C203377

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

CONTRACT AND

CONTRACT BONDS

FOR CONTRACT NO. C203377

5CR.20921.44 STATE FUNDED WBS

COUNTY OF

WAKE

THIS IS THE

ROADWAY CONTRACT

ROUTE NUMBER

LENGTH

22.170 MILES

LOCATION

16 SECTIONS OF SECONDARY ROADS.

CONTRACTOR

FSC II LLC DBA FRED SMITH COMPANY

ADDRESS

6105 CHAPEL HILL RD

RALEIGH, NC 27607

BIDS OPENED

JUNE 18, 2013

CONTRACT EXECUTION JUL 2 4 2013

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

PROPOSAL

DATE AND TIME OF BID OPENING

CONTRACT ID

WBS

5CR.2

IĎ NO. STATE FUNDED

COUNT

WAKE

T.P. NO.

ILES

22.170

OUTE NO.

OCATION

16 SECTIONS OF SECTIONAL ROADS.

YPE OF WORK MILLING, RESURFACING, AND SHOULDER GRADING.

BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS ABGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN RAL STATE TES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRAC DERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE L MPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND IG AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOT WITHSTANDING T BIDDER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLI TS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES. RANSPOR

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY F

OSIT REQUIRED 5% BID BOND OR BID DEI

PROPOSAL FOR THE CONSTRUCTION OF CONTRACT No. C203377 IN WAKE COUNTY, NORTH CAROLINA

CONTRACT No. C203377 IN WA	AKE COUNTY, NORTH CAROLII
Date	20
DEPARTMENT OF	F TRANSPORTATION,
DALEICH NO	ODTH CADOLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. <u>C203377</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 2012 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. C203377 in Wake County, 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.

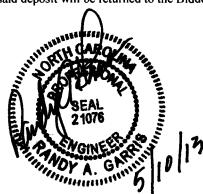
The published volume entitled North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2012 with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the 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

C203377 Wake County

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PROJECT SPECIAL PROVISIONS

GENERAL

CONTRACT TIME AND LIQUIDATED DAMAGES:

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

108

SP1 G10 A

The date of availability for this contract is **July 29, 2013**.

The completion date for this contract is May 31, 2014.

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 Dollars (\$1,000.00) per calendar day.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

(2-20-07)

108

SP1 G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on MAPS 1, 3-6, 8-14, and 16 during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday through Friday: 6:00 a.m. to 9:00 a.m. Monday through Friday: 4:00 p.m. to 7:00 p.m.

The Contractor shall complete the required work of installing, maintain, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on MAPS 2, 15 during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday through Sunday: 6:00 a.m. to 9:00 p.m.

The Contractor shall complete the required work of installing, maintaining and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on MAP 7 during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday through Friday: 6:00 a.m. to 9:00 p.m.

In addition, 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 6:00 a.m. December 31st and 7:00 p.m. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until 7:00 p.m. the following Tuesday.
- 3. For Easter, between the hours of 6:00 a.m. Thursday and 7:00 p.m. Monday.
- 4. For Memorial Day, between the hours of 6:00 a.m. Friday and 7:00 p.m. Tuesday.
- 5. For **Independence Day**, between the hours of **6:00 a.m.** the day before Independence Day and **7:00 p.m.** the day after Independence Day.
 - If Independence Day is on a Friday, Saturday, Sunday or Monday, then between the hours of 6:00 a.m. the Thursday before Independence Day and 7:00 p.m. the Tuesday after Independence Day.
- 6. For Labor Day, between the hours of 6:00 a.m. Friday and 7:00 p.m. Tuesday.
- 7. For Thanksgiving Day, between the hours of 6:00 a.m. Wednesday and 7:00 p.m. Monday.
- 8. For **Christmas**, between the hours of **6:00 a.m.** the Friday before the week of Christmas Day and **7:00 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 will not be 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 above and place traffic in the existing traffic pattern.

The liquidated damages are Two Hundred Fifty Dollars (\$ 250.00) per fifteen minute time period.

INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES:

21-13) 108 SPI 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.

INTERMEDIATE CONTRACT TIME NUMBER 3 AND LIQUIDATED DAMAGES:

(6-18-13) 108 SPI G14 K

The Contractor shall complete the work required as shown on Maps 2 and 7 and shall place and maintain traffic on same.

The date of availability for this intermediate contract time is July 29, 2013.

The completion date for this intermediate contract time is **November 15, 2013**.

The liquidated damages are **One Thousand Dollars** (\$ 1,000.00) per calendar day.

PROSECUTION OF WORK:

(7-1-95) (Rev. 8-21-12) 108 SPI 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 \$ 1,000.00 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.

POSTED WEIGHT LIMITS:

(7-1-95)

The Contractor's attention is directed to the fact that many Primary and Secondary Roads and bridges are posted with weight limits less than the legal limit. Do not exceed the posted weight limits in transporting materials and/or equipment to the projects, unless otherwise indicated below. Make a thorough examination of all projects and haul routes and be prepared to discuss them at the Preconstruction Conference.

The following maps have posted weight limits:

Map 1 – SR 1393 (Bass Lake Road) Bridge Number 373 is posted SV 19 TTST 26 tons.

Map 4 – SR 1633 (Good Hope Church Road) Bridge Number 449 is posted SV 19 TTST 24 tons.

Map 6 – SR 2720 (Grovemont Road) Bridge Number 496 is posted SV 26 TTST 39 tons.

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 2012 Standard Specifications):

Line#	Description
12	Asphalt Concrete Surface Course, Type S9.5B

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 2012 Standard Specifications).

	Line#	Description
1	7 thru 25	Long-Life Pavement Markings
3	33 thru 34	Permanent Pavement Markers
3	36 thru 38	Erosion Control
	39	Signals/ITS System

FUEL PRICE ADJUSTMENT:

(11-15-05) (Rev. 1-17-12) 109-8 SPI G43

Revise the 2012 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 \$ 2.9306 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
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
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. 5-21-13) 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> Progress (% of Dollar Value)</u>
2014	(7/01/13 - 6/30/14)	100% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the 2012 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. 5-21-13)

102-15(J)

SP1 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 either the MBE or WBE goal. No submittal of a Letter of Intent is required, unless the additional participation is used for banking purposes.

Committed MBE/WBE Subcontractor - Any MBE/WBE submitted at the time of bid that is being used to meet either the MBE or 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 Goals Requirement - The approved MBE and WBE participation at time of award, but not greater than the advertised contract goals for each.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed MBE and WBE 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 Goal - A portion of the total contract, expressed as a percentage, that is 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 Goal - A portion of the total contract, expressed as a percentage, that is 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. http://www.ncdot.org/doh/forms/files/DBE-IS.xls

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

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

JC-1 Joint Check Notification Form - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

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

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the amount listed at the time of bid.

http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf

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

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

MBE and **WBE** Goal

The following goals for participation by Minority Business Enterprises and Women Business Enterprises are established for this contract:

- (A) Minority Business Enterprises 5.0 %
 - (1) If the MBE goal 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 as the MBE goal.
 - (2) If the MBE goal 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 6.0 %
 - (1) If the WBE goal 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 as the WBE goal.
 - (2) If the WBE goal 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.

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 MBE and WBE goals respectively. The Directory can be found at the following link. https://partner.ncdot.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 MBE goal and the 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 for which letters of intent are received 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 either the MBE or WBE goal.

(B) Paper Bids

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.

- (1) If either the MBE or 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.
- (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 corresponding goal.
- (2) If either the MBE or WBE goal is zero, bidders, at the time the bid proposal is submitted, shall enter the word "None"; or the number "0"; or if there is participation, add the value on the Listing of MBE and WBE Subcontractors contained elsewhere in the contract documents.

MBE or **WBE** Prime Contractor

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

For example, on a proposed contract, the WBE goal is 10%, and the MBE goal is 8%. A WBE bidder puts in a bid where they will perform 40% of the contract work and have a WBE subcontractor which will perform another 5% of the work. Together the two WBE firms submit on the *Listing of MBE and WBE Subcontractors* a value of 45% of the contract which fulfills the WBE goal. The 8% MBE goal shall be obtained through MBE participation with MBE certified subcontractors or documented through a good faith effort. It should be noted that you cannot combine the two goals to meet an overall value. The two goals shall remain separate.

MBE/WBE prime contractors shall also follow Sections A and B listed under *Listing of MBE and 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 MBE and WBE goals 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 12:00 noon 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 12:00 noon 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 MBE and WBE goals, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the MBE/WBE goal. If the lack of this participation drops the commitment below either the MBE or WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the State Contractor Utilization Engineer or DBE@ncdot.gov no later than 12:00 noon 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 12:00 noon on the next official state business day.

