

BID FORM

**MISSOURI DEPARTMENT OF TRANSPORTATION
GENERAL SERVICES
P. O. BOX 270
JEFFERSON CITY, MO 65102**

REQUEST NO. 2-150211RW
DATE January 29, 2015

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

2:00 p.m., Local Time, February 11, 2015

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

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

Submit net bid as cash discount stipulations will not be considered
Various MoDOT Locations

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

BUYER: Robin Warren

BUYER TELEPHONE: 573-526-7929

BUYER EMAIL:

Robin.Warren@modot.mo.gov

SUPPLIES OR SERVICES

GLASS BEADS – TYPE L

To establish a contract to furnish “Glass Beads – Type L” with an effective date of Notice to Proceed through February 28, 2016 in accordance with the following pages.

(SEE ATTACHED FOR TERMS, CONDITIONS, AND INSTRUCTIONS)

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: _____

Firm Name: _____

Telephone No.: _____

Address: _____

Fax No.: _____

By (Signature): _____

Email Address: _____

Type/Print Name _____

Is your firm MBE certified? Yes No

Title: _____
Is your firm WBE certified? Yes No

1. INTRODUCTION

1.1 Introduction:

This Request for Bid seeks bids from qualified organizations to provide Glass Beads – Type L located throughout the State of Missouri with an effective contract period of Notice to Proceed through December 31, 2015, to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT). Each bid must be returned in a sealed envelope per section 3.1 Bid Submission. All questions regarding the RFB shall be submitted to the RFB Coordinator listed below. Bids must be returned no later than 2:00 p.m Local Time, February 11, 2015.

RFB Coordinator:

Robin Warren
Sr. General Services Specialist

Phone: 573-526-7929
E-mail: Robin.Warren@modot.mo.gov

2. SCOPE OF WORK

2.1 General Requirements:

- 2.1.1 The contractor shall provide Glass Beads – Type L on an as needed, if needed basis for the Missouri Highway and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT), hereinafter referred to as the “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 the MoDOT.
- 2.1.3 The MoDOT reserves the right to obtain “like or similar” products as specified herein from other manufacturers, exclusive of the contract, when use of such products is deemed in the best interest of the MoDOT.
- 2.1.4 Unless otherwise specified herein, the contractor shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.

2.2 Specific Requirements:

- 2.2.1 The contractor shall insure all materials, equipment, and/or services comply MoDOT Specification MGS-94-01I and any other provisions outlined in the solicitation document.
- 2.2.2 The contractor shall agree and understand the glass beads shall be inspected at delivery site.
- 2.2.3 The contractor shall remove all rejected glass beads from MoDOT property immediately upon notification of rejection.
 - a. The contractor shall agree and understand that if the glass beads are rejected due to not meeting specifications, all cost associated with returning the product to the contractor shall be paid by the contractor, at no additional cost to MoDOT.
 - b. The contractor shall agree and understand that MoDOT personnel shall not reload or assist with the reloading of the rejected glass beads.

2.3 Delivery Requirements:

- 2.3.1 The contractor(s) shall deliver glass beads F.O.B. destination to the following MoDOT locations. *See attached District Map.*

Northwest - St. Joseph, MO 64507
Northeast - Macon, MO 63552
Northeast - Hannibal, MO 63401
Kansas City – Kansas City, MO 64133
Kansas City -Warrensburg, MO 64093
Central - Jefferson City, MO 65109
Central -Rolla, MO 65401
St. Louis - Ballwin, MO 63021
Southwest - Joplin, MO 64804
Southwest - Springfield, MO 65802
Southeast - Willow Springs, MO 65793
Southeast - Sikeston, MO 63801
Southeast – Park Hills, MO 63601

- 2.3.2 The contractor shall not deliver any glass beads to MoDOT until being notified by MoDOT by telephone or purchase order.
- 2.3.3 The contractor(s) must contact MoDOT no later than 2 working days after receipt of a purchase order if the contractor will not be able to fill an order. The contractor(s) shall understand and agree that the first contingency contractor will be sent the purchase order in such situation.
- 2.3.4 In the event the contractor does not contact MoDOT within 2 working days after receipt of a purchase order when the contractor will not be able to fill the order, the contractor(s) shall understand and agree that MoDOT may cancel the contract with the contractor and charge the contractor the difference in price between the contractor's price and the first contingency contractor's price of the unfilled order.
- 2.3.5 The contractor shall furnish MoDOT with a planned delivery schedule at least 16 hours before starting delivery.
- a. Notification should be during the normal workday preceding the day on which the contractor desires to initiate delivery.
 - b. It will be necessary for a representative of MoDOT to be present when the material is delivered.
- 2.3.6 The contractor shall deliver glass beads within fifteen (15) working days from the date order is placed, excluding Saturday, Sunday, Holidays, and days whereas MoDOT has suspended work.
- a. In the event glass beads are not delivered within the 15 working day period, MoDOT shall be compensated at a rate of \$500 per day until the glass beads are delivered.
 - b. 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
 - c. 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.
- 2.3.7 The contractor shall deliver glass beads in full truckloads, and in bulk cartons or bulk bags as requested by MoDOT.
- 2.3.8 The contractor should deliver glass beads on flatbed trailers. In the event there are no flatbed trailers readily available, the contractor shall deliver the glass beads with a van trailer.
- 2.3.9 The contractor shall deliver the glass beads on pallets and in truckload lots (44,000 pounds).

