

Job No.: J2P3103  
J2S3363  
J2S3402  
Route: 15, P, BB  
County: Knox  
Shelby

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

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	<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636
	<b><i>Klingner &amp; Associates, P.C.</i></b> 907 East Ash Street Columbia, MO 65201 Certificate of Authority: 000866 Consultant Phone: 573-355-5988
	JOB NUMBER: J2P3103 J2S3363 J2S3402 SCOTLAND/KNOX/SHELBY COUNTY, MO DATE PREPARED: 08/03/2021
	ADDENDUM DATE:
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: ALL	

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JOB  
SPECIAL PROVISION

A. General - Federal JSP-09-02G

**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](http://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](http://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 2021 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.

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**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: January 31, 2022  
Completion Date: November 1, 2022

**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
J2P3103	145	\$2300
J2S3363	49	\$1800
J2S3402	30	\$1800

**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 **\$1500** 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

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

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

## **2.0 Traffic Management Schedule.**

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

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

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

**2.4** In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

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

### **2.5.1 Traffic Safety.**

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

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**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, 2021 – 6:00 a.m. July 6, 2021  
12:00 noon July 1, 2022 – 6:00 a.m. July 5, 2022  
12:00 noon June 30, 2023 – 6:00 a.m. July 5, 2023

**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.

### **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.

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**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 law enforcement or other emergency agencies for incident management. In case of traffic accidents or the need for law enforcement to direct or restore traffic flow through the job site, the contractor shall notify law enforcement or other emergency agencies immediately as needed. The area engineer's office shall also be notified when the contractor requests emergency assistance.

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

Missouri Highway Patrol 660-385-2132		
Shelby County	Knox County	
Fire: 660-676-4372	Fire: 660-434-5530	
Police: 573-633-2161	Police: 660-397-2186	

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

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

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

**E. Project Contact for Contractor/Bidder Questions**

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

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Chris Knapp, Project Contact  
N.E. District  
P.O. Box 1067  
Hannibal, MO 63401

Telephone Number: 573-248-2586  
Email: [Christopher.Knapp@modot.mo.gov](mailto:Christopher.Knapp@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-18-01R

Compliance with [2 CFR 200.216 – Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment](#).

The Missouri Highways and Transportation Commission shall not enter into a contract (or extend or renew a contract) using federal funds to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as substantial or as critical technology as part of any system where the video surveillance and telecommunications equipment was produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

Stormwater Compliance Requirements

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

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

**1.2 Reporting of Off-Site Land Disturbance.** If the project includes any planned land disturbance on the project site, prior to the start of work, the contractor shall submit a written report to the engineer that



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

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

### **2.1 Duties of the WPCM:**

- (a) Be familiar with the stormwater requirements including the current MoDOT State Operating Permit for construction stormwater discharges/land disturbance activities; MoDOT's statewide Stormwater Pollution Prevention Plan (SWPPP); the Corps of Engineers Section 404 Permit, when applicable; the project specific SWPPP, the Project's Erosion & Sediment Control Plan; all applicable special provisions, specifications, and standard drawings; and this provision;
- (b) Successfully complete the MoDOT Stormwater Training Course within the last 4 years. The MoDOT Stormwater Training is a free online course available at [MoDOT.org](http://MoDOT.org);
- (c) Attend the Pre-Activity Meeting for Grading and Land Disturbance and all subsequent Weekly Meetings in which grading activities are discussed;
- (d) Oversee and ensure all work is performed in accordance with the Project-specific SWPPP and all updates thereto, or as designated by the Engineer;
- (e) Review the project site for compliance with the Project SWPPP, as needed, from the start of any grading operations until final stabilization is achieved, and take necessary actions to correct any known deficiencies to prevent pollution of the waters of the state or adjacent property owners prior to the engineer's weekly inspections;
- (f) Review and acknowledge receipt of each MoDOT Inspection Report (Land Disturbance Inspection Record) for the Project within forty eight (48) hours of receiving the report and ensure that all Stormwater Deficiencies noted on the report are corrected as soon as possible, but no later than stated in Section 5.0.

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

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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.

## COVID-19 Safety

**1.0 Description.** The coronavirus disease 2019 or COVID-19 has reached a pandemic stage across the United States, including the State of Missouri. To reduce the impact of COVID-19 outbreak conditions on businesses, workers, customers and the public, the contractor shall be aware of all COVID-19 guidance from the Center for Disease Control (CDC) and other government health mandates. The contractor shall conduct all operations in conformance with these safety directives. The guidance may change during the project construction and the contractor shall change and adapt their operation and safety protocols accordingly.

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**2.0 Safety Plan.** The contractor shall include these procedures in the project safety plan as called for in the contract documents and revise the safety plan as needed.

**3.0 Essential Work.** In accordance with any state or local Stay at Home Order, care for the infrastructure has been deemed essential and MoDOT is moving forward with construction projects, this project is considered essential and the contractor and their employees, subcontractors and suppliers are considered essential business and performing essential functions.

