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	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636
	If a seal is present on this sheet, JSP's has been electronically sealed and dated.
	JOB NO. JSLM0112 St. Louis County, MO Date Prepared: 8/1/2025
Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: All	

A. CONSTRUCTION REQUIREMENTS

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

2.0 Construction Requirements. The plans and the asbestos and lead inspection report(s) for the existing structure(s) 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 a lane closure is for the absolute minimum amount of time required to complete the work. A lane shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

2.2 Bridge work by contractor forces, including erection, rehabilitation or demolition, shall not be allowed over traffic unless a bridge platform protection system is installed below the work area except for work performed above a deck that is intact. The protection system shall be capable of catching all falling objects such as tools, overhang brackets or materials. Lifting of objects that are heavier than the capacity of the bridge protection system shall not be permitted.

2.3 Qualified special mortar shall be a qualified rapid set concrete patching material in accordance with [Sec 704](#). A qualified rapid set concrete patching material will not be permitted for half-sole repair, deck repair with void tube replacement, full depth repair, modified deck repair and substructure repair (formed) unless a note on the bridge plans specifies that a qualified special mortar may be used.

2.6 Provisions shall be made to prevent any debris and material from falling onto the roadway. 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. Traffic under the bridge shall be maintained in accordance with the contract documents.

2.7 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.

2.8 Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

2.9 The contractor shall provide steel plates over any unprotected open excavation in the bridge deck during non-working hours and in areas where work is not active. The plates shall be 3/4 inch thick. The plates shall extend 12 to 18 inches each side of the opening and cover the full width of work. The contractor shall bevel all edges to a slope no steeper than 3H:1V. The driving surface shall be treated for skid resistance either by surface deformation or direct application of a friction course and delineated as shown in the plans. The plates shall be securely affixed to the deck using concrete anchors or through bolts. The contractor may also secure the plate by attaching it to the superstructure or substructure. However, nothing shall be welded or bolted to these elements. The method of attachment shall be approved by the engineer. Any damage to the deck, superstructure, or substructure as a result of this work shall be repaired as approved by the engineer at the contractor's expense.

3.0 Coating Information.

3.4 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.

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

3.5 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

5.0 Method of Measurement. No measurement will be made.

6.0 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. HYDRO DEMOLITION

1.0 Description. This provision describes requirements for the hydro demolition process and all other preparatory and repair work associated with the partial replacement of concrete bridge deck.

2.0 Hydro Demolition.

2.1 Description. This work shall consist of the selective removal of sound original concrete over the concrete girder and concrete panel with hydro demolition equipment.

2.2 Material. Water used in the hydro demolition shall be in accordance with Sec 1070.

2.3 Environmental Compliance.

2.3.1 Prior to the start of any bridge repair work, the contractor shall submit to the engineer for review an Environmental Compliance Plan (ECP) that ensures compliance with all federal, state, and local environmental laws and regulations. The ECP shall include specific details of the contractor's plan for containment, filtering, and disposal of water, slurry, and other debris, including all best management practices (BMPs) that the contractor plans to utilize to prevent environmental pollution and protect the waters of the state.

2.3.2 All drains, joints, and other locations where discharge water could exit the deck shall be blocked in order to direct runoff to a central collection and filtering location, as designed by the contractor. When runoff is allowed to be dispersed adjacent to the bridge, BMPs shall be utilized to contain and filter the slurry to prevent the discharge of slurry or other contaminants.

2.3.3 No direct payment will be made for compliance with this ECP, including, but not limited to, containment of the water and slurry, installing, maintaining, and removing the BMPs, filtering, and disposal of all waste materials.

2.4 Equipment.

2.4.1 General. The hydro demolition process shall consist of a water supply system, a high pressure water pumping system, and a demolition type unit. The demolition unit shall be robotic, computerized, and self-propelled, utilizing a high pressure water jet stream that is capable of removing concrete to the desired depths specified. It shall also be capable of cleaning rust and concrete particles from all exposed reinforcing steel. The resulting concrete surface profile shall be one that is highly rough and bondable.

2.4.1.1 The hydro demolition equipment shall provide shielding to ensure containment of all dislodged concrete within the removal area in order to protect the traveling public and work crew from flying debris on, adjacent to, and below the work site.

2.4.1.2 Vacuum equipment shall be utilized for clean-up of hydro demolition debris. This equipment shall be equipped with fugitive dust control devices and shall be capable of removing wet debris and standing water in the same pass.

2.4.2 Calibration. The hydro demolition equipment shall be calibrated on a representative sample of sound deck concrete, as directed by the engineer. The calibration will demonstrate the ability to cut to the desired depth or depths, as indicated on the plans. The minimum allowable water pressure shall be 13,000 psi and the maximum water pressure shall not exceed 20,000 psi. The calibration shall accomplish the desired surface roughness, profile, and cutting depth as indicated on the contract plans. The equipment shall then be moved to an area of deteriorated deck, as directed by the engineer, in order to demonstrate the ability to remove all sound original material. The equipment shall selectively remove all sound original concrete to the desired depth, avoid the removal of unnecessary sound concrete from the girder or precast panel, and provide a rough and bondable surface to the panel.