- a. For the purpose of unloading with a forklift, the contractor’s driver shall insure the pallets are sitting to the side or rear of the transporting vehicle.
- b. The contractor shall provide the contractor’s driver with a hand-operated dolly for this purpose.

2.3.10 The contractor(s) shall be prohibited from manipulating order processing to avoid late delivery fees. The contractor(s) shall ensure orders are shipped in the order received (earliest to latest). The contractor(s) shall understand and agree that modifications to the shipping process may only be authorized by the MoDOT designee.

2.4 Liquidated Damage Requirements:

2.4.1 The contractor shall agree and understand that providing glass beads in accordance with the requirements stated herein is considered critical to the efficient operations of the MoDOT. However, since the amount of actual damages would be difficult to establish in the event the contractor fails to comply with the contractual requirements, the contractor shall agree and understand that the percentages identified below as liquidated damages shall be reasonable and fair under the circumstances.

- a. In the event the contractor fails to provide glass beads in accordance with the contractual requirements specified herein, the contractor shall agree and understand that MoDOT shall solely determine which of the following percentages of deduction shall be assessed against the contractor for the contractor’s noncompliance, and such shall be final and without recourse.
- b. The contractor shall agree and understand the following table of deductions is cumulative. In the event more than one parameter is out of specification (Roundness, Refractive Index, Gradation, etc.) the sum of the percentages shall be accessed against the contractor for noncompliance. MoDOT shall determine the parameter out of specification percentages.
 - 1) Deductions shall be accessed on a per truckload lot basis.

Deduction Rate Table

<u><i>Deduction</i></u>	<u><i>Percent out of Specification</i></u>
Minor 5%	< 5%
Slight 10%	5 to 7%
Moderate 25%	7 to 10%
Severe 50%	> 10%

- c. The contractor shall agree and understand that in the event 5 or more truckload lots in a contract year are determined not to comply with the contractual requirements, MoDOT reserves the right to increase the percentages listed above.
- d. The contractor shall agree and understand that such liquidated damages shall either be deducted from the total amount due the contractor or paid by the contractor as a direct payment to the MoDOT, at the sole discretion of the MoDOT.
- e. The contractor shall understand that the liquidated damages described herein shall not be construed as a penalty.
- f. The contractor shall agree and understand that all assessments of liquidated damages shall be in addition to, not in lieu of, the rights of the State of Missouri to pursue other appropriate remedies.
- g. The contractor shall understand and agree that all assessments of liquidated damages shall be within the discretion of each District as a separate entity, and shall be in addition to, not in lieu of, the rights of the

State of Missouri to pursue other appropriate remedies. The contractor shall understand and agree that each District's decision shall be individual, final, and without recourse.

2.5 Invoicing and Payment Requirements:

- 2.5.1 The contractor shall submit an itemized invoice to the applicable requesting address for the completion of deliverables, as specified herein.
- 2.5.2 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.
- 2.5.3 The contractor shall be paid in accordance with the firm, fixed price stated on the pricing page of this document, after completion of deliverables specified herein and acceptance by the MoDOT.
- 2.5.4 Other than the payment specified above, no other payments or reimbursements shall be made to the contractor for any reason whatsoever.
- 2.5.5 MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax.
- 2.5.6 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.
- 2.5.7 The MoDOT 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 MoDOT's rejection and shall be returned at the contractor's expense.
- 2.5.8 The MoDOT reserves the right to purchase goods and services using the state-purchasing card.

2.6 Other Contractual Requirements:

- 2.6.1 Contract Period - The contract shall commence from Notice to Proceed through December 31, 2015 with up to three (3) one-year renewal option periods. If the option for renewal is exercised by MoDOT, the contractor shall agree to all terms and conditions of the RFB and all subsequent amendments. Renewal options are at the sole discretion of MoDOT.
- 2.6.2 Renewal Periods - If the option for renewal is exercised by MoDOT, the contractor shall agree that the prices for the renewal period shall not exceed the maximum price for the applicable renewal period stated herein.
 - a. If renewal prices are not provided, the prices during renewal periods shall be the same as during the current contract period.
 - b. MoDOT does not automatically exercise its option for renewal based upon the maximum price and reserves the right to offer or to request renewal of the contract at a price less than the maximum price stated.
 - c. In the event MoDOT exercises its option(s) to renew the contract, the requirements for future years shall be basically similar.
 - d. Renewal percentages will not be considered in determination of bid award.

