

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 9

PROPOSAL

DATE AND TIME OF BID OPENING: MARCH 10, 2021 AT 2:00 PM

CONTRACT ID: 2021-CONCRETE/ASPHALT/BRIDGE DECK
JOINT REPAIRS

WBS ELEMENT NO.: N/A

FEDERAL AID NO.: N/A

COUNTY: DAVIDSON, DAVIE, FORSYTH, ROWAN,
STOKES

TIP NO.: N/A

MILES: MILES

ROUTE NO.: VARIOUS

LOCATION: TO BE DETERMINED ON AN AS-NEEDED
BASIS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT
AND ROADWAYS, CRACK SEALING, ASPHALT MILLING
AND FOAM INJECTIONS

NOTICE:
ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF
GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH
CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR
CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR
MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS
SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF
ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS
CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING
THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED
PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR
LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

THIS IS A ROADWAY PROJECT.

BID BONDS ARE NOT REQUIRED.

NAME OF BIDDER

ADDRESS OF BIDDER

**PROPOSAL FOR
CONTRACT No. 2021-CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS IN DAVIDSON,
DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES, NORTH CAROLINA**

FEBRUARY 17, 2021

**DEPARTMENT OF TRANSPORTATION,
RALEIGH, NORTH CAROLINA**

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **2021-CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS**; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with *the 2018 Standard Specifications for Roads and Structures* by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. **2021-CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS** in **Davidson, Davie, Forsyth, Rowan and Stokes Counties**, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2018* with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer or Division Engineer.

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient.

An increase or decrease in the quantity of an item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

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INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid. NO BID BONDS REQUIRED.

TRADITIONAL PAPER BIDS:

1. Download the entire proposal from the Connect NCDOT website and return the entire proposal with your bid.
2. All entries on the itemized proposal sheet (bid form) shall be written in ink or typed.
3. The Bidder shall submit a unit price for every item on the itemized proposal sheet. The unit prices for the various contract items shall be written in figures. Unit prices shall be rounded off by the Bidder to contain no more than TWO decimal places.
4. An amount bid shall be entered on the itemized proposal sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount" column of the form.
5. The total amount bid shall be written in figures in the proper place on the bid form. The total amount bid shall be determined by adding the amounts bid for each item.
6. Changes to any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do not use correction fluid, correction tape or similar product to make corrections.
7. The bid shall be properly executed on the included **Execution of Bid – Non-collusion, Debarment and Gift Ban Certification** form. All bids shall show the following information:
 - a. Name of corporation, partnership, Limited Liability Company, joint venture, individual or firm, submitting bid.
Corporations that have a corporate seal should include it on the bid.
 - b. Name of individual or representative submitting bid and position or title held on behalf of the bidder.
 - c. Name, signature, and position or title of witness.
8. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
9. The Bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
10. **THE PROPOSAL WITH THE ITEMIZED PROPOSAL SHEET ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL BE DELIVERED TO AND RECEIVED IN THE NCDOT DIVISION OFFICE, LOCATED AT 375 Silas Creek Parkway, BY 2:00 PM ON MARCH 10, 2021.**

PAPER BIDS (UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIAL PROVISIONS) FOR THE CONSTRUCTION OF THE FOLLOWING PROJECT WILL BE PUBLICLY READ AT DIVISION 9 LOCATED AT 375 SILAS CREEK PARKWAY, WINSTON-SALEM, NC AT 2:00 PM ON MARCH 10, 2021. NO PAPER BIDS WILL BE RECEIVED AFTER 2:00 PM.

Due to the ongoing COVID-19 event, the bid opening for March 10, 2021 will not be open to public attendance. If a bidder wishes they may attend the bid opening remotely, via conference call using the following phone number:

Conference Call Phone Number: 336-334-3150

11. The sealed bid must display the following statement on the front of the sealed envelope:

Name and Address of Company and:

**“CONTRACT #2021– CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS TO BE
DETERMINED ON AN AS NEEDED BASIS IN DAVIDSON, DAVIE, FORSYTH, ROWAN AND
STOKES COUNTIES TO BE OPENED AT 2:00 PM ON MARCH 10, 2021.”**

12. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

N. C. DEPARTMENT OF TRANSPORTATION

ATTN: Jeff Turner

375 Silas Creek Parkway

Winston Salem, NC 27127

PROJECT SPECIAL PROVISIONS

GENERAL

GENERAL:

This contract is for repairing concrete/asphalt/bridge deck joints and roadways, crack sealing, asphalt milling and installing foam injections at various locations in Davidson, Davie, Forsyth, Rowan and Stokes Counties.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation Standard Specifications for Roads and Structures, January 2018, the North Carolina Department of Transportation Roadway Standards Drawing and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the Standard Specifications.

BIDS OVER LIMIT:

(08-01-16)

SPD 01-400

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$5.0 million, the bid will not be considered for award.

DIVISION LET CONTRACT PREQUALIFICATION:

(07-01-14)(12-1-16)

SPD 01-410

Any firm that wishes to bid as a prime contractor shall be prequalified as a Bidder or PO Prime Contractor prior to submitting a bid. Information regarding prequalification can be found at: <https://connect.ncdot.gov/business/Prequal/Pages/default.aspx>.

Prior to performing the work, the prime contractor and/or subcontractor(s) shall be prequalified in the work code(s) which are identified as work items in the prime contractor's construction progress schedule that they will complete themselves. Any contractor identified as working outside their expertise may be considered in default of contract.

BOND REQUIREMENTS – No Bonds Required

(06-01-16)

SPD 01-420B

The provisions of Articles 102-10 and 103-7 of the 2018 Standard Specifications for Roads and Structures are waived for this project. No bonds required.

CONTRACT TIME AND LIQUIDATED DAMAGES:

(7-1-95) (Rev. 12-18-07)

108

SP1 G10 A

The date of availability for this contract is **the date of execution of the purchase order.**

The completion date for this contract is **1 year from date of purchase order.**

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Five Hundred Dollars (\$ 500.00)** per calendar day.

CONTRACT TIME

The date of availability for this contract is the date of execution of the purchase order. The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. The completion date is one calendar year after receipt of a purchase order contract.

No work will be permitted and no purchase order will be issued until all requirements and prerequisite conditions and certifications have been satisfied.

At any time the Contractor fails to meet the terms of the contract it may result in cancellation of the contract.

CONTRACT PERIOD:

(2-19-14)

SPD 01-600

This contract shall be effective for one (1) contract period (12 months). At the option of the Department and upon agreement by the Contractor, this contract may be extended for up to two (2) additional one (1) year periods with a three percent (3%) increase in prices each year.

No changes in the terms, condition, etc. of this contract will be made when an extension of the contract is implemented. The Engineer will notify the Contractor in writing prior to renewal of the contract. The Contractor must notify the Engineer in writing within thirty (30) days of notification by the Engineer of his acceptance or rejection of this offer. Failure on the part of the Contractor to reply will be viewed as a rejection of the contract extension.

The Contractor shall provide an ACORD insurance certificate showing a minimum of \$5,000,000 Liability Insurance along with proof of all other legally required insurance.

NO MAJOR CONTRACT ITEMS:

(2-19-02) (Rev. 8-21-07)

104

SP1 G31

None of the items included in this contract will be major items.

NO SPECIALTY ITEMS:

(7-1-95)

108-6

SP1 G34

None of the items included in this contract will be specialty items (see Article 108-6 of the 2018 Standard Specifications).

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 6-19-18)

108-2

SP1 G58

The Contractor's attention is directed to the Standard Special Provision entitled *Availability of Funds Termination of Contracts* included elsewhere in this proposal. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

	<u>Fiscal Year</u>	<u>Progress (% of Dollar Value)</u>
2021	(7/01/20 - 6/30/21)	25% of Total Amount Bid
2022	(7/01/21 - 6/30/22)	75% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the 2018 Standard Specifications. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS):

(10-16-07)(Rev. 2-19-19)

102-15(J)

SP1 G67

Description

The purpose of this Special Provision is to carry out the North Carolina Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with State funds.

Definitions

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will not be used to meet the Combined MBE/WBE goal. No submittal of a Letter of Intent is required.

Combined MBE/WBE Goal: A portion of the total contract, expressed as a percentage that is to be performed by committed MBE/WBE subcontractors.

Committed MBE/WBE Subcontractor - Any MBE/WBE submitted at the time of bid that is being used to meet the Combined MBE / WBE goal by submission of a Letter of Intent. Or any MBE or WBE used as a replacement for a previously committed MBE or WBE firm.

Contract Goal Requirement - The approved participation at time of award, but not greater than the advertised Combined MBE/WBE contract goal.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed participation along with a listing of the committed MBE and WBE firms.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor.

MBE Participation (Anticipated) - A portion of the total contract, expressed as a percentage that is anticipated to be performed by committed MBE subcontractor(s).

Minority Business Enterprise (MBE) - A firm certified as a Disadvantaged Minority-Owned Business Enterprise through the North Carolina Unified Certification Program.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

Replacement / Substitution – A full or partial reduction in the amount of work subcontracted to a committed (or an approved substitute) MBE/WBE firm.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for MBE/WBE certification. The MBE/WBE program follows the same regulations as the federal Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

WBE Participation (Anticipated) - A portion of the total contract, expressed as a percentage that is anticipated to be performed by committed WBE subcontractor(s).

Women Business Enterprise (WBE) - A firm certified as a Disadvantaged Women-Owned Business Enterprise through the North Carolina Unified Certification Program.

Forms and Websites Referenced in this Provision

Payment Tracking System - On-line system in which the Contractor enters the payments made to MBE and WBE subcontractors who have performed work on the project.
<https://apps.dot.state.nc.us/Vendor/PaymentTracking/>

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all MBE/WBE firms working on the project. This form is for paper bid projects only.
<https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf>

RF-1 MBE/WBE Replacement Request Form - Form for replacing a committed MBE or WBE.
<http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request%20Form.pdf>

SAF Subcontract Approval Form - Form required for approval to sublet the contract.
<http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20Form%20Rev.%202012.zip>

JC-1 Joint Check Notification Form - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.
<http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check%20Notification%20Form.pdf>

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the estimated amount (based on quantities and unit prices) listed at the time of bid.
<http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf>

Listing of MBE and WBE Subcontractors Form - Form for entering MBE/WBE subcontractors on a project that will meet the Combined MBE/WBE goal. This form is for paper bids only.
[http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20\(State\).docx](http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20(State).docx)

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages.
<http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls>

Combined MBE/WBE Goal

The Combined MBE/WBE Goal for this project is **0 %**

The Combined Goal was established utilizing the following anticipated participation for Minority Business Enterprises and Women Business Enterprises:

(A) Minority Business Enterprises **0 %**

- (1) *If the anticipated MBE participation is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that MBEs participate in at least the percent of the contract as set forth above.
- (2) *If the anticipated MBE participation is zero*, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.

(B) Women Business Enterprises **0 %**

- (1) *If the anticipated WBE participation is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that WBEs participate in at least the percent of the contract as set forth above.
- (2) *If the anticipated WBE participation is zero*, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

The Bidder is required to submit only participation to meet the Combined MBE/WBE Goal. The Combined Goal may be met by submitting all MBE participation, all WBE participation, or a combination of MBE and WBE participation.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the Combined MBE / WBE goal. The Directory can be found at the following link.

<https://www.ebs.nc.gov/VendorDirectory/default.html>

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of MBE/WBE Subcontractors

At the time of bid, bidders shall submit all MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the Combined MBE/WBE goal

will be considered committed, even though the listing shall include both committed MBE/WBE subcontractors and additional MBE/WBE subcontractors. Any additional MBE/WBE subcontractor participation above the goal will follow the banking guidelines found elsewhere in this provision. All other additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward the Department's overall race-neutral goals. Only those firms with current MBE and WBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of MBE and WBE participation. The Contractor shall indicate the following required information:

(A) Electronic Bids

Bidders shall submit a listing of MBE and WBE participation in the appropriate section of the electronic submittal file.

- (1) Submit the names and addresses of MBE and WBE firms identified to participate in the contract. If the bidder uses the updated listing of MBE and WBE firms shown in the electronic submittal file, the bidder may use the dropdown menu to access the name and address of the firms.
- (2) Submit the contract line numbers of work to be performed by each MBE and WBE firm. When no figures or firms are entered, the bidder will be considered to have no MBE or WBE participation.
- (3) The bidder shall be responsible for ensuring that the MBE and WBE are certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the Combined MBE/WBE goal.

(B) Paper Bids

- (1) *If the Combined MBE/ WBE goal is more than zero,*
 - (a) Bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation, including the names and addresses on *Listing of MBE and WBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE and WBE participation for the contract.
 - (b) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The

Department will not consider these bids for award and the proposal will be rejected.

- (c) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the Combined MBE/WBE goal.
- (2) *If the Combined MBE/WBE Goal is zero*, entries on the *Listing of MBE and WBE Subcontractors* are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

MBE or WBE Prime Contractor

When a certified MBE or WBE firm bids on a contract that contains a Combined MBE/WBE Goal, the firm is responsible for meeting the goal or making good faith efforts to meet the goal, just like any other bidder. In most cases, a MBE or WBE bidder on a contract will meet the Combined MBE/WBE goal by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the MBE or WBE bidder and any other similarly certified subcontractors will count toward the goal. The MBE or WBE bidder shall list itself along with any MBE or WBE subcontractors, if any, in order to receive credit toward the goals.

MBE/WBE prime contractors shall also follow Sections A or B listed under *Listing of MBE/WBE Subcontractors* just as a non-MBE/WBE bidder would.

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the Combined MBE/WBE goal of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 10:00 a.m. on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed MBE and WBE to be used toward the Combined MBE/WBE goal, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the Combined MBE/WBE goal. If the lack of this participation drops the commitment below the Combined MBE/WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the Engineer no later than 2:00 p.m. of the eighth calendar day following opening

of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 10:00 a.m. on the next official state business day.

Banking MBE/WBE Credit

If the committed MBE/WBE participation submitted exceeds the algebraic sum of the Combined MBE/WBE goal by \$1,000 or more, the excess will be placed on deposit by the Department for future use by the bidder. Separate accounts will be maintained for MBE and WBE participation and these may accumulate for a period not to exceed 24 months.

When the apparent lowest responsive bidder fails to submit sufficient participation by MBE and WBE firms to meet the advertised goal, as part of the good faith effort, the Department will consider allowing the bidder to withdraw funds to meet the Combined MBE/WBE goal as long as there are adequate funds available from the bidder's MBE and WBE bank accounts.

Submission of Good Faith Effort

If the bidder fails to meet or exceed the Combined MBE/WBE goal, the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach that specific goal.

One complete set and **3** copies of this information shall be received in the office of the Engineer no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 10:00 a.m. on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of MBE/WBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Consideration of Good Faith Effort for Projects with a Combined MBE/WBE Goal More Than Zero

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient MBE/WBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought MBE/WBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goals and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/WBEs that are also prequalified subcontractors. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the MBEs/WBEs to respond to the solicitation. Solicitation shall provide the opportunity to MBEs/WBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the MBEs/WBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by MBEs/WBEs in order to increase the likelihood that the Combined MBE/WBE goal will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the advertised goal when the work to be sublet includes potential for MBE/WBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested certified MBEs/WBEs that are also prequalified subcontractors with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D)
 - (1) Negotiating in good faith with interested MBEs/WBEs. It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as the advertised goal into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for

a bidder's failure to meet the advertised goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.

- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening the Business Opportunity and Work Force Development Unit at BOWD@ncdot.gov to give notification of the bidder's inability to get MBE or WBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the advertised goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the Combined MBE/WBE goal.
- (2) The bidders' past performance in meeting the contract goal.
- (3) The performance of other bidders in meeting the advertised goal. For example, when the apparent successful bidder fails to meet the goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the advertised goal, but meets or exceeds the average MBE and WBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the Combined MBE/WBE goal can be met or that an adequate good faith effort has been made to meet the advertised goal.

Non-Good Faith Appeal

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting MBE/WBE Participation Toward Meeting the Combined MBE/WBE Goal

(A) Participation

The total dollar value of the participation by a committed MBE/WBE will be counted toward the contract goal requirements. The total dollar value of participation by a committed MBE/WBE will be based upon the value of work actually performed by the MBE/WBE and the actual payments to MBE/WBE firms by the Contractor.

(B) Joint Checks

Prior notification of joint check use shall be required when counting MBE/WBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (*Joint Check Notification Form*) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the anticipated MBE participation. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE/WBE subcontracts to a non-MBE/WBE firm does not count toward the contract goal requirement. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill the MBE or WBE participation breakdown. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified firms and there is no interest or availability, and they can get assistance from other certified firms, the Engineer will not hold the prime responsible for meeting the individual MBE or WBE breakdown. If a MBE or WBE contractor or subcontractor

subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function.

(D) Joint Venture

When a MBE or WBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the MBE or WBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the MBE or WBE performs with its forces.

(E) Suppliers

A contractor may count toward its MBE /WBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a MBE or WBE regular dealer and 100 percent of such expenditures from a MBE or WBE manufacturer.

(F) Manufacturers and Regular Dealers

A contractor may count toward its MBE /WBE requirement the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a MBE/WBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a MBE/WBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Commercially Useful Function

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for

execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors. If it is determined that a MBE or WBE is not performing a Commercially Useful Function, the contractor may present evidence to rebut this presumption to the Department.

