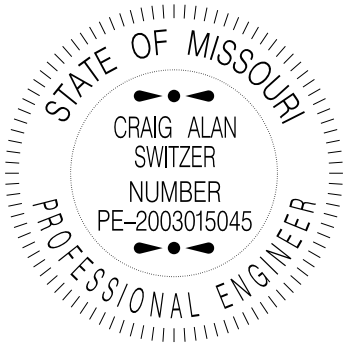
Job No.: J7P0601
Route: I-49
County: McDonald

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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

Job No.: J7P0601
Route: I-49
County: McDonald



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

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

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

JOB NUMBER: J7P0601
McDONALD COUNTY, MO
DATE PREPARED: 12/09/2019

ADDENDUM DATE:

Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: All

Job No.: J7P0601
Route: I-49
County: McDonald

JOB
SPECIAL PROVISION

A. General - Federal JSP-09-02E

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 2019 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

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 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: April 16, 2020
Completion Date: September 30, 2021

2.1 Calendar Days. The count of calendar days will begin on the date the contractor starts any construction operations on the project.

Job Number	Calendar Days	Daily Road User Cost
J7P0601	N/A	$5,400

3.0 Liquidated Damages for Contract Administrative Costs. Should the contractor fail to complete the work on or before the 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 **$2,500** 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 above specified 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 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.

C. Work Zone Traffic Management

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 beyond this delay threshold. If disruption of the traffic flow occurs and traffic is backed up in queues equal to or greater than the delay time threshold listed above 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. When a Work Zone Analysis Spreadsheet is provided, the contractor will find it in the electronic deliverables on MoDOT's Online Plans Room. The contractor may refer to the Work Zone Analysis Spreadsheet for detailed information on traffic delays.

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.

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:

12:00 noon July 2, 2020 – 10:00 p.m. July 5, 2020
12:00 noon July 2, 2021 – 6:00 a.m. July 6, 2021
12:00 noon July 1, 2022 – 6:00 a.m. July 5, 2022

3.2 The contractor shall not perform any construction operation on the roadway during restricted periods, holiday periods or other special events specified in the contract documents.

3.3 The contractor shall not alter the start time, ending time, or a reduction in the number of through lanes of traffic or ramp closures without advance notification and approval by the engineer. The only work zone operation approved to begin 30 minutes prior to a reduction in through traffic lanes or ramp closures is the installation of traffic control signs. Should lane closures be placed or remain in place, prior to the approved starting time or after the approved ending time, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delays, with a resulting cost to the traveling public. These damages are not easily computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount of **$1,000 per 15 minute increment** for each 15 minutes that the temporary lane closures are in place and not open to traffic in excess of the limitation as specified elsewhere in this special provision. It shall be the responsibility of the engineer to determine the quantity of unapproved closure time.

3.3.1 The said liquidated damages specified will be assessed regardless if it would otherwise be charged as liquidated damages under the Missouri Standard Specification for Highway Construction, as amended elsewhere in this contract.

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. The CMS shall be capable of communication with the Transportation Management Center (TMC), if applicable, prior to installation on right of way. 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. Periods during which the contractor will be allowed to interrupt traffic will be designated by the engineer.

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

1.0 The contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow through the job site, the contractor shall notify police 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 police services, the following agencies may also be notified for accident or emergency situations within the project limits.

Missouri Highway Patrol – Troop D: (417) 895-6868		
McDonald County Sheriff: (417) 223-4319		
MoDOT Customer Service: (417) 895-7600		
City of Bella Vista: Fire: (479) 855-8249 Police: (479) 855-3771	City of Pineville: Fire: (417) 223-4368 Police: (417) 223-4369	City of Noel: Fire: (417) 475-3554 Police: (417) 475-3777
Emergency Only Numbers		
911 *55 cell phone – Missouri Highway Patrol (417) 864-1160 – MoDOT Incident Management Coordinator		

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 police agency.

2.2 The contractor shall notify 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 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

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

Craig Switzer, Project Contact
Southwest District
2915 Doughboy Drive
Joplin, MO 64804

Telephone Number: 417-621-6331
Email: craig.switzer@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-18-01H

Stormwater Compliance Requirements

1.0 Description. This provision requires the contractor to provide a Water Pollution Control Manager (WPCM) for any project that includes areas of land disturbance that will total one (1) acre or greater on the project site at any point in time. 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.

1.1 Applicability. The project site consists of all areas designated on the plans, including temporary and permanent easements. This provision does not apply to Contractor staging, plant, or borrow areas that are not located on MoDOT right of way (Off-site). The Contractor is responsible for obtaining its own separate land disturbance permit for Off-site areas. This provision is in addition to any other stormwater, environmental, and land disturbance requirements specified elsewhere in the contract.

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 within 7 days of the stormwater inspection or any extended period of time granted by the Engineer.

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.

G. Utilities

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**
McDonald County Telephone Company Todd Clay 704 Main Street Pineville, MO 64856 Phone: 417-223-4313 Email: srickman@olemac.net	Yes (see 2.0 below)	Communication
New-Mac Electric Cooperative Stan Irsik 12105 E. Highway 86 Neosho, MO 64850 Phone: 417-451-1515 Email: sirsik@newmac.com	None (see 3.0 below)	Power
SGO Broadband Seneca, Goodman, Ozark Telephone Kim Little 816 Oneida Street Seneca, MO 64865 Phone: 417-776-1807 Email: kim@sgobroadband.com	None	Communication

Southern Star Central Gas Pipeline Mike DeGraeve 6300 S. Rangeline Road Joplin, MO 64804 Phone: 270-852-5125 Email: mike.degraeve@sscgp.com	None	Gas
Spire Energy Ken Stegall 520 E. 5th Street Joplin, MO 64801 417-626-4831 Email: Ken.Stegall@spireenergy.com	None	Gas

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 McDonald County Telephone Company. The contractor will be required to install and weld together 302 feet of 8" diameter steel pipe encasement as shown in the plans. The location of encasement is under I-49 at Sta. 853+00. McDonald County Telephone Company will supply 302 feet of smooth wall, steel pipe encasement, 8" in diameter with a minimum wall thickness of 0.188 inches. All cost associated with installing the encasement will be included in the contractor's submitted unit cost under Bid Item 603-99.03, Installing Utility Crossing, per linear foot. McDonald County Telephone Company will be adjusting lines during and after installation of encasement. The contractor will be responsible for contacting Todd Clay at (417) 223-4313 in advance of beginning work to coordinate the delivery of the encasement and the adjustment of communication lines.

3.0 New-Mac Electric Cooperative. MoDOT will be obtaining two new electric services from New-Mac Electric Cooperative (New-Mac) on this project for roadway lighting. The new power services are located at the following:

Northeast side of I-49 and US 71 interchange
Northeast quadrant of I-49 and MO 90 Interchange

At both locations, the roadway contractor will install a 2" diameter conduit run from New-Mac's pole over to MoDOT's new Type 2 Power Supply. The conduit run shall include 30" radius sweeps at the power pole and at the Type 2 Power Supply. The minimum cover New-Mac will accept is 24 inches below finished grade. The roadway contractor will be responsible for installing the conduit and wire from the Type 2 Power Supply over to the new ground mounted lighting controller. Under no circumstance will a combined unit containing a power supply and lighting controller be allowed at any of the two locations where power is being obtained from New-Mac. The contractor will be responsible for cleanup of brush and trees from New-Mac's installation of new electric services. New-Mac will provide and install the wire from the

transformer to the Type 2 Power Supply and set their meter in the new power supply. New-Mac will trim brush and trees as needed to install new electric services. The roadway contractor will be responsible for all charges until the new street lights have been accepted for MoDOT's maintenance. All cost associated with installing the conduit from New-Mac's pole to the new power supply shall be included in the contractor's submitted unit price for the Type 2 Power Supply. All cost associated with cleanup of brush and trees shall be considered incidental to the unit cost of other bid items. The contractor will be responsible for contacting Danny Harris at (417) 850-8074 in advance of beginning work so that New-Mac can schedule the work.

