



1. Solicitation #: 25-4-0060 / 3450034527

2. Solicitation Issue Date: 08/21/2024

3. Brief Description of Requirement:

Frictional Mastic Surface Treatment

US-177 in Kay County, beginning at the Noble County line and extending North 6 miles to Ponca City.

See attached specifications for more details.

Questions should be emailed to mlgroom@odot.org no later than Wednesday, August 28, 2024 by 2:00 PM. Answers will be posted no later than Wednesday, September 4, 2024 by 2:00 PM.

4. Response Due Date¹: September 11, 2024

Time: 2:00 PM CST/CDT

5. Issued By and **RETURN SEALED BID TO**²:

Electronic Submission Address: ODOTBIDS@ODOT.OK.GOV

6. Solicitation Type (type "X" at one below):

- Invitation to Bid
- Request for Proposal
- Request for Quote

7. Contracting Officer:

Name: Melissa Groom
Phone: 405-227-5473
Email: mlgroom@odot.org

¹ Amendments to solicitation may change the Response Due Date (read GENERAL PROVISIONS, section 3, "Solicitation Amendments").
² If "U.S. Postal Delivery" differs from "Carrier Delivery, use "Carrier Delivery" for courier or personal deliveries.

*"Certification for Competitive Bid and Contract" **MUST** be submitted along with the response to the Solicitation.*

1. **RE: Solicitation #** 25-4-0060

2. **Bidder General Information:**

FEI / SSN : _____ Supplier ID: _____

Company Name: _____

3. **Bidder Contact Information:**

Address: _____

City: _____ State: ____ Zip Code: _____

Contact Name: _____

Contact Title: _____

Phone #: _____ Fax #: _____

Email: _____ Website: _____

4. **Oklahoma Sales Tax Permit³:**

YES – Permit #: _____

NO – Exempt pursuant to Oklahoma Laws or Rules – Attach an explanation of exemption

5. **Registration with the Oklahoma Secretary of State:**

YES - Filing Number: _____

NO - Prior to the contract award, the successful bidder will be required to register with the Secretary of State or must attach a signed statement that provides specific details supporting the exemption the supplier is claiming (www.sos.ok.gov or 405-521-3911).

6. **Workers' Compensation Insurance Coverage:**

Bidder is required to provide with the bid a certificate of insurance showing proof of compliance with the Oklahoma Workers' Compensation Act.

YES – Include with the bid a certificate of insurance.

NO – Exempt from the Workers' Compensation Act pursuant to 85A O.S. § 2(18)(b)(1-11) – Attach a written, signed, and dated statement on letterhead stating the reason for the exempt status.⁴

³ For frequently asked questions concerning Oklahoma Sales Tax Permit, see <https://www.ok.gov/tax/Businesses/index.html>

⁴ For frequently asked questions concerning workers' compensation insurance, see <https://www.ok.gov/wcc/Insurance/index.html>

7. Disabled Veteran Business Enterprise Act

- YES – I am a service-disabled veteran business as defined in 74 O.S. §85.44E. Include with the bid response 1) certification of service-disabled veteran status as verified by the appropriate federal agency, and 2) verification of not less than 51% ownership by one or more service-disabled veterans, and 3) verification of the control of the management and daily business operations by one or more service-disabled veterans.
- NO – Do not meet the criteria as a service-disabled veteran business.

Authorized Signature	Date
Printed Name	Title



Certification for Competitive Bid and/or Contract (Non-Collusion Certification)

NOTE: A certification shall be included with any competitive bid and/or contract exceeding \$5,000.00 submitted to the State for goods or services.

Agency Name: Oklahoma Department of Transportation Agency Number: 34500

Solicitation or Purchase Order #: 25-4-0060

Supplier Legal Name: _____

SECTION I [74 O.S. § 85.22]:

A. For purposes of competitive bid,

1. I am the duly authorized agent of the above named bidder submitting the competitive bid herewith, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to said bid;
2. I am fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and have been personally and directly involved in the proceedings leading to the submission of such bid; and
3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:
 - a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
 - b. to any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
 - c. in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract, nor
 - d. to any collusion with any state agency or political subdivision official or employee as to create a sole-source acquisition in contradiction to Section 85.45j.1. of this title.

B. I certify, if awarded the contract, whether competitively bid or not, neither the contractor nor anyone subject to the contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring this contract herein.

SECTION II [74 O.S. § 85.42]:

For the purpose of a contract for services, the supplier also certifies that no person who has been involved in any manner in the development of this contract while employed by the State of Oklahoma shall be employed by the supplier to fulfill any of the services provided for under said contract.

The undersigned, duly authorized agent for the above named supplier, by signing below acknowledges this certification statement is executed for the purposes of:

the competitive bid attached herewith and contract, if awarded to said supplier;

OR

the contract attached herewith, which was not competitively bid and awarded by the agency pursuant to applicable Oklahoma statutes.