**4.0 Basis of Payment.** Compliance with regulations and laws pertaining to COVID-19 is covered under Sec 107 of the Missouri Standard Specifications for Highway Construction. No direct payment will be made for compliance with this provision.

#### Anti-Discrimination Against Israel Certification

By signing this contract the Company certifies it is not currently engaged in and shall not, for the duration of the contract, engage in a boycott of goods or services from the State of Israel, companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel, or persons or entities doing business in the State of Israel as defined by Section 34.600 RSMo. This certification shall not apply to contracts with a total potential value of less than One Hundred Thousand Dollars (\$100,000) or to contractors with fewer than ten (10) employees.

#### G. Contractor Quality Control for Plant Mix Bituminous Surface Leveling NJSP-15-21A

**1.0 Description.** The contractor shall provide Quality Control (QC) testing and shall perform verification procedures associated with the production and placement of Plant Mix Bituminous Surface Leveling Mixture in accordance with this provision.

**2.0 Asphalt Plant Requirements.** The contractor shall perform quality control testing in the production of the Surface Leveling Mixture and report the results electronically on MoDOT-provided forms. All reports shall include the Contract ID, Project Number, Route, County, and Job Mix number.

**2.1** Calibration of the asphalt plant shall be in accordance with Sec 403.17.2.2. Record retention for verification of test reports shall be in accordance with Sec 403.17.3.2.

**2.2** At a minimum, the contractor shall perform one QC sieve analysis test for each day of production of Surface Level mixture in excess of 100 tons to verify the aggregate is within the required gradation range. Results of the QC sieve analysis test shall be reported to the engineer daily. A split of each sample shall be clearly labeled and stored by the contractor in a manner that prevents contamination. The engineer will collect a minimum of one random QC split sample, and one full sample from plant production, for testing per each 10,000 tons of production. Uncollected QC split samples shall be retained by the contractor until the engineer authorizes disposal or until the Final Inspection, whichever occurs earlier.

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**2.3** The contractor shall monitor the quantity of asphalt binder used in the production of the mix, including any commercial mix, and report that quantity to the engineer. Original asphalt binder delivery tickets shall accompany the report submitted to the engineer. The engineer will perform a minimum of one asphalt binder content test per each 10,000 tons of production for any project that exceeds a total of 5,000 tons of production.

**2.4** The contractor shall take a daily QC sample of the asphalt binder per instructions in Section 460.3.13 of the EPG. The engineer will collect the QC samples and ship to the MoDOT Central lab for random testing. In addition, the engineer will take a minimum of one random Quality Assurance sample per project from the binder line. The engineer sample will be shipped to the Central Lab along with the daily samples and will be designated for testing.

**2.5** The contractor shall perform one moisture content test for each day of production of Surface Level mixture in excess of 100 tons. The frequency of the moisture test may be reduced if approved by the engineer.

**3.0 Roadway Requirements.** The contractor shall perform quality control verification of the Surface Leveling Mixture on the roadway and shall monitor the asphalt tonnage placed in relation to plan quantity.

**3.1 Irregularities.** Additional tons of Surface Leveling mix will be provided for irregularities in the existing roadway surface. The tonnage specified for irregularities is an estimated quantity and shall only be placed at locations where it is necessary to fill ruts and other low points. Prior to placing the mix, the contractor and engineer shall evaluate the entire route and develop a plan that best utilizes the tonnage needed for irregularities. Any excess quantity of irregularities shall not be placed.

**3.2 Tack.** On the first day of production, the contractor shall demonstrate proper application of tack coat in the presence of the engineer. Thereafter, when the engineer is not present to witness the application of the tack coat, the contractor shall document the tack application by taking a minimum of two high-resolution date/time stamped photographs of the tacked surface per one-mile segment. Pictures should be taken just in front of the paver in order to account for loss of tack from truck tires. The contractor shall also monitor and document the application rate. The contractor shall take distributor readings at the beginning and ending of each shift and document the quantity used.

**3.3 Spreading and Rolling.** On the first day of production, the contractor shall demonstrate successful spreading and compaction of the mixture, including proper rolling patterns, in the presence of the engineer. Thereafter, the contractor shall monitor all roadway production procedures and document daily. Use of approved Intelligent Compaction technology is an allowable substitute for daily documentation.

**3.4 Monitoring of Quantity.** The contractor shall monitor the quantity of Surface Level mix placed and report that information to the engineer and production staff as specified herein.

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**3.4.1** The contractor shall verify that the quantity of Surface Leveling mix in the contract for each route is sufficient to cover the roadway as shown on the typical sections, including any surface irregularities. Any discrepancies shall be brought to the engineer's attention in writing prior to the pre-construction conference. Plan quantity shall be defined as the total tons computed to cover the surface area according to the typical section, plus any amount pre-approved by the engineer for pavement irregularities.

