Bid Set No.

Bidder \_\_\_\_\_



# **PROJECT MANUAL**

# FOR

# FY 2024-2025 TOWN OF STALLINGS

# PAVEMENT PRESERVATION & REPAIR PROGRAM (Formal Bid Process)

Town Council: David Scholl, Mayor Pro-Tempore Graham Hall Traylor-Rae Drake Steven Ayers Laurie Wojtowicz Brad Richardson Mayor: Wyatt Dunn Town Manager: Alex Sewell

Date: 12/03/2024

#### SOLICITATION FOR BIDS December 3, 2024

The Town of Stallings invites qualified construction contractors to submit bids for the Town of Stallings' FY 2025 Pavement Preservation and Repair Program to complete micro surfacing on several roadways located in the Town of Stallings.

Bids are due **no later than 2:00 P.M. local time on** Wednesday, December 11, 2024, to the following address:

FY 2025 Pavement Preservation and Repair Program Bid Package c/o Justin Russell, Associate Engineer Town of Stallings Engineering Department 315 Stallings Road Stallings, NC 28104

The bid opening will occur on Wednesday, December 11, 2024, at 2:05p.m. at the following address:

Second Floor of Stallings Town Hall 315 Stallings Road Stallings, NC, 28104

If three bids are not received by the Wednesday, December 11, 2024, deadline, the Town will re-advertise for bids beginning on Wednesday, December 11, 2024, with a submission deadline of Thursday, December 19, 2024, at 2:00 p.m. The contractor(s) may choose to leave their unopened bid(s) with the Town to hold until the second and final bid opening that will occur on Thursday, December 19, 2024, at 2:05 p.m.

Upon verification of each bid's accuracy and completeness, the lowest bidder shall be awarded the contract.

For any questions related to the bid package please contact:Kevin Parker, Engineering DirectorJustin Russellkparker@stallingsnc.orgjrussell@stallingsnc.org704-821-0309704-821-0321

The following Contract Special Provisions contains the formatting, content, and other requirements for a bid. Any bids received after the date and time listed above will be rejected and returned unopened

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# **CONTRACT SPECIAL PROVISIONS** FY 2025 Town of Stallings Pavement Preservation Project (Formal Bid Process)

If there is any conflict between the special provision and any standard specifications the special provisions shall take precedence.

## **CONTRACT PERIOD**

The Contract period will begin upon the issuance of the Notice to Proceed, and the project must be completed and fully invoiced by May 1, 2025.

## **CONTRACT TIME EXTENSION**

(Contract Time Extensions and Apportionment of Liquidated Damages NCDOT section 108-12) The Contractor's attention is directed to article 108-10 through 108-13 in the NCDOT standard specifications in respect to completion time, liquidated damages, and termination of contract. The completion date may be extended at the written approval of the Town Engineer, due to extreme weather conditions or any delay to utility repairs.

## **GUARANTEE**

The Contractor shall guarantee all materials and workmanship for a period of one (1) year from the date of acceptance by the Town and shall replace any portions that fail because of faulty materials or workmanship at no additional cost to the Town. A six (6) month and eleven (11) month inspection will be held during the warranty period. The Contractor shall immediately repair all defective items upon notification. Items repaired under the provisions shall have an extended warranty period of twelve (12) months from the date of accepted repair of the item.

The performance bond will be held as the guarantee for the one (1) year period following the completion of the project.

## LIQUIDATED DAMAGES

Bidder hereby agrees to commence work under this contract on a date to be specified in written "Notice to Proceed" by the Town of Stallings and agrees to complete the work within the time as stipulated in the specifications. Bidder further agrees to pay Liquidated Damages, in the sum of five hundred dollars (\$500.00) for each consecutive calendar day after the established or extended date as established by the extension provision of this contract. The completion of the project within the contract period shall include the correction of all deficiencies provided by the Town on punch lists during the inspections of the project.

## CONTRACT BONDS (NCDOT Section 103-7 and 103-9)

The successful bidder, within 14 calendar days after the notice of award is received by him, shall provide the Town with a contract payment bond and a contract performance bond each in an amount equal to 100% of the amount of the contract pursuant to NCGS §44A-26. All bonds shall be in conformance with NCGS § 44A-33. The corporate surety furnishing the bonds shall be authorized to do business in the State of North Carolina.

The successful bidder's failure to file acceptable bonds within 14 calendar days after the notice of award is received by him shall be just cause for the forfeiture of the bid bond or bid deposit and rescinding the award

of the contract. Award may then be made to the next lowest responsible bidder, or the work may be readvertised and constructed under contract or otherwise, as the Town may decide.

## **DEFINITION OF TERMS**

Whenever the following terms are used in the Standard Specifications, in any of the Contract Documents, or in the plans, the intended meaning of such terms shall be as follows:

"State or Department" shall be replaced by the words Town of Stallings.

"Sampling and Testing by Department" shall be replaced by the words sampling and testing by Town or its approved testing agency.

"Inspection by Department" shall be replaced by the words inspection by the Town or its duly authorized representative.

"Owner" shall be replaced by the words Town of Stallings with whom the Contractor has entered into the Agreement and for whom the Work is to be provided.

"Town Standards" shall refer to the latest edition of Stallings Land Development Standards Manual or NCDOT Standards.