Submission of Good Faith Effort

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

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 12:00 noon of 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 the next official state business day. If the contractor cannot send the information electronically, then one complete set and 9 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 MBE/WBE Goals 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 who have the capability to perform the work of the contract. 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 MBE and WBE goals 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 contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested MBEs/WBEs 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 contract goals 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 MBE or WBE goals, 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 Development Manager in the Business Opportunity and Work Force Development Unit 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 MBE and WBE 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 MBE and WBE goals.
- (2) The bidders' past performance in meeting the MBE and WBE goals.
- (3) The performance of other bidders in meeting the MBE and WBE goals. For example, when the apparent successful bidder fails to meet the goals, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goals. If the apparent successful bidder fails to meet the MBE and WBE goals, 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 MBE and WBE goals can be met or that an adequate good faith effort has been made to meet the MBE and WBE goals.

Non-Good Faith Appeal

The State Contractor Utilization 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 MBE/WBE Goals

(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 MBE contract goal requirement. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE subcontracts to a non-MBE firm does <u>not</u> count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. 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. The MBE/WBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption may be subject to review by the Office of Inspector General, NCDOT.

(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 or 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 or 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.

(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 MBE or 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 goal requirement. 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 liable for meeting the goal.
- (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.

Banking MBE/WBE Credit

If the bid of the lowest responsive bidder exceeds \$500,000 and if the committed MBE/WBE participation submitted by Letter of Intent exceeds the algebraic sum of the MBE or 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 firms to meet the contract goal, as part of the good faith effort, the Department will consider allowing the bidder to withdraw funds to meet the MBE goal as long as there are adequate funds available from the bidder's MBE bank account.

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

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 termination.

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

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

- (1) Copies of written notification to 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 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 and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

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

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

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

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

(A) Electronic Bids Reporting

The Contractor shall report the accounting of payments through the Department's Payment Tracking System.

(B) Paper Bids Reporting

The Contractor shall report the accounting of payments on the Department's DBE-IS (Subcontractor Payment Information) with each invoice. Invoices will not be processed for payment until the DBE-IS is received.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the 2012 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).

LOCATING EXISTING UNDERGROUND UTILITIES:

D : 4 2012 G / 1 1 G / C / C 11

SP1 G115

Revise the 2012 Standard Specifications as follows:

Page 1-43, Article 105-8, line 28, after the first sentence, add the following:

Identify excavation locations by means of pre-marking with white paint, flags, or stakes or provide a specific written description of the location in the locate request.

RESOURCE CONSERVATION:

(5-21-13) 104-13 SPI G118

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(2), and NCGS 136-28.8, it is the policy of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, and to find ways to recycle and reuse materials for the benefit of the Citizens of North Carolina.

Initiate, develop and use products and construction methods that incorporate the use of recycled or solid waste products in accordance with Article 104-13 of the 2012 Standard Specifications. Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills on the Project Construction Reuse and Recycling Reporting Form.

A location-based tool for finding local recycling facilities and the Project Construction Reuse and Recycling Reporting Form are available at:

http://connect.ncdot.gov/resources/Environmental/Pages/North-Carolina-Recycling-Locations.aspx

DOMESTIC STEEL:

(4-16-13) 106 SPI G120

Revise the 2012 Standard Specifications as follows:

Page 1-49, Subarticle 106-1(B) Domestic Steel, lines 2-7, replace the first paragraph with the following:

All steel and iron products that are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined material cost of the items involved does not exceed 0.1% of the total amount bid for the entire project or \$2,500, whichever is greater. If invoices showing the cost of the material are not provided, the amount of the bid item involving the foreign material will be used for calculations. This minimal amount of foreign produced steel and iron products permitted for use is not applicable to high strength fasteners. Domestically produced high strength fasteners are required.

OUTSOURCING OUTSIDE THE USA:

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

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09) 107-1 SPI G152

By Executive Order 24, issued by Governor Perdue, and N.C.G.S.§ 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (A) Have a contract with a governmental agency; or
- (B) Have performed under such a contract within the past year; or
- (C) Anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and N.C.G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:

(1-16-07) (Rev 9-18-12) 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, twice weekly for construction related *Federal Clean Water Act, Section 303(d)* impaired streams with turbidity violations, and within 24 hours after a significant rainfall event of 0.5 inch that occurs within a 24 hour period.
 - (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-bysection 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. 3-20-13) 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:

- Either cease discharge or modify the discharge volume or turbidity levels to bring the (A) downstream turbidity levels into compliance, or
- Evaluate the upstream conditions to determine if the exceedance of the standard is due to (B) 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 2012 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.

EMPLOYMENT:

(11-15-11) (Rev. 1-17-12) 108, 102 SPI G184

Revise the 2012 Standard Specifications as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

Revise the 2012 Standard Specifications as follows:

SP1 G185

Replace all references to "State Highway Administrator" with "Chief Engineer".

PROJECT SPECIAL PROVISIONS

ROADWAY

SHOULDER GRADING PER SHOULDER MILE:

Description

The work covered by this provision consists of clipping high shoulders and reconstructing the earth shoulder in accordance with Standard Drawing No. 560.01 and 560.02 of the 2012 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 in accordance with Section 1019 of the 2012 Standard Specifications. All soil is subject to test and acceptance or rejection by the Engineer.

Construction Methods

Obtain material from within the project limits or approved borrow source. Prior to adding borrow material, 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 grading shall be disposed of by the Contractor in an approved disposal site.

Measurement and Payment

Shoulder Grading 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.

Borrow Excavation will be paid in accordance with Section 230 of the Standard Specifications for earth material furnished by the Contractor. The requirements of Article 104-5 of the Standard Specifications pertaining to revised contract prices for overrunning minor items will not apply to the item of Borrow Excavation.

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

Seeding and Mulching will be measured and paid as shown elsewhere in the contract documents.

Payment will be made under:

Pay ItemPay UnitShoulder GradingShoulder MileBorrow ExcavationCubic Yard

CONSTRUCTION SEQUENCE:

(7-1-95) (Rev. 8-21-12) 560 SPI R34R

Pave each section of roadway begun in a continuous operation. Do not begin work on another section of roadway unless satisfactory progress is being made toward completion of intersections and all other required incidental work by satisfactorily furnishing additional paving equipment and personnel, except for milling and patching operations.

INCIDENTAL STONE BASE:

(7-1-95) (Rev.8-21-12) 545 SP5 R28R

Description

Place incidental stone base on driveways, mailboxes, etc. immediately after paving and do not have the paving operations exceed stone base placement by more than one week without written permission of the Engineer.

Materials and Construction

Provide and place incidental stone base in accordance with Section 545 of the 2012 Standard Specifications.

Measurement and Payment

Incidental Stone Base will be measured and paid in accordance with Article 545-6 of the 2012 Standard Specifications.

ASPHALT PAVEMENTS - SUPERPAVE:

(6-19-12) (Rev. 4-16-13) 605, 609, 610

SP6 R01

Revise the 2012 Standard Specifications as follows:

Page 6-3, Article 605-7 APPLICATION RATES AND TEMPERATURES, replace this article, including Table 601-1, with the following:

Apply tack coat uniformly across the existing surface at target application rates shown in Table 605-1.

TABLE 605-1 APPLICATION RATES FOR TACK COAT		
Evisting Surface	Target Rate (gal/sy)	
Existing Surface	Emulsified Asphalt	
New Asphalt	0.04 ± 0.01	
Oxidized or Milled Asphalt	0.06 ± 0.01	
Concrete	0.08 ± 0.01	

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport or at application.

TABLE 605-2 APPLICATION TEMPERATURE FOR TACK COAT

Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 64-22	350 - 400°F
Emulsified Asphalt, Grade RS-1H	130 - 160°F
Emulsified Asphalt, Grade CRS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-1H	130 - 160°F
Emulsified Asphalt, Grade HFMS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-2	130 - 160°F

Page 6-7, Article 609-3 FIELD VERIFICATION OF MIXTURE AND JOB MIX FORMULA ADJUSTMENTS, lines 35-37, delete the second sentence of the second paragraph.

Page 6-18, Article 610-1 DESCRIPTION, lines 40-41, delete the last sentence of the last paragraph.

Page 6-19, Subarticle 610-3(A) Mix Design-General, line 5, add the following as the first paragraph:

Warm mix asphalt (WMA) is allowed for use at the Contractor's option in accordance with the NCDOT Approved Products List for WMA Technologies available at:

https://connect.ncdot.gov/resources/Materials/MaterialsResources/WMA%20Approved%20Lists.pdf

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), replace Table 610-1 with the following:

TABLE 610-1 DESIGN MIXING TEMPERATURE AT THE ASPHALT PLANT ^A					
Binder Grade	HMA JMF Temperature	WMA JMF Temperature Rang			
PG 64-22	300°F	225 - 275°F			
PG 70-22	315°F	240 - 290°F			
PG 76-22	335°F	260 - 310°F			

A. The mix temperature, when checked in the truck at the roadway, shall be within plus 15° and minus 25° of the temperature specified on the JMF.

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), lines 4-6, delete first sentence of the second paragraph. Line 7, in the second sentence of the second paragraph, replace "275°F" with "275°F or greater."

Page 6-22, Article 610-4 WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, lines 15-17, replace the second sentence of the first paragraph with the following:

Do not place asphalt material when the air or surface temperatures, measured at the location of the paving operation away from artificial heat, do not meet Table 610-5.

