C203078

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

CONTRACT BONDS

FOR CONTRACT NO. C203078

WBS

35579.3.1 STATE FUNDED

T.I.P NO.

R-3405

COUNTY OF

WILKES

THIS IS THE

ROADWAY CONTRACT

ROUTE NUMBER

NC 18

LENGTH 3.333 MILES

LOCATION

NC-18 FROM SR-1002 (MOUNTAIN VIEW RD) TO SR-1717 (YELLOW

BANKS RD).

CONTRACTOR

CARL ROSE & SONS, INC.

ADDRESS

P.O. BOX 786

ELKIN, NC 286210786

BIDS OPENED

SEPTEMBER 18, 2012

CONTRACT EXECUTION ____

OCT 2 5 2012

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

PROPOSAL

FEMBER 18, 2012 AT 2:00 PM DATE AND TIME OF BID OPENING

CONTRACT ID

WBS

FEDERAL-O. STATE FUNDED

COUNTY

WILKES

T.I.P. NO.

R-3405

MILES

3.333

ROUTE NO.

NC 18

LOCATION

NC-18 FROM SR-1002 (MOUNTAIN VIEW RD) TO SR-1717 (YELLO

BANKS RD).

TYPE OF WORK

WIDENING, GRADING, DRAINAGE, PAVING, AND RETAINING WALL

RANSPO

RIDDERS 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. NOT WITHSTANDING THESE LIMITATIONS ON BIDDING. THE BIDDER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

PROPOSAL FOR THE CONSTRUCTION OF CONTRACT No. C203078 IN WILKES COUNTY, NORTH CAROLINA

Date	20
DEPARTMENT C	F TRANSPORTATION,
RALEIGH, N	ORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. C203078; 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. C203078 in <u>Wilkes 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

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PROJECT SPECIAL PROVISIONS

GENERAL

CONTRACT TIME AND LIQUIDATED DAMAGES:

(4-17-12)

SP1 G07 C

The date of availability for this contract is March 4, 2013.

The completion date for this contract is March 13, 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 **Two Hundred Dollars (\$200.00)** per calendar day. These liquidated damages will not be cumulative with any liquidated damages which may become chargeable under Intermediate Contract Time Number 1.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

(7-1-95) (Rev. 2-21-12)

108

SP1 G13 A

Except for that work required under the Project Special Provisions entitled *Planting*, *Reforestation* and/or *Permanent Vegetation Establishment*, included elsewhere in this proposal, the Contractor will be required to complete all work included in this contract and shall place and maintain traffic on same.

The date of availability for this intermediate contract time is March 4, 2013.

The completion date for this intermediate contract time is **September 15, 2015**.

The liquidated damages for this intermediate contract time are One Thousand Dollars (\$1,000.00) per calendar day.

Upon apparent completion of all the work required to be completed by this intermediate date, a final inspection will be held in accordance with Article 105-17 and upon acceptance, the Department will assume responsibility for the maintenance of all work except *Planting, Reforestation* and/or *Permanent Vegetation Establishment*. The Contractor will be responsible for and shall make corrections of all damages to the completed roadway caused by his planting operations, whether occurring prior to or after placing traffic through the project.

INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES:

(2-20-07)

108

SPI G14 C

The Contractor shall complete the required work of installing, maintaining and removing the traffic control devices for lane closures and restoring traffic to a 2-lane, 2-way traffic pattern. The Contractor shall not close or narrow a lane of traffic on NC 18 during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday through Friday from 6:00 A.M. to 8:00 A.M.

The time of availability for this intermediate contract time will be the time the Contractor begins to install traffic control devices required for the lane closures according to the time restrictions stated herein.

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

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

PERMANENT VEGETATION ESTABLISHMENT:

(2-16-12)

04

SP1 G16 '

Establish a permanent stand of the vegetation mixture shown in the contract. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish 80% coverage of permanent vegetation within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the applicable section of the 2012 Standard Specifications.

Once the Engineer has determined that 80% coverage of permanent vegetation has been established, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

Payment for Response for Erosion Control, Seeding and Mulching, Repair Seeding, Supplemental Seeding, Mowing, Fertilizer Topdressing, Silt Excavation, and Stone for Erosion Control will be made at contract unit prices for the affected items. Work required that is not represented by contract line items will be paid in accordance with Articles 104-7 or 104-3 of the 2012 Standard Specifications. No additional compensation will be made for maintenance and removal of temporary erosion control items.

<u>DELAY IN RIGHT OF ENTRY:</u> (7-1-95)

(7-1-95) 108 SP1 G22 B

The Contractor will not be allowed right of entry to the following parcels prior to the listed dates unless otherwise permitted by the Engineer.

Parcel No.	Property Owner	<u>Date</u>
001A	F&S Investments	11/02/12
001C	Don C. Houck	11/02/12
001	Austin Freeman	11/02/12
005	Doris Brooks Barnette	11/02/12
005A	William F. Brooks	11/02/12
006	Leonard L. Brooks	11/02/12
008	Barbara B. Hubbard	8/13/12
010	Bank of Granite	11/02/12
011	Gary B. Miller	12/31/12
013	Bertie Smithey	12/31/12
014	Tracy & Elizabeth Oliver	11/02/12
016	Donna Wagoner Everette	12/31/12
025	Kenneth & Rebecca Huffman	11/02/12
027	Ina Roten	12/31/12
040	William & Linda Laprad	11/02/12
047	Phillip & Susan Barker	11/02/12
048	Shirley B. Triplett	11/02/12
050	Geneva Bumgarner Heirs	11/02/12
065	Terry W. Kilby	11/02/12
067	Edith Kilby Estate	11/02/12
070	Bank of America	11/02/12
072	Wayne & Nancy Pardue	12/31/12
078	Christopher Scott Brown	11/02/12
080	Grace Farrington	11/02/12
082	Scott & Dana Combs	11/02/12
083	Charles & Mildred Call	11/02/12
084	Mildred Call	11/02/12
090	James & Hazel Miller	11/02/12
097	Willam B. Norris	12/31/12
098	Steve Joseph Whitley	12/31/12
099	Mulberry-Fairplains Water Association	11/02/12
102	Mulberry-Fairplains Water Association	11/02/12
103	Quincy David Foster Estate	11/02/12
104	Church of God Prophecy	9/14/12
108	Diane S. Stone et al	11/02/12
115	Robert & Joyce McRae	12/31/12
116	Ronald & Sure Cohn, et al	11/02/12
117	Larry & Diane Stone	11/02/12
118	Robert & Joyce McRae	11/02/12

133	Steve Joseph Whitley	: 11/02/12
140	Steve Joseph Whitley	11/02/12
141	Carmon & Linda Kilby	11/02/12
148	Baptist Home Church	. 12/31/12
149	Baptist Home Church	11/02/12
156	Marilyn Wright Pollock	11/02/12
160	Mark A. Brown	11/02/12
161	Joseph Allie Hayes, II	7/30/12
169	Kimberly Bell	11/02/12
171	Stacy Jones Glass	11/02/12
174	State of North Carolina	11/30/12
176	Robert & Joyce Miller	12/31/12
177A	Claude Brian & Christy Rhodes	11/02/12
178	Edith Church	11/02/12
195	Rod Shumate	11/02/12
200	Karen K. Lackey	11/02/12
201	Central Telephone Company	11/02/12
206	Robert & Joyce Miller	11/02/12
207	Gary Bruce Miller	11/02/12
208	Casildo V. Penaloza, et ux	11/02/12
211	Velma Rohla	11/02/12
219	Velma Rohla	11/02/12
220	. Velma Rohla	11/02/12
221	Crossroads Baptist Church	11/02/12
222	Council M. & Lois Shumate	11/02/12

MAJOR CONTRACT ITEMS:

(2-19-02) 104 SPI G28

The following listed items are the major contract items for this contract (see Article 104-5 of the 2012 Standard Specifications):

Line#	Description
29	Asphalt Concrete Base Course, Type B25.0B
30	Asphalt Concrete Intermediate Course, Type I19.0B
31	Asphalt Concrete Surface Course, Type S9.5B
90	16" Water Line

SPECIALTY ITEMS:

(7-1-95)(Rev. 1-17-12) 108-6 SP1 G37

Items listed below will be the specialty items for this contract (see Article 108-6 of the 2012 Standard Specifications).

Line#	Description
59 thru 60	Fencing
64 thru 68	Signing
75 thru 78	Long-Life Pavement Markings
and 82	

85	Permanent Pavement Markers
86 thru 104	Utility Construction
105 thru 128	Erosion Control

FUEL PRICE ADJUSTMENT:

(11-15-05) (Rev. 1-17-12) 109-8 SP1 G43

Revise the 2012 Standard Specifications as follows:

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

The base index price for DIESEL #2 FUEL is \$3.0348 per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

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

Description	Units	Fuel Usage Factor Diesel
Unclassified Excavation	Gal/CY	0.29
Borrow Excavation	Gal/CY	0.29
Class IV Subgrade Stabilization	Gal/Ton	0.55
Aggregate Base Course	Gal/Ton	0.55
Asphalt Concrete Base Course, Type	Gal/Ton	2.90
Asphalt Concrete Intermediate Course, Type	Gal/Ton	2.90
Asphalt Concrete Surface Course, Type	Gal/Ton	2.90
Open-Graded Asphalt Friction Course	Gal/Ton	2.90
Sand Asphalt Surface Course, Type	Gal/Ton	2.90
Aggregate for Cement Treated Base Course	Gal/Ton	0.55
Portland Cement for Cement Treated Base Course	. Gal/Ton	0.55
" Portland Cement Concrete Pavement	Gal/SY	0.245
Concrete Shoulders Adjacent to Pavement	Gal/SY	0.245

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 6-19-12) 108-2 SPI G58

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

,	Fiscal Year	Progress (% of Dollar Value)
2013	(7/01/12 - 6/30/13)	19% of Total Amount Bid
2014	(7/01/13 - 6/30/14)	47% of Total Amount Bid
2015	(7/01/14 - 6/30/15)	30% of Total Amount Bid
2016	(7/01/15- 6/30/16)	4% 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. 1-17-12)

102-15(J)

SP1 G66

Description

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

Definitions

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will <u>not</u> be used to meet either the MBE or WBE goal. No submittal of a Letter of Intent is required, unless the additional participation is used for banking purposes.

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

Contract Goals Requirement - The approved MBE and WBE participation at time of award, but not greater than the advertised contract goals for each.

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

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

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

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

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

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

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

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

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

Forms and Websites Referenced in this Provision

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

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all MBE/WBE firms working on the project. This form is for paper bid projects only. http://www.ncdot.org/doh/forms/files/DBE-IS.xls

RF-1 *MBE/WBE Replacement Request Form* - Form for replacing a committed MBE or WBE. https://apps.dot.state.nc.us/_includes/download/external.html?pdf=http%3A//www.ncdot.gov/doh/forms/files/RF-1.pdf

SAF Subcontract Approval Form - Form required for approval to sublet the contract. http://www.ncdot.org/doh/operations/dp chief eng/constructionunit/saf.xls

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.

https://apps.dot.state.nc.us/_includes/download/external.html?pdf=http%3A//www.ncdot.gov/doh/forms/files/JC-1.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://www.ncdot.org/doh/preconstruct/ps/contracts/letterofintent.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://www.ncdot.gov/doh/preconstruct/ps/word/MISC3.doc

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

 $http://www.ncdot.gov/business/ocs/goodfaith/excel/Ex_Subcontractor_Quote_Comparison.xls$

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 4.0%

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

(B) Women Business Enterprises 6.0%

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

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the MBE and WBE goals respectively. The Directory can be found at the following link. https://partner.ncdot.gov/VendorDirectory/default.html

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

Listing of MBE/WBE Subcontractors

At the time of bid, bidders shall submit <u>all</u> MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the MBE goal and the WBE goal will be considered committed, even though the listing shall include both committed MBE/WBE subcontractors and additional MBE/WBE subcontractors. Any additional MBE/WBE subcontractor participation above the goal for which letters of intent are received will follow the banking guidelines found elsewhere in this provision. All other additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward the Department's overall race-neutral goals. Only those firms with current MBE and

WBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of MBE and WBE participation. The Contractor shall indicate the following required information:

(A) Electronic Bids

Bidders shall submit a listing of MBE and WBE participation in the appropriate section of Expedite, the bidding software of Bid Express[®].

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

(B) Paper Bids

Blank forms will not be deemed to represent zero participation. Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.

- (1) If either the MBE or WBE goal is more than zero,
 - (a) Bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation, including the names and addresses on *Listing of MBE and WBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE and WBE participation for the contract.
 - (b) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety.
 - (c) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.

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

MBE or WBE Prime Contractor

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

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

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

Written Documentation – Letter of Intent

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

The documentation shall be received in the office of the State Contractor Utilization Engineer or at DBE@ncdot.gov no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization Engineer no later than 12:00 noon on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed MBE and WBE to be used toward the MBE and WBE goals, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the MBE/WBE goal. If the lack of this participation drops the commitment below either the MBE or WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the State Contractor Utilization Engineer or DBE@ncdot.gov no later than 12:00 noon on the eighth calendar day following opening of bids, unless the eighth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization Engineer no later than 12:00 noon on the next official state business day.

Submission of Good Faith Effort

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

A hard copy and an electronic copy of this information shall be received in the office of the State Contractor Utilization Engineer or at DBE@ncdot.gov no later than 12:00 noon of the sixth calendar day following opening of bids unless the sixth day falls on an official state holiday. In that situation, it would be due in the office of the State Contractor Utilization Engineer the next official state business day. If the contractor cannot send the information electronically, then one complete set and 9 copies of this information shall be received under the same time constraints above.

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

Consideration of Good Faith Effort for Projects with MBE/WBE Goals More Than Zero

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

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

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices 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. This includes, where appropriate, breaking 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.

- (C) Providing interested MBEs/WBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) (1) Negotiating in good faith with interested MBEs/WBEs. It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for a bidder's failure to meet the contract MBE or WBE goals, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening the Business Development Manager in the Business Opportunity and Work Force Development Unit to give notification of the bidder's inability to get MBE or WBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the MBE and WBE goal.

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

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

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

Non-Good Faith Appeal

The State Contractor Utilization Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the State Contractual Services Engineer or at DBE@ncdot.gov. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting MBE/WBE Participation Toward Meeting MBE/WBE Goals

(A) Participation

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

(B) Joint Checks

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

(C) Subcontracts (Non-Trucking)

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the MBE contract goal requirement. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE subcontracts to a non-MBE firm does <u>not</u> count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. If a MBE or WBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption may be subject to review by the Office of Inspector General, NCDOT.

(D) Joint Venture

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

(E) Suppliers

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

(F) Manufacturers and Regular Dealers

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

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

Commercially Useful Function

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors.

(B) MBE/WBE Utilization in Trucking

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

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

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

Banking MBE/WBE Credit

If the bid of the lowest responsive bidder exceeds \$500,000 and if the committed MBE/WBE participation submitted by Letter of Intent exceeds the algebraic sum of the MBE or WBE goal by \$1,000 or more, the excess will be placed on deposit by the Department for future use by the bidder. Separate accounts will be maintained for MBE and WBE participation and these may accumulate for a period not to exceed 24 months.

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

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

MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the Contractor's own forces or those of an affiliate. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination.

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

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

(A) Performance Related Replacement

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

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

- (1) Copies of written notification to MBEs/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBEs/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted.
 - (b) A description of the information provided to MBEs/WBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why MBE/WBE quotes were not accepted.
- (4) Efforts made to assist the MBEs/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

(1) When a committed MBE/WBE is decertified by the Department after the SAF (Subcontract Approval Form) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.

When a committed MBE/WBE is decertified prior to the Department receiving the SAF (Subcontract Approval Form) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another similarly certified MBE/WBE subcontractor to perform at least the same amount of work to meet the MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

Changes in the Work

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

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

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

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

Reports and Documentation

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

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

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

Reporting Minority and Women Business Enterprise Participation

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

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

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

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

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

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

At any time, the Engineer can request written verification of subcontractor payments.

(A) Electronic Bids Reporting

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

(B) Paper Bids Reporting

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

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the 2012 Standard Specifications may be cause to disqualify the Contractor.

SUBSURFACE INFORMATION:

(7-1-95) 450 SPI G112 C (Rev.)

SP1 G115

SP1 G125

Subsurface information is available on the retaining wall portion of this project only.

LOCATING EXISTING UNDERGROUND UTILITIES:

(3-20-12)

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.

MAINTENANCE OF THE PROJECT:

(11-20-07) (Rev. 1-17-12) 104-10

Revise the 2012 Standard Specifications as follows:

Page 1-35, Article 104-10 Maintenance of the Project, line 25, add the following after the first sentence of the first paragraph:

All guardrail/guiderail within the project limits shall be included in this maintenance.

Page 1-35, Article 104-10 Maintenance of the Project, line 30, add the following as the last sentence of the first paragraph:

The Contractor shall perform weekly inspections of guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project in accordance with this article, such repair or replacement shall be performed within 7 consecutive calendar days of such inspection report.

Page 1-35, Article 104-10 Maintenance of the Project, lines 42-44, replace the last sentence of the last paragraph with the following:

The Contractor will not be directly compensated for any maintenance operations necessary, except for maintenance of guardrail/guiderail, as this work will be considered incidental to the work covered by the various contract items. The provisions of Article 104-7, Extra Work, and Article 104-8, Compensation and Record Keeping will apply to authorized maintenance of guardrail/guiderail. Performance of weekly inspections of guardrail/guiderail, and the damage reports required as described above, will be considered to be an incidental part of the work being paid for by the various contract items.

