



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: NOVEMBER 12, 2013	BID DUE BY (DATE AND TIME): NOVEMBER 26, 2013 BY 1:00 PM CST	F.O.B. REQUIREMENTS: DESTINATION (SEE DELIVERY LOCATIONS BELOW)
PROJECT TO BE COMPLETED BY: AS SOON AS POSSIBLE	Bid #: KC-B13-032 SEALED BID THIS BID # SHOULD BE REFERENCED ON ALL MAILING LABELS, ENVELOPES, AND ANY OTHER CORRESPONDENCE.	BUYER NAME: TONI TERRY SR. GENERAL SERVICES TECHNICIAN PHONE: 816-347-4112 TONI.TERRY@MODOT.MO.GOV
District Mailing Address: Missouri Department of Transportation General Services Procurement Division 600 NE Colbern Road Lee's Summit, MO 64086		Project Locations: See List Below

Quantity	U/M	DESCRIPTION (including size and/or part #'s)	UNIT PRICE	UNIT PRICE EXTENSION	DELIVERY TIME
23	Each	6 X 30 Detection Loops installed with leads pulled to currently used pull box at the various locations listed below.			
<p><u>Detection Loops Installation</u></p> <ul style="list-style-type: none"> Contractor shall use sealant products listed on Approved Products List. All wire type and sealant shall be submitted for approval before use. Contractor shall be responsible for all traffic control and must comply with MUTCD and Section 616 of MoDOT Engineering Policy Guide and must provide two days advance notice of lane closures. All loops must comply to Sections 902 and 1061 of Missouri Standard Specifications for Highway Construction and Missouri Standard Plans for Highway Construction Section 902.50. <p><u>Project Locations</u></p> <ul style="list-style-type: none"> 40 @ Lee's Summit (NB) 71 @ 75th Street (EBLT) 50 @ Winchester – Sedalia (EB Center Lane) 72nd Street @ Prairie View (NB Right Lane) 435 @ 23rd Street (NB) 13 @ South – Richmond (WB) 70 @ Paseo (SB North Side) 70 @ Paseo (SB North Side) 70 @ Paseo (SB North Side) 70 @ Paseo (NB South Side) 70 @ Paseo (NB South Side) 70 @ Paseo (NB South Side) 210 @ Ameristar / Eldon (NB) 210 @ Ameristar / Eldon (NBLT) 210 @ Ameristar / Eldon (NBLT) 210 @ Ameristar / Eldon (SB) 210 @ Ameristar / Eldon (SBLT) 210 @ Ameristar / Eldon (EB) 210 @ Ameristar / Eldon (EB) 210 @ Ameristar / Eldon (EBLT) 210 @ Ameristar / Eldon (WB) 210 @ Ameristar / Eldon (WB) 210 @ Ameristar / Eldon (WBLT) 					

Notification of award will be at the time the tabulation is posted to the Internet. It is the sole responsibility for all bidders to check the website for bid results.

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.

VENDOR NOTES

VENDORS MAY ATTACH OTHER PERTINENT/SUPPORTING DATA WITH THEIR RESPONSE TO THIS SOLICITATION.

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 & 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:

- 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
- 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

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.

SIGNATURE AND IDENTITY OF BIDDER

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

() sole individual

() partnership

() joint venture

() corporation, incorporated under laws of state of _____

Dated _____.

Name of individual, all partners,
or joint ventures:

Address of each:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

doing business under the name of:

Address of principal place of business in Missouri

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

(If a corporation, show its name above)

ATTEST: (SEAL)

_____ Secretary	_____ Title
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(NOTE: If the Bidder is doing business under a FICTITIOUS NAME, the Proposal shall be executed in the legal name of the individual, partners, joint ventures, or corporation, with the legal address shown, and REGISTRATION OF FICTITIOUS NAME filed with the Secretary of State, as required by Sections 417.200 to 417.230, RS Mo. If the Bidder is a CORPORATION NOT ORGANIZED UNDER THE LAWS OF MISSOURI, it shall procure a CERTIFICATE OF AUTHORITY TO DO BUSINESS IN MISSOURI, as required by Section 351.570 and following, RS Mo. A CERTIFIED COPY of such Registration of Fictitious Name or Certificate of Authority to do Business in Missouri shall be filed with the Missouri Highways and Transportation Commission, as required by the Standard specifications, Sec 102.6.6 and 102.6.7.

Exhibit A
ANNUAL WORKER ELIGIBILITY VERIFICATION AFFIDAVIT
(for joint ventures, a separate affidavit is required for each business entity)

STATE OF _____)
) ss
COUNTY OF _____)

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

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

• I, the Affiant, am the _____ of _____, and I am duly
title business name
authorized, directed, and/or empowered to act officially and properly on behalf of this business entity.

• I, the Affiant, hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security, and the aforementioned business entity shall participate in said program to verify the employment eligibility of newly hired employees working in connection with any services contracted by the Missouri Highways and Transportation Commission (MHTC). I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo.

• I, the Affiant, also hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection with any services contracted by MHTC, any alien who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. § 1324a(h)(3).

• I, the Affiant, am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.530, RSMo, the aforementioned business entity may be held liable under Sections 285.525 through 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the state of Missouri.

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

Affiant Signature

Subscribed and sworn to before me in _____, _____, the day and year first above-written.
city (or county) state

Notary Public

My commission expires:

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

Exhibit B
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
owner or partner business name
(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:

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.

