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

C203687

# CONTRACT AND CONTRACT BONDS

FOR CONTRACT NO. C203687 <u>12CR.10231.14, 12CR.20231.21 STATE FUNDED</u>

WBS

COUNTY OFCLEVELANDTHIS IS THEROADWAYROUTE NUMBERLENGTHLOCATIONUS-74 BUS FROM SR-2487 TO GASTON CO LINE, NC-226 FROM NC-180TO BUFFALO CREEK BRIDGE AND 5 SECTIONS OF SECONDARY ROADS.

CONTRACTOR ASPHALT PAVING OF SHELBY, INC. ADDRESS P.O. BOX 1526 SHELBY, NC 281511526

BIDS OPENEDMAY 19, 2015CONTRACT EXECUTION6/11/2015

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

# PROPOSAL

# DATE AND TIME OF BID OPENING: MAY 19, 2015 AT 2:00 PM

CONTRACT ID C203687

WBS 12CR.10231.14, 12CR.20231.21

#### 

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

#### BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A <u>ROADWAY</u> PROPOSAL

#### 5% BID BOND OR BID DEPOSIT REQUIRED

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#### PROPOSAL FOR THE CONSTRUCTION OF

#### CONTRACT No. C203687 IN CLEVELAND COUNTY, NORTH CAROLINA

Date

20

#### DEPARTMENT OF TRANSPORTATION,

#### **RALEIGH, NORTH CAROLINA**

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **C203687**; 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. <u>C203687</u> in <u>Cleveland County</u>, 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



# **TABLE OF CONTENTS**

### COVER SHEET PROPOSAL SHEET

## **PROJECT SPECIAL PROVISIONS**

CONTRACT TIME AND LIQUIDATED DAMAGES:	G-1
INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES	5: G-1
PROSECUTION OF WORK:	
RAILROAD GRADE CROSSING:	G-3
MAJOR CONTRACT ITEMS:	G-3
SPECIALTY ITEMS:	G-3
FUEL PRICE ADJUSTMENT:	
SCHEDULE OF ESTIMATED COMPLETION PROGRESS:	G-4
MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE:	G-4
LOCATING EXISTING UNDERGROUND UTILITIES:	G-19
RESOURCE CONSERVATION AND ENV. SUSTAINABLE PRACTICES:	
DOMESTIC STEEL:	G-20
OUTSOURCING OUTSIDE THE USA:	G-20
GIFTS FROM VENDORS AND CONTRACTORS:	G-21
LIABILITY INSURANCE:	
EMPLOYMENT:	
STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:	G-22
SUBLETTING OF CONTRACT:	G-22
ROADWAY	<b>R-</b> 1

# STANDARD SPECIAL PROVISIONS

AVAILABILITY FUNDS – TERMINATION OF CONTRACTSS	SP-1
ERRATAS	SP-2
PLANT AND PEST QUARANTINESS	SP-4
MINIMUM WAGES	SP-5
ON-THE-JOB TRAININGS	SP-6

# UNIT PROJECT SPECIAL PROVISIONS

# PROPOSAL ITEM SHEET

ITEM SHEET(S) (TAN SHEETS)

# **SKETCH MAPS (INSERT)**

## **PROJECT SPECIAL PROVISIONS**

**G-1** 

#### **GENERAL**

#### CONTRACT TIME AND LIQUIDATED DAMAGES:

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

The date of availability for this contract is June 29, 2015.

The completion date for this contract is **November 1, 2016**.

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 SPI 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 **Map #1 and Map #7** during the following time restrictions:

#### DAY AND TIME RESTRICTIONS

#### Monday thru Friday, 6:00 AM to 7:00 PM

In addition, the Contractor shall not close or narrow a lane of traffic on **Any Maps**, 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.

SP1 G10 A

108

- 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.** Tuesday 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 **Five Hundred Dollars** (\$ **500.00**) per hour.

## **PROSECUTION OF WORK:**

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

108

SP1 G15R

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

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of **\$ 1,000.00** 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)

Provide at least 2 weeks advance notice to the railroad's local Roadmaster or Track Supervisor when the use of slow-moving or stopped equipment is required over at-grade railroad crossings.		
MAJOR CONTRACT ITEMS:		
(2-19-02)	104	SP1 G28
The following listed items are the major 2012 Standard Specifications):	contract items for this contract	ct (see Article 104-5 of the
Line #Description9—Asphalt Concrete Surface	Course, Type S9.5B	
SPECIALTY ITEMS:		
(7-1-95)(Rev. 1-17-12)	108-6	SP1 G37
Items listed below will be the special 2012 Standard Specifications).	lty items for this contract (	(see Article 108-6 of the
Line # Description		

#### Line # Description

20-24 and	Long-Life Pavement Markings
29-30	
31	Permanent Pavement Markers

# FUEL PRICE ADJUSTMENT: (11-15-05) (Rev. 2-18-14)

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 **\$ 1.8192** per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

109-8

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

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

SP1 G17R

SP1 G43

107-9

**G-3** 

# **G-4**

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

#### **SCHEDULE OF ESTIMATED COMPLETION PROGRESS:**

(7-15-08) (Rev. 5-19-15)

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SP1 G58

SP1 G66

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:

2016	(7/01/15 - 6/30/16)	86 % of Total Amount Bid	
2017	(7/01/16 - 6/30/17)	14 % 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. 12-17-13)

102-15(J)

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

C203687 12CR.10231.14, etc.

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%20Notif ication%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%20 a%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%20M BE-WBE%20Subcontractors%20(State).docx

*Subcontractor Quote Comparison Sheet* - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote %20Comparison%20Example.xls

# **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 **3.0 %** 
  - (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 **5.0** %
  - (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<sup>®</sup>.

(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
  - (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. <u>Blank</u> <u>forms will not be deemed to represent zero participation.</u> Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.
    - (c) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.
  - (2) If either the MBE or WBE goal is zero, entries on the Listing of MBE and WBE Subcontractors are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

#### **MBE or WBE Prime Contractor**

When a certified MBE or WBE firm bids on a contract that contains 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 (2<sup>nd</sup> and 3<sup>rd</sup> 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.
  - (2) When a committed MBE/WBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another 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.

#### **LOCATING EXISTING UNDERGROUND UTILITIES:**

(3-20-12)

105

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 AND ENV. SUSTAINABLE PRACTICES: (5-21-13) (Rev. 5-19-15) 104-13

SP1 G118

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the *Standard Specifications*.

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually

on the Project Construction Reuse and Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

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

Submit the Project Construction Reuse and Recycling Reporting Form by August 1 annually to <u>valuemanagementunit@ncdot.gov</u>. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.

#### **DOMESTIC STEEL:**

(4-16-13)

106

SP1 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)

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.

SP1 G150

#### GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09)

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:

**G-21** 

- (A) Have a contract with a governmental agency; or
- Have performed under such a contract within the past year; or **(B)**
- (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.

#### **LIABILITY INSURANCE:**

(5-20-14)

Revise the 2012 Standard Specifications as follows:

Page 1-60, Article 107-15 LIABILITY INSURANCE, line 16, add the following as the second sentence of the third paragraph:

Prior to beginning services, all contractors shall provide proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors, irrespective of whether having regularly in service fewer than three employees.

#### **EMPLOYMENT:**

(11-15-11) (Rev. 1-17-12)

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.

SP1 G152

SP1 G160

SP1 G184

108, 102

C203687 12CR.10231.14, etc.

**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:**

(9-18-12)

Revise the 2012 Standard Specifications as follows:

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

### **SUBLETTING OF CONTRACT:**

(11-18-2014)

Revise the 2012 Standard Specifications as follows:

Page 1-66, Article 108-6 Subletting of Contract, line 37, add the following as the second sentence of the first paragraph:

108-6

All requests to sublet work shall be submitted within 30 days of the date of availability or prior to expiration of 20% of the contract time, whichever date is later, unless otherwise approved by the Engineer.

Page 1-67, Article 108-6 Subletting of Contract, line 7, add the following as the second sentence of the fourth paragraph:

Purchasing materials for subcontractors is not included in the percentage of work required to be performed by the Contractor. If the Contractor sublets items of work but elects to purchase material for the subcontractor, the value of the material purchased will be included in the total dollar amount considered to have been sublet.

Cleveland County

G-22

SP1 G186

SP1 G185

# **R-1**

#### PROJECT SPECIAL PROVISIONS

#### ROADWAY

#### SHOULDER RECONSTRUCTION PER SHOULDER MILE

(1-18-00) (Rev 8-21-12)

#### Description

This work consists of reconstructing each shoulder (including median shoulders as applicable) in accordance with Roadway Standard Nos. 560.01 and 560.02 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. This work shall be performed immediately after the resurfacing operations are complete as directed by the Engineer.

#### Materials

The Contractor shall use Aggregate Shoulder Borrow (ASB) which meets the following gradation on all maps unless otherwise directed by the Engineer.

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

#### **Construction Methods**

Obtain material from within the project limits or approved borrow source. Material shall be compacted to the satisfaction of the Engineer.

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

#### **Measurement and Payment**

*Shoulder Reconstruction* will be measured and paid for 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 for all labor, tools, equipment, and incidentals necessary to complete the work.

*Incidental Stone Base* will be measured and paid for as provided in Article 545-6 of the *Standard Specifications*. If ASB is used for Incidental Stone Base, payment will be made for Aggregate Shoulder Borrow as referenced below.

