



**MISSOURI DEPARTMENT OF TRANSPORTATION  
 BID GUIDELINES AND DOCUMENTATION**

**THIS IS NOT AN ORDER**

**REQUEST FOR BID**

**\*\*\*THIS DOCUMENT MUST BE RETURNED AS A SEALED BID\*\*\***

It is the vendor's responsibility to read and comply with all conditions, specifications, and instructions outlined in this document. This document and any subsequent attachments shall supersede all confirmation forms, receipts, or any other paperwork needed to secure materials, equipment, or services.

TODAY'S DATE: 09-03-2009	<b>BID DUE BY (DATE AND TIME):</b> <b>09-14-2009 By 1:00 PM CST</b>	F.O.B. REQUIREMENTS: DESTINATION (SEE DELIVERY LOCATIONS BELOW)
TO BE COMPLETED BY: <b>ASAP</b> NO LATER THAN 3 TO 4 WEEKS AFTER NOTICE TO PROCEED / PURCHASE ORDER IS ISSUED	<b>BID #: B4-09-016</b> THIS BID # SHOULD BE REFERENCED ON ALL MAILING LABELS, ENVELOPES, AND ANY OTHER CORRESPONDENCE. <b>***SEALED BID***</b>	BUYER NAME:  ROBIN WARREN 816-622-0054
District Mailing Address: Missouri Department of Transportation – District 4 General Services Procurement Division 600 NE Colbern Road Lee's Summit, MO 64086		Project Location:  As Indicated Below in Scope of Work

**ALL BIDS MUST BE EXTENDED AND TOTALED. DELIVERY TIME MUST BE LISTED**

Quantity	U/M	DESCRIPTION (including size and/or part #'s)	UNIT PRICE	UNIT PRICE EXTENSION	DELIVERY TIME
1	LUMP SUM	Install a complete Wireless, Battery-Powered Vehicle Detection System per attached specifications to be installed at a Type NEMA TS2 type 1 Controller at the intersections of E Bannister Rd @ MO 350, and NW Colbern Rd @ NW Blue Pkwy. The minimum number of Access Points shall be 2. The minimum number of Repeaters shall be 1. The minimum number of Sensors shall be 25.  See attached documents for minimum system specifications and location diagram.  Traffic control shall be included and approved by the engineer prior to construction.  This bid shall include all equipment necessary for a complete operational wireless detection system.			

**\*Contact Mark Green at 816-622-0406 or 816-377-0405 with questions on Scope of Work or Specs\***

Prevailing wage applies to this project. Annual Wage Order No. 16 for Jackson County is in effect. <a href="http://www.dolir.mo.gov/ls/prevailingwage/16_WO048.pdf">http://www.dolir.mo.gov/ls/prevailingwage/16_WO048.pdf</a>
<b>Note insurance liability requirements in attached Special Terms and Conditions</b>

<b>TOTAL ORDER EXTENSION</b>	<b>\$</b>
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**VENDOR NOTES**

**Missouri Department of Transportation purchase orders must be issued to the invoicing company/address. If the invoicing company/address will be different from that listed in the vendor information section (below), the vendor must specify the “remit to” company/address in the vendor notes section (above).**

**VENDOR INFORMATION**

Vendor Name/Mailing Address:	Vendor Contact Information (including area codes):  Phone #:  Fax #:  Cellular #:
Printed Name and Title of Responsible Officer or Employee:	Signature:
Is your company registered/certified with the State of Missouri as a (please circle):	
MINORITY BUSINESS ENTERPRISE (MBE) ?	YES                      NO
WOMEN BUSINESS ENTERPRISE (WBE) ?	YES                      NO
Would your company like information on becoming a registered/certified MBE/WBE vendor?	YES                      NO

**All responses to this Request for Bid MUST be submitted on this form and all pages MUST be returned to the Buyer listed above at the District mailing address shown.**

**PREFERENCE IN PURCHASING PRODUCTS**

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

The bidders attention is directed to Section 34.076 RsMO 1986 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/quotation 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.