H. Alternate Technical Concepts

The Alternate Technical Concepts (ATC) process is being utilized for this project. This process is being utilized to encourage contractor participation in the design process to produce the best and most cost-efficient design for the citizens of Missouri. Only those prequalified contractors who have met the requirements for participating in the ATC process as defined in the "Guidelines and Procedures for the I-49 Missouri-Arkansas Connector Alternate Technical Concepts" document shall be allowed to submit an ATC-based bid. All other contractors who elect to bid on this project must submit a bid based upon the base set of contract plans.

I. Special Design Reinforced Concrete Pipes and Flared End Sections

1.0 Description. This specification covers the contract requirement for use of special design reinforced concrete pipes and flared end sections.

1.1 Amend section 726.1.4 of the Standard Specifications to include the following:

> **726.1.4.1** For fill heights greater than 50 feet, reinforced concrete pipe will be specified on the plans. The contractor shall provide the design, bedding and compaction details to the engineer in accordance with Sec 726.1.4.2 and obtain acceptance of the design prior to installation of the reinforced concrete pipe. A special designed hydraulically equivalent reinforced concrete box culvert may be used in lieu of the special designed culverts shown.
>
> **726.1.4.2** Four copies of the design computations and shop drawings reflecting design and stress details, signed and sealed by a professional engineer registered in the state of Missouri, shall be submitted to the engineer and be accepted in writing prior to fabrication of the reinforced concrete pipe. Shop drawings shall include complete details required for reinforced concrete pipe fabrication including wall thickness, concrete design strength, the type, size and placement of reinforcement, and the inside and outside dimensions.

2.0 Basis of Payment. All labor, equipment, material and engineering costs to complete the described work shall be completely covered by item numbers:

726-99.03	24 IN RCP (Special Design)
726-99.03	30 IN RCP (Special Design)
732-99.02	24 IN Precast Concrete FES (Special Design)
732-99.02	30 IN Precast Concrete FES (Special Design)

J. 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.

K. Liquidated Damages Specified

1.0 Description. If relocated Route 90 is not complete and open to traffic prior to 101 calendar days after the closure of Route 90 for construction of I-49 the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways. These damages include, but are not limited to increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion, and motorist delay with its resulting cost to the traveling public. 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 $8,400 per day for each full day that the work is not complete and open to traffic in excess of the limitation as specified elsewhere in this Provision. It shall be the responsibility of the engineer to determine the quantity of excess closure time.

1.1 The said liquidated damages specified will be assessed regardless of whether or not they would otherwise be charged as liquidated damages under the Missouri Standard Specifications for Highway Construction, as amended elsewhere in this contract.

1.2 For the purpose of this Provision, “relocated Route 90” shall include: grading of the roadbed on new alignment, establishment of sufficient drainage, paving of the roadbed and adjacent ramp terminals to the radius points, completion of bridge A7000, MSE wall A7595, MSE wall A7596, pavement marking of the roadway, and all incidentals necessary to safely open the roadway to traffic.

L. Alternates for Pavements

1.0 Description. This work shall consist of a pavement composed of either portland cement concrete or asphaltic concrete, constructed on a prepared subgrade in accordance with the Standard Specifications and in conformity with the lines, grades, thickness and typical cross sections shown on the plans or established by the engineer.

1.1 Separate pay items, descriptions and quantities are included in the itemized proposal for each of the alternates. The bidder shall only bid one of the alternates and leave the contract unit price column blank for any pay item listed for any other alternate. If the bidder leaves any value in the unit price column for another alternate other than the one they are bidding, the bid will be rejected.

2.0 Mainline Pavements.

2.0.1 A sum of $1,538,800 will be added by the Commission to the total bid using an asphalt alternate for the I-49 mainline pavement for bid comparison purposes to factor in life cycle cost analysis of the roadway. The additional amount added will not represent any additional payment to be made to the successful bidder and is used only for determining the low bid.

2.0.2 A sum of $112,600 will be added by the Commission to the total bid using an asphalt alternate for the Route 90 and ramps pavement for bid comparison purposes to factor in life cycle cost analysis of the roadway. The additional amount added will not represent any additional payment to be made to the successful bidder and is used only for determining the low bid.

2.1 A2 Shoulders

2.1.1 A sum of $319,100 will be added by the Commission to the total bid using an asphalt A2 Shoulder alternate for the I-49 mainline pavement for bid comparison purposes to factor in life cycle cost analysis of the roadway. The additional amount added will not represent any additional payment to be made to the successful bidder and is used only for determining the low bid.

2.1.2 A sum of $30,400 will be added by the Commission to the total bid using an asphalt A2 Shoulder alternate for the Route 90 and ramps pavement for bid comparison purposes to factor in life cycle cost analysis of the roadway. The additional amount added will not represent any additional payment to be made to the successful bidder and is used only for determining the low bid.

2.2 The quantities shown for each alternate reflect the total square yards of pavement surface designated for alternate pavement types as computed and shown on the plans. No additional payment will be made for asphaltic concrete mix quantities to construct the required 1:1 slope along the edge of the pavement, or for tack applied between lifts of asphalt.

2.3 The grading shown on the plans was designed for the thinner pavement alternate.

2.4 Pavement alternates composed of Portland cement concrete shall have contrast pavement markings for intermittent markings (skips), dotted lines, and solid intersection lane lines. The pavement markings shall comply with Sec 620. No additional payment will be made for the contrast pavement markings.

3.0 Method of Measurement. The quantities of concrete pavement will be measured in accordance with Sec 502.14. The quantities of asphaltic concrete pavement will be measured in accordance with Sec 403.22.

4.0 Basis of Payment. The accepted quantity of the chosen alternate and other associated items will be paid for at the unit price for each of the appropriate pay items included in the contract.

4.1 For projects with previously graded roadbeds, any additional quantities required to bring the roadway subgrade to the proper elevation will be considered completely covered by the pay item for Subgrading and Shouldering.

4.2 For projects with grading in the contract, there will be no adjustment of the earthwork quantities due to adjusting the roadway subgrade for alternate pavements.

M. MoDOT's Construction Workforce Program

1.0 Description.

1.1 Projects utilizing federal funds include contract provisions for minority and female workforce utilization in the various trade crafts used to complete construction contracts. These federal contract workforce goals are described in the section labeled "Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity". These goals are included in all MoDOT federal aid contracts and are under the authorization and enforcement of the U.S. Department of Labor (US DOL).

1.2 The Federal workforce requirement (Goals – TABLE 1) is authorized in 41 CFR Part 60-4 and Executive Order 11246 which set Equal Employment Opportunity goals with Affirmative Action requirements.

1.3 The required federal aid workforce provisions noted above, coupled with the following additional contract provisions, constitute MoDOT's Construction Workforce Program herein called Program.

1.4 This provision does not require pre-qualification nor is it a condition of award.

1.5 The Program does not eliminate or limit any actions the US DOL may take in relation to this contract's federal provisions.

1.6 The Program goals included in the contract are separate from any Disadvantaged Business Enterprise (DBE) or On-The-Job (OJT) training provision that may be included as contract provisions. DBE and OJT goals may or may not be included in a contract based on the individual size of contracts, type of contract work, anticipated length of contract, available and willing resources or other reasons.

1.7 Contractor, for the purpose of this provision, means the prime contractor and any and all subcontractors.

1.8 It is expected that the contractor recognizes the construction workforce goals for both minority and female workers in the project's county and make efforts to attain those goals, if possible, through the existing workforce makeup of the prime (including subcontractors) that will be on the project and/or through hiring opportunities that may arise for the project. However, it is not the intent of this provision to compel any contractor to displace existing workforce or move workers around to just meet the workforce goals.

1.9 If the contractor's existing Missouri construction workforce meets or exceeds the federal workforce goals established in Table 1, then the OJT goal (Training Provision) if included in the contract, does not be apply.