Supplier Authorized Signature

Certified This Date

Printed Name

Title

Phone Number

Email

Fax Number

A. GENERAL PROVISIONS

A.1. Definitions

As used herein, the following terms shall have the following meaning unless the context clearly indicates otherwise:

- A.1.1. "Acquisition" means items, products, materials, supplies, services, and equipment a state agency acquires by purchase, lease purchase, lease with option to purchase, or rental pursuant to the Oklahoma Central Purchasing Act;
- A.1.2. "Addendum" means a written restatement of or modification to a Contract Document executed by the Supplier and State.
- A.1.3. "Bid" means an offer in the form of a bid, proposal, or quote a bidder submits in response to a solicitation;
- A.1.4. "Bidder" means an individual or business entity that submits a bid in response to a solicitation;
- A.1.5. "Solicitation" means a request or invitation by the State Purchasing Director or a state agency for a supplier to submit a priced offer to sell acquisitions to the state. A solicitation may be an invitation to bid, request for proposal, or a request for quotation; and
- A.1.6. "Supplier" or "vendor" means an individual or business entity that sells or desires to sell acquisitions to state agencies.

A.2. Bid Submission

- A.2.1. Submitted bids shall be in strict conformity with the instructions to bidders and shall be submitted with a completed Responding Bidder Information, OMES-FORM-CP-076, and any other forms required by the solicitation.
- A.2.2. Bids shall be submitted to the procuring agency in a single envelope, package, or container and shall be sealed, unless otherwise detailed in the solicitation. The name and address of the bidder shall be inserted in the upper left corner of the single envelope, package, or container. SOLICITATION NUMBER AND SOLICITATION RESPONSE DUE DATE AND TIME MUST APPEAR ON THE FACE OF THE SINGLE ENVELOPE, PACKAGE, OR CONTAINER.
- A.2.3. The required certification statement, "Certification for Competitive Bid and/or Contract (Non-Collusion Certification)", OMES-FORM-CP-004, must be made out in the name of the bidder and must be properly executed by an authorized person, with full knowledge and acceptance of all its provisions.
- A.2.4. All bids shall be legible and completed in ink or with electronic printer or other similar office equipment. Any corrections to bids shall be identified and initialed in ink by the bidder. Penciled bids and penciled corrections shall NOT be accepted and will be rejected as non-responsive. In addition to a hard copy submittal, the bidder will also be required to submit an electronic copy. Electronic responses must be submitted in the identical format contained in the solicitation (for example Microsoft Word, Microsoft Excel, but not Adobe PDF). In the event the hard copy of the price worksheets and electronic copy of the price worksheets do not agree, the electronic copy will prevail.
- A.2.5. All bids submitted shall be subject to the Oklahoma Central Purchasing Act, Central Purchasing Rules, and other statutory regulations as applicable, these General Provisions, any Special Provisions, solicitation specifications, required certification statement, and all other terms and conditions listed or attached herein—all of which are made part of this solicitation.

A.3. Solicitation Amendments

- A.3.1. If an "Amendment of Solicitation", OMES-FORM-CP-011, is issued, the bidder shall acknowledge receipt of any/all amendment(s) to solicitations by signing and returning the solicitation amendment(s). Amendment acknowledgement(s) may be submitted with the bid or may be forwarded separately. If forwarded separately, amendment acknowledgement(s) must contain the solicitation number and response due date and time on the front of the envelope. The procuring agency must receive the amendment acknowledgement(s) by the response due date and time specified for receipt of bids for the bid to be deemed responsive. Failure to acknowledge solicitation amendments may be grounds for rejection.
- A.3.2. No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in the solicitation. All amendments to the solicitation shall be made in writing by the procuring agency.
- A.3.3. It is the bidder's responsibility to check frequently for any possible amendments that may be issued. The procuring agency is not responsible for a bidder's failure to download any amendment documents required to complete a solicitation.

A.4. Bid Change

If the bidder needs to change a bid prior to the solicitation response due date, a new bid shall be submitted to the procuring agency with the following statement "This bid supersedes the bid previously submitted" in a single envelope, package, or container and shall be sealed, unless otherwise detailed in the solicitation. The name and address of the bidder shall be inserted in the upper left corner of the single envelope, package, or container. SOLICITATION NUMBER AND SOLICITATION RESPONSE DUE DATE AND TIME MUST APPEAR ON THE FACE OF THE SINGLE ENVELOPE, PACKAGE, OR CONTAINER.

A.5. Certification Regarding Debarment, Suspension, and Other Responsibility Matters

By submitting a response to this solicitation:

- A.5.1. The prospective primary participant and any subcontractor certifies to the best of their knowledge and belief, that they and their principals or participants:
 - A.5.1.1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal, State or local department or agency;
 - A.5.1.2. Have not within a three-year period preceding this proposal been convicted of or pled guilty or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) contract; or for violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - A.5.1.3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph A.5.1.2. of this certification; and
 - A.5.1.4. Have not within a three-year period preceding this application/proposal had one or more public (Federal, State, or local) contracts terminated for cause or default.
- A.5.2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to its solicitation response.

A.6. Bid Opening

Sealed bids shall be opened by the Oklahoma Dept of Transportation located at See Page 1
_____ at the time and date specified in the solicitation as the Response Due Date and Time.

