



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**INVITATION FOR BID # 12578
AMENDMENT #1
FOR FRICTION TESTER**

DATE: November 18, 2022

ITB # 12578 IS AMENDED AS FOLLOWS:

1. State responses to questions and comments in the table below amend and clarify this ITB.

Any restatement of ITB text in the Question/Comment column shall NOT be construed as a change in the actual wording of the ITB document.

ITB SECTION	PAGE #	QUESTION / COMMENT	STATE RESPONSE
		<p>1 Specification #2) Minimum requirements shall include:</p> <p>c. The test system described by these specifications shall be a tow vehicle-trailer combination able to measure the frictional braking forces at the trailer tire-pavement interface in a locked-wheel or incipient slip mode. It shall perform reliable, repeatable tests at measured speeds from 20 to 70 mph, between ambient air temperatures of 35 to 100 degrees F, under self-wetted pavement conditions.</p> <p>Question - With ASTM E274 specifying a minimum of 40 degrees F, does the DOT still want to collect at 35 degrees F?</p>	<p>40F to 100F is correct. The 35F was a typo. See Specifications Release 2.</p>
		<p>2 Specifications #3) Special Instructions</p> <p>Specifications shall require complete chassis pre-delivery service. Contractor shall be responsible to perform the pre-delivery service before delivery is made to TDOT. Units not fully complying with these specifications shall be rejected at the Contractor's expense.</p> <p>Question – Can the DOT confirm what is required as part of the pre-delivery servicing?</p>	<p>#3 is removed. See Specifications Release 2.</p>
		<p>3 Specifications #5) Mileage / Odometer Reading</p>	

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		<p>The maximum acceptable mileage allowable for any vehicle to be considered acceptable shall be 500 miles. The Contractor shall be required to make arrangements to ensure that the mileage/odometer reading does not exceed the maximum miles listed when the vehicle is delivered to TDOT for final acceptance.</p> <p>Question – As part of the requirements, the system will need to be certified at TRC in Ohio. For this certification, is estimated that 240 miles or more will be driven to complete the required testing. In addition to this, our own quality control and validations range from 250 to 400 miles per system. It is important to our company that systems are thoroughly tested prior to delivery to clients. Would the DOT consider increasing this mileage cap to 1000 miles?</p>	<p>Yes, we can increase the mileage to 1000 or less. See Specifications Release 2.</p>
		<p>4 Specifications #7) Test Trailer Specifications</p> <p>b. Minimum Specifications</p> <p>3. Two-channel force transducer shall be mounted on the LEFT wheel hub assembly. This transducer shall conform to all of the specifications and limits stated in ASTM E-274.</p> <p>Question – Please confirm this is a duplicate to 7-B-2 and not a special request. 7-B-2 already notes Two-channel transducers on the LEFT and RIGHT sides.</p>	<p>Yes, this is a duplicate, Two-channel transducers on the LEFT and RIGHT sides for this system. See Specifications Release 2.</p>
		<p>5 10. Space provided in truck bed for at least one spare test wheel and tire. The rear portion of the trailers shall not be hinged for storage access. Spare wheel and tire shall not be stored in the trailer.</p> <p>Question a. – With our model of SFT, the rear compartment of the trailer houses components needed for operation. For access by the user, this compartment is hinged with air shocks for easy access. Will the DOT consider revising this requirement?</p> <p>Question b. – With our model of SFT, the front compartment houses electronics and a spare test tire. With our experience, having the</p>	<p>A. Yes, we will allow hinge for access. See Specifications Release 2.</p> <p>B. Yes, we will allow the spare tire to be stored in the trailer. See Specifications Release 2.</p>

