MITERLINE

BARRIER LINE

53 RECESS & CL

CURB LINE

153 RECESS & CL

NEUPRONE SEAL

NEUPRONE SEAL

A

SEE BARRIER DETAIL

PLAN VIEW

SEE BARRIER DETAIL

SEE BARRIER DETAIL

SEE BARRIER DETAIL

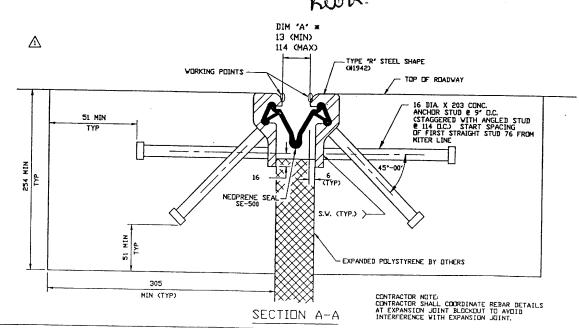
Approval Stamp must be in Red ink to be valid

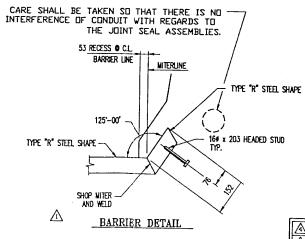
			JOINT 1	INFORMAT	ION CHART						
WBA PRODUCT NO.	BRIDGE NO.	BRIDGE NAME	P.M.	QTY.	ROUTE	LUCATION	M.R.	SKEW		DIM 'A'	
SSR72393AA	55-953	TRABUCO CREEK	1201	 			111111	SKE W	VINTER	SPRING/FALL	SUMMER
			30.1	1	241	ABUT 1	100	17*11′17*	25	20	15
\$\$R72393AA	55-953	TRABUCO CREEK	30.1	1	241	ABUT 4	90	17*11′17*	25	20	15

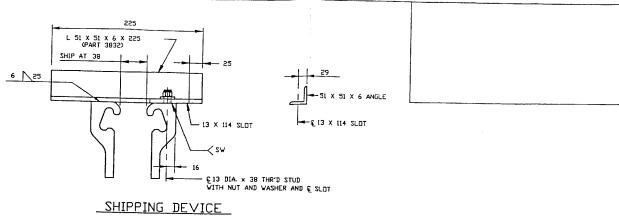
APPROVED
PURSUANT TO SECTION 5-1.02
OF THE CALTRANS
STANDARD SPECIFICATIONS

MAY - 1 2000

COUNTY OF ORANGE PUBLIC FACILITIES & RESOURCES DATE: DESIGN DIVISION OR DESIGN DIVISION







- (1) CONTRACTOR SHALL REMOVE AFTER JOINT IS SET, GRIND VELDS SMOOTH AND TOUCH UP DAMAGED GALVANIZING.
- (2) SHIPPING ANGLES SHALL BE SPACED 610 FROM MITER LINE AND 1220 C.C. THEREAFTER.

GENERAL NOTES

- 1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO FABRICATION TO ENSURE ACCURACY OF THE EXPANSION JOINT.
- 2. ALL MATERIALS AND FABRICATION SHALL BE IN ACCORDANCE WITH THE 1995
 STATE OF CALIFORNIA STANDARD SPECIFICATIONS AND THE PROJECT SPECIAL
 PROVISIONS, EXCEPT AS NOTED HEREIN.

 \triangle

- 3. ALL WELDING SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE AWS WELDING SPECIFICATION DI.5.
- 4. THE EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS, SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123 AFTER FABRICATION.
- 5. THE NEOPRENE SEALS SHALL BE SHOP INSTALLED BY THE MANUFACTURER USING PRIMA LUB ADHESIVE AND SEAL INSTALLATION TOOLS.