Page 6-23, Article 610-4 WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, replace Table 610-5 with the following:

TABLE 610-5 PLACEMENT TEMPERATURES FOR ASPHALT						
Asphalt Concrete Mix Type	Minimum Surface and Air Temperature					
B25.0B, C	35°F					
I19.0B, C, D	35°F					
SF9.5A, S9.5B	40°F					
S9.5C, S12.5C	45°F					
S9.5D, S12.5D	50°F					

Page 6-26, Article 610-7 HAULING OF ASPHALT MIXTURE, lines 22-23, in the fourth sentence of the first paragraph replace "so as to overlap the top of the truck bed and" with "to".

GUIDELINES FOR LANE WIDTH ON RESURFACING PROJECTS IN DIVISION FIVE

The Contractor shall place the pavement markings in accordance with this table and detail unless otherwise directed by the Engineer.

TWO-LANE, TWO-WAY ROADWAY 55 MPH

ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9'*	0'
20'	10'*	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'

TWO-LANE, TWO-WAY ROADWAY 50 MPH or LESS

ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9'*	0'
20'	10'*	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	11'	3'
32'	11'	5'

^{*}May vary due to pavement width.

SCHEMATIC OF ROADWAY

(Not to Scale)

Edge of Pavement

Shoulder Width

Lane Width

CL Roadway

Shoulder Width

Edge of Pavement

SHOULDER WEDGE:

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

Revise the 2012 Standard Specifications as follows:

Page 6-26, Article 610-8, add the following after line 43:

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.

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:

(11-21-00) (Rev. 7-17-12)

609

SP6 R15

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course	Type B 25.0	4.4%
Asphalt Concrete Intermediate Course	Type I 19.0	4.8%
Asphalt Concrete Surface Course	Type S 4.75A	6.8%
Asphalt Concrete Surface Course	Type SA-1	6.8%
Asphalt Concrete Surface Course	Type SF 9.5A	6.7%
Asphalt Concrete Surface Course	Type S 9.5	6.0%
Asphalt Concrete Surface Course	Type S 12.5	5.6%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the 2012 Standard Specifications.

ASPHALT PLANT MIXTURES:

(7-1-95)

SP6 R20

Place asphalt concrete base course material in trench sections with asphalt pavement spreaders made for the purpose or with other equipment approved by the Engineer.

609

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 2012 Standard Specifications.

The base price index for asphalt binder for plant mix is \$ 559.06 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on May 1, 2013.

FINAL SURFACE TESTING NOT REQUIRED:

(5-18-04) (Rev. 5-15-12) 610

SP6 R45

Final surface testing is not required on this project.

ASPHALT CONCRETE SURFACE COURSE COMPACTION:

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

SP6 R49R

Compact the asphalt surface course on this project in accordance with Subarticle 610-9 of the 2012 Standard Specifications and the following provision:

Perform the first rolling with a steel wheel roller followed by rolling with a self-propelled pneumatic tired roller with the final rolling by a steel wheel roller.

RESURFACING EXISTING BRIDGES:

(3-20-12) (Rev. 8-21-12)

SP6 R61BR

The Contractor's attention is directed to the fact that he will be required to mill and 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, mill a taper into existing pavement for a length of 25 feet per inch of final surface. A temporary asphalt wedge will be required immediately after milling to ensure smooth travel if the final layer of surface course is not placed on the same day as milling.

TRENCHING FOR BASE COURSE:

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

610

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.

Density tests may be taken every 2,000 feet in the widened areas as directed by the Engineer. Shape and compact the subgrade in the widened areas to the satisfaction of the Engineer. Compact the asphalt concrete base course in the widened areas in accordance with the provisions of Article 610-9 of the 2012 Standard Specifications.

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. 12-18-12)

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 2012 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

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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.

Patching Existing Pavement will be considered a minor item. 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 MANHOLES:

(7-1-95) (Rev. 8-21-12) 858 SP8 R95R

The Contractor's attention is directed to Section 858-3 of the 2012 Standard Specifications.

The use of cast iron or steel fittings in the adjustment of manholes will not be permitted on this project except where it is considered by the Engineer to be in the best interest of the Department to allow rings to be used. When rings are permitted for the adjustment of manholes, the rings shall have satisfactory bearing on the existing manhole frames and 50 percent of the circumference shall be tack welded at four equally spaced locations as directed by the Engineer. If the existing covers do not fit the rings, furnish and install new covers at no additional expense to the Department.

MATERIALS: (2-21-12) (Rev. 5-21-13)

1000, 1005, 1050, 1074, 1078, 1080, 1081, 1087, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

			REQ	TA UIREME	BLE 1000 NTS FOR		CRETE	***************************************			· •
	Ġ	Maxii		er-Cement		Con	sistency . Slump		Cement	t Conten	t
Class of Concrete	Min. Comp. Strength at 28 days		Air-Entrained Concrete		Non Air- Entrained Concrete		Non- Vibrated	Vibrated		Non- Vibrated	
00	Mi S at	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vibrated	S S	Min.	Max.	Min.	Max.
Units	psi		9			inch	inch	lb/cy	lb/cy	lb/cy	lb/cy
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800
Α	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	
В	2,500	0.488	0.567	0.559	0.630	2.5	4	508	-	545	-
B Slip Formed	2,500	0.488	0.567	-	-	1.5	-	508	-	-	-
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	_	Flow- able	-	-	40	100
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow- able	-	-	100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with:

All fencing material and accessories shall meet Section 106.

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

Light- weight	ABC (M)	ABC	9	14M	78M	67	6M	57M	57	Si	467M	4	Std. Size#	
ı	•	,		ı	ı	ı	ı	ı	1	1	100	100	2"	
ı	100	100	•	1	•	ı	,	100	100	100	95- 100	90- 100	1/2"	
•	75- 100	75- 97	ı	1	ı	100	100	9 5-	95 - 100	90- 100	ı	20- 55	=	
ı	ı	•	•	ı	100	90- 100	100	ı	4	20- 55	35- 70	0-15	3/4"	P
100	45- 79	55- 80	•	•	98- 100	ı	20- 55	25- 45	25- 60	0-10	•	ı	1/2"	Percentage of Total by Weight Passing
80- 100	•	•	100	100	75- 100	20- 55	0-20	•		0-5	0-30	0-5	3/8"	tage o
5- 40	20 -	35 <u>-</u> 55	100	35- 70	20- 45	0-10	0-8	0-10	0-10		0-5	•	#	f Tota
0-20	1		4 6 9	5-20	0-15	0-5		0-5	0-5	ı		1	#	d by V
1	0- 25	25- 45		ı	•		•	•	ı	ļ		1	#10	Veigh
0-10	•		0-10	0-8						ı	•	ı	#16	Pass
•	ı	14- 30	ı	ı	ı	ı	ı	ı	ı	ı		ı	#40	gai
0-2.5	0- 12 ^B	4- 12 ^B	A	>	A	ð	ð	>	>	A	>	A	#200	
AST	Maintenance Stabilization	Aggregate Base Course, Aggregate Stabilization	AST	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains	AST, Str. Concrete, Asphalt Plant Mix	AST	AST, Concrete Pavement	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone	AST, Sediment Control Stone	Asphalt Plant Mix	Asphalt Plant Mix	Remarks	

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace with the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and

conformance to M306 loading (40,000 lbs.) will be required only when noted on the design documents.

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1 REQUIREMENTS F		
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi
Maximum Water/Cementitious Material Ratio	0.45	0.40
Maximum Slump without HRWR	3.5"	3.5"
Maximum Slump with HRWR	8"	8"
Air Content (upon discharge into forms)	5 + 2%	5 + 2%

Page 10-151, Article 1080-4 Inspection and Sampling, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-162, Subarticle 1081-1(A) Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A.

Page 10-162, Subarticle 1081-1(B) Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-169, Subarticle 1081-3(G) Anchor Bolt Adhesives, delete this subarticle.

Page 10-179, Subarticle 1087-4(A) Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B) Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A) Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace
Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

TABLE 1092-3
MINIMUM COEFFICIENT OF RETROREFLECTION FOR NC GRADE A
(Candelas Per Lux Per Square Meter)

Observation Angle, degrees	Entrance Angle, degrees	White	Yellow	Green	Red	Blue	Fluorescent Yellow Green	Fluorescent Yellow
0.2	-4.0	525	395	52	95	30	420	315
0.2	30.0	215	162	22	43	10	170	130
0.5	-4.0	310	230	31	56	18	245	185
0.5	30.0	135	100	14	27	6	110	81
1.0	-4.0	120	60	8	16	3.6	64	48
1.0	30.0	45	34	4.5	9	2	36	27
······································	······································		***************************************				~·········	

SHOULDER AND SLOPE BORROW:

(3-19-13) 1019 SP10 R10

Use soil in accordance with Section 1019 of the 2012 Standard Specifications. Use soil consisting of loose, friable, sandy material with a PI greater than 6 and less than 25 and a pH ranging from 5.5 to 7.0.