TWELVE MONTH GUARANTEE:

(7-15-03) 108 SP1 G145

- (A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.
- (B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Contractor would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force the Contractor to return to the project to make repairs or perform additional work that the Department would normally compensate the Contractor for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

OUTSOURCING OUTSIDE THE USA:

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

SP1 G150

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

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

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

GIFTS FROM VENDORS AND CONTRACTORS:

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

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

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

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

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

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:

(1-16-07) (Rev 9-18-12)

105-16, 225-2, 16

SP1 G180

General

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

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

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

(D) Certified Designer - Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

Roles and Responsibilities

- (A) Certified Erosion and Sediment Control/Stormwater Supervisor The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) Manage Operations Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
 - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (d) Implement the erosion and sediment control/stormwater site plans requested.
 - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
 - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
 - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
 - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
 - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
 - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
 - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.

- (2) Requirements set forth under the NPDES Permit The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references NCG010000, General Permit to Discharge Stormwater under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
 - (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
 - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days, twice weekly for construction related *Federal Clean Water Act, Section 303(d)* impaired streams with turbidity violations, and within 24 hours after a significant rainfall event of 0.5 inch that occurs within a 24 hour period.
 - (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.
 - (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
 - (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
 - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
 - (g) Provide secondary containment for bulk storage of liquid materials.
 - (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
 - (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
 - (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
 - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.

- (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
- (d) Conduct the inspections required by the NPDES permit.
- (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
- (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
- (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
- (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
- (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
- (j) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.
- (B) Certified Foreman At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
 - (1) Foreman in charge of grading activities
 - (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
 - (3) Foreman in charge of utility activities

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

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

- (C) Certified Installers Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:
 - (1) Seeding and Mulching
 - (2) Temporary Seeding
 - (3) Temporary Mulching
 - (4) Sodding
 - (5) Silt fence or other perimeter erosion/sediment control device installations
 - (6) Erosion control blanket installation
 - (7) Hydraulic tackifier installation
 - (8) Turbidity curtain installation
 - (9) Rock ditch check/sediment dam installation

- (10) Ditch liner/matting installation
- (11) Inlet protection
- (12) Riprap placement
- (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
- (14) Pipe installations within jurisdictional areas
- If a Level I Certified Installer is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.
- (D) Certified Designer Include the certification number of the Level III-B Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III-A Certified Designer on the design of the project erosion and sediment control/stormwater plan.

Preconstruction Meeting

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

Ethical Responsibility

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

Revocation or Suspension of Certification

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

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

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

- (H) Dismissal from a company for any of the above reasons.
- (I) Suspension or revocation of one's certification by another entity.

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

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

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

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

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

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

Measurement and Payment

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

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:

(2-20-07)

05-16, 230, 801

SP1 G181

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

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

(A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or

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

During the Environmental Assessment required by Article 230-4 of the 2012 Standard Specifications, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

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

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

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

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

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

EMPLOYMENT:

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

SP1 G184

Revise the 2012 Standard Specifications as follows:

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

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

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

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

(9-18-12

SP1 G185

Revise the 2012 Standard Specifications as follows:

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

PROJECT SPECIAL PROVISIONS

ROADWAY

CLEARING AND GRUBBING - METHOD II:

(9-17-02) (Rev. 1-17-12)

200

SP2 R02A

Perform clearing on this project to the limits established by Method "II" shown on Standard Drawing No. 200.02 of the 2012 Roadway Standard Drawings.

BUILDING AND UNDERGROUND STORAGE TANK REMOVAL:

(1-1-02) (Rev. 1-17-12)

215

SP2 R15 C

Remove the buildings, underground storage tanks and appurtenances listed below in accordance with Section 215 of the 2012 Standard Specifications:

Building Removal No. 1

Parcel 011 – Left of Survey Station 30+50 to 31+02, Line -L-

1SBLK Business (1,047 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 2

Parcel 051 – Left of Survey Station 54+59 to 55+37, Line -L-

1SBLK Business – Approximately 4,560 SF – 2,280 SF Upstairs and 2,280 SF Basement

Building Removal No. 3

Parcel 087 - Left of Survey Station 72+78 to 73+16, Line -L-

1SMB (1,768 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 4

Parcel 098 - Right of Survey Station 77+15 to 77+77, Line -L-

1SBLK Business (3,112 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 5

Parcel 104 - Right of Survey Station 82+35, Line -L-

Wood Sign

Building Removal No. 6

Parcel 105 – Left of Survey Station 83+50 to 83+71, Line -L-

1SBLK Building (216 SF)

Building Removal No. 7

Parcel 108 - Left of Survey Station 87+14 to 87+69, Line -L-

2SBKB (2,475 SF), Steel Stairs (21 SF), Steel Balcony (15 SF)

Building Removal No. 8

Parcel 111 – Right of Survey Station 89+57to 90+14, Line -L-1SFD (1,040 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 9

Parcel 113 – Right of Survey Station 90+70 to 91+15, Line -L-1SFD (1,096 SF), Front Porch (210 SF), Back Porch (28 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 10

Parcel 115 – Right of Survey Station 92+08 to 92+48, Line -L-1SFD (1,038 SF), Covered Front Porch (86 SF)

Building Removal No. 11

Parcel 118 – Right of Survey Station 94+25 to 94+55, Line -L-1SBKD (1,143 SF)

Building Removal No. 12

Parcel 128 – Left of Survey Station 100+00 to 100+80, Line -L-1SF Business w/2 Apartment Units (2,853 SF), Wood Canopy (392 SF), Concrete Porch and Steps (81 SF), Septic System/Tail Lines, Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 13

Parcel 139 – Right of Survey Station 105+30 to 105+82, Line -L-1SBLK Building (2,076 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 14

Parcel 150 – Right of Survey Station 122+60 to 123+51, Line -L-1SFD (1,900 SF), Walk Up Area (312 SF), Carport/Garage (672 SF), Handicap Ramp (345 SF), Deck (72 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 15

Parcel 176 – Right of Survey Station 148+88 to 149+17, Line -L-1SFD (1,016 SF), Front Porch (145 SF), Rear Porch (145 SF), Partially Outside of Right of Way and/or Construction Limits

Building Removal No. 16

Parcel 207 – Left of Survey Station 172+37 to 180+00, Line -L-1SF Business (991 SF), 1SBLK Rest Room (65 SF), Partially Outside of Right of Way and/or Construction Limits

When the description of the work for an item indicates a building partially inside and partially outside the right of way and/or construction area, but does not require the building to be cut off, the entire building shall be removed.

SHOULDER AND FILL SLOPE MATERIAL:

(5-21-02)

235 560

SP2 R45 A

Description

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 560 and Section 235 of the 2012 Standard Specifications.

Measurement and Payment

Where the material has been obtained from an authorized stockpile or from a borrow source and *Borrow Excavation* is not included in the contract, no direct payment will be made for this work, as the cost of this work will be part of the work being paid at the contract lump sum price for *Grading*. If *Borrow Excavation* is included in this contract and the material has been obtained from an authorized stockpile or from a borrow source, measurement and payment will be as provided in Section 230 of the 2012 Standard Specifications for Borrow Excavation.

ASPHALT PAVEMENTS - SUPERPAVE:

(6-19-12

605

SP6 R01

Revise the 2012 Standard Specifications as follows:

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

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

TABLE 605-1 APPLICATION RATES FOR TACK COAT

Evisting Course	Target Rate (gal/sy)
Existing Surface	Emulsified Asphalt
New Asphalt	0.04 ± 0.01
Oxidized or Milled Asphalt	0.06 ± 0.01
Concrete	0.08 ± 0.01

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

TABLE 605-2
APPLICATION TEMPERATURE FOR TACK COAT

MILLICATION IEMILENATURE FOR THEIR COM		
Temperature Range		
350 - 400°F		
130 - 160°F		

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: http://www.ncdot.org/doh/operations/materials/pdf/wma.pdf.

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:

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

609

SP6 R15

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

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

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

ASPHALT PLANT MIXTURES:

(7-1-95)

609

SP6 R20

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

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00)

620

SP6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 Standard Specifications.

The base price index for asphalt binder for plant mix is \$590.33 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on August 1, 2012.

FINAL SURFACE TESTING NOT REQUIRED:

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

SP6 R45

Final surface testing is not required on this project.

TEMPORARY WOVEN WIRE FENCE:

(7-1-95) (Rev. 7-18-06)

866

SP8 R85

Description

Construct a temporary 48" woven wire fence at locations directed by the Engineer. Use only fabric and posts that have been approved by the Engineer. Provide post spacing of 12 feet. Construct the fence and maintain it with the fabric taut and securely fastened to the posts at all times.

After the fence has served its purpose and is no longer needed, as determined by the Engineer, it becomes the property of the Contractor.

Measurement and Payment

Temporary "Woven Wire Fence, Complete with Posts will be measured and paid as the actual number of linear feet of fence constructed and accepted, measured in place from center of end post to center of end post. Such price and payment will be full compensation for all materials, labor, fence maintenance, and incidentals necessary to satisfactorily complete the work.

Payment will be made under:

Pay Item

Pay Unit

Temporary "Woven Wire Fence, Complete with Posts

Linear Foot

DETECTABLE WARNINGS FOR PROPOSED CURB RAMPS:

(6-15-10) (Rev. 8-16-11)

SP8 R126

Description

Construct detectable warnings consisting of integrated raised truncated domes on proposed concrete curb ramps in accordance with the 2012 Standard Specifications, plan details, the requirements of the 28 CFR Part 36 ADA Standards for Accessible Design and this provision.

Materials

Detectable warning for proposed curb ramps shall consist of integrated 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 cast into the concrete of the curb ramps. The material shall have an integral color throughout the thickness of the material. The detectable warning shall include fasteners or anchors for attachment in the concrete 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 proposed concrete curb ramps, 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 in proposed concrete curb ramps in accordance with the manufacturer's recommendations.

Measurement and Payment

Detectable Warnings installed for construction of proposed curb ramps will not be paid for separately. Such payment will be included in the price bid for *Concrete Curb Ramps*.

STREET SIGNS AND MARKERS AND ROUTE MARKERS:

(7-1-95) 900 SP9 R02

Move any existing street signs, markers, and route markers out of the construction limits of the project and install the street signs and markers and route markers so that they will be visible to the traveling public if there is sufficient right of way for these signs and markers outside of the construction limits.

Near the completion of the project and when so directed by the Engineer, move the signs and markers and install them in their proper location in regard to the finished pavement of the project.

Stockpile any signs or markers that cannot be relocated due to lack of right of way, or any signs and markers that will no longer be applicable after the construction of the project, at locations directed by the Engineer for removal by others.

The Contractor shall be responsible to the owners for any damage to any street signs and markers or route markers during the above described operations.

No direct payment will be made for relocating, reinstalling, and/or stockpiling the street signs and markers and route markers as such work shall be considered incidental to other work being paid for by the various items in the contract.

MATERIALS: (2-21-12) (Rev. 9-18-12)

21-12) (Rev. 9-18-12) 1005, 1081, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

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

TABLE 1000-1 REQUIREMENTS FOR CONCRETE											
	: 2	Maxir		er-Cement		Con	sistency . Slump		Cemen	t Content	t
Class of Concrete	Min. Comp Strength at 28 days	Air-Entrained Concrete		Non Air- Entrained Concrete		Vibrated	Non- Vibrated	Vibrated		Non- Vibrated	
• 0	Min at Si	Rounded Aggre-gate	Angular Aggre- gate	Rounded Aggre-gate	Angular Aggre- gate	Vib		Min.	Max.	Min.	Max.
Units	psi				M	inch	inch	lb/cy	lb/cy	: lb/cy	lb/cy
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-
AA Slip Form	4,500	0.381	0.426	-	-	1.5	: -	639	. 715	· •	-
Drilled Pier	4,500	. -	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	, 800
Α	3,000	0.488	0.532	0.550	0.594	3.5	4	564	· -	602	-
В	2,500	0.488	0.567	0.559	0.630	2.5	: 4	508	-	545	-
B Slip Formed	2,500	0.488	0.567	-	-	1.5	. <u>-</u>	508	_	_	-
Sand Light- weight	4,500	_	0.420		-	. 4		715	; -	-	-
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-		: =
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed		Flow- able	-	: : -	40	100
Flowable Fill	. 125	as needed	as needed	as needed	as needed	-	Flow- able	-	. <u>-</u>	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	<u>-</u>	-

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

Light- weight ^C	ABC (M)	ABC	9	14M	78M	67	6M	57M	57	5	467M	: . 4	Std. Size#	:
	•	•			•			1			100	100	2"	:
: 1	100	100		ı			•	8	100	100	100	100	1/2"	:
•	75- 100	75- 97		1	ı	100	100	95- 100	95- 100	100	,	20- . 55	7	· :
	•	•			100	90 <u>-</u>	100		•	20- 55	35 <u>-</u> 70	0-15	3/4"	
100	45- 79	80	•		98- 100	1	20- 55	25- 45	25- 60	0-10	-1		1/2"	Percentage of Total by Weight Passing
100	ı	ı	100	100	75- 100	20- 55	0-20		1	0-5	0-30	0-5	3/8"	tage o
.40	20 <u>-</u>	35- 55	100	35- 70	20- 45	0-10	0-8	0-10	0-10	. 1	0-5		#	f Tota
0-20	•	ı	40	5-20	0-15	0-5	ı	0-5	0-5	:		· •	#8	ıl by V
	0- 25	25- 45	•	ı		ı	. ,		,	,			#10	Veigh
0-10	•	•	0-10	0-8	ı	ı	ı			: I		· · · · · ·	#16	t Pass
•	•	14- 30	. •	ı	ı	ı	ı		ı	•			#40	ing
0-2.5	0- 12 ^B	12 B	A	>	A	Α	A	A :	Α	A	A	>	#200	
AST	Maintenance Stabilization	Aggregate Base Course, Aggregate Stabilization	AST	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains	AST, Str. Concrete, Asphalt Plant Mix	AST	AST, Concrete Pavement	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone	AST, Sediment Control Stone	Asphalt Plant Mix	Asphalt Plant Mix	Remarks	

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

TABLE 1078-1 REQUIREMENTS FOR CONCRETE					
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 10-162, Subarticle 1081-1(A) Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A.

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

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

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

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

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace

Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

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

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

SELECT MATERIAL, CLASS III, TYPE 3:

(1-17-12) 1016, 104

SP10 R05

Revise the 2012 Standard Specifications as follows:

Page 10-39, Article 1016-3, CLASS III, add the following after line 14:

Type 3 Select Material

Type 3 select material is a natural or manufactured fine aggregate material meeting the following gradation requirements and as described in Sections 1005 and 1006:

Percentage of Total by Weight Passing							
3/8"	#4	#8	#16	#30	#50	#100	#200
100	95-100	65-100	35-95	15-75	5-35	0-25	0-8

Page 10-39, Article 1016-3, CLASS III, line 15, replace "either type" with "Type 1, Type 2 or Type 3".

Page 10-62, Article 1044-1, line 36, delete the sentence and replace with the following:

Subdrain fine aggregate shall meet Class III select material, Type 1 or Type 3.

Page 10-63, Article 1044-2, line 2, delete the sentence and replace with the following:

Subdrain coarse aggregate shall meet Class V select material.

PERMANENT SEEDING AND MULCHING:

(7-1-95) 1660

SP16 R02

The Department desires that permanent seeding and mulching be established on this project as soon as practical after slopes or portions of slopes have been graded. As an incentive to obtain an early stand of vegetation on this project, the Contractor's attention is called to the following:

For all permanent seeding and mulching that is satisfactorily completed in accordance with the requirements of Section 1660 in the 2012 Standard Specifications and within the following percentages of elapsed contract times, an additional payment will be made to the Contractor as an incentive additive. The incentive additive will be determined by multiplying the number of acres of seeding and mulching satisfactorily completed times the contract unit bid price per acre for Seeding and Mulching times the appropriate percentage additive.

Percentage of Elapsed Contract Time	Percentage Additive
0% - 30%	30%
30.01% - 50%	15%

Percentage of elapsed contract time is defined as the number of calendar days from the date of availability of the contract to the date the permanent seeding and mulching is acceptably completed divided by the total original contract time.

PEDESTRIAN SAFETY RAIL:

Description

Furnish and install pedestrian safety rail at the locations shown in the plans, in accordance with the detail in the plans and as directed by the Engineer.

Measurement and Payment

Pedestrian Safety Rail will measured and paid for as the actual number of linear feet of safety rail measured along the top of the rail to the nearest 0.1 of a foot. Such price and payment shall be full compensation for fabricating, furnishing, installing, painting and all incidentals necessary to satisfactorily install the safety rail.

Payment will be made under:

Pay Item
Pedestrian Safety Rail

Pay Unit Linear Foot

CONTAMINATED SOIL (7-26-2012)

The Contractor's attention is directed to the fact that soil contaminated with petroleum hydrocarbon compounds exists within the project area. The known areas of contamination are indicated on corresponding plan sheets. Information relating to these contaminated areas, sample locations, and investigation reports are available at the following web address by navigating to the correct letting year and month then selecting, "Plans and Proposals", "Wilkes R-3405", "GeoEnvironmental":

http://dotw-xfer01.dot.state.nc.us/dsplan/

The Contractor shall only excavate those soils which the Engineer designates necessary to complete a particular task. The Engineer shall determine if soil is contaminated based on petroleum odors and unusual soil staining. Contaminated soil not required to be excavated is to remain in place and undisturbed. Undisturbed soil shall remain in place, whether contaminated or not. The Contractor shall load, haul and dispose of contaminated soil with the pay item listed below. The Contractor shall transport all contaminated soil excavated from the project to a facility licensed to accept contaminated soil.

In the event that the Contractor chooses to stockpile the soil temporarily, the stockpile shall be created within the property boundaries of the source material and in accordance with the Stockpile Detail found in the plans. If the volume of contaminated material exceeds available space on site, the Contractor shall obtain a permit from the NCDENR UST Section's Winston Salem Regional Office for off-site temporary storage. Stockpiling contaminated soil will be incidental to the project. The Contractor shall provide disposal manifests and weigh tickets to the Engineer for review and approval. The Engineer will in turn provide the Geotechnical Engineering Unit with a copy of the disposal manifests and weigh tickets for their records.

