



**SPECIAL PROVISIONS
FOR
UNFORESEEN FABRICATION OF STRUCTURAL STEEL MEMBERS,
BRACKETS, FASTENERS, AND GUSSET PLATES**

**Buchanan County
TAP-R-C010(117)--8T-10**

**Effective Date
September 17, 2024**

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

236021.01 DESCRIPTION.

This work is for the repair or replacement of structural steel rolled shapes or plate members, brackets, fasteners, and gusset plates not tabulated or noted in the plans that are found to be in need of repair/replacement during construction. This item of work does not include repair or replacement of members damaged by the Contractor.

236021.02 DETERMINATION OF REPLACEMENT.

- A.** Deficient structural members, brackets, and gusset plates that are not noted for replacement or repair in the plans that require replacement may be encountered in the field during construction or by fabricators while sandblasting and refurbishing members in the shop.
- B.** A steel structural member shall be considered deficient and eligible for replacement if it meets one of the following conditions.
 - 1.** A steel member exhibits excessive corrosion with 10% or more section loss of cross section as determined by visible inspection and measurements in the field, or measurements of the cross section after sand blasting operations on refurbished members in a fabrication facility.
 - 2.** Steel member has localized corrosion (i.e. pitting, excessive pack rust, etc.) where 50% or more of the cross section has been lost as determined by visible inspection and measurements in the field or measurements in a fabrication facility after sand blasting.
 - 3.** Member has visible cracks from damage or fatigue either in the field or after sand blasting operations.

4. Member has visible damage that meets the following:
 - More than 20% overall damage.
 - 50% or more localized damage.
- C. A steel bracket, fastener, or gusset plate shall be considered deficient and eligible for replacement if it meets one of the following conditions.
1. Steel member exhibits overall or localized corrosion with 10% or more section loss of cross section as determined by visible inspection and measurements in the field, or measurements of the cross section after sand blasting operations on refurbished members in a fabrication facility.
 2. Member has visible cracks from damage or fatigue either in the field or after sand blasting operations.
 3. Member has visible damage or distortion that meets the following:
 - More than 20% overall damage
 - 50% or more localized damage
 - Gusset plates with greater than 0.125 inches of distortion caused by pack rust based off field measurements
- D. Members that meet the criteria to be considered deficient and eligible for replaced shall be brought to the attention of the Engineer.
- E. The Engineer shall have final determination on whether a member is eligible for replacement.

236021.03 MATERIALS.

A. Steel.

1. Apply Article 2408.02 of the Standard Specifications.
2. Replacement steel shall be of like material of replacement part, either grade 36 or 50 steel.

B. Rivets

Apply Special Provisions for Hot Driven Rivets.

C. Bolts

Apply Article 2408.02 of the Standard Specifications.

236021.04 CONSTRUCTION.

Unless otherwise stated in the contract documents, construction shall follow:

- Article 2408.03 of the Standard Specifications.
- Special Provisions for Hot Driven Rivets.

236021.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

For each steel member that is to be replaced or refurbished under this special provision, the Contractor and Contracting authority shall negotiate a price for replacement or refurbishment of steel members before fabrication can begin per Article 1109.03, B of the Standard Specifications.