## **INDEMNIFICATION**

- a. To the fullest extent allowed by law, the Contractor shall indemnify and hold harmless the Town, its officers, officials, employees, agents, or indemnities (collectively called "Indemnified Parties") from and against those losses, liabilities, damages, and costs proximately caused by, arising out of, or resulting from the negligence of the Contractor, the Contractor's agents, or the Contractor's employees.
- b. In matters other than those covered by subsection (a) above, and to the fullest extent allowed by law, the Contractor shall indemnify and hold harmless the Indemnified Parties from and against those losses, liabilities, damages, and costs caused by, arising out of, resulting from, or in connection with the execution of the work provided for in this contract when the fault of the Contractor or its derivative parties is a proximate cause of the loss, liability, damage, or expense indemnified.
- c. Costs and expenses shall include attorneys' fees, litigation or arbitration expenses, or court costs actually incurred by the Indemnified Parties to defend against third-party claims alleged in any court, tribunal, or alternative dispute resolution procedure required of any of the Indemnified Parties by law or by contract, only if the fault of the Contractor or its derivative parties is a proximate cause of the attorney's fees, litigation or arbitration expenses, or court costs to be indemnified.
- d. Only to the extent provided pursuant to a policy of insurance, the Contractor shall defend the Indemnified Parties against claims alleged in any court, tribunal, or alternative dispute resolution procedure if the fault of the Contractor or its derivative parties is a proximate cause of such claims.
- e. The Contractor's duty to indemnify, defend, and hold harmless described hereinabove shall survive the termination or expiration of this Contract.
- f. Definitions:
  - i. For the purposes of this Section, the term "Fault" shall mean any breach of contract; negligent, reckless, or intentional act or omission constituting a tort under applicable statutes or common law; or violation of applicable statutes or regulations.
  - ii. For the purposes of this Section, the term "Loss" or "Losses" shall include, but not be limited to, fines, penalties, and/or judgments issued or levied by any local,

state, or federal governmental entity.

iii. For the purposes of this Section, the term "Derivative Parties" shall mean any of the Contractor's subcontractors, agents, employees, or other persons or entities for which the Contractor may be liable or responsible as a result of any statutory, tort, or contractual duty.

## MINORITY/WOMEN/SMALL BUSINESS ENTERPRISE:

The Town of Stallings, as awarding authority for construction projects, and the contractors and subcontractors performing the construction contracts awarded, shall cooperate and in good faith do all things legal, proper and reasonable to achieve the goal of ten percent (10%) for participation by minority businesses in each construction project as mandated by G.S. §143-128.2.

# **INSURANCE REQUIREMENTS**

Contractor's Liability and Other Insurance: The Contractor shall purchase and maintain with a company acceptable to the Town and authorized to do business in the State of North Carolina, such insurance as will protect him from claims under workers' compensation laws, disability benefit laws or other similar employee benefit laws; from claims of damages because of bodily injury, occupational sickness or disease, or death of his employees; from claims for damages because of bodily injury and personal injury; and from claims for damage and destruction of tangible property, including loss of use resulting there-from; any or all of which may arise out of or result from the Contractor's operations under the Contract Documents, whether such operations be by himself or any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable.

The Contractor shall maintain umbrella liability insurance with policy limits of not less than \$2,000,000 each occurrence and \$2,000,000 in the aggregate. The insurance shall be written for not less than the limits of liability specified below.

Automobile: Bodily injury and property liability covering all owned, non-owned and hired automobiles for limits of not less than \$1,000,000 bodily injury each person, each accident and \$1,000,000 property damage, or \$1,000,000 combined single limit – bodily injury and property damage combined.

<u>Commercial General Liability</u>: Bodily injury and property damage liability as shall protect the Contractor and any subcontractor performing work under this Contract from claims of bodily injury or property damage which arise from operations of this Contracts, whether such operations are performed by the Contractor, any subcontractor, or anyone directly or indirectly employed by either. The amounts of such insurance shall not be less than \$1,000,000 bodily injury each occurrence/aggregate and \$1,000,000 property damage each occurrence/aggregate or \$1,000,000 bodily injury and property damage combined single limits each occurrence/aggregate. This insurance shall include coverage for products/completed operations, personal injury liability and contractual liability assumed under the indemnity provision of this Contract and broad form property damage, explosion, collapse and underground property damage (XC&U). The coverage shall be on an occurrence basis.

<u>Workers' Compensation and Employers' Liability:</u> Shall meet the statutory requirement of the State of North Carolina, in an amount of \$100,000 each accident and disease – each employee and \$500,000 disease policy limit providing coverage for employees and owners.

The Town shall be named as an additional insured under the commercial liability insurance for operations or services rendered under this Contract.

At the time of execution of the Contract, the Contractor shall provide the Town with insurance certificates certifying that the foregoing insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be cancelled, allowed to expire, or be materially changed without giving the Town thirty (30) days advance written notice by registered mail.

The Contractor is advised that if any part of the work under this Contract is sublet, he shall require the subcontractor(s) to carry insurance as required above. However, this will in no way relieve the Contractor from providing full insurance coverage on all phases of the Project, including any that is sublet.

When certain work is performed inside rights-of-way owned by railroads, North Carolina Department of Transportation or other agencies, both the Contractor and any subcontractors may be required to furnish individual insurance certificates made in favor by the controlling agency, with limits established by that agency.

## E-VERIFY

Contractor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Further, should Contractor utilize a subcontractor, Contractor shall require the subcontractor(s) to comply with the requirements of Article 2, Chapter 64 of the General Statutes.

