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| <p>"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."</p> | <p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636</p> |
| | <p>TranSystems Corporation 2400 Pershing Road Suite 400 Kansas City, MO 64108</p> |
| | <p>Certificate of Authority 00273 Engineering Consultant Phone 816 329-8600</p> |
| | <p>If a seal is present on this sheet, JSP's has been electronically sealed and dated.</p> |
| | <p>JOB NO. J6I3538 St. Louis/St. Charles Counties Date Prepared: 9/12/2024</p> |
| <p>Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: A-G</p> | |

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 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.

2.4 Provisions shall be made to prevent any debris and material from falling into the waterway. 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.

2.5 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.

2.6 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.

2.7 SSPC-SP2 and SSPC-SP3 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-SP11 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

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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 Existing Bridge Information. The informational plans may be used by bidders in determining the amount of steel to be cleaned and painted/coated with the full understanding that the State accepts no responsibility for accuracy of the estimated tons of existing steel shown in the table below. The bidder's acceptance and use of the estimate shown below shall be no cause for claim for any final adjustment in the contract unit price for the work involved in repainting. Each bidder is expected to carefully examine the structure(s), investigate the condition of existing paint and prepare their own estimate of quantities involved before submitting a bid. Surface preparation and applying field coatings to the structural steel shall be based on the contract plan quantities. No final measurements will be made.

| Bridge No. | Estimated Tons | | | Existing Paint System | Lead Based |
|------------|----------------|----------|-------|-----------------------|------------|
| | Coating System | | Total | | |
| | System G | Overcoat | | | |
| A4017 | 790 | 4,544 | 5,334 | C | No |

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

3.6 Impermeable Surface Limits. For the duration of cleaning and recoating or overcoating the truss spans, the truss span superstructure in any span shall not be draped with an impermeable surface subject to wind loads for a length any longer than 1/4 the span length at any one time regardless of height of coverage. Simultaneous work in adjacent spans is permissible using the specified limits in each span.

4.0 Navigation Requirements.

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4.1 All work shall be performed so that the free flow of navigation is not unreasonably interfered with, the navigable depths are not impaired and navigation lighting is visible at all times. Any floating equipment or vessels working in the channel shall display lights and signals as required by the current "Inland Navigation Rules". If platforms, scaffolding, or nets are suspended below low steel in the navigation span, the U.S. Coast Guard district office shall be advised so that the temporary reductions in clearance for river traffic can be checked for reasonableness and appropriate notices can be published. The work platforms shall be no lower than 1 foot below low steel in the navigation span (Span 5 of the WB Bridge). Positive precautions shall be taken to prevent the accidental dropping of spark producing, flame producing, lighted or damaging objects onto barges or vessels passing beneath the bridge. All flame cutting, welding or other similar spark producing operations shall be ceased over the channel when vessels are passing beneath the bridge.

4.2 The contractor shall be responsible for submitting a work plan to the engineer for review. When the engineer is in concurrence with the work plan, the engineer will forward the material to the U.S. Coast Guard district office for approval. The U.S. Coast Guard will require at least 30 days to review the work plan prior to any work beginning. The work plan shall be submitted to the District Commander, Western Rivers Operation, Eighth Coast Guard District, Bridge Branch.

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. CONCRETE WEARING SURFACE REPAIR

1.0 Description. This work shall consist of repairing designated areas of the bridge decks with an existing concrete wearing surface (low slump, latex modified, or silica fume concrete). All work shall be in accordance with Sec 704 except as herein modified.

2.0 Construction Requirements.

2.1 A boundary perimeter with vertical sides shall be established outside the delaminated and deteriorated concrete wearing surface repair areas by saw cutting the full depth of the wearing surface. The contractor shall use caution to not saw into the underlying bridge deck. Any remaining wearing surface around the perimeter of the saw cut shall be chipped vertically and all wearing surface material within the perimeter removed. Upon removal of the deteriorated wearing surface, the engineer will sound the underlying bridge deck to determine areas of deteriorated concrete. The engineer may require removal of additional areas of wearing surface to determine the extent of deteriorated underlying bridge deck.

