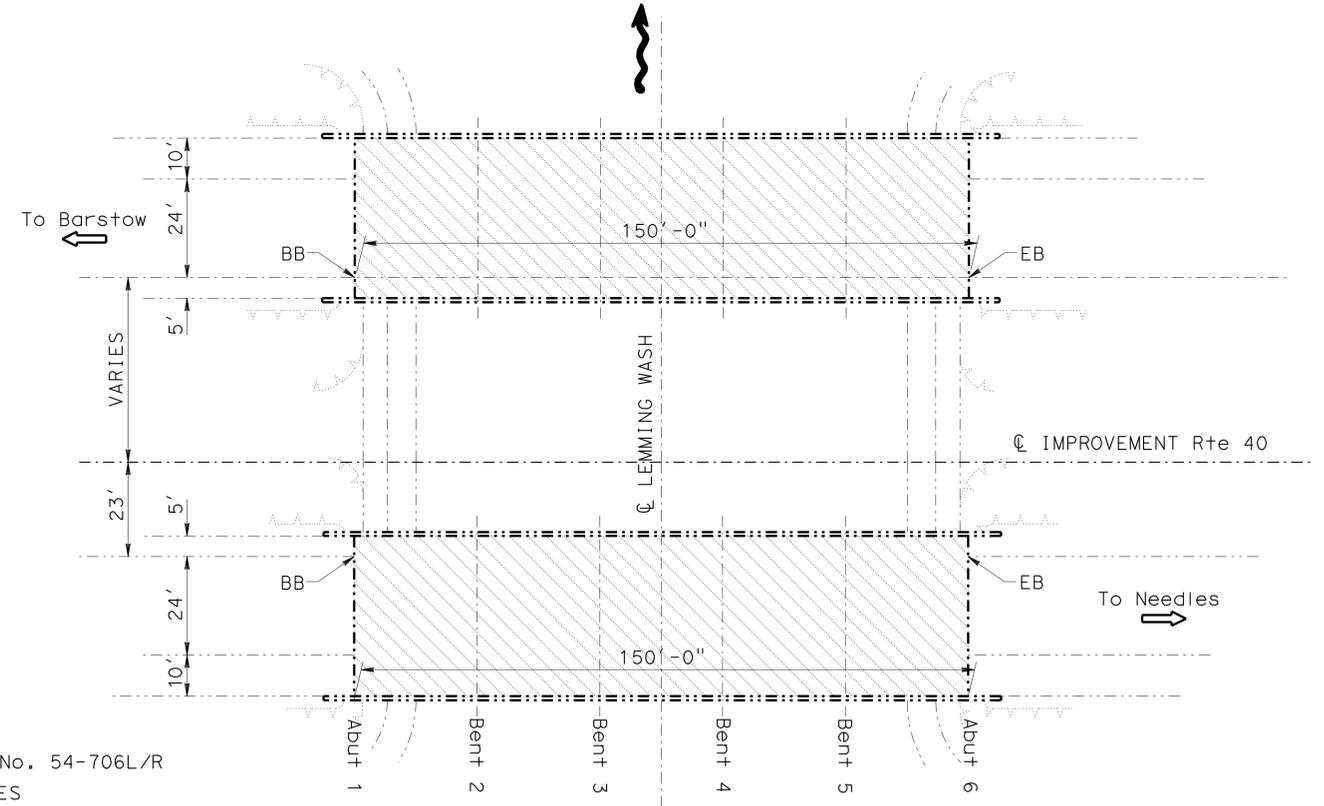


**FOX WASH OVERFLOW BRIDGE**

Br No. 54-0705L, Rte 40, PM R140  
 SCALE: 1" = 20'

**FOX WASH OVERFLOW BRIDGE No. 54-0705L**  
 QUANTITIES

REMOVE UNSOUND CONCRETE	15 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	5,850 SQFT
RAPID SETTING CONCRETE (PATCH)	15 CF
FURNISH POLYESTER CONCRETE OVERLAY	366 CF
PLACE POLYESTER CONCRETE OVERLAY	5,850 SQFT



**LEMING WASH BRIDGE**

Br No. 54-0706L/R, Rte 40, PM R140.11  
 SCALE: 1" = 20'

**LEMING WASH BRIDGE No. 54-706L/R**  
 QUANTITIES

REMOVE UNSOUND CONCRETE	30 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	11,700 SQFT
RAPID SETTING CONCRETE (PATCH)	30 CF
FURNISH POLYESTER CONCRETE OVERLAY	732 CF
PLACE POLYESTER CONCRETE OVERLAY	11,700 SQFT

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

DESIGN	BY Edward Li	CHECKED Mazin Ibrahim	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
DETAILS	BY Clayton Tom	CHECKED Edward Li	LAYOUT	BY Clayton Tom
QUANTITIES	BY Edward Li	CHECKED Mazin Ibrahim	SPECIFICATIONS	BY Mingxia Pan