## **TERMINATION BY THE TOWN FOR CAUSE**

- 1. The Town may terminate the Contract if the Contractor:
  - a. Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
  - b. Fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;
  - c. Persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or
  - d. Otherwise is guilty of substantial breach of a provision of the Contract Documents.
- 2. When any of the above reasons exist, the Town, upon certification by the Engineer that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Town and after giving the Contractor and the Contractor's surety, if any, seven days written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:
  - a. Take possession of the site and all materials, equipment, tools and construction equipment and machinery thereon owned by the Contractor;
  - b. Accept assignment of subcontracts; and
  - c. Finish the work by whatever reasonable method the Town may deem expedient. Upon request of the Contractor, the Town shall furnish the Contractor a detailed accounting of the costs incurred
- 3. When the Town terminates the Contract for one of the reasons stated above, the Contractor shall not be entitled to receive further payment until the work is finished.
  - a. The Town Manager shall have authority to terminate the Contract without additional authorization by Town Council.
  - b. If the unpaid balance of the Contract Sum exceeds the costs of finishing the work, including compensation for the Engineer's services and expenses made necessary thereby, and other damages incurred by the Town and not expressly waived, such expenses shall be paid to the

Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Town. The amount paid to the Contractor or the Town, as the case may be, shall be certified by the Engineer, upon application, and this obligation for payment shall survive the termination of the Contract.

### **TERMINATION BY THE TOWN FOR CONVENIENCE**

- 1. The Town may, at any time, terminate the Contract for the Town's convenience and without cause. Upon written notice from the Town of such termination for the Town's convenience, the Contractor shall:
  - a. Cease operations as directed by the Town in the notice;
  - b. Take actions necessary, or that the Town may direct, for the protection and preservation of the work; and
  - c. Except for the work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
- 2. The Town Council shall have authority to terminate the Contract. In case of such termination for the Town's convenience, the Contractor shall be entitled to receive payment for work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit for the completed work.

### NOTICE TO PROCEED

A Notice to Proceed will be issued to the Contractor upon receipt of a fully executed contract, bonds, insurance certificates, receipt of approval by other governmental agencies (if required) and any other documentation required by the Town. After the notice to proceed is given, the contractor will provide a time and resource driven schedule that shows how the contractor will meet the contract period. This schedule must be submitted and approved by the Town of Stallings prior to commencing work.

#### **PRE-CONSTRUCTION CONFERENCE**

An on-site pre-construction conference will be scheduled at least 24 hours prior to start of any work and as soon as practical after the award of the Contract to verify work areas. The Contractor shall attend the conference along with the prospective job superintendent, any anticipated major subcontractors and major material suppliers. A proposed progress schedule in a form satisfactory to the Engineer and a statement of the anticipated monthly progress payments showing the percent of progress each month shall be submitted.

The Contractor shall also provide at least two (2) local telephone numbers that may be used to contact the Contractor or his authorized representative in the event of an emergency after normal business hours. Upon receipt of the required documentation, a Notice to Proceed will be issued by the Town.

The Contractor shall provide the name and contact information of the Contractor's on-site Quality Control personnel representative who is responsible for inspection of Contractor and Sub-Contractors' performance and materials.

The Contractor shall provide a resource loaded construction schedule for approval to the Town Engineer. The Contractor shall provide a construction status update on a bi-weekly basis for the duration of the work. The Town Engineer will state how the update shall be communicated.

#### **COMMUNITY NOTICE**

Prior to any construction, the Contractor will attend the Stallings' March 24, 2025, Stormwater and Infrastructure Committee (SIC) Meeting, which will be advertised to the residents along the affected communities/roadways shown in Exhibit A below, to provide information regarding the scope of work and answer any questions.

Additionally, the Contractor shall notify the residents along the affected roadways shown in Exhibit A, below, 48 hours in advance of construction beginning. Notifications may include, but are not limited to, door hangers, mailers, etc....

### ADDITIONAL OR EXTRA WORK

The Town may require the Contractor to furnish materials and to do additional or extra work not provided in the contract or in the specifications, but which may be found necessary to the proper protection and completion of the work embraced in this contract, at price to be fixed by the prices named in the Proposal. But no other work than that included in the contract shall be done, and no additional material shall be furnished by the Contractor without a written order from the Engineer. In the absence of such written order from the Engineer, the Contractor shall not be entitled to payment for such additional or extra work. Bills for additional or extra work shall be filed with the Town within three (3) days after such additional or extra work is completed, in order that the Engineer may establish the accuracy of the additional or extra work bills.

Any increase to the Contract Sum shall be approved and documented by a written change order with the appropriate authorized signature(s).

## **CARE OF WORK**

The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault, omission or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed here under until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Town.

#### **CLEANING UP**

Before acceptance of the project, or as directed by the Engineer, borrow sources, waste areas, and all ground occupied by the Contractor within the project limits in connection with the work shall be cleaned of all rubbish, excess material, temporary structures and equipment.

#### **OSHA REQUIREMENTS**

The Contractor shall comply with OSHA 29 CFR Part 1926, Subpart P – Excavations, 29 CFR Part 1910.146, Permit-required confined spaces and all other applicable regulations.

#### **HAZARDOUS MATERIALS**

If the Contractor encounters any materials considered or suspected of being hazardous, he shall immediately secure the area and contact the Union County Environmental Health Division for further instructions.

