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 <p>STATE OF MISSOURI JEFFREY B. SMITH NUMBER E-27175 REGISTERED PROFESSIONAL ENGINEER</p> <p>THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.</p>	<p><b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636</p>
	<p>If a seal is present on this sheet, JSP's have been electronically sealed and dated.</p>
	<p>JOB NO. J1P3106 Gentry County, MO Date Prepared: 07/17/20</p>
	<p>Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: ALL</p>



JOB SPECIAL PROVISIONS (BRIDGE)

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A. CONSTRUCTION REQUIREMENTS

**1.0 Description.** This provision contains general construction requirements for this project.

**2.0 Construction Requirements.** Plans for all the existing structures are included in the contract in the bridge electronic deliverables zip file for informational purposes only.

**2.1** In order to assure the least traffic interference, the work shall be scheduled so that the bridge closure is for the absolute minimum amount of time required to complete the work. The bridge shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed bridge is opened to traffic.

**2.2** The existing slab for the bridge(s) to be redecked was constructed as composite or non-composite as shown in the table below.

Bridge No.	Type of deck
A07291	Composite

**2.3** Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**2.4** Provisions shall be made to prevent any debris and material from falling into the stream. If determined necessary by the engineer, any debris and material that falls below the bridge outside the previously specified limits shall be removed as approved by the engineer at the contractor's expense.

**2.5** SSPC-SP2 and SSPC-SP-3 surface preparation shall be in accordance with the environmental regulations in [Sec 1081](#) and collection of residue shall be in accordance with [Sec 1081](#) for collection of blast residue. SSPC-SP6, SSPC-SP10 and SSPC-SP-11 surface preparation shall be in accordance with the approved blast media and environmental regulations in [Sec 1081](#) and collection of blast residue shall be in accordance with [Sec 1081](#).

**3.0 Coating Information.**

**3.1 Straps Removal.** Exposed portions of straps for stay-in-place forms shall be removed prior to surface preparation. Straps need not be removed in areas that are not being painted. Flame cutting will not be permitted. The contractor shall exercise care not to damage the existing structure during removal. Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**3.2 Slab Drains and Stay-In-Place Forms.** The stay-in-place forms, slab drains and slab drain brackets shall not be recoated, overcoated or damaged during the painting operation. Any portion of the slab drain bracket that is blast cleaned shall be recoated with System G. Any damage sustained as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**3.3 Environmental Contact.** Environmental Section may be contacted at the below address or phone number. The Missouri Department of Health may be contacted at (573) 751-6102.

(a) MoDOT - Design Division - Environmental Section

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P.O. Box 270  
105 W. Capitol Ave., Jefferson City, MO 65102  
Telephone: (573) 526-4778

**3.4 Approved Smelter and Hazardous Waste Treatment, Storage and Disposal Facility.** The following is the approved smelter and hazardous waste treatment, storage and disposal facility:

Doe Run Company - Resource Recycling Division - Buick Facility  
Highway KK  
Boss, MO 65440  
Telephone: (573) 626-4813

**4.0 Method of Measurement.** No measurement will be made.

**5.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

**B. DEFLECTION AND HAUNCHING**

**1.0 Description.** The contractor shall determine dead load deflections and haunching based on field measurements and/or existing bridge plans and these shall be adjusted based on the difference between the new and existing dead load weights.

**2.0 Construction Requirements.** In order to properly form the haunches for the new deck, the contractor shall survey top of deck elevations above each beam including centerline of roadway and along each beam line (top or bottom flange) prior to deck removal followed by surveying elevations of the beams (top or bottom flange) after deck removal.

**3.0 Method of Measurement.** No measurement will be made.

**4.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract

**C. STRUCTURAL STEEL REQUIREMENTS**

**1.0 Description.** This provision contains general structural steel requirements for this project.

**2.0 Material.** All material shall be in accordance with Division 1000, Material Details, and specifically as shown below. The gray epoxy-mastic primer (non-aluminum) shall be compatible with concrete and produce a dry film thickness of no less than 3 mils (75 µm).

Item	Section
Structural Steel Construction	712
Gray Epoxy-Mastic Primer (non-aluminum)	1045
Structural Steel Fabrication	1080
Coating of Structural Steel	1081

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**3.0 Construction Requirements.**

**3.1** Before fabrication of new metalwork, the contractor shall make the necessary measurements in the field to verify dimensions of the existing structure where new members are affected. Any deviation of the dimensions shown on the plans shall be called to the engineer's attention. The contractor shall be responsible for developing all required dimensional adjustments and coordinating the implementation of the dimensional adjustments with all involved fabricators and subcontractors.

**3.2** Prior to erection of the new structural steel, the steel that is to remain shall be carefully inspected for irregularities. If such irregularities are found, the irregularities shall be brought to the attention of the engineer.

**3.3** A minimum edge distance shall be maintained for all field drilled holes. The minimum edge distance for bolts shall be as shown in table below measured from the centerline of holes.