 ADHESIVE SHALL BE APPLIED TO THE FULL PERIMETER OF THE WALLS OF THE STRIP SEAL CAVITY. FACTORY SPLICES SHALL BE PERMITTED. THE SEAL SHALL BE ONE CONTINUOUS PIECE, FIELD SPLICES WILL NOT BE PERMITTED.
- 6. THE EXPANSION JOINT OPENING SHALL BE PRESET BY THE MANUFACTURER TO 38 PRIOR TO SHIPPING. FINAL ADJUSTMENTS SHALL BE MADE IN THE FIELD BY THE CONTRACTOR, AT THE DIRECTION OF THE ENGINEER IN CHARGE, PRIOR TO FINAL CONCRETE PLACEMENT.
- \triangle 7. In house state inspection is <u>not</u> required.
 - SHIPPING CLAMPS SHALL BE GIVEN A SHOP COAT OF CLEAR LAQUER FOR PROTECTION AGAINST CORROSION.

9. SHOP SHALL TOUCH UP ANY DAMAGED GALVANIZED AREAS AS PER SPECIFICATIONS.

SHEET HUMBER.
ITOM DESIGNATION.
ITOM NAMBER.
2e1

MARK SYSTEM

 \triangle

STATE:	CALIFORNIA
COUNTY:	ORANGE
DISTRICT:	12 ROUTE: 241
BRIDGE NO .:	55-953
W.O. NO.:	EH23075
WBA PRODUCT NO .: .	SSR72393AA

[A					
A		_		TPL PROPERTY TPL	11/8/99
A	REVISED PER MANUFACTURER	TPL	3/27 2000	95 Pineview Drive, Amherst, New York 14228 Phone: 716/691-7566 Fax: 716/691-9239	DATE:
	REVISED TO SUIT APPROVAL	TPL	3/15 2000	PROJECT: THE TRABUCO CREEK BIKE TRAIL	11/9/99
NO.			DATE	OVERCROSSING OVER STATE ROUTE 241.	WBA JOB NO.:
<u></u>	REVISIONS		_	NTS	72393
11 8	THIS DRAWN'S AND THE DESCRIS, DETAILS AND/OR ENGREERING INFORMATION CON- TAMED HERON ARE THE PROPRETIES PROPERTY OF WATSON BOWARD AS AN ARE NOT TO BE REPRODUCED ON USED DICCOT FOR THE PURPOSE FOR WHICH THEY HAVE BED! PURPSHED, ALL ROYLTS OF ESSENT AND INVESTION AND FLORED'S RESERVED.			W.B.A. SSR W/ SE500 JOINT DETAILS 9-627 NO.: 1 OF 2	DRAMING NO.: B-18878

1. 10.

SSR/	2393AA QTY: 2 REG	10.		STRUCTURED BILL OF MATERIALS	DY	VC. NO:8-18878
٤٧	PART NO.	METRIC QTY	NUM	METRIC DESCRIPTION	MATERIAL	REY.
0	SSR72393AA	1.000	EA	SSR; SE500; 0 ABUT 1, 4; 3.90 LM (X	GALVANIZED	REY.
					SHIPPING LENGTH= 3.9 LM (13FT+/)	
ţ	SSR72393AA01	1.000	PK	EXTRUSION ASSEMBLIES (W		
1	SSR72393S1	1.000	EA	SEAL FOR ASSEMBLY	usangus.	
2	094	4880.000	LN	SE-500 GLAND (C-3314-4)	NEOPRENE	
				2 200 2010 (0 3017 1)		
_						
2	1942	8540.000	LM	SSR FM 1.25 X 3.25 C-15390 A36	A36	
2	6970	4.000	EA	THD STUD 1/2" x 1 1/2" AW A108 NP	A108	
2	4640	78,000	EA	CONC ANC ST 16 x 203 AW A108 NP	A108	
2	3832	10.000	EA	SHIPPING CLAMP 51x 51 x 225 C9077 (U		
	SSR72393AA02	1.000	PK	PARTS FOR ASSEMBLY (U		
	7521	4.000	EA	WASHER 13 F436 ZP AM	A-307	
	7954	4.000	EA	NUT 13 H A325 ZP AM	A-325	
3	3471	1.000	EA	CRYSTAL CLEAR LAQUER \$1301 (13 oz.)	FOR TEMP DEVICES	
3	3468	1.000	EA	PNT #2117 RUSTOLEUM GALV.	FOR TOUCH UP	