## **MATERIALS AND EQUIPMENT STORAGE**

The Contractor shall be responsible for locating and providing storage areas for construction materials and equipment. The material and equipment storage shall comply with all local and state ordinances throughout the construction period. The Contractor shall restore the storage area to its original condition upon completion of the Project or upon such time as directed by the Engineer. Such restoration shall be at no additional cost to the Town.

The Contractor shall be responsible for the safeguarding of materials and equipment against fire, theft and vandalism and shall not hold the Town responsible in any way for the occurrences of same. The Contractor shall furnish and erect, at no additional cost, whatever works may be necessary for the protection of the public, including but not limited to barricades, fences, etc. Prior to final payment being made, the Contractor shall obtain a release from the property owner of the storage area utilized for the Project.

## METHOD AND MATERIAL

All work covered in this special provision shall be in accordance with and all material shall conform to the requirements of the North Carolina Department of Transportation Standard Specifications for Road and Structures (latest edition).

## **INVOICING AND PERIODIC PAYMENTS**

The contractor shall invoice the Town upon completion of work in each subdivision, as described in Exhibit A. The invoice(s) shall include:

- 1. Subdivision where work was completed.
- 2. Road names where work was completed.
- 3. Date(s) that work occurred.
- 4. Itemized quantity and description of any additional work outside of the treatments outlined in Exhibit A.

Payment will be made within twenty (20) calendar days after receipt of a correct payment request as outlined above.

The Contractor shall have a copy of his current payment request on the job site so that it may be viewed by subcontractors upon request.

## PROJECT CLOSEOUT DOCUMENTS

The Contractor shall provide the following documents with the final pay request:

- 1. Contractor's Affidavit Release and Waiver of Claim
- 2. State/County Sales/Use Tax Statement
- 3. Consent of Surety to Final Payment (contracts equal to or exceeding \$100,000) (AIA Document G707)

No final payment will be authorized until these documents have been properly completed and submitted by the Contractor.

## TAX STATEMENT SUBMITTAL

1. All tax statement bodies, and all signatures must be original. Photocopies of blank forms may be used, provided the document containing the information is original.

- 2. All tax statements must be signed by the Contractor/subcontractor's company officer submitting the statement and certified by a Notary Public. All tax statements must list in detail taxes paid by individual invoice. No lump sum, running total, or copies of previously reported statements will be accepted. Tax statements shall show North Carolina and County taxes paid.
- 3. A tax statement showing detailed amounts with "amounts previously reported" noted on the face will be accepted if they are original. This is the equivalent of a statement indicating "no taxes paid this period." All subcontractors for whom tax statements are included must be certified as such on the face of the Contractor's tax statement.
- 4. Tax statements (the State/County Sales/Use Tax Statement form) must <u>always</u> accompany a payment request for the related project. All final construction payment requests must have a final tax statement regardless of whether any taxes have been paid during the period in question. If no taxes have been paid, the detail page should simply state "0", "None", or "No taxes paid this period."

## TAXES AND LICENSES

North Carolina sales and/or use taxes are applicable to purchases of building materials and other tangible personal property by Contractors for use in performing Town contracts (see Tax Statement Submittal section of this contract). Use tax is also due on construction equipment brought into North Carolina for use in the performance of City contracts (N.C. Revenue Laws, G.S. 105-164.4 and G.S. 105-164.6). Contractors are liable for payment of applicable franchise, corporate income, license, and withholding taxes (N.C. Revenue Laws, G.S. 105-122, G.S. 105-123, G.S. 105-163.2).

## **SUBLETTING**

The Town Engineer reserves the right to waive the subcontracting limits set forth in Article 108-6 of the Standard Specifications whenever it is deemed to be in the interest of the Town. The limits can only be waived upon written approval of the Town Engineer.

## SPECIAL CONTRACT PROVISIONS

The North Carolina Department of Transportation, Standard Specifications for Roads and Structures (latest edition) and the Town of Stallings Land Development Standards Manual (latest edition), hereinafter referred to as the "Standard Specifications" shall apply to all portions of the project unless otherwise specified herein.

## ASPHALT PRESERVATION

## **Executive Summary**

This specification covers the materials, equipment, and application procedures for furnishing and placing micro-surfacing material for rut filling and/or surfacing of existing paved surfaces in accordance with the contract. The micro-surfacing system shall be a mixture of cationic latex modified asphalt emulsion, crushed mineral aggregate, mineral filler, water, and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this specification and as directed by the Town. The mix shall be capable of being spread in variable thickness cross-sections (wedges, ruts, scratch courses and surfaces) which, after curing and initial traffic consolidation, resists compaction throughout the entire design tolerance range of asphalt binder content and variable thickness to be encountered. The end product shall maintain a skid-resistant surface in variable thick sections throughout the service life of the micro surfacing. The mix shall be a quick-traffic system that will be able to accept straight rolling traffic one hour after application.

(A) Latex Modified Emulsified Asphalt

The emulsified asphalt shall be a cationic type CQS-1hLM and shall conform to AASHTO M 208

or ASTM D2397. In general, 3% polymer solids, based on asphalt weight, is considered minimum. The ring and ball softening point of the residue shall be a minimum of 135°F. It shall show no separation after mixing. The cement mixing test is waived for the latex modified CQS-1hLM.

