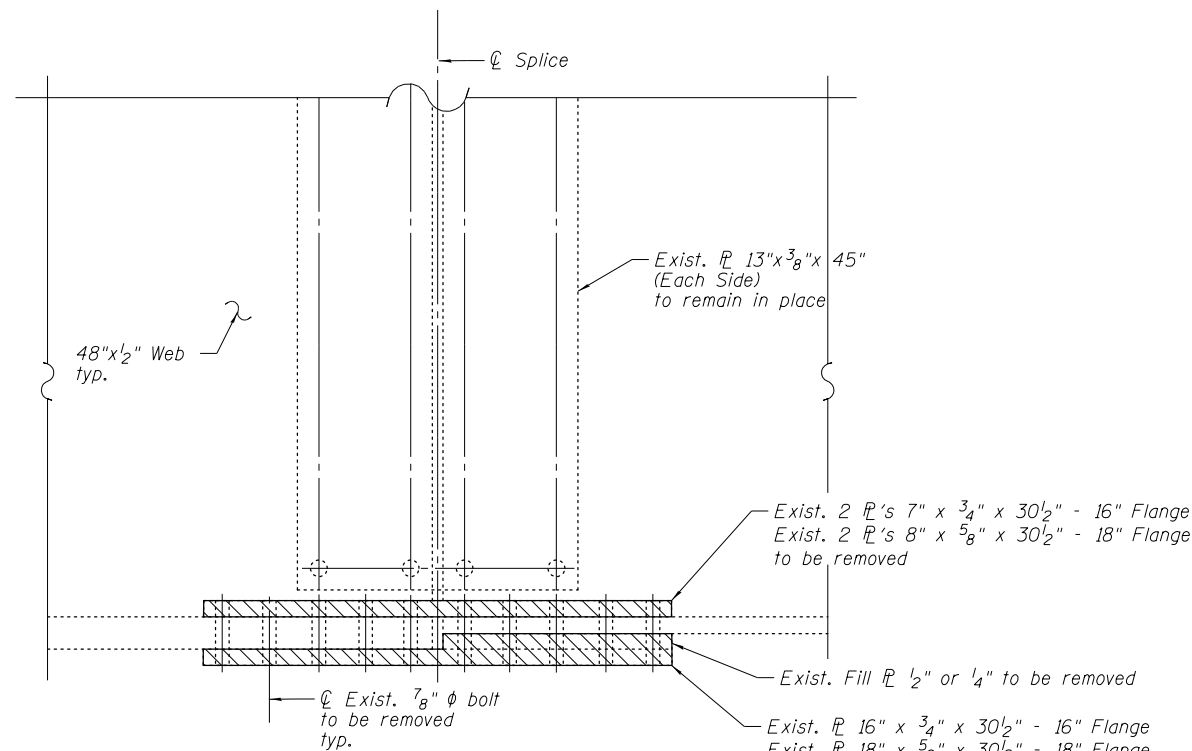


2/26/16 PM

12/7/2012

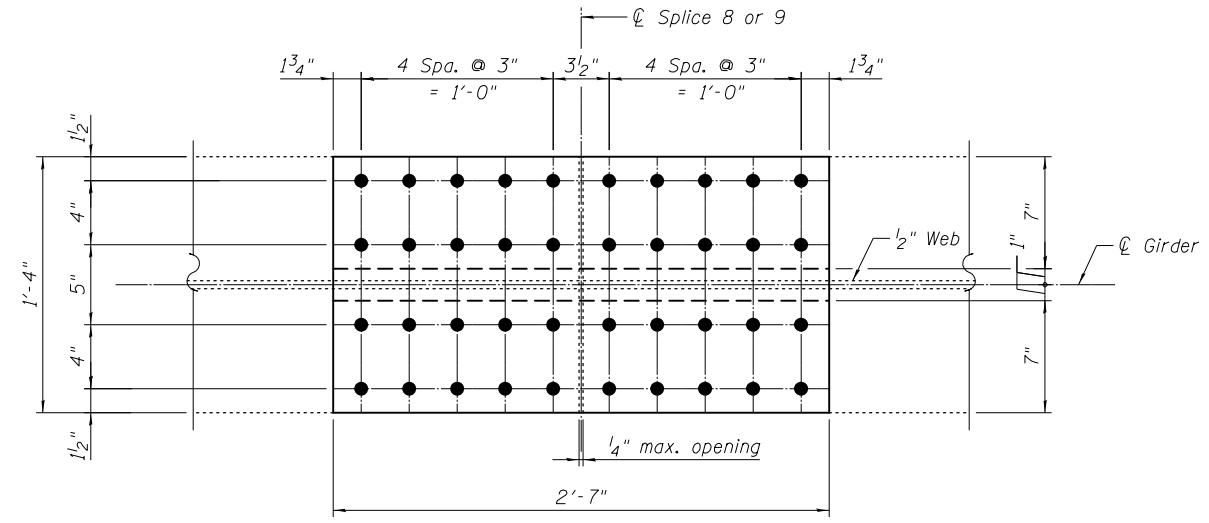
S:\1072\_05\_CADD\Structure\1 SN 0162437\CADD Sheets\0162437-036-SS02.dgn



