

**MISSOURI DEPARTMENT OF TRANSPORTATION  
GENERAL SERVICES- PROCUREMENT  
ST. LOUIS DISTRICT, 2309 BARRETT STATION RD  
BALLWIN, MO 63021**

REQUEST NO.	SL14-115-R7
DATE	March 17, 2014
PAGE NO.	1
NO. OF PAGES	48

SEALED BIDS, SUBJECT TO THE ATTACHED CONDITIONS WILL  
BE RECEIVED AT THIS OFFICE UNTIL

**10:00 a.m., Local Time, April 7, 2014**

AND THEN PUBLICLY OPENED AND READ FOR FURNISHING  
THE FOLLOWING SUPPLIES OR SERVICES.

THE BIDDER MUST SIGN AND RETURN BEFORE DATE AND TIME SET FOR OPENING.

**BIDS TO BE BASED F.O.B. MISSOURI DEPARTMENT OF  
TRANSPORTATION**

Submit net bid as cash discount stipulations will not be considered

Job Location:

St. Louis City & County  
Clayton Road, McCausland Ave, Bellevue Ave

**BUYER:** Stephanie Austin Rashid, CPPB  
**BUYER EMAIL:**  
Stephanie.AustinRashid@modot.mo.gov

**BUYER TELEPHONE:** 314-301-1439  
**BUYER FAX:**  
573-526-0016

**SUPPLIES OR SERVICES**

**I-64 Slide Repair**

**COMPLETION DATE: July 30, 2014**

Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.

**Components of Agreement:** The Agreement between MHTC and the successful Bidder shall consist of: the RFB and any written amendments thereto, the "Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions" that are attached to this RFB, the bid submitted by the Bidder in response to the RFB and the post-award contract agreement signed between the parties. However, MHTC reserves the right to clarify any relationship in writing and such written clarification shall govern in case of conflict with the applicable requirements stated in the RFB or the Bidder's bid. The Bidder is cautioned that its bid shall be subject to acceptance by MHTC without further clarification.

**Return sealed bid to the address shown at the top of this page.**

**Note to Respondent:** A vendor must be in compliance with the laws regarding conducting business in the State of Missouri. The compliance to conduct business in the state shall include but may not be limited to: Registration of business name, vendors MUST submit a bid/proposal that correctly and accurately identifies the company name that is registered to do business in the State of Missouri. The Missouri Department of Transportation reserves the right to reject any or all bids, and to accept or reject any items thereon and to waive technicalities. All bids must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.

*In compliance with the above Request For Bid, and subject to all conditions thereof, the undersigned bidder agrees to furnish and deliver any or all the items on which prices were bid within the timeframe specified herein, after receipt of formal purchase order.*

**Date:** \_\_\_\_\_  
**Telephone No.:** \_\_\_\_\_  
**Fax No.:** \_\_\_\_\_  
**Federal I.D. No.** \_\_\_\_\_  
**Email Address:** \_\_\_\_\_

**Firm Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
\_\_\_\_\_  
**By (Signature):** \_\_\_\_\_  
**Type/Print Name** \_\_\_\_\_  
**Title:** \_\_\_\_\_

**Is your firm MBE certified?** ☐ Yes ☐ No

**Is your firm WBE certified?** ☐ Yes ☐ No

List all agencies your firm is currently certified with:

## **INTRODUCTION AND GENERAL INFORMATION**

### **1.1 Introduction:**

- 1.1.1 This Request For Bid seeks bids from qualified organizations to provide slide repair on I-64 in St. Louis City and County, MO.
- 1.1.2 Limits of this project are as described in Exhibit A, Miscellaneous Contract Requirements and Specification.
- 1.1.3 Each bid must be mailed or hand delivered in a sealed envelope to Ms. Stephanie Austin Rashid, Procurement Unit, Operations Complex, 2309 Barrett Station Rd., Ballwin, Mo. 63021.

All questions regarding the RFB shall be submitted to Ms. Stephanie Austin Rashid. Bids must be returned to the office of Ms. Austin Rashid no later **than 10:00 a.m., Local Time, April 7, 2014.**

### **RFB Coordinator:**

**Ms. Stephanie Austin Rashid, CPPB  
General Services Specialist  
Missouri Department of Transportation  
2309 Barrett Station Road, Ballwin, MO 63021**

**PHONE: 314-301-1439  
FAX: 573-522-0016  
EMAIL: Stephanie.AustinRashid@modot.mo.gov**

## **1.2 General Information:**

This document constitutes an invitation for competitive, sealed bids for the procurement of services slide repair on I-64 in St. Louis City and County, MO., in accordance with terms as specified in these provisions.

1.2.1 Organization - This document, referred to as a Request for Bid (RFB), is divided into the following parts:

- 1) Introduction and General Information
- 2) Exhibit A, Miscellaneous Contract Requirements and Specification
- 3) Bid Submission
- 4) Pricing Page
- (5) Attachment(s)
- (6) Terms and Conditions

1.2.2 This document contains requirements related to the newly revised statute.

Effective January 1, 2009 and pursuant to RSMo 285.530 (1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. Additional specific information is included herein.

<http://www.moga.mo.gov/statutes/C200-299/2850000530.HTM>

E-Verify is an example of a federal work authorization program. For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is available at:

[http://www.dhs.gov/files/programs/gc\\_1185221678150.shtm](http://www.dhs.gov/files/programs/gc_1185221678150.shtm)



## 2.0 Exhibit A

### Miscellaneous Contract Requirements and Specification

#### A. Purpose and Work Location

The purpose of this project is to repair landslide locations to stabilize the slopes and prevent additional sliding in the future. The limits of this project are at three locations in close proximity on I-64. From east to west they are located on the north side of I-64 near Bellevue, north side of I-64 between the mainline and exit ramp at McCausland, and south side of I-64 approaching Clayton Road from the west. These locations are located behind barrier, fence, and guardrail and will be difficult to access. The contractor shall account for any specialized equipment needed to construct the slide repairs behind barrier in their bid.

#### B. Contract Liquidated Damages

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

**2.0 Period of Performance.** Prosecution of work is expected to begin on the date specified below in accordance with Sec 108.2. Regardless of when the work is begun on this contract, all work shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Notice to Proceed: Upon award of contract  
Completion Date: July 30, 2014

**2.1 Calendar Days.** The count of calendar days will begin on the date the contractor starts any construction operations at the slide location.

<u>Slide</u>	<u>Calendar Days</u>
Bellevue	21
McCausland	21
Clayton	21

**3.0 Liquidated Damages for Contract Administrative Costs.** Should the contractor fail to complete the work on or before the completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged contract administrative liquidated damages in the amount of **\$250** per calendar day for each full calendar day that the work is not fully completed. For projects in combination, these damages will be charged in full for failure to complete one or more projects within the above specified completion date or calendar days.

**4.0 Liquidated Damages for Road User Costs.** Should the contractor fail to complete the work on or before the completion date specified in Section 2.0, or within the number of calendar days specified in Section 2.1, whichever occurs first, the contractor will be charged road user costs in accordance with Sec 108.8 in the amount specified in Section 4.1. These damages are in addition to the contract administrative damages and any other damages as specified elsewhere in this contract.

**4.1 Road User Costs.**

<u>Job</u>	<u>Road User Cost</u>
I-64 Slides	\$ 500

**C. CONTRACTOR RETAINED EXCESS EXCAVATION**

**1.0 Description.** Any excess excavated soil not used for capping the finished slope 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. 203-10.00, "Class A Excavation".

**D. Work Description – Prefabricated Modular Block Gravity Wall (Bellevue slide)**

**1.0 Description.** Work shall consist of design, furnishing materials, and construction of wet cast prefabricated modular block gravity wall (PMBGW) structure meeting approval of the Engineer. Design and supply of modular blocks, drainage composite, and erosion control materials, and site assistance are all to be furnished by the wall system supplier.

**1.1 Work Requirements.** Construction at the Bellevue slide shall be performed before construction at the Clayton and McCausland slides. The order of work shall be removing mulch and any vegetation within 15' of the excavation area, excavating the existing soil, installing the new drainage system below the proposed PMBGW and sound wall, installing the PMBGW while placing select backfill, applying the sacrificial graffiti protection system, and seeding the capping soil on the backfill.

**2.0 Preliminary Design and Plans.**

**2.1.** Prior to any work being done, PMBGW design plans and computations shall be submitted to the engineer complete with all details as a separate submittal for each individual wall structure.

**2.2.** All drawings shall be clear and complete. Six sets of drawings of the completed wall design plans shall be submitted for distribution. The drawings submitted shall be legible and have distinct details of sufficient contrast to be suitable for electronic filing. Drawings which do not have the desired clarity and contrast will be returned for corrective action. The PMBGW system manufacturer shall be solely responsible for the content of the design plans.

**2.3.** All PMBGW design plans submitted for distribution shall be signed, sealed and stamped in accordance with the laws relating to architects and professional engineers (Chapter 327, RSMo.).

**2.4.** The minimum factors of safety for slope stability shall be as follows or as required by the contract.

**2.4.1.** 1.5 horizontal sliding of the wall mass along its base

**2.4.2.** 2.0 against overturning and bearing capacity

**2.4.3.** 1.3 against external, deep seated failures

**2.4.4.** 1.3 against compound failure surfaces

**2.4.5.** 1.3 against internal failure

**2.4.6.** 1.1 seismic loading for the above failure modes

**2.5.** Prefabricated Modular Block Gravity Walls shall be designed for the appropriate SEISMIC PERFORMANCE CATEGORY A, B, C, or D and additional requirements as may be shown in the plans or this specification.

**2.6.** Completed PMBGW design plans shall also contain all material specifications, fabrication requirements, and all construction requirements for erecting the wall complete in place. Any requirements on the design plans conflicting with this special provision shall not be used.

### **3.0 Select Granular Backfill Material.**

**3.1.** Select Granular Backfill material for PMBGW shall conform to the following requirements.

**3.2.** Select Granular Backfill shall be gravel, crushed stone, or any combination, conforming to the following gradation limits:

<b>Sieve Size</b>	<b>Percent Passing</b>
3/4 inch (19 mm)	100-75
No. 40 (425 mm)	0-60
No. 200 (75 mm)	0-15

**3.3.** The effective internal friction angle for the coarse aggregate shall be a minimum 34 degrees according to AASHTO T 236 on samples compacted to 95 percent density or block manufacturer's recommendation.

**3.4.** The material shall substantially be free of shale or other soft, poor durability particles and shall have a magnesium sulfate soundness loss of less than 30 percent after four cycles as determined by AASHTO T-104.

**3.5** If any excavated soil material is to be used as capping soil, the contract shall ensure that all mulch is removed from the excavated material along with meeting all the requirements listed in this section.

### **4.0 Design and Plan Requirements.**

**4.1.** The Contractor shall use one of the following products for wet cast prefabricated modular block gravity wall (PMBGW) systems, or an approved equal.

A. T-Wall Retaining Wall System  
The Neel Company  
8328-D Traford Lane  
Springfield, VA 22152  
Phone: 703-913-7858; Fax: 703-913-7859

B. Redi-Rock System  
Redi-Rock International  
05481 US 31 South

Charlevoix, MI 49720  
Phone: 866-222-8400; Fax: 231-237-95213

- C. Stone Strong Systems  
Stone Strong Systems  
3801 Union Dr., Suite 102  
Lincoln, NE 68516  
Phone: 402-434-5652; Fax: 402-434-5654
- D. ReCon Series 50 Gravity Walls  
ReCon Wall Systems, Inc.  
7600 W. 27th Street #229  
St. Louis Park, MN 55426  
Tel 952.922.0027; Fax 952.922.0028

**4.2.** The final design to be submitted after contract award shall include detailed design computations and all details, dimensions, quantities and cross sections necessary to construct the wall(s). Prefabricated modular block gravity wall systems shall be designed in accordance with the AASHTO specifications shown on the plans and in accordance with additional publications or specifications referenced within the AASHTO specifications. The seismic performance category, angle of internal friction for the selected granular backfill for structural systems and other design requirements shown on the plans shall be incorporated into the design of the wall system. The fully detailed plans shall be prepared to MoDOT standards and shall include, but not be limited to, the following items:

**4.2.1.** An elevation view indicating elevations at top and bottom of wall, beginning and end stations, all horizontal and vertical break points, whole station points, and each level of block placement. Location of proposed final ground lines shall be indicated.

