## JOB SPECIAL PROVISIONS TABLE OF CONTENTS

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

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"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."	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: J4I2373 PLATTE COUNTY, MO DATE PREPARED: 12/7/12
	ADDENDUM DATE:
Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: ALL	

# JOB SPECIAL PROVISION

### A. GENERAL - FEDERAL JSP-09-02

- **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.mo.gov under "Business With MoDOT". 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.mo.gov under "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 October 2009 Missouri Std. Plans For Highway Construction

These supplemental bidding documents contain all current revisions to the bound printed 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. PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS JSP-96-05

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

Randy Johnson, Project Contact Kansas City District Telephone Number 816-607-2265 e-mail randy.johnson@modot.mo,gov All questions concerning the bid document preparation can be directed to the Central Office – Design at (573) 751-2876.

## C. <u>UTILITIES</u>

**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:

Known Required Adjustment

**Utility Company** 

Kirk Thoelke LightCore, A CenturyLink Company 11111 Dorsett Road Maryland Heights, MO 63043 636-887-4752 Office

No

- 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.
- 1.2 The contractor agrees that any effects of the presence of the utilities, their relocation, contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in the work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay as provided in Section 105.7.3. The contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the contractor, it's subcontractors and suppliers in any claim or action arising out of or in relation to the work under the contract.
- **1.3** The contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The contractor shall hold and save harmless the Commission from damages to any utility facilities interruption of service by it or it's subcontractor's operation.
- **2.0** It shall be noted by the contractor that MoDOT is a member of Missouri One Call (800 Dig Rite). Some work on this project may be in the vicinity of MoDOT utility facilities, which includes but is not limited to traffic signal cables, highway lighting circuits, ITS cables, cathodic protection cables, etc. Prior to beginning work, the contractor shall request locates from Missouri One Call. The contractor shall also complete the Notice of Intent to Perform Work form located at the Missouri Department of Transportation website:

#### http://www.modot.mo.gov/asp/intentToWork.shtml

The contractor shall submit the form over the web (preferred method) or by fax to the numbers on the printed form. The notice must be submitted a minimum of 2 and a maximum of 10 working days prior to excavation just as Missouri One Call requires.

## 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 situation within the project limits.

Missouri Highway Patrol 816-622-0800		
City of	Kansas City MO	City of Riverside
Fire:	816-784-9200	Fire: 816-372-9024
Police:	816-234-5000	Police: 816-741-1191

- **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. ADVANCED NOTICE FOR CLOSURE OF BRIDGE A2281

The contractor shall notify the engineer of the contractor's intent to close bridge A2281 no less than two weeks prior to the planned closure. As part of the detour plan, signals at Rte. D will need to be adjusted by MoDOT traffic staff. Adequate notice is essential to allow for proper traffic flow at the signals. Jose Rodriguez with MoDOT traffic can be reached at (816) 387-2898.

No direct pay shall be made for activities required by this JSP.

# F. WORKZONE TRAFFIC MANAGEMENT

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

## 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, hours traffic control will be in place, and work hours.
- **2.2** The contractor shall provide written notification to the engineer 48 hours prior to lane closures, shifting traffic onto detours, or shifting traffic within roadways. The contractor shall notify the engineer 1 week prior to completely closing roadways or ramps. Weekends and holidays shall not be considered part of the advance notice period.
- **2.3** The engineer shall be immediately notified of any postponement due to weather, material or other circumstances. A new schedule shall be submitted to the engineer.
- **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** The contractor shall be responsible for maintaining the existing traffic flow through the job site during construction. If disruption of the traffic flow occurs and traffic is backed up in queues of 15 minute delays or longer, then the contractor shall review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from occurring again.

#### 3.0 Work Hour Restrictions.

**3.1** All lanes shall be scheduled to be open to traffic during the following holiday periods, from 12:00 noon on the last weekday preceding the holiday until 9:00 a.m. on the first weekday subsequent to the holiday:

Memorial Day Labor Day Independence Day (Sunday, Monday, Wednesday, Friday, Saturday)

All lanes shall be scheduled to be open to traffic for a Tuesday Independence Day from 12:00 noon on the Friday preceding the holiday until 9:00 a.m. on the Wednesday subsequent to the holiday. Work hours for Saturday and Sunday within this period are at the discretion of the engineer.