## 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:  


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- [ ] 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): \_\_\_\_\_  


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- [ ] 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): \_\_\_\_\_  


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### 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.**

## 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 an offeror 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 offeror **must** provide the following with the proposal 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 proposals, in their entirety, are comparable:

- a. A copy of a letter from the Department of Veterans Affairs (VA), or a copy of the offeror's discharge paper (DD Form 214, Certificate of Release or Discharge from Active Duty) from the branch of service the offeror was in, stating that the offeror 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 offeror'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

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





**APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP**

(a separate affidavit is required for each owner and general partner)

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 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:

## Specification for a Wireless, Battery-Powered Magnetometer Vehicle Detection System for Presence Detection Applications

This specification sets forth the minimum requirements for a system to detect vehicles on a roadway by using battery-powered magnetometer-type sensors that communicate their detection data by radio to a roadside communications hub before the data is relayed to a local traffic controller and, optionally, a central software system or a data server as may be desired.

### 1 Overview

- 1.1 The detection system shall provide accurate roadway information as needed to support traffic signal control
- 1.2 The Wireless Battery-Powered Magnetometer Vehicle Detection System shall consist of one or more of the following:
  - 1.2.1 battery-powered sensors installed in-pavement in each traffic lane
  - 1.2.2 Access Points (APs) mounted on the side of the roadway, serving as the communications hub for the installation
  - 1.2.3 optional wireless Repeaters (RPs) mounted on the side of the roadway, serving to extend the radio range of an AP
  - 1.2.4 Contact Closure Interface (CCI) cards to support the interface between an AP and a standard traffic controller using contact closure signals
  - 1.2.5 software to control and configure the sensors, APs, and RPs
  - 1.2.6 software to store and retrieve detection data
- 1.3 Communications between the sensors and the AP or RP and between the RP and AP shall be via radio
- 1.4 Detection data shall be relayed from each AP to a local traffic controller for real-time vehicle presence detection using contact closure signals
- 1.5 As an option, data shall be capable of being relayed from each AP to a central software system or central server over standard IP (Internet Protocol) networks

### 2 Functional Capabilities

- 2.1 Each sensor shall be installed in the roadway using the following procedure
  - 2.1.1 The roadway shall be core drilled to provide a 4" diameter hole, 2.25" deep
  - 2.1.2 A small layer of sand or epoxy sufficient to cover the bottom of the hole shall be applied
  - 2.1.3 The sensor shall then be placed on top of this layer of sand in the correct orientation as clearly marked on the sensor
  - 2.1.4 The sensor shall be fully encapsulated with the epoxy to the lip of the cored hole
- 2.2 Each sensor shall detect a vehicle by measuring changes in the earth's magnetic field near the sensor as caused by a stopped or passing vehicle (i.e., magnetometer-type detection)
  - 2.2.1 The sensor shall sample the earth's magnetic field at a rate of 128 Hz
  - 2.2.2 The sensor shall communicate time-stamped ON and OFF vehicle detection events
  - 2.2.3 As an option, the sensor shall provide a mode where the complete X-Y-Z magnetic signatures of detected vehicles are transmitted as data