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN

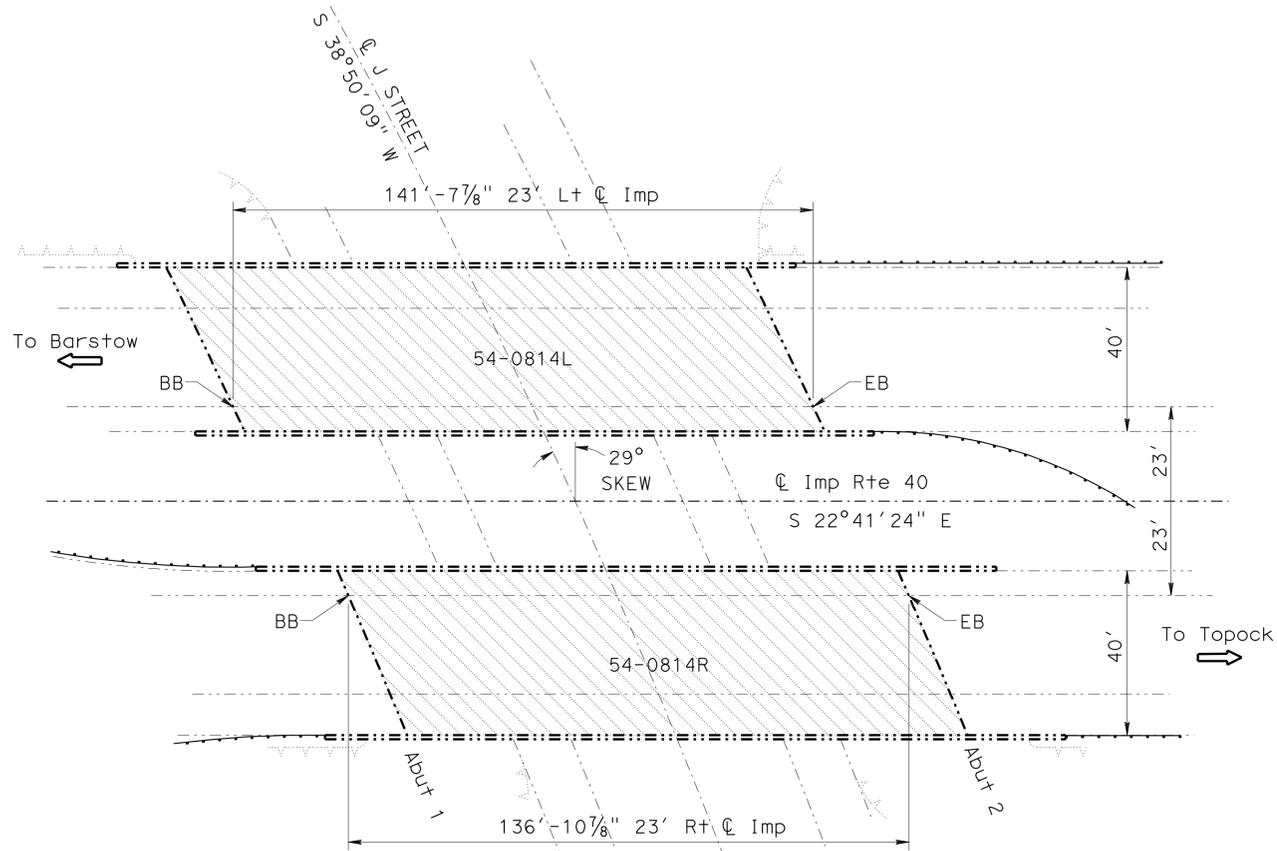
BRIDGE NO. Various  
 POST MILE Varies

**ROUTE 40 BRIDGES**  
**GENERAL PLAN No. 4**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	21	24
Edward Li			08-05-10	REGISTERED CIVIL ENGINEER DATE	
5-2-11			PLANS APPROVAL DATE		
No. C56706			Exp. 06/30/11		
CIVIL			STATE OF CALIFORNIA		
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**LEGEND:**

- INDICATES EXISTING.
- INDICATES DIRECTION OF TRAFFIC.
-  INDICATES LIMITS OF CLEAN AND TREAT BRIDGE DECK WITH HIGH MOLECULAR WEIGHT METHACRYLATE. PRIOR TO BRIDGE DECK TREATMENT, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.
-  INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE, FURNISH AND PLACE NEW MINIMUM 3/4" DEPTH POLYESTER CONCRETE OVERLAY. PRIOR TO PLACING NEW POLYESTER CONCRETE OVERLAY, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.
-  INDICATES LIMITS OF EXISTING JOINT SEAL REMOVAL AND PLACEMENT OF NEW JOINT SEAL. PRIOR TO PLACEMENT OF NEW JOINT SEAL, REPAIR JOINT SPALLS.

