STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH, N.C.

CONTRACT AND

CONTRACT BONDS

FOR CONTRACT NO. C204170

WBS <u>2018CPT.08.13.10621</u>, <u>2018CPT.08.13.10771</u>, <u>2018CPT.08.13.20621</u>,

2018CPT.08.13.20771, 47774, 47775 STATE FUNDED

COUNTY OF MONTGOMERY, RICHMOND

THIS IS THE ROADWAY CONTRACT

ROUTE NUMBER NC 73 LENGTH 33.225 MILES

LOCATION <u>2 SECTIONS OF NC-109 BUS, 1 SECTION OF NC-24/27, 4 SECTIONS</u>

OF NC-73, AND 7 SECTIONS OF SECONDARY ROADS.

CONTRACTOR BARNHILL CONTRACTING COMPANY

ADDRESS P.O. BOX 7948

ROCKY MOUNT, NC 27804

BIDS OPENED MAY 15, 2018 6/20/2018

CONTRACT EXECUTION

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH, N.C.

PROPOSAL

DATE AND TIME OF BID OPENING: MAY 15, 2018 AT 2:00 PM

CONTRACT ID C204170

WBS 2018CPT.08.13.10621, 2018CPT.08.13.10771, 2018CPT.08.13.20621, 2018CPT.08.13.20771,

47774, 47775

FEDERAL-AID NO. STATE FUNDED

COUNTY MONTGOMERY, RICHMOND

T.I.P. NO.

MILES 33.225 ROUTE NO. NC 73

LOCATION 2 SECTION OF NC-109 BUS, 1 SECTIONS OF NC-24/27, 4 SECTIONS

OF NC-73, AND 7 SECTIONS OF SECONDARY ROADS.

TYPE OF WORK MILLING, RESURFACING, AND SHOULDER RECONSTRUCTION.

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.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

PROPOSAL FOR THE CONSTRUCTION OF

CONTRACT No. C204170 IN MONTGOMERY AND RICHMOND COUNTIES, NORTH CAROLINA

RALEIGH, NORTH CAROLINA

Date	20
DEPARTMENT OF T	TRANSPORTATION,

The Bidder has carefully examined the location of the proposed work to be known as Contract No. <u>C204170</u> 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 Board 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. C204170 in Montgomery and Richmond 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.

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.

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the *Standard Specifications*; otherwise said deposit will be returned to the Bidder.



State Contract Officer

Ronald E. Davenport, Jr. 4/11/2018
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PROJECT SPECIAL PROVISIONS

GENERAL

CONTRACT TIME AND LIQUIDATED DAMAGES:

(7-1-95) (Rev. 12-18-07) 108 SPI G10 A

The date of availability for this contract is **June 25, 2018**.

The completion date for this contract is **August 1, 2019**.

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 **One Thousand Five Hundred Dollars** (\$ 1,500.00) per calendar day.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

(2-20-07)

108

SP1 G14 F

The Contractor shall not close or narrow a lane of traffic on **Any Map**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of **6:30 a.m.** December 31st and **8:00 p.m.** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **8:00 p.m.** the following Tuesday.
- 3. For **Easter**, between the hours of **6:30 a.m.** Thursday and **8:00 p.m.** Monday.
- 4. For **Memorial Day**, between the hours of **6:30 a.m.** Friday and **8:00 p.m.** Tuesday.
- 5. For **Independence Day**, between the hours of **6:30 a.m.** the day before Independence Day and **8:00 p.m.** the day after Independence Day.
 - If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **6:30 a.m.** the Thursday before Independence Day and **8:00 p.m.** the Tuesday after Independence Day.
- 6. For Labor Day, between the hours of 6:30 a.m. Friday and 8:00 p.m. Tuesday.
- 7. For **Thanksgiving**, between the hours of **6:30 a.m.** Tuesday and **8:00 p.m.** Monday.

8. For **Christmas**, between the hours of **6:30 a.m.** the Friday before the week of Christmas Day and **8:00 p.m.** the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated herein and **restore traffic to a 2-lane, 2-way** traffic pattern.

The liquidated damages are **Eight Hundred Dollars** (\$ 800.00) per hour.

INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES:

(5-21-13)

108

SP1 G14 I

The Contractor shall complete the work required of installing each new inductive loop after the removal of each existing loop by the milling, patching or resurfacing operations and shall place and maintain traffic on same.

The date of availability for this intermediate contract time for each inductive loop installation will be the date when the Contractor elects to disturb the existing inductive loop.

The completion date for this intermediate contract time for each inductive loop installation will be the date which is seven (7) consecutive calendar days after the date of availability.

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

PROSECUTION OF WORK:

(7-1-95) (Rev. 8-21-12)

10

SP1 G15R

The Contractor will be required to prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance of the project. The Contractor will not be permitted to suspend his operations except for reasons beyond his control or except where the Engineer has authorized a suspension of the Contractor's operations in writing.

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of \$ 1,500.00 will be charged the Contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages due to extra engineering and maintenance costs and due to increased public hazard resulting from a suspension of the work. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work on time.

RAILROAD GRADE CROSSING:

(7-1-95) (Rev. 1-15-13) 107-9 SPI G17R

Provide at least 2 weeks advance notice to the railroad's local Roadmaster or Track Supervisor when the use of slow-moving or stopped equipment is required over at-grade railroad crossings.

MAJOR CONTRACT ITEMS:

(2-19-02) 104 SPI G28

The following listed items are the major contract items for this contract (see Article 104-5 of the 2018 Standard Specifications):

Line # Description

9 — Asphalt Concrete Surface Course, Type S9.5 B

SPECIALTY ITEMS:

(7-1-95)(Rev. 1-17-12) 108-6 SPI G37

Items listed below will be the specialty items for this contract (see Article 108-6 of the 2018 Standard Specifications).

Line #	Description
23 thru 31, 38	Long-Life Pavement Markings
39 thru 40	Permanent Pavement Markers
41 thru 43	Erosion Control
44	Signals/ITS System

FUEL PRICE ADJUSTMENT:

(11-15-05) (Rev. 2-18-14) 109-8 SP1 G43

Revise the 2018 Standard Specifications as follows:

Page 1-83, Article 109-8, Fuel Price Adjustments, add the following:

The base index price for DIESEL #2 FUEL is \$ 2.0984 per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

The pay items and the fuel factor used in calculating adjustments to be made will be as follows:

Description	Units	Fuel Usage Factor Diesel
Unclassified Excavation	Gal/CY	0.29
Borrow Excavation	Gal/CY	0.29
Class IV Subgrade Stabilization	Gal/Ton	0.55
Aggregate Base Course	Gal/Ton	0.55
Sub-Ballast	Gal/Ton	0.55
Asphalt Concrete Base Course, Type	Gal/Ton	2.90
Asphalt Concrete Intermediate Course, Type	Gal/Ton	2.90
Asphalt Concrete Surface Course, Type	Gal/Ton	2.90
Open-Graded Asphalt Friction Course	Gal/Ton	2.90

Permeable Asphalt Drainage Course, Type	Gal/Ton	2.90
Sand Asphalt Surface Course, Type	Gal/Ton	2.90
Aggregate for Cement Treated Base Course	Gal/Ton	0.55
Portland Cement for Cement Treated Base Course	Gal/Ton	0.55
" Portland Cement Concrete Pavement	Gal/SY	0.245
Concrete Shoulders Adjacent to" Pavement	Gal/SY	0.245

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 5-16-17) 108-2 SPI 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>Fiscal Year</u>	Progress (% of Dollar Value)	
	2019	(7/01/18 - 6/30/19)	96% of Total Amount Bid	
	2020	(7/01/19 - 6/30/20)	4% 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:

(10-16-07)(Rev. 5-15-18) 102-15(J) SPI G66

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 <u>not</u> 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.

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.

 $http://connect.ncdot.gov/projects/construction/Construction\%\,20 Forms/Joint\%\,20 Check\%\,20 Notification\%\,20 Form.pdf$

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%20 a%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

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 7.0 %

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

- (A) Minority Business Enterprises 3.0 %
 - (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 4.0 %
 - (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 <u>all</u> 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 Expedite, the bidding software of Bid Express[®].

(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 Expedite, 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 goal.

MBE/WBE prime contractors shall also follow Sections A and B listed under *Listing of MBE/WBE Subcontractor* 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 State Contractor Utilization Engineer or at DBE@ncdot.gov no later than 10:00 a.m. of the sixth calendar day following opening of bids, unless the sixth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization 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, completed in its entirety, to the State Contractor Utilization Engineer or DBE@ncdot.gov no later than 10:00 a.m. on the eighth calendar day following opening of bids, unless the eighth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization Engineer no later than 10:00 a.m. on the next official state business day.

Banking MBE/WBE Credit

If the bid of the lowest responsive bidder exceeds \$500,000 and 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.

A hard copy and an electronic copy of this information shall be received in the office of the State Contractor Utilization Engineer or at DBE@ncdot.gov no later than 10:00 a.m. on the sixth calendar day following opening of bids unless the sixth day falls on an official state holiday. In that situation, it would be due in the office of the State Contractor Utilization Engineer no later than 10:00 a.m. on the next official state business day. If the contractor cannot send the information electronically, then one complete set and 5 copies of this information shall be received under the same time constraints above.

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 contract 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 State Contractual Services 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 State Contractual Services Engineer or at DBE@ncdot.gov. 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 true for work that a WBE subcontracts to another WBE firm. Work that a MBE/WBE subcontracts to a non-MBE/WBE firm does <u>not</u> 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), 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 firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE 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. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the proposed termination. The prime contractor must give the MBE/WBE firm 5 days to respond to the prime contractor's notice of intent to terminate and advise the prime contractor and the Department of the reasons, if any, why the firm objects to the proposed termination of its subcontract and why the Department should not approve the action.

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 (*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.

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 MBEs/WBE 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 MBEs/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 MBEs/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted.
 - (b) A description of the information provided to MBEs/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 MBEs/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.
- 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 similarly certified 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).

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/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 work on future DOT 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 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.

CONTRACTOR'S LICENSE REQUIREMENTS:

(7-1-95) 102-14

SP1 G88

If the successful bidder does not hold the proper license to perform any plumbing, heating, air conditioning, or electrical work in this contract, he will be required to sublet such work to a contractor properly licensed in accordance with *Article 2 of Chapter 87 of the General Statutes* (licensing of heating, plumbing, and air conditioning contractors) and *Article 4 of Chapter 87* of the *General Statutes* (licensing of electrical contractors).

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.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:

(1-16-07) (Rev 11-22-16)

105-16, 225-2, 16

SP1 G180

General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollution discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the *Erosion and Sediment Control/Stormwater Pollution Prevention Plan* is implemented and maintained over the life of the contract.

- (A) Certified Supervisor Provide a certified Erosion and Sediment Control/Stormwater Supervisor to manage the Contractor and subcontractor operations, insure compliance with Federal, State and Local ordinances and regulations, and manage the Quality Control Program.
- (B) *Certified Foreman* Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) *Certified Installer* Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.
- (D) Certified Designer Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

Roles and Responsibilities

- (A) Certified Erosion and Sediment Control/Stormwater Supervisor The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) Manage Operations Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.

- (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
- (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
- (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
- (d) Implement the erosion and sediment control/stormwater site plans requested.
- (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
- (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
- (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
- (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
- (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
- (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
- (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.
- (2) Requirements set forth under the NPDES Permit The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references NCG010000, General Permit to Discharge Stormwater under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
 - (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
 - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days and within 24 hours after a rainfall event of 0.5 inch that occurs within a 24 hour period.