Payment will be made under:

Pay Item
Shoulder Reconstruction
Aggregate Shoulder Borrow

**Pay Unit** Shoulder Mile Ton

#### INCIDENTAL STONE BASE: (7-1-95) (Rev.8-21-12)

545

SP5 R28R

SP6 R01

#### 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. 4-21-15)

605, 609, 610, 650

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		
Existing Surface	Target Rate (gal/sy)	
Existing Surface	Emulsified Asphalt	
New Asphalt	$0.04 \pm 0.01$	
Oxidized or Milled Asphalt	$0.06 \pm 0.01$	
Concrete	$0.08 \pm 0.01$	

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/Warm%20 Mix%20Asphalt%20Approved%20List.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 <sup>A</sup>			
Binder Grade	HMA JMF Temperature	WMA JMF Temperature Range	
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	$40^{\circ} F^{A}$		
\$9.5C, \$12.5C	$45^{\circ}F^{A}$		
\$9.5D, \$12.5D	50°F		

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

**Page 6-26, 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".

Page 6-41, Subarticle 650-3(B) Mix Design Criteria, replace Table 650-1 with the following:

TABLE 650-1 OGAFC GRADATION CRITERIA				
Sieve Size (mm)	Type FC-1	Type FC-1 Modified	Type FC-2 Modified	
19.0	-	-	100	
12.5	100	100	<b>80</b> - 100	
9.50	75 - 100	75 - 100	55 - <b>80</b>	
4.75	25 - 45	25 - 45	15 - <b>30</b>	
2.36	5 - 15	5 - 15	5 - 15	
0.075	1.0 - 3.0	1.0 - 3.0	2.0 - 4.0	

#### ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:

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

600

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	Туре В 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.

#### PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00)

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 \$ 511.15 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on April 1, 2015.

# FINAL SURFACE TESTING NOT REOUIRED:

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

Final surface testing is not required on this project.

#### **RESURFACING EXISTING BRIDGES:**

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

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

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

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

#### ASPHALT CONCRETE SURFACE COURSE, TYPE xxx (Leveling Course): 610

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

Place a leveling course of Asphalt Concrete Surface Course, Type \_\_\_\_ at locations shown on the sketch maps and as directed by the Engineer. The rate of this leveling course is not established but will be determined by allowing the screed to *drag* the high points of the section. It is anticipated that some map numbers will be leveled from beginning to end while others may only require a leveling course for short sections.

SP6 R61AR

SP6 R85R

SP6 R45

SP6 R25

The Asphalt Concrete Surface Course, Type \_\_\_ (Leveling Course) shall meet the requirements of Section 610 of the 2012 Standard Specifications except payment will be made at the contract unit price per ton for Asphalt Concrete Surface Course, Type \_\_\_ (Leveling Course).

## PATCHING EXISTING PAVEMENT (DIV. 12 SP)

(1-15-02) (Rev.12-18-12)

\_\_\_\_

#### Description

The Contractor's attention is directed to the fact that there are areas of existing asphalt pavement on this project that will require repair.

Patch the areas that, in the opinion of the Engineer, need repairing. The areas to be patched will be delineated by the NCDOT representative prior to the Contractor performing repairs.

#### **Construction Methods**

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.

The Contractor's attention is directed to the fact that all patching of existing pavement performed under this contract shall be performed with the use of a milling machine. This machine shall have a minimum cutting width of 36", be of sufficient size and capacity to perform the work. The machine shall have been designed and built exclusively for pavement milling operations and shall have sufficient power, traction and stability to accurately maintain depth of cut and slope. Multiple passes may be required to remove deteriorated pavement.

Milling width and depth will be varied by Engineer's representative to accomplish desired results. Payment will be made for the area delineated by the Engineer. Any overages resulting from equipment limitations will not be compensated.

Patching of existing pavement includes but is not limited to the **milling** of the existing pavement to a neat vertical joint and uniform line; the removal and disposal of pavement, base, and subgrade material as approved or directed by the Engineer; the coating of the area to be repaired with a tack coat; and the replacement of the removed material with asphalt plant mix.

Place Asphalt Concrete Base Course, in lifts not exceeding 5 1/2 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, then use Asphalt Surface Course in the top 1.25 inches of the patch.

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

SP6 R88R

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

The quantity of patching existing pavement, measured as provided above, will be paid for at the contract unit price per ton for "Patching Existing Pavement".

The above price and payment will be full compensation for all work covered by this provision, including but not limited to removal and disposal of 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.

The above price and payment will be full compensation for all work covered by this provision, including but not limited to removal and disposal of 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.

The item of "Patching Existing Pavement" will be considered a minor item.

Payment will be made under:

Pay Item	Pay Unit
Patching Existing Pavement	Ton

#### ADJUSTMENT OF MANHOLES, METER BOXES, AND VALVE BOXES: (7-1-95) REV

The Contractor's attention is directed to Article 858-3 of the 2012 Standard Specifications. Cast iron or steel fittings (rings) will **not** be permitted for the adjustment of manholes, meter boxes, and valve boxes on this project.

Make adjustments to manholes on this project using high early strength, rapid set (grout, mortar, or concrete) **that is black in color** as approved by the Engineer. Bag mixes must be approved by the Engineer before use.

<u>When milling roadway</u> all existing manhole frames, rings, valve boxes, and meter boxes shall be removed and those areas covered with steel plates capable of carrying traffic. Once the asphalt surface course has been placed, the steel plate shall be removed and all manholes, meter boxes, and valve boxes shall be adjusted to finish grade of the new pavement.

All manhole adjustments shall be completed within fourteen (14) calendar days from the time the paving is completed.

# **R-8**

#### **DETECTABLE WARNINGS TO RETROFIT EXISTING CURB RAMPS:**

(10-21-03) (Rev. 8-16-11)

### 848

SP8 R125

#### Description

Construct detectable warnings consisting of raised truncated domes to retrofit existing curb ramps in accordance with the plan details, Section 848 of the 2012 Standard Specifications, the requirements of the 28 CFR Part 36 ADA Standards for Accessible Design and these provisions.

#### Materials

Detectable warning for retrofitting existing curb ramps shall consist of raised truncated domes. The description, size and spacing shall conform to Section 848 of the 2012 Standard Specifications.

Use material for detectable warning systems as shown herein. Material and coating specifications must be stated in the Manufacturers Type 3 Certification and all Detectable Warning systems must be on the NCDOT Approved Products List.

Install detectable warnings created from one of the following materials: precast concrete blocks or bricks, clay paving brick, gray or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile. Only one material type for detectable warning will be permitted per project, unless otherwise approved by the Engineer.

- (A) Detectable Warnings shall consist of a base with integrated raised truncated domes, and when constructed of precast concrete they shall conform to the material requirements of Article 848-2 of the *2012 Standard Specifications*.
- (B) Detectable Warnings shall consist of a base with integrated raised truncated domes, and may be comprised of other materials including, but not limited to, clay paving brick, gray iron or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile, which are applied directly to the curb ramps by incorporating into or attaching to the existing ramp floor. The material shall have an integral color throughout the thickness of the material. The detectable warning shall include fasteners, anchors, or adhesives for attachment in the existing ramp and shall be furnished as a system from the manufacturer.

Prior to installation, the Contractor shall submit to the Engineer assembling instructions from the manufacturer for each type of system used in accordance with Article 105-2 of the *2012 Standard Specifications*. The system shall be furnished as a kit containing all consumable materials and consumable tools, required for the application. They shall be capable of being affixed to or anchored in the concrete curb ramp, including green concrete (concrete that has set but not appreciably hardened). The system shall be solvent free and contain no volatile organic compounds (VOC). The static coefficient of friction shall be 0.8 or greater when measured on top of the truncated domes and when measured between the domes in accordance with ASTM C1028 (dry and wet). The system shall be resistant to deterioration due to exposure to sunlight, water, salt or

adverse weather conditions and impervious to degradation by motor fuels, lubricants and antifreeze.

(C) When steel or gray iron or ductile iron casting products are provided, only products that meet the requirements of Subarticle 106-1(B) of the 2012 Standard Specifications may be used. Submit to the Engineer a Type 6 Certification, catalog cuts and installation procedures at least 30 days prior to installation for all.

#### **Construction Methods**

- (A) Prior to placing detectable warnings in existing concrete curb ramps, saw cut to the full depth of the concrete, for other material remove as necessary, and adjust the existing subgrade to the proper grade and in accordance with Article 848-3 of the *2012 Standard Specifications*.
- (B) Install all detectable warning to retrofit existing curb ramps in accordance with the manufacturer's recommendations.

#### Measurement and Payment

*Retrofit Existing Curb Ramps* with detectable warnings constructed of any type material will be paid as the actual number of retrofitted curb ramps, completed and accepted. Such price and payment will be full compensation for excavating and backfilling; sawing, repairing and replacing portions of the existing curb ramp within the pay limits for retrofit shown on the detail; pavement repairs; furnishing and placing detectable warnings, construction joints and removing and disposing of portions of the existing curb ramp when required and for all materials, labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

**Pay Item** Retrofit Existing Curb Ramp Pay Unit Each

#### MATERIALS: (2-21-12) (Rev. 5-19-15)

 (2-21-12) (Rev. 5-19-15)
 1000, 1002, 1005, 1018, 1024, 1050, 1056, 1074, 1078, 1080, 1081, 1086, 1084, 1087, 1092
 SP10 R01

 Revise the 2012 Standard Specifications as follows:

**Page 10-1, Article 1000-1, DESCRIPTION, lines 9-10,** replace the last sentence of the first paragraph with the following:

Type IL, IP, IS or IT blended cement may be used instead of Portland cement.

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

If any change is made to the mix design, submit a new mix design (with the exception of an approved pozzolan source change).

If any major change is made to the mix design, also submit new test results showing the mix design conforms to the criteria. Define a major change to the mix design as:

- (1) A source change in coarse aggregate, fine aggregate or cement.
- (2) A pozzolan class or type change (e.g. Class F fly ash to Class C fly ash).
- (3) A quantitative change in coarse aggregate (applies to an increase or decrease greater than 5%), fine aggregate (applies to an increase or decrease greater than 5%), water (applies to an increase only), cement (applies to a decrease only), or pozzolan (applies to an increase or decrease greater than 5%).

