ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT EQUIPMENT AND PROCUREMENT DIVISION BID INVITATION

Bid Number:	M-15-004P			AHTD Equipment and	MAIL TO: AHTD Equipment and	DELIVER TO: AHTD Equipment and
Bid Opening Date: _	July 29, 2014	Time:	11:00 a.m.	Procurement Division 11302 West Baseline Road Little Rock, AR 72209	Procurement Division P.O. Box 2261 Little Rock, AR 72203	Procurement Division 11302 West Baseline Road Little Rock, AR 72209
delivery locations unt	il the above-noted bid opening	date and	time, and then publ	oject to the Conditions on page 2 of the licly opened at the above-noted bid op the licly will not be considered.		
In compliance with thi opposite each item.	s Bid Invitation and subject to	all the Con	ditions thereof, the u	ndersigned offers and agrees to furnish	any and all items upon which	prices are quoted, at the price set
Company Name:			Name (Type or Print):			
Address:			Title:			
				Phone:	Fax:	
City:	State:		Zip:	E-Mail:		
Federal Tax ID or Social Security No.:				Signature: Signature must be legible, original (not photocopied) and in ink. Unsigned bids will be rejected.		

1. 3-D Laser Pavement Surface Imaging and Analysis System and all supporting hardware, software and equipment.

1 Ea. Lump Sum Price______(Shall include all expenses including the System, shipping and training.)

To meet the requirements of Arkansas State Highway and Transportation Department Specifications attached to and made a part of this bid.

FOB: AHTD – Equipment and Procurement Division

11302 W. Baseline Road Little Rock, AR 72209

Attn: Mark Evans 501-569-2234

If any literature and/or specifications of items conflict with AHTD specifications, the conflict(s) shall be specifically noted, corrected and submitted with the bid.

Bid Bond in the amount of 5% of total bid price required of all bidders at time of bid opening or bid will be rejected. **Personal and company checks are not acceptable as Bid Bonds.** See Condition 3 on page 2.

Performance Bond in the amount of 5% of total bid price will be required of successful bidder prior to providing goods/services. **Personal and company checks are not acceptable as Performance Bonds**. See Condition 3 on page 2.

The successful bidder will be required to complete delivery within 30 days after notice of award.

Bids and Specifications are available on-line by going to the AHTD Web Site – www.arkansashighways.com and clicking on "Commodities and Services Bids/Contracts Information". Tabulations will also be available at this site within 72 hours after bid opening. If you have any questions, call this office at 501-569-2667.

(53-5001)

STANDARD BID CONDITIONS

M-15-004P

- 1. **ACCEPTANCE AND REJECTION:** The Arkansas State Highway and Transportation Department (AHTD) reserves the right to reject any or all bids, to accept bids in whole or in part (unless otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the State.
- 2. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.
- BID BONDS AND PERFORMANCE BONDS: If required, a Bid Bond in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. Personal and company checks are not acceptable as Bid Bonds. Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by AHTD or fails to honor their bid. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a Performance Bond in an amount stated in the Bid Invitation and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. Personal and company checks are not acceptable as Performance Bonds. In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company authorized to do business in Arkansas, and must be signed by a Resident Local Agent licensed by the Arkansas State Insurance Commissioner to represent that surety company. Resident Agent's Power-of-Attorney must accompany the surety bond. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U.S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.
- 4. **TAXES:** The AHTD is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the AHTD as an addition thereto, and should be added to the billing to the AHTD. The AHTD is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the AHTD.
- 5. "ALL OR NONE" BIDS: Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.
- 6. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.
- 7. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.
- 8. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.
- 9. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.
- 10. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of AHTD request, and free demonstrations within 30 days, unless AHTD extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by AHTD. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.
- 11. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.
- 12. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the AHTD, as soon as possible, of the reason for any delay and the expected delivery date. The AHTD has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
- 13. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by AHTD after delivery. Default in promised delivery or failure to meet specifications authorizes the AHTD to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.
- 14. **ETHICS:** "It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business." (Arkansas Code, Annotated, Section 19-11-708).

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

NOTICE OF NONDISCRIMINATION

The Arkansas State Highway and Transportation (Department) complies with the Americans Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VI of the Civil Rights Act of 1964 and other federal equal opportunity laws and therefore does not discriminate on the basis of race, sex, color, age, national origin, religion or disability, in admission or access to and treatment in Department programs and activities, as well as the Department's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department's nondiscrimination policies may be directed to Joanna P. McFadden, Section Head -EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501) 569-2298, (Voice/TTY 711), or the following email address: Joanna.Mcfadden@arkansashighways.com.

This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.

3-Dimensional Laser Pavement Surface Imaging and Analysis System

<u>DESCRIPTION:</u> This item shall consist of the acquisition by the Arkansas State Highway and Transportation Department (AHTD) of a three dimensional pavement surface imagery and analysis system, hereafter referred to as 3-D pavement imaging system, to be used to provide three dimensional pavement surface data for use in three dimensional crack analysis and determination of other pavement surface characteristics.