1.10 Contractor's Workforce Plan. The Contractor shall submit its Workforce Plan a minimum of 1 week before construction starts. One plan shall be submitted for the project that shall include the cumulative planned workforce of the prime and subcontractor(s). The contractor shall prepare the plan, for total minority and female utilization, regardless of the craft. The Engineer will provide the Contractor with comments regarding their Workforce Plan prior to the start of construction. Once work starts, all monthly reporting shall include the craft of each worker reported. If the contractor's plan includes project manager, direct project support roles,

project testers or other project professionals, these designations should also be included in addition to the workers designated by craft such as laborer, operator, carpenter, ironworker and others.

1.11 The plan accepted by the engineer before the start of construction will be the effort expected of the prime contractor to maintain during the life of the project.

1.12 If the contractors planned project workforce plan (including OJT hours if included in the contract) is short of the goals included in Table 1, there is opportunity for the contractor to receive a reimbursement of $10.00 / hour for any new project minority and female hires needed through the remainder of the project. The reimbursement is applicable to work that qualifies for prevailing wage under the federal Davis-Bacon Act, 40 U.S.C. §§ 3141–3148, in accordance with an approved workforce plan. Any reimbursement must be pre-approved by the Engineer. The reimbursement is provided as a remedy to the contractor and as an aid in the long-term growth of experienced persons in the building of roads and bridges in Missouri. The contractor shall manage the plan through the life of the project as described in the plan or as modified, in coordination with the Engineer. The total amount available per project is not capped.

1.13 The Contractor's workforce plan may include existing construction support and professional services staff.

2.0 Forms and Documentation. The bidder must submit the following documents if awarded the contract:

2.1 Cumulative Workforce Utilization Reports. This report is contract specific. One report shall be submitted to the Engineer by the 15th of each month. The report will be used to report the total workforce compliance data for the prime contractor and all subcontractors retained by the contractor on the Commission's construction contract. The reporting shall include the workforce hours per each craft broken down by gender and ethnicity. Construction Support, testing and other professional services hours shall be included as these hours are part of the overall plan. The report will include the previous month's hours worked for the project. For projects less than 60 days in length, only one report with total hours worked by classification is required at substantial completion of construction.

3.0 Methods for Securing Workforce Participation and Good Faith Efforts.

3.1 By submitting a bid, the Bidder agrees, as a material term of the contract, to carry out MoDOT's Construction Workforce Program by making good-faith efforts to utilize minority and female workers on the contractor's job sites to the fullest extent consistent with submitting the lowest bid to MoDOT. The Bidder shall agree that the Program is incorporated into this document and agree to follow the Program. If a bidder is unable to meet the workforce goals at the time of bid, it shall be required to objectively demonstrate to MoDOT that the goals have been met or demonstrate a good faith effort has been made with the level of effort submitted prior to the start of construction.

3.2 The Engineer, through consultation with MoDOT's External Civil Rights (ECR's) Division, may determine that the contractor has demonstrated that good-faith efforts to secure minority and female participation have been made.

3.3 In evaluating good-faith efforts, the ECR's Division will take into consideration the affirmative actions listed in the Federal Provisions (including provisions of Executive Order 11246).

3.4 MoDOT's Program allows the contractor flexibility to implement a project specific workforce and improve the diversity of their existing workforce that can be utilized across various areas of the state to meet future MoDOT Program goals and Federal Provisions.

3.5 If the contractor's approved plan changes during the project and/or the available workforce changes from what is approved at any time, it is the contractor's responsibility to remedy, in coordination with MoDOT's ECR Division, the conditions as outlined and made available through this provision.

4.0 Compliance Determination. (Required with project closeout) All documentation and on-site information will be reviewed by MoDOT's ECR Division in making a determination of whether the contractor made sufficient good faith efforts to meet the compliance with MoDOT's Construction Workforce Program.

5.0 Liquidated Damages. If the contractor elects to not submit a workforce plan prior to work starting or fails to fulfill their workforce plan committed to prior to the start of construction, the contractor will be required to establish a good-faith effort determination, as to why either of these events occurred. MoDOT may sustain damages, the exact extent of which would be difficult or impossible to ascertain, as this impacts the cost of future road and bridge construction. Therefore, in order to liquidate those damages, MoDOT shall be entitled, at its sole discretion, to deduct and withhold the following amounts: **The sum of one thousand five hundred dollars ($1,500)**

6.0 Administrative Reconsideration. The contractor shall be offered the opportunity for administrative reconsideration upon written request related to findings and/or actions determined by MoDOT's ECR's Division. The Administrative Reconsideration Committee shall be composed of individuals not involved in the original MoDOT determination(s).

7.0 Available Pre-Apprentice Training Programs. The Commission has established a labor force recruiting program intended to assist contractors in identifying, interviewing and hiring qualified job applicants. MoDOT strongly encourages the hiring of individuals from the MoDOT funded pre-apprentice training programs.

8.0 Independent Third-Party Compliance Monitor (Monitor). MoDOT may utilize a monitor that will be responsible for tracking the project's workforce utilization for the information the contractor submits. The contractor and its subcontractors shall allow the monitor access to their reports, be available to answer the monitor's questions and allow the monitor to access to the site and to contractor and subcontractor employees. The monitor shall abide by the contractor's project site protocols.

9.0 Regional Diversity Council (Council). (Applicable to the Kansas City and St. Louis District regions only) The Council shall consist of local community leaders, leadership of local construction trades, MoDOT staff, Industry representation, and a representative(s) from the Federal Highway Administration. The Council will meet quarterly and evaluate the workforce activity per each project according to the following criteria:

a. Review monthly workforce reports.
b. Review progress toward the stated project workforce program.

c. Review findings of Administrative Reconsideration hearings.
d. Recommend *other* workforce actions to MoDOT.

10.0 Federal Workforce Goals.

Female Participation for Each Trade is 6.9% Statewide for Missouri.

Minority Participation for Each Trade is shown below in Table 1.

TABLE 1:

County	Goal (Percent)	County	Goal (Percent)
Adair	4	Linn	4
Andrew	3.2	Livingston	10
Atchison	10	McDonald	2.3
Audrain	4	Macon	4
Barry	2.3	Madison	11.4
Barton	2.3	Maries	11.4
Bates	10	Marion	3.1
Benton	10	Mercer	10
Bollinger	11.4	Miller	4
Boone	6.3	Mississippi	11.4
Buchanan	3.2	Moniteau	4
Butler	11.4	Monroe	4
Caldwell	10	Montgomery	11.4
Callaway	4	Morgan	4
Camden	4	New Madrid	26.5
Cape Girardeau	11.4	Newton	2.3
Carroll	10	Nodaway	10
Carter	11.4	Oregon	2.3
Cass	12.7	Osage	4
Cedar	2.3	Ozark	2.3
Chariton	4	Pemiscot	26.5
Christian	2	Perry	11.4
Clark	3.4	Pettis	10
Clay	12.7	Phelps	11.4
Clinton	10	Pike	3.1
Cole	4	Platte	12.7
Cooper	4	Polk	2.3
Crawford	11.4	Pulaski	2.3
Dade	2.3	Putnam	4
Dallas	2.3	Ralls	3.1
Daviess	10	Randolph	4
DeKalb	10	Ray	12.7
Dent	11.4	Reynolds	11.4
Douglas	2.3	Ripley	11.4
Dunklin	26.5	St. Charles	14.7
Franklin	14.7	St. Clair	2.3
Gasconade	11.4	St. Francois	11.4

Gentry	10	Ste. Genevieve	11.4
Greene	2	St. Louis City	14.7
Grundy	10	St. Louis County	14.7
Harrison	10	Saline	10
Henry	10	Schuyler	4
Hickory	2.3	Scotland	4
Holt	10	Scott	11.4
Howard	4	Shannon	2.3
Howell	2.3	Shelby	4
Iron	11.4	Stoddard	11.4
Jackson	12.7	Stone	2.3
Jasper	2.3	Sullivan	4
Jefferson	14.7	Taney	2.3
Johnson	10	Texas	2.3
Knox	4	Vernon	2.3
Laclede	2.3	Warren	11.4
Lafayette	10	Washington	11.4
Lawrence	2.3	Wayne	11.4
Lewis	3.1	Webster	2.3
Lincoln	11.4	Worth	10
		Wright	2.3

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

This contractor and subcontractor shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status.