Prevailing Wage

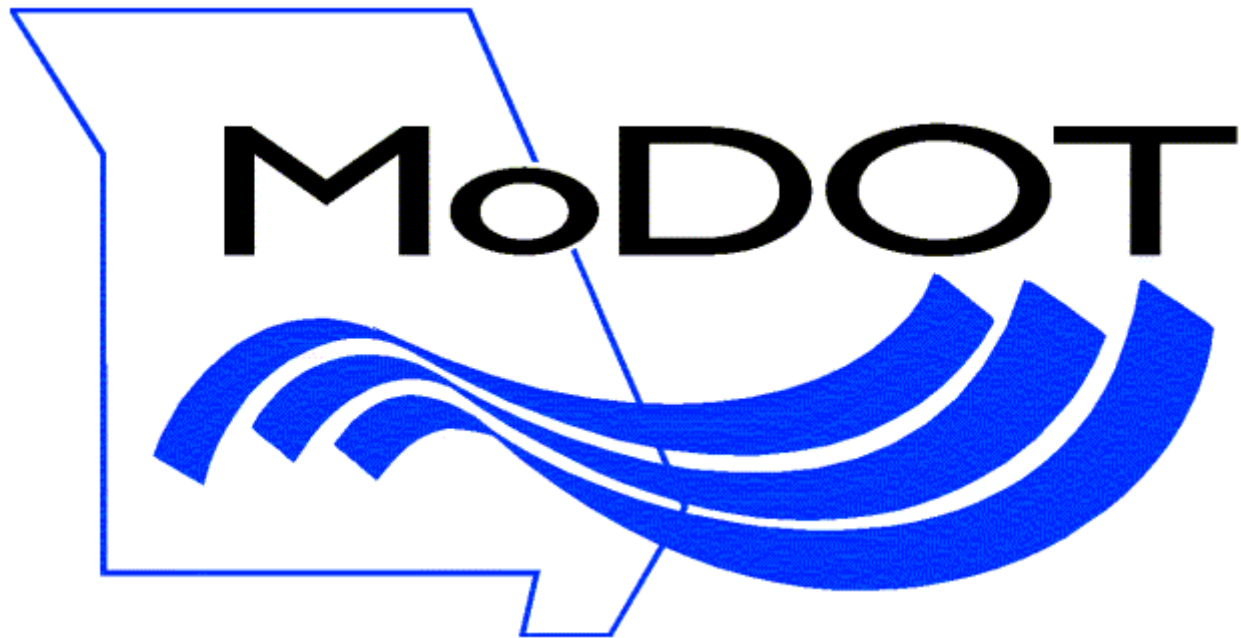
- a. The work to be performed under this solicitation is governed by the provisions of Chapter 290 RSMo, as amended, related to prevailing wages to be paid on public works.
- b. If the bid/quote is accepted, the vendor will be required to comply with the prevailing wages as fixed by the Missouri Department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

Permits, Licenses and Safety Issues

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.

Liquidated Damages

- a. In the event the successful Contractor fails to deliver the material 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 per day, per item**, 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.



Traffic Operations

APPROVED PRODUCTS LIST

**TRAFFIC SIGNALS, HIGHWAY LIGHTING,
AND HIGHWAY SIGNING EQUIPMENT**

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

TRAFFIC SIGNALS AND HIGHWAY LIGHTING EQUIPMENT

I. GENERAL

This Approved Products List (APL) is based on equipment meeting department specifications and being tested for the specified test period with satisfactory performance. All models shall conform to the latest revision of the Missouri Standard Specifications for Highway Construction unless otherwise indicated. The models indicated on the list are approved, but are subject to final field inspection before acceptance.

The department frequently tests new products and equipment for traffic signals and highway lighting. These new products may be installed on a construction project, purchased on parts orders or with controller orders. Vendors may also submit items, at no cost to the department, for the test period. Only a limited number of units will be accepted for test statewide until an item is added to the Approved Products List. A vendor wishing to initiate a test on a new product shall submit a Product Evaluation Request Form - Signal and Lighting Equipment. Copies of this form can be obtained from our website at www.modot.state.mo.us or contact MoDOT Traffic Operations. Minor model changes do not require an evaluation period, although the vendor shall submit specification sheets and a sample of the product for the Department to inspect.

All equipment evaluations are coordinated through MoDOT Traffic Operations. The vendor supplying the equipment shall provide equipment specifications and a certification that the equipment meets department specifications before the test is performed. The equipment is tested for the period specified on the APL. Products that are not performing satisfactorily will be replaced with an approved product if the vendor cannot provide timely correction of the problem or if unsatisfactory operation of the intersection results.

If a vendor is proposing a product that does not meet department specifications, an explanation of why the product meets or exceeds the current specifications must be provided by the vendor in writing to Traffic Operations. If approved, the product may be tested for the specified period as described above. If the product is satisfactory, the Department will consider a revision to the applicable specifications. Products will not be added to the Approved Products List that do not meet department specifications.

Products on the APL shall continue to perform satisfactorily. In addition, the vendors shall support the products. Products not performing as required or not supported are subject to removal from the APL.

Grounds for removal of products include but are not limited to:

- Significant change in product specifications or design without notification to the department.

- Failure to correct or replace products that are defective in manufacturing or workmanship.

- Repeated patterns of malfunctions of a product not adequately corrected by the vendor.

- Unreasonable pricing of repair parts or repair work. Repair work not completed in a reasonable time frame.

- Excessive delivery times for new purchases or replacement parts.

Changes in standard specifications may also necessitate removal of specific products from the APL. If this occurs, there will be a grace period where the product will be retained on the list after the specifications are changed. However the product will be removed from the list if it is not revised to meet specifications.

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

II. TRAFFIC SIGNAL EQUIPMENT

All traffic signal equipment requires a one-year evaluation period.

