STATE OF ILLINOIS

Procedure for Hoan Repair Detail

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- 1. Remove existing ${}^{3}_{\mathcal{B}}$ " connecting \mathbb{P} . The minimum distance from cut to face of web shall be the larger of I_4 " or web to \mathcal{R} weld size, with removal of remaining material by grinding as described below. The cut shall be made parallel to the web without angling the cut towards the web. Equipment and method of cutting shall be approved by the Engineer. Any method of removal to be used shall ensure that no damage is done to the existing web, vertical stiffener or welds connecting these elements. Cutting shall be done in a manner such that the paint on the opposite face of the web is not damaged. If damage to the paint occurs due to cutting, the damaged area shall be repainted at the contractor's expense and procedures shall be modified to prevent damage at subsequent removal locations.
- 2. Remove material between cut and web by grinding and grind smooth at web surface. Web $I_{\rm L}^{\rm c}$ surfaces shall have a roughness average (Ra) of 250 μ in. or less. Grinding equipment shall be approved by the Engineer. The grinding operation should not gouge the girder web P.
- 3. The web surface at the modification shall be inspected using dye penetrant or magnetic particle (MT) methods. Any cracks found shall be identified and reported to the Bureau of Bridges and Structures for further disposition.

Cost of above described work shall be included with Structural Steel Repair.





Procedure for Repair Detail

1. Cut existing longitudinal stiffener ±4" from face of vertical stiffener and along web as shown, with a 1"R (Min) at Web. The minimum distance from cut to face of web shall be the larger of ${}^{I}_{4}{}^{\prime\prime}$ or web to plate weld size, with removal of remaining material by grinding as described below. The cut shall be made parallel to the web without angling the cut towards the web. Equipment and method of cutting shall be approved by the Engineer. Any method of removal to be used shall ensure that no damage is done to the existing web, vertical stiffener or welds connecting these elements. Cutting shall be done in a manner such that the paint on the opposite face of the web is not damaged. If damage to the paint occurs due to cutting, the damaged area shall be repainted at the contractor's expense and procedures shall be modified to prevent damage at subsequent removal locations.

2. Remove material between cut and web by grinding and grind smooth at web surface and cut end of stiffener. Web R surfaces and cut end of stiffener shall have a roughness average (Ra) of 250 μ in. or less, Grinding equipment shall be approved by the Engineer. The grinding operation should not gouge the girder web R.

3. The web surface at the modification shall be inspected using dye penetrant or magnetic particle (MT) methods. Any cracks found shall be identified and reported to the Bureau of Bridges and Structures for further disposition.

4. The exposed steel surfaces shall be cleaned and painted using an aluminum epoxy mastic primer according to Article 506.05 of the Standard Specifications.

Each 4" stiffener removal area is to be considered as one retrofit. Accepted above referenced work will be paid for at the contract unit price each for Stiffener Intersection Modification, which price shall include all materials, equipment, labor, cleaning, testing

> REPAIR DETAILS F.A.I. RT. 280 OVER MISSISSIPPI RIVER ROCK ISLAND COUNTY SN 081-0106