As used in these specifications:

"Minority" includes;

(i) Black (all person having origins in any of the Black African racial groups not of Hispanic origin);
(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
(iii) Asian and pacific islander (all persons having origins in any of the original peoples of the Far East, southeast Asia, the Indian Subcontinent, or the Pacific Islands; and
(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

N. Quality Management

1.0 Quality Management. The contractor shall provide Quality Management as specified herein to ensure the project work and materials meets or exceeds all contract requirements.

1.1 The contractor shall provide Quality Control (QC) of the work and material, as specified herein, to ensure all work and material is in compliance with contract requirements. QC staff shall perform and document all inspection and testing. The QC inspectors and testers may be employed by the contractor, sub-contractor, or a qualified professional service provided by the contractor.

1.2 The engineer will provide Quality Assurance (QA) inspection. The role of QA is to verify the performance of QC and provide confidence that the product will satisfy given requirements for quality.

1.3 The contractor shall designate a person to serve as the project Quality Manager (QM). The QM shall be knowledgeable of standard testing and inspection procedures for highway and bridge construction, including a thorough understanding of the Missouri Standard Specifications. The QM shall be responsible for the implementation and execution of the Quality Management Plan and shall oversee all QC responsibilities, including all sub-contract work. The QM shall be the primary point of contact for all quality related issues and responsibilities, and shall ensure qualified QC technicians and inspectors are assigned to all work activities. The QM should be separate from the manager of the work activities to effectively manage a QC program.

1.4 Any QC personnel determined in sole discretion of the engineer to be incompetent, derelict in their duties, or dishonest, shall at a minimum be removed from the project. Further investigation will follow with a stop work notification to be issued until the contractor submits a corrective action report that meets the approval of the engineer.

2.0 Quality Management Plan. The contractor shall develop, implement and maintain a Quality Management Plan (QMP) that will ensure the project quality meets or exceeds all contract requirements, and provides a record for acceptance of the work and material. A sample QMP, which shows minimum requirements, is provided on the MoDOT website at: www.modot.org/quality.

2.1 The QMP shall address all QC inspection and testing requirements of the work as described herein. A draft QMP shall be submitted to the Resident Engineer for review at least two weeks prior to the pre-construction conference. An approved QMP is required at least two weeks prior to the start of work, unless otherwise allowed by the engineer. Physical work on the project shall not begin prior to approval of the QMP by the engineer.

2.2 The approved QMP shall be considered a contract document and any revisions to the QMP will require approval from the engineer.

2.3 The following items shall be included in the Quality Management Plan:

a) Organizational structure of the contractor's project management, production staff, and QC staff, specific to this project.

b) Name, qualifications and job duties of the Quality Manager.

c) A list of all certified QC testers who will perform QC duties on the project, including sub-contract work, and the tests in which they are certified.

d) A list of all QC inspectors who will perform QC inspection duties on the project, including sub-contract work, and the areas of inspection that they will be assigned.

e) A procedure for verifying documentation is accurate and complete as outlined in Section 3.

f) A procedure describing QC Inspections as outlined in Section 4.

g) A procedure describing QC Testing, as outlined in Section 5, including a job specific Inspection and Test Plan (ITP).

h) A procedure describing Material Receiving as outlined in Section 6.

i) A list of Hold Points that are not included in the checklist forms, as outlined in Section 8.

j) A procedure for documenting and resolving Non-Conforming work as outlined in Section 9.

k) A procedure for tracking and documenting revisions to the QMP.

l) A list of any approved changes to the Standard Specifications or ITP, including a reference to the corresponding change order.

m) Format for the Weekly Schedule and Work Plans as outlined in Section 10, including a list of activities that will require pre-activity meetings.

3.0 Project Documentation. The contractor shall establish a Document Control Procedure for producing and uploading the required Quality Management documents to a MoDOT-provided server. The document management software used by MoDOT is Microsoft SharePoint®. Contractors do not need to purchase Microsoft SharePoint®, however, it is recommended that new users acquire some basic training to better understand how to use this software. MoDOT does not provide the software training, but there are several online vendors who do. Contractors are required to use Microsoft Excel® and Microsoft Word® with some documents.

3.1 The contractor shall utilize the file structure and file naming convention provided by MoDOT. A sample file structure is available on the MoDOT website.

3.2 Documents (standard forms, reports, and checklists) referenced throughout this provision are considered the minimum documentation required. They shall be obtained from MoDOT at the following web address: www.modot.org/quality. The documents provided by MoDOT are required to be used in the original format, unless otherwise approved by the engineer. Any alteration to these forms shall be approved by the engineer.

3.3 Timely submittal of the required documents to the MoDOT document storage location is essential to ensure payment can be processed for the completed work. Submittal of the

documents is required within 12 hours of the work shift that the work was performed, or on a document-specific schedule approved by the engineer and included in the QMP.

3.4 The contractor shall establish a verification procedure that ensures all required documents are submitted to the engineer within the specified time, and prior to the end of each pay period for the work that was completed during that period. Payment will not be made for work that does not include all required documents. Minimum documents that might be required prior to payment include: Test Reports, Inspection Checklists, Materials Receiving Reports, and Daily Inspection Reports.

3.5 The contractor shall perform an audit at project closeout to ensure the final collection of documents is accurate and complete.

4.0 Quality Control Inspections. The QMP shall identify a procedure for performing QC inspections. QC inspections shall be performed for all project activities to ensure the work is in compliance with the contract, plans and specifications.

4.1 The QM shall identify the QC inspectors assigned to each work activity. The QC inspectors shall inspect the work to ensure the work is completed in accordance with the plans and specifications, and shall document the inspection by completing the required inspection checklists, forms, and reports provided by MoDOT. Depending on the type of work, the checklists may be necessary daily, or they may follow a progressive work process. The frequency of each checklist shall be stated in the QMP. The contractor may propose alternate versions of checklists that are more specific to the work.

4.2 A Daily Inspection Report (DIR) is required to document pertinent activity on the project each day. This report shall include a detailed diary that describes the work performed as well as observations made by the inspection staff regarding quality control. The report shall include other items such as weather conditions, location of work, installed quantities, tests performed, and a list of all subcontractors that performed work on that date. The report shall include the full name of the responsible person who filled out the report and shall be digitally signed by an authorized contractor representative.

4.3 External fabrication of materials does not require further QC inspection if the product is currently under MoDOT inspection or an approved QC/QA program. QC inspection and testing required in the production of concrete for the project shall be the responsibility of the contractor.

4.4 The contractor shall measure, and document on the DIR, the quantity for all items of work that require measurement. Any calculations necessary to support the measurement shall be included with the documentation. The engineer will verify the measurements prior to final payment.

5.0 Quality Control Testing. The QMP shall identify a procedure for QC testing. The contractor shall perform testing of the work at the frequency specified in the Inspection and Test Plan (ITP).

5.1 MoDOT will provide a standard ITP and the contractor shall modify it to include only the items of work in the contract, including adding any Job Special Provision items. The standard ITP is available on the MoDOT website at www.modot.org/quality. The contractor shall not change the specifications, testing procedures, or the testing frequencies, from the standard ITP without approval by the engineer and issuance of a change order.

5.2 Test results shall be recorded on the standard test reports provided by the engineer, or in a format approved by the engineer. Any test data shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report.

