Job No.: J7P3542
Route: MO 64
County: Dallas and Laclede

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

(Job Special Provisions shall prevail over General Special Provisions whenever in conflict therewith.)

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Job No.: J7P3542
Route: MO 64
County: Dallas and Laclede



November 17, 2026

Dennis Koscielski, P.E.
Missouri Professional Engineer
License Number: 2005000712

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 W. CAPITOL AVE.
JEFFERSON CITY, MO 65102
Phone 1-888-275-6636

HANSON PROFESSIONAL SERVICES INC.
600 Washington Ave Suite 950
St. Louis, MO 63101
Certificate of Authority: 001632
Consultant Phone: (314) 770-0467

If a seal is present on this sheet, JSP's have been electronically sealed and dated.

JOB NUMBER: J7P3542
Dallas and Laclede Counties, MO
DATE PREPARED: 08/10/2026

ADDENDUM DATE:
R002 – 11/13/2026
R003 – 11/17/2026

Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All except JSP's O, P, Q, R, S

Job No.: J7P3542
Route: MO 64
County: Dallas and Laclede

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August 10, 2026

Clint Woods, P.E.
Missouri Professional Engineer
License Number: 2009018807</td>
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Dallas and Laclede Counties, MO
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<td colspan="2">Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: JSP’s O, P, Q, R, S</td>
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Job No.: J7P3542
Route: MO 64
County: Dallas and Laclede

JOB
SPECIAL PROVISION

A. General - Federal JSP-09-02M

1.0 Description. The Federal Government is participating in the cost of construction of this project. All applicable Federal laws, and the regulations made pursuant to such laws, shall be observed by the contractor, and the work will be subject to the inspection of the appropriate Federal Agency in the same manner as provided in Sec 105.10 of the Missouri Standard Specifications for Highway Construction with all revisions applicable to this bid and contract.

1.1 This contract requires payment of the prevailing hourly rate of wages for each craft or type of work required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the contractor and the contractor's subcontractors shall pay the higher of these two applicable wage rates. State Wage Rates, Information on the Required Federal Aid Provisions, and the current Federal Wage Rates are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT", "Contractor Resources". Effective Wage Rates will be posted 10 days prior to the applicable bid opening. These supplemental bidding documents have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

1.2 The following documents are available on the Missouri Department of Transportation web page at www.modot.org under "Doing Business with MoDOT"; "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to July 2026 Missouri Standard Plans For Highway Construction

These supplemental bidding documents contain all current revisions to the published versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project

B. Contract Liquidated Damages JSP-13-01E

1.0 Description. Liquidated Damages for failure or delay in completing the work on time for this contract shall be in accordance with Sec 108.8. The liquidated damages include separate amounts for road user costs and contract administrative costs incurred by the Commission.

2.0 Period of Performance. Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work on

all projects shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Notice to Proceed: January 19, 2027

Contract Completion Date: June 30, 2028

The Contract Completion Date must be the same for all project JSPs.

2.1 Calendar Days. Completion of the project is required as specified herein. The count of calendar days will begin on the date the contractor starts any construction operations on the project.

Project	Calendar Days	Daily Road User Cost
J7P3542	529 days	$1,800.00

3.0 Liquidated Damages for Contract Administrative Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in accordance with Sec 108.8 in the amount of **$2,000** per calendar day for each calendar day, or partial day thereof, that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the specified contract completion date or calendar days.

4.0 Liquidated Damages for Road User Costs. Should the contractor fail to complete the work on or before the contract completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 2.1 for each calendar day, or partial day thereof, that the work is not fully completed. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.

5.0 Liquidated Damages for Winter Months. Delete Sec 108.8.1.3 (a)

Liquidated damages for failure to complete the work on time shall not be waived from December 15 to March 15, both dates inclusive.

C. Work Zone Traffic Management JSP-02-06N

1.0 Description. Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows.

1.1 Maintaining Work Zones and Work Zone Reviews. The Work Zone Specialist (WZS) shall maintain work zones in accordance with Sec 616.3.3 and as further stated herein. The WZS shall coordinate and implement any changes approved by the engineer. The WZS shall ensure all traffic control devices are maintained in accordance with Sec 616, the work zone is operated within the hours specified by the engineer, and will not deviate from the specified hours without prior approval of the engineer. The WZS is responsible to manage work zone delay in accordance with these project provisions. When requested by the engineer, the WZS shall submit a weekly

report that includes a review of work zone operations for the week. The report shall identify any problems encountered and corrective actions taken. Work zones are subject to unannounced inspections by the engineer and other departmental staff to corroborate the validity of the WZS's review and may require immediate corrective measures and/or additional work zone monitoring.

1.2 Work Zone Deficiencies. Failure to make corrections on time may result in the engineer suspending work. The suspension will be non-excusable and non-compensable regardless if road user costs are being charged for closures.

2.0 Traffic Management Schedule.

2.1 Traffic management schedules shall be submitted to the engineer for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, the hours traffic control will be in place, and work hours.

2.2 The traffic management schedule shall conform to the limitations specified in Sec 616 regarding lane closures, traffic shifts, road closures and other width, height and weight restrictions.

2.3 The engineer shall be notified as soon as practical of any postponement due to weather, material, or other circumstances.

2.4 In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes 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.

2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone. The contractor shall immediately implement appropriate mitigation strategies whenever traffic congestion reaches an excess of 10 minutes to prevent congestion from escalating to 15 minute or above threshold. If disruption of the traffic flow occurs and traffic is backed up in queues of 15-minute delays or longer, then the contractor shall immediately review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from reoccurring. Traffic delays may be monitored by physical presence on site or by utilizing real-time travel data through the work zone that generate text and/or email notifications where available. The engineer monitoring the work zone may also notify the contractor of delays that require prompt mitigation. The contractor may work with the engineer to determine what other alternative solutions or time periods would be acceptable.

2.5.1 Traffic Safety.

2.5.1.1 Recurring Congestion. Where traffic queues routinely extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the contractor shall extend the advance warning area, as approved by the engineer.

2.5.1.2 Non-Recurring Congestion. When traffic queues extend to within 1000 feet of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet of the ROAD WORK

AHEAD, or similar, sign on an undivided highway infrequently, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet and no more than 0.5 mile in advance of the end of the traffic queue on divided highways and no less than 500 feet and no more than 0.5 mile in advance of the end of the traffic queue on undivided highways.

2.6 Transportation Management Plan. The contractor Work Zone Specialist (WZS) shall review the Transportation Management Plan (TMP), found as an electronic deliverable on MoDOT's Online Plans Room and discuss the TMP with the engineer during the preconstruction conference. Throughout the construction project, the WZS is responsible for updating any changes or modifications to the TMP and getting those changes approved by the engineer a minimum of two weeks in advance of implementation. The WZS shall participate in the post construction conference and provide recommendations on how future TMPs can be improved.

3.0 Work Hour Restrictions.

3.1 Except for emergency work, as determined by the engineer, and long term lane closures required by project phasing, all lanes shall be scheduled to be open to traffic during the five major holiday periods shown below, from 12:00 noon on the last working day preceding the holiday until 6:00 a.m. on the first working day subsequent to the holiday unless otherwise approved by the engineer.

Memorial Day
Labor Day
Thanksgiving
Christmas
New Year's Day

3.1.1 Independence Day. The lane restrictions specified in Section 3.1 shall also apply to Independence Day, except that the restricted periods shall be as follows:

When Independence Day falls on:	The Holiday is Observed on:	Halt Lane Closures beginning at:	Allow Lane Closures to resume at:
Sunday	Monday	Noon on Friday	6:00 a.m. on Tuesday
Monday	Monday	Noon on Friday	6:00 a.m. on Tuesday
Tuesday	Tuesday	Noon on Monday	6:00 a.m. on Wednesday
Wednesday	Wednesday	Noon on Tuesday	6:00 a.m. on Thursday
Thursday	Thursday	Noon on Wednesday	6:00 a.m. on Friday
Friday	Friday	Noon on Thursday	6:00 a.m. on Monday
Saturday	Friday	Noon on Thursday	6:00 a.m. on Monday

3.1.2 Spring Fishing. All lanes on Missouri Route 64 and all connecting roadways in the project limits shall be open for traffic for the opening of trout season at Bennett Springs State Park. The dates this restriction applies to are February 27 to March 3.

3.2 The contractor shall not perform any construction operation on the roadway, roadbed, or active lanes, including the hauling of material within the project limits, during restricted periods, holiday periods specified in the contract documents.

3.3 The contractor shall be aware that traffic volume data indicates no restrictions for construction operations on the roadbed are required.

4.0 Detours and Lane Closures.

4.1 When a changeable message sign (CMS) is provided, the contractor shall use the CMS to notify motorists of future traffic disruption and possible traffic delays one week before traffic is shifted to a detour or prior to lane closures. The CMS shall be installed at a location as approved or directed by the engineer. All messages planned for use in the work zone shall be approved and authorized by the engineer or its designee prior to deployment. When permanent dynamic message signs (DMS) owned and operated by MoDOT are located near the project, they may also be used to provide warning and information for the work zone. Permanent DMS shall be operated by the TMC, and any messages planned for use on DMS shall be approved and authorized by the TMC at least 72 hours in advance of the work.

4.2 At least one lane of traffic in each direction shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic and when the engineer allows the roadway to be closed to traffic. Periods during which the contractor will be allowed to interrupt traffic will be designated by the engineer.

4.3 The contractor will not be allowed to open Bridge A9346 to traffic until all applicable paving, signing, barrier curb, guardrail, delineation and permanent pavement marking is in place.

4.4 Single lane closures will be allowed for bird nest removal except during restricted periods, holiday periods or other special events specified in the contract documents.

4.4.1 Single lane closures for bird nest removal will be allowed during restricted periods, holiday periods and other special events with prior approval of the engineer. The engineer may require such closures be during off-peak hours.

5.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract document. All authorized changes in the traffic control plan shall be provided for as specified in Sec 616.

D. Emergency Provisions and Incident Management JSP-90-11A

1.0 The contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from law enforcement or other emergency agencies for incident management. In case of traffic accidents or the need for law enforcement to direct or restore traffic flow through the job site, the contractor shall notify law enforcement or other emergency agencies immediately as needed. The area engineer's office shall also be notified when the contractor requests emergency assistance.

2.0 In addition to the 911 emergency telephone number for ambulance, fire or law enforcement services, the following agencies may also be notified for accident or emergency situation within the project limits.

Job No.: J7P3542
Missouri Highway Patrol (Troop D): (417) 895-6868 *55 cell phone – Missouri Highway Patrol
Missouri Highway Patrol (Troop I): (573) 368-2345 *55 cell phone – Missouri Highway Patrol
Dallas County Sheriff (417) 345-2411
Laclede County Sheriff (417) 532-2311
Laclede County Emergency Management (417) 532-6992
Bennett Springs Fire Protection District (417) 588-9833
Buffalo Rural Fire Department (417) 345-7843
MoDOT Customer Service 1 (888) 275-6636

2.1 This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate law enforcement agency.

2.2 The contractor shall notify law enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the contractor completes this notification with law enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident management.