(B) Mineral Aggregate

The mineral aggregate used shall be compatible with the latex modified emulsified asphalt and can produce a good skid resistant surface. The aggregate shall meet requirements in Article 1012-1 of the *Standard Specifications*.

(C) Mineral Filler

Mineral filler shall be any recognized brand of non-air entrained Portland cement that is free of lumps or hydrated lime meeting the requirements of ASTM D242. It may be accepted upon visual inspection.

(D) Water

The water shall be potable and shall be free of harmful soluble salts in accordance with Article 1024-4 of the *Standard Specifications*.

(E) Latex Modifier

A latex based modifier, certified from an approved source, along with special emulsifiers shall be milled into the asphalt emulsion by an approved emulsion manufacturer. The latex modified emulsified asphalt shall be so formulated that when the paving mixture is applied at a thickness of one inch it will cure sufficiently so that rolling traffic can be allowed back on the pavement in one hour with no damage to the surface.

(F) Other Additives

The additives are any other materials that are added to the emulsion mix or to any of the component materials to provide the specified properties. The additives shall be supplied by the emulsion manufacturer to provide control of the set time in the field.

## Mix Design

The Contractor is required to design the asphalt mix and to obtain an approved Job Mix Formula (JMF) issued by the Department. A mix design and proposed JMF targets for each required mix type and combination of aggregates must be submitted in electronic format to the Materials and Tests Unit for review and approval at least 10 days prior to start of asphalt mix production. The mix design shall conform to the International Slurry Surfacing Association's ISSA A143, Section 5.2.

Compatibility of the aggregate test results and a certificate of analysis (COA) for the latex modified CQS-1hlm shall be submitted with the mix design.

Aggregate used in the job mix formula shall be of the material proposed by the Contractor for use on the project.

The gradation of the aggregate shall be in accordance with the following:

Screen Size	ize Type II (% passing) Type III (% passing)		Stockpile Tolerance	
3/8"	100	100		
#4	90 - 100	70 - 90	± 5	
#8	65 - 90	45 - 70	± 5	
#16	45 - 70	28 - 50	± 5	
#30	30 - 50	19 - 34	± 5	
#50	18 - 30	12 - 25	± 4	
#100	10 - 21	7 - 18	± 3	
#200	5 - 15	5 - 15	± 2	

The gradation of the aggregate stockpile shall not vary by more than the stockpile tolerance from the mix design gradation (indicated in the table above) while also remaining within the specification gradation band. The percentage of aggregate passing any 2 successive sieves shall not change from one end of the specified range to the other end. (The #200 sieve material shall not vary by more than  $\pm 2$  of the JMF value.)

The aggregate will be accepted at the job location or stockpile based on 5 gradation tests sampled according to AASHTO T 2. If the average of the 5 tests is within the stockpile tolerance from the mix design gradation, the material will be accepted. If the average of those test results is out of specification or tolerance, the Contractor will be given the choice to either remove the material or blend additional aggregate with the stockpile material to bring it into compliance. Materials used in blending shall meet the required aggregate quality test specifications in Section 1012 of the *Standard Specifications* before blending and shall be blended in a manner to produce a consistent gradation.

Aggregate blending may require a new mix design. Screening shall be required at the stockpile if there are any problems created by oversized materials in the mix.

Type II aggregate gradation is used to fill surface voids, address surface distresses, seal and provide a durable wearing surface.

Type III aggregate gradation provides maximum skid resistance and an improved wearing surface. This type of microsurfacing is appropriate for heavily traveled pavements or for placement on highly textured surfaces requiring larger size aggregate to fill voids. Type III microsurfacing shall be used for rut filling.

The mineral aggregate shall be weighed by means of scale approved by the Engineer before delivery to the job site. Emulsified asphalt shall be weighed by means of approved scales or be measured by volume.

Precautions shall be taken to ensure that stockpiles do not become contaminated.

Samples for gradation will be taken from aggregate stockpiles designated by the Contractor for use. Samples for asphalt content shall be taken from the completed mix. Samples of aggregate and filler will be taken at the job site. The frequency of sampling and testing will be established by the Engineer based upon the Department's current acceptance program. The asphalt content will be determined by AASHTO T 308 modified.

## Equipment

Use equipment that meets ISSA A143 Section 6.

Each mixing unit to be used in performance of the work shall be calibrated in the presence of the Engineer before beginning the work. Submit calibration documentation to the Engineer. Any equipment replacement affecting material proportioning requires that the machine be recalibrated. No machine will be allowed to work on the project until the calibration has been accepted.

#### **Construction Methods**

#### (A) Weather

The material shall be placed only when the surface is dry and the atmospheric and surface temperature is at least 50°F and rising and there is no chance of temperatures below 32°F within 24 hours from the time the material is applied. The material should not be placed when the atmospheric temperature is 50°F and falling or if rain is imminent. Clouds, fog, excessive humidity or shady conditions can slow break time of the mixture.

#### (B) Surface Preparation

Immediately prior to applying the paving mixture the surface shall be thoroughly cleaned of all vegetation, loose materials, dirt, mud, and other deleterious materials. If water is used, cracks shall be allowed to dry thoroughly before applying microsurfacing. Manholes, valve boxes, drop inlets and other service entrances shall be protected from the microsurfacing by a suitable method. Remove all pavement marking lines, symbols, and characters unless otherwise approved by the Engineer prior to microsurfacing in accordance with Subarticle 1205-3(I) of the *Standard Specifications*.