5.3 The contractor shall ensure that all personnel who perform sampling and/or testing are certified by the MoDOT Technician Certification Program or a certification program that has been approved by MoDOT for the sampling and testing they perform.

5.4 If necessary, an independent third party will be used to resolve any significant discrepancies between QC and QA test results. All dispute resolution testing shall be performed by a laboratory that is accredited in the AASHTO Accreditation Program in the area of the test performed. The contractor shall be responsible for the cost to employ the third party laboratory if the third party test verifies that the QA test was accurate. The Commission shall be responsible for the cost if the third party test verifies that the QC test was accurate.

6.0 Material Receiving. The QMP shall identify a procedure for performing material receiving. Standard material receiving forms will be provided by the engineer.

6.1 The procedure shall address inspections for all material delivered to the site (excluding testable material such as concrete, asphalt, aggregate, etc.) for general condition of the material at the time it is delivered. The material receiving procedure shall record markings and accompanying documentation indicating the material is MoDOT accepted material (MoDOT-OK Stamp, PAL tags, material certifications, etc.).

6.2 All required material documentation must be present at the time of delivery. If the material is not MoDOT accepted, the contractor shall notify the engineer immediately and shall not incorporate the material into the work.

7.0 Quality Assurance. The engineer will perform Quality Assurance inspection and testing (QA) to verify the performance of QC inspection and testing. The frequency of the QA testing will be as shown in the ITP, but may be more frequent at the discretion of the engineer. The engineer will record the results of the QA testing and inspection and will inform the contractor of any known discrepancies.

7.1 QA is responsible for verifying the accuracy of the final quantity of all pay items in the contract. This includes taking measurements on items that require measurement and other items that are found to have appreciable errors.

7.2 QA inspection and test results shall not be used as a substitute for QC inspection and testing.

7.3 QA will be available for Hold Point inspections at the times planned in the Weekly Schedule. The inspections may be re-scheduled as needed, but a minimum 24-hour advance notification from the contractor is required unless otherwise approved by the engineer.

8.0 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 the succeeding work depends on a QA review of the preceding work before work can continue.

8.1 A list of minimum Hold Points will be provided by the engineer and shall be included in the QMP. The engineer may make changes to the Hold Point list at any time.

8.2 Prior to all Hold Point inspections, QC shall provide the engineer with the Daily Inspection Reports, Inspection Checklists, Test Reports, and Material Receiving Reports for the work performed leading up to the Hold Point. 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.

9.0 Non-Conformance Reporting. Non-conformance reports shall be issued by the contractor for work that does not meet the contract requirements. Non-conforming work includes work, testing, materials and processes that do not meet contract requirements. The contractor shall establish a procedure for identifying and resolving non-conforming work as well as tracking the status of the reports.

9.1 Contractor QC staff or production staff should identify non-conforming work and document the details on the Non-Conformance Report form provided by MoDOT. QA staff may also initiate a non-conformance report.

9.2 In-progress work that does not meet the contract requirements may not require a non-conformance report if production staff is aware of the issue and corrects the problem during production. QC or QA may issue a non-conformance report for in-progress work when documentation of the deficiency is considered beneficial to the project record.

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

9.4 For recurring non-conformance work of the same or similar nature, a written Corrective Action Request will be issued by QC or QA. The contractor shall then establish a procedure for tracking the corrective action from issuance of the request to implementation of the solution. Approval from the engineer is required prior to implementation of the proposed corrective action. The contractor shall notify the engineer after the approved corrective action has been implemented.

10.0 Work Planning and Scheduling. The contractor shall include Quality Management in all aspects of the work planning and scheduling. This shall include providing a Weekly Schedule, a Work Plan for each work activity, and holding pre-activity meetings for each new activity.

10.1 A Weekly Schedule shall be provided to the engineer each week that outlines the planned project activities for the following two-week period. This schedule shall include all planned work, identification of all new activities, traffic control events, and requested Hold Point inspections for the period. Planned quantity of materials, along with delivery dates should also be included in the schedule.

10.2 A Work Plan shall be submitted to the engineer at least one week prior to the pre-activity meeting. The Work Plan shall include the following: a safety plan, list of materials to be used, work sequence, defined responsibilities for QC testing and inspection personnel, and stages of work that will require Hold Point inspections.

10.3 A pre-activity meeting is required prior to the start of each new activity. The purpose of this meeting is to discuss details of the Work Plan and schedule, including all safety precautions. Those present at the meeting shall include: the production supervisor for the activity, the Quality Manager, QC inspection and testing staff, and QA. The Quality Manager will review the defined responsibilities for QC testing and inspection personnel and will address any quality issues with the production staff. Attendees may join the meeting in person or by phone or video conference.

11.0 Basis of Payment. Payment for all costs associated with developing, implementing and maintaining the Quality Management Plan, providing Quality Control inspection and testing, and all other costs associated with this provision, will be considered included in the unit price of each contract item. No direct pay will be made for this provision.

O. Contractor Furnished Surveying and Staking - SW

In addition to the requirements of Section 627 of the Missouri Standard Specifications for Highway Construction, the following shall apply:

1.0 Description. The contractor shall be responsible for all layout required on the project. This responsibility shall include, but not be limited to the following: Construction signing, transition milling, pavement marking, loop detectors, etc.

1.1 The above list is not all inclusive. The contractor shall have the primary responsibility for these operations. The contractor shall provide the Resident Engineer with a staking plan layout for approval prior to the installation of signs. The RE will also provide assistance during this layout provided a request is submitted to the RE or Construction Project Manager 48 hours in advance. This will ensure that all permanently mounted traffic control devices remain consistent with District policy and avoid re-staking. If the contractor installs any signs without engineer approval, all costs associated with re-staking and/or relocation will be at the contractor's expense.

1.2 The intent of this provision is to increase the quality of our work zones and minimize negative impacts to the contractor's schedule that can result from delays in staking.

1.3 Any adjustments to the plan quantities or line numbers established in the contract shall be approved by the Engineer.

2.0 Basis of Payment. No direct payment will be made to cover the costs associated with these additional requirements. All costs will be considered completely covered by the unit bid price submitted for Contractor Furnished Surveying and Staking.

P. Contractor Retained Guardrail

1.0 Description. All guardrail removed from this project shall become the property of the Contractor and shall be disposed of in accordance with Sec 202.

1.1 Holes left in the ground after removal of existing guardrail posts shall be backfilled in accordance with Sec 202.3.4. Payment for this item of work shall be considered as fully covered under pay item 202-20.10, Removal of Improvements, per lump sum.

2.0 Basis of Payment. All costs incurred for complying with this provision shall be considered completely covered by the contract unit price for Item No. 202-20.10, Removal of Improvements.

Q. Seeding and Fertilizer

1.0 In accordance with Sec 805, the following mixture shall be applied at the rate specified:

Cool Season Mixture	Pounds of Pure Live Seed Per Acre
Tall Fescue	40
Annual Ryegrass	8
White Clover	2.5
Total	50.5

2.0 In accordance with Sec 801, the following shall be applied at the rate specified:

Item	Rate (Lb/Acre)
Effective neutralizing material	4000
Nitrogen (N)	80
Phosphorus (P_2O_5)	240
Potash (K_2O)	160

3.0 In accordance with Sec 802, vegetative mulch with mulch overspray shall be applied.

R. Damage to Existing Pavement, Shoulders, Side Roads, and Entrances

1.0 Description. This work shall consist of repairing any damage to existing pavement, shoulders, side roads and entrances caused by contractor operations. This shall include, but is not limited to, damage caused by the traffic during contractor operations within the project limits including the work zone signing.

2.0 Construction Requirements. Any cracking gouging, or other damage to the existing pavement, shoulders, side roads, or entrances from general construction shall be repaired within twenty-four (24) hours of the time of damage at the contractor's expense. Repair of the damaged pavement, shoulders, side roads, or entrances shall be as determined by the engineer.

3.0 Method of Measurement. No measurement of damaged pavement or shoulder areas or damaged side roads or entrances as described above shall be made.