**4.2.2.** Length, size, and type of block shall be shown.

**4.2.3.** Internal drainage alignment, elevations, and wall face exit points shall be shown on the elevation, plan, and cross section views.

**4.2.4.** Plan view shall reflect the horizontal alignment and shall indicate the offset from the horizontal control line to the front face of the wall. All utilities, signs, lights, etc. that affect the PMBGW shall be shown.

**4.2.5.** Any general notes required for construction of the PMBGW.

**4.2.6.** Cross sections showing limits of construction, fill requirements, and excavations limits.

**4.2.7.** Limits and extent of PMBGW fill volume.

**4.3. Typical Details for Drainage and Soil Separation Geotextile.**

**4.3.1.** Drainage details for drainage aggregate zone and retained soil zone.

**4.3.2.** Drainage aggregate shall consist of clean crushed stone or crushed gravel meeting the following. Gradation tested in accordance with ASTM C-136:

Sieve Size	Percent Passing
1 inch (25 mm)	100
No. 200 (75 $\mu$ m)	< 5

**4.3.3.** Temporary slope face support (if required).

**4.3.4.** All details for construction of the wall(s) around drainage facilities, overhead sign footings and abutments shall be clearly shown.

#### **4.4. Detailed Design Computations.**

**4.4.1.** Slope stability computations, internal wall stability, computer output, and an explanation of analysis details within the program. A copy of the computer program with user documentation if an in-house computer program was used.

**4.4.2.** Cross section plots showing critical failure planes for internal, compound, and global failure modes; and a summary of the critical failure surface(s) search.

**4.4.3.** Sliding stability computations.

**4.4.4.** Seismic stability computations, where applicable.

**4.4.5.** Tractive shear stress of all erodible surfaces and appropriate anchorage mechanism(s). (Erosion protection requirements to be specified by MoDOT.)

**4.4.6.** Drainage system design computations including volume of water to be removed by the subsurface drainage system; geotextile retention, permeability, and survivability requirements based upon fill and subgrade characteristics; and maximum long-term flow of the drainage composite. (Maximum drain spacing and flow requirements to be specified by MoDOT.)

**4.5.** The plans and design computations shall be prepared and sealed by a professional engineer, licensed according to Chapter 327. RSMo. Six sets of design drawings and detail design computations shall be submitted to MoDOT. The computations shall include a detailed explanation of any symbols and computer programs used in the design.

#### **5.0 Construction Requirements.**

**5.1.** Delivery, storage, and handling of geosynthetic fabric, drainage composite, and geosynthetic erosion mat shall comply with requirements set forth in the Missouri Standards Specifications for Highway Construction. The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include any costs related to this technical assistance in the unit price bid for this item.

**5.2.** All areas immediately beneath the installation area for the leveling pad shall be properly prepared as detailed on the plans, specified elsewhere within the specifications, or directed by the Engineer. Subgrade surface shall be level, free from deleterious materials, loose or otherwise unsuitable soils. Prior to placement of the leveling pad, subgrade shall be proof-rolled to provide a uniform and firm surface. Any soft areas, as determined by the Engineer, shall be excavated and replaced with suitable compacted materials. The leveling pads may be cast in place concrete, or compacted coarse aggregate. All details for the leveling pads, including the steps, shall be shown on the contract plans. Foundation surface shall be inspected and approved by the Engineer prior to block placement. Benching the backcut into competent soil is recommended to improve stability.

**5.3.** Backfill shall be placed, spread, and compacted in such a manner to minimize the development of wrinkles and/or displacement of geosynthetic fabric. Granular soils shall be compacted in a maximum loose lift thickness of 10 inches (250 mm). Backfill shall be compacted as specified by project specifications or to at least 95 percent of the maximum density determined in accordance with AASHTO T-99, whichever is greater.



Backfill shall be graded away from the last row of placed blocks and rolled at the end of each work day to prevent ponding of water on surface of the backfill soil mass. Tracked construction equipment shall not be operated directly upon geosynthetic fabric. A minimum fill thickness of 6 inches (150 mm) is required prior to operation of tracked vehicles over geosynthetic fabric. Turning of tracked vehicles shall be kept to a minimum to prevent tracks from displacing fill. If approved by the Engineer and subject to satisfactory performance, rubber-tired equipment may pass over geosynthetic fabric at speeds no greater than 10 mph (16 km/h). Sudden braking and sharp turning shall be avoided.

**5.4. Batter Requirements.** Wall systems shall be built with some inward batter, as determined by the wall system manufacturer, to accommodate the horizontal movement created by the placement and compaction of selected granular backfill for structural systems. Facing elements out of alignment shall not be pulled or pushed into proper place, as that may cause damage to the facing element. If misalignment occurs, the select granular backfill for structural systems shall be removed and the facing elements reset to the proper alignment.

## **5.5. Erosion Control Material Installation.**

**5.5.1. Delivery, Storage, and Handling.** When erosion control material is required the contractor shall check the erosion control material to ensure that the proper material has been received. During all periods of shipment and storage, the erosion mat shall be protected from temperatures greater than 140 F (60 C), mud, dirt, and debris. Follow manufacturer's recommendations in regards to protection from direct sunlight. At the time of installation, the erosion mat/blanket shall be rejected if it has defects, tears, punctures, flaws, deterioration, or damage incurred during manufacture, transportation, or storage. If approved by the engineer, torn or punctured sections may be removed by cutting a cross section of the mat out. The remaining ends should be overlapped and secured with ground anchors. Any erosion mat/blanket damaged during storage or installation shall be replaced by the contractor at no additional cost to MoDOT.

**5.5.2. On Site Representative.** Erosion control material suppliers shall provide a qualified and experienced representative on site, for a minimum of one day, to assist the contractor and MoDOT inspectors at the start of construction. If there is more than one slope on a project then this criteria will apply to construction of the initial slope only. The representative shall also be available on an as needed basis, as requested by the engineer, during construction of the remaining slope(s).

**5.5.3. Placement.** The erosion control material shall be placed and anchored on a smooth graded, firm surface approved by the engineer. Anchoring terminal ends of the erosion control material shall be accomplished through use of key trenches. The material in the trenches shall be anchored to the soil on maximum 18 inch (450 mm) centers.

**5.5.3.1.** Erosion control material shall be anchored, overlapped, and otherwise constructed to ensure performance until vegetation is well established. Anchors shall be as designated on the construction drawings, with a minimum length of 12 inches (300 mm) recommended, and shall be spaced as designated on the construction drawings, with a maximum spacing of 4 feet (1.2 m) recommended.

**5.5.4. Soil Filling.** If noted on the construction drawings, the erosion control mat shall be filled with fine grained topsoil, as recommended by the manufacturer. Soil shall be lightly raked or brushed on/into the mat to fill mat thickness or to a maximum depth of 1 inch (25 mm).

## **5.6. Geosynthetic Drainage Composite.**

**5.6.1. Delivery, Storage, and Handling.** Contractor shall check the erosion control material to ensure that the proper material has been received. During all periods of shipment and storage, the geotextile shall be protected from temperatures greater than 140 F (60 C), mud, dirt, and debris. Follow manufacturer's recommendations in regards to protection from direct sunlight. At the time of installation, the geotextile shall

be rejected if it has defects, tears, punctures, flaws, deterioration, or damage incurred during manufacture, transportation, or storage. If approved by the engineer, torn or punctured sections may be removed by cutting a cross section of the fabric. The remaining ends should be overlapped and secured with ground anchors. Any geotextile damaged during storage or installation shall be replaced by the contractor at no additional cost to MoDOT.

**5.6.2. On Site Representative.** Geosynthetic drainage composite material suppliers shall provide a qualified and experienced representative on site, for a minimum of one half day, to assist the contractor and MoDOT inspectors at the start of construction with directions on the use of drainage composite in conjunction with the geosynthetic reinforced soil system (if required). If there is more than one slope on a project then this criteria will apply to construction of the initial slope only. The representative shall also be available on an as needed basis, as requested by the engineer, during construction of the remaining slope(s).

**5.6.3.** A geotextile flap shall be provided along all drainage core edges. This flap shall be of sufficient width for sealing the geotextile to the adjacent drainage structure edge to prevent soil intrusion into the structure during and after installation. The geotextile shall cover the full length of the core.

**5.6.4.** The geocomposite core shall be furnished with an approved method of constructing and connecting with outlet pipes or weep holes as shown on the plans. Any fittings shall allow entry of water from the core but prevent intrusion of backfill material into the core material.

**5.6.5. Placement.** The soil surface against which the geosynthetic drainage composite is to be placed shall be free of debris and inordinate irregularities that will prevent contact between the soil surface and the drain.

**5.6.6. Seams.** Edge seams shall be formed by utilizing the flap of geotextile extending from the geocomposite's edge and lapping over the top of the fabric of the adjacent course. The fabric flap shall be securely fastened to the adjacent fabric by means of plastic tape or non-water soluble construction adhesive, as recommended by the supplier. Where vertical splices are necessary at the end of a geocomposite roll or panel, an 8 inch (200 mm) wide continuous strip of geotextile may be placed, centering over the seam and continuously fastened on both sides with plastic tape or non-water soluble construction adhesive. As an alternative, rolls of geocomposite drain material may be joined together by turning back the fabric at the roll edges and interlocking the cuspidations approximately 2 inches (50 mm). For overlapping in this manner, the fabric shall be lapped over and tightly taped beyond the seam with tape or adhesive. Interlocking of the core shall always be made with the upstream edge on top in the direction of water flow. To prevent soil intrusion, all exposed edges of the geocomposite drainage core shall be covered by tucking the fabric flap over and behind the core edge. Alternatively, a 12 inch (300 mm) wide strip of fabric may be utilized in the same manner, fastening it to the exposed fabric 8 inches (200 mm) in from the edge and folding the remaining flap over the core edge.

**5.6.7. Repairs.** Should the fabric be damaged during installation by tearing or puncturing, the damaged section shall be cut out and replaced completely or repaired by placing a piece of fabric that is large enough to cover the damaged area and provide a sufficient overlap on all sides to fasten.

**5.6.8. Soil Fill Placement.** Drainage aggregate (backfill) shall be placed immediately over the geocomposite drain. Care shall be taken during the backfill operation not to damage the geotextile surface of the drain. Care shall also be taken to avoid excessive settlement of the backfill material. The geocomposite drain, once installed, shall not be exposed for more than seven days prior to backfilling.

## **6.0 Method of Measurement.**

**6.1.** Measurement of Prefabricated Modular Block Gravity Wall Systems is on a vertical square foot basis.

**6.2.** Payment shall cover PMBGW design, materials, and installation of geosynthetic material, backfill, wall

drain components, and geosynthetic erosion mat. Excavation of any unsuitable materials shall be paid under a separate pay item.

**6.3.** Quantities of Prefabricated Modular Block Gravity Wall System as shown on the plans may be increased or decreased at the direction of the Engineer based on construction procedures and actual site conditions.

**7.0 Basis of Payment.** The accepted quantities of Prefabricated Modular Block Gravity Wall System will be paid for per vertical square ft. This shall include the wall, select granular backfill, capping soil, wall drainage, and geotextile fabric.

E. Work Requirements – Aesthetic Concrete Stain

**1.0 Description.** This work item shall consist of providing a field concrete stain to aesthetically color concrete exteriors to match the surrounding walls.

**2.0 Material Requirements.** The material shall be two-coat, pigmented acrylic resin system which penetrates into the concrete surface to provide water repellency, semi-opaque aesthetic color and salt resistance and shall form a breathable film allowing trapped moisture vapor to safely migrate through the coating without blistering or peeling. The color shall match that of the surrounding walls and the contractor shall supply the engineer with a manufacturer's certification indicating that the material supplied is in accordance with this specification.

**3.0 Construction Requirements.** The concrete surface shall be fully cured a minimum of 28 days prior to application of the aesthetic concrete stain. The absence of moisture in the concrete surface shall be verified with standard test ASTM D4263. Pressure washing with a minimum of 3,000 psi shall be used to remove all foreign matter, form oils, waxes, curing compounds, laitance, efflorescence and dirt. Sand blasting will not be permitted for cleaning. The cleaned surface shall be free of blemishes, discolorations, surface voids and conspicuous form marks to the satisfaction of the engineer. The concrete stain shall be adequately mixed within its container until homogenous in color. Application of the stain shall be in accordance with the manufacturer's recommendations including allowable ambient conditions. Application of the stain will not be allowed during rain. All manufacturers' safety precautions shall be submitted to the engineer prior to work and followed during staining.