3.0 No direct pay will be made to the contractor to recover the cost of the communication equipment, labor, materials, or time required to fulfill the above provisions.

E. Project Contact for Contractor/Bidder Questions JSP-96-05

All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Cameron Sooy, PE
MoDOT – Southwest District Telephone Number: (417) 895-7612
3025 East Kearney Street Email: cameron.sooy@modot.mo.gov

All questions concerning the bid document preparation can be directed to the Central Office – Design at (573) 751-2876.

F. Supplemental Revisions JSP-18-01GG

- Compliance with 2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.

The Missouri Highways and Transportation Commission shall not enter into a contract (or extend or renew a contract) using federal funds to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as substantial or as critical technology as part of any system where the video surveillance and telecommunications equipment was

produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- Stormwater Compliance Requirements

1.0 Description. This provision requires the contractor to provide a Water Pollution Control Manager (WPCM) for any project that includes land disturbance on the project site and the total area of land disturbance, both on the project site, and all Off-site support areas, is one (1) acre or more. Regardless of the area of Off-site disturbance, if no land disturbance occurs on the project site, these provisions do not apply. When a WPCM is required, all sections within this provision shall be applicable, including assessment of specified Liquidated Damages for failure to correct Stormwater Deficiencies, as specified herein. This provision is in addition to any other stormwater, environmental, and land disturbance requirements specified elsewhere in the contract.

1.1 Definitions. The project site is defined as all areas designated on the plans, including temporary and permanent easements. The project site is equivalent to the "permitted site", as defined in MoDOT's State Operating Permit. An Off-site area is defined as any location off the project site the contractor utilizes for a dedicated project support function, such as, but not limited to, staging area, plant site, borrow area, or waste area.

1.2 Reporting of Off-Site Land Disturbance. If the project includes any planned land disturbance on the project site, prior to the start of work, the contractor shall submit a written report to the engineer that discloses all Off-site support areas where land disturbance is planned, the total acreage of anticipated land disturbance on those sites, and the land disturbance permit number(s). Upon request by the engineer, the contractor shall submit a copy of its land disturbance permit(s) for Off-site locations. Based on the total acreage of land disturbance, both on and Off-site, the engineer shall determine if these Stormwater Compliance Requirements shall apply. The Contractor shall immediately report any changes to the planned area of Off-site land disturbance. The Contractor is responsible for obtaining its own separate land disturbance permit for Off-site areas.

2.0 Water Pollution Control Manager (WPCM). The Contractor shall designate a competent person to serve as the Water Pollution Control Manager (WPCM) for projects meeting the description in Section 1.0. The Contractor shall ensure the WPCM completes all duties listed in Section 2.1.

2.1 Duties of the WPCM:

(a) Be familiar with the stormwater requirements including the current MoDOT State Operating Permit for construction stormwater discharges/land disturbance activities; MoDOT's statewide Stormwater Pollution Prevention Plan (SWPPP); the Corps of Engineers Section 404 Permit, when applicable; the project specific SWPPP, the Project's Erosion & Sediment Control Plan; all applicable special provisions, specifications, and standard drawings; and this provision;

(b) Successfully complete the MoDOT Stormwater Training Course within the last 4 years. The MoDOT Stormwater Training is a free online course available at MoDOT.org;

(c) Attend the Pre-Activity Meeting for Grading and Land Disturbance and all subsequent Weekly Meetings in which grading activities are discussed;

(d) Oversee and ensure all work is performed in accordance with the Project-specific SWPPP and all updates thereto, or as designated by the engineer;

(e) Review the project site for compliance with the Project SWPPP, as needed, from the start of any grading operations until final stabilization is achieved, and take necessary actions to correct any known deficiencies to prevent pollution of the waters of the state or adjacent property owners prior to the engineer's weekly inspections;

(f) Review and acknowledge receipt of each MoDOT Inspection Report (Land Disturbance Inspection Record) for the Project within forty eight (48) hours of receiving the report and ensure that all Stormwater Deficiencies noted on the report are corrected as soon as possible, but no later than stated in Section 5.0.

3.0 Pre-Activity Meeting for Grading/Land Disturbance and Required Hold Point. A Pre-Activity meeting for grading/land disturbance shall be held prior to the start of any land disturbance operations. No land disturbance operations shall commence prior to the Pre-Activity meeting except work necessary to install perimeter controls and entrances. Discussion items at the pre-activity meeting shall include a review of the Project SWPPP, the planned order of grading operations, proposed areas of initial disturbance, identification of all necessary BMPs that shall be installed prior to commencement of grading operations, and any issues relating to compliance with the Stormwater requirements that could arise in the course of construction activity at the project.

3.1 Hold Point. Following the pre-activity meeting for grading/land disturbance and subsequent installation of the initial BMPs identified at the pre-activity meeting, a Hold Point shall occur prior to the start of any land disturbance operations to allow the engineer and WPCM the time needed to perform an on-site review of the installation of the BMPs to ensure compliance with the SWPPP is met. Land disturbance operations shall not begin until authorization is given by the engineer.

4.0 Inspection Reports. Weekly and post run-off inspections will be performed by the engineer and each Inspection Report (Land Disturbance Inspection Record) will be entered into a web-based Stormwater Compliance database. The WPCM will be granted access to this database and shall promptly review all reports, including any noted deficiencies, and shall acknowledge receipt of the report as required in Section 2.1 (f.).

5.0 Stormwater Deficiency Corrections. All stormwater deficiencies identified in the Inspection Report shall be corrected by the contractor within 7 days of the inspection date or any extended period granted by the engineer when weather or field conditions prohibit the corrective work. If the contractor does not initiate corrective measures within 5 calendar days of the inspection date or any extended period granted by the engineer, all work shall cease on the project except for work to correct these deficiencies, unless otherwise allowed by the engineer. All impact costs related to this halting of work, including, but not limited to stand-by time for equipment, shall be borne by the Contractor. Work shall not resume until the engineer approves the corrective work.

5.1 Liquidated Damages. If the Contractor fails to complete the correction of all Stormwater Deficiencies listed on the MoDOT Inspection Report within the specified time limit, the

Commission will be damaged in various ways, including but not limited to, potential liability, required mitigation, environmental clean-up, fines, and penalties. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of $2,000 per day for failure to correct one or more of the Stormwater Deficiencies listed on the Inspection Report within the specified time limit. In addition to the stipulated damages, the stoppage of work shall remain in effect until all corrections are complete.

6.0 Basis of Payment. No direct payment will be made for compliance with this provision.

- ***Delete Sec 106.9 in its entirety and substitute the following:***

106.9 Buy America Requirements.
Buy America Requirements are waived if the total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

106.9.1 Buy America Requirements for Iron and Steel.
On all federal-aid projects, the contractor's attention is directed to Title 23 CFR 635.410 *Buy America Requirements*. Where steel or iron products are to be permanently incorporated into the contract work, steel and iron material shall be manufactured, from the initial melting stage through the application of coatings, in the USA except for "minimal use" as described herein. Furthermore, any coating process of the steel or iron shall be performed in the USA. Under a general waiver from FHWA the use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the USA will be permitted in the domestic manufacturing process for steel or iron material.

106.9.1.1 Buy America Requirements for Iron and Steel for Manufactured items.
A manufactured item will be considered iron and steel if it is "predominantly" iron or steel. Predominantly iron or steel means that the cost of iron or steel content of a product is more than 50 percent of the total cost of all its components.

106.9.2 Any sources other than the USA as defined will be considered foreign. The required domestic manufacturing process shall include formation of ingots and any subsequent process. Coatings shall include any surface finish that protects or adds value to the product.

106.9.3 "Minimal use" of foreign steel, iron or coating processes will be permitted, provided the cost of such products does not exceed 1/10 of one percent (0.1 percent) of the total contract cost or $2,500.00, whichever is greater. If foreign steel, iron, or coating processes are used, invoices to document the cost of the foreign portion, as delivered to the project, shall be provided and the engineer's written approval obtained prior to placing the material in any work.

106.9.4 Buy America requirements include a step certification for all fabrication processes of all steel or iron materials that are accepted per Sec 1000. The AASHTO Product Evaluation and Audit Solutions compliance program verifies that all steel and iron products fabrication processes conform to 23 CFR 635.410 Buy America Requirements and is an acceptable standard per 23 CFR 635.410(d). AASHTO Product Evaluation and Audit Solutions compliant suppliers will not be required to submit step certification documentation with the shipment for some selected steel and iron materials. The AASHTO Product Evaluation and Audit Solutions compliant supplier shall maintain the step certification documentation on file and shall provide this documentation to the engineer upon request.

106.9.4.1 Items designated as Category 1 will consist of steel girders, piling, and reinforcing steel installed on site. Category 1 items require supporting documentation prior to incorporation into the project showing all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements. This includes the Mill Test Report from the original producing steel mill and certifications documenting the manufacturing process for all subsequent fabrication, including coatings. The certification shall include language that certifies the following. That all steel and iron materials permanently incorporated in this project was procured and processed domestically and all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410.

106.9.4.2 Items designated as Category 2 will include all other steel or iron products not in Category 1 and permanently incorporated in the project. Category 2 items shall consist of, but not be limited to items such as fencing, guardrail, signing, lighting and signal supports. The prime contractor is required to submit a material of origin form certification prior to incorporation into the project from the fabricator for each item that the product is domestic. The Certificate of Materials Origin form (link to certificate form) from the fabricator must show all steps of manufacturing, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements and be signed by a fabricator representative. The engineer reserves the right to request additional information and documentation to verify that all Buy America requirements have been satisfied. These documents shall be submitted upon request by the engineer and retained for a period of 3 years after the last reimbursement of the material.

106.9.4.3 Any minor miscellaneous steel or iron items that are not included in the materials specifications shall be certified by the prime contractor as being procured domestically. Examples of these items would be bolts for sign posts, anchorage inserts, etc. The certification shall read "I certify that all steel and iron materials permanently incorporated in this project during all manufacturing processes, including coating, as being completed in the United States and in accordance with CFR Title 23 Section 635.410 Buy America Requirements procured and processed domestically in accordance with CFR Title 23 Section 635.410 Buy America Requirements. Any foreign steel used was submitted and accepted under minor usage". The certification shall be signed by an authorized representative of the prime contractor.

106.9.5 When permitted in the contract, alternate bids may be submitted for foreign steel and iron products. The award of the contract when alternate bids are permitted will be based on the lowest total bid of the contract based on furnishing domestic steel or iron products or 125 percent of the lowest total bid based on furnishing foreign steel or iron products. If foreign steel or iron products are awarded in the contract, domestic steel or iron products may be used; however, payment will be at the contract unit price for foreign steel or iron products.

