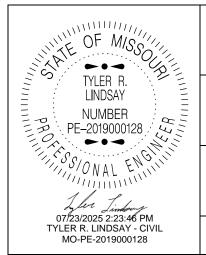
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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. J8S3158 Greene County, MO Date Prepared: 7/17/2025

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 asbestos and lead inspection report(s) for the existing structure(s) and the geotechnical report for the new 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 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** 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** Provisions shall be made to prevent any debris and material from falling onto the railroad right of way. 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.
- **2.4** 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.
- **2.5** 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.
- **2.6** A washer shall be required under head and nut when any reaming is performed for bolt installation.

3.0 Coating Information.

3.1 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

3.2 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. BRIDGE SLAB (WITH TRANSPARENT FORMS)
- **1.0 Description.** This work shall consist of constructing the concrete bridge slab in accordance with the contract plans and Sec 703 and Sec 706 except that permanent transparent forms shall be used to the extent possible in accordance with the contract plans and the details below.
- **1.1** The use of precast panels or non-transparent permanent forms will not be considered.
- 2.0 Materials and Fabrication Requirements.
- **2.1** The steel for the structural joists and tracks shall be in accordance with the requirements of ASTM A 653 with a minimum yield strength of 33 ksi and shall be galvanized.
- **2.2** The steel for the structural support angles shall be in accordance with the requirements of ASTM A 653 with a minimum yield strength of 36 ksi and shall be galvanized.
- **2.3** All materials used for connections of transparent formwork to the girders/beams shall be shown on the shop drawing submittal for the review and approval from the engineer.
- **2.4** The transparent acrylic plastic sheet for the fabricated formwork shall be in accordance with the requirements of ASTM D 4802-16. Dimensions of the sheet shall be specified in the approved shop drawings.
- **2.5** The permanent transparent forms and ancillary items associated with the pay item shall be supplied by the following:

ClearCast Forms by Contech Engineered Solutions LLC 9100 Centre Pointe Drive West Chester, OH 45069 www.conteches.com **2.6** All permanent forms shall be fabricated with the following tolerances:

Form Dimensions: 1/4 inch

Form Squareness: The difference between the two diagonals shall not exceed 1/2 inch

- **2.7** All fabricated permanent transparent forms delivered to the contractor shall be stored on pallets at least three inches off the ground with one end elevated to allow for drainage. Binding on permanent transparent forms shall remain in place until immediately prior to installation. Care shall be taken to avoid damage to the transparent forms during handling and installation. Forms shall be lifted from beneath the steel track, not the plastic sheet. Any forms that are damaged shall be replaced at no additional cost, as directed by the engineer.
- **2.8** The bridge deck concrete and admixtures shall contain no calcium chloride. All concrete admixtures shall be reviewed for compatibility with the acrylic sheeting of the forms.

3.0 Construction Requirements.

3.1 Shop Drawings and Design.

- **3.1.1** Shop drawings and design calculations shall be submitted to the engineer for review and approval. Submittals shall show complete details of all elements required for proper construction of the system, including complete material specifications.
- **3.1.2** The forms shall be designed on the basis of dead load of form, reinforcing bars, and plastic concrete plus 50 psf for construction loads. The allowable design pressure shall be shown on the shop drawings. Deflection under the weight of the forms, the plastic concrete and reinforcing bars shall not exceed 1/180 of the form span or 1/2 inch, whichever is less, for spans equal to or less than 10 feet; and shall not exceed 1/240 of the form span or 3/4 inch, whichever is less, for spans greater than 10 feet. However, the deflection loading shall not be less than 120 psf total. The allowable form camber shall be based on the actual dead load condition. Camber shall not be used to compensate for deflection in excess of the foregoing limits. The design span of the form sheets shall be the clear span between the edges of the girders less the minimum bearing length specified by the manufacturer.
- **3.1.3** The design, materials and construction shall be in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition; the AASHTO Guide Design Specifications for Bridge Temporary Works, 1st Edition; AISI S100-12, North American Specification for Cold-Formed Steel Structural Members; ACI 318-14, Building Code Requirements for Structural Concrete; and AISC 360-10, Specification for Structural Steel Buildings.

3.2 Installation.

- **3.2.1** A qualified representative of the form manufacturer shall be present at the beginning of the form installation work.
- **3.2.2** The masking, provided on the top surface of the transparent form, shall be left in place during installation operations to provide protection of the transparent surface. Only plastic putty knives or scrapers shall be used to remove masking. Care shall be taken to not scratch the

JOB SPECIAL PROVISIONS (BRIDGE)

surface of the transparent form. Masking shall be removed immediately prior to setting reinforcing steel.