**5.0 Acceptance.** The contractor shall furnish a manufacturer's certification stating that the material supplied is in accordance with all requirements specified and that the material furnished is of the same composition as originally approved.

**6.0 Method of Measurement.** Measurement of Aesthetic Concrete Stain will be covered under Aesthetic Concrete Stain, lump sum.

**7.0 Basis of Payment.** The accepted quantities of Aesthetic Concrete Stain will be paid for as 1 lump sum, (Aesthetic Concrete Stain, lump sum).

F. Work Requirements – Subsurface Drainage System

**1.0 Description.** Work shall consist of furnishing and placing materials required for proper subsurface drainage behind the existing sound wall to the proposed type B gutter.

**2.0 Materials.** The materials required for proper subsurface drainage include 6" perforated drain tubing, 4" perforated drain tubing, an 8" drain basin, and Grade 4 aggregate for drainage.

**2.1** The drainage pipes and basin shall be made of either polyethylene or PVC material.

**2.2** The contractor shall use one of the following suppliers for the drain basin and/or drainage pipes, or an approved equal:

A. Advanced Drainage Systems  
4640 Trueman Blvd.  
Hilliard, OH 43026  
Phone: 1-800-821-6710

B. MPR Supply Company  
2541 Link Rd.  
St. Louis, MO 63114-1677  
Phone: 314-426-4838

C. ASP Enterprises, Inc.  
1099 Cassens Industrial Ct.  
Fenton, MO 63026  
Phone: 636-343-4357  
Fax: 636-343-4723

D. Nu Way Concrete  
4190 Hoffmeister Ave.  
St. Louis, MO 63125-2205  
Phone: 314-544-1214

**2.3** All or some of the materials required for the Subsurface Drainage System may also be found at chain hardware stores such as Lowes and The Home Depot.

**2.4** Aggregate for drainage shall be crushed limestone or dolomite or reclaimed concrete, in accordance with the following gradation requirements:

Gradation A	
Sieve Size	Percent by Weight
1 1/2-inch	100
1-inch	95-100
1/2-inch	25-60
No. 4	0-10
No.8	0-5

Gradation B	
Sieve Size	Percent by Weight
1-inch	100
3/4-inch	95-100
3/8-inch	20-55
No. 4	0-10
No.8	0-5

**2.5** The materials for the Subsurface Drainage System shall be installed according to the design plans unless specified otherwise by the Engineer.

**3.0 Method of Measurement.** The quantities shown on the plans shall be considered an estimate and may be subject to change based on field conditions. This work will not be measured for payment, but will be considered a lump sum unit. Any Value Engineering proposals to the temporary traffic control will not be paid for through value engineering but will be covered under Subsurface Drainage System, lump sum.

**4.0 Basis of Payment.** The drainage system will be paid for as one lump sum and shall include all necessary labor, equipment, and materials for installation of the subsurface drainage system. No direct payment will be made for any items incidental to the construction of the subsurface drainage system including excavation, rock, pipe, drain basin, etc.

G. Work Requirements – Removing/Reinstalling Guardrail

**1.0 Description.** This work shall consist of removing and reinstalling the Type A Guardrail sections as needed for the contractor to have access to the work site.

**2.0 Materials.** The materials required for this work are Type A Guardrail sections, replacement Guardrail Posts, and Type F Temporary Traffic Barriers.

**2.1** Existing guardrail shall only be removed to allow contractor equipment access to and from the work site.

**2.2** At times when the existing guardrail is removed, Type F Temporary Traffic Barriers shall be inserted in its place to protect incoming traffic from entering the excavation site and striking the blunt end of the guardrail. The blunt end of the barrier shall be placed 4' behind the removed section of guardrail and the downstream end shall be placed in front of the guardrail.

**2.3** Any deficient guardrail or guardrail posts removed shall be replaced to meet applicable standards of specifications 606 and 1040 of the Missouri Specifications for Highway Construction.

**3.0 Method of Measurement.** This work will not be measured for payment, but will be considered a lump sum unit. Any Value Engineering proposals to the temporary traffic control will not be paid for through value engineering but will be covered under Removing/Reinstalling Guardrail, Lump Sum.

**4.0 Basis of Payment.** Payment for removing/replacing the guardrail section shall be paid for as a lump sum under the pay item "removing and reinstalling guardrail, lump sum".

**4.1** It is the contractor's responsibility to properly store the removed guardrail sections. There will be no direct payment for new guardrail if the existing guardrail is damaged and needs to be replaced.

**4.2** Posts damaged during removal will be replaced with new posts. New posts will be included in the cost for removal and installation of guardrail.

H. Work Description – Geosynthetic Reinforced Soil Slope System (Clayton and McCausland slides)

**1.0 Description.** Work shall consist of design, furnishing materials, and construction of geosynthetic reinforced soil slope (GRSS) structure meeting approval of the Engineer. Design and supply of geosynthetic

reinforcement, drainage composite, erosion control materials, and site assistance are all to be furnished by the slope system supplier.

**2.0 Prequalification of Reinforced Slope System and Materials.** All systems and materials shall be pre-qualified and approved before the contract is awarded. To apply for prequalification or prequalification requirements, the supplier or manufacturer shall submit a request to Construction and Materials. The following systems are pre-qualified and may be used:

Tensar Sierra Slope Retention System:

Tensar Earth Technologies, Inc.  
5883 Glenridge Drive  
Suite 200  
Atlanta, GA 30328-5363

phone 404-250-1290  
sales 800-202-4459  
fax 404-250-0461

Mirafi Geogrid Reinforced Slope:

Ten Cate Nicolon USA  
365 South Holland Drive  
Pendergrass, GA 30567

phone 706-693-2226  
fax 706-693-4400  
email: tc mirafi@rtcusa.net

StrataSlope System:

Strata Systems Inc.  
380 Dahlonega Rd, Suite 200  
Cumming, GA 30040

phone 770-888-6688  
fax 770-888-6680  
email: [strata@geogrid.com](mailto:strata@geogrid.com)

**3.0 Preliminary Design and Plans.**

**3.1** Prior to any work being done, GRSS design plans and computations shall be submitted to the engineer complete with all details as a separate submittal for each individual reinforced slope structure.

**3.2** All drawings shall be clear and complete. Six sets of drawings of the completed wall design plans shall be submitted for distribution. The drawings submitted shall be legible and have distinct details of sufficient contrast to be suitable for microfilming. Drawings which do not have the desired clarity and contrast will be returned for corrective action. The GRSS system manufacturer shall be solely responsible for the content of the design plans.

**3.3** All GRSS design plans submitted for distribution shall be signed, sealed and stamped in accordance with the laws relating to architects and professional engineers (Chapter 327, RSMo.).

**3.4** The minimum factors of safety for slope stability shall be as follows or as required by the contract.

**3.4.1** 1.5 against horizontal sliding of the reinforced mass along its base

**3.4.2** 1.3 against external, deep seated failures

**3.4.3** 1.3 against compound failure surfaces

**3.4.4** 1.3 against internal failure

**3.4.5** 1.1 seismic loading for the above failure modes

**3.5** Reinforced slopes shall be designed for the appropriate SEISMIC PERFORMANCE CATEGORY A, B, C, or D and additional requirements as may be shown in the plans or this specification.

**3.6** Completed GRSS design plans shall also contain all material specifications, fabrication requirements, and all construction requirements for erecting the reinforced slope complete in place. Any requirements on the design plans conflicting with this special provision shall not be used.

**3.7** The effect of construction damage test shall be incorporated into the construction damage factor  $F_c$ , that is applied to the limit and serviceability state reinforcement tensions. Where construction tests have been made but with fills or construction procedures other than those representative or site specific on the project, the minimum value of  $F_c$  shall be taken as 1.25. Lower values of  $F_c$  may be only used if substantiated with damage test using fills and construction procedures specific to the project. A default  $F_c$  value of 3.0 shall be used in the absence of any construction tests.

#### **4.0 Backfill Material.**

**4.1** Backfill material for GRSS shall conform to the following requirements.

**4.2** The GRSS shall be constructed of in situ material. The Contractor must ensure that all mulch is removed from the excavated material prior to using as the Select Granular Backfill.

#### **5.0 Design and Plan Requirements.**

**5.1** The final design to be submitted after contract award shall include detailed design computations and all details, dimensions, quantities and cross sections necessary to construct the slope(s). The fully detailed plans shall be prepared to MoDOT standards and shall include, but not be limited to, the following items:

**5.1.1** An elevation view indicating elevations at top and bottom of slope, beginning and end stations, all horizontal and vertical break points, whole station points, and each level of reinforcement. Location of proposed final ground lines shall be indicated.

**5.1.2** Length, size, and type of grade of reinforcement shall be shown.

**5.1.3** Internal drainage alignment, elevations, and slope face exit points shall be shown on the elevation, plan, and cross section views.

**5.1.4** Plan view shall reflect the horizontal alignment and shall indicate the offset from the horizontal control line to the front face of the slope. All utilities, signs, lights, etc. that affect the reinforced slope shall be shown.

**5.1.5** Any general notes required for construction of the reinforced slope.

**5.1.6** Cross sections showing limits of construction, fill requirements, and excavations limits.

**5.1.7** Limits and extent of reinforced soil fill volume.

#### **5.2 Typical Details of Primary and Secondary Reinforcement.**

**5.2.1** Facing details for erosion control.

**5.2.2** Temporary slope face support (if required).

**5.2.3** All details for construction of slope around drainage facilities, overhead sign footings and abutments shall be clearly shown.

### **5.3 Detailed Design Computations.**

**5.3.1** Slope stability computations, computer output, and an explanation of analysis details within the program. A copy of the computer program with user documentation if an in-house computer program was used.

**5.3.2** Cross section plots showing critical failure planes for internal, compound, and global failure modes; and a summary of the critical failure surface(s) search.

**5.3.3** Sliding stability computations.

**5.3.4** Seismic stability computations, where applicable.

**5.3.5** Tractive shear stress of all erodible surfaces and appropriate anchorage mechanism(s). (Erosion protection requirements to be specified by MoDOT.)

**5.3.6** Drainage system design computations including volume of water to be removed by the subsurface drainage system; geotextile retention, permeability, and survivability requirements based upon fill and subgrade characteristics; and maximum long-term flow of the drainage composite. (Maximum drain spacing and flow requirements to be specified by MoDOT.)

**5.4** The plans and design computations shall be prepared and sealed by a professional engineer, licensed according to Chapter 327. RSMo. Six sets of design drawings and detail design computations shall be submitted to MoDOT. The computations shall include a detailed explanation of any symbols and computer programs used in the design. All design and construction details will be checked by MoDOT against the preapproved design values and procedures for materials approved for use in that particular system.

### **6.0 Construction Requirements.**

**6.1** Delivery, storage, and handling of geosynthetic reinforcement, drainage composite, and geosynthetic erosion mat shall comply with requirements set forth in the Missouri Standards Specifications for Highway Construction.

**6.2** Geosynthetic reinforcement material suppliers shall provide a qualified and experienced representative on site, for a minimum of three days, to assist the contractor and MoDOT inspectors at the start of construction. If there is more than one slope on a project, then these criteria will apply to construction of the initial slope only. The representative shall also be available on an as needed basis, as requested by the Engineer, during construction of the remaining slope(s).

**6.3** All areas immediately beneath the installation area for the geosynthetic reinforcement shall be properly prepared as detailed on the plans, specified elsewhere within the specifications, or directed by the Engineer. Subgrade surface shall be level, free from deleterious materials, loose or otherwise unsuitable soils. Prior to placement of geosynthetic reinforcement, subgrade shall be proof-rolled to provide a uniform and firm surface. Any soft areas, as determined by the Engineer, shall be excavated and replaced with suitable compacted materials. Foundation surface shall be inspected and approved by the Engineer prior to fill placement. Benching the backcut into competent soil is recommended to improve stability.