#### (C) Tack Coat for Microsurfacing

The tack coat used should conform to the manufacturer's recommendation for the microsurfacing product being applied. Tack coat shall be applied according to Section 605 of the *Standard Specifications*. The emulsified asphalt used for tack coat shall be CSS, CQS, CRS or the microsurfacing emulsion diluted to one part emulsified asphalt to 2 or 3 parts water, as approved by the Engineer. Consult with the microsurfacing emulsion supplier to determine dilution stability. The distributor shall be capable of applying the diluted tack coat evenly at a rate of 0.08 to 0.15 gallons per square yard as required by the Engineer. The tack coat shall be allowed to cure sufficiently before the application of microsurfacing.

#### (D) Application

When rutting or deformation is less than 0.5 inch, a full width scratch course may be applied with the spreader box using a metal or stiff rubber strike-off. Apply at a sufficient rate to level the pavement surface. The mixture shall be spread to fill minor cracks, minor surface irregularities, and shallow potholes and leave a uniform high-skid resistant application of aggregate and asphalt on the surface. Approved squeegees shall be used to spread the mixture in areas inaccessible to the spreader box and other areas hand spreading may be required. Ruts that are greater than 0.5-inch depth shall be filled independently by means of a box specifically designed for that purpose. The box shall be 5 to 6 feet in width and have a dual chamber with an inner "V" configuration of augers to channel the large aggregate to the center of the rut and the fines to the edges of the rut fill pass. The box shall be equipped with dual steel strike-off to control both the width and depth of the rut fill. All rut-filling and leveling material should cure under traffic for at least 24 hours before additional material is placed.

A sufficient amount of surface sealer shall be carried to all parts of the spreader box at all times so that complete coverage is obtained. Water in very limited quantity may be sprayed into the spreader box to prevent build-up on the blades to facilitate spreading without harming the mix. No lumping, balling, or unmixed aggregate shall be permitted in the finished surface. Any oversized aggregate or foreign materials shall be screened from the aggregate prior to delivery to the mixing machine. Microsurfacing, as a single course application, for the final surface course shall be placed at a total application rate of 18 to 22 pounds per square yard for Type II and 22 to 26 pounds per square yard for Type III. In a double course application, the leveling course shall be applied at a rate of 12 to

16 pounds per square yard. The surface course shall be applied at 16 to 20 pounds per square yard. The total combined application rate shall be 32 to 36 pounds per square yard.

In restricted areas where hand spreading is necessary, slight adjustments to the mix formula may be required to slow setting time. The paving mixture shall be poured into a small windrow along one edge of the surface to be covered. The mixture then shall be spread uniformly by a hand squeegee or lute.

The seam where two passes join shall be neat in appearance and uniform.

All excess material shall be removed from ends of each run immediately on surface course.

(E) Curing

Breaking should occur within 5-10 minutes. Curing of microsurfacing placed at 0.5 inches thick should generally be allowed to take place without traffic interruption for 30 - 90 minutes. The Contractor shall determine the appropriate curing time of the microsurfacing before it is opened up to traffic. Adequate means shall be provided to protect the microsurfacing from damage by traffic until the mixture has cured sufficiently so that it will not adhere to or be picked up by the tire of vehicles. Adjust mixture properties according to humidity and temperature conditions if curing is not occurring within 90 minutes. Stopping and starting traffic may require additional curing time. All rut-filling and level-up material and first lift in two lift areas should cure under traffic for at least 24 hours before additional material is placed. During the curing time, the temperature cannot drop below  $32^{\circ}$ F. If temperatures drop below  $32^{\circ}$ F, this time does not count towards the curing requirements.

Any damage done by traffic to the microsurfacing shall be repaired by the Contractor.

(F) Test Strip

A test strip shall be placed with job site materials and approved by the Engineer. The test strip shall be a minimum of 500 feet and constructed at the beginning of the first day of production and after, as directed by the Engineer. The weather and time of day, day or night, during the test strip shall be similar to expected conditions during construction. Upon completion of the test strip the Engineer will approve the mixture for proper curing and placement.

#### Workmanship

Immediately take corrective action if microsurfacing material is exhibiting evidence of poor workmanship, delayed opening to traffic, or surface irregularities, including excessive scratch marks, drag marks, tears, streaks, raveling, delamination and segregation. After immediately contacting the Pavement Preservation Engineer in the Materials and Tests Unit, the Engineer may allow placement to continue for no more than 1 day of production while the Contractor takes corrective action and/or takes corrective action as directed by the Engineer. If workmanship issues persist after the 1-day period, the Engineer will suspend paving until corrective action is taken to the satisfaction of the Engineer.

#### (A) Finished Surface

Provide a finished surface with a uniform texture free from excessive scratch marks, tears, or other surface irregularities. Marks, tears, or irregularities are considered excessive if:

- (1) More than 1 irregularity is at least 1/4 inch wide and at least 10 feet long in any 100 foot pull
- (2) More than 3 irregularities are at least 1/2 inch wide and more than 6 feet long in any 100 foot pull

(3) Any are 1 inch wide or wider and more than 4 inch in length

(B) Construction Joints

Place mixture so that longitudinal joints on the surface course coincide with lane lines, or as directed by the Engineer. Provide longitudinal and transverse joints that are uniform and neat in appearance. Provide construction joints that have limited buildup and no gaps between applications. Joints with buildup will be considered acceptable if:

- (1) No more than 1/2 inch vertical space exists between the pavement surface and a 4 foot straightedge placed perpendicular to the longitudinal joint and
- (2) No more than 1/4 inch vertical space exists between the pavement surface and a 4 foot straightedge placed perpendicular to the transverse joint.

