STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION 9 <u>CONTRACT PROPOSAL</u> PURCHASE ORDER CONTRACT

CONTRACT NO.:	BRIDGE MAINT-15	WBS ELEMENT:	41665.4G
ROUTES:	US-29 I-85 NC-8 US-52	COUNTIES:	FORSYTH ROWAN
DESCRIPTION:	REPAIR DAMAGED STEEL STRAIGHTENING ON BRID ACROSS I-85 AND BRIDGE ACROSS US-52	GE NO. 790094 (RC	OWAN) ON US-29
BID OPENING:	DIVISION 9 OFFICE 375 SILAS CREEK PARKW WINSTON-SALEM, NC 271 NOVEMBER 19, 2014	(d) (77.6 (7.1)	

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD.

ALL BIDDERS MUST BE PREQUALIFIED AS A "BIDDER" or "PO PRIME CONTRACTOR" WITH NCDOT PRIOR TO BID OPENING.

NAME OF BIDDER	N.C. CONTRACTOR'S LICENSE NUMBER
ADDRESS OF BIDDER	
RETURN RIDS TO:	

J. Brett Abernathy, PE, PLS
Division 9 Project Manager
N. C. Department of Transportation
375 Silas Creek Parkway
Winston-Salem, North Carolina 27127

If you have any questions concerning this contract, contact J. Brett Abernathy at (336) 747-7800.

PROPOSAL FOR THE REPAIR OF DAMAGED STEEL BRIDGE BEAMS BY HEAT STRAIGHTENING ON BRIDGE NO. 790094 (ROWAN) ON US-29 ACROSS I-85 AND BRIDGE NO. 330048 (FORSYTH) ON NC-8 ACROSS US-52

CONTRACT NO. BRIDGE MAINT-15 IN FORSYTH & ROWAN COUNTIES, NORTH CAROLINA OCTOBER 29, 2014

DEPARTMENT OF TRANSPORTATION, RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. BRIDGE MAINT-15 has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Board of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with the 2012 Standard Specifications for Roads and Structures by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. <u>BRIDGE MAINT-15</u> in <u>Forsyth & Rowan Counties</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.

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SUBSTITUTE FORM W9	Attached
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EXECUTION OF CONTRACT	Attached
BID FORM	Attached

INSTRUCTIONS TO BIDDERS

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

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- 1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner.
- 2. All entries on the bid sheet, including signatures, shall be written in ink.
- 3. The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures. ** Unit bid prices must be limited to two (2) decimal places. **
- **4.** An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet.
- **5.** The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do NOT use white-out.
- 7. The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number
 - e. Contractor's License Number
- 8. Bids submitted by corporations shall bear the seal of the corporation.
- 9. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **10.** The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 11. THE ENTIRE PROPOSAL INCLUDING BID FORM AND MB/WB FORMS SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE DIVISION OFFICE AT 375 SILAS CREEK PARKWAY, WINSTON-SALEM, NC 27127 BY 10:00 A.M. ON NOVEMBER 19, 2014 (DIVISION OFFICE).
- 12. The sealed bid must display the following statement on the front of the sealed envelope:

Name and Address of Company and:

"REPAIR DAMAGED STEEL BRIDGE BEAMS BY HEAT STRAIGHTENING ON BRIDGE NO. 790094 (ROWAN) ON US-29 ACROSS I-85 AND BRIDGE NO. 330048 (FORSYTH) ON NC-8 ACROSS US-52 TO BE OPENED AT 10:00AM ON NOVEMBER 19, 2014."

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

J. Brett Abernathy, PE, PLS
Division 9 Project Manager
N. C. Department of Transportation
375 Silas Creek Parkway
Winston-Salem, North Carolina 27127

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder. The lowest responsible Bidder will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject any and all bids.

PROJECT STANDARD PROVISIONS

GENERAL:

This contract is for the repair of damaged steel bridge beams by heat straightening on bridge #790094 (Rowan) on US-29 across I-85 and Bridge #330048 (Forsyth) on NC-8 across US-52. The permissible methods of repairs will include flame straightening and welding. Replacement of damaged diaphragm and connection plates may also be required. Removal of paint (including paint containing lead) shall be the responsibility of the Contractor. All touch-up painting after repairs will be performed by the Department. Traffic control will be performed by State Forces.

