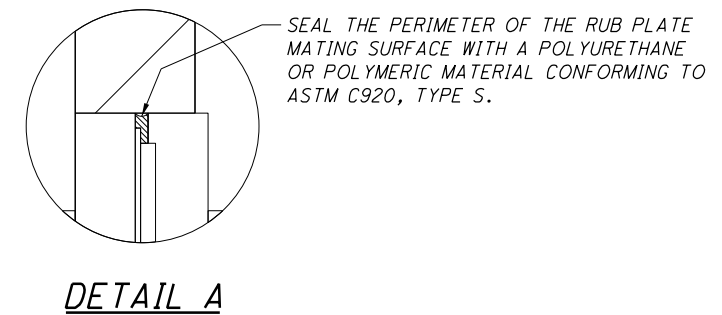
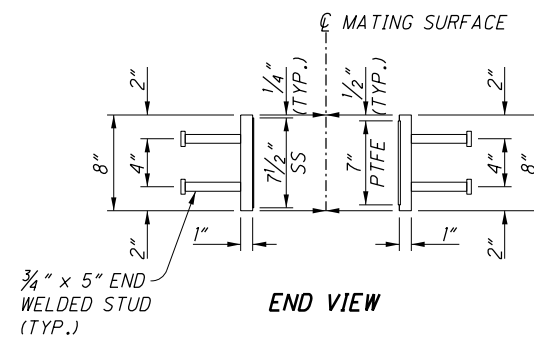
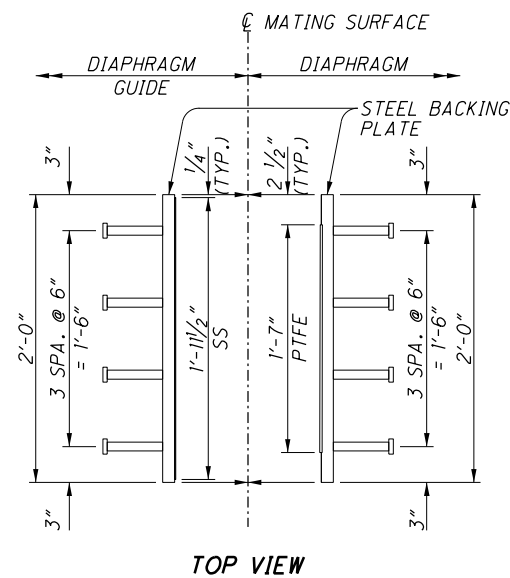


- \* - FINISH THE SURFACE OF THE CONSTRUCTION JOINT WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE 1/4" DEEP MINIMUM
- \*\* - PLACE TO AVOID INFERENCE WITH LONGITUDINAL REINFORCEMENT IN THE BEAM SEAT.



**RUB PLATE DETAILS**  
SS = STAINLESS STEEL  
PTFE = POLYTETRAFLUORETHYLENE

**GENERAL NOTES**

**DESCRIPTION:** THIS DRAWING PROVIDES THE COMPLETE PLAN DETAILS FOR SEMI-INTEGRAL DIAPHRAGM GUIDES.

**DESIGNER NOTES:** EACH DIAPHRAGM GUIDE HAS BEEN DESIGNED TO A FACTORED CAPACITY NORMAL TO THE RUB PLATES OF 517 KIP AND PARALLEL TO THE RUB PLATES OF 103 KIP. FOR IMPOSED FACTORED LOADING EXCEEDING THESE CAPACITIES, ADDITIONAL GUIDES SHALL BE SPECIFIED.

THE PROJECT PLANS SHALL DETAIL THE LOCATION OF EACH DIAPHRAGM GUIDE. THE VOLUME OF CONCRETE AND REINFORCING STEEL FOR THE DIAPHRAGM GUIDES SHALL NOT BE INCLUDED IN THE PLAN QUANTITIES.

**SKEW:** FOR BRIDGES WITH SKEW ANGLE EQUAL TO 0°, RUB PLATES SHALL BE INSTALLED ON BOTH SIDES OF THE DIAPHRAGM GUIDE.

**CONCRETE:** PERFORM WORK ACCORDING TO C&MS 511. USE THE SAME CLASS OF CONCRETE USED IN THE ABUTMENT. F'C = 4.0 KSI.

**REINFORCING STEEL:** PROVIDE REINFORCEMENT ACCORDING TO C&MS 509. MIN. YIELD STRENGTH = 60 KSI

**STAINLESS STEEL:** 13 GAGE STAINLESS STEEL, TYPE 304, ASTM A167 OR A240 WITH A SURFACE FINISH OF 8.0 μ-IN OR BETTER WELDED AROUND THE ENTIRE PERIMETER TO THE 1" BACKING PLATE PER 869.12.

**PTFE:** PROVIDE PTFE SHEET OR FABRIC PER SUPPLEMENTAL SPECIFICATION 869.10 AND ATTACH PER 869.11.

**STEEL BACKING PLATE:** PROVIDE ASTM A709 GRADE 50 STEEL BACKING PLATES ACCORDING TO C&MS 711.01.

**END WELDED STUDS:** PROVIDE END WELDED STUDS IN ACCORDANCE WITH C&MS 513.22.

**RUB PLATES:** FABRICATE RUB PLATES ACCORDING TO SUPPLEMENTAL SPECIFICATION 869. SHIP AND PACKAGE FABRICATED UNITS ACCORDING TO 869.18. LEAVE WRAPPING, STRAPS OR RETAINING CLAMPS IN PLACE UNTIL BOTH SIDES OF THE UNIT ARE SECURED IN THEIR FINAL POSITION. ADDITIONAL REINFORCEMENT MAY BE INCLUDED IN THE GUIDE FOR THIS PURPOSE.

**CORROSION PROTECTION:** SHOP METALLIZE AND SEAL ALL STEEL SURFACES, EXCEPT PTFE-STAINLESS STEEL SLIDING SURFACES PER 869.13.

**BASIS OF PAYMENT:** THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES OF CAULK, PEJF, CONCRETE, REINFORCEMENT AND RUB PLATES AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
511	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE

MARK	NUMBER	TYPE	DIMENSIONS		
			A	B	C
DG601	5	3	$\frac{(2'-8")}{\cos(\phi)}$	3'-8 1/2"	
DG801	7	5	2'-8"	3'-7"	2'-4"

**BENDING DIAGRAMS**

**TYPE-3**      **TYPE-5**