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		<p>extra space for spare tires is a benefit to the user. Would the DOT consider revising this requirement to allow a test tire to be stored in the trailer?</p>	
	6	<p>Specifications e. Sensors and Electronics</p> <p>7. A digital display shall be mounted on the dashboard in the tow vehicle directly in front of the driver. It shall display accurate speed to within 0.1 mph directly from the DMI. It shall have a second line of display that shows the SN, peak braking, and test count. The size, lighting, and shading of the readout shall be such that the driver can easily view it in a variety of lighting situations.</p> <p>Question –Due to space requirements on the LCD dash display, is the requirements from 7-G-4 acceptable since the SN and test counts are shown in collection software run screen?</p>	<p>Yes, this is acceptable. See Specifications Release 2.</p>
	7	<p>Specifications f. Computerized Controller</p> <p>8. System shall have a 24” (min.) color, flat panel LCD display.</p> <p>Question – Due to space limitations, a 24” monitor will cause the driver issues with seeing the passenger side mirror during vehicle operations. Can the DOT confirm this size monitor is correct?</p>	<p>24” min. is correct.</p>
	8	<p>Specifications h. Miscellaneous</p> <p>1. Prior to delivery to TDOT, each skid unit shall be taken by the vendor to the Evaluation and Field Test Center or Skid Measurement Systems (“EFTC”) located at the Transportation Research Center Inc. in East Liberty Ohio. Here the units shall undergo the standard annual calibration of subsystems and correlation to the Area Reference Skid Measurement System. This correlation shall produce the Standard Skid Measurement System Evaluation report containing correlation equations for both the smooth and ribbed tire (E524, E501) at speeds of 20, 40, and 60 mph. All transportation, labor, and material costs shall be paid for by the vendor. Contractor shall transport each skid unit and each skid unit shall not be driven to the location.</p> <p>Questions – It is our understanding that the DOT does not use smooth tires for testing.</p>	<p>The State only wants ribbed tire testing at TRC. Smooth tire testing is not necessary. See Specifications Release 2.</p>

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		<p>As per this section, the DOT is requiring that correlation shall be for ribbed and smooth tires. We have confirmed with TRC that TDOT has not had smooth tire validation completed in the past. Can the DOT confirm they want smooth validation at TRC in addition to the ribbed?</p>	
		<p>9 Specifications i. Training</p> <p>The Contractor shall provide a one-day, comprehensive operator training session for three (3) persons on-site at the TDOT facility. The vendor shall demonstrate that all functions and options are present and functioning properly and meet all specifications. The vendor shall provide training, demonstrate the functions both statically and in the field, and provide for an extensive question and answer session with the TDOT operators. TDOT will then evaluate the unit for a period of not less than 90 days. TDOT operators will evaluate the unit independently and verify it meets all specifications, and expectations. Operators will demonstrate that they are able to successfully operate the unit and utilize all functions. If any repairs, revisions, or technical support are needed during this evaluation period, the 90- day clock will reset. The exact dates and times of delivery and training shall be mutually agreed upon by TDOT and the contractor.</p> <p>Question a. – The number of days and persons being training in the specification does not match the respondent’s checklist that is required for submission. This specification calls for one day and 3 people, while the checklist calls for 3 days and 7 people for training. Can the DOT please clarify what is required?</p> <p>Question b. - With the requirement that TDOT will need to evaluate the system for 90 days, does this hold up the vendor from invoicing or receiving payment for the system until the evaluation period is completed?</p>	<p>a. The specifications are correct. See revised Checklist Release #2.</p> <p>b. We check the system on day one. The moment the skid system gets here the State confirms that all requirements are met, hardware and software. We suggest coordinating training on the day the system will arrive so that there is no delay in payment.</p>
		<p>10 Respondents Checklist:</p> <p>A comprehensive operator training session for seven (7) TDOT employees shall be provided on-site at the TDOT facility for a minimum 3-day period.</p>	<p>The specifications are correct. See revised Checklist Release #2.</p>

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		Question – Based on the training requirements in the specification, these requirements do not match. Can the DOT clarify the number of days and number of people required for training?	

2. **Delete ITB 12578 Respondent Checklist, in its entirety, and replace it with ITB 12578 Respondent Checklist, Release #2, attached to this amendment.** Revisions of the original RFP document are emphasized within the new release. **Any sentence or paragraph containing revised or new text is highlighted.**
3. **Delete ITB Friction Tester Specifications, in its entirety, and replace it with ITB Friction Tester Specifications, attached to this amendment.** Revisions of the original RFP document are emphasized within the new release. **Any sentence or paragraph containing revised or new text is highlighted.**
4. **ITB Amendment Effective Date.** The revisions set forth herein shall be effective upon release. All other terms and conditions of this ITB not expressly amended herein shall remain in full force and effect.