2.2 Wearing surface repairs shall be performed the same as deck repairs except no exposed reinforcing steel is required. Deck repairs shall be in accordance with Sec 704. Concrete to replace the wearing surface, with or without deck repairs below, shall be the same as that required for deck repairs. Concrete for the wearing surface repairs with deck repairs below shall be placed monolithically up to the top surface of the wearing surface. Finishing and curing the repair area shall be in accordance with Sec 704.

3.0 Method of Measurement. The extent of repair may vary from the estimated quantities, but

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the contract unit price shall prevail regardless of the variation. No duplication of measurement will be made for half-sole repair or concrete wearing surface repair. Areas of concrete wearing surface repair will be measured to the nearest square foot. Deck repairs will be measured and paid for in accordance with Sec 704.

4.0 Basis of Payment. Accepted quantities of half-sole repair or concrete wearing surface repair will be paid for at the contract unit price for each of the pay items included in the contract.

C. CONCRETE CRACK FILLER

1.0 Description. This work shall consist of preparing and treating the concrete bridge deck cracks with a high molecular weight methacrylate (HMWM) or methyl methacrylate (MMA) crack filler material. This type of surface treatment shall be in accordance with this job special provision, the standard specifications and the manufacturer's recommendations. The objective of this treatment is to seal all concrete deck cracks in order to preserve and extend the life span of the deck.

2.0 Materials. The low viscosity concrete bridge deck crack filler shall be a high molecular weight methacrylate (HMWM) or methyl methacrylate (MMA) system in accordance with [Sec 1053](#) and shall be on MoDOT's qualified product list.

3.0 Construction Requirements.

3.1 Equipment. Application equipment shall be as recommended by the manufacturer. The spray equipment, tanks, hoses, brooms, rollers, coaters, squeegees, etc. shall be thoroughly clean, dry, and free of foreign matter, oil residue and water prior to application of the treatment.

3.2 Cleaning, Surface Preparation and Sealing. Surfaces which are to be treated shall meet the approved product's requirements for surface condition. The contractor shall furnish the engineer with written instructions for the surface preparation requirements, and a representative of the manufacturer shall be present to ensure that the surface conditions meet the manufacturer's requirements.

3.2.1 At a minimum, the surface shall be thoroughly cleaned to remove dust, dirt, oil, wax, curing components, efflorescence, laitance, coatings and other foreign materials. The manufacturer or manufacturer's representative shall approve the use of chemicals and other cleaning compounds to facilitate the removal of these foreign materials before use. The treatment shall be applied within 48 hours following surface preparation.

3.2.2 Cleaning equipment shall be fitted with suitable traps, filters, drip pans and other devices to prevent oil and other foreign material from being deposited on the surface.

3.2.3 The deck shall be water blasted to clean out cracks and allowed to dry prior to sealing.

3.2.4 Before starting sealing operations, all cracks shall be blown out with dry high-pressure air.

3.2.5 The contractor shall prevent sealer material from leaking through the deck at any cracks, construction joints or at precast panel joints on the bottom side of the deck that reflect through the slab. The contractor shall take measures to treat these areas to prevent loss of material intended to seal the deck.

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3.2.6 The contractor shall follow the manufacturer's recommendations for a method and material resistant to effects of the deck sealer to prevent leakage of deck sealer through the bridge deck.

3.3 Application. After leakage prevention measures are completed, a flood application shall be performed on the entire deck surface to fill all cracks. Flood application and broadcast aggregate shall be placed in accordance with the manufacturer's application rates.

3.4 Opening to Traffic. Traffic shall be allowed on the deck only after the treated area is visibly dry. Dried coating shall not leave residue on glass, painted metal or automobiles.