**3.4.2** The contractor shall provide temporary log mile reference points at no less than ½ mile intervals along each route to monitor the tons of Surface Leveling mix laid in relation to plan quantity. Entrances, shoulders, or other irregular areas will be monitored as directed by the engineer.

**3.4.3** During production, the contractor shall document the total tons placed in each one-mile segment, along with the plan quantity and the percent over/under for that segment. The cumulative quantity and percent over/under for the route should also be documented. After each one-mile segment, the contractor shall provide a status report to the production manager and the engineer. When the engineer is not present on the project, the contractor shall send an electronic status report to the engineer.

**3.4.4** The goal is to keep the placed quantity within 2% of plan quantity for the project. The engineer will monitor the status reports and will advise the contractor on how to proceed when there is an excessive variance from plan quantity. The engineer may decrease the frequency of the electronic status reports when the variances are consistently low.

**3.4.5** The contractor shall collect asphalt tickets from the delivery trucks and group them per each one-mile segment. The contractor shall submit to the engineer a daily summary report that includes all of the information specified in Section 3.4.3. The contractor shall sign the summary report confirming that the information is accurate and that the attached tickets represent the asphalt material placed.

**3.4.6** The contractor shall be equipped with a contractor-furnished cellular device capable of providing and maintaining a reliable means of immediate communication with the engineer when the engineer is not present on the project.

**4.0 Excessive Quantity.** If the contractor places Surface Level mix on any one-mile segment, or any other isolated areas, in excess of plan quantity by 5% or more, without prior approval from the engineer, further investigation may be required to determine if the excess was warranted. If directed by the engineer, the contractor shall core the pavement at locations established by the engineer to determine the amount that was excessive, if any. No payment will be made for the cost to core the pavement or for the tons of Surface Level mix that the engineer determines to be excessive. If the amount of Surface Level mix is determined to be justified, payment will be made for the mix, and for the cost of coring at the fixed price established in Sec 109. Placement of asphalt in excess of plan quantity for two consecutive segments without prior approval from the engineer may result in issuance of an Order Record to stop work.

**5.0 Basis of Payment.** No direct payment will be made for compliance with this provision. All costs shall be considered completely covered under the pay items provided in the contract.

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H. Flagging Procedure for Two-Lane Roadways (3-2-1 Cone Procedure) NJSP-17-03A

**1.0 Description.** Flagging operations shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) Chapter 6, Section 107 and 616 in Missouri Standard Specifications for Highway Construction, Missouri Standard Plans for Highway Construction, temporary traffic control plans, and as described herein.

**2.0 Procedures for Flagging Short, Intermediate, or Long-Term Stationary Operations.** This procedure includes the use of three traffic cones or other channelizing devices.

**2.1 Step 1.** The flagger shall place three cones across the lane of traffic to be stopped, from centerline to shoulder. When no vehicles are present, the flagger should remain on the shoulder with the stop paddle visible.

**2.2 Step 2.** When traffic has stopped, the flagger shall move towards the centerline of the roadway, keeping the stop paddle visible, and keeping a visual contact with the stopped drivers. Once the flagger has confirmed that opposing traffic is clear, the flagger shall prepare to release the stopped traffic.

**2.3 Step 3a.** If the vehicles are to travel in the current lane, the flagger shall remove the center cone from the center of the lane.

**2.4 Step 3b.** If the vehicles are to travel in the opposite lane, the three cones shall remain across the closed lane.

**2.5 Step 4.** If opening the lane (Step 3a above) the flagger shall walk back to the shoulder with the cone, turn the stop paddle to slow, and then release traffic using a hand signal to direct vehicles between the two remaining cones. If releasing traffic to the other lane (Step 3b above) the flagger shall remain near the centerline of the roadway, turn the stop paddle to slow, and use a hand signal to direct the traffic around the cones into the open lane.

**2.6** Once all traffic has cleared, the flagger shall return the slow paddle to stop. The flagger shall replace the cone to the center of the lane or leave the cones across the lane. The flagger then returns to the shoulder and repeats the steps.

**2.7** If the roadway width is less than 12 feet, the number of cones may be reduced to two or one, or other channelizing devices may be used.