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

The following is the link to the current edition of the NCDOT

"Standard Specifications for Roads and Structures" and "Roadway Standard Drawings" http://ncdot.org/doh/preconstruct/ps/std_draw/06english/default.html

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

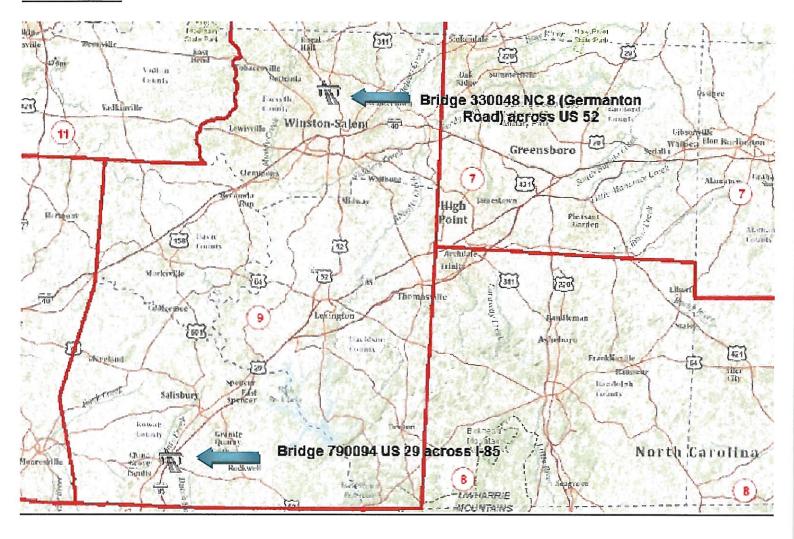
QUALIFYING TO PERFORM WORK:

Only contractors who have successfully completed at least three similar projects within the 18 months prior to this bid may perform work on this contract.

Bidders need not submit evidence of the above qualifications until the lowest bidder is announced. The contract will not be awarded until the qualifications of the lowest responsible bidder are verified by the Engineer.

¹ Successfully: Work completed in accordance with contract specifications, free of citation from safety or environmental agencies.

LOCATIONS:



CONTRACT TIME AND LIQUIDATED DAMAGES:

The date of availability for this project is <u>January 5, 2015</u>. No work will be permitted and no purchase order will be issued until all required bonds and prerequisite conditions and certifications have been satisfied. The awarded contractor may begin work prior to this date if approved by the Engineer.

The completion date for this project is <u>February 9, 2015</u>. No extensions will be authorized except as authorized by Article 108-10 of the current edition of the *Standard Specifications*.

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.

Rowan Availability: January 5, 2015 Rowan Completion: January 23, 2015

Forsyth Availability: January 26, 2015 Forsyth Completion: February 9, 2015

Liquidated damages of Two Hundred Fifty Dollars (\$250.00) per calendar day will be charged for each calendar day after the completion date for this project that any part of the required work has not been completed.

Procedures and work schedule shall be submitted to the Engineer prior to beginning work. After award of the project, the Contractor shall notify the Engineer of his expected date for beginning work. Should the Contractor desire to revise this date, he shall notify in writing at least fourteen (14) days prior to the revised date.

PROSECUTION OF WORK:

(7-1-95) (Rev. 8-21-12) 108 SPI G15R

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

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of \$ 250.00 will be charged the Contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages due to extra engineering and maintenance costs and due to increased public hazard resulting from a suspension of the work. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work on time.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

(2-20-07) 108 SPI G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on I-85, NC-8, US-29 and US-52 during the following time restrictions:

DAY AND TIME RESTRICTIONS

6am to 8pm

In addition, the Contractor shall not close or narrow a lane of traffic on I-85, NC-8, US-29 and US-52, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.

- 2. For **New Year's Day**, between the hours of **6am** December 31st and **8pm** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **8pm** the following Tuesday.
- 3. For **Easter**, between the hours of **6am** Thursday and **8pm** Monday.
- 4. For **Memorial Day**, between the hours of **6am** Friday and **8pm** Tuesday.
- 5. For **Independence Day**, between the hours of **6am** the day before Independence Day and **8pm** the day after Independence Day.

If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **6am** the Thursday before Independence Day and **8pm** the Tuesday after Independence Day.

- 6. For **Labor Day**, between the hours of **6am** Friday and **8pm** Tuesday.
- 7. For **Thanksgiving Day**, between the hours of **6am** Tuesday and **8pm** Monday.
- 8. For **Christmas**, between the hours of **6am** the Friday before the week of Christmas Day and **8pm** the following Tuesday after the week of Christmas Day.

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

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

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated above and place traffic in the existing traffic pattern.

The liquidated damages are Two Hundred and Fifty Dollars (\$ 250.00) per hour.

NO MAJOR CONTRACT ITEMS:

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

104

SP1 G31

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

NO SPECIALTY ITEMS:

(7-1-95)

108-6

SP1 G34

None of the items included in this contract will be specialty items (see Article 108-6 of the 2012 Standard Specifications).