- Additional monitoring may be required at the discretion of Division of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.
- (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.
- (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
- (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
- (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
- (g) Provide secondary containment for bulk storage of liquid materials.
- (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
- (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
 - (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
 - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
 - (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
 - (d) Conduct the inspections required by the NPDES permit.
 - (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
 - (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
 - (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
 - (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
 - (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
 - (j) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.

- (B) *Certified Foreman* At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
 - (1) Foreman in charge of grading activities
 - (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
 - (3) Foreman in charge of utility activities

The Contractor may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Contractor may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

- (C) *Certified Installers* Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:
 - (1) Seeding and Mulching
 - (2) Temporary Seeding
 - (3) Temporary Mulching
 - (4) Sodding
 - (5) Silt fence or other perimeter erosion/sediment control device installations
 - (6) Erosion control blanket installation
 - (7) Hydraulic tackifier installation
 - (8) Turbidity curtain installation
 - (9) Rock ditch check/sediment dam installation
 - (10) Ditch liner/matting installation
 - (11) Inlet protection
 - (12) Riprap placement
 - (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
 - (14) Pipe installations within jurisdictional areas

If a Level I *Certified Installer* is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

(D) Certified Designer - Include the certification number of the Level III-B Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III-A Certified Designer on the design of the project erosion and sediment control/stormwater plan.

Preconstruction Meeting

Furnish the names of the *Certified Erosion and Sediment Control/Stormwater Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

Revocation or Suspension of Certification

Upon recommendation of the Chief Engineer to the certification entity, certification for *Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* may be revoked or suspended with the issuance of an *Immediate Corrective Action (ICA)*, *Notice of Violation (NOV)*, or *Cease and Desist Order* for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

- (A) Failure to adequately perform the duties as defined within this certification provision.
- (B) Issuance of an ICA, NOV, or Cease and Desist Order.
- (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications.
- (D) Demonstration of erroneous documentation or reporting techniques.
- (E) Cheating or copying another candidate's work on an examination.
- (F) Intentional falsification of records.
- (G) Directing a subordinate under direct or indirect supervision to perform any of the above actions.
- (H) Dismissal from a company for any of the above reasons.
- (I) Suspension or revocation of one's certification by another entity.

Suspension or revocation of a certification will be sent by certified mail to the certificant and the Corporate Head of the company that employs the certificant.

A certificant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer 1536 Mail Service Center Raleigh, NC 27699-1536

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified

will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

Measurement and Payment

Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer will be incidental to the project for which no direct compensation will be made.

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:

(2-20-07) (Rev. 3-19-13)

105-16, 230, 801

SP1 G181

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

If during any operating day, the downstream water quality exceeds the standard, the Contractor shall do all of the following:

- (A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or
- (B) Evaluate the upstream conditions to determine if the exceedance of the standard is due to natural background conditions. If the background turbidity measurements exceed the standard, operation of the pit and discharge can continue as long as the stream turbidity levels are not increased due to the discharge.
- (C) Measure and record the turbidity test results (time, date and sampler) at all defined sampling locations 30 minutes after startup and at a minimum, one additional sampling of all sampling locations during that 24-hour period in which the borrow pit is discharging.
- (D) Notify DWQ within 24 hours of any stream turbidity standard exceedances that are not brought into compliance.

During the Environmental Assessment required by Article 230-4 of the 2018 Standard Specifications, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and

represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

The discharge shall be closely monitored when water from the dewatering activities is introduced into jurisdictional wetlands. Any time visible sedimentation (deposition of sediment) on the wetland surface is observed, the dewatering activity will be suspended until turbidity levels in the stilling basin can be reduced to a level where sediment deposition does not occur. Staining of wetland surfaces from suspended clay particles, occurring after evaporation or infiltration, does not constitute sedimentation. No activities shall occur in wetlands that adversely affect the functioning of a wetland. Visible sedimentation will be considered an indication of possible adverse impacts on wetland use.

The Engineer will perform independent turbidity tests on a random basis. These results will be maintained in a log within the project records. Records will include, at a minimum, turbidity test results, time, date and name of sampler. Should the Department's test results exceed those of the Contractor's test results, an immediate test shall be performed jointly with the results superseding the previous test results of both the Department and the Contractor.

The Contractor shall use the NCDOT Turbidity Reduction Options for Borrow Pits Matrix, available at http://www.ncdot.gov/doh/operations/dp-chief-eng/roadside/fieldops/downloads/Files/TurbidityReductionOptionSheet.pdf to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

NOTES TO CONTRACTOR:

(11-07-06)

The Contractor's attention is directed to the following:

- 1. Contractor shall use rubber-tired rollers on all maps to be resurfaced.
- 2. Contractor shall resurface to radius return on all side streets to the mainline on each map and as directed by the Engineer.

PROJECT SPECIAL PROVISIONS

ROADWAY

SHOULDER CONSTRUCTION:

(12-21-99) (Rev. 8-21-12) 560 SP1 R04R

Description

Shoulder construction is the construction of a new shoulder due to moving ditches or widening embankments on the existing roadway. Place earth material along the completed edge of pavement and construct shoulders as shown on the sketch map and/or as directed by the Engineer. Backfill and compact the area to the satisfaction of the Engineer.

Materials

Furnish all earth material for the construction of the shoulders. Provide earth material that meets the approval of the Engineer. No testing will be necessary.

Measurement and Payment

Shoulder Construction will be measured and paid as the actual number of shoulder miles that have been constructed. Measurement will be made along the surface of each shoulder and to the nearest 0.01 of a mile. Such price and payment will be full compensation for furnishing earth material, hauling, placing, compaction, and all incidentals necessary to complete construction of the shoulders.

Incidental Stone Base will be measured and paid as provided in Article 545-6 of the 2018 Standard Specifications.

Seeding and Mulching will be measured and paid as provided elsewhere in this contract.

Payment will be made under:

Pay Item
Shoulder Construction

Pay Unit Shoulder Mile

SHOULDER RECONSTRUCTION PER SHOULDER MILE:

(1-18-00) (Rev. 8-21-12) 560 SPI R07AR(Rev)

Description

This work consists of reconstructing each shoulder (including median shoulders as applicable) in accordance with Standard Drawing No. 560.01 and 560.02 of the 2018 Roadway Standard Drawings except that the rate of slope and width will be as shown on typical section, or to the existing shoulder point, whichever is nearer, as long as the desired typical is achieved, and when completed, seeding and mulching. This work shall be performed immediately after the resurfacing operations are complete as directed by the Engineer.

Materials

The Contractor shall furnish all earth material necessary for the construction of the shoulders. All soil is subject to test and acceptance or rejection by the Engineer.

The Contractor is required to use Aggregate Shoulder Borrow (ASB) on ALL MAPS and as directed by the Engineer. ASB shall meet the following gradation:

<u>Sieve</u>	Percent Passing	
1 1/2"	100	
1/2"	55 - 95	
#4	35 - 74	

Construction Methods

Obtain material from within the project limits or approved source. Prior to adding ASB, the existing shoulder shall be scarified to provide the proper bond and shall be compacted to the satisfaction of the Engineer.

Any excess material generated by the shoulder reconstruction shall be disposed of by the Contractor in an approved disposal site.

Measurement and Payment

Shoulder Reconstruction will be measured and paid as the actual number of miles of shoulders that have been reconstructed. Measurement will be made along the surface of each shoulder to the nearest 0.01 of a mile. Such price will include disposing of any excess material in an approved disposal site, and for all labor, tools, equipment, and incidentals necessary to complete the work.

Where ASB is used, Incidental Stone will not be required

Aggregate Shoulder Borrow will be measured and paid at the contract unit price per ton.

Where ASB is used, seeding and mulching will not be required.

Payment will be made under:

Pay Item
Shoulder Reconstruction
Aggregate Shoulder Borrow

Pay Unit Shoulder Mile Ton

MICROSURFACING:

Description

This provision covers the materials, equipment, construction and application procedures for rut filling and/or surfacing of existing paved surfaces in accordance with the contract. The microsurfacing system shall be a mixture of cationic latex modified asphalt emulsion, mineral

aggregate, mineral filler, water and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this provision and as directed by the Engineer.

Materials

(A) Latex Modified Emulsified Asphalt

The emulsified asphalt shall be a cationic type CSS-1h or CQS-1h and shall conform to AASHTO M 208 or ASTM D2397. In general a 3% polymer solids, based on asphalt weight, is considered minimum. The ring and ball softening point of the residue shall be a minimum of 140°F. It shall show no separation after mixing. The cement mixing test is waived for the latex modified CSS-1h and CQS-1h.

(B) Mineral Aggregate

The mineral aggregate used shall be compatible with the latex modified emulsified asphalt and can produce a good skid resistant surface. The aggregate shall meet requirements in Article 1012-1 of the 2018 Standard Specifications.

(C) Mineral Filler

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

(D) Water

The water shall be potable and shall be free of harmful soluble salts in accordance with Article 1024-4 of the 2018 Standard Specifications.

(E) Latex Modifier

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

(F) Other Additives

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

Mix Design

The Contractor shall submit a mix design certified by the latex modified emulsion manufacturer and present certified test results for the Engineer's approval. Compatibility of the aggregate and

latex modified CSS-1h or CQS-1h shall be certified. The job mix formula shall provide a minimum Marshall stability of 1,800 pounds and a flow of 6 to 16 units when tested according to modified ASTM procedures. Aggregate used in the job mix formula shall be of the material proposed by the Contractor for use on the project.

Submit mix design to the Materials and Tests Unit for approval. The mix design shall conform to the International Slurry Surfacing Association's ISSA A143, Section 5.2.

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

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

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

The aggregate will be accepted at the job location or stockpile based on 5 gradation tests sampled according to AASHTO T 2. If the average of the 5 tests is within the stockpile tolerance from the mix design gradation, the material will be accepted. If the average of those test results is out of specification or tolerance, the Contractor will be given the choice to either remove the material or blend additional aggregate with the stockpile material to bring it into compliance. Materials used in blending shall meet the required aggregate quality test specifications in Section 1012 of the 2018 Standard Specifications before blending and shall be blended in a manner to produce a consistent gradation.

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

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

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

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

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

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

Equipment

Use equipment that meets ISSA A143 Section 6.

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

Construction Methods

(A) Weather Limitations

The material shall be placed only when the surface is dry and the atmospheric and surface temperature is at least 45°F and rising and there is no chance of temperatures below 32°F within 24 hours from the time the material is applied.

(B) Surface Preparation

Immediately prior to applying the paving mixture the surface shall be thoroughly cleaned of all vegetation, loose materials, dirt, mud, and other deleterious materials. If water is used, cracks shall be allowed to dry thoroughly before applying microsurfacing. Manholes, valve boxes, drop inlets and other service entrances shall be protected from the microsurfacing by a suitable method.

(C) Tack Coat for Microsurfacing

The emulsified asphalt used for tack coat shall be CSS, CQS, CRS or the microsurfacing emulsion diluted to one part emulsified asphalt to two (2) or three (3) parts water, as approved by the Engineer. Consult with the microsurfacing emulsion supplier to determine dilution stability. The distributor shall be capable of applying the diluted tack coat evenly at a rate of 0.08 to 0.15 gallons per square yard as required by the Engineer. The tack coat shall be allowed to cure sufficiently before the application of microsurfacing.

(D) Application

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

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

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

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

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

(E) Curing

Adequate means shall be provided to protect the microsurfacing from damage by traffic until the mixture has cured sufficiently so that it will not adhere to or be picked up by the tire of vehicles. Normally, microsurfacing accepts straight rolling traffic on a 0.5 inch thick surface within one hour after placement. Stopping and starting traffic may require additional curing time. All rut-filling and level-up material should cure under traffic for at least 24 hours before additional material is placed.

