THROUGH TRUSS RIVET REPLACEMENT

**From Montpelier BHF 6400(31)

xx. DESCRIPTION. This work shall consist of removal of existing rivets and replacement with high strength bolts at locations determined in accordance with the Plans and as directed by the Engineer.

This work shall be performed in accordance with these provisions, the Plans, and Section 506 of the Standard Specifications.

xx. MATERIALS. High strength bolts, nuts, and washers shall meet the requirements of Subsection 714.05.

xx. CONSTRUCTION REQUIREMENTS.

(a) Rivet Replacement. Existing rivets shall be inspected for integrity and section loss, and identified for replacement, in accordance with the replacement criteria detailed in the Plans.

Existing rivets shall be removed without damaging the base metal. The remainder of the rivet head shall be ground flush with the base metal and the shaft drilled for removal. If necessary, the rivet head on the opposite side shall be removed in the same manner. The use of pneumatic rivet breakers and punching of rivet shanks will not be allowed, unless approved in writing by the Engineer. Flame cutting the rivet heads, if approved in writing by the Engineer, shall be performed by a certified welder.

If the steel is painted, prior to the beginning of any other work, the paint shall be removed for a minimum distance of 100 mm (4 inches) on each side of the centerline of work location. Paint removal shall be performed in accordance with Section 513.

New bolts shall have the same diameter as the rivets they replace. Bolts shall have washers placed under both the head and the nut. Temporary support shall be provided until the removed rivets are replaced with new bolts.

High-strength bolts shall be installed after the nicks, burrs, and foreign substances that might interfere with seating of the bolt head and nut washers are removed. Light grinding may be ordered by the Engineer.

If the bolt will not fit the rivet hole, the hole may be drilled or reamed sufficiently to accommodate the bolt, but only with the written permission of the Engineer.

After completion of bolt tightening, the bolt and the area of paint removal around the bolt shall be field painted in conformance with Section 506.

xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Through Truss Rivet Replacement) to be measured for payment will be the number of existing rivets replaced with high strength bolts in the complete and accepted work.

Measurement will be made in only those areas of the existing trusses for which structural steel repairs are not required by the Plans or directed by the Engineer.

xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Through Truss Rivet Replacement) will be paid for at the Contract unit price for each. Payment will be full compensation for performing the work specified and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

The costs for paint removal and field painting will not be paid separately, but will be considered incidental to Special Provision (Through Truss Rivet Replacement).

Payment for the removal and, where necessary, disposal, of existing rivets, bolts, plates, and other bridge components, as needed to perform structural steel repairs as detailed in the Plans and as directed by the Engineer, will not be paid under this Section, but will be considered incidental to Contract item 506.60.

Payment will be made under:

Pay Item		Pay Unit
900.620	Special Provision (Through Truss Rivet Replacement)	Each