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 5-20-14)

108-2

SP1 G58

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

	Fiscal Year	Progress (% of Dollar Value)
2015	(7/01/14 - 6/30/15)	100% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the 2012 Standard Specifications. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS):

(10-16-07)(Rev. 12-17-13)

102-15(J)

SP1 G67

Description

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

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

Forms and Websites Referenced in this Provision

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

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

RF-1 MBE/WBE Replacement Request Form - Form for replacing a committed MBE or WBE.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request%20Form.pdf

SAF Subcontract Approval Form - Form required for approval to sublet the contract.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20Form%20Rev.%202012.zip

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

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

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

Listing of MBE and WBE Subcontractors Form - Form for entering MBE/WBE subcontractors on a project that will meet this MBE and WBE goals. This form is for paper bids only.

http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-

WBE%20Subcontractors%20(State).doc

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

MBE and WBE Goal

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

- (A) Minority Business Enterprises 0.0 %
 - (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 0.0 %
 - (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 submitted at the time of bid will be used toward 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) If either the MBE or WBE goal is more than zero.
 - (1) 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.
 - (2) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.
 - (3) 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.
- (B) If either the MBE or WBE goal is zero, entries on the Listing of MBE and WBE Subcontractors are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

MBE or WBE Prime Contractor

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

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

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

Written Documentation - Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the 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 Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 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 Engineer no later than 12:00 noon of the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 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).

One complete set and $\underline{2}$ copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

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

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

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

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

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/WBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the MBEs/WBEs to respond to the solicitation. Solicitation shall provide the opportunity to MBEs/WBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the MBEs/WBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by MBEs/WBEs in order to increase the likelihood that the MBE and WBE goals will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested MBEs/WBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (D) (1) Negotiating good faith with MBEs/WBEs. interested 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 NCDOT's 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 Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting MBE/WBE Participation Toward Meeting 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 work MBE the to another 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.

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 further work on future projects until the required information is submitted.

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

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

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

Failure to Meet Contract Requirements

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

LOCATING EXISTING UNDERGROUND UTILITIES:

(3-20-12) 105 SP1 G115

Revise the 2012 Standard Specifications as follows:

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

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

RESOURCE CONSERVATION:

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

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

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

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

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

DOMESTIC STEEL:

(4-16-13) 106 SPI G120

Revise the 2012 Standard Specifications as follows:

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

All steel and iron products that are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined material cost of the items involved does not exceed 0.1% of the total amount bid for the entire project or \$2,500, whichever is greater. If invoices

showing the cost of the material are not provided, the amount of the bid item involving the foreign material will be used for calculations. This minimal amount of foreign produced steel and iron products permitted for use is not applicable to high strength fasteners. Domestically produced high strength fasteners are required.

OUTSOURCING OUTSIDE THE USA:

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

RG150

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)

SP1 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:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) 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 G.S. § 133-32.

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

LIABILITY INSURANCE:

(5-20-14)

SPI G160

Revise the 2012 Standard Specifications as follows:

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

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

EMPLOYMENT:

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

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) SPI G185

Revise the 2012 Standard Specifications as follows:

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

PRECONSTRUCTION CONFERENCE:

Prior to beginning work on this contract, the Contractor shall schedule a Preconstruction Conference with the Engineer or one of his authorized representatives. The Contractor shall identify any conditions, concerns or needs to the Engineer at this time. Upon the conclusion of the Preconstruction Conference, the Contractor will be deemed to have accepted the project in the condition as it exists with exceptions as noted during the Preconstruction Conference. If the Contractor does not schedule or attend a Preconstruction conference, the Contractor shall be deemed to have accepted the project as of the availability date of the contract.

MATERIALS AND TESTING:

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the current edition of the *Standard Specifications* and the Department's "Materials and Test Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project under construction.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the current edition of the *Standard Specifications*. Material which is not properly certified will not be accepted. All material must be approved by the Engineer prior to being used.

WORK TO BE PERFORMED BY STATE FORCES:

(3-3-14) 105 SPD 01-260

Traffic Control will be performed by State Forces. The Contractor shall cooperate with the State Forces to the extent that the work can be carried out to the best advantage of all concerned. Contact Chuck White, Bridge Maintenance Superintendent at 704-630-3260 to schedule and coordinate the work to be done.