SSR72393AARW QTY: 2 REQ'D.				STRUCTURED BILL OF MATERIALS .	DWG. NO:B-18878		
٤٧	PART NO.	METRIC QTY	MUN	METRIC DESCRIPTION	MATERIAL		
0	SSR72393AARW	1.000	EA	SSR; SE500; • ABUT 1, 4; 3.90 LM (X	GALVANIZED	REV.	
					SHIPPING LENGTH= 3.9 LM (13FT+/-)		
1	SSR72393AA	1.000	PK	EXTRUSION ASSEMBLIES (W			
1	1942	610.000	LM	SSR FM 1.25 X 3.25 C-15390 A36	A36		
1	4640	2.000	EA	CONC ANC ST 16 x 203 AW ATOS NP	A108		

APPROVED PURSUANT TO SECTION 5-4.02 OF THE CALTRANS STANDARD SPECIFICATIONS

MAY - 1 2000

COUNTY OF ORANGE PUBLIC FACILITIES & RESOURCES DEPT. **DESIGN DIVISION**

> APPROVAL STAMP MUST BE IN RED INK TO BE VALID

LEVERAGE

FIGURE 3 GLAND

INSTALLATION PROCEDURE

- STEP 1. BLOCKOUT-Blockout in the roadway shall be constructed to dimensions shown in section A-A and as directed by the field engineer.
- STEP 2. Place expansion joint over centerline of open joint and adjust to proper grade and elevation.
- STEP 3. Check width of open joint and make final adjustments if necessary. (as directed by Engineer)
- STEP 4. Tie joint to blockout reinforcing or formwork.
- STEP 5. Pour concrete into blockout.
- STEP 6. Contractor shall remove shipping devices after concrete has set, grind welds smooth, and touch-up any damaged galvanizing.