Measurement and Payment:

The quantity of contaminated soil hauled, and disposed of shall be the actual number of tons of material, which has been acceptably transported and weighed with certified scales as documented by disposal manifests and weigh tickets. The quantity of contaminated soil, measured as provided above, shall be paid for at the contract unit price per ton for "Hauling, and Disposal of Contaminated Soil".

The above price and payment shall be full compensation for all work covered by this section, including, but not limited to loading, transportation, weighing, laboratory testing, disposal, equipment, decontamination of equipment, labor, and personal protective equipment. Excavation will be paid under the lump sum grading pay item.

Payment shall be made under:

Pay Item

Hauling and Disposal of Petroleum Contaminated Soil

Pay Unit Ton

1.0 GENERAL

Construct soldier pile retaining walls consisting of driven or drilled-in steel H-piles with either precast concrete panels in between piles or a cast-in-place reinforced concrete face attached to front of piles unless required otherwise in the plans. Timber lagging is typically used for temporary support of excavations during construction. Provide cast-in-place reinforced concrete coping as required. Design and construct soldier pile retaining walls based on actual elevations and wall dimensions in accordance with the contract and accepted submittals. Use a prequalified Cantilever Wall Contractor to construct soldier pile retaining walls. Define "soldier pile wall" as a soldier pile retaining wall. Define "panel" as a precast concrete panel and "concrete facing" as a cast-in-place reinforced concrete face. Define "pile" as a steel H-pile and "coping" as cast-in-place concrete coping.

2.0 **MATERIALS**

Refer to the Standard Specifications.

Item	Section
Anchor Pins	1056-2
Curing Agents	1026
Flowable Fill, Excavatable	1000-6
Geosynthetics	1056
Joint Materials	1028
Masonry	1040
Neat Cement Grout, Nonshrink	1003
Portland Cement Concrete	1000
Reinforcing Steel	1070
Retaining Wall Panels	1077
Select Material, Class VI	1016
Shoulder Drain Materials	816-2
Steel H-Piles	1084-1
Untreated Timber	1082-2
Welded Stud Shear Connectors	1072-6
Wire Staples	1060-8(D)

Provide Type 2 geotextile for separation geotextiles and Class VI select material (standard size No. 57 stone) for leveling pads and backfilling. Use Class A concrete for concrete facing and coping and Class A concrete that meets Article 450-2 of the Standard Specifications for drilled-in piles. Use untreated timber with a thickness of at least 3" and a bending stress of at least 1,000 psi for timber lagging.

Unless required otherwise in the contract, produce panels with a smooth flat final finish that meets Article 1077-11 of the Standard Specifications. When noted in the plans, produce panels with an exposed aggregate finish that meets Article 1077-12 of the Standard Specifications. Produce panels within 1/4" of the panel dimensions shown in the accepted submittals. Damaged panels with excessive discoloration, chips or cracks as

determined by the Engineer will be rejected.

For soldier pile walls with panels, galvanize piles in accordance with Section 1076 of the Standard Specifications. When noted in the plans, paint galvanized piles in accordance with Article 442-12 of the Standard Specifications. Apply the following system to paint galvanized piles gray with waterborne paints that meet Article 1080-11 of the Standard Specifications. For painting galvanized piles other colors, contact the Materials and Tests (M&T) Unit for an appropriate paint system.

GRAY PAINT SYSTEM FOR GALVANIZED PILES							
Coat	Color	Dry/Wet Film Thickness (Mils					
			Max.				
Intermediate	Brown	3.0 DFT	5.0 DFT				
Stripe	White	4.0 WFT	7.0 WFT				
Topcoat	Gray	2.0 DFT	4.0 DFT				
Total		5.0 DFT	9.0 DFT				

Store steel materials on blocking at least 12" above the ground and protect it at all times from damage; and when placing in the work make sure it is free from dirt, dust, loose mill scale, loose rust, paint, oil or other foreign materials. Load, transport, unload and store soldier pile wall materials so materials are kept clean and free of damage.

3.0 PRECONSTRUCTION REQUIREMENTS

A. Soldier Pile Wall Surveys

The Retaining Wall Plans show a plan view, typical sections, details, notes and an elevation or profile view (wall envelope) for each soldier pile wall. Before beginning soldier pile wall design, survey existing ground elevations shown in the plans and other elevations in the vicinity of soldier pile wall locations as needed. Based on these elevations, finished grades and actual soldier pile wall dimensions and details, submit revised wall envelopes for acceptance. Use accepted wall envelopes for design.

B. Soldier Pile Wall Designs

Submit 11 copies of working drawings and 3 copies of design calculations and a PDF copy of each for soldier pile wall designs at least 30 days before the preconstruction meeting. Do not begin soldier pile wall construction until a design submittal is accepted.

Use a prequalified Cantilever Wall Design Consultant to design soldier pile walls. Provide designs sealed by a Design Engineer approved as a Geotechnical Engineer (key person) for the Cantilever Wall Design Consultant.

Design soldier pile walls in accordance with the plans and Article 11.8 of the AASHTO LRFD Bridge Design Specifications unless otherwise required. Design soldier pile walls for seismic if walls are located in seismic zone 2 based on Figure 2-1 of the

Structure Design Manual. Design soldier pile walls for a maximum deflection of 2" or 1.5% of H, whichever is less, with H as shown in the plans.

When noted in the plans, design soldier pile walls for a live load (traffic) surcharge of 250 lb/sf in accordance with Article 11.5.5 of the AASHTO LRFD specifications. For steel beam guardrail with 8 ft posts above soldier pile walls, analyze walls for a horizontal load (P_{H1}) of 300 lb/ft of wall in accordance with Figure 3.11.6.3-2(a) of the AASHTO LRFD specifications. For concrete barrier rail above soldier pile walls, analyze walls for a P_{H1} of 500 lb/ft of wall in accordance with Figure 3.11.6.3-2(a).

Use a maximum H-pile spacing of 10 ft. At the Contractor's option, use driven or drilled-in piles for soldier pile walls with concrete facing unless otherwise required. For soldier pile walls with panels, use drilled-in piles unless noted otherwise in the plans. Use concrete or grout for embedded portions of drilled-in piles. Install drilled-in piles by excavating holes with diameters that will result in at least 3" of clearance all around piles.

Provide temporary support of excavations for excavations more than 4 ft deep and timber lagging in accordance with the AASHTO Guide Design Specifications for Bridge Temporary Works. At the Contractor's option and when noted in the plans, provide temporary slopes instead of temporary support of excavations. Do not extend temporary slopes outside right-of-way or easement limits. Except for fill sections or when using temporary slopes, backfill voids behind panels, lagging and piles with No. 57 stone. Place separation geotextile between No. 57 stone and overlying fill or pavement sections except when concrete pavement, full depth asphalt or cement treated base is placed directly on stone.

At the Contractor's option, use panels or concrete facing unless required otherwise in the plans. Design panels and concrete facing in accordance with the plans and Section 5 of the AASHTO LRFD Bridge Design Specifications. Provide reinforcing steel of sufficient density to satisfy Article 5.7.3.4 of the AASHTO LRFD specifications. Attach concrete facing to front of H-piles with welded stud shear connectors. Use panels or concrete facing at least 6" thick and extend facing at least 6" above where the grade intersects back of concrete facing unless required otherwise in the plans.

Use No. 57 stone for aggregate leveling pads. Use 6" thick leveling pads beneath panels and concrete facing. Unless required otherwise in the plans, embed top of leveling pads at least 12" below bottom of walls shown in the plans.

Provide wall drainage systems consisting of geocomposite drain strips, drains and outlet components. Place drain strips with a horizontal spacing of no more than 10 ft and center strips between adjacent piles. Attach drain strips to front of timber lagging or back of panels or concrete facing and connect strips to leveling pads. Locate a continuous aggregate shoulder drain along the base of panels or concrete facing in front of piles and leveling pads. Provide drains and outlet components in accordance with Standard Drawing No. 816.02 of the *Roadway Standard Drawings*.

Unless required otherwise in the plans, use cast-in-place reinforced concrete coping at top of soldier pile walls with panels. Extend coping at least 6" above where the grade intersects back of coping unless required otherwise in the plans. Use coping dimensions shown in the plans. At the Contractor's option, connect coping to panels with dowels or extend coping down back of panels. When concrete barrier rail is required above soldier pile walls, use concrete barrier rail with moment slab as shown in the plans.

Submit working drawings and design calculations for acceptance in accordance with Article 105-2 of the *Standard Specifications*. Submit working drawings showing plan views, wall profiles with pile locations, typical sections and details of piles, drainage, temporary support, leveling pads, panels and concrete facing. If necessary, include details on working drawings for coping, concrete barrier rail with moment slab and obstructions extending through walls or interfering with piles, barriers or moment slabs. Submit design calculations including deflection calculations for each wall section with different surcharge loads, geometry or material parameters. Include analysis of temporary conditions in design calculations. When designing soldier pile walls with computer software, a hand calculation is required for the tallest wall section.

C. Soldier Pile Wall Construction Plan

Submit 4 copies and a PDF copy of a soldier pile wall construction plan at least 30 days before the preconstruction meeting. Do not begin soldier pile wall construction until the construction plan submittal is accepted. Provide project specific information in the soldier pile wall construction plan including a detailed construction sequence. For driven piles, submit proposed pile driving methods and equipment in accordance with Subarticle 450-3(D)(2) of the *Standard Specifications*. For drilled-in piles, submit installation details including drilling equipment and methods for stabilizing and filling holes. Provide details in the construction plan of excavations including temporary support and any other information shown in the plans or requested by the Engineer.

If alternate construction procedures are proposed or necessary, a revised soldier pile wall construction plan submittal may be required. If the work deviates from the accepted submittal without prior approval, the Engineer may suspend soldier pile wall construction until a revised plan is accepted.

D. Preconstruction Meeting

Before starting soldier pile wall construction, hold a preconstruction meeting to discuss the construction and inspection of the soldier pile walls. Schedule this meeting after all soldier pile wall submittals have been accepted. The Resident or Bridge Maintenance Engineer, Bridge Construction Engineer, Geotechnical Operations Engineer, Contractor and Cantilever Wall Contractor Superintendent will attend this preconstruction meeting.

4.0 Construction Methods

Control drainage during construction in the vicinity of soldier pile walls. Direct run off

away from soldier pile walls and areas above and behind walls. Contain and maintain No. 57 stone and backfill and protect material from erosion.

Notify the Engineer before blasting in the vicinity of soldier pile walls. Perform blasting in accordance with the contract. Unless required otherwise in the plans, install foundations located behind soldier pile walls before beginning wall construction if the horizontal distance to the closest foundation is less than the height of the tallest wall section.

Install soldier pile walls in accordance with the accepted submittals and as directed. Do not excavate behind soldier pile walls unless a temporary slope is shown in the accepted submittals. If overexcavation occurs and is not approved, repair walls with an approved method and a revised soldier pile wall design or construction plan may be required.

A. Piles

If a temporary slope is shown in the accepted submittals, excavate the slope before installing piles. Otherwise, install piles before excavating for soldier pile walls. Weld stud shear connectors to piles in accordance with Article 1072-6 of the *Standard Specifications*.

Install piles within 1" of horizontal and vertical alignment shown in the accepted submittals and with no negative batter (piles leaning forward). Minimize alignment variations between piles for soldier pile walls with concrete facing since variations can result in thicker concrete facing in some locations in order to provide the minimum required facing thickness elsewhere. Locate piles so the minimum required concrete facing thickness, if applicable, and roadway clearances are maintained for variable pile alignments.

Install piles with the minimum required embedment in accordance with Subarticles 450-3(D) and 450-3(E) of the *Standard Specifications*. Piles may be installed with a vibratory hammer as approved by the Engineer. Do not splice piles. If necessary, cut off piles at elevations shown in the accepted submittals along a plane normal to the pile axis.

Use pile excavation to install drilled-in piles. If overexcavation occurs, fill to required elevations with No. 57 stone before setting piles. After filling holes with concrete or grout to the elevations shown in the accepted submittals, remove any fluids and fill remaining portions of holes with flowable fill. Cure concrete or grout at least 7 days before excavating.

Notify the Engineer if refusal is reached before pile excavation or driven piles attain the minimum required embedment. When this occurs, a revised soldier pile wall design or construction plan submittal may be required.

B. Excavation

If a temporary slope is shown in the accepted submittals, excavate the slope as shown. Otherwise, excavate in front of piles from the top down in accordance with the accepted

submittals. Excavate in staged horizontal lifts with a maximum height of 5 ft. Use timber lagging or an alternate approved method for temporary support of excavations in accordance with the accepted submittals.

Install temporary support within 24 hours of excavating each lift unless otherwise approved. The installation may be delayed if it can be demonstrated that delays will not adversely affect excavation stability. If excavation faces will be exposed for more than 24 hours, use polyethylene sheets anchored at top and bottom of lifts to protect excavation faces from changes in moisture content.

If an excavation becomes unstable at any time, suspend soldier pile wall construction and temporarily stabilize the excavation by immediately placing an earth berm up against the unstable excavation face. When this occurs, repair walls with an approved method and a revised soldier pile wall design or construction plan may be required.

Remove flowable fill and material in between piles as necessary to install timber lagging. Position lagging with at least 3" of contact in the horizontal direction between the lagging and pile flanges. Do not excavate the next lift until temporary support for the current lift is accepted.

C. Wall Drainage Systems

Install wall drainage systems as shown in the accepted submittals and in accordance with Section 816 of the *Standard Specifications*. Place geocomposite drain strips with the geotextile side facing away from wall faces. Secure drain strips so strips are in continuous contact with surfaces to which they are attached and allow for full flow the entire height of soldier pile walls. Discontinuous drain strips are not allowed. If splices are needed, overlap drain strips at least 12" so flow is not impeded. Connect drain strips to leveling pads by embedding strip ends at least 4" into No. 57 stone.

D. Leveling Pads, Panels, Coping and Concrete Facing

Construct aggregate leveling pads at elevations and with dimensions shown in the accepted submittals. Compact leveling pads with a vibratory compactor to the satisfaction of the Engineer.

Set panels against pile flanges as shown in the accepted submittals. Position panels with at least 2" of contact in the horizontal direction between the panels and pile flanges. If contact cannot be maintained, remove panels, fill gaps with joint filler and reset panels. Securely support panels until enough No. 57 stone or backfill is placed to hold panels in place.

Construct coping as shown in the accepted submittals and Subarticle 452-3(C) of the *Standard Specifications*. When single faced precast concrete barrier is required in front of and against soldier pile walls, stop coping just above barrier so coping does not interfere with placing barrier up against wall faces.

Construct concrete facing in accordance with the accepted submittals and Section 420

of the Standard Specifications. Do not remove forms until concrete attains a compressive strength of at least 2,400 psi. Unless required otherwise in the plans, provide a Class 2 surface finish for concrete facing that meets Subarticle 420-17(F) of the Standard Specifications. Construct concrete facing joints at a maximum spacing of 30 ft unless required otherwise in the plans. Make 1/2" thick expansion joints that meet Article 420-10 of the Standard Specifications for every third joint and 1/2" deep grooved contraction joints that meet Subarticle 825-11(B) for the remaining joints. Stop reinforcing steel for concrete facing 2" on either side of expansion joints.

If a brick veneer is required, construct brick masonry in accordance with Section 830 of the *Standard Specifications*. Anchor brick veneers to soldier pile walls with approved brick to concrete type anchors in accordance with the manufacturer's instructions. Space anchors no more than 16" apart in the vertical direction and no more than 32" apart in the horizontal direction with each row of anchors staggered 16" from the row above and below.

Seal joints above and behind soldier pile walls between coping or concrete facing and ditches or concrete slope protection with silicone sealant.

E. Backfill

For fill sections or if a temporary slope is shown in the accepted submittals, backfill behind piles, panels and concrete facing in accordance with Article 410-8 of the *Standard Specifications*. Otherwise, backfill voids behind panels, lagging and piles with No. 57 stone as shown in the accepted submittals. Ensure all voids between panels and lagging and between piles, lagging and excavation faces are filled with No. 57 stone. Compact stone to the satisfaction of the Engineer. When separation geotextiles are required, overlap adjacent geotextiles at least 18" and hold separation geotextiles in place with wire staples or anchor pins as needed.

F. Pile Coatings

For soldier pile walls with panels, clean exposed galvanized or painted surfaces of piles with a 2,500 psi pressure washer after wall construction is complete. Repair galvanized surfaces that are exposed and damaged in accordance with Article 1076-7 of the *Standard Specifications*. Repair painted surfaces that are exposed and damaged by applying 4.0 to 7.0 mils wet film thickness of a topcoat to damaged areas with brushes or rollers. Use the same paint for damaged areas that was used for the topcoat when painting piles initially. Feather or taper topcoats in damaged areas to be level with surrounding areas.

5.0 MEASUREMENT AND PAYMENT

Soldier Pile Retaining Walls will be measured and paid in square feet. Soldier pile walls will be measured as the square feet of exposed wall face area with the height equal to the difference between top and bottom of wall elevations. Define "top of wall" as top of coping or top of panels or concrete facing for soldier pile walls without coping. Define "bottom of wall" as shown in the plans and no measurement will be made for portions of

soldier pile walls embedded below bottom of wall elevations.

The contract unit price for Soldier Pile Retaining Walls will be full compensation for providing designs, submittals, labor, tools, equipment and soldier pile wall materials, installing piles, excavating, backfilling, hauling and removing excavated materials and supplying temporary support of excavations, wall drainage systems, leveling pads, panels, concrete facing, No. 57 stone, geotextiles and any incidentals necessary to construct soldier pile walls. The contract unit price for Soldier Pile Retaining Walls will also be full compensation for coping, pile coatings and brick veneers, if required. No additional payment will be made and no extension of completion date or time will be allowed for repairing overexcavations or unstable excavations or thicker concrete facing.