- 2.2.4 Each sensor shall automatically recalibrate in the event of a detector lock
- 2.3 Each sensor shall communicate by radio to a nearby AP or RP
  - 2.3.1 Each sensor shall transmit its detection data within 150 ms of a detected event
  - 2.3.2 Each sensor shall automatically re-transmit a detected event if no acknowledgement is received from the AP
  - 2.3.3 Each sensor may stop retransmission after 8 attempts
  - 2.3.4 Each sensor shall transmit a unique identifying code
  - 2.3.5 Each sensor shall respond within 100 seconds when the AP is powered on
  - 2.3.6 When no AP or RP is present or powered on, the sensors are not required to detect vehicles
- 2.4 The radio links between each sensor and AP or RP and between each RP and AP shall conform to the following:
  - 2.4.1 The physical layer of the radio links (i.e., the over-the-air data rate(s), modulation type(s), forward error correction, bit interleaving, channel coding, and other aspects of the transmitted signal) shall conform to published standards (e.g., IEEE, ITU-T, etc.)
  - 2.4.2 The center frequencies, bandwidths, and transmit power levels of the radio links shall allow operation in an unlicensed frequency band
  - 2.4.3 Frequency channels shall be employed by the sensors, APs, and RPs to avoid interference with other devices operating in the unlicensed band
    - 2.4.3.1 Frequency channels shall be user-configurable
    - 2.4.3.2 At least 16 frequency channels shall be supported
  - 2.4.4 The link budget (i.e., transmit power plus transmit antenna gain plus receive antenna gain minus receive sensitivity, where receive sensitivity shall assume a 1% packet error rate) for all radio links shall be 93 dB or greater
  - 2.4.5 The maximum distance between a sensor installed in the roadway and an AP or an RP with a clear line-of-sight between devices shall be:
    - 2.4.5.1 At least 150 feet / 45.7 meters for an AP or RP installed 24 feet / 7.3 meters above the roadway
    - 2.4.5.2 At least 100 feet / 30.5 meters for an AP or RP installed 18 feet / 5.5 meters above the roadway
    - 2.4.5.3 At least 75 feet / 22.9 meters for an AP or RP installed 12 feet / 3.7 meters above the roadway
  - 2.4.6 The maximum distance between an AP and an RP shall be at least 750 feet / 228.6 meters when both units are installed 18 feet / 5.5 meters above the roadway and with a clear line-of-sight between devices
- 2.5 Each installation of the Wireless Battery-Powered Magnetometer Vehicle Detection System shall consist of one or more sensors installed in each traffic lane where presence detection is required, avoiding sources of magnetic noise such as underground power cables, overhead high tension power cables, light rail or subway tracks, and power generation stations and sub-stations

- 2.5.1 The sensors shall be located as specified by the intersection plans, with each sensor's supporting AP or RP installed no farther than the maximum range indicated in Section 2.4.5
- 2.5.2 After losing radio contact because of stopped vehicles over or near the sensor, each sensor shall be capable of re-establishing the radio link with its supporting AP or RP in less than 2 seconds
- 2.6 Each sensor in an installation shall be capable of being individually configured with its own sensitivity level
  - 2.6.1 A single sensor shall be capable of being configured with a sensitivity level that approximates the detection zone of a standard 6' x 6' / 1.8m x 1.8m inductive loop
  - 2.6.2 Each sensor shall be capable of being configured with relatively higher or lower sensitivity levels as may be required to detect bicycles, motorcycles, or light rail
  - 2.6.3 Up to two sensors properly configured shall be capable of detecting
    - 2.6.3.1 motorcycles in a standard traffic lane
    - 2.6.3.2 bicycles in a designated bicycle lane
- 2.7 An AP shall support the relay of sensor detection data through several interfaces as required by the application
  - 2.7.1 Detection data shall be communicated to a standard roadside traffic controller via Contact Closure Interface cards capable of being installed in standard contact closure input shelves, where the following controller types shall be supported:
    - 2.7.1.1 Type 170
    - 2.7.1.2 Type 2070 ATC
    - 2.7.1.3 NEMA TS1
    - 2.7.1.4 NEMA TS2
  - 2.7.2 As an option, detection data shall be communicated over TCP/IP via an integrated 10/100BaseT Ethernet interface
  - 2.7.3 As an option, detection data shall be communicated as IP data over GSM-based cellular data services via an integrated GPRS cellular modem
  - 2.7.4 As an option, detection data shall be communicated as IP data over CDMA-based cellular data services via an integrated 1xRTT cellular modem
  - 2.7.5 The AP shall be capable of simultaneously communicating detection data via the contact closure interface, optional Ethernet interface, and optional cellular data modem interface
- 2.8 Each sensor, AP, and RP shall be capable of accepting software and firmware upgrades
- 2.9 The Wireless Battery-Powered Magnetometer Vehicle Detection System shall provide software operating on conventional notebook/portable PCs
  - 2.9.1 To support configuration of a sensor
  - 2.9.2 To support configuration of an AP
  - 2.9.3 To support configuration of an RP