All lanes shall be scheduled to be open to traffic for a Thursday Independence Day from 12:00 noon on the Wednesday preceding the holiday until 9:00 a.m. on the Monday subsequent to the holiday. Work hours for Friday and Saturday within this period are at the discretion of the engineer.

All lanes shall be scheduled to be open to traffic during the Thanksgiving holiday period, from 12:00 noon on Wednesday preceding the holiday until 12:00 midnight on Sunday subsequent to the holiday.

No work shall be performed during special events that would significantly impact traffic flow through the project.

- **3.1.2** Special events to consider could include Kansas Speedway, Truman Sports Complex, Kemper Arena, and University of Missouri events.
- **3.2** The contractor shall not perform any construction operation on the roadway, including the hauling of material within the project limits, during restricted periods, holiday periods or other special events specified in the contract documents or as directed by the engineer.

#### 4.0 Detours and Lane Closures.

- **4.1** The contractor shall provide changeable message signs notifying motorists of future traffic disruption and possible traffic delays one week before ramp or roadway closures. The contractor shall provide changeable message signs notifying motorists of future traffic disruption and possible traffic delays 48 hrs in advance of lane closures, shifting traffic onto detours, or shifting traffic within roadways. The changeable message sign shall be installed at a location as approved or directed by the engineer.
- **4.2** At least one lane of traffic in each direction on Route 435 southbound 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. The engineer will designate periods during which the contractor will be allowed to halt traffic.
- **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.

## G. TIME FOR COMPLETION OF THE WORK JSP-90-01C

- **1.0 Description.** Completion of this contract shall be in accordance with Sec 108.7 and will be administered on both a calendar date completion basis and by calendar days completion basis.
- **1.1** 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.

Completion Date: November 15, 2013.

**1.2** In addition, calendar days for the completion of this contract have been established. The count of calendar days will start on the date the contractor starts any construction operations. All work shall be completed within the calendar days specified below. Completion of the work by calendar days shall be in accordance with the requirements of Sec 108.7.

Over All Calendar Days:	
Bridge A2281 Calendar Days:	21
Bridge A2433 Calendar Days:	50
Bridge A2434 Calendar Days:	30
Bridge A2439 Calendar Days:	58
Bridge A3431 Calendar Days:	15
Bridge A3441 and A3456 Calendar Days:	30

(Bridges may be done concurrently if it can be demonstrated to the engineer that the work will not increase traffic delays.)

**1.3** Should the contractor, or in case of default, the surety, fail to complete the work within the above specified calendar days or the completion date, whichever occurs first, a deduction of the amount shown below will be made for each day that the contract remains uncompleted in accordance with the requirements of Sec 108.8. These damages are in addition to any other damages as specified elsewhere in this contract.

Liquidated Damages Per Day Overall:	\$3,000
Liquidated Damages Per Day Bridge A2281:	\$11,450
Liquidated Damages Per Day Bridge A2433:	\$1,110
Liquidated Damages Per Day Bridge A2434:	\$1,810
Liquidated Damages Per Day Bridge A2439:	\$13,615
Liquidated Damages Per Day Bridge A3431:	\$2,100
Liquidated Damages Per Day Bridge A3441 and Bridge A3456	\$11,240

**1.4** If all Work is not complete prior to the specified overall contract completion date, the contractor will be charged with an overall liquidated damage specified in the amount of \$1,225 per day for each full day that the Work is not fully completed. This damage will be assessed independently of the liquidated damages (per bridge) as specified above.

#### H. LIQUIDATED DAMAGES FOR WINTER MONTHS JSP-04-17

- **1.0 Description.** Revise Sec 108.8.1.2 (a) and (b) and substitute the following for the project:
  - (a) Liquidated damages will be assessed from December 15 to March 15
  - (b) Liquidated damages will be assessed for Saturdays, Sundays and Holidays.

