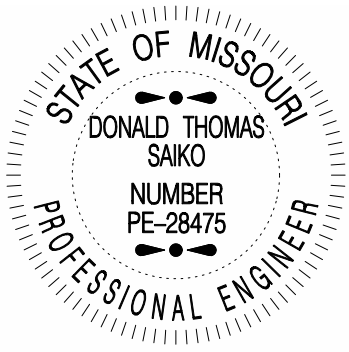
Job No. J8I2167
Route: I-44
Laclede County

JOB SPECIAL PROVISIONS TABLE OF CONTENTS (ROADWAY)

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

ADDITIONAL INFORMATION

Asbestos Survey Reports
Nationwide Permit No. 14



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

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

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

JOB NUMBER: J8I2167
LACLEDE COUNTY, MO
DATE PREPARED: 09-09-10

ADDENDUM DATE:

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

Job No. J8I2167
Route: I-44
Laclede County

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. WORK ZONE TRAFFIC MANAGEMENT PLAN

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.

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 notify the engineer 48 hours prior to lane closures or shifting traffic onto detours.

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.

2.5.1 Traffic Delay. 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.

2.5.2 Traffic Safety.

2.5.2.1 Where traffic queues routinely extend to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet (150 m) of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the contractor shall extend the advance warning area, as approved by the engineer.

2.5.2.2 When a traffic queue extends to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet (150 m) of the ROAD WORK AHEAD, or similar, sign on an undivided highway due to non-recurring congestion, 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 (300 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on divided highways and no less than 500 feet (150 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on undivided highways.

3.0 Work Hour Restrictions.

3.1 There are five major holiday periods: Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day proceding the holiday until 9:00 a.m. on the first working day subsequent to the holiday.

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

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 traffic is shifted to a detour or prior to lane closures. 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 I-44 shall be maintained at all times except for brief intervals of time required when the movement of the contractor's equipment will seriously hinder the safe movement of traffic. Periods during which the contractor will be allowed to halt traffic will be designated by the engineer.

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

C. PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS

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

Don Saiko, Project Contact
District 8, Project Development
3025 East Kearney
P.O. Box 868
Springfield, MO 65801
Telephone Number 417-895-7692
E-mail: Donald.Saiko@modot.mo.gov

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

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 417-895-6868, Emergency 1-800-525-5555, Cellular *55		
Laclede County Sheriff	MoDOT Customer Service	MoDOT Incident Response
417-532-2311	417-895-7600	417-766-3265

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. UTILITIES

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

Utility Name	**Known Required Adjustment**
Mr. Kirk Thoelke LightCore a CenturyLink Company 1151 CenturyTel Drive, Bldg A Wentzville, MO 63385 636-887-4752 email: kirk.thoelke@lightcore.net	(See 1.1)
Mr. Terry Rosenthal Laclede Electric Cooperative P.O. Box M 1400 E. Route 66 Lebanon, MO 65536 417-532-3164 email: trosenthal@lacledelectric.com	None
Mr. Taryn Keating CenturyLink (formerly Embarq) P.O. Box 1099 1008 Elm Street Rolla, MO 65402-1099 573-341-0452 email: taryn.keating@centurylink.com	None
Mr. Mike Wilson Laclede County PWSD #3 23006 Paradise Drive Lebanon, MO 65536 417-532-4525	None

1.1 LightCore has a fiber optic cable along the median of IS-44 through the limits of the project. The only exceptions are where the fiber optic cable is routed under the Gasconade River Bridge at the spill fills and where the fiber is bored under the pavement at the overflow channel of the Gasconade River. The contractor is responsible for locating this facility prior to beginning any construction activities. If the fiber optic cable must be relocated and /or moved in order to accommodate the proposed roadway improvements, the contractor shall be solely responsible for any and all costs associated with the cable and pull box relocation. The contractor shall also be responsible for all coordination necessary to move this facility. Any costs associated with the relocation of the fiber optic cable shall be completely covered in the unit bid prices for other items. There will be no direct pay for compliance of this job special provision.

1.2 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.

1.3 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.

1.4 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.

F. CONTRACTOR RETAINED GUARDRAIL

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

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

G. RELOCATE TYPE A CRASHWORTHY END TERMINAL

1.0 Description. This work shall consist of removing and relocating crashworthy end terminals as shown on the plans or as approved by the engineer.

2.0 Construction Requirements. End terminals shall be removed from their existing location, including post, and reinstalled in accordance with the manufacturer's approved shop drawings, recommendations and as shown on the plans. Any units damaged during the term of the contract shall be replaced immediately at the contractor's expense.

2.1 Relocated crashworthy end terminals shall be furnished with a modified Type 3 object marker. The marker size, shape, method of attachment and placement shall be approved by the engineer prior to installation.

3.0 Method of Measurement. Measurement for relocated crashworthy end terminals will be made for each unit removed, installed and complete in place.

4.0 Basis of Payment. The accepted quantities for relocating crashworthy end terminals will be paid for at the contract unit price, 606-99.02 Relocate Type A Crashworthy End Terminal. Payment will be considered full compensation for removal and relocated installation of the existing crashworthy end terminal.

H. SEEDING, FERTILIZING, AND MULCHING

1.0 Construction Requirements. In accordance with Sections 801 and 805, the following shall be applied at the rate specified. Vegetative mulch will be stabilized with recycled paper overspray in accordance with Section 802.

Seeding Mixture:	Pounds Pure Live Seed/Acre
Tall Fescue	80
Annual Ryegrass	10
White Clover	5
Perennial Rye	5
Oats	10

Fertilizer:	Pounds/Acre
Nitrogen (N)	80
Phosphoric Acid (P205)	80
Soluble Potash (K20)	60
Effective Neutralizing Material	1000

Soil Neutralizer:	Pounds/Acre
Lime	1000

2.0 Basis of Payment. Accepted seeding, fertilizing and mulching will be paid for at the unit price bid for Cool Season Mixtures (Seeding). Payment for fertilizer and mulch will be considered incidental to seeding.

I. DAMAGE TO EXISTING PAVEMENT

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

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

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

4.0 Basis of payment. No payment will be made for repairs to existing pavement or shoulders damaged by contractor operations.

J. THREE-STRAND GUARD CABLE

1.0 Description. This work shall consist of furnishing and installing three-strand guard cable that is removed for the construction of the median crossovers, including all hardware and appurtenances as shown on the plans or as directed by the engineer.