**6.4** Geosynthetic reinforcement shall be installed within the layers of the compacted soil in accordance with the manufacturer's recommendations and as shown on the plans. Geosynthetic reinforcements are to be placed within 3 inches (75 mm) of the design elevations and extend the length as shown on the elevation view unless otherwise directed by the Engineer. Correct orientation of the geosynthetic reinforcement shall be verified by the contractor.



**6.5** Backfill shall be placed, spread, and compacted in such a manner to minimize the development of wrinkles and/or displacement of the geosynthetic reinforcement. Cohesive soils shall be compacted in a maximum loose lift thickness of 8 inches (200 mm), and granular soils in a maximum loose lift thickness of 10 inches (250 mm). Backfill shall be compacted as specified by project specifications or to at least 95 percent of the maximum density determined in accordance with AASHTO T-99, whichever is greater. Backfill shall be graded away from the slope crest and rolled at the end of each work day to prevent ponding of water on surface of the reinforced soil mass. Tracked construction equipment shall not be operated directly upon the geosynthetic reinforcement. A minimum fill thickness of 6 inches (150 mm) is required prior to operation of tracked vehicles over the geosynthetic reinforcement. Turning of tracked vehicles shall be kept to a minimum to prevent tracks from displacing the fill and the geosynthetic reinforcement. If approved by the Engineer and subject to satisfactory performance, rubber-tired equipment may pass over the geosynthetic reinforcement at speeds no greater than 10 mph (16 km/h). Sudden braking and sharp turning shall be avoided.

## **6.6 Erosion Control Material Installation.**

**6.6.1 Delivery, Storage, and Handling.** Contractor shall check the erosion control material to ensure that the proper material has been received. During all periods of shipment and storage, the erosion mat shall be protected from temperatures greater than 140 F (60 C), mud, dirt, and debris. Follow manufacturer's recommendations in regards to protection from direct sunlight. At the time of installation, the erosion mat/blanket shall be rejected if it has defects, tears, punctures, flaws, deterioration, or damage incurred during manufacture, transportation, or storage. If approved by the engineer, torn or punctured sections may be removed by cutting a cross section of the mat out. The remaining ends should be overlapped and secured with ground anchors. Any erosion mat/blanket damaged during storage or installation shall be replaced by the contractor at no additional cost to MoDOT.

**6.6.2 On Site Representative.** Erosion control material suppliers shall provide a qualified and experienced representative on site, for a minimum of one day, to assist the contractor and MoDOT inspectors at the start of construction. If there is more than one slope on a project then this criteria will apply to construction of the initial slope only. The representative shall also be available on an as needed basis, as requested by the engineer, during construction of the remaining slope(s).

**6.6.3 Placement.** The erosion control material shall be placed and anchored on a smooth graded, firm surface approved by the engineer. Anchoring terminal ends of the erosion control material shall be accomplished through use of key trenches. The material in the trenches shall be anchored to the soil on maximum 18 inch (450 mm) centers. (Topsoil, if required by construction drawings, placed over final grade prior to installation of the erosion control material shall be limited to a depth not exceeding 3 inches (75 mm)).

**6.6.3.1** Erosion control material shall be anchored, overlapped, and otherwise constructed to ensure performance until vegetation is well established. Anchors shall be as designated on the construction drawings, with a minimum length of 12 inches (300 mm) recommended, and shall be spaced as designated on the construction drawings, with a maximum spacing of 4 feet (1.2 m) recommended.

**6.6.4 Soil Filling.** If noted on the construction drawings, the erosion control mat shall be filled with fine grained topsoil, as recommended by the manufacturer. Soil shall be lightly raked or brushed on/into the mat to fill mat thickness or to a maximum depth of 1 inch (25 mm).

## **6.7 Geosynthetic Drainage Composite.**

**6.7.1 Delivery, Storage, and Handling.** Contractor shall check the erosion control material to ensure that the proper material has been received. During all periods of shipment and storage, the erosion mat shall be protected from temperatures greater than 140 F (60 C), mud, dirt, and debris. Follow manufacturer's recommendations in regards to protection from direct sunlight. At the time of installation, the erosion

mat/blanket shall be rejected if it has defects, tears, punctures, flaws, deterioration, or damage incurred during manufacture, transportation, or storage. If approved by the engineer, torn or punctured sections may be removed by cutting a cross section of the mat out. The remaining ends should be overlapped and secured with ground anchors. Any erosion mat/blanket damaged during storage or installation shall be replaced by the contractor at no additional cost to MoDOT.

**6.7.2 On Site Representative.** Geosynthetic drainage composite material suppliers shall provide a qualified and experienced representative on site, for a minimum of one half day, to assist the contractor and MoDOT inspectors at the start of construction with directions on the use of drainage composite in conjunction with the geosynthetic reinforced soil system. If there is more than one slope on a project then this criteria will apply to construction of the initial slope only. The representative shall also be available on an as needed basis, as requested by the engineer, during construction of the remaining slope(s).

**6.7.3** A geotextile flap shall be provided along all drainage core edges. This flap shall be of sufficient width for sealing the geotextile to the adjacent drainage structure edge to prevent soil intrusion into the structure during and after installation. The geotextile shall cover the full length of the core.

**6.7.4** The geocomposite core shall be furnished with an approved method of constructing and connecting with outlet pipes or weep holes as shown on the plans. Any fittings shall allow entry of water from the core but prevent intrusion of backfill material into the core material.

**6.7.5 Placement.** The soil surface against which the geosynthetic drainage composite is to be placed shall be free of debris and inordinate irregularities that will prevent contact between the soil surface and the drain.

**6.7.6 Seams.** Edge seams shall be formed by utilizing the flap of geotextile extending from the geocomposite's edge and lapping over the top of the fabric of the adjacent course. The fabric flap shall be securely fastened to the adjacent fabric by means of plastic tape or non water soluble construction adhesive, as recommended by the supplier. Where vertical splices are necessary at the end of a geocomposite roll or panel, an 8 inch (200 mm) wide continuous strip of geotextile may be placed, centering over the seam and continuously fastened on both sides with plastic tape or non water soluble construction adhesive. As an alternative, rolls of geocomposite drain material may be joined together by turning back the fabric at the roll edges and interlocking the cuspidations approximately 2 inches (50 mm). For overlapping in this manner, the fabric shall be lapped over and tightly taped beyond the seam with tape or adhesive. Interlocking of the core shall always be made with the upstream edge on top in the direction of water flow. To prevent soil intrusion, all exposed edges of the geocomposite drainage core shall be covered by tucking the fabric flap over and behind the core edge. Alternatively, a 12 inch (300 mm) wide strip of fabric may be utilized in the same manner, fastening it to the exposed fabric 8 inches (200 mm) in from the edge and folding the remaining flap over the core edge.

**6.7.7 Repairs.** Should the fabric be damaged during installation by tearing or puncturing, the damaged section shall be cut out and replaced completely or repaired by placing a piece of fabric that is large enough to cover the damaged area and provide a sufficient overlap on all sides to fasten.

**6.7.8 Soil Fill Placement.** Structural backfill shall be placed immediately over the geocomposite drain. Care shall be taken during the backfill operation not to damage the geotextile surface of the drain. Care shall also be taken to avoid excessive settlement of the backfill material. The geocomposite drain, once installed, shall not be exposed for more than seven days prior to backfilling.

## **7.0 Method of Measurement.**

**7.1** Measurement of Geosynthetic Reinforced Soil Slope Systems is on a vertical square foot basis.

**7.2** Payment shall cover GRSS design, materials, and installation of geosynthetic reinforcement, backfill, drainage composites, and geosynthetic erosion mat. Excavation of any unsuitable materials and requirement with select fill, as directed by the Engineer shall be paid under a separate pay item.

**7.3** Quantities of reinforced soil slope system as shown on the plans may be increased or decreased at the direction of the Engineer based on construction procedures and actual site conditions.

**7.0 Basis of Payment.** The accepted quantities of geosynthetic reinforced soil slope system will be paid for per vertical square foot of GRSS in place, (Geosynthetic Reinforced Slope System, square feet).

**I. Work Requirements – Seeding and Mulching**

**1.0 Description.** This work shall consist of furnishing and sowing seed as specified in the contract. All disturbed areas shall be seeded except for sodded areas, surfaced areas, solid rock, and slopes consisting primarily of broken rock.

**2.0 Material.** All material shall be in accordance with the following.

**2.1** The seed shall be grown and processed in the United States or Canada and shall comply with the requirements of the Missouri Seed Law. Certain lots of seed may be desirable for the advancement of a local ecotype when specified, and will be the only seed permitted. The following percentages for purity and germination or pure live seed will be the minimum requirements in the acceptance of seed, unless otherwise permitted by the engineer.

**Seed Requirements**

<b>Non-Native Grass</b>	<b>Scientific Name</b>	<b>Purity</b>	<b>Germination</b>	<b>Rate of Application</b>
Bermuda Grass	Cynodon dactylon	95	80	44 # / Acre
Blue Grama	Bouteloua gracilis	-	-	10 # / Acre
Annual Ryegrass	Lolium multiflorum	98	85	5 # / Acre
Buffalo Grass	Buchloe dactyloides	-	-	8 # / Acre
White Clover	Trifolium repens	98	85	5 # / Acre
Perennial Rye	Lolium perenne	98	85	5 # / Acre
Sand Love Grass	-	-	-	1 # / Acre
Rough Dropseed	Sporobolus compositus	-	-	2 # / Acre
Tall Fescue	Festuca arundinacea	97	85	40 # / Acre

<sup>a</sup> Will not apply if unhulled or unscarified seed is specified

**2.2** If the specified quantity is in pounds of seed, no reduction will be permitted in the specified quantity of seed if the purity or germination or both, are higher than the minimum required by the specifications. If the

specified quantity is in pounds of pure live seed, the pure live seed quantity shall be determined from the actual percentage shown by the supplier for native grasses or by multiplying the actual percentages of purity times the actual percentage of germination, including hard seed for other seed.

**2.3** All leguminous seed shall be inoculated or treated with the proper quantity of cultures approved for the particular legume to be sown. Leguminous seed will include alsike clover, Korean lespedeza, red clover, white clover, hairy vetch, partridge pea and slender bush clover.

**2.3.1** The inoculant for treating leguminous seed shall be a nitrogen-fixing bacteria culture. The inoculant containers shall be plainly marked with the expiration date for use. The manufacturer's recommendations for inoculating seed shall be followed.

### **3.0 Construction Requirements.**

**3.1** The seedbed shall be prepared in accordance with Section 801. Neutralizing material shall be applied at the rates below. No direct payment will be made for neutralizing material.

Effective Neutralizing Material	1000 lbs. per Acre
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Seeding shall be done before the seedbed becomes eroded. Seed shall be uniformly applied at no less than the rates specified.

**3.2** Disturbed areas outside of authorized construction limits shall be seeded at the contractor's expense.

**3.3** All seeded areas shall be mulched in accordance with Sec 802.

**4.0 Acceptance.** The performance standard shall be met before acceptance of the work. At least two random counts per acre in representative areas of the project will be conducted. All erodible seeded areas shall provide a minimum of 20 living plants, uniformly spaced, of the specified type per square foot. For areas with a large percentage of rock, the number of living plants shall be proportional to the percentage of erodible surface, as determined by the engineer. Inspection for acceptance will be made within 60 days after seeding, excluding seeding dates that fall between September 30 and March 1. Seeding dates that fall between September 30 and March 1 will be counted no earlier than May 1.

**5.0 Corrective Action.** Inadequate stands shall be reworked and reseeded within the time period agreed upon at the contractor's expense. On previously accepted seeded areas, the engineer may authorize eroded areas to be repaired to an acceptable condition as determined by the engineer.

**6.0 Method of Measurement.** Measurement of seeding will be made of the area seeded to the nearest 1/10 acre.

**8.0 Basis of Payment.** The accepted quantity of seeding, liming, fertilizing or seedbed preparation will be paid for at the contract unit price for Item 8059919, Bermudagrass Seeding, per Square Yard.

## **J. Erosion Control**

**1.0 Description.** Erosion control shall be in accordance with all applicable portions of Division 800 of the Standards and Specifications.

**2.0 Materials.** The materials used for all three locations include silt fence, type II ditch checks, and inlet checks.

**3.0 Method of Measurement.** Measurement for silt fence will be to the nearest linear foot. Type II ditch checks and inlet checks shall be paid for each individual unit placed.