SITE INVESTIGATION AND REPRESENTATION:

(3-3-2014) 102-6 SPD 01-280

By signing the proposal documents, the Contractor acknowledges that:

- (A) He understands the nature of the work and general and local conditions, particularly those bearing on transportation;
- (B) He is familiar with the availability and cost of labor and materials;
- (C) He will to adhere to State regulations for safety and security of property, roads, and facilities:
- (D) He is able to prosecute the work in accordance with all applicable local, state and federal rules and regulations, and:
- (E) He has thoroughly investigated the project site(s).

Any failure on the part of the Contractor to acquaint himself with all available information shall not relieve him from the responsibility any aspect of the contracting process. No adjustment in contract time or contract prices will be made due to the Contractor's negligence in familiarizing himself with the contract or project site(s).

INDEMNIFICATION:

The Contractor shall indemnify, defend and save harmless, the State, the Department, and all of its officers, agents and employees from all damages, suits, actions or claims brought of any injuries or damages sustained by any person or

property on account of the Contractor's operations in connection with the contract. It is specifically understood and agreed that this indemnification agreement does not cover or indemnify the Department for its own negligence, breach of contract, equipment failure, or other circumstance of operation beyond the control of the Contractor. The Contractor shall be responsible for and indemnify and save the Department harmless for any and all damages to its property caused by the negligence of the Contractor, its employees or agents in carrying out this contract.

BIDS OVER LIMIT:

(01-30-14) SPD 01-400

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$2.5 million, the bid will not be considered for award.

DIVISION LET CONTRACT PREQUALIFICATION:

(07-01-14) SPD 01-410

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

CONTRACT PAYMENT AND PERFORMANCE BOND

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, is liable is required. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the Contractor is liable.

IMPORTANT: Do not submit the contract payment and performance bonds with your bid. Hold bonds until you are informed that you are the lowest Bidder. The successful bidder, within fourteen (14) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100% of the amount of the contract.

CONTRACTOR CLAIM SUBMITTAL FORM:

(2-12-14) 104-3 SPD 01-440

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the Contractor Claim Submittal Form (CCSF) available through the Construction Unit or at https://connect.ncdot.gov/projects/construction/Pages/Construction-Resources.aspx as Form CCSF under Construction Forms.

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer in writing, with detailed justification, prior to submitting the final invoice payment. Once an invoice is received and accepted that is marked as "Final", the Contractor shall be barred from recovery.

AUTHORITY OF THE ENGINEER:

(01-30-14) 105-1 SPD 01-460

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

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly.

COMPETITIVE PROPOSALS:

Pursuant to the provisions of G.S. 143-54 under penalty of perjury, the signer of this proposal certifies this proposal has not been arrived at collusively nor otherwise in violation of Federal or North Carolina Anti-Trust Laws. All proposals must be signed by the owner or an officer of the firm.

ACCEPTANCE AND REJECTION:

The right is reserved by the Department to accept or reject all proposals or to waive any informality in the proposals.

INSPECTION:

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

SUPERVISION BY CONTRACTOR:

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

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

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

Availability

Provisions shall be made so that a Supervisor can be contacted at any time during the day or night throughout the duration of the project.

SAFETY AND ACCIDENT PROTECTION:

In accordance with Article 107-22 of the *Standard Specifications*, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

SUBLETTING OF CONTRACT:

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his right, title, or interest therein; without written consent of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article 108-6 of the *Standard Specifications*.

MAINTENANCE OF PROJECT:

The Contractor shall maintain the project from the availability date of the Contract or as may be noted in the exceptions determined at the Preconstruction Conference until the project is finally accepted in accordance with Section 104-10, Maintenance of Project, Section 104-11, Final Clean Up, and Section 105-16, Failure to Maintain the Project or Perform Erosion Control Work.

EXTENSION OF CONTRACT TIME:

Failure on the part of the Contractor to furnish bonds or certifications or to satisfy preliminary requirements necessary to issue the purchase order will not constitute grounds for extension of the contract time. If the Contractor has fulfilled all preliminary requirements for the issuance of a purchase order, and the purchase order authorization is not available by the date of availability, the Contractor shall be granted an extension equal to the number of calendar days the purchase order authorization is delayed after the date of availability.

PAYMENT AND RETAINAGE:

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the Standard Specifications. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. Minority Business Enterprise and Women Business Enterprise (MBE/WBE) participation shall be listed on the Department's DBE Subcontractor Payment Information Form DBE-IS, which is available at http://www.ncdot.org/doh/forms/files/DBE-IS.xls, and shall be submitted with each payment request. If there is no participation the word "None" or the figure "0" shall be entered. There will be no retainage held on this contract. One hundred percent (100%) payment shall be made after successful completion of the work and all quantities have been verified. The invoices will show the requisition number and purchase order number and should state "Terms Net Ten (10) Days."