(B) MBE/WBE Utilization in Trucking

The following factors will be used to determine if a MBE or WBE trucking firm is performing a commercially useful function:

- (1) The MBE/WBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting the Combined MBE/WBE goal.
- (2) The MBE/WBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The MBE/WBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The MBE may subcontract the work to another MBE firm, including an owner-operator who is certified as a MBE. The same holds true that a WBE may subcontract the work to another WBE firm, including an owner-operator who is certified as a WBE. When this occurs, the MBE or WBE who subcontracts work receives credit for the total value of the transportation services the subcontracted MBE or WBE provides on the contract. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill the participation breakdown. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified transportation service providers and there is no interest or availability, and they can get assistance from other certified providers, the Engineer will not hold the prime responsible for meeting the individual MBE or WBE participation breakdown.

- (5) The MBE/WBE may also subcontract the work to a non-MBE/WBE firm, including from an owner-operator. The MBE/WBE who subcontracts the work to a non-MBE/WBE is entitled to credit for the total value of transportation services provided by the non-MBE/WBE subcontractor not to exceed the value of transportation services provided by MBE/WBE-owned trucks on the contract. Additional participation by non-MBE/WBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the MBE/WBE and the Contractor will not count towards the MBE/WBE contract requirement.
- (6) A MBE/WBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the MBE/WBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the MBE/WBE, so long as the lease gives the MBE/WBE absolute priority for use of the leased truck. This type of lease may count toward the MBE/WBE's credit as long as the driver is under the MBE/WBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the MBE/WBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE subcontractor (or an approved substitute MBE or WBE subcontractor) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE subcontractor for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the Contractor's own forces or those of an affiliate.

The Contractor must give notice in writing both by certified mail and email to the MBE/WBE subcontractor, with a copy to the Engineer of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor must give the MBE/WBE subcontractor five (5) business days to respond to the Contractor's Notice of Intent to Request Termination and/or Substitution. If the MBE/WBE subcontractor objects to the intended termination/substitution, the MBE/WBE, within five (5) business days must advise the Contractor and the Department of the reasons why the action should not be approved. The five-day notice period shall begin on the next business day after written notice is provided to the MBE/WBE subcontractor.

A committed MBE/WBE subcontractor may only be terminated after receiving the Department's written approval based upon a finding of good cause for the proposed termination and/or substitution. For purposes of this section, good cause shall include the following circumstances:

- (a) The listed MBE/WBE subcontractor fails or refuses to execute a written contract;
- (b) The listed MBE/WBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the MBE/WBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (c) The listed MBE/WBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
- (d) The listed MBE/WBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (e) The listed MBE/WBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1,200 or applicable state law;
- (f) The listed MBE/WBE subcontractor is not a responsible contractor;
- (g) The listed MBE/WBE voluntarily withdraws from the project and provides written notice of withdrawal;
- (h) The listed MBE/WBE is ineligible to receive MBE/WBE credit for the type of work required;
- (i) A MBE/WBE owner dies or becomes disabled with the result that the listed MBE/WBE contractor is unable to complete its work on the contract;
- (j) Other documented good cause that compels the termination of the MBE/WBE subcontractor. Provided, that good cause does not exist if the prime contractor seeks to terminate a MBE/WBE it relied upon to obtain the contract so that the prime contractor can self-perform the work for which the MBE/WBE contractor was engaged or so that the prime contractor can substitute another MBE/WBE or non-MBE/WBE contractor after contract award.

The Contractor shall comply with the following for replacement of a committed MBE/WBE:

(A) Performance Related Replacement

When a committed MBE/WBE is terminated for good cause as stated above, an additional MBE/WBE that was submitted at the time of bid may be used to fulfill the MBE/WBE commitment to meet the Combined MBE/WBE Goal. A good faith effort will only be required for removing a committed MBE/WBE if there were no additional MBE/WBEs submitted at the time of bid to cover the same amount of work as the MBE/WBE that was terminated.

If a replacement MBE/WBE is not found that can perform at least the same amount of work as the terminated MBE/WBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to MBE/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
 - (2) Efforts to negotiate with MBE/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBE/WBEs who were contacted.
 - (b) A description of the information provided to MBE/WBEs regarding the plans and specifications for portions of the work to be performed.
 - (3) A list of reasons why MBE/WBE quotes were not accepted.
 - (4) Efforts made to assist the MBE/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.
- (B) Decertification Replacement
- (1) When a committed MBE/WBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
 - (2) When a committed MBE/WBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another MBE/WBE subcontractor to perform at least the same amount of work to meet the Combined MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 (*DBE Replacement Request*). If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months.

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed MBE/WBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a MBE/WBE based upon the Contractor's commitment, the MBE/WBE shall participate in additional work to the same extent as the MBE/WBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a MBE/WBE, the Contractor shall seek additional participation by MBEs/WBEs equal to the reduced MBE/WBE participation caused by the changes.

Reports and Documentation

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a MBE/WBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving MBE/WBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a MBE/WBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for MBE/WBE credit.

Reporting Minority and Women Business Enterprise Participation

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given

month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (A) Withholding of money due in the next partial pay estimate; or
- (B) Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to MBEs/WBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for further work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-MBE/WBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments. The Contractor shall report the accounting of payments through the Department's DBE Payment Tracking System.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *2018 Standard Specifications* may be cause to disqualify the Contractor.

MULTI-YEAR MAINTENANCE CONTRACTS:

(4-20-21)

SP1 G75

This contract is a multi-year maintenance contract let pursuant to the provisions of N.C. General Statute §136-28.1. In accordance with N.C. General Statute §136-28.1, an award in a maintenance contract shall not exceed \$5,000,000 per year. This contract award is limited to \$5,000,000 per year. No payments in excess of this amount will be disbursed, in accordance with the Statute.

USE OF UNMANNED AIRCRAFT SYSTEM (UAS):

(8-20-19)

SP1 G092

The Contractor shall adhere to all Federal, State and Local regulations and guidelines for the use of Unmanned Aircraft Systems (UAS). This includes but is not limited to US 14 CFR Part 107

Small UAS Rule, NC GS 15A-300.2 Regulation of launch and recovery sites, NC GS 63-95 Training required for the operation of unmanned aircraft systems, NC GS 63-96 Permit required for commercial operation of unmanned aircraft system, and NCDOT UAS Policy. The required operator certifications include possessing a current Federal Aviation Administration (FAA) Remote Pilot Certificate, a NC UAS Operator Permit as well as operating a UAS registered with the FAA.

Prior to beginning operations, the Contractor shall complete the NCDOT UAS – Flight Operation Approval Form and submit it to the Engineer for approval. All UAS operations shall be approved by the Engineer prior to beginning the operations.

All contractors or subcontractors operating UAS shall have UAS specific general liability insurance to cover all operations under this contract.

The use of UAS is at the Contractor's discretion. No measurement or payment will be made for the use of UAS. In the event that the Department directs the Contractor to utilize UAS, payment will be in accordance with Article 104-7 Extra Work.

EQUIPMENT IDLING GUIDELINES:

(1-19-21)

107

SP1 G096

Exercise reduced fuel consumption and reduced equipment emissions during the construction of all work associated with this contract. Employees engaged in the construction of this project should turn off vehicles when stopped for more than thirty (30) minutes and off-highway equipment should idle no longer than fifteen (15) consecutive minutes.

These guidelines for turning off vehicles and equipment when idling do not apply to:

1. Idling when queuing.
2. Idling to verify the vehicle is in safe operating condition.
3. Idling for testing, servicing, repairing or diagnostic purposes.
4. Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane, mixing concrete, etc.).
5. Idling required to bring the machine system to operating temperature.
6. Emergency vehicles, utility company, construction, and maintenance vehicles where the engines must run to perform needed work.
7. Idling to ensure safe operation of the vehicle.
8. Idling when the propulsion engine is providing auxiliary power for other than heating or air conditioning. (such as hydraulic systems for pavers)
9. When specific traffic, safety, or emergency situations arise.
10. If the ambient temperature is less than 32 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants (e.g. to run the heater).
11. If the ambient temperature is greater than 90 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants of off-highway equipment (e.g. to run the air conditioning) no more than 30 minutes.

12. Diesel powered vehicles may idle for up to 30 minutes to minimize restart problems.

Any vehicle, truck, or equipment in which the primary source of fuel is natural gas or electricity is exempt from the idling limitations set forth in this special provision.

SUBSURFACE INFORMATION:

(7-1-95)

450

SP1 G112 A

There is **no** subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

OUTSOURCING OUTSIDE THE USA:

(9-21-04) (Rev. 5-16-06)

SP1 G150

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

Outsourcing for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

DEFAULT OF CONTRACT:

The Department of Transportation shall have the right to declare a default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the Standard Specifications.

WARRANTY – MATERIALS AND WORKMANSHIP:

All materials and workmanship to be warranted for a period of one year from the date of installation.

AUTHORITY OF THE ENGINEER:

(01-30-14)

105-1

SPD 01-460

The Engineer for this project shall be the Division Engineer, Division 9, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representative.

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to

enforce and make effective such decisions and orders as the Contractor fails to carry out promptly.

BANKRUPTCY:

The Department of Transportation, at its option, may terminate the contract upon filing by the Contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

SUPERVISION BY CONTRACTOR:

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hour notice. Such employee shall be fully authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

TEMPORARY SUSPENSION OF WORK:

In accordance with Article 108-7 of the Standard Specifications, the Engineer will have the authority to suspend the work wholly or in part, any written order for such periods as he may deem necessary for any of the following reasons.

1. Conditions considered unfavorable for the suitable prosecution of the work, or
2. The Contractor's failure for correct conditions unsafe for workmen or the general public,
or
3. The Contractor has not carried out orders given to him by the Engineer, or
4. The Contractor's failure to perform any provisions of the contract.

PROSECUTION AND PROGRESS:

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods as may be required to complete the

work described in the contract by the completion date and in accordance with the *2018 Standard Specifications*.

The Contractor's operations are restricted to daylight hours. No work may be performed on Sundays and legal State holidays, unless otherwise approved by the Engineer. Work shall only be performed when weather and visibility conditions allow safe operations.

PAYMENT AND RETAINAGE:

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the Standard Specifications. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. Minority Business (MB) and Women's Business (WB) participation shall be listed in the appropriate spaces on all requests for payment. If there is no participation the word "None" or the figure "0" shall be entered. The invoices will show the requisition number and purchase order number and should state "Terms Net Ten (10) Days".

CONTRACT BID QUANTITIES:

Contractor shall note that the contract quantities are used for figuring the lowest responsible bidder only. No minimum amount of work is guaranteed under this contract.

PROJECT SPECIAL PROVISIONS
PURCHASE ORDER CONTRACT

GENERAL:

All concrete and/or asphalt repairs on roadways and bridge deck joint repairs shall be designated by the Engineer. The Contractor shall begin work within 5 days of notification. Failure to respond within the designated time frame may result in cancellation of this contract.

All areas of crack sealing shall be shall be designated by the Engineer. The Contractor shall begin work within 5 days of notification. Failure to respond within the designated time frame may result in cancellation of this contract.

All areas of asphalt milling shall be shall be designated by the Engineer. The Contractor shall begin work within 5 days of notification. Failure to respond within the designated time frame may result in liquidated damages or cancellation of this contract.

All areas of foam injections shall be shall be designated by the Engineer. The Contractor shall begin work within 5 days of notification. Failure to respond within the designated time frame may result in cancellation of this contract.

Payment for mobilization will be made for each occurrence of mobilization.

The Contractor shall notify the Division Maintenance Engineer at the beginning of each week of his intended schedule of work. This will allow the DOT to schedule inspections accordingly.

All existing concrete and asphalt of other material removed shall become the property of the Contractor and shall be disposed of properly.

TRAFFIC CONTROL:

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, North Carolina Department of Transportation Standard Specifications for Roads and Structures, January 2018, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

Traffic movements through lane closures on roads with two-way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

All personnel while on the project shall wear an approved safety vest, or shirt or jacket which meets the color requirements of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall comply with all applicable Federal, State and local laws, ordinances, and regulations governing, safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in subarticle I 08-7 of the Standard Specifications.

When closing a lane on a 2-lane, 2-way roadway the Contractor shall install temporary lane closures in accordance with Standard 1101.02 sheet 1 and 2 of 9 of the Highway Design Branch roadway Standard Drawings. When closing a lane on a multi-lane roadway the Contractor shall install temporary lane closures in accordance with Standard 1101.02 sheets 3, 4, 5, 6 and 7 of 9 of the Highway Design Branch Roadway Standard Drawings.

When a temporary lane closure on a multi-lane roadway is shifted to another lane, the Contractor will be paid for a Lane Closure Shift. On 2-lane, 2-way roadways, the Contractor will be paid one Temporary Lane Closure for both lanes.

Payments shall be made under:

Temporary Lane Closure (2-Lane, 2-Way Roadway)	Each
Temporary Lane Closure (Multi-lane Roadway)	Each
Lane Closure Shift (Multi-lane Roadway)	Each
Nighttime Temporary Lane Closure (2-Lane, 2-Way Roadway)	Each
Nighttime Temporary Lane Closure (Multi-lane Roadway)	Each
Nighttime Lane Closure Shift (Multi-lane Roadway)	Each
Shoulder Closure	Day

CONCRETE/ASPHALT ROADWAY/BRIDGE DECK JOINT REPAIRS:

Concrete/Asphalt Repair- Fibrecrete B

Concrete/asphalt and bridge deck joints repairs shall be made using the following approved Hot Applied Flexible Repair Material Fibrecrete B or approved equal.

The Contractor shall prepare areas by removing any loose debris using a pavement breaker, by using a mechanical planer or as directed by the Engineer. The recess is then cleaned and dried using hot compressed air to thoroughly prepare the surface, removing all debris and loose material. The Hot Applied Flexible Repair Material is immediately poured and screeded to fill the recess flush with the surrounding area and overlap the edges. While the material is still molten, a preheated high P.S.V. aggregate is applied to the surface.

When repairing pot holes from 1 Yz" to full depth, the Contractor will include Yz" - I" washed aggregate at the rate of no more than 30% of volume as directed by the Engineer. The balance of the repair will be completed as previously stated.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand and quantity.

Sufficient material to perform the entire repair application shall be in storage at the site or at the Contractors facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application.

Stored materials may be inspected prior to their use and shall meet the requirements of these Special Provisions at the time of use.

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejections shall be immediately replaced by the Contractor at no additional cost to the Department.

Each shipment of the Hot Applied Flexible Repair Material shall be accompanied by Material Safety Data Sheets (MSDS) and a Certificate of Compliance certifying that the materials conform to the requirements as approved by NCDOT Materials and Test Unit.

Basis of Payment

The quantity of Hot Applied Flexible Repair Material for which payment will be made will be the actual pounds of material used. Payment shall be in full compensation for all labor, tools, equipment and incidentals necessary for the completion of the work. Payment shall be made as follows:

Concrete/Asphalt Repair – Fibrecrete B

Lbs

MANUFACTURER’S SPECIFICATIONS

Fibrecrete “B” – FLEXIBLE REPAIR MATERIALS

DESCRIPTION

Fibrecrete B is a flexible repair material for joint/large crack, spalls and pot-hole repairs in asphalt and concrete. It is a hot-applied mastic asphalt binder with 36% bitumen content, polymers mixed with graded fillers, recycled steel fibers (less than 1% total weight), aggregates and recycled tire rubber (no less than 3% of total weight).

APPLICATIONS

Fibrecrete is designed to replace traditional asphaltic repairs, which are prone to failure due to their stiffness. Fibrecrete exceed the requirements of most asphaltic joint seals due to its flexibility. The installed product is a load-bearing repair that has superior tensile strength and flexibility to accommodate limited thermal expansion and contraction. Fibrecrete has exceptional resistance to water intrusion and to a broad range of salts, bases and organic materials, making the repair a long-term solution for highway maintenance projects.

MATERIAL SPECIFICATIONS

Fibrecrete is an electrometric polymer modified binder. Installed in accordance with the manufacturer's specifications, the installed product will conform to the following properties:

BINDER PROPERTIES	METHOD	REQUIREMENT
Bond	ASTM D 1190	Pass, 3 cycles @ -20°C, 50%
Penetration	ASTM D 5329	1 mm min @ -18°C, 200 g, 60 sec 9 mm max @ -25°C, 150 g, 5 sec
Ductility	ASTM D113	40 cm min @ 25°C
Flexibility	ASTM D5329	Pass@ -12°C
Flow	ASTM D5329	3 mm max @ 60° @ 5 hours
Resilience	ASTM D5329	40% min @ 25°C
Softening Point	ASTM D36	82°C min
Elongation		500%min
Wheel tracking@ 122°F	BS598	4.8mm/h
Safe Heating Temperature		230°C (440°F)
Recommended Pouring Temperature		185°C to 199°C (365°F-390°F)

SITE PREPARATION

The joint/crack shall be milled with a mechanical planer to the specified width and depth (if required) all spalls and pot holes shall be milled or saw cut or jack hammered at the Engineer's discretion. The repair surfaces will be cleaned and dried with a hot air lance capable of producing temperatures in excess of 1400°C and directional velocities exceeding 750 meters per second. The recessed area and vertical walls will be treated with a primer agent to promote adhesion and prevent moister intrusion (for concrete applications only).