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

			REC	TA DUIREME	ABLE 100 ENTS FOI		RETE				
	ė.	Maxin		er-Cement		Consiste	ncy Max. mp		Cement	Content	;
Class of Concrete	Min. Comp. Strength at 28 days	Air-En Conc		Non Entra Cone	ained	Vibrated	Non- Vibrated	Vib	rated	Non- V	ibrated
00	at <sup>S</sup> Mi	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vib	Vib	Min.	Max.	Min.	Max.
Units	psi					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
А	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	1.5 machine- placed 2.5 hand- placed	4	508	-	545	-
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 10-1, Article 1000-2, MATERIALS, line 16; Page 10-8, Subarticle 1000-7(A), Materials, line 8; and Page 10-18, Article 1002-2, MATERIALS, line 9, add the following to the table of item references:

Item	Section
Type IL Blended Cement	1024-1

Page 10-19, Article 1002-3, SHOTCRETE FOR TEMPORARY SUPPORT OF EXCAVATIONS, line 30, add the following at the end of Section 1002:

### (H) Handling and Storing Test Panels

Notify the Area Materials Engineer when preconstruction or production test panels are made within 24 hours of shooting the panels. Field cure and protect test panels from

damage in accordance with ASTM C1140 until the Department transports panels to the Materials and Tests Regional Laboratory for coring.

**Page 10-1, Subarticle 1000-3(A), Composition and Design, lines 25-27,** replace the second paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced.

**Page 10-2, Subarticle 1000-3(A), Composition and Design, lines 12-21,** delete the third paragraph through the sixth paragraph beginning with "If any change is made to the mix design, submit..." through "...(applies to a decrease only)."

**Page 10-6, Subarticle 1000-4(I), Use of Fly Ash, lines 36-2,** replace the first paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced. Use Table 1000-1 to determine the maximum allowable water-cementitious material (cement + fly ash) ratio for the classes of concrete listed.

Page 10-7, Table 1000-3, MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO, delete the table.

Page 10-7, Article 1000-5, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE, lines 30-31, delete the second sentence of the third paragraph.

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

	Light- weight <sup>C</sup>	ABC (M)	ABC	9	14M	78M	67	6M	57M	57	S	467M	4	Std. Size #		
С. В. А.	1	I		I	I	ı	I	ı		I	ı	100	100	2''		
See Subarticle 1005-4(A). See Subarticle 1005-4(B). For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).		100	100	ı	I	1	ı	ı	100	100	100	95- 100	90- 100	1 1/2"		
icle 100: icle 100: /eight A <sub>i</sub>	1	75- 100	75- 97	I	I	I	100	100	95- 100	95- 100	90- 100	I	20- 55	1"		AGG
5-4(A). 5-4(B). ggregate	1	I	I	I	I	100	90- 100	90- 100	ı	I	20- 55	35- 70	0-15	3/4"	P	TABLE 1005-1 AGGREGATE GRADATION - COARSE AGGREGATE
used in	100	45- 79	55- 80	I	I	98- 100	I	20- 55	25- 45	25- 60	0-10	ı	ı	1/2"	Percentage of Total by Weight Passing	ATE (
Structur	80- 100	I	I	100	100	75- 100	20- 55	0-20	I	I	0-5	0-30	0-5	3/8"	tage o	T
al Conci	40 5-	20- 40	35- 55	85- 100	35- 70	20- 45	0-10	0-8	0-10	0-10		0-5	ı	#4	f Tota	TABLE 1005-1 DATION - CO.
rete, see	0-20	ı		40-	5-20	0-15	0-5	ı	0-5	0-5	1	1	ı	<b>8</b> #	l by V	E 1005 N - C
Subartic	1	0- 25	25- 45	1	1	1	I	1		I	1	1	ı	#10	Veight	5-1 OARS
le 1014.	0-10	I		0-10	0-8	ı	I	ı	1	I	1	1	ı	#16	Passi	SE AG
-2(E)(6)	1	I	14- 30	1	1	1	I	1		I	1	1	ı	#40	ng	GRE
·	0-2.5	0- 12 <sup>в</sup>	4- 12 <sup>в</sup>	A	A	A	A	A	A	A	A	A	A	#200		GATI
	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		

**R-13** 

**Page 10-40, Tables 1018-1 and 1018-2, PIEDMONT, WESTERN AND COASTAL AREA CRITERIA FOR ACCEPTANCE OF BORROW MATERIAL,** under second column in both tables, replace second row with the following:

Acceptable, but not to be used in the top 3 ft of embankment or backfill

**Page 10-46, Article 1024-1, PORTLAND CEMENT, line 33,** add the following as the ninth paragraph:

Use Type IL blended cement that meets AASHTO M 240, except that the limestone content is limited to between 5 and 12% by weight and the constituents shall be interground. Class F fly ash can replace a portion of Type IL blended cement and shall be replaced as outlined in Subarticle 1000-4(I) for Portland cement. For mixes that contain cement with alkali content between 0.6% and 1.0% and for mixes that contain a reactive aggregate documented by the Department, use a pozzolan in the amount shown in Table 1024-1.

### **Page 10-46, Table 1024-1, POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE,** replace with the following:

POZZOLANS FO	TABLE 1024-1 DR USE IN PORTLAND CEMENT CONCRETE
Pozzolan	Rate
Class F Fly Ash	20% - 30% by weight of required cement content with 1.0 lb Class F fly ash per lb of cement replaced
Ground Granulated Blast	35%-50% by weight of required cement content
Furnace Slag	with 1.0 lb slag per lb of cement replaced
Microsilica	4%-8% by weight of required cement content with 1.0 lb microsilica per lb of cement replaced

**Page 10-47, Subarticle 1024-3(B), Approved Sources, lines 16-18,** replace the second sentence of the second paragraph with the following:

Tests shall be performed by AASHTO's designated National Transportation Product Evaluation Program (NTPEP) laboratory for concrete admixture testing.

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

All fencing material and accessories shall meet Section 106.

**Page 10-73, Article 1056-1, DESCRIPTION, lines 7-8,** delete the first sentence of the second paragraph and replace with the following:

Use geotextile fabrics that are on the NCDOT Approved Products List.

**Page 10-73, Article 1056-2, HANDLING AND STORING, line 17,** replace "mechanically stabilized earth (MSE) wall faces" with "temporary wall faces".

**Page 10-73, Article 1056-4, GEOTEXTILES, line 33,** add the following after the first sentence in the second paragraph:

Geotextiles will be identified by the product name printed directly on the geotextile. When geotextiles are not marked with a product name or marked with only a manufacturing plant identification code, geotextiles will be identified by product labels attached to the geotextile wrapping. When identification is based on labels instead of markings, unwrap geotextiles just before use in the presence of the Engineer to confirm that the product labels on both ends of the outside of the geotextile outer wrapping match the labels affixed to both ends of the inside of the geotextile roll core. Partial geotextile roles without the product name printed on the geotextile or product labels affixed to the geotextile roll core may not be used.

TABLE 1056-1 GEOTEXTILE REQUIREMENTS										
Property		Requirement           Type 1         Type 2         Type 3 <sup>A</sup> Type 4         Type 5 <sup>B</sup>								
Toperty	Type 1			Type 4	Type 5 <sup>B</sup>	Test				
Typical	Shoulder	Under	Temporary	Soil	Temporary	Method				
Application	Drains	Rip Rap	Silt Fence	Stabilization	Walls					
Elongation	≥ 50%	> 50%	$\leq 25\%$	< 50%	< 50%	ASTM				
(MD & CD)	$\geq 3070$	$\geq 3070$	$\leq 2370$	< 30%	< 30%	D4632				
Grab Strength			100 lb <sup>C</sup>			ASTM				
(MD & CD)			100 10			D4632				
Tear Strength	Table 1 <sup>D</sup> ,	Table 1 <sup>D</sup> , Class 1		Table 1 <sup>D</sup> ,	_	ASTM				
(MD & CD)	Class 3		-	Class 3		D4533				
Puncture						ASTM				
Strength			-			D6241				
					2,400 lb/ft <sup>C</sup>					
Ultimate					(unless					
Tensile					required	ASTM				
Strength	_	_	_	_	otherwise	D4595				
(MD & CD)					in the					
					contract)					
Permittivity					0.20 sec <sup>-1,C</sup>	ASTM				
remnurvity	Tabl	e 2 <sup><b>D</b></sup> ,			0.20 300	D4491				
Apparent		o 50%	n.	r.	0.60 mm <sup>F</sup>	ASTM				
Opening Size		u Soil	Table 7 <sup>D</sup>	Table 5 <sup>D</sup>	0.00 mm	D4751				
UV Stability		No. 200 <sup>E</sup>			a c	ASTM				
(Retained	i assing .	110.200			70% <sup>C,G</sup>	D4355				
Strength)						D+333				

### Page 10-74, Table 1056-1, GEOTEXTILE REQUIREMENTS, replace with the following:

**A.** Minimum roll width of 36" required.

**B.** Minimum roll width of 13 ft required.

- **C.** MARV per Article 1056-3.
- **D.** AASHTO M 288.
- **E.** US Sieve No. per AASHTO M 92.
- **F.** Maximum average roll value.
- **G.** After 500 hours of exposure.

**Page 10-74, Article 1056-5, GEOCOMPOSITES, lines 7-8,** replace the first sentence with the following:

Provide geocomposite drain strips with a width of at least 12" and Type 1 geotextiles attached to drainage cores that meet Table 1056-2.

**Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11,** replace 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 10-161, Subarticle 1081-1(A), Classifications, lines 29-33,** delete first 3 sentences of the description for Type 2 and replace with the following:

**Type 2 -** A low-modulus, general-purpose adhesive used in epoxy mortar repairs. It may be used to patch spalled, cracked or broken concrete where vibration, shock or expansion and contraction are expected.