2.0 Construction Requirements.

2.1 Line Posts. All posts shall be driven unless otherwise directed by the engineer. Driving shall be accomplished with approved equipment and methods that will leave the posts in the final position, free from any distortion, burring or other damage. All posts shall be aligned to a tolerance of 1/4 inch (6 mm) for plumb and grade line. If rock is encountered when setting line posts, the contractor may set line posts with or without a soil plate. Line posts set with a soil plate shall be installed by digging or boring a hole into the rock to the required depth and of sufficient size for the post to be set with the soil plate attached. Line posts set without the soil plate shall be installed by drilling a hole to the required depth not to exceed 5 inches (125 mm) in diameter. Following placement of the post, the hole shall be backfilled with a cohesive soil or sand in accordance with Sec 1005.3 and thoroughly tamped.

2.2 Anchor Assemblies. The specified type of anchor assembly shall be constructed at each end of a run of guard cable. If intermediate end anchors are required, the cable assembly shall be overlapped as shown on the plans. The location of all intermediate anchor assemblies shall be determined by the contractor and approved by the engineer. The concrete anchor shall be cast in place with the centerline normal to the line of the guard cable. The top 12 inches (300 mm) of the anchor below finished ground line shall be formed, unless the engineer determines soil conditions permit excavation to be made to the neat lines of the anchor and the anchor cast against the undisturbed vertical soil face. Anchors shall be constructed on firm, stable, undisturbed soil to the minimum dimensions shown on the plans. Anchor bolts and anchor post slip bases shall be firmly held in the proper position supported at the top by a template during concrete placement. Backfill shall be thoroughly compacted with mechanical tampers with care taken to prevent damage to the finished concrete. Backfill shall be brought up level with the finished grade line. The anchor may be cast in place or precast as either one or two units.

2.3 Cables. The contractor shall reuse the existing cables that were removed for the construction of the median crossovers. Cables shall be attached to the line posts, anchor posts, cable transition brackets and anchor brackets as shown on the plans. Where compensating devices or turnbuckles are required, the cables shall be attached to the end anchor with turnbuckles fully opened. Compensating devices and turnbuckles shall be installed such that no interference with the functions of any other part of the system occurs. Individual cables may be spliced with a device approved by the engineer. Each cable shall be stretched taught by mechanical means to eliminate sag between the posts. The contractor may tighten cable hook bolts after final cable tensioning is complete to allow cable slack to be adequately taken up. Prior to final acceptance, the cables shall be tensioned in accordance with the temperature and spring compression table shown on the plans and all cable hook bolts tightened.

2.4 Aggregate Bedding. Material for aggregate bedding shall consist of a durable crushed stone, shot rock or broken concrete with approximately 20 percent of the pieces being between 1 inch and 3 inches in diameter but none greater than 3 inches. The remainder of the material shall be such that provides a uniform, angular appearance. Acceptance by the engineer will be made by visual inspection.

2.5 Delineators. Delineator spacing and reflector colors shall be in accordance with Sec 606.10.

3.0 Method of Measurement.

3.1 Three-Strand Guardrail. Measurement of three-strand guard cable will be made from center of line post to center of line post, totaled to the nearest linear foot (0.5 meter).

3.2 Anchor Assemblies. Measurement of anchor assemblies will be made per each.

3.3 Aggregate Bedding. Aggregate bedding material will not be measured.

4.0 Basis of Payment. The accepted quantities of three-strand guard cable, end anchors, posts, hardware will be paid for at the contract unit price for each of the pay items included in the contract. No direct payment will be made for setting posts in rock. No direct payment will be made for aggregate bedding. No direct payment will be made for guard cable delineators provided on new guard cable posts. Removal and storage of existing guard cable for the construction of the median crossovers will be paid for at the contract unit price for “Removal of Improvements”.

K. GROOVING FOR PAVEMENT MARKING

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 On bituminous pavements the width of the groove shall be 7 inches. On PCCP pavements the width of the groove shall be 10 inches.

2.4 The final depth of the groove on bituminous pavements shall be 50 mils, plus or minus 5 mils. The final depth of the grove on PCCP pavement 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 authorized changes during construction or where appreciable errors are found in the contract quantity. Where required, grooves will be measured separately and made to the nearest 1/10 station. The revision or correction will be 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.

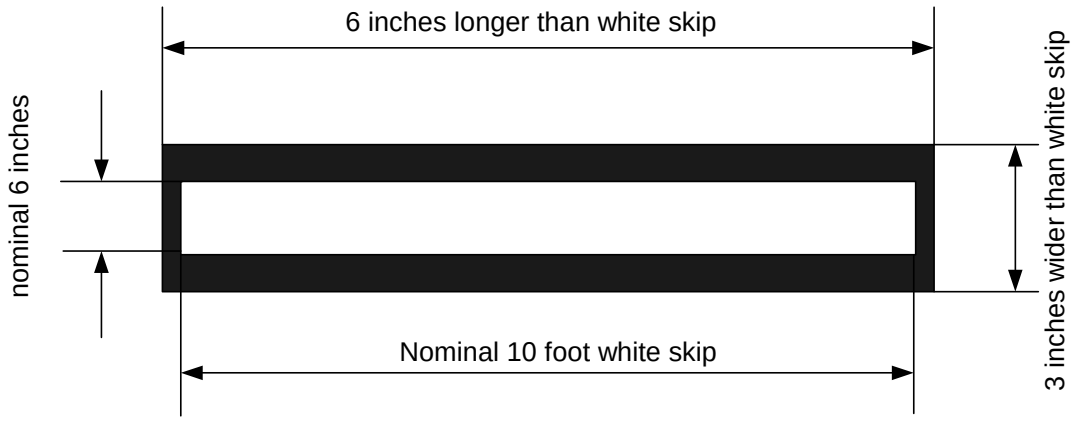
L. CONTRAST PAVEMENT MARKINGS HIGH BUILD

1.0 Description. This work shall consist of furnishing and installing a black waterborne acrylic contrasting pavement marking as a foundation for intermittent markings (skips) and solid 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 consist of an acrylic waterborne paint that is compatible with the high build paint used in the wet reflective pavement marking system or acrylic waterborne pavement marking paint depending on the type of marking used for the intermittent markings.

3.0 Construction Requirements.

3.1 The Contrast markings shall be accomplished by placing the black pavement marking on the pavement with the application of the white pavement marking on top of the black marking after the black marking has cured according to manufacturer's recommendations. The black contrast marking and the white skips shall be placed according to the following diagram:



3.2 The white skip shall be centered on the black skip such that there will be a 1.5 inch border of black on either side of the white skip. The white skip shall be located within the black paint area with black on both the leading and trailing edges. Tolerances for the width and length of the black and white skips shall be in accordance with Sec 620.2.4.2.