INSTALLATION

Installation of the Fibrecrete material shall be by factory trained and certified installation professionals. The Fibrecrete material will be heated in a thermostatically controlled mixer, having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 300°F, the molten Fibrecrete will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion. For depths greater than 1 inch heated ¾" granite aggregate shall be added at a rate of 25%- 35% by volume. The final ¾" of the repair will be Fibrecrete material for optimum flexibility of the repair. Once this top layer has been screeded to a level grade, a high PSV aggregate will be applied to the top of the repair to ensure proper skid resistance.

Depending on the depth of the repair, the Fibrecrete material will be ready for traffic return between 30 minutes to 1 hour.

All removed material and residual repair materials will be recovered and disposed of away from the site according to the client's specifications.

MANUFACTUER'S WARRANTY

Fibrecrete Technologies, LLC warrants that Fibrecrete products meet applicable specifications provided they are installed in accordance with the manufacturer's guidance and specifications. The supplier shall warrant that the materials furnished shall perform for 2 years from date of installation when installed by the materials supplier's certified applicator and installed to the manufacturers specifications.

CONCRETE/ASPHALT REPAIR - Fibrecrete G

Concrete/asphalt and bridge deck joint repairs shall be made using the following approved Hot Applied Flexible Repair Material: Fibrecrete G or approved equal

The Contractor shall prepare areas by removing any loose debris using a pavement breaker, by using a mechanical planer or as directed by the Engineer. The recess is then cleaned and dried using hot compressed air to thoroughly prepare the surface, removing all debris and loose material. The Hot Applied Flexible Repair Material is immediately poured and screeded to fill the recess and overlap the edges. While the material is still molten, a preheated high P.S.V. aggregate is applied and then compacted to ensure that the finished repair is flush with the surrounding area.

When repairing pot holes from 1 ½" to full depth, that are not adjacent to or spanning a joint, the Contractor will include ½" - 1" washed aggregate at the rate of no more than 30% of volume as directed by the Engineer. The balance of the repair will be completed as previously stated.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand and quantity.

Sufficient material to perform the entire repair application shall be in storage at the site or at the Contractors facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application.

Stored materials may be inspected prior to their use and shall meet the requirements of these Special Provisions at the time of use.

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejections shall be immediately replaced by the Contractor at no additional cost to the Department.

Each shipment of the Hot Applied Flexible Repair Material shall be accompanied by Material Safety Data Sheets (MSDS) and a Certificate of Compliance certifying that the materials conform to the requirements as approved by NCDOT Materials and Test Unit.

Basis of Payment

The quantity of Hot Applied Flexible Repair Material for which payment will be made will be the actual pounds of material used. Payment shall be in full compensation for all labor, tools, equipment and incidentals necessary for the completion of the work. Payment shall be made as follows:

Concrete/Asphalt Repair – Fibrecrete G	Lbs
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MANUFACTURER'S SPECIFICATIONS

Fibrecrete "G" – FLEXIBLE REPAIR MATERIALS

DESCRIPTION

Fibrecrete G is a flexible repair material for joint/large crack, spalls and pot hole repairs in concrete. It is a hot-applied, synthetic polymer modified resin compound containing mineral fillers, chopped fibers, and graded aggregates.

APPLICATIONS

Fibrecrete G is designed to replace traditional cementitious repairs, which are prone to failure due to their stiffness. Fibrecrete capabilities exceed the requirements of most asphaltic joint seals due to its flexibility. The installed product is colored-matched, load-transferring repair that has superior tensile strength and flexibility to accommodate limited joint/crack movement. Fibrecrete has exceptional resistance to water intrusion and to a broad range of salts, bases and organic materials, making the repair a long-term solution for highway maintenance projects.

MATERIAL SPECIFICATIONS

Fibrecrete G is a synthetic polymer modified resin binder. Installed in accordance with the manufacturer's specifications, the installed product will conform to the following properties:

BINDER PROPERTIES	METHOD	REQUIREMENT
Bond	ASTM D 1190	Pass, 3 cycles @ -20°C, 50%
Penetration	ASTM D 5329	1 mm min @ -18°C, 200 g, 60 sec 9 mm max @ -25°C, 150 g, 5 sec
Ductility	ASTM D113	40 cm min @ 25°C
Flexibility	ASTM D5329	Pass@ -12°C
Flow	ASTM D5329	3 mm max @ 60° @ 5 hours
Resilience	ASTM D5329	40% min @ 25°C
Softening Point	ASTM D36	82°C min
Elongation		500%min
Wheel tracking@ 122°F	BS598	4.8mm/h
Safe Heating Temperature		230°C
Recommended Pouring Temperature		185°C to 199°C

SITE PREPARATION

The joint/crack, spall or pot hole will be saw cut/milled to the specified width and depth (if required). The joint/crack, spall or pot hole surfaces will be cleaned and dried with a hot air lance capable of producing temperatures in excess of 1400°C and directional velocities exceeding 750 meters per second. The recessed area and vertical walls will be treated with a primer agent to promote adhesion and prevent moisture intrusion (for concrete applications only).

INSTALLATION

The Fibrecrete G material will be heated in a thermostatically controlled mixer, having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 195°C, the molten Fibrecrete G will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion. The remainder of the repair process will consist of layering coarse hot angular aggregate (cleaned and dried) with the molten Fibrecrete G until within ½” of the top of the repair. The final ½” of the repair will be Fibrecrete G material for optimum flexibility of the repair. Once this top layer has been screened to a level grade, a high PSV aggregate will be applied to the top of the repair to ensure proper skid resistance. Depending on the depth of the repair, the Fibrecrete G material will be ready for traffic return between 30 minutes to 1 hour.

All removed material and residual repair materials will be recovered and disposed of away from the site according to the client's specifications.

MANUFACTURER'S WARRANTY

Fibrecrete Technologies, LLC warrants that Fibrecrete products meet applicable specifications provided they are installed in accordance with the manufacturer's guidance and specifications. The supplier shall warrant that the materials furnished shall perform for 2 years from date of installation when installed by the materials supplier's certified applicator and installed to the manufacturer's specifications.

SEALING EXISTING PAVEMENT CRACKS:

(3-22-12)

657

SPD 6-400

Description

The work consists of sealing existing longitudinal and transverse pavement cracks with Sealant Type 2, PS/AR (hot-poured rubber asphalt) at locations as directed by the Engineer. The Contractor will not be required to seal the existing edge joints.

Materials

Use Sealant Type 2, PS/AR (hot-poured rubber asphalt) in accordance with Article 1028-2 of the *2018 Standard Specifications*.

Construction Methods

Install the sealant so that it forms a complete watertight bond with a high degree of elasticity, with maximum flexibility and longevity under extreme temperature ranges.

Use an HCA (hot compressed air) lance at all times to blast out any vegetation, dirt, dampness and loose materials from the cracks.

Use a concentrated hot air jet that is at least 3,000°F in temperature and that has an air jet force of not less than 3,000 feet per second of blasting.

Force open asphalt cracks, cleaned warm and dry, and make ready for the application of the preheated sealant for maximum crack sealability.

Preheat the sealant to correct temperature, using the air jacketed flow method to prevent the burning of the modified rubber in the sealant. Perform this by means of a trailer mounted 190 gallon safety tested crack sealant preheater melter kettle, with a horizontally mounted full sweep double paddle agitator.

Apply sealant in the prepared cracks at a temperature range of 370°F minimum and 420°F maximum, using the pressure screed shoe to completely fill the crack, leaving a sealed 2" overband. Excessive overbanding or waste of sealant materials will not be tolerated.

Do not apply the PS/AR sealant when the surface temperature of the pavement is below 32°F.

Seal all cracks with a minimum of 1/8" depth of sealant installed.

After the crack has been sealed, promptly remove surplus sealer on the pavement. Do not permit traffic over the sealed cracks without approval by the Engineer.

The sealant shall be packaged in polyethylene bags and placed in boxes, which weigh approximately 60 pounds. The sealant may be packed in 60 pound boxes containing

2 polyethylene bags of sealant which weigh approximately 30 pounds each. Boxes of sealant are to be palletized for shipment. The pallets are to be protected with a weatherproof covering. The Contractor is responsible for storage.

Measurement and Payment

Sealing Existing Pavement Cracks will be measured and paid as the actual pounds of material that has satisfactorily been used to seal pavement cracks in the designated highway. Any material that has been spilled, used in excessive overbanding, wasted, misapplied, or unsatisfactorily used in any way will be deducted in determining quantities for payment. The Engineer will determine the quantity, if any, to be deducted. The Engineer's decision on the quantity to be deducted will be final and binding. The above price and payment will be full compensation for all work required to seal the pavement cracks including, but not limited to, furnishing, hauling, loading and unloading, and storage of all sealant materials; cleaning and preparation of cracks to be sealed; application of sealant material in the prepared cracks; any clean-up; and any incidentals necessary to satisfactorily complete the work.

Payment will be made under:

Pay Item	Pay Unit
Crack Sealing (without Router or Diamond Saw)	Pound
Crack Sealing (with Router or Diamond Saw)	Pound

MILLING ASPHALT PAVEMENT

The work covered by this section consists of milling asphalt pavement in accordance with Section 607 of the North Carolina Department of Transportation Standard Specification for Roads and Structures 2018 and in accordance with this special provision.

The Contractor shall perform profile milling at locations as directed by the Engineer on a say by day basis. Any and all milling for single or multiple locations performed for a single work day shall be considered a single operation and shall be paid for as such. All work including, but not limited to, labor, equipment, incidentals, removal and disposal of materials shall be included in the quote for milling asphalt pavement. Payment for milling pavement shall be made as follows:

Milling Asphalt Pavement	Day
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FOAM INSTALLATION- Slab Leveling, Undersealing and Voidfilling:

HDPF (High Density Polyurethane Foam) Processes - General and Slab Leveling, Undersealing and Voidfilling

Material

The medium used for Slab Leveling, Undersealing and Voidfilling shall be a blown high-density polyurethane. The material shall be hydrophobic.

The high-density, closed cell, polyurethane system shall exhibit the following physical characteristics and properties:

DENSITY, Lbs/Ft ASTM 1622	COMPRESSIVE STRENGTH ASTM 1621
3.0	40 psi
3.5	50 psi
4.0	60 psi
6.0	110 psi

The polyurethane foam system will have a free rise density of 3.0 - 4.2 lb/ft, with a minimum compressive strength of 40psi. The expansion of the polyurethane foam under pressure increases the foam density above the original free rise density value. The compressive strength is a function of density of the tested material; therefore the foam produced during the lifting process will normally have a higher compressive strength than foam produced without restriction (free rise).

Equipment

A listing of lifting and under sealing equipment shall be submitted to the Engineering Department for review. The minimum list of equipment required shall be as listed below. The listing is a minimum and shall not preclude the use of additional equipment.

- A. A pneumatic drill and an electric drill capable of drilling 5/8" – 3/4" dia. Holes.
- B. A dynamic penetrometer.
- C. A truck-mounted pumping unit capable of injecting the high-density polyurethane formulation below the concrete slab or asphalt pavement into the sub-surface soils.
- D. A laser level or dial indicator devices capable of monitoring and verifying that the concrete slab or asphalt pavement is raised to the required elevation.

Contractor Pre-Qualification Requirements

The Contractor shall have a minimum of three years of experience in performing this type of work and a minimum of 10 projects on which the contractor has successfully completed this type of work. Prior to beginning work, the Contractor shall submit certification to the Engineer that the Contractor meets the minimum required experience. The certification shall include a listing of previous clients with contract name and phone numbers.

Prior to being approved for performing this type of work, the following documents shall be supplied by the Contractor to the Engineer and found to be acceptable:

- A. A report from an industrial hygienist who has conducted a personnel, production vehicle and typical jobsite safety review of the contractor's implementation procedures involving the polyurethane material.
- B. A copy of the Contractor's Employee Safety Manual specific to polyurethane pavement raising and undersealing work.

Construction Methods

Final elevations shall be within 1/4" of the elevations proposed by profile, to the extent permitted by the structure, existing construction and site conditions. A tight string line may be used to monitor and verify elevations for slab lengths of 50 foot or less. For longer sections, a laser level will be used to monitor and verify elevations. Elevations can also be verified by flooding the area to confirm that the paving has been realigned properly. The Contractor shall be responsible for any pavement blowouts or excessive pavement lifting which may result from process and shall repair the damaged area to the satisfaction of the Engineer without additional cost.

The HDPF shall reach 90% of the full compressive strength in 15 minutes after injection.

HDPF Slab Leveling, Undersealing and Voidfilling

For leveling and undersealing, the Contractor shall prepare concrete to be leveled by profiling existing pavement and determining where the pavement needs to be raised. Voidfilling shall be in areas as indicated and as directed by the Engineer. A series of 5/8" holes shall be drilled into the pavement 6-8 foot O.C. (exact locations and spacing to be determined in the field). The expanding HDPF material shall be injected under the slab. The amount of rise shall be controlled by regulating the rate of HDPF injected. Injection holes shall be sealed with non-expansive cementitious grout once leveling is complete.

Measurement

The polyurethane material shall be paid for by the pound, which will include furnishing and injecting material.

Double Verification of Actual Pounds pumped will be accomplished as follows:

1. A conversion from pump counters to pounds will be provided with a manufacturer's certification of the accurate conversion factor.
2. A visual measurement conversion on the actual totes/barrels of pounds per inch pumped.

Basis of Payment

The quantity of material to be paid for shall be the quantity actual used, based on the contract unit price shown on the bid form. Only those items shown on the bid sheet shall be paid directly. All other labor, tool, equipment, and incidentals necessary for the completion of the project shall be considered incidental to the contract bid items.

Payment will be made as follows:

Foam Installation – HDPF Slab Leveling, Undersealing and Voidfilling	Lbs
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FOAM INSTALLATION-Soil Stabilization

Important Notice

The information contained herein related to material selection, installation techniques and instruction is general in nature and may not be applicable to a particular project. Specific installation procedures, material requirements, and measuring techniques should be determined after careful analysis of the conditions and desired results of the actual project. We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

Specification describes pressure injection of soils to stabilize weak and loose soils and stop water migration through injected soils using a hydrophobic polyurethane injection resin.

1.01 Purpose

- A. Furnish all materials, labor, tools and equipment to stabilize soils as indicated on drawings or in contract documents.

1.02 Related Work

- A. None

1.03 Quality Assurance

- A. Manufacturer of polyurethane material shall have been in existence for a period of not less than 15 (fifteen) years.
 - 1. The Contractor must provide the Engineer with job references where they have successfully completed 10 (ten) projects using moisture activated hydrophobic polyurethane resins for soil stabilization.

1.04 Delivery, Storage, and Handling

- A. Deliver the specified products in original, unopened containers with manufacturer's name, labels, product identification, and batch numbers intact.
- B. Store and condition the specified product as recommended by the manufacturer.

1.05 Job Conditions

- A. Do not apply the material if it is or it appears that it will be raining or snowing unless precautions are taken to protect the material from moisture. If temperature is or will be below 34 degrees F protect grout from freezing. Ice or the formation of ice can prevent grout penetration and travel.
- B. Contractor will take all precautions necessary to insure that no damage will occur to any work zone due to handling or pumping of the polyurethane resin.

Part 2 Materials

2.01 Acceptable Manufacturers

- A. Prime Flex 920, as manufactured by Prime Resins, Inc., Conyers, Georgia (800-321-7212) is considered to conform to the requirements of this specification and has performed satisfactorily for soil stabilization.

- B. The use of a product other than specified will be considered providing the Contractor requests its use in writing to the Engineer. The request shall be accompanied by a notarized certification of compliance from an approved independent testing laboratory that the proposed substitute product meets or exceeds the specified performance criteria, tested in accordance with the specified test standards, and documented proof that the proposed product has a proven record of performance of soil stabilization, confirmed by actual field tests and five successful installation that the Engineer can investigate.
- C. The installing contractor must have a minimum of at least ten successful soil stabilization projects utilizing moisture activated hydrophobic polyurethane injection resins and be able to provide project lists and references to the Engineer.

2.02 Performance Criteria

A. Physical properties of polyurethane resin:

- 1. Water activate resin
- 2. Variable cure rate
- 3. Viscosity 110-130 cps. + -20 cps
- 4. Solids Content 100% solids
- 5. Characteristics Hydrophobic polymer
- 6. Meets ANSI/NSF 61 Approval

B. Physical properties of Catalyst

- 1. Appearance – Clear Liquid
- 2. Viscosity 15-20 cps
- 3. Solids content 100%

C. Physical properties of polyurethane resin cured under pressure:

- 1. Shrinkage – (ASTM D-1042 / D-756) None
- 2. Tensile Properties (ASTM D-1623)
 - a. Tensile strength 23 psi
 - b. Elongation 3%
- 3. ANSI/NSF 61 Approval

2.03 Materials

A. Polyurethane Resin

- 1. Polyurethane resin shall be a single component material that requires catalyst. Adjusting the percentage of catalyst to the base resin shall control reaction time of the grout.
- 2. Material shall be water reactive grout.
- 3. Polyurethane resin shall be based on MDI in combination with pre polyols.
- 4. Polyurethane resin shall be hydrophobic in nature.