A.7. Open Bid / Open Record

Pursuant to the Oklahoma Public Open Records Act, a public bid opening does not make the bid(s) immediately accessible to the public. The procurement or contracting agency shall keep the bid(s) confidential, and provide prompt and reasonable access to the records only after a contract is awarded or the solicitation is cancelled. This practice protects the integrity of the competitive bid process and prevents excessive disruption to the procurement process. The interest of achieving the best value for the State of Oklahoma outweighs the interest of vendors immediately knowing the contents of competitor's bids. [51 O.S. § 24A.5(5)]

Additionally, financial or proprietary information submitted by a bidder may be designated by the Purchasing Director as confidential and the procurement entity may reject all requests to disclose information designated as confidential pursuant to 62 O.S. (2012) § 34.11.1(H)(2) and 74 O.S. (2011) § 85.10. Bidders claiming any portion of their bid as proprietary or confidential must specifically identify what documents or portions of documents they consider confidential and identify applicable law supporting their claim of confidentiality. The State Purchasing Director shall make the final decision as to whether the documentation or information is confidential pursuant to 74 O.S. § 85.10. Otherwise, documents and information a bidder submits as part of or in connection with a bid are public records and subject to disclosure after contract award or the solicitation is cancelled.

A.8. Late Bids

Bids received by the procuring agency after the response due date and time shall be deemed non-responsive and shall NOT be considered for any resultant award.

A.9. Legal Contract

- A.9.1. Submitted bids are rendered as a legal offer and any bid, when accepted by the procuring agency, shall constitute a contract.

A.9.2. The Contract resulting from this solicitation may consist of the following documents in the following order of precedence:

A.9.2.1. Any Addendum to the Contract;

A.9.2.2. Purchase order, as amended by Change Order (if applicable);

A.9.2.3. Solicitation, as amended (if applicable); and

A.9.2.4. Successful bid (including required certifications), to the extent the bid does not conflict with the requirements of the solicitation or applicable law.

A.9.3. Any contract(s) awarded pursuant to the solicitation shall be legibly written or typed.

A.10. Pricing

A.10.1. Bids shall remain firm for a minimum of sixty (60) days from the solicitation closing date.

A.10.2. Bidders guarantee unit prices to be correct.

A.10.3. In accordance with 74 O.S. §85.40, ALL travel expenses to be incurred by the supplier in performance of the Contract shall be included in the total bid price/contract amount.

A.11. Manufacturers' Name and Approved Equivalents

Unless otherwise specified in the solicitation, manufacturers' names, brand names, information and/or catalog numbers listed in a specification are for information and not intended to limit competition. Bidder may offer any brand for which they are an authorized representative, and which meets or exceeds the specification for any item(s). However, if bids are based on equivalent products, indicate on the bid form the manufacturer's name and number. Bidder shall submit sketches, descriptive literature, and/or complete specifications with their bid. Reference to literature submitted with a previous bid will not satisfy this provision. The bidder shall also explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. Bids that do not comply with these requirements are subject to rejection.

A.12. Clarification of Solicitation

A.12.1. Clarification pertaining to the contents of this solicitation shall be directed in writing to the Contracting Officer specified in the solicitation, and must be prior to the closing date of the solicitation.

A.12.2. If a bidder fails to notify the State of an error, ambiguity, conflict, discrepancy, omission or other error in the SOLICITATION, known to the bidder, or that reasonably should have been known by the bidder, the bidder shall submit a bid at its own risk; and if awarded the contract, the bidder shall not be entitled to additional compensation, relief, or time, by reason of the error or its later correction. If a bidder takes exception to any requirement or specification contained in the SOLICITATION, these exceptions must be clearly and prominently stated in their response.

A.12.3. Bidders who believe proposal requirements or specifications are unnecessarily restrictive or limit competition may submit a written request for administrative review to the contracting officer listed on the solicitation. This request must be made prior to the closing date of the solicitation.

A.13 Negotiations

A.13.1. In accordance with Title 74 §85.5, the State of Oklahoma reserves the right to negotiate with one, selected, all or none of the vendors responding to this solicitation to obtain the best value for the State. Negotiations could entail discussions on products, services, pricing, contract terminology or any other issue that may mitigate the State's risks. The State shall consider all issues negotiable and not artificially constrained by internal corporate policies. Negotiation may be with one or more vendors, for any and all items in the vendor's offer.

A.13.2. Firms that contend that they lack flexibility because of their corporate policy on a particular negotiation item shall face a significant disadvantage and may not be considered. If such negotiations are conducted, the following conditions shall apply:

A.13.3. Negotiations may be conducted in person, in writing, or by telephone.

A.13.4. Negotiations shall only be conducted with potentially acceptable offers. The State reserves the right to limit negotiations to those offers that received the highest rankings during the initial evaluation phase.

A.13.5. Terms, conditions, prices, methodology, or other features of the bidders offer may be subject to negotiations and subsequent revision. As part of the negotiations, the bidder may be required to submit supporting

financial, pricing, and other data in order to allow a detailed evaluation of the feasibility, reasonableness, and acceptability of the offer.

- A.13.6. The requirements of the Request for Proposal shall not be negotiable and shall remain unchanged unless the State determines that a change in such requirements is in the best interest of the State Of Oklahoma.