## I. CONTRAST PAVEMENT MARKINGS JSP 08-07A

- **1.0 Description.** This work shall consist of furnishing and installing black contrasting pavement marking for intermittent markings (skips), dotted lines and solid intersection lane lines on concrete surfaces. This work shall be in accordance with Sec 620 and accompanying provisions except as modified herein
- **2.0 Material.** The black contrast marking shall be compatible with the white pavement marking material specified in the plans.
- 3.0 Construction Requirements.
- **3.1** The Contrast markings shall be accomplished by placing the black pavement marking according to manufacturer's recommendations.
- **3.2** The white marking shall be centered within the black marking such that there will be a 1.5 inch border of black on both sides of the white marking. Tolerances for the width and length of the black and white markings shall be in accordance with Sec 620.2.4.2.
- **4.0 Basis of Payment.** There will be no direct payment for compliance with the requirements of this provision.

## J. WET REFLECTIVE PAVEMENT MARKINGS JSP 08-06B

- 1.0 **Description**. This work shall consist of furnishing and installing wet reflective pavement markings as shown on the plans or as directed by the engineer. The pavement markings shall consist of pavement marking paint as specified in the plans, MoDOT Type P glass beads, and wet reflective pavement marking elements. The beads and wet reflective elements shall be placed as a double drop system to provide wet night retroreflectivity. This work shall be in accordance with Sec 620 and accompanying provisions except as modified herein
- **2.0 Material.** All material shall be in accordance with Division 1000, Material Details, and specifically as follows.

Item	Section
Type P Drop-On Glass Beads	1048.40
Epoxy Pavement Marking Material	1048.60
High Build Acrylic Waterborne Pavement Marking Paint	1048.90

2.1 Wet Reflective Elements. The wet reflective elements used shall be from the following approved products list:

Manufacturer	Product	
3M Inc.	All Weather Elements	
	(Series 50 or 90)	
Potters	Visimax	
Industries,		
Inc.		
Swarco	Plus-9-Spots	

## 3.0 Construction Requirements.

- 3.1 Application of the wet reflective marking shall consist of placement of the marking paint, followed by the application of Type P glass beads and the wet reflective elements. Manufactures recommendations shall be followed in the application of the wet reflective elements including, if applicable, the matching of bead colors with paint colors.
- 3.2 The width of the line shall be as shown on the plans.
- **3.3** The marking paint shall be applied at a minimum thickness as shown in the following chart. The thickness may be increased depending on manufacturer's recommendations to properly hold the bead system.

High Build Acrylic Waterborne	20
Marking Paint	mils
Epoxy Pavement Marking	25
Material	mils

- **3.4** Type P glass beads and the wet reflective elements shall be mechanically applied to the wet paint directly behind the paint spray guns. The order of application and the application rates of the Type P beads and the wet reflective elements shall be based on the manufacturer's recommendations to provide wet night retroreflectivity.
- **3.5** The completed pavement marking system shall meet the initial retroreflectivity requirements of Sec. 620.2.4.1.
- **3.6** The contractor shall assure the engineer that the wet reflective system has been calibrated for proper application according to manufacturers recommendations before the application begins.

#### 4.0 Method of Measurement.

**4.1** Final measurement will not be made except for authorized changes during construction or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

- **4.2** Where required, measurement of 4 inch, 6 inch, 8 inch or 24 inch pavement marking will be made to nearest linear foot. Where intermittent lines are specified, deductions will be made for the gaps in pavement marking.
- **5.0 Basis of Payment.** The accepted quantity of wet reflective pavement markings will be paid at the contract unit price for each of the pay items included in the contract.

# K. ROCK FLUME

- **1.0 Description.** Work includes constructing rock flume as indicated on the Quantity sheet 1 of 2. Flume shall be installed as shown on the special sheets.
- **2.0 Method of Measurement.** Final measurement for rock shall be in accordance with Sec. 609.60. Final measurement of associated grading shall be paid for in accordance with Sec. 207.
- **3.0 Basis of Payment.** Final accepted quantity for rock shall be in accordance with Sec. 609.60. Final accepted quantity of associated grading shall be paid for in accordance with Sec. 207. No direct payment shall be made for clearing of shrubs and grass for installing the rock flume.