**Page 10-162, Subarticle 1081-1(A), Classifications, lines 4-7,** delete the second and third sentences of the description for Type 3A. Lines 16-22, delete Types 6A, 6B and 6C.

C203687 12CR.10231.14, etc.

**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.

## **R-19**

1,500	1,500	1,500	2,000	2,000	1,500	1,500	Min. Bond Strength Slant Shear Test at 14 days (psi)	
1.0	1.0	1.0	1.5	1.0	1.0	1.5	Maximum Water Absorption (%)	
ı	5,000	ı	I	ı	I	5,000 (Neat)	Min. Compressive Strength of 2" mortar cubes at 7 days	
6,000	3,000	3,000	6,000 (Neat)	6,000-	4,000-	3,000 (Neat)	Min. Compressive Strength of 2". mortar cubes at 24 hours	
2-5	5-15	5-15	2-5	2-5	30 min.	30 min.	Tensile Elongation at 7 days (%)	
4,000	1,500	1,500	4,000	4,000	2,000	1,500	Minimum Tensile Strength at 7 days (psi)	
20-60	40-80	40-80	5-50	20-50	30-60	20-50	Pot Life (Minutes)	1
50	10	10	1	20	20	I	Speed (RPM)	
2	4	4	1	4	ω	I	Spindle No.	
1-6	40-150	40-150	Gel	25-75	10-30	Gel	Viscosity-Poises at $77^{\circ}F \pm 2^{\circ}F$	
Type 5	Type 4B	Type 4A	Type 3A	Type 3	Type 2	Type 1	Property	
		STEMS	<b>VESIN SY</b>	1081-1 EPOXY F	TABLE 1081-1 MIXED EPOXY	TIES OF	TABLE 1081-1 PROPERTIES OF MIXED EPOXY RESIN SYSTEMS	

**Page 10-163, Table 1081-1, PROPERTIES OF MIXED EPOXY RESIN SYSTEMS,** replace with the following:

**Page 10-164, Subarticle 1081-1(E), Prequalification, lines 31-33,** replace the second sentence of the first paragraph with the following:

Manufacturers choosing to supply material for Department jobs must submit an application through the Value Management Unit with the following information for each type and brand name:

Page 10-164, Subarticle 1081-1(E)(3), line 37, replace with the following:

(3) Type of the material in accordance with Articles 1081-1 and 1081-4,

**Page 10-165, Subarticle 1081-1(E)(6), line 1,** in the first sentence of the first paragraph replace "AASHTO M 237" with "the specifications".

Page 10-165, Subarticle 1081-1(E), Prequalification, line 9-10, delete the second sentence of the last paragraph.

**Page 10-165, Subarticle 1081-1(F), Acceptance, line 14,** in the first sentence of the first paragraph replace "Type 1" with "Type 3".

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

**Page 10-170, Article 1081-3, HOT BITUMEN, line 9,** add the following at the end of Section 1081:

### **1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS**

### (A) General

This section covers epoxy resin adhesive for bonding traffic markers to pavement surfaces.

### (B) Classification

The types of epoxies and their uses are as shown below:

**Type I** – Rapid Setting, High Viscosity, Epoxy Adhesive. This type of adhesive provides rapid adherence to traffic markers to the surface of pavement.

**Type II** – Standard Setting, High Viscosity, Epoxy Adhesive. This type of adhesive is recommended for adherence of traffic markers to pavement surfaces when rapid set is not required.

**Type III** – Rapid Setting, Low Viscosity, Water Resistant, Epoxy Adhesive. This type of rapid setting adhesive, due to its low viscosity, is appropriate only for use with embedded traffic markers.

Type IV – Standard Set Epoxy for Blade Deflecting-Type Plowable Markers.

### (C) Requirements

Epoxies shall conform to the requirements set forth in AASHTO M 237.

### (D) Prequalification

Refer to Subarticle 1081-1(E).

### (E) Acceptance

Refer to Subarticle 1081-1(F).

# Page 10-173, Article 1084-2, STEEL SHEET PILES, lines 37-38, replace first paragraph with the following:

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required

by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piling encased in concrete shall receive a barrier coat. The barrier coat shall be an approved waterborne coating with a lowviscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

Page 10-174, Subarticle 1086-1(B)(1), Epoxy, lines 18-24, replace with the following:

The epoxy shall meet Article 1081-4.

The 2 types of epoxy adhesive which may be used are Type I, Rapid Setting, and Type II, Standard Setting. Use Type II when the pavement temperature is above 60°F or per the manufacturer's recommendations whichever is more stringent. Use Type I when the pavement temperature is between 50°F and 60°F or per the manufacturer's recommendations whichever is more stringent. Epoxy adhesive Type I, Cold Set, may be used to attach temporary pavement markers to the pavement surface when the pavement temperature is between 32°F and 50°F or per the manufacturer's recommendations whichever is more stringent.

Page 10-175, Subarticle 1086-2(E), Epoxy Adhesives, line 27, replace "Section 1081" with "Article 1081-4".

Page 10-177, Subarticle 1086-3(E), Epoxy Adhesives, line 22, replace "Section 1081" with "Article 1081-4".

**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, Table 1092-3 MINIMUM COEFFICIENT OF RETROREFLECTION FOR NC GRADE A, replace with the following:

MINIMU		IENT ( ndelas	OF RE		REFL		ON FOR NC GR eter)	ADE A
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

# **<u>GROUT PRODUCTION AND DELIVERY:</u>** (3-17-15)

1003

SP10 R20

Revise the 2012 Standard Specifications as follows:

Replace Section 1003 with the following:

### **SECTION 1003 GROUT PRODUCTION AND DELIVERY**

### **1003-1 DESCRIPTION**

This section addresses cement grout to be used for structures, foundations, retaining walls, concrete barriers, embankments, pavements and other applications in accordance with the contract. Produce non-metallic grout composed of Portland cement and water and at the Contractor's option or as required, aggregate and pozzolans. Include chemical admixtures as required or needed. Provide sand cement or neat cement grout as required. Define "sand cement grout" as grout with only fine aggregate and "neat cement grout" as grout without aggregate.

The types of grout with their typical uses are as shown below:

**Type 1** – A cement grout with only a 3-day strength requirement and a fluid consistency that is typically used for filling subsurface voids.

**Type 2** – A nonshrink grout with strength, height change and flow conforming to ASTM C1107 that is typically used for foundations, ground anchors and soil nails.

**Type 3** – A nonshrink grout with high early strength and freeze-thaw durability requirements that is typically used in pile blockouts, grout pockets, shear keys, dowel holes and recesses for concrete barriers and structures.

**Type 4** – A neat cement grout with low strength, a fluid consistency and high fly ash content that is typically used for slab jacking.

**Type 5** – A low slump, low mobility sand cement grout with minimal strength that is typically used for compaction grouting.

### 1003-2 MATERIALS

Refer to Division 10.

Item	Section
Chemical Admixtures	1024-3
Fine Aggregate	1014-1
Fly Ash	1024-5
Ground Granulated Blast Furnace Slag	1024-6
Portland Cement	1024-1
Silica Fume	1024-7
Water	1024-4

Do not use grout that contains soluble chlorides or more than 1% soluble sulfate. At the Contractor's option, use an approved packaged grout instead of the materials above except for water. Use packaged grouts that are on the NCDOT Approved Products List.

Use admixtures for grout that are on the NCDOT Approved Products List or other admixtures in accordance with Subarticle 1024-3(E) except do not use concrete additives or unclassified or other admixtures in Type 4 or 5 grout. Use Class F fly ash for Type 4 grout and Type II Portland cement for Type 5 grout.

Use well graded rounded aggregate with a gradation, liquid limit (LL) and plasticity index (PI) that meet Table 1003-1 for Type 5 grout. Fly ash may be substituted for a portion of the fines in the aggregate. Do not use any other pozzolans in Type 5 grout.

TABLE 1003-1AGGREGATE REQUIREMENTS FOR TYPE 5 GROUT									
Grad Sieve Designation per AASHTO M 92	ation Percentage Passing (% by weight)	Maximum Liquid Limit	Maximum Plasticity Index						
3/8"	100								
No. 4	70 - 95	-							
No. 8	50 - 90	-							
No. 16	30 - 80	N/A	N/A						
No. 30	25 - 70								
No. 50	20 - 50								
No. 100	15-40	-							
No. 200	10 - 30	25	10						

### **1003-3 COMPOSITION AND DESIGN**

When using an approved packaged grout, a grout mix design submittal is not required. Otherwise, submit proposed grout mix designs for each grout mix to be used in the work. Mixes for all grout shall be designed by a Certified Concrete Mix Design Technician or an Engineer licensed by the State of North Carolina. Mix proportions shall be determined by a testing laboratory approved by the Department. Base grout mix designs on laboratory trial batches that meet Table 1003-2 and this section. With permission, the Contractor may use a quantity of chemical admixture within the range shown on the current list of approved admixtures maintained by the Materials and Tests Unit.

Submit grout mix designs in terms of saturated surface dry weights on Materials and Tests Form 312U at least 35 days before proposed use. Adjust batch proportions to compensate for surface moisture contained in the aggregates at the time of batching. Changes in the saturated surface dry mix proportions will not be permitted unless revised grout mix designs have been submitted to the Engineer and approved.

Accompany Materials and Tests Form 312U with a listing of laboratory test results of compressive strength, density and flow or slump and if applicable, aggregate gradation, durability and height change. List the compressive strength of at least three 2" cubes at the age of 3 and 28 days.

The Engineer will review the grout mix design for compliance with the contract and notify the Contractor as to its acceptability. Do not use a grout mix until written notice has been received. Acceptance of the grout mix design or use of approved packaged grouts does not relieve the Contractor of his responsibility to furnish a product that meets the contract. Upon written request from the Contractor, a grout mix design accepted and used satisfactorily on any Department project may be accepted for use on other projects.