- 2.6.3 Escalation Clause - In the event the contractor requests a price increase during the contract period (original contract period or contract renewal period), the contractor must provide a written request and documentation justifying the need for a price increase, and the amount of such price increase. MoDOT will review the contractor's written request and documentation, and decide if a price increase is to be granted at that particular time. The contractor shall understand and agree that MoDOT's decision shall be final and without recourse.
- a. No price increase shall be granted during the first 3 months of the original contract period, or if applicable, first 3 months of a contract period for a renewal.
 - b. In the event a price increase is granted due to an approved escalation, the renewal percentage shall be based upon the current contract value.
- 2.6.4 Contract Bond - In the event a price increase is granted due to an approved escalation, the contractor shall increase their 100% contract bond, as specified elsewhere herein, to reflect the current contract value.
- 2.6.5 Inspection Specifications - MoDOT reserves the right to inspect the material at the point of manufacture, intermediate storage point, or at a destination which shall be at the discretion of MoDOT.

- 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.
- 3.1.6 Bids will be reviewed to determine if the bid complies with the mandatory requirements, and to determine the lowest and best bid.
- 3.1.7 *Cost Determination* - The low bid shall be determined by multiplying the estimated quantity with the applicable unit price to obtain a total price. The grand total of the lowest bids per district will be compared to the total of the lowest statewide bid.
- 3.1.8 *Contract Award* – The contract will be awarded to the lowest responsive bidder determined as specified above.
- a. Award of this bid will be made on a “District-by-District” basis **or** a “Statewide” basis, whichever is the lowest cost to the state as a whole using the “lowest and best” principle of award.
 - b. No award of contract shall be made until the traffic marking paint has successfully complied with all of the requirements specified herein, and has been tested in the MoDOT Central Laboratory. **NOTE:** Normal-testing time is a minimum of thirty (30) calendar days.
 - c. MoDOT reserves the right to reject any or all bids, and no award is final until formally approved

4. PRICING

4.1 Pricing and Renewals:

- 4.1.1 The bidder shall provide a firm, fixed price on the Pricing Page for the original contract period for providing the deliverables in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables shall be included in the price. Bidder is encouraged, but not required to submit bids on all line items. However, to be considered responsive for a district, all line items within a given district must have a bid amount.
- 4.1.2 In the event that MoDOT exercises its options to renew the contract for three (3) additional one-year periods pursuant to the applicable provisions outlined in this document, the Bidder shall provide below the maximum percentage of increase or maximum percentage of decrease for each renewal period.

1st Renewal Period _____ % of maximum increase and/or _____ % of maximum decrease.

2nd Renewal Period _____ % of maximum increase and/or _____ % of maximum decrease.

3rd Renewal Period _____ % of maximum increase and/or _____ % of maximum decrease.

Company Name

Signature

VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

Vendor Information

All bidders must furnish ALL applicable information requested below

Vendor Name/Mailing Address: Email Address:	Vendor Contact Information (including area codes): Phone #: Cellular #: Fax #:
Printed Name of Responsible Officer or Employee:	Signature:
For Corporations - State in which incorporated:	For Others - State of domicile:

If the address listed in the Vendor Name/Mailing Address block above is not located in the State of Missouri, list the address of Missouri offices or places of business:

*If additional space is required, please attach an additional sheet and identify it as **Addresses of Missouri Offices or Places of Business.***

M/WBE INFORMATION: List all certified Minority or Women Business Enterprises (**M/WBE**) utilized in the fulfillment of this bid. Include percentages for subcontractors and identify the M/WBE certifying agency:

<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>

*If additional space is required, please attach an additional sheet and identify it as **M/WBE Information***

Preference Certification

All bidders must furnish ALL applicable information requested below

GOODS/PRODUCTS MANUFACTURED OR PRODUCED IN USA: If any or all of the goods or products offered in the attached bid which the bidder proposes to supply to the MHTC are not manufactured or produced in the "United States", or imported in accordance with a qualifying treaty, law, agreement, or regulation, list below, by item or item number, the country other than the United States where each good or product is manufactured or produced.

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

*If additional space is required, please attach an additional sheet and identify it as **Location Products are Manufactured or Produced.***

MISSOURI SERVICE-DISABLED VETERAN BUSINESS: Please complete the following if applicable. Additional information may be requested if preference is applicable. See below definitions for qualification criteria:

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.