## (C) Edges

Provide an edge along the roadway centerline, lane lines, shoulder, edge of pavement, or curb line that is uniform and neat in appearance. The edge is considered acceptable when:

- (1) It varies no more than 3 inches from a 100 foot straight line on a tangent section and
- (2) It varies no more than 3 inches from a 100 foot arc on a curved section.

### (D) Miscellaneous Areas

Use a single-batch-type-lay-down machine or approved method to place materials on ramps or other short sections. Apply tack coat uniformly at the rate as shown in the contract, unless otherwise directed by the Engineer. Provide uniform coverage of appearance and comparable to that produced by the spreader box.

### Measurement and Payment

(A) When a surface or leveling course is applied, measurement and payment is as follows.

*Latex Modified Microsurfacing Type* \_\_\_\_ will be measured along the top surface of the completed work, placed and accepted as specified herein. Payment will be made at the contract unit price per square yard for the type specified, which price will be full compensation for all materials including modifiers and additives, emulsion, aggregate, tack coat, labor, tools, equipment, and all other incidentals necessary to complete the work.

*Removal of Pavement Marking Lines,* \_\_\_\_ and *Removal of Pavement Marking Symbols & Characters* will be measured and paid for in accordance with Article 1205-10.

(B) When a rut filling course is applied, measurement and payment is as follows.

*Latex Modified Emulsion* will be measured and paid at the contract unit price per gallon, which price will be full compensation for all materials including modifiers and additives, tack coat, labor, tools, equipment, and all other incidentals necessary to complete the work.

*Aggregate, Type III* will be measured and paid at the contract unit price per ton which price will be full compensation for all material, including mineral filler, labor, tools, equipment, and maintenance of traffic and all incidentals necessary to complete the work.

*Removal of Pavement Marking Lines,* \_\_\_\_\_ and *Removal of Pavement Marking Symbols & Characters* will be measured and paid for in accordance with Article 1205-10.

## **TRAFFIC**

Completed sections of the roadways may be opened when necessary to lightweight local traffic, provided the roadway has cured sufficiently to prevent marring or distorting of the surface, and provided the curing is not impaired.

#### MAINTENANCE

Maintain the base in an acceptable condition until final acceptance of the project. Including immediate repair of any defects of damage that may occur in any maintenance operation. Perform this maintenance at no cost to the Owner and repeat as often as may be necessary to keep the base in an acceptable condition. Perform repairs to the base by replacing the base for its full depth.

#### **ADJUSTMENT OF STRUCTURES**

All structures such as manholes/valves to be raised prior to overlay. Raise or lower all existing manholes/valves within the limits of the project to match the finished grade to within <sup>1</sup>/<sub>4</sub>". Adjustments shall be made using an approved rapid-set grout, mortar, or concrete that will take full set and become load bearing within sixty minutes.

#### **REBUILD SHOULDERS**

The rebuilding of the roadway shoulders on ditch type road cross section shall consist of reconstructing the areas adjacent to disturbed pavement sections to conform to the line, grades and typical section shown on the plans. This constitutes stripping all existing vegetation from the ground surface wherever shaping of the roadway is to be done, as necessary, adding any additional soil, and seeding and mulching the disturbed area to provide stabilization.

#### LOAD LIMITS

So as not to further damage existing roads being repaired, the total weight of a truck and material cannot exceed 70,000 lbs. Any deviation from this load limit needs prior approval from the Engineer. Rollers will be limited to 15 tons or 30,000 pounds.

#### TRAFFIC CONTROL

During daily construction work hours, the Contractor will maintain at least one lane of traffic. During periods of construction inactivity all lanes of traffic will be open unless otherwise approved by the Town Manager.

The Contractor shall use flagger control in accordance with NCDOT Standards. The Contractor shall not work on both sides of the road simultaneously within same area.

The Contractor will be required to maintain ingress and egress to all business and dwellings and shall always provide clear access to fire hydrants.

The Contractor shall paint edges of all structures to be raised prior to repair or resurfacing, in the event the completion of the pavement is not completed within the working day, in a florescent orange marking paint.

It shall be the responsibility of The Contractor to ensure vehicles do not drive through/across/traverse active work zones. If a vehicle owner claims the resurfacing caused damage to their vehicle and/or other property, then The Contractor shall coordinate a resolution with the vehicle owner at no cost to the Town.

All necessary traffic control for this Project shall be included within the pricing for the work provided. No separate payment shall be provided for this work.

## **MOBILIZATION**

Work covered by the provision shall consist of preparatory work and operations which must be performed or for costs incurred prior to the beginning of work on this Project. The payment for the entire lump sum price for this item will be made with the first pay request paid on this contract. The bid price shall not exceed 5% of the total bid for the various items in this contract. The Town will not pay to remobilize due to any delay.

### **QUALITY CONTROL**

The Contractor shall provide an on-site quality control inspector who will be responsible for the quality of the workmanship of the Contractor and all subcontractors on the project. The Town may provide an inspector to review the construction and protect the Town's interests in the quality of the workmanship and materials. Due to the Town's limited staff, any personnel conflicts between the Contractor, Subcontractors or his assigned staff and the Town staff resulting in the delay of progress will be the Contractor's responsibility to resolve the issue by whatever means necessary.