Property	Test Method
Aggregate Gradation <sup>A</sup>	AASHTO T 27
Compressive Strength	AASHTO T 106
	AASHTO T 121,
Density (Unit Weight)	AASHTO T 133 <sup>B</sup> ,
	ANSI/API RP <sup>C</sup> 13B-1 <sup>B</sup> (Section 4, Mud Balance)
Durability	AASHTO T 161 <sup>D</sup>
Flow	ASTM C939 (Flow Cone)
Height Change	ASTM C1090 <sup>E</sup>
Slump	AASHTO T 119

Perform laboratory tests in accordance with the following test procedures:

- **A.** Applicable to grout with aggregate.
- **B.** Applicable to Neat Cement Grout.
- C. American National Standards Institute/American Petroleum Institute Recommended Practice.
- **D.** Procedure A (Rapid Freezing and Thawing in Water) required.
- **E.** Moist room storage required.

### **1003-4 GROUT REQUIREMENTS**

Provide grout types in accordance with the contract. Use grouts with properties that meet Table 1003-2. The compressive strength of the grout will be considered the average compressive strength test results of three 2" cubes at each age. Make cubes that meet AASHTO T 106 from the grout delivered for the work or mixed on-site. Make cubes at such frequencies as the Engineer may determine and cure them in accordance with AASHTO T 106.

TABLE 1003-2 GROUT REQUIREMENTS									
Type of Grout	Minimum Compressive Strength at		Height Change	Flow <sup>A</sup> /Slump <sup>B</sup>	Minimum Durability				
	3 days	28 days	at 28 days		Factor				
1	3,000 psi	_	_	10 - 30  sec	_				
2	Table 1 <sup>C</sup>			Fluid Consistency <sup>C</sup>	_				
3	5,000 psi	_	0-0.2% Per Accepte Grout Mix Des Approved Packaged Grout		80				
4 <sup>D</sup>	600 psi	1,500 psi	_	10 – 26 sec	_				
5	_	500 psi	_	1 – 3"	_				

- A. Applicable to Type 1 through 4 grouts.
- **B.** Applicable to Type 5 grout.
- **C.** ASTM C1107.
- **D.** Use Type 4 grout with proportions by volume of 1 part cement and 3 parts fly ash.

### **1003-5 TEMPERATURE REQUIREMENTS**

When using an approved packaged grout, follow the manufacturer's instructions for grout and air temperature at the time of placement. Otherwise, the grout temperature at the time of placement shall be not less than 50°F nor more than 90°F. Do not place grout when the air temperature measured at the location of the grouting operation in the shade away from artificial heat is below  $40^{\circ}$ F.

### **1003-6 ELAPSED TIME FOR PLACING GROUT**

Agitate grout continuously before placement. Regulate the delivery so the maximum interval between the placing of batches at the work site does not exceed 20 minutes. Place grout before exceeding the times in Table 1003-3. Measure the elapsed time as the time between adding the mixing water to the grout mix and placing the grout.

TABLE 1003-3 ELAPSED TIME FOR PLACING GROUT (with continuous agitation)							
Air or Grout Temperature, Whichever is Higher	Maximum No Retarding Admixture Used	Elapsed Time Retarding Admixture Used					
90°F or above	30 minutes	1 hr. 15 minutes					
80°F through 89°F	45 minutes	1 hr. 30 minutes					
79°F or below	60 minutes	1 hr. 45 minutes					

### **1003-7 MIXING AND DELIVERY**

Use grout free of any lumps and undispersed cement. When using an approved packaged grout, mix grout in accordance with the manufacturer's instructions. Otherwise, comply with Articles 1000-8 through 1000-12 to the extent applicable for grout instead of concrete.

Z-2

### <u>STANDARD SPECIAL PROVISION</u> <u>AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS</u>

(5-20-08)

*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

SSP-2

#### **ERRATA**

(1-17-12) (Rev. 04-21-15)

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 3**

Page 3-1, after line 15, Article 300-2 Materials, replace "1032-9(F)" with "1032-6(F)".

### **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 7**

**Page 7-1, Article 700-3, CONCRETE HAULING EQUIPMENT,** line 33, replace "competion" with "completion".

#### **Division 8**

**Page 8-23, line 10, Article 838-2 Materials,** replace "Portland Cement Concrete, Class B" with "Portland Cement Concrete, Class A".

#### **Division 10**

**Page 10-166, Article 1081-3 Hot Bitumen,** replace "Table 1081-16" with "Table 1081-2", replace "Table 1081-17" with "Table 1081-3", and replace "Table 1081-18" with "Table 1081-4".

Z-4

### **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 15-4, Subarticle 1505-3(F) Backfilling, line 26,** replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)".

**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".

### STANDARD SPECIAL PROVISION

### PLANT AND PEST QUARANTINES

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

(3-18-03) (Rev. 10-15-13)

Z-04a

### Within Quarantined Area

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

### **Originating in a Quarantined County**

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

### Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or *http://www.ncagr.gov/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.

### STANDARD SPECIAL PROVISION

### MINIMUM WAGES

(7-21-09)

Z-5

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

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

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

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

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

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

### STANDARD SPECIAL PROVISION

### **ON-THE-JOB TRAINING**

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

Z-10

### Description

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

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

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

### **Minorities and Women**

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

### **Assigning Training Goals**

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

### **Training Classifications**

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

Equipment OperatorsOffice EngineersTruck DriversEstimatorsCarpentersIron / Reinforcing Steel WorkersConcrete FinishersMechanicsPipe LayersWelders

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.

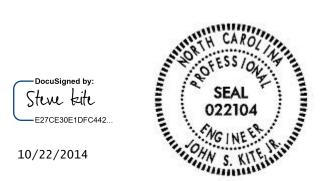
### **Measurement and Payment**

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

### WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS

### TEMPORARY TRAFFIC CONTROL (TTC):

(7-16-13) (Rev. 7-15-14)



RWZ-1

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

Install Work Zone Advance Warning Signs in accordance with the detail drawing provided in these plans prior to beginning any other work. Use a lane closure or slow moving operation to complete the work, as necessary, unless otherwise indicated. Refer to Standard Drawing No. 1101.02, 1101.11, 1110.01, 1110.02, 1130.01 1135.01 and 1180.01 of the 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. 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, and 1180.01 of the *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 and skinny drums may be used instead of drums. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 1 mile in length at any given time on 2 Lane, 2 Way facilities unless otherwise approved by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the *2012 Standard Specifications* and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to and within 5 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings. When personnel and/or equipment are working within a lane of travel of an undivided facility, close the lane according to the traffic control plans, 2012 Roadway Standard Drawings or as directed by the Engineer. Conduct the work so that all

# **TC-2**

personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

When utilizing a slow-moving operation for such items as pavement marking and marker placement, as a minimum the slow moving operation caravan shall consist of the vehicles and devices shown on the Moving Operation Caravan Details according to Roadway Standard Drawing No. 1101.02, sheet 11 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.

### **TRAFFIC OPERATIONS:**

### 1) Drop-Off Requirements and Time Limitations:

Do not exceed a difference of 2 inches in elevation between open lanes of traffic for nominal lifts of 1.5 inches

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

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 limits less than 45 mph.

For drop-offs that exceed the above requirements, backfill the unacceptable drop-off with suitable compacted material, as approved by the Engineer. The material, equipment and labor associated with this operation will be at no expense to the Department. This work is not considered part of shoulder reconstruction.

### 2) **Project Requirements:**

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

1. Before working on ANY MAP, the Contractor shall submit a written construction sequence for traffic control and construction lighting for ALL MAPS to the Engineer at the first 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. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures. The maximum length of any one lane closure is 1 mile unless otherwise directed by the Engineer.
- 3. Contractor shall mill and pave lanes in an order such that water shall not accumulate.
- 4. Traffic Control for the milling and/or paving of ramps is to be done according to Standard Drawing Number 1101.02, Sheets 9 & 10 unless otherwise approved to be closed by the Engineer. If approved, Contractor will provide plans and devices for the detour at no additional cost to the department.
- 5. If lane closure restrictions apply, see Special Provision, "Intermediate Contract Times and Liquidated Damages".
- 6. If milled areas are not paved back within 72 hours, the Contractor is to furnish and install the following portable signs to warn drivers of the conditions. These are to include, but not limited to "Rough Road" (W8-8), "Uneven Lanes" (W8-11), and "Grooved Pavement" (W8-15) w/ Motorcycle Plaque mounted below. These are to be dual indicated on Multi-Lane Roadways with speed limits 45 mph and greater where lateral clearance can be obtained within the median areas. These portable signs are incidental to the other items of work included in the temporary traffic control (Lump Sum) pay item.

### 3) Work Zone Signing:

### Description

Install advance/general warning work zone signs according to the Detail Drawing provided in these plans prior to beginning of work. Install and maintain signing in accordance with the attached drawings and Divisions 11 and 12 of the *2012 Standard Specifications*.

### (A) Installation

All stationary Advance/General warning work zone signs require notification to existing Utility owners per Article 105-8 of the *2012 Standard Specifications* and Special Provision SP1 G115 within 3 to 12 full working days prior to installation.

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

All stationary signing is to be installed as shown on the detail drawing(s) unless otherwise directed by the Engineer. All sign locations to be verified by the Engineer prior to installation. Once the signs have been installed and accepted, any sign relocations requested by the Department will be compensated in accordance with Article 104-7. Any additional signs other than the ones shown in the drawing will be compensated in accordance with Article 104-7.

## TC-4

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

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

### (B) Sign Removal

All stationary work zone signs shall be removed once the project is substantially complete. The project is substantially complete when the resurfacing operations are completed and the shoulders are brought up to the same elevation as the proposed pavement and when pavement markings are installed. The pavement marking doesn't have to be the final marking material to be considered substantially complete. Any remaining punch list items are to be completed with portable work zone signing. There will be no compensation for any portable signing. Sign removal is a condition of final project acceptance.