- **3.2.3** The installed transparent forms shall be protected from any cleaning solutions, solvents such as acetone, gasoline, alcohol or thinners. Any forms that are damaged according to the engineer shall be replaced by the contractor at no additional cost to the Department. Any permanently exposed steel on the forms with damaged galvanized coating shall be cleaned and repaired as directed by the engineer with the zinc alloy stick method in accordance with ASTM A 870.
- **3.2.4** When forms are cut or drilled, methods shall be submitted to both the supplier and to the engineer for approval prior to work. Cutting by torch or burning will not be allowed.
- **3.2.5** The form supports shall be set to meet the required screed elevations, deck thickness and plan profile. All dimensions and form support elevations shall be checked and adjusted as required prior to installing the transparent forms.
- **3.2.6** The welding of form support to tension flanges or to non-weldable grades of steel is not permitted. If field welding is required, it must be in accordance with Sec 712.
- **3.2.7** The permanent transparent forms shall be placed on form supports to meet the minimum bearing lengths shown on the plans. Forms shall not be set and attached directly on the top of beam flanges. All attachments for form supports shall be made by welds, bolts, clips, or other approved means. The vertical leg of angles used as form supports shall not extend higher than 1/4 inch above the top of the permanent transparent form.
- **3.2.8** Form supports at steel girder bridges shall be placed in direct contact with the top flange of the girder and shall be adjusted to maintain the required deck thickness. Where straps are used on the top flanges, the straps shall be No. 10 gage thick (min.), fit tight, and may be galvanized at the manufacturers' discretion.
- **3.2.9** Form supports at prestressed concrete I-girder or NU girder bridges shall be placed in direct contact with the edge of the girder beam flange and shall be adjusted to maintain the required deck thickness. The form supports may be attached to steel inserts cast into the top of the girder, to straps extending across the top of the flange, to hangers mechanically attached to reinforcing bars extending from the top of the flange, or by other approved means. Where straps are used across the top flange, they shall be No. 10 gage thick, fit tight, and may be galvanized at the manufacturer's discretion. Attachments shall not be welded directly to beam reinforcement. The use of recesses cast into the prestressed beam to serve as a form support will not be allowed.
- **3.2.10** Transparent forms shall be connected to the form supports immediately upon placement to prevent movement or uplift, before applying any load or walking on the form, and before the end of each work shift.
- **3.2.11** Joints between adjacent transparent forms and the support angle shall be mortar tight. Joints larger than 1/2 inch shall be sealed with an approved material to prevent leakage of the concrete.

- **3.2.12** All screws shall be placed such that there is a minimum distance of 0.29 inches between the center of the screw and material edge.
- **3.2.13** All reinforcing bars shall have a minimum clearance of 1 inch from the forms and be placed in accordance with Sec 706.
- **3.2.14** Prior to pouring concrete, all debris and extraneous matter shall be removed from the forms. The placement and thickness of concrete shall be controlled such that the pressure applied does not exceed the allowable design pressure.
- **3.2.15** Concrete shall be placed in accordance with Sec 703, and concrete shall not be dropped from a height greater than 10 inches above the transparent forms. Care shall be taken to avoid contact of equipment, tools, and vibrators with the top of forms. Vibrators shall be rubber tipped.
- **4.0 Method of Measurement.** Final measurement will not be made unless changes from contract plans are authorized by the engineer during construction, or appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity. Where required, quantities for concrete masonry will be computed from dimensions shown on the plans, or as revised in writing by the engineer because of changes to the contract plans or due to appreciable errors, and will be computed to the nearest square yard for each structure.
- **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 as shown below:

Bridge No. A8938	Slab on Concrete NU-Girder (with Transparent Forms)

C. SPECIAL CHANGE ORDER AND VALUE ENGINEERING CONSIDERATION

1.0 Description. Increased Federal Share has been approved by FHWA for an innovative technology or practice. The Commission will receive an additional five percent (5%) Federal Share of the overall contract value due to innovations within the following pay item(s):

Pay Item No.	Pay Item Description	Innovation
7034234	Slab on Concrete NU-Girder (with Transparent Forms)	Transparent Forms

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** 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 of this job special provision jeopardizes 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 such item(s) from the contract ensuring that 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 (5%) Federal Share value, the engineer shall notify the MoDOT project manager.