

REPAIR 1 DETAIL

Span 3, L1E-U1E
(Cost included with Structural Steel Repair.)
(Contractor must ensure that no damage is done to the vertical truss members.)

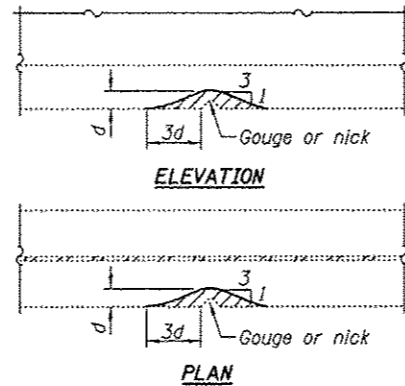
**REPAIR 2
TABLE OF HOLE LOCATIONS**

SPAN	MEMBER	LOCATION	DESCRIPTION	ACTION
3	L1E-U1E	6' above deck	3 Small holes	Fill with bolts
3	U1W-L2W	8' above deck	3/4" Hole	Fill with bolt
3	U5W-L5W	3' above deck	1" Hole	Fill with bolt
5	L4W-U4W	15' above deck	3/4" Hole, ea. O.S. L	Fill with bolts
5	L7E-U7E	1' above deck	2-3/4" Holes	Fill with bolts
5	L7E-U7E	15' above deck	2-3/4" Holes	Fill with bolts
5	L7W-U7W	20' above deck	3/4" Hole	Fill with bolt
5	L10E-U10E	15' above deck	2-3/4" Holes, O.S. L	Fill with bolts
5	M11W-U12W	at M11W	1" Hole	Fill with bolt
6	L5W-U6W	25' above deck	4-3/4" Holes	Fill with bolts
7	L7W-L8W	8' N. of L8W	2-Missing Rivets	Fill with bolts
8	L6W-U7W	3' above deck	2-3/4" Holes	Fill with bolts
8	L5W-U5W	10' above deck	2-3/4" Holes	Fill with bolts

**REPAIR 3
TABLE OF MISSING GUARDRAIL BOLTS**

WEST TRUSS			EAST TRUSS		
SPAN	LOCATION	# MISSING	SPAN	LOCATION	# MISSING
3	LOW	2	3	2' N. of L6E	2
3	6' N. of L1W	2	3	5' S. of L7E	2
3	PP5 - PP6	2	4	LOE	2
3	PP7 - PP8	2	4	6' N. of L1E	2
4	LOW - L1W	2	5	5' N. of L8E	2
5	PP8	4	5	5' S. of L8E	2

Note:
For Repair 5 locations, the Contractor shall field measure the existing plates and determine the actual locations of the existing rivets prior to ordering or fabricating any plates. Any discrepancies from the plans or existing shop plans shall be brought to the attention of the Engineer prior to fabrication.

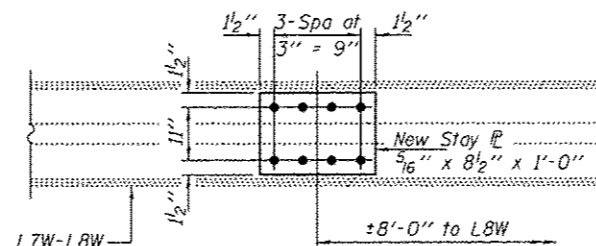


REPAIR 4 - GRINDING DETAIL

Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating any beam straightening operations. Any cracks that cannot be removed by grinding approximately 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Ground surfaces shall be spot cleaned and painted with an aluminum epoxy mastic primer followed by a finish coat to match the color of the existing beam. Cost of grinding, testing and spot painting included with Structural Steel Repair.

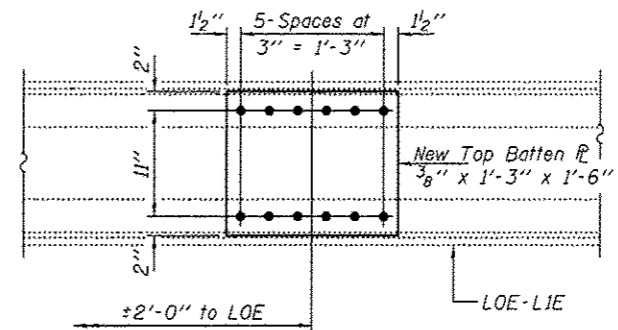
**REPAIR 4
TABLE OF GRINDING LOCATIONS**