## L. TACK COAT

- **1.0** Polymerized Tack Coat, CRS2P shall be required for use in lieu of SS-1 or SS-1h for this project.
- 2.0 Tack coat shall be applied at a minimum rate of 0.10 Gal/SY for this project.

#### M. SIGNS PROVIDED BY MoDOT

- **1.0 Description.** Signs required for detouring US 69 during the closure of bridge A2439 are already in place from previous and future MoDOT maintenance work. These signs may be used by the contractor with approval by the engineer. The contractor shall be required to turn signs to face traffic when the detour is in use and turn signs away from traffic when the detour is no longer active. The contractor shall also be responsible to monitor, repair and/or replace as if the signs were provided in the contract and as directed by the engineer.
- **2.0 Method of Measurement** Replacing signs shall be paid for by the square foot. "MoDOT provided signs" shall be paid for as a Lump sum.
- **3.0 Basis of Payment.** Replacement signs shall be paid at the contract unit price for "Construction Signs" 616-10.05. Turning and maintaining shall be paid for at the contract unit price for "MoDOT Provided Signs" 616-99.01.

## N. SAFETY PLAN

- **1.0 Description.** This contractor shall submit to the engineer a project Safety Plan (SP) for all work performed by the contractor and all subcontractors. The purpose of the SP is to encourage and enable all work to be performed in the safest possible manner and that all parties involved are aware of their individual responsibility for safety on the jobsite.
- **1.1** The SP shall be completed by the contractor and provided to the engineer prior to the beginning of any construction activity or phase on the project.
- **1.2** The contractor shall designate a person to serve as Project Safety Manager (PSM). The PSM shall be responsible for implementing and overseeing the SP. The PSM is not required to be present on the project at all times, but must be available to address safety issues and needs.
- **1.3** The PSM shall make revisions to the SP as necessary. Any new project activities or phases shall be included in the SP prior to work beginning on that activity or phase.
- **1.4** An example Safety Plan is available at: www.modot.org/safetyplan
- **2.0 Emergency Preparedness.** The SP shall outline and detail for all workers, the specific procedures and actions necessary to respond to a jobsite emergency and the measures taken to communicate these requirements to all workers.
- **2.1** The SP shall include a list of local emergency contacts including phone numbers. A copy of the emergency contact list shall be accessible to workers.
- **2.2** In the case where there is no cellular or land line phone service at the jobsite, the SP shall identify how to reach the nearest available phone service.
- **3.0 Project Safety Analysis.** The SP should contain a basic Project Safety Analysis (PSA) that outlines the actions necessary to complete each activity or phase of the project. The SP shall include a general description of the primary activities or steps required to safely complete the project.
- **3.1** Each activity should also include a general description of the work involved along with the known risks associated with the activity. In addition the PSA should outline the controls for those risks, including any Personal Protection Equipment (PPE) requirements for that activity or phase, and whether or not the activity or phase requires a specific safety meeting prior to beginning the activity or phase.
- **3.2** Submittal of the PSA for all activities or phases is not required with the initial submittal of the SP; however, the PSA for each activity or phase shall be completed prior to the beginning of that activity or phase.
- **4.0 Safety Meetings.** The SP shall include the types of safety meetings that will be required of and conducted by the contractor.

- **5.0 Safety Training.** The SP shall identify the required safety training provided to the contractor's personnel. The contractor shall require that the appropriate safety training for the contractor's personnel is completed prior to the beginning of work on each activity or phase.
- **5.1** The SP shall identify the recommended safety training needs and PPE for MoDOT employees who will be exposed to the work activities. MoDOT will provide safety training and PPE to MoDOT employees based on MoDOT safety policies.
- **6.0 Payment.** There will be no direct payment for compliance with this Safety Plan provision.