1. GENERAL CLAUSES AND CONDITIONS

The AHTD currently owns and operates an in-house built data collection vehicle, hereafter referred to as data collection vehicle. The AHTD requires a 3-D pavement imaging system to provide cracking data and other pavement related performance data. The enhanced data collection vehicle will be used to support the Department's Automatic Road Analyzer (ARAN) vehicle in the collection of pavement performance data required by the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141).

- 1.1 The AHTD desires to procure a commercial-off-the-shelf laser-based 3-D imaging sensor system and software algorithms which it intends to integrate with its existing data collection vehicle.
- 1.2 Only proven commercial-off-the-shelf sensors will be considered. Successful delivery of at least 50 of the same sensor model as proposed are required to demonstrate that the proposed solution is truly a commercial-off-the-shelf product.
- 1.3 The equipment furnished under these specifications shall be the latest improved model in current production, as offered to commercial trade, and shall be of quality workmanship and material. The bidder represents that all equipment offered under these specifications shall be new. USED OR DISCONTINUED MODELS ARE NOT ACCEPTABLE.
- 1.4 The commercial-off-the-shelf sensors will be completely assembled and ready to integrate with the AHTD data collection vehicle.
- 1.5 All parts, not specifically mentioned, which are necessary for the commercial-off-the-shelf sensors to be complete and ready for operation or which are normally furnished as standard equipment shall be furnished by the successful bidder. All parts shall conform in strength, quality and workmanship to the accepted standards of the industry.
- 1.6 Quality of the sensor is paramount, and, as such, it is a requirement that the sensor be ISO 9001/2008 certified.
- 1.7 The manufacturer of the system shall have essential parts in inventory for all component subsystems. A parts inventory should be provided upon request.

2. SPECIFICATIONS

2.1 The technology must be proven to provide accurate and repeatable measurements on a variety of road surfaces including: hot mix asphalt, chip seal and concrete (both tined and untined).

- 2.2 The technology employed should consist of a single synchronized pair of 3D cameras which can scan a full 13.2 foot (4.0m) wide lane with a lateral resolution of 4,096 points, a configurable scanning frequency up to 11,200Hz, and a vertical accuracy of 0.02 inches (0.5mm).
- 2.3 Factory-integrated Inertial Measurement Units shall be included so as to tag 3D scans with sensor pitch, roll and heading data.
- 2.4 All data processing algorithms required for automatic detection and quantification of the following shall be provided:
 - 2.4.1 Measurement of longitudinal profile and IRI measurement according to applicable AASHTO standards,
 - 2.4.2 Algorithm for lane tracking,
 - 2.4.3 Ability to detect pavement markings to limit the detection of cracking outside the markings,
 - 2.4.4 Measurement of transverse profile and rutting,
 - 2.4.5 Detection and measurement of edge drop-off condition and curb detection,
 - 2.4.6 Measurement of roadway geometries, to include but not limited to:
 - o Longitudinal grade,
 - o Pavement surface cross-fall,
 - o Horizontal curvature,
 - 2.4.7 Unsealed longitudinal, transverse and pattern cracking measurement,
 - 2.4.8 Sealed cracking measurement (as separate from unsealed cracking),
 - 2.4.9 Concrete joint detection and faulting measurement,
 - 2.4.10 Macro Texture measurement (MPD, MTD) reported according to AASHTO bands.
 - The macro-texture data should correlate within +/- 10% of the macro-texture provided by standard ASTM tests such as the sand patch method,
 - 2.4.11 Measurement and detection of surface raveling,
 - 2.4.12 Measurement and detection of potholes in the pavement surface.
- 2.5 The software should be compatible with Windows XP or Windows 7 (32 or 64 bits) and the data acquisition software libraries (DLL's) should also be compatible with Windows XP or Windows 7 (32 or 64 bits).
- 2.6 Distance Measurement Instrument (DMI) that includes, but not limited to the following:
 - o An encoder with a minimum of 10,000 pulses per rotation.
 - o The DMI assembly with lug nut adapters for the data collection vehicle.
 - o All required cabling from the DMI to the sensor controller.
- 2.7 All required calibration equipment to validate the accuracy of the sensors and a suitable carrying case.

3. TRAINING AND REFERENCE MATERIALS

3.1 Onsite training and integration support is to be provided directly by the sensor manufacturer.

- 3.2 A detailed training schedule should be made available within four (4) weeks of anticipated delivery of the 3-D pavement imaging system to ensure adequate time is allotted for training.
- 3.3 A minimum of two sets of software reference and installation manuals will be provided.

4. **SUPPORT**

- 4.1 A minimum of one year of telephone and email technical support will be included.
- 4.2 For a minimum of one year all applicable software upgrades and bug fixes will be included.
- 4.3 Optional extended technical support, software upgrades, annual maintenance and recalibration should be available.

5. WARRANTY

- 5.1 A minimum one year full warranty on all parts and equipment will be included.
- 5.2 Optional extended warranty and customer support should be available.

6. **DELIVERY**

6.1 The 3-D pavement imaging system shall be delivered to the AHTD Equipment and Procurement Division's shop in Little Rock, Arkansas, by the factory or their representative, within thirty (30) days after the issue of the purchase order.