NOTIFICATION OF OPERATIONS:

The Contractor shall notify the Engineer 48 hours in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection of acceptance testing required.

CONSTRUCTION METHODS:

The Contractor shall perform all construction activities in accordance with the applicable requirements of the latest editions of the AASHTO/AWS D1.5M/D1.5, AASHTO Standard Specifications for Highway Bridges, and the NCDOT Standard Specifications for Roads and Structures, except as otherwise specified herein.

PROJECT SPECIAL PROVISIONS

STRUCTURE

DOMESTIC STEEL PRODUCTS:

All steel products which are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel products may be used provided the combined project cost of the bid items involved does not exceed one-tenth of one percent (0.1 percent) of the total amount bid for the entire project or \$2,500.00, whichever is greater. This minimal amount of foreign produced steel products permitted for use by this Special Provision is not applicable to fasteners. Domestically produced fasteners are required for this project.

All steel products furnished as "domestic products" shall be melted, cast, formed, shaped, drawn, Extruded, forged, fabricated, produced or otherwise processed and manufactured in the United States. Raw materials used in manufacturing "domestic" steel products may be imported; however, all manufacturing processes to produce the products must occur in the United States.

Before each steel product is incorporated into this project or included for partial payment on a monthly estimate, the Contractor shall furnish the Division Bridge Maintenance Engineer a notarized certification certifying that the product conforms to the requirements of this Special Provision. The Division Bridge Maintenance Engineer will forward a copy of each certification to the Materials and Test Unit. Each purchase order issued by the Contractor or a subcontractor for steel products to be permanently incorporated into this project shall contain in bold print a statement advising the supplier that all manufacturing processes to produce the steel shall have occurred in the United States. The Contractor and all affected subcontractors shall maintain a separate file for steel products permanently incorporated into this project so that verification of the Contractor's efforts to purchase "domestic" steel products can readily be verified by an authorized representative of the Department.

REPAIR OF DAMAGED STEEL BEAMS:

Scope of Work

All repairs shall be made in accordance with FHWA's Guide for Heat-Straightening of Damaged Steel Bridge Members. The guide can be found at the following web address: http://www.fhwa.dot.gov/BRIDGE/steel/index.cfm

The work shall consist of, but not be limited to, furnishing all labor, materials, equipment, and incidentals required to perform all operations in connection with the removal of all paint (including paint containing lead) as needed and repair by flame straightening and welding. Replacement of damaged diaphragm and connection plates may also be required. The intent of the work is to bring damaged beams back to the tolerances specified in Table A1 of Guide for Heat-Straightening of Damaged Steel Bridge Members. Tolerance limits may be relaxed by the Department's Engineer as specified in the Guide for Heat-Straightening of Damage Steel Bridge Members. Touch up painting after the repairs will be performed by State Forces.

It is the desire of the Department that the repairs be made using "heat straightening" as defined in Chapter 2 of the Guide for Heat-Straightening of Damaged Steel Bridge Members. "Hot mechanical straightening" should only be considered for non-load carrying elements when replacement or other methods are not viable. "Hot working" should not be used to repair damaged structural steel. Written authorization must be given by the Departments' Engineer before any "hot mechanical straightening" or "hot working" repairs are made, regardless of the size of the repair.

Flame Straightening Requirements

The Contractor shall inspect, identify and document all yield zones, yield lines and associated damage and provide this information to the Engineer prior to initiation of heat straightening by either visual inspection or measurements. NCDOT shall have staff on- site at all times during the heat straightening operations to provide inspection and technical support.

The heating patterns and torch paths **shall be** laid out **and approved by the Engineer** prior to application of heat. The heating steel temperature will be as specified in the Guide for Heat-Straightening of Damaged Steel Bridge Members.

NCDOT will test and provide the Contractor with the steel types of damaged bridge members. Monitoring of heating will be by heat sticks. Torch operator must be skilled and experienced at producing results that are free of wrinkles, cracks, bulges, and poor alignment. The Engineer **shall** require evidence of qualifications for the technicians involved in the conduct of the heat applications. These qualifications may include evidence of similar, prior work on equivalent structures, documented training in heat straightening and the ability to explain performance of their duties.

Vee heats should be confined to ½ the width of the flange. The opening width of Vee heats should be between 3" and 10" wide, and simultaneous Vee heats shall have a minimum spacing of 12 inches. A good rule of thumb is to limit the open end of the vee to 250mm (10 in) for one inch thick plates. However a smaller limit should be considered for progressively thinner plates. These limits will minimize distortion which might occur due to local buckling of the plate element.