Soil with a pH ranging from 4.0 to 5.5 will be accepted without further testing if additional limestone is provided in accordance with the application rates shown in Table 1019-1A. Soil type is identified during the soil analysis. Soils with a pH above 7.0 require acidic amendments to be added. Submit proposed acidic amendments to the Engineer for review and approval. Soils with a pH below 4.0 or that do not meet the PI requirements shall not be used.

ADDI	TABLE 1019-1A ADDITIONAL LIMESTONE APPLICATION RATE TO RAISE pH						
pH TEST RESULT	Sandy Soils Additional Rate (lbs. / Acre)	Silt Loam Soils Additional Rate (lbs. / Acre)	Clay Loam Soils Additional Rate (lbs. / Acre)				
4.0 - 4.4	1,000	4,000	6,000				
4.5 - 4.9	500	3,000	5,000				
5.0 - 5.4	. NA	2,000	4,000				

Note: Limestone application rates shown in this table are in addition to the standard rate of 4000 lbs. / acre required for seeding and mulching.

No direct payment will be made for providing additional lime or acidic amendments for Ph adjustment.

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" 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.

5CR.20921.44 Wake County Date: 4/24/2012 Revised:

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TRAFFIC CONTROL:

(01-17-12) (Rev. 4-16-13)

Maintain traffic in accordance with Divisions 10, 11 and 12 of the 2012 Standard Specifications and the following provisions:

SP1 RG14 I

Install Work Zone Advance Warning Signs in accordance with Standard Drawing No. 1101.01 of the 2012 Roadway Standard Drawings 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 and 1130.01 of the 2012 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. 1101.01, 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, 1170.01 and 1180.01 of the 2012 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 may be used instead of drums for lane closures during daylight hours. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 3 miles in length at any given time unless otherwise directed 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 2012 Standard Specifications and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to an undivided facility and within 5 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working on the shoulder, adjacent to a divided facility and within 10 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, 2012 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. Do not perform work involving heavy equipment within 15 feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

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Do not exceed a difference of 2 inches in elevation between open lanes of traffic for nominal lifts of 1.5 inches. Install advance warning UNEVEN LANES signs (W8-11 at 48" X 48") 500 feet in advance and a minimum of once every half mile throughout the uneven area.

Backfill at a 6:1 slope up to the edge and elevation of existing pavement in areas adjacent to an open travel lane 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 limit less than 45 mph. Backfill the unacceptable drop-off with suitable compacted material, as approved by the Engineer, at no expense to the Department. This work is not considered part of shoulder reconstruction and/or grading.

When utilizing a slow-moving operation for such items as pavement marking placement, pavement marker installation and pesticide spraying, the slow moving operation caravan shall consist, as a minimum, of the vehicles and devices shown on the Moving Operation Caravan Details as shown on Standard Drawing No. 1101.02, sheets 11, 12 and 13 of the 2012 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.

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 pre-construction 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 919-773-2800 or Traffic Services for additional traffic control guidance, as necessary.
- 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.
- 3. Once the Contractor has started work at a location, the Contractor should prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance unless determined otherwise by the Engineer.
- 4. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures.
- 5. 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 and/or permanent markers, the Contractor shall be responsible for, at his expense, paint per Article 1205-8(C) and temporary markers per Article 1251 of the 2012 Standard Specifications.
- 6. Contractor shall mill and pave lanes in an order such that water shall not accumulate.

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

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The Contractor may elect to use Law Enforcement on ANY Map in the contract. If the Contractor elects to use Law Enforcement, furnish Law Enforcement Officers and marked Law Enforcement vehicles with blue lights mounted on top of the vehicle and Law Enforcement vehicle emblems to direct or control traffic. There will be no direct payment for Law Enforcement Officers and marked Law Enforcement vehicles as they are considered incidental to the other pay items in the contract.

Notify the Engineer 15 consecutive calendar days before resurfacing a bridge or its approaches. Patch and make repairs to the existing asphalt wearing surface on the 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.

During a resurfacing only operation, bring all newly resurfaced lanes to the same elevation within 72 hours for nominal lifts of 1.5 inches or less of asphalt course and by the end of each work day for nominal lifts of greater than 1.5 inches of asphalt course.

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 operations 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) For 1 ½" milling: Mill (single lane or full width) prior to patching. Traffic is not allowed to ride on the milled surface for more than 7 days. For elevation differences of 1.5 inches or less, lanes shall be brought to the same elevation within 72 hours or as directed by the Engineer. Lanes shall be brought to the same elevation by the end of each work day for elevation differences of greater than 1.5 inches.
- (B) For 2 ½" milling: Mill (single lane or full width) prior to patching. Traffic is not allowed to ride on the milled surface. For elevation differences of 1.5 inches or less, lanes shall be brought to the same elevation within 72 hours or as directed by the Engineer. Lanes shall be brought to the same elevation by the end of each work day for elevation differences of greater than 1.5 inches.

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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) For 1 ½" milling: Mill (single lane or full width) prior to patching. Traffic is not allowed to ride on the milled surface for more than 7 days. For elevation differences of 1.5 inches or less, lanes shall be brought to the same elevation within 72 hours or as directed by the Engineer. Lanes shall be brought to the same elevation by the end of each work day for elevation differences of greater than 1.5 inches.
- (B) For 2 ½" milling: Mill (single lane or full width) prior to patching. Traffic is not allowed to ride on the milled surface. For elevation differences of 1.5 inches or less, lanes shall be brought to the same elevation within 72 hours or as directed by the Engineer. Lanes shall be brought to the same elevation by the end of each work day for elevation differences of greater than 1.5 inches.

When resurfacing facilities with ramps, resurface the ramp and gore area of the ramp as agreed upon with the Engineer. Place the transverse joint on the ramp at the terminal point of the gore unless the ramp is being resurfaced beyond this limit.

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.

Maintain vehicular access in accordance with Article 1101-14 of the 2012 Standard Specifications using suitable backfill material approved by the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Do not cross medians with equipment, except at properly designated interchanges.

Review and record the existing pavement markings and markers prior to resurfacing. Use the record of existing pavement markings and markers in accordance with the 2012 Roadway Standard Drawings to re-establish the proposed pavement markings and markers unless otherwise directed by the Engineer.

Provide appropriate lighting in accordance with Section 1413 of the 2012 Standard Specifications.

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.

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Payment will be made for the traffic control items that have been included in the contract. No direct payment will be made for providing other traffic control as required herein, as the cost of same will be considered incidental to the work being paid for under those various traffic control items that have been included. Where the Contractor maintains traffic as required herein but no specific pay items have been included in the contract, all associated costs will be considered incidental to the work being paid for under the various items in the contract.

WORK ZONE SIGNING:

(01-17-12)

RWZ-3

Description

Install and maintain signing in accordance with Divisions 11 and 12 of the 2012 Standard Specifications, the 2012 Roadway Standard Drawings and the following provisions:

Furnish, install, maintain and remove advance warning work zone signs and any required lane closure signing.

Furnish, install and maintain general work zone warning signs for resurfacing and milling such as ROUGH ROAD (W8-8 at 48" X 48") (for milling only), UNEVEN LANES (W8-11 at 48" X 48"), LOW SHOULDER (W8-9 at 48" X 48"), LOW / SOFT SHOULDER (DOT No. 16-79860 at 48" X 48"), UNMARKED PAVEMENT AHEAD (DOT No. 116087130 at 48" X 48") and DO NOT PASS (R4-1 at 24" X 30"). When construction is completed in any area of the project, relocate signs to the next work site, as directed by the Engineer. Remove these signs at the completion of the project.

All work zone signs may be portable.

Construction Methods

(A) General

Install all warning work zone signs before beginning work on a particular map. If signs are installed three days prior to the beginning of work on a particular map, cover the signs until the work begins. Install each work zone 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.

(B) Advance Warning Work Zone Signs

Install advance warning work zone signs in accordance with Standard Drawing No. 1101.01, 1101.02 and 1110.01 of the 2012 Roadway Standard Drawings prior to beginning of work and remove upon final completion of the project. If there is a period of construction inactivity longer than two weeks, remove or cover advance warning work zone signs. Uncover advance warning work zone signs no more than 3 days before work resumes. All other operations could be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

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(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 2012 Roadway Standard Drawings.

(D) General Work Zone Warning Signs

Install general work zone warning signs for resurfacing and milling such as ROUGH ROAD (W8-8 at 48" X 48") (for milling only), UNEVEN LANES (W8-11 at 48" X 48"), LOW SHOULDER (W8-9 at 48" X 48") and LOW / SOFT SHOULDER (W8-9B at 48" X 48") at 1 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer.

Install the LOW SHOULDER (W8-9 at 48" X 48") or LOW / SOFT SHOULDER (DOT No. 16-79860 at 48" X 48") signs prior to any resurfacing in an area where shoulder construction will be performed.

Install general work zone warning signs such as UNMARKED PAVEMENT AHEAD (DOT No. 116087130 at 48" X 48") and DO NOT PASS (R4-1 at 24" X 30") alternately at 1/2 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer. Install signs prior to the obliteration of any pavement markings.