MEMBER	LOCATION	DESCRIPTION	ACTION
U7W-L8W	3.5'-5' above deck	Gouges	Grind
LOE-U1E	3' above deck	Gouge	Grind
L3E-U3E	4' above deck	Gouge	Grind
L5W-U5W	8' above deck	Gouge	Grind
L6W-U7W	2' above deck	Gouge	Grind
L8E-U7E	4' above deck	Gouge	Grind
U1W-L2W	5' above deck	Gouge	Grind
U13W-L14W	3' above deck	Gouge	Grind
LOE-U1E	4' above deck	Gouge	Grind
LOW-U1W	4' above deck	Gouge	Grind
L2W-U2W	6' above deck	Gouge	Grind
U2W-L3W	7' above deck	Gouge	Grind
L3W-U3W	3' & 6' above deck	Gouge	Grind
L3W-U4W	6' above deck	Gouge	Grind
U3W-L4W	6' above deck	Gouge	Grind
L4W-U4W	6' above deck	Gouge	Grind
L5W-U5W	4' & 6' above deck	Gouge	Grind
L6E-U6E	4' above deck	Gouge	Grind
L6W-U6W	6' above deck	Gouge	Grind
L7W-U7W	6' above deck	Gouge	Grind
U7W-L8W	6' above deck	Gouge	Grind
LOE-U1E	4' above deck	Gouge	Grind
Gusset Plate	M3.5 E	Gouge	Grind
L4E-U4E	4' above deck	Gouge	Grind
L7E-U7E	5' above deck	Gouge	Grind
U7E-L8E	4' above deck	Gouge	Grind
U7W-L8W	3' above deck	Gouge	Grind



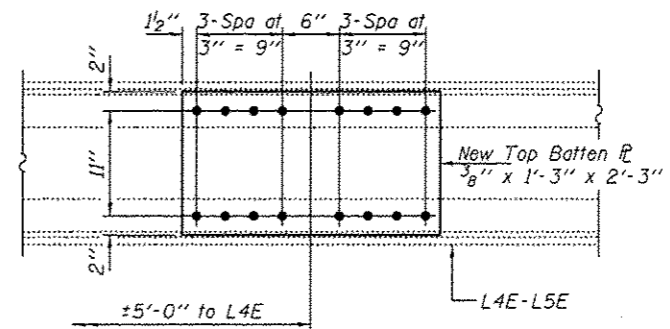
REPAIR 5 DETAIL

Plan View - Span 7, L7W-L8W



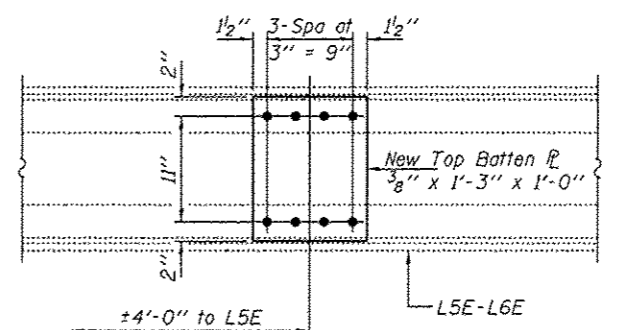
REPAIR 5 DETAIL

Plan View - Span 5, LOE-L1E



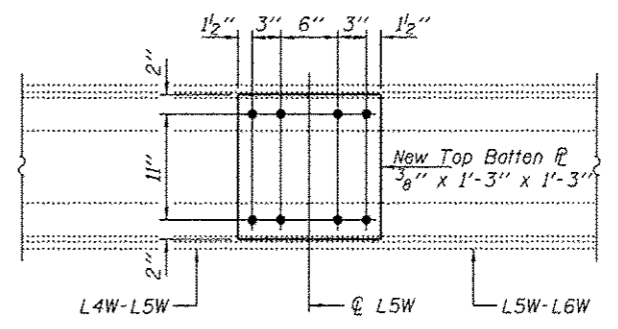
REPAIR 5 DETAIL

Plan View - Span 5, L4E-L5E



REPAIR 5 DETAIL

Plan View - Span 5, L5E-L6E



REPAIR 5 DETAIL

Plan View - Span 5 at L5W
(L5W-U5W not shown for clarity)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	180
Bolt Replacement	Each	50

DESIGNED - MKC
CHECKED - VP
DRAWN - Kyle M. Steffen
CHECKED - MKC VP

EXAMINED
PASSED
ACTING ENGINEER OF STRUCTURAL SERVICES
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - JULY 26, 2012
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIRS 1 THRU 5 DETAILS
SN 062-0036

SHEET NO. 5 OF 10 SHEETS

F.A.S. R.T.E. 2369
SECTION (U04B-DI)
COUNTY MARSHALL
TOTAL SHEETS 17
SHEET NO. 12
CONTRACT NO. 68B16
ILLINOIS FED. AID PROJECT