## O. QUALITY MANAGEMENT

- **1.0 Quality Management.** The contractor shall provide Quality Management to ensure the project work and materials meets or exceeds all contract requirements as specified herein.
- **1.1** The contractor shall provide all Quality Control (QC) of the work and material. QC staff shall hold the primary responsibility for ensuring all work and material is in compliance with contract requirements. QC staff shall perform and document all inspection and testing. The QC inspectors may be contractor employees or the contractor may utilize a third party.
- **1.2** The engineer will provide Quality Assurance (QA) inspection. The role of QA is to verify the performance of the QC.
- **1.3** The contractor shall designate a person to serve as the project Quality Manager (QM). At a minimum the QM shall be responsible for the implementation of the Quality Management Plan and shall oversee all QC activities. The QM shall be the point of contact for all quality related issues and needs.
- **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 of acceptance of the work and material. The QMP shall address all QC inspection and test requirements of the on-site construction work. Revisions to the QMP will require approval from the engineer.
- **2.1** Physical work on the project shall not begin prior to the contractor obtaining approval from the engineer for the QMP. The approved QMP shall be considered a contract document.
- 2.2 The contractor shall establish a Document Control Procedure. This procedure will describe the project file structure for all documents required in the QMP, including a file naming system and folder structure. The document storage shall be an electronic format that allows quick access to all documents. A secure web based document sharing application such as SharePoint, or an approved project management software, may be used as a storage and retrieval system for the project files. The contractor shall provide the engineer with access to project records at all times.
- 2.3 The following items shall be included in the Quality Management Plan:
  - a) General organizational structure of the contractor's production and QC staff.

- b) Name, qualifications and job duties of the Quality Manager and all QC inspectors.
- c) A procedure describing QC Inspections as outlined in Section 3.0.
- d) A procedure describing QC Testing as outlined in Section 4.0.
- e) A procedure describing Material Receiving as outlined in Section 5.0.
- f) A Document Control Procedure as described in Section 2.2.
- g) A procedure for Non-Conforming and Deficient work, and Corrective Action Requests, as described in Section 8.0.
- h) A list of work items that will be sub-contracted and the QC personnel who will be responsible for inspection and testing of the sub-contracted work.
- i) A list of QA Hold Points and a procedure for addressing any issues found during the QA Hold Point inspections.
- j) A list of QC Hold Points and a procedure for addressing any issues found during the QC Hold Point inspections.
- k) A procedure for making revisions to the QMP.
- References to specific applicable QC Plans such as asphaltic concrete pavement or Portland cement concrete pavement.
- m) A proposed independent third party company name, address and phone number for dispute resolution as described in Section 4.3.
- n) Any approved changes to the standard forms provided by MoDOT.
- o) Format for the Weekly Schedule and Work Plans as described in Section 9.0.
- p) A procedure for project closeout, including a Quality Documentation Audit that verifies all project documentation is accurate and complete.
- **3.0 Quality Control Inspections.** The QMP shall identify a procedure for performing QC inspections. QC inspections shall be performed for all on-site work per the project Inspection & Test Plan (ITP). The engineer will provide a standard ITP that may be modified to a project-specific ITP, as approved by the engineer.
- **3.1** Standard inspection checklists and reports will be provided by the engineer. The contractor may use alternate versions as approved by the engineer. Each day the contractor shall completely fill out an inspection checklist and any required test reports for each element of work. Completed inspection checklists and associated test reports shall be submitted electronically to the engineer within 12 hours of completion of a shift.

- **3.2** QC inspection and testing for sub-contract work may be performed by certified staff from the contractor, sub-contractor, or a third party.
- **3.3** External fabrication of materials does not require further QC inspection if the product is currently under MoDOT inspection or an approved QC/QA program.
- **3.4** All Surveying and Staking shall be completed by the contractor in accordance with Sec 627 except as specified herein. Payment for surveying and staking will only be made when a pay item is provided in the contract. If no pay item is provided, all costs associated with surveying and staking shall be considered included in the cost of other bid items.
- **4.0 Quality Control Testing.** The QMP shall identify a procedure for QC testing. The procedure shall ensure that testing is performed at the frequencies shown in the Inspection and Test Plan. Results shall be recorded on the standard test reports provided by the engineer, or in a format approved by the engineer. Any test data required in the standard test reports shall be immediately provided to the engineer upon request at any time, including prior to the submission of the test report.
- **4.1** 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.
- **4.2** 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.
- **4.3** An independent third party shall be used to resolve any significant disputes over discrepancies between QC and QA test results. All testing shall be performed by an approved laboratory that is AASHTO Accreditation Program certified in the area of the test, if applicable. The contractor shall be responsible for the cost 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.
- **5.0 Material Receiving.** The QMP shall identify a procedure for performing material receiving. Standard material receiving forms will be provided by the engineer. 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.).
- **5.1** All required material documentation must be present at the time of delivery. If the contractor is unable to determine whether the material is accepted, the engineer shall be notified prior to incorporation of the material into the work. Material receiving reports shall be submitted to the engineer electronically no later than the morning following the delivery.
- **6.0 Quality Assurance.** The engineer will perform Quality Assurance inspections (QA) for contract compliance on the contractor's performance and QC process. The frequency of the QA Inspections 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 inspections in the SiteManager system.

