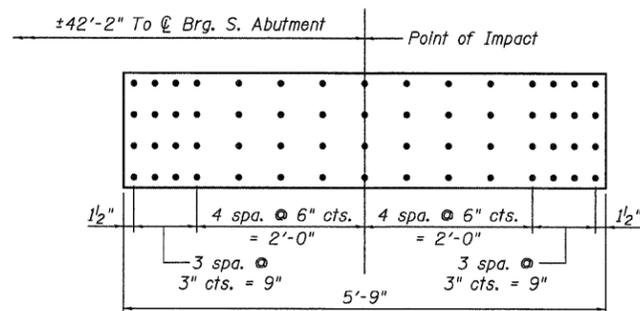


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-----------------------|----------|-------------------|------------|-----------|
| ROUTE NO. | SECTION | COUNTY | JOB SHEETS | SHEET NO. |
| F.A.L. | - | ST. CLAIR | 7 | 7 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT- | | |

SHEET NO. 3
3 SHEETS

Operator: dheberling
Date: 9/9/2008
Filename: L:\Jobs\DOT BBS\6727 BBS Various\Various\6727.08\Drawings\Structure\082-0150.dgn

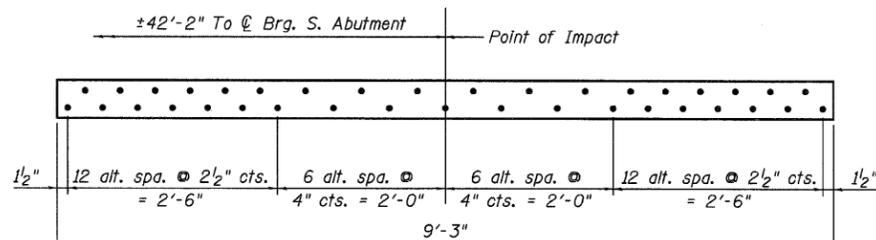


WEB STRENGTHENING PLATE

2 - PL's 3/8" x 1'-4 1/2" x 5'-9"

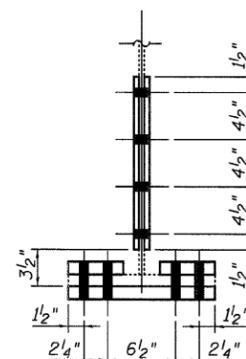
1 1/2" φ holes for 7/8" φ H.S. bolts in bottom flange and web strengthening PL's. Field drill 1 1/2" φ holes in existing girder to match holes in strengthening PL's.

- * Field drill holes in new gusset PL to match holes in existing connection PL. Typ. for top gusset PL's and both gusset PL's at beam 3.
- ** Shop drill holes in new gusset PL. Field drill holes in new L 4 x 4 x 3/8 to match holes in new gusset PL. Typ for bottom gusset PL's at beams 5 and 4.
- *** Fillet weld angles along 3 sides and on one face of the gusset PL. Typ. all angle to gusset PL connections.
- **** Fill PL 3/8 x 4 x 9 between angle and Gusset PL.

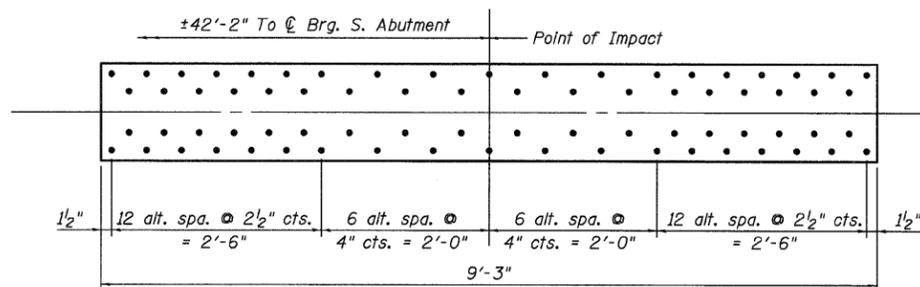


INSIDE FLANGE STRENGTHENING PLATE

PL 1" x 5 1/4" x 9'-3"