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

(F) Test Strip

A test strip shall be placed with job site materials and approved by the Engineer. The weather and time of day, day or night, during the test strip shall be similar to expected conditions during construction. Upon completion of the test strip the Engineer will approve the mixture for proper curing and placement.

Measurement and Payment

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

Payment will be made under:

Pay ItemPay UnitLatex Modified Microsurfacing Type IISquare Yard

SHOULDER WEDGE:

(9-20-11) (Rev. 8-21-12) 610 SP6 R03R

Revise the 2018 Standard Specifications as follows:

Page 6-21, Article 610-8, SPREADING AND FINISHING, add the following after line 39:

Attach a device, mounted on screed of paving equipment, capable of constructing a shoulder wedge with an angle of 30 degrees plus or minus 4 degrees along the outside edge of the roadway, measured from the horizontal plane in place after final compaction on the final surface course. Use an approved mechanical device which will form the asphalt mixture to produce a wedge with uniform texture, shape and density while automatically adjusting to varying heights.

Payment for use of this device will be incidental to the other pay items in the contract.

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00) 620 SP6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2018 Standard Specifications.

The base price index for asphalt binder for plant mix is \$ 446.50 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **April 1, 2018**.

FINAL SURFACE TESTING NOT REQUIRED:

(5-18-04) (Rev. 2-16-16) SP6 R45

Final surface testing is not required on this project in accordance with Section 610-13, *Final Surface Testing and Acceptance*.

ASPHALT SURFACE TREATMENT AGGREGATE TYPE AND APPLICATION RATES:

(02-13-15) (Rev 01-1-18) 660 SP06 R054

MAP#	TYPE OF SEAL	LAYER	AGGREGATE TYPE	AGGREGATE TARGET RATES ^A (LBS/SY)	EMULSION TARGET RATES ^{B,C,D} (GAL/SY)
4,5,10,11	Single	Top	#78	18	0.35
7	Matcoat	Top	#67	38	0.40

- **A.** Aggregate Target Rates have +/- 2.0 lbs/sy tolerance limit.
- **B.** Emulsion Target Rates have +/- 0.05 gal/sy tolerance limit.
- C. Grades of emulsion shall be CRS-2L or CRS-2P.
- **D.** Application temperatures shall be 160-170°F.

Contractor shall adjust aggregate and emulsion rates as necessary based on the existing surface, roadway conditions, weather conditions, and as directed by the Engineer. When the Engineer requires aggregate to be applied at rates above the tolerance limit, the additional aggregate above the limit will be paid in accordance with Article 104-7 of the *Standard Specifications*.

RESURFACING EXISTING BRIDGES:

(7-1-95) (Rev. 8-21-12) SP6 R61AR

The Contractor's attention is directed to the fact that he will be required to resurface the bridges on this project if directed by the Engineer.

Place the surface so as to follow a grade line set by the Engineer with the minimum thickness as shown on the sketch herein or as directed by the Engineer. State Forces will make all necessary repairs to the bridge floors prior to the time that the Contractor places the proposed surfacing. Give the Engineer at least 15 days' notice prior to the expected time to begin operations so that State Forces will have sufficient time to complete their work.

At all bridges that are not to be resurfaced, taper out the proposed resurfacing layer adjacent to the bridges to insure a proper tie-in with the bridge surface.

ASPHALT CONCRETE PLANT MIX PAVEMENTS:

(2-20-18) 610, 1012 SP6 R65

Revise the 2018 Standard Specifications as follows:

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		E 610-3 N CRIT	ERIA			
M:	Design Binder		Lovole		Max.	Volumetric Properties			
Mix Type	ESALs millions A	PG Grade ^B	Gm	m @	Rut Depth	773 # A 77573 # 775		VFA	%G _{mm}
	millions "	Grade-	Nini	N _{des}	(mm)	% Min.	%	MinMax.	@ N _{ini}
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	Dust to	Dust to Binder Ratio (P _{0.075} / P _{be})					0.6 -	1.4 ^C	
Types	Tensi	Tensile Strength Ratio (TSR) D					85% N	Лin. ^E	

- **A.** Based on 20 year design traffic.
- ${f B.}$ 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:

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

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

TABLE 610-6 PLACEMENT TEMPERATURES FOR ASPHALT				
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. If the mix contains any amount of RAS, The virgin binder shall be PG 58-28.

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

Pay Unit
Ton

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

Mix Type	Coarse Aggregate Angularity ^B	Fine Aggregate Angularity % Minimum	Sand Equivalent % Minimum	Flat and Elongated 5:1 Ratio % Maximum
Test Method	ASTM D5821	AASHTO T 304	AASHTO T 176	ASTM D4791
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.

PAVING INTERSECTIONS:

(7-1-95) (Rev. 8-21-12) 610 SP6 R67BR

Condition, prime, and surface all unpaved intersections back from the edge of the pavement on the main line of the project a minimum distance of 50 feet. The pavement placed in the intersections shall be of the same material and thickness placed on the mainline of the project.

Resurface all paved intersections back to the ends of the radii, or as directed by the Engineer.

Widen the pavement on curves as directed by the Engineer.

PAVING DRIVEWAYS AND MAILBOX TURNOUTS:

(8-21-12) 610 SP6 R70BR

Condition, prime, and surface all driveway and mailbox turnouts as directed by the Engineer. Place pavement on driveway and mailbox turnouts of the same material as used on the main line and in depths directed by the Engineer. Widen the pavement on curves as directed by the Engineer.

TRENCHING FOR BASE COURSE:

(7-1-95) (Rev.1-19-16) SP6 R79AR

Perform all trenching necessary to place the asphalt concrete base course widening in accordance with the typical sections, at locations shown on the sketch maps, and as directed by the Engineer.

Perform the trenching for the base course on the same day that the base course is to be placed. If the base course cannot be placed on the same day the trench section is excavated, backfill the trench with earth material and compact it to the satisfaction of the Engineer. Once the trench is open, perform backfilling and re-opening of the trench at no cost to the Department.

The Contractor will be restricted to widening one side of the project at a time unless otherwise permitted by the Engineer. In widening, operate equipment and conduct operations in the same direction as the flow of traffic.

Compact the asphalt concrete base course in the widened areas using means and methods acceptable to the Engineer. Density testing will be performed in accordance with Section 10.3.4 of the *QMS Manual*.

Place the excavated material from trenching operation on the adjacent shoulder area as directed by the Engineer. Cut adequate weep holes in the excavated material to provide for adequate drainage as directed by the Engineer. Remove all excavated material from all drives to provide ingress and egress to abutting properties and from in front of mailboxes and paper boxes. Saw a neat edge and remove all asphalt and/or concrete driveways, and existing asphalt widening, as directed by the

Engineer, to the width of the widening and dispose of any excavated concrete or asphalt materials. Properly reconnect driveways.

Upon completion of the paving operation, backfill the trench to the satisfaction of the Engineer. Properly dispose of any excess material remaining after this operation.

No direct payment will be made for trenching, sawing, and removal of driveways, depositing material on shoulder area, backfilling trench, or removal of spoil material, as the cost of this work shall be included in the bid unit price per ton for *Asphalt Concrete Base Course*, *Type* ____.

PATCHING EXISTING PAVEMENT:

(1-15-02) (Rev. 3-11-18) 610 SP6 R88R

Description

The Contractor's attention is directed to the fact that there are areas of existing pavement on this project that will require repair prior to resurfacing. Patch the areas that, in the opinion of the Engineer, need repairing. The areas to be patched will be delineated by the Engineer prior to the Contractor performing repairs.

Materials

The patching consists of Asphalt Concrete Base Course, Asphalt Concrete Intermediate Course, Asphalt Concrete Surface Course, or a combination of base, binder and surface course.

Construction Methods

Remove existing pavement at locations directed by the Engineer in accordance with Section 250 of the 2018 Standard Specifications.

Place Asphalt Concrete Base Course, in lifts not exceeding 5.5 inches. Utilize compaction equipment suitable for compacting patches as small as 3.5 feet by 6 feet on each lift. Use an approved compaction pattern to achieve proper compaction. If patched pavement is to be open to traffic for more than 48 hours prior to overlay, use Asphalt Surface Course in the top 1.5 inches of the patch.

Schedule operations so that all areas where pavement has been removed will be repaired on the same day of the pavement removal and all lanes of traffic restored.

Measurement and Payment

Patching Existing Pavement will be measured and paid as the actual number of tons of asphalt plant mix complete in place that has been used to make completed and accepted repairs. The asphalt plant mixed material will be measured by being weighed in trucks on certified platform scales or other certified weighing devices. The above price and payment will be full compensation for all work covered by this provision, including but not limited to removal and disposal of all types of pavement; furnishing and applying tack coat; furnishing, placing, and compacting of asphalt plant mix; furnishing of asphalt binder for the asphalt plant mix; and furnishing scales.

Any provisions included in the contract that provides for adjustments in compensation due to variations in the price of asphalt binder will not be applicable to payment for the work covered by this provision.

Payment will be made under:

Pay ItemPay UnitPatching Existing PavementTon

ADJUSTMENT OF VALVE BOXES, MANHOLES, AND METER BOXES:

(11-07-06) RR 103

Valve boxes, manholes, and meter boxes shall be adjusted in accordance with Section 858 of the *Standard Specifications*. This item consists of raising or lowering existing manholes and valve boxes to match the finished surface grade.

Adjustment to manholes, meter boxes, and valve boxes on this project shall be made by the use of an approved **Rapid Set Grout, Mortar, or Concrete** that will take full set and become load bearing within sixty minutes of placement. A list of approved materials will be furnished to the Contractor by the Resident Engineer.

Where the Engineer requires the contractor to adjust any utility before milling and then adjust the same utility to match the final surface elevation, the lowering and raising of the utility shall be paid for as ONE adjustment.

The Contractor shall replace worn manhole rings and covers, worn meter box frames and covers, and worn valve box frames and covers, as directed by the Engineer, with a new ring/frame and cover assembly. These assemblies will be furnished at no cost to the Contractor by the Department or utility owner.

The Contractor shall construct a temporary ramp of bituminous plant mix around all structures that have been adjusted, unless otherwise directed by the Engineer.

Basis of payment will be under Adjustment of Manholes or Adjustment to Valve Boxes, per each.

EROSION AND STORMWATER CONTROL FOR SHOULDER CONSTRUCTION AND RECONSTRUCTION:

(11-16-10) (Rev. 8-21-12) 105-16, 225-2, Division 16 SP16 R03R

Land disturbing operations associated with shoulder construction/reconstruction may require erosion and sediment control/stormwater measure installation. National Pollutant Discharge Elimination System (NPDES) inspection and reporting may be required.

Erosion control measures shall be installed per the erosion control detail in any area where the vegetated buffer between the disturbed area and surface waters (streams, wetlands, or open waters) or drainage inlet is less than 10 feet. The Engineer may reduce the vegetated buffer threshold for this requirement to a value between 5 and 10 feet. Erosion control measures shall be spot checked every 14 days until permanent vegetative establishment.

In areas where shoulder construction/reconstruction includes disturbance or grading on the front slope or to the toe of fill, relocating ditch line or backslope, or removing vegetation from the ditch line or swale, NPDES inspection and monitoring are required every 14 days or within 24 hours of a rainfall event of 0.5 inch or greater. Maintain daily rainfall records. Install erosion control measures per detail.