### (C) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the 2012 Roadway Standard Drawings. Any required portable signs for lane closures are compensated in the contract pay item for Temporary Traffic Control.

### 4) Measurement and Payment:

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

The work of satisfactorily installing and removing work zone advance and/or general warning signs, including, but not limited to, furnishing, locating, installing, covering, uncovering and removing stationary signs will be measured for each required sign and paid at the contract price for *Work Zone Advance/General Warning Signing (SF)*. Payment for *Work Zone* 

## **TC-5**

*Advance/General Warning Signing* will be limited to a maximum of 90% of the total installed quantity. The remaining 10% will be paid once all signs have been removed.

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

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

Payment will be made under:

**Pay Item** Temporary Traffic Control Work Zone Advance/General Warning Signing **Pay Unit** Lump Sum Square Foot

### **RESURFACING OPERATIONS:**

(7-15-14)

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

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

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

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

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

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

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

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

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

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

Operate equipment and conduct operations in the same direction as the flow of traffic. Maintain vehicular access in accordance with Article 1101-05 of the *2012 Standard Specifications* using suitable backfill material approved by the Engineer.

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

### Milled Rumble Strips:

When utilized, milled rumble strips shall be installed in accordance with the 2012 Standard Specifications and the 2012 Roadway Standard Drawing 665.01.

### PAVEMENT MARKINGS AND MARKERS:

(7-15-14)

### **Markings: All Facilities**

Pavement markings shall be installed in accordance with Standard Drawings 1205.01 through 1205.13 of the *2012 Roadway Standard Drawings* and Section 1205 of the *2012 Standard Specifications* with the exception of the 15 day edge line replacement requirement for two-lane, two-way roadways as described in Subarticle 1205-3(D) of the *2012 Standard Specifications*. For all two-lane, two-way facilities, edge lines can be replaced within 30 calendar days after they have been obliterated.

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

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

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

### Markers: All Facilities

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

Install permanent pavement markers within 60 calendar days after completing the resurfacing on each map. Pavement markers shall be installed in accordance with Standard Drawing 1205.12 and Standard Drawings 1250.01 through 1253.01 of the *2012 Roadway Standard Drawings* and Sections 1250 through 1253 of the *2012 Standard Specifications*.

### Markings and Markers: All Facilities

Review and record the existing pavement markings and markers before resurfacing. Re-establish the new pavement markings and markers using the record of existing markings in conjunction with the *2012 Roadway Standard Drawings* unless otherwise directed by the engineer. Have existing or proposed "passing zones" reviewed by the engineer before installation. Submit the record of the existing pavement markings seven calendar days before the obliteration of any pavement markings.

Mainline pavement shall not be left milled, unmarked or uneven at the end of a paving season. If the Contractor begins any map and does not complete within the seasonal restrictions,

including placement of final pavement markings or permanent markers, the Contractor shall be responsible for, at his expense, Paint in accordance with Article 1205-08 and Temporary Markers in accordance with Section 1251 of the 2012 Standard Specifications.

# **TC-10**

### WORK ZONE TRAFFIC CONTROL Project Special Provisions

### **LAW ENFORCEMENT:**

(02/06/13)

### Description

Furnish Law Enforcement Officers and marked Law Enforcement vehicles direct traffic in accordance with the contract.

### **Construction Methods**

Use uniformed Law Enforcement Officers and marked Law Enforcement vehicles equipped with blue lights mounted on top of the vehicle, and Law Enforcement vehicle emblems to direct or control traffic as required by the plans or by the Engineer.

### **Measurement and Payment**

Law Enforcement will be measured and paid for in the actual number of hours that each Law Enforcement Officer is provided during the life of the project as approved by the Engineer. There will be no direct payment for marked Law Enforcement vehicles as they are considered incidental to the pay item.

Payment will be made under:

Pay Item Law Enforcement Pay Unit Hour





10/22/2014

Apr 06, 2015 11:16 am

Page 1 of 2

-	bunty : Cleveland				Page 1 of 2	
Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amoun
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0255000000-E	SP	GENERIC GRADING ITEM AGGREGATE SHOULDER BORROW	2,208 TON		
0003	1220000000-Е	545	INCIDENTAL STONE BASE	255 TON		
0004	1245000000-Е	SP	SHOULDER RECONSTRUCTION	14.17 SMI		
0005	1297000000-Е	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (1-1/2")	80,594 SY		
0006	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (3")	14,086 SY		
0007	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (4-1/2")	7,216 SY		
0008	133000000-Е	607	INCIDENTAL MILLING	1,445 SY		
0009	151900000-Е	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	20,244 TON		
0010	152000000-Е	SP	ASPHALT CONC SURFACE COURSE, TYPE S9.5B (LEVELING COURSE)	1,132 TON		
0011	1575000000-Е	620	ASPHALT BINDER FOR PLANT MIX	1,289 TON		
0012	170400000-Е	SP	PATCHING EXISTING PAVEMENT	3,983 TON		
0013	2600000000-N	SP	RETROFIT EXISTING CURB RAMP	25 EA		
0014	2815000000-N	858	ADJUSTMENT OF DROP INLETS	4 EA		
0015	2830000000-N	858	ADJUSTMENT OF MANHOLES	64 EA		
0016	284500000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	39 EA		
0017	441300000-Е	SP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	1,420 SF		
0018	4457000000-N	SP	TEMPORARY TRAFFIC CONTROL	Lump Sum	L.S.	

County : Cleveland

Line	Item Number Sec	Description	Quantity	Unit Cost	Amount
#	#		-		

0019	451000000-N	SP	LAW ENFORCEMENT	61 HR	
0020	4695000000-Е	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	480 LF	
0021	4697000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	832 LF	
0022	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	790 LF	
0023	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	24 EA	
0024	4725000000-Е	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	189 EA	
0025	481000000-Е	1205	PAINT PAVEMENT MARKING LINES (4")	168,180 LF	
0026	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	850 LF	
0027	4835000000-Е	1205	PAINT PAVEMENT MARKING LINES (24")	526 LF	
0028	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	106 EA	
0029	4847000000-Е	1205	POLYUREA PAVEMENT MARKING LINES (4", *********) (HIGHLY REFLECTIVE ELEMENTS)	167,810 LF	
0030	4847110000-E	1205	POLYUREA PAVEMENT MARKING LINES (8", *********) (HIGHLY REFLECTIVE ELEMENTS)	450 LF	
0031	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	1,145 EA	
0032	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum	L.S.

1116/Apr06/Q475464.17/D101441210000/E32

Total Amount Of Bid For Entire Project :

# Vendor 1 of 1: ASPHALT PAVING OF SHELBY, INC. (3562) Call Order 013 (Proposal: C203687)

# **Bid Information**

<b>Proposal County:</b>	CLEVELAND	<b>Bid Checksum:</b>	312232B6
Vendor Address:		Bid Total:	\$2,541,753.40
	Shelby , NC , 28151	Items Total:	\$2,541,753.40
Signature Check:	Ken_Fannin_3562	Time Total:	\$0.00
Time Bid Received:	May 19, 2015 08:14 AM		
Amendment Count:	0		

#### **Bidding Errors:**

None.

MBE Goal Set 3.0 MBE Goal Met 3.0 WBE Goal Set 5.0 WBE Goal Met 5.0

# Vendor 1 of 1: ASPHALT PAVING OF SHELBY, INC. (3562) Call Order 013 (Proposal: C203687)

## **Bid Bond Information**

Projects:	Bond Maximum:
Counties:	State of Incorporation:
Bond ID: SNC15563428	Agency Execution Date: 5/15/2015 4
Paid by Check: No	Surety Name: surety2000
<b>Bond Percent:</b> 5%	Bond Agency Name: Great American Insurance Company

Bidder 1 of 1 Vendor 3562's Bid Information for Call 013, Letting L150519, 05/19/15 Asphalt Paving of Shelby, Inc (3562) Call Order 013 (Proposal ID C203687) LIST OF MBE PARTICIPANTS VENDOR DBE NAME WORK CFRT NUMBER ADDRESS CODE TYPE OF WORK TYPE AMOUNT 81,039.20 Committed 11282MBB&J HAULING OF MAIDEN LLC Sub 302 RAMSEUR ROAD , MAIDEN, NC 28650 TOTAL: \$81,039.20 3.19% Vendor 3562's Bid Information for Call 013, Letting L150519, 05/19/15 Asphalt Paving of Shelby, Inc (3562) Call Order 013 (Proposal ID C203687) LIST OF WBE PARTICIPANTS VENDOR DBE NAME WORK CERT NUMBER ADDRESS CODE TYPE OF WORK TYPE AMOUNT 5796 WB A-1 PAVEMENT MARKING LLC Sub 127,420.00 Committed 238 N BIVENS RD , MONROE, NC 28110 TOTAL: \$127,420.00 5.01% Vendor 3562's Bid Information for Call 013, Letting L150519, 05/19/15 Asphalt Paving of Shelby, Inc (3562) Call Order 013 (Proposal ID C203687) 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:

Bidder 1 of 1

Contract Number NOT ANSWERED NOT ANSWERED NOT ANSWERED NOT ANSWERED NOT ANSWERED NOT ANSWERED

County

Bid Bond Data Info - Contractor Responses:

BondID: SNC15563428 Surety Registry Agency: surety2000 Verified?: Yes Surety Agency: Great American Insurance Company Bond Execution Date: 5/15/2015 4 Bond Amount: \$127,087.67 (Five Percent of Bid)