2.4.2.1 If the equipment does not demonstrate the ability to produce the desired result, as determined by the engineer, the equipment shall be removed from the project and the contractor shall provide other equipment for calibration. No additional contract time or compensation will be allowed for the mobilization of replacement equipment to the work site.

2.4.2.2 After the contractor has calibrated the equipment settings to the satisfaction of the engineer so that the equipment does selectively remove all sound original concrete to specified depth and provide a rough and bondable surface, without removing additional sound concrete from the girder or precast panel, the calibration will be approved by the engineer and the contractor shall record the equipment settings as follows:

Water Pressure Gauge	
Machine Staging Control (Step)	
Nozzle Size	
Nozzle Type	
Nozzle Travel Speed	
Water Usage Rate	

^a Only applicable inside special repair zones on existing cast-in-place concrete box girder, solid slab and voided slab bridges. Not applicable for prestressed concrete or steel beam and girder bridges.

2.5 Hydro Demolition Operation Requirements.

2.5.1 After calibration of the equipment, the contractor shall perform hydro demolition as specified on the bridge plans.

2.5.1.1 For bridges without special repair zones, the settings shall be maintained throughout the operation, unless the desired results are not being attained, in which case re-calibration shall be performed.

2.5.1.3 Calibration shall be required on the bridge and when different equipment is brought to the site for use. The engineer will periodically verify the calibration settings to ensure the desired results are being attained.

2.5.2 When the hydro demolition process is taking place above an area of concern, the contractor shall take measures to protect that area from hydro blasting through the deck, falling debris, water runoff, or any other action that the engineer considers a risk to public safety or a risk of property damage. An area of concern shall include vehicular traffic, boat traffic, pedestrian traffic, parking areas, private property, railroad property or any other area of concern as determined by the engineer.

2.5.3 Only those vehicles directly required to perform the hydro demolition work and clean-up, or corresponding wearing surface construction equipment, shall be allowed on the bridge deck. Contamination of the deck by construction equipment or any other source shall be prevented.

2.5.4 The contractor shall clean up the slurry and rubble from the hydro demolition operation as soon as possible following the hydro demolition process. This clean-up shall be completed prior to the drying of the slurry on the deck and reinforcing steel. The contractor shall utilize a vacuum collection type system capable of removing wet debris and water in a single operation. Following the cleaning, the surface shall be free of all debris, loose material, slurry, or cement paste.

2.6 Incidental Conventional Concrete Removals After Hydro Demolition.

2.6.1 The contractor shall remove all identified original deck material, as well as any areas on the deck that were inaccessible to the hydro demolition equipment. This removal work shall be included in the cost of Partial Removal of Existing Deck.

2.6.2 All removals after hydro demolition shall be done with pneumatic hammers no heavier than the nominal 15-pound class and operated no more than a 45 degree angle from the horizontal. Use of mechanical equipment for the purpose of chipping shall be kept to the absolute minimum to avoid creating micro-fractures on the surface of the girder or precast panels.

2.6.3 Reinforcing Steel Repair. The contractor shall take steps necessary to prevent damage to existing reinforcing steel. All equipment shall be operated in a manner that does not damage the deck, reinforcing steel or superstructure components. Any damage caused by the contractors equipment or negligence shall be repaired at the contractors expense.

2.6.3.1 Reinforcing steel that is exposed by the process shall be thoroughly cleaned by sand, shot or hydro blasting to the satisfaction of the engineer.

2.6.3.2 Reinforcement repair shall be in accordance with Sec 704. Replacement of damaged reinforcing steel may include the removal of additional concrete to adequately anchor reinforcing steel to the appropriate lap splice length in accordance with Sec 706.

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2.6.3.3 No direct payment will be made for additional cleaning of reinforcing steel or for removal of loose concrete from the bars. Replacement of reinforcing steel will be made at the fixed unit price in Sec 109.15, except that no payment will be made for replacement of reinforcing steel cut or broken by the contractor.

3.0 Basis of Payment

3.1 Payment for Hydro Demolition of the bridge deck will be paid for at the contact unit price for Partial Removal of Existing Deck. Payment includes all work associated with the hydro demolition process including, but not limited to, ECP, equipment calibration, hand chipping, removal of remaining original concrete and clean-up of debris and slurry.

C. CONDUIT SYSTEM ON STRUCTURE

1.0 Description. This work shall consist of furnishing and installing the Conduit System on Structure as detailed in the bridge plans.

2.0 Materials. Materials shall be in accordance with Sec 712.

3.0 Construction Requirements.

3.1 The contractor shall be responsible for coordination with utilities regarding protection, allowable temporary outages, and utility company/contractor access for utility repairs/replacements.

4.0 Basis of Payment. Payment for the above described work including all coordination, material, labor, tools, equipment, and all incidentals necessary to complete this item of work will be considered completely covered by the contract lump sum price Conduit System on Structure.