3.3 As an alternate to the above, contrast marking shall be accomplished by placing the black pavement marking at the same time as the white pavement marking. If this alternate is used, the white skip shall be centered on the black skip such that there will be a 1.5 inch border of black on either side of the white skip. No black is required on either the leading or trailing edges. Tolerances for the width and length of the black and white markings shall be in accordance with Sec 620.2.4.2.

3.4 For solid lane line pavement markings, the contrast shall be placed as described above.

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 contrast pavement marking will be made to nearest linear foot.

5.0 Basis of Payment. The accepted quantity of black contrast pavement marking will be paid for at the contract unit price for the pay item as included in the contract. The white intermittent or white solid markings will be paid for separately.

M. HIGH BUILD WET REFLECTIVE PAVEMENT MARKINGS

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 a high build acrylic waterborne pavement marking paint, MoDOT Type P glass beads, and wet reflective pavement marking beads. The beads 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
High Build Acrylic Waterborne Pavement Marking Paint	1048.90

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

Manufacturer	**Product**
3M Inc.	All Weather Elements
Potters Industries, Inc.	Visimax
Swarco	Plus-9-Spots

3.0 Construction Requirements.

3.1 Application of the wet reflective marking shall consist of placement of the waterborne paint, followed by the application of Type P glass beads and the wet reflective beads. The color of the wet reflective beads shall match the color of the line being applied.

3.2 The width of the line shall be as shown on the plans.

3.3 The waterborne paint shall be applied at a minimum thickness of 15 mils. The thickness may be increased depending on manufacturer's recommendations to properly hold the bead system.

3.4 Type P glass beads and the wet reflective beads 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 beads 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 450 mcd/m^2/lux.

3.6 The manufacturer of the wet reflective bead shall have a factory representative on site before the contractor begins striping operations. The factory representative shall assure the engineer that the wet reflective system has been calibrated for proper application before the contractor begins. The factory representative shall remain available to periodically assure the engineer the system is being applied according to manufacturers recommendations.

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.

N. REMOVAL OF BRIDGE DEBRIS

1.0 Description. The contractor shall prevent any debris and materials from falling into the creek, stream, lake, or wetland below the bridge.

1.1 The contractor shall make provisions to prevent debris and materials from falling below the bridge. If any debris or material from contractor operations falls into the river it shall be removed as directed by the engineer at the contractor's expense.

1.2 All material removed from the existing structure shall be disposed of by the contractor in accordance with Sec 202.

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

2.0 Basis of Payment. No direct payment will be made for any expense incurred by the contractor by reason of compliance with the specific requirements of this provision, including any delay, inconvenience, or extra work except for those items for which payment is included in the contract.

O. SUPPLEMENTAL REVISIONS JSP-09-01F

Insert 109.15, subsequent section renumbered accordingly:

MEASUREMENT AND PAYMENT

109.15 Asphalt Cement Price Index. Adjustments will be made to the payments due the Contractor for any plant mix bituminous base, plant mix bituminous pavement, plant mix bituminous surface leveling, asphaltic concrete pavement and ultrathin bonded asphalt wearing surface that contains performance graded (PG) asphalt binder when it has been determined that the monthly average price for the midpoint of the published prices of PG64-22 for St. Louis, Missouri area and Kansas City area has fluctuated from the monthly average price of the month the project was bid. The St. Louis, Missouri area and Kansas City area prices will be obtained from the Asphalt Weekly Monitor® published by Poten & Partners Inc. The monthly base price will be the price from the last published Asphalt Weekly Monitor® prior to MoDOT's monthly bid

opening. The monthly base price, established prior to the monthly bid opening, shall apply to payment estimates for the following month.

109.15.1 The adjusted contract unit price will be applied to the actual amount of PG asphalt binder used by the Contractor for all asphalt items. The adjustment will be applied to projects that have a quantity of asphalt wet ton mix pay items or converted square yard quantity over 1000 tons. For projects that are paid for with square yard pay items, the adjustments will be made for applicable tons calculated based upon the plan square yard quantity and thickness converted to tons excluding the 1:1 wedge. The percentage of virgin PG asphalt binder as shown in the job mix formula, in accordance with Sec 401, Sec 403 and Sec 413, will be the basis for adjustments for any asphalt mix type placed on the project during the monthly index period. The effective asphalt binder obtained from the use of Recycled Asphalt Pavement (RAP) and/or Recycled Asphalt Shingles (RAS) will not be eligible for adjustment. The base price index for PG64-22 will be applied to the asphalt mix for mixes using any PG asphalt binder.

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

A = (B x C) x (D-E)

Where: A = Adjustment for mix placed during monthly average index period
B = Tons of Mix Placed during the monthly average index period
C = % of virgin PG asphalt binder as listed in the job mix formula in use
D = monthly average price at time mix placement
E = monthly average price at time of bid

109.15.3. The engineer will make adjustment payments, as defined above, for the applicable work completed during each month except for projects on which the contractor is being charged liquidated damages, due to working beyond the project completion date, in accordance with Sec 108. In this case, the "D" value used for the price adjustment will be either the last "D" value prior to the date that liquidated damage assessment began or the current monthly "D" value, whichever is lower. If the contractor is being charged liquidated damages due to the contract being beyond the project completion date and the current months “D” value results in a deduction, then the current monthly "D" value will be used.

109.15.4. 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. Failure by the bidder to execute the acceptance form will be interpreted to mean election to not participate in the Asphalt Cement Price Index. If the Asphalt Cement Price Index is accepted, PG asphalt binder for the project will not be eligible for a material allowance as described in Sec 109.