#### 2.9.4 To store and retrieve detection data

### 3 Sensor Hardware

- 3.1 All sensor components shall be contained within a single housing
  - 3.1.1 The sensor housing shall conform to NEMA Type 6P and IEC IP68 standards
  - 3.1.2 The sensor components shall be fully encapsulated within the housing to prevent moisture from degrading the components
  - 3.1.3 The sensor housing shall be capable of being installed in a 4-inch / 10-cm diameter hole approximately 2 ¼ inches / 5.7 cm deep
- 3.2 A sensor shall operate at temperatures from -37 °F / -38.3 °C to +176 °F / +80 °C
- 3.3 A sensor shall be battery-powered with an average lifetime of ten (10) years when the sensor is configured for and operating under normal traffic conditions

### 4 Access Point (AP) Hardware

- 4.1 An AP shall support at least 48 sensors
- 4.2 An AP shall be factory-configurable to support at least two (2) different power options:
  - 4.2.1 Power shall be supplied via an isolated nominal 48 VDC (36-58 VDC) input, consuming a maximum of 3W and providing 1500 V isolation and 5 kV surge protection
  - 4.2.2 Power shall be supplied via a non-isolated nominal 12 VDC (10-15 VDC) input, consuming a maximum of 2W
- 4.3 An AP shall operate at temperatures from -37 °F / -38.3 °C to +176 °F / +80 °C
- 4.4 All AP components shall be contained within a single housing
  - 4.4.1 The AP housing shall conform to NEMA Type 4X and IEC IP67 standards
  - 4.4.2 An AP shall be no larger than 12" H x 8" W x 4" D / 30 cm H x 20 cm W x 10 cm D
  - 4.4.3 An AP shall weigh no more than 4 pounds / 1.8 kg