Measurement and Payment

Payment will be made for the work zone signing items that have been included in the contract. No direct payment will be made for providing other work zone signing as required herein, as the cost of same will be considered incidental to the work being paid for under those various work zone signing items that have been included. Where the Contractor provides work zone signing as required herein but no specific pay items have been included in the contract, all associated costs will be considered incidental to the work being paid for under the various items in the contract.

TIME LIMITATION FOR PAVEMENT MARKINGS AND MARKERS ON NEWLY RESURFACED AREAS:

7-12) RWZ-4

Markings: Two-Lane, Two-Way Facilities

For all two-lane, two-way facilities, place all edge lines and other symbols within 30 calendar days after they have been obliterated by the resurfacing operation.

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Markings: All Facilities

The pavement markings on a specific map are subject to an observation period that begins with the satisfactory completion of all pavement markings required on a specific map in accordance with Subarticle 1205-3(H) of the 2012 Standard Specifications.

All characters, symbols and stop bars on concrete shall be either Type 2 or Type 3 Cold Applied Plastic or Heated-In-Place Thermoplastic as shown on NCDOT Approved Product List. The quantity for characters, symbols and stop bars on concrete will be included in the pay items for Type 2 Cold Applied Plastic.

All characters, symbols and stop bars on asphalt shall be either Heated-In-Place Thermoplastic or Extruded Thermoplastic as shown on NCDOT Approved Product List. The quantity for characters, symbols and stop bars on asphalt will be included in the pay items for Heated-In-Place Thermoplastic.

Markers: All Facilities

Install permanent pavement markers within 60 calendar days after completing the resurfacing on each map.

ROADWAY STANDARD DRAWINGS FOR PAVEMENT MARKINGS AND MARKERS: (01-17-12) RWZ-5

Use the following in conjunction with the 2012 Standard Specifications:

Standard Pavement Markings 2012 Roadway Standard Drawings:

1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1205.06, 1205.07, 1205.08, 1205.09, 1205.10,

1205.11, 1205.12, 1205.13

Raised Pavement Markers 2012 Roadway Standard Drawings:

1205.12, 1250.01, 1251.01

Snowplowable Pavement Markers 2012 Roadway Standard Drawings:

1250.01, 1253.01

Milled Rumble Strips 2012 Roadway Standard Drawings:

665.01

STABILIZATION REQUIREMENTS:

(11-4-11) S-1

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)

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	Septemb	er 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.

Approved Tall Fescue Cultivars

2 nd Millennium	Duster	Magellan	Rendition
Avenger	Endeavor	Masterpiece	Scorpion
Barlexas	Escalade	Matador	Shelby
Barlexas II	Falcon II, III, IV & V	Matador GT	Signia
Barrera	Fidelity	Millennium	Silverstar
Barrington	Finesse II	Montauk	Southern Choice II
Biltmore	Firebird	Mustang 3	Stetson
Bingo	Focus	Olympic Gold	Tarheel
Bravo	Grande II	Padre	Titan Ltd
Cayenne	Greenkeeper	Paraiso	Titanium
Chapel Hill	Greystone	Picasso	Tomahawk
Chesapeake	Inferno	Piedmont	Tacer
Constitution	Justice	Pure Gold	Trooper
Chipper	Jaguar 3	Prospect	Turbo
Coronado	Kalahari	Quest	Ultimate
Coyote	Kentucky 31	Rebel Exeda	Watchdog
Davinci	Kitty Hawk	Rebel Sentry	Wolfpack
Dynasty	Kitty Hawk 2000	Regiment II	
Dominion	Lexington	Rembrandt	

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.

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-ft. long with a 2" x 2" 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 2012 Standard Specifications, or shall meet specifications provided elsewhere in this contract.

Provide staples made of 0.125" diameter new steel wire formed into a u shape not less than 12" in length with a throat of 1" 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" with no more than 2" projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

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".

Installation of matting shall be in accordance with the detail provided in the plans, and in accordance with Article 1631-3 of the 2012 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 2012 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 2012 Standard Specifications, or in accordance with specifications provided elsewhere in this contract.

Payment will be made under:

Pay Item
Wattle

Pay Unit Linear Foot

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(E) of the 2012 Standard Specifications.

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 <u>found</u> pure seed and <u>found</u> 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:

Restricted Noxious Weed	Limitations per Lb. Of Seed	Restricted Noxious <u>Weed</u>	Limitations per Lb. of Seed
Blessed Thistle Cocklebur Spurred Anoda Velvetleaf Morning-glory Corn Cockle Wild Radish Purple Nutsedge Yellow Nutsedge Canada Thistle	4 seeds 4 seeds 4 seeds 4 seeds 4 seeds 8 seeds 10 seeds 12 seeds 27 seeds 27 seeds 27 seeds	Cornflower (Ragged Robin) Texas Panicum Bracted Plantain Buckhorn Plantain Broadleaf Dock Curly Dock Dodder Giant Foxtail Horsenettle Quackgrass	27 seeds 27 seeds 54 seeds
Field Bindweed Hedge Bindweed	27 seeds 27 seeds	Wild Mustard	54 seeds

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

Korean Lespedeza German Millet – Strain R
Weeping Lovegrass Clover – Red/White/Crimson

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

(1-17-12) (Rev. 9-18-12)

Z-4

Revise the 2012 Standard Specifications as follows:

Division 2

Page 2-7, line 31, Article 215-2 Construction Methods, replace "Article 107-26" with "Article 107-25".

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete "pipe culverts,".

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows: Line 1, replace "(4) Buffer Zone" with "(c) Buffer Zone"; Line 12, replace "(5) Evaluation for Potential Wetlands and Endangered Species" with "(d) Evaluation for Potential Wetlands and Endangered Species"; and Line 33, replace "(6) Approval" with "(4) Approval".

Division 4

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace "sheet pile" with "reinforcement".

Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace "30" with "45".

Page 6-10, line 42, Subarticle 609-6(C)(2), replace "Subarticle 609-6(E)" with "Subarticle 609-6(D)".

Page 6-11, Table 609-1 Control Limits, replace "Max. Spec. Limit" for the Target Source of $P_{0.075}/P_{be}$ Ratio with "1.0".

Page 6-40, Article 650-2 Materials, replace "Subarticle 1012-1(F)" with "Subarticle 1012-1(E)"

Division 10

Page 10-74, Table 1056-1 Geotextile Requirements, replace "50%" for the UV Stability (Retained Strength) of Type 5 geotextiles with "70%".

Division 12

Page 12-7, Table 1205-3, add "FOR THERMOPLASTIC" to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace "Table 1205-2" with "Table 1205-4".

Page 12-8, Table 1205-4 and 1205-5, replace "THERMOPLASTIC" in the title of these tables with "POLYUREA".

Page 12-9, Subarticle 1205-6(B), line 21, replace "Table 1205-4" with "Table 1205-6".

Page 12-11, Subarticle 1205-8(C), line 25, replace "Table 1205-5" with "Table 1205-7".

Division 15

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following: $W = LD\sqrt{P} \div 148,000$

Page 15-6, Subarticle 1510-3(B), line 32, delete "may be performed concurrently or" and replace with "shall be performed".

Page 15-17, Subarticle 1540-3(E), line 27, delete "Type 1".

Division 17

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the 2012 Roadway Standard Drawings as follows:

1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation, replace "1633.01" with "1631.01".

PLANT AND PEST QUARANTINES

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

(3-18-03)

Z-04a

Within Ouarantined 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, 919-733-6932, or http://www.ncagr.com/plantind/ 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 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. 5-21-13) 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. A sample agreement is available at www.ncbowd.com/section/on-the-job-training.

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.

ITEMIZED PROPOSAL FOR CONTRACT NO. C203377

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	untv	Wake
	WILLY	TTONE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0106000000-E	230	BORROW EXCAVATION	2,424		
				CY	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
0003	0264000000-Е	SP	GENERIC GRADING ITEM SHOULDER GRADING	24.3 SMI		
0004	1220000000-E	 545	INCIDENTAL STONE BASE	1,337		
				TON		
0005	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***"	343,724		
			DEPTH (1-1/2")	SY		
0006	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***"	48,076		4.8 & a a a a a 4 4 5 1 1 1 1 4 4 5 1 1 1 1 1 1 1 1 1 1
			DEPTH (2-1/2")	SY		
0007	1308000000-E	607	MILLING ASPHALT PAVEMENT, ***" TO ******	6,569		
			TO ************************************	SY		
0008	1308000000-E	607	MILLING ASPHALT PAVEMENT, ***"	3,926	***************************************	
			TO ******" (2-1/2" TO 4")	SY		
0009	133000000-E	607	INCIDENTAL MILLING	6,873		
				SY 		
0010	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	2,603		
			B23.0B	TON		
0011	1498000000-E	610	ASPHALT CONC INTERMEDIATE	7,201		
			COURSE, TYPE I19.0B	TON		
0012	1519000000-E	610	ASPHALT CONC SURFACE COURSE,	51,271		
			TYPE S9.5B	TON		
0013	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	3,538		
				TON		
0014	1704000000-E	SP	PATCHING EXISTING PAVEMENT	4,637	99444 <u>4</u> 844	
			•	TON		
0015	2830000000-N	858	ADJUSTMENT OF MANHOLES	60		
				EA	,,	
0016	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	57 EA		
 0017	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING	160,181	***************************************	
	· · · · · · · · ·		LINES (4", 90 MILS)	LF		