A.14. Rejection of Bid

The State reserves the right to reject any bids that do not comply with the requirements and specifications of the solicitation. A bid may be rejected when the bidder imposes terms or conditions that would modify requirements of the solicitation or limit the bidder's liability to the State. Other possible reasons for rejection of bids are listed in OAC 260:115-7-32.

A.15. Award of Contract

- A.15.1. The State Purchasing Director may award the Contract to more than one bidder by awarding the Contract(s) by item or groups of items, or may award the Contract on an ALL OR NONE basis, whichever is deemed by the State Purchasing Director to be in the best interest of the State of Oklahoma.
- A.15.2. Contract awards will be made to the lowest and best bidder(s) unless the solicitation specifies that best value criteria is being used.
- A.15.3. In order to receive an award or payments from the State of Oklahoma, suppliers must be registered. The vendor registration process can be completed electronically through the OMES website at the following link: <https://www.ok.gov/dcs/vendors/index.php>.

A.16. Contract Modification

- A.16.1. The Contract is issued under the authority of the State Purchasing Director who signs the Contract. The Contract may be modified only through a written Addendum, signed by the State Purchasing Director and the supplier .
- A.16.2. Any change to the Contract, including but not limited to the addition of work or materials, the revision of payment terms, or the substitution of work or materials, directed by a person who is not specifically authorized by the procuring agency in writing, or made unilaterally by the supplier, is a breach of the Contract. Unless otherwise specified by applicable law or rules, such changes, including unauthorized written Addendums, shall be void and without effect, and the supplier shall not be entitled to any claim under this Contract based on those changes. No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in the resultant Contract.

A.17. Delivery, Inspection and Acceptance

- A.17.1. Unless otherwise specified in the solicitation or awarding documents, all deliveries shall be F.O.B. Destination. The supplier(s) awarded the Contract shall prepay all packaging, handling, shipping and delivery charges and firm prices quoted in the bid shall include all such charges. All products and/or services to be delivered pursuant to the Contract shall be subject to final inspection and acceptance by the State at destination. "Destination" shall mean delivered to the receiving dock or other point specified in the purchase order. The State assumes no responsibility for goods until accepted by the State at the receiving point in good condition. Title and risk of loss or damage to all items shall be the responsibility of the supplier until accepted by the receiving agency. The supplier(s) awarded the Contract shall be responsible for filing, processing, and collecting any and all damage claims accruing prior to acceptance.
- A.17.2. Supplier(s) awarded the Contract shall be required to deliver products and services as bid on or before the required date. Deviations, substitutions or changes in products and services shall not be made unless expressly authorized in writing by the procuring agency.

A.18. Invoicing and Payment

- A.18.1. Upon submission of an accurate and proper invoice, the invoice shall be paid in arrears after products have been delivered or services provided and in accordance with applicable law. Invoices shall contain the purchase order number, a description of the products delivered or services provided, and the dates of such delivery or provision of services. An invoice is considered proper if sent to the proper recipient and goods or services have been received.
- A.18.2. State Acquisitions are exempt from sales taxes and federal excise taxes.
- A.18.3.** Pursuant to 74 O.S. §85.44(B), invoices will be paid in arrears after products have been delivered or services provided.

A.18.4. Payment terms will be net 45. Interest on late payments made by the State of Oklahoma is governed by 62 O.S. § 34.72.

A.18.5. Additional terms which provide discounts for earlier payment may be evaluated when making an award. Any such additional terms shall be no less than ten (10) days increasing in five (5) day increments up to thirty (30) days. The date from which the discount time is calculated shall be the date of a proper invoice.

A.19. Tax Exemption

State agency acquisitions are exempt from sales taxes and federal excise taxes. Bidders shall not include these taxes in price quotes.

A.20. Audit and Records Clause

A.20.1. As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form. In accepting any Contract with the State, the successful bidder(s) agree any pertinent State or Federal agency will have the right to examine and audit all records relevant to execution and performance of the resultant Contract.

A.20.2. The successful supplier(s) awarded the Contract(s) is required to retain records relative to the Contract for the duration of the Contract and for a period of seven (7) years following completion and/or termination of the Contract. If an audit, litigation, or other action involving such records is started before the end of the seven (7) year period, the records are required to be maintained for two (2) years from the date that all issues arising out of the action are resolved, or until the end of the seven (7) year retention period, whichever is later.

A.21. Non-Appropriation Clause

The terms of any Contract resulting from the solicitation and any Purchase Order issued for multiple years under the Contract are contingent upon sufficient appropriations being made by the Legislature or other appropriate government entity. Notwithstanding any language to the contrary in the solicitation, purchase order, or any other Contract document, the procuring agency may terminate its obligations under the Contract if sufficient appropriations are not made by the Legislature or other appropriate governing entity to pay amounts due for multiple year agreements. The Requesting (procuring) Agency's decisions as to whether sufficient appropriations are available shall be accepted by the supplier and shall be final and binding.

A.22. Choice of Law

Any claims, disputes, or litigation relating to the solicitation, or the execution, interpretation, performance, or enforcement of the Contract shall be governed by the laws of the State of Oklahoma.