Part 3 Execution

3.01 Preparation

- A. Prior to starting work the Owner shall provide the grouting contractor with detailed drawing of all underground utilities in the work zone and all utilities shall be properly marked on the site. If a soil analysis report is not part of the original documents the

- Contractor has the right to request one be provided at no additional cost to the contractor. This may be needed to determine proper probe placement, to identify potential problem areas, and natural differences in soil composition.
- B. Contractor shall determine appropriate spacing and depth placement for injection probes to successfully seal and stabilize area as shown in drawings. Test sections may be necessary to determine best probe spacing depending on soil types and conditions encountered. (Typical spacing will vary between 12" - 60" in each direction and if multiple rows are needed then each row shall be offset ½ the space distance.) Probes: Pipe shall utilize Expendable Drive Point or other acceptable means to keep dirt from clogging pipe during driving. Type and size to be determined by contractor. Pipes may be placed by manual driver, pneumatic driver, auger or water jetting.
 - C. Prior to injecting grout contract shall ensure that the soils contain enough moisture to fully react the grout OR shall use a plural component pump to inject water and grout simultaneously (twin streaming) through injection pipe/probe. When twin streaming is done a ratio of 10:1 (grout:water) shall be used. A pump capable of injection pressures from 100 psi- 3300 psi is recommended. Flow rate of pumps shall be 2.0 gpm minimum. Manually operated or "hand pumps" are considered unacceptable and cannot be used.
 - D. A grout log shall be maintained recording amount of grout and percentage of catalyst used for inspection by the Engineer at all times. Request for payment of grout shall include a copy of grout log detailing quantities used.

3.02 Application

- A. Contractor shall determine amount of grout to be injected into each probe to ensure all areas with the work area are fully grouted. Grouting shall use the "Lift Grouting Technique" where the pipe is raised or jacked up and grout is injected in 12" - 15" intervals or lifts. The amount of grout to be injected at each lift is to be determined by the contractor based on soil conditions for that particular area. Injection pressures will vary depending on soil conditions.
- B. On blow grade structures grouting can also be done via the "through wall" method. This involved drilling holes through a wall (or floor) and grouting via these holes. In some cases it may be necessary to install soil pipes to transfer grout further out into the soils. Contractor to determine appropriate hole spacing to ensure desired results.
- C. Adhere to all limitations and cautions set forth by the manufacturer.

3.03 Safety

- A. Copy of data sheet and Materials Safety Data Sheet (MSDS) of all chemicals used must be on site at all times.
- B. Workers must wear protective rubber gloves, full protection (front and side) safety glasses, chemical goggles or face shield and any other necessary precautions as outlines in product MSDS when handling or pumping grout.

3.04 Cleaning

- A. Flush the pump and hoses with approved pump flush. Do not use solvents to clean off human skin.
- B. Uncured polyurethane resin can be removed from tools with an approved solvent. Cured polyurethane can only be removed mechanically.

- C. Remove all pipes from work area. Leave work area clean and neat.
- D. Leave work area clean and neat.

Part 4 Payment

4.01 Measurement

- A. Lump sum price shall be given for mobilization, all necessary tools, equipment, labor, permits, materials except for Chemical Grout, Catalyst, and piping.
- B. Unit price for pipe shall be based on actual quantity of pipe used and shall be measured by the lineal foot. Lineal foot price shall include placement, all pipefittings, modifications (cutting, threading, etc.) and accessories including drive tips and probes.
- C. Unit price for Chemical Grout shall be based on actual quantity of chemical grout (including catalyst) pumped in gallons. Payment shall be made based on quantities reported in grout logbook.

Basis of Payment

The quantity of materials to be paid for shall be the quantity actual used, based on the contract unit price shown on the bid form. Only those items shown on the bid sheet shall be paid for directly. All other labor, tool, equipment, and incidentals necessary for the completion of the project shall be considered incidental to the contract bid items.

Payment will be made as follows:

Foam Installation – Soil Stabilization

Gals

BRIDGE DECK JOINT REPAIR

SILICON EXPANSION JOINT REPLACEMENT

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the silicon expansion joint in accordance with the manufacturer's recommendation. The expansion joint shall be replaced with the materials stated in this contract.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, date of manufacture, batch number, trade name brand, and quantity. Sufficient material to perform the entire expansion joint shall be "on hand" prior to removing the existing expansion joint. Stored materials may be inspected prior to their use and shall meet the requirements of these provisions. Each shipment of repair material shall be accompanied by Material Safety Data Sheets (MSDS) and a certificate of compliance certifying that the materials conform to the requirements of these provisions. The repair material shall be one of the following approved products:

Joints less than or equal to one (1) inch in width:

Sealant – Dow 888

Baysilon 960 (silicon based)

Joints greater than one (1) inch in width:
Sealant – Dow 902 (silicon based)

The entire cost for the silicon expansion joint replacement including but not limited to labor, maintenance, equipment, tools and incidentals will be included in the unit prices for Silicon Joint Replacement.

Payments shall be made under:

Pay Item	Pay Unit
Silicon Joint Replacement	Linear Feet

EVAZOTE EXPANSION JOINT REPLACEMENT

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the evazote expansion joint in accordance with the manufacturer's recommendation. Contractor shall have a manufacturer's representative present during the installation of the first evazote expansion joint of the project. The expansion joint shall be replaced with the materials stated in this contract.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, date of manufacture, batch number, trade name brand, and quantity. Sufficient material to perform the entire expansion joint shall be "on hand" prior to removing the existing expansion joint. Stored materials may be inspected prior to their use and shall meet the requirements of these provisions. Each shipment of repair material shall be accompanied by Material Safety Data Sheets (MSDS) and a certificate of compliance certifying that the materials conform to the requirements of these provisions.

Evazote Joint Seal Specifications

Use preformed seals compatible with concrete and resistant to abrasion, oxidation, oils, gasoline, salt and other materials that are spilled on or applied to the surface. Use a low-density closed cell, cross-linked ethylene vinyl acetate polyethylene copolymer nitrogen blown materials for the seal. Use seals manufactured with grooves 1/8" (3 mm) ± wide by 1/8" (3 mm) ± deep and spaced between 1/4" (6 mm) and 1/2" (13 mm) apart along the bond surface running the length of the joint. Use seals sized so that the depth of the seal meets the manufacturer's recommendation, but is not less than 70% of the uncompressed width. Provide a seal designed so that, when compressed, the center portion of the top does not extend upward above the original height of the seal by more than 1/4" (6 mm). Splice the seal using the heat welding method by placing the joint material ends against a Teflon heating iron of 350°F (177°C) for 7-10 seconds, then pressing the ends together tightly. Do not test the welding until the material has completely cooled. Use material that resists weathering and ultraviolet rays. Provide a seal that has a working range of 30% tension and 60% compression and is watertight along its entire length including the ends. Have the top of the evazote seal clearly shop marked. Inspect the evazote seals upon receipt to ensure that the marks are clearly visible upon installation.

Provide seals that meet the requirements given below.

TEST	TEST METHOD	REQUIREMENT
Elongation at break	ASTM D3575	210 ± 15%
Tensile strength, psi (kPa)	ASTM D2575	110 ± 15 (755 ± 100)
Compression Recovery (% of original width)	AASHTO T42 50% compr. For 22 hr. @ 73°F (23°C) ½ hr. recovery	87 ± 3
Weather/Deterioration	AASHTO T42 Accelerated Weathering	No deterioration for 10 years min.
Compression/Deflection	@ 50% deflection of original width @ 50% deflection of original width	10psi (69 kPa) min. 60 psi (414 kPa) max.
Tear Strength, psi (kPa)	ASTM D624	16 ± 3 (110 ± 20)
Density	ASTM D545	2.8 to 3.4
Water Absorption (% vol/vol	ASTM D3575 Total immersion for 3 months	3

Adhesives

Use a two component, 100% solid, modified epoxy adhesive with the seal that meets the requirements of ASTM C881, Type 1, Grade 3, Class B & C and has the following physical properties:

Tensile strength	3500 psi (24.1 MPa) min.
Compressive strength	7000 psi (48.3 MPa) min.
Shore D Hardness	75 psi (0.5 MPa) min.
Water Absorption	0.25% by weight

Use an adhesive that is workable to 40°F (4°C). When installing in temperatures below 40°F (4°C) or for application on moist, difficult to dry concrete surfaces, use an adhesive specified by the manufacturer of the joint material.

Joint Preparation

After removal of existing joint, area must be sand-blasted immediately prior to installation of the new joint. Blasting medium shall be a non-silica product. Blasting medium shall be swept up and removed from the project. Traffic shall be protected from blasting operations. Joint shall be re-cleaned (and re-blasted if necessary), if joint installation is delayed and joint is determined to be unsuitable due to dirt, oils, etc. Exact size of joint seals to be used where joints have been repaired with elastomeric concrete shall be determined after the elastomeric concrete work is completed.

Seal Installation

Do not install the joint seal if the ambient air temperature is below 45°F (7°C).

Begin installation at the low end of the joint after applying the mixed epoxy to the sides of both the joint material and both sides of the joint, making certain to completely fill the grooves with epoxy. With gloved hands, compress the material and with the help of a blunt probe, push it down into the joint until it is recessed approximately 1/4" (6 mm) below the surface. Do not push the seal at an angle that it would stretch the material. Once work on a joint begins, do not stop until it is completed. Clean the excess epoxy off the surface of the joint material *quickly* and *thoroughly*. Do not use solvents to remove excess epoxy. Remove excess epoxy in accordance with the joint manufacturer's recommendations.

The entire cost for the Evazote expansion joint replacement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Evazote joint replacement.

Payments shall be made under:

Pay Item	Pay Unit
Evazote Joint Replacement	Linear Feet

SAW-CUTTING FOR EVAZOTE EXPANSION JOINTS

The Engineer may require saw-cutting of the expansion joint prior to the placement of Evazote. When this is required, a track mounted saw shall be used and the cut shall be in a continuous and straight line parallel to the existing joint.

Payment shall be made under:

Pay Item	Pay Unit
Saw-Cutting for Evazote Expansion Joints	Linear Feet

EVAZOTE EXPANSION JOINT PLACEMENT IN OPEN JOINTS

Contractor shall cut or mill concrete deck along the existing open expansion joints to create a ledge for the Evazote expansion joint material to rest on. This indentation shall be constructed in a continuous and straight line parallel to the existing joint. It must be constructed to the necessary depth for the material to be installed according to the manufacture's specifications. All areas shall be smooth and clean before Evazote material is to be placed. The Evazote expansion joint shall then be placed in accordance with the manufacturer's recommendations.

The entire cost for the cutting or milling of the open joint and the Evazote expansion joint placement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Open Joint Evazote Placement.

Payment shall be made under:

Pay Item	Pay Unit
Open Joint Evazote Placement	Linear Feet

ASPHALT JOINT REPAIR AND REPLACEMENT

Joint material shall be hot applied, pre-mixed bituminous material that will provide a smooth riding surface and a waterproof joint. The Contractor shall prepare the surface to be repaired by saw cutting to a minimum of 20" wide and 2" depth, per manufacture's specifications, or as directed by the Engineer, removing all loose material and cleaning the area with compressed air.

No repairs shall be made during periods of rain, snow, or sleet. Standing water shall be removed prior to placement of material.

Steel bridging plates shall be used as needed to provide load transfer across the joint opening. Plates shall be plate steel, 1/8" to 1/4" thick, and 4" to 9" wide.

Bulking aggregate shall be chosen from the Basalt, Gritstone, Gabbro or Granite family. Only 1/2" to 1" size stone shall be used.

Material Requirements

All materials shall meet the specifications as approved by the Engineer prior to use. The joint material shall be one of the following approved products:

FibreJoint, A/P Bridge Flex Joint, or other NCDOT approved material

Payment shall be made under:

Pay Item	Pay Unit
Asphalt Joint Repair/Replacement (18"-24" wide with plate	Cubic Feet

FIBREJOINT

MATERIAL SPECIFICATIONS OF THE FIBREJOINT ASPHALTIC PLUG EXPANSION JOINT SYSTEM BY FIBRECRETE TECHNOLOGIES, LLC

Scope

This work shall consist of supplying and installing a binder and aggregate system composed of specially blended polymer modified asphalt and specific aggregate placed in layers into a prepared expansion joint block-out. When properly installed, the FibreJoint system by FTL will provide a flexible waterproof bridge joint, which will allow for a joint movement of 1" in expansion and 1" in compression.

Material

Binder Material

The bridge joint binder shall be polymer modified asphalt, as manufactured by Fibrecrete Technologies, LLC, and shall meet the following requirements when tested according to ASTM test methods:

TEST METHOD TYPICAL VALUES

Softening Point ASTM D-36	180°F (82°C)
Tensile Adhesion ASTM D-5329	750% Min.
Ductility @ 77°F (25°C) ASTM D-113	40 cm Min.
Penetration ASTM D-5329	90 dmm Max.
77°F (25°C) 150g, 5 sec.	
0°F (-18°C) 200g, 60 sec.	0 dmm Min.
Flow 5h @ 140°F (60°C) ASTM D-5329	3.0 MM Max.
Resilience @ 77°F (25°C) ASTM D-5329	40% Min.
Asphalt Compatibility ASTM D-5329	Pass
Recommended Pouring Temperature	390°F (199°C)
Safe Heating Temperature	410°F (216°C)

Aggregate

The stone shall be FibreJoint Bulking Stone. The specified aggregate shall be crushed, double washed and shall meet the following requirements:

Screen Size Percent	
Passing 1”	100%
½”	9%

INSTALLATION SPECIFICATIONS OF THE FIBREJOINT ASPHALTIC PLUG EXPANSION JOINT SYSTEM BY FIBRECRETE TECHNOLOGIES, LLC.

INSTALLATION CREWS

The FibreJoint™ System is to be installed only by factory trained and certified installation professionals.

EQUIPMENT

The equipment will consist of:

- Small self-propelled dry cut saw.
- Pneumatic compressor of 185 CFM capacity.
- One Hot-Compressed Air Lance (HCA Lance), capable of delivering a flame retarded air stream with a temperature of 3,000°F (1,648°C), at a speed of 3,000 feet per second
- Rotating vented or un-vented drum type mixers each with a Hot-Compressed Air Lance (HCA Lance), or a pressure-air injection torch (PAT torch).
- Melter unit equipped with agitation and an automatic temperature control which can accurately maintain the material temperature from 100°F - 375°F. A thermometer to monitor the material temperature must be provided. The burner system shall have a safety pilot capable of shutting off the gas supply in the event of a flame-out.
- 100lb bottles of propane or smaller.
- Vibratory roller or plate capable of compacting up to 1” in one pass.
- Hand held calibrated digital temperature sensor.
- Chop-saw with carbide blade, if needed.
- Sandblasting equipment, required only for installation in a concrete overlay.

- Safety clothing and equipment as required by OSHA.

INSTALLATION

The following procedures are to be followed to ensure a successful installation:

Note: FibreJoint must be installed at a minimum depth of two inches (2") in order to perform correctly.

Marking Out: FibreJoint™ System shall be located centrally over the deck expansion gap or fixed joint and marked out to the recommended width of 20".

Excavation: The joint shall be excavated by the use of saws and pneumatic hand tools. Where possible, saws shall be set to cut the full required depth of the wearing surface and any membrane present. Variations in the depth of the wearing surface across the road should be considered to insure, where possible, that the deck is not damaged. All debris from the excavation channel shall be removed to allow the full volume of new joint to be installed.

Cleaning: The entire channel must be thoroughly cleaned and dried. Small debris will be removed by using compressed air. The Hot Compressed Air Lance will then be applied throughout the length of the channel. Installation in concrete overlays requires sandblasting of the concrete vertical walls and adjacent deck area prior to the use of the HCA Lance application.

Repairs: Spalled and defective concrete should be repaired with an approved material as agreed upon by the Engineer.

Caulking: The gap shall be caulked with the backer rod, allowing for approximately 1" of binder in the gap on top of the rod. If the previous caulking is intact and will hold the binder, it may be used to take the place of the backer rod. A small amount of hot binder should be placed onto the caulking to insure that the gap is adequately plugged.

Tanking: Immediately after cleaning and caulking, the entire channel shall be coated with a thin layer of hot binder. If significant delay occurs, the channel shall be inspected to determine if re-cleaning is necessary.

Plating: The gap shall be bridged with the steel plates centered over the gap. There must be at least 2" between the edge of the steel plate and the wall of the channel. The top of the plate shall be coated with a thin layer of hot binder.

MATERIAL PREPARATION

Aggregate: The aggregate must be heated in a vented or un-vented rotating drum mixer by the use of a hot compressed air lance (HCA Lance), or a pressure air injection torch (PAT torch). Once the aggregate has been heated to a temperature of 370° - 380°F (188° - 193°C) it is then coated with a small quantity of binder. One gallon of binder per 100 lbs of stone should be sufficient to coat the stone.

Binder: The binder shall be heated to the recommended pouring temperature, 370° - 385°F (188° - 196°C). At no time shall the recommended safe heating temperature of 400°F (204°C) be exceeded.

Material Installation: Layers of hot pre-coated aggregate not more than 2.5” thick shall be placed in the channel and immediately covered to the level of the coated aggregate. This will ensure that the 3:1 weight ratio of aggregate to binder has been achieved. Layers shall be raked to insure the aggregate is completely coated and that all air pockets are eliminated. This process shall cease approximately three-quarters of an inch (3/4”) from the top of the channel.