CONTROLLERS

NEMA TS1 CONTROLLERS

MODEL

Econolite	ASC/2-2100
Econolite	ASC/2S-2100
Econolite	ASC/3-2100
Naztec	980
Peek	3000
Siemens	EPAC Genesis M40
Siemens	EPAC M42
Siemens	EPAC M52
Traffic Control Technologies (TCT)	LMD-8000

NEMA ON-STREET MASTER CONTROLLER

MODEL

Econolite	KMC-10,000
Econolite	ASC/2M
Siemens	MARC 360

SOLID STATE PRETIMED CONTROLLERS (ALL TYPES)

MODEL

Siemens	EPIC Series
Traffic Control Technologies (TCT)	LMD 40 Series

170 CONTROLLERS

MODEL

McCain	170E
Phillips/Sisson Industries, Inc.	170E
Safetran	170E
Siemens	170E

CABINETS AND BACK PANELS (NEMA & S.S. PRETIMED)

NOTE: Cabinets and Back panels that meet MoDOT specifications from the following manufacturers will be accepted. ALL other manufacturers must provide a model that meets specifications and complete a satisfactory one-year evaluation as described above to be added to the list.

NEMA CABINET AND BACK PANEL ASSEMBLIES

Control Technology
Econolite
Henke/Bison
IDC/Gibbons
Naztec P-44
Siemens

MISSOURI DEPARTMENT OF TRANSPORTATION

APPROVED PRODUCTS LIST

SOLID STATE PRETIMED CABINET AND BACK PANEL ASSEMBLIES

Siemens

CABINETS AND RACKS (TYPE 170 CONTROLLERS)

NOTE: Cabinets and Racks that meet MoDOT specifications from the following manufacturers will be accepted. ALL other manufacturers must provide a model that meets specifications and complete a satisfactory one-year evaluation as described above to be added to the list.

332 AND 336S CABINET AND RACK ASSEMBLIES

McCain

Phillips/Sisson Industries, Inc.

Safetran

CONFLICT MONITORS

NEMA CONFLICT MONITORS

MODEL

Eberle Design Incorporated (EDI).....	NSM-6
Eberle Design Incorporated (EDI).....	NSM-12
Eberle Design Incorporated (EDI).....	SSM-12LE
Eberle Design Incorporated (EDI).....	MMU-16E
Eberle Design Incorporated (EDI).....	MMU-16LE
Naztec, Incorporated	NM512
Peek/Transyt.....	1200
Power Distribution & Control (PDC).....	CM82-03
Power Distribution & Control (PDC).....	CM82-06
Power Distribution & Control (PDC).....	CM82-12
Reno A&E	MMU-1600 Series
Solid State Devices.....	NM-6
Solid State Devices.....	NM-12
Solid State Devices.....	LCD-6P
Solid State Devices.....	LCD-12P
Traffic Control Technologies (TCT)	LNM Series

170 CONFLICT MONITORS

MODEL

Eberle Design Incorporated (EDI).....	210E
Reno A & E	2018
Solid State Devices.....	210P

CABINET ACCESSORIES

AUXILIARY TIME CLOCK

MODEL

Eltec	NTC-17E
Eltec	TC-14
RTC.....	AP41

MISSOURI DEPARTMENT OF TRANSPORTATION

APPROVED PRODUCTS LIST

EXTERNAL T.B.C. COORDINATORS MODEL

EltecTC-14

FLASHERS MODEL (NEMA & 170)

Eberle Design Incorporated (EDI).....810
 Power Distribution & Control (PDC).....SSF-86
 Power Distribution & Control (PDC).....SSF-88
 Reno A & EFL-200
 Traffic Sensor Corp.....204
 Traffic Sensor Corp.....204-15
 Traffic Sensor Corp.....304
 Traffic Sensor Corp.....304-15

FLASH TRANSFER RELAYS MODEL

AMECO136-4962
 Struthers-Dunn.....21ACPX-2/21ACPXD-5
 Mid-Tex136-62T-3A1
 Power Distribution & Control (PDC).....FTR 91
 RenoTR-200

LOAD SWITCHES MODEL (NEMA & 170)

Eberle Design Incorporated (EDI).....510
 Power Distribution & Control (PDC).....SSS-86
 Power Distribution & Control (PDC).....SSS-88
 Reno A & ELS-200
 Traffic Control Technologies (TCT)SSS-86
 Traffic Sensor Corp.....200
 Traffic Sensor Corp.....200-15
 Traffic Sensor Corp.....300
 Traffic Sensor Corp.....300-15

ISOLATORS (170 only) MODEL (242=DC, 252=AC)

Eberle Design Incorporated242
 GDI.....242
 GDI.....252
 Power Distribution & Control (PDC).....242
 Power Distribution & Control (PDC).....252
 Safetran242
 Safetran252

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

SURGE PROTECTORS

MODEL

Edco.....	SHA 1210
Edco.....	SHA-1250

TONE RECEIVERS

MODEL

Iniven	IR30M-05-30
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TONE TRANSMITTERS

MODEL

Iniven	IT30
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DETECTORS

MICROWAVE DETECTORS

MODEL

Microwave Sensors.....	TC-26B
Electronic Integrated Systems, Inc. (EIS)	RTMS X-2

MICROLOOP, PROBE

MODEL

3M	Canoga 701
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PEDESTRIAN PUSH BUTTONS

MODEL

Campbell.....	4 EVR 120
Polara Engineering, Inc.	BDSP-010-B

POWER SUPPLY FOR CARD RACK DETECTORS - NEMA

MODEL

ICC.....	PS24
PGK	PS-1.2

SINGLE CHANNEL SHELF MOUNT DETECTORS, STANDARD

MODEL

Eberle Design Incorporated (EDI).....	LMD301S
Sarasota.....	535B/MS

SINGLE CHANNEL SHELF MOUNT DETECTORS, TIME DELAY

MODEL

Eberle Design Incorporated (EDI).....	LMD301T
Sarasota.....	535T/MS

ULTRASONIC DETECTORS

MODEL

Microwave Sensors.....	TC-30
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MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