### 5 Repeater (RP) Hardware

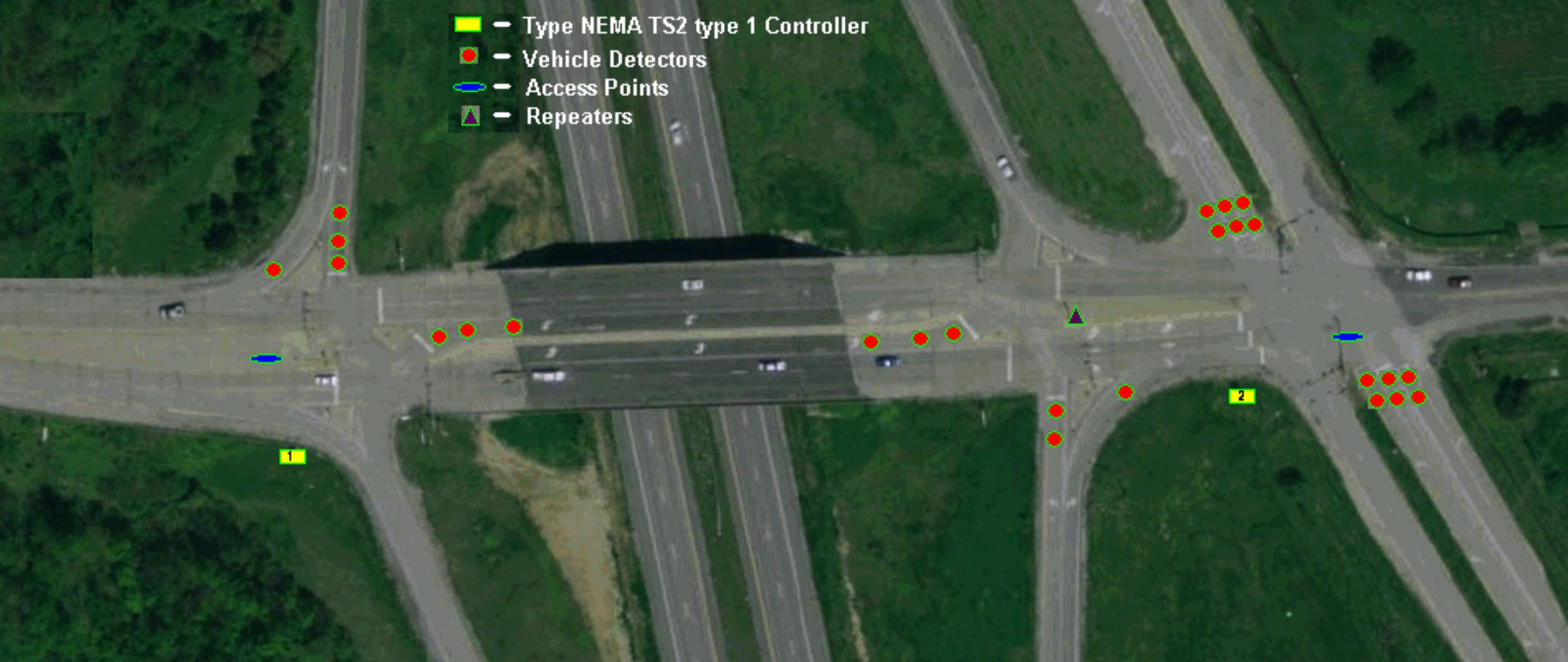
- 5.1 An RP shall support at least 10 sensors
- 5.2 An RP shall be battery-powered
- 5.3 The RP battery shall be field replaceable
- 5.4 An RP shall operate at temperatures from -37 °F / -38.3 °C to +176 °F / +80 °C
- 5.5 All RP components shall be contained within a single housing
  - 5.5.1 The RP housing shall conform to NEMA Type 4X and IEC IP67 standards
  - 5.5.2 An RP shall be no larger than 5" H x 4" W x 4" D / 12.7 cm H x 10 cm W x 10 cm D
  - 5.5.3 An RP shall weigh no more than 4 pounds / 1.8 kg

### 6 Contact Closure Interface (CCI) Card Hardware

- 6.1 Each CCI card shall provide detector data as contact closure signals to the traffic controller
  - 6.1.1 A CCI card shall directly plug in to standard 170/2070 input files or NEMA detector racks

- 6.1.2 One or more CCI cards shall provide up to 256 channels of detection data from a single AP's supported sensors, where each channel comprises an optically isolated contact closure relay and, if configured for TS2 operation, an additional contact closure relay to indicate the channel status
  - 6.2 Each CCI card shall be configurable
    - 6.2.1 A CCI card shall provide contact closure signals in either presence or pulse mode
    - 6.2.2 A CCI card shall provide up to 31 seconds of delay timing
    - 6.2.3 A CCI card shall provide up to 7.5 seconds of extension (carryover) timing
  - 6.3 The CCI card front panel shall provide status LEDs to monitor:
    - 6.3.1 Detection channel status
    - 6.3.2 Line Quality
    - 6.3.3 Fault Monitor
  - 6.4 The CCI card front panel shall provide switches to select and configure:
    - 6.4.1 Presence or pulse mode
    - 6.4.2 Delay timing
    - 6.4.3 Extension timing
  - 6.5 A CCI card shall be powered by the traffic controller backplane via an 11-26 VDC input
  - 6.6 A CCI card shall be surge protected to GR-1089 standards
  - 6.7 A CCI card shall operate at temperatures from -37 °F / -38.3 °C to +176 °F / +80 °C
  - 6.8 A CCI card shall operate in humidity up to 95% (non-condensing)
- 7 Limited Warranty
- 7.1 The supplier shall provide a limited two-year warranty for the Wireless Battery-Powered Magnetometer Vehicle Detection System
  - 7.2 During the warranty period, technical support shall be available from the supplier via telephone within 24 hours of the time a call is made by a user, where this support shall be provided by factory-authorized personnel or factory-authorized installers
  - 7.3 During the warranty period, standard updates to the software shall be available from the supplier without charge
- 8 Maintenance and Support
- 8.1 The supplier shall maintain a sufficient inventory of parts to provide support and maintenance of the system, where these parts shall be available for delivery within 30 days of receipt of a purchase order by the supplier at the supplier's then-current pricing and terms of sale
  - 8.2 The supplier shall maintain an ongoing program for customer support for the system via telephone, email, or trained personnel sent to the installation upon receipt of a purchase order at the supplier's then-current pricing and terms of sale for technical support services.
  - 8.3 Installation and/or training support shall be provided by a factory-authorized representative
  - 8.4 All documentation shall be provided in the English language