Nicks, Cracks, and Gouge Repair

Any defects on the bottom flanges and webs must be repaired by grinding or welding the dents to an acceptable contour or shape. Gouges less than 3/16 inch deep in the bottom flange surface shall be ground to a 1/10 slope with smooth finish. Gouges deeper than 3/16 inch shall be welded and ground flush. Cracks shall be removed by hand grinding, arc or flame gouging. Prior to arc or flame gouging, the work area must be heated to 150° F minimum. Also, any nicks or gouges on surfaces to be welded (such as from grinding or gouging) should be ground out prior to welding.

Effect of Heating

Contractor must adequately support both sides of the damaged area of the flange(s) while heating or welding the area to prevent any sagging, deck cracking or possible girder failure.

Crack Injection

Any separation of top flange from the deck above, as a result of the repair process, must be injected (by the contractor) with an NCDOT pre-approved epoxy grout to obtain full bearing of the slab on the top flange of the beam.

Partial Replacement

The Department does not anticipate the use of partial replacement to repair structural steel beams on the bridge locations included in this contract. Diaphragm and diaphragm connection plates may not be able to be repaired and may need to be replaced as part of this project. Replacement of those items should be included in the lump sum bid price for the specific bridge locations if anticipated by the Contractor.

If the Contractor properly performs the heat straightening repairs on the structural beams and it is determined that damage was more extensive or that the tolerance cannot be met, partial replacement might be considered and would be included as a supplemental agreement. If partial replacement is required because of error or poor quality work on the part of the Contractor, NCDOT will not consider this work supplemental and no additional compensation will be provided for this work.

Welding

Preheat shall always be used when making weld repairs. Minimum preheat temperature shall be 300° F. Maximum preheat shall be 450° F.

Post heat temperature shall be 200° F degrees and it shall be maintained at this temperature for 1-1/2 hours. After this time period, the heat source should be removed and the weldment must be covered to cool down slowly to ambient temperature.

Prior to welding, the joint surface shall be cleaned by wire brush or light grinding to remove any rust that may have formed.

Welders must be qualified in all welding types and positions per Part B of Section 5 of the latest edition of AWS D1.5.

The shielded metal arc (covered electrode) shall be used. The Gas Metal Arc, or Metal Inert Gas (GMA or MIG), is not acceptable.

E7018 Low Hydrogen covered electrodes shall be used on AASHTO M270 Grades 36 & 50 and ASTM A-36 & A-572 steels.

E8018 Low Hydrogen covered electrodes shall be used on ASTM A-588 Grade 50W (Weathering) steel.

The minimum electrode size shall be 5/32" diameter, and special care must be taken to prevent moisture pickup when the container is opened. The electrode should be kept in the oven at 250° F as soon as the can is opened and kept in the oven until ready to weld. The electrode should be warm to touch when used.

Peening Welds

Peening of intermediate weld layers may be permitted. Prior approval is required before the contractor begins peening the welds.

Testing

Magnetic testing and Ultrasonic testing on welded cracks, nicks, gouges will be done by NCDOT personnel.

Safety and Accident Protection- Section 107-22, NCDOT Standard Specifications (latest edition)

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

Lead Containment and Disposal

The repair work shall be done in such a manner as not to introduce hazardous materials into the air, water or workers bodies, and that complies with all applicable laws and regulations, including those of OSHA & DENR.

All existing paint is assumed to be lead based and no work shall begin until the Contractor furnishes the Engineer with a lead containment and disposal plan for all work on the bridge, and the engineer reviews and responds in writing about the acceptability of said plan. The plan shall describe how lead is contained and collected. Also, it should tell how the system would allow for such possibilities as receiving rainwater.

Disposal of lead shall be in accordance with the North Carolina Hazardous Waste Rules 15A NCAC 13A (see Section 442-13 of the NCDOT Std Specs).

The Contractor shall have a competent person on site whenever any lead removal process is going on. A competent person is able to both recognize a hazard and take the proper action to contain it. A supervisor (who is not working) is allowed to be the competent person, but a worker is not.

Touch Up and Field Painting

All touch-up and field painting shall be performed by State Forces.

Required Submittals

It is the intent of the Department that they have a clear understanding of the Contractor's work plan prior to the start of any heat straightening repairs. The following steps should be performed, documented and submitted to the Engineer for review and approval. No work shall begin before the work plan has been approved. Allow 5 days for review and approval of work plan.

- Analyze the degree of damage and maximum strains induced.
- Demarcate the regions for heat straightening repair.
- · Select heating patterns and parameters.
- Develop a constraint plan and design the jacking restraint configuration.
- Estimate heating cycles required to straighten members.