2-CHANNEL CARD RACK COUNTING DETECTORS, DUAL OUTPUT

Eberle Design Incorporated (EDI).....LMD632

2-CHANNEL CARD RACK COUNTING DETECTORS, SINGLE OUTPUT PULSE MODE (NEMA)

MODEL

Eberle Design Incorporated (EDI).....LMD632T
ICC.....S27B
Reno A & EC

2-CHANNEL CARD RACK DETECTORS, STANDARD (170)

MODEL

Eberle Design Incorporated (EDI).....LM222
Eberle Design Incorporated (EDI).....LMD222
Reno A & E222
Sarasota.....222-GP5
Sarasota.....222 GP6

2-CHANNEL CARD RACK DETECTORS, STANDARD (NEMA)

MODEL

Eberle Design Incorporated (EDI).....LMD602R
ICC.....S27B
Reno A & EC
Reno A & EG

2-CHANNEL CARD RACK DETECTORS, TIME DELAY (NEMA)

MODEL

3MCanoga C800 Series
Eberle Design Incorporated (EDI).....LMD602TR
Reno A & EC
Reno A & EGT

SIGNAL HEADS

BACKPLATES

MODEL

Chapel Hill44xx Series
IntelightBP INTLIT Series
Pelco.....BK-100x Series
Neodesia PlasticsBP Series

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

HARDWARE

NOTE: Hardware that meets MoDOT specifications from the following manufacturers will be accepted. ALL other manufacturers must provide equipment that meets specifications and complete a satisfactory six-month evaluation as described above to be added to the list.

Pelco	
Reliable 3/8" Strandvise	5202
Reliable 1/4" Strandvise	5200

LOUVERS	MODEL
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Pelco	GPL
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POLYCARBONATE SIDE-MOUNT BRACKETS WITH RELATED HARDWARE	MODEL
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Component Products	Any
Eagle	UKS1452AB

SIGNAL HEADS - OPTICALLY LIMITED	MODEL
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Intelight, Inc.	ESB Series
McCain	HPTS Series

SIGNAL HEADS - POLY CONVENTIONAL	MODEL
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Chapel Hill	SIG-TPB-305-CTN-NVN-0N (3 section)
Chapel Hill	SIG-TPB-586-CTN-NVN-0N (5 section)
Eagle	SA Series
General Traffic Equipment Corp.....	T-30 POLY
IDC/Safetrans	LT Series
McCain	MTSTP Series
Traffic Control Technologies (TCT).....	PSS Series

PEDESTRIAN HEAD – POLY 1-SECTION	MODEL
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McCain	M32258
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PEDESTRIAN LED SIGNAL INDICATION	MODEL
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Pedestrian LED signal indications must be ETL verified. The ETL verified listing is located at [Intertek ETL Verified Listing - Link](#)

MISSOURI DEPARTMENT OF TRANSPORTATION

APPROVED PRODUCTS LIST

POSTS AND MAST ARMS

Note: Posts and Mast Arms do not require an evaluation period. Posts and Mast Arms shall be fabricated in accordance with MoDOT specifications and standards. Posts and Mast Arms shall be pre-approved as required by the MoDOT standards and specifications to be added to the list. The following manufacturers have pre-approved fabrication details and documentation on file with the department. Posts and Mast Arms are subject to field inspection before acceptance.

STEEL POSTS AND MAST ARMS

DRAWING NUMBER

Ameron International	MO9811 - Rev. 9 (Type C)
Ameron International	MO9812 - Rev. 10 (Type CL)
JEM Engineering & Manufacturing	MODOT1-4 Rev. 2 (Types C, CL, B & BL)
Maico Industries, Inc.	MOMAST 1-5A Rev. 1-6 (Types C, CL, B & BL)
Millerbernd Manufacturing Company	780C388 (Type B)
Millerbernd Manufacturing Company	780C389 (Type BL)
Millerbernd Manufacturing Company	780C49 (Type C)
Millerbernd Manufacturing Company	780C51 (Type CL)
Millerbernd Manufacturing Company	500A971
Pelco Structural, LLC	MODMA1001 & 1002 (Type B)
Pelco Structural, LLC	MODMAL1001 & 1002 (Type BL)
Pelco Structural, LLC	MOSMA1001 & 1002 (Type C)
Pelco Structural, LLC	MOSMAL1001 & 1002 (Type CL)
Union Metals.....	30443-B202 - Rev. 19 (Types C, CL, B & BL)
Valmont	DB00408 - Rev. C (Types C, CL, B & BL)

MISCELLANEOUS

LOOP SEALANTS

MODEL

(Loop sealants do not require material certification)

3M.....	5000
Bondo	560
Bondo	575
Bondo	P606
Chemque	290S
Chemque	296-06
Durant Paints.....	Stat-A-Flex Polyseal
RAI Products	Pro-Seal 6006

PEDESTAL BASES

MODEL

Akron Foundry	TS-1000-L-P
Akron Foundry	TS-1000-L-WP
Component Products.....	CPI-BAS-1
Pelco.....	PB5336
Pelco.....	PB5337
Pelco.....	PB5340
Pelco.....	PB5341
Traffic Parts	TP 289 X

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

SPLICE KITS (DETECTOR LEAD-IN)