**4.0 Basis of Payment.** Silt fence shall be paid for under the contract unit price for item 8061019, Silt Fence, per linear foot. Type II ditch checks shall be paid under the contract unit price for item 8061022, Type II Ditch Check, per each. Inlet checks shall be paid for under the contract unit price for item 8061025, inlet check, per each.

K. UTILITIES JSP-93-26C

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

<u>Utility Name</u>	<u>Known Required Adjustment</u>	<u>Type</u>
Keith Von Hatten <b>Ameren Missouri</b> Telephone: 314.992.9812	None	Power
Becky Loyett <b>AT&amp;T Distribution</b> Telephone: 636.256.1452 Email: <a href="mailto:bl6083@att.com">bl6083@att.com</a>	None	Communications
Steve Gerrein <b>Charter Communications</b> Telephone: 636.387.6641 Email: <a href="mailto:Steve.Gerrein@charter.com">Steve.Gerrein@charter.com</a>	None	Communications
Jose Arellano <b>Laclede Gas Company</b> 3950 Forest Park St. Louis, MO 63108 Telephone: 314.658.8495 573.338.3536 Cell Email: <a href="mailto:Jarellano@lacledegas.com">Jarellano@lacledegas.com</a>	None (See provision below)	<b>Gas</b> <b>Jim Young-Laclede Inspector</b> <b>314.575.4620</b>  <b>Contractor shall contact inspector at least 3 business days prior to mobilizing at Clayton slide.</b>
Steve Runde <b>City of St. Louis BPS</b> Email: <a href="mailto:RundeS@stlouiscity.com">RundeS@stlouiscity.com</a>	None	Lighting/Signals
Mr. Mark Nankivil <b>St. Louis City Water Division</b> 4600 McRee St. Louis, MO 63110 Telephone: 314.633.9023 Fax: 314.664.4074 Email: <a href="mailto:mnankivil@stlwater.com">mnankivil@stlwater.com</a>	None	Water

Francis Kaiser <b>St. Louis Metropolitan District</b> Telephone: 314.768.6204	None	Sewer
Jason Johns <b>Lightcore, A Centurylink Co</b> Telephone: 916.296.8520 Email: <a href="mailto:Jason.Johns@CenturyLink.com">Jason.Johns@CenturyLink.com</a>	None	Communications
Don Torbett <b>MCI</b> Telephone: 918.877.7333 Email: <a href="mailto:donald.torbett@verizon.com">donald.torbett@verizon.com</a>	None	Communications

**1.1** The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

**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, its 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 its subcontractor's operation.

**2.0** Laclede Gas Company has existing 8" and 24" gas mains crossing I-64 at the Clayton slide repair site. Laclede Gas Company has obtained horizontal and vertical information on these mains. Contractor shall directly contact Laclede for information.

**2.1** Contractor shall directly contact Laclede Gas Company, Jim Young, Inspector 314-575-4620 at least 3 business days ahead prior to mobilizing at the Clayton slide areas. The contractor shall not excavate above the gas lines and within 36" adjacent to the outermost edge of these gas lines, thus creating two separate slide excavation areas. The excluded space shall not be disturbed. A 2:1 slope extending from the outermost edges of the gas mains shall be maintained. There shall be no direct pay in complying with this provision.

**3.0 The contractor shall be aware that several utilities including MoDOT facilities may be in the limits of the project's slide areas. No utility relocations are anticipated. The contractor shall verify the utilities, locations and depths, within the limits of the repair work and take necessary measures to not disturb the existing facilities.**

**4.0** 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.

**5.0 There will be no direct pay for conformance to the Utilities provisions.**

L. 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 and any revisions shall be submitted to the engineer for review and approval prior to the start of work affected. 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 a minimum of two weeks prior to lane closures.

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

**2.4** To ensure minimal traffic disruption, 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 10 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, 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 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 six major holiday periods per year: Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day proceeding the holiday until 9:00 a.m. on the first working day subsequent to the holiday. There may be other events of regional significance, such as specific sporting events (i.e. St. Louis Cardinals home games, St Louis Blues, St Louis Rams, parades, marathons, concerts, and other major St Louis or Metro East events, etc.). The contractor shall not close a lane on eastbound I-64 until 1 hour after the beginning of a Cardinals baseball game. Closures times on westbound I-64 will be determined by the engineer. The engineer will advise the contractor of any such events and how they are to be handled. Restricted periods for special events shall be determined by the engineer.

**3.2 Lane closure times will be restricted to weekends except as approved by the engineer.** The contractor shall not perform any work except in compliance with the following work hour restrictions. Working hours for holidays shall be determined by the engineer.

#### **Interstate 64 Weekend Working Hours**

Eastbound Single lane closures allowed – 8:00 am to 9:00 pm

Westbound Single lane closures allowed – 8:00 am to 9:00 pm

The Contractor may also use these working hours for weekdays if the excavation site can be accessed without the need for a lane closure,

### **4.0 Lane Closures.**

**4.1** The contractor shall provide changeable message signs notifying motorists of future traffic disruptions and possible traffic delays one week prior to lane closures. All changeable message signs shall be compliant with the guidelines outlined in the "Changeable Message Sign Requirements" JSP. The changeable message sign shall be installed at a location as approved or directed by the engineer.

The contractor shall provide the engineer notice two (2) weeks prior to lane closures. MoDOT will issue a press release to the local news media, newspaper, radio and television prior to lane closure. The press release will advise motorists to take alternate routing to avoid traffic congestion at the construction site and to anticipate a slowdown in traffic flow.

In the event of any weather, material, or related postponement, notification shall be made to the engineer of the postponement and the re-scheduling of the roadway lane closure to a new date.

The contractor shall note that on a weekly basis, MoDOT's Maintenance of Traffic (MOT) Team reviews all work zones scheduled for the following week and month for the entire St. Louis District. If two or more work zones negatively impact each other's flow of traffic and traffic mitigation is not feasible or practical, MoDOT's MOT reserves the right to reject or alter those work zones.

**5.0 Coordination with other Projects.** The contractor shall coordinate traffic management between this project and any other projects on I-64 and projects on routes which affect I-64 in this area. The contractor shall



be aware of the following jobs: J611248 - I-64 Ramps and Bridges near Tower Grove Avenue. Also, a tree removal and replacement project may also be active along I-64 in this area.

**5.1** This list of projects is not all inclusive. The contractor shall be aware that there may be other projects including, but not limited to, utility, St. Louis City, private, MoDOT maintenance, permit, or other projects that may impact project construction or traffic control in the vicinity of this project. It shall be the responsibility of the contractor to determine what, if any projects other than the ones listed above may impact this project and work to coordinate construction and traffic management efforts between this project and any other project involved.

## **6.0 Traffic Control Plan Revisions.**

**6.1** The plans provide a traffic control plan with quantities of traffic control devices. The contractor is allowed to propose changes to the traffic control plan if the construction time frame can be shortened, and/or the number of days traffic lanes are restricted can be reduced. If the contractor proposes modifying the traffic control plans, there will be no additional payment for additional traffic control items.

**6.2** Any modification to the Traffic Control Plans or alternate traffic control plan must meet the minimum requirements of this provision. The Modified Traffic Control Plan must be signed and sealed by a Professional Engineer registered in the State of Missouri and must comply to the current edition of the MUTCD and MoDOT standards, whichever is more conservative.

**6.3** Any Modified Traffic Control Plan Sheets must be submitted 3 weeks prior to implementation to allow ample time for review and approval.

## **7.0 Documentation Records of Traffic Control**

**7.1** The contractor shall measure and/or count all temporary traffic control items used on this project. A document will be filled out by the contractor listing the items, along with the quantity and location on the roadway. This document will be similar in form to a MoDOT Documentation Record.

**7.2** These Documentation Records will be submitted to the engineer three working days prior to the estimate so the engineer can verify the information and quantities may be included for pay where applicable. They shall have the following certification statement and be signed by the Director of Traffic Management.

“In keeping with United States Code, Title 18, Section 1020, regarding False Statements, I certify, to the best of my ability, the above information is correct and accurate with regards to date placed, quantity, length and location”. Signature & Date

**9.0 Basis of Payment.** No direct payment shall be made for additional expenses incurred by the contractor for the cost of equipment, labor, materials, incidentals, or time required to fulfill the above provisions.

## **M. Project Contact for Contractor/Bidder Questions**

All questions concerning this project during the bidding process shall be submitted in writing (may be emailed, or faxed) to the buyer of record listed below. Responses will be published as addenda posted on the General Services St. Louis District website.

Stephanie Austin Rashid, CPPB  
General Services Specialist  
2309 Barrett Station Rd.  
Ballwin, MO. 63021

Telephone Number: (314) 301-1439  
Fax Number: (573) 526-0016  
E-mail: Stephanie.AustinRashid@modot.mo.gov

**N. 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 State Highway Patrol  
Troop C Headquarters  
891 Technology Dr.  
Weldon Spring, MO 63304  
(636) 300-2800

St. Louis County Police Department  
7900 Forsyth Blvd  
Clayton, MO  
314-729-0398

St. Louis Metropolitan Police Department  
Central Patrol Division  
919 North Jefferson  
St. Louis, MO 63106  
314-444-2500

Barnes-Jewish Hospital  
1 Barnes-Jewish Hospital Plaza  
St. Louis, MO 63110  
(314) 747-3000

SSM Saint Mary's Health Center  
6420 Clayton Rd,  
Richmond Heights, MO 63117  
(314) 768-8000

St. Louis City Fire Department Headquarters  
1421 N. Jefferson Ave.  
St. Louis, MO 63106  
314-533-3406

St. Louis City Tow Lot/Towing Services  
7410 Hall Street  
St. Louis, MO 63147  
314-383-7546

MoDOT Transportation Management Center (TMC)  
14301 South Outer 40 Rd.  
Chesterfield, MO 63017  
(314) 275-1500

**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.

O. Temporary Traffic Control

**1.0 Description.** All work necessary to maintain safe and efficient traffic flow through the work areas shall be provided by the contractor. This will include furnishing, relocating, and removing temporary traffic control devices, truck mounted attenuators and equipment, and the removal and relocation or covering and uncovering of existing signs and other traffic control devices in accordance with the contract documents or as directed by the engineer.

**2.0 Work requirements.** Work shall be in accordance with the Missouri Standard Specification for Highway Construction Sec 616, Sec 612, and the contract plans. All traffic control shall be provided by the contractor as shown in Exhibit C of the contract documents. Standard MUTCD compliant signs, channelizers, flashing arrow panels, etc. shall be used.

**3.0 Method of Measurement.** The quantities shown on the plans shall be considered an estimate and may be subject to change based on field conditions. This work will not be measured for payment, but will be considered a lump sum unit. Any Value Engineering proposals to the temporary traffic control will not be paid for through value engineering but will be covered under Temporary Traffic Control, lump sum.

**4.0 Basis of Payment.**

**4.1** Upon satisfactory completion and acceptance of all work items, the contractor shall submit, an itemized invoice as instructed in these bid documents. All bid items shall be completed in their entirety, by traffic direction listed below, prior to invoice for payment. Each slide location may be submitted for payment separately as work is completed, but there will be no other partial payments allowed.

**4.2** Temporary traffic control will be paid for at the contract lump sum price for Item 616-99.01, Temporary Traffic Control. No direct payment will be made for the following:

- (a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.
- (b) Installing, operating, maintaining, cleaning, repairing, removing or replacing traffic control devices.
- (c) Covering and uncovering existing signs and other traffic control devices.

- (d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.
- (e) Providing channelizers, temporary traffic barriers, directional indicator barricades, etc.
- (f) Worker apparel.
- (g) Flaggers, pilot vehicles, and appurtenances at flagging stations.
- (h) Truck or trailer mounted attenuators
- (i) Work zone lighting
- (j) Furnishing, installing, operating, maintaining, and removing construction-related vehicle and equipment lighting.
- (k) Construction and removal of temporary equipment crossovers, including restoring pre-existing crossovers.
- (l) Removing existing pavement markings, installing temporary pavement markings, and removing and relocating temporary pavement markings as necessary for staging operations.
- (m) Furnishing and placing Changeable Message Signs

**4.3** Any additional work deemed necessary by the engineer that requires temporary traffic control and is not covered by the contract plans will be included in the cost change order for the additional work. However, if the added work is required in a stage where temporary traffic control is already in place, no additional traffic control pay will be allowed in this case.