4.0 Method of Measurement. Measurement will be made to the nearest square yard measured longitudinally from end of bridge approach slab to end of bridge approach slab and transversely from roadway face of curb to roadway face of curb. Additional areas to be sealed will be identified on the plans. No deduction will be made for gaps to avoid raised pavement markers, manholes or other obstructions. Final measurement will not be made except for authorized changes during construction or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

5.0 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 Concrete Crack Filler.

D. FATIGUE CRACK REPAIR

1.0 Description. This work shall consist of performing testing to locate the ends of cracks and repairing the cracks as shown on the bridge plans and as required by the engineer.

2.0 Material. All material shall be in accordance with Division 1000, Material Details, and specifically as shown below.

| Item | Section |
|---|---------|
| Gray Epoxy-Mastic Primer (non-aluminum) | 1045 |
| Coating of Structural Steel | 1081 |

3.0 Construction Requirements.

3.1 All cracks shall be tested with the use of a dye penetrate test. The testing inspector shall be qualified as a NDT Level II as specified in the American Society of Non-Destructive Testing, recommended practice No. SNT-TC-1A and shall be on the list as maintained in the Bridge Office.

3.2 The contractor shall provide the satisfactory means to access all locations to be tested.

3.3 The testing inspector shall furnish the engineer with a report of test results. The testing inspector shall maintain a log of the hours spent inspecting each day and the log shall be signed by the engineer daily.

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3.4 The contractor may be required to loosen or remove any diaphragms before field drilling holes at the end of cracks. If any diaphragms are loosened or removed, new high strength bolts shall be installed in accordance with [Sec 712](#). The faying surfaces of existing steel where the bolts and rivets are loosened and/or removed and inside of any drilled holes or holes where bolts and rivets are removed shall be cleaned and coated in accordance with this special provision

3.5 In areas not to be recoated with System G, coating damaged by the testing services, inside of new drilled holes and any cracks that have damaged the existing coating 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](#).

4.0 Method of Measurement. The extent of fatigue crack repair may vary from the estimated quantity but the contract unit price shall prevail regardless of the variation. Fatigue crack repair will be measured per each.

5.0 Basis of Payment. Accepted quantity of fatigue crack repair will be paid for at the contract unit price. Payment for the work described above, 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 Fatigue Crack Repair.

E. CLEARANCE GAUGE

1.0 Description. This work shall consist of providing a clearance gauge on the downstream face and the upstream face for the piers as shown on the plans.

2.0 Materials. All material shall be in accordance with Division 1000, Material Details, and specifically as follows.

| Item | Section |
|-------|----------------------|
| Water | 1070 |

2.1 The paint base type shall be a vinyl resin, copolymer type or chlorinated natural rubber that is compatible in all respects with the intended use. The paint shall be suitable for use on concrete masonry under severe exposure or submersion in water as recommended by the manufacturer. Paint applications shall meet the maximum dry mil thickness as recommended by the manufacturer. The white second coat and the black finish coat for the gauge markings shall have a glossy finish. All paint proposed for use shall be as approved by the engineer. The first coat shall be one of the following.

2.1.1 The first coat shall be adaptable for use as a primer under the succeeding coats with the undercoat tint the same as the second coat.

2.1.2 The first coat shall be the same as the second coat with the manufacturer certifying the paint to be self-priming.

2.2 In lieu of painting the gauges, the contractor may use a durable material shall be of such strength and durability as to provide a clearance gauge resistant to weather, tide and current as approved by the engineer.

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3.0 Construction Requirements.

3.1 Form work shall have been removed at least 60 days prior to the application of any paint except as approved by the engineer. The area to be painted shall be prepared by removing all dirt, oil or other foreign substance. Prior to the application of the first coat, the surface shall be etched with approximately a 10 percent solution of muriatic acid in water. The surface shall then be flushed down with clear water and allowed to dry.