Veteran Information

Business Information

Service-Disabled Veteran's Name (Please Print)

Service-Disabled Veteran Business Name

Service-Disabled Veteran's Signature

Missouri Address of Service Disabled Veteran Business

COOPERATIVE AGREEMENT NOTICE

The Department is interested in assisting Missouri governmental entities, etc. in purchasing equipment, various materials and supplies that meet the Highway and Transportation Department specifications.

Each bidder is asked to indicate below whether they would be willing to offer **Glass Beads - Type L** listed in the attached "Request for Bid" for sale to these local political entities at the same bid price offered to this Department.

It is understood the Department will not issue purchase orders, accept delivery nor make payment for these items ordered by any of these agencies. It is further understood the price is based on the **Glass Beads - Type L** meeting the Department specifications. Any added options, deletions, or extra freight costs would be negotiated between the local agency and the successful vendor.

Indicate below whether your company is willing to offer such cooperative purchasing for Missouri counties, cities or other political entities.

YES _____

NO _____

If the price varies throughout the state on Department bids because of different delivery destinations, please indicate the price f.o.b. your location that would be offered as described.

F.O.B. Location _____

Indicate the deadline date that orders will be accepted. _____

COMPANY NAME _____

ADDRESS _____

PHONE NUMBER _____

SIGNATURE _____

TITLE _____

DATE _____

(Each vendor should complete the appropriate sections of their form and submit with their bid.)

ANTI-COLLUSION STATEMENT

STATE OF _____)
)
COUNTY OF _____) **SS.**

_____ being first

duly sworn, deposes and says that he is _____
Title of Person Signing

of _____

Name of Bidder

that all statements made and facts set out in the bid for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

Sworn to before me this _____ day of _____, 20____.

Notary Public

My Commission Expires _____

Glass Beads - Type L

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 **Glass Beads - Type L** 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 proposal, 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.

RFB 2-150211RW - Glass Beads Type L Pricing Page

Item #	Location	Estimated Qty	Unit Price	Extended Cost
<i>Northwest District</i>				
1	St. Joseph	615,000		
Northwest Total \$				
<i>Northeast District</i>				
2	Macon	285,000		
3	Hannibal	285,000		
Northeast Total \$				
<i>Kansas City District</i>				
4	Kansas City	505,000		
5	Warrensburg	505,000		
Kansas City Total \$				
<i>Central District</i>				
6	Jefferson City	350,000		
7	Rolla	350,000		
Central Total \$				
<i>St. Louis District</i>				
8	St. Louis	865,000		
St. Louis Total \$				
<i>Southwest District</i>				
9	Joplin	530,000		
10	Springfield	530,000		
Southwest Total \$				
<i>Southeast District</i>				
11	Willow Springs	325,000		
12	Sikeston	325,000		
13	Park Hills	325,000		
Southeast Total \$				
14	STATEWIDE	5,795,000		
Statewide Total \$				

Company Name _____ Signature _____



TYPE L (LARGE) GLASS BEADS FOR TRAFFIC MARKING PAINT MGS-94-01I

1.0 DESCRIPTION. These specifications cover Type L (Large) glass beads to be gravity dropped upon traffic marking paint.

1.1 Unless otherwise specified, references to a national standard agency specification (AASHTO, ASTM, etc.) are the latest revision in effect at the time of the contract letting.

2.0 MATERIALS. The Type L beads shall meet the following requirements. The beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles and conform to the following specific requirements. The beads shall be compliant with all Federal, State, and local laws.

2.1 COATING. The beads shall be coated to insure satisfactory embedment and adhesion when applied to 20 mils (wet) of acrylic waterborne paint.

2.2 REFRACTIVE INDEX. The beads shall have a minimum refractive index of 1.50 when tested in accordance with AASHTO M 247.

2.3 ROUNDNESS. The beads shall have a minimum of 80 percent rounds per screen for the two highest sieve quantities and no more than 3 percent angular particles per screen when tested in accordance with ASTM D 7681 with Federal Lands Highway (FLH) Test Method T520-93 (determined visually per aspect ratio using microfiche reader) serving as the referee method. The remaining sieve fractions shall typically be no less than 75 percent rounds when tested in accordance with ASTM D 7681 with Federal Lands Highway (FLH) Test Method T520-93 (determined visually per aspect ratio using microfiche reader) serving as the referee method.

2.4 GRADATION. The beads shall meet the following gradation requirements when tested in accordance with ASTM D 1214.

U. S. Standard Sieve No.	Percent Passing
12	100
14	95 -100
16	80 - 95
18	10 - 40
20	0 - 5
25	0 - 2

2.5 SILICA CONTENT. The beads shall be made of glass containing not less than 58.0 percent Silica (SiO_2) when tested in accordance with ASTM C 169, Procedures for Referee Analysis.