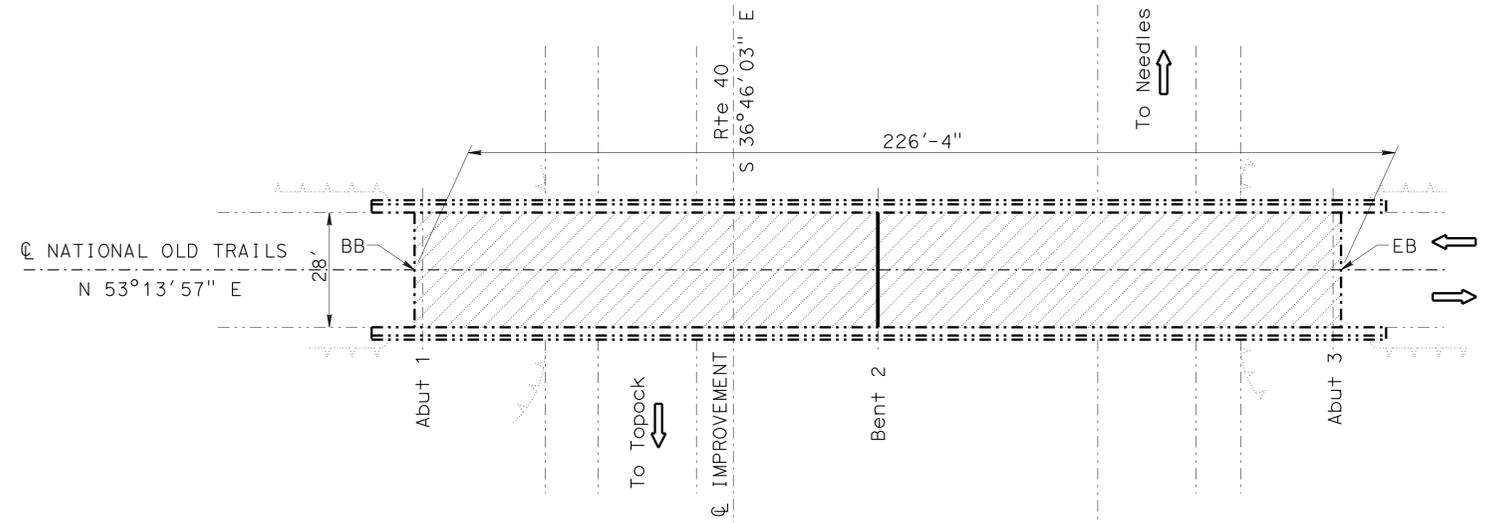


**"J" STREET UC**

Br No. 54-0814L/R, Rte 40, PM R142.37  
SCALE: 1" = 20'

"J" STREET UC No. 54-0814L/R  
QUANTITIES

REMOVE UNSOUND CONCRETE	28 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	11,147 SQFT
RAPID SETTING CONCRETE (PATCH)	28 CF
FURNISH POLYESTER CONCRETE OVERLAY	697 CF
PLACE POLYESTER CONCRETE OVERLAY	11,147 SQFT



**5 MILE STATION ROAD OC**

Br No. 54-0683, Rte 40, PM R148.2  
SCALE: 1" = 20'

5 MILE STATION ROAD OC No. 54-0683  
QUANTITIES

REMOVE UNSOUND CONCRETE	16 CF
CLEAN BRIDGE DECK	6,370 SQFT
CLEAN EXPANSION JOINT	28 LF
RAPID SETTING CONCRETE (PATCH)	16 CF
JOINT SEAL (MR 1/2")	28 LF
TREAT BRIDGE DECK	6,337 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	80 GAL

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

TONY D. BRAKE  
DESIGN ENGINEER

DESIGN	BY Edward Li	CHECKED Mazin Ibrahim	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
DETAILS	BY Clayton Tom	CHECKED Edward Li	LAYOUT	BY Clayton Tom
QUANTITIES	BY Edward Li	CHECKED Mazin Ibrahim	SPECIFICATIONS	BY Mingxia Pan