**P. CHANGEABLE MESSAGE SIGN (CONTRACTOR FURNISHED and RETAINED)**

**1.0 Description.** All solar powered changeable message signs, hereinafter referred to as a CMS, shall be in accordance with these specifications.

**2.0 Material.** Each CMS shall consist of an all LED (light emitting diode) matrix message board, solar/battery power supply and a user-operated interface, as specified, all mounted on a heavy duty, towable trailer.

**2.1** Each CMS shall be either Full Matrix or Character Matrix, and have the following minimum characteristics:

- (a) Full Matrix - Each CMS shall be the Full Matrix type with the capability of providing one, two, and three lines of individual changeable characters with minimum heights of 52 (1300), 28 (700), and 18 (450) inches (mm), respectively. Full Matrix signs shall be capable of both static and dynamic graphics, and full display sized messages.
- (b) Character Matrix (Three Line) – Each CMS shall consist of a minimum of three lines containing eight individual changeable characters per line. Each character shall be a minimum of 12 inches wide and 18 inches (450 mm) high.

- (c) The sign controller shall be remotely accessible by the MoDOT St Louis District TMC (Transportation Management Center) ATMS (Advanced Transportation Management System) software, provided by TransSuite.
- (d) Sign firmware shall comply with the current FHWA and DOT (Department of Transportation) NTCIP standards and support all NTCIP mandatory objects.
- (e) The sign shall also have a GPS unit that can assist in locating the sign's position when polled by the TMC. The GPS unit must be remotely accessible by the TMC and be part of or work with the provided communication modem.

**2.2** Full matrix CMS and character matrix CMS shall meet the following:

- (a) The overall sign dimensions shall not be less than 72 inches (1800 mm) high x 126 inches (3150 mm) wide.
- (b) The CMS shall be legible up to a distance of 650 feet (200 m) for both day and night operations and shall be visible for ½-mile (800 m) with 18 inch (450 mm) characters.
- (c) When fully raised in the display position, the bottom of the CMS board shall be at least a height of 7 feet (2100 mm) from the ground and shall be able to rotate a complete 360 degrees atop the lift mechanism. A sight tube, used to aim the CMS board to oncoming traffic, shall be installed on the CMS board or mast. The CMS shall have an electrical-hydraulic lifting mechanism that includes a manual lifting and lowering relief mechanism as a backup. It also must be able to be locked into various viewing angles as determined best for the motorists by the CMS operator.
- (d) All LED displays and control circuitry shall be operational from -20 F (6 C) to 120 F (50 C). The LED's shall have a rated life of 100,000 hours. The LED's shall be ITE amber in color on a flat black background.
- (e) The CMS face shall be constructed that if an individual panel or pixel fails the rest of the face shall continue to display the message.
- (f) The CMS shall have a cellular data modem compatible with the district's current cellular IP (packet data) service provider and be capable of allowing the MoDOT St Louis District TMC ATMS software to have full control of the NTCIP compliant CMS controller remotely. The modem shall also allow for the polling of the signs current GPS coordinates.
- (g) Testing to verify modem communication, sign NTCIP compliance, remote GPS status polling, and ability control the sign from the St Louis District TMS ATMS software shall be the responsibility of the Contractor.
- (h) The Contractor shall be responsible for all monthly cellular service fees for the duration of the project.
- (i) The unit shall be able to withstand a 65-mph (105-kmph) maximum road wind speed. The trailer shall be able to support the fully extended CMS board in an 80-mph (130-kmph) wind load.
- (j) Solar charging system shall allow for total autonomy of 24/7/365 continuous operation.
- (k) All exterior surfaces except the sign face shall be cleaned, primed, and finished with two coats of Highway Safety Orange and the sign interior itself shall be cleaned and finished with one coat of corrosion inhibiting primer and two coats of flat black. The sign face shall be covered with a rigid translucent material to prevent damage to the sign face caused by the environment.

**3.0 Construction Requirements.** Prior to placing a CMS on a project, the engineer shall verify proposed CMS location is void of conflict with another DMS or CMS locations presently established. If a conflict is present, the engineer shall contact the Traffic Management Center (TMC) at 314-275-1543 to mitigate. If no conflict is present, engineer shall provide Traffic Management Center (TMC) with the Job Number, Route, County, specific CMS location, and a CMS identification number that is permanently affixed to the CMS. The engineer and contractor shall verify the message displayed on board is compliant with CMS messaging policies. The contractor shall place the CMS 6 feet [2 meters] off of the right edge of shoulder at the location shown on the plans or as directed by the engineer. The CMS shall be placed so that the right side of the unit is advanced approximately 3 degrees ahead with the direction of traffic. CMS shall not be located in medians. CMS shall be delineated with a minimum of five non-metallic channelizing devices. Installation, including location and placement, shall be approved by the engineer. If needed, the contractor shall relocate the CMS as directed by the engineer.

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

**4.0 Basis of Payment.** All expenses incurred by the contractor in maintaining, relocating, operating and protecting the changeable message signs as outlined above shall be paid for at the contract unit price for Item 616-10.98, Changeable Message Sign, Contractor Furnished and Retained, per Each.

**4.1.1** Cost for channelizers shall be included in the contract unit price for CMS.

**4.1.2** Cost for cellular phone hookup and monthly usage fee for the duration of the project shall be included in the contract unit price for CMS.

Q. Quantities

**Bellevue**

Description	Quantity
Class A Excavation CY	244
Precast Modular Block Gravity Wall SF	1300
Aesthetic Concrete Stain LS	1
Subsurface Drainage System LS	1
Type B Gutter LF	90
Rock Fill Furnishing/Placement CY	53
Bermudagrass Seeding Acres	0.2

**Clayton**

Description	Quantity
Class A Excavation	898

CY	
Geosynthetic Reinforced Soil Slope System SF	2484
Rock Fill Furnishing/Placement CY	421
Guardrail Removal/Reinstallation LS	1
Bermudagrass Seeding Acres	0.3

### **McCausland**

Description	Quantity
Class A Excavation CY	560
Geosynthetic Reinforced Soil Slope System SF	1617
Rock Fill Furnishing/Placement CY	260
Bermudagrass Seeding Acres	0.2

### **Traffic Control**

Quantity	Description
1	Sign CONST-7-72 Rate Our Work Zone (72"x36")
4	Sign W020-1 Road/Bridge/Ramp Work Ahead (48"x48") (Road-3, Ramp-1)
2	Sign W020-5 Right Lane Closed Ahead (48"x48")
2	Sign W020-6a Right Lane Closed (48"x48")
3	Sign G020-5ap Work Zone (Plaque) (36"x24")
5	Sign R2-1 Speed Limit XX (36"x48") (50 mph-3, 60 mph-2)
1	Sign W05-1 Ramp Narrows (48"x48")
3	Advanced Warning Rail System ("Right"-2, "Left"-1)
8	Flag Assembly
50	Channelizer (Trim Line)
14	Directional Indicator Barricade
40	Type F Temporary Traffic Barrier (Contractor furnished/retained) (LF)
1	Flashing Arrow Panel

2	Changeable Message Sign
1	Truck Mounted Attenuator
1	Work Zone Lighting
1	Mobilization

Work performed for Traffic Control shall include any equipment, materials and labor required and will be paid for as 1 Lump Sum. TC quantities are provided for only one location at a time. TC for other locations shall be paid for at the Contractor's expense.

### **Erosion Control**

Silt Fence LF	712
Type II ditch Check EACH	12
Inlet Check EACH	2

### **2.1 General Requirements:**

- 2.1.1 The contractor shall provide slide repair on I-64 in St. Louis City and County, MO for the MHTC and MoDOT, in accordance with the provisions and requirements stated herein.
- 2.1.2 The contractor shall provide all deliverables/services to the sole satisfaction of MoDOT.
- 2.1.3 Unless otherwise specified herein, the contractor shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.
- 2.1.4 MoDOT reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid/quote/proposal, unit prices will govern.
- 2.1.5 This work is to be performed under the general supervision and direction of MoDOT and, if awarded any portion of the work, the Contractor agrees to furnish at his own expense all labor and equipment required to complete the work, it being expressly understood that this solicitation is for completed work based upon the price(s) specified and is not a solicitation for rental of equipment or employment of labor by MoDOT, and MoDOT is to have no direction or control over the employees used by the Contractor in performance of the work.

### **2.2 Invoicing and Payment Requirements:**

- 2.2.1 The contractor shall submit an itemized invoice to the following address after the completion of deliverables, as specified herein.

Missouri Department of Transportation  
Business & Benefits  
1590 Woodlake  
Chesterfield, MO. 63017-5712

- 2.2.2 Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices



for payment.

- 2.2.3 The contractor shall be paid in accordance with the firm, fixed prices stated on the pricing page(s) of this document after completion of deliverables specified herein and acceptance by MoDOT.
- 2.2.4 Other than the payment specified above, no other payments or reimbursements shall be made to the contractor for any reason whatsoever.
- 2.2.5 MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Project Tax Exemption Certificate will be furnished to the successful bidder upon request.
- 2.2.6 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- 2.2.7 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the contractor's expense.
- 2.2.8 Notarized weekly payroll documentation for prime and subcontractors will be required from start to finish of this contract showing compliance with prevailing wage rates. Lien Waivers from materials suppliers shall also be provided. Additional documents shall be furnished as required by other provisions in the bid package.
- 2.2.9 Payment shall be made per contractor invoice upon satisfactory completion of all work items and the receipt of required documentation.

### **2.3 Other Contractual Requirements:**

- 2.3.1 **RSMo 285.530** - The contractor understands and agrees that by entering into a contractual agreement with MoDOT, they certify the following:
  - a. The contractor shall only utilize personnel authorized to work in the United States in accordance with applicable federal and state laws. This includes, but is not limited to, the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) and INA Section 274A.
  - b. If the contractor is found to be in violation of this requirement or the applicable state, federal and local laws and regulations, and if the State of Missouri has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States, the state shall have the right to cancel the contract immediately without penalty or recourse and suspend or debar the contractor from doing business with the state.
  - c. The contractor agrees to fully cooperate with any audit or investigation from federal, state or local law enforcement agencies.
  - d. In addition, the contractor shall maintain enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services included herein.

### 2.3.2 Prevailing Wage:

- a. **General Wage Order # 57 to apply, St. Louis City & County, MO.**

### 2.4 Construction Safety Program:

Missouri law, 292.675 RSMo, requires the awarded Contractor and its subcontractor(s) to provide a ten-hour occupational safety and health administration (OSHA) construction safety program (or a similar program approved by the Missouri Department of Labor and Industrial Relations as a qualified substitute) for their on-site employees (laborers, workmen, drivers, equipment operators, and craftsmen) who have not previously completed such a program and are directly engaged in actual construction of the improvement (or working at a nearby or adjacent facility used for construction of the improvement). The Contractor and its subcontractor(s) shall require all such employees to complete this ten-hour program, pursuant to 292.675 RSMo, unless they hold documentation on their prior completion of said program. Penalties for non-compliance include Contractor forfeiture to the Commission in the amount of \$2,500, plus \$100 per contractor and subcontractor employee for each calendar day such employee is employed beyond the elapsed time period for required program completion under 292.675 RSMo.

### 2.5 Insurance Requirements:

The Contractor shall maintain or cause to be maintained at Contractor's own expense commercial general liability, automobile liability, worker's compensation insurance against negligent acts, errors or omissions of the Contractor, or its subcontractors and anyone directly or indirectly employed by any of them. Any insurance policy required as specified in this Section shall be written by a company that is licensed and authorized to issue such insurance in the state of Missouri and shall provide insurance coverage for not less than the following limits of liability:

- 1) General Liability: Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- 2) Automobile Liability: Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- 3) Missouri State Workmen's Compensation policy or equivalent in accordance with state law.

Upon request from the Commission, the Contractor shall provide the Commission with certificates of insurance evidencing the required coverage and that such insurance is in effect.