MODEL

3M.....	DBY Series
HOMAC HMC Industries	RAB 1/0 Series

METER SERVICE PEDESTAL (SIGNALS/SIGNALS & LIGHTING) MODEL

Milbank 120V Signal Only	CP3B51C1PAAOMO1
Milbank 120V Signal with 2 –Circuit 240V Lighting.....	CP3B51C1PBAOMO2
Milbank 120V Signal with 2-Circuit 240V Lighting Dual Meter.....	CP3B62C2NBAOMO1
Myers 120V Signal with 2-Circuit 240V Lighting	MEUGLA-M100-MDOT
Myers 120V Signal with 2-Circuit 240V Lighting	MEUG 20
Pacific Utility Products 120V Signal Only.....	USP16-M2100-112C-MODOT6-TS
Pacific Utility Products 120V Signal with 2-Circuit 240V Lighting	USPA-100-100-MODOT
Pacific Utility Products 120V Signal with 2-Circuit 240V Lighting	USP16-M2100-112C-MODOT
Pacific Utility Products 120V Signal with 2-Circuit 240V Lighting	USP24-M2100-100-MODOT6-TSL
Pacific Utility Products 120V Sgnl w/2-Circuit 240V Lighting Dual Mtr	USPD-2M2100-100-MODOT6
Tesco 120V Signal with 2-Circuit 240V Lighting	28-105 Type III BF
Tesco 120V Signal with 2-Circuit 240V Lighting	28-102F

LIGHT EMITTING DIODES (LED)

LED's (circular and arrow) must be ETL verified. The ETL verified listing is located at [Intertek ETL Verified Listing - Link](#)

PROGRAMMABLE VIEW

MODEL

Dialight.....	P463R33003 (Red Ball)
Dialight.....	P463Y33003 (Yellow Ball)
Dialight.....	P463G33003 (Green Ball)
GELcore	DR3-RCFB-01A (Red Ball)
GELcore	DR3-YCFB-01A (Yellow Ball)
GELcore	DR3-GCFB-01A (Green Ball)

VIDEO DETECTION SYSTEMS

VIDEO DETECTOR

MODEL

Econolite.....	Autoscope 2020
Econolite.....	Autoscope RackVision
Econolite.....	Autoscope RackVision Terra
Econolite.....	Autoscope Solo Terra
Iteris.....	Vantage Edge2
Traficon.....	VIP 3D.1
Traficon.....	VIP 3D.2

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

III. HIGHWAY LIGHTING

All highway lighting equipment require a one-year evaluation period except for items noted requiring a six-month evaluation.

LIGHTING POLES

Note: Poles do not require an evaluation period. Poles shall be fabricated in accordance with MoDOT specifications and standards. They shall be pre-approved as required by the MoDOT standards and specifications in order to be added to the list. The following manufacturers have pre-approved fabrication details and documentation on file with the department. Lighting poles are subject to field inspection before acceptance.

STEEL POLES

DRAWING NUMBER

Ameron International	MO98AT3 – Rev. 4 (Type AT45) Design 1 & 2
Ameron International	MO98AT2 – Rev. 4 (Type AT45) Design 3, 4 & 5
Ameron International	MO98AT4 – Rev. 3 (Type AT30)
Ameron International	MO98B2 – Rev. 3 (Type B45 & MB45)
Ameron International	MO98B4 – Rev. 2 (Type B30)
JEM Engineering and Manufacturing	MO-AT30 – Rev. 3 (Type AT30)
JEM Engineering and Manufacturing	MO-AT45 – Rev. 3 (Type AT45)
Millerbernd Manufacturing Co.	730B907 (Type AT30)
Millerbernd Manufacturing Co.	730B653 (Type AT45)
Millerbernd Manufacturing Co.	730B908 (Type B30)
Millerbernd Manufacturing Co.	730B909 (Type B45)
Millerbernd Manufacturing Co.	730B910 (Type MB45)
Union Metals.....	71020-B2 - Rev. 5 (Type AT30)
Union Metals.....	71020-B3 - Rev. 4 (Type B30)
Union Metals.....	71019-B6 - Rev. 7 (Type AT45)
Union Metals.....	71019-B7 - Rev. 4 (Types B45 & MB45)
Union Metals.....	71019-B8 – Rev. 3 (Type B30)
Union Metals.....	71019-B9 – Rev. 3 (Type B45)
Union Metals.....	71019-B10 – Rev. 3 (Type MB45)
Union Metals.....	71020-B103 – Rev. 3 (Type AT30)
Union Metals.....	71020-B104 – Rev. 4 (Type AT45)
Valmont	DB00019 – Rev. N (Types AT30 & B30)
Valmont	DB00020 – Rev. N (Types AT45, B45 & MB45)
Valmont	MO-051707 (Type AT-30)

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

FOUNDATIONS

Note: Screw anchor foundations do not require an evaluation period. Screw anchor foundations shall be fabricated in accordance with MoDOT specifications and standards. They shall be pre-approved as required by the MoDOT standards and specifications in order to be added to the list. The following manufacturers have pre-approved fabrication details and documentation on file with the department. Screw anchor foundations are subject to field inspection before acceptance.

SCREW ANCHOR FOUNDATIONS	DRAWING NUMBER
Component Products, Inc.	SLSF 8-5 (Type AT30)
Component Products, Inc.	SLSF 10-7 (Type AT45)
Hubbell Chance	SA112-0696 – Rev. G (Type AT30)
Hubbell Chance	SA112-0786 – Rev. D (Type AT45)
Integrated Traffic Solutions, Inc.	ITS AT30 (Type AT30)
Integrated Traffic Solutions, Inc.	ITS AT45 (Type AT45)
J. H. Botts	JHB MOH 30 – Rev. C (Type AT30)
J. H. Botts	JHB MOH 45 – Rev. D (Type AT45)

LUMINAIRES

NOTE: Luminaires will not be furnished with photoelectric cells. Receptacles will have a shorting plug in place of cell. Multi-tap ballast for 120 Volt and 240 Volt fixtures is permissible.