Surface Layer: The surface layer shall be applied as other layers except that the pre-coated aggregate is not flooded with binder. The pre-coated aggregate shall be transferred to the joint and leveled slightly higher than the adjacent road surface. On a standard 2” deep joint, the topcoat should be one quarter inch (1/4”) higher than the road surface. Deeper joints will require higher levels before tamping.

Compaction: Compaction should take place after the point has cooled to approximately 225°F (107°C). The joint surface shall be made approximately level with the existing road surface by using the vibratory plate or roller.

Top Coating: After compaction, lines of 4” tape are placed one inch beyond the joint width on each side of the joint to insure evenness of appearance. The joint and at least one inch of the road surface shall be top-coated with the hot binder until the surface is smooth and absent of voids.

Note: If it is impossible to topcoat the joint during the same working day/night, it is allowable that the topcoat step be completed on the next working day/night. However, the surface must be cleaned, dried and heated with the HCA Lance.

Surface Dressing: Immediately after top-coating, an anti-skid material is spread evenly over the joint to eliminate material tracking (Black Beauty Sand, Medium Grade).

Final Preparation: Prior to departure the crew will insure that the entire work area is clean of debris.

Temporary Joint: In the event of a work stoppage while constructing a joint, the following procedure can be used for low ADT roadways (<20,000). Fill the cavity with cold uncoated aggregate to the level of the road surface and top the aggregate with binder to form a temporary riding surface. Roadways with an ADT greater than 20,000 will require materials similar to a cold patch asphalt. Be sure whatever is used is approved by the State Agency.

QUALITY CONTROL

Upon request, certifications of the materials will be provided.

ELASTOMERIC CONCRETE PLACEMENT

Contractor shall repair damaged concrete adjacent to expansion joints as directed by the Engineer with elastomeric concrete.

Contractor shall submit falsework plans for approval. Falsework plans shall take into account expansion of the bridge deck due to changes in temperature.

Do not place elastomeric concrete if the ambient air temperature is below 45°F (7°C). Prepare and apply a primer, as per manufacturer’s recommendations, to all vertical concrete faces, all steel components to be

in contact with elastomeric concrete, and to areas specified by the manufacturer. Align the angles with the joint opening.

Prepare, batch and place the elastomeric concrete in accordance with the manufacturer’s instructions. Place the elastomeric concrete while the primer is still tacky and within 2 hours after applying the primer. Pay careful attention to properly consolidate the elastomeric concrete around the steel and anchors.

Tarps are to be utilized under the mixing areas, and the bridge deck joint shall be tapered off to protect the bridge deck from spills during elastomeric concrete installation.

Provide materials that comply with the following minimum requirements at 14 days:

CONCRETE PROPERTIES	TEST METHOD	MINIMUM REQUIREMENT
Bond, psi (Strength to Concrete MPa)	ASTM D638 (D638M)	450 (3.1)
Brittleness by Impact, ft-lb (kg-m)	Ball Drop	7 (0.97)
Compressive Strength, psi (MPa)	ASTM D695 (D695M)	2800 (19.3)

BINDER PROPERTIES (without aggregate)	TEST METHOD	MINIMUM REQUIREMENT
Tensile Strength, psi (MPa)	ASTM D638 (D638M)	800 (5.5)
Ultimate Elongation	ASTM D638 (D638M)	150%
Tear Resistance, lb/in (kN/m)	ASTM D624	90 (15.7)

In addition to the requirements above, use elastomeric concrete that also resists water, chemical, UV and ozone exposure and withstands extreme temperature (freeze-thaw) changes.

Furnish a manufacturer’s certification verifying that the materials satisfy the above requirements.

Provide samples of elastomeric concrete to the Engineer, if requested, to independently verify conformance with the above requirements.

The entire cost for joint repair using elastomeric concrete including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Joint Repair using Elastomeric Concrete. Linear feet measurement will include both sides of the joint to be repaired.

Payment shall be made under:

Pay Item	Pay Unit
Joint Repair using Elastomeric Concrete (16” wide or less and 2” deep or less)	Linear Feet
Joint Repair using Elastomeric Concrete (Greater than 16” wide or greater than 2” deep)	Cubic Feet

REHABILITATING PIPE REPAIR

Scope of Work

The scope of work on this project involves rehabilitating various sizes of in situ corrugated metal pipe. Rehabilitation includes utilizing approved hydrophilic polyurethane resin for joint sealing, a hydrophobic polyurethane injection resin to backgrout all necessary joints and fastening culvert grade aluminum plates using stainless steel fasteners throughout the corroded invert. An approved moisture activated hydrophobic polyurethane injection resin will then be pumped beneath the aluminum plates to fill voids and stabilize the bottom of the pipe in this area. The material is to be installed per the approved manufacturer's instructions. If required, a two-component elastomeric membrane will be spray-applied to the pipe interior above the plated invert.

Dewatering and Cleaning

The General Contractor will be responsible for all dewatering of conduit in preparation for sealing, backgrouting and coating process if the dewatering process can be obtained by the use of a single 3" (or less) centrifugal water pump. All other dewatering activities shall be completed by NCDOT. **All permits required by ACOE, DWQ or any other agencies shall be the responsibility of the NCDOT.** The Contractor shall be responsible to follow all requirements listed in these permits.

The Contractor shall be required to clean the conduit prior to any repairs.

Payments shall be made under:

Pay Item	Pay Unit
Dewatering and Cleaning	Per Day

Materials

Hydrophilic Polyurethane Injection Resin

Hydrophilic polyurethane injection resin for use in construction of containment dams and joint repair shall be a hydrophilic polyurethane resin. A certification from ANSI/NSF for use in potable water systems shall be submitted and approved by the contracting officer prior to use. Typical physical properties at 73° F are:

Appearance:	Amber liquid
Viscosity:	250-350 cps
Wt. Per Gal.:	8.65 lbs
Solids Cont:	88%
Induction Time:	3 to 4 minutes
Cure Time:	5 to 6 minutes

Cured foam tests

Bond Strength:	60 psi	ASTM 882
Tensile Strength:	450 psi	ASMT D-3574
Elongation:	350%	ASTM D-3574
	64%	ASTM 1623, free rise
Shrinkage:	less than 2%	ASTM D-1042/D-756
Int. Lin. Shrink.:	5%	
Tear Resist.:	21 lbs/in	ASTM D-3574
Density:	610 kg/m ³	

Hydrophobic Polyurethane Resin

Polyurethane injection resin for use in backgrouting and filling voids shall be a moisture activated hydrophobic polyurethane resin. This material shall utilize a catalyst to activate timed expansion as required by the site conditions. A certification from ANSI/NSF for use in potable water systems shall be submitted and approved by the contracting officer prior to use. Typical physical properties at 73° F are:

Appearance:	brown liquid
Viscosity:	120 cps
Wt. Per Gal.:	9.34 lbs
Solids Cont:	100%

Cured foam tests

Tensile Strength:	41 psi	ASMT D-3574
Elongation:	3.4%	ASTM D-3574
Shrinkage:	none	ASTM D-1042/D-756

Typical physical properties of Catalyst at 73° F are:

Appearance:	clear liquid
Viscosity:	15-20 cps
Wt. Per Gal.:	8.73 lbs
Solids Cont:	100%

The jute oakum for use as a composite containment dam shall consists of a fibrous twisted jute rope, dry and oil free meeting Federal Specification HHP117, T-1.

Aluminum Plating

Aluminum alloy sheets shall conform to the applicable requirements of AASHTO M 197 for alclad alloy 3004-H34 or H32. All sheets shall be new and unused and a minimum of 16-gage nominal thickness, unless otherwise specified.

Two-component Elastomeric System (optional)

This system shall be a waterborne, polymer-modified, two-component elastomeric system that is spray applied to form a non-toxic, seamless fully bonding monolithic membrane. The contractor shall be a certified applicator and approved for this type of work to insure conformance to manufacturer's instructions.

This system shall be certified to meet the following physical properties:

<u>Test</u>	<u>Result</u>	<u>Method</u>
Elongation	>1,750 %; Max machine stroke reached	ASTM D412
Tensile Strength	No failure; Max machine stroke reached	ASTM D412
Recovery	95%	ASTM D412
Peel Strength	Material does not peel from substrate	ASTM D903
Puncture Resistance	No puncture at deflection at 12.5" Maximum machine stroke reached	ASTM E154
Low Temp Elong. (at 22° F)	>500%	ASTM D412-92
High Temp Aging (48 days at 176°)	Elongation >300% min. No deterioration at failure	ASTM D240
Service Temp.	-35 to 176° F No deterioration at failure	ASTM D412-92 ASTM D746
Water Absorption	Wt. change 1.02% maximum	ASTM D570
Water Vapor Trans.	0.08 grains/hr./ft ²	ASTM E96
Permeance	0.16 grains/hr./ft ² /in Hg (perms)	ASTM E96
Resist Hydro Head	>150 ft water, no leak observed	Calders Testing Hydro Stand 10-30K
Ozone Exposure (41 days @ 100 ppm, maintained at 95° F)	Period equivalent to 14 yrs. Exposure in outdoor ambient environment No deterioration at failure	ASTM G19 ASTM D756
Salt Fog Exposure (@ 95° F for 1,000 hours)	No deterioration at failure	ASTM B117-90
Biomonitoring (daphnia, fathead Minnow, algal)	Passed	SeaCrest Int'l.

Cathodic Disbond	No disbondment	ASTM G8
Class A Fire Rating (1/2":12 slope)	Passed	ASTM E108-94
UV Light Expos.	Period equivalent to 57 yrs. Exposure in outdoor ambient environment	ASTM G26
Accel. Aging	Period equivalent to 61 yrs.	ASTM D573
Noise Reduction ASTM E492	98% @205 mils	ASTM E1007

Submittals

Submittals for all materials, contractor experience and a copy of the contractor's confined safety plan as referenced herein shall be provided to the NCDOT Engineer for approval one week prior to work being initiated. No work shall be performed without express written approval by the Engineer/Owner.

Experience and Certification

Contractor shall provide the Department with ten (10) projects, including references and contact information, where pipe culvert rehabilitation described herein was successfully performed within the two years. Contractor shall provide approved applicator certification from manufacturers of polyurethane resins and two component elastomeric system, as described herein. **Onsite supervisor must be NCDOT Level I or II certified for Erosion and Sedimentation Control.** Certifications are to be submitted accordingly (see Submittals).

Installation

1. Cleaning and Preparation

Culvert inverts will be cleaned using high-pressure power washer and hand-brooming. Protruding areas in the invert caused by corrosion such as severe pitting or perforations will be either cut away and disposed of at the contractor's expense or hammered out so area no longer protrudes into pipe interior.

2. Inlet Protection

When required, a small toe wall will be constructed underneath existing pipe inlet to prevent further undermining and to hold replaced bedding. The toe wall will be located at the interface with the existing embankment and the projection point of the culvert. It will be constructed by using either sand bags or cement bags at the direction of the engineer. If needed, a lightweight nonwoven geotextile will be placed on the soil side of the wall to help prevent soil migration.

3. Invert Protection

Eroded bedding underneath the pipe will be replaced with washed pea gravel where perforations and large voids exist permitting access to these areas.

Minimum 16-gage aluminum alloy plates shall conform to the applicable requirements of AASHTO M 197 or ASTM B209 for alclad alloy 3004-H34 or H32 plates will be placed in the invert using stainless steel, self-tapping screws or fasteners. Heavier gage plates may be used in larger structures > 48" diameter. Fasteners shall be secured as follows into competent steel:

Circumferentially at overlaps: 6-inch spacing
Longitudinally: 18-inch spacing
Circumferentially: 24-inch spacing

The bottom of plates shall be precoated with an elastomeric field coating system (see #6 below). The plates will be shingled such that the leading edges will not be exposed to hydraulic traffic and underneath the trailing edge of the adjacent upstream plate. The plates covering areas where bedding has been eroded will be equipped with Zerk-type fittings to facilitate pumping of hydrophobic polyurethane injection resin. The spacing of these fasteners shall be no more than 18" centers in each direction. A moisture activated hydrophobic polyurethane injection resin meeting all requirements shall be pumped underneath plates using Zerk-type fittings to fill voids underneath pipe invert.

Payments shall be made under:

Pay Item	Pay Unit
Repairs to corrugated metal pipes	Per SF

4. Sealing Pipe Joints

All interior pipe joints, when required, shall be sealed using a containment dam consisting of polyurethane as specified above along with an approved jute oakum. Clean area in joint, removing soil, grease or chemical contaminates with water and scrub brush. Spray joint with water prior to inserting containment dam. Cut the oakum into appropriate lengths and saturate with hydrophilic polyurethane resin. Rubber gloves shall be used while handling activated oakum. Avoid breathing urethane vapors (see Ventilation). Submerge saturated oakum in water per manufacturer's instructions. Force oakum into joint and drive in as deep as possible with screwdriver or pry bar. Allow to cure.

Drill 3/8" injection port holes at approximately 18" cc around the periphery of each joint. Clean holes by injecting water through a wand that will reach the back of the hole. Insert injection ports, flush water into the port holes, leaving the fittings off.

Payments shall be made under:

Pay Item	Pay Unit
Sealing Pipe Joints	Per LF

5. Backgrouting Pipe Joints

Mix the appropriate ratio of catalyst to hydrophobic polyurethane resin as the conditions require, following the recommended rates per the manufacturer. Apply first fitting to port in the bottom and pump resin at a pressure of 250 psi minimum or per manufacturer's instructions. When material begins to flow out of next port up, apply fitting and begin pumping in through that port, working around the entire perimeter of the joint.

Payments shall be made under:

Pay Item	Pay Unit
Backgrouting/Void Filling at Pipe Joints	Per Gal.

*Optional

6. Waterborne, Polymer Modified, Two Component Elastomeric Coating

Subsequent to placement of invert protection, sealing and backpacking the joints, a 60-mil thick coating of an approved polymer modified two-component elastomeric system shall be spray applied in accordance with the manufacturer's instructions. Both components shall be water based, non-flammable, non-hazardous liquids that present no application, transportation or storage hazards. The material shall remain unaffected by long-term ultra-violet exposure. It shall be non-toxic and the application shall not produce VOCs or offensive odors.

Payments shall be made under:

Pay Item	Pay Unit
Placement of Elastomeric Spray-On Coating	Per SF

Confined Space Entry

The contractor and all laborers shall be certified per OSHA regulations for Confined Space Entry. All laborers shall wear full harnesses, meeting OSHA regulations with sufficient lengths of ½ -inch nylon rope tied off at entry. An outside supervisor shall be stationed at the entry during work inside pipe. Supervisor and crew shall communicate using standard-issue 2-way communication devices. The contractor is responsible for entry using a ladder or other acceptable means. Entry security is to be maintained by the contractor during the project and in coordination with the contracting officer. The contractor is to submit copies of Confined Entry Safety plan to NCDOT engineer prior to commencement of work (see Submittals).

Ventilation

A ventilation fan, stationed outside the pipe manhole entry, shall be utilized to pump clean air into the work area. The fan shall employ sufficient duct to force air into the work zone. Contractor is responsible for operation of fan. Air quality detection device with alarm shall be worn to measure exhaustables and other harmful gases, such as hydrogen sulfide.

Clean Up

The contractor is responsible for all necessary clean up.

SITE INVESTIGATION AND REPRESENTATION

The Contractor acknowledges that he has satisfied himself as to the nature of the work, and general and local conditions; particularly those bearing on transportation, availability of labor, and State Regulations for safety required for the prosecution of the work and all matters which can in any way affect the work or cost thereof under this contract. Any failure by the Contractor to acquaint himself with all the available information concerning these conditions will not relieve him from the responsibility for estimating properly the difficulty or cost of successfully performing the work.

SAFETY VESTS and FLAGGER CERTIFICATION

All Contractors personnel, all subcontractors and their personnel, and any material suppliers and their personnel must wear an OSHA approved or MUTCD Class II (Class III at night) reflective vest or outer garment at all times while on the project. All flaggers must be certified.

PROJECT SPECIAL PROVISIONS

ROADWAY

ASPHALT CONCRETE PLANT MIX PAVEMENTS:

(2-20-18) (Rev.1-15-19)

610, 1012

SP6 R65

Revise the 2018 *Standard Specifications* as follows:

Page 6-14, Table 609-3, LIMITS OF PRECISION FOR TEST RESULTS, replace with the following:

TABLE 609-3 LIMITS OF PRECISION FOR TEST RESULTS	
Mix Property	Limits of Precision
25.0 mm sieve (Base Mix)	± 10.0%
19.0 mm sieve (Base Mix)	± 10.0%
12.5 mm sieve (Intermediate & Type P-57)	± 6.0%
9.5 mm sieve (Surface Mix)	± 5.0%
4.75 mm sieve (Surface Mix)	± 5.0%
2.36 mm sieve (All Mixes, except S4.75A)	± 5.0%
1.18 mm sieve (S4.75A)	± 5.0%
0.075 mm sieve (All Mixes)	± 2.0%
Asphalt Binder Content	± 0.5%
Maximum Specific Gravity (G_{mm})	± 0.020
Bulk Specific Gravity (G_{mb})	± 0.030
TSR	± 15.0%
QA retest of prepared QC Gyratory Compacted Volumetric Specimens	± 0.015
Retest of QC Core Sample	± 1.2% (% Compaction)
Comparison QA Core Sample	± 2.0% (% Compaction)
QA Verification Core Sample	± 2.0% (% Compaction)
Density Gauge Comparison of QC Test	± 2.0% (% Compaction)
QA Density Gauge Verification Test	± 2.0% (% Compaction)

Page 6-17, Table 610-1, MIXING TEMPERATURE AT THE ASPHALT PLANT, replace with the following:

TABLE 610-1 MIXING TEMPERATURE AT THE ASPHALT PLANT	
Binder Grade	JMF Temperature
PG 58-28; PG 64-22	250 - 290°F
PG 76-22	300 - 325°F

Page 6-17, Subarticle 610-3(C), Job Mix Formula (JMF), lines 38-39, delete the fourth paragraph.