County: Wake

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	255,320 LF		
0019	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	5,152 LF		
0020	4697000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	8,939 LF		
 0021	4705000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS)	100 LF		·
0022	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	4,493 LF	444464444444	
 0023	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	182 EA		
0024	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	646 EA		
0025	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (III)	3,145 LF		
 0026	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	310,335 LF		
0027	482 0000000-Е	1205	PAINT PAVEMENT MARKING LINES (8")	10,836 LF		
0028	4830000000-E	1205	PAINT PAVEMENT MARKING LINES (16")	50 LF		######################################
0029	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	3,688 LF		
0030	4840000000-N	1205	PAINT PAVEMENT MARKING CHARAC- TER	166 EA		445071.2465BX466554462
0031	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	539 EA	J	
0032	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	3,145 LF		
 0033	490000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	3,432 EA		
0034	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	1,255 EA	N	

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ITEMIZED PROPOSAL FOR CONTRACT NO. C203377

Page 3 of 3

County	-	Wake

County:	Wake		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum	L.S.	
0036	6000000000-E	1605	TEMPORARY SILT FENCE	1,810 LF		
0037	6071010000-Е	SP	WATTLE	4,590 LF		
0038	6084000000-Е	1660	SEEDING & MULCHING	18.1 ACR		
0039	7444000000- Е	1725	INDUCTIVE LOOP SAWCUT	18,546 LF		

Total Amount Of Bid For Entire Project :

Vendor 1 of 4: FSC II LLC DBA FRED SMITH COMPANY (5072) Call Order 008 (Proposal: C203377)

Bid Information

County: WAKE

Address: 6105 Chapel Hill Road

Raleigh, NC, 27607

Signature Check: Thomas_T_Johnson_Jr_5072

Time Bid Received: June 18, 2013 12:35 PM

Amendment Count: 0

Bid Checksum: CC5FC21B

Bid Total: \$5,441,603.43

Items Total: \$5,441,603.43

Time Total: \$0.00

Bidding Errors:

None.

MBE GOAL SET 5.0 WBE GOAL SET 6.0

MBE GOAL MET 5.0 WBE GOAL MET 6.0

Vendor 1 of 4: FSC II LLC DBA FRED SMITH COMPANY (5072) Call Order 008 (Proposal: C203377)

Bid Bond Information

Projects:

Counties:

Bond ID: SNC13416101

Paid by Check: No

Bond Percent: 5%

Bond Maximum:

State of Incorporation:

Agency Execution Date: 6/7/2013 5

Surety Name: surety2000

Bond Agency Name: Western Surety Company

Vendor 5072's Bid Information for Call 008, Letting L130618, 06/18/13

FSC II LLC, dba, Fred Smith Company (5072) Call Order 008 (Proposal ID C203377)

LIST OF MBE PARTICIPANTS

VENDOR DBE NAME WORK **CERT**

TYPE AMOUNT CODE TYPE OF WORK NUMBER ADDRESS

9210 MB AUSTIN TRUCKING, LLC Committed Sub 272,081.60

P.O. BOX 606 , CLAYTON, NC 27528

TOTAL: \$272,081.60

5.00%

Vendor 5072's Bid Information for Call 008, Letting L130618, 06/18/13

FSC II LLC, dba, Fred Smith Company (5072) Call Order 008 (Proposal ID C203377)

LIST OF WBE PARTICIPANTS

VENDOR DBE NAME WORK CERT

NUMBER ADDRESS CODE TYPE OF WORK TYPE AMOUNT

Committed 12393 WB ROYALS CONTRACTING, INC. 326,497.60 Sub

8601 BAREFOOT INDUSTRIAL RD , RALEIGH, NC 27617

TOTAL: \$326,497.60

6.00%

Vendor 5072's Bid Information for Call 008, Letting L130618, 06/18/13

FSC II LLC, dba, Fred Smith Company (5072) Call Order 008 (Proposal ID C203377)

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:

Contract Number

County

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

Bid Bond Data Info - Contractor Responses:

BondID: SNC13416101

Surety Registry Agency: surety2000

Verified?: Yes

Surety Agency: Western Surety Company

Bond Execution Date: 6/7/2013 5

Bond Amount: \$272,080.17 (Five Percent of Bid)

NCDOT

State of NC Date: 05-21-13 Dept of Transportation Revised:

Contract ID: C203377 Project(s): STATE FUNDED

Letting Date: 06-18-13 Call Order: 008

Bidder: 5072 - FSC II LLC, dba, Fred Smith Company

Line	Item	 	Approx.	Unit Price	Bid Amount
No. 	Description		Quantity and Units	 Dollars Cts	Dollars Ct
+					+

Section 0001 ROADWAY ITEMS

Alt Group

Alt Group			,
000010000 N MOBILIZAT	ZIO LUMP 	 LUMP 	
0106000000-E BORROW 0002 EXCAVATION	 2,424.000 CY	 18.30000 	
0264000000-E GENERIC 0003 GRADING ITEM SHOULDER GRADING	 24.300 SMI	 2,455.00000 	
122000000-E INCIDENTA 0004 STONE BASE 	L 1,337.000 TON	 27.20000 	36,366.40
1297000000-E MILLING 0005 ASPHALT PAVEMENT, ***"DEPTH (1-1/2")	 343,724.000 SY	 0.70000 	240,606.80
1297000000-E MILLING 0006 ASPHALT PAVEMENT, 	 48,076.000 SY		2,403.80
1308000000-E MILLING 0007 ASPHALT PAVEMENT, ***"T *****" (0" TO 1-1/2")	0 6,569.000 SY	 3.50000 	22,991.50
1308000000-E MILLING 0008 ASPHALT PAVEMENT, ***"T *****" (2-1/2" TO 4")	 0 3,926.000 SY	1.25000 1.25000	4,907.50
133000000-E INCIDENTA 0009 MILLING	L 6,873.000	3.20000	21,993.60
1489000000-E ASPHALT 0010 CONC BASE COURSE, TYPE B25.0B	2,603.000 TON	33.00000 	85,899.00
1498000000-E ASPHALT 0011 CONC INTERMEDIATE COURSE, TYPE I19.0B	7,201.000 TON	25.75000 	185,425.75
· 			

Check: CC5FC21B Page 1

State of NC Date: 05-21-13 Revised:

Dept of Transportation

Contract ID: C203377 Project(s): STATE FUNDED

Letting Date: 06-18-13 Call Order: 008

Bidder: 5072 - FSC II LLC, dba, Fred Smith Company

+ Line No.		 	 Approx. Quantity	Unit Price	Bid Amount
140.1	besettperon		and Units	Dollars Cts	Dollars Ct
10012	1519000000-E ASPHALT CONC SURFACE COURSE, TYPE S9.5B	 TON	51,271.000	 26.50000	1,358,681.50
	1575000000-E ASPHALT BINDER FOR PLANT MIX	 TON	3,538.000	 600.00000	2,122,800.00
	170400000-E PATCHING EXISTING PAVEMENT 	 TON	4,637.000	 84.75000 	 392,985.75
	2830000000-n ADJUSTMENT OF MANHOLES 	 EA	60.000	 450.00000 	 27,000.00
0016	2845000000-N ADJUSTMENT OF METER BOXES OR VALVE BOXES	 EA	57.000	 365.00000	20,805.00
0017	4685000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (4", 90 MILS)	 LF	160,181.000	0.40000	
0018	4686000000-E THERMOPLAST IC PAVEMENT MARKING LINES (4", 120 MILS)		255,320.000 255	0.54000	
0019	4695000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (8", 90 MILS)		5,152.000 5,152	1.50000	7,728.00
0020	4697000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (8", 120 MILS)		8,939.000 8	1.50000 	13,408.50
0021	4705000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (16", 120 MILS)		100.000	6.00000 	600.00
00221	4710000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (24", 120 MILS)		4,493.000 	8.00000 8.00000	35,944.00

State of NC Date: 05-21-13 Revised:

Dept of Transportation

Project(s): STATE FUNDED Contract ID: C203377

Letting Date: 06-18-13 Call Order: 008

Bidder: 5072 - FSC II LLC, dba, Fred Smith Company

+ Line No.		 	Approx. Quantity	Unit Price	
	1	į	and Units	Dollars Cts	Dollars Ct
0023 	4721000000-E THERMOPLAST IC PAVEMENT MARKINGCHARACTER (120 MILS)	 EA	182.000	 65.00000 	
10024	4725000000-E THERMOPLAST IC PAVEMENT MARKINGSYMBOL (90 MILS)	•	646.000	 85.00000 	
0025 	4770000000-E COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (III)	 LF	3,145.000	 3.00000 	9,435.00
10026	4810000000-E PAINT PAVEMENT MARKING LINES (4")	 LF	310,335.000	 0.11000 	34,136.85
10027	4820000000-E PAINT PAVEMENT MARKING LINES (8")	 LF	10,836.000	0.30000 0.30000	3,250.80
0028	4830000000-E PAINT PAVEMENT MARKING LINES (16")	 LF	50.000	2.00000	100.00
0029	4835000000-E PAINT PAVEMENT MARKING LINES (24")	 LF	3,688.000	3.00000 	11,064.00
10030	4840000000-N PAINT PAVEMENT MARKING CHARAC-TER	EA	166.000 	15.00000 15.00000	2,490.00
	4845000000-N PAINT PAVEMENT MARKING SYMBOL	EA	539.000 	15.00000 15.00000	8,085.00
0032	4850000000-E REMOVAL OF PAVEMENT MARKING LINES (4")	LF	3,145.000 	0.50000	1,572.50
00331	4900000000-N PERMANENT RAISED PAVEMENT MARKERS	EA	3,432.000 	3.25000	11,154.00

State of NC Date: 05-21-13 Dept of Transportation Revised:

Project(s): STATE FUNDED Contract ID: C203377

Letting Date: 06-18-13 Call Order: 008

Bidder: 5072 - FSC II LLC, dba, Fred Smith Company

ı				
Line No.	•	Approx. Quantity	Unit Price 	Bid Amount
		and Units	Dollars Cts	Dollars Ct
	4905000000-N SNOWPLOWABL E PAVEMENT MARKERS	 1,255.000 EA	 23.00000 	28,865.00
	5255000000-N PORTABLE	 LUMP	LUMP	53,000.00
	6000000000-E TEMPORARY SILT FENCE	 1,810.000 LF	 3.25000 	5,882.50
 0037 		4,590.000 LF	5.25000 	24,097.50
	6084000000-E SEEDING & MULCHING		2,725.00000 	49,322.50
-	7444000000-E INDUCTIVE LOOP SAWCUT	 18,546.000 LF	5.93000 	109,977.78 109
 	Section 0001 Total	 	·	5,441,603.43
 	Bid Total	 		 5,441,603.43

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;
- 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;
- 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.

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION

PAGE: 7 MBE COMMITMENT ITEMS

PROPOSAL: C203377

LETTING: L130618 CALL: 008

VENDOR: 5072 FSC II LLC, dba, Fred Smith Company

ITEM UNIT SUBCONTRACTOR SUBCONTRACTOR
DESC. TYPE QUANTITY UNIT PRICE LINE ITEM NO. NO. MBE SUBCONTRACTOR: 9210 AUSTIN TRUCKING, LLC Will Use Quote: Yes 0002 0106000000-E BORROW EXCAV CY 2200.000 11.44000 25168.00 HAULS TO BE PAID AT QUOTED RATE OF \$66.00/HR 0005 1297000000-E MILL ASP PVM SY 250000.000 0.45000 112500.00 HAULS TO BE PAID AT QUOTED RATE OF \$66.00/HR 0010 1489000000-E ASP CONC BAS TON 1000.000 4.18000 4180.00 HAULS TO BE PAID AT QUOTED RATE OF \$66.00/HR 0011 1498000000-E ASP CONC INT TON 3000.000 6.93000 20790.00

HAULS TO BE PAID AT QUOTED RATE OF \$66.00/HR 5.16000 109443.60 0012 1519000000-E ASP CONC SUR TON 21210.000

HAULS TO BE PAID AT QUOTED RATE OF \$66.00/HR

MBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 272,081.60 Committed

Entered: 5.00% or 272081.60 Required: 5.00% or 272080.17 TOTAL MBE COMMITMENT FOR VENDOR:

<GOAL MET>

DATE: 05-21-13

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION WBE COMMITMENT ITEMS

PROPOSAL: C203377 LETTING: L130618 CALL: 008

VENDOR: 5072 FSC II LLC, dba, Fred Smith Company

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

WBE SUBCONTRACTOR: 12393 ROYALS CONTRACTING, INC.

Will Use Quote: Yes

0005 1297000000-E MILL ASP PVM SY 187285.000 0.57000 106752.45

PORTION OF 1.5" MILLING ITEM

0009 1330000000-E INCIDENTAL M SY 6873.000 3.40000 23368.20

PORTION OF INCIDENTAL MILLING ITEM

0014 1704000000-E PATCHING EXI TON 4637.000 42.35000 196376.95

PORTION OF PATCHING ITEM / REMOVE AND REPLACE

WBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 326, 497.60 Committed

Entered: 6.00% or 326497.60 Required: 6.00% or 326496.21 TOTAL WBE COMMITMENT FOR VENDOR:

<GOAL MET>

DATE: 05-21-13 PAGE: 8

Jul 05, 2013 9:30 am

North Carolina Department Of Transportation Contract Item Sheets For C203377

Page: 1 of 3

Contract Item Sheets For C203377						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	135,922.00	135,922.00
				LS	·	***************************************
0002	0106000000-E	230	BORROW EXCAVATION	2,424 CY	18.30	44,359.20
0003	0264000000-E	SP	GENERIC GRADING ITEM SHOULDER GRADING	24.3 SMI	2,455.00	59,656.50
0004	1220000000-E	545	INCIDENTAL STONE BASE	1,337 TON	27.20	36,366.40
0005	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (1-1/2")	343,724 SY	0.70	240,606.80
0006	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (2-1/2")	48,076 SY	0.05	2,403.80
 0007	1308000000-E	607	MILLING ASPHALT PAVEMENT, ***" TO ******" (0" TO 1-1/2")	6,569 SY	3.50	22,991.50
0008	1308000000-E	607	MILLING ASPHALT PAVEMENT, ***" TO *****" (2-1/2" TO 4")	3,926 SY	1.25	4,907.50
0009	1330000000-E	607	INCIDENTAL MILLING	6,873 SY	3.20	21,993.60
0010	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	2,603 TON	33.00	85,899.00
0011	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE 119.0B	7,201 TON	25.75	185,425.75
0012	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	51,271 TON	26.50	1,358,681.50
0013	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	3,538 TON	600.00	2,122,800.00
0014	1704000000-E	SP	PATCHING EXISTING PAVEMENT	4,637 TON	84.75	392,985.75
0015	2830000000-N	858	ADJUSTMENT OF MANHOLES	60 EA	450.00	27,000.00
0016	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	57 EA	365.00	20,805.00
0017	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	160,181 LF	0.40	64,072.40

North Carolina Department Of Transportation Contract Item Sheets For C203377

Page: 2 of 3

	Contract Item Sheets For C203377							
Line #	itemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid		
0018	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	255,320 LF	0.54	137,872.80		
0019	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	5,152 LF	1.50	7,728.00		
0020	4697000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	8,939 LF	1.50	13,408.50		
0021	4705000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS)	100 LF	6.00	600.00		
0022	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	4,493 LF	8.00	35,944.00		
0023	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	182 EA	65.00	11,830.00		
0024	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	646 EA	85.00	54,910.00		
0025	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (III)	3,145 LF	3.00	9,435.00		
0026	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	310,335 LF	0.11	34,136.85		
0027	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	10,836 LF	0.30	3,250.80		
0028	483000000-E	1205	PAINT PAVEMENT MARKING LINES (16")	50 LF	2.00	100.00		
0029	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	3,688 LF	3.00	11,064.00		
0030	484000000-N	1205	PAINT PAVEMENT MARKING CHARAC- TER	166 EA	15.00	2,490.00		
 0031	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	539 EA	15.00	8,085.00		
0032	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	3,145 LF	0.50	1,572.50		
0033	490000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	3,432 EA	3.25	11,154.00		
0034	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	1,255 EA	23.00	28,865.00		

Jul 05, 2013 9:30 am

North Carolina Department Of Transportation Contract Item Sheets For C203377

Page: 3 of 3

\$5,441,603.43

Line #	itemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0035	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum LS	53,000.00	53,000.00
0036	6000000000-E	1605	TEMPORARY SILT FENCE	1,810 LF	3.25	5,882.50
0037	6071010000-E	SP	WATTLE	4,590 LF	5.25	24,097.50
0038	6084000000-E	1660	SEEDING & MULCHING	18.1 ACR	2,725.00	49,322.50
0039	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	18,546 LF	5.93	109,977.78

TOTAL AMOUNT OF BID FOR ENTIRE PROJECT

0930/Jul05/Q1278890.4/D138473110000/E39

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

LIMITED LIABILITY COMPANY

The Contractor being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with 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 Affidavit 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

FSC II, LLC dba Fred Smith Company

Full Name of Firm

6105 Chapel Hill Road, Raleigh, NC 27607

Address as Prequalified

Adam Kingsley

Print or type Signer's name

Signature of Witness

Select appropriate title
Thomas T. Johnson, Jr.

Signature of Member/Manager/Authorized Agent

Print or type Signer's Name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sy	worn to befor	e me this the
-------------------	---------------	---------------

My Commission Expires: 8/30/2014

NOTARY SEAL

18^{44} da	y of July	<u>20 3</u> .
La	Jan Bas	
	Signature of N	otary Public
of	licate	County
State of	north Ca	rolina

Earlane Bass
NOTARY PUBLIC - NORTH CAROLINA
Wake County
My Commission Expires 08/30/16

Contract No.