A.23. Choice of Venue

Venue for any action, claim, dispute or litigation relating in any way to the Contract shall be in Oklahoma County, Oklahoma.

A.24. Termination for Cause

A.24.1. The supplier may terminate the Contract for default or other just cause with a 30-day written request and upon written approval from the procuring agency. The State may terminate the Contract for default or any other just cause upon a 30-day written notification to the supplier.

A.24.2. The State may terminate the Contract immediately, without a 30-day written notice to the supplier, when violations are found to be an impediment to the function of an agency and detrimental to its cause, when conditions preclude the 30-day notice, or when the State Purchasing Director determines that an administrative error occurred prior to Contract performance.

A.24.3. If the Contract is terminated, the State shall be liable only for payment for products and/or services delivered and accepted.

A.25. Termination for Convenience

A.25.1. The State may terminate the Contract, in whole or in part, for convenience if the State Purchasing Director determines that termination is in the State's best interest. The State Purchasing Director shall terminate the contract by delivering to the supplier a Notice of Termination for Convenience specifying the terms and

effective date of Contract termination. The Contract termination date shall be a minimum of 60 days from the date the Notice of Termination for Convenience is issued by the State Purchasing Director.

A.25.2. If the Contract is terminated, the State shall be liable only for products and/or services delivered and accepted, and for costs and expenses (exclusive of profit) reasonably incurred prior to the date upon which the Notice of Termination for Convenience was received by the supplier.

A.26. Insurance

The successful supplier(s) awarded the Contract shall obtain and retain insurance, including workers' compensation, automobile insurance, medical malpractice, and general liability, as applicable, or as required by State or Federal law, prior to commencement of any work in connection with the Contract. The supplier awarded the Contract shall timely renew the policies to be carried pursuant to this section throughout the term of the Contract and shall provide the procuring agency with evidence of such insurance and renewals.

A.27. Employment Relationship

The Contract does not create an employment relationship. Individuals performing services required by this Contract are not employees of the State of Oklahoma or the procuring agency. The supplier's employees shall not be considered employees of the State of Oklahoma nor of the procuring agency for any purpose, and accordingly shall not be eligible for rights or benefits accruing to state employees.

A.28. Compliance with the Oklahoma Taxpayer and Citizen Protection Act of 2007

By submitting a bid for services, the bidder certifies that they, and any proposed subcontractors, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employment Verification Program (E-Verify) through the Department of Homeland Security and available at www.dhs.gov/E-Verify.

A.29. Compliance with Applicable Laws

The products and services supplied under the Contract shall comply with all applicable Federal, State, and local laws, and the supplier shall maintain all applicable licenses and permit requirements.

A.30. Special Provisions

Special Provisions set forth in SECTION B apply with the same force and effect as these General Provisions. However, conflicts or inconsistencies shall be resolved in favor of the Special Provisions.

Textured Bituminous Mastic Surface Treatment - Kay Co. – US-177 south of Ponca City.

Scope of Work – Apply textured bituminous mastic surface treatment to the surface of approx. 6 miles of US-177 south of Ponca City. Includes inside and outside shoulders, turn lanes, and median openings.

Begin - The pavement change just south of Eagles Nest Rd. which is also the Kay/Noble Co. line.

End - The asphalt/concrete interface approx. 700 feet south of U.S. 60.

Pay Item – S.Y.

Application Rate – 0.3 gal/S.Y.

Approx. quantity – 263,000 S.Y. – This is an estimate. Actual quantities may be more or less and may be adjusted by ODOT.

All materials will conform to the 2019 Standard Specifications for Highway Construction and attached Textured Bituminous Mastic Surface Treatment Guideline which will supersede the Standard Specification where in conflict.

Included in bid will be all materials, labor, and equipment to apply product including work zone traffic control.

Work zone traffic control will conform to the latest edition of the Manual on Uniform Traffic Control Devices.

At least one lane each direction shall remain open at all times with the exception of the two-lane section at the south end of the project.

The contractor shall have 60 days to complete the work after the first day work has commenced.

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

I. DESCRIPTION:

A. The Textured Bituminous Mastic Surface Treatment (TBMST) Or (MST) consists of applying a designed mixture of asphalt emulsion, minerals, polymers, water and other additives to a prepared surface in accordance with plans and specified contract documents for the purpose of extending the life of that surface through pavement preservation.

B. BID ITEM UNITS
Mastic Surface Treatment Gallons or Pounds per Square Yard

C. REFERENCES

1. AASHTO Standards

a)	AASHTO R 5	<i>Selection and Use of Emulsified Asphalts</i>
b)	AASHTO R 9	<i>Acceptance Sampling Plans for Highway Construction</i>
c)	AASHTO T 11	<i>Materials Finer than # 200 Sieve</i>
d)	AASHTO T 27	<i>Sieve Analysis of Fine & Coarse Aggregates</i>
e)	AASHTO T 49	<i>Penetration of Bituminous Materials</i>
f)	AASHTO T 59	<i>Standard Method of Test for Emulsified Asphalt</i>
g)	AASHTO T 84	<i>Specific Gravity and Absorption of Fine Aggregate</i>
h)	AASHTO M 208	<i>Standard Specification for Cationic Emulsified Asphalt</i>
i)	AASHTO T 308	<i>Determining the Asphalt Binder Content of Hot-Mix Asphalt (HMA) by the Ignition Method</i>