4.0 Basis of Payment. No payment will be made for repairs to existing pavement, shoulders, side roads or entrances damaged by contractor expenses.

S. Post-Award Value Engineering Change Proposal Workshop JSP-16-01

1.0 Description. A post award Value Engineering workshop will be held, prior to the Notice to Proceed, and shall be attended by the Contractor. The workshop will consist of a facilitated discussion to identify potential Value Engineering Change Proposals (VECP) and Practical Design Value Engineering Change Proposals (PDVECP), as defined in Sec 104.6. The purpose of the workshop is to develop and discuss any ideas that may result in reducing the cost of the project, reducing construction activity duration, increasing the cost effectiveness of the project, or improving the quality of the project.

2.0 Description of Workshop.

2.1 Workshop logistics, including date, time and location, will be determined by the engineer.

2.2 A minimum of two contractor's workshop participants will be required to participate. These participants shall be familiar with the project and with the intended construction practices which will be used to complete the project, and of suitable authority to make project decisions for the contractor. Within two days of being notified of the award of the project, the contractor shall provide a list of dates prior to the notice to proceed for which the representatives are available to participate.

2.3 The one-day workshop will be facilitated by MoDOT or an external facilitator contracted to MoDOT. The facilitator will lead the workshop participants through a process to identify potential alternatives and to consider the advantages and disadvantages of these identified alternatives. Additionally, the workshop participants will discuss applicable submittal dates and review periods associated with any alternatives which the workshop team chooses to propose.

2.4 The workshop is intended to identify potential alternatives and facilitate contractor submittal of acceptable alternatives. Submittal and approval of identified proposals will be in accordance with Sec 104.6.

2.5 A negotiated delay in the Notice to Proceed may be necessary to facilitate a proposal that requires further research or design modifications.

3.0 Payment. No direct payment will be made for the cost of attendance and participation in the workshop. Payment for approved VECP and PDVECP proposals will be made in accordance with Sec 104.6.

T. Temporary Long-Term Rumble Strips JSP-13-04C

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 at the contract unit price for 616-20.02, Temporary Long-Term Rumble Strips, per each set. 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.

U. Temporary Short-Term Rumble Strips JSP-13-05E

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

2.0 Material.

2.1 The short-term rumble strips shall be 10 to 12 feet in length, minimum of 8 inches wide, ¾ to 1¼ inch thick, fabricated from a polymer material, and orange in color.

2.2 The short term-rumble strips shall not curl or deform across the width of the strip, maintaining its rigidity.

3.0 Construction.

3.1 Each set shall consist of three individual strips spanning a single lane, spaced in accordance with the plans or as directed by the engineer. The short-term rumble strips shall be installed and removed in accordance with manufacturer's recommendation.

3.2 The contractor shall monitor, maintain alignment, and repair if needed the short-term rumble strips during construction. Short-term rumble strips shall not be placed on roadways when there are no workers present.

3.3 Strips shall not extend onto the shoulder without the approval of the Engineer.

4.0 Method of Measurement. Measurement of short-term rumble strips will be based per each set.

5.0 Basis of Payment. The accepted quantity of Temporary Short-Term Rumble Strips sets will be paid for at the contract unit price for 616-20.04, Temporary Short-Term Rumble Strips, per each set. The short-term rumble strips unit bid price shall include the cost of all labor, equipment and materials to install, maintain, remove and relocate the rumble strips during the construction of the project.

V. Cooperation Between Contractors

1.0 Description. This contract is one of several contemplated relative to the overall project. Separate contracts may be let that will be within this contract's area.

2.0 Construction Requirements.

2.1 The work for this project shall be performed in the order necessary to best facilitate the early completion of the combined projects on this improvement. The contractor shall be required to arrange the storage of materials and equipment and perform the construction operations so as not to unduly interfere with the operations of other contractors. This may require the contractor to store equipment and materials off state right of way and make the necessary arrangements for storage sites.

2.2 Full cooperation of the contractors involved with this improvement in careful and complete coordination of their respective activities in the area will be required. Each contractor involved shall so schedule and conduct work as to avoid unnecessary inconvenience, delay to another and a manner as not to damage work being performed or completed by another. When necessary for proper prosecution of work, each contractor shall permit the other access through the overlapping construction areas and the use of any access or haul roads constructed by others.

2.3 The projects occurring concurrently with this project are as follows:

(a) Arkansas Department of Transportation (ARDOT) project CA0905, which extends Interstate 49 south of the Missouri-Arkansas state line. This project is currently under construction.

(b) Missouri Department of Transportation (MoDOT) project J7S3292, which resurfaces and adds shoulders on Route 90 from Route 43 in Southwest City to Route 37 near Washburn. This project is currently scheduled for an October 2020 letting.

(c) Missouri Department of Transportation (MoDOT) project J7P3260, which resurfaces Route 71 from south of Goodin Hollow Road to the Missouri-Arkansas state line. This project is tentatively scheduled for construction in 2021.

3.0 Method of Measurement. No measurement will be made.

4.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

W. Relocated Signs

1.0 Description. This item provides for relocating and mounting existing signs of various sizes to new posts at locations shown on the signing sheets.

2.0 Construction Requirements. The contractor shall install new posts at the locations shown and then mount existing signs to the appropriate post type as summarized on sheets D-29 and D-30 of the signing sheets. All work shall be in accordance with the construction requirements of Sec 903.

3.0 Method of Measurement. Measurement will be made per each for relocating and mounting existing signs to new posts. Measurement for any concrete footings, structural steel posts, pipe posts, perforated square steel tubes and anchor sleeves, and breakaway assemblies will be made in accordance with Sec 903.

4.0 Basis of Payment. All cost incurred for relocating and mounting existing signs to new posts at the locations shown, complete in place, will be paid for at the contract unit price for Pay Item 903-99.02, Relocated Signs, per each. Payment for all other labor, equipment, material, and incidental items will be made in accordance with Sec 903 and paid for at the contract unit price for each of the pay items included in the contract.

X. Removal and Delivery of Existing Signs

1.0 Description. All Commission-owned signs removed from the project shall remain the property of the Commission and shall be disassembled and delivered as specified herein.

2.0 Disassembly and Delivery. All Commission-owned signs, not to include abandoned billboard signs, designated for removal in the plans, and any other signs designated by the engineer, shall be removed by the contractor and delivered to the address below. The contractor shall call the phone number listed below 48 hours prior to delivery and make arrangements for delivery during normal business hours.

Commission's Joplin Maintenance Lot
2800 Stephens Boulevard
Joplin, MO 64804
Contact Name: Joe Dotson
Phone: (417) 895-7599

2.1 Signs shall be removed from sign supports and structures prior to delivery. Sign supports and structures shall become the property of the Contractor and removed from the project. Any oversized sign panels shall be disassembled or cut into widths of 8-feet or less with no restriction on length. Signs shall be stacked neatly in bins provided by MoDOT at the delivery site.

3.0 Basis of Payment. All costs associated with removing, disassembling, storing, and transporting of signs shall be considered as completely covered by the contract unit price for Item No. 202-20.10, "Removal of Improvements", per lump sum.

Y. Special Considerations Resulting from Right of Way Negotiations

1.0 Description. As a result of right of way negotiations with an adjacent property owner, the Commission's representative has committed to the following condition. The contractor shall be required to fulfill the following commitment:

1.1 The contractor shall notify the owner of Parcel 37, Hell Creek Land and Cattle Company, a minimum of two (2) weeks in advance of the start of construction on their entrance.

Mike Dablemont
Project Manager, Hell Creek Land and Cattle Company
Construction Manager, ALL Consulting
1718 South Cheyenne Avenue
Tulsa, OK 74119-4612
Phone: (918) 382-7581

2.0 Basis of Payment. There shall be no direct payment for compliance with this provision.

Z. Type 4 Turf Reinforcement Mat

1.0 Description. Type 4 turf reinforcement mat shall conform to the applicable portions of Secs 806.90 and 1011.

2.0 Construction Requirements. Type 4 turf reinforcement mat shall be installed and maintained according to the manufacturer's recommendations.