106.9.6 Buy America Requirements for Construction Materials other than iron and steel materials. Construction materials means articles, materials, or supplies that consist of only one of the items listed. Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material. Upon request by the engineer, the contractor shall submit a domestic certification for all construction materials listed that are incorporated into the project.

(a) Non-ferrous metals

(b) Plastic and Polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
(c) Glass (including optic glass)
(d) Fiber optic cable (including drop cable)
(e) Optical fiber
(f) Lumber
(g) Engineered wood
(h) Drywall

106.9.6.1 Minimal Use allowance for Construction Materials other than iron or steel.
"The total value of the non-compliant products is no more than the lesser of $1,000,000 or 5% of total applicable costs for the project." The contractor shall submit to the engineer any non-domestic materials and their total material cost to the engineer. The contractor and the engineer will both track these totals to assure that the minimal usage allowance is not exceeded.

106.9.7 Buy America Requirements for Manufactured Products.
Manufactured products means:

(a) Articles, materials, or supplies that have been:
    (i) Processed into a specific form and shape; or
    (ii) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

(b) If an item is classified as an iron or steel product, a construction material, or a section 70917(c) material under § 184.4(e) and the definitions set forth in this section, then it is not a manufactured product. However, an article, material, or supply classified as a manufactured product under § 184.4(e) and paragraph (1) of this definition may include components that are construction materials, iron or steel products, or section 70917(c) materials.

106.9.7.1 Manufactured products are exempt from Buy America requirements. To qualify as a manufactured product, items that consist of two or more of the listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials.

106.9.7.2 Manufactured items are covered under a general waiver to exclude them from Buy America Requirements. To qualify for the exemption the components must comprise of 55% of the value of materials in the item. The final assembly must also be performed domestically.

- Third-Party Test Waiver for Concrete Aggregate

1.0 Description. Third party tests may be allowed for determining the durability factor for concrete pavement and concrete masonry aggregate.

2.0 Material. All aggregate for concrete shall be in accordance with Sec 1005.

2.1 MoDOT personnel shall be present at the time of sampling at the quarry. The aggregate sample shall be placed in an approved tamper-evident container (provided by the quarry) for shipment to the third-party testing facility.

2.2 AASHTO T 161 Method B Resistance of Concrete to Rapid Freezing and Thawing, shall be used to determine the aggregate durability factor. All concrete beams for testing shall be 3-inch wide by 4-inch deep by 16-inch long or 3.5-inch wide by 4.5-inch deep by 16-inch long. All beams for testing shall receive a 35-day wet cure fully immersed in saturated lime water prior to initiating the testing process.

2.3 Concrete test beams shall be made using a MoDOT approved concrete pavement mix design.

3.0 Testing Facility Requirements. All third-party test facilities shall meet the requirements outlined in this provision.

3.1 The testing facility shall be AASHTO accredited.

3.1.1 For tests ran after January 1, 2025, accreditation documentation shall be on file with the Construction and Materials Division prior to any tests being performed.

3.1.2 Construction and Materials Division may consider tests completed prior to January 1, 2025, to be acceptable if all sections of this provision are met, with the exception of 3.1.1. Accreditation documentation shall be provided with the test results for tests completed prior to January 1, 2025. No tests completed prior to September 1, 2024, will be accepted.

3.2 The testing facility shall provide their testing process, list of equipment, equipment calibration documentation, and testing certifications or qualifications of technicians performing the AASHTO T 161 Procedure B tests. The testing facility shall provide details on their freezing and thawing apparatus including the time and temperature profile of their freeze-thaw chamber. The profile shall include the temperature set points throughout the entirety of the freeze-thaw cycle. The profile shall show the cycle time at which the apparatus drains/fills with water and the cycle time at which the apparatus begins cooling the specimens.

3.3 Results, no more than five years old, from the third-party test facility shall compare within ±2.0 percent of an independent test from another AASHTO accredited test facility or with MoDOT test records, in order to be approved for use (e.g. test facility results in a durability factor of 79, MoDOT's recent durability test factor is 81; this compared within +2 percent). The independent testing facility shall be in accordance with this provision. The comparison test can be from a different sample of the same ledge combination.

3.4 When there is a dispute between the third party durability test results and MoDOT durability test results, the MoDOT durability test result shall govern.

3.5 Test results shall be submitted to MoDOT's Construction and Materials division electronically for final approval. Test results shall include raw data for all measurements of relative dynamic modulus of elasticity and percent length change for each individual concrete specimen. Raw data shall include initial measurements made at zero cycles and every subsequent measurement of concrete specimens. Raw data shall include the cycle count and date each measurement was taken. Test results shall also include properties of the concrete mixture as required by AASHTO T 161. This shall include the gradation of the coarse aggregate sample. If AASHTO T 152 is used to measure fresh air content, then the aggregate correction factor for the mix determined in accordance with AASHTO T 152 shall also be included.

4.0 Method of Measurement. There is no method of measurement for this provision. The testing requirements and number of specimens shall be in accordance with AASHTO T 161 Procedure B.

5.0 Basis of Payment. No direct payment will be made to the contractor or quarry to recover the cost of aggregate samples, sample shipments, testing equipment, labor to prepare samples or test samples, or developing the durability report.

15.0 Bidder's List Quote Summary. MoDOT is a recipient of federal funds and is required by 49 CFR 26.11 to provide data about its DBE program. All bidders who seek to work on federally assisted contracts must submit data about all DBE and non-DBEs in accordance with Sec 102.7.9. MoDOT will not compare the submitted Bidder's List Quote Summary to any other documents or submittals, pre or post award. All information will be used by MoDOT in accordance with 49 CFR 26.11 for reporting to USDOT and to aid in overall DBE goal setting**.**

102.7.9 Bidder's List Quote Summary. Each bidder shall submit with each bid a summary of all subcontractors, material suppliers, and service providers (e.g. hauling) considered on federally funded projects pursuant to 49 CFR 26.11. The bidder will provide the firm's name, the corresponding North American Industry Classification System (NAICS) code(s) the firm(s) were considered for, and whether or not they were used in the bid. The information submitted should be the most complete information available at the time of bid. The information shall be disclosed on the Bidder's List Quote Summary form provided in the bidding documents and submitted in accordance with Sec 102.10. Failure to disclose this information may result in a bid being declared irregular.

G. Utilities JSP-93-26F

1.0 For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

Utility Name	**Known Required Adjustment**	**Type**
Laclede Electrical Cooperative Trent Stark Phone: (417) 588-6842 Email: tdstark@lacledeelectric.com	None	Power
Brightspeed of West Missouri Kelly Weigle Phone: (417) 733-7866 Email: kelly.weigle1@brightspeed.com	None	Communications

1.1 The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any

representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

2.0 Basis of Payment. No direct payment shall be made for compliance with this provision.

H. Contractor Quality Control NJSP-15-42

1.0 The contractor shall perform Quality Control (QC) testing in accordance with the specifications and as specified herein. The contractor shall submit a Quality Control Plan (QC Plan) to the engineer for approval that includes all items listed in Section 2.0, prior to beginning work.

2.0 Quality Control Plan.

(a) The name and contact information of the person in responsible charge of the QC testing.
(b) A list of the QC technicians who will perform testing on the project, including the fields in which they are certified to perform testing.
(c) A proposed independent third party testing firm for dispute resolution, including all contact information.
(d) A list of Hold Points, when specified by the engineer.
(e) The MoDOT Standard Inspection and Testing Plan (ITP). This shall be the version that is posted at the time of bid on the MoDOT website (www.modot.org/quality).

3.0 Quality Control Testing and Reporting. Testing shall be performed per the test method and frequency specified in the ITP. All personnel who perform sampling or testing shall be certified in the MoDOT Technician Certification Program for each test that they perform.

3.1 Reporting of Test Results. All QC test reports shall be submitted as soon as practical, but no later than the day following the test. Test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report. No payment will be made for the work performed until acceptable QC test results have been received by the engineer and confirmed by QA test results.

3.1.1 Test results shall be reported on electronic forms provided by MoDOT. Forms and Contractor Reporting Excel2Oracle Reports (CRE2O) can be found on the MoDOT website. All required forms, reports and material certifications shall be uploaded to a Microsoft SharePoint® site provided by MoDOT, and organized in the file structure established by MoDOT.

3.2 Non-Conformance Reporting. A Non-Conformance Report (NCR) shall be submitted by the contractor when the contractor proposes to incorporate material into the work that does not meet the testing requirements or for any work that does not comply with the contract terms or specifications.

3.2.1 Non-Conformance Reporting shall be submitted electronically on the Non-Conformance Report form provided on the MoDOT Website. The NCR shall be uploaded to the MoDOT SharePoint® site and an email notification sent to the engineer.

3.2.2 The contractor shall propose a resolution to the non-conforming material or work. Acceptance of a resolution by the engineer is required before closure of the non-conformance report.

4.0 Work Planning and Scheduling.

4.1 Two-week Schedule. Each week, the contractor shall submit to the engineer a schedule that outlines the planned project activities for the following two-week period. The two-week schedule shall detail all work and traffic control events planned for that period and any Hold Points specified by the engineer.

4.2 Weekly Meeting. When work is active, the contractor shall hold a weekly project meeting with the engineer to review the planned activities for the following week and to resolve any outstanding issues. Attendees shall include the engineer, the contractor superintendent or project manager and any foreman leading major activities. This meeting may be waived when, in the opinion of the engineer, a meeting is not necessary. Attendees may join the meeting in person, by phone or video conference.

4.3 Pre-Activity Meeting. A pre-activity meeting is required in advance of the start of each new activity, except when waived by the engineer. The purpose of this meeting is to review construction details of the new activity. At a minimum, the discussion topics shall include: safety precautions, QC testing, traffic impacts, and any required Hold Points. Attendees shall include the engineer, the contractor superintendent and the foreman who will be leading the new activity. Pre-activity meetings may be held in conjunction with the weekly project meeting.

4.4 Hold Points. Hold Points are events that require approval by the engineer prior to continuation of work. Hold Points occur at definable stages of work when, in the opinion of the engineer, a review of the preceding work is necessary before continuation to the next stage.

4.4.1 A list of typical Hold Point events is available on the MoDOT website. Use of the Hold Point process will only be required for the project-specific list of Hold Points, if any, that the engineer submits to the contractor in advance of the work. The engineer may make changes to the Hold Point list at any time.

4.4.2 Prior to all Hold Point inspections, the contractor shall verify the work has been completed in accordance with the contract and specifications. If the engineer identifies any corrective actions needed during a Hold Point inspection, the corrections shall be completed prior to continuing work. The engineer may require a new Hold Point to be scheduled if the corrections require a follow-up inspection. Re-scheduling of Hold Points require a minimum 24-hour advance notification from the contractor unless otherwise allowed by the engineer.