## **LOCATION OF PROJECT**

The project shall consist of repairing the street segments identified in the attached EXHIBIT A. It is the responsibility of the Contractor to be familiar with the portions of these streets as paint-marked, for the individual areas of repair and resurfacing.

#### **BID SCHEDULE**

#### **NOTES**

- 1. Bid shall include sales tax and all other applicable taxes and fees. Include tax listing for materials in payment request.
- 2. Town of Stallings, NC reserves the right to increase or decrease the work by 25 percent without affecting any change in unit bid prices.
- 3. Bidders must bid on all items in a section for a Complete Bid. Failure to do so may result in rejection of the bid.
- 4. All items shall be bid as constructed, complete, in-place and ready for use by the Town of Stallings upon acceptance of work by the Engineer and the Town of Stallings.
- 5. All applicable insurance certificates, as outlined in the Special Provisions, must be submitted with the bid package to be considered a complete bid.
  - a. North Carolina General Contractor License must be provided.
- 6. Bids shall include a minimum of two (2) North Carolina municipal references of which the bidding contractor has performed Microsurfacing. References include:
  - a. Reference Name, Municipality Name
  - b. Position Title
  - c. Phone Number
  - d. Email Address
  - e. Month/Year of completed project(s)
- 7. Bids shall include the fully signed and sealed Contractor's Affidavit Release and Waiver of Claim.

# **Bid Items**

	DR					
FY2025 TOWN OF STALLINGS PAVEMENT PRESERVATION PROJECT						
NO.	DESCRIPTION	EST. QTY.	UNITS	UNIT PRICE	COST	
	TOWN OF STALLINGS ROADWAYS					
1	Micro-Surfacing, Type II, Single Course	73,750	SY			
2	Crack Sealing (NCDOT Spec 657)	18,400	LB			
3	Maintenance of Traffic	1	LS			
4	Stop Bar Striping	37	EA			
5	Mobilization	1	LS			
6	Contingency (20%)	1	LS			
	SUB-TOTAL					
TOTAL BID AMOUNT						

N.C. License No	
Telephone No:	By:
	Name:
Fax No:	
	Title:
E-mail:	Company:
SEAL: (If Bid by Corporation)	Address:
	Date:

# **BONDS AND CERTIFIED POWER OF ATTORNEY**

(Attach Bond and Power of Attorney to this sheet)

# **INSURANCE CERTIFICATE**

(Attach Certificate to this sheet)

# **CONTRACTOR'S AFFIDAVIT RELEASE AND WAIVER OF CLAIM**

\_\_\_\_\_, being first duly sworn, deposes and says that: (Contractor)

The undersigned is authorized to execute this Affidavit, Release and Waiver of Claim on behalf of the Contractor and that he has personal knowledge of all facts set forth herein;

This Affidavit, Release and Waiver of Claim are made concerning the construction of the following; Project: \_\_\_\_\_\_ Project No.: \_\_\_\_\_\_

All payrolls, material bills, sales tax, social security tax, state and federal unemployment insurance, and all other liabilities and taxes owed by the Contractor and arising in any manner from the above-described project have been paid in full;

No claim or lien exists in favor of any supplier of materials or labor or in favor of any subcontractor furnishing materials or labor on the above-described project;

Notwithstanding the foregoing, if the Town of Stallings, or property of the Town of Stallings, is subject to any claim or lien that arises in any manner from the failure of the Contractor to pay any liability described above, the Contractor will indemnify and hold the Town of Stallings harmless for any amount that the Town of Stallings is required to pay to discharge such lien or settle such claim and, further, will pay the Town of Stallings expenses, costs, and attorney fees incurred in connection

therewith;

All claims, suits, and proceedings of every name, description, or nature arising out of the above project against the Town of Stallings, its officers, employees, and agents have been settled;

The Contractor releases and waives any and all claims of every type and description that the Contractor may have against the Town of Stallings arising in any manner from the construction of the above-described project.

# **STATE/COUNTY SALES & USE TAX STATEMENT**

# PROJECT:\_\_\_\_\_

# CONTRACTOR/SUBCONTRACTOR:

# PERIOD COVERED:

Invoice No.	Invoice Date	Vendor's Name	Amount Before Taxes	4.5% NC Tax	3% County Tax	Total Invoice Amount	County Paid

Instruction estimate and the property upon which such taxes were paid were, or will be, used in the performance of this Contract. The list above does not include any taxes paid on purchase of tangible personal property that does not annex, to, affix to, or in some manner become a part of the project, building, structure or repairs.

Signed:\_\_\_\_\_

Title:\_\_\_\_\_

# Exhibit A – Roadway Maps

# **Fairhaven Subdivision**



Roads included: Yellow Daisy Dr, Sunflower Field Pl, Afternoon Sun Rd, Fair Sky Dr, Tranquil Falls Ln, Blue Iris Dr, Mountain Laurel Ct, Fair Oaks Dr, Shadowy Retreat Dr, Purple Vale Dr, Haven Lodge Rd, Shady Knoll Ct, Grassy Knoll Circle, Churchill Glen Circle, Serenity Pl, Scenic Way, Pleasant View Dr

# **Deepwood Subdivision**



Roads included: Knollwood Pl, Gold Crest Dr, Deepwood Pl, Shaftwood Dr