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE DESIGN

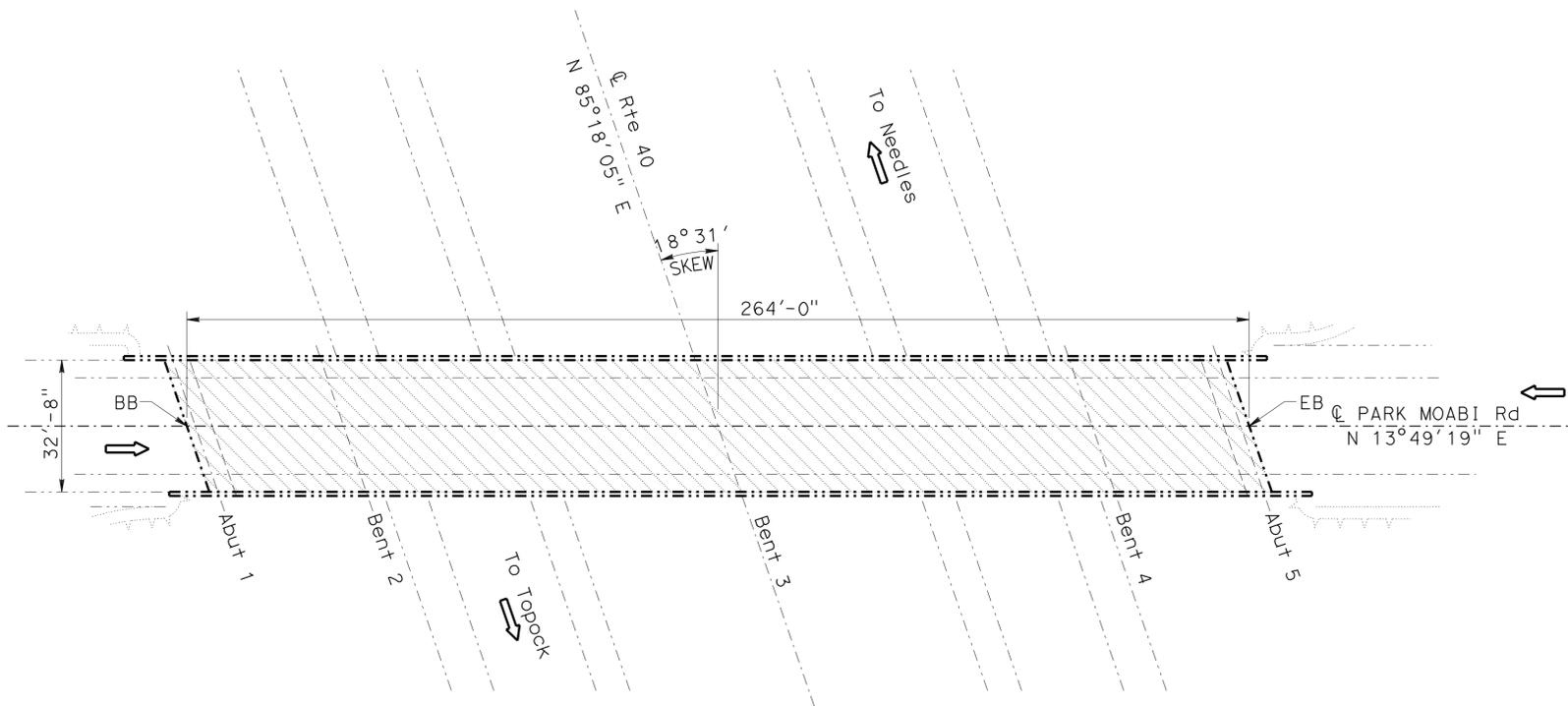
BRIDGE NO. Various  
POST MILE Varies

ROUTE 40 BRIDGES  
GENERAL PLAN No. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	22	24
Edward Li		08-05-10		REGISTERED CIVIL ENGINEER DATE	
5-2-11		PLANS APPROVAL DATE			
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**LEGEND:**