Delete 403.2.6, 403.2.6.1 and 403.2.6.2 and replace accordingly:

403.2.6 Reclaimed Asphalt. A maximum of 30 percent virgin effective binder replacement may be used in mixtures without changing the grade of binder. The asphalt binder content of recycled asphalt materials shall be determined in accordance with AASHTO T 164, ASTM D 2172 or other approved method of solvent extraction. A correction factor for use during production may be determined for binder ignition by burning a sample in accordance with AASHTO T 308 and subtracting from the binder content determined by extraction. The

aggregate specific gravity shall be determined by performing AASHTO T 209 in accordance with Sec 403.19.3.1.2 and calculating the G_{se} to use in lieu of G_{sb} as follows:

$$G_{se} = \frac{100 - P_b}{\frac{100}{G_{mm}} - \frac{P_b}{G_b}}$$

403.2.6.1 Reclaimed Asphalt Pavement. Reclaimed Asphalt Pavement (RAP) may be used in any mixture, except SMA mixtures. Mixtures may be used with more than 30 percent virgin effective binder replacement provided testing according to AASHTO M 323 is included with the job mix formula that ensures the combined binder meets the grade specified in the contract. All RAP material, except as noted below, shall be tested in accordance with AASHTO TP 58, *Method of Resistance of Coarse Aggregate Degradation by Abrasion in the Micro-Deval Apparatus.* Aggregate shall have the asphalt coating removed either by extraction or binder ignition during production. The material shall be tested in the Micro-Deval apparatus at a frequency of once per 1500 tons (Mg). The percent loss shall not exceed the Micro-Deval loss of the combined virgin material by more than five percent. Micro-Deval testing will be waived for RAP material obtained from MoDOT roadways. All RAP material shall be in accordance with Sec 1002 for deleterious and other foreign material.

403.2.6.2 Reclaimed Asphalt Shingles. Reclaimed Asphalt Shingles (RAS) may be used in any mixture specified to use PG 64-22 in accordance with AASHTO PP 53 except as follows: When the ratio of virgin effective binder to total binder in the mixture is between 60 and 70 percent, the grade of the virgin binder shall be PG 52-28 or PG 58-28. Shingles shall be ground to 3/8-inch minus. Waste, manufacturer or new, shingles shall be essential free of deleterious materials. Post-consumer RAS shall not contain more than 1.5 percent wood by weight or more than 3.0 percent total deleterious by weight. Post-consumer RAS shall be certified to contain less than the maximum allowable amount of asbestos as defined by national or local standards. The gradation of the aggregate may be determined by solvent extraction of the binder or using the following as a standard gradation:

Shingle Aggregate Gradation	
Sieve Size	**Percent Passing by Weight**
3/8 in. (9.5 mm)	100
No. 4 (4.75 mm)	95
No. 8 (2.36 mm)	85
No. 16 (1.18 mm)	70
No. 30 (600 μm)	50
No. 50 (300 μm)	45
No. 100 (150 μm)	35
No. 200 (75 μm)	25

P. OPTIONAL ASPHALT MODIFICATION JSP-08-08

1.0 Scope. This specification allows the optional use of ground tire rubber (GTR) and transpolyoctenamer rubber (TOR) for modification of bituminous material to be used in highway construction. Material shall be in accordance with Sec 1015 except as noted in this specification.

1.1 Characteristics for Rubber Asphalt. Performance graded asphalt binder shall be in accordance with AASHTO M 320 for the designated grade, except as follows. AASHTO T 111, *Inorganic Matter or Ash in Bituminous Materials*, may be substituted for AASHTO T 44, *Solubility of Bituminous Materials*, at the specification value indicated prior to the addition of GTR. All blends containing GTR shall include 4.5 percent TOR by weight of the GTR. The direct tension test will be waived. One of the following additional requirements will apply:

1.1.1 Elastic Recovery.

Binder Characteristics[c]	
Absolute Temperature Spread Between Upper and Lower Temperature for PG Binder Grade[a]	**Elastic Recovery[b] , Percent, Minimum, AASHTO T 301**
86 C	-
92 C	55
98 C	65
104 C	75

[a] Temperature Spread = Upper PG Temperature minus Lower PG Temperature.
[b] Elastic recovery test to be performed on the residue from the Rolling Thin Film Oven Test at 25 C and 10 cm elongation.
[c] Separation test is not required, however, provisions shall be made for constant agitation during storage and production.

1.1.2 Multiple Stress Creep and Recovery (MRCR).

Binder Characteristics[c]	
Absolute Temperature Spread Between Upper and Lower Temperature for PG Binder Grade[a]	**MSCR[b] , Percent, Minimum, AASHTO TP 70**
86 C	-
92 C	15
98 C	35
104 C	55

[a] Temperature Spread = Upper PG Temperature minus Lower PG Temperature.
[b] MSCR test to be performed on the residue from the Rolling Thin Film Oven Test at 3200 Pa and 64 C. The percent difference in recovery between 100 Pa and 3200 Pa shall be no more than 75 percent.
[c] Separation test is not required, however, provisions shall be made for constant agitation during storage and production.

1.2 Characteristics for GTR. Ground tire rubber shall be free of wire or other contaminating materials and not contain more than 0.1 percent fabric. The gradation of the GTR shall be as follows:

Percent Passing by Weight	
Sieve Size	**GTR**
No. 8 (2.36 mm)	100
No. 16 (1.18 mm)	100-96
No. 30 (600 μm)	100-90
No. 50 (300 μm)	20 min.

1.3 Modification Process. The percentage by weight of binder shall be included with each lot of material. Ground tire rubber shall be tested and certified in accordance with Sec 1015.10.2 and may be incorporated by any of the following methods:

1.3.1 Blending at HMA Plant. All sampling and testing shall be performed in accordance the requirements for terminal blending including high and low temperature testing.

1.3.2 Terminal Blending. Blending and certification shall be in accordance with Sec 1015.

Q. ACCELERATING THE COMPLETION OF CLOSURE WORK
(Incentive/Disincentive Clause)

1.0 Description. This provision contains modifications to the standard specifications for accelerating the bridge rehabilitation work on the I-44 westbound bridge over the Gasconade River in order to minimize the eastbound lane head to head traffic operation associated with the bridge closure.

1.1 Unless otherwise stated, specification section references are to the Missouri Standard Specifications for Highway Construction and its supplements in effect at the time of this contract.

2.0 Definition of Terms.

2.1 For this project the following terms are used as defined below:

(a) Closure Time

Closure time is defined as any day or other unit of time, including Saturdays, Sundays and legal holidays, when **any lane or lanes are closed to traffic on I-44 due to the contractor's operations**.

Under no circumstances will the closure time bid be allowed to extend actual closure of I-44 westbound bridge over the Gasconade River beyond May 23, 2011 or 60 calendar days beyond the beginning of the head to head traffic operation, whichever is sooner.

(b) Average Daily Road-User Cost

The amount shown in the bid, determined by the Commission, that interference and inconvenience to highway traffic will cost the road-users for each unit of closure time of the I-44 westbound bridge over the Gasconade River closure. The average daily road-user cost cannot be changed by the bidder. Bidder and its surety stipulate to the reasonableness and accuracy of that amount and expressly waive any right they may have to contest that amount in any claim, litigation or otherwise.

