## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



## MISSING FASTENER REPLACEMENT

SPAN	MEMBER	LOCATION	REQUIRED NO. BOLTS	BOLT LENGTH	THREAD LENGTH
10	Stringer 5 at Floorbeam 5	Stringer 5 at Floorbeam 5 Stringer to floorbeam connection / fixed side of relief joint		2 <sup>5</sup> 16"	1 <sup>1</sup> 2"
11	Stringer 5 at Floorbeam 6	Stringer to floorbeam connection / expansion side of relief joint	2	See Shoulder Bolt Detail	
14	Floorbeam 4 at Inside North Girder	Floorbeam bottom flange to girder connection	1	2 <sup>5</sup> 16"	1 <sup>/</sup> 2"
17	Stringer 6 at Floorbeam 5	Stringer to floorbeam connection / expansion side of relief joint	1	See Shoulder Bolt Detail	

Note:

Missing fasteners shall be replaced with  $7_{B}$ "  $\phi$  H.S. bolts unless noted otherwise.



SHEET NO

33 SHEET

of 33 for details.

Note: All costs associated with replacing missing fasteners and removing tack welds shall be included with the cost for Structural Steel Repair.

BILL OF MATERIAL

Item	Unit	Total	
Structural Steel Repair	Pound	10	

MISCELLANEOUS STEEL REPAIR DETAILS - 5 I-80 OVER MISSISSIPPI RIVER STRUCTURE NO. 081-0011

o. 21	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
••••	80	(81-1B)M-4	ROCK ISLAND	75	48			
rs	SN 081-0011 CONTRACT NO. 64				F 31			
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT							