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	If a seal is present on this sheet, JSP's has been electronically sealed and dated.
	JOB NO. J2P3043 Lincoln County, MO Date Prepared: 4/1/2024
Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: All	

JOB SPECIAL PROVISIONS (BRIDGE)

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 and the geotechnical report for the new structure 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 The bridge substructure for the widened portion of stage one construction shall be constructed as near to completion as feasible before removing the adjacent portions of existing superstructure.

2.5 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.

2.6 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.

2.7 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.

2.8 A washer shall be required under head and nut when any reaming is performed for bolt installation.

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.

JOB SPECIAL PROVISIONS (BRIDGE)

B. PILE WAVE ANALYSIS

1.0 General.

1.1 Scope of Work. Scope of work shall include furnishing a wave equation analysis of piles (WEAP) as specified in this special provision.

1.2 Performance and Design Requirements. Performance and design conditions for WEAP shall be in accordance with [section 4.0](#) of this special provision.

1.3 Qualifications. The contractor shall perform wave equation analysis utilizing the services of an independent dynamic pile testing consultant and qualified personnel. An engineer with a minimum of 5 years WEAP experience shall perform the analysis.

2.0 Execution.

2.1 Pile Driving Modeling. The contractor shall perform preconstruction wave equation analyses and prepare a summary report of the results. The wave equation analyses shall be used to assess the ability of all proposed pile driving systems to install piles to the required capacity and the desired penetration depth within allowable driving stresses. The report shall include a drivability graph relating pile capacity, blow count and driving stresses to depth. The report shall include a bearing graph relating the pile capacity to the pile driving resistance. The bearing graph shall indicate blow count versus capacity and stroke. The report shall also contain a constant capacity analysis or inspector's chart to assist the engineer in determining the required driving resistance at other field observed strokes. The contractor shall perform wave equation analyses in accordance with [section 4.0](#) of this special provision. Acceptability of the wave equation report and the adequacy of analyses will be determined by the engineer.

2.1.1 WEAP shall provide driving criteria for driving piling to rock. WEAP shall give pile solution for driving piling through hard material to rock, or through soft material to rock.

2.1.2 Approval by the engineer of the proposed pile driving system will be based upon the wave equation analyses indicating that the proposed system can develop the specified pile capacity at a pile driving rate of 2 to 10 blows per inch at the end of driving, and within allowable driving stresses per *AASHTO LRFD Bridge Construction Specifications*, Section 4.4.1. The contractor shall provide preliminary pile driving criteria based on wave equation analyses and any anticipated capacity changes after driving, set-up or relaxation, subject to revision based upon field measurements.

2.1.3 If any changes or modifications are made to the approved pile driving system, additional wave equation analyses in accordance with [section 2.1](#) of this special provision shall be required.

3.0 Schedule of Contract Submittals.

3.1 Proposed independent dynamic pile testing consultant, and a list of assigned personnel and their experience and qualifications shall be submitted to the engineer. All documents shall be submitted 45 calendar days before pile driving starts.

4.0 Wave Equation Analysis. A minimum of one and sufficient additional analyses as needed are required to define performance for all combinations of piles, driving systems and subsurface conditions anticipated.

5.0 Method of Measurement. Pile wave analysis will be measured per each bent.

6.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for "Pile Wave Analysis".