(c) Contract Amount

The total amount bid for all items of work to be performed by the contractor. This amount is the summation of the products of the approximate quantities shown in the bid schedule multiplied by the contract unit price. The contract amount does not include the amount produced by this acceleration of work clause.

3.0 Preparation of Bid.

3.1 In addition to the requirements of Sec 102.7, the bidder shall specify in the bid the closure time which it determines is required to complete the work. The bidder shall show the product of the closure time and the average daily road-user cost in the amount column provided for that purpose. This amount will be added to the contract amount. The sum will be read as the bid total.

3.2 A bidder may alter or correct the units of closure time entered in the bid, provided the bidder follows the same requirements set forth for altering or correcting bid prices in Sec 102.7.1.

4.0 Bid Guaranty. For this project the amount of guaranty required by Sec 102.9 shall be not less than five percent of the contract amount as defined above.

5.0 Award and Execution of Contract. Delete Sec 103.1 and substitute the following:

5.1 Consideration of Bids. After the bids are opened and the bid totals read, they will be compared on the basis of the contract amount, to which has been added the product of the closure time submitted by the bidder and the average daily road-user cost shown in the bid. This total amount will be used to determine the lowest responsive and responsible bid for the project. The Commission reserves the right to reject any and all bids including those which, in the sole judgment of the Commission, contain too few or too many units of closure time.

6.0 Prosecution and Progress.

6.1 Subletting of Contract. For this project the total contract cost referred to in Sec 108.1.1 shall be considered as the summation of the products of the approximate quantities shown in the bid schedule multiplied by the contract unit price.

6.2 Prosecution of Work. Assessment of closure time will begin on the first day of any lane closure on I-44 westbound bridge over the Gasconade River.

6.2.1 Prior to beginning work causing lane closure, the engineer may require the contractor to submit a schedule and written narrative for the lane closure work. The schedule shall be provided in accordance with Sec 108.4, or by the Critical Path Method if that is the schedule method specified by the contract. This schedule is required to reflect the effect of all constraints on the lane closure work.

6.2.2 This schedule requirement is in addition to any other schedule requirement of the contract. The cost for this requirement will be considered fully covered by the contract prices for the lane closure work.

6.2.3 The contractor is advised of the following matters which may be constraints upon the lane closure work and effect the schedule, order of work and cost of lane closure work:

1. Flooding that could occur along the Gasconade River.

6.3 Liquidated Damages for Failure or Delay in Completing Work on Time. Sec 108.8 is modified as follows:

6.3.1 If the contractor fails to complete all work necessary to have all lanes of traffic open on eastbound and westbound I-44 in the closure time specified by the bidder, the amount shown in the bid as average road-user cost per day will be deducted from the contractor's payment for each unit of closure time, including Saturdays, Sundays and legal holidays more than the closure time bid or after May 23, 2011 until such time as all lanes of eastbound and westbound I-44 are opened to traffic.

6.3.2 This deduction will be made as liquidated damages from any money due or to become due to the contractor under the contract. The contractor and surety shall be liable for any liquidated damages assessed in excess of any amount due the contractor.

6.3.3 This deduction will continue until such time as all lanes of eastbound and westbound I-44 are open to traffic. Liquidated damages as described elsewhere in the contract will be assessed on any work, excluding the bridge rehabilitation work on the I-44 westbound bridge over the Gasconade River if not complete by June 24, 2011.

6.4 Credit for Completion of Work Ahead of Time. If the contractor completes all work required and has all lanes of traffic opened on eastbound and westbound I-44 in less than the closure time specified by the bidder, the amount shown in the bid as average road-user cost per day will be added to the contractor's payment for each unit of closure time, including Saturdays, Sundays and legal holidays less than the closure time specified in the bid.

6.4.1 Computation of this payment will begin on the first full unit of closure time that all lanes of eastbound and westbound I-44 are opened to traffic. This credit will be added to the amount of money due or to become due the contractor under the contract. The total amount of this credit shall not exceed six hundred thousand dollars **($600,000).**

6.4.2 An extension of the closure time may be granted for changes in the work as specified in Sec 104.3 or for excusable, noncompensable and compensable delays as specified in Sec 108.14 only to the extent, as determined by the engineer, they actually affect the then major item of work or the critical path of the work.

7.0 Measurement and Payment. Sec 109.2 is supplemented by the following:

7.1 Scope of Payment. The average daily road-user cost, shown in the bid, will be used only for bid comparisons and as a deduction from money due the contractor in accordance with section 6.3, "Liquidated Damages for Failure or Delay in Completing Work on Time", or as a credit for additional money due the contractor in accordance with section 6.4, "Credit for Completion of Work Ahead of Time", and for no other purpose.

R. Alternative Traffic Management Plan

1.0 Description
This special provision allows the contractor the opportunity to develop and submit an alternative to the Traffic Management Plan associated with the project and detailed in the contract plans.

2.0 Alternative Traffic Management Plan
The Contractor may propose an Alternative Traffic Management Plan (TMP) to the plan presented in the Contract Documents. Have the Contractor's Engineer of Record sign and seal the alternative traffic management plan. Prepare the TMP in conformance with and in the form outlined in MoDOT's Engineering Policy Guide. Identify pay items associated with the alternative traffic management plan and costs associated with any pay items not in the contract. Indicate in the plan a TMP for each phase of activities. Propose an incident management plan for all levels of delay associated with an incident or peak hour congestion. Take responsibility for identifying and assessing any potential impacts to a utility that may be caused by the alternate TMP proposed by the Contractor, and notify the Department in writing of any such potential impacts to utilities. Engineer's approval of the alternate TMP does not relieve the Contractor of sole responsibility for all utility or bridge impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those in the original Contract Specifications, design plans (including traffic management plans) or other Contract Documents and which effect a change in utility work different from that shown in the utility plans, joint project agreements or utility relocation schedules. The Department reserves the right to reject any Alternative Traffic Management Plan. Obtain the Engineer's written approval before beginning work using an alternate TMP. The Engineer's written approval is required for all modifications to the TMP. The Engineer will only allow changes to the TMP in an emergency without the proper documentation. The contractor's proposed plan shall be in accordance with the current Manual of Uniform Traffic Control Devices.