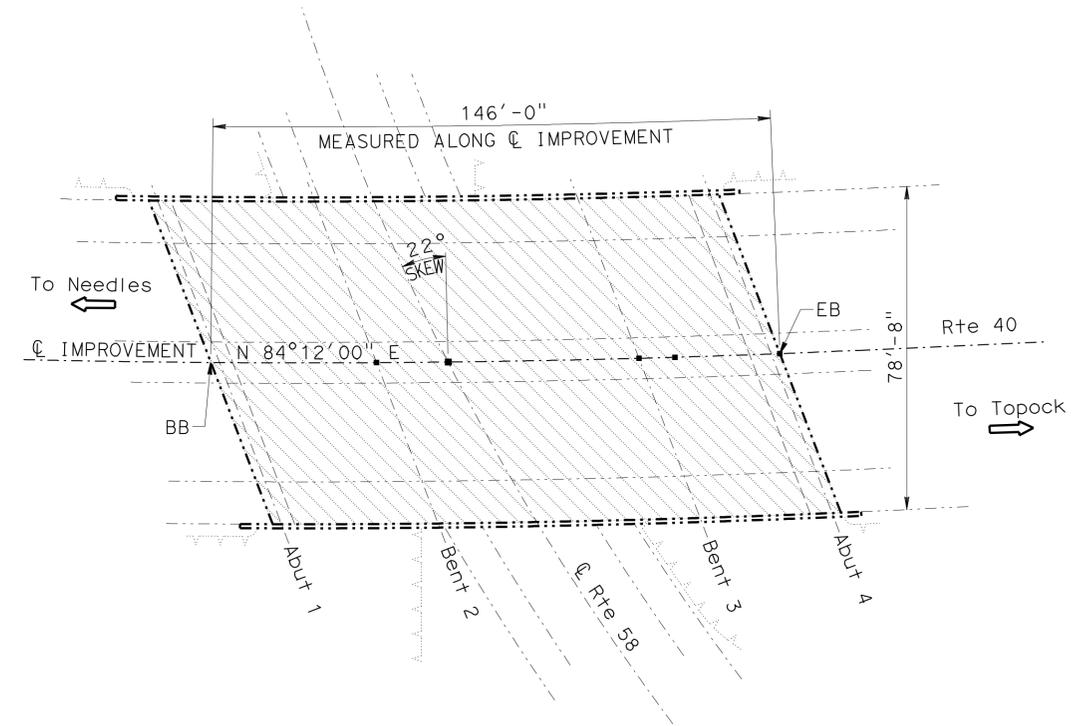
- INDICATES EXISTING.
- ➔ INDICATES DIRECTION OF TRAFFIC.
- INDICATES LIMITS OF PREPARE CONCRETE BRIDGE DECK SURFACE, FURNISH AND PLACE NEW MINIMUM 3/4" DEPTH POLYESTER CONCRETE OVERLAY. PRIOR TO PLACING NEW POLYESTER CONCRETE OVERLAY, REMOVE UNSOUND CONCRETE AND PATCH WITH RAPID SETTING CONCRETE.



**PARK MOABI ROAD OC**

Br No. 54-0669, Rte 40, PM R153.32  
 SCALE: 1" = 20'  
 PARK MOABI ROAD OC No. 54-0669

QUANTITIES	
REMOVE UNSOUND CONCRETE	22 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	8,625 SQFT
RAPID SETTING CONCRETE (PATCH)	22 CF
FURNISH POLYESTER CONCRETE OVERLAY	539 CF
PLACE POLYESTER CONCRETE OVERLAY	8,625 SQFT



**MARINA ROAD UC**

Br No. 54-0670, Rte 40, PM R154.42  
 SCALE: 1" = 20'  
 MARINA ROAD UC No. 54-0670

QUANTITIES	
REMOVE UNSOUND CONCRETE	29 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	11,486 SQFT
RAPID SETTING CONCRETE (PATCH)	29 CF
FURNISH POLYESTER CONCRETE OVERLAY	718 CF
PLACE POLYESTER CONCRETE OVERLAY	11,486 SQFT

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

TONY D. BRAKE  
 DESIGN ENGINEER

DESIGN	BY Edward Li	CHECKED Mazin Ibrahim	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE PERMIT DESIGN LOAD
DETAILS	BY Clayton Tom	CHECKED Edward Li	LAYOUT	BY Clayton Tom
QUANTITIES	BY Edward Li	CHECKED Mazin Ibrahim	SPECIFICATIONS	BY Mingxia Pan
				CHECKED Edward Li
				PLANS AND SPECS COMPARED Mingxia Pan

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
 STRUCTURE MAINTENANCE DESIGN

BRIDGE NO. Various  
 POST MILE Varies

**ROUTE 40 BRIDGES  
 GENERAL PLAN No. 6**

USERNAME => HSTFK DATE PLOTTED => 02-MAY-2011 TIME PLOTTED => 15:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	23	24