2.6 WATER RESISTANCE. The beads shall show no readily discernible dulling and the amount of 0.1 Normal Hydrochloric Acid needed to titrate the filtrate shall not exceed 4.5 milliliters, when tested in accordance with this specification.

2.7 CALCIUM CHLORIDE RESISTANCE. The beads shall show no readily discernible dulling when tested in accordance this specification.

2.8 SODIUM SULFIDE RESISTANCE. The beads shall show no readily discernible darkening or dulling when tested in accordance with this specification.

3.0 TEST METHODS.

3.1 WATER RESISTANCE. Ten \square 0.5 grams of beads placed in a Whatman single thickness cellulose extraction thimble, 33 by 80 millimeters, are refluxed for one hour in a Soxhlet extractor having an 85 millimeter siphon capacity using 150 milliliters of distilled water. All connections shall be ground glass. At the end of the refluxing period, allow the filtrate to cool to room temperature, and titrate with 0.1 normal hydrochloric acid, using phenolphthalein indicator. The beads shall be dried at 100 C, and examined for dulling under 60 power magnification.

3.2 CALCIUM CHLORIDE RESISTANCE. Immerse approximately 10 grams of the beads in a 1.0 Molar calcium chloride solution for 3 hours. Rinse well, by decantation, with distilled water. Spread beads on a clean filter paper and allow to dry. Examine the beads for dulling under 60 power magnification.

3.3 SODIUM SULFIDE RESISTANCE. Immerse approximately 10 grams of the beads in a 50 percent solution of sodium sulfide for one hour. Rinse well, by decantation, with distilled water. Spread beads on a clean filter paper and allow to dry. Examine the beads for dulling under 60 power magnification.

3.4 Embedment Coating - In accordance with following procedure.

3.4.1 Apparatus and Reagents.

- Graduate Cylinder (50ml)
- Acetone - Reagent Grade
- Dansyl Chloride - 98%
- Scale - Analytical Balance (4 place)
- Darkened Glass Container (that can be sealed tightly)
- Rubber Gloves (long sleeves)
- Safety Glasses or Goggles
- Medicine Dropper
- Glass Filter Paper (4" diameter)
- Small Aluminum Weighing Dishes
- 2-inch (50 mm) Buchner Funnel and Suction Flasks
- 2-inch (50 mm) diameter Filter Paper (Whatman #1)
- Vacuum Pump
- Ultra-Violet Light Source - Intensity 7,000 uw/cm²

Caution: Dansyl Chloride is a hazardous compound. Do not handle without protective gloves and safety glasses or goggles. Do not get onto skin.

3.4.2 Preparation of Dansyl Chloride Solution - Prepare a solution by weighing 0.2 grams of Dansyl Chloride and dissolving it in 25 ml of acetone. This solution can be used for several tests during the day but must be kept refrigerated in a dark, tightly closed container between uses. Make a fresh solution daily.

3.4.3 Procedure.

- (1) Set drying oven to 60 C. Turn on ultra-violet light.
- (2) Weigh 2 samples of beads of 10 grams each. Place the sample to be evaluated in an aluminum weighing dish. Retain the other sample for a fluorescence observation comparison.
- (3) Place a 2" diameter filter paper into the Buchner funnel and attach to the suction flask.
- (4) Put the beads in the Buchner funnel and saturate the sample with the Dansyl Chloride solution using a medicine dropper. Let solution and sample stand for 30 seconds.
- (5) Place the saturated beads into an aluminum dish and dry in oven at 60 C for 15-20 minutes. Beads will be yellow and agglomerated. Do not let the Dansyl Chloride solution char. (Properly discard the used filter paper because of the toxicity of the Dansyl Chloride.)
- (6) Remove sample from the oven and place the glass beads in the Buchner funnel with new filter paper. Rinse the beads with 100 ml of Acetone. Use the suction during this step. All yellow must be removed from the beads.
- (7) Remove the beads from the funnel and place into a new aluminum tray. Allow the beads to dry in the oven for 5 to 10 minutes until free flowing.
- (8) Remove the beads from the oven and place on glass filter paper. If beads are agglomerated, break them up with a spatula.
- (9) Inspect the treated sample under the ultra-violet light, in a darkened room.

3.4.4 Observations.

- (1) Embedment coated beads will emit a yellow-green fluorescence.
- (2) If additional fluorescence is observed when compared with the original untreated sample, the lot is accepted. If no additional fluorescence is observed, the test should be rerun using a new 10 gram sample of beads and a fresh solution of Dansyl Chloride.
- (3) If no additional fluorescence is observed on the new sample of beads, the material is not properly coated and the lot is rejected. If additional fluorescence is observed, the lot is accepted.

