

GENERAL NOTES

Fasteners shall be ASTM A 325 Type 1, mechanically galvanized bolts. Bolts 7/8" dia., open holes 15/16" dia., unless otherwise noted.

The Contractor shall replace all loose, broken, severely corroded or missing rivets with H.S. bolts. Cost included in Structural Steel Repair. The weight of each bolt, not detailed for replacement within the contract plans, shall be in addition to the quantities shown on the plans.

When existing rivets are removed and replaced with bolts, the rivets shall be removed by: 1) drilling, or 2) using a pneumatic chisel to remove the rivet head and a pneumatic punch to drive out the shank. If, in the opinion of the Engineer, rivet shanks cannot be removed by punching without damaging the base metal, the rivet shanks shall be removed by drilling.

Before installing each bolt, all nicks, burrs, corrosion, scale, paint and foreign substance shall be removed from inside the hole and from the surfaces around the hole with a power tool to ensure proper seating of the nut, bolt head and washers. Holes in existing material shall be inspected for fatigue cracking. Any cracking found shall be reported to the Engineer. Necessary repairs will be as directed by the Engineer.

Calculated weight of Furnish and Erect Structural Steel =
 M 270 Grade 36: 29,540 lbs
 M 270 Grade 50: 429,920 lbs

All new Structural Steel shall conform to M270 Grade 36, unless otherwise noted.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Cost of removal and re-installation of all steel members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair or Furnishing and Erecting Structural Steel.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Existing cracked tack welds and miscellaneous steel welded to structural members shall be removed as shown on the plans. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that can not be removed by grinding 1/4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welds, grinding and inspecting weld areas and grinding cracks, as noted on the plans, is included with Structural Steel Repair.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor shall field verify all proposed ϕ dimensions and spacing of holes prior to ordering steel.

Existing structure plans are available for review in the District office. Contact Tim Padgett at (618) 346-3325.

Structural repairs involving removal and replacement of existing steel components are detailed for replacement in kind. Upon approval by the Engineer, the Contractor may increase angles and/or plate sizes to accommodate current availability restrictions at the expense of the Contractor.

Gaps between the existing steel and the new steel angles and/or cover plates, as well as abandoned holes to be covered by new steel plates and/or angles, shall be sealed with an approved polyurethane sealant. The sealant shall be compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use. All costs associated with the installation of the sealant shall be included with the cost for Structural Steel Repair.

The Contractor shall perform the work with care, so that any materials which are to remain in place shall not be damaged. If the Contractor damages any materials which are to remain in place, the damaged materials shall be replaced or repaired in a manner satisfactory to the Engineer at the expense of the Contractor.

All material removed from the structure, as specified by this contract, shall become the property of the Contractor and disposed of properly.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. For this project, the anticipated construction activities within the water are limited to pier repairs, riprap placement, and access to the Illinois riverfront.

PAINING NOTES

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project as specified in the special provision for Containment and Disposal of Lead Paint Cleaning Residues.

Calendar date painting restrictions will be waived for this project. See Special Provisions.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures.

Cleaning and painting of existing structural steel in the areas of structural repairs or new structural installations shall be as specified in the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures.

The Organic Zinc Rich Primer/Epoxy/Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The Contractor shall match the color of the final finish coat for all interior steel surfaces to the existing paint color on the structure. The Contractor shall match the color of the final finish coat for the exterior and bottom flange of the fascia beams to the existing paint color on the structure.

CONSTRUCTION SEQUENCE

The structure will be closed to traffic during construction. Contractor shall sequence construction in order to complete work in accordance with the required completion date. See Completion Date special provision.

Contractor is required to provide Structural Assessment Reports for proposed work. See special provisions.

The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges (Complex), for the preparation of the Structural Assessment Report(s). Contractor's pre-approval shall not be applicable for this project. See Special Provision.

Current Ratings on File for Existing Structure
 Inventory: HS 8.8
 Operating: HS 14.8
 Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.

Grid deck removal and replacement shall be sequenced in order to maintain the structural integrity of the bridge.

LEGEND

- Field drill holes
- Shop or field drill holes
- ∴ Existing holes to remain
- I.F. Inside Face
- F.F. Front Face

COORDINATION

See special provisions for United States Coast Guard (U.S.C.G.) requirements.

U.S.C.G. Contact:
 Mr. Peter J. Sambor, M.P.A.
 U.S.C.G. Bridge Management Specialist
 Coast Guard 8th District
 1222 Spruce Street, Suite 2.107F
 St. Louis, Missouri 63103
 Phone: (314) 269-2380
 U.S.C.G. 24-hour watch center (314) 269-2332

See special provisions for Terminal Railroad Association of St. Louis (T.R.R.A.) requirements.

T.R.R.A. Contact:
 Mr. Asim Raza
 T.R.R.A. of St. Louis
 415 South 18th Street, Suite 200
 St. Louis, Missouri 63103
 Phone: (314) 241-4729