BRACKET ARM MOUNT - 150 WATT	MODEL
American Electric Lighting	115 Series
American Electric Lighting	Durastar 2000, Series 30
Crouse-Hinds/Cooper	OVZ Series
Crouse-Hinds/Cooper	OVX Series
General Electric (GE).....	M2RR Series
Holophane.....	Mongoose Series

BRACKET ARM MOUNT - 250 WATT	MODEL
American Electric Lighting	115 Series
American Electric Lighting	Durastar 2000, Series 30
Crouse-Hinds/Cooper	OVZ Series
Crouse-Hinds/Cooper	OVX Series
General Electric (GE).....	MSRL Series
Holophane.....	Mongoose Series

BRACKET ARM MOUNT - 400 WATT	MODEL
American Electric Lighting	125 Series
American Electric Lighting	Durastar 2000, Series 30
Crouse-Hinds/Cooper	OVX Series
General Electric (GE).....	MSRL Series
Holophane.....	Mongoose Series

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

HIGH MAST LIGHTING

MODEL

NOTE: *High mast lighting is custom designed for the location. Fixtures from the following manufacturer's series are considered pre-approved.*

Cooper	HMC Series
General Electric (GE).....	HMA Series
Holophane.....	HMAO Series
Holophane.....	HMS Series
Metrolux	VA Series

POLE TOP MOUNTING

MODEL

Holophane.....	HL2A Series
Holophane.....	Mongoose Series

SIGN LIGHTING - 250 WATT

MODEL

General Electric (GE).....	V2FN Series
Guth	B17632 Series
Holophane.....	PANL Series
Holophane.....	SNVW Series

SIGN LIGHTING - 400 WATT

MODEL

Holophane.....	PANL Series
Holophane.....	SNVW Series

UNDERPASS (WALLPACKS)

MODEL

American Electric Lighting	582 Series
Cooper	WPK Series
General Electric (GE).....	WAL Series
Holophane.....	MDWP Series
Holophane.....	WL2K Series
Hubbell	PGM-150S Series

CONTROL EQUIPMENT

CONTACTORS-ELECTROMECHANICAL

MODEL

Square D.....	Type S
Westinghouse/Cutler-Hammer	A202 Series

CONTACTORS-MERCURY

MODEL

Dayton/Duracool	6A/6X Series
Magnecraft.....	WM Series

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

BASE MOUNTED CONTROL CABINETS

NOTE: Cabinets that meet MoDOT specifications from the following manufacturers will be accepted. All other manufacturers must provide a model that meets specifications and complete a satisfactory six-month evaluation as described above to be added to the list.

Cleveland Switchboard
Coxline
Hoffman
Shallbetter
Inland Technologies

LIGHTNING ARRESTER

MODEL

Delta	LA 600 Series
General Electric Tranquell	9L15ECB001

MOUNTING SOCKET FOR PHOTOELECTRIC CONTROL.....MODEL

NOTE: Mounting sockets require a six-month evaluation.

American Electric Lighting	PBC
Fischer-Pierce	S476-71
General Electric (GE)	MB-PECTL

PHOTOELECTRIC CONTROL

MODEL

Area Lighting Research	SST-120 (120 volt)
Area Lighting Research	SST-240 (240 volt)
Area Lighting Research	SST-PV (120/240 volt)
American Electric Lighting	D120-1.0-STJ (Dark to Light) (120 volt)
American Electric Lighting	D124-1.0-STJ (120/240 volt)
American Electric Lighting	D240-1.0-STJ (240 volt)
American Electric Lighting	DE480-1.0-TJ (480 volt)
Fischer-Pierce	FPN7790B (105 – 285 volt)
Fischer-Pierce	FPN7772 (195 – 305 volt)
Fischer-Pierce	FPN7794 (480 volt)
Fischer-Pierce	FPN7760 (120 volt)
General Electric (GE)	PEC01TL (>120v/< 305v w/ time delay)
General Electric (GE)	PEC1TL (120v)
General Electric (GE)	PEC5TL (480v)
ITT	SAT-15
Tyco	6190 VPS

TYPE A CIRCUIT BREAKERS

MODEL

Square D	FAL Series
Westinghouse/Cutler-Hammer	EHD Series (1-Pole)
Westinghouse/Cutler-Hammer	FDB Series (2-Pole)

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

MISCELLANEOUS

AVIATION LIGHTING MODEL

Hughey & Philips.....KG114

FUSED SLIP CONNECTORS MODEL

NOTE: Slip connectors require a six-month evaluation.

BussHEB-JWRYC

METER SERVICE PEDESTAL (LIGHTING) MODEL

Milbank 4-Circuit 240V LightingCP3B51C1PBAOMO3
 Milbank 4-Circuit 480V LightingCP3B51D1PBAOMO1
 Milbank 4-Circuit 480V Lighting (used for Ameren cold sequence)CP3B51D1PBAOMOCS1
 Pacific Utility Products 4-Circuit 240V Lighting.....USP24-M2100-100-MODOT6
 Pacific Utility Products 4-Circuit 480V Lighting.....USP16-M2100-112C-MODOT
 Pacific Utility Products 4-Circuit 480V Lighting.....USP24-M2100-100-MODOT6-480

NAVIGATION LIGHTING MODEL

TidelandML-140 with TF-3AC Lamp Changer
 Automatic Power, Inc.FA-143

SPLICE KITS MODEL

3M82A1 (Single)
 3M82A2 (Single)
 3M82B1 (Three Way)
 3M82B2 (Three Way)
 HOMAC HMC Industries.....RAB 1/0 Series

TRANSFORMER BASES MODEL

Akron FoundryTB1-17H (for AT30)
 Akron FoundryTB3-17H (for AT45)

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

IV. POWER SUPPLY EQUIPMENT AND PULL BOXES

All items require a six-month evaluation period.