Page 6-18, Subarticle 610-3(C), Job Mix Formula (JMF), line 12, replace “SF9.5A” with “S9.5B”.

Page 6-18, Table 610-3, MIX DESIGN CRITERIA, replace with the following:

Mix Type	Design ESALs millions ^A	Binder PG Grade	Compaction Levels		Max. Rut Depth (mm)	Volumetric Properties ^B			
			G _{mm} @			VMA % Min.	VTM %	VFA Min.-Max.	%G _{mm} @ N _{ini}
			N _{ini}	N _{des}					
S4.75A	< 1	64 - 22	6	50	11.5	16.0	4.0 - 6.0	65 - 80	≤ 91.5
S9.5B	0 - 3	64 - 22	6	50	9.5	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S9.5C	3 - 30	64 - 22	7	65	6.5	15.5	3.0 - 5.0	65 - 78	≤ 90.5
S9.5D	> 30	76 - 22	8	100	4.5	15.5	3.0 - 5.0	65 - 78	≤ 90.0
I19.0C	ALL	64 - 22	7	65	-	13.5	3.0 - 5.0	65 - 78	≤ 90.5
B25.0C	ALL	64 - 22	7	65	-	12.5	3.0 - 5.0	65 - 78	≤ 90.5
Design Parameter						Design Criteria			
All Mix Types	Dust to Binder Ratio (P _{0.075} / P _{be})					0.6 - 1.4 ^C			
	Tensile Strength Ratio (TSR) ^D					85% Min. ^E			

A. Based on 20 year design traffic.

B. Volumetric Properties based on specimens compacted to N_{des} as modified by the Department.

C. Dust to Binder Ratio (P_{0.075} / P_{be}) for Type S4.75A is 1.0 - 2.0.

D. NCDOT-T-283 (No Freeze-Thaw cycle required).

E. TSR for Type S4.75A & B25.0C mixes is 80% minimum.

Page 6-19, Table 610-5, BINDER GRADE REQUIREMENTS (BASED ON RBR%), replace with the following:

**TABLE 610-5
BINDER GRADE REQUIREMENTS (BASED ON RBR%)**

Mix Type	%RBR ≤ 20%	21% ≤ %RBR ≤ 30%	%RBR ≥ 30%
S4.75A, S9.5B, S9.5C, I19.0C, B25.0C	PG 64-22	PG 64-22 ^A	PG-58-28
S9.5D, OGFC	PG 76-22 ^B	n/a	n/a

A. If the mix contains any amount of RAS, the virgin binder shall be PG 58-28.

B. Maximum Recycled Binder Replacement (%RBR) is 18% for mixes using PG 76-22 binder.

Page 6-20, Table 610-6, PLACEMENT TEMPERATURES FOR ASPHALT, replace with the following:

Asphalt Concrete Mix Type	Minimum Surface and Air Temperature
B25.0C	35°F
I19.0C	35°F

S4.75A, S9.5B, S9.5C	40°F ^A
S9.5D	50°F

- A. For the final layer of surface mixes containing recycled asphalt shingles (RAS), the minimum surface and air temperature shall be 50°F.

Page 6-21, Article 610-8, SPREADING AND FINISHING, lines 34-35, delete the second sentence and replace with the following:

Use an MTV for all surface mix regardless of binder grade on Interstate, US Routes, and NC Routes (primary routes) that have 4 or more lanes and median divided.

Page 6-21, Article 610-8, SPREADING AND FINISHING, lines 36-38, delete the fourth sentence and replace with the following:

Use MTV for all ramps, loops, Y-line that have 4 or more lanes and are median divided, full width acceleration lanes, full width deceleration lanes, and full width turn lanes that are greater than 1000 feet in length.

Page 6-23, Table 610-7, DENSITY REQUIREMENTS, replace with the following:

TABLE 610-7 DENSITY REQUIREMENTS	
Mix Type	Minimum % G_{mm} (Maximum Specific Gravity)
S4.75A	85.0 ^A
S9.5B	90.0
S9.5C, S9.5D, I19.0C, B25.0C	92.0

- A. Compaction to the above specified density will be required when the S4.75A mix is applied at a rate of 100 lbs/sy or higher.

Page 6-24, Article 610-13, FINAL SURFACE TESTING, lines 35-36, delete the second sentence and replace with the following:

Final surface testing is not required on ramps, loops and turn lanes.

Page 6-26, Subarticle 610-13(A)(1), Acceptance for New Construction, lines 29-30, delete the second sentence and replace with the following:

Areas excluded from testing by the profiler may be tested using a 10-foot straightedge in accordance with Article 610-12.

Page 6-27, Subarticle 610-13(B), Option 2- North Carolina Hearne Straightedge, lines 41-46, delete the eighth and ninth sentence of this paragraph and replace with the following:

Take profiles over the entire length of the final surface travel lane pavement exclusive of structures, approach slabs, paved shoulders, tapers, or other irregular shaped areas of pavement,

unless otherwise approved by the Engineer. Test in accordance with this provision all mainline travel lanes, full width acceleration or deceleration lanes and collector lanes.

Page 6-28, Subarticle 610-13(B), Option 2- North Carolina Hearne Straightedge, lines 1-2, delete these two lines.

Page 6-32, Article 610-16 MEASUREMENT AND PAYMENT, replace with the following:

Pay Item	Pay Unit
Asphalt Concrete Base Course, Type B25.0C	Ton
Asphalt Concrete Intermediate Course, Type I19.0C	Ton
Asphalt Concrete Surface Course, Type S4.75A	Ton
Asphalt Concrete Surface Course, Type S9.5B	Ton
Asphalt Concrete Surface Course, Type S9.5C	Ton
Asphalt Concrete Surface Course, Type S9.5D	Ton

Page 10-30, Table 1012-1, AGGREGATE CONSENSUS PROPERTIES, replace with the following:

**TABLE 1012-1
AGGREGATE CONSENSUS PROPERTIES^A**

Mix Type	Coarse Aggregate Angularity^B	Fine Aggregate Angularity % Minimum	Sand Equivalent % Minimum	Flat and Elongated 5 : 1 Ratio % Maximum
<i>Test Method</i>	<i>ASTM D5821</i>	<i>AASHTO T 304</i>	<i>AASHTO T 176</i>	<i>ASTM D4791</i>
S4.75A; S9.5B	75 / -	40	40	-
S9.5C; I19.0C; B25.0C	95 / 90	45	45	10
S9.5D	100 / 100	45	50	10
OGFC	100 / 100	45	45	10
UBWC	100 / 85	45	45	10

A. Requirements apply to the design aggregate blend.

B. 95 / 90 denotes that 95% of the coarse aggregate has one fractured face and 90% has 2 or more fractured faces.

STANDARD SPECIAL PROVISION
AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08)

Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(D) of the *2018 Standard Specifications*.

STANDARD SPECIAL PROVISION

ERRATA

(10-16-18) (Rev.2-16-21)

Z-4

Revise the *2018 Standard Specifications* as follows:

Division 6

Page 6-7, Article 609-1 DESCRIPTION, line 29, replace article number “609-10” with “609-9”.

Division 7

Page 7-27, Article 725-1 MEASUREMENT AND PAYMENT, line 4, replace article number “725-1” with “724-4”.

Page 7-28, Article 725-1 MEASUREMENT AND PAYMENT, line 10, replace article number “725-1” with “725-3”.

Division 10

Page 10-78, Article 1056-4 GEOTEXTILES, TABLE 1056-1, Permittivity, Type 2, replace “Table 6^D” with “Table 7^D” and **Permittivity, Type 3^B,** replace “Table 7^D” with “Table 8^D”.

Page 10-121, Article 1076-7, REPAIR OF GALVANIZING, line 8, replace article number “1080-9” with “1080-7”.

Page 10-162, Article 1080-50 PAINT FOR VERTICAL MARKERS, line 1, replace article number “1080-50” with “1080-10”.

Page 10-162, Article 1080-61 EPOXY RESIN FOR REINFORCING STEEL, line 5, replace article number “1080-61” with “1080-11”.

Page 10-162, Article 1080-72 ABRASIVE MATERIALS FOR BLAST CLEANING STEEL, line 22, replace article number “1080-72” with “1080-12”.

Page 10-163, Article 1080-83 FIELD PERFORMANCE AND SERVICES, line 25, replace article number “1080-83” with “1080-13”.

Division 17

Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, lines 42-44, replace the second sentence with the following:

An example is an installation of a single 1.25 inch HDPE conduit would be paid as:

Directional Drill (1)(1.25”) Linear Foot

STANDARD SPECIAL PROVISION

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, Emerald Ash Borer, Guava Root Knot Nematode, And Other Noxious Weeds)

(3-18-03) (Rev. 5-21-19)

Z-04a

Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a Quarantined County

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-707-3730, or <https://www.ncagr.gov/plantindustry/Plant/quaran/table2.htm> to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
2. Plants with roots including grass sod.
3. Plant crowns and roots.
4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
5. Hay, straw, fodder, and plant litter of any kind.
6. Clearing and grubbing debris.
7. Used agricultural cultivating and harvesting equipment.
8. Used earth-moving equipment.
9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed, emerald

ash borer, guava root knot nematode, or other noxious weeds.

STANDARD SPECIAL PROVISION

MINIMUM WAGES

(7-21-09)

Z-5

FEDERAL: The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

STATE: The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

STANDARD SPECIAL PROVISION

TITLE VI AND NONDISCRIMINATION:

(6-28-77)(Rev 6/19/2018)

Z-6

Revise the *2018 Standard Specifications* as follows:

Replace Article 103-4(B) with the following:

The North Carolina Department of Transportation is committed to carrying out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts.

The provisions of this section related to United States Department of Transportation (US DOT) Order 1050.2A, Title 49 Code of Federal Regulations (CFR) part 21, 23 United States Code (U.S.C.) 140 and 23 CFR part 200 (or 49 CFR 303, 49 U.S.C. 5332 or 49 U.S.C. 47123) are applicable to all North Carolina Department of Transportation (NCDOT) contracts and to all related subcontracts, material supply, engineering, architectural and other service contracts, regardless of dollar amount. Any Federal provision that is specifically required not specifically set forth is hereby incorporated by reference.

(1) Title VI Assurances (USDOT Order 1050.2A, Appendix A)

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(a) Compliance with Regulations

The contractor (hereinafter includes consultants) shall comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

(b) Nondiscrimination

The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

(c) Solicitations for Subcontractors, Including Procurements of Materials and Equipment

In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

(d) Information and Reports

The contractor shall provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor shall so certify to the Recipient or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(e) Sanctions for Noncompliance:

In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it and/or the FHWA may determine to be appropriate, including, but not limited to:

(i) Withholding payments to the contractor under the contract until the contractor complies; and/or

(ii) Cancelling, terminating, or suspending a contract, in whole or in part.

(f) Incorporation of Provisions

The contractor shall include the provisions of paragraphs (a) through (f) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

(2) **Title VI Nondiscrimination Program (23 CFR 200.5(p))**

The North Carolina Department of Transportation (NCDOT) has assured the USDOT that, as a condition to receiving federal financial assistance, NCDOT will comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by Title 49 CFR part 21 and related nondiscrimination authorities to ensure that no person shall, on the ground of race, color, national origin, limited English proficiency, sex, age, or disability (including religion/creed or income-level, where applicable), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs, activities, or services conducted or funded by NCDOT. Contractors and other organizations under contract or agreement with NCDOT must also comply with Title VI and related authorities, therefore:

(a) During the performance of this contract or agreement, contractors (e.g., subcontractors, consultants, vendors, prime contractors) are responsible for complying with NCDOT's Title VI Program. Contractors are not required to prepare or submit Title VI Programs. To comply with this section, the prime contractor shall:

1. Post NCDOT's Notice of Nondiscrimination and the Contractor's own Equal Employment Opportunity (EEO) Policy in conspicuous locations accessible to all employees, applicants and subcontractors on the jobsite.

2. Physically incorporate the required Title VI clauses into all subcontracts on federally-assisted and state-funded NCDOT projects, and ensure inclusion by subcontractors into all lower-tier subcontracts.
 3. Required Solicitation Language. The Contractor shall include the following notification in all solicitations for bids and requests for work or material, regardless of funding source:

“The North Carolina Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. In accordance with other related nondiscrimination authorities, bidders and contractors will also not be discriminated against on the grounds of sex, age, disability, low-income level, creed/religion, or limited English proficiency in consideration for an award.”
 4. Physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only.
 5. Provide language assistance services (i.e., written translation and oral interpretation), free of charge, to LEP employees and applicants. Contact NCDOT OCR for further assistance, if needed.
 6. For assistance with these Title VI requirements, contact the NCDOT Title VI Nondiscrimination Program at 1-800-522-0453.
- (b) Subrecipients (e.g. cities, counties, LGAs, planning organizations) may be required to prepare and submit a Title VI Plan to NCDOT, including Title VI Assurances and/or agreements. Subrecipients must also ensure compliance by their contractors and subrecipients with Title VI. (23 CFR 200.9(b)(7))
 - (c) If reviewed or investigated by NCDOT, the contractor or subrecipient agrees to take affirmative action to correct any deficiencies found within a reasonable time period, not to exceed 90 calendar days, unless additional time is granted by NCDOT. (23 CFR 200.9(b)(15))
 - (d) The Contractor is responsible for notifying subcontractors of NCDOT’s External Discrimination Complaints Process.
 1. Applicability
Title VI and related laws protect participants and beneficiaries (e.g., members of the public and contractors) from discrimination by NCDOT employees, subrecipients and contractors, regardless of funding source.

2. Eligibility

Any person—or class of persons—who believes he/she has been subjected to discrimination based on race, color, national origin, Limited English Proficiency (LEP), sex, age, or disability (and religion in the context of employment, aviation, or transit) may file a written complaint. The law also prohibits intimidation or retaliation of any sort.

3. Time Limits and Filing Options

Complaints may be filed by the affected individual(s) or a representative and must be filed no later than 180 calendar days after the following:

- (i) The date of the alleged act of discrimination; or
- (ii) The date when the person(s) became aware of the alleged discrimination; or
- (iii) Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

Title VI and related discrimination complaints may be submitted to the following entities:

- North Carolina Department of Transportation, Office of Civil Rights, Title VI Program, 1511 Mail Service Center, Raleigh, NC 27699-1511; toll free 1-800-522-0453
- Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010
- US Department of Transportation, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070

4. Format for Complaints

Complaints must be in writing and signed by the complainant(s) or a representative, and include the complainant’s name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone will be reduced to writing and provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages, including Braille.

5. Discrimination Complaint Form

Contact NCDOT Civil Rights to receive a full copy of the Discrimination Complaint Form and procedures.

6. Complaint Basis

Allegations must be based on issues involving race, color, national origin (LEP), sex, age, disability, or religion (in the context of employment, aviation or transit). “Basis” refers to the complainant’s membership in a protected group category.

**TABLE 103-1
COMPLAINT BASIS**

Protected Categories	Definition	Examples	Applicable Nondiscrimination Authorities

Race and Ethnicity	An individual belonging to one of the accepted racial groups; or the perception, based usually on physical characteristics that a person is a member of a racial group	Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, White	Title VI of the Civil Rights Act of 1964; 49 CFR Part 21; 23 CFR 200; 49 U.S.C. 5332(b); 49 U.S.C. 47123. (<i>Executive Order 13166</i>)
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.	
National Origin (<i>Limited English Proficiency</i>)	Place of birth. Citizenship is not a factor. (<i>Discrimination based on language or a person's accent is also covered</i>)	Mexican, Cuban, Japanese, Vietnamese, Chinese	
Sex	Gender. The sex of an individual. <i>Note: Sex under this program does not include sexual orientation.</i>	Women and Men	1973 Federal-Aid Highway Act; 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Age	Persons of any age	21-year-old person	Age Discrimination Act of 1975 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Disability	Physical or mental impairment, permanent or temporary, or perceived.	Blind, alcoholic, para-amputee, epileptic, diabetic, arthritic	Section 504 of the Rehabilitation Act of 1973; Americans with Disabilities Act of 1990
Religion (in the context of employment) (<i>Religion/ Creed in all aspects of any aviation or transit-related construction</i>)	An individual belonging to a religious group; or the perception, based on distinguishable characteristics that a person is a member of a religious group. In practice, actions taken as a result of the moral and ethical beliefs as to what is right and wrong, which are sincerely held with the strength of traditional religious views. <i>Note: Does not have to be associated with a recognized religious group or church; if an individual sincerely holds to the belief, it is a protected religious practice.</i>	Muslim, Christian, Sikh, Hindu, etc.	Title VII of the Civil Rights Act of 1964; 23 CFR 230; FHWA-1273 Required Contract Provisions. (<i>49 U.S.C. 5332(b); 49 U.S.C. 47123</i>)

(3) Pertinent Nondiscrimination Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability) and 49 CFR Part 27;
 - The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
 - Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
 - (g) The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
 - (h) Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
 - (i) The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
 - (j) Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
 - (k) Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
 - (l) Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
 - (m) Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e et seq., Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin).
- (4) **Additional Title VI Assurances**
- **The following Title VI Assurances (Appendices B, C and D) shall apply, as applicable*
- (a) **Clauses for Deeds Transferring United States Property (1050.2A, Appendix B)**
The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4.