RECOMMENDED SEAL INSTALLATION PROCEDURE

- 1. PRIOR TO INSTALLING OF THE STRIP SEAL GLAND, INSTALLATION OF THE EXPANSION JOINT HARDWARE AND COMPONENTS (ANCHORS, BEDDING TAPE, AND EXTRUSIONS) SHALL BE COMPLETED AND SATISFY THE DETAILS AS SHOWN IN THE SHOP DRAWINGS (IF SUPPLIED).
- 2. SEAL INSTALLER SHALL INSURE THAT THE OPENING AT THE EXPANSION JOINT COPPLIED EQUALS VIDTH BETWEEN TOP INSIDE EDGES OF THE EXTRUSIONS) HAS BEEN SET TO A VIDTH REQUIRED BY TEMPERATURE AND IS A MINIMUM FIELD INSTALLATION VIDTH OR
- 3. PRIOR TO INSTALLATION OF THE SEAL, THE EXTRUSION CAVITY MUST BE FREE OF ALL RUST, DIRT, OIL OR ANY DITHER FOREIGN MATTER THAT COULD BE DETRIMENTAL TO THE SEALING CAPABILITY OF THE NEOPERNE GLAND AND SHALL BE CLEANED WITH AN APPROVED SOLVENT (TOLUENE OR MEX). DRIED CONCRETE FROM THE DECK POURTING OFFRATION OR PIECES OF SAND & GRAVEL, IF LEFT IN THE CAVITY, WILL PREVENT THE SEAL FROM LOCKING INTO THE EXTRUSION CAVITY.
- 4. APPLY THE LUBRICANT/ADHESIVE TO THE INSIDE OF THE EXTRUSION CAVITY AND TO THE EAR LUGS ON BOTH SIDES OF THE EXPANSION JOINT.
- NOTE: IT IS RECOMMENDED THAT THE INSTALLER APPLY THE LUBRICANT/ADHESIVE IN APPROXIMATE IS25 INCREMENTS. EXTRA TIME MAY BE REQUIRED TO INSTALL THE SEAL, THEREFORE, THESE SHALL INTERVALS VILL MINITZE THE CHANCE OF THE LUBRICANT/ADHESIVE SETTING BEFORE THE SEAL HAS BEEN INSERTED.
- TO BEGIN INSTALLATION, TAKE HOLD OF THE SEAL AND MANUALLY FOLD SEAL AS INDICATED IN FIGURE 1. CENTER FOLDED SEAL OVER EXPANSION JOINT OPENING.
- G. INSERT SEAL INTO OPENING BETVEEN STEEL EXTRUSIONS. IN THIS, CARE SHOULD BE EXERCISED THAT THE SEAL IS NOT INSERTED THROUGH AND PAST THE JOINT OPENING. ONCE PROPERLY INSERTED, THE BOITION HALF OF THE GLAND EAR OR THE LOVER EAR BOITION POSITION OF THE STRUSTED BOUTON HALF AND SEAT THEMSELVES INTO THE BOTTOM POSITION OF THE EXTRUSION CAVITY. SEE FIGURE 2 FOR COMPLETED SETUP OF INSTALLATION AT HIS TIME.
- 7. THE INSTALLER SHALL NOV PROCEED TO USE THE INSTALLATION TOOL AS SUPPLIED BY THE JOINT MANUFACTURER (PT. # 3020). PLEASE NOTE POSITION OF TOOL AS INDICATED IN FIGURE 3. THE TOOL MAY BE APPLIED TO EITHER SIDE OF THE EXTRUSION. VITH THE VORKING EDGE OF THE TOOL, APPLY FORCE TO THE VORKING POINT OF THE SEAL INDICATED IN FIGURE 3. VORK THE SEAL UPWARD TO ALLOW THE UPPER EARLUG TO ROTATE TOWARD THE REAR OF THE EXTRUSION CAVITY & LOCK IN HUMBER THE UPPER LIP. VORK THE TOOL IN SMALL SEGMENTS ALONG THE LENGTH OF THE JOINT. TO CONTINUE THE INSTALLATION, USE OF DIRECTOR TOOL THE UPPER EAR LUG AND A SECOND TOOL TO APPLY THE LEVER ACTION THAT IS RECOMMENDED UNTIL THE UPPER EAR LUG HAS BEEN PROPERLY SEATED AND LOCKED INTO THE UPPER PORTION OF THE
- 8. UPON COMPLETING THE 1525 SECTION OF THE SEAL, REVERSE THE TOOL AS INDICATED IN FIGURE 4 AND FOLLOW THE SAME PROCEDURE AS OUTLINED IN STEP 7. HERE WE ARE SIMPLY WORKING THE TOOL ALONG THE OPPOSITE SIDE OF THE JOINT.
- 9. UPON COMPLETING STEP 8, THE INSTALLER SHALL REPEAT 3 THROUGH 8 UNTIL THE TOTAL LENGTH HAS BEEN INSTALLED.
- 10. IT IS RECOMMENDED THAT THE INSTALLER INSPECT THE OVERALL SEAL INSTALLATION AND ENSURE THAT THE SEAL HAS BEEN PROPERLY INSTALLED AND LOCKED IN THE EXTRUSION CAVITY. ANY PORTION OF THE SEAL NOT LOCKED PROPERLY MUST BE CORRECTED AT ONCE FOLLOWING STEPS 7 AND B.
- 11. INSTALLATION IS NOW COMPLETE. ALLOW LUBRICANT/ADHESIVE APPROXIMATELY 24 HOURS

MATERIAL SPECIFICATIONS

STRIP SEAL - Type 'R' is made in accordance with ASTM A-36.