- **6.1** The QM will be notified of any nonconforming work identified by QA.
- **6.2** QA inspection and test results may not be used as a substitute for QC inspection and testing.
- **6.3** QA staff 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.
- **7.0 Hold Points.** Hold Points are events that require approval prior to continuation of work. Hold Points occur at definable stages of work or progress phases when the succeeding work depends on acceptance of the preceding work. QC staff shall provide completed Daily Inspection Reports, Inspection Checklists, and Material Test Reports to QA staff prior to all QA Hold Points.
- **7.1** QC Hold points are established by the QM for compliance verification prior to QA Hold Points. QC Hold points typically occur at more frequent stages than the QA Hold Points. At a minimum, a QC Hold Point inspection shall occur just prior to each QA Hold Point inspection.
- **7.2** A list of minimum QA Hold Points will be provided by the engineer. The engineer may make changes to the QA Hold Point list at any time. Following a QA Hold Point inspection, all issues identified by the engineer shall be corrected prior to continuing work and a new hold point shall be scheduled.
- **8.0 Non-Conforming and Deficient Work.** Non-conforming work is defined as completed work that does not meet the contract requirements. Deficient work is defined as in-progress work that does not meet the contract requirements. The contractor shall establish a procedure for the identification, tracking, resolution, and time requirements for addressing non-conforming and deficient work. The engineer shall approve the resolution of all non-conforming work. Either the engineer or the contractor may identify non-conforming or deficient work.
- **8.1** Corrective Action Requests are issued by QA or QC for recurring non-conforming or deficient work. The contractor shall establish a procedure for tracking the corrective action from issuance of the request to implementation of the solution. The engineer shall approve the corrective action. The contractor shall notify the engineer after the approved corrective action has been implemented.
- **9.0** Work Planning and Scheduling. The contractor shall include Quality Management in all aspects of the work planning. Aspects of the Work Plan should include a safety plan, size of crew, equipment, material, work sequence, quality control, and hold points for inspection.
- **9.1** A Weekly Schedule shall be provided to the engineer each week. This schedule shall include all planned work activities and hold points for the following two-week period. Other routine items that should be included in this schedule are: planned quantity of materials, identification of new activities, planned delivery dates, traffic control events, and any other pertinent information.
- **9.2** A Work Plan and pre-activity meeting is required prior to the start of each new activity. The purpose of this meeting is to plan for all aspects of the new activity and incorporate quality control into the

process. A Work Plan shall be submitted to the engineer for review prior to the pre-activity meeting. The QM will develop a QC inspection checklist for the new activity and include it in the Work Plan. QC, QA, and production staff should all be present at all pre-activity meetings.

- **10.0 Standard Forms, Checklists, and Reports.** Documents referenced in this provision such as the standard Inspection and Test Plan, Inspection Checklists, inspection/test reports, and minimum QA Hold Points can be obtained online at the following link: <a href="http://www.modot.org/quality">http://www.modot.org/quality</a>.
- **11.0** Basis of Payment. Payment for any costs associated with developing, implementing and maintaining the QMP, providing Quality Control inspection and testing, and all 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.

## P. GROOVING FOR PAVEMENT MARKING JSP-12-11

**1.0 Description.** This work shall consist of furnishing and installing a groove in the pavement for placement of pavement markings as shown on the plans or as directed by the engineer.