In areas where the vegetated buffer is less than 10 feet between the disturbed area and waters of the State classified as High Quality Water (HQW), Outstanding Resource Water (ORW), Critical Areas, or Unique Wetlands, NPDES inspection and monitoring are required every 14 days or within 24 hours of a rainfall event of 0.5" or greater. The Engineer may reduce the vegetated buffer threshold for this requirement to a value between 5 and 10 feet. The plans or provisions will indicate the presence of these water classifications. Maintain daily rainfall records. Install erosion control measures per detail.

Land disturbances hardened with aggregate materials receiving sheet flow are considered non-erodible.

Sites that require lengthy sections of silt fence may substitute with rapid permanent seeding and mulching as directed by the Engineer.

NPDES documentation shall be performed by a Level II Erosion and Sediment Control/Stormwater certificate holder.

Materials used for erosion control will be measured and paid as stated in the contract.

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.

Montgomery and Richmond Counties

STANDARD SPECIAL PROVISION NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11) Z-3

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Limitations per Lb. Of Seed	Restricted Noxious <u>Weed</u>	Limitations per Lb. of Seed
4 seeds	Cornflower (Ragged Robin)	27 seeds
4 seeds	Texas Panicum	27 seeds
4 seeds	Bracted Plantain	54 seeds
4 seeds	Buckhorn Plantain	54 seeds
8 seeds	Broadleaf Dock	54 seeds
10 seeds	Curly Dock	54 seeds
12 seeds	Dodder	54 seeds
27 seeds	Giant Foxtail	54 seeds
27 seeds	Horsenettle	54 seeds
27 seeds	Quackgrass	54 seeds
27 seeds	Wild Mustard	54 seeds
27 seeds		
	Lb. Of Seed 4 seeds 4 seeds 4 seeds 4 seeds 4 seeds 8 seeds 10 seeds 12 seeds 27 seeds 27 seeds 27 seeds 27 seeds 27 seeds	Lb. Of Seed 4 seeds Cornflower Robin) 4 seeds Texas Panicum 4 seeds Bracted Plantain 4 seeds Buckhorn Plantain 8 seeds Broadleaf Dock Curly Dock 10 seeds Curly Dock 12 seeds Dodder Giant Foxtail 27 seeds Horsenettle Quackgrass Wild Mustard

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)

Kobe Lespedeza

Bermudagrass

Browntop Millet

Carpetgrass

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties) Kentucky Bluegrass (all approved varieties) Hard Fescue (all approved varieties) Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass Japanese Millet
Crownvetch Reed Canary Grass

Pensacola Bahiagrass Zoysia

Creeping Red Fescue

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass

Big Bluestem

Little Bluestem

Bristly Locust

Birdsfoot Trefoil

Indiangrass

Orchardgrass

Switchgrass

Yellow Blossom Sweet Clover

ERRATA

(2-12-18) Z-4

Revise the 2018 Standard Specifications as follows:

Division 7

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

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

Division 10

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

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

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

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

PLANT AND PEST QUARANTINES

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

(3-18-03) (Rev. 12-20-16) 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 http://www.ncagr.gov/plantindustry/ 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, or other noxious weeds.

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.

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.

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.



HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES

Description

This work consists of machine applied hot spray thermoplastic pavement marking material with drop-on glass beads. All work shall be in accordance with the applicable requirements of Section 1205 of the *Standard Specifications* and this provision.

Construction

Use application equipment that provides multiple width settings ranging from 4" to 12" and multiple thickness settings to achieve a minimum 50 mil thickness in one pass.

Hand-liners will not be allowed.

All thermoplastic markings shall be of the hot, machine applied type. Application shall be accomplished by spraying methods only.

Produce a cross-sectional thickness of hot spray thermoplastic markings for long line markings only with a minimum thickness of 50 mils without glass beads and/or a minimum thickness of 55 mils with glass beads.

Material

Furnish the following pavement marking material certifications in accordance with Article 106-3 of the *Standard Specifications*:

Hot Spray Thermoplastic Type 3 Material Certification

Extruded type thermoplastic shall not be sprayed.

Measurement and Payment

Pay Item			Pay Un	iit
Hot Spray Thermoplastic Pavement Marking Lines ("	mils)	LF	

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS

TEMPORARY TRAFFIC CONTROL (TTC):

(7-16-13) (Rev. 1-16-18)

Maintain traffic in accordance with Divisions 10, 11 and 12 of the 2018 Standard Specifications and the following provisions:

Install Work Zone Advance Warning Signs in accordance with the detail drawing provided in these plans prior to beginning any other work. Use a lane closure or slow moving operation to complete the work, as necessary, unless otherwise indicated. Refer to Standard Drawing No. 1101.02, 1101.11, 1110.01, 1110.02, 1130.01 1135.01 and 1180.01 of the 2018 Roadway Standard Drawings. Use a moving operation only if the minimum speed maintained at all times is 3 mph with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than 3 mph at any time, install a lane closure. Maintain the existing traffic pattern at all times, except in the immediate work zone where lane closures are allowed as determined by the Engineer.

Refer to attached details and Standard Drawing No. 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, and 1180.01 of the 2018 Roadway Standard Drawings when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal. Properly ballasted cones and skinny drums may be used instead of drums. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 1 mile in length at any given time on 2 Lane, 2 Way facilities unless otherwise approved by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the 2018 Standard Specifications and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to and within 5 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2018 Roadway Standard Drawings. When personnel and/or equipment are working within a lane of travel of an undivided facility, close the lane according to the traffic control plans, 2018 Roadway Standard Drawings or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

When utilizing a slow-moving operation for such items as pavement marking and marker placement, the operation shall consist of the vehicles and devices as shown on Roadway Standard Drawing No. 1101.02, sheet 11 or 12 of the 2018 Roadway Standard Drawings. Traffic cones may be used when necessary to provide additional protection of wet pavement markings. Ballast all traffic cones so they will not be blown over by traffic.

PAVING OPERATIONS:

1) Paving Lift Requirements and Time Limitations:

For paving lifts of 2.0 inches or less, bring all newly resurfaced lanes to the same station and elevation within 72 hours. If not brought up to the same station and elevation within 72 hours, the Contractor shall place portable "UNEVEN PAVEMENT" signs in advance of the uneven pavement and spaced every 1/2 mile along the section of uneven pavement. Once mitigated, all portable "UNEVEN PAVEMENT" signs shall be removed. No additional compensation will be made for these signs or any other type of portable warning signs as these are included in the "Temporary Traffic Control" contract pay item.

For paving lifts greater than 2 inches, bring all newly resurfaced lanes to the same station and elevation by the end of each work day unless the Contractor utilizes the notched wedge paving methods as described below.

Failure to comply with the following requirements will result in a suspension of all other operations until all lanes of traffic are brought to the same station and elevation:

- 1. During paving operations, any paving lift greater than 2 inches for asphalt surface course mixes shall be mitigated by having an approved wedge apparatus on the paver that shapes the edge 1 inch vertically and the remaining at a maximum slope steepness of 2:1. For intermediate and base course mixes, use an approved wedge device that shapes the edge with a maximum slope steepness of 2:1. The maximum paving lift allowed to use this method is 3 inches.
- 2. At the end of the work day, the Contractor shall place portable "UNEVEN PAVEMENT" signs in advance of the uneven pavement and spaced every 1/2 mile along the section of uneven pavement. Once mitigated, all portable "UNEVEN PAVEMENT" signs shall be removed. No additional compensation will be made for these signs or any other type of portable warning signs as these are included in the "Temporary Traffic Control" contract pay item.
- 3. In the next day's paving operation and not to exceed 72 hours, the Contractor shall bring up the adjacent lane to the same station and elevation before any further paving takes place on the project.

2) Asphalt Surface Treatments (AST)

For AST Operations, there is no drop-off condition to be signed. Stationary "LOOSE GRAVEL" and "UNMARKED PAVEMENT" signs shall replace "LOW/SOFT SHOULDER" signs. For placement and spacing of these signs, see the Signing Detail Sheet. All other advance warning signs are to be portable mounted. These signs are included as part of the temporary traffic control (Lump Sum) item.

3) Fine Milling/Microsurfacing (Depths less than 1")

For fine milling operations less than 1 inch, paving is not required in the same work period. The paving of the fine milled area is to be conducted within the next work period and not to exceed 72 hours. No advance warning signs are necessary for these conditions unless the paving operations exceed 72 hours. If this occurs, install portable "UNMARKED PAVEMENT" signs. These signs are incidental to the other items of work included in the temporary traffic control (Lump Sum) item.

4) Shoulder Drop-Off Requirements

Whenever paving operations create an edge of pavement drop-off greater than 2 inches, within 72 hours, the Contractor shall backfill at a 6:1 slope from the edge and finished elevation of the pavement that has an edge of pavement drop-off as follows:

- (A) Drop-off that exceeds 2 inches on roadways with posted speed limits of 45 mph or greater.
- (B) Drop-off that exceeds 3 inches on roadways with posted speed limits less than 45 mph.

Backfill the edge of pavement drop-off with suitable compacted material, as approved by the Engineer. The material, equipment and labor associated with this operation will be at no expense to the Department. This work is not considered part of shoulder reconstruction.

PROJECT REQUIREMENTS:

Failure to comply with the following requirements will result in a suspension of all other operations:

- 1. Before working on ANY MAP, the Contractor shall submit a written construction sequence for traffic control and construction lighting for ALL MAPS to the Engineer at the first preconstruction meeting and the sequence must be approved before closing a lane of traffic. The Contractor and Engineer will coordinate with the Traffic Management Unit at 919-814-5000 or Traffic Services for additional traffic control guidance, as necessary.
- 2. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures. The maximum length of any one lane closure is 1 mile unless otherwise directed by the Engineer.
- 3. If Lane Closure Restrictions apply, see Special Provision, "Intermediate Contract Times and Liquidated Damages".
- 4. Contractor shall mill and pave lanes in an order such that water shall not accumulate.
- 5. Traffic Control for the milling and/or paving of ramps is to be done according to Standard Drawing Number 1101.02, Sheets 9 & 10, unless otherwise approved to be closed by the Engineer. If approved, Contractor will provide plans and devices for the detour at no additional cost to the department.

6. If milled areas are not paved back within 72 hours, the Contractor is to furnish and install portable signs to warn drivers of the conditions. These are to include, but not limited to "Rough Road" (W8-8), "Uneven Lanes" (W8-11), and "Grooved Pavement" (W8-15) w/ Motorcycle Plaque mounted below. These are to be dual indicated on Multi-Lane Roadways with speed limits 45 mph and greater where lateral clearance can be obtained within the median areas. These portable signs are incidental to the other items of work included in the temporary traffic control (Lump Sum) pay item.

WORK ZONE SIGNING:

Description

Install advance/general warning work zone signs according to the Detail Drawing provided in these plans prior to beginning of work. Install and maintain signing in accordance with the attached drawings and Divisions 11 and 12 of the 2018 Standard Specifications.

(A) Installation

All stationary Advance/General warning work zone signs require notification to existing Utility owners per Article 105-8 of the 2018 Standard Specifications and Special Provision SP1 G115 within 3 to 12 full working days prior to installation.

Install Advance/General warning work zone signs before beginning work on a particular map. If signs are installed more than 7 calendar days prior to the beginning of work on a particular map, cover the signs until the work begins. Install each work zone Advance/General warning sign separately and not on the same post or stand with any other sign except where an advisory speed plate or directional arrow is used.