- — Type NEMA TS2 type 1 Controller
- — Vehicle Detectors
- Access Points
- ▲ — Repeaters



1

2

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

**STANDARD SOLICITATION PROVISIONS**

- a. The Missouri Department of Transportation (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.
- b. All bids/quotes/proposals must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
- c. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown, within the State of Missouri.
- d. Time of delivery is a part of the consideration and, if not otherwise stated in the solicitation documents, must be stated in definite terms by the Bidder/Offeror and must be adhered to. If time varies on different items, the Bidder/Offeror shall so state.
- e. If providing bids/quotes/proposals for commodities, the Bidder/Offeror will state brand or make on each item. If bidding or proposing other than the make, model or brand specified, the manufacturer's name, model number or catalog number must be given.
- f. **For bids/proposals of \$25,000 or more**, no bids/proposals by telephone, telegram or telefax will be accepted.
- g. The date specified for the returning of bids/quotes/proposals is a firm deadline and all bids/quotes/proposals must be received at the designated office by that time. The Department does not recognize the U.S. Mail, Railway Express Agency, Air Express, or any other organization, as its agent for purposes of accepting proposals. All proposals arriving at the designated office after the deadline specified will be rejected.

**GENERAL TERMS AND CONDITIONS**

**General Performance**

- a. This work is to be performed under the general supervision and direction of the Missouri Department of Transportation (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.

**Deliveries**

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.
- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- c. Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

**Nondiscrimination**

- a. The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. All solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of the Contractor's obligations under this contract and the Regulations, will be relative to nondiscrimination on the grounds of race, color, or national origin.
  - 1) **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MoDOT 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/proposal, the Bidder/Offeror 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 proposal and/or submitted pricing, and (3) the MHTC's acceptance of the proposal and/or bid by purchase order or post-award contract.
- 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 purchase order and/or notice to proceed.
- d. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

**Subcontracting**

- a. It is specifically understood that no portion of the material or any interest in the contract, shall be subcontracted, transferred, assigned or otherwise disposed of, except with the written consent of MoDOT. Request for permission to subcontract or otherwise dispose of any part of the work shall be in writing to MoDOT and accompanied by documentation showing that the organization which will perform the work is particularly experienced and

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equipped for such work.

- b. Consent to subcontract or otherwise dispose of any portion of the work shall not be construed to relieve the Contractor of any responsibility for the production and delivery of the contracted work and the completion of the work within the specified time.
- c. All payments for work performed by a subcontractor shall be made to the Contractor to whom the contract was awarded and the purchase order issued.

**Invoicing and Payment**

- a. 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/Offeror upon request if applicable.
- b. 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.
- c. 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.
- d. 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.
- e. The MHTC reserves the right to purchase goods and services using the state-purchasing card.

**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.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri 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 MoDOT a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
  - 1) 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 MoDOT a copy of their current Transient Employer Certificate from the Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
- c. 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.

**Executive Order**

- a. 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.

**Preferences**

- a. In the evaluation of bids/quotes/proposals, preferences shall be applied in accordance with Chapter 34 RSMo. Contractors should apply the same preferences in selecting subcontractors.
- b. 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.