5.0 Quality Assurance Testing and Inspection. MoDOT will perform quality assurance testing and inspection of the work, except as specified herein. The contractor shall utilize the inspection checklists provided in the ITP as a guide to minimize findings by MoDOT inspection staff. Submittal of completed checklists is not required, except as specified in 5.1.

5.1 Inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor. Submittal of the 501 Concrete Plant Checklist is required.

6.0 Basis of Payment. No direct payment will be made for compliance with this provision.

I. Guardrail Requirements

1.0 Safety Devices. Before any guardrail or bridge approach transition sections are installed, the contractor shall layout the proposed alignment in the field to ensure that each of these items can indeed be installed properly based upon the standard plans and the manufacturer's recommendations. The contractor shall notify the engineer when that field inspection will take place as to allow the engineer to be present at that time. The contractor is advised that in order to ensure that the bridge approach transition section selected by the contractor can indeed be installed at each of the locations listed in the plans, it is suggested that the field inspection meeting mentioned above take place before the ordering of any bridge approach transition sections.

2.0 Basis of Payment. The accepted bridge approach transition sections, complete in place, will be paid for by the contract unit bid price for the following item and will be full compensation for all labor, equipment, and material to complete the above-described work.

Item Number	Type / Description	Unit
606-10.69	MGS Bridge Approach Transition Section (Regular/No Curb)	Each

J. Clearing and Grubbing

1.0 Description. Clearing and Grubbing shall consist of clearing, grubbing, removing, and disposing of trees, bushes, and other vegetation within the disturbance limits of the project site, except such vegetation as is designated to remain or to be selectively treated.

2.0 Construction requirements. All work shall conform to Missouri Standard Specifications for Highway Construction, Section 201.

Contractor is responsible for cutting down the trees at the project site. The Contractor shall be responsible for removing fallen trees and root balls as part of this pay item.

When removing trees, the Contractor shall take precautions not to damage adjacent property.

3.0 Method of Measurement. Each section of **"Clearing and Grubbing"** completed shall be measured by the nearest tenth of an acre and shall include all labor and materials necessary to complete the **"Clearing and Grubbing"**.

4.0 Basis of Payment. Payment for **"Clearing and Grubbing"** will be made as shown belwo. Cost for "Clearing and Grubbing" shall include all costs for stump removal, hauling, mulching, labor, materials, backfill, etc.

Item Number	Type / Description	Unit
201-30.00	Clearing and Grubbing	Acre

K. Optional Pavement – Asphalt or Concrete

1.0 Description. This work shall consist of a pavement composed of either Portland Cement Concrete or asphaltic concrete constructed on a prepared subgrade. This work shall be performed in accordance with the standard specifications and as shown on the plans or established by the engineer.

2.0 The quantities shown reflect the total square yards of pavement surface designated for each pavement type as computed and shown on the plans.

2.1 No additional payment will be made for asphaltic concrete mix quantities to construct the required slope along the edge of the pavement, or for tack applied between lifts of asphalt.

2.2 No additional payment will be made for aggregate base quantities outside the limits of the final surface area as computed and shown on the plans.

2.3 The grading shown on the plans was designed for the thicker pavement option. For projects with grading in the contract, there will be no adjustment of the earthwork quantities due to adjusting the roadway subgrade for optional pavements.

2.4 The contractor shall comply with Sections 401 through 403 of the MoDOT Standard Specifications for the asphalt option and Sections 501 and 502 of the MoDOT Standard Specifications for the concrete option.

2.5 Pavement options composed of Portland cement concrete shall have contrast pavement marking for intermittent markings (skips) and dotted lines. The pavement markings shall be in accordance with Section 620 of the MoDOT Standard Specifications. No additional payment will be made for the contrast pavement markings.

2.6 If asphalt is the elected pavement used, Contractor shall install bituminous edge line rumble strips and centerline rumble strips. If concrete is chosen edge line and centerline rumble strips shall be installed and will be paid for as bituminous rumble strips without any change in the unit price received in the bid.

3.0 Method of Measurement. The quantities of concrete pavement will be measured in accordance with Section 502.14 of the MoDOT Standard Specifications. The quantities of asphaltic concrete pavement will be measured in accordance with Section 403.22 Standard Specifications.

4.0 Basis of Payment. The accepted quantity of the chosen option will be paid for as shown below:

Item Number	Type / Description	Unit
401-99.05	Misc. {Optional Pavement – Asphalt or Concrete}	Square Yard

L. Changeable Message Sign with Communication Interface, Contractor Furnished/Retained

1.0 Description. The contractor shall furnish changeable message sign(s) with communication interface, hereinafter referred to as a CMS, in a serviceable and working condition to the job site. Each CMS will not be delivered until requested by the contractor through the engineer and the immediate use of the CMS will be for the contractor to place it into service. When the CMS is no longer needed, the engineer shall be notified to remove the CMS from the job site.

1.1 The contractor shall be responsible for relocating, maintaining, operating and protecting the CMS from theft and traffic hazards from the time the CMS is delivered until it is no longer needed. The contractor shall maintain the CMS as required by the manufacturer and the engineer during the time the contractor is responsible for the CMS. The manufacturer recommended procedures for maintenance and operation will be on file at the project office.

2.0 Material. The contractor shall furnish and employ any fuel, oil, fuel filters, oil filters, batteries, hydraulic fluid or brake fluid needed to operate and maintain the CMS.

2.1 The contractor shall program the CMS as directed by the engineer.

3.0 Liability.

3.1 Should any CMS be damaged beyond reuse by the contractor's negligence, the contractor shall replace the CMS with an equivalent make and model at the contractor's expense. If minor damage(s) caused by the contractor's operation, the contractor shall make all the necessary repairs to restore the CMS to its usable and functional condition.

3.2 Upon the completion of work, the contractor shall make all necessary repairs to the CMS if needed or replace the CMS with an equivalent type, if the equipment is beyond repairs, to the satisfaction of the engineer before returning it to an assigned location determined by the engineer.

4.0 Construction Requirements. The contractor shall place the CMS at the location shown on the plans or as directed by the engineer. CMS shall be delineated with a minimum of five non-metallic drum-like channelizers. Installation, including location and placement, shall be approved by the engineer. If needed, the contractor shall relocate the CMS as directed by the engineer.

4.1 When not in use, the CMS shall be stored no closer than 30 feet (10 meters) to the edge of pavement carrying traffic, unless it is in a properly protected area or an off-site storage area or as otherwise directed by the engineer.

5.0 Basis of Payment. All expenses incurred by the contractor in maintaining, relocating, operating and protecting the changeable message signs as outlined above shall be paid for at the contract unit price for:

Item No.	Unit	Description
616-10.99	Each	Changeable Message Sign with Communication Interface, Contractor Furnished/Retained

M. Removal and Delivery of Existing Signs JSP-12-01C

1.0 Description. All Commission-owned signs removed from the project shall be disassembled, stored, transported, and disposed of as specified herein. Sign supports, structures and hardware removed from the project shall become the property of the contractor.

2.0 Disassembly and Delivery.

2.1 All Commission-owned signs, (excluding abandoned billboard signs), designated for removal in the plans, or any other signs designated by the engineer, shall be removed from the sign supports and structures, disassembled, stored, transported, and delivered by the contractor to the recycling center for destruction.

2.2 The contractor shall coordinate and make arrangements with the recycling center for delivery of the signs. Sign panels shall be disassembled and/or cut into sizes as required by the recycling center.

2.3 The contractor shall provide the engineer with a "Sign Delivery Certification" attesting to completion of delivery of all existing sign material from the project to the recycler. In addition, the contractor shall provide to the engineer a final "Sign Certification of Destruction" from the recycler that documents the total pounds of scrap sign material received from the project and attests that all such material will not be re-purposed and will be destroyed in a recycling process. The contractor can locate the required certification statements from the Missouri Department of

Transportation website:
https://www.modot.org/forms-contractor-use

2.4 Funds received from the disposal of the signs from the recycling center shall be retained by the contractor.

3.0 Basis of Payment. All costs associated with removing, disassembling and/or cutting, storing, transporting, and disposing of signs shall be considered as completely covered by the contract unit price for 202-20.10, Removal of Improvements, per lump sum.

N. Pot Holing For Utility Facilities

1.0 Description. The contractor shall field verify that the proposed traffic signal bases, light poles, RRFB's, sign posts and roadway drainage structure locations (inlets, manholes or pipes) will not need to be shifted to avoid utilities prior to ordering any necessary RRFB's, sign posts, drainage structures, light poles, or signal equipment. The contractor shall be proactive in the discovery of potential utility conflicts. The contractor shall submit One Call tickets where existing utilities are located in close proximity to proposed improvements and coordinate with the utility company and the engineer to determine if a conflict will be encountered due to the work proposed in the contract. If a conflict is anticipated, the contractor shall perform test holes to field verify whether conflicts exist with proposed roadway improvement locations.

If utility facilities are discovered the contractor shall contact the engineer. The engineer will determine whether relocation of the utility is necessary to accommodate construction or if the work can be installed in accordance with Missouri Standard Plans for Highway Construction for

the item of work specified. The contractor shall coordinate construction activities with the utilities and take measures to ensure the integrity of the existing facilities are not disturbed during construction.

The contractor shall not order materials until measurements are field verified.

2.0 Basis of Payment.

2.1 All labor, equipment, materials, and restoration necessary to pothole buried utilities at proposed signal bases, light poles and drainage structure (inlets, manholes or pipes) locations shall be paid for under:

Item No.	Unit	Description
902-99.02	Each	Misc. {Pot Holing for Utility Facilities}

O. 6-Inch Force Main, HDPE (DR-11) (HDD Installation)

1.0 Description. The specification covers requirements for installation of underground infrastructure using the trenchless technology method known as Horizontal Directional Drilling (HDD). The HDD method involves first drilling a pilot bore, then enlarging the drilled pilot bore to facilitate the installation of the required pipe. The pilot bore is enlarged approximately 1.5 times the size of the product pipe and then the product pipe is pulled into the enlarged borehole.

The work shall consist of furnishing and installing the sanitary force main and appurtenances under the Niangua River by HDD as shown in the plans. All work shall be performed in accordance with the latest edition of the Missouri Natural Resources Wastewater Guidelines and Standards Document and ASTM Standards for HDD, except as modified herein.

HDD Terms and Definitions:

(A) Pilot Hole: The initial controlled drilled horizontal shaft used to guide the enlargement to design size and eventual installation of the product pipe.
(B) Reaming: The back reaming hole opener is attached to the drill pipe and rotated and pulled back through the pilot hole to enlarge the bore in one or more passes to the size needed for product pipe installation.
(C) Pullback: The pipe installation pulled back by a swivel/pulling head connected behind the reamer, which pulls the prepared product pipe into place.
(D) Drilling Fluids: Fluids consisting of water, bentonite, and any approved additives such as environmentally safe polymers, lubricants, and viscosifiers.
(E) Bore-tracking Equipment: Methods and systems generally defined as a walkover or non-walkover. To be specified by the Contractor and used to measure the actual accuracy of the bore to the specific line and grade. The bore path is monitored during the pilot bore by taking periodic readings of the inclination and azimuth of the probe located within the sonde housing.
(F) Bore-tracking Pit: An excavated area for entry, exit, slurry sump or any other excavation used to manage, control, and track the progress of the bore.
(G) Critical Structure: Any pipeline, utility, building, structure, bridge, pier, or similar construction partially or entirely located within a zone of active excavation.