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the North Carolina Department of Transportation (NCDOT) will accept title to the lands and maintain the project constructed thereon in accordance with the North Carolina General Assembly, the Regulations for the Administration of the Federal-Aid Highway Program, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the NCDOT all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the North Carolina Department of Transportation (NCDOT) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the NCDOT, its successors and assigns.

The NCDOT, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the NCDOT will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

(b) Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program (1050.2A, Appendix C)

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(a):

1. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
 - (i.) In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. *
3. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

(c) Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program (1050.2A, Appendix D)

The following clauses will be included in deeds, licenses, permits, or similar instruments/ agreements entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(b):

1. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
2. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, the NCDOT will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued. *
3. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

STANDARD SPECIAL PROVISION

ON-THE-JOB TRAINING

(10-16-07) (Rev. 4-21-15)

Z-10

Description

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority shall be given to training employees on NCDOT Federal-Aid funded projects.

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Assigning Training Goals

The Department, through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year.\

Training Classifications

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft/operator positions. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators	Office Engineers
Truck Drivers	Estimators
Carpenters	Iron / Reinforcing Steel Workers
Concrete Finishers	Mechanics
Pipe Layers	Welders

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

Records and Reports

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

Trainee Interviews

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

CORPORATION

The prequalified bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF PREQUALIFIED BIDDER

_____ Full name of Corporation

_____ Address as Prequalified

Attest _____ By _____
Secretary/Assistant Secretary President/Vice President/Assistant Vice President
Select appropriate title *Select appropriate title*

_____ Print or type Signer's name

_____ Print or type Signer's name

Date of Execution _____

CORPORATE SEAL

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

LIMITED LIABILITY COMPANY

The prequalified bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF PREQUALIFIED BIDDER

Full Name of Firm

Address as Prequalified

Signature of Witness

Signature of Member/Manager/Authorized Agent
Select appropriate title

Print or type Signer's name

Print or type Signer's Name

Date of Execution _____

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

JOINT VENTURE (2) or (3)

The prequalified bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF PREQUALIFIED BIDDER

Instructions: **2 Joint Venturers** Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

Address as Prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal and

(3) _____
Name of Contractor

Address as Prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal and

(4) _____
Name of Contractor (for 3 Joint Venture only)

Address as Prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

Date of Execution _____

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The prequalified bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF PREQUALIFIED BIDDER

Name of Prequalified Bidder

_____ Individual name

Trading and doing business as

_____ Full name of Firm

_____ Address as Prequalified

_____ Signature of Witness

_____ Signature of Prequalified Bidder, Individually

_____ Print or type Signer's name

_____ Print or type Signer's name

Date of Execution _____

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The prequalified bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF PREQUALIFIED BIDDER

Name of Prequalified Bidder _____
Print or type name

Address as Prequalified

Signature of Prequalified Bidder, Individually

Print or type Signer's Name

Signature of Witness

Print or type Signer's name

Date of Execution _____

DEBARMENT CERTIFICATION

Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation filed with the Department, or has become erroneous because of changed circumstances.
2. The terms *covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded*, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273)* provided by the Department, without subsequent modification, in all lower tier covered transactions.
5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of 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) transaction or contract under a public transaction; 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;
- c. 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 b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

Forsyth COUNTY

Who Ever Company

NAME OF BIDDER

LISTING OF MBE & WBE SUBCONTRACTORS

Sheet 1 of 5

FIRM NAME AND ADDRESS	MBE or WBE	ITEM NO.	ITEM DESCRIPTION	*AGREED UPON UNIT PRICE	**DOLLAR VOLUME OF ITEM
Xyz Truck Hauling Company	WB	3	Xyz Trucks Hauling Material	\$65/hr	\$7,000.00
0000 Somewhere Street			Tandem	\$68/hr	
Winston-Salem, NC 27103			Triaxle	\$75/hr	
Mr/Ms XYZ					
(336) 222-3333					
Xyz Company	WB	5	XYZ Performing Same Type	\$50/LF	\$1,000.00
0000 Pending Street			Of LF Work		
Salisbury, NC 11111					
Mr/Ms XYZ					
(704)444-6666					
ABC Company	MB	7	ABC Structure Adjustment	\$500/ea	\$12,000.00
0000 Somewhere Street			Concrete		
Lexington, NC 27292			Asphalt		
Mr/Ms XYZ					
(336)555-6666					
CDF Company	MB	15	CDF Whatever Material	\$85/TN	\$4,000.00
0000 Somewhere Street					
Mocksville, NC 27103					
Mr/Ms XYZ					
(336)333-4444					
				EXAMPLE TOTAL CONTRACT PRICE	\$400,000.00
				Total Dollar Committed for MBE Subcontractor	\$16,000.00
				MBE Percentage of Total Contract Bid Price	4%
				Total Dollar Committed for WBE Subcontractor	\$8,000.00
				WBE Percentage of Total Contract Bid Price	2%

This form **shall be** included with bid submittal. Failure to complete will result in nonresponsive bid and **shall** be rejected.

COUNTY

NAME OF BIDDER

LISTING OF MBE & WBE SUBCONTRACTORS

Sheet _____ of _____

FIRM NAME AND ADDRESS	MBE or WBE	ITEM NO.	ITEM DESCRIPTION	*AGREED UPON UNIT PRICE	**DOLLAR VOLUME OF ITEM
				Total Dollar Committed for MBE Subcontractor	\$
				MBE Percentage of Total contract Bid Price	%
				Total Dollar Committed for WBE Subcontractor	\$
				WBE Percentage of Total Contract Bid Price	%

This form **shall be** included with bid submittal. Failure to complete will result in nonresponsive bid and **shall** be rejected.

**State of North Carolina
Department of Transportation
Subcontractor Payment Information**

Submit with Invoice

Firm Invoice No. Reference 1231
 NCDOT PO/Contract Number 360001234
 WBS No. (State Project No.) 40491
 Date of Invoice 12/11/2007
 Signed John Doe

EXAMPLE

Invoice Line Item Reference (from PO)	Payer Name	Payer Federal Tax Id	Subcontractor / Subconsultant / Material Supplier Name	Subcontractor / Subconsultant / Material Supplier Federal Tax Id	Amount Paid To Subcontractor / Subconsultant / Material Supplier This Invoice	Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice
Example 1						
10	XYZ Trucking	123-45-6789	ABC Company	987-65-4312	\$ 7,000.00	11/16/2007
60	CDF Company	456-78-9123	DEF Paving	789-12-3456	\$ 1,000.00	11/17/2007

If no Subcontractor/Subconsultant participation, please submit form as shown below in Example 2

N/A					0.00	

	Example 1	Example 2
Total Amount Paid to Subcontractor Firms	\$ 8,000.00	0.00

NOTE: - These documents are scanned into our Fiscal program. Please do not highlight or shade the figures.

I certify that this information accurately reflects actual payments made and the dates the payments were made to Subcontractors/ Subconsultants/Material Suppliers on the above referenced project.

Signature	<u>John Doe</u>	Title	<u>Owner</u>
Print Name	<u>John Doe</u>	Date	<u>12/11/2007</u>

Field

Instructions

Subgrantee Letterhead / Name & Address Goes Here

Enter the name and address of the company, firm, governmental entity or subgrantee requesting payment from the North Carolina Department of Transportation

Submit with Invoice To:

Update this section with the name and address of the NCDOT representative that is responsible for processing payment requests for your contracts.

Firm Invoice No. Reference

Enter the invoice number that was submitted to NCDOT that corresponds with the payment information contained on this form.

NCDOT PO / Contract Number
WBS No. (State Project No.)

Enter the NCDOT Purchase Order or Contract number that corresponds with the information contained on this form.
Enter the NCDOT WBS element number assigned to this project.

Date of Invoice

Enter the date of the invoice that was submitted for payment.

Signed

Enter the name of the person responsible for the validity of the information contained on this form.

Invoice Line Item Reference

Enter the invoice line item or pay item that the DBE payment information is related to.

Payer Name
Payer Federal Tax Id

Enter the name of the company, firm, governmental entity or subgrantee that is responsible for paying the DBE subcontractor.
Enter the Federal Tax Identification number of the Payer (See Payer Name)

Subcontractor / Subconsultant/ Material Supplier Name

Enter the name of the DBE Subcontractor, Subconsultant or Material Supplier that is being paid for goods or services related to the NCDOT PO / Contract Number.

Subcontractor / Subconsultant/ Material Supplier Federal Tax Id
Amount Paid To Subcontractor / Subconsultant / Material Supplier

Enter the Federal Tax Identification number of the DBE Subcontractor, Subconsultant or Material Supplier that is being paid for goods or services related to the NCDOT PO / Contract Number.
Enter the amount paid to the DBE Subcontractor, Subconsultant or Material Supplier for the invoice referenced.

This Invoice
Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice

Enter the date that the Subcontractor / Subconsultant / Material Supplier was paid for the items referenced on the invoice.

Total Amount Paid to DBE Firms

Enter the total payments made to all DBE Subcontractor / Subconsultant / Material Supplier for the invoice referenced.

SUBSTITUTE FORM W-9

**VENDOR REGISTRATION FORM
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**

Pursuant to Internal Revenue Service (IRS) Regulations, vendors must furnish their Taxpayer Identification Number (TIN) to the State. If this number is not provided, you may be subject to a 20% withholding on each payment. To avoid this 20% withholding and to insure that accurate tax information is reported to the Internal Revenue Service and the State, please use this form to provide the requested information exactly as it appears on file with the IRS.

**INDIVIDUAL AND SOLE PROPRIETOR: ENTER NAME AS SHOWN ON SOCIAL SECURITY CARD
CORPORATION OR PARTNERSHIP : ENTER YOUR LEGAL BUSINESS NAME**

NAME: _____

MAILING ADDRESS: STREET/PO BOX: _____

CITY, STATE, ZIP: _____

DBA / TRADE NAME (IF APPLICABLE): _____

BUSINESS DESIGNATION: INDIVIDUAL (use Social Security No.) SOLE PROPRIETER (use SS No. or Fed ID No.)
 CORPORATION (use Federal ID No.) PARTNERSHIP (use Federal ID No.)
 ESTATE/TRUST (use Federal ID no.) STATE OR LOCAL GOVT. (use Federal ID No.)
 OTHER / SPECIFY _____

SOCIAL SECURITY NO. _____ - _____ - _____ (Social Security #)

OR

FED.EMPLOYER IDENTIFICATION NO. _____ - _____ - _____ (Employer Identification #)

COMPLETE THIS SECTION IF PAYMENTS ARE MADE TO AN ADDRESS OTHER THAN THE ONE LISTED ABOVE:

REMIT TO ADDRESS: STREET / PO BOX: _____

CITY, STATE, ZIP: _____

Participation in this section is voluntary. You are not required to complete this section to become a registered vendor. The information below will in no way affect the vendor registration process and its sole purpose is to collect statistical data on those vendors doing business with NCDOT. If you choose to participate, circle the answer that best fits your firm's group definition.

What is your firm's ethnicity? (Prefer Not To Answer, African American, Native American, Caucasian American, Asian American, Hispanic American, Asian-Indian American, Other: _____)

What is your firm's gender? (Prefer Not to Answer, Male, Female) **Disabled-Owned Business?** (Prefer Not to Answer, Yes, No)

IRS Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the IRS that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. person (including a U.S. resident alien).

The IRS does not require your consent to any provision of this document other than the certifications required to avoid backup withholding. For complete certification instructions please see IRS FORM W-9 at <http://www.irs.gov/pub/irs-pdf/fw9.pdf>.

NAME (Print or Type)

TITLE (Print or Type)

SIGNATURE

DATE

PHONE NUMBER

To avoid payment delays, completed forms should be returned promptly to:

**NC Department of Transportation
Fiscal /Commercial Accounts
1514 Mail Service Center
Raleigh, North Carolina 27699-1514**

PHONE (919) 733-3624 FAX (919) 715-3700



LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

CONTRACT:

NAME OF BIDDER:

The undersigned intends to perform work in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation as:

Name of MBE/WBE/DBE Subcontractor _____

Address _____

City _____ State _____ Zip _____

Please check all that apply:

Minority Business Enterprise (MBE) _____

Women Business Enterprise (WBE) _____

Disadvantaged Business Enterprise (DBE) _____

The MBE /WBE /DBE status of the above named subcontractor is certified by the North Carolina Department of Transportation. The above named subcontractor is prepared to perform the described work listed on the attached MBE/WBE/DBE Commitment Items sheet, in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation. The above named subcontractor is prepared to perform the described work at the estimated Commitment Total for Subcontractor Price identified on the MBE/WBE/DBE Commitment Items sheet and amount indicated below.

Commitment Total based on estimated Unit Prices and Quantities on the "attached" MBE/WBE/DBE Commitment Items sheet. Amount \$ _____

The above named bidder and subcontractor mutually accepts the Commitment Total estimated for the Unit Prices and Quantities. This commitment total is based on estimated quantities only and most likely will vary up or down as the project is completed. Final compensation will be based on actual quantities of work performed and accepted during the pursuance of work. The above listed amount represents the entire dollar amount quoted based on these estimated quantities. No conversations, verbal agreements, and/or other forms of non-written representations shall serve to add, delete, or modify the terms as stated.

This document shall not serve in any manner as an actual subcontract between the two parties. A separate subcontractor agreement will describe in detail the contractual obligations of the bidder and the MBE/WBE/DBE subcontractor.

Affirmation

The above named MBE/ WBE/ DBE subcontractor affirms that it will perform the portion(s) of the contract for the estimated dollar value as stated above.

Name of MBE/ WBE/ DBE Subcontractor

Name of Bidder

Signature / Title

Signature / Title

Date

Date

Subcontract Approval Form (SAF)

1. Complete the "Subcontract Approval Form" (Form SAF) for the Subcontractor and the 2nd Tier Subcontractor on one form. Additional items of work can be entered on the "Subcontract Approval Form Attachment". If there is more than one 2nd Tier Subcontractor, the information should be listed on the "Subcontract Approval Form - Additional 2nd Tier" (SAF - Additional 2nd Tier).
2. Reporting Number is the Fiscal Vendor Number for Contractors and Subcontractors. This number can be found in the NCDOT Directory of Transportation Firms - Prequalified Bidders and Subcontractors. Use the following web address to access the list of Prequalified Bidders and Subcontractors.

<https://partner.ncdot.gov/VendorDirectory/default.html>

Enter the name of your subcontractor and hit "Submit". If the firm is prequalified to perform work for NCDOT, the firm's information will be shown on the screen. Click on the firm's name to access the Reporting Number.

3. If retainage is being withheld for the Subcontractor or 2nd Tier Subcontractor place an "X" in the box under the column titled "Retainage."
4. When the proposed Subcontractor or 2nd Tier Subcontractor is a certified DBE, MBE, or WBE Subcontractor, select the appropriate certification from the drop down list. When the proposed Subcontractor is not a certified DBE, MBE, or WBE subcontractor, select "NONE" from the drop down list.
5. **Partial Item of Work and Portion of Work**

Partial Item of Work is defined as a Subcontractor performing part of the work associated with a line item, such as hauling asphalt or tying steel. The partial item of work should be indicated by the symbol (♦). The work associated with the contract line item to be performed by the Subcontractor shall be identified.

Portion of Work is defined as a Subcontractor performing all the work associated with a line item, but only a portion of the contract quantity. An example is grading from Station 225+00 - L- to the end of the project. The portions of work should be indicated by the symbol (●). The physical limits of the sublet quantity shall be identified.

The Contractor may designate a subcontracted item of work as both a portion and a partial. (Example: Contractor is subcontracting hauling of unclassified excavation to multiple trucking contractors.) If the item of work is designated as both a portion and a partial the unit price shall be less than the contract unit price and the quantity shall be less than the contract quantity.

6. Sub or 2nd Tier - Designate if the work for the associated line item will be performed by a Subcontractor or a 2nd Tier Subcontractor. This must be completed to correctly calculate the Subcontract Amount.
7. Units of Measure (UOM) shown on the Subcontract Approval Form (SAF) shall be the same as those shown in the Department's contract. Any conversions that are necessary to satisfy this requirement shall be the responsibility of the Contractor. The Converted Price (CP) shall be denoted with an asterisk (*). (Examples of converting units of measure can be found in the HiCAMS User Guide, Chapter 2, Section 8A. Use the following link to view the examples.)

<https://connect.ncdot.gov/projects/construction/Pages/HiCAMS-Manual.aspx>

8. DBE/MBE/WBE Unit Price - This unit price should only be completed for DBE/MBE/WBE Subcontractors. Enter a DBE/MBE/WBE Unit Price for the items of work performed by any certified DBE/MBE/WBE. Use the chart below to determine if a DBE/MBE/WBE Unit Price shall be entered for the line item, based on the certification of the firm.

