U.I.P., STRENGTHEN AND REHABILITATE EXISTING \(X', X', X')\) WIDE FLANGE BEAM SPANS (SKEW: \(X\))

STANDARD DETAILING GUIDANCE
(donot show on plans)
Use for adding welded cover plates and applying a jacking load to increase capacity.

A “no jack” option may be used by designer in lieu of “jacking” option. Welding in both cases should not be performed under live load, especially direct live load.

TYPICAL ELEVATION OF BEAM
Span \((-\) and \(+)\)

**Estimated Quantities**

**General Notes:**

- Design Specifications:
  - 2007 AASHTO LRFD (17th Ed.) Standard Specifications
  - 1993 Missouri Posting Loads (H20 & 3S2)
  - No Future Wearing Surface

- Design Loading:
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  - 1993 Missouri Posting Loads (H20 & 3S2)
  - No Future Wearing Surface

- Design Unit Stresses:
  - Structural Carbon Steel \(F_y = 36,000\) psi (New Steel)
  - Existing Steel \(F_y = \) psi
  - Working Stress Design = 68% of \(F_y\) (Existing)

- Paint:
  - Calcium Sulfonate (2 coats)

- Beam Support:
  - All existing beams in the span being strengthened shall be raised simultaneously Dimension \(H\) at jacking point and supported during welding of new steel plates.

  - The temporary supports must be capable of safely supporting a service load of approximately \(J\) tons per beam (factor of safety not included). See special provisions.

- Traffic Handling:
  - One lane of traffic shall be maintained on structure during construction. See roadway plans for traffic control.

- Miscellaneous:
  - Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

- Longitudinal dimensions are based on the original design plans.

- Contractor shall verify all dimensions in field before finalizing the shop drawings.

**REPAIRS TO BRIDGE:** ROUTE * OVER *

**ROUTE:** FROM \(\) TO \(\)

**ABOUT:** MILES \(\) OF \(\)

**STA:** \(\) (Match Existing)

**Table of Variables**

<table>
<thead>
<tr>
<th>Beam Location</th>
<th>Dimension A</th>
<th>Dimension B</th>
<th>Dimension C</th>
<th>Dimension D</th>
<th>Dimension E</th>
<th>Dimension F</th>
<th>Dimension G</th>
<th>Dimension H</th>
<th>Load</th>
</tr>
</thead>
</table>

**Details**

- Checked\n
**Note:** This drawing is not to scale. Follow dimensions.