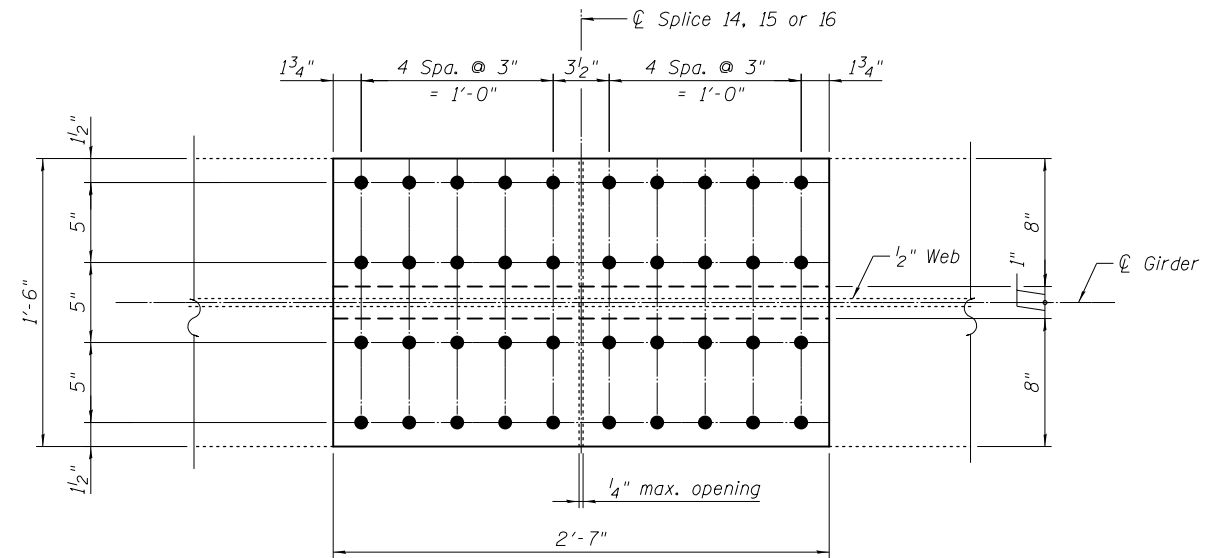
**LEGEND**



**DETAIL 1**  
(Removal)



**VIEW A-A**  
(Unit 3)



**VIEW A-A**  
(Unit 4)

**SPLICE PLATE DIMENSIONS**  
(For All 4 Girders)

UNIT	SPAN	SPLICE	FLANGE WIDTH	OUTER PLATE A	INNER PLATE B	FILL PLATE C
3	8	8	16"	16" x 3/4" x 31"	(2)-7" x 7/8" x 31"	16" x 1/4" x 15 3/8"
		9		16" x 7/8" x 31"	(2)-7" x 1" x 31"	
4	12	14	18"	18" x 5/8" x 31"	(2)-8" x 3/4" x 31"	18" x 1/4" x 15 3/8"
		15				
		16				