<u>Subcontractor</u>	<u>2nd Tier</u>	Enter DBE/MBE/WBE Unit Price For
Certified	None	Subcontractor
Certified	Certified	Subcontractor
None	Certified	2nd Tier

The DBE/MBE/WBE Unit Price must be the negotiated unit or lump sum price agreed upon between the Contractor and the Subcontractor, **unless the Contractor is entering a Converted Price**. Indicating a Converted Price acknowledges that the price shown is not the actual price, but an approximate value used for calculating the Sublet Amount as reasonably close as possible. It can be higher, lower or equal to the contract bid price.

9. DBE/MBE/WBE Sublet Amount is the DBE/MBE/WBE Unit Price multiplied by the Quantity. For committed firms, the DBE/MBE/WBE Sublet Amount shall be the same or higher than the amount listed in the contract.
10. Subcontract Unit Price - The Subcontract Unit Price must be the same as the contract unit price unless the Subcontractor is performing a partial item of work. When a partial item of work is sublet, the unit price must be less than the contract unit price. When only a portion of the quantity of an item is sublet, the unit price shall be the same as the contract unit price. If an item of work is designated as both a partial and a portion, refer to Item 5 of these instructions. A Subcontract Unit Price must be entered for every line item, including an item of work performed by a DBE/MBE/WBE Subcontractor.
11. The Total Subcontract Amount is the Subcontract Unit Price multiplied by the Quantity.
12. The Subcontract Amount is the amount subcontracted by the Contractor. The amount is used to determine the percent of work performed by the Prime Contractor. (Refer to Article 108-6 of the Standard Specifications for subletting percentages.) The Subcontract Amount is calculated by summing the Total Subcontract Amounts for the Subcontractor. Any items listed on the Attachment sheet for the Subcontractor is also included in the Subcontract Amount. The line items for 2nd Tier Subcontractor(s) are not included.
13. When any item requested to be sublet has been previously included in an approved subcontract, the following statement shall be included above the listing of these items: "The following items are being deleted from "Subcontract Request Number ____."
14. The Contractor, Subcontractor and 2nd Tier Subcontractor shall sign the original Subcontract Approval Form and the Contractor shall submit the form to the Resident Engineer.

Sublet Percentages

FOR USE BY NCDOT PERSONNEL (for non HiCAMS contracts)

The following is the process used to calculate the Sublet Percentages after the approval of each subcontract. The fields will not populate, this process should be hand calculated.

(1) Total Original Contract Amount _____	(5) Difference $\{1-(2+3)\}$ _____
(2) Specialty Items Sublet _____	(6) Percent by Prime $\{(1-4)/5\}$ _____
(3) Non-spec. Items Sublet to DBE/MBE/WBE _____	(7) Threshold Check $\{(1-4)/(1-2)\}$ _____
(4) Total Sublet (Grand Total) _____	

AWARD LIMITS ON MULTIPLE PROJECTS (Paper Bids):

(4-9-13)

It is the desire of the Proposer to be awarded contracts, the value of which will not exceed a total of \$_____, for those projects indicated below on which bids are being opened on the same date as shown in the Proposal Form. Individual projects shall be indicated by placing the project number and county in the appropriate place below. Projects not selected will not be subject to an award limit.

_____ (Project Number)	_____ (County)
_____ (Project Number)	_____ (County)
_____ (Project Number)	_____ (County)
_____ (Project Number)	_____ (County)

*If a Proposer desires to limit the total amount of work awarded to him in this letting, he shall state such limit in the space provided above in the second line of this form.

It is agreed that in the event that I am (we are) the successful bidder on indicated projects, the total value of which is more than the above stipulated award limits, the Department will award me (us) projects from among those indicated which have a total value not exceeding the award limit and which will result in the best advantage to the Department.

**Signature of Authorized Person

**Only those persons authorized to sign bids in accordance with Subarticle 102-8(A)(8) of the 2012 Standard Specifications shall be authorized to sign this form.

ADDENDA

ADDENDUM #1

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #1.

ADDENDUM #2

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #2.

ADDENDUM #3

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #3.

Execution of Contract

Contract No: 2021 – CONCRETE/ASPHALT/BRIDGE DECK REPAIRS

County: Davidson, Davie, Forsyth, Rowan & Stokes

ACCEPTED BY THE _____

Proposals Engineer

Date

EXECUTION OF CONTRACT AND BONDS
APPROVED AS TO FORM:

Division Engineer

Date

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
 FOAM INJECTIONS AT VARIOUS LOCATIONS

DAVIDSON COUNTY

LINE #	SECT	DESCRIPTION	QTY	UOM	UNIT BID PRICE	AMOUNT
1	SP	MOBILIZATION	5	EA		
2	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE B	15,000	LB		
3	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE G	10,000	LB		
4	SP	CRACK SEALING (WITHOUT ROUTER OR DIAMOND SAW)	2,500	LB		
5	SP	CRACK SEALING (WITH ROUTER OR DIAMOND SAW)	2,500	LB		
6	SP	MILLING ASPHALT PAVEMENT	2	DAY		
7	SP	FOAM INSTALLATION - HDPF SLAB LEVELING, UNDERSEALING AND VOIDFILLING	1,000	LB		
8	SP	FOAM INSTALLATION - SOIL STABLIZATION	250	GAL		
9	SP	SILICON JOINT REPLACEMENT	1,000	LF		
10	SP	EVAZOTE JOINT REPLACEMENT	1,500	LF		
11	SP	SAW CUTTING FOR EVAZOTE EXPANSION JOINTS	1,000	LF		
12	SP	OPEN JOINT EVAZOTE PLACEMENT	500	LF		
13	SP	ASPHALT JOINT REPAIR/REPLACEMENT (18" - 24"wide, with plate	150	CF		
14	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (16" wide or less and 2" deep or less)	750	LF		
15	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (greater than 16" wide or greater than 2" deep)	200	CF		
16	SP	DEWATERING AND CLEANING	5	DAY		
17	SP	REPAIRS TO CORRUGATED METAL PIPES	1,000	SF		
18	SP	SEALING PIPE JOINTS	500	LF		
19	SP	BACKGROUTING/VOID FILLING AT PIPE JOINTS	800	GAL		
20	SP	PLACEMENT OF ELASTOMERIC SPRAY-ON COATING	500	SF		
21	SP	TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	10	EA		
22	SP	TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	10	EA		
23	SP	LANE CLOSURE SHIFT (MULTI-LANE ROADWAY)	2	EA		
24	SP	NIGHTTIME TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	2	EA		
25	SP	NIGHTTIME TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	10	EA		
26	SP	NIGHTTIME TEMPORARY LANE SHIFT (MULTI-LANE ROADWAY)	2	EA		
27	SP	SHOULDER CLOSURE	5	DAY		
Total Bid						

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
FOAM INJECTIONS AT VARIOUS LOCATIONS

DAVIDSON COUNTY

CONTRACTOR _____
ADDRESS _____

Federal Identification Number	_____	Contractor's License Number	_____
Authorized Agent	_____	Title	_____
Signature	_____	Date	_____
Witness	_____	Title	_____
Signature	_____	Date	_____

THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for Roads and Structures, 2018.

Reviewed by	_____	_____	(date)
Accepted by NCDOT	_____	Engineer	_____ (date)
Reviewed by	_____	_____	(date)
Accepted by NCDOT	_____	Engineer	_____ (date)

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
 FOAM INJECTIONS AT VARIOUS LOCATIONS

DAVIE COUNTY

LINE #	SECT	DESCRIPTION	QTY	UOM	UNIT BID PRICE	AMOUNT
1	SP	MOBILIZATION	5	EA		
2	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE B	2,500	LB		
3	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE G	2,500	LB		
4	SP	CRACK SEALING (WITHOUT ROUTER OR DIAMOND SAW)	2,500	LB		
5	SP	CRACK SEALING (WITH ROUTER OR DIAMOND SAW)	2,500	LB		
6	SP	MILLING ASPHALT PAVEMENT	2	DAY		
7	SP	FOAM INSTALLATION - HDPF SLAB LEVELING, UNDERSEALING AND VOIDFILLING	1,000	LB		
8	SP	FOAM INSTALLATION - SOIL STABLIZATION	250	GAL		
9	SP	SILICON JOINT REPLACEMENT	1,000	LF		
10	SP	EVAZOTE JOINT REPLACEMENT	1,500	LF		
11	SP	SAW CUTTING FOR EVAZOTE EXPANSION JOINTS	1,000	LF		
12	SP	OPEN JOINT EVAZOTE PLACEMENT	500	LF		
13	SP	ASPHALT JOINT REPAIR/REPLACEMENT (18" - 24"wide, with plate	150	CF		
14	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (16" wide or less and 2" deep or less)	750	LF		
15	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (greater than 16" wide or greater than 2" deep)	200	CF		
16	SP	DEWATERING AND CLEANING	5	DAY		
17	SP	REPAIRS TO CORRUGATED METAL PIPES	1,000	SF		
18	SP	SEALING PIPE JOINTS	500	LF		
19	SP	BACKGROUTING/VOID FILLING AT PIPE JOINTS	800	GAL		
20	SP	PLACEMENT OF ELASTOMERIC SPRAY-ON COATING	500	SF		
21	SP	TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	10	EA		
22	SP	TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	10	EA		
23	SP	LANE CLOSURE SHIFT (MULTI-LANE ROADWAY)	2	EA		
24	SP	NIGHTTIME TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	2	EA		
25	SP	NIGHTTIME TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	2	EA		
26	SP	NIGHTTIME TEMPORARY LANE SHIFT (MULTI-LANE ROADWAY)	2	EA		
27	SP	SHOULDER CLOSURE	5	DAY		

Total Bid _____

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
FOAM INJECTIONS AT VARIOUS LOCATIONS

DAVIE COUNTY

CONTRACTOR _____

ADDRESS _____

Federal Identification Number _____ Contractor's License Number _____

Authorized Agent _____ Title _____

Signature _____ Date _____

Witness _____ Title _____

Signature _____ Date _____

THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for Roads and Structures, 2018.

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
 FOAM INJECTIONS AT VARIOUS LOCATIONS

FORSYTH COUNTY

LINE #	SECT	DESCRIPTION	QTY	UOM	UNIT BID PRICE	AMOUNT
1	SP	MOBILIZATION	5	EA		
2	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE B	15,000	LB		
3	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE G	15,000	LB		
4	SP	CRACK SEALING (WITHOUT ROUTER OR DIAMOND SAW)	5,000	LB		
5	SP	CRACK SEALING (WITH ROUTER OR DIAMOND SAW)	5,000	LB		
6	SP	MILLING ASPHALT PAVEMENT	2	DAY		
7	SP	FOAM INSTALLATION - HDPF SLAB LEVELING, UNDERSEALING AND VOIDFILLING	1,000	LB		
8	SP	FOAM INSTALLATION - SOIL STABLIZATION	250	GAL		
9	SP	SILICON JOINT REPLACEMENT	1,000	LF		
10	SP	EVAZOTE JOINT REPLACEMENT	1,500	LF		
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13	SP	ASPHALT JOINT REPAIR/REPLACEMENT (18" - 24"wide, with plate	150	CF		
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15	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (greater than 16" wide or greater than 2" deep)	200	CF		
16	SP	DEWATERING AND CLEANING	5	DAY		
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18	SP	SEALING PIPE JOINTS	500	LF		
19	SP	BACKGROUTING/VOID FILLING AT PIPE JOINTS	800	GAL		
20	SP	PLACEMENT OF ELASTOMERIC SPRAY-ON COATING	500	SF		
21	SP	TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	10	EA		
22	SP	TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	15	EA		
23	SP	LANE CLOSURE SHIFT (MULTI-LANE ROADWAY)	2	EA		
24	SP	NIGHTTIME TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	5	EA		
25	SP	NIGHTTIME TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	15	EA		
26	SP	NIGHTTIME TEMPORARY LANE SHIFT (MULTI-LANE ROADWAY)	5	EA		
27	SP	SHOULDER CLOSURE	5	DAY		

Total Bid _____

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
FOAM INJECTIONS AT VARIOUS LOCATIONS

FORSYTH COUNTY

CONTRACTOR _____

ADDRESS _____

Federal Identification Number _____ Contractor's License Number _____

Authorized Agent _____ Title _____

Signature _____ Date _____

Witness _____ Title _____

Signature _____ Date _____

THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for Roads and Structures, 2018.

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
 FOAM INJECTIONS AT VARIOUS LOCATIONS

ROWAN COUNTY

LINE #	SECT	DESCRIPTION	QTY	UOM	UNIT BID PRICE	AMOUNT
1	SP	MOBILIZATION	5	EA		
2	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE B	2,500	LB		
3	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE G	10,000	LB		
4	SP	CRACK SEALING (WITHOUT ROUTER OR DIAMOND SAW)	2,500	LB		
5	SP	CRACK SEALING (WITH ROUTER OR DIAMOND SAW)	2,500	LB		
6	SP	MILLING ASPHALT PAVEMENT	2	DAY		
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8	SP	FOAM INSTALLATION - SOIL STABLIZATION	250	GAL		
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10	SP	EVAZOTE JOINT REPLACEMENT	1,500	LF		
11	SP	SAW CUTTING FOR EVAZOTE EXPANSION JOINTS	1,000	LF		
12	SP	OPEN JOINT EVAZOTE PLACEMENT	500	LF		
13	SP	ASPHALT JOINT REPAIR/REPLACEMENT (18" - 24"wide, with plate	150	CF		
14	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (16" wide or less and 2" deep or less)	750	LF		
15	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (greater than 16" wide or greater than 2" deep)	200	CF		
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26	SP	NIGHTTIME TEMPORARY LANE SHIFT (MULTI-LANE ROADWAY)	2	EA		
27	SP	SHOULDER CLOSURE	5	DAY		

Total Bid _____

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
FOAM INJECTIONS AT VARIOUS LOCATIONS

ROWAN COUNTY

CONTRACTOR _____

ADDRESS _____

Federal Identification Number _____ Contractor's License Number _____

Authorized Agent _____ Title _____

Signature _____ Date _____

Witness _____ Title _____

Signature _____ Date _____

THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for Roads and Structures, 2018.

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 BID FORM**

CONTRACT NO.: 2021 - CONCRETE/ASPHALT/BRIDGE DECK JOINT REPAIRS

LOCATION: VARIOUS ROADS

TYPE OF WORK: REPAIRS TO CONCRETE/ASPHALT/BRIDGE DECK JOINT AND ROADWAYS, CRACK SEALING, ASPHALT MILLING AND
 FOAM INJECTIONS AT VARIOUS LOCATIONS

STOKES COUNTY

LINE #	SECT	DESCRIPTION	QTY	UOM	UNIT BID PRICE	AMOUNT
1	SP	MOBILIZATION	5	EA		
2	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE B	2,500	LB		
3	SP	CONCRETE/ASPHALT REPAIR FIBRECRETE G	2,500	LB		
4	SP	CRACK SEALING (WITHOUT ROUTER OR DIAMOND SAW)	2,500	LB		
5	SP	CRACK SEALING (WITH ROUTER OR DIAMOND SAW)	2,500	LB		
6	SP	MILLING ASPHALT PAVEMENT	2	DAY		
7	SP	FOAM INSTALLATION - HDPF SLAB LEVELING, UNDERSEALING AND VOIDFILLING	1,000	LB		
8	SP	FOAM INSTALLATION - SOIL STABLIZATION	250	GAL		
9	SP	SILICON JOINT REPLACEMENT	1,000	LF		
10	SP	EVAZOTE JOINT REPLACEMENT	1,500	LF		
11	SP	SAW CUTTING FOR EVAZOTE EXPANSION JOINTS	1,000	LF		
12	SP	OPEN JOINT EVAZOTE PLACEMENT	500	LF		
13	SP	ASPHALT JOINT REPAIR/REPLACEMENT (18" - 24"wide, with plate	150	CF		
14	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (16" wide or less and 2" deep or less)	750	LF		
15	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (greater than 16" wide or greater than 2" deep)	200	CF		
16	SP	DEWATERING AND CLEANING	5	DAY		
17	SP	REPAIRS TO CORRUGATED METAL PIPES	1,000	SF		
18	SP	SEALING PIPE JOINTS	500	LF		
19	SP	BACKGROUTING/VOID FILLING AT PIPE JOINTS	800	GAL		
20	SP	PLACEMENT OF ELASTOMERIC SPRAY-ON COATING	500	SF		
21	SP	TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	10	EA		
22	SP	TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	10	EA		
23	SP	LANE CLOSURE SHIFT (MULTI-LANE ROADWAY)	2	EA		
24	SP	NIGHTTIME TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	2	EA		
25	SP	NIGHTTIME TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	2	EA		
26	SP	NIGHTTIME TEMPORARY LANE SHIFT (MULTI-LANE ROADWAY)	2	EA		
27	SP	SHOULDER CLOSURE	5	DAY		

Total Bid _____

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FOAM INJECTIONS AT VARIOUS LOCATIONS

STOKES COUNTY

CONTRACTOR _____

ADDRESS _____

Federal Identification Number _____ Contractor's License Number _____

Authorized Agent _____ Title _____

Signature _____ Date _____

Witness _____ Title _____

Signature _____ Date _____

THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for Roads and Structures, 2018.

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)

Reviewed by _____ (date)

Accepted by NCDOT _____ Engineer _____ (date)