

GENERAL NOTES:

1. Plan dimensions and details relative to the 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 work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2. The Contractor shall exercise extreme caution with demolition activities to prevent damage to the existing structure. Any damage from the construction activities shall be repaired at the Contractor's expense.
3. The Contractor shall field verify all proposed structural plate and angle dimensions and spacing of holes prior to ordering steel.
4. No field welding is permitted, except as specified in the contract documents.
5. Fasteners shall be ASTM F3125 Grade A325, mechanically galvanized bolts. Bolts shall be 7/8 in. diameter and placed in 1 1/16 in. diameter holes, unless noted otherwise.
6. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
7. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision, "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". Cost included with Furnishing and Erecting Structural Steel or Structural Steel Repair, as appropriate. All faying surfaces of bolted connections must meet the requirements for a Class A surface, as defined by AASHTO.
8. All new structural steel shall be hot-dip galvanized and painted. See Special Provisions for "Hot Dip Galvanizing for Structural Steel."
9. Calculated weight of Structural Steel for the lump sum pay item Furnishing and Erecting Structural Steel = 11,890 pounds. Items included under this lump sum pay item are detailed on Sheets S-151 and S-152. See Special Provision for Furnishing and Erecting Structural Steel (Lump Sump). All steel for this pay item shall be AASHTO M270 Grade 36.
10. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign materials shall be removed from the surface in contact with concrete. Tightly adhered paint may remain unless noted otherwise. Removal shall be accomplished by methods that will not damage the steel, with cost included in "Removal of Existing Concrete Deck."
11. As directed by the Engineer, existing construction accessories, including existing metal deck accessories, welded to the top flange of beams, stringers, and girders shall be removed at locations of deck replacement or full thickness patching. 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.
12. Reinforcing bars shall conform to the requirements of ASTM A 706 Grade 60 and ASTM A 775.
13. The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

CONCRETE REPAIR NOTES

1. Concrete deck repair areas as shown in the drawings are based on a chain drag survey conducted in April 2020. Substructure repair areas based on February 2016 survey.
2. It is expected that actual repair areas may be different in shape, size, and location than shown on the drawings. The exact locations shall be determined by the Engineer. The Engineer shall show actual repair areas and their dimensions on as-built plans.
3. Only partial depth deck repairs are anticipated in spans without full deck replacement and at locations away from joints; however, a nominal quantity of full depth repair quantities have been included for use in case removal operations extend to the bottom mat of reinforcement.
4. For partial depth substructure repairs, saw cut perimeter of repair area and remove all unsound concrete and sufficient sound concrete to create minimum gaps around reinforcing bars while permitting minimum depths of concrete pours as required for anode placement.
5. For full depth deck repairs near joints, saw cut perimeter of repair area and remove all concrete 3 ft from each side of the joint. If a finger joint is to be constructed, remove all concrete 5 ft from each side of the joint. Extreme caution shall be exercised while removing concrete adjacent to beams. Any damage to beams shall be repaired at the Contractor's expense. Removal of existing expansion joints and stay-in-place metal pans shall be included in the cost of concrete removal.
6. Any reinforcing bars damaged during concrete removal shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with concrete removal.
7. The Contractor shall take all measures necessary to ensure that no debris or other construction materials or equipment is allowed to infringe on the railroad construction envelope, per Railroad General Notes and Railroad Clearance Envelope sheets.

CONCRETE REPAIR NOTES (cont'd)

8. New concrete deck surfaces adjacent to expansion joints and at deck slab repairs shall have a tined finish as per Article 420.09(e)(1) of the Standard Specifications. Cost is included with "Concrete Superstructure".
9. Surface preparation and application of a concrete sealer shall extend across the entire top surface of the deck and the tops and inside vertical faces of the parapets. Note is applicable to Spans D26 thru D45.

FIELD WELDING NOTES

Field Welding:

1. All field welding operations, including cleaning, testing and inspection, shall be performed in accordance with the AASHTO/AWS Bridge Welding Code D 1.5-2015 (BWC) and additional requirements as specified in these notes.
2. All field welding shall be performed by the manual Shielded Metal Arc Welding (SMAW) process. Other welding processes will not be considered for approval. Welding electrodes used to perform the welding shall be E7018-H4R classification. Welding electrode storage and handling on the worksite shall be in accordance with Clause 4.5 of the BWC and shall be constantly monitored and approved by the Contractor's QC Certified Welding Inspector (CWI).
3. Prior to start of the work, the Contractor shall submit to the Engineer for approval a properly prepared Welding Procedure Specification (WPS). The WPS shall include all information as required by the BWC.