MAIN SERVICE DISCONNECT ENCLOSURE WITH SAFETY SWITCH (NEMA 4)

MODEL

General Electric (GE).....	TE 100 CS
Square D.....	FA-100-DS Series E2
Westinghouse	WFDN 100

PREFORMED PULL BOX-CLASS 1

MODEL

Straight

Armorcast Products Company.....	A6001640TAPCX22 (Box & Lid)
Carson Industries	H1730-24 (Box)
CDR	A14-1730 series-22" (Box & Lid)
Composite Industries	CI183024PB1P
Highline	PHA173024HO1R
.....	H1730-PI (Lid)
Martin Enterprises.....	173022PC
Strongwell/Quazite.....	PG1730B532 (Box)
	PG1730H511 (Lid)
	PG1730BA Series
Synertech.....	S1730B24AA (Box)
	S1730HBB0A (Lid)

Flared

Armorcast Products Company.....	A6001640TAX24 (Box & Lid)
CDR	A12-1730 series-22" (Box & Lid)
Highline	CHA173024HO1R
NewBasis	FCA173022CC4126-62 (Box & Lid)
NewBasis	FCA173022CC4749-61 (Box & Lid)
NewBasis	FCA173024CC40303 (Box & Lid)
Pencell Plastics.....	PEM-1830-PCX (Box & Lid)

PREFORMED PULL BOX-CLASS 2

MODEL

Straight

Armorcast Products Company.....	A6001974TAPCX26 (Box & Lid)
Armorcast Products Company.....	A6001974TAPCX24
Carson Industries.....	H2436-24 (Box)
.....	H2436-PI (Lid)
CDR	A14-2436 series-24" (Box & Lid)
Composite Industries	CI243624PB1P
Highline	PHA243624HO1R
Martin Enterprises.....	243624PC
Strongwell/Quazite.....	PG2436B539 (Box)
	PG2436H508 (Lid)
	PG2436BA Series
Synertech.....	S2436B26AA (Box)
	S2436HCB0A (Lid)

MISSOURI DEPARTMENT OF TRANSPORTATION

APPROVED PRODUCTS LIST

Flared

Armorcast Products Company	A6001974TAX26 (Box & Lid)
Armorcast Products Company	A6001974TAX24
CDR	A12-2436 series-24" (Box & Lid)
Highline	CHA243624HO1R
NewBasis	FCA243630CC4126-61 (Box & Lid)
NewBasis	FCA243630CC4749-61 (Box & Lid)
NewBasis	FCA243624CC40716 (Box & Lid)
Pencell Plastics	PEM-2436-36 (Box & Lid)
Pencell Plastics	PEM-2436-PCX-24 (Box & Lid)
Synertech	S2436B24AA (Box)
.....	S2436HCB0A (Lid)

PREFORMED PULL BOX-CLASS 3

Straight

Armorcast Products Company	A6001430TAPCX36 (Box & Lid)
Carson Industries	H3048-36 (Box)
.....	H3048-P1 (Lid)
CDR	A14-3048 series-36" (Box & Lid)
Composite Industries	CI304836PB1P
Highline	PHA304836HO1R
Martin Enterprises	304836PC
Strongwell/Quazite	PG3048B560 (Box)
	PG3048H517 (Lid)
	PG3048BA Series
Synertech	S3048B36AA (Box)
	S3048HCB0A (Lid)

Flared

Armorcast Products Company	A6001550TAX36 (Box & Lid)
CDR	A12-3048-series 36" (Box & Lid)
Highline	CHA304836HO1R
NewBasis	FCA304836EE4749-61 (Box & Lid)
NewBasis	FCA304836EE40304 (Box & Lid)
Pencell Plastics	PEM-3048-36-PCX-SPLIT (Box & Lid)

PREFORMED PULL BOX-CLASS 5

Flared

Armorcast Products Company	A6001466TA (Box & Lid)
Armorcast Products Company	A6000172TAX36 (Box & Lid)
CDR	A12-3200 series-36" (Box & Lid)
NewBasis	FCA320036T-90003
NewBasis	FCA540036C4800 (Box & Lid)
NewBasis	FCA540036C40336 (Box & Lid)
NewBasis	FCA540036-MODOT
Quazite	PR3944Z504

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

HIGHWAY SIGNING EQUIPMENT

V. GENERAL

This Approved Products List (APL) for highway signing equipment contains current pre-approved products for highway signing. This list is applicable to department purchases and construction contracts. The list includes products that have been approved for use based on satisfactory performance during a specified test period. Products listed have undergone sufficient field testing to be considered acceptable for use at any time. All field tests of new products or pending products should be arranged with Central Office Traffic.

The department frequently tests new products and equipment for highway signing. These new products may be installed on a construction project or used for normal department installations and maintenance. Vendors may also submit items, at no cost to the department, for the test period. Only a limited number of units will be accepted for test statewide until the product is added to the Approved Products List. A vendor wishing to initiate a test on a new product shall submit a Product Evaluation Request Form. Copies of this form can be obtained from our website at www.modot.state.mo.us or contact MoDOT Central Office Traffic. Minor model changes of previously approved products do not require a new evaluation period, although the vendor shall submit specification sheets and a sample of the product for the Department to inspect. Any modifications determined to potentially alter the performance of the product may require the product to undergo additional field testing and evaluation.

All product evaluations are coordinated through MoDOT Central Office Traffic. The vendor supplying the equipment shall provide equipment specifications and a certification that the equipment meets department specifications before the test is performed. The equipment is tested for the period specified by Central Office Traffic (typically one year). Products that are not performing satisfactorily will be left off of the list. Products that were previously approved that begin to perform unsatisfactorily will be removed or replaced with an approved product if the vendor cannot provide timely correction of the problem.