Lettin	Dept act ID: C203687 ng Date: 05-19-15 Call Or r: 3562 - Asphalt Paving o	der: 013	n Rex STATE FUNDED	Date: 04-21-15 /ised:
+  Line   No. 	Item   Description 	Approx.   Quantity   and Units	Unit Price        Dollars   Cts	Bid Amount        Dollars  Ct
+ Sectio	on 0001 ROADWAY ITEM Alt Group	 S		+
+    0001 	0000100000-N MOBILIZATIO  N 			41,000.00  
0002	0255000000-E GENERIC  GRADING ITEM AGGREGATE  SHOULDER BORROW	   2,208.000  TON	   25.00000  	55,200.00
	1220000000-E INCIDENTAL  STONE BASE 	   255.000  TON	   25.00000  	6,375.00  
•	1245000000-E SHOULDER  RECONSTRUCTION 	   14.170  SMI	   1,500.00000  	21,255.00
0005	1297000000-E MILLING  ASPHALT PAVEMENT,  ***"DEPTH (1-1/2")	   80,594.000  SY	   1.00000  	80,594.00  
0006	1297000000-E MILLING  ASPHALT PAVEMENT,  ***"DEPTH (3")	   14,086.000  SY	   2.00000  	28,172.00
0007	1297000000-E MILLING  ASPHALT PAVEMENT,  ***"DEPTH (4-1/2")	   7,216.000  SY	   3.00000  	21,648.00
	1330000000-E INCIDENTAL  MILLING 	   1,445.000  SY	   6.00000  	8,670.00  
0009	1519000000-E ASPHALT  CONC SURFACE COURSE,  TYPE S9.5B	   20,244.000  TON	   36.00000  	728,784.00
0010 	1520000000-E ASPHALT  CONC SURFACE COURSE,  TYPE S9.5B (LEVELING  COURSE)	1,132.000    TON	   36.00000  	40,752.00    

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Letti	Dept of act ID: C203687 ng Date: 05-19-15 Call Oro r: 3562 - Asphalt Paving of	der: 013	n Rev STATE FUNDED	Date: 04-21-15 vised:
+  Line		Approx.	Unit Price	+   Bid Amount
No.	Description	Quantity   and Units	   Dollars   Cts	   Dollars  Ct
	1575000000-E ASPHALT  BINDER FOR PLANT MIX 	   1,289.000  TON	   592.00000 	   763,088.00  
	1704000000-E PATCHING  EXISTING PAVEMENT 	   3,983.000  TON	   85.00000 	   338,555.00  
	260000000-N RETROFIT  EXISTING CURB RAMP 	   25.000  EA	   600.00000 	   15,000.00  
	2815000000-N ADJUSTMENT  OF DROP INLETS 	   4.000  EA	   1,100.00000 	4,400.00
	2830000000-N ADJUSTMENT  OF MANHOLES 	   64.000  EA	   850.00000 	   54,400.00  
0016	2845000000-N ADJUSTMENT  OF METER BOXES OR VALVE  BOXES		   750.00000 	   29,250.00  
0017		   1,420.000  SF	   6.00000 	   8,520.00  
	4457000000-N TEMPORARY  TRAFFIC CONTROL 	  LUMP 	     LUMP 	   5,000.00  
•	451000000-N LAW  ENFORCEMENT 	   61.000  HR	   40.00000 	2,440.00
0020	4695000000-E THERMOPLAST  IC PAVEMENT MARKINGLINES  (8", 90 MILS)	480.000	   3.00000 	   1,440.00  
0021	4697000000-E THERMOPLAST  IC PAVEMENT MARKINGLINES  (8", 120 MILS)	832.000	   3.25000 	2,704.00
0022	471000000-E THERMOPLAST  IC PAVEMENT MARKINGLINES  (24", 120 MILS)	790.000	   7.30000 	   5,767.00  
+			Check: 312	+

Check: 312232B6 Page 2

Letti	Dept o act ID: C203687 ng Date: 05-19-15 Call Oro r: 3562 - Asphalt Paving o:	der: 013		Date: 04-21-15 ised:
+  Line		Approx.	Unit Price	Bid Amount
No.	Description 	Quantity   and Units	   Dollars   Cts	Dollars  Ct
0023 	4721000000-E THERMOPLAST  IC PAVEMENT  MARKINGCHARACTER (120  MILS)	   24.000    EA	   140.00000  	3,360.00  
0024	4725000000-E THERMOPLAST  IC PAVEMENT MARKINGSYMBOL  (90 MILS)		   145.00000  	27,405.00
0025	4810000000-E PAINT  PAVEMENT MARKING LINES  (4")	   168,180.000  LF	   0.24000  	40,363.20  
0026	4820000000-E PAINT  PAVEMENT MARKING LINES  (8")	   850.000  LF	   2.00000  	1,700.00
0027	4835000000-E PAINT  PAVEMENT MARKING LINES  (24")	   526.000  LF	   5.00000  	2,630.00
	4845000000-N PAINT  PAVEMENT MARKING SYMBOL 	   106.000  EA	   86.00000  	9,116.00
0029 	4847000000-E POLYUREA  PAVEMENT MARKING  LINES (4", *********)  (HIGHLY REFLECTIVE  ELEMENTS)	   167,810.000      LF	   0.92000      	154,385.20        
0030   	4847110000-E POLYUREA  PAVEMENT MARKING  LINES (8", *********)  (HIGHLY REFLECTIVE  ELEMENTS)	   450.000    LF	   3.50000      	1,575.00        
	4905000000-N SNOWPLOWABL  E PAVEMENT MARKERS 	   1,145.000  EA	   29.00000  	33,205.00
	5255000000-N PORTABLE  LIGHTING 	   LUMP 	  LUMP   	5,000.00
+   	  Section 0001 Total		   	2,541,753.40

	State of NC	Date: 04-21-15
	Dept of Transportation	Revised:
Contract ID: C203687 Letting Date: 05-19-15 Bidder: 3562 - Asphalt		IDED
Line  Item  No.  Description	Quantity	Price   Bid Amount      5   Cts   Dollars  Ct
+	   	2,541,753.40

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### NON-COLLUSION AND DEBARMENT CERTIFICATION

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

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

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

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

Explanation: NOT ANSWERED NOT ANSWERED NOT ANSWERED NOT ANSWERED

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

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

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 NumberCountyNOT ANSWEREDNOT ANSWEREDNOT ANSWEREDNOT ANSWEREDNOT ANSWEREDNOT ANSWEREDNOT 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 CAR	OLINA STATE DE MBE COMMITM		4ENT OF TRANSPO ITEMS	-	DATE:04-21-15 PAGE: 7		
LETT	DSAL: C203687 ING: L150519 DR: 3562 Aspl	CALI halt Paving of						
				SUBCONTRACTOR QUANTITY				
	SUBCONTRACTOR: Use Quote: Yes		JLING	OF MAIDEN LLC				
0020	4695000000-E	THERMO PVT M	LF	480.000	3.00000	1440.00		
		THERMO PVT M			3.25000			
0022	471000000-E	24"WIDE THER	LF	790.000	7.30000	5767.00		
0023	4721000000-E	THERMO PVT M	EA	24.000	140.00000	3360.00		
0024	4725000000-E	THERMO PVT S	EA	189.000	145.00000	27405.00		
0025	481000000-E	PAINT PVMT M	LF	168180.000	0.24000	40363.20		
	MBE COMMITMEN	NT TOTAL FOR S	SUBCON	NTRACTOR:		81,039.20 Committed		

TOTAL MBE COMMITMENT FOR VENDOR: Entered: 3.19% or 81039.20 Required: 3.00% or 76252.60 <GOAL MET>

\_\_\_\_\_

	NORTH CARC	DLINA STATE DE WBE COMMITE		MENT OF TRANSPO ITEMS	-	DATE:04-21-15 PAGE: 8	
LETT	DSAL: C203687 ING: L150519 DR: 3562 Aspl	CALI nalt Paving of					
LINE NO.				SUBCONTRACTOR QUANTITY			
	SUBCONTRACTOR: Use Quote: Yes		EMENT	MARKING LLC			
0029	484700000-E	POLYUREA LIN	LF	138500.000	0.92000	127420.00	
	WBE COMMITMEN	NT TOTAL FOR S	GUBCOI	NTRACTOR:		127,420.00 Comm	nitted
TOTAJ	WBE COMMITMEN	NT FOR VENDOR:	:	Entered: Required:	5.01% or 5.00% or		

\_\_\_\_\_

<GOAL MET>

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THIS PROPOSAL CONTAINS THE FOLLOWING ERRORS/WARNINGS (IF ANY)

This Bid contains 0 amendment files

#### Electronic Bid Submission

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

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

Signature	Agency	Date

Jun 03, 2015 8:12 am

### North Carolina Department Of Transportation

Contract Item Sheets For C203687

Page: 1 of 2

Amount Bid	Unit Bid Price	Quantity Unit	Description	Sec #	ItemNumber	Line #
			ROADWAY ITEMS			
41,000.00	41,000.00	Lump Sum LS	MOBILIZATION	800	0000100000-N	0001
55,200.00	25.00	2,208 TON	GENERIC GRADING ITEM AGGREGATE SHOULDER BORROW	SP	0255000000-E	0002
6,375.00	25.00	255 TON	INCIDENTAL STONE BASE	545	1220000000-E	0003
21,255.00	1,500.00	14.17 SMI	SHOULDER RECONSTRUCTION	SP	1245000000-E	0004
80,594.00	1.00	80,594 SY	MILLING ASPHALT PAVEMENT, ***" DEPTH (1-1/2")	607	1297000000-E	0005
28,172.00	2.00	14,086 SY	MILLING ASPHALT PAVEMENT, ***" DEPTH (3")	607	1297000000-E	0006
21,648.00	3.00	7,216 SY	MILLING ASPHALT PAVEMENT, ***" DEPTH (4-1/2")	607	1297000000-E	0007
8,670.00	6.00	1,445 SY	INCIDENTAL MILLING	607	1330000000-E	0008
728,784.00	36.00	20,244 TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	610	1519000000-E	0009
40,752.00	36.00	1,132 TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B (LEVELING COURSE)	SP	1520000000-E	0010
763,088.00	592.00	1,289 TON	ASPHALT BINDER FOR PLANT MIX	620	1575000000-E	0011
338,555.00	85.00	3,983 TON	PATCHING EXISTING PAVEMENT	SP	170400000-E	0012
15,000.00	600.00	25 EA	RETROFIT EXISTING CURB RAMP	SP	260000000-N	0013
4,400.00	1,100.00	4 EA	ADJUSTMENT OF DROP INLETS	858	2815000000-N	0014
54,400.00	850.00	64 EA	ADJUSTMENT OF MANHOLES	858	2830000000-N	0015
29,250.00	750.00	39 EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES	858	284500000-N	0016
8,520.00	6.00	1,420 SF	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	SP	4413000000-E	0017
5,000.00	5,000.00	Lump Sum LS	TEMPORARY TRAFFIC CONTROL	SP	4457000000-N	0018