**3.0 Basis of Payment.** No direct payment will be made for any cost associated with this provision.

**Pictorial Representation of Steps for Flagging Procedure for Two-Lane Roadways (3-2-1 Cone Procedure)**

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STEP 1



STEP 2



STEP 3



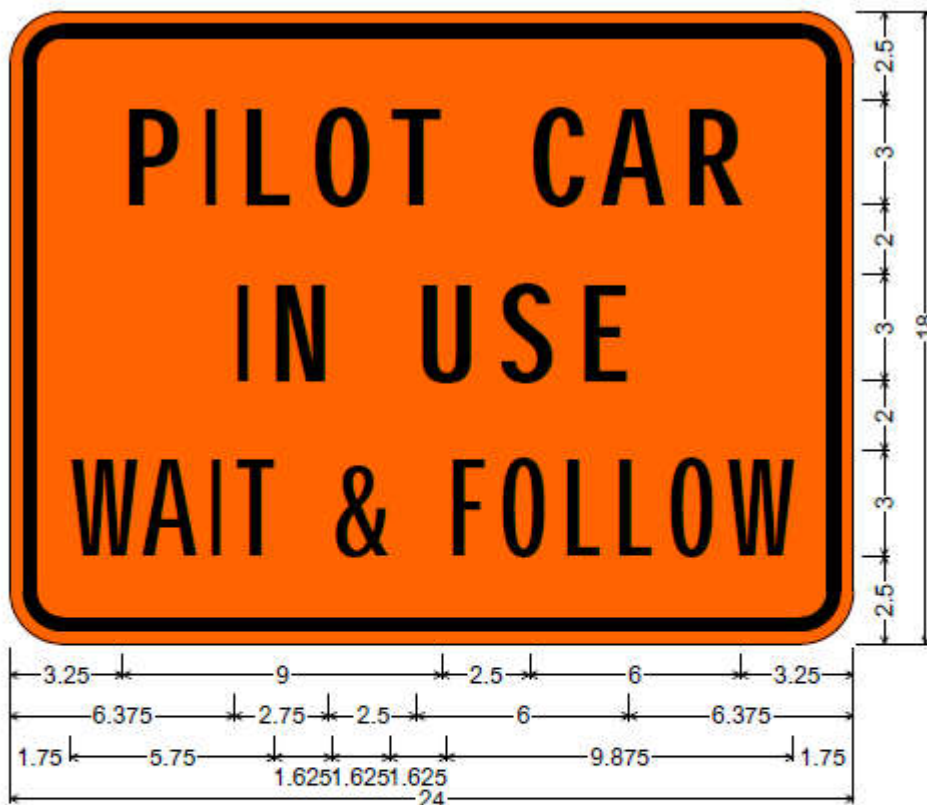
STEP 4

I. Pilot Car in Use – Wait and Follow Sign NJSP-1803

**1.0 Description.** The sign shown below shall be printed on 4 mm corrugated plastic or similar and supported with a 10"x30", 9 gauge, galvanized steel H-frame, or similar. This sign shall only be used at private and commercial entrances to enhance the work zone signing, and will not be permitted for use on intersecting state, county or city roads.

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**2.0 Method of Payment.** Signs shall be contractor furnished/contractor retained. The cost of the signs and stands are incidental to other traffic control items.



1.500" Radius, 0.375" Border, 0.375" Indent, Black on Orange;  
"PILOT CAR" C; "IN USE" C; "WAIT & FOLLOW" B 80% spacing;  
Table of letter and object lefts.

P	I	L	O	T	C	A	R
3.250	5.500	6.500	8.500	10.750	14.750	16.750	19.125
I	N	U	S	E			
6.375	7.375	11.625	13.875	16.125			
W	A	I	T	&			
1.750	3.750	5.625	6.375	9.125			
F	O	L	L	O	W		
12.375	13.875	15.750	17.250	18.750	20.375		



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J. Bridge End Transitions

**1.0** At all bridge exceptions, the engineer will determine in the field the ending point of the transition. This point will not necessarily be at the bridge end, but will be located at a point which provides the smoothest transition and approach to the bridge.

K. Pavement Marking Log

**1.0 Description.** The contractor shall log the locations of existing pavement marking prior to any construction operations that may affect the existing pavement marking. The log shall contain all existing pavement marking and shall include center stripes, no passing stripes, lane lines, turn arrows, hash bars, cross walks, and stop bars. The contractor shall provide a copy of the existing pavement marking log to the engineer. The contractor shall place the new pavement marking at the same locations as the existing pavement marking, unless otherwise directed by the engineer or shown on the plans.

**2.0 Basis of Payment.** No direct payment will be made for logging of existing pavement marking.

L. Additional Flaggers

**1.0** Additional flagger(s) and appropriate construction signs shall be provided at each of the specified locations when work zone extends through the following intersections and/or approaches:

- a) City of Edina
- b) City of Plevna
- c) City of Bethel
- d) City of Shelbyville
- e) State Route Intersections within the project limits

**2.0 Basis of Payment.** There will be no direct pay for all labor and equipment necessary to provide additional flaggers. All cost shall be considered completely covered under the pay items provided in the contract.

M. Winter Months Requirements JSP-15-07A *(if applicable)*

**1.0 Description.** This project contains work which spans the winter months.

**2.0 Work to be Completed.** When the contractor ceases operations for the winter months, any paving operation performed by the contractor shall not result in a lane height differential between adjacent lanes.

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**3.0 Maintenance of Pavement Marking.** Prior to ceasing operations for winter months, a permanent or temporary stripe shall be provided on any completed length to the point that the original stripe was obliterated or obscured by the contractors operation. Temporary striped areas shall be re-striped with the remaining route upon performance of the final striping.