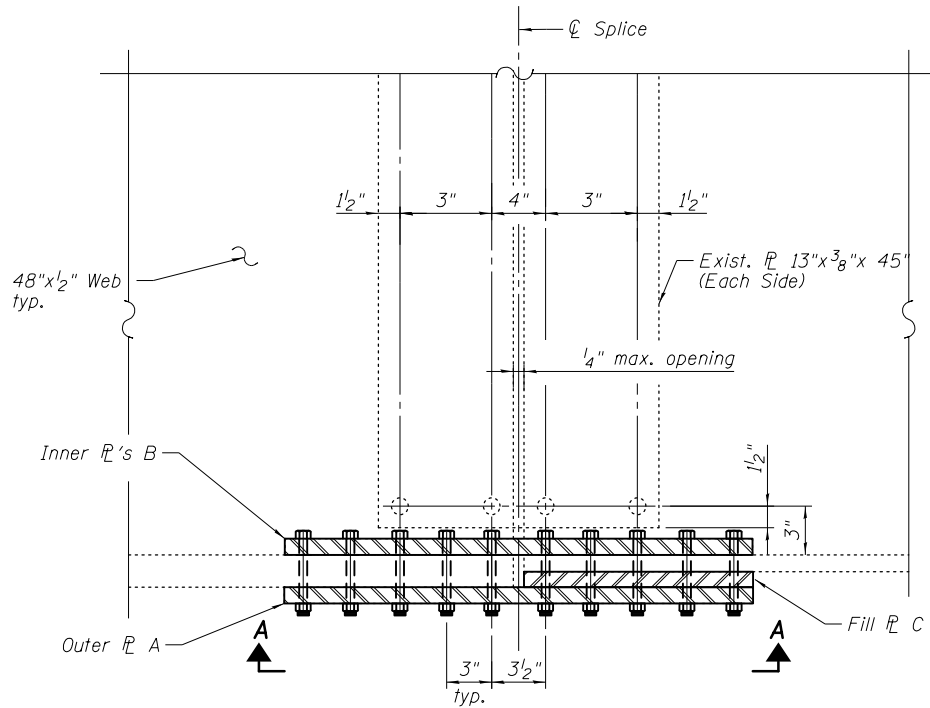
See Sheet S-35 for the replacement locations.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	5,950
Temporary Shoring & Cribbing	Each	40

**NOTES:**

- The splice plates and bolts shall be replaced after removal of the existing deck and prior to forming of the new deck.
- Prior to removal of the existing splice plates and bolts, Contractor shall provide temporary support to each connecting beam. The temporary support system shall be removed after the replacement is complete. Cost included with Temporary Shoring and Cribbing. See Special Provision.
- If jacking is used for the temporary support system, Contractor shall provide min jacking capacity of 70 kips (for beam dead load reaction of 45 kips) at each side of the splice.
- Work shall be performed in such a manner so as not to damage the existing structural steel that is to remain in place. If structural steel is damaged due to negligence on the part of the Contractor, the repair or replacement shall be done by the Contractor at the Contractor's expense and as directed by the Engineer.
- The Contractor shall provide adequate protection for vehicular traffic, which may be endangered by falling material during repair operations. The cost of any such protection, or of any working platforms for the repair operations, shall be considered included in the cost of Temporary Shoring and Cribbing.
- The bottom row of web splice bolts may be removed and replaced as required to replace the bottom flange bolts. Any web splice bolts removed shall be replaced with new 7/8" phi ASTM A325 high-strength bolts. Cost included with Structural Steel Repair.
- All structural steel shall conform to AASHTO M270 Grade 50 and all plates except fill plates shall conform to the Impact Testing Requirement, Zone 2. All new fasteners in the flange shall be 7/8" phi high strength ASTM A490 bolts (with threads excluded from the shear plane). Reuse existing 1" phi open holes.



**DETAIL 1**  
(Proposed)

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com



USER NAME =	DESIGNED - IYL	REVISED -
PLOT SCALE =	CHECKED - BAK	REVISED -
PLOT DATE = 11/08/2012	DRAWN - MTR	REVISED -
	CHECKED - IYL	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS II  
STRUCTURE NO. 016-2437

SHEET NO. S-36 OF S-83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-060-BR	COOK	285	199
CONTRACT NO. 60V61				
ILLINOIS FED. AID PROJECT				