 Prepare a step by step work plan and submit to the Engineer for review and approval (allow 5 days).

Basis of Inspection and Acceptance

It is the intent of the Department that they have inspection staff on hand during the majority of the repair operations. The following items are some of the areas that will be observed and checked during repairs. The NCDOT will:

- Check for adherence to accepted heating patterns.
- Check for adherence to accepted heating patterns.
- Periodically check the jack gauges to insure that excessive force is not being applied before heating.
- Observe the color of the steel at the torch tip. Looking for a satiny silver halo at the tip in normal daylight lighting and for a slight dull red glow in low light.
- Verify reference points to measure movements by a taut line or straightedge.
- Insure that the Contractor is working safely and that jacks and other equipment are secured from falling.
- Testing by Liquid Penetrant, Magnetic-Particle, Ultrasonic or Radiographic examination shall be performed the Department's staff. If NCDOT forces are not available to perform testing, the Contractor may be asked to provide independent testing through supplemental agreement.

Final acceptance will be based on meeting the specified dimensional tolerances, as agreed upon by the Engineer, without exceeding temperature or restraint limitations.

Basis of Payment

Bid prices and payments will be full compensation for all work, including but not limited to supervision, labor, materials, transportation, fuels, lubricants, repair parts, equipment, machinery, and tools, necessary for the prosecution and completion of the work. Payments will be made to the Contractor for work accomplished and accepted.

Payment for this item will be made for as follows:

Flame Straightening & Welding Repairs to Bridge No. 790094 (Rowan) on US-29 across I-85 and Bridge No. 330048 (Forsyth) on NC-8 across US-52

LS

TECHNICAL SPECIFICATIONS – (FROM THE FHWA GUIDE FOR HEAT-STRAIGHTENING OF DAMAGED STEEL BRIDGE MEMBERS)

1. Equipment

- **1.1** Heating shall be with an oxygen-fuel combination. The fuel may be propane, acetylene or other similar fuel as may be selected by the contractor, subjected to the Engineer's approval.
- **1.2** Heat application shall be by single or multiple orifice tips only. The size of the tip shall be proportional to the thickness of the heated material. As a guide, the tip sizes shown in table A2 are recommended. No cutting torch heads are permitted.
- **1.3** Jacks, come-alongs or other force application devices shall be gauged and calibrated so that the force exerted by the device may be controlled and measured. No external force shall be applied to the structure by the contractor unless it is measured.

2. Damage Assessment

- **2.1** Suspected areas of cracking shall be called to the attention of the Engineer and shall be inspected by one or more of the following methods as applicable.
 - 2.1.1 Visual Inspection

- 2.1.2 Liquid penetrant examination as described in ASTM E165 (1994 or latest edition).
- 2.1.3 Magnetic-Particle testing as described in ASTM E709 (1994 or latest edition).

Table A1. Recommended Tolerances for Heat Straightening Repair

Member Type	Recommended Min	Recommended Minimum Tolerance 1,2			
	English (in)	SI (mm)			
Beams, Truss members, or Columns overall at impact point	½ in over 20 ft 34 in over 20 ft	13 mm over 6 meters 19 mm over 6 meters			
Local Web Deviations	d/100 but not less than 1/4 in	d/100 but not less than 6 mm			
Local Flange Deviations	b/100 but not less than 1/4 in	b/100 but not less than 6 mm			

 $^{^{\}mathrm{1}}$ Units of member depth, d, and flange width, b, are inches and millimeters, respectively, for English and SI units

Tolerances for curved or cambered members should account for the original shape of the

Table A2. Recommended torch tips for various material thicknesses

Steel Thickness (in)	Orifice Type	Size
< 1/4	Single	3
3/8	Single	4
1/2	Single	5
5/8	Single	7
3/4	Single	8
1	Single Rosebud	8 3
2	Single Rosebud	8 4
3	Rosebud	5

\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Rosehud	5
> 4	Rosepud	

- **2.1.4** Ultrasonic examination as described in section 6, part C of the ANSI/AASHTO/AWS Bridge Welding Code D1.5, American Welding Society (1996 or latest edition).
- **2.1.5** Radiographic examination as described in section 6, part B of the ANSI/AASHTO/AWS Bridge Welding Code D1.5, American Welding Society (1996 or latest edition).
- **2.2** The cost of the inspections under 2.1 shall be additional to other testing required and costs shall be negotiated between the Engineer and contractor.
- **2.3** Contractor shall identify and document all yield zones, yield lines and associated damage and provide this information to the Engineer prior to initiation of heat straightening by either visual inspection or measurements.
- **2.4** Steel with strains up to 100 times the yield strain may be repaired by heat straightening. For strains greater than this limit, the Engineer shall determine if heat straightening may be used.
- **2.5** Cracks and/or strains exceeding 100 times the yield strain, or other serious defects may require changes in the scope of the contract which shall be negotiated between the Engineer and the contractor.