The contract unit price for Soldier Pile Retaining Walls does not include the cost for ditches, fences, handrails, barrier or guardrail associated with soldier pile walls as these items will be paid for elsewhere in the contract.

Where it is necessary to provide backfill material behind soldier pile walls from sources other than excavated areas or borrow sources used in connection with other work in the contract, payment for furnishing and hauling such backfill material will be paid as extra work in accordance with Article 104-7 of the *Standard Specifications*. Placing and compacting such backfill material is not considered extra work but is incidental to the work being performed.

Payment will be made under:

Pay Item Soldier Pile Retaining Walls Pay Unit Square Foot

STONE VENEERED CONCRETE MASONRY UNIT (CMU) RETAINING WALL

(SPECIAL)

1.0 GENERAL

The natural stone (masonry) walls and columns are to be in accordance with the plans and the Standard Specifications with the following additions and exceptions.

A. Quality Assurance

An experienced stone mason with a minimum of 7 years of practice shall be required to construct the stone walls and columns, if applicable. Mason must submit references and samples of built work prior to beginning work.

The Stone Veneer will be constructed of hard, durable stone matching that which is currently on site. The existing rocks in the stone walls are to be reused where possible, at the direction of the Engineer. The Stone capping is to be constructed using a one stone thickness of the wall stone with a minimum 2" thickness. All edges are to be rock faced on the outside edges. Stone height shall vary but be similar in size and shape to that which is currently present. Prior to construction of masonry work, actual stone samples or sections of stone shall be submitted for approval of color and texture. After approval, a sample stone wall is to be erected using proposed materials, and bond and joint tooling required for final work. Provide special features as directed for caulking and contiguous work. The sample walls shall be built at the site, where directed, of full thickness and contain approximately a minimum of 20 square feet of veneer surface area and a minimum of 5 linear feet of capping, indicating the proposed range of color, texture and workmanship to be expected in the completed work. The sample wall shall be a separate wall or may be incorporated into proposed walls as shown on plans, or as directed by the Engineer. Written acceptance of visual qualities of the panel(s) shall be obtained prior to constructing any other masonry work.

An accepted panel shall be retained during construction as a standard for judging quality of completed masonry work. Approved panel shall not be altered, moved, or destroyed until all masonry work is completed. Sample panel may be used to test proposed cleaning procedures.

B. Protection of Work

Cold weather protection shall be in accordance with the Standard Specifications.

During erection, cover top of walls with heavy waterproof sheeting at end of each days' work. Cover partially completed structures when work is not in progress. Extend cover a minimum of 1.0 feet down both sides and hold cover securely in place.

Do not apply concentrated loads for at least 3 days after building masonry walls.

2.0 MATERIALS

A. Stone Masonry Units, General

Obtain natural stone from one or more quarries as needed to produce a veneering that meets the criteria noted above, or reuse cleaned stones from the existing walls.

B. Masonry Wall and Footing

Concrete shall be Class "A" and meet the requirements of Section 1000 of the Standard Specifications. Reinforcing steel shall meet the requirements of Section 1070. Concrete block shall be "Ivany Block" specifically manufactured for reinforced masonry wall construction.

Excavate and pour reinforced concrete footing, build reinforced block wall, and lay stone veneer and coping as shown on the drawings. Place reinforcing steel as described in Section 425. Allow the masonry to cure a minimum of 7 days prior to placing backfill.

C. Masonry Accessories

Ties shall be 3/16" diameter wire 7 1/2" anchor with 3 1/4" tie min.

Use Heckman Double Eye-Rod Anchor/Tie No. 263, Hohmann and Banard Adjustable Wall Tie No. 600, or National No. 915.

Backfill shall be Class I Select as described in Section 1016.

D. Mortar

Use Type S mortar that is in accordance with Section 830-3 of the Standard Specifications. The color of the mortar sand shall match as close as possible the mortar of other adjacent walls on the project.

3.0 INSTALLATION

A. General

Build single-wythe veneer to maximum thickness of the stone masonry units, using units of nominal thickness shown or specified.

Wet stones, prior to setting in mortar, that have ASTM C-67 absorption rates greater than 25 gal./(min. x 19.4 mm₂).

Frozen Materials and Work:

Do not use frozen materials or materials mixed or coated with ice or frost. For masonry which is specified to be wetted, comply with the BIA recommendations. Do not build on frozen work. Remove and replace masonry work damaged by frost or freezing.

Stone Veneer Pattern

Lay exposed stone masonry except where otherwise shown or specified, in a random pattern that approximates what is presently on site, or as directed by the Engineer.

Layout veneer in advance for accurate spacing of surface bond patterns, with varying joint widths to properly locate openings, movement-type joints, returns and offsets. Avoid the use of less-than-half size units at corners and where possible at other locations.

Lay-up stone veneer plumb and true and with courses level, accurately spaced and coordinated with other work.

Stopping and Resuming Work:

Rack back ½ masonry unit length in each course; do not tooth. Clean exposed surfaces of set masonry, wet units lightly (if specified to be wetted), and remove loose masonry units and mortar prior to laying fresh masonry.

B. Batch Control

Measure/batch materials by volume or weight, such that required proportions for mortar can be accurately controlled and maintained. Measurement of sand by shovel will not be permitted.

Mix mortars with maximum amount of water consistent with workability to provide maximum tensile bond strength within the capacity of the mortar.

Mix mortar ingredients for a minimum of 3 minutes and a maximum of 5 minutes in a mechanical batch mixer. Use water clean/free of deleterious materials which would impair the work. Discard mortar which has begun to set, or if more than 2 hours has elapsed since initial mixing or 1½ hr. in hot weather. Retemper mortar during first 1½ hr. period as required to restore workability.

Lay stone units with completely filled bed, head and collar joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not slush head joints.

C. Joints

Maintain consistent joint widths, except for minor variations required to maintain stone alignment. Deeply rake exposed joints between stones. Rake out mortar in preparation for application of caulking or sealants where shown.

Remove stone masonry units disturbed after laying; clean and relay in fresh mortar. Do not pound corners at jambs to fit stretcher units which have been set in position. If adjustments are required, remove units, clean off mortar, and reset in fresh mortar.

D. Anchoring Brick Veneer Work

Anchor single wythe stone masonry veneer to backing with metal ties as follows:

Anchor veneer to CMU core wall as directed by manufacture's recommendations or as directed by the Engineer. Provide anchors with flexible tie section, unless otherwise indicated.

Space veneer anchors not more than 1.25 ft o.c. vertically and 2.0 ft o.c. horizontally. Provide additional anchors with 1.0 ft of openings and space not more than 3.0 ft around perimeter.

E. Control and Expansion Joints

Provide vertical control joints in brick masonry veneer where shown. Build-in related masonry accessory items as masonry work progresses.

F. Repair, Pointing and Cleaning

Replace stone masonry units which are loose, chipped broken, stained or otherwise damaged, or if units do not match adjoining units as intended.

Provide new units to match adjoining units and install in fresh mortar pointed to eliminate evidence of replacement.

During tooling of joints, enlarge any voids or holes, except weepholes, and completely fill with mortar. Point-up all joints at corners, openings and adjacent work to provide neat, uniform appearance, properly prepared fro application of caulking or sealant compounds.

Clean exposed brick masonry surfaces by the bucket and brush, hand cleaning method or by high pressure water method.

4.0 BASIS OF PAYMENT

Stone Veneered CMU Retaining Walls will be measured and paid in square feet. Stone Veneered CMU Retaining Walls will be measured as the square feet of exposed wall face area with the height equal to the difference between top and bottom of wall elevations. Define "top of wall" as top of stone cap. Define "bottom of wall" as shown in the plans and no measurement will be made for portions of walls embedded below bottom of wall elevations.

The contract unit price for Stone Veneered CMU Retaining Walls will be full compensation for all work covered by this special provision including but not limited to furnishing all materials (including native stone, mortar, masonry accessories, anchors, samples, etc.), labor tools, and equipment necessary for installing these units in place and accepted. Reinforcing steel, backfill, and coarse gravel filter will be incidental to the work and no separate payment will be made for these items.

No separate payment will be made for temporary shoring for wall construction. Temporary shoring for wall construction will be incidental to the contract unit price for Stone Veneered CMU Retaining Walls.

Payment as described above will be full compensation for all work covered by this section including but not limited to footing excavation, furnishing and installing reinforcing steel, concrete, block, stone veneer, foundation drain, backfill, and other incidental material; and all labor and equipment necessary to complete the work.

Payment will be made under:

Pay Item
Stone Veneered CMU Retaining Walls

Pay Unit Square Foot





Project: R-3405 (U.C.) County: Wilkes

PROJECT SPECIAL PROVISIONS

Utility Construction

General Construction Requirements:

The proposed utility construction shall meet the requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated July 2012 and the following provisions:

The Contractor shall be responsible for field verifying location, size, type and elevation of all underground utilities, as well as reconnecting any water services disturbed during construction, even if they are not shown on the plans. The water main shall be installed as to provide a minimum of 4 feet of coverage above the top of pipe from finished grade, unless shown differently on plans.

The Contractor is herein forewarned as to the possibility of having to vary the depth of the water main installation to achieve minimum clearance of existing or proposed utilities or storm drainage while maintaining minimum cover specified (whether on existing or proposed pipelines, conduits, cables, mains, storm drainage are shown on the plans or not).

The Contractor shall submit his proposed method of anchoring to the Engineer for review and approval of restraining all pipe, pipe bends, valves and other related appurtenances. Anchoring will be the responsibility of the Contractor. Connecting to existing water mains may alter such lines to the extent that these pipelines with existing pipe bends, valves and other related appurtenances may also require reaction blocking; this is also the responsibility of the Contractor.

Owner:

The existing water mains and appurtenances are owned and maintained by Mulberry/Fairplains Water Association (1613 Sparta Road, North Wilkesboro, NC 28659 Phone: (336) 670-2410). The Contractor shall provide access for the Owner's representatives to all phases of construction. Notify the Owner two weeks before commencement of any work and one week before service interruption. Interruption of water service on main lines shall be limited to a maximum of four (4) hours. Individual service connection interruptions shall be scheduled between regular working hours unless otherwise permitted by the Owner. Water services shall be restored within the same working day.



The Owner has indicated that the existing water main(s) that will be replaced are manufactured of asbestos cement. Once the new water line is declared operational, the Contractor shall be responsible for the abandonment or removal of all existing asbestos cement water mains within the project limits.

The Owner requires that the following be included in these Special Provisions:

- 1) Owner, or his agent, shall witness all pressure and biological testing
- 2) The Contractor shall take all biological samples and send to Owner's preferred laboratory for testing.
- 3) All existing appurtenances (hydrants, valves, glands and fittings) that are removed as a result of the water main relocation will remain the property of the Owner, and the Contractor will remove said appurtenances to 193 Foster Road, North Wilkesboro, NC as directed by the Engineer.
- 4) The Contractor shall have the parts available on hand and capability to repair service mains immediately if service is interrupted due to damage caused by the Contractor.
- 5) Water service to all customers shall be maintained during construction of the new water main. Service disruptions for any reason shall be limited to a maximum time of four hours.
- 6) All water main materials of construction will be PVC per the following specifications except that all hydrant legs will be ductile iron pipe.

Standards:

Where materials and methods are indicated in the following specifications as being in conformance with a standard specification, it shall refer in all cases to the latest edition of the specification and shall include all interim revisions. Listing of a standard specification without further reference indicates that the particular material or method shall conform with such listed specification. All materials (except where specified below), installation, and testing shall be in accordance with the NCDOT Standards and Specifications for Roads and Structures, dated July 2012. If NCDOT material specifications exceed those specified below, the NCDOT specification shall apply.

Construction Materials:

General

All materials and equipment shall be furnished by an established and reputable manufacturer or supplier. All materials and equipment shall be new and shall be of first class ingredients and construction designed and guaranteed to perform the service required and shall conform to the following specifications or shall be the product of the listed manufacturer or similar and equal thereto as approved by the Owner.

Ductile Iron Pipe and Fittings

All ductile iron pipe and fittings shall conform to ANSI/AWWA C151/A21.51, Pressure Class 250 and the following:

- (a) Pipe and Fittings
 - (1) MECHANICAL JOINT PIPE ANSI/AWWA C151/A21.51
 - (2) SINGLE GASKET JOINT PIPE (PUSH-ON-JOINT) ANSI/AWWA C151/A21.51. Bells shall be modified to accommodate a single gasket type jointing material. Modified bells shall be supplied on pipe only and not on fittings
 - (3) FLANGED PIPE
 ANSI/AWWA C115/A21.15. Flanges shall be faced and drilled to
 ANSI Class 150.
 - (4) FLANGED FITTINGS
 ANSI/AWWAC110/A21.0. Flanges shall be faced and drilled to ANSI Class 150.
 - (5) BELL & SPIGOT FITTINGS AND MECHANICAL JOINT FITTINGS ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/A21.53 latest.
 - (b) Coatings
 - (1) OUTSIDE COATING The coating for the exterior of fittings and pipes required by ANSI/AWWA C110/A21.10 and C151/A21.51 shall conform to Federal Specification WW-P 421C.
 - (2) CEMENT MORTAR LINING OF INTERIOR OF PIPE AND FITTINGS ANSI/AWWA C104/A21.4. All cement lining shall receive a seal coat of bituminous material.
 - (3) PROTECTIVE FUSION BONDED EPOXY COATINGS ANSI/AWWA C116/A21.16.
 - (4) SPECIAL COATINGS AND LININGS ANSI/AWWA C104/A21.4.

Thickwall P.V.C. Pressure Pipe

All P.V.C. pressure pipe shall conform to AWWA C-900 or C-905, DR-18 (235 PSI). All fittings shall be ductile iron, mechanical joint fittings. All non-metallic pipe shall be buried with detector tape.

Service Pipe and Appurtenances

- (a) Pipe
 - (1) Copper Pipe All water service pipe shall be copper water tube, Type K, soft temper, for underground service, conforming to ASTM B-88 and B251. The pipe shall be marked with the manufacturer's name or trademark and a mark indicative of the type of pipe. The outside diameter of the pipe and minimum weight per foot of the pipe shall not be less than that listed in ASTM B251, Table 11.
- (b) Stops and fittings All corporation stops and curb stops shall be fabricated of brass and shall be provided with outlets suitable for copper connections or wiped lead connections. Curb stops shall be of the roundway type. Fittings for lead services shall be of brass suitable for wiped joints. Fittings for copper pipe shall be copper and of the compression type. Stream line fittings of the soldered joint type may be used, if so designated in the Project Specifications. The type of threads for all corporation stops and curb stops shall be as specified in the Project Specifications.
- (c) Service saddles shall be double strap type.
- (d) Meter Boxes – Meter boxes shall be heavy-duty, high-density Polyethylene, one-piece molded construction with a minimum wall thickness of 0.550 inches, vertical loading rating minimum of 15,000 pounds, sidewall loading of 200 pounds side load applied with a 4"x4" plate, multi-layer wall construction, black exterior surface to provide UV protection, gray foaming for strength an insulating value, white interior surface for ease of meter reading, and flush, cast iron cover. The meter box shall be of adequate size with the base of ample size to completely house the services stop. Box covers shall be furnished with the cover labeled "WATER METER".

Valves, Hydrants and Appurtenances

Tee intersections will have two valves, one on the -L- Line water main and one on the -Y- Line. Cross intersections shall have at least three valves as directed by the Engineer.

New fire hydrants will be installed as shown on the plans or as directed by the Engineer. All hydrants shall have a hydrant valve on the hydrant leg.

(a) VALVES

- (1) Unless otherwise required by the Project Specification or the Contract Drawings, all buried valves shall be gate valves.
- (2) Gate valves shall be non-rising stem valves with a 2 inch square operating nut, designed to take full pressure on either face furnished in full compliance with AWWA C500 or C509. All valves shall open by turning to the left unless otherwise specified.
- (3) All valves shall be of ample strength to withstand and operate satisfactorily under the working pressures and shall be subject to the test pressures both expressed in pounds per square inch below:

Cold Water Pressure in Pounds Working: 150
Per Square Inch Test: 300

- (4) Bolt holes on flanged end valves shall straddle the vertical centerline unless otherwise indicated on the Contract Drawings.
- (5) Gate valves to be installed in a horizontal position in a horizontal line which are designed for working pressures lower than 150 pounds, in sizes 16 inches and larger, shall be equipped with bronze rollers and bronze tracks secured to the body. Gate valves smaller than 16 inches shall have double cast iron disk, bronze mounted seat rings, parallel seat O-ring seals with bronze stem and stem nuts. All buried valves shall be Mechanical Joint. All valves shall be iron body bronze mounted gate valves with 2" square operating nuts.

(b) VALVE BOXES

- (1) Valve boxes shall be supplied for all buried valves unless they are to be housed in valve basins. Valve boxes shall be made of good quality cast iron and shall be of the sectional type. The lower section shall be a minimum of five and one guarter (5-1/4) inches in diameter, enlarged to fit around the bonnet of the valve, if a two section box is used, or to fit a circular or oval base section if three section box is used. The upper section shall be arranged to screw down over the adjoining lower section and shall be full diameter throughout. Two (2) piece valve boxes shall be used on all valves up to those four (4) feet deep. Valves deeper than four (4) feet shall utilize SDR-41 or thicker PVC barrel extensions between the cast iron box sections. Valve boxes shall be provided with cast iron lids or covers. Lids or covers shall be marked "WATER". The overall length of valve boxes shall be sufficient to permit the top to be set flush with the established ground surface grade.
- (2) All valves not in pavement or concrete shall be set in a circular concrete ring.

(c) HYDRANTS

Fire hydrants shall comply with all requirements of ANSI/AWWA C502 (latest revision), plus further design requirements listed herein.