3.2 The first coat shall be worked well into the pores of the concrete. Paint shall not be applied when the air temperature is below 45°F (7°C) or when the air temperature exceeds 90°F (32°C). Painting shall not be started unless it can be reasonably expected that the gauge can be completed with all coats plus 7 days time before any portion of the gauge becomes submerged, unless the material used will permit earlier submersion without detriment to the finished work. The area to be painted shall receive two coats of white paint. The gauge numbers and foot markings shall be painted with two coats of black paint on top of the white paint coats. Each coat shall be thoroughly dry with a minimum of 24 hours between succeeding coats.

3.3 In lieu of painting the gauges, the contractor may use a durable material that shall be permanently fixed to the bridge pier as recommended by the manufacturer. Cleaning of the pier shall be in accordance with [section 3.1](#) of this provision.

4.0 Method of Measurement. No measurement will be made.

5.0 Basis of Payment.

5.1 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 lump sum price for Clearance Gauge.

5.2 In the event the river stage conditions are such that the contractor is unable to perform this work or for any other reason, the State retains the option to eliminate the work or parts thereof from the contract without alteration of the contract unit prices for other work or the option to permit the contractor to delay the performance of the work beyond the end of the contract period.

F. MoDOT ACCESS FOR BRIDGE INSPECTIONS

1.0 Description. The contractor will provide access to MoDOT personnel and equipment to complete the biennial bridge inspection for each structure.

2.0 Timing of Inspections. MoDOT will coordinate with the contractor to identify a time in March 2025 or April 2025 when the inspections can be completed. The inspections shall occur after the bypass is constructed but before traffic is shifted. The inspections are anticipated to take one (1) week per bridge (Eastbound and Westbound) to complete.

3.0 MoDOT Notification. The contractor shall notify the following MoDOT personnel 30 days prior to shifting traffic:

Joe Molinaro
District Bridge Engineer
(314) 453-1760

joseph.molinaro@modot.mo.govAdam Zentz
Bridge Inspection Engineer
(573) 508-7769
adam.zentz@modot.mo.gov

4.0 Method of Measurement. There will be no measurement for this access.

5.0 Method of Payment. The contractor will not receive compensation for providing access to MoDOT.

G. SPECIAL CONSIDERATION OF CHANGE ORDERS AND VALUE ENGINEERING

1.0 Description. Increased Federal Share has been approved by the FHWA for an innovative technology or practice. The Commission will receive an additional five percent Federal Share of the overall contract value due to innovations within the following pay item(s).

| Pay Item Number | Pay Item Description | Innovation |
|-----------------|---|-------------------|
| 7125201 | SURFACE PREPARATION FOR OVERCOATING STRUCTURAL STEEL (SYSTEM G) | System G Overcoat |
| 7125365A | INTERMEDIATE FIELD COAT (SYSTEM G) | System G Overcoat |
| 7125370A | FINISH FIELD COAT (SYSTEM G) | System G Overcoat |
| | | |
| | | |

Due to the increased Federal Share, the project components related to the innovation(s) described above must be constructed with the materials, quantities, methods and innovations as shown on the project plans and specifications. If the contractor requests materials, quantities, methods or innovations other than those included in the plans and specifications, the request must be reviewed and approved by the Commission and FHWA. Approved changes to the innovation items above shall be at no additional cost to the Commission and shall not increase the contract time.

2.0 Special Consideration of Change Orders and Value Engineering Change Proposals (VECP). Change ordering and/or value engineering the pay item(s) listed in section 1.0 jeopardize the ability for the Commission to receive an additional Federal Share for the overall contract value. Special consideration should be given to the change order value for removing or modifying such item(s) from the contract ensuring the benefit outweighs the cost.

3.0 Contacting Financial Services. If it is determined that the proposed change order and/or VECP outweighs the additional overall five percent Federal Share value, the Engineer shall notify the MoDOT project manager.