2.0 Material. The force main material shall be of the size, type, and class as shown on the plans.

Sectional pipe is pipe that requires assembly of the joints, such as a bell and spigot pipe. Sectional pipe shall be specifically designed for installation by HDD.

Non-sectional pipe is pipe that requires joining together by a fusion or welding process. It is assembled prior to pulling the product pipe into the bore hole.

Non-sectional pipe that requires fusion of the joints, such as HDPE or Fusible-PVC, shall be fused by a skilled operator. The Contractor is responsible for using qualified personnel to ensure the fusion process follows the pipe manufacturer's recommended procedures. The Contractor shall submit certification from the pipe manufacturer or an accredited training agency documenting personnel qualifications. Untrained personnel shall not be permitted to perform fusion of any pipe on the project. The Contractor shall use a data-logger or manually record the following information for each fused joint in the product pipe, unless the product pipe is used as a sleeve, pulled through a sleeve, or used for dry utilities.

- Date and time of joint
- Temperature
- Fusion pressure applied to joint
- Joining/fusion time
- Cooling time

Solid tracer wire AWG #14 or larger shall be pulled with the pipe.

3.0 Submittals. Requirements listed below.

Personnel Qualifications: The Contractor shall provide a competent and experienced individual familiar with the equipment and the type of HDD operations to be performed. The individual shall be present onsite while HDD operations are being performed and be in direct charge and control of the HDD operations. Documentation of experience and appropriate training shall be provided upon request.

Bore Plan/Profile: A scaled plan and profile drawing of the proposed pilot bore shall be submitted by the Contractor. The bore plan/profile shall show existing surface features and grade, the proposed pilot bore size and path, and all existing utilities with dimensioned vertical and horizontal clearances.

Drilling Fluid Management Plan: Indicate the type and amount of the drilling fluid planned to be used on the project. Include safety data sheets for the identified drilling fluid components and additives. The drilling fluid plan is developed based upon the anticipated soil and rock conditions. Indicate the intended method of disposal of spent drilling fluids. The Drilling Fluid Management Plan shall identify contingency measures to be employed in case of inadvertent returns. The contingency plan may include containment with sediment control devices, removal with vacuum equipment or other such contingency measures as appropriate. In all cases, the plan shall indicate that if primary control measures fail and inadvertent returns cannot be controlled, work will be suspended until such a time as the plan can be revised and effective control measures can be implemented. No drilling fluids are permitted to enter Niangua River.

Equipment & Site Setup: Specifications on directional drilling equipment shall be used to ensure that the equipment will be adequate to complete the project. Equipment list is to include, but not be limited to, drilling rig, mud system, down-hole tools, guidance system, and rig safety systems. Identify the site setup dimensions and where the equipment shall be located.

3.0 Construction. Requirements listed below.

The HDD equipment is to have an electronic tracking system or a Magnetic Guidance System (MGS) to accurately guide boring operations; a system to monitor maximum pullback pressure during pull-back operations; a system to detect electrical current from the drill string shall be in place with an audible alarm that automatically sounds when an electrical current is detected; a vacuum unit of sufficient capacity to handle the drilling fluid volume; and trained and competent personnel to operate the systems. All equipment shall be in good, safe condition with sufficient supplies, materials, and spare parts on hand to maintain the system in good working order for the duration of the project.

An electronic tracking system, MGS probe or proven (non-experimental) gyroscopic probe, and interface for continuous and accurate determination of the location of the drill head shall be used during the drilling operation. The locating system shall be capable of determining the in-ground position of the drill head and shall be accurate to +/-2% of the distance from the transmitter to the receiver. It shall enable the driller to guide the drill head by providing information on the pitch, roll and clock face orientation of the drill head. The locating system shall be capable of determining the depth of the drill head from the transmitter to the surface at any location along the path of the bore. The locating system shall be calibrated per the manufacturer's specifications prior to commencing the bore.

A self-contained, closed, drilling fluid mixing system of sufficient size to mix and deliver drilling fluid composed of bentonite clay, uncontaminated water, and appropriate additives shall be used. The mixing system shall be able to molecularly shear individual bentonite particles from the dry powder to avoid clumping and ensure thorough mixing. The drilling fluid reservoir tank shall be of sufficient capacity to supply an amount of drilling fluid that is equal to the maximum rated output of the drilling fluid pump over at least a fifteen-minute duration. Ensure the drilling fluid is mixed per drilling fluid manufacturer's recommendations and continually agitate the drilling fluid during drilling operations. The Contractor shall be responsible to monitor drilling fluid properties and return fluid properties and shall modify the drilling fluid mix as appropriate for the soil conditions encountered. Contractor shall continually monitor and record any necessary drilling fluid properties such as viscosity as determined by a marsh funnel standard test method ASTM D6910. The drill fluid pumping system shall be capable of delivering drilling fluid at a sufficient output rate and at minimum pressures as necessary to enable successful completion of the bore. Furnish pumping equipment and/or vacuum truck(s) of sufficient size to convey drilling fluid from containment areas to storage and recycling facilities or disposal.

Stabilize the open bore hole by means of bentonite drilling slurry pumped through the drill rod and through openings in the drill head or reamer. The drilling slurry shall be in a homogenous/flowable state serving as an agent to carry the loose cuttings to the surface through the annulus of the borehole. Calculate the volume of drilling fluid required for each reamer pass based upon hole size and soil conditions. The driller shall not be permitted to outrun the mud which is the condition occurring when the drilling penetration or retrieval rate is generating cuttings at a rate faster than the drill fluid pumping system can suspend and convey the cuttings out of the bore hole. Contain all drilling fluids in pits or holding tanks for recycling or disposal. Monitor drill fluid circulation

throughout the duration of the bore activity and immediately take corrective actions to restore fluid circulation should circulation be lost.

Upon completion of the pilot bore, ream the bore hole up to a large enough diameter to accommodate the pullback of the product pipe. The final reamed hole opening shall be 1.5 times the outside diameter of the product pipe.

Care shall be taken during transportation of the product pipe to prevent it from being cut, kinked, or damaged. Use ropes, fabrics, or rubber protected slings and straps when handling pipes. Do not use chains, cables, or hooks inserted into the pipe ends. Use slings spread apart for lifting each length of pipe. Do not drop pipe or fittings onto rocky or unprepared ground. Store pipe on level ground that is free of sharp objects that could damage the pipe. Limit the stacking of pipes to a height that will not cause excessive deformation of the bottom layers of pipe under anticipated temperature conditions. Handle assembled pipe in a manner that avoids damage to the pipe. The pipe is not to be dragged over sharp objects. Position slings to prevent stress on pipe joints. Product pipe that has cuts, gouges, or excessive deformation shall be removed and replaced.

4.0 Basis of Payment. Payment will be made at the contract unit price for each type and size of pipe installed and accepted. The work shall include all labor, material, tools, and equipment required for the HDD installation, complete in place, including all related excavation, shoring and bracing, backfill, and compaction. Payment shall include, testing, restoration, and works items, labor, and ancillary items required to complete installation of the force main under the Niangua River. No additional payment shall be made for encountering rock during excavation or during the boring process. See the geotechnical boring logs for additional information.
Payment shall be paid at the contract unit price for:

Item No.	Unit	Description
605-99.03	Linear Foot	Misc. {6-inch Force Main, HDPE (DR-11) (HDD Installation)}

P. <u>6-Inch Force Main, HDPE (DR-11) (Open Cut Installation)</u>

1.0 Description. The work shall consist of furnishing and installing the sanitary force main, and appurtenances underground as shown in the plans. All work shall be performed in accordance with the latest edition of the Missouri Natural Resources Wastewater Guidelines and Standards Document, except as modified herein.

2.0 Requirements. The high-density polyethylene (HDPE) pipe and ductile iron fittings shall meet the following requirements.

HDPE force main material shall be made from PE4710, rated for 200 psi at 73 degrees Fahrenheit. The pipe shall conform to AWWA C-906, ASTM F714 and ASTM D3035. Restraints shall be used for all ductile iron pipe fittings.

All force main fittings shall be mechanical joint ductile iron for below ground service.

All fittings shall conform to ANSI A21.53 (AWWA C153), where possible. Minimum pressure rating shall be 350 psi. All rubber gaskets shall conform to ANSI A21.11 (AWWA C111). All fittings shall have cement mortar lining and seal coat per ANSI A21.40 (AWWA C104).

Mechanical joints shall utilize locking glands in lieu of standard glands. The locking gland shall meet the applicable requirements of ANSI/AWWA C110/A21.53. The glands shall have a working pressure equal to or greater than the fitting they are bolted to.

Solid tracer wire AWG #14 or larger shall be buried with the pipe.

All ductile iron fittings and pipe shall be wrapped with polyethylene encasement.

The Polyethylene shall be manufactured of virgin polyethylene material conforming to the following requirements of A.S.T.M. Standard Specification D-1248-78 for Polyethylene Plastics Molding and Extrusion Materials:

Raw material used to manufacture polyethylene film: Type: I; Class: A (natural) or B (black); Grade: E-I; Flow rate: 0.4 maximum; and, Dielectric strength: Volume resistivity, minimum ohm-cm(3)=10 (15)

Polyethylene film: Tensile strength: 1200 psi (8.3 MPa) minimum; Elongation: 300 percent minimum; and, Dielectric strength: 800 V/mil. (31.5 um) thickness minimum

Thickness: Polyethylene film shall have a minimum thickness of 0.008 in. (8 mil. or 200 um). The minus tolerance on thickness shall not exceed 10 percent of the nominal thickness.

3.0 Basis of Payment. All items, labor, and ancillary items required to complete installation of the buried force main; including excavation and backfill, fittings required to make changes in vertical and horizontal direction shall be included in the contract unit price for:

Item No.	Unit	Description
605-99.03{1}	Linear Foot	Misc. {6-inch Force Main, HDPE (DR-11) (Open Cut Installation)}

3.1 No additional payment shall be made for encountering rock during trench excavation for the open cut installation of the proposed force main. See the geotechnical boring logs for additional information.

Q. Connection to Existing Force Main

1.0 Description. This work shall consist of furnishing materials, equipment and labor for connecting the new force main to the existing force main at the two locations indicated on the plans. The contractor shall field verify the location, size and material of the existing sanitary force main at the proposed connection locations.