3.0 Public Relations Awareness Plan
The contractor shall submit to the engineer at the preconstruction meeting for review and approval a Public Relations Awareness Plan. The plan shall include the following:

(a) Procedures for notifying the public of all road construction activities that may impact traffic due to lane or road closures. At a minimum, the Contractor shall notify the property owners and traveling public of road and access closures at least seven days prior to closures or shifting of traffic.

(b) The contractor shall coordinate and plan with the emergency and community organizations, schools, and businesses to maintain their services to the property owners affected by the project.

(c) Procedures for coordinating road closures and private entrance closures with property owners.

4.0 Selection of Traffic Management Plan (TMP)
A Traffic Management Plan (TMP) is included in the contract. The Contractor will furnish a letter to the Resident Engineer stating whether they plan to use the Department designed TMP or will submit an alternate TMP for approval. The alternate TMP must be signed and sealed by a Professional Engineer licensed in the State of Missouri and shall be reviewed, discussed and approved by the Resident Engineer. The submission of the alternate TMP will include a 11" x

17" set of plan sheets which indicate the type and location of all signs, lights, channeling devices, striping, barriers and geometrics of transitions and detours to be used for the safe passage of pedestrians, bicyclists and vehicular traffic through the project and for the protection of the workers. The plan will indicate conditions and setups for each phase of the Contractor's activities. When the Contractor proposes a modification to the TMP, particular attention should be given to the utility adjustment plan of the project. If the proposed TMP modification affects the scheduled adjustment of utilities in any measure, the Contractor must obtain written approval from the affected utilities. The District Utilities Engineer should be given the opportunity to review and comment on the modified TMP submittal. The Resident Engineer shall consult/get approval from the District Design and/or the District Traffic Operations Offices before approving/disapproving the proposed alternate TMP. Emergency Services should be notified in advance of any major modifications affecting traffic flow or patterns. If the Contractor's proposed TMP is equal to or better than the Department's plan, the alternative proposal will be given consideration. The TMP approval letter must include a statement to the effect that any additional costs, delay or increase to the cost of utility adjustments will be borne by the Contractor. The change will be documented by a Change Order with the Contractor's revised plan drawings. In no case will the Contractor begin work using an alternate TMP until the Resident Engineer has approved such plan.

5.0 Modification to Traffic Management Plan
Modifications to the TMP that will change traffic patterns will also be submitted to the Department for approval. No modifications to the approved plan will be allowed, except for enhancements, or in case of emergencies, until the Resident Engineer has approved such modification. These modifications may be documented by Change Order. Enhancements to the TMP will not involve changing traffic patterns.

6.0 Payment
Payment shall be made in accordance with the pay items of the contract or those pay items in the approved alternative traffic management plan that were not in the contract but were proposed with the alternative TMP. Pay items that are under-run as a result of the approved alternative TMP shall not be paid in whole or in part under the provisions of the practical design value engineering change proposal provisions of the contract.

S. Worksite Traffic Supervisor

1.0 Description
This special provision enhances section 616 of the Missouri Standard Specifications for Highway Construction by establishing a Worksite Traffic Supervisor. This enhancement to section 616 clarifies and prescribes the duties of the contractor relative to traffic control efforts.

2.0 Worksite Traffic Supervisor. Provide a Worksite Traffic Supervisor who shall be employed by the Prime Contractor and has passed MoDOT's Advanced Work Zone course, ATSSA's Traffic Control Supervisor course or an approved equivalent training course and who is responsible for initiating, installing, and maintaining all traffic control devices in the Contract Documents. Use approved alternate Worksite Traffic Supervisors when necessary.

Provide the Worksite Traffic Supervisor with all equipment and materials needed to set up, take down, maintain traffic control, and handle traffic-related situations. Ensure that the Worksite Traffic Supervisor performs the following duties:

1. Performs on site direction of all traffic control in a work zone.
2. Is on site during all set up and take down, and performs a drive through inspection immediately after set up.
3. Is on site during all nighttime and peak hour operations to ensure proper Maintenance of Traffic.
4. Immediately corrects all safety deficiencies and does not permit minor deficiencies that are not immediate safety hazards to remain uncorrected for more than 1 hour.
5. Is available on a 24-hour per day basis and present within 15 minutes after notification of an emergency situation and is prepared to positively respond to repair the work zone traffic control or to provide alternate traffic arrangements.
6. On Maintenance of Traffic lasting more than 24 hours conduct daily daytime and weekly nighttime inspections of projects with predominately daytime work activities, and daily nighttime and weekly daytime inspections of projects with predominantly nighttime work activities of all traffic control devices, traffic flow, pedestrian, bicyclist, and business accommodations.
Advise the project personnel of the schedule of these inspections and give them the opportunity to join in the inspection as is deemed necessary. Submit a comprehensive weekly report to the Resident Engineer detailing the condition of all traffic control devices (including pavement markings) being used. Include assurances in the inspection report that pedestrians are accommodated with a safe travel path around work sites and safely separated from mainline traffic, that existing or detoured bicyclist paths are being maintained satisfactorily throughout the project limits, and that existing businesses in work areas are being provided with adequate entrances for vehicular and pedestrian traffic during business hours. Have the Worksite Traffic Supervisor sign the report and certify that all of the above issues are being handled in accordance with the Contract Documents. When deficiencies are found, the Worksite Traffic Supervisor is to note such deficiencies and include the proposed corrective actions, including the date corrected. The Engineer may disqualify and remove from the project a Worksite Traffic Supervisor who fails to comply with the provisions of these Job Special Provisions. The Engineer may temporarily suspend all activities, except traffic, erosion control and such other activities that are necessary for project maintenance and safety, for failure to comply with these provisions.

3.0 Discussion of Traffic Management Plan at Pre-Construction Conference
The TMP to be utilized on the project, as detailed within the contract or a submitted and approved alternate, will be reviewed and discussed at the pre-construction conference. The review of the TMP shall consist of reviewing the different phases of work and the provisions to maintain traffic during each phase. The Worksite Traffic Supervisor (WTS) shall photograph or videotape each finalized Maintenance of Traffic (MOT) Phase and submit to the Engineer. Any errors or omissions shall be noted for corrective action.