All stationary signing is to be installed as shown on the detail drawing(s) unless otherwise directed by the Engineer. The signs as shown on the detail drawing(s) are all that are required for a contractor to begin a resurfacing contract. Any additional signs requested by the Engineer shall be installed within 7 business days of the start of contract work. All sign locations are to be verified by the Engineer prior to installation. Once the signs have been installed and accepted, any sign relocations requested by the Department will be compensated in accordance with Article 104-7. Any additional signs other than the ones shown in the drawing will be compensated in accordance with Article 104-7.

No stationary -Y- Line advance warning signage is required unless there is more than 1,000 feet of resurfacing along the -Y- line. Whenever work proceeds through an intersection, portable signs shall be used for traffic control. There will be no direct compensation for any portable signing.

If there is a period of construction inactivity longer than 14 calendar days, remove or cover advance/general warning work zone signs. Uncover advance/general warning work zone signs no more than 7 calendar days before work resumes. All other operations may be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

(B) Sign Removal

Once Maps on the Project are substantially complete, it is acceptable practice to remove the Stationary Work Zone Signs in lieu of waiting until all of the Maps are completed on the Project. A Map is substantially complete when the resurfacing operations are finished and the shoulders are brought up to the same elevation as the proposed pavement and when pavement markings (paint) are installed along the centerline and edge lines. The final pavement markings (ex. Thermoplastic/Polyurea) or pavement markers (Raised/Snowplowable) don not have to be installed for Maps to be considered substantially complete. Final pavement marking/markers are installed with portable signing according to Roadway Standard Drawing 1101.02, sheet 11 or 12. Any remaining punch list items requiring traffic control are compensated in the contract pay item for *Temporary Traffic Control*.

Stationary Work Zone Sign removal is a condition of final project acceptance.

(C) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the 2018 Roadway Standard Drawings. Any required portable signs for lane closures are compensated in the contract pay item for Temporary Traffic Control.

MEASUREMENT AND PAYMENT:

Temporary traffic control work, including, but not limited to installation and removal of portable signs, cones, drums, skinny drums, flaggers, AFAD's, changeable message boards, truck mounted attenuators, flashing arrow boards, and pilot vehicles will be paid at the contract lump sum price for *Temporary Traffic Control*. The *Temporary Traffic Control* pay item does not include work zone advance or general warning signs. Partial payments for *Temporary Traffic Control* will be made as follows: The cumulative total of the lump sum price for temporary traffic control will be equal to the percent complete (project) as calculated for each partial pay estimate. Additional flashing arrow boards and message boards beyond those shown in the contract, detail drawings or *Roadway Standard Drawings* required by the Engineer will be paid as extra work in accordance with Article 104-7 of the *Standard Specifications*.

The work of satisfactorily installing and removing work zone advance and/or general warning signs, including, but not limited to, furnishing, locating, installing, covering, uncovering and removing stationary signs will be measured for each required sign and paid at the contract price for *Work Zone Advance/General Warning Signing (SF)*. Payment for *Work Zone Advance/General Warning Signing* will be limited to a maximum of 90% of the total installed quantity. The remaining 10% will be paid once all signs have been removed.

The Lump Sum price for *Temporary Traffic Control* will include the work of 4 flaggers per operation per map being utilized at the same time on any day. If a pilot vehicle is used for an operation, the Lump Sum Price for *Temporary Traffic Control* will include the work of five (5) flaggers. The operator of a pilot vehicle will be considered one of the five flaggers.

Any additional flagging beyond the "included" amount covered in the *Temporary Traffic Control* pay item will be considered supplemental flagging and compensated at a rate of \$20.00 per hour for each additional flagger as approved by the Engineer.

Payment will be made under:

Pay Item
Temporary Traffic Control
Work Zone Advance/General Warning Signing

Pay Unit Lump Sum Square Foot



RESURFACING OPERATIONS:

(7-15-14) RWZ-2

Coordinate the installation of items required by the contract documents and resurfacing operations such that these operations are completed in the order as agreed upon with the Engineer at the first pre-construction meeting. Refer to the Provisions, Typicals and Details unless otherwise directed by the Engineer.

Notify the Engineer 15 consecutive calendar days before resurfacing a bridge or its approaches. Patch and make repairs to bridge surface and its approaches before resurfacing occurs. Coordinate all operations on the bridge and its approaches with the Engineer.

Notify the Engineer 48 hours before resurfacing the areas of existing pavement that require patching. Patch these areas before resurfacing occurs. Allow full depth asphalt patching to cool to the point of supporting traffic without displacement or rutting before reopening closed lane. Coordinate the resurfacing operations of the patched areas with the Engineer.

Notify the Engineer 48 hours before milling or resurfacing will interfere with the existing Signal Loops. Loops may need to be placed in milled surface before resurfacing occurs. Coordinate all signal loop operations with the Engineer.

For partial or wheel track milling operations on two-way, two-lane facilities, mill and pave back by the end of each work day. For Partial or wheel track milling operation on multi-lane facilities, the lane being milled may be left closed and paved back within 72 hours.

The following options are available during Resurfacing and milling operations on two-way, two-lane facilities when the entire roadway or entire lane is to be milled:

- (A) Mill a single lane and pave back by the end of each work day.
- (B) Mill the entire width of roadway and pave back within 72 hours.

The following options are available during Resurfacing and milling operations on multi-lane facilities when all lanes or a single lane in one direction are to be milled:

- (A) Mill a single lane and pave back by the end of each work day.
- (B) Mill the entire width of pavement for all lanes to be milled in any direction daily and pave back within 72 hours.

Slope the pavement at the beginning and ending of the daily milling operation as directed by the Engineer. Sweep and remove all milled material from the roadway as soon as the daily milling operation is completed. Continue milling operations until the particular section of roadway being milled is complete. Remove any existing pavement adjacent to the milled area that has been damaged and replace with patch material as directed by the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Maintain vehicular access in accordance with Article 1101-05 of the 2018 Standard Specifications using suitable backfill material approved by the Engineer.

Provide appropriate lighting in accordance with Section 1413 of the 2018 Standard Specifications.

Milled Rumble Strips:

When utilized, milled rumble strips shall be installed in accordance with the 2018 Standard Specifications and the 2018 Roadway Standard Drawing 665.01.

PAVEMENT MARKINGS AND MARKERS:

(7-15-14) RWZ-3

Markings: All Facilities

Pavement markings shall be installed in accordance with Standard Drawings 1205.01 through 1205.13 of the 2018 Roadway Standard Drawings and Section 1205 of the 2018 Standard Specifications with the exception of the 15 day edge line replacement requirement for two-lane, two-way roadways as described in Subarticle 1205-3(D) of the 2018 Standard Specifications. For all two-lane, two-way facilities, edge lines can be replaced within 30 calendar days after they have been obliterated.

Type 3 Cold Applied Plastic may be used in lieu of Type 2 Cold Applied Plastic. If Type 3 Cold Applied Plastic is used, it shall be paid for using the Type 2 Cold Applied Plastic pay item.

Unless otherwise specified, Heated-in-Place Thermoplastic may be used in lieu of Extruded Thermoplastic for stop bars, symbols, characters and diagonals. If Heated-in-Place Thermoplastic is used, it shall be paid for using the Extruded Thermoplastic pay item.

Unless otherwise specified, Heated-in-Place Thermoplastic may be used in lieu of Cold Applied Plastic for stop bars, symbols, characters and diagonals on asphalt or concrete roadways. If Heated-in-Place Thermoplastic is used, it shall be paid for using the Cold Applied Plastic pay item.

Markers: All Facilities

Remove existing pavement markers in preparation for paving. Repair any pavement damage due to existing pavement marker removal prior to the end of the work day. Dispose of existing pavement markers as directed by the Engineer. No direct payment will be made for this work as it will be incidental to the paving operation.

Install permanent pavement markers within 60 calendar days after completing the resurfacing on each map. Pavement markers shall be installed in accordance with Standard Drawing 1205.12 and Standard Drawings 1250.01 through 1253.01 of the 2018 Roadway Standard Drawings and Sections 1250 through 1253 of the 2018 Standard Specifications.

Markings and Markers: All Facilities

Review and record the existing pavement markings and markers before resurfacing. Re-establish the new pavement markings and markers using the record of existing markings in conjunction with the 2018 Roadway Standard Drawings unless otherwise directed by the engineer. Have existing or proposed "passing zones" reviewed by the engineer before installation. Submit the record of the existing pavement markings seven calendar days before the obliteration of any pavement markings.

Mainline pavement shall not be left milled, unmarked or uneven at the end of a paving season. If the Contractor begins any map and does not complete within the seasonal restrictions, including placement of final pavement markings or permanent markers, the Contractor shall be responsible for, at his expense, Paint in accordance with Article 1205-08 and Temporary Markers in accordance with Section 1251 of the 2018 Standard Specifications.

STABILIZATION REQUIREMENTS:

S-11-16) S-2

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit effective August 3, 2011 issued by the North Carolina Department of Environment and Natural Resources Division of Water Quality. Temporary or permanent ground cover stabilization shall occur within 7 calendar days from the last land-disturbing activity, with the following exceptions in which temporary or permanent ground cover shall be provided in 14 calendar days from the last land-disturbing activity:

- Slopes between 2:1 and 3:1, with a slope length of 10 ft. or less
- Slopes 3:1 or flatter, with a slope of length of 50 ft. or less
- Slopes 4:1 or flatter

The stabilization timeframe for High Quality Water (HQW) Zones shall be 7 calendar days with no exceptions for slope grades or lengths. High Quality Water Zones (HQW) Zones are defined by North Carolina Administrative Code 15A NCAC 04A.0105 (25). Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

SEEDING AND MULCHING:

(East Crimp)

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

All Roadway Areas

March 1 - August 31		September 1 - February 28		
50#	Tall Fescue	50#	Tall Fescue	
10#	Centipede	10#	Centipede	
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)	
500#	Fertilizer	500#	Fertilizer	
4000#	Limestone	4000#	Limestone	

Waste and Borrow Locations

March 1	– August 31	September 1 - February 28		
75#	Tall Fescue	75#	Tall Fescue	
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)	
500#	Fertilizer	500#	Fertilizer	
4000#	Limestone	4000#	Limestone	

Note: 50# of Bahiagrass may be substituted for either Centipede or Bermudagrass only upon Engineer's request.

EC-2

Approved Tall Fescue Cultivars

06 Dust	Escalade	Justice	Scorpion
2 nd Millennium	Essential	Kalahari	Serengeti
3 rd Millennium	Evergreen 2		Shelby
Apache III	Falcon IV	Kitty Hawk 2000	Sheridan
Avenger	Falcon NG	Legitimate	Signia
Barlexas	Falcon V	Lexington	Silver Hawk
Barlexas II	Faith	LSD	Sliverstar
Bar Fa	Fat Cat	Magellan	Shenandoah Elite
Barrera	Festnova	Matador	Sidewinder
Barrington	Fidelity	Millennium SRP	Skyline
Barrobusto	Finelawn Elite	Monet	Solara
Barvado	Finelawn Xpress	Mustang 4	Southern Choice II
Biltmore	Finesse II	Ninja 2	Speedway
Bingo	Firebird	Ol' Glory	Spyder LS
Bizem	Firecracker LS	Olympic Gold	Sunset Gold
Blackwatch	Firenza	Padre	Taccoa
Blade Runner II	Five Point	Patagonia	Tanzania
Bonsai	Focus	Pedigree	Trio
Braveheart	Forte	Picasso	Tahoe II
Bravo	Garrison	Piedmont	Talladega
Bullseye	Gazelle II	Plantation	Tarheel
Cannavaro	Gold Medallion	Proseeds 5301	Terrano
Catalyst	Grande 3	Prospect	Titan ltd
Cayenne	Greenbrooks	Pure Gold	Titanium LS
Cessane Rz	Greenkeeper	Quest	Tracer
Chipper	Gremlin	Raptor II	Traverse SRP
Cochise IV	Greystone	Rebel Exeda	Tulsa Time
Constitution	Guardian 21	Rebel Sentry	Turbo
Corgi	Guardian 41	Rebel IV	Turbo RZ
Corona	Hemi	Regiment II	Tuxedo RZ
Coyote	Honky Tonk	Regenerate	Ultimate
Darlington	Hot Rod	Rendition	Venture
Davinci	Hunter	Rhambler 2 SRP	Umbrella
Desire	Inferno	Rembrandt	Van Gogh
Dominion	Innovator	Reunion	Watchdog
Dynamic	Integrity	Riverside	Wolfpack II
Dynasty	Jaguar 3	RNP	Xtremegreen
Endeavor	Jamboree	Rocket	

On cut and fill slopes 2:1 or steeper Centipede shall be applied at the rate of 5 pounds per acre and add 20# of Sericea Lespedeza from January 1 - December 31.