**4.0 Winter Related Maintenance Activities.** The contractor shall have the project in a condition as not to interfere with the plowing of snow. The contractor shall also provide a taper at the end of his paving that will not be damaged by the plowing of snow.

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

N. Utilities (J2P3103 – RTE. 15)

**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:

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
<b>Clarence Cannon Wholesale Water Commission</b> Mark McNally 34146 Route U Stoutsville, MO 65283 Phone: (573) 672-3221 Email: <a href="mailto:ccwwc@parismo.net">ccwwc@parismo.net</a>	None	Water
<b>PWSD #1 of Knox County</b> Gary Mallett PO Box 138 Knox City, MO 63446 Phone: (660) 434-5289 Email: <a href="mailto:knoxpwsd@marktwain.net">knoxpwsd@marktwain.net</a>	None	Sanitary Sewer Water

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<b>Mark Twain Rural Telephone</b> Jason Cook PO Box 68 Hurdland, MO 63547 Phone: (660) 423-5211 Phone: (660) 651-4484 - cell Email: <a href="mailto:jcook@marktwain.coop">jcook@marktwain.coop</a>	Yes Section 2.1	Communications
<b>Lewis County Rural Electric Cooperative</b> Terry O'Brien PO Box 68 Lewistown, MO 63452 Phone: (573) 215-4000 Email: <a href="mailto:tobrien@lewiscountyrec.org">tobrien@lewiscountyrec.org</a>	None	Power
<b>Village of Bethel</b> Theresa Malcarne 120 Maple St. Bethel, MO 63434 Phone: (660) 346-0628 Email: <a href="mailto:vobclerk@marktwain.net">vobclerk@marktwain.net</a>	None	Sanitary Sewer
<b>Macon Electric Cooperative</b> Danny Miller P.O. Box 157 31571 Business Hwy 36 East Macon, MO 63552 Phone: (660) 385-3157 Phone: (660) 651-4255 - cell Email: <a href="mailto:damiller@maconelectric.com">damiller@maconelectric.com</a>	Yes Section 2.2	Power
<b>PWSD #1 of Shelby County</b> Tony Stiefel 3781 State Hwy 15 Shelbyville, MO 63469 Phone: (573) 633-2242 Email: <a href="mailto:sch2o@marktwain.net">sch2o@marktwain.net</a>	None	Water
<b>CenturyLink</b> Tim Howe 1151 CenturyLink Drive Wentzville, MO 63385 Phone: (636) 332-7261 Email: <a href="mailto:Tim.Howe@lumen.com">Tim.Howe@lumen.com</a>	None	Communications

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<b>Charter Communications</b> Danny Shires 647 Clinic Road Hannibal, MO 63401 Phone: (573) 745-0335 Email: <a href="mailto:Daniel.shires@chartercom.com">Daniel.shires@chartercom.com</a>	None	Communications
<b>City of Shelbyville</b> Randy Shores PO Box 90 106 S. Washington Shelbyville, MO 63469 Phone: (573) 633-2520 Email: <a href="mailto:shelbyville@marktwain.net">shelbyville@marktwain.net</a>	None	Sanitary Sewer Water

**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 Project Specific Provisions:**

**2.1 Mark Twain Rural Telephone** has facilities located along the sidewalk limits throughout the project in Plevna. Two existing communication pedestal risers are currently located along the south sidewalk, at approximately station 7+20, 2.8' RT and 9+02, 3.3' RT. These pedestals are planned to be relocated to the back of the new right of way. This work will be completed in coordination with the contractor's work after staking and two weeks prior to the scheduled work. The location of the relocated pedestals will be approximately station 7+20, 5.5' RT (2.66' to the south) and 9+02, 5.5' RT (2.25' to the south). Underground communication lines to be adjusted as necessary to allow the pedestal relocations. Contractors shall contact Jason Cook, with Mark Twain Rural Telephone (660) 423-5214, to ensure contractor operations will not affect their facilities.

**2.2 Macon Electric Cooperative** has facilities near the sidewalk work in Bethel. Relocation work consists of relocating the existing power pole, guy wire and guy anchor at the NW quadrant of Route 15/2nd St. in Bethel. Overhead electric lines to be adjusted as necessary. This work is required to allow for the proposed sidewalk work at this location where the existing guy wire is anticipated to conflict with the ADA Pedestrian Access Route. This work is anticipated to be completed by the contractor's notice to proceed. Contractors shall contact Danny Miller, with Macon Electric Coop (660) 651-4255, to ensure contractor operations will not affect their facilities.