2. ASTM Standards

a)	ASTM C 117	<i>Materials Finer Than 0.075mm (No. 22) Sieve in Mineral Aggregates by Washing</i>
b)	ASTM C136	<i>Sieve Analysis of Fine and Coarse Aggregates</i>
c)	ASTM D5	<i>Standard Test Method for Penetration of Bituminous Materials</i>
d)	ASTM D 244	<i>Standard Test Methods and Practices for Emulsified Asphalts</i>
e)	ASTM D 2196	<i>Rheological Properties of Non-Newtonian Materials by Rotational Viscometer (Brookfield Type)</i>
f)	ASTM D 2397	<i>Standard Specification for Cationic Emulsified Asphalt</i>
g)	ASTM D 3910	<i>Standard Practices for Design, Testing and Construction of Slurry Seal</i>
h)	ASTM D 6934	<i>Residue by Evaporation of Emulsified Asphalt</i>
i)	ASTM D 6937	<i>Standard Test Method for Determining Density of Emulsified Asphalt</i>
j)	ASTM E 303-93	<i>Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester</i>
k)	ASTM E 1911	<i>Measuring Paved Surface Frictional Properties Using the Dynamic Friction Tester</i>

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

3. International Slurry Surfacing Association (ISSA) Bulletins and Guidelines
 - a) ISSA A 105 *Recommended Performance Guideline for Emulsified Asphalt Slurry Seal*
 - b) ISSA TB 100 *Test Method for Wet Track Abrasion of Slurry Surfaces*

D. SUBMITTALS

1. Mix Design
2. Materials and Manufacturers Certificates
3. Application Rate Recommendations from TBMST Supplier
4. Weather Related TBMST Product and Application Information from the Supplier

II. MATERIALS:

A. EMULSIFIED ASPHALT

1. Provide asphalt emulsion consistent with CSS-1 or CSS-1H and complies with specifying agency according to Table 1 - Emulsified Asphalt.

Table 1 - Emulsified Asphalt			
Criterion	Standard Guideline	Min	Max
Viscosity, Saybolt Furol at 77°F, seconds	AASHTO T 59 / ASTM D244	15	100
Particle Charge Test In case of inconclusive particle charge, material having a maximum pH value of 6.0 will be acceptable as a CSS type	AASHTO T 59 / ASTM D244	Positive	
Sieve %	AASHTO T 59	0	0.1
Residue by Distillation, percent	AASHTO T 59	57	--
Penetration at 77° F, 100 g, 5 seconds (Test on Residue from Distillation)	AASHTO T 49 / ASTM D 5	15	150

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

B. AGGREGATE

1. Use aggregate that is clean and free from organic matter, detrimental substances and cemented or conglomerated material that complies with gradation in Table 2 - Aggregate unless expressly allowed by the TBMST Manufacturer and Agency Representative. The aggregate must meet the requirements of the TBMST Manufacturer and Agency Representative with regard to physical properties such as - angularity, hardness, cleanliness, durability, color, moisture content and any other parameters deemed appropriate by said manufacturer and representative.

Table 2 - Aggregate			
Physical Properties (a)			
Criterion	Standard	Min	Max
Water absorption, percent (b)	AASHTO T 84	---	4
Gradation (c)			
Sieve	Standard	Master Grading Band Limits Percent Passing	Target Tolerance
No. 8	ASTM C 136	95 – 100	
No. 16	ASTM C 136	75 – 100	+/- 5
No. 30	ASTM C 136	50 – 95	+/- 5
No. 50	ASTM C 136	25 – 65	+/- 5
No. 60	ASTM C 136	20 – 65	+/- 5
No. 100	ASTM C 136	20 – 60	+/- 5
No. 200	ASTM C 117	15 – 55	+/- 5
<p>a) Perform physical property tests on aggregates that are received before blending into sealer.</p> <p>b) Perform on aggregate retained on larger than the #50 Sieve.</p> <p>c) Includes all mineral components.</p>			

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

C. CENTRAL PLANT ADDITIVES

1. Central plant additives may be utilized at the central manufacturing plant as approved or supplied by the TBMST Manufacturer to meet mix design requirements and achieve adequate field performance.
2. Central plant shall use water that is clean, non-detrimental and free from salts and contaminants.
3. Central plant mixture contains a minimum of 30 percent mineral solids by weight of wet mix.
4. Central plant mixture contains a minimum of 10 percent polymer by weight of asphalt binder in the mix.

D. FIELD CONSTRUCTION ADDITIVES

1. Field construction additives may be utilized in the final mix before application as approved or supplied by the TBMST Manufacturer and Agency Representative to meet final field mixing or application to achieve adequate field performance.
2. Pavement pretreatment is recommended to be applied on all surfaces to be TBMST applied. The pretreatment contains an adhesion promoter as approved and supplied by the TBMST Manufacturer. The pretreatment must be applied according to TBMST supplier's recommendations and rates.