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

All areas seeded and mulched shall be tacked with asphalt. Crimping of straw in lieu of asphalt tack shall not be allowed on this project.

CRIMPING STRAW MULCH:

Crimping shall be required on this project adjacent to any section of roadway where traffic is to be maintained or allowed during construction. In areas within six feet of the edge of pavement, straw is to be applied and then crimped. After the crimping operation is complete, an additional application of straw shall be applied and immediately tacked with a sufficient amount of undiluted emulsified asphalt.

Straw mulch shall be of sufficient length and quality to withstand the crimping operation.

Crimping equipment including power source shall be subject to the approval of the Engineer providing that maximum spacing of crimper blades shall not exceed 8".

WATTLE: (10-19-10) (Rev. 1-17-12)

1060.1630.1631 T1

Description

Wattles are tubular products consisting of excelsior fibers encased in synthetic netting. Wattles are used on slopes or channels to intercept runoff and act as a velocity break. Wattles are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of wattles, matting installation, and removing wattles.

Materials

Wattle shall meet the following specifications:

100% Curled Wood(Excelsior) Fibers

Minimum Diameter 12 in.

Minimum Density $2.5 \text{ lb/ft}^3 +/- 10\%$

Net MaterialSyntheticNet Openings1 in. x 1 in.Net ConfigurationTotally Encased

Minimum Weight 20 lb. +/- 10% per 10 ft. length

Stakes shall be used as anchors.

Provide hardwood stakes a minimum of 2 feet long with a 2 inch x 2 inch nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving down into the underlying soil.

Matting shall meet the requirements of Article 1060-8 of the 2018 Standard Specifications, or shall meet specifications provided elsewhere in this contract.

Provide staples made of 0.125 inch diameter new steel wire formed into a u shape not less than 12 inches in length with a throat of 1 inch in width.

Construction Methods

Wattles shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each section of wattle. A minimum of 4 stakes shall be installed on the downstream side of the wattle with a maximum spacing of 2 linear feet along the wattle, and according to the detail. Install a minimum of 2 stakes on the upstream side of the wattle according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 inches with no more than 2 inches projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

EC-5

Only install wattle(s) to a height in ditch so flow will not wash around wattle and scour ditch slopes and according to the detail provided in the plans and as directed. Overlap adjoining sections of wattles a minimum of 6 inches.

Installation of matting shall be in accordance with the detail provided in the plans, and in accordance with Article 1631-3 of the 2018 Standard Specifications, or in accordance with specifications provided elsewhere in this contract.

The Contractor shall maintain the wattles until the project is accepted or until the wattles are removed, and shall remove and dispose of silt accumulations at the wattles when so directed in accordance with the requirements of Section 1630 of the 2018 Standard Specifications.

Measurement and Payment

Wattle will be measured and paid for by the actual number of linear feet of wattles which are installed and accepted. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the *Wattle*.

Matting will be measured and paid for in accordance with Article 1631-4 of the 2018 Standard Specifications, or in accordance with specifications provided elsewhere in this contract.

Payment will be made under:

Pay ItemPay UnitWattleLinear Foot

County: Montgomery, Richmond

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
		F	ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0106000000-E	230	BORROW EXCAVATION	670 CY		
0003	1243000000-E	SP	SHOULDER CONSTRUCTION	9.03 SMI		
0004	1245000000-E	SP	SHOULDER RECONSTRUCTION	51.25 SMI		
0005	1260000000-E	SP	AGGREGATE SHOULDER BORROW	7,298 TON		
0006	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (1-1/2")	87,124 SY		
0007	1330000000-E	607	INCIDENTAL MILLING	5,760 SY		
0008	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	2,840 TON		
0009	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	33,975 TON		
0010	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	2,160 TON		
0011	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	2,298 TON		
0012	1704000000-E	SP	PATCHING EXISTING PAVEMENT	1,740 TON		
0013	1775500000-E	660	ASPHALT SURFACE TREATMENT, MAT COAT, #*** STONE (67)	19,000 SY		
0014	1814500000-E	660	ASPHALT SURFACE TREATMENT, SINGLE SEAL	244,742 SY		
0015	1838000000-E	660	EMULSION FOR ASPHALT SURFACE TREATMENT	93,259 GAL		
0016	1838500000-N	660	VACUUM TRUCK	3 WK		
0017	1891000000-E	SP	GENERIC PAVING ITEM LATEX MODIFIED MICROSURFACING TYPE II	88,077 SY		
0018	2830000000-N	858	ADJUSTMENT OF MANHOLES	15 EA		

ITEMIZED PROPOSAL FOR CONTRACT NO. C204170

County: Montgomery, Richmond

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0019	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	12 EA		
0020	4413000000-E	SP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	3,872 SF		
0021	4457000000-N	SP	TEMPORARY TRAFFIC CONTROL	Lump Sum	L.S.	
0022	4510000000-N	1190	LAW ENFORCEMENT	80 HR		
0023	4685000000-Е	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	325,939 LF		
0024	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	291,962 LF		
0025	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	485 LF		
0026	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	230 LF		
0027	4705000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS)	300 LF		
0028	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	576 LF		
0029	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	30 EA		
0030	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	88 EA		
0031	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (II)	1,072 LF		
0032	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	29,800 LF		
0033	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	170 LF		
0034	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	51,072 LF		

County: Montgomery, Richmond

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	4860000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (8")	170 LF		
0036	4870000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (24")	235 LF		
0037	4875000000-N	1205	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	73 EA		
0038	489000000-E	SP	GENERIC PAVEMENT MARKING ITEM HOT SPRAY THERMOPLASTIC PAVE- MENT MARKING LINES (4", 50 MILS)	20,200 LF		
0039	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	405 EA		
0040	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	1,614 EA		
0041	6000000000-E	1605	TEMPORARY SILT FENCE	455 LF		
0042	6071010000-E	SP	WATTLE	80 LF		
0043	6084000000-E	1660	SEEDING & MULCHING	6.57 ACR		
0044	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	1,568 LF		

1448/Apr10/Q1319517.85/D154281610000/E44

Total Amount Of Bid For Entire Project :

COMBINED GOAL SET: 7.00% COMBINED GOAL OBT: 7.02%

Vendor 1 of 3: BARNHILL CONTRACTING COMPANY (3516) Call Order 012 (Proposal: C204170)

Bid Information

Proposal County:RANDOLPHBid Checksum:9BBBE9CC

Vendor Address:Bid Total:\$4,910,882.73Signature Check:James_Partington_IV_3516Items Total:\$4,910,882.73

Amendment Count: 0

Bidding Errors:

None.

NCDOT Page 99 of 153

Vendor 1 of 3: BARNHILL CONTRACTING COMPANY (3516) Call Order 012 (Proposal: C204170)

Bid Bond Information

Projects: Bond Maximum:
Counties: State of Incorporation:

Bond ID: SNC18284141 **Agency Execution Date:** 4/18/2018 12

Paid by Check: No Surety Name: surety2000

Bond Percent: 5% **Bond Agency Name:** Travelers Casualty and Surety

Company of America

NCDOT Page 100 of 153

7.02%

Bidder 1 of 3

Vendor 3516's Bid Information for Call 012, Letting L180515, 05/15/18

Barnhill Contracting Company (3516) Call Order 012 (Proposal ID C204170)

LIST OF DBE PARTICIPANTS

	VENDOR NUMBER		WORK CODE TYPE OF WORK	CERT TYPE	AMOUNT	
WB	3765	STAY ALERT SAFETY SERVICES INC POST OFFICE BOX 467 , KERNERSVI	TILE NC 27285	Sub	38,332.80	COMMITTED
MB	1795	J A HUNT'S ENTERPRISE 2841 BLUE SPRINGS ROAD , RED SF	,	Sub	18,000.00	COMMITTED
MB	12374	DELCO INC P.O. BOX 130 , ROCKINGHAM, NC 2	•	Sub	102,000.00	COMMITTED
MB	9602	CAROLINA TRANSPORT OF GREENSBOR 347 SOUTH CHERRY STREET , KERNE		Sub	10,258.56	COMMITTED
WB	2653	BROWE CONSTRUCTION COMPANY POST OFFICE BOX 1499 , CLAYTON,		Sub	26,950.00	COMMITTED
MB	7612	BURUCA TRUCKING INC 165 WILLOW RIDGE DRIVE , SANFOR		Sub	45,000.00	COMMITTED
MB	10102	K & N TRUCKING 2312 BOONE TRAIL ROAD , SANFORD	•	Sub	15,080.00	COMMITTED
WB	12843	PAMELA STALEY GUNTER DBA GUNTER 2512 WOODFIELD DRIVE , SOPHIA,		Sub	17,500.00	COMMITTED
WB	3153	MCARTHUR CONSTRUCTION COMPANY		Sub	71,400.00	COMMITTED
		POST OFFICE BOX 2838 , LUMBERTO	JN, NC 20339	TOTAL:	\$344,521.36	

Vendor 3516's Bid Information for Call 012, Letting L180515, 05/15/18

Barnhill Contracting Company (3516) Call Order 012 (Proposal ID C204170)

Miscelleneous Data Info - Contractor Responses:

NON-COLLUSION AND DEBARMENT CERTIFICATION

Explanation of the prospective bidder that is unable to certify to any of the statements in this certification:

Explanation:

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

AWARD LIMITS ON MULTIPLE PROJECTS

By answering YES to this statement, the bidder acknowleges that they are using the award limits on multiple projects. No

It is the desire of the Bidder to be awarded contracts, the value of which will not exceed a total of NOT ANSWERED for those projects indicated herein, for which bids will be opened on (MM/DD/YY)

The Award Limits shall apply to the following projects:

NCDOT Page 126 of 199

Bidder 1 of 3

Contract Number County

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

Bid Bond Data Info - Contractor Responses:

BondID: SNC18284141

Surety Registry Agency: surety2000

Verified?: Yes

Surety Agency: Travelers Casualty and Surety Company of America

Bond Execution Date: 4/18/2018 12

Bond Amount: \$245,544.14 (Five Percent of Bid)

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Dept of Transportation Re Date: 04-18-18

Contract ID: C204170

Letting Date: 05-15-18 Call Order: 012 Bidder: 3516 - Barnhill Contracting Company