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O. Utilities (J2S3363 – RTE. P)

**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:

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
<b>Ameren Missouri Electric</b> Kirk Ranson 204 W. Cottonwood St. Kirksville, MO 63501 Phone: (660) 785-2705 Email: <a href="mailto:kranson@ameren.com">kranson@ameren.com</a>	Yes Section 2.1	Power
<b>AT&amp;T Distribution</b> Kathy Smith 402 N. 3rd St. St. Charles, MO 63301 Phone: (636) 448-9571 Email: <a href="mailto:ks9340@att.com">ks9340@att.com</a>	None Section 2.2	Communications
<b>City of Edina</b> Joe Dimmitt 208 E. Monticello Edina, MO 63537 Phone: (660) 397-3251 Phone: (660) 341-3262 - cell Email: <a href="mailto:edinacty@marktwain.net">edinacty@marktwain.net</a>	Yes Section 2.3	Water Sewer
<b>Knox County PWSD 1</b> Gary Mallett PO Box 138 Knox City, MO 63446 Phone: (660) 434-5289 Phone: (660) 341-6053 - cell Email: <a href="mailto:knoxpwsd@marktwain.net">knoxpwsd@marktwain.net</a>	None	Water Sewer

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<b>Lewis County Electric Coop</b> Terry O'Brien PO Box 68 Lewistown, MO 63452 Phone: (573) 215-4000 Email: <a href="mailto:tobrien@lewiscountyrec.org">tobrien@lewiscountyrec.org</a>	None Section 2.4	Power
<b>Liberty Utilities</b> Randy Snodgrass 916 N. Green St. Kirksville, MO 63501 Phone: (660) 216-1139 Email: <a href="mailto:randall.snodgrass@libertyutilities.com">randall.snodgrass@libertyutilities.com</a>	None Section 2.5	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 Project Specific Provisions:**

**2.1 Ameren Missouri Electric** has facilities located along the project limits. There are two power poles that will require relocation to construct the new sidewalk, sidewalk Station 7+94, 4' RT and Station 11+25, 4' RT. Ameren plans to relocate the overhead primary line to the south side of Route P which will allow for the removal of the two poles that are conflicting with the project. These poles are anticipated to be removed prior to the contractor notice to proceed. Contractors shall contact Kirk Ranson, with Ameren (660) 785-2705, prior to any grading operations to ensure contractor operations will not affect their facilities.

**2.2 AT&T Distribution** has underground communication facilities located along the south/west side of Route P. AT&T also has a buried cable line crossing Route P at Dandy Place, approximate Route P station 458+42 (sidewalk station 5+15). AT&T has various service lines crossing the proposed ADA sidewalk work to private residences. Although ADA sidewalk improvement work is planned at these locations, relocation of these facilities is not anticipated. Contractors shall contact Kathy Smith, with AT&T (636) 949-1312, prior to any ADA sidewalk work to ensure contractor operations will not affect their facilities.

**2.3 City of Edina** has facilities located along the project limits. A fire hydrant on the north/east side of Route P, at approximate sidewalk station 9+33 or Route P station 462+53, 25.5' LT will be required to be relocated along with the connecting water line. The city will plan to relocate the fire hydrant to

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station 462+53, 22.5' LT, or 3' to the south (towards Route P). Additionally, a concrete vault with water meter cover will be required to be removed at approximate sidewalk station 9+65 or Route P station 462+84, 29' LT. A buried waterline connection will be made to bypass the existing vault to allow for the removal. To minimize disturbance to the adjoining property and entrance, this relocation work is to be coordinated with the contractor's work and a two-week notice provided to the city to allow for the relocation work to be completed prior to the scheduled sidewalk work. A water valve/shut off at sidewalk station 15+92 will be required to adjust to grade of the new sidewalk in coordination with the work. The existing fire hydrant at sidewalk station 14+80 will be allowed to use in place as a 4' minimum sidewalk width is achievable at this location. Contractors shall contact Joe Dimmitt, with City of Edina (660) 341-3262, prior to any grading operations to ensure contractor operations will not affect their facilities.

**2.4 Lewis County Rural Electric Cooperative (LCREC)** has underground power facilities located along the south/west side of Route P and no conflicts are anticipated. Contractors shall contact Terry O'Brien, with LCREC (573) 215-4000, to ensure contractor operations will not affect their facilities.

**2.5 Liberty Utilities** has gas main and service line facilities located parallel and crossing the ADA improvement work at various locations throughout the project. Although ADA improvement work is planned near these locations, relocation of these facilities is not anticipated. Contractors shall contact Randy Snodgrass with Liberty Utilities (660) 216-1139, prior to any removal or grading operations to ensure contractor operations will not affect their facilities.

P. Utilities (J2S3402 - RTE. BB)

**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:

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
<b>PWSD #1 of Knox County</b> Gary Mallett PO Box 138 Knox City, MO 63446 Phone: (660) 434-5289 Email: <a href="mailto:knoxpwsd@marktwain.net">knoxpwsd@marktwain.net</a>	None	Sanitary Sewer Water

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<b>Mark Twain Rural Telephone</b> Jason Cook PO Box 68 Hurdland, MO 63547 Phone: (660) 423-5211 Phone: (660) 651-4484 - cell Email: <a href="mailto:jcook@marktwain.coop">jcook@marktwain.coop</a>	None	Communications
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**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.