### 3.0 BID SUBMISSION

#### Bid Submission Information:

- 3.1.1 Submit completed Contractor Questionnaire with attachments not later than seven (7) days prior to the date and hour of the bid opening. See Sec 102.2 of the Missouri Standard Specifications for Highway Construction, and Rule 7 CSR 10-15.900, "Prequalifications to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website at <http://www.modot.org/business/BecomeAMoDOTPrimeContractor.htm>
- 3.1.2 All bids must be received in a sealed envelope clearly marked **"SL14-115-R7 I-64 Slide Repair"**.
- 3.1.3 All bids must be received at the following address no later than **April 7, 2014 at 10:00 a.m., Local Time**.

The Missouri Department of Transportation  
Procurement Division  
Attn: Stephanie Austin Rashid, CPPB  
2309 Barrett Station Rd.  
Ballwin, MO. 63021

- 3.1.4 The bidder may withdraw, modify or correct his bid after it has been deposited with the Department provided such request is submitted in writing and received at the location designated for the bid opening prior to the time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the time specified for the opening of bids.
- 3.1.5 Open Competition / Request For Bid Document:
  - a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.
  - b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
  - c. Bidders are cautioned that the only official position of the MoDOT is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
  - d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.
- 3.1.6 Pursuant to 285.530 RSMo, the bidder must affirm enrollment and participation in a federal work authorization program with respect to the employees proposed to work in connection with the services requested herein by:
  - a. Submitting a completed Signature and Identity of Bidder form, attached herein,

- b. Submitting a completed, notarized copy of the applicable portion of Attachment IV, WORKER ELIGIBILITY VERIFICATION AFFIDAVIT **or** APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP, and

3.1.7 Proposal/Bid Guaranty/Contract Bond:

- a. Each bid shall be accompanied by a Bid Bond, Certified Check, Cashier's Check or Bank Money Order payable to the Director of Revenue – Credit State Road Fund for an amount equal to Five Percent (5%) of the amount of the BID submitted. This is to act as a guarantee that the bidder, if awarded the contract, will furnish an acceptable performance and payment bond (Contract Bond) or a cashier's check, a bank money order or a certified check made payable to "Director of Revenue--Credit State Road Fund" in an amount equal to One Hundred (100%) of the contract price.
- b. If a BID BOND is used (in lieu of a certified check, cashier's check, or bank money order), it must be in the form provided and executed by the bidder as principal and by a surety company authorized to do business in the MoDOT as surety. The agent executing the same on behalf of the surety company must attach a current Power of Attorney setting forth his authority to execute the bond involved.
- c. Certified Checks, Cashier's Checks or Bank Money Orders of unsuccessful bidders will be returned as soon as the award is made. The checks or bank money orders of the successful bidder(s) will be retained until the contract is executed and a satisfactory Performance and Payment (Contract Bond) is furnished. Bid Bonds will not be returned except on specific request of the bidder.
- d. Failure to execute the contract and file acceptable performance payment (Contract Bond) or cashier's check, bank money order or certified check within **15 days** after the contract has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised and performed under contract or otherwise, as the Commission may decide. No contract shall be considered effective until it has been executed by all parties thereto.

3.1.8 Bids will be reviewed to determine if the bid complies with the mandatory requirements, and to determine the lowest and best responsible bid.

3.1.9 Cost Determination - The low bid shall be determined by adding all of the firm, fixed prices on the pricing page for the original contract period to obtain a total price.

3.1.10 Contract Award – The contract will be awarded to the lowest responsible bidder determined as specified above.

- a. Award of this bid will be made on an “All Or Nothing” basis using the “lowest and best responsible” principle of award.
- b. Notification of award will be at the time the tabulation is posted to the Internet. It is the sole responsibility for all bidders to check the website for bid results.

#### 4.0 PRICING PAGE SL14-115-R7

- 4.1 The bidder shall provide a firm, fixed price in the table below for the original contract period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below.

I-64 Slide Repair					
Item #	Description	QTY	U/M	COST U/M	EXTENDED COST
<b>Bellevue</b>					
001	Class A Excavation	244	CY		
002	Precast Modular Block Gravity Wall	1300	SF		
003	Aesthetic Concrete Stain	1	Lump Sum		
004	Subsurface Drainage System	1	Lump Sum		
005	Type B Gutter	90	LF		
006	Rock Fill Furnishing/Placement	53	CY		
007	Bermudagrass Seeding	0.2	Acres		
<b>EXTENDED COST-BELLEVUE</b>					
<b>Clayton</b>					
008	Class A Excavation	898	CY		
009	Geosynthetic Reinforced Soil Slope System	2484	SF		
010	Rock Fill Furnishing/Placement	421	CY		
011	Guardrail Removal/Reinstallation	1	Lump Sum		
012	Bermudagrass Seeding	0.3	Acres		
<b>EXTENDED COST-CLAYTON</b>					
<b>McCausland</b>					
013	Class A Excavation	560	CY		
014	Geosynthetic Reinforced Soil Slope System	1617	SF		
015	Rock Fill Furnishing/Placement	260	CY		
016	Bermudagrass Seeding	0.2	Acres		
<b>EXTENDED COST-MCCAUSLAND</b>					
<b>Traffic &amp; Erosion Control</b>					
017	Traffic Control	1	Lump Sum		
018	Silt Fence	712	LF		
019	Type II Ditch Check	12	EACH		
020	Inlet Check	2	EACH		
<b>EXTENDED COST-TRAFFIC &amp; EROSION CONTROL</b>					
<b>TOTAL EXTENDED COST FOR PROJECT</b>					<b>\$</b>

**PRICING PAGE SL14-115-R7 (Page 2)**

**COMPANY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

**PRINTED NAME/ TITLE:** \_\_\_\_\_

Attachment I  
**PREFERENCE IN PURCHASING PRODUCTS**

DATE: \_\_\_\_\_

The bidders attention is directed to Section 34.076 RSMo 2000 which gives preference to Missouri corporations, firms, and individuals when letting contracts or purchasing products. Bids/Quotations received will be evaluated on the basis of this legislation.

**All vendors submitting a bid/quotation must furnish ALL information requested below.**  
**FOR CORPORATIONS:**

State in which incorporated:

\_\_\_\_\_  
**FOR OTHERS:**

State of domicile:

\_\_\_\_\_  
**FOR ALL VENDORS:**

List address of Missouri offices or places of business:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**THIS SECTION MUST BE COMPLETED AND SIGNED:**

**FIRM NAME:** \_\_\_\_\_  
**ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **ZIP:** \_\_\_\_\_

**BY (signature required):** \_\_\_\_\_

**Federal Tax I.D. #:** \_\_\_\_\_ **if no Federal Tax I.D. # - list Social Security #:** \_\_\_\_\_

NOTE: For bid to be considered, the "Preference in Purchasing Products" form must be on file in the General Services (Procurement) Division and must be dated in the current calendar year.

**Attachment II**  
**MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT**

The bidder's attention is directed to the Missouri Domestic Products Procurement Act, Sections 34.350 to 34.359, RsMO, which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured or produced in the United States.

Section 34.355, RsMO, requires the vendor or contractor to certify his compliance with Section 34.353 and, if applicable, Section 34.359, RsMO, at the time of bidding **and** prior to payment. Failure to comply with Section 34.353, RsMO, during the performance of the contract **and** to provide certification of compliance prior to payment will result in nonpayment for those goods or commodities.

Section 34.353.2, RsMO, specifies that it does not apply where the total contract is less than Twenty-Five Thousand Dollars (\$25,000.00). If your total bid is Twenty-Five Thousand Dollars (\$25,000.00) or more, you **must** complete this form as directed below.

**Failure to complete and return this document with this bid will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis. Please read the certification appearing below on this form.**

- [    ] If all the goods or products specified in the attached bid which the bidder proposes to supply to the State shall be manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left.
- [    ] If only one item of any particular goods or products specified in the attached bid is manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left and list the items (or item number) here:
- \_\_\_\_\_
- \_\_\_\_\_
- [    ] If any or all of the goods or products specified in the attached bid which the bidder proposes to supply to the State are **not** manufactured or produced in the "United States" as defined in Section 34.350, RsMO, then: (a) check the box at left; (b) list below, by item (or item number), the country other than the United States where each good or product is manufactured or produced; and (c) check the boxes to the left of the paragraphs below if applicable and list the corresponding items (or item numbers) in the spaces provided.

Item (or item number)	Location Where Item Manufactured or Produced

(attach an additional sheet if necessary)

- [    ] The following specified goods or products cannot be manufactured or produced in the United States in sufficient quantities or in time to meet the contract specifications. Items (or item numbers): \_\_\_\_\_
- [    ] The following specified goods or products must be treated as manufactured or produced in the United States, in accordance with an existing treaty, law, agreement, or regulation of the United States, including a treaty between the United States and any foreign country regarding export-import restrictions or international trade. Items (or item numbers): \_\_\_\_\_
- \_\_\_\_\_

**CERTIFICATION**

**By submitting this document, completed as directed above, with a bid, the bidder certifies under penalty of making false declaration (Section 575.060, RsMO) that the information contained in this document is true, correct and complete, and may be relied upon by the State in determining the bidders qualifications under and in compliance with the Missouri Domestic Products Procurement Act.**

**The bidder's failure to complete and return this document with the bid as directed above will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis pursuant to Section 34.353.3(2), RsMO.**



### **Attachment III**

#### **SIGNATURE AND IDENTITY OF BIDDER**

The undersigned states that the correct LEGAL NAME and ADDRESS of (1) the individual Bidder, (2) each partner or joint venture (whether individuals or corporations, and whether doing business under a fictitious name), or (3) the corporation (with the state in which it is incorporated) are shown below; that (if not signing with the intention of binding himself to become the responsible and sole contractor) he is the agent of, and duly authorized in writing to sign for the Bidder or Bidders; and that he is signing and executing this (as indicated in the proper spaces below) as the proposal of a

( ) sole individual                                      ( ) partnership                                      ( ) joint venture

( ) corporation, incorporated under laws of state of \_\_\_\_\_

Dated \_\_\_\_\_.

Name of individual, all partners,  
or joint ventures:

Address of each:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

doing business under the name of:

Address of principal place of business in Missouri

\_\_\_\_\_  
(If using a fictitious name, show  
this name above in addition  
to legal names)

\_\_\_\_\_  
(If a corporation, show its name above)

ATTEST:                      (SEAL)

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Title

(NOTE: If the Bidder is doing business under a FICTITIOUS NAME, the Proposal shall be executed in the legal name of the individual, partners, joint ventures, or corporation, with the legal address shown, and REGISTRATION OF FICTITIOUS NAME filed with the Secretary of State, as required by Sections 417.200 to 417.230, RS Mo. If the Bidder is a CORPORATION NOT ORGANIZED UNDER THE LAWS OF MISSOURI, it shall procure a CERTIFICATE OF AUTHORITY TO DO BUSINESS IN MISSOURI, as required by Section 351.570 and following, RS Mo. A CERTIFIED COPY of such Registration of Fictitious Name or Certificate of Authority to do Business in Missouri shall be filed with the Missouri Highways and Transportation Commission, as required by the Standard specifications, Sec 102.6.6 and.

**Attachment IV**  
**WORKER ELIGIBILITY VERIFICATION AFFIDAVIT FOR ALL**  
**MHTC/MODOT CONTRACT AGREEMENTS IN EXCESS OF \$5,000**  
(for joint ventures, a separate affidavit is required for each business entity)

STATE OF \_\_\_\_\_ )  
 ) ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be a person whose name is subscribed to this affidavit, who being by me duly sworn, deposed as follows:

My name is \_\_\_\_\_, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 285.530, RSMo, to enter into any contract agreement with the state to perform any job, task, employment, labor, personal services, or any other activity for which compensation is provided, expected, or due, including but not limited to all activities conducted by business entities:

I am the \_\_\_\_\_ of \_\_\_\_\_, and I am duly authorized, directed, and/or empowered to act officially and properly on behalf of this business entity. I hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, and the aforementioned business entity shall participate in said program with respect to all employees working in connection to work under the within state contract agreement with the Missouri Highways and Transportation Commission (MHTC). I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo. In addition, I hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection to work under the within state contract agreement with MHTC, any alien who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. § 1324a(h)(3). I am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.530, RSMo, the aforementioned business entity may be held liable under Sections 285.525 through 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the state of Missouri.

I acknowledge that I am signing this affidavit as a free act and deed of the aforementioned business entity and not under duress.