+----+

Section 0001 ROADWAY ITEMS

Alt Group

1	Alt Group			ı
 0001 	0000100000-N MOBILIZATIO N 	 LUMP 	 LUMP 	
	0106000000-E BORROW EXCAVATION 	 670.00 CY	 5.00000 	 3,350.00
	1243000000-E SHOULDER CONSTRUCTION	 9.03 SMI	500.00000	
	1245000000-E SHOULDER RECONSTRUCTION	 51.25 SMI	1,300.00000	
	1260000000-E AGGREGATE SHOULDER BORROW 	 7,298.00 TON	 17.20000 	
	1297000000-E MILLING ASPHALT PAVEMENT, ***"DEPTH (1-1/2")	 87,124.00 SY	1.90000	
	133000000-E INCIDENTAL MILLING 	 5,760.00 SY	9.20000	
10008	1491000000-E ASPHALT CONC BASE COURSE, TYPE B25.0C	2,840.00	69.80000	
	1519000000-E ASPHALT CONC SURFACE COURSE, TYPE S9.5B	 33,975.00 TON	 38.85000 	
10010	1523000000-E ASPHALT CONC SURFACE COURSE, TYPE S9.5C	 2,160.00 TON	 46.00000 	
•	1575000000-E ASPHALT BINDER FOR PLANT MIX 	 2,298.00 TON	 479.00000 	1,100,742.00
				+

Check: 9BBBE9CC Page 1

State of NC Date: 04-18-18 Revised:

Dept of Transportation

Project(s): STATE FUNDED Contract ID: C204170

Letting Date: 05-15-18 Call Order: 012 Bidder: 3516 - Barnhill Contracting Company

Line No.	•	 Approx. Quantity	Unit Price 	Bid Amount	
İ		and Units	Dollars Cts	Dollars Ct	
	1704000000-E PATCHING EXISTING PAVEMENT	 1,740.000 TON		290,580.00	
0013	1775500000-E ASPHALT SURFACE TREATMENT, MATCOAT, #*** STONE (67)	 19,000.000 SY	 1.01000	19,190.00 	
0014	1814500000-E ASPHALT SURFACE TREATMENT, SINGLE SEAL	 244,742.000 SY	 0.85000 	208,030.70 	
0015	1838000000-E EMULSION FOR ASPHALT SURFACE TREATMENT	 93,259.000 GAL	 1.80000 	167,866.20 	
	1838500000-N VACUUM TRUCK 	 3.000 WK	 4,500.00000 	13,500.00	
0017	1891000000-E GENERIC PAVING ITEM LATEX MODIFIED MICROSURFACING TYPE II	 88,077.000 SY		220,192.50	
	283000000-N ADJUSTMENT OF MANHOLES 	 15.000 EA		13,500.00	
0019	2845000000-n ADJUSTMENT OF METER BOXES OR VALVE BOXES	 12.000 EA	 900.00000 	10,800.00	
10020	4413000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNING	 3,872.000 SF	 9.90000 	38,332.80 	
	4457000000-N TEMPORARY TRAFFIC CONTROL 	 LUMP 	 LUMP	117,705.00	
	4510000000-N LAW ENFORCEMENT 	 80.000 HR		4,000.00	

State of NC Date: 04-18-18 Revised:

Dept of Transportation

Project(s): STATE FUNDED Contract ID: C204170

Letting Date: 05-15-18 Call Order: 012 Bidder: 3516 - Barnhill Contracting Company

+	Bidder: 3516 - Barnnill Contracting Company									
Line No.	Item Description		Approx. Quantity	Unit Price 						
 	<u> </u>		and Units	Dollars Cts	Dollars Ct					
0023	4685000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (4", 90 MILS)	Ì	325,939.000		136,894.38					
0024	4686000000-E THERMOPLAST IC PAVEMENT MARKING LINES (4", 120 MILS)	•	291,962.000		160,579.10					
0025	4695000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (8", 90 MILS)		485.000		970.00					
0026	4700000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (12", 90 MILS)	•	230.000	 2.50000 	575.00					
0027	4705000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (16", 120 MILS)		300.000	 5.00000	1,500.00					
0028	4710000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (24", 120 MILS)	Ì	576.000	 6.00000 	3,456.00					
0029	4721000000-E THERMOPLAST IC PAVEMENT MARKINGCHARACTER (120 MILS)	 EA	30.000	 110.00000 	3,300.00 					
0030	4725000000-E THERMOPLAST IC PAVEMENT MARKINGSYMBOL (90 MILS)	•	88.000		8,800.00					
0031	4770000000-E COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (II)	 LF	1,072.000	 3.50000 	3,752.00					
0032	4810000000-E PAINT PAVEMENT MARKING LINES (4")	 LF	29,800.000		7,152.00					
0033	4820000000-E PAINT PAVEMENT MARKING LINES (8")	 LF	170.000	 1.00000	170.00					

State of NC Date: 04-18-18 Dept of Transportation Revised:

Project(s): STATE FUNDED Contract ID: C204170

Letting Date: 05-15-18 Call Order: 012 Bidder: 3516 - Barnhill Contracting Company

Line No.		Approx. Quantity	Unit Price 	Bid Amount				
		and Units	Dollars Cts	Dollars Ct				
0034	4850000000-E REMOVAL OF PAVEMENT MARKING LINES (4")			25 , 536.00				
0035	4860000000-E REMOVAL OF PAVEMENT MARKING LINES (8")		 1.00000	170.00				
0036	4870000000-E REMOVAL OF PAVEMENT MARKING LINES (24")	 235.000 LF	 3.00000 	705.00 				
0037	4875000000-N REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	 73.000 EA	 55.00000 	4,015.00				
0038	4890000000-E GENERIC PAVEMENT MARKING ITEM HOT SPRAY THERMOPLASTIC PAVE- MENT MARKING LINES (4", 50 MILS)	· · · · · · · · · · · · · · · · · · ·	 0.35000 	7,070.00 				
0039	4900000000-N PERMANENT RAISED PAVEMENT MARKERS	405.000 EA		2,025.00				
	4905000000-N SNOWPLOWABL E PAVEMENT MARKERS 	 1,614.000 EA		42,771.00				
	6000000000-E TEMPORARY SILT FENCE 	 455.000 LF	 3.50000 	1,592.50				
0042		 80.000 LF		800.00				
	6084000000-E SEEDING & MULCHING	 6.570 ACR		3,285.00				
	7444000000-E INDUCTIVE LOOP SAWCUT			9,721.60				
+				+				

State of NC Date: 04-18-18

Dept of Transportation Revised:

Contract ID: C204170 Project(s): STATE FUNDED

Letting Date: 05-15-18 Call Order: 012

Bidder: 3516 - Barnhill Contract

Bidder:	3516 - Barnhill	Contracting 	Company			
Line No.	Item Description	 	Approx. Quantity	 -	Unit Price	Bid Amount
+			and Units	i	Dollars Cts	Dollars Ct
	ection 0001 Tota	L		 		4,910,882.73
 	id Total					4,910,882.73

NON-COLLUSION AND DEBARMENT CERTIFICATION

The bidder certifies that neither he, nor any official, agent or employee of the bidder 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 this bid, and that the bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor. In addition, submitting this electronic bid constitutes the bidder's certification of Status under penalty of perjury under the laws of the United States and in accordance with the Debarment Certification on file with the Department.

By submitting this bid, the bidder certifies to the best of his knowledge and belief that he and his principals:

- 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.

Where the prospective bidder is unable to certify to any of the statements in this certification, the bidder shall submit an explanation in the blanks provided herein. The explanation will not necessarily result in denial of participation in a contract.

Explanation:

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

If the prequalified bidder's status changes, he shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change to the Contract Office prior to submitting the bid.

Failure to furnish a certification or an explanation will be grounds for rejection of a bid

AWARD LIMITS ON MULTIPLE PROJECTS

By answering YES to this statement, the bidder acknowleges that they are using the award limits on multiple projects. No

A bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than he is equipped to handle, may bid on any number of projects but may limit the total amount of work awarded to him on selected projects by completing the AWARD LIMITS ON MULTIPLE PROJECTS.

The Award Limits on Multiple Projects must be filled in on each project bid for which the Bidder desires protection.

It is the desire of the Bidder to be awarded contracts, the value of which

will not exceed a total of NOT ANSWERED for those

projects indicated herein, for which bids will be opened on (MM/DD/YY)

The Award Limits shall apply to the following projects:

Contract Number

County

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

It is agreed that if I am (we are) the low Bidder(s) on indicated projects, the total value of which is more than the above stipulated award limits, the Board of Transportation will award me (us) projects from among those indicated that have a total value not to exceed the award limit and will result in the lowest total bids to the Department of Transportation.

DBE COMMITMENT ITEMS

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION DATE:04-18-18

PROPOSAL: C204170

LETTING: L180515 CALL: 012

VENDOR: 3516 Barnhill Contracting Company

LINE ITEM ITEM UNIT SUBCONTRACTOR SUBCONTRACTOR EXTENDED NO. NO. DESC. TYPE QUANTITY UNIT PRICE AMOUNT

DBE SUBCONTRACTOR: 3765 STAY ALERT SAFETY SERVICES INC

Will Use Ouote: Yes

0020 4413000000-E WORK ZONE AD SF 3872.000 9.90000 38332.80

DBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 38,332.80

DBE COMMITMENT TOTAL FOR VENDOR (SubContractor) 38,332.

DBE SUBCONTRACTOR: 1795 J A HUNT'S ENTERPRISE

Will Use Ouote: Yes

0011 1575000000-E ASP FOR PLAN TON 1000.000 18.00000 18000.00

Haul Liquid to Plant

. _ _ _ _ _ _ _ _ _ _ _ _ DBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 18,000.00

DBE COMMITMENT TOTAL FOR VENDOR (SubContractor) 18,000.

DBE SUBCONTRACTOR: 12374 DELCO INC

Will Use Quote: Yes

0005 1260000000-E AGGREGATE SH TON 2500.000 6.00000 15000.00

Haul ASB to Map

0008 1491000000-E ASP CONC BAS TON 1000.000 7.00000 7000.00

Haul Mix to Map

0009 1519000000-E ASP CONC SUR TON 10000.000 7.00000 70000.00

Haul Mix to Map

0012 1704000000-E PATCHING EXI TON 500.000 20.00000 10000.00

Haul Mix to Map

DBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 102,000.00

DBE COMMITMENT TOTAL FOR VENDOR (SubContractor) 102,000

DBE SUBCONTRACTOR: 9602 CAROLINA TRANSPORT OF GREENSBORO INC

Will Use Quote: Yes

0011 1575000000-E ASP FOR PLAN TON 548.000 18.72000 10258.56

Haul Liquid to plant

DBE COMMITMENT TOTAL FOR SUBCONTRACTOR:

10,258.56

DBE COMMITMENT TOTAL FOR VENDOR (SubContractor) 10,258.