4.0 SAMPLING AND TESTING.

4.1 The manufacturer shall furnish the engineer free access to all parts of the plant and shall furnish every reasonable facility for inspection.

4.2 The engineer reserves the right to sample at the point of manufacture, at intermediate points of storage, or at destination. The engineer will determine the location and frequency of sampling.

5.0 CERTIFICATION AND ACCEPTANCE.

5.1 The manufacturer shall furnish to the engineer, at destination, prior to approval and use of any material delivered, a certification in triplicate as shown in this specification for each shipment, certifying that the beads conform to all requirements of these specifications. The certification shall include or have attached specific results of tests performed for Roundness, Refractive Index, Coating, and Gradation. The certifications shall also show the purchase order number, destination, quantity, date shipped, and the lot number.

5.2 Pre-approved beads may be accepted by certification and random sampling as designated by the engineer. Beads which have not been pre-approved must be sampled and approved prior to use.

6.0 PACKAGING AND MARKING.

6.1 Beads shall be furnished in 2000 pound bulk cartons or 2400 pound bulk bags as specified in the bid request.

6.2 BULK CARTONS. The bulk cartons shall meet the requirements of Federal Specifications PPP-B-640d, Class II for Boxes, Fiberboard, Corrugated, Triple-wall with a minimum 4 mil. thick plastic bag liner.

6.2.1 The cartons shall be approximately 40 inches square by 29 inches high, shipped on a double faced reusable-type pallet approximately 40 x 42 inches in size.

6.2.2 The cartons shall have two horizontal steel bands and one vertical steel band, each at least 1/2 inch wide and tightened sufficiently to allow double deck storage and to keep the carton from deforming during shipment.

6.3 BULK BAGS. The bulk bags shall meet the requirements of Section 16.1 of the United Nations Recommendations on the Transport of Dangerous Goods, Sixth Edition (ST/SG/AC.10/1/Rev.). The loading for the "Top Lifting Test" shall be modified to require a mass 5 times the maximum possible load.

6.3.1 The bags shall be sized such that they fit on a standard 42 x 42 inch pallet for shipping with interior baffles and constructed as follows:

- a. The bags shall be constructed of 6 1/2 ounce coated sift proof polypropylene fabric,
- b. The bags shall be constructed with a coated sift proof fabric remote opening that can be controlled by a person standing to one side of the bag with a single hand.
- c. The bag shall have four top-lift loops sized to allow lifting from a central hook when the bag is full.
- d. All seams on the bag are sift proof.

6.3.2 Bags shall be shipped on a double-faced, reusable pallet approximately 42 x 42 inches, topped with a double-faced, type B fluted, 42 inch x 42 inch by 1/8 inch thick, 200-pound test, cardboard sheet. The assembled bag and pallets shall be stackable two high.

6.3.3 Each bag shall be strapped or banded to the pallet with a minimum of three nylon or polypropylene straps. Two straps shall be vertically positioned at 90 degrees to each other. The third strap shall be centrally positioned horizontally to the pallet.

6.4 Each container shall be shrink or stretch wrapped with plastic on the top and sides, so that the contents will completely shed water.

6.5 Each container shall be marked with the name and type of contents, manufacturer of the beads, net weight, and lot designation.

7.0 ORDERING INFORMATION. Beads are to be ordered as Type L Glass Beads. The type of packaging is to be shown in the bid request as "Bulk Cartons" or "Bulk Bags".

8.0 CERTIFICATION STATEMENT. The following form is to be completed, signed and submitted in triplicate with each shipment of glass beads, however more than one shipment may be shown on a single certification so long as test results are included for each lot:

We hereby certify that Type L Glass Beads described below comply with all requirements of the Missouri Department of Transportation's specifications in Bid Request No. _____.

The following glass beads were manufactured by _____ at _____ and are covered by this certification.

Purchase Order	Destination	Quantity (Pounds)	Lot Number	Date Shipped
No. 1				
No. 2				
No. 3				

Following are specific results of tests performed on these glass beads:

	Destination No. 1	Destination No. 2	Destination No. 3
Type	_____	_____	_____
Lot No.:	_____	_____	_____
Roundness	_____	_____	_____
Refractive Index:	_____	_____	_____
Coating:	_____	_____	_____
Gradation:			
Percent Passing No. 12	_____	_____	_____
Percent Passing No. 14	_____	_____	_____
Percent Passing No. 16	_____	_____	_____
Percent Passing No. 18	_____	_____	_____
Percent Passing No. 20	_____	_____	_____
Percent Passing No. 25	_____	_____	_____

Certified By: _____

Title: _____

Date: _____

Missouri Highways and Transportation Commission
Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions

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 (6th) 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.