\_\_\_\_\_  
Affiant Signature

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires:

***[documentation of enrollment/participation in a federal work authorization program attached]***

**APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP**  
(a separate affidavit is required for each owner and general partner) *(if applicable)*

STATE OF \_\_\_\_\_ )  
 ) ss

COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instruments, who being by me duly sworn, deposed as follows:

***My name is \_\_\_\_\_, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 208.009, RSMo, for failure to provide affirmative proof of lawful presence in the United States of America:***

☐ I am the \_\_\_\_\_ of \_\_\_\_\_, which is applying  
owner or partner for a public benefit (grant, contract, and/or loan) administered/provided by the Missouri Highways and Transportation Commission (MHTC), acting by and through the Missouri Department of Transportation (MoDOT). I am classified by the United States of America as: (check the applicable box) a United States citizen. an alien lawfully admitted for permanent residence.

I am aware that Missouri law provides that any person who obtains any public benefit by means of a willfully false statement or representation, or by willful concealment or failure to report any fact or event required to be reported, or by other fraudulent device, shall be guilty of the crime of stealing pursuant to Section 570.030, RSMo, which is a Class C felony for stolen public benefits valued between \$500 and \$25,000 (punishable by a term of imprisonment not to exceed 7 years and/or a fine not more than \$5,000 – Sections 558.011 and 560.011, RSMo), and is a Class B felony for stolen public benefits valued at \$25,000 or more (punishable by a term of imprisonment not less than 5 years and not to exceed 15 years – Section 558.011, RSMo).

I recognize that, upon proper submission of this sworn affidavit, I will only be eligible for temporary public benefits until such time as my lawful presence in the United States is determined, or as otherwise provided by Section 208.009, RSMo.

I understand that Missouri law requires MHTC/MoDOT to provide assistance in obtaining appropriate documentation to prove citizenship or lawful presence in the United States, and I agree to submit any requests for such assistance to MHTC/MoDOT in writing.

I acknowledge that I am signing this affidavit as a free act and deed and not under duress.

\_\_\_\_\_  
Affiant Signature

\_\_\_\_\_  
Affiant's Social Security Number or  
Applicable Federal Identification Number

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires:

**Attachment V SL14-115-R7**

**BID BOND**

**KNOW ALL MEN BY THESE PRESENTS**, that we \_\_\_\_\_,  
as Principal and \_\_\_\_\_, as Surety are held and firmly bound  
unto the **STATE OF MISSOURI** (acting by and through the **Missouri Highways and Transportation  
Commission**) in the penal sum of:

\_\_\_\_\_ **Dollars**  
(\$ \_\_\_\_\_) to be paid to the **State of Missouri or to the Missouri Highways and  
Transportation Commission**, to be credited to the State Road Fund, the Principal and Surety binding  
themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these  
presents.

Sealed with our seals and dated this \_\_\_\_\_

**THE CONDITION OF THIS OBLIGATION** is such that:

**WHEREAS**, the Principal is submitting herewith a bid to the Missouri Highways and Transportation  
Commission for furnishing **slide repair on I-64 in St. Louis City and County, MO** as set out in the bid to  
which this bond is attached.

**NOW THEREFORE**, if the Missouri Highways and Transportation Commission shall accept the bid of the  
Principal and if said Principal shall properly execute and deliver to the Missouri Highways and Transportation  
Commission the contract and contract bond in compliance with the requirements of the bid, the specifications  
and the provisions of law, to the satisfaction of the Highways and Transportation Commission, then this  
obligation shall be void and of no effect, otherwise to remain in full force and effect.

In the event the said Principal shall, in the judgment of the Missouri Highways and Transportation Commission,  
fail to comply with any requirement as set forth in the preceding paragraph, then the State of Missouri acting  
through the Missouri Highways and Transportation Commission shall immediately and forthwith be entitled to  
recover the full penal sum above set out, together with court costs, attorney's fees and any other expense of  
recovery.

(SEAL)

\_\_\_\_\_  
Principal

By \_\_\_\_\_

Signature

(SEAL)

\_\_\_\_\_  
Surety

By \_\_\_\_\_

Attorney-in-Fact

NOTE: This bond must be executed by the PRINCIPAL and by a CORPORATE SURETY  
authorized to conduct surety business in the State of Missouri.

## Attachment VI

### MISSOURI SERVICE-DISABLED VETERAN BUSINESS PREFERENCE

By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.

#### Definitions:

**Service-Disabled Veteran** is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

**Service-Disabled Veteran Business** is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

If a bidder meets the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and is either doing business as a Missouri firm, corporation, or individual; or maintains a Missouri office or place of business, the bidder **must** provide the following with the bid in order to receive the Missouri service-disabled veteran business preference over a non-Missouri service-disabled veteran business when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable:

- a. A copy of a letter from the Department of Veterans Affairs (VA), or a copy of the bidder's discharge paper (DD Form 214, Certificate of Release or Discharge from Active Duty) from the branch of service the bidder was in, stating that the bidder has a service-connected disability rating ranging from 0 to 100% disability; and
- b. A completed copy of this exhibit

(NOTE: For ease of evaluation, please attach copy of the above-referenced letter from the VA or a copy of the bidder's discharge paper to this Exhibit.)

By signing below, I certify that I meet the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and that I am either doing business as a Missouri firm, corporation, or individual; or maintain Missouri offices or places of business at the location(s) listed below.

#### Veteran Information

Service-Disabled Veteran's Name, (Please Print)

#### Business Information

Service-Disabled Veteran Business Name

*Service-Disabled Veteran's Signature*

Missouri Address of Service-Disabled Veteran  
Business

## **STANDARD SOLICITATION PROVISIONS**

- a. The solicitation for the procurement of the supplies referenced therein, to which these "Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions" are attached, is being issued under, and governed by, the provisions of Title 7 – Missouri Department of Transportation, Division 10 – Missouri Highways and Transportation Commission, Chapter 11 – Procurement of Supplies, of the Code of State Regulations. The Missouri Highways and Transportation Commission (**MHTC**), acting by and through its operating arm, the Missouri Department of Transportation (**MoDOT**), draws the Bidder's attention to said 7 CSR 10-11 for all the provisions governing solicitation and receipt of bids/quotes and the award of the contract pursuant to this solicitation.
- b. All bids/quotes must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.

## **GENERAL TERMS AND CONDITIONS**

### **Definitions**

Capitalized terms as well as other terms used but not defined herein shall have the meaning assigned to them in section 7 CSR 10-11.010 Definition of Terms.

### **Nondiscrimination**

- a. The Contractor shall comply with all state and federal statutes applicable to the Contractor relating to nondiscrimination, including, but not limited to, Chapter 213, RSMo; Title VI and Title VII of Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 2000e, *et seq.*); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101, *et seq.*).
- b. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MHTC shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
  - ii. cancellation, termination or suspension of the contract, in whole or in part.

### **Contract/Purchase Order**

- a. By submitting a bid/quote, the Bidder agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's bid response, and (3) the MHTC's acceptance of the bid by post-award contract or purchase order.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized notice to proceed and/or purchase order.

### **Applicable Laws and Regulations**

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri, Missouri Department of Revenue, and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MHTC a copy of their current Authority Certificate from the Secretary of State of the State of Missouri and/or a copy of their Certificate of No Tax Due from the Missouri Department of Revenue.
- c. Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MHTC a copy of their current Transient Employer Certificate from the Missouri Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.

### **Executive Order:**

The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6<sup>th</sup>) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.

- 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
- 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
- 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

### **Cancellation of Contract**

The MHTC may cancel the Contract at any time for a material breach of contractual obligations or for convenience by providing Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.

### **Bankruptcy or Insolvency**

Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntarily, or upon the appointment of a receiver, trustee, or assignee, for the benefit of creditors, the Commission reserves the right and sole discretion to either cancel the Agreement or affirm the Agreement and hold the Contractor responsible for damages.

### **Warranty**

The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by the MHTC, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

### **Status of Independent Contractor**

The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

### **Non-Waiver**

If one of the parties agrees to waive its right to enforce any term of this Contract, that party does not waive its right to enforce such term at any other time or to enforce any or all other terms of this Contract.

### **Indemnification**

The Contractor shall defend, indemnify and hold harmless MHTC, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Contractor's performance of its obligations under the contract awarded pursuant to this solicitation.

## **SPECIAL TERMS AND CONDITIONS**

### **Required Specifications**

- a. The material to be supplied under the contract will comply with the quality and gradation requirements of the **Missouri Standard Specifications for Highway Construction, Edition of 2004**, and any revisions thereto, unless modified by these specifications.

### **Permits, Licenses and Safety Issues**

- a. The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to state agencies.
- b. The Contractor will comply with local laws involving safety in the prosecution of the work.

### **Failure to Execute Contract**

- a. Failure to execute the contract and file acceptable performance payment (Contract Bond) or cashier's check, bank money order or certified check within **15 days** after the contract has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised and performed under contract or otherwise, as the Commission may decide. No contract shall be considered effective until it has been executed by all parties thereto.

### **Delivery – Additional Requirements**

- a. The following days shall be construed as **official holidays** under the terms of the contract:

January 1	New Year's Day
Third Monday in January	Martin Luther King, Jr.'s Birthday
February 12	Lincoln's Birthday
Third Monday in February	Washington's Birthday
May 8	Truman's Birthday
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day

- b. When any of the above **holidays falls** on a **Sunday**, the holiday will be observed on the following **Monday**; when any of the above **holidays falls** on a **Saturday**, the **holiday** will be observed on the immediately preceding **Friday**.

#### **Temporary Suspension of Work**

- a. The **District Engineer** shall have authority to suspend work wholly or in part for such period or periods as may be deemed necessary when weather or other conditions are such that in the opinion of the engineer, the work may be done at a later time with advantage to the Department or for failure on the part of the Contractor to comply with any of the provisions of the Contract.
- b. If the Department suspends the work for its own advantages and not because of the Contractor's failure to comply with the Contract, the Contractor will be allowed an equal number of calendar days after the completion date for the completion of the work. The Department may at its discretion give the Contractor an extension of time for completing the work where the Contractor incurs delays for causes beyond his control.
- c. Normal rainfall is not considered a cause qualifying for an extension of time. Claim for extension of time for all causes must be submitted by the Contractor in writing within **30 Days** after the claimed cause for the delay has ceased to exist.

#### **Prevailing Wage**

- a. The work to be performed under this solicitation is governed by the provisions of Chapter 290 RSMo, as amended, related to prevailing wages to be paid on public works.
- b. If the bid/quote is accepted, the vendor will be required to comply with the prevailing wages as fixed by the Missouri Department of Labor and Industrial Relations, in effect as of the date of the issuance of the solicitation, for each affected craft and type of workmen in the following county(ies): **St. Louis City and County, MO**. The **General Wage Order # 57** is attached to the bid documents.
- c. Pursuant to the requirements of the Chapter 290 RSMo., not less than the prevailing hourly rate of wages, as set out in the wage order attached to and made part of the specification for work under the contract, must be paid to all workers performing work under the contract.
- d. The Contractor shall provide all information, reports and other documentation as required by MHTC to ensure compliance with Chapter 290 RSMo., as amended, relating to prevailing wages to be paid on public works.
- e. The Contractor shall forfeit a penalty to the contracting public body of \$100 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under the contract by the contractor or by any subcontractor.

#### **Prohibition Of Employment Of Unauthorized Aliens:**

- a. Pursuant to RSMo 285.530 (1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state to a business entity, or for any business entity receiving a state-administered or subsidized tax credit, tax abatement, or loan from the state, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)] A copy of the affidavit referenced above is provided within this document.

E-Verify is an example of a federal work authorization program. Acceptable enrollment and participation documentation consists of **completed** copy of the E-Verify Memorandum of Understanding (MOU). For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify available at [http://www.dhs.gov/files/programs/gc\\_1185221678150.shtm](http://www.dhs.gov/files/programs/gc_1185221678150.shtm).

#### **Preferences**

- a. By virtue of statutory authority, RSMo. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
- 1) If attached, the document entitled **"PREFERENCE IN PURCHASING PRODUCTS"** should be completed and returned with the solicitation documents.
- 2) If attached, the document entitled **"MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT"** should be completed and returned with the solicitation documents. **Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more.**
- b. By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable. 1) If attached, the document entitled **"MISSOURI SERVICE-DISABLED VETERAN PREFERENCE"** should be completed and returned with the solicitation documents.