3.0 Method of Measurement. Measurement will be made to the nearest square yard of surface area covered.

4.0 Basis of Payment. The accepted quantity of type 4 turf reinforcement mat shall be considered as included in and completely covered by the contract unit price for Pay Item 806-99.05, Type 4 Turf Reinforcement Mat, per square yard. Payment shall include all materials, labor, maintenance during construction, time and incidentals.

AA. Wildlife Crossings

1.0 Description. This work shall consist of constructing wildlife crossings through type C concrete traffic barrier in the median of I-49 as shown on the special sheet in the plans.

2.0 Construction Requirements.

2.1 Wildlife crossings shall conform to the spacing and dimensions as shown on the special sheet in the plans. The intent of wildlife crossings is to provide cross-median-barrier access for small and medium sized wildlife at locations where the roadway excavation transitions from deep cut to deep fill. Wildlife crossing locations may be adjusted to better meet this requirement, and care shall be taken to accommodate the above intent if adjusting the grading as a result of an approved Alternate Technical Concept, Value Engineering Change Proposal or Practical Design Value Engineering Change Proposal.

2.2 The method of construction for wildlife crossings shall be devised by the contractor and approved by the engineer. Slip forming of the barrier is allowed, however the contractor shall take care to insure the wildlife crossing form is sufficiently anchored and will not shift during the slip forming operation.

2.3 Forms may be stay-in-place or removable. Stay-in-place forms shall consist of material conforming to the applicable specifications for group C pipe or better. Stay-in-place forms, based on the sole judgment of the engineer, shall not pose a long-term maintenance concern, and shall be securely anchored to the type C concrete traffic barrier to prevent separation.

2.4 Rectangular openings may be substituted for semi-circular openings as approved by the engineer. Rectangular openings shall not exceed 15” in width and 7.5” in height, and corners shall have a 0.75” camber, 0.5” radius, or alternate treatment as approved by the engineer.

3.0 Method of Measurement. Wildlife crossings shall be measured per each.

4.0 Basis of Payment. The accepted quantity of wildlife crossings, complete and in place, shall be considered as included in and completely covered by the contract unit bid price for Pay Item 617-99.02, Wildlife Crossings, per each. Payment shall include all materials, labor, time and incidentals required to construct wildlife crossings.

BB. Rock Embankment

1.0 Description. This work shall consist of constructing rock embankment as shown on the typical section in the plans.

2.0 Construction Requirements.

2.1 Rock embankment shall be constructed in the bottom portion of fills exceeding 40 feet in height. Fill height shall be measured from the edge of shoulder to existing ground or from the edge of the guardrail widening berm to existing ground, whichever is lower.

2.2 Rock embankment where required, shall extend the full width of the fill section.

2.3 Rock embankment shall be constructed according to the requirements of Sec 214.

3.0 Materials. Material for rock embankment shall meet the requirements of Sec 214, or other material as approved by the engineer. Native material may be used.

4.0 Method of Measurement. Rock embankment shall be obtained from unclassified excavation material or another source furnished by the contractor and approved by the engineer. No separate measurement for furnishing rock embankment will be made. Measurement for placing rock embankment will be made according to Sec 203. No distinction in measurement shall be made between placing rock embankment and compacting embankment.

5.0 Basis of Payment. Payment for furnishing rock embankment shall be considered as completely covered by the contract unit price for other items included in the contract. Placing of rock embankment shall be considered as included in and completely covered by the contract

unit price for Pay Item 203-60.00, Compacting Embankment, per cubic yard. No distinction in payment shall be made between placing rock embankment and compacting embankment.

CC. Intelligent Compaction Testing

1.0 Description. This project has been selected for an intelligent compaction (IC) study with the Federal Highway Administration (FHWA) that will evaluate the uniformity and quality of the subgrade foundation for pavements.

2.0 Test Strip Requirement. A test strip with minimum dimensions of 250 feet x 25 feet will be determined on site by the contractor and engineer for research testing purposes.

3.0 Equipment. For testing, the contractor shall provide a nuclear density gauge and a vibratory roller with a minimum 10-ton gross weight. All other equipment, including an IC system retrofit kit for the contractor roller, shall be provided through MoDOT.

4.0 Contractor Requirements. Contractors shall assist with completing the following items during the research:

4.1 Selecting the test section location.

4.2 Providing equipment and operators for nuclear density gauge measurements and roller compaction.

4.3 All daily field activities and responsible parties are outlined in the table below. The field activities will take approximately 3 days to complete.

Work Plan Activities		
Time	**Tasks**	**Activities**
Prior to Field Demonstration	Coordination	• Identify field project and select the test section (MoDOT, contractor, research team) • Arrange for spot test equipment and operators (MoDOT, contractor, research team) • Arrange for roller instrumentation (contractor, industry partners, research team)
Day 1	Initial set-up and trial runs	• Identify and mark the test section (MoDOT, contractor, research team) • Initial setup of IC roller and GPS validation • Dry runs with the IC roller to collect, record, save, download and transfer data for this project (Contractor, MoDOT and research team) • Trial tests with spot test equipment (MoDOT, contractor and research team)

Day 2	Subbase compaction and tests	• Pre-map subgrade within the test section (contractor, research team) • Prepare and compact subgrade within the test section (contractor) • Map the top of subgrade with IC roller (contractor, research team) • Select locations for spot tests based on ICMV map or a grid-pattern (research team) • Conduct spot testing with NDG/LWD/FWD/GPS (MoDOT, contractor, research team)
Day 3	Map subbase and tests	• Identify and mark other existing or completed subgrade sections (MoDOT, contractor, research team) • Map the top of subgrade with IC roller (Contractor, research team) • Select locations for spot tests based on ICMV map (research team) • Conduct spot testing with NDG/LWD/FWD/GPS (MoDOT, contractor, research team)

4.4 All acceptance testing for compacted subgrade within the test section limits will be in accordance with Sec 203.5.

4.5 The contractor shall submit a schedule of work to the engineer at least seven days prior to starting the research work activities. Any changes to the schedule, except weather related events, shall be provided to the engineer in writing at least three days prior to the change in work schedule occurring.

4.6 The contractor shall allow the Commission and other research entities access to all operations for further data collection.

5.0 Basis of Payment. Contractor activities required for compliance with this provision will be paid at the contract unit price for Item No. 203-99.01, Intelligent Compaction, per lump sum.

DD. 404 Permit Delay

1.0 Description. The contractor and the Commission understand and agree that there has been and may continue to be a delay in the issuance of the 404 Permit for this project. This permit delay may result in restraints on the contractor's ability to perform work on this project.

2.0 The 404 permit is anticipated to be issued by the Corps of Engineers by the notice to proceed date of this project, however, this date is not warranted and a later date is equally possible. The contractor and the Commission understand and agree that due to a delay in the issuance of the 404 Permit, the work site for this job may not be available for the contractor to commence work on the job site or parts of it until after the notice to proceed. Therefore, the parties mutually agree that the notice to proceed on this project will not be issued until the 404 Permit has been issued, unless the engineer and the contractor mutually decide that the notice to proceed should be issued on an earlier date.

2.1 The contractor will not have general access to the work site for construction purposes until the date the notice to proceed is issued. However, the contractor and its subcontractors may proceed to order necessary supplies, materials, and equipment for this project, and may visit the available portions of the job site to prepare for the later construction work, prior to the date the notice to proceed is issued.

2.2 The contractor is required to plan its order of work, manpower and equipment loading, and bid, taking into consideration all effects of delayed issuance of the 404 Permit. Any effects, impacts, cumulative impacts or consequences of delay in issuance of the 404 Permit shall be noncompensable. This shall include any claim for extra work, as well as delay effects on work not delayed, suspension or acceleration of the work, differing site condition, interference or otherwise.