The discussion at the pre-construction conference shall include:

(1) Inspections performed (including daily reviews) by the Contractor and the paperwork that will be completed and submitted to document that the inspections have been performed and that any corrective actions needed have been taken.
(2) Responsibilities of the Worksite Traffic Supervisor (WTS),
(3) The Contractor's work notification to the Engineer,
(4) Traffic safety,
(5) Changes required enhancing the TMP,
(6) Quality control of MOT devices,
(7) Sign installations and removal or covering of existing signs,
(8) Installation and removal of pavement markings,

(9) Crash reporting,
(10) Night work,
(11) Maintenance of MOT devices,
(12) Speed restrictions,
(13) Work zone clearances,
(14) Inactive work zones,
(15) Variable message boards, etc.
(16) Proper use of Traffic Control Law Enforcement Officers,
(17) Pedestrian and ADA accommodations.

The Contractor's role in implementing any corrective actions must be clarified before the project begins. This will ensure that needed changes are performed with minimum disruption to work activities.

4.0 Inspections

4.1 Initial Inspection and Evaluation of Work Zone

The (WTS) will perform the initial evaluation on new phases of construction by driving through the work zone and observing how traffic moves through the work zone. This drive through inspection will be done in all lanes, both directions, on crossroads, during the day and night and from all entry and exit points and during peak hour traffic within the zone. Detours, if any, should also be driven. The evaluation will also include inspection of signs and devices for the desired sight distance, maintenance and spacing. A newly implemented work zone TMP may not function as well as it was intended to function. To lessen hazards to motorists and workers, traffic controls will be inspected and evaluated by the WTS, immediately after the TMP is implemented, and after each phase change. Any sight distance problems should be noted and corrections made to the location of the devices. The location and length of tapers and the spacing of devices should be checked. Any existing signs or signals that are not needed shall be covered. All proposed pavement markings should have been applied. Non-applicable pavement markings shall be removed if the work zone is stationary and will be in place for sufficient duration. Bicycle paths through the work zone should be well marked and signed. Bicycle paths should not be directed through pedestrian walkways. Pedestrian paths should be clean of debris, well protected with positive barriers and/or separated from traffic, and be ADA compliant. Business entrances should be well maintained, and designated with devices through construction areas. Entrances should be signed appropriately so as to give advance notice to the motorist. All business signs shall be post mounted. Any unsafe driving actions should be identified and corrective action taken to achieve a smooth traffic flow through the work zone. Any enhancements to the TMP should be documented in the project diary, and coordinated with potentially affected parties (e.g., utilities).

4.2 Weekly Night and Day Inspections

The Contractor's WTS will perform an inspection of work zone area and record any deficiencies found. The WTS will provide the original report to the Resident Engineer weekly. The Engineer will review the MOT Review Report and shall confirm the notations on the report (positive and negative findings) by conducting a field project inspection of the work zone. If additional deficiencies are found that were not included in the WTS's MOT Review Report, such deficiencies will be documented and will be given to the WTS with the understanding that the deficiencies shall be corrected in accordance with the following categories:

(a) Category 1 – Presents an immediate danger to the traveling public or workers and needs to be addressed immediately.
(b) Category 2 – The situation doesn't pose an immediate threat to either the public or the workers, but can impact the proper functioning of the work zone.
(c) Category 3 – The situation doesn't impact the functioning of the work zone but is more of a maintenance or aesthetic issue.

The time required for correcting deficiencies are as follows for each category of deficiency:

(a) A Category 1 deficiency shall be corrected within one hour.
(b) A Category 2 deficiency shall be corrected within 24 hours.
(c) A Category 3 deficiency shall be corrected within 96 hours.

For each documented incidence of the WTS not correcting the deficiencies in the required time frame, the Resident Engineer will assess a charge of $1000 against the contractor and deduct this amount from the payment for work.

4.3 Recommended Action to Shut Down a Project Due to MOT Deficiencies

(1) Any MOT deficiency noted that is considered a severe hazard and life threatening will require immediate corrective action by the Contractor. Failure to correct the hazard immediately is basis to shut down the project and obtain other means to correct the hazard.
(2) If corrective action on a category 2 deficiency of which the Contractor has been given written notification has not been corrected within the 24-hour time limit is basis to shut down the project and obtain other means to correct the hazard. The WTS shall be disqualified if corrective action is not completed within the 24-hour time limit on three notifications to the Contractor.

The following shall apply to disqualification of WTS:
First Notification - Verbal (documented) warning
Second Notification - Written warning
Third Notification - Suspension of qualification (all projects)

5.0 Other Requirements

(1) The WTS will inspect MOT operations provided by a utility company within the project limits throughout the project duration.
(2) The WTS will coordinate with adjacent projects and existing MoDOT DMS signage and make frequent inspections to ensure that there are no conflicts in the information and/or instructions given to the motoring public.
(3) The WTS/Contractor will periodically check reflectivity of pavement markings and in the event of failure, provide for re-application of the pavement markings as required by the Engineering Policy Guide.

6.0 Payment

The duties of the WTS will be considered reimbursed entirely by the traffic management plan pay items.

T. POTENTIAL CONSTRUCTION DELAYS DUE TO HIGH WATER

1.0 Description

The contractor's attention is directed to the electronic deliverables where the hydrographs have been included for the Gasconade River that shows the history of significant water level fluctuations during the proposed contract schedule. The closure days submitted in the bid for this project will not be extended for any work impacted by fluctuations in the water level of the Gasconade River. The contractor shall be responsible for considering these potential impacts when determining the number of closure days bid for this project. These river delays will be non compensable.

MEMORANDUM

Missouri Department of Transportation
Construction and Materials
Central Laboratory

TO: Catherine Bullinger-8de

COPY: ProjectWise

FROM: Steve Bates SB
Environmental Chemist

DATE: August 27, 2009

SUBJECT: Materials
Asbestos & Heavy Metal Paint Inspection
Route I-44
Job No. J8I2167
Parcel – Bridge #L-0698
Laclede County

We are providing you with the results of the requested inspection on the above referenced property. The inspection report contains an asbestos and a heavy metals survey, unless otherwise requested. The asbestos inspection included sample collection of suspect asbestos-containing material and National Voluntary Laboratory Accreditation Program (NVLAP) accredited testing to confirm the presence of asbestos. This asbestos and heavy metal paint report includes four different report forms. Form T746 lists all of the samples taken during the asbestos inspection. Form T747 shows only those samples that tested positive for Category I nonfriable asbestos-containing materials that may remain in the structure during demolition, if kept adequately wet to avoid visible air emissions. Form T748 shows only those samples that tested positive for asbestos and require removal prior to demolition. Form C760 lists all paint samples taken during the heavy metal paint inspection and their metal content.