2.0 Requirements.

2.1 The existing force main location shall be field verified and coordinated with the Engineer. The existing force main location along east side of the river shall be used to identify the intermediate system high point for the proposed Sewage Combination Air Valve and Vault. The contractor should field verify existing location, size and material before purchasing materials.

2.2 Ductile iron fittings shall be used with mechanical joint restraints for connection to HDPE pipe. The mechanical joint restraint shall be Megalug Series 2000PV by EBAA or approved equal. The mechanical joint restraint shall be designed to resist pull out forces based on the maximum working pressure rating of the pipe. Forces experienced due to expansion and contraction of the pipe require special consideration. Internal pipe wall stiffners must be used when restraining HDPE. The stiffners must be sized to encompass the entire bearing length of the restraint device.

3.0 Basis of Payment. All items, labor, and ancillary items required to field verify the existing force main location and complete the connection to the existing force main shall be included in the contract per:

Item No.	Unit	Description
605-99.02	Each	Misc. {Connection to Existing Force Main}

R. Sewage Combination Air Valve and Vault

1.0 Description. This work shall include furnishing and installing a single body sewage combination air valve and vault as shown in the plans.

2.0 Requirements.

The single body sewage combination air valve shall be APCO model ASC by DeZURIK, GA Industries Figure 942, Val-Matic Model 801A or approved equal.

The combination air valve shall conform to AWWA C512 (latest version).

The large orifice shall allow large volumes of air to escape or enter when filling or draining a pipeline. When the pipeline is filled and pressurized the large orifice shall stay closed. The valve's large orifice shall shut off when the free floating, center-guided plug is raised into the orifice by the lifting force of the concave bottom float.

The valve's small diameter air release orifice shall remain operative and open during normal system operation to allow small pockets of air accumulation to escape automatically and independently of the large orifice.

Valve seat shall be resilient material and must be fastened to the valve cover, without distortion, for drop tight shut-off.

Valve float shall be heavily constructed stainless steel; hermetically sealed; and have a concave bottom impact area to provide immediate resistance to flow and instant upwards movement to shut-off the large orifice without spilling.

The vault shall be a MODOT 731.00 precast concrete manhole with open bottom as shown in the plan details.

3.0 Basis of Payment. All items, labor, and ancillary items required to complete installation of the sewage combination air valve and vault be included as shown below:

Item No.	Unit	Description
605-99.02{1}	Each	Misc. {Sewage Combination Air Valve and Vault}

S. Removal and Disposal of Existing Force Main

1.0 Description. Removal of Improvements shall include removal and disposal of the existing force main within the limits of the project as indicated in the plans. This work shall include placing concrete grout caps over any existing force main left in place below grade.

2.0 Requirements. The contractor shall coordinate with MODOT, MDNR and the Engineer for the removal of the existing force main.

The Contractor shall remove all sewage from the existing force main before removal. The sewage can be discharged into the existing Bennett Spring State Park Wastewater Treatment Facility Lagoon with MDNR approval. The existing force main shall be cleaned and disinfected before removal from the Niangua River. No sewage is permitted to be spilled into the Niangua River. Materials used to cap the existing force main in place shall be per approval of Engineer.

3.0 Basis of Payment. This work shall be incidential to the projet. No direct pay for removal and disposal of the existing force main.

T. Required Pre-construction Notification for Survey for Hellbenders

1.0 Description. The contractor shall provide a notification to Engineer and Missouri Department of Conservation at least 10-calendar days prior to beginning work on site. A on-site preconstruction survey for Hellbenders shall be completed to detect, capture and relocate the specimens within the immediate area of the project upstream and downstream of the bridge in the project site. Only trained and authorized biologists directed by the Missouri Department of Conservation will conduct surveys and handle hellbenders. Prior to releasing each hellbender captured, the rocks or crevices to which the individual will be relocated will be checked to ensure that the shelter is not already occupied by a hellbender. Work may not commence until after this required survey is completed.

2.0 Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract documents.

U. Temporary Long Term Rumble Strips

1.0 Description. The work shall include furnishing, installing, maintaining and removing long-term rumble strips, as shown in the plans, or as designated by the engineer.

2.0 Material.

2.1 The long-term rumble strips shall be 10 feet to 12 feet in length, fabricated from a polymer material, and be orange in color.

2.2 The long-term rumble strips shall have a minimum width of 4 inches, but no greater than 6 inches. The long-term rumble strips shall have a minimum thickness of 0.25 inch, but no greater than 0.50 inch.

2.3 The long-term rumble strips shall have a pre-applied adhesive backing for securing to the asphalt or concrete roadway surface.

3.0 Construction. Long-term rumble strips layout and spacing shall be in accordance with the plans or as approved by the engineer. The long-term rumble strips shall be installed and removed in accordance with manufacturer's recommendation. The contractor shall monitor and repair, and maintain if necessary the long-term rumble strips until removed.

3.1 Each set shall consist of five individual strips spaced ten to twelve feet on center.

3.2 The long-term rumble strips removal process shall not damage the roadway surface. If any damage occurs to the pavement during the removal of long-term rumble strips, the contractor shall replace or repair the damaged pavement at no cost to the Commission.

4.0 Method of Measurement. Measurement of long-term rumble strips will be per each complete set of five strips.

5.0 Basis of Payment. The accepted quantity of Temporary Long-Term Rumble Strips sets will be paid for as shown below. The long-term rumble strips unit bid price shall include the cost of all labor, equipment and materials to install, maintain, and remove the rumble strips.

Item No.	Unit	Description
616-20.02	Each	Temporary Long-Term Rumble Strips

V. Truck Mounted Attenuator (TMA) for Stationary Activities

1.0 Description. Provide and maintain Truck Mounted Attenuators (TMA) in accordance with Sec 612 and as specified herein.

2.0 Construction Requirements. Truck Mounted Attenuators (TMA) shall be used for the work activities indicated in the plans or specified herein.

2.1 Bridge Replacement–

(a) TMAs shall be placed at locations as indicated in plans prepared by the engineer. TMAs shall be placed before beginning the flagging operation.

(b) TMAs shall be positioned at least 150 feet in advance of the work space.

(c) TMAs shall be used for each phase of bridge replacement construction in accordance with the plans prepared by the engineer.

3.0 Method of Measurement. No measurement will be made for Truck Mounted Attenuators (TMA).

4.0 Basis of Payment. Delete Sec 612.5.1 and substitute with the following:

4.1 No payment will be made for truck mounted attenuators (TMAs) used in mobile operations or for any TMAs designated as optional.

4.2 Payment for TMAs required for stationary work activities will be paid as shown in table below. The lump sum payment includes all work activities that require a TMA, regardless of the number of deployments, relocations, or length of time utilized. No payment will be made for repair or replacement of damaged TMAs.

Item No.	Unit	Description
612-30.01	Lump Sum	Truck Mounted Attenuator (TMA)

W. Wildlife Trail

1.0 Description The contactor shall construct the Wildlife Trail in accordance with the plans prepared by the engineer along the west and east abutments of the proposed bridge.

2.0 Material The contractor shall construct the proposed wildlife trail along the east and west abutments using three (3) layers of Six-Inch Type 5 Aggregate Base as a capping material to rock blanket. The contractor shall place the second and third layers as directed by the engineer.

3.0 Basis of Payment All payment shall be made for the proposed Wildlife Trail as shown in the table below. Payment shall include grading, equipment, material, excavation, and the placement of the three layers of aggregate etc.

Item No.	Unit	Description
304-05.06	Square Yard	Type 5 Aggregate Base (6 In. Thick).

X. Tree Clearing Restriction JSP-07-05C

1.0 Description. The project is within the known range of the federally endangered Indiana bat, northern long-eared bat, and proposed endangered tricolored bat. These bats are known to roost in trees with suitable habitat characteristics during summer months.

1.1 MoDOT has determined that suitable trees for one or more of these bat species exist within the project area.

1.2 To avoid negative impacts to these bat species, removal of any trees/limbs greater than three (3) inches in diameter shall only occur between November 11 and March 31.

2.0 Basis of Payment. No direct pay shall be provided for any labor, equipment, time, or materials necessary to complete this work.

Y. ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01C

1.0 Description. The contractor shall comply with all laws pertaining to the Americans with Disabilities Act (ADA) during construction of pedestrian facilities on public rights of way for this project. An ADA Checklist is provided herein to be utilized by the contractor for verifying compliance with the ADA law. The contractor is expected to familiarize himself with the plans involving pedestrian facilities and the ADA Post Construction Checklist prior to performing the work.

2.0 ADA Checklist. The contractor can locate the ADA Checklist form on the Missouri Department of Transportation website:

https://www.modot.org/forms-contractor-use

2.1 The ADA Checklist is not to be considered all-inclusive, nor does it supersede any other contract requirements. The ADA checklist is a required guide for the contractor to use during the construction of the pedestrian facilities and a basis for the commission's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. This notification shall be made in writing. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

2.2 It is encouraged that the contractor monitor the completed sections of the newly constructed pedestrian facilities in attempts to minimize negative impacts that his equipment, subcontractors or general public may have on the work. Completed facilities must comply with the requirements of ADA and the ADA Checklist or have documented reasons for the non-compliant items to remain.

3.0 Coordination of Construction.

3.1 Prior to construction and/or closure on an existing pedestrian path of travel, the contractor shall submit a schedule of work to be constructed, which includes location of work performed, the duration of time the contractor expects to impact the facility and an accessible signed pedestrian detour compliant with MUTCD Section 6D that will be used during each stage of construction. This plan shall be submitted to the engineer for review and approval at or prior to the pre-construction conference. Accessible signed detours shall be in place prior to any work being performed that has the effect of closing an existing pedestrian travel way.

3.2 When consultant survey is included in the contract, the contractor shall use their survey crews to verify that the intended design can be constructed to the full requirements as established in the 2010 ADA Standards. When 2010 ADA Standards do not give sufficient information to construct the contract work, the contractor shall refer to the PROWAG.

3.3 When consultant survey is not included in the contract, the contractor shall coordinate with the engineer, prior to construction, to determine if additional survey will be required to confirm the designs constructability.

4.0 Final Acceptance of Work. The contractor shall provide the completed ADA Checklist to the engineer at the semi-final inspection. ADA improvements require final inspection and compliance with the ADA requirements and the ADA Checklist. Each item listed in the checklist must receive either a "YES" or an "N/A" score. Any item receiving a "NO" will be deemed non-compliant and shall be corrected at the contractor's expense unless deemed otherwise by the engineer. Documentation must be provided about the location of any non-compliant items that are allowed to remain at the end of the construction project. Specific details of the non-compliant items, the ADA requirement that the work was not able to comply with, and the specific reasons that justify the exception are to be included with the completed ADA Checklist provided to the engineer.

4.1 Slope and grade measurements shall be made using a properly calibrated, 2 foot long, electronic digital level approved by the engineer.