Hydrants shall have a minimum valve opening of 4 $\frac{1}{2}$ ". They shall be "dry top", "traffic model", furnished with two (2) each 2 $\frac{1}{2}$ " hose nozzles and one (1) each 4 $\frac{1}{2}$ " steamer nozzle with caps and chains. Nozzle threads shall be National Standard.

Fire Hydrants shall be rodded with two (2) 3/4" rods with bitumastic coating and blocked with concrete. Concrete shall be the same as blocking required for a 6 inch diameter 90° bend.

Furnish a pentagonal operating nut measuring 1 ½" from point to flat. Hydrants shall OPEN by turning the operating nut to the left (counter clockwise). Hydrants shall be suitable for setting in a 3'-6" trench unless deeper settings are required and indicated in the Bid Form. Provide a 6" mechanical joint base with MJ accessories. Hydrants shall be painted red.

Hydrants shall incorporate the following design features:

A <u>WEATHER SHIELD</u> shall be provided between the operating nut and the hydrant cover. Additionally, a weather cap shall be affixed which conceals the hold-down nut. It shall be embossed with an arrow indicating the opening direction.

A TRAVEL STOP NUT shall be provided in the "head" of the hydrant to eliminate further compressive loading of the hydrant rod after the hydrant has reached its full open position. Travel stop devices in the "base" or main valve area are not acceptable.

A <u>DRY TOP LUBRICATION CHAMBER</u> with triple "o-ring" seals shall be provided for protection and lubrication of the rod and operating nut threads. Hydrants shall be provided with an anti-friction thrust washer.

A <u>TRAFFIC FLANGE</u> (two piece) shall be provided at the ground line, and installed in accordance with the manufacturer's recommendations and installation instructions.

A <u>BREAKABLE ROD COUPLING</u> (one piece) shall be provided at the groundline connection of the upper and lower rods. Provide pin and cotter key fastening for easy removal of the coupling.

A <u>BRONZE DRAIN RING</u> shall be provided with integral, external drain ports. The drain ring shall be secured between the lower barrel and base flanges. The valve assembly shall be secured to the drain ring by bronze to bronze threading. The drain ring and valve assembly shall provide a totally bronze drain system. The drain system shall have a minimum of two (2) internal and two (2) external ports as a part of the all bronze drain system. Drain ports in the base and partially bronze lined drain systems are not acceptable.

Drain closure shall be by conventional double facings of an approved material other than leather. Hydrant valve top shall be bronze.

All flanges shall be integrally cast or "screwed-on". Snap or retainer ring (loose flange) design is not acceptable.

Hydrants shall be capable of being extended (raised) at the ground line in 6" increments. "Stacking" of extensions will not be permitted.

Hydrant design shall permit seat removal by use of a SHORT BODY "T" wrench which shall engage the upper hydrant rod. Designs requiring disassembly at the groundline are not acceptable.

Hydrant manufacturer shall have existing authorized stocking distributors currently serving the area of this project.

Trenchless Installation:

All waterlines 2-inches and smaller, including water services shall be dry bored. Trenchless installation shall be in accordance with the NCDOT Standard Specifications for Roads and Structures, dated July 2012.

Roadway Crossings:

Waterlines greater than 2-inch diameter crossing the line of traffic from the opposite side of the road from the main waterline shall be installed by open cut. Detours shall be implemented so that only one lane of traffic shall be shutdown at any time during the waterline installation. Lane closures and detours shall be in accordance with NCDOT Standard Specifications for Roads and Structures, dated July 2012.

PROJECT: R-3405 COUNTY: Wilkes

PROJECT SPECIAL PROVISIONS Utilities

UTILITIES BY OTHERS

General:

The following utility companies have facilities that will conflict with the construction of this project:

- A. Duke Energy (Distribution)
- B. CenturyLink
- C. Charter Communications

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted and are therefore listed in these special provisions for the benefit of the Contractor. All utility work listed herein will be done by the utility owners. All utilities are shown on the plans from the best available information.

The Contractor's attention is directed to Article 105-8 of the Standard Specifications.

Utilities requiring Adjustment:

A. Duke Energy (Distribution)

- 1. See "Utility by Others Plans" for utility conflicts and new pole locations.
- 2. Installation of new power facilities will not be completed before roadway construction begins. It will take Duke 6 weeks to clear the needed right of way and nine (9) months to complete the construction and removal of conflicting poles. The completion date for Duke's relocation work will be August 1, 2013.
- 3. CenturyLink and Charter will attach to the new poles.
- 4. Contact person for Duke Energy is Mr. Gary VonCannon and he can be reached at 336-632-3848.

B. CenturyLink

- 1. See "Utility by Others Plans" for existing and proposed utility locations.
- 2. After Duke Energy has installed its new poles and attached its conductor, CenturyLink will begin its work. CenturyLink will be working in concert with Duke Energy. The existing buried cable cannot be abandoned until the new aerial facilities are in service. CenturyLink will complete its work by August 1, 2013.
- 3. Contact person is Mr. Ron Maynor, Construction Supervisor for CenturyLink. He can be reached at 828-323-2539 or by cell phone 828-449-7493.

C. Charter Communication

- 1. See "Utility by Others Plans" for existing and proposed utility locations.
- Charter Communications will attach to Duke Energy's new poles throughout the project limits. Once the new facilities have been activated, Charter will remove its existing cable. All work will be completed by August 1, 2013.
- 3. Contact person for Charter is Mr. Chris Cleary and he can be reached at 336-927-7960.

R-3405 Project Special Provisions Erosion Control

Wilkes County

STABILIZATION REQUIREMENTS:

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

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

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

SEEDING AND MULCHING:

(West)

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

Shoulder and Median Areas

August 1 - June 1		May 1 - September 1			
20#	Kentucky Bluegrass	20#	Kentucky Bluegrass		
75#	Hard Fescue	75#	Hard Fescue		
25#	Rye Grain	10#	German or Browntop Millet		
500#	Fertilizer	500#	Fertilizer		
4000#	Limestone	4000#	Limestone		

Areas Beyond the Mowing Pattern, Waste and Borrow Areas:

August 1 - June 1		May 1 - S	May 1 - September 1			
100#	Tall Fescue	100#	Tall Fescue			
15#	Kentucky Bluegrass	15#	Kentucky Bluegrass			
30#	Hard Fescue	30#	Hard Fescue			
25#	Rye Grain	10#	German or Browntop Millet			
500#	Fertilizer	500#	Fertilizer			
4000#	Limestone	4000#	Limestone			

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Approved Tall Fescue Cultivars

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

Approved Kentucky Bluegrass Cultivars:

Alpine	Bariris	Envicta	Rugby
Apollo	Bedazzled	Impact	Rugby II
Arcadia	Bordeaux	Kenblue	Showcase
Arrow	Champagne	Midnight	Sonoma
Award	Chicago II	Midnight II	

Approved Hard Fescue Cultivars:

Chariot	Nordic	Rhino	Warwick
Firefly	Oxford	Scaldis II	
Heron	Reliant II	Spartan II	
Minotaur	Reliant IV	Stonehenge	

On cut and fill slopes 2:1 or steeper add 20# Sericea Lespedeza January 1 - December 31.

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

TEMPORARY SEEDING:

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet, or Browntop Millet

shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

FERTILIZER TOPDRESSING:

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre. A different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis and as directed.

SUPPLEMENTAL SEEDING:

The kinds of seed and proportions shall be the same as specified for *Seeding and Mulching*, and the rate of application may vary from 25# to 75# per acre. The actual rate per acre will be determined prior to the time of topdressing and the Contractor will be notified in writing of the rate per acre, total quantity needed, and areas on which to apply the supplemental seed. Minimum tillage equipment, consisting of a sod seeder shall be used for incorporating seed into the soil as to prevent disturbance of existing vegetation. A clodbuster (ball and chain) may be used where degree of slope prevents the use of a sod seeder.

MOWING:

The minimum mowing height on this project shall be six inches.

LAWN TYPE APPEARANCE:

All areas adjacent to lawns must be hand finished as directed to give a lawn type appearance. Remove all trash, debris, and stones ³/₄" and larger in diameter or other obstructions that could interfere with providing a smooth lawn type appearance. These areas shall be reseeded to match their original vegetative conditions, unless directed otherwise by the Field Operations Engineer.

RESPONSE FOR EROSION CONTROL:

Description

Furnish the labor, materials, tools and equipment necessary to move personnel, equipment, and supplies to the project necessary for the pursuit of any or all of the following work as shown herein, by an approved subcontractor.

Section	Erosion Control Item	Unit
1605	Temporary Silt Fence	LF
1606	Special Sediment Control Fence	LF/TON
1615	Temporary Mulching	ACR
1620	Seed - Temporary Seeding	LB

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1620	Fertilizer - Temporary Seeding	TN
1631	Matting for Erosion Control	SY
SP	Coir Fiber Mat	SY
1640	Coir Fiber Baffles	LF
SP	Permanent Soil Reinforcement Mat	SY
1660	Seeding and Mulching	ACR
1661	Seed - Repair Seeding	LB
1661	Fertilizer - Repair Seeding	TON
1662	Seed - Supplemental Seeding	LB
1665	Fertilizer Topdressing	TON
SP	Safety/Highly Visible Fencing	LF
SP	Response for Erosion Control	EA

Construction Methods

Provide an approved subcontractor who performs an erosion control action as described in the NPDES Inspection Form SPPP30. Each erosion control action may include one or more of the above work items.

Measurement and Payment

Response for Erosion Control will be measured and paid for by counting the actual number of times the subcontractor moves onto the project, including borrow and waste sites, and satisfactorily completes an erosion control action described in Form 1675. The provisions of Article 104-5 of the Standard Specifications will not apply to this item of work.

Payment will be made under:

Pay Item Pay Unit Each

Response for Erosion Control

HIGH QUALITY WATERS:

Description

The Reddies River and Lousy Creek have been identified as high quality waters. A High Quality Water Zone is defined as being within one mile and draining to a high quality water which exists throughout the project limits. Per this designation requires special procedures to be used for within the High Quality Water Zone and as designated by the Engineer. In accordance with 15A NCAC 04B .0124 DESIGN STANDARDS IN SENSITIVE WATERSHEDS, all uncovered areas in HQW zones shall be limited at any time to a maximum total area within the boundaries

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of the tract of 20 acres. Only the portion of the land-disturbing activity within a HQW zone shall be governed by this Rule. This also requires special procedures to be used for seeding and mulching and staged seeding.

Construction Methods

(A) Seeding and Mulching

Seeding and mulching shall be performed in accordance with Section 1660 of the *Standard Specifications* and vegetative cover sufficient to restrain erosion shall be installed immediately following grade establishment.

Seeding and mulching shall be performed on the areas disturbed by construction immediately following final grade establishment. No appreciable time shall lapse into the contract time without stabilization of slopes, ditches and other areas within the High Quality Water Zones/Environmentally Sensitive Areas.

(B) Stage Seeding

The work covered by this section shall consist of the establishment of a vegetative cover on cut and fill slopes as grading progresses. Seeding and mulching shall be done in stages on cut and fill slopes that are greater than 20 feet in height measured along the slope, or greater than 2 acres in area. Each stage shall not exceed the limits stated above.

Additional payments will not be made for the requirements of this section, as the cost for this work shall be included in the contract unit prices for the work involved.

MINIMIZE REMOVAL OF VEGETATION:

The Contractor shall minimize removal of vegetation at stream banks and disturbed areas within the project limits as directed.

STOCKPILE AREAS:

The Contractor shall install and maintain erosion control devices sufficient to contain sediment around any erodible material stockpile areas as directed.

ACCESS AND HAUL ROADS:

At the end of each working day, the Contractor shall install or re-establish temporary diversions or earth berms across access/haul roads to direct runoff into sediment devices. Silt fence sections that are temporarily removed shall be reinstalled across access/haul roads at the end of each working day.

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WASTE AND BORROW SOURCES:

Payment for temporary erosion control measures, except those made necessary by the Contractor's own negligence or for his own convenience, will be paid for at the appropriate contract unit price for the devices or measures utilized in borrow sources and waste areas.

No additional payment will be made for erosion control devices or permanent seeding and mulching in any commercial borrow or waste pit. All erosion and sediment control practices that may be required on a commercial borrow or waste site will be done at the Contractor's expense.

PERMANENT SOIL REINFORCEMENT MAT:

Description

This work consists of furnishing and placing *Permanent Soil Reinforcement Mat*, of the type specified, over previously prepared areas as directed.

Materials

The product shall be a permanent erosion control reinforcement mat and shall be constructed of synthetic or a combination of coconut and synthetic fibers evenly distributed throughout the mat between a bottom UV stabilized netting and a heavy duty UV stabilized top net. The matting shall be stitched together with UV stabilized polypropylene thread to form a permanent three-dimensional structure. The mat shall have the following minimum physical properties:

Property	Test Method	Value	Unit
Light Penetration	ASTM D6567	9	%
Thickness	ASTM D6525	0.40	in
Mass Per Unit Area	ASTM D6566	0.55	lb/sy
Tensile Strength	ASTM D6818	385	lb/ft
Elongation (Maximum)	ASTM D6818	49	%
Resiliency	ASTM D1777	>70	%
UV Stability *	ASTM D4355	≥80	%
Porosity (Permanent Net)	ECTC Guidelines	≥85	%
Maximum Permissible Shear	Performance Bench	≥8.0	lb/ft²
Stress (Vegetated)	Test		
Maximum Allowable Velocity	Performance Bench	≥16.0	ft/s
(Vegetated)	Test		

^{*}ASTM D1682 Tensile Strength and % strength retention of material after 1000 hours of exposure.

Submit a certification (Type 1, 2, or 3) from the manufacturer showing:

- (A) the chemical and physical properties of the mat used, and
- (B) conformance of the mat with this specification.

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Construction Methods

Matting shall be installed in accordance with Subarticle 1631-3(B) of the Standard Specifications.

All areas to be protected with the mat shall be brought to final grade and seeded in accordance with Section 1660 of the *Standard Specifications*. The surface of the soil shall be smooth, firm, stable and free of rocks, clods, roots or other obstructions that would prevent the mat from lying in direct contact with the soil surface. Areas where the mat is to be placed will not need to be mulched.

Measurement and Payment

Permanent Soil Reinforcement Mat will be measured and paid for as the actual number of square yards measured along the surface of the ground over which Permanent Soil Reinforcement Mat is installed and accepted. Overlaps will not be included in the measurement, and will be considered as incidental to the work. Such payment shall be full compensation for furnishing and installing the mat, including overlaps, and for all required maintenance.

Payment will be made under:

Pay Item Pay Unit

Permanent Soil Reinforcement Mat

Square Yard

WATTLES WITH POLYACRYLAMIDE (PAM):

Description

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

Materials

Wattle shall meet the following specifications:

100% Curled Wood (Excelsior) Fibers

Minimum Diameter 12 in.

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

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

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

Anchors: Stakes shall be used as anchors.

8 of 12

Wooden Stakes:

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

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

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

Polyacrylamide (PAM) shall be applied in powder form and shall be anionic or neutrally charged. Soil samples shall be obtained in areas where the wattles will be placed, and from offsite material used to construct the roadway, and analyzed for the appropriate PAM flocculant to be utilized with each wattle. The PAM product used shall be listed on the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) web site as an approved PAM product for use in North Carolina.

Construction Methods

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

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

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

Apply PAM over the lower center portion of the wattle where the water is going to flow over at a rate of 2 ounces per wattle, and 1 ounce of PAM on matting on each side of the wattle. PAM applications shall be done during construction activities after every rainfall event that is equal to or exceeds 0.50 in.

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

Measurement and Payment

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

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

Polyacrylamide(PAM) will be measured and paid for by the actual weight in pounds of PAM applied to the wattles. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to apply the Polyacrylamide(PAM).

Payment will be made under:

Pay ItemPay UnitPolyacrylamide(PAM)PoundWattleLinear Foot

SILT FENCE COIR FIBER WATTLE BREAK:

Description

Silt Fence Coir Fiber Wattle Breaks are tubular products consisting of coir fibers (coconut fibers) encased in coir fiber netting and used in conjunction with Temporary Silt Fence at toe of fills to intercept runoff. Silt Fence Coir Fiber Wattle Breaks are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation, maintenance and removing Silt Fence Coir Fiber Wattle Breaks.

Materials

Coir Fiber Wattle shall meet the following specifications:

100% Coir (Coconut) Fibers
Minimum Diameter 12 in.
Minimum Length 10 ft.

Minimum Density $3.5 \text{ lb/ft}^3 +/- 10\%$

Net Material Coir Fiber
Net Openings 2 in. x 2 in.
Net Strength 90 lbs.

Minimum Weight 2.6 lbs./ft. +/- 10%

Anchors: Stakes shall be used as anchors.

Wooden Stakes:

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

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

Construction Methods

A trench shall be excavated the entire length of the coir fiber wattle with a depth of 1 to 2 inches for the wattle to be placed. Silt Fence Coir Fiber Wattle Breaks shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each wattle. A minimum of 4 stakes shall be installed on the downslope side of the wattle with a maximum spacing of 2 linear feet, and according to the detail. Install a minimum of 2 stakes on the upslope side of the Silt Fence Coir Fiber Wattle Break according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 in. with no more than 2 in. projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

Install Temporary Silt Fence in accordance with section 1605 of the Standard Specifications and overlap each downslope side of silt fence wattle break by 6 in.

The Contractor shall maintain the Silt Fence Coir Fiber Wattle Breaks until the project is accepted or until the Silt Fence Coir Fiber Wattle Breaks are removed, and shall remove and dispose of silt accumulations at the Silt Fence Coir Fiber Wattle Breaks when so directed in accordance with the requirements of Section 1630 of the *Standard Specifications*.