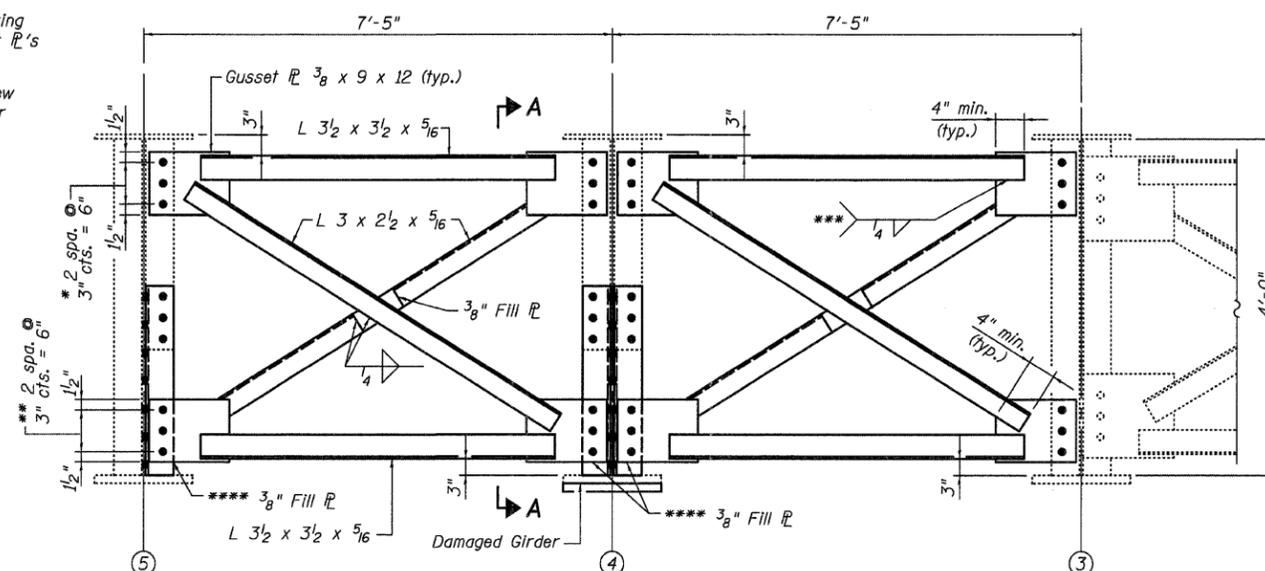


TYPICAL STRENGTHENING SECTION



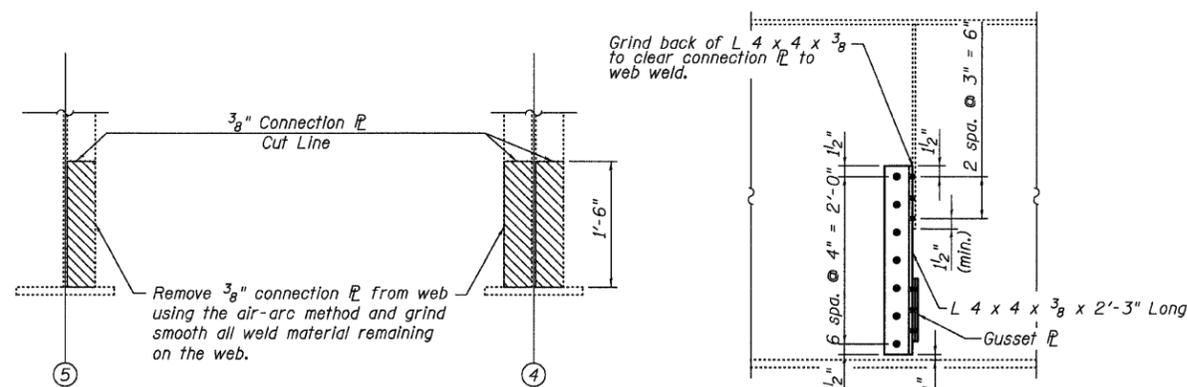
OUTSIDE FLANGE STRENGTHENING PLATE

PL 3/4" x 1'-2" x 9'-3"



CROSS FRAME REPAIR DETAIL

(Looking North)



CONNECTION PLATE REMOVAL DETAIL

Grind back of L 4 x 4 x 3/8 to clear connection PL to web weld.

Remove 3/8" connection PL from web using the air-arc method and grind smooth all weld material remaining on the web.

Note:

VIEW A-A

Field drill 1 1/2" φ holes in existing web and connection PL to match holes in new L 4 x 4 x 3/8 (Cross-Frame not shown for clarity)

| | |
|----------|--------|
| DESIGNED | S.D.S. |
| CHECKED | C.W.C. |
| DRAWN | D.L.H. |
| CHECKED | S.D.S. |

WHKS & CO.

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BEAM STRENGTHENING DETAILS
10th STREET OVER I-64
ST. CLAIR CO.
S.N. 082-0150