Welder Qualification Tests:

1. Welders proposed to perform the work shall be qualified for overhead position fillet welds in accordance with BWC requirements. Copies of welder qualification documents shall be reviewed and approved by the Contractor's QC CWI and subsequently provided to the Engineer.
2. In addition, all welders shall be required to successfully complete a one-time special on-site overhead fillet weld qualification test immediately prior to start of the work. The qualification test shall be a fillet weld T- Test Plate (Option 1) as per Clause 5.23.1.4 of the BWC. Only visual and fillet weld break testing is required. Macroetch testing is not required. On-site welder qualification testing shall be administered by the Contractor's QC CWI. Cost for the additional testing shall be included with the various items of work. No additional compensation will be made to the Contractor for performing these tests.

Cleaning Prior To Welding:

1. The ends of the stiffeners and the area of the floorbeam flange to be welded shall be prepared by blast cleaning to a near- white condition (SSPC 10). All corrosion and paint shall be removed for at least three (3) inches beyond the limits of the weld zone, with special attention to remove corrosion at the root of the proposed fillet welds.
2. Surfaces to be welded shall be free of surface rust and meet SSPC-10 condition requirements immediately prior to welding. Should there be a delay between blast cleaning and welding that results in surface flash rusting, blast cleaning of the weld area shall be repeated.
3. The Contractor's attention is directed to the fact that the existing paint coatings on the structure may contain lead and the work must comply with all applicable federal and state regulations regarding worker safety and environmental hazards for removal of lead-based coatings.

Welding Preheat:

1. Preheating operations shall be in accordance with Clause 4 of the BWC. The Contractor's QC CWI shall verify and monitor minimum preheat and interpass temperatures.

Weld Quality:

1. All welds shall be visually inspected and approved by the Contractor's QC CWI.
2. Weld quality shall meet the requirements of Clause 6.26 of the BWC. Fillet weld toe undercut shall not exceed 0.010 inches on the floorbeam flange and 1/32 inches on the stiffener.

FIELD WELDING NOTES (cont'd)

Non-Destructive Testing (NDT) of Welds:

1. After visual inspection and approval by the Contractor's QC CWI, all welds shall be 100% inspected by Magnetic Particle Testing (MT). Personnel performing the MT and testing procedures shall be in accordance with Clause 6 of the BWC.
2. The Contractor's QC CWI shall verify qualifications of the NDT personnel, witness all MT testing and countersign all MT reports. Copies of completed MT reports shall be provided to the Engineer. Costs for NDT shall be borne by the Contractor and included in the various items of work. No separate payment will be made for NDT.

Quality Control (QC) Inspection:

1. All phases of the work including cleaning, welding and testing shall be witnessed, inspected and approved by an inspector who is qualified as a Certified Welding Inspector (CWI) by the American Welding Society. Reference Clause 6 of the BWC.
2. The CWI shall be employed/engaged by the Contractor and costs will be included with the various items of work. No separate payment will be made for inspection costs. Scheduling of QC CWI inspection is the Contractor's responsibility.
3. Should the Contractor elect to perform work in multiple locations on the structure, a sufficient number of CWI's shall be made available to provide inspection at each work site location. The number of inspectors assigned and work locations shall be approved by the Engineer.
4. The Contractor's QC CWI shall prepare daily reports, suitable to the Engineer, which document the work inspected and welds approved. Field Welding of Stiffeners shall be paid for at the contract unit price per each which shall include the required field welding on both sides of an individual bearing stiffener. The contract unit price per each shall include all materials, equipment and labor required for surface preparation, welding, follow-up pointing, welding qualification testing, and quality control inspection, including non-destructive testing.



MODEL: Default
FILE NAME: p:\w\hqp\p\m101.a-e\transys\corp\com\transys\corp\pw\1\Documents\Projects_2020\CD404\40420001\7\Bridges\304.02 - CADD\Sheets\0820144-76B55-5009-GenNoteB0W2



USER NAME = jescobar	DESIGNED = JMP	REVISED = 10/19/2020 JE
CHECKED = AMD	REVISIONS =	
PLOT SCALE = 0.1667' / in.	DRAWN = JTF	REVISIONS =
PLOT DATE = 10/20/2020	CHECKED = AMD	REVISIONS =

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA 2
S.N. 082-0144**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-3HVB-2R-14-1	ST. CLAIR	361	88
CONTRACT NO. 76B55				
SHEET S-9 OF S-183 SHEETS		ILLINOIS FED. AID PROJECT		

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