Edward Li 08-05-10  
REGISTERED CIVIL ENGINEER DATE

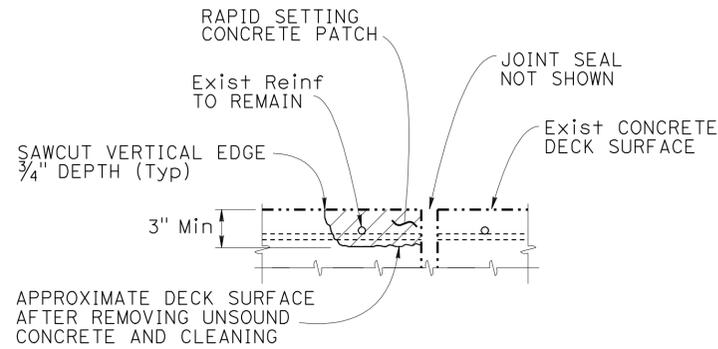
5-2-11  
PLANS APPROVAL DATE

No. C56706  
Exp. 06/30/11  
CIVIL  
STATE OF CALIFORNIA

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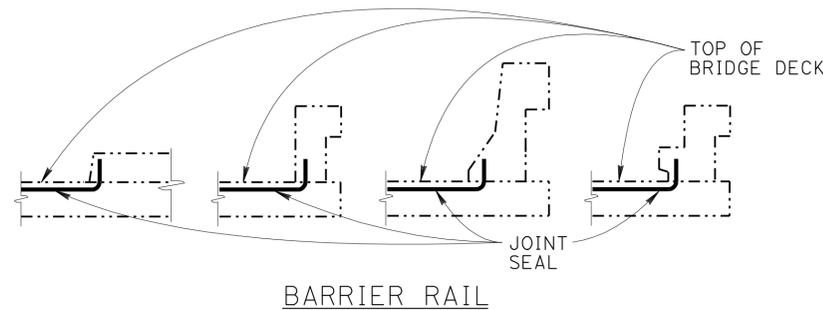
### JOINT SEAL TABLE

BRIDGE NAME	BRIDGE NUMBER	JOINT SEAL LOCATION	MINIMUM "MR" (INCHES)	Approx LENGTH (FEET)	EXISTING WATERSTOP	Approx DEPTH TO CLEAN Exp JOINT (INCHES)	Approx DEPTH OF JOINT SPALLS (INCHES)	Approx WIDTH OF JOINT SPALLS (INCHES)	Approx LENGTH OF JOINT SPALLS (FEET)
5 MILE STATION Rd OC	54-0683	BENT 2	1/2	28	NO	12	3	6	5



### JOINT SPALL REPAIR DETAIL

REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL AND IS TO REMAIN UNDAMAGED.



### 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.

### NOTES:

THE FOLLOWING NOTES APPLY TO JOINT SEAL TYPE A:

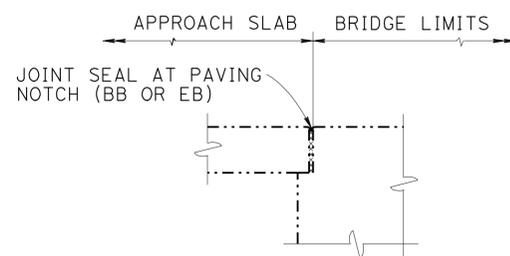
INSTALL JOINT SEAL (MR = 1/2") OR SILICONE JOINT SEAL 3" UP INTO CURB OR BARRIER RAIL ON THE LOW SIDE OF THE DECK WHERE DECK JOINT ALIGNS WITH CURB OR BARRIER RAIL JOINT.

FOR DETAILS NOT SHOWN SEE RSP B6-21 SHEET.

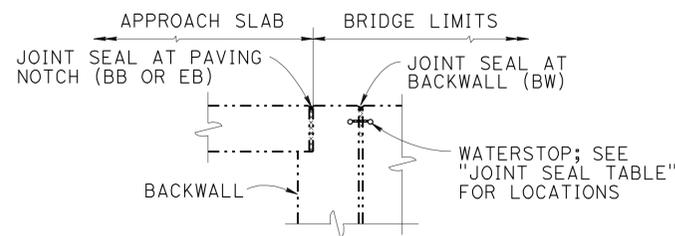
THE FOLLOWING NOTES APPLY TO JOINT SEAL TYPE B:

- SEAL MUST SATISFY BOTH MINIMUM MOVEMENT RATING (MR) AND MINIMUM W1 REQUIREMENTS.
- 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.
- W1 SHALL BE THE SMALLER OF THE VALUES DETERMINED AS FOLLOWS:
  - 0.85 TIMES THE MANUFACTURER'S DESIGNED MINIMUM UNCOMPRESSED WIDTH OF THE SEAL.
  - 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.
- 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.

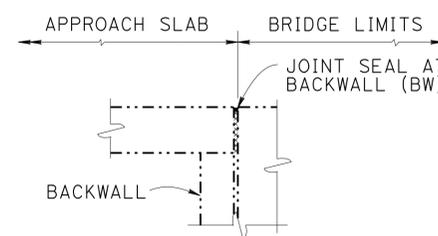
FOR DETAILS NOT SHOWN SEE RSP B6-21 SHEET.



