
Special Specification 4137

Strongback Support



1. DESCRIPTION

Use strongback support system to temporarily support truss floorbeam while replacing gusset plates.

2. CONSTRUCTION

Refer to the details in the plans for specific requirements for the fabrication, installation, and sequence of the strongback system. Do not allow vehicles on the structure while the strongback is supporting the floorbeam and gusset plates are disconnected. Light temporary construction loads are allowed.

Provide shop drawings for the strongback beam and hanger components to the Engineer for approval. Fabricate metal components in accordance with Item 442 "Metal for Structures".

Submit detailed plans and calculations signed and sealed by a licensed professional engineer for any alterations to or deviation from the strongback system shoring approach described in the plans. Approval of these plans does not relieve the Contractor from responsibility for the completion of the work nor from liability for repair or replacement of damaged portions of the structure due to the methods approved and employed.

Use jacks with a minimum capacity of 2 times the unfactored dead load specified in the plans.

Do not remove and unload the strongback until the gusset plate replacement and corresponding bolt installation is complete at the truss location in question.

Repair holes in the bridge deck for temporary threadbar access in accordance with Item 429 "Concrete Structure Repair".

3. MEASUREMENT

The work as provided for by this specification will be measured by the lump sum.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the price bid for "Strongback Support." This price is full compensation for all strongback beam and hanger hardware, hydraulic jacks, bracing materials, and furnishing all equipment, tools, labor and incidentals necessary to complete the work.