2.3 The contractor and the Commission understand and agree that by executing this contract, the contractor releases the Commission from any possible liability under this contract or for a possible breach of this contract for failing to make the job site available until the notice to proceed is issued in accordance with the terms of this contract, or for failing to timely and promptly issue the notice to proceed to the contractor, and for all direct and indirect, incidental, or consequential damages or losses the contractor may suffer from this delay in making the job site available or issuing a timely notice to proceed. The contractor further waives any possible claim, action, cause of action, or right to sue the Commission, Missouri Department of Transportation, or their members, employees, agents of representatives which the contractor may have by contract, at law or in equity, concerning the delay in issuing the notice to proceed of making the job site available, or any liability, losses, or damages the contractor may have experienced as a result of those Commission actions.

2.4 The contractors SOLE REMEDY for any delay in issuance of the 404 Permit is that the completion date of this contract shall be extended, day for day, for each day that delayed issuance of the 404 Permit actually interferes with the major items of work as of the time of the occurrence both as shown by the contractor's current progress schedule and as determined by the engineer.

2.5 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.

EE. Consultant Plans for Special Design Reinforced Concrete Box Culverts

1.0 Description. The base plans for special design reinforced box culverts at the following stations were prepared in 2009 by Consultant per the Missouri Standard Specifications for Highway Construction in effect at the time the plans were signed and sealed. These plans are provided without modification as contract documents for this project.

743+58.95 NBL	739+41.86 SBL	768+06.77
842+96.71	844+08.90	887+10.93
899+93.87	909+72.11	

2.0 The following general note shall be added to the plans: “If precast option is used, precast box culvert ties in accordance with Sec 733 and Standard Plan 733 shall be provided between all precast sections. Extra strength connection details shall be used.”

3.0 The following general note on the plans shall be disregarded: "If precast option is used, collars shall be provided between all precast pieces."

4.0 Method of Measurement. No measurement will be made.

5.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

FF. Contract Adjustments for Variation in Existing Ground Elevation

1.0 Description. This provision allows for adjustment of excavation quantities due to variations in the elevation of existing ground.

2.0 Construction Requirements.

2.1 The contractor surveyor shall evaluate existing ground elevations for conformance with Sec 203.8.1.1(b) prior to the contractor commencing grading operations. All areas identified as out of compliance with Sec 203.8.1.1(b) shall be delineated by the contractor surveyor and reported to the engineer.

2.2 Contractor surveyor data shall be based on the MoDOT provided control points.

2.3 The final determination of compliance with Sec 203.8.1.1(b) shall be made solely by the engineer.

2.4 For areas determined to be in compliance with Sec 203.8.1.1(b) no final measurement will be made, and plan quantities for unclassified excavation and compacting embankment will not be adjusted to account for any variations in the existing ground elevation.

2.5 For areas determined to be out of compliance with Sec 203.8.1.1(b) the engineer shall determine a remedy based on the specific nature of the non-compliance (location, size, etc.), corrected topography will be obtained, and an add or deduct quantity will be computed and used to correct the plan quantities for unclassified excavation and compacting embankment.

2.5.1 The engineer will compute add and deduct quantities for unclassified excavation and compacting embankment by running a volumetric comparison between the original existing ground terrain model and the corrected existing ground terrain model. Terrain models shall be Geopak SS4 triangular irregular network (TIN) files, and shall be compared using a minimum of three (3) MoDOT provided control points to ensure that the surfaces can be oriented properly in the horizontal and vertical directions. For this purpose, all references to the "average end area method" as the method of measurement in Sec 203.8 shall be deleted.

2.5.2 Grading shall not commence in areas determined to be out of compliance with Sec 203.8.1.1(b) until corrected quantities have been computed and agreed upon by the contractor and the engineer.

2.6 The contractor may elect not to survey existing ground for compliance with Sec 203.8.1.1(b). In this case the contractor accepts plan quantity for unclassified excavation and

compacting embankment, and releases the Commission from all future claims of payment adjustment for variation in the existing ground elevation.

3.0 Basis of Payment.

3.1 The accepted add or deduct quantity of unclassified excavation shall be considered as included in and completely covered by the contract unit bid price for Pay Item 203-50.00, Unclassified Excavation, per cubic yard.

3.2 The accepted add or deduct quantity of compacting embankment shall be considered as included in and completely covered by the contract unit bid price for Pay Item 203-60.00, Compacting Embankment, per cubic yard.

3.3 All costs for contractor surveyor evaluation of existing ground elevations, including the delineation and reporting of areas determined to be out of compliance with Sec 203.8.1.1(b), shall be considered as included in and completely covered by the contract unit bid price for Pay Item 627-40.00, Contractor Furnished Surveying and Staking, per lump sum.

GG. Contract Adjustments for Variation in Existing Rock Surface Elevation

1.0 Description. This provision allows for adjustment of excavation quantities due to variations in the existing rock surface elevation.

2.0 Construction Requirements.

2.1 Following completion of the grading and paving portions of the project the engineer will obtain LiDAR data throughout the entire project limits from which final earthwork quantities will be computed.

2.2 The engineer will compute add and deduct quantities for unclassified excavation and compacting embankment by running a volumetric comparison between the original proposed design surface terrain model and the terrain model for the as-constructed surface as determined from the LiDAR data. Terrain models shall be Geopak SS4 triangular irregular network (TIN) files, and shall be compared using a minimum of three (3) MoDOT provided control points to ensure that the surfaces can be oriented properly in the horizontal and vertical directions. For this purpose, all references to the “average end area method” as the method of measurement in Sec 203.8 shall be deleted.

2.3 The intent of this provision is to compensate the contractor for appreciable errors in grading quantities due to variations in the existing rock surface elevation, and authorized changes during construction. Unauthorized changes during construction (e.g. overblasting or incorrect benching configuration in cut sections, or flattening of slopes in fill sections) shall not be compensated.

3.0 Basis of Payment.

3.1 The accepted add or deduct quantity of unclassified excavation shall be considered as included in and completely covered by the contract unit bid price for Pay Item 203-50.00, Unclassified Excavation, per cubic yard.

3.2 The accepted add or deduct quantity of compacting embankment shall be considered as included in and completely covered by the contract unit bid price for Pay Item 203-60.00, Compacting Embankment, per cubic yard.

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THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 W. CAPITOL AVE.
JEFFERSON CITY, MO 65101
Phone (888) 275-6636

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

JOB NO. J7P0601
McDonald County, MO
Date Prepared: 11/6/2019

Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: A

A. CONSTRUCTION REQUIREMENTS

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

2.0 Construction Requirements. Plans for existing structure(s) are not applicable for this project; however, geotechnical investigation information is included in the contract in the bridge electronic deliverables zip file for informational purposes only.

2.1 In order to assure the least traffic interference, the work shall be scheduled so that a lane closure is for the absolute minimum amount of time required to complete the work. A lane shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

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

2.3 Provisions shall be made to prevent any debris and materials from falling into the stream, lake or onto the roadway. Any debris and materials that falls below the bridge outside the limits mentioned previously and if determined necessary by the engineer, the debris shall be removed as approved by the engineer at the contractor's expense. Traffic under the bridge shall be maintained in accordance with the contract documents.

2.4 Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

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

3.0 Consultant Plans per Previous Missouri Standard Specifications for Highway Construction. The base plans for Bridge Structures A6380 and A7000 and MSE Retaining Walls A7595, A7596, A7800 and A7801 were prepared in 2009 by Consultant per the 2004 Missouri Standard Specifications for Highway Construction and are provided without modification as contract documents for this project. References in these Consultant-prepared plans to Special Provisions for corrugated metal pipe for use as pipe pile spacers shall be disregarded. Pipe pile spacers shall be in accordance with the current Missouri Standard Specifications for Highway Construction.

4.0 Method of Measurement. No measurement will be made.

5.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.