E. MIX DESIGN

1. Mix design must be developed and submitted to Agency Representative for approval of the TBMST application. TBMST approved and submitted must meet the criteria set forth in this guideline or equivalent to be accepted as an approved, compliant mix design. TBMST must meet criteria in Table 3 - Asphalt Mastic Mix Design.

Table 3 – Asphalt Mastic Mix Design			
Criterion	Standard	Min	Max
Dynamic Rotational Viscosity @ 20 RPM / RV Spindle @ 25°C, cps	ASTM D 2196	800	--
Solids content by Evaporation Method @ 130°C, percent (a), (b)	AASHTO T 59 / ASTM D 6934	38	--
Binder content by Ignition Method, percent (b)	AASHTO T 308 (Modified)	18	--
Wet-Track Abrasion Loss (3-day soak), g/m ² (c), (d)	ASTM D 3910 / ISSA TB 100 (Modified)	--	80

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

NOTES

- (a) Sample shall be dried to a state where weight measurements taken 30 minutes apart indicate a change of no more than 0.1%.
- (b) Due to high asphalt binder content of the mix, the sample size processed in the ignition oven needs to be adjusted to account for this in the allowable binder content for a particular model. A 500 – 1000 gram representative sample of the mix is typically dried in a suitable oven with homogenizing until weight loss ceases. Solids content shall then be defined as the net residual weight divided by net original weight expressed in percent. This residual dried mix is used for asphalt binder content testing(AASHTO T 308) at a typical sample size of 250 – 500 gram homogenized mix sample.
- (c) Use the modified method to account for realistic application depth and fine emulsion mixture while allowing for a three day soak with proper coating thickness and substrate integrity.
- (d) Specimens are prepared before addition of coarse frictional aggregate.

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

III. CONSTRUCTION:

A. CONSTRUCTION EQUIPMENT

1. **Mixing and Mixing Equipment**

a) All materials must be thoroughly mixed at a central plant manufacturer to produce a homogenous surface treatment for pavement preservation application. Proportion each individual material by individual volume or weight controls measures in the TBMST mix. Individual proportioning devices are to be calibrated and readily accessible for calibration to determine the amount of each material used during manufacture. The mixing vessel must have full sweep agitation and capable of producing a fully homogenous mastic mixture. The temperature must be kept above 32°F for the mixture.

2. **Distribution Application Equipment**

a) The distributor equipment will be equipped with a full sweep agitation system, a pumping system designed to handle specified aggregate mixtures and sufficient power to operate the complete distribution and agitation system at the same time. The distribution equipment will be able to keep all the component ingredients in the TBMST thoroughly and uniformly blended at all times. The distribution equipment will be equipped with a monitoring system that ensures the even cross-web and downstream distribution application of material and measures the application rate of the mix for each applied section. The distributor will be capable of applying the TBMST in full lane width passes each intended pass. The distribution equipment will be capable to apply by means of spray, fan, multiport, gravity channel, drag-box, scrub brush or scrub broom setup. The distribution setup will be approved by TBMST Manufacturer, TBMST Applicator and Agency Representative prior to application of material and capable to adequately apply mastic across the web and downstream for the full length of application.

3. **Storage Tanks**

a) Job site storage tanks will have a minimum capacity to receive an entire transport load of material. The storage tank will have an internal full sweep agitation system capable to provide a homogenous TBMST mixture representative of the tank.

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

B. PREPARATION

1. Surface Preparation

a) Clean and remove loose material, soil, mud spots, sand, dust, vegetation and other contamination materials that will disrupt the bonding of the TBMST to the intended surface. Blow the surface as a final preparation to clear any contamination generated as part of the cleaning process. When using water to clean surface, allow cracks and surface to thoroughly dry. Minimum suggested requirement is to blow the surface, broom the surface and blow the surface a second time.

2. Protection of Adjacent Surfaces and Structures

a) Protect adjacent surfaces and structures from damage or overspray as directed by contract documents or Agency Representative. Remove any protective devices for surfaces and structures as directed in the contract documents or Agency Representative. Prune trees to allow equipment passage and underneath. Mask off end of streets and intersections to provide straight lines.

3. Pretreatment of Surfaces

a) Apply a specified adhesion promoter to intended surfaces according to TBMST Manufacturers and/or Agency Representative requirements depending on specified surface needs. Pretreatment will be supplied according to TBMST Manufacturers requirements.

b) Pretreatment will be applied with an approved application method and equipment capable to fully cover the intended surface and allow the TBMST to be properly placed.

c) Pretreatment application rate of 0.023 to 0.030 gallons per square yard will be required for all surfaces needing pretreatment. Pretreatment can be applied by a system mounted on the distributor, a system on a secondary equipment in front of distributor or secondary equipment a time period in front of the distribution equipment.

d) Pretreatment best practice is to be mounted on the distribution system equipment and applied by mist spraying just in front to the TBMST application.

C. APPLICATION OF MASTIC SURFACE TREATMENT

1. Uniformly apply TBMST as shown in contract documents. Maintain a homogenous mix conforming to the approved job mix formula from the approved mix design delivered to the job site and properly applied to the intended surface.