NEOPRENE SEAL- The neoprene material shall conform to ASTM D2628, modified for hardness and exclusive of recovery tests. The physical property requirements are as follows:

	ASTM	
PHYSICAL PROPERTIES	PROCEDURE	REQUIREMENTS
Tensile Strength, min. psi (kg/cm2)	D-412	2000 (141)
Elongation at break, min. %	D-412	250
Hardness, Type A Durometer	D-2240	55 - 70
Compression Set, 70 hrs. 100°C max.	D-395	40%
7 - F 7 - 7 - 7 - 7 - 100 C Max.	Method B	40%
Oven Aging 70 hrs. 100°C	modified B	
Tensile Strength, loss, max.	D-573	
Floresting to a service of the servi		20%
Elongation loss, max.		20%
Hardness, Type A duro (points chng.)		0 to +10
Dil Swell, ASTM #3 oil, 70 hrs. @ 100°C	471	
Weight Change, max.		45%
Ozone Resistance, 20% Strain 300 pphm	D-1149	
in air 70 hrs. e40°C (wipe with		
toluene to remove surface contam.)		no cracks
Low Temp. stiffening max. 7 days € -10°C	D-2240	no cracks
Hardness Type A Duro	2 2210	+15
Permanent Set At Break, %	D-412	10 max.
	D 41C	IU Max.

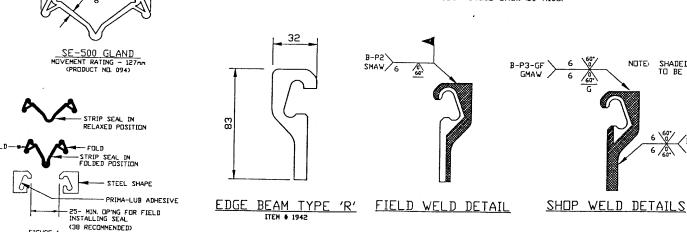
PRIMA-LUB ADHESIVE- Neoprene seals are to be bonded in place (in field) using Prima-tub Adhesive. The material is a one-part moisture curing polyurethane and aromatic hydrocarbon solvent mixture which complies with ASTM D4070-81. The physical properties are as follows:

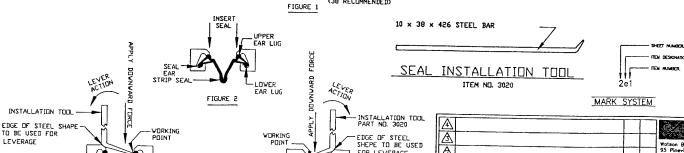
NOTE: SHADED AREAS TO BE WELDED

B-P3-GF GMAW

Average weight per gallon 3.86 kg +/- 10% 72% (min.) Solids content Adhesive to remain workable From -15° TO 49 °C 2000 psi (141 kg/cm2)(min.) Film strength Elongation at room temperature 350% (min.) over 40°C Flash point (seta closed cup)

CONCRETE ANCHOR STUDS- Studs shall be A108.





TOOL	11	BRIDGE NO.: W.O. NO.:	12 55-953 EH23075 CT NO.: SSR7239		241
		Watson Bournan Acros Corp.	Watson Bowman	IPL	11/8/99

STATF:

CALIFORNIA

ORANGE

95 Pineview Drive, Amherst, New York 14226 Phone: 718/691-7566 Fax: 716/691-9239 LPT 11/9/99 TPL 3/27 PROJECT: THE TRABUCO CREEK BIKE TRAIL REVISED PER MANUFACTURER OVERCROSSING OVER STATE ROUTE 241. DESCRIPTION NTS 72393 REVISIONS W.B.A. SSR W/ SE500 JOINT DETAILS 2 OF 2 B-18878