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- 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.**
- c. 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.
- d. In the event of a tie of low bids, the MHTC reserves the right to establish the method to be used in determining the award

**Remedies and Rights**

- a. No provision in the contract shall be construed, expressly or implied, as a waiver by the MHTC of any existing or future right and/or remedy available by law in the event of any claim by the MHTC of the Contractor's default or breach of contract.
- b. The Contractor agrees and understands that the contract shall constitute an assignment by the Contractor to the MHTC of all rights, title and interest in and to all causes of action that the Contractor may have under the antitrust laws of the United States or State of Missouri for which causes of action have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or produced by the Contractor in the fulfillment of the contract with the MHTC.
- c. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request MoDOT to enter into such litigation to protect the interests of the MHTC, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**Cancellation of Contract**

- a. The MHTC may cancel the contract at any time for a material breach of contractual obligations or for convenience by providing the 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.
- b. If the MHTC cancels the contract for breach, the MHTC reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as the MHTC deems appropriate and charge the Contractor for any additional costs incurred thereby.

**Bankruptcy or Insolvency**

- a. Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assigned the benefit or creditors, the Contractor must notify MoDOT immediately. Upon learning of any such actions, the MHTC reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the Contractor responsible for damages.

**Inventions, Patents, and Copyrights**

- a. The Contractor shall defend, protect, and hold harmless the MHTC, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the Contractor's performance or products produced under the terms of the contract.

**Inspection and Acceptance**

- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

**Warranty**

- a. 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 MoDOT, (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.
- b. Such warranty shall survive delivery and shall not be deemed waived either by reason of the MHTC's acceptance of or payment for said equipment, supplies, and/or services.

**Status of Independent Contractor**

- a. 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.

**Indemnification**

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- a. The Offeror shall defend, indemnify and hold harmless the Commission, 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 Offeror's performance of its obligations under this Agreement.

**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:

- a. 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;
- b. 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;
- c. 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.

**Required Specifications**

- a. All materials, equipment, and/or services bid upon must comply with the attached MoDOT Specifications and Diagram and any other provisions outlined in the solicitation documents.
- b. 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.

**Information and Reports**

- a. The Contractor shall provide all information and reports required by the Regulations, or Directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Missouri Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or Directives. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the Missouri Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

**Prevailing Wage**

- a. If the bid/quote/proposal 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): **JACKSON**. The Annual Wage Order #16 may be inspected at any District Office or at the Central Office in Jefferson City, MO.
- b. The Contractor shall submit notarized weekly payroll affidavit documentation included with the project request for payment. The successful vendor must provide a lien waiver from all material suppliers.

**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.

**Award**

- a. Award of this bid will be made on an "All Or Nothing" basis using the "lowest and best" principle of award.

**Failure to Execute Contract**

- a. Failure to execute the contract within **15 days** after the contract award shall be just cause for the cancellation of the award. 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.

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**Notice to Proceed**

- a. A purchase order will be issued as a "Notice to Proceed," which will specify the date or dates that the Contractor can start. These dates will be in accordance with the dates shown in the proposal.

**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.

**Liquidated Damages**

- a. In the event the successful Contractor fails to complete the project within the time specified, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the **sum of one-hundred dollars (\$100.00) per day**, for each assessable calendar day on which the delivery has not been completed, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the Contractor or otherwise collected from the Contractor as liquidated damages.
- b. **Saturdays, Sundays, holidays and days whereas the Department has suspended work** shall not be assessable days.

**Environmental Issues**

Attention of the bidder is invited to the **Land Reclamation Act, Chapter 444, Laws of 1971, (House Bill 519)** and the necessity for compliance if applicable.

The Contractor shall take necessary precautions and shall schedule and conduct his operations so as to avoid or minimize siltation of streams while removing gravel there from.

**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 is available at [http://www.dhs.gov/xprevprot/programs/qc\\_1185221678150.shtm](http://www.dhs.gov/xprevprot/programs/qc_1185221678150.shtm).