C203377

County (ies):

<u>Wake</u>

ACCEPTED BY THE DEPARTMENT OF TRANSPORTATION

Contract Officer

Date

Execution of Contract and Bonds Approved as to Form:

Attorney General

Signature Sheet (Bid - Acceptance by Department)

Contract No. County

C203377			
Wake	 	 	 _

CONTRACT PAYMENT BOND

Date of Payment Bond Execution
Name of Principal Contractor
Name of Surety:

Name of Contracting Body:

Manual of Bond:

Contract ID No.:

Date of Payment Bond Execution

July 18, 2013

FSC II, LLC dba Fred Smith Company

Western Surety Company and Liberty Mutual Insurance Company

North Carolina Department of Transportation

Raleigh, North Carolina

\$5,441,603.43

C203377

Wake

Wake

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.

CONTRACT PAYMENT BOND

Affix	Seal	of	Surety	Company

Western Surety Company and Liberty Mutual Insurance Company

Print or type Surety Company Name

Bv

Renee Ellis

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

Rueculum Signature of Attorney-in-Fact

Signature of Witness

Thomas J. Gentile

Print or type Signer's name

2601 Bell Road, Montgomery, Alabama 36117

Address of Attorney-in-Fact

CONTRACT PAYMENT BOND

LIMITED LIABILITY COMPANY

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

FSC II, LLC dba Fred Smith Company

Full name of Firm

6105 Chapel Hill Road, Raleigh, NC 27607

Address as prequalified

Bv:

Signature of Member, Manager, Authorized Agent

Select appropriate title

Thomas T. Johnson, Jr.

Print or type Signer's name

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Thomas J Gentile, Billie Jo Sanders, Renee Ellis, Paul B Scott Jr., David J Durden, Individually

of Montgomery, AL, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 2nd day of October, 2012.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

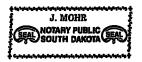
State of South Dakota County of Minnehaha

SE

On this 2nd day of October, 2012, before me personally came Paul T. Bruflat, to me known, who, being by me duly swom, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2015



Mohr

. Mohr. Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse here of is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 18th day of July, 2013



WESTERN SURETY COMPANY

3. Relson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

Contract No.	C203377
County	Wake

CONTRACT PAYMENT BOND

Attach certified copy of Power of Attorney to this sheet

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.
This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6065292

American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company

POWER OF ATTORNEY

and appoint, Billié Jo Sanders; David J. Durden; Paul B.	(herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, c Scott Jr; Flernee Ellis; Tammy P. Williams; Thomas J. Gentile
and deliver, for and on its behalf as surely and as its act and deed, a	individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, ackn any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents a by the president and attested by the secretary of the Companies in their own proper persons.
IN WITNESS WHEREOF, this Power of Attorney has been subscribe thereto this 4th day of April , 2013 .	ed by an authorized officer or official of the Companies and the corporate seals of the Companies have been
1906 8 0 0 1919 8 (2 1912) 0 (3 1912) 0 (4 1912) 0	American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company
STATE OF WASHINGTON 88 COUNTY OF KING	Gregory W. Davenport, Assistant Secretary
On this 4th day of April 2013, before me person Fire and Casualty Company, Liberty Mutual Insurance Company, The	onally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of A e Chio Casualty Company, and West American Insurance Company, and that he, as such, being authorized s by signing on behalf of the corporations by himself as a duty authorized officer.
	affixed my notarial seal at Seattle, Washington, on the day and year first above written.
	AOTARY By: KO Riley , Notary Public
	ority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty In surance Company which resolutions are now in full force and effect reading as follows:
ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer to such limitation as the Chairman or the President may prescribe, a acknowledge and deliver as surety any and all undertakings, bonds, repowers of attorney, shall have full power to bind the Corporation by executed, such instruments shall be as binding as if signed by the Pre	r or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execusecognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their returned their signature and execution of any such instruments and to attach thereto the seal of the Corporation. We sident and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact, the Chairman, the President or by the officer or officers granting such power or authority.
and subject to such limitations as the chairman or the president may p seal, acknowledge and deliver as surety any and all undertakings, b	and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the processribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, economics, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth any by their signature and execution of any such instruments and to attach thereto the seal of the Company. Visident and attested by the secretary.
	g pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizant
	irectors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretar attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Compa
	Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, are of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Com
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed	the seals of said Companies thisday of, 20

CONTRACT PERFORMANCE BOND

July 18, 2013
FSC II, LLC dba Fred Smith Company
Western Surety Company and Liberty Mutual Insurance Company
North Carolina Department of Transportation
Raleigh, North Carolina
\$5,441,603.43
C203377
Wake

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, pursuant to authority of its governing body.

C203377	

Rev 5-17-11

CONTRACT PERFORMANCE BOND

11/100 Scar of Surcey Company	Affix	Seal	of Surety	Company
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Wake

Western Surety Company and Liberty Mutual Insurance Company

Print or type Surety Company Name

 $\mathbf{R}\mathbf{v}$

Renee Ellis

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

Signature of Attorney-in-Fa

Signature of Witness

Thomas J. Gentile

Print or type Signer's name

2601 Bell Road, Montgomery, Alabama 36117

Address of Attorney-in-Fact

CONTRACT PERFORMANCE BOND

LIMITED LIABILITY COMPANY

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

FSC II, LLC dba Fred Smith Company

Full name of Firm

6105 Chapel Hill Road, Raleigh, NC 27607

Address as prequalified

Signature of Member, Manager, Authorized Agent

Select appropriate title

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Thomas J Gentile, Billie Jo Sanders, Renee Ellis, Paul B Scott Jr., David J Durden, Individually

of Montgomery, AL, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 2nd day of October, 2012.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

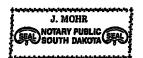
State of South Dakota County of Minnehaha

SS

On this 2nd day of October, 2012, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2015



J. Mohr. Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 18 th day of July, 2013



WESTERN SURETY COMPANY

John

J. Relson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6065291

American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company

POWER OF ATTORNEY

all of the city of Montgomery state of AL each individually if there be n and deliver, for and on its behalf as surely and as its act and deed, any and all undertakings, be as binding upon the Companies as if they have been duly signed by the president and atte	e more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowns, bonds, recognizances and other surety obligations, in pursuance of these presents an attested by the secretary of the Companies in their own proper persons.
IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized office the day of April 2013_	ifficer or official of the Companies and the corporate seals of the Companies have been
1906 S 2 1919 S 2 1912 S 1991 S	American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company
STATE OF WASHINGTON 89	By: J.C. Screening Gregory W. Davenport, Assistant Secretary
COUNTY OF KING On this 4th day of April , 2013, before me personally appeared Grego Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Compa execute the foregoing instrument for the purposes therein contained by signing on behalf of the	gory W. Daveriport, who acknowledged himself to be the Assistant Secretary of Ampany, and West American Insurance Company, and that he, as such, being authorized so if the corporations by himself as a duly authorized officer.
N WITNESS WIEREOF, I have hereunto subscribed my name and affixed my notarial seal	al at Seattle, Washington, on the day and year first above written. By: KD Riley , Notably Public
This Power of Attorney is made and executed pursuant to and by authority of the following By-li Company, Liberty Mutual Insurance Company, and West American Insurance Company which	y-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Inst
ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the C to such limitation as the Chairman or the President may prescribe, shall appoint such attorn acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to be the provisions of this article may be revoked at any time by the Board, the Chairman, the President	Corporation authorized for that purpose in writing by the Chairman or the President, and someos-in-fact, as may be necessary to act in behalf of the Corporation to make, executive resurety obligations. Such attorneys-in-fact, subject to the limitations set forth in their responsecution of any such instruments and to attach thereto the seal of the Corporation. We by the Secretary, Any power or authority granted to any representative or attorney-in-fact
ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any of and subject to such limitations as the chairman or the president may prescribe, shall appoint a seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances are respective powers of attorney, shall have full power to bind the Company by their signature an executed such instruments shall be as binding as if signed by the president and attested by the	t such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, ex and other surety obligations. Such attorneys-in-fact subject to the limitations set forth i and execution of any such instruments and to attach thereto the seal of the Company. Wi
Certificate of Designation - The President of the Company, acting pursuant to the Bylav attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, a other surety obligations.	laws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizance
Authorization – By unanimous consent of the Company's Board of Directors, the Company of Company, wherever appearing upon a certified copy of any power of attorney issued by the the same force and effect as though manually affixed.	y consents that facsknile or mechanically reproduced signature of any assistant secretary e Company in connection with surety bonds, shall be valid and binding upon the Compar
I, David M. Carey, the undereigned, Assistant Secretary, of American Fire and Casualty Com American Insurance Company do hereby certify that the original power of attorney of which the	he foregoing is a full, true and correct copy of the Power of Attorney executed by said Comp
is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, I have becaume set my hand and affixed the seals of said Comp	mpanies this day of 101y 13