**Q. Contractor Quality Control NJSP-15-42**

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

**2.0 Quality Control Plan.**

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

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

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



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

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

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

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

#### **4.0 Work Planning and Scheduling.**

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

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

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

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

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

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

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

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

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

R. Seeding and Fertilization

**1.0 Seeding.** The following seed mixtures shall be applied at the rate specified in accordance with Sec. 805:

**Cool Season Mixture**

<b>Cool Season Mixture Pounds Pure Live Seed (PLS) per Acre</b>	
Tall fescue	80 lbs.
Annual ryegrass	10 lbs.
Perennial ryegrass	6 lbs.
White clover	6 lbs.
Oats	10 lbs.
<b>TOTAL</b>	<b>112 PLS lbs./acre</b>

**2.0 Fertilizing.** The following fertilizer mixture shall be applied at the rate specified in accordance with Sec. 801:

	<b>Pounds per Acre</b>			
	Nitrogen (N)	Phosphorous (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Effective Neutralizing Material
All Areas	80	80	160	0

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**3.0 Mulching.** Vegetative Mulch Overspray shall be applied in accordance with Sec. 802.

**4.0 Basis of Payment.** All labor, equipment and materials necessary for compliance with this provision shall be completely covered under the unit bid price for item 805-99.01, Seeding-cool season mixture, per lump sum.

S. ADA Compliance and Final Acceptance of Constructed Facilities JSP-10-01B

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

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

[www.modot.org/business/contractor\\_resources/forms.htm](http://www.modot.org/business/contractor_resources/forms.htm)

**2.1** The ADA Checklist is intended to be a helpful tool for the contractor to use during the construction of the pedestrian facilities and a basis for the commission's acceptance of work. Prior to work being performed, the contractor shall bring to the engineer's attention any planned work that is in conflict with the design or with the requirement shown in the checklist. Situations may arise where the checklist may not fully address all requirements needed to construct a facility to the full requirements of current ADA law. In those situations, the contractor shall propose a solution to the engineer that is compliant with current ADA law using the following hierarchy of resources: 2010 ADA Standards for Accessible Design, Draft Public Rights of Way Accessibility Guidelines (PROWAG) dated November 23, 2005, MoDOT's Engineering Policy Guidelines (EPG), or a solution approved by the U.S. Access Board.

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

**3.0 Coordination of Construction.**

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

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

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

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

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

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

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

T. Macro-Synthetic Fibers for Concrete

**1.0 Description.** This work shall consist of producing and placing macro-synthetic fiber reinforced (MSFR) concrete as shown on the plans or as directed by the engineer. The MSFR pavement shall be in accordance with [Sec 502](#), except as modified herein.

**2.0 Materials.** All materials shall be in accordance with Division 1000, Material Details, unless otherwise noted.

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**2.1 Macro-Synthetic Fiber.** The macro-synthetic fibers shall be manufactured from virgin polyolefins (polypropylene and polyethylene) and shall comply to ASTM D7508/D7508M with the following additional criteria:

Property	Minimum Criteria
Fiber Length, in., minimum	1.50 in
Aspect Ratio (length divided by equivalent diameter)	45 - 150
Relative Tensile Strength, ksi., minimum	50 ksi

**2.2 Macro-Synthetic Fiber Reinforced Concrete.** The MSFR concrete shall be a Type III Synthetic Fiber-Reinforced concrete mixture in accordance with ASTM C 1116.4.1.3.

**2.3 Submittals.** The fiber manufacturer shall submit ASTM C1609/C1609M test results from a 4000/600 psi (28-Day Compressive Strength / 28-Day Flexural Strength, respectively) mix design for MSFR concrete with a minimum equivalent flexural strength ratio ( $R^{D_{T, 150}}$ ) of 30 percent at the recommend fiber dosage rate. The  $R^{D_{T, 150}}$  results along with the fiber dosage rate shall be submitted with the mix design in accordance with Sec 501. Under no circumstances shall the fiber dosage rate be less than 3 pounds per cubic yard or greater than 20 pounds per cubic yard.

**3.0 Construction.** Fiber material shall be delivered, stored, handled, and mixed in accordance with manufacturer's guidelines. The fiber shall be added at the concrete plant at the addition rate specified in the mix design. The fiber manufacture shall be on site during the first day's production and shall specify the mixing time required to ensure adequate dispersion of the fibers and achieve a homogenous and workable mixture. All other requirements shall be in accordance with Sec 502.