If a vendor is proposing a product that does not meet department specifications, an explanation of why the product meets or exceeds the current specifications must be provided by the vendor in writing to Central Office Traffic. If approved, the product may be tested for the specified period as described above. If the product is satisfactory, the Department will consider a revision to the applicable specifications. Products will not be added to the Approved Products List that does not meet department specifications.

Products on the APL shall continue to perform satisfactorily. In addition, the vendors shall support the products. Products not performing as required or not supported are subject to removal from the APL.

Grounds for removal of products include but are not limited to:

- Significant change in product specifications or design without notification to the department.
- Failure to correct or replace products that are defective in manufacturing or workmanship.
- Repeated patterns of malfunctions of a product not adequately corrected by the vendor.
- Unreasonable pricing of repair parts or repair work. Repair work not completed in a reasonable time frame.
- Excessive delivery times for new purchases or replacement parts.

Changes in standard specifications may also necessitate removal of specific products from the APL. If this occurs, there will be a grace period where the product will be retained on the list after the specifications are changed. However the product will eventually be removed from the list if it is not revised to meet specifications.

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

VI. HIGHWAY SIGNING EQUIPMENT

BREAKAWAY DEVICES

MANUFACTURER	DESCRIPTION, MODEL
Ultimate Highway Products	Triangular Slip Base for 2.5" PSST, Slip-Mate
Xcessories Squared	Kleen Break 425 for 2" PSST, XKB42520-G
Xcessories Squared.....	Redi-Torque 280 for 2.5" PSST, SB8C-250A-G
Xcessories Squared.....	Redi-Torque Bolt Kit, RTSB-MPHDW
Northwest Pipe Company	S-Q 8" Square Slipbase for 2.5" PSST, 31209
Designovations, Inc.....	Snap n Safe S250 and S250 S
Dent Breakaway Industries, Inc	3/4" Dent Bolt, #6882
Dent Breakaway Industries, Inc	5/8" Dent Bolt, #6878
Dent Breakaway Industries, Inc	1/2" Dent Bolt, #6874
Dent Breakaway Industries, Inc	5/8" Ground Anchors (Galvanized)
Dent Breakaway Industries, Inc	5/8" Modified Dent Bolt, #6220
Dent Breakaway Industries, Inc	3/4" Modified Dent Bolt, #6882

FOUNDATIONS/ANCHORS

MANUFACTURER	DESCRIPTION, MODEL
None	None

SIGN HARDWARE

MANUFACTURER	DESCRIPTION, MODEL
Xcessories Squared.....	Aluminum Post Clamp for 2.5" Pipe, XAPC278RD
Xcessories Squared.....	Aluminum Post Clamp for 3" Pipe, XAPC350RD
Xcessories Squared.....	Aluminum Post Clamp for 4" Pipe, XAPC450RD
Xcessories Squared.....	Aluminum Bar for Post Clamps, XAB750
Xcessories Squared.....	Aluminum Sign Backer Bar, ASB200P1
Xcessories Squared.....	Extruded Panel Clamp for 2" PSST, EPPCS200SQ
Xcessories Squared.....	Extruded Panel Clamp for 2.5" PSST, EPPCS250SQ
Xcessories Squared.....	Extruded Panel Clamp for 2.5" Pipe, EPPCS250RD
Xcessories Squared.....	Extruded Panel Clamp for 3" Pipe, EPPCS300RD
Xcessories Squared.....	Extruded Panel Clamp for 4" Pipe, EPPCS400RD
Xcessories Squared.....	Extruded Panel Clamp for 4x4 Wood, EPPCS44W
Xcessories Squared.....	Extruded Panel Clamp for 4x6 Wood, EPPCS46W
Xcessories Squared.....	Extruded Panel Clamp for 6x6 Wood, EPPCS66W

SIGNS

MANUFACTURER	DESCRIPTION, MODEL
Tapco	Blinkersigns

MISSOURI DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST

ADDED:

ISOLATORS (170 only) (242=DC, 252=AC)

MODEL

Eberle Design Incorporated.....242

STEEL POLES

DRAWING NUMBER

Valmont.....MO-051707 (Type AT-30)

VIDEO DETECTION SYSTEMS

VIDEO DETECTOR

MODEL

Aldis.....GridSmart

BREAKAWAY DEVICES

MANUFACTURER

DESCRIPTION, MODEL

Dent Breakaway Industries, Inc3/4" Dent Bolt, #6882
 Dent Breakaway Industries, Inc5/8" Dent Bolt, #6878
 Dent Breakaway Industries, Inc1/2" Dent Bolt, #6874
 Dent Breakaway Industries, Inc5/8" Ground Anchors (Galvanized)
 Dent Breakaway Industries, Inc5/8" Modified Dent Bolt, #6220
 Dent Breakaway Industries, Inc3/4" Modified Dent Bolt, #6882

DELETED:

SIGN HARDWARE

MANUFACTURER

DESCRIPTION, MODEL

Xcessories Squared.....Redi-Torque Bolt Kit, RTSB-MPHDW
 Dent Breakaway Industries, Inc3/4" Dent Bolt, #6874
 Dent Breakaway Industries, Inc5/8" Dent Bolt, #6874
 Dent Breakaway Industries, Inc1/2" Dent Bolt, #6874

These products are listed under BREAKAWAY DEVICES

REVISED:

METER SERVICE PEDESTAL (LIGHTING)

MODEL PEDESTRIAN PUSH

Changed
 Milbank 2-Circuit 240V Lighting.....CP3B51C1PBAOMO3
 To
 Milbank 4-Circuit 240V Lighting.....CP3B51C1PBAOMO3

PEDESTRIAN PUSH BUTTONS

MODEL

Changed
 Polara Engineering, Inc.BDSP-003-B Bulldog
 To
 Polara Engineering, Inc.....BDSP-010-B