Preferences

- a. In the evaluation of bids/quotes, preferences shall be applied in accordance with 7 CSR 10-11.020(7). Contractors should apply the same preferences in selecting subcontractors. The attached document entitled "**VENDOR INFORMATION AND PREFERENCE CERTIFICATION FORM**" must be completed and returned with the solicitation documents.
- b. 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.

Missouri Highways and Transportation Commission
Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions

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.

Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions

SPECIAL TERMS AND CONDITIONS

Insurance

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.

Prohibition Of Employment Of Unauthorized Aliens

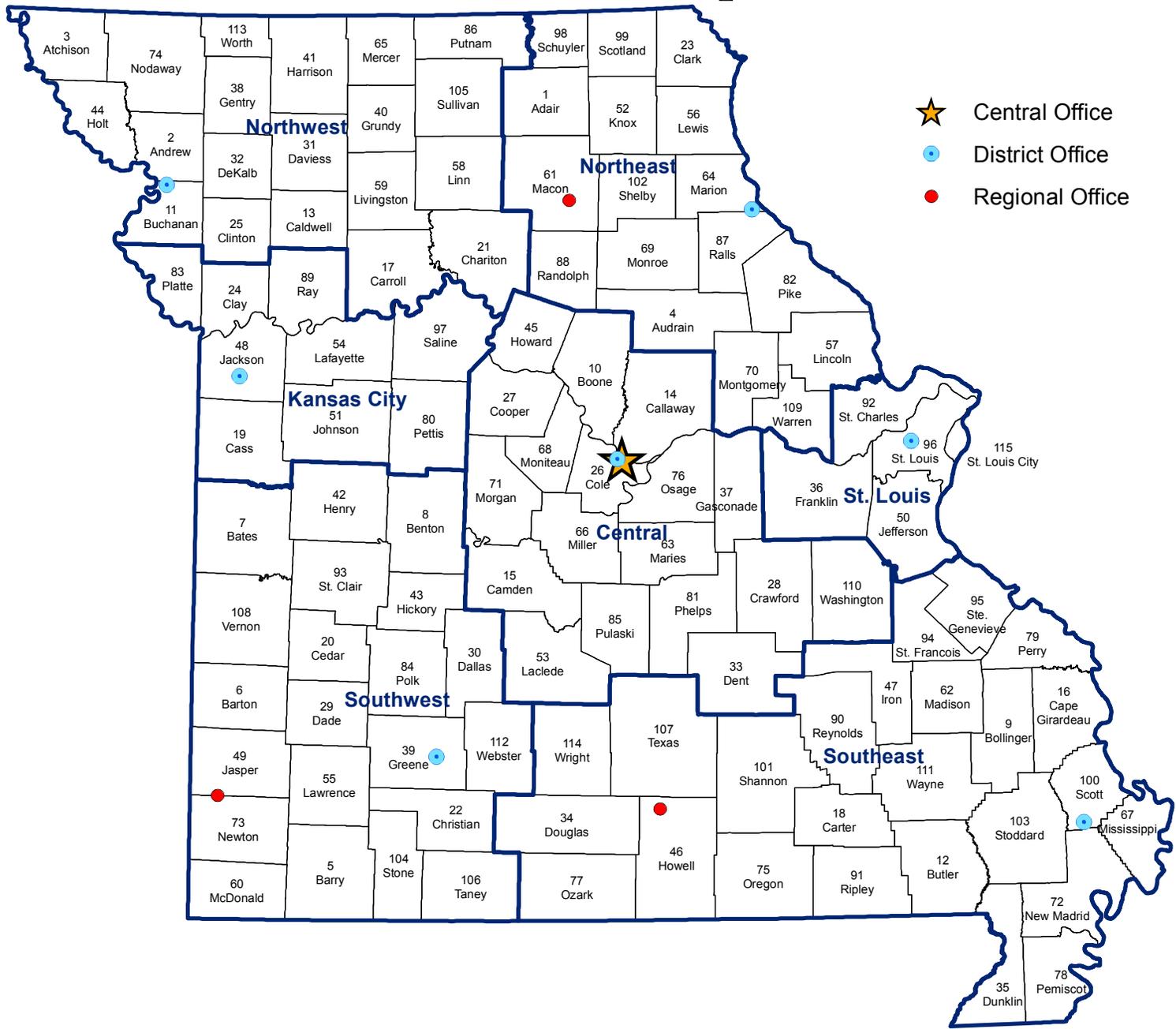
- a. **Non-employment of Unauthorized Aliens:** Pursuant to Section 285.530, RSMo., no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the State of Missouri. As a condition for the award of any contract or grant 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:
 - 1) 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. E-Verify is an example of a federal work authorization program. The business entity must affirm its enrollment and participation in the E-Verify federal work authorization program with respect to the employees proposed to work in connection with the services requested herein by providing acceptable enrollment and participation documentation consisting of **completed** copy of the E-Verify Memorandum of Understanding (MOU). For business entities 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
 - 2) By sworn affidavit, affirm that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. A copy of the affidavit referenced herein is provided within this document, attached as Exhibit A.
- b. **Proof of Lawful Presence For Sole Proprietorships and Partnerships:** If the business entity is a sole proprietorship or partnership, pursuant to Section 208.009, RSMo., each sole proprietor and each general partner shall provide affirmative proof of lawful presence in the United States. Such sole proprietorship or partnership is eligible for temporary public benefits upon submission by each sole proprietor and general partner of a sworn affidavit of his/her lawful presence on the United States until such lawful presence is affirmatively determined, or as otherwise provided by Section 208.009, RSMo. A copy of the affidavit reference herein is provided within this document, attached as Exhibit B.