<b>Bolt Diameter</b>	<b>Minimum Edge Distance</b>
<b>inch (mm)</b>	<b>inch (mm)</b>
3/4 (19.0)	1-1/4 (32)
7/8 (22.2)	1-1/2 (38)
1 (25.4)	1-3/4 (45)

**3.4** The surfaces of existing steel that will become faying surfaces for new connections shall be cleaned according to the manufacturer's recommendation and with a minimum of SSPC-SP-3 surface preparation and coated with one prime coat of Gray Epoxy-Mastic Primer (non-aluminum) in accordance with [Sec 1081](#).

**3.5** Exposed girder areas that are not a faying surface or not covered by concrete that are scratched, damaged by the contractor or by field welding operations shall be touched up with Gray Epoxy-Mastic Primer (non-aluminum) in accordance with [Sec 1081](#). The areas shall receive the coating system as shown on the plans.

**3.6** The two existing structural steel fascia girders to remain in place shall be recoated with the System G paint system in accordance with [Sec. 1081.10.4](#) unless otherwise noted. The color of the topcoat shall be as shown on the plans.

**3.7** The top of the top flanges to be covered by concrete on all girders to remain in place shall be coated with one prime coat of Gray Epoxy-Mastic Primer (non-aluminum) in accordance with [Sec 1081](#).

**4.0 Method of Measurement.** No measurement will be made.

**5.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for the structural steel and coating items included in the contract. No payments or adjustments will be made where new members are affected due to any deviation of the dimensions shown on plans or shop drawings.

D. HINGE REMOVAL

**1.0 Description.** This work shall consist of furnishing the necessary materials, labor, and equipment for removal of existing structural steel to the limits shown in the plans and installation

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of new steel girder splices as shown on the plans to make the girders continuous while removing the existing pin and pin plate connections near intermediate Bents 2 and 5. This work shall be done as specified herein and in accordance with Sec 712, 1080, and 1081 and the plans.

**2.0 Construction Requirements.**

**2.1** Before commencing operations, the contractor shall submit to the engineer complete working plans for the temporary support of the girders for review of the method and sequence of operation proposed to be use in performing this work. The working plans shall be signed, sealed and stamped by a registered professional engineer in the State of Missouri in accordance with Authentication of Certain Documents in [Sec 107](#). The hinge modification operation shall be done only when authorized, but such authorization shall not relieve the contractor of responsibility for the safety of the operation or for damage to the structure.

**2.2** The time frame for removing and modifying the structural steel near intermediate Bent Nos. 2 and 5 is after the existing deck has been removed and before the new slab is formed. The modification of existing structural steel shall not relieve the contractor of responsibility for the safety of the new operation or for damage to the structure.

**2.3** The contractor shall exercise caution during the entire operation to protect the bridge from damage. Any damage to the existing structure as a result of this work shall be repaired to the satisfaction of the engineer at the contractor's expense.

**2.4** The existing girders shall be cut at locations of the new splices. The exposed edges shall be ground to a roughness no greater than 1/16 in.

**2.5** Existing stiffeners that interfere with new splice locations shall be completely removed. Base surfaces shall be ground smooth and shall receive the coating system as shown on the plans.

**2.6** Structural steel construction shall be in accordance with [Sec 1080](#).

**3.0 Method of Measurement.** No measurement shall be made.

**4.0 Basis of Payment.** Payment for the above described work, including all material, equipment, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for Partial Remove of Existing Structural Steel.

**E. EPOXY PRESSURE INJECTING**

**1.0 Description.** Surface cracks in the substructure shall be pressure injected with epoxy. The engineer will designate the cracks to be repaired.

**2.0 Material.**

**2.1 Epoxy.** The epoxy material shall consist of a two-component system in accordance with the requirements of ASTM C 881, Type IV, Grade 1, except that the viscosity shall be a maximum of 4.5 poise (0.45 Pa·s). The Class designation of the epoxy shall be determined according to the temperature that exists on the job.

**2.2 Certification.** The contractor shall furnish manufacturer's certification that the material supplied is in accordance with these specifications. The certification shall include or have

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attached typical test results for all specified properties required by ASTM C 881 for the injecting resin. The engineer reserves the right to sample and test any or all material supplied.

**3.0 Construction Requirements.** The surface to receive the epoxy grout shall be cleaned of laitance, grease and foreign matter by sandblasting. The cracks shall be cleaned of debris by using oil-free and water-free compressed air or vacuum. After the cracks are cleaned, the epoxy shall be injected in accordance with manufacturer's recommendations. The temporary surface seal and placement and method of attachment of injection ports shall be in accordance with the epoxy manufacturer's recommendations.

**4.0 Method of Measurement.** The extent of epoxy pressure injecting may vary from the estimated quantity but the contract unit price shall prevail regardless of the variation. The epoxy pressure injecting will be measured to the nearest linear foot (0.5 m).

**5.0 Basis of Payment.** Accepted quantity of epoxy pressure injecting will be paid for at the contract unit price. Payment for the above described work, including all material, equipment, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for "Epoxy Pressure Injecting".