In accordance with the National Emissions Standard for Hazardous Air Pollutants (NESHAP), as well as city and county asbestos abatement regulations - Registration, Notification, and Performance Requirements, regulated asbestos-containing material (RACM) namely, Friable and Category II nonfriable, have a high probability of becoming friable under normal demolition forces. Practices and procedures for removal prior to demolition, disposal, and clearances should be in accordance with referenced regulations. Missouri Department of Transportation policy is to perform asbestos abatements in accordance with NESHAP.

In accordance with Missouri Department of Natural Resources' Technical Bulletin "Managing Construction and Demolition Waste" dated January 31, 2003, a heavy metal paint inspection has been performed on the above referenced property. We are providing you with the results of this inspection. The inspection includes locating painted concrete, block and/or brick surfaces, sampling the painted surface(s) and testing the paint(s) to determine if hazardous heavy metals are present. Non-hazardous painted concrete, blocks, or bricks may be used as clean fill

materials, if properly handled. You must contact the Central Office Design Division for proper handling of the reported painted surfaces.

Although our survey included observing and sampling behind walls, above ceilings, beneath floors, etc., it is possible that potentially hidden asbestos-containing materials may exist within the structure. To our knowledge, we have located all suspect asbestos-containing and all painted concrete, block and brick surfaces. If suspect asbestos-containing materials or if painted concrete, block and/or brick surfaces are observed in addition to those reflected in this inspection report, then please advise us immediately so that we may schedule a follow-up inspection.

Should you have any questions regarding these reports, please contact me at (573) 526-4359.

db
J:\barred\asbestos\cover letter sb.doc
Attachments

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Asbestos Survey Report
All Suspect ACM

ROUTE:	I-44	**SURVEYED BY:**	Steve Bates
MODOT JOB NO.:	J8I2167	**CERTIFICATION #:**	7028012508MOIR11238
DISTRICT:	8	**SITE ADDRESS:**	Westbound Over Gasconade River
COUNTY:	Laclede	**TYPE OF STRUCTURE:**	Bridge
DATE OF SURVEY:	June 2, 2008		
PARCEL NO.:	Bridge #L0698		

Sample ID	Type of Materials	Location of Material	Friability Category	Field Measure
	No samples taken. No suspect ACM located.			
	Bridge Paint is not a suspect ACM per MSDS's on file.			

N-ACM = Non-Asbestos Containing Material I NF = Category I Nonfriable II NF = Category II Nonfriable F = Friable
NAFD = No Asbestos Fiber Detected * = Tested By Point Count Procedure

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Asbestos Survey Report
Nonfriable Asbestos-Containing Materials
(Abatement not required if not made friable during demolition.)

ROUTE: I-44
MODOT JOB NO.: J8I2167
DISTRICT: 8
COUNTY: Laclede
DATE OF TESTS: June 2, 2008
PARCEL NO.: Bridge #L0698

TESTED BY: Steve Bates DB
CERTIFICATION #: 7028012508MOIR11238
SITE ADDRESS: Westbound Over Gasconade River
TYPE OF STRUCTURE: Bridge

Sample ID	Type of Material	Location of Material	Friability Category	Field Measure	Asbestos Type	Percent
		None Located	I NF			

All necessary work to handle this material is the contractor's responsibility.

I NF = Category I Nonfriable

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Asbestos Survey Report
All materials requiring removal or special handling.

ROUTE:	I-44	**TESTED BY:**	Steve Bates SB
MODOT JOB NO.:	J8I2167	**CERTIFICATION #:**	7028012508MOIR11238
DISTRICT:	8	**SITE ADDRESS:**	Westbound Over Gasconade River
COUNTY:	Laclede	**TYPE OF STRUCTURE:**	Bridge
DATE OF TESTS:	June 2, 2008		
PARCEL NO.:	Bridge #L0698		

Bid Item No.	Sample ID	Type of Material	Location of Material	Friability Category	Field Measure	Asbestos Type	Percent
			None Located	F			
			None Located	II NF			

I NF = Category I Nonfriable II NF = Category II Nonfriable F = Friable * = Tested By Point Count Procedure

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Metals Survey Report of Painted Concrete, Block, Brick and Surfaces

ROUTE: I-44
MODOT JOB NO.: J8I2167
DISTRICT: 8
COUNTY: Laclede
SURVEYED BY: Steve Bates
DATE OF SURVEY: June 2, 2008

TESTED BY: N/A
DATE OF TESTS: N/A
PARCEL NO.: Bridge #L0698
SITE ADDRESS: Westbound Over Gasconade River
TYPE OF STRUCTURE: Bridge

Sample ID	Color/Location of Material/Substrate	Metals (ppm)							
		As	Cr	Pb	Cd	Se	Ba	Hg	Ag
	No samples taken. No painted surfaces located.								

All results are by XRF unless otherwise indicated: a = USEPA SW-846 Method 3050
b = USEPA SW-846 Method 7471

Missouri
Department
of Transportation

MoDOT

105 West Capitol Avenue
P.O. Box 270
Jefferson City, MO 65102
(573) 751-2551
Fax (573) 751-6555
www.modot.org

Kevin Keith, Interim Director

September 2, 2010

To Whom it May Concern:

Subject: **Nationwide Permit #14 (Linear Transportation Projects below the Reporting Threshold)**
Interstate 44, Laclede County
Job No. J8I2167
Bridge Deck Re-placement, West Bound Lanes over Gasconade River

The Army Corps of Engineers issues Nationwide Permit # 14 for activities required for construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, airport runways, and taxiways) in waters of the U.S. The Missouri Department of Transportation (MoDOT) and its contractors regularly construct bridge and roadway projects that have been evaluated by MoDOT staff and have been determined to have minimal impact to waters of the U.S. Projects with minimal impact can be defined as those projects involving discharges to waters of the U.S. (e.g. streams, lakes, and ponds) causing losses no greater than 1/10-acre. No wetland impact may result if the project is to meet the minimal impact definition. This job meets the criteria as defined above, and no pre-construction notification is required by the Corps of Engineers. However, the permittee is still bound by and shall follow the Section 404 Nationwide Permit No. 14 conditions and the Section 404 Nationwide Permit General Conditions within the General Provisions. In addition, the permittee must also follow the seven conditions as specified in the Section 401 Water Quality Conditions in the same document referenced above. **It is likely that "Temporary Impacts" will occur as a result of temporary work pad/crossings.**

Sincerely,

Gayle Unruh for

Buck Brooks
MoDOT, Wetland Coordinator