Official Holidays

- 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**.

Missouri Department of Transportation District Map



County	No. Dist.	County	No. Dist.	County	No. Dist.	County	No. Dist.	County	No. Dist.	County	No. Dist.
Adair	1 .. NE	Chariton	21 .. NW	Harrison	41 .. NW	Macon	61 .. NE	Phelps	81 .. C	Shannon	101 .. SE
Andrew	2 .. NW	Christian	22 .. SW	Henry	42 .. SW	Madison	62 .. SE	Pike	82 .. NE	Shelby	102 .. NE
Atchison	3 .. NW	Clark	23 .. NE	Hickory	43 .. SW	Maries	63 .. C	Platte	83 .. KC	Stoddard	103 .. SE
Audrian	4 .. NE	Clay	24 .. KC	Holt	44 .. NW	Marion	64 .. NE	Polk	84 .. SW	Stone	104 .. SW
Barry	5 .. SW	Clinton	25 .. NW	Howard	45 .. C	Mercer	65 .. NW	Pulaski	85 .. C	Sullivan	105 .. NW
Barton	6 .. SW	Cole	26 .. C	Howell	46 .. SE	Miller	66 .. C	Putnam	86 .. NW	Taney	106 .. SW
Bates	7 .. SW	Cooper	27 .. C	Iron	47 .. SE	Mississippi	67 .. SE	Ralls	87 .. NE	Texas	107 .. SE
Benton	8 .. SW	Crawford	28 .. C	Jackson	48 .. KC	Moniteau	68 .. C	Randolph	88 .. NE	Vernon	108 .. SW
Bollinger	9 .. SE	Dade	29 .. SW	Jasper	49 .. SW	Monroe	69 .. NE	Ray	89 .. KC	Warren	109 .. NE
Boone	10 .. C	Dallas	30 .. SW	Jefferson	50 .. SL	Montgomery	70 .. NE	Reynolds	90 .. SE	Washington	110 .. C
Buchanan	11 .. NW	Davies	31 .. NW	Johnson	51 .. KC	Morgan	71 .. C	Ripley	91 .. SE	Wayne	111 .. SE
Butler	12 .. SE	Dekalb	32 .. NW	Knox	52 .. NE	New Madrid	72 .. SE	St. Charles	92 .. SL	Webster	112 .. SW
Caldwell	13 .. NW	Dent	33 .. C	Laclede	53 .. C	Newton	73 .. SW	St. Clair	93 .. SW	Worth	113 .. NW
Callaway	14 .. C	Douglas	34 .. SE	Lafayette	54 .. KC	Nodaway	74 .. NW	St. Francois	94 .. SE	Wright	114 .. SE
Camden	15 .. C	Dunklin	35 .. SE	Lawrence	55 .. SW	Oregon	75 .. SE	Ste. Genevieve	95 .. SE	St. Louis City	115 .. SL
Cape Girardeau	16 .. SE	Franklin	36 .. SL	Lewis	56 .. NE	Osage	76 .. C	St. Louis	96 .. SL		
Carroll	17 .. NW	Gasconade	37 .. C	Lincoln	57 .. NE	Ozark	77 .. SE	Saline	97 .. KC		
Carter	18 .. SE	Gentry	38 .. NW	Linn	58 .. NW	Pemiscot	78 .. SE	Schuyler	98 .. NE		
Cass	19 .. KC	Greene	39 .. SW	Livingston	59 .. NW	Perry	79 .. SE	Scotland	99 .. NE		
Cedar	20 .. SW	Grundy	40 .. NW	McDonald	60 .. SW	Pettis	80 .. KC	Scott	100 .. SE		