5.0 Basis of Payment. The contractor will receive full pay of the contract unit cost for all sidewalk, ramp, curb ramp, median, island, approach work, cross walk striping, APS buttons, pedestrian heads, detectible warning systems and temporary traffic control measures that are completed during the current estimate period as approved by the engineer. Based upon completion of the ADA Checklist, the contractor shall complete any necessary adjustments to items deemed non-compliant as directed by the engineer.

5.1 No direct payment will be made to the contractor to recover the cost of equipment, labor, materials, or time required to fulfill the above provisions, unless specified elsewhere in the contract documents.

Z. Pavement Edge Treatment Drop Off Conditions

1.0 Description. The contractor shall conduct construction operations so that there will be no drop off exceeding 2 inches adjacent to traffic.

2.0 Measurement and Payment: No direct payment for any pavemet edge treatment drop offs on project. Costs shall be considered incidental to and completely covered by the other items in the contract. There will be no direct payment for any aggregate Pavement Edge Treatment on this project as shown in the plans and quantities.

AA. Modified Linear Grading, Class 2

1.0 Description. Modified Linear Grading Class 2 shall consist of any necessary clearing and grubbing in accordance with Sec 201, preparing subgrade for shoulder, pavement, shoulders, drainage, or other roadside appurtenances by excavating, compacting, finish-grading, and shaping existing shoulder and ditch foreslope, conforming to the typical section shown on the plans. It may be necessary to haul material from off-site and/or from distances longer than 200 feet within the project limits.

1.1 This work will include the placement of fill material and preparation of the roadway typical section of Temporary Marigold pavement and other temporary pavement used on Route 64 and the other roadways on the project.

1.2 This work includes excavation/removal of the temporary pavement surface, earthwork and rock blankets after the temporary pavement is no longer needed for temporary traffic control.

1.3 The final finish grade of the roadway sections shall be paid for as the differential between existing surface and proposed finish grade using the Class A excavation, Class C Excavation, Compacting Embankment and/or Embankment in Place as shown in the quantities and cross sections sheets.

2.0 Construction Requirements. The construction requirement for Modified Linear Grading Class 2 shall meet Sec 207, except as herein.

2.1 The shoulder, pavement, paved approaches, shoulder, drainage or other roadside appurtenances shall be excavated and graded as shown on the typical section with minimal disturbance of the existing sub-grade and foreslope. Density shall be obtained from reasonable compactive efforts consisting of no less than three passes with a roller until no further visible compaction can be achieved, or by other methods approved by the Engineer. Subgrade preparation and compaction shall also be in accordance with Sections 203, 209 and 210.

2.2 All ditches and temporary ditches shall be graded to drain and maintain existing flow capacity, unless approved by the engineer. If fill material for the shoulder widening work impacts the ditch capacity, the contractor shall re-grade the backslope to maintain the flow capacity of the ditch. Fore slopes and back slopes shall be constructed at a 3:1, except as noted on the plans or approved otherwise by the engineer.

2.3 It may be necessary to go outside the limits of the right of way to obtain additional material or to dispose of excess material. All costs for providing additional material or disposing of excess material shall be included at the contract unit price for pay item Linear Grading Class 2, Modified. All contractor furnished material shall be approved by the Engineer prior to being incorporated into the project. Quarry screenings will not be considered an approved contractor furnished material.

2.4 Included in this work is any pavement edge treatment that might be necessary to stay in compliance with the Standard Plans. The need for edge treatment is determined by the contractor's method of operations.

2.5 If material is encountered, outside the limits of construction for the final finish-graded roadway typical section, that may be classified as other than Class A Excavation the method measurement and basis of payment will be in accordance with Sec 207.3.2.

3.0 Method of Measurement. Measurement will be made to the nearest 1/10 station and measured along the centerline of the roadway, regardless of the width to be constructed. The pay total shall be to the whole station for the sum of all segments.

4.0 Basis of Payment. Payment for Modified Linear Grading, Class 2 as described in this provision will be made at the contract unit price for:

Item No.	Unit	Description
207-99.09	Station	Misc. {Linear Grading Class 2, Modified}

BB. Clean Water Act Section 404 Permit Requirements NJSP 21-02

1.0 Description. The Contractor shall be aware that any work within streams, wetlands, or special aquatic sites requires a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE).

2.0 This project meets the conditions of the following listed permits with no pre-construction notification (No PCN) to the USACE:

Section 404 Nationwide Permit (NWP)

3.0 The Contractor shall abide by all general and regional conditions of Section 404 Permits, Section 401 Water Quality Certification, and specific conditions of the following listed Nationwide Permit found in the General Provisions and Supplemental Specifications to the current Missouri Standard Specifications for Highway Construction referenced in this contract.
Enter permit numbers indicated in NWP No PCN letter attached to RES

3.1 If the Contractor makes any changes to the scope or limits of the project, the Contractor shall notify the Engineer who shall then notify the MoDOT Environmental Section to verify the project still meets permit conditions.

3.2 No additional time will be added to this contract for the Contractor to obtain any permits unless the need for additional permits is beyond the control of the Contractor.

4.0 Basis of Payment. There will be no direct payment for compliance with this provision.

CC. Restrictions for Migratory Birds NJSP-16-06A

1.0 Description. Swallows or other bird species protected by the Migratory Bird Treaty Act may be nesting under the bridge or bridges that will be repaired under this contract.

2.0 Restrictions. To comply with the Migratory Bird Treaty Act, nests of protected species cannot be disturbed when active (eggs or young are present). Generally, nests are active between April 1 and July 31, but active nests can be present outside of these dates.

3.0 Avoidance Measures. The contractor shall not disturb active nests or destroy adults, eggs or young birds. In an effort to comply with the Migratory Bird Treaty Act, the contractor operations will be limited to the options established in the following sections.

3.1 Inactive or Partially Constructed Nests. If nests are present and MoDOT determines that the nests are inactive or partially constructed, the contractor may remove the nests provided that the colony's inactive or partially constructed nests are completely removed by March 15 and the contractor maintains a nest free condition until the bridge work is complete. Dry removal methods shall be used when practicable. If dry removal is not practicable, hydro cleaning may be used if approved by the Engineer and only if water is free of blasting grit, chemicals, or detergents, and applied using pressure less than 5,000 PSI. Clean water such as that from municipal water treatment plants or wells shall be used. Use of source water from Waters of the State (i.e., streams or lakes), is allowable, if the appropriate methods to prevent the possible spread of invasive aquatic species are implemented.

3.2 Water and Equipment Used for Hydro cleaning. Aquatic invasives such as zebra mussels and some algae species have infested several bodies of water in the United States and can be transported by vessels (barges, boats, tugs, tankers, etc.) and equipment (tanks, tubing, pumps, etc.) that have been used in areas that contain these invasive species. If equipment is not properly inspected and treated to prevent the spread of invasives, these species can be introduced into areas not currently known to have a population. These invasive species are detrimental to existing ecosystems and can outcompete native species. To assist in preventing the introduction and spread of aquatic invasive species through MoDOT projects in Missouri streams and lakes, the following precautions shall be followed.

3.2.1 Use of Water from Streams, Lakes or Ponds. Contractors shall not use water for nest removal from streams, lakes or ponds, unless they have implemented appropriate methods to prevent the possible spread of invasive aquatic species. Water sources from municipal water treatment plants or wells may be used without following these measures provided the equipment to be used has not previously contained waters from streams, lakes or ponds. If the equipment has previously contained waters from other streams or lakes, the following measures must be implemented prior to use.

3.2.1.1 Equipment Washing. Prior to the use or re-use of equipment following any use with water from streams, lakes or ponds, all equipment shall be washed and rinsed thoroughly with hard spray (power wash) and hot (minimum 120^{o} F) water, for at least one minute.

3.2.1.2 Equipment Treating or Drying. Equipment shall be treated or dried in one of the following manners.

3.2.1.2.1 Equipment interior and/or other surfaces shall be treated with a 10% bleach solution to kill any aquatic nuisance species. This solution must also be run through all intake lines and hoses, to sterilize interior components. When chlorine treatment is used, all chlorine runoff from equipment washing must be collected and properly treated and/or disposed of in accordance with Sec 806.

3.2.1.2.2 Equipment interior and/or other surfaces shall be treated with 140º F water for a minimum of 10 seconds contact on all surfaces. 140 º F water must also be run through all intake lines and hoses, to purge any standing water.

3.2.1.2.3 Equipment shall be flushed of all non-municipal water, and dried thoroughly, in the sun before using in or transporting between streams and lakes. Dry times will depend on the season the equipment is being used. Equipment must dry a minimum of 7 days for June-September, 18 days for March-May; 18 days for October-November, and 30 days for December-February. The drying method should be reserved as a last resort option.

3.2.2 Prior to use of equipment, contractors shall provide the MoDOT inspector written documentation of the equipment's geographic origin (including the water body it was last used in), as well as defining the specified treatment method used to adequately ensure protection against invasive species. The written documentation will include a statement indicating the contractor is aware of these provisions and will also treat the equipment appropriately after completion of the project.

3.3 Active Nests. The contractor may work on the bridge if active nests are present, as long as the work does not impact or disturb the birds and/or nests. At a minimum, work shall not be

performed within 10 feet of an active nest; however, the contractor is responsible for ensuring their activities do not impact the nests, eggs, or young.

4.0 Additional Responsibilities. If active bird nests remain after all reasonable avoidance measures have been taken, or if bird nests are observed during project construction, the contractor shall notify the Resident Engineer and contact the MoDOT Environmental Section (573-526-4778) to determine if there are other allowable options.*

5.0 Basis of Payment. There will be no direct payment for compliance with this provision.

DD. Water Quality Control Measures in Consideration of Sensitive Species

1.0 Description. The Niangua River serves as habitat for sensitive species, some of which are federally listed. To avoid any negative impacts to these species, water quality shall be protected from construction materials falling from the bridge or washing from the adjacent ROW and into the water.

2.0 Requirements. Material, water, or residue shall not be allowed to enter the stream or floodplain. This shall include, but is not limited to, cement, concrete dust, paint, beads, asphalt, and petroleum products. Vehicles or equipment around the stream shall be inspected prior to use daily for leaks or other potential water quality hazards. Any leaks or other water quality hazards on equipment shall be repaired and cleaned off equipment prior to use around the stream.

2.1 Erosion and sediment controls must be utilized to ensure no runoff or material enters the Niangua River from any activity but not limited to drilled shaft construction. The contractor has the option to remove the drilled shaft water from the project via tanker truck. BMPs to prevent runoff shall be used in all areas of Bridge J0782.

2.2 If vegetative waste is burnt onsite, no ash and other residue shall be allowed to wash into the river. BMPs shall be used during burning and the remaining waste shall be hauled offsite. The excavation of burn pits will not be allowed anywhere within the project limits.

2.3 No work shall take place below the Ordinary High Water (OHW) line between March 15 to June 15 for fish spawning dates and August 15 to October 15 for other sensitive aquatic species breeding dates.