**4.0 Basis of Payment.** The accepted quantity of Macro-Synthetic Fiber Reinforced Concrete will be paid for at the contract unit prices of:

608-10.10 SQYD Concrete Curb Ramp  
608-60.04 SQYD Concrete Sidewalk, 4 IN  
608-60.07 SQYD Concrete Sidewalk, 7 IN

U. Detectable Pedestrian Channelizing Barricade

**1.0 Description.** This work shall consist of utilizing Detectable Pedestrian Channelizing Barricades as shown on the plans in accordance with the Manual for Uniform Traffic Control Devices. The pedestrian barricade is similar to the Type 2 Barricade indicated in Section 6F.63.

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**2.0 Basis of Payment.** Payment for furnishing and installing the pedestrian barricades shall be completely covered by the contract unit price for Item No. 616-99.02, Detectable Pedestrian Barricade, per each.

V. Permanent Aggregate Edge Treatment NJSP-15-40A

**1.0 Description.** This work shall consist of furnishing and installing a permanent aggregate edge treatment along the edge of shoulder or pavement as shown on the plans or as directed by the engineer.

**2.0 Construction Requirements.** Aggregate shall be simultaneously deposited and spread on the sub-grade and shall not be deposited on the pavement or shoulder and bladed into place. Aggregate material shall be shaped according to the typical section and compacted until there is no visible evidence of further consolidation.

**3.0 Material Requirements.** Material used for the aggregate edge treatment shall be Type 1, 5, or 7 Aggregate in accordance with Sec 1007 or an allowable substitute approved by the engineer. Bituminous cold millings meeting the gradation for Type 1, 5 or 7 Aggregate may be used in lieu of aggregate. Limestone screenings or other material with excessive fines will not be allowed. Material will be accepted based on certification in lieu of testing contingent upon satisfactory results being obtained in the field.

**4.0 Measurement by Weight.** Measurement of the aggregate edge treatment material shall be per ton and in accordance with Sec 310.5.3.

**5.0 Basis of Payment.** The accepted quantities of aggregate edge treatment will be paid for at the contract unit price for 304-99.10, Permanent Aggregate Edge Treatment, per ton and will be full compensation for all labor, equipment and material to complete the described work.

W. Relocated Signs

**1.0 Description.** This work shall consist of removing the existing signs as shown in the plans and installing them on proposed pipe posts in accordance with Standard Plan 903.03BN.

**2.0 Basis of Payment.** Payment for removing and installing the existing signs on the proposed posts shall be completely covered by the contract unit price for Item No. 903-9902, MISC(RELOCATE SIGNS), per each.

X. Shoulder Grading

Job No.: J2P3103  
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**1.0 Description.** This work shall consist of excavating and grading the existing shoulder to facilitate placement of shoulder pavement, as well as backfilling the shoulder and shaping the fore slope following placement of the shoulder pavement.

**2.0 Construction Requirements.** The shoulder shall be excavated and graded as shown on the typical section with minimal disturbance of the existing sub-grade and fore slope. Density shall be obtained from reasonable compactive efforts consisting of no less than three passes with a roller until no further visible compaction can be achieved, or by other methods approved by the engineer.

**2.1** Following placement of the shoulder pavement, the construction of the aggregate wedge adjacent to the new shoulder will be paid for as permanent aggregate edge treatment as shown on the typical section.

**2.2** It may be necessary to go outside the limits of the right of way to obtain additional material or to dispose of excess material. All costs for providing additional material or disposing of excess material shall be included in SHOULDER GRADING.

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

**3.0 Method of Measurement.** Final measurement will not be made except where appreciable errors are found in the contract quantity.

**3.1** Where required, measurement will be made to the nearest 10 feet, separately for the length of shoulder along each side of the roadway, measured along centerline of the traveled way and totaled to the nearest 100 feet for the sum of all segments.

**4.0 Basis of Payment.** Payment for SHOULDER GRADING as described in this provision will be made at the contract unit price for pay item 212-99.09 MISC. SHOULDER GRADING.

Y. Steel Tread Plate

**1.0 Description.** This work shall consist of constructing a steel tread plate to the sections shown on the roadway plans.

**2.0 Basis of Payment.** Payment for this work, including all materials, equipment, labor and work shall be completely covered by the contract unit price for Item 608-99.03, Solid Steel Tread Plate, per linear foot or Item 608-99.03(1) Grated Steel Tread Plate, per linear foot.

Z. Curb and Gutter Type B, Special

Job No.: J2P3103  
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County: Knox  
Shelby

**1.0 Description.** This work shall consist of constructing combination curb and gutter to the sections shown on the roadway plans.

**2.0 Basis of Payment.** Payment for this work, including all materials, equipment, labor and work shall be completely covered by the contract unit price for Item 609-99.03, Curb and Gutter Type B, Special, per linear foot.

AA. Curb and Gutter Type A, Special

**1.0 Description.** This work shall consist of constructing combination curb and gutter to the sections shown on the roadway plans.

**2.0 Basis of Payment.** Payment for this work, including all materials, equipment, labor and work shall be completely covered by the contract unit price for Item 609-99.03(1), Curb and Gutter Type A, Special, per linear foot.