## 2.0 Construction Requirements.

- **2.1** The grooves shall be cut such that the surface of the groove is uniform with minimal variation in height.
- **2.2.** The grooves shall be located where the final pavement marking will be placed according to the plans or as directed by the engineer.
- **2.3** The width of the grove shall be 7 inches.
- **2.4** The final depth of the groove shall be 80 mils, plus or minus 5 mils.
- **2.5** The groove shall be clean and dry before the installation of the pavement marking can begin.
- **2.6** All debris resulting from the installation of the grooves shall be removed and disposed of by the contractor.
- **3.0 Method of Measurement.** Final measurement will not be made except for an authorized change during construction or where appreciable errors are found in the contract quantity. Where required, grooves will be measured separately and made to the nearest linear foot. The revision or correction will computed and added to or deducted from the contract quantity.
- **4.0 Basis of Payment.** The accepted quantity of grooves will be paid for at the contract unit price per each of the pay items included in the contract. Payment will be considered full compensation for all labor, equipment, and material necessary to complete the described work, including loading, hauling, stockpiling and disposal of material; and any other incidental items.

# Q. <u>SUPPLEMENTAL REVISIONS JSP-09-01J</u>

Insert Sec 109.15, Sec 109.16 and Sec 109.17, subsequent section renumbered accordingly:

**109.15 Seal Coat Price Index.** Adjustments will be made to the payments due the contractor for Seal Coat placed in accordance with Section 409 of the Standard Specifications when the quantity exceeds 50,000 square yards for an individual project or any number of projects in the contract combination. Adjustments will be calculated in accordance with Asphalt Cement Price Index of the General Provisions, except as defined herein.

**109.15.1 Basis of Payment.** To determine the adjustment for any material specified in this provision the following formula will be used.

A = B X (2.01/2000) X (D - E)

Where: A = adjustment for Seal Coat placed during the index period

B = square yards of seal coat placed during the index period

D = average index price at the beginning of the period

E = average index price at the time of bid

**109.15.2 Optional.** This provision is optional. If the bidder wishes to be bound by this provision, the bidder shall execute the acceptance form in the Bid for the Asphalt Cement Price Index. Acceptance of this provision will apply to both the Asphalt Cement Price Index and Seal Coat Price Index. Failure by the bidder to execute the acceptance form will be interpreted to mean election to not participate in the Asphalt Cement Price Index or Seal Coat Price Index.

**109.16 Asphalt Underseal Price Index.** Adjustments will be made to the payments due the contractor for Asphalt underseal placed in accordance with Section 625 of the Standard Specifications when the quantity exceeds 10,000 gallons for an individual project or any number of projects in the contract combination. Adjustments will be calculated in accordance with Asphalt Cement Price Index of the General Provisions, except as defined herein.

**109.16.1 Basis of Payment.** To determine the adjustment for any material specified in this provision the following formula will be used.

A = B X (8.66/2000) X (D - E)

Where: A = adjustment for asphalt underseal placed during the index period

B = gallons of asphalt underseal placed during the index period

D = average index price at the beginning of the period

E = average index price at the time of bid

(use average specific gravity of 1.04 for underseal)

**109.16.2 Optional.** This provision is optional. If the bidder wishes to be bound by this provision, the bidder shall execute the acceptance form in the Bid for the Seal Coat Price Index. Failure by the bidder to execute the acceptance form will be interpreted to mean election to not participate in the Seal Coat Price Index.

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**109.17 Polymer Modified Emulsion Membrane Price Index.** Adjustments will be made to the payments due the contractor for Polymer Modified Emulsion Membrane placed in accordance with Sec 413.30 when the quantity exceeds 5,000 square yards. Adjustment will be calculated in accordance with the Supplemental Asphalt Price Adjustment except as defined herin.

**109.17.1 Basis of Payment.** To determine the adjustment for any material specified in this provision the following formula will be used.

A=B X (1.20/2000) x (D - E)

Where: A = adjustment for membrane placed during the index period

B = square yards of membrane placed during the index period

D = average index price at the beginning of the period

E = average index price at time of bid

**109.17.2 Optional.** This provision is optional. If the bidder wishes to be bound by the provision, the bidder shall execute the acceptance form in the Bid for Polymer Modified Emulsion Membrane Price Index. Failure by the bidder to execute the acceptance form will be interpreted to mean election not to participate in the Polymer Modified Emulsion Membrane Price Index.