Measurement and Payment

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

Payment will be made under:

Pay Item

Coir Fiber Wattle

Linear Foot

11 of 12 6/11/2012

TEMPORARY ROCK SILT CHECK TYPE A WITH EXCELSIOR MATTING AND **POLYACRYLAMIDE (PAM):**

Description

Temporary Rock Silt Checks Type A with Excelsior Matting and Polyacrylamide (PAM) are devices utilized in temporary and permanent ditches to reduce runoff velocity and incorporate PAM into the construction runoff to increase settling of sediment particles and reduce turbidity of runoff. Temporary Rock Silt Checks Type A with Excelsior Matting and PAM are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of Temporary Rock Silt Checks Type A, matting installation, PAM application, and removing Temporary Rock Silt Checks Type A with Excelsior Matting and PAM.

Materials

Structural stone shall be class B stone that meets the requirements of Section 1042 of the Standard Specifications for Stone for Erosion Control, Class B.

Sediment control stone shall be #5 or #57 stone, which meets the requirements of Section 1005 of the Standard Specifications for these stone sizes.

Matting shall meet the requirements of Excelsior Matting in Subarticle 1060-8(B) of the Standard Specifications, or shall meet specifications provided elsewhere in this contract.

Polyacrylamide (PAM) shall be applied in powder form and shall be anionic or neutrally charged. Soil samples shall be obtained in areas where the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM will be placed, and from offsite material used to construct the roadway, and analyzed for the appropriate PAM flocculant to be utilized with each Temporary Rock Silt Check Type A. The PAM product used shall be listed on the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) web site as an approved PAM product for use in North Carolina.

Construction Methods

Temporary Rock Silt Checks Type A shall be installed in accordance with Subarticle 1633-3(A) of the Standard Specifications, Roadway Standard Drawing No. 1633.01 and the detail provided in the plans.

Installation of matting shall be in accordance with the detail provided in the plans, and anchored by placing Class B stone on top of the matting at the upper and lower ends.

Apply PAM at a rate of 3.5 ounces over the center portion of the Temporary Rock Silt Checks Type A and matting where the water is going to flow over. PAM applications shall be done during construction activities and after every rainfall event that is equal to or exceeds 0.50 in.

The Contractor shall maintain the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM until the project is accepted or until the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM are removed, and shall remove and dispose of silt accumulations at the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM when so directed in accordance with the requirements of Section 1630 of the *Standard Specifications*.

Measurement and Payment

Temporary Rock Silt Checks Type A will be measured and paid for in accordance with Article 1633-5 of the Standard Specifications, or in accordance with specifications provided elsewhere in this contract.

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

Polyacrylamide(PAM) will be measured and paid for by the actual weight in pounds of PAM applied to the Temporary Rock Silt Checks Type A. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to apply the Polyacrylamide(PAM).

Payment will be made under:

Pay Item
Polyacrylamide(PAM)
Pound

STANDARD SPECIAL PROVISION AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08)

Z-2

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

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

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the 2012 Standard Specifications.

STANDARD SPECIAL PROVISION NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11)

Z-3

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

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

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

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

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

Limitations per Lb. Of Seed	Restricted Noxious <u>Weed</u>	Limitations per Lb. of Seed
4 seeds	Cornflower (Ragged Robin)	27 seeds 27 seeds
4 seeds	Bracted Plantain	54 seeds
4 seeds	Buckhorn Plantain	54 seeds
8 seeds	Broadleaf Dock	54 seeds
10 seeds	Curly Dock	54 seeds
12 seeds	Dodder	54 seeds
27 seeds	Giant Foxtail	54 seeds
27 seeds	Horsenettle	54 seeds
27 seeds	Quackgrass	54 seeds
27 seeds 27 seeds	Wild Mustard	54 seeds
	Lb. Of Seed 4 seeds 4 seeds 4 seeds 4 seeds 8 seeds 10 seeds 12 seeds 27 seeds 27 seeds 27 seeds 27 seeds 27 seeds	Lb. Of SeedWeed4 seedsCornflower (Ragged Robin)4 seedsTexas Panicum4 seedsBracted Plantain4 seedsBuckhorn Plantain8 seedsBroadleaf Dock10 seedsCurly Dock12 seedsDodder27 seedsGiant Foxtail27 seedsHorsenettle27 seedsQuackgrass27 seedsWild Mustard

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

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

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

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

Sericea Lespedeza Oats (seeds)

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

Tall Fescue (all approved varieties)

Kobe Lespedeza

Bermudagrass

Browntop Millet

Korean Lespedeza

German Millet – Strain R

Weeping Lovegrass German Millet – Strain R

Clover – Red/White/Crimson

Carpetgrass

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

Common or Sweet Sundangrass

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

Rye (grain; all varieties) Kentucky Bluegrass (all approved varieties) Hard Fescue (all approved varieties) Shrub (bicolor) Lespedeza Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass Japanese Millet
Crownvetch Reed Canary Grass
Pensacola Bahiagrass Zoysia

Creeping Red Fescue

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

Barnyard Grass
Big Bluestem
Little Bluestem
Bristly Locust
Birdsfoot Trefoil
Indiangrass
Orchardgrass
Switchgrass
Yellow Blossom Sweet Clover

ERRATA

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

Z-4

Revise the 2012 Standard Specifications as follows:

Division 2

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

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

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

Division 4

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

Division 6

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

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

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

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

Division 10

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

Division 12

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

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

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

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

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

Division 15

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

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

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

Division 17

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

Revise the 2012 Roadway Standard Drawings as follows:

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

PLANT AND PEST QUARANTINES

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

(3-18-03)

Z-04a

Within 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.com/plantind/ to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

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

MINIMUM WAGES

(7-21-09) Z-5

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

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

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

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

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

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

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

ON-THE-JOB TRAINING

(10-16-07) (Rev. 7-21-09)

Z-10

Description

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

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

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

Minorities and Women

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

Assigning Training Goals

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

Training Classifications

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

Equipment Operators Office Engineers

Truck Drivers Estimators

Carpenters Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics
Pipe Layers Welders

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

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

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

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

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

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

Records and Reports

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

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

Trainee Interviews

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

Trainee Wages

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

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

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

Achieving or Failing to Meet Training Goals

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

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

Measurement and Payment

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

Vendor 1 of 5: CARL ROSE & SONS, INC. (3619) Call Order 013 (Proposal: C203078)

Bid Information

County: WILKES

Address: P.O.Box 786

Elkin, NC, 28621

Signature Check: Dean_Rose_3619

Time Bid Received: September 18, 2012 01:01 PM

Amendment Count: 0

Bid Checksum: FE90045D

Bid Total: \$8,567,871.64

Items Total: \$8,567,871.64

Time Total: \$0.00

Bidding Errors:

DBE Warning: MBE Warning: MBE Commitment Goal not met

MBE GOAL SET 4.0

MBE GOAL OBT 1.4

WBE GOAL SET 6.0

WBE GOAL MET 6.0

Vendor 1 of 5: CARL ROSE & SONS, INC. (3619) Call Order 013 (Proposal: C203078)

Bid Bond Information

Projects: Bond Maximum:
Counties: State of Incorporation:

Bond ID: SNC12504623 **Agency Execution Date:** 8/30/2012 11

Paid by Check: No Surety Name: surety2000

Bond Percent: 5% **Bond Agency Name:** Federal Insurance Company

NCDOT Page 3 of 11

Vendor 3619's Bid Information for Call 013, Letting L120918, 09/18/12

Carl Rose and Sons, Inc (3619) Call Order 013 (Proposal ID C203078)

LIST OF MBE PARTICIPANTS

WORK **CERT** VENDOR DBE NAME

NUMBER ADDRESS CODE TYPE OF WORK TYPE AMOUNT

57,915.00 committed 7505 MDB SLOAN TRUCKING Sub

P.O. BOX 752 , MORAVIAN FALLS, NC 28654

63,000.00 committed Sub 4435 MDB KENNETH LEON MARTIN DBA MARTIN

9694 NC 268 , ELKIN, NC 28621

\$120,915.00 TOTAL:

1.41%

Vendor 3619's Bid Information for Call 013, Letting L120918, 09/18/12

Carl Rose and Sons, Inc (3619)

Call Order 013 (Proposal ID C203078)

LIST OF WBE PARTICIPANTS

VENDOR DBE NAME WORK CERT

NUMBER ADDRESS CODE TYPE OF WORK TYPE AMOUNT

15,519.92 committed

4761 WB TRAFFIC CONTROL SAFETY SERVICES Sub

POST OFFICE BOX 24511 , WINSTON-SALEM, NC 27114 431, 905.25 committed 4388 WB FOOTHILLS CONSTRUCTION SERV INC Sub

6081 PEA RIDGE PASS , HAMPTONVILLE, NC 27020

137, 000.00 * 0.60 = 82,200.00 committed 8932 WB A & R MATERIALS, LLC Sup

9450 MOSS PLANTATION AVE , CONCORD, NC 28027 TOTAL: \$529,625.17

6.18%

Vendor 3619's Bid Information for Call 013, Letting L120918, 09/18/12

Carl Rose and Sons, Inc (3619)

Call Order 013 (Proposal ID C203078)

Miscelleneous Data Info - Contractor Responses:

NON-COLLUSION AND DEBARMENT CERTIFICATION

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

Explanation:

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

AWARD LIMITS ON MULTIPLE PROJECTS

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

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

The Award Limits shall apply to the following projects:

Contract Number

County

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

Bid Bond Data Info - Contractor Responses:

BondID: SNC12504623

Surety Registry Agency: surety2000

Verified?: Yes

Surety Agency: Federal Insurance Company

Bond Execution Date: 8/30/2012 11

Bond Amount:

\$428,393.58 (Five Percent of Bid)

Contract ID: C203078 Project(s): STATE FUNDED

Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

Section 0001 ROADWAY ITEMS

Alt Group

Alt Group			,
0000100000-N MOBILIZATI	 O LUMP 	 LUMP 	 520,602.00
0000400000-N CONSTRUCTI 0002 N SURVEYING	 LUMP 	 LUMP 	
004300000-N GRADING 0003	 LUMP 	 LUMP 	
0050000000-E SUPPLEMENT: 0004 RY CLEARING & GRUB-BING	A 3.000 ACR	 5,000.00000 	
0057000000-E UNDERCUT 0005 EXCAVATION 	 200.000 CY	 6.00000 	
0134000000-E DRAINAGE 0006 DITCH EXCAVATION	 170.000 CY	 6.00000 	1,020.00
0195000000-E SELECT 0007 GRANULAR MATERIAL	 100.000 CY	 24.00000 	2,400.00
0196000000-E GEOTEXTILE 0008 FOR SOIL STABILIZA-TION	 3,400.000		13,600.00
0255000000-E GENERIC 0009 GRADING ITEM HAULING AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	 50.000 TON		5,000.00
0318000000-E FOUNDATION 0010 CONDITIONING MATE- RIAL, MINOR STRUCTURES	 3,050.000 TON		85,400.00

Contract ID: C203078 Project(s): STATE FUNDED

Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

Line	•		Approx.	Unit Price	Bid Amount
No.	Description	1	Quantity and Units	Dollars Cts	Dollars Ct
0011	032000000-E FOUNDATION CONDITIONING GEO- TEXTILE	 SY	13,530.000	 1.50000 	 20,295.00
	0335200000-E 15" DRAINAGE PIPE 	 LF	2,702.000	 15.00000 	 40,530.00
	0335300000-E 18" DRAINAGE PIPE 	 LF	184.000	20.00000	 3,680.00
	0335400000-E 24" DRAINAGE PIPE 	 LF	28.000 28.000	28.00000	 784.00
	0360000000-E 12" RC PIPE CULVERTS, CLASS III 	 LF	128.000 128	26.25000	3,360.00
	0366000000-E 15" RC PIPE CULVERTS, CLASS III 	 LF	4,220.000 	24.50000 24.50000	103,390.00
	0372000000-E 18" RC PIPE CULVERTS, CLASS III 	 LF	1,264.000 1	29.60000 29.60000	37,414.40
	0378000000-E 24" RC PIPE CULVERTS, CLASS III 	 LF	412.000 	39.20000 39.20000	16,150.40
	0384000000-E 30" RC PIPE CULVERTS, CLASS III	LF	72.000 	 52.50000 	3,780.00
	0453000000-E **" PIPE END SECTION (24")	EA	1.000 	600.00000 	600.00
	0995000000-E PIPE	LF	3,058.000	4.00000 4.00000	12,232.00
	1099500000-E SHALLOW UNDERCUT	CY	1,200.000	4.00000 	4,800.00

Date: 08-21-12 State of NC Revised:

Dept of Transportation

Project(s): STATE FUNDED Contract ID: C203078 Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc.

Line	•	Approx. Quantity - and Units		Unit Price	Bid Amount
No.	Description			 Dollars Cts	 Dollars Ct
0023	1099700000-E CLASS IV SUBGRADE STABILIZA- TION	 TON	2,200.000	28.00000	 61,600.00
	1110000000-E STABILIZER AGGREGATE 	 TON	3,500.000 	24.00000	84,000.00
	1121000000-E AGGREGATE BASE COURSE 	 TON	263.000 263.000	24.00000	6,312.00
	1220000000-E INCIDENTAL STONE BASE 	 TON	1,000.000 1,000	24.00000 	24,000.00
0027		 GAL	249.000 	5.00000 5.00000	1,245.00
0028	1308000000-E MILLING ASPHALT PAVEMENT, ***"TO *****" (0" TO 3")	 SY	1,510.000 	5.00000 5.00000	7,550.00
0029	1489000000-E ASPHALT CONC BASE COURSE, TYPE B25.0B	 TON	14,500.000 	48.00000 	696,000.00
0030	1498000000-E ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	TON	13,500.000 	48.00000 	648,000.00
0031	•	TON	15,550.000 	48.00000 	746,400.00
	1575000000-E ASPHALT BINDER FOR PLANT MIX	TON	2,220.000 	 696.00000 	1,545,120.00
0033	1693000000-E ASPHALT PLANT MIX, PAVEMENT REPAIR	TON	250.000 	 150.00000 	37,500.00
	2000000000-N RIGHT OF WAY MARKERS	EA	139.000 	 165.00000 	22,935.00

Contract ID: C203078 Project(s): STATE FUNDED

Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

+ Line	r: 3619 - Carl Rose and So	 I	Approx.	 Unit Price	Bid Amount
No.	•	 	Quantity and Units	 Dollars Cts	
 0035	2022000000-E SUBDRAIN EXCAVATION	 CY	22.400	 	
	2033000000-E SUBDRAIN FINE AGGREGATE 	 CY	16.800	35.00000	588.00
	2044000000-E 6" PERFORATED SUBDRAIN PIPE 	 LF	100.000	9.30000	930.00
	2070000000-N SUBDRAIN PIPE OUTLET 	 EA	1.000 1.000	100.00000 100.00000	100.00
	2077000000-E 6" OUTLET PIPE 	 LF	6.000 	20.00000 	120.00
0040	•	 CY	0.326 	3,500.00000 	1,141.00
	2253000000-E PIPE COLLARS 	 CY	3.340 	1,200.00000 	4,008.00
	2286000000-N MASONRY DRAINAGE STRUCTURES	 EA	65.000 	875.00000 	56,875.00 56
	2308000000-E MASONRY DRAINAGE STRUCTURES 	 LF	20.100 	200.00000 	4,020.00
-	2364000000-N FRAME WITH TWO GRATES, STD 840.16		11.000	400.00000 	4,400.00
	2364200000-N FRAME WITH TWO GRATES, STD 840.20		1.000	375.00000 	375.00 375.00
	2366000000-N FRAME WITH TWO GRATES, STD 840.24		6.000 	350.00000 	2,100.00

Contract ID: C203078 Project(s): STATE FUNDED

Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

Line	•	1	Approx.	Unit Price	Bid Amount
No.	Description 		Quantity and Units	 Dollars Cts	 Dollars C
	2367000000-N FRAME WITH TWO GRATES, STD 840.29 		12.000	 370.00000 	4,440.00
0048	2374000000-N FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	 EA	2.000	440.00000	880.00
0049	2374000000-N FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	 EA	14.000 	460.00000	6,440.00
0050	2374000000-N FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	 EA	9.000 9.000 	460.00000 460.00000	4,140.00
	2396000000-N FRAME WITH COVER, STD 840.54	 EA	 5.000 	 300.00000 	1,500.00
0052	2407000000-N STEEL FRAME WITH TWO GRATES, STD 840.37	 EA	5.000 5.000 	1,050.00000 	5,250.00
-	2535000000-E **"X **" CONCRETE CURB (8" X 18")	 LF	340.000 	19.00000 	6,460.00
	2549000000-E 2'-6" CONCRETE CURB & GUTTER	 LF	2,790.000 	13.95000 	38,920.50
	2577000000-E CONCRETE EXPRESSWAY GUTTER	 LF	200.000 	34.95000 	6,990.00
•	2580000000-E CONCRETE VALLEY GUTTER	LF	520.000 	 13.95000 	7,254.00
	2605000000-N CONCRETE CURB RAMP	EA	5.000 	150.00000 	750.00
	2612000000-E 6" CONCRETE DRIVEWAY	SY	130.000	63.00000 	8,190.00

Date: 08-21-12 State of NC Dept of Transportation Revised:

Project(s): STATE FUNDED Contract ID: C203078

+ Line		 	Approx.	 Unit Price	 Bid Amount
No.	Description		Quantity and Units	 Dollars Cts	 Dollars Ct
	3559000000-E ** STRAND BARBED WIRE FENCE WITH POSTS (3)	 LF	1,500.000	 4.25000 	 6,375.00
	3563000000-E TEMP **" WOVEN WIRE FENCE, COMPLETE W/POSTS (47")	 LF	1,000.000	 4.75000 	 4,750.00
	3628000000-E RIP RAP, CLASS I 	 TON	20.000	 40.00000 	 800.00
	3649000000-E RIP RAP, CLASS B 	 TON	60.000	 40.00000 	 2,400.00
	3656000000-E GEOTEXTILE FOR DRAINAGE 	 SY	2,105.000	 1.75000 	 3,683.75
	4072000000-E SUPPORTS, 3-LB STEEL U-CHANNEL	 LF	1,664.000	3.45000	5,740.80
	4102000000-N SIGN ERECTION, TYPE E 	 EA	72.000	49.50000	3,564.00
	4108000000-N SIGN ERECTION, TYPE F 	 EA	2.000 	70.00000 70.00000	140.00
0067	4116100000-N SIGN ERECTION, RELOCATE, TYPE **** (GROUND MOUNTED) (E)		1.000	 135.00000 	135.00
	4155000000-N DISPOSAL OF SIGN SYSTEM, U- CHANNEL 	•	83.000 83.000	3.50000	290.50
	4400000000-E WORK ZONE SIGNS (STATIONARY)	 SF	 528.000	3.75000 3.75000	1,980.00
	4405000000-E WORK ZONE SIGNS (PORTABLE)	SF	144.000 	 5.70000 	820.80

Date: 08-21-12 State of NC Dept of Transportation Revised:

Project(s): STATE FUNDED Contract ID: C203078

+	r: 3619 - Carl Rose and So				
Line		1	Approx. Quantity		Bid Amount
 +		<u> </u>	and Units	Dollars	Dollars Ct
 0071 	4430000000-N DRUMS 	 EA	1,142.000	 50.00000 	 57,100.00
•	4445000000-E BARRICADES (TYPE III) 	 LF	16.000	 15.00000 	240.00
+ 0073 	4455000000-N FLAGGER 	 DAY	780.000	180.00000	140,400.00
10074	4650000000-N TEMPORARY RAISED PAVEMENT MARKERS	 EA	221.000 221	8.25000	1,823.25
10075	4700000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (12", 90 MILS)		42.000 42.000	5.25000 	220.50
10076	4710000000-E THERMOPLAST IC PAVEMENT MARKINGLINES (24", 120 MILS)	•	406.000 	 12.00000 	4,872.00
0077 	4721000000-E THERMOPLAST IC PAVEMENT MARKINGCHARACTER (120 MILS)	 EA	12.000 	 80.00000 	960.00
0078	4725000000-E THERMOPLAST IC PAVEMENT MARKINGSYMBOL (90 MILS)		110.000 	140.00000 	15,400.00
0079	4810000000-E PAINT PAVEMENT MARKING LINES (4")	 LF	67,686.000 67	0.18000 0.18000	12,183.48
0080	4835000000-E PAINT PAVEMENT MARKING LINES (24")	LF	240.000 	3.25000	780.00
0081	4840000000-N PAINT PAVEMENT MARKING CHARAC-TER	EA	24.000 	52.50000 	1,260.00

Contract ID: C203078 Project(s): STATE FUNDED

+	er: 3619 - Carl Rose and So				
Line		1	Approx. Quantity	Unit Price 	Bid Amount
 +		 	and Units	Dollars Cts	Dollars Ct
 0082 	4847000000-E POLYUREA PAVEMENT MARKING LINES (4", ********) (HIGHLY REFLECTIVE		79,323.000	 0.98000 	 77,736.54
 +	ELEMENTS)	LF		 	
10083	4850000000-E REMOVAL OF PAVEMENT MARKING LINES (4")		18,758.000	 0.40000 	 7,503.20
10084	4875000000-N REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	 EA	24.000	 40.00000 	 960.00
	4905000000-N SNOWPLOWABL E PAVEMENT MARKERS	 EA	457.000 457.000	31.50000	 14,395.50
-	5325200000-E 2" WATER LINE 	 LF	582.000 582.000	8.10000	4,714.20
	5325600000-E 6" WATER LINE 	 LF	3,057.000 3,057.000	26.00000 26.00000	79,482.00
10088		 LF	620.000 	37.00000 37.00000	22,940.00
 0089		 LF	160.000 160.000	81.45000 81.45000	13,032.00
 0090		 LF	16,672.000 	 51.50000 	858,608.00
 0091		 EA	6.000 	580.00000 	3,480.00
 0092		EA	16.000 	965.00000 	15,440.00

Project(s): STATE FUNDED

Contract ID: C203078 Proj Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

Line No.			Approx. Quantity and Units		Unit Price	Bid Amount
					Dollars Cts	 Dollars Ct
0093	5546000000-E	8" VALVE	 EA	1.000	1,277.00000	1,277.00
0094	5552000000-E 		 EA	2.000 	2,280.00000	4,560.00
0095	5558600000-E 		 EA	 15.000 	5,113.00000 5,113	76,695.00
	5571000000-E VALVE (2 ") 	**" TAPPING	 EA	7.000 7.000	1,182.00000 1,182	8,274.00
	5571600000-E VALVE 	6" TAPPING	 EA	14.000 	3,280.00000 3,280.00000	45,920.00
	5571800000-E VALVE 	1	 EA	1.000 	4,183.00000 	4,183.00
	5572000000-E VALVE 	1	 EA	2.000 	4,800.00000 	9,600.00
	5648000000-N WATER METER 	RELOCATE 	EA	134.000 	1,600.00000 1	214,400.00
	5666000000-E HYDRANT 	FIRE 	EA	 15.000 	4,200.00000 	63,000.00
-	5800000000-E UTILITY PIPE 	ĺ	LF	1,987.000 	1.25000 	2,483.75 2,483
	5801000000-E UTILITY PIPE	Ì	LF	9,323.000	2.20000 	20,510.60
	5802000000-E UTILITY PIPE	ABANDON 10" 	LF	7,397.000	3.25000 	24,040.25 24,040

Contract ID: C203078 Project(s): STATE FUNDED

Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

Line No.			Approx. Quantity	Unit Price	Bid Amount
	 6000000000-E TEMPORARY SILT FENCE 	 LF	and Units 	Dollars Cts 1.41000	
0106	6006000000-E STONE FOR EROSION CONTROL, CLASS A	 TON	1,930.000	32.00000	 61,760.00
0107	6009000000-E STONE FOR EROSION CONTROL, CLASS B	 TON	2,615.000	32.00000	83,680.00
	6012000000-E SEDIMENT CONTROL STONE	 TON	2,045.000 2,045	29.00000	59,305.00
	6015000000-E TEMPORARY MULCHING 	 ACR	51.000 51.000	615.00000 	31,365.00
	6018000000-E SEED FOR TEMPORARY SEEDING	 LB	1,400.000 1,400	2.19000 	3,066.00
	6021000000-E FERTILIZER FOR TEMPORARY SEED-ING	 TON	5.750 5.750	904.00000 904	5,198.00
•	6024000000-E TEMPORARY SLOPE DRAINS	 LF	1,000.000 	8.00000 8.00000 	8,000.00
	6030000000-E SILT EXCAVATION	CY	4,180.000 	2.50000 	10,450.00
	6036000000-E MATTING FOR EROSION CONTROL	SY	40,000.000 	1.36000 	54,400.00
	6038000000-E PERMANENT SOIL REINFORCEMENT MAT	SY	6,700.000 	4.76000 	31,892.00
	6042000000-E 1/4" HARDWARE CLOTH	LF	4,200.000 	3.89000 3.89000	16,338.00

Date: 08-21-12 State of NC Dept of Transportation Revised:

Project(s): STATE FUNDED Contract ID: C203078

Letting Date: 09-18-12 Call Order: 013 Bidder: 3619 - Carl Rose and Sons, Inc

+ Line	•	 !	Approx.	Unit Price	Bid Amount
No.	Description	 	Quantity and Units	Dollars Cts	Dollars Ct
 0117 	6071010000-E WATTLE 	 LF	8,600.000	 5.05000 	 43,430.00
-	6071012000-E COIR FIBER WATTLE 	 LF	300.000	 4.10000 	 1,230.00
	6071020000-E POLYACRYLAM IDE (PAM) 	 LB	4,050.000	 8.00000 	 32,400.00
-	6071030000-E COIR FIBER BAFFLE 	 LF	900.000	 5.10000 	
-	6084000000-E SEEDING & MULCHING 	 ACR	42.000	 1,674.00000 	 70,308.00
 0122 		 ACR	20.000	99.00000	 1,980.00
	6090000000-E SEED FOR REPAIR SEEDING	 LB	550.000 550.000	2.19000	 1,204.50
	6093000000-E FERTILIZER FOR REPAIR SEEDING 	TON	1.500 1.500	904.00000 904	1,356.00
	6096000000-E SEED FOR SUPPLEMENTAL SEEDING	LB	1,000.000 	2.89000 2.89000	2,890.00
	6108000000-E FERTILIZER TOPDRESSING	TON	 29.750 	775.00000 	23,056.25
	6114500000-N SPECIALIZED HAND MOWING 	MHR	120.000 	23.00000 23.00000	2,760.00
	6117000000-N RESPONSE FOR EROSION CONTROL	EA	90.000 	200.00000 	18,000.00

State of NC Date: 08-21-12 State of NC Dept of Transportation Revised:

Contract ID: C203078 Project(s): STATE FUNDED

Line Item	 	Approx. Quantity and Units	Unit Price	Bid Amount
No. Description			Dollars Cts	Dollars Ct
8802014000-E SOLDIER 0129 PILE RETAINING WALLS 	 SF	846.000 846.000	174.32000 	147,474.72
8839000000-E GENERIC 0130 RETAINING WALL ITEM PEDESTRIAN SAFETY RAIL	 LF	235.000 	130.95000	30,773.25
8847000000-E GENERIC 0131 RETAINING WALL ITEM STONE VENEERED CMU RETAINING WALL	 SF	416.000 	220.00000 	91,520.00
 Section 0001 Total				8,567,871.64
 Bid Total		 		8,567,871.64

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:

- 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.

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

Explanation:

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

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

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

AWARD LIMITS ON MULTIPLE PROJECTS

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

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

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

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

will not exceed a total of NOT ANSWERED for those

projects indicated herein, for which bids will be opened on

(MM/DD/YY)

The Award Limits shall apply to the following projects:

Contract Number

County

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

NOT ANSWERED

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

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION MBE COMMITMENT ITEMS

DATE: 08-21-12

PAGE: 15

PROPOSAL: C203078

LETTING: L120918

CALL: 013

VENDOR: 3619 Carl Rose and Sons, Inc

LINE ITEM ITEM UNIT SUBCONTRACTOR SUBCONTRACTOR EXTENDED NO. NO. DESC. TYPE QUANTITY UNIT PRICE AMOUNT MBE SUBCONTRACTOR: 7505 SLOAN TRUCKING Will Use Ouote: Yes 0029 1489000000-E ASP CONC BAS TON 297.000 65.00000 Partial item, haul only, 297 hours @ \$65.00 per hour=\$19,305.00 0030 1498000000-E ASP CONC INT TON 297.000 65.00000 Partial item, haul only, 297 hours@ \$65.00 per hour= 19,305.00 0031 1519000000-E ASP CONC SUR TON 297.000 65.00000 19305.00 Partial item, haul only, 297 hours @ \$65.00 per hour= 19,305.00 committed MBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 57,915.00 MBE SUBCONTRACTOR: 4435 KENNETH LEON MARTIN DBA MARTIN & MARTIN Will Use Quote: Yes 0029 1489000000-E ASP CONC BAS TON 300.000 70.00000 21000.00 Partial item, haul only, 300 hours @ \$70.00 per hour= 21,000.00 0030 1498000000-E ASP CONC INT TON 300.000 70.00000 21000.00 Partial item, haul only, 300 hours @ \$70.00 per hour= 21,000.00 0031 1519000000-E ASP CONC SUR TON 300.000 70.00000 Partial item, haul only, 300 hours @ 70.00 per hour= \$21,000.00

MBE COMMITMENT TOTAL FOR SUBCONTRACTOR:

63,000.00

committed

TOTAL MBE COMMITMENT FOR VENDOR:

Entered: 1.41% or 120915.00 Required: 4.00% or 342714.87

<GOAL NOT MET>

Check: FE90045D Page 15

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION DATE: 08-21-12 WBE COMMITMENT ITEMS

PAGE: 16

PROPOSAL: C203078

LETTING: L120918 CALL: 013 VENDOR: 3619 Carl Rose and Sons, Inc

LINE NO.	ITEM NO.	ITEM DESC.	UNIT TYPE	SUBCONTRACTOR QUANTITY	SUBCONTRACTOR UNIT PRICE	EXTENDED AMOUNT	
	SUBCONTRACTOR: Use Quote: Ye		CONTE	ROL SAFETY SERV			. -
	4072000000-E	SUPPORT, 3-L	LF	1664.000	4.88000	8120.32	
	4102000000-N	SIGN ERECTIO	EA	72.000	50.00000	3600.00	
	4108000000-N 4116100000-N	SIGN ERECTIO	EA	2.000 1.000	88.00000	176.00	
	4116100000-N 4155000000-N	DIGN ERECT,	EA En	83.000	1 00000	73.00	
	440000000-R	DISPOSE SIGN	CE CE	528.000	3 95000	2085 60	
				144.000			
0072	4445000000-E	BARRICADES (LF	16.000	16.50000	264.00	
	WBE COMMITME	NT TOTAL FOR S	BUBCON	TRACTOR:	- 1	 15,519.92	committee
	SUBCONTRACTOR:	4388 FOOTHILI		STRUCTION SERV			
	Use Quote: Yes						
034	2000000000-N	RIGHT OF WAY	EA	139.000 1500.000 1000.000 37150.000 51.000 1400.000 5.750 40000.000 6700.000 4200.000	165.00000	22935.00	
059	3559000000-E	** STRAND BW	LF	1500.000	4.25000	6375.00	
060	3563000000-E	TEMP **" WW	LF	1000.000	4.75000	4750.00	
105	6000000000-E	TEMPORARY SI	LF	37150.000	1.41000	52381.50	
109	6015000000-E	TEMPORARY MU	ACR	51.000	615.00000	31365.00	
110	6018000000-E	SEED FOR TEM	LB	1400.000	2.19000	3066.00	
111	6021000000-E	FERT FOR TEM	TON	5.750	904.00000	5198.00	
114	6036000000-E	MATTING FOR	SY	40000.000	1.36000	54400.00	
115	6038000000-E	PERM SOIL RE	SY	6700.000	4.76000	31892.00	
116	6042000000-E	1/4" HARDWAR	LF	4200.000	3.89000	16338.00	
T T 1	00/101000-E	MUTITE	ПE	0000.000	3.03000	42420.00	
	6071012000-E			300.000			
	6071020000-E			4050.000			
				900.000			
		MOWING AND	ACR	42.000	16/4.00000		
		MOWING	ACK	20.000 550.000	99.00000	1980.00	
						1204.50 1356.00	
		FERT FOR REP		1000.000		2890.00	
				29.750			
				120.000			
				90.000			
	WBE COMMITMEN	IT TOTAL FOR S	UBCON'	TRACTOR:	4	31,905.25	committed
	UBCONTRACTOR: Use Quote: Yes		TERIA:	LS, LLC			
	1575000000-E		ПОМ	200 000	695 00000	137000.00	

Check: FE90045D Page 16

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION WBE COMMITMENT ITEMS

DATE: 08-21-12

PAGE: 17

ITEM UNIT SUBCONTRACTOR SUBCONTRACTOR EXTENDED DESC. TYPE QUANTITY UNIT PRICE AMOUNT

LINE ITEM NO. NO.