Jun 03, 2015 8:12 am

# North Carolina Department Of Transportation

Page: 2 of 2

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0019	451000000-N	SP	LAW ENFORCEMENT	61 HR	40.00	2,440.00
0020	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	480 LF	3.00	1,440.00

0021	4697000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	832 LF	3.25	2,704.00
0022	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	790 LF	7.30	5,767.00
0023	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	24 EA	140.00	3,360.00
0024	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	189 EA	145.00	27,405.00
0025	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	168,180 LF	0.24	40,363.20
0026	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	850 LF	2.00	1,700.00
0027	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	526 LF	5.00	2,630.00
0028	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	106 EA	86.00	9,116.00
0029	4847000000-E	1205	POLYUREA PAVEMENT MARKING LINES (4", *********) (HIGHLY REFLECTIVE ELEMENTS)	167,810 LF	0.92	154,385.20
0030	4847110000-E	1205	POLYUREA PAVEMENT MARKING LINES (8", *********) (HIGHLY REFLECTIVE ELEMENTS)	450 LF	3.50	1,575.00
0031	490500000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	1,145 EA	29.00	33,205.00
0032	525500000-N	1413	PORTABLE LIGHTING	Lump Sum LS	5,000.00	5,000.00

TOTAL AMOUNT OF BID FOR ENTIRE PROJECT

\$2,541,753.40

0812/Jun03/Q475464.17/D101441210000/E32

### EXECUTION OF CONTRACT

### NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

#### CORPORATION

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

Asphalt Paving of Shelby, Inc

Full name of Corporation

PO Box 1526, She	elby, NC 28151
Address as Prece Attest <u>Omen Secretary/Assistant Secretary</u> By Select appropriate title	
Donald G Dedmon, Sr	Donald G Dedmon, Jr
Print or type Signer's name AFFIDAVIT MUST E Subscribed and sworn to before me this the	Print or type Signer's name CORPORATE SEAL CORPORATE SEAL BE NOTARIZED
Subscribed and sworn to before me this the	Eing CHELBY, N.C. is and
<u>944</u> day of June 2015. Illen D Posh	NOTARY SEAL
Signature of Notary Public of <u>Cleveland</u> County State of <u>North Capolina</u> My Commission Expires: <u>April 14, 2020</u>	NOTAQLIC C.
	COUNTRY

#### **DEBARMENT CERTIFICATION**

Conditions for certification:

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

#### DEBARMENT CERTIFICATION

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

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

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

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

Check here if an explanation is attached to this certification.

Contract No. <u>C203687</u>

County (ies): <u>Cleveland</u>

# ACCEPTED BY THE DEPARTMENT OF TRANSPORTATION

DocuSigned by:

Contract Officer

6/11/2015

Date

Execution of Contract and Bonds Approved as to Form:

—DocuSigned by: Colin Justice

n *gussic* 

Attorney General

6/11/2015

Date

Signature Sheet (Bid - Acceptance by Department)

Contract No.	C203687		
County	Cleveland		

Rev 5-17-11

#### CONTRACT PAYMENT BOND

June 4, 2015		
Asphalt Paving of Shelby, Inc.		
Great American Insurance Company		
North Carolina Department of Transportation		
Raleigh, North Carolina		
\$2,541,753.40		
C203687		
Cleveland County		

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 No. County

C203687 Cleveland

Rev 5-17-11

#### **CONTRACT PAYMENT BOND**

#### **CORPORATION**

#### SIGNATURE OF CONTRACTOR (Principal)

Asphalt Paving of Shelby, Inc.

Full name of Corporation

P.O. Box 1526, Shelby, NC 28151 Address as prequalified

By

Signature of President, Vice President, Assistant-Vice President Select appropriate title

SIL



Print or type Signer's name

Attest

Signature of Secretary, Assistant Secretary Select appropriate title

Dua on, Sr

Print or type Signer's name

Contract No. County Cleveland

Rev 5-17-11

### CONTRACT PAYMENT BOND

Affix Seal of Surety Company

Great American Insurance Company

Print or type Surety Company Name

By Deborah H. Davis Print, stamp or type name of Attorney-in-Fact

Signature of Attorney-in-Fact

Nor Signature of Witness

Millie Wood

Print or type Signer's name

222 N. Lafayette St., Suite 11 Shelby, NC 28150

Address of Attorney-in-Fact

Contract No. County C203687 Cleveland

Rev 5-17-11

#### CONTRACT PERFORMANCE BOND

Date of Performance Bond Execution:	June 4, 2015		
Name of Principal Contractor:	Asphalt Paving of Shelby, Inc.		
Name of Surety:	Great American Insurance Company		
Name of Contracting Body:	North Carolina Department of Transportation		
	Raleigh, North Carolina		
Amount of Bond:	\$2,541,753.40		
Contract ID No.:	C203687		
County Name:	Cleveland		

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.

Contract No, County

C203687

Cleveland

Rev 5-17-11

#### **CONTRACT PERFORMANCE BOND**

#### **CORPORATION**

#### SIGNATURE OF CONTRACTOR (Principal)

Asphalt Paving of Shelby, Inc.

Full name of Corporation

P. O. Box 1526, Shelby, NC 28151

Address as prequalified By

Signature of President, Vice President, Assistant Vice President Select appropriate title

Print or type Signer's name

OBSCORE CALL G OF SA SUDDER ONELL

Attest

Signature of Secretary, Assistant Sceretary

Select appropriate title

Dava

Print or type Signer's name

Contract No. County C2O3687 Cleveland

Rev 5-17-11

### **CONTRACT PERFORMANCE BOND**

Affix Seal of Surety Company

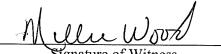
Great American Insurance Company Print or type Surety Company Name

By Deborah H. Davis

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

Ja

Signature of Attorney-in-Fact



Signature of Witness

Millie Wood

Print or type Signer's name

222 N.Lafayette St., Suite 11 Shelby, NC 28150

Address of Attorney-in-Fact

#### GREAT AMERICAN INSURANCE COMPANY®

Administrative Office: 301 E 4TH STREET CINCINNATI, OHIO 45202 513-369-5000 FAX 513-723-2740

The number of persons authorized by this power of attorney is not more than FOUR

No. 0 20059

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the GREAT AMERICAN INSURANCE COMPANY, a corporation organized and existing under and by virtue of the laws of the State of Ohio, does hereby nominate, constitute and appoint the person or persons named below, each individually if more than one is named, its true and lawful attorney-in-fact, for it and in its name, place and stead to execute on behalf of the said Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; provided that the liability of the said Company on any such bond, undertaking or contract of suretyship executed under this authority shall not exceed the limit stated below.

	Name	Address	Limit of Power
KAY ARCHER PRICE		ALL OF	ALL
MILLIE A. WOOD		SHELBY, NORTH CAROLINA	\$100,000,000.
DEBOARH H. DAVIS			

JILL BLACK

This Power of Attorney revokes all previous powers issued on behalf of the attorney(s)-in-fact named above. IN WITNESS WHEREOF the GREAT AMERICAN INSURANCE COMPANY has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 29th day of AUGUST 2013 GREAT AMERICAN INSURANCE COMPANY Attest



Assistant Secretary

Divisional Senior Vice President DAVID C. KITCHIN (877-377-2405)

STATE OF OHIO, COUNTY OF HAMILTON - ss:

On this 29th day of AUGUST , 2013 , before me personally appeared DAVID C. KITCHIN, to me known, being duly sworn, deposes and says that he resides in Cincinnati, Ohio, that he is a Divisional Senior Vice President of the Bond Division of Great American Insurance Company, the Company described in and which executed the above instrument; that he knows the seal of the said Company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by authority of his office under the By-Laws of said Company, and that he signed his name thereto by like authority.



#### **KAREN L. GROSHEIM** NOTARY PUBLIC, STATE OF OHIO MY COMMISSION EXPIRES 02-20-16

4th

ren R. Grod

This Power of Attorney is granted by authority of the following resolutions adopted by the Board of Directors of Great American Insurance Company by unanimous written consent dated June 9, 2008.

RESOLVED: That the Divisional President, the several Divisional Senior Vice Presidents, Divisional Vice Presidents and Divisonal Assistant Vice Presidents, or any one of them, be and hereby is authorized, from time to time, to appoint one or more Attorneys-in-Fact to execute on behalf of the Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; to prescribe their respective duties and the respective limits of their authority; and to revoke any such appointment at any time.

RESOLVED FURTHER: That the Company seal and the signature of any of the aforesaid officers and any Secretary or Assistant Secretary of the Company may be affixed by facsimile to any power of attorney or certificate of either given for the execution of any bond, undertaking, contract of suretyship, or other written obligation in the nature thereof, such signature and seal when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

#### CERTIFICATION

I. STEPHEN C. BERAHA, Assistant Secretary of Great American Insurance Company, do hereby certify that the foregoing Power of Attorney and the Resolutions of the Board of Directors of June 9, 2008 have not been revoked and are now in full force and effect.



June day of

. 2015

Assistant Secretary