TABLE OF REPAIRS

NBIS Item #	Location	Stringer No.	Span	Problem	Shim Plate Thickness	Crack Length
10	Bent W	S2	X	Gap	1/2 **	-
7	Bent W	S3	W	Gap	1/4"	-
9	Bent W	<u>\$</u> 4	X	Gap	14 ¹¹	-
6	Bent W	S5	W	Gap, Weld Crack	1_" 4	29"
8	Bent W	S6	X	Gap	15 "	-
101	Bent W	S7	W	Weld Crack	-	29"
110	Bent 2	\$3	2	Weld Crack	-	7"
11	Bent 2	54	2	Gap	2"	-
115	Bent 2	<u>\$</u> 4	3	Gap	3 " 16	-
363	Bent 17	S2	17	Gap	3,"	-
366	Bent 17	S3	18	Gap	14"	-
31	Bent 17	S6	17	Gap	31"	~
34	Bent 22	S2	22	Gap	4"	-
300	Bent 27	54	28	Gap	1/8 "	-



SHIM PLATES AT BENT W (5 Reg'd)



SHIM PLATES AT BENT 2 AND 27 (3 Rea'd)

CLEANING AND PACK RUST REMOVAL

NBIS Item #	Location	Problem
120	Bent 7 North and South Column	Clean Bearing Surfaces at Column Bases
363	Bent 17 at Stringers 2 on Span 17	Remove Pack Rust (Prior to Shimming)
31	Bent 17 at Stringers 6 on Span 17	Remove Pack Rust (Prior to Shimming)
280	Bent 18 North Column Base	Clean Bearing Surfaces at Column Bases
280	Bent 18 North Column Base	Remove Pack Rust
290	Bent 23, North Column of Footing	Clean Bearing Surfaces at Column Bases
290	Bent 23. North Column at Footing	Remove Pack Rust
302	Bent 28, North Column at Footing	Clean Bearing Surfaces at Column Bases
302	Bent 28. North Column at Footing	Remove Pock Rust

* Typical procedure for shim placement.

- 1.) Jack stringer l_{B} " from bearing and sand blast gap between sole plate
- 2.) Measure opening (Thickness, Width, Length, Stope)
- 3.) Place shim plate
- 4.) Lower stringers and weld
- ** Typical Crack Repair

Existing crack shall be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange. After removal of the weld, the base metal shall be checked for cracks using dye penetrant (PT), magnetic particle (MT), or other approved testing method performed by the qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included with Adjust and Reposition Bearings. The cost of crack repair in the base metal if necessary will be paid with Adjust and Reposition Bearings. If no cracks are present then the removed weld of the same size and type shall be replaced.

Clean and paint bearing repair areas in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures. Cost included with Adjust and Reposition Bearings,

Notes:

The Contractor is to verify the existing dimensions and submit a report of the measured opening sizes prior to fabricating the shim plates. It is intended to keep the existing beams at their current elevation.

Cost of shim plates, anchor bolts, welding, sand blasting and grinding of existing welds shall be included in the pay item Adjust and Reposition Bearings.

Clean and paint areas requiring pack rust removal in accordance with the special provision for Cleaning and Painting Existing Steel Structures, Cost included with Cleaning and Painting Steel Bridge No. 1.

					(Sheet 2 of 2)		
	USER NAME +	DESIGNED - JJA	REVISED -		BEABING REPAIRS	F.A.P. SECTION COUNTY TOTAL SHEET	
CIN ENGINEERING, LTD.	FILE NAME	CHECKED - TBP	REVISED -	STATE OF ILLINOIS		799 IBR. DRS-2 ST. CI AIR 156 108	
	PLOT SCALE .	DRAWN - AJF	REVISED -	DEPARTMENT OF TRANSPORTATION	S.N. 082–6001 MLK BRIDGE OVER MISSISSIPPI RIVER	CONTRACT NO. 76B03	
Springfeld, Kilmole	PLOT DATE + 05/02/2014	CHECKED ~ VPT	REVISED -		SHEET NO. SOGO OF S138 SHEETS	ILLINOIS FED. AID PROJECT	



SHIM PLATES AT BENT 17 AND 22 (4 Rea'd)

BILL OF MATERIAL

	Item			Unit	Total
Adjust	and	Reposition	Bearings	Each	14