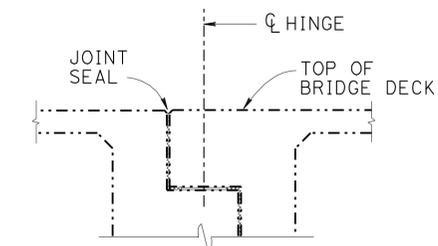
DIAPHRAGM ABUTMENT



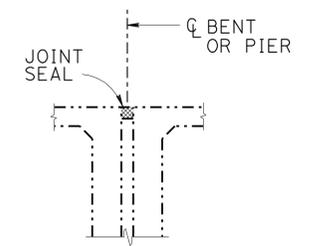
ABUTMENT WITH BACKWALL AND PAVING NOTCH



ABUTMENT WITH BACKWALL



HINGE



BENT OR PIER

### JOINT SEAL LOCATION

NO SCALE

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

DESIGN	BY	Edward Li	CHECKED	Mazin Ibrahim	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO.	Various	ROUTE 40 BRIDGES MISCELLANEOUS DETAILS No. 1	
	DETAILS	BY	Clayton Tom	CHECKED			Edward Li	POST MILE		Varies
	QUANTITIES	BY	Edward Li	CHECKED			Mazin Ibrahim			

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 2/4/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

CU 08  
EA OP1801

DISREGARD PRINTS BEARING EARLIER REVISION DATES

03-17-10	05-17-10	04-08-10	01-27-10	08-05-10					
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SHEET 7 OF 8

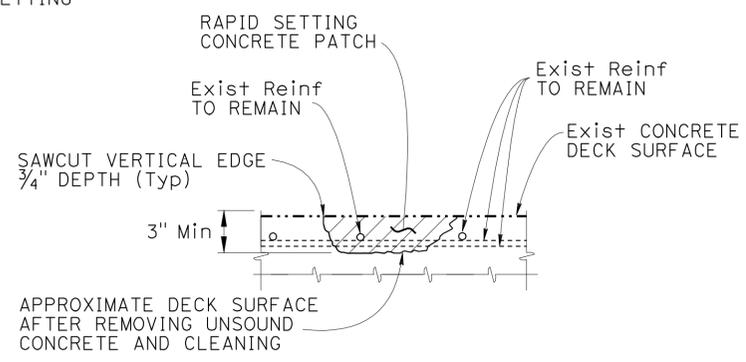
USERNAME => HSTFK DATE PLOTTED => 02-MAY-2011 TIME PLOTTED => 15:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	SBd	40	R120.0/R154.4	24	24

Edward Li 08-05-10  
 REGISTERED CIVIL ENGINEER DATE  
 5-2-11  
 PLANS APPROVAL DATE  
 No. C56706  
 Exp. 06/30/11  
 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.

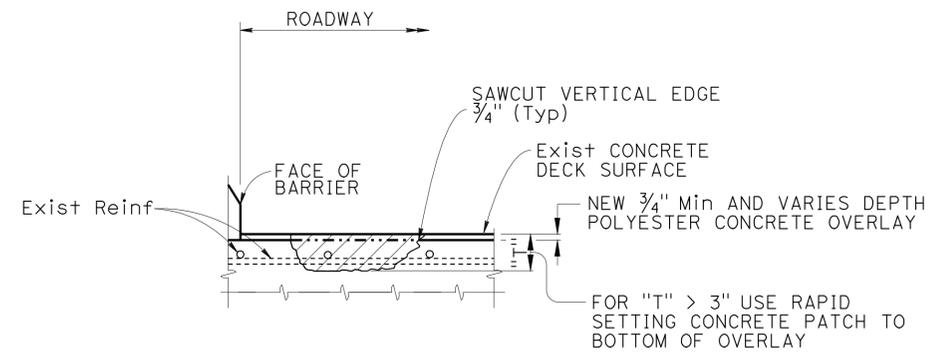
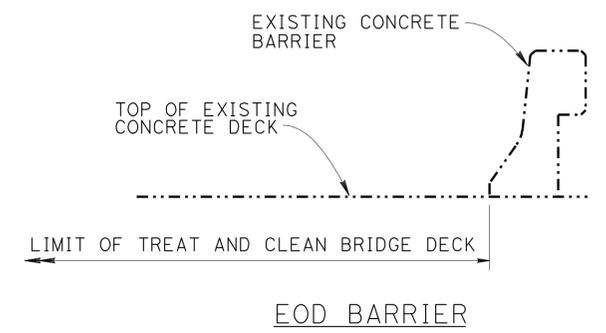
DECK REPAIR TABLE REMOVE UNSOUND CONCRETE AND RAPID SETTING CONCRETE (PATCH)			
BRIDGE NAME	BRIDGE NUMBER	APPROXIMATE AREA DAMAGED (%)	APPROXIMATE DEPTH (INCHES)
WATER ROAD OC	54-0856	1	3
BUZZARD WASH Br	54-0700R	1	3
BUZZARD WASH OVERFLOW	54-0701L	1	3
BUZZARD WASH (R+)	54-0701R	1	3
PARK ROAD OC	54-0702S	1	3
FOX WASH Br	54-0704R	1	3
FOX WASH OVERFLOW	54-0705L	1	3
LEMMING WASH (L+)	54-0706L	1	3
LEMMING WASH (R+)	54-0706R	1	3
L STREET UC	54-0820	1	3
J STREET UC (L+)	54-0814L	1	3
J STREET UC (R+)	54-0814R	1	3
5 MILE STATION Rd OC	54-0683	1	3
PARK MOABI Rd OC	54-0669	1	3
MARINA ROAD UC	54-0670	1	3

- DECK REPAIR NOTES:
- EXISTING REINFORCEMENT SHALL BE PROTECTED IN PLACE DURING UNSOUND CONCRETE REMOVAL AND PATCHING OPERATIONS.
  - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY REINFORCEMENT THAT IS ACCIDENTLY 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 3/4 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 DECK SURFACE WITH RAPID SETTING CONCRETE PATCH.



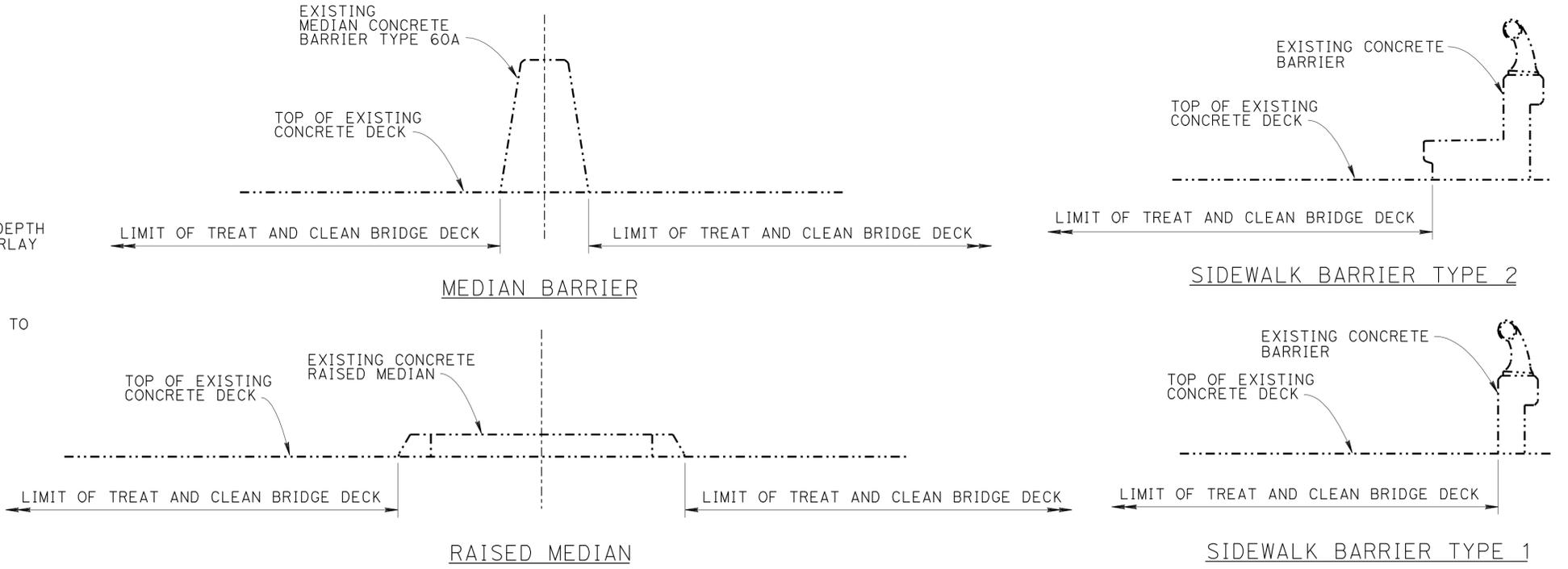
**DECK DAMAGE REPAIR DETAIL**

LOCATION WILL BE DETERMINED BY THE ENGINEER. REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL AND IS TO REMAIN UNDAMAGED.



**DECK OVERLAY DETAIL**

LOCATION WILL BE DETERMINED BY THE ENGINEER. REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.



**TYPICAL LIMITS OF DECK WORK**

NO SCALE

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

DESIGN BY Edward Li	CHECKED Mazin Ibrahim	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF MAINTENANCE STRUCTURE MAINTENANCE DESIGN	BRIDGE NO. Various	ROUTE 40 BRIDGES MISCELLANEOUS DETAILS No. 2
DETAILS BY Clayton Tom	CHECKED Edward Li			POST MILE Varies	
QUANTITIES BY Edward Li	CHECKED Mazin Ibrahim				

STRUCTURES MAINTENANCE DETAIL SHEET (ENGLISH) (REV. 2/4/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 CU 08 EA OP1801 DISREGARD PRINTS BEARING EARLIER REVISION DATES 03-17-10 05-17-10 04-28-10 01-27-10 08-05-10 SHEET 8 OF 8