3.0 Staging. No staging, storage, or refueling of equipment shall be allowed within 100 feet of the Niangua River.

4.0 Basis of Payment. There will be no direct payment for compliance with this provision.

EE. Habitat Protection and Restoration

1.0 Description. As a requirement of the USFWS for a conservation measure commitment for habitat restoration, the contractor shall abide by the following requirements. Quarried limestone slab rocks shall be purchased for placement by MoDOT Environmental and MDC downstream of the bridge at least 2 years after the bridge project is completed.

2.0 Restoration Requirements. The Contractor shall purchase 50-75 slab rocks to replace or augment suitable habitat impacted by the construction activities after project completion.

2.1 The slab rocks shall be quarried limestone and meet the size requirements in the table below. Preference shall be given to the "mean" and "maximum" sizes listed below.

Recommended rock size (surface area and thickness) for habitat restoration.			
Rock Size	Mean	Minimum	Maximum
Surface Area (L X W; ft)	3 x 3 ft	2 X 2 ft	4 X 4 ft
Thickness (inches)	9 in.	3 in	15 in

3.0 Habitat protection requirement. The duration of drilling shall be as short as possible.

4.0 Basis of Payment. The accepted Slab Rocks, delivered and placed as per direction of Engineer, will be paid for by the contract unit bid price for the following item and will be full compensation for all labor, equipment, and material to complete the above-described work.

Item No.	**Unit**	**Description**
806-99.02	Each	Misc. {Rock Slab (Mean Size 3'x3'x9")}

FF. Temporary Workpads

1.0 Description. This work shall include construction of temporary work pads to facilitate the placement of the Contractor's equipment in the stream. The project is located within an environmentally sensitive area; therefore, construction activities will be tightly restricted and monitored by MoDOT, and other Federal and State regulatory agencies.

2.0 Material Requirements. The Contractor shall use a material meeting the gradation requirements of less than 5-percent passing a No. 200 sieve.

3.0 Construction Requirements. The Contractor shall be solely responsible for the design, installation, maintenance, and removal of the work pads, as well as any structures installed to maintain proper flow while the work pads are in place.

3.1 The Contractor shall design the work pads, including the size and number of pipes, to maintain normal flows, prevent upstream flooding, and allow free movement of aquatic life in the stream.

3.2 Storm water from the approaches to the temporary work pads must be diverted to appropriate erosion control devices to allow sediment-laden runoff to be treated prior to entering the stream.

3.3 Pipes shall be anchored or adequately secured with clean fill material to prevent being swept from the project during high flows.

3.4 Work pads shall not conflict with existing utilities. Any utilities that conflict with the construction of a temporary work pad or operation of equipment on a temporary work pad shall be relocated at the Contractor's expense.

3.5 Access to the pier will only be allowed from one bank only. A full causeway across the river will not be permitted.

3.6 Work pads and culverts shall be removed from the river as soon as possible, after it is deemed unnecessary by the engineer for construction of the bridge. Regardless of the contractor's operations, no work pad placement or removal shall take place between March 15 to June 15 for fish spawning dates and August 15 to October 15 for other sensitive aquatic species breeding dates.

3.7 The Contractor shall notify MoDOT Environmental no less than 14 calendar days prior to work pad placement/removal so that area of direct impact can be surveyed for sensitive aquatic species relocation, see separate JSP on pre-construction notification for details.

4.0 Basis of Payment. There will be no direct payment for compliance with this provision.

GG. Removal of Trees Considered Suitable Bat Habitat

1.0 Description. The project is within the known range of the federally endangered Indiana bat, tricolored (proposed threatened), northern long-eared bat. These bats are known to roost in trees in summer months. MoDOT has determined that bat habitat exists within the project area. Therefore, to avoid potential negative impacts to roosting Indiana, tricolored, or northern long-eared bats, removal of all trees will only be allowed between October 16 and March 31.

2.0 Basis of Payment. No direct pay shall be provided for any labor, equipment, time, or materials necessary to complete this work.

HH. Removal of Bridge and Other Roadway Debris

1**.0 Description.** Removal of Improvements shall include removal of the existing bridge abutments, piers, footings, bridge deck, trusses and other bridge and roadway debris associated with the old bridge. The debris includes roadway surfacing, concrete and steel from the structure.

2.0 In addition to Section 202 of the Standard Specifications for Highway Construction; "Removal of Roadway and Buildings", Section 216 "Removals for Bridge Structures" shall apply to the removal of the existing bridge structures. Any blasting or use of explosives will not be allowed in bridge demolition operations, or any other operations necessary to remove the existing bridge debris and other improvements listed in the plans.

2.1 The contractor shall coordinate with the engineer and MoDOT environmental specialists to implement measures during the removal to minimize the likelihood of concrete separating from the northern truss and falling into the water and to identify ways to minimize impacts to sensitive species habitat in the instance that concrete falls into the water.

2.2 The center bridge pier is located just upstream of the new bridge and shall be removed from the river. Access to the pier will only be allowed from one bank. A full causeway across the river will not be permitted.

2.3 This project is located within a sensitive cultural resource area so disturbance of the existing ground shall be kept to a minimum. Access roads shall be constructed on top of the existing ground and removed when not necessary for operations.

2.4 No burial of road and bridge debris shall be allowed without prior approval of the engineer. Concrete debris may be incorporated into fill if properly buried, all protruding reinforcing steel has been trimmed, and any attached asphalt pavement has been removed. Final acceptance and placement of concrete debris for construction material will be determined by the engineer.

3.0 Basis of Payment. There will be no direct payment for compliance with this provision.

II. Inspection of Bridge for Bat Roosts

1.0 Description. There is acoustic evidence of endangered bats species roosting beneath the eastern section (expansion joint) of the existing bridge. Special conditions will apply since this structure is being removed during the season when bats are active.

2.0 Removal Requirements. MoDOT environmental specialists shall be notified of live, dead, dying, or injured bats on the bridge observed by the contractor. The contractor shall conduct a visual survey of the area underneath the bridge on the day that the bridge demolition takes place and report any bats to MoDOT Environmental to ensure compliance with take provisions in the biological options. Bridge demolition shall occur in the following period (October 16 - March 31).

3.0 Basis of Payment. There will be no direct payment for compliance with this provision.

JJ. Additional Environmental Requirements

1.0 Description. The project is located within an environmentally sensitive area; therefore, construction activities will be tightly restricted and monitored by MoDOT, and other Federal and State regulatory agencies. During project development, it was discussed that the existing MDC access road approach tying into MO Route 64 would be paved to prevent a continued source of gravel laden runoff from entering the river after project construction**.**

2.0 Construction Requirements. The MDC access road in the northwest quadrant of the project area shall be paved as specified on project plan sheets.

2.1 The sewer pipe north of the old bridge and within the footprint of the new bridge shall be pressurized with fresh water to remove the contents to the treatment facility, and then the pipe will be ~~abandoned in place~~ removed in accordance with JSP S, "Removal and Disposal of Existing Force Main". No material from the old pipe will be allowed to enter the river. △2

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4.0 Basis of Payment. There will be no direct payment for compliance with this provision.

KK. Slurry and Residue Produced During Surface Treatment of PCCP and Bridge Decks

1.0 Description. This work covers the requirements for controlling residue or slurry produced by milling, grinding, planning, grooving or other methods of surface treatments on new or existing PCCP and bridge decks in addition to Section 622.

2.0 Construction Requirements. The following shall be considered the minimum requirements for performing this work within the project limits.

2.1 The contractor shall submit to the Engineer for approval in writing prior to the preconstruction meeting, the best management practices (BMP's) to be used to protect the environment, including the method of disposal of the residue whether on right of way or off-site.

2.2 When slurry is dispersed on the right of way, BMP's shall be installed to keep slurry or residue from entering paved ditches or structures discharging within the areas restricted by Section 622.303.8.6, from entering any waterways or from leaving the right of way.

2.3 Upon approval of the contractor's BMP and residue disposal plan and prior to the contractor beginning surface treatment operations, the Engineer will identify slurry or residue "no discharge zones". .

2.4 Operations may be suspended by the Engineer during periods of rainfall or during freezing temperatures.

3.0 Basis of Payment. No direct payment for slurry or residue control requirements for BMP's will be made. Compliance with this specification along with the cost of all materials, labor and equipment necessary for the surface treatment work shall be included in and completely covered by the unit price bid for each of the items of work for surface treatment included in contract.

LL. ADA Material Testing Frequency Modifications JSP-23-01A

1.0 Description. This provision revises the Inspection and Testing Plan (ITP) for the construction of ADA compliant features to better match the nature of the work. The minimum Quality Control (QC) testing frequencies shall be as stated in these provisions.

2.0 Compaction Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches. (Revises ITP Sec 304.3.4) The required test frequency shall be one per 600 tons.

3.0 Gradation Test on Base Rock Under Sidewalk, Curb Ramps and Paved Approaches. (Revises ITP Sec 304.4.1) The required frequency shall be one per 500 tons.

4.0 Concrete Plant Checklists. (Revises ITP Sec 501) Submittal of the 501 Concrete Plant Checklist shall be once per week when the contractor is only pouring curb, sidewalk, paved approaches, and curb ramps.

5.0 Concrete Median, Median Strip, Sidewalk, Curb Ramps, Steps and Paved Approaches. The required frequency shall remain as stated in ITP Sec 608 and further detailed in Sec 608.3.7.

6.0 Concrete Curb. (Revises ITP Sec 609 only for Concrete Curb) For concrete curb, the required frequency shall be equivalent to ITP Sec 608 (concrete median, median strip, sidewalk, curb ramps, steps and paved approaches) and Sec 608.3.7.

MM. Right-of-Way Clearance – Delayed Possession

1.0 Description. The right of way for this project has been acquired except for

Parcel 1 (Missouri Conservation Commission) – New RW and TCE
Parcel 2 (LKLR Real Estate LLC) – New RW and TCE
Parcel 3 (Buhrmans of Bennett Springs LLC) – New RW and TCE

1.1 The contractor shall inform itself of the location of this tract. No encroachment, storage of equipment and materials or construction on these tracts shall be permitted until notification by the engineer is given that these tracts have been acquired.

1.2 The contractor shall schedule its work utilizing the available right of way until this tract is cleared for construction, which is estimated to be ~~January 19, 2027~~ December 15, 2026. However, this date expressly is not a warranty by or contractually binding on the Commission as the date the three tracts will be clear for construction. No encroachment, storage of equipment and materials or construction on these tracts shall be permitted until the contractor is notified by the engineer that these tracts have been acquired.

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~~**1.3 The contractor shall have no claim for damage for delay, disruption, interference or otherwise as a result of the unavailability of Parcels listed above in Item 1.0. The contractor may be given an extension of time upon proof of actual delay caused by the unavailability of these tracts as approved by the engineer.**~~

△3 Revised 11-17-2026