DBE SUBCONTRACTOR: 2653 BROWE CONSTRUCTION COMPANY

Will Use Quote: Yes

0001 0000100000-N MOBILIZATION LS 1.000 2000.00000 2000.00

Mobilization

0018 2830000000-N ADJ MANHOLES EA 15.000 850.00000 12750.00

______ Check: 9BBBE9CC Page 8

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION DATE:04-18-18 DBE COMMITMENT ITEMS PAGE: 9

			TYPE	SUBCONTRACTOR QUANTITY		AMOUNT
0021 4			EΑ	12.000	850.00000 2000.00000	10200.00 2000.00
	DBE COMMITMEN	NT TOTAL FOR	SUBCOI VENDOI	NTRACTOR: R (SubContracto:	•	26,950.00 26,950.
	UBCONTRACTOR: Use Quote: Yes		TRUCK:	ING INC		
	1519000000-E ul mix to map	ASP CONC SUR	TON	5000.000		45000.00
	DBE COMMITMEN	NT TOTAL FOR	SUBCOI VENDOI	NTRACTOR: R (SubContracto:	r)	45,000.00 45,000.
	JBCONTRACTOR: Jse Quote: Yes		TRUCK	ING		
			TON	1000.000	9.00000	9000.00
0013 3	ul mix to map 1775500000-E ockpile Stone		SY	19000.000		
		NT TOTAL FOR		NTRACTOR: R (SubContracto:	: :	15,080.00 15,080.
	JBCONTRACTOR: Jse Quote: Yes		STALI	EY GUNTER DBA G	UNTER TRUCKING	CO
		ASP CONC SUR	TON	1000.000	10.00000	10000.00
0006	ıl Mix to map 1297000000-E ıl Millings	MILL ASP PVM	SY	25000.000	0.30000	7500.00
		NT TOTAL FOR		NTRACTOR: R (SubContracto:		17,500.00 17,500.
	UBCONTRACTOR: Use Quote: Yes		R CON	STRUCTION COMPAI	1 17	
	1519000000-E ul mix to map	ASP CONC SUR	TON	10200.000	7.00000	71400.00
		NT TOTAL FOR		NTRACTOR: R (SubContracto:		71,400.00 71,400.
TOTAL	DBE COMMITMEN	NT FOR VENDOR	:	Entered: Required:	7.02% or 7.00% or <go< td=""><td>343761.79</td></go<>	343761.79

Check: 9BBBE9CC Page 9

ППТС	DDODOGNI	$C \cap M \oplus X + M C$	ㅠㅂㄷ	FOLLOWING		/WYDNITNICC	/ T 🗁	カガン'
$T \square T \square$	LVOLONAT	CONTATIVO	1 11 12	$L \cap T \cap \cap M + M \cap I$	ロレレハレン	\ MADNINGS	(T E	AINT

I Hereby certify that I have the authority to submit this bid.

This Bid contains 0 amendment files

Electronic Bid Submission

By submitting this bid electronically, I hereby acknowledge that all requirements included in the hard copy proposal, addendum, amendments, plans, standard specifications, supplemental specifications and special provisions are part of the bid and contract. Further, I acknowledge that I have read, understand, accept, acknowledge and agree to comply with all statements in this electronic bid.

Signature Agency Date

North Carolina Department Of Transportation Contract Item Sheets For C204170

Page: 1 of 3

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
		π	ROADWAY ITEMS	Offic	Tite	Бій
0001	0000100000-N	800	MOBILIZATION	Lump Sum LS	245,540.00	245,540.00
0002	0106000000-E	230	BORROW EXCAVATION	670 CY	5.00	3,350.00
0003	1243000000-E	SP	SHOULDER CONSTRUCTION	9.03 SMI	500.00	4,515.00
0004	1245000000-E	SP	SHOULDER RECONSTRUCTION	51.25 SMI	1,300.00	66,625.00
0005	1260000000-E	SP	AGGREGATE SHOULDER BORROW	7,298 TON	17.20	125,525.60
0006	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (1-1/2")	87,124 SY	1.90	165,535.60
0007	1330000000-E	607	INCIDENTAL MILLING	5,760 SY	9.20	52,992.00
0008	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	2,840 TON	69.80	198,232.00
0009	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	33,975 TON	38.85	1,319,928.75
0010	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	2,160 TON	46.00	99,360.00
0011	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	2,298 TON	479.00	1,100,742.00
0012	1704000000-E	SP	PATCHING EXISTING PAVEMENT	1,740 TON	167.00	290,580.00
0013	1775500000-E	660	ASPHALT SURFACE TREATMENT, MAT COAT, #*** STONE (67)	19,000 SY	1.01	19,190.00
 0014	1814500000-E	660	ASPHALT SURFACE TREATMENT, SINGLE SEAL	244,742 SY	0.85	208,030.70
0015	1838000000-E	660	EMULSION FOR ASPHALT SURFACE TREATMENT	93,259 GAL	1.80	167,866.20
0016	1838500000-N	660	VACUUM TRUCK	3 WK	4,500.00	13,500.00
0017	1891000000-E	SP	GENERIC PAVING ITEM LATEX MODIFIED MICROSURFACING TYPE II	88,077 SY	2.50	220,192.50
0018	2830000000-N	858	ADJUSTMENT OF MANHOLES	 15 EA	900.00	13,500.00

North Carolina Department Of Transportation Contract Item Sheets For C204170

Page: 2 of 3

			Contract Item Sheets For C20			
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0019	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	12 EA	900.00	10,800.00
0020	4413000000-E	SP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	3,872 SF	9.90	38,332.80
0021	4457000000-N	SP	TEMPORARY TRAFFIC CONTROL	Lump Sum LS	117,705.00	117,705.00
0022	4510000000-N	1190	LAW ENFORCEMENT	80 HR	50.00	4,000.00
0023	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	325,939 LF	0.42	136,894.38
0024	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	291,962 LF	0.55	160,579.10
0025	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	485 LF	2.00	970.00
0026	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	230 LF	2.50	575.00
0027	4705000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS)	300 LF	5.00	1,500.00
0028	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	576 LF	6.00	3,456.00
0029	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	30 EA	110.00	3,300.00
0030	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	88 EA	100.00	8,800.00
0031	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (II)	1,072 LF	3.50	3,752.00
0032	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	29,800 LF	0.24	7,152.00
0033	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	170 LF	1.00	170.00
0034	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	51,072 LF	0.50	25,536.00
0035	4860000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (8")	170 LF	1.00	170.00

May 29, 2018 9:19 am

North Carolina Department Of Transportation Contract Item Sheets For C204170

	Page: 3 of 3	
id ce	Amount Bid	

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0036	4870000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (24")	235 LF	3.00	705.00
0037	4875000000-N	1205	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	73 EA	55.00	4,015.00
0038	4890000000-E	SP	GENERIC PAVEMENT MARKING ITEM HOT SPRAY THERMOPLASTIC PAVE- MENT MARKING LINES (4", 50 MILS)	20,200 LF	0.35	7,070.00
0039	490000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	405 EA	5.00	2,025.00
0040	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	1,614 EA	26.50	42,771.00
0041	6000000000-E	1605	TEMPORARY SILT FENCE	455 LF	3.50	1,592.50
0042	6071010000-E	SP	WATTLE	80 LF	10.00	800.00
0043	6084000000-E	1660	SEEDING & MULCHING	6.57 ACR	500.00	3,285.00
0044	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	1,568 LF	6.20	9,721.60

TOTAL AMOUNT OF BID FOR ENTIRE PROJECT

\$4,910,882.73

0919/May29/Q1319517.85/D154281610000/E44

County Montgomery, Richmond

EXECUTION OF CONTRACT NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

CORPORATION

The Contractor declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States 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 this Contract, that the Contractor has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Contractor intends to do the work with its own bonafide employees or subcontractors and did not bid for the benefit of another contractor.

By submitting this Execution of Contract, Non-Collusion and Debarment Certification, the Contractor is certifying 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 CONTRACTOR Barnhill Contracting Company

Full name of Corporation

P.O. Box 7948, Rocky Mount, NC 27804

Address as Prequalified

Attest

Secondary/Assistant Secretary/ Select appropriate title By

President Vice President Assistant Vice Presidente

Harlan R. Hott, Jr.

Print or type Signer's name

James Partington IV.

CORPORATE SEAL

Country Montgomery, Richmond

40 - 90

DEBARMENT CERTIFICATION

Conditions for certification:

- 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.

Countract No. C204170

County Montgomery, Richmond

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 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.

Contract No. <u>C204170</u>
County (ies): Montgomery, Richmond
ACCEPTED BY THE DEPARTMENT OF TRANSPORTATION
Pocusigned by: Ronald E. Davenport, Jr.
Contract Officer
6/20/2018
Date
Execution of Contract and Bonds
Approved as to Form:
Joseph Herrin 568809693007493
Attorney General
6/20/2018 Date

Signature Sheet (Bid - Acceptance by Department)

Bond No. 106887410

Contract No. C204170
County Montgomery, Richmond

CONTRACT PAYMENT BOND

Name of Principal Contractor

Name of Surety:

Name of Contracting Body:

Name of Contracting Body:

North Carolina Department of Transportation

1020 Birch Ridge Drive, Raleigh NC 27610

Amount of Bond:

\$4,910,882.73

Contract ID No.:

County Name:

May 24, 2018

Barnhill Contracting Company

Travelers Casualty and Surety Company of America

North Carolina Department of Transportation

1020 Birch Ridge Drive, Raleigh NC 27610

County Name:

Montgomery, Richmond

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Bond No. 106887410

Contract No. C204170

County

Montgomery, Richmond



CONTRACT PAYMENT BOND

Travelers Casualty and Surety Company of America Print or type Surety Company Name

By Shirley A. Johnson, Attorney-in-fact

Print, stamp or type name of Attorney-in-Fact

Signature of Attorney-in-Fact

Tara J. Smithwick

Print or type Signer's name

County Montgomen

County Montgomery, Richmond

CONTRACT PAYMENT BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

Barnhill Contracting Company

Full name of Corporation

P O Box 7948, Rocky Mount NC 27804

Address as prequalified

By

Signature of Freehous, Vice President, Assistant Nick Rresident Select appropriate title

James Partington IV.

Print or type Signer's name

Attest

Signature of Secretary, Assistant Secretary

Select appropriate title

Harlan R. Hott, Jr.

Print or type Signer's name

Contract No. C204170
County Montgomery, Richmond

CONTRACT PERFORMANCE BOND

Date of Performance Bond Execution:

May 24, 2018

Name of Principal Contractor:

Barnhill Contracting Company

Travelers Casualty and Surety Company of America

Name of Contracting Body:

North Carolina Department of Transportation

1020 Birch Ridge Drive, Raleigh NC 27610

Amount of Bond:

\$4,910,882.73

Contract ID No.:

C204170

Montgomery, Richmond

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, publicant to authority of its governing body.

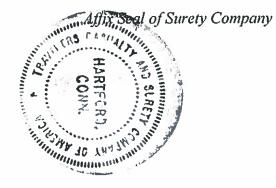
Bond No. 106887410

Contract No. C204170

County

Montgomery, Richmond

CONTRACT PERFORMANCE BOND



Travelers Casualty and Surety Company of America Print or type Surety Company Name

By Shirley A. Johnson, Attorney-In-Fact Print, stamp or type name of Attorney-in-Fact

Tara J. Smithwick

Print or type Signer's name

5417 S. Miami Blvd., Durham NC 27703

Address of Attorney-in-Fact

Contract No. C204170

County

Montgomery, Richmond

CONTRACT PERFORMANCE BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

Barnhill Contracting Company

Full name of Corporation

P O Box 7948, Rocky Mount NC 27804

Address as prequalified

By

dent, Assistant Wick Fresident

appropriate title

James Partington IV.

Print or type Signer's name

Attest

Signature of Secretary, Assistant Secretary

Select appropriate title

Harlan R. Hott, Jr.

Print or type Signer's name



Travelers Casualty and Surety Company of America **Travelers Casualty and Surety Company** St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Shirley A. Johnson of Durham

, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 3rd day of February.







State of Connecticut

City of Hartford ss.

On this the 3rd day of February, 2017, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2021



This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary, or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 24th

day of

May

2018

AND SURETA HARTSORD,

Kevin E. Hughes, Assistant Secretary

HARTFORD, To verify the authenticity of this Power of att wildy, pies & Call us at 1-800-421-3880. Please refer to the above-named Attorney-in-Fact and the details of the