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

2. Allowable TBMST application methods -
 - a) *Multiport Spray Bar – low and high pressure* *and/or Scrub*
Brush or Broom capable
 - b) *Multiport Spray Fan – high volume low pressure delivery* *and/or Scrub*
Brush or Broom capable
 - c) *Gravity Channel Drag-box* *and/or Scrub*
Brush or Broom capable
 - d) *Multiport Distribution Drag-box* *and/or Scrub*
Brush or Broom capable
3. NO dilution of the mix in the field with water or other additives except as directed by TBMST Manufacturer and approved by Agency Representative.
4. Storage tank with full sweep agitation, sufficient power system, operator controls, pumping system with multiple pumps, material filters or screens and application bar capable to apply full lane width.
5. Sufficient available power to operate full applicator system and the agitation system at the same time.
6. System allowing the measurement and calculation of application rates.
7. Pumps engineered to allow the system to handle specified angular aggregate materials.
8. Pumps equipped with primary filter prior to the pumps and allow for a secondary filter system (if needed and capable) for the fine post pump filtration of material.
9. Application bar sized with volumetric capacity to dampen any possible pressure ripples by providing even pressure to all application points and capable of height adjustment during application process or as needed.
10. Where allowed and approved, provide a safe area on the back of the distributor for a qualified operator to monitor and control clean out the application system while directing the distributor driver when to stop for adjustments.
11. Monitor the TBMST application and the condition and operation of the distributor equipment by using a qualified ground foreman with regular two-way radio communication to the distributor for maintaining application continuity and quality.
12. Apply the TBMST utilizing one pass of the distributor supplying the entirety of the specified application rate.

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

Application Type	One Pass Target, Lbs/Yd ² - Gal/Yd ²	Two Pass per Pass Target, Lbs/Yd ² - Gal/Yd ²	Total Application Target, Lbs/Yd ² - Gal/Yd ²
Spray Applied	2.0-4.5 - 0.25-0.40	1.0-2.2 - 0.15-0.22	2.0-4.5 - 0.25-0.40
Multi-Port Drag-box	2.5-5.0 - 0.25-0.48	1.2-2.2 - 0.15-0.24	2.4-5.0 - 0.25-0.48
Scrub Brush or Scrub Broom	2.5-5.0 - 0.25-0.48	1.2-2.2 - 0.15-0.24	2.4-5.0 - 0.25-0.48
Pretreatment	0.023 - 0.035 gallons/yd ²		

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

13. Allow two pass application of TBMST if needed for consistent surface texture needs and as required by Agency Representative, TBMST Manufacturer or TBMST Technology Provider to maintain high quality in place final surface.
14. At the beginning of each applied section, start the application on a strip of building paper that is wide and long enough to cover the full depth and width of the application bar. If the application cut-off is not positive, use paper at the end of each applied section. Remove and dispose of the paper in accordance with local ordinances. The distributor will be moving forward at proper speed when the application is initiated, unless the distributor is equipped to apply specified rates from a standing start.
15. Correct any skipped area or deficiencies. Provide complete and uniform coverage.
16. Construct junctions (joints) of applications to obtain a smooth riding surface. Alternative methods of constructing junctions may be approved by the Agency Representative.
17. Regulate the distribution of the mix to obtain a uniform application cross-web and downstream. Frequently check and adjust the angle of application points and the height of application distribution to obtain uniform distribution.
18. When utilizing spray bars with spray nozzles maintain equipment to provide a continuous uniform application distribution. Immediately stop application should any nozzle malfunction. If the application bar rises as the load is removed, contributing to a drilling and streaking, modify the distributor to maintain a constant application bar height. Correct any deficiency before distribution is resumed.
19. Projects utilizing gravity feed chute and drag-box will be full application width and capable to handle and deliver the specified target material rates needed for the surface.
20. Projects requiring the use of a Scrub Mastic system for the TBMST will require the use of an approved scrub drag brush/broom to apply the TBMST at the approved specified rate. Scrub Drag Brush/Broom will be full application width and capable to handle the specified target material rates needed for the surface.

D. TREATMENT OF ADJACENT AREAS

1. When shown in the contract documents place the TBMST at existing intersections and entrances, mailbox turnouts, etc. having asphalt surfaces.

E. CURING

1. Provide adequate means to protect the TBMST surface from damage by traffic until the mix has cured sufficiently. Allow the mix to cure so there is NO adherence or picking up by tires of vehicles. Allow traffic on the surface once the mix has cured.

F. WEATHER LIMITATIONS

1. TBMST will be placed when ambient air temperature is 50°F or higher.
2. Temperature forecast must show higher than 32°F and above freezing within 24 hours after placement for application conditions to be acceptable.
3. Follow all weather related requirements from the TBMST Manufacturer.
4. Make sure NO fog, rain or wet surface when placing TBMST.

TEXTURED BITUMINOUS MASTIC SURFACE TREATMENT GUIDELINE

G. ACCEPTANCE

1. The Agency Representative along with the Application Contractor may inspect the TBMST within a reasonable time after the work is completed to verify completion of contracted work. Any deficiencies will be corrected as approved and agreed with the Agency Representative and Application Contractor.