WBE COMMITMENT TOTAL FOR SUBCONTRACTOR:

137,000.00

* 0.60 = 82,200.00 committed

TOTAL WBE COMMITMENT FOR VENDOR:

Entered: 6.18% or 529625.17 Required: 6.00% or 514072.30

<GOAL MET>

Check: FE90045D Page 17

Page: 1 of 8

	Contract Item Sheets For C203078					
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum LS	520,602.00	520,602.00
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum LS	49,914.00	49,914.00
0003	0043000000-N	226	GRADING	Lump Sum LS	850,000.00	850,000.00
0004	0050000000-Е	226	SUPPLEMENTARY CLEARING & GRUB- BING	3 ACR	5,000.00	15,000.00
0005	0057000000-E	226	UNDERCUT EXCAVATION	200 CY	6.00	1,200.00
0006	0134000000-E	240	DRAINAGE DITCH EXCAVATION	170 CY	6.00	1,020.00
0007	0195000000-E	265	SELECT GRANULAR MATERIAL	100 CY	24.00	2,400.00
8000	019600000-Е	270	GEOTEXTILE FOR SOIL STABILIZA- TION	3,400 SY	4.00	13,600.00
0009	0255000000-E	SP	GENERIC GRADING ITEM HAULING AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	50 TON	100.00	5,000.00
0010	0318000000-E	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	3,050 TON	28.00	85,400.00
0011	032000000-E	300	FOUNDATION CONDITIONING GEO- TEXTILE	13,530 SY	1.50	20,295.00
0012	0335200000-E	305	15" DRAINAGE PIPE	2,702 LF	15.00	·
0013	0335300000-E		18" DRAINAGE PIPE	184 LF	20.00	
0014			24" DRAINAGE PIPE	28 LF		784.00
0015	036000000-E	310	12" RC PIPE CULVERTS, CLASS III	128 LF	26.25	
0016	0366000000-E	310	15" RC PIPE CULVERTS, CLASS	4,220 LF	24.50	103,390.00
 0017	0372000000-E	310	18" RC PIPE CULVERTS, CLASS		29.60	37,414.40
 0018	0378000000-E	310	24" RC PIPE CULVERTS, CLASS	412 LF		16,150.40

Page: 2 of 8

	Contract Item Sheets For C203078						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid	
0019	038400000-E	310	30" RC PIPE CULVERTS, CLASS	72 LF	52.50	3,780.00	
0020	0453000000-E	310	**" PIPE END SECTION (24")	1 EA	600.00	600.00	
0021	0995000000-E	340	PIPE REMOVAL	3,058 LF	4.00	12,232.00	
0022	1099500000-E	505	SHALLOW UNDERCUT	1,200 CY	4.00	4,800.00	
0023	1099700000-E	505	CLASS IV SUBGRADE STABILIZA- TION	2,200 TON	28.00	61,600.00	
0024	1110000000-E	510	STABILIZER AGGREGATE	3,500 TON	24.00	84,000.00	
0025	1121000000-E	520	AGGREGATE BASE COURSE	263 TON	24.00	6,312.00	
0026	1220000000-E	545	INCIDENTAL STONE BASE	1,000 TON	24.00	24,000.00	
0027	1275000000-E	600	PRIME COAT	249 GAL	5.00	1,245.00	
0028	130800000-Е	607	MILLING ASPHALT PAVEMENT, ***" TO ******" (0" TO 3")	1,510 SY	5.00	7,550.00	
0029	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	14,500 TON	48.00	696,000.00	
0030	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	13,500 TON	48.00	648,000.00	
0031	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	15,550 TON	48.00	746,400.00	
0032	1575000000-E		ASPHALT BINDER FOR PLANT MIX	2,220 TON		1,545,120.00	
0033	169300000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	250 TON	150.00	37,500.00	
0034			RIGHT OF WAY MARKERS	139 EA	165.00		
0035	2022000000-E	815	SUBDRAIN EXCAVATION	22.4 CY	10.00	224.00	
0036	2033000000-E	815	SUBDRAIN FINE AGGREGATE	16.8 CY	35.00	588.00	
	~						

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Contract Item Sheets For C203078						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0037	204400000-Е	815	6" PERFORATED SUBDRAIN PIPE	100 LF	9.30	930.00
0038	2070000000-N		SUBDRAIN PIPE OUTLET	1 EA	100.00	100.00
0039				6 LF	20.00	120.00
0040	2209000000-E	838	ENDWALLS	0.326 CY	3,500.00	1,141.00
0041			PIPE COLLARS	3.34 CY	1,200.00	4,008.00
0042	2286000000-N	840		65 EA	875.00	56,875.00
0043	2308000000-E		MASONRY DRAINAGE STRUCTURES	20.1 LF	200.00	
0044	2364000000-N			11 EA	400.00	4,400.00
0045	2364200000-N	840	FRAME WITH TWO GRATES, STD 840.20	1 EA	375.00	375.00
0046	2366000000-N	840	FRAME WITH TWO GRATES, STD 840.24	6 EA	350.00	2,100.00
 0047	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	12 EA	370.00	4,440.00
 0048	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	2 EA	440.00	880.00
 0049	2374000000-N	840		14 EA	460.00	6,440.00
 0050	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	9 EA	460.00	4,140.00
0051	2396000000-N		FRAME WITH COVER, STD 840.54	5 EA	300.00	•
0052	2407000000-N	840	STEEL FRAME WITH TWO GRATES, STD 840.37	5 EA	1,050.00	5,250.00
0053	2535000000-E	846	**"X **" CONCRETE CURB (8" X 18")	340 LF	19.00	6,460.00

Page: 4 of 8

2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	Quantity Unit	Unit Bid Price	Amoun Bid
2577000000-E		2'-6" CONCRETE CURB & GUTTER			
2577000000-E		2'-6" CONCRETE CURB & GUTTER			
	040		2,790 LF	13.95	38,920.50
2580000000-F	846	CONCRETE EXPRESSWAY GUTTER	200 LF	34.95	6,990.00
20000000002	846	CONCRETE VALLEY GUTTER	520 LF	13.95	7,254.00
2605000000-N	848	CONCRETE CURB RAMP	5 EA	150.00	750.00
2612000000-E	848	6" CONCRETE DRIVEWAY	130 SY	63.00	8,190.00
3559000000-E	866	** STRAND BARBED WIRE FENCE WITH POSTS (3)	1,500 LF	4.25	6,375.00
3563000000-E	SP	TEMP **" WOVEN WIRE FENCE, COMPLETE W/POSTS (47")	1,000 LF	4.75	4,750.00
3628000000-E	876		20 TON	40.00	800.00
364900000-E	876	RIP RAP, CLASS B	60 TON	40.00	2,400.00
3656000000-E	876		2,105 SY	1.75	3,683.75
ю72000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	1,664 LF	3.45	5,740.80
			72 EA	49.50	3,564.00
108000000-N	904	SIGN ERECTION, TYPE F	2 EA	70.00	140.00
			1 EA		
			83 EA	3.50	290.50
		WORK ZONE SIGNS (STATIONARY)	528 SF	3.75	1,980.00
405000000-Е	1110	WORK ZONE SIGNS (PORTABLE)	144 SF	5.70	820.80
		DRUMS	1,142 EA	50.00	57,100.00
445000000-E	1145	BARRICADES (TYPE III)	16 LF		
38 36 36 36 36 36 36 36 36 36 36 36 36 36	563000000-E 563000000-E 563000000-E 563000000-E 572000000-E 572000000-N 55000000-N 55000000-E 50000000-E 50000000-E	559000000-E 876 528000000-E 876 5349000000-E 876 5356000000-E 903 102000000-N 904 116100000-N 904 55000000-N 907	Sepandonoone	130	### ### ##############################

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	Contract Item Sheets For C203078					
Amoun Bio	Unit Bid Price	Quantity Unit	Description	Sec #	ItemNumber	Line #
140,400.00	180.00	780 DAY	FLAGGER	1150	445500000-N	0073
1,823.25	8.25	221 EA	TEMPORARY RAISED PAVEMENT MARKERS	1251	4650000000-N	0074
220.50	5.25	42 LF	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	1205	4700000000-E	0075
4,872.00	12.00	406 LF	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	1205	4710000000-E	0076
960.00	80.00	12 EA	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	1205	4721000000-E	0077
15,400.00	140.00	110 EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	1205	4725000000-E	0078
	0.18	67,686 LF	PAINT PAVEMENT MARKING LINES (4")	1205	4810000000-E	0079
780.00	3.25	240 LF	PAINT PAVEMENT MARKING LINES (24")	1205	4835000000-E	0080
1,260.00	52.50	24 EA	PAINT PAVEMENT MARKING CHARAC- TER	1205	484000000-N	0081
77,736.54	0.98	79,323 LF	POLYUREA PAVEMENT MARKING LINES (4", *********) (HIGHLY REFLECTIVE ELEMENTS)	1205	4847000000-E	0082
	0.40	18,758 LF	REMOVAL OF PAVEMENT MARKING LINES (4")		485000000-E	0083
960.00	40.00	24 EA	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS		4875000000-N	0084
14,395.50	31.50	457 EA	SNOWPLOWABLE PAVEMENT MARKERS	1253	4905000000-N	0085
4,714.20	8.10	582 LF	2" WATER LINE	1510	5325200000-E	0086
79,482.00	26.00	3,057 LF		1510	5325600000-E	0087
22,940.00	37.00	620 LF	8" WATER LINE	1510	5325800000-E	0088
13,032.00	81.45	160 LF	10" WATER LINE	1510	5326000000-E	0089

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Contract Item Sheets For C203078						_
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0090	5326600000-E	1510	16" WATER LINE	16,672 LF	51.50	858,608.00
0091	5536000000-E	1515		6 EA	580.00	3,480.00
0092	5540000000-E	1515	6" VALVE	16 EA	965.00	15,440.00
0093	5546000000-E	1515		1 EA	1,277.00	1,277.00
0094	5552000000-E	1515	10" VALVE	2 EA	2,280.00	4,560.00
0095	5558600000-E	1515	16" VALVE	15 EA	5,113.00	·
0096	5571000000-E	1515	**" TAPPING VALVE (2")	7 EA	1,182.00	8,274.00
0097	5571600000-E	1515	6" TAPPING VALVE	14 EA	3,280.00	
0098	5571800000-E	1515	8" TAPPING VALVE	1 EA	4,183.00	4,183.00
0099	5572000000-E	1515	10" TAPPING VALVE	2 EA	4,800.00	9,600.00
0100	5648000000-N	1515	RELOCATE WATER METER	134 EA	1,600.00	214,400.00
0101	5666000000-E	1515	FIRE HYDRANT	15 EA	4,200.00	63,000.00
			ABANDON 6" UTILITY PIPE	1,987 LF	1.25	2,483.75
0103	5801000000-E	1530	ABANDON 8" UTILITY PIPE	9,323 LF	2.20	20,510.60
	5802000000-E	1530	ABANDON 10" UTILITY PIPE	7,397 LF		24,040.25
0105	600000000-E	1605	TEMPORARY SILT FENCE	37,150 LF	1.41	52,381.50
0106			STONE FOR EROSION CONTROL, CLASS A	1,930 TON	32.00	61,760.00
0107	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	2,615 TON		83,680.00
0108	6012000000-E		SEDIMENT CONTROL STONE	2,045 TON	29.00	59,305.00
0109	6015000000-E	1615	TEMPORARY MULCHING	51 ACR	615.00	

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	Contract Item Sheets For C203078					
Line #	ItemNumber 	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0110	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	1,400 LB	2.19	3,066.00
0111	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED- ING	5.75 TON	904.00	5,198.00
0112	6024000000-E	1622	TEMPORARY SLOPE DRAINS	1,000 LF	8.00	
0113	603000000-E	1630	SILT EXCAVATION	4,180 CY	2.50	10,450.00
0114	6036000000-E		MATTING FOR EROSION CONTROL	40,000 SY	1.36	54,400.00
0115	603800000-E			6,700 SY	4.76	
0116	6042000000-E	1632	1/4" HARDWARE CLOTH	4,200 LF	3.89	16,338.00
0117	6071010000-E	SP	WATTLE	8,600 LF	5.05	43,430.00
0118	6071012000-E	SP	COIR FIBER WATTLE	300 LF	4.10	1,230.00
0119	6071020000-E	SP	POLYACRYLAMIDE (PAM)	4,050 LB	8.00	32,400.00
0120	6071030000-E	1640	COIR FIBER BAFFLE	900 LF	5.10	4,590.00
0121	608400000-E	1660	SEEDING & MULCHING	42 ACR	1,674.00	70,308.00
0122	6087000000-E	1660	MOWING	20 ACR	99.00	1,980.00
0123	609000000-E	1661	SEED FOR REPAIR SEEDING	550 LB	2.19	1,204.50
0124			FERTILIZER FOR REPAIR SEEDING	1.5 TON	904.00	1,356.00
0125	609600000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	1,000 LB	2.89	2,890.00
0126	610800000-E	1665	FERTILIZER TOPDRESSING	29.75 TON	775.00	23,056.25
0127	6114500000-N	1667	SPECIALIZED HAND MOWING	120 MHR	23.00	2,760.00
0128	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	90 EA	200.00	18,000.00
0129	8802014000-E	SP	SOLDIER PILE RETAINING WALLS	846 SF	174.32	147,474.72

Oct 11, 2012 9:14 am

North Carolina Department Of Transportation Contract Item Sheets For C203078

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0130	883900000-E	SP	GENERIC RETAINING WALL ITEM PEDESTRIAN SAFETY RAIL	235 LF	130.95	30,773.25
 0131	8847000000-E	SP	GENERIC RETAINING WALL ITEM STONE VENEERED CMU RETAINING WALL	416 SF	220.00	91,520.00

TOTAL AMOUNT OF BID FOR ENTIRE PROJECT

0914/Oct11/Q427848.966/D475424686000/E131

Page: 8 of 8

County WILKES

Rev. 5-19-11

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 CARL ROSE & SONS, INC.

Full name of Corporation

	NORTH CAROLINA 28621
Attest College Address a	s Prequalified By
Secretary/ Assistant Secretar y Select appropriate title	President/Vice President/Assistant Vice President Select appropriate title
C. DEAN ROSE	DALE E. ROSE
Print or type Signer's name	Print or type Signer's name

CORPORATE SEAL

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

10TH day of OCTOBER
2012

NOTARY SEAL
Signature of Notary Public

Of NORTH CAROLINA

Notary Public

My Commission Expires: MAY 6, 2015

Notary Public
Janice N. Stanley
Yadkin County, NC
My Commission Expires

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.

Contrac	t No.	C203078
County	WIL	KES

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.

Γ	
L	 Check here if an explanation is attached to this certification.

Contract No. C203078

County (ies): Wilkes

ACCEPTED BY THE DEPARTMENT OF TRANSPORTATION

Contract Officer

Execution of Contract and Bonds Approved as to Form:

Attorney General

Contract No.	C203078		
County	Wilkes		

Rev 5-17-11

CONTRACT PAYMENT BOND

Date of Payment Bond Execution	October 17, 2012	
Name of Principal Contractor	Carl Rose & Sons, Inc.	
Name of Surety:	Federal Insurance Company	
Name of Contracting Body:	North Carolina Department of Transportation	
	Raleigh, North Carolina	
Amount of Bond:	(\$8,567,871.64) Eight Million Five Hundred Sixty Seven Thousand Eight Hundred Seventy One Dollars and 64/100	
Contract ID No.:	C203078	
County Name:	Wilkes	

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

<u>C203078</u>
Wilkes

CONTRACT PAYMENT BOND

Affix Seal of Surety Company

Federal Insurance Company

Print or type Surety Company Name

By Donna K. Ashley

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



Signature of Attorney in Fact

Signature of Witness

Wendy E. Lahm

Print or type Signer's name

6100 Fairview Road

Charlotte, NC 28210

Address of Attorney-in-Fact

Rev 5-17-11

CONTRACT PAYMENT BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

CARL ROSE & SONS, INC.

Full name of Corporation

P. O. BOX 786 ELKIN, N. C. 28621

Address as prequalified

Ву

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

DALE E. ROSE

Print or type Signer's name

Affix Corporate Seal

Attest

Signature of Secretary, Assistant Secretary.

Select appropriate title

C. DEAN ROSE

C. Duk

Print or type Signer's name



POWER OF ATTORNEY Federal Insurance Company Vigilant Insurance Company Pacific Indemnity Company Attn: Surety Department 15 Mountain View Road Warren, NJ 07059

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint

Donna K. Ashley

as their true and lawful Attorney- in- Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, the following Surety Bond:

Surety Bond Number

:8220-57-84

Obligee

:North Carolina Department of Transportation

And the execution of such bond or obligation by such Attorney- in- Fact in the Company's name and on its behalf as surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof, be valid and binding upon the Company.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 20th day of November, 2008.

Kennth C. Wendel

Richard A. Ciullo, Vice President

Verdie Kalsh

STATE OF NEW JERSEY

County of Somerset

SS.

On this 20th day of November, 2008, before me, a Notary Public of New Jersey, personally came Kenneth C. Wendel, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Kenneth C. Wendel, being by me duly swom, did depose and say that he is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By- Laws of said Companies; and that he signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that he is acquainted with Richard A. Ciulio, and knows him to be Vice President of said Companies; and that the signature of Richard A. Ciulio, subscribed to said Power of Attorney is in the genuine handwriting of Richard A. Ciulio, and was thereto subscribed by authority of said By- Laws and in deponent's presence.

Notarial Seal



WENDIE WALSH Notory Public, State of New Jersey No. 0054504 Commission Expires April 18, 2013

Notary

Public

CERTIFICATION

Extract from the By- Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or tithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys- in- Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

- I, Kenneth C. Wendel, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that
 - the foregoing extract of the By- Laws of the Companies is true and correct,
 - (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in Puerto Rico and the U.S. Virgin Islands, and Federal is licensed in American Samoa, Guam, and each of the Provinces of Canada except Prince Edward Island; and
 - (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this

1/tn

day of October, 2012







Kenneth C. Wendel, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@ chubb.com

Bond No. 8220-57-84

Contract No. C203078

County Wilkes

Rev 5-17-11

CONTRACT PERFORMANCE BOND

Date of Performance Bond Execution:

October 17, 2012

Name of Principal Contractor:

Name of Surety:

Name of Contracting Body:

North Carolina Department of Transportation

Raleigh, North Carolina

Amount of Bond:

(\$8,567,871.64)

Eight Million Five Hundred Sixty Seven Thousand Eight Hundred Seventy One Dollars and 64/100

Contract ID No.:

C203078

Wilkes

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 PERFORMANCE BOND

Affix Seal of Surety Company

Federal Insurance Company

Print or type Surety Company Name

By Donna K. Ashley

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



Signature of Attorney-in-Ract

Signature of Witness

Wendy E. Lahm

Print or type Signer's name

6100 Fairview Road

Charlotte, NC 28210

Address of Attorney-in-Fact

Rev 5-17-11

CONTRACT PERFORMANCE BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

CARL ROSE & SONS, INC.

Full name of Corporation

P. O. BOX 786 ELKIN, N. C. 28621

Address as prequalified

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

DALE E. ROSE

Print or type Signer's name

Affix Corporate Seal

Attest

Signature of Secretary, Assistant Secretary
Select appropriate title

C. DEAN ROSE

Print or type Signer's name



POWER OF ATTORNEY Federal Insurance Company Vigilant Insurance Company Pacific Indemnity Company Attn: Surety Department 15 Mountain View Road Warren, NJ 07059

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In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 20th day of November, 2008.

Kenneth C. Wendel . Assistant Secretary

Richard A. Ciullo, Vice President

Kendie Kalsh

STATE OF NEW JERSEY

County of Somerset

SS.

On this 20th day of November, 2008, before me, a Notary Public of New Jersey, personally came Kenneth C. Wendel, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Kenneth C. Wendel, being by me duly sworn, did depose and say that he is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By- Laws of said Companies; and that he signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that he is acquainted with Richard A. Ciulio, and knows him to be Vice President of said Companies; and that the signature of Richard A. Ciulio, subscribed to said Power of Attorney is in the genuine handwriting of Richard A. Ciulio, and was thereto subscribed by authority of said By- Laws and in deponent's presence.

Notarial Seal



WENDIE WALSH Notary Public, State of New Jersey No. 0054504 Commission Expires April 18, 2013

Notary

Public

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17th

day of October, 2012







Kenneth C. Wendel, Assistant Secretary

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