3. Heat Application

- 3.1 The temperature of the steel during heat straightening shall not exceed the following:
 - 3.1.1 650°C (1,200°F) for Carbon Steels.
 - 3.1.2 620°C (1,100°F) for A514 and A709 (grades 100 and 100W) steels.
 - 3.1.3 565°C (1,050°F) for A709 grade 70W steel.
- **3.2** The Contractor shall use one or more of the following methods for routine, ongoing, documented temperature verification during heat straightening:
 - 3.2.1 Temperature sensitive crayons
 - 3.2.2 Pyrometer
 - 3.2.3 Infrared non-contact thermometer
- **3.3** Material should be heated in a single pass following the specified pattern and allowed to cool to below 120°C (250°F) prior to re-heating.
- **3.4** Heating patterns and sequences shall be selected to match the type of damage and cross section shape.
- 3.5 Vee heats shall be shifted over the yield zone on successive heating cycles.
- 3.6 Simultaneous vee heats may be used provided that the clear spacing between vees is greater than the width of the plate element
- **3.7** Repair of previously heat-straightened members in the same region of damage may be conducted once. Further repairs are not recommended unless approved by the Engineer.

4. Application of Jacking forces

- 4.1 Jacks shall be placed so that forces are relieved as straightening occurs during cooling.
- 4.2 Magnitude of Jacking Forces
 - **4.2.1** Jacking shall be limited so that the maximum bending moment in the heated zone shall be less than 50 percent of the plastic moment capacity of the member or major bending element. For local damage, the jacking force shall be limited to 50 percent of initial yield of the element.
 - **4.2.2** The jacking force shall be adjusted so that the sum of jacking-induced moments and estimated residual moments shall be less than 50 percent of the plastic moment capacity of the member. As an alternative to considering residual moments, the moment due to jacking forces can be limited to 25 percent of the plastic moment capacity of the member during the first two heating cycles. For additional heating cycles, the limit of 50 percent may again be used.

4.3 Control of jacking forces

The contractor shall determine and document the maximum jacking force for each damage location, and the proposed sequence of jacking and heating. Copies of the documentation shall be submitted to the Engineer for acceptance before beginning repairs. Modifications due to changing condition shall be submitted to the Engineer. The maximum jacking force may be controlled by measuring the deflection resulting from the jacking force. The deflection limitation can be computed by one of the following methods.

4.4 The calibration of jacks and electronic temperature monitoring equipment shall be performed and documented monthly, and load cells used for calibration must be certified within a two year period.

5. Field Supervision of Repair

- **5.1** Jacking forces shall be monitored to insure that limits are not exceeded.
- **5.2** Heating patterns shall be approved by the Engineer.
- 5.3 Heating temperatures shall be routinely monitored to insure compliance with specified limits.

6. Tolerances

- **6.1** The dimensions of heat-straightened structural members shall conform to the tolerances specified in table A1 except as noted below.
- **6.2** Tolerance limits may be relaxed at the discretion of the Engineer, based on one or more or the following considerations:
 - (a) Type and location of damage in the member.
 - (b) Time considerations resulting from the nature of traffic congestion during the repair operation.
 - (c) Cost of repair.
 - (d) Degree of restoration required to restore structural integrity.

PROJECT SPECIAL PROVISIONS ROADWAY

MATERIALS:

(2-21-12) (Rev. 5-20-14)

1000, 1002, 1005, 1024, 1050, 1056, 1074, 1078, 1080, 1081, 1086, 1084, 1087, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

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

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

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

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

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

			RE		BLE 1000- NTS FOR		RETE				
≠ a	np.	Maxi	mum Wate	er-Cement	Ratio		sistency . Slump	-	Cement	Content	
Class of	Min. Comp. Strength at 28 days	Air-Ent			Entrained crete	Vibrate d	Non- Vibrate d	Vib	rated	Non- V	/ibrated
ರ ೮	Min. C Strer at 28	Rounded Aggregate	Angular Aggre-gate	Rounded Aggregate	Angular Aggre-gate	Αib	N di	Min.	Max.	Min.	Max.
Units	psi	505	50 5			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	-	1.5	_	508	-	-	-
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-
Latex Modified	3,000 7 day	0.400	0.400	_	-	6	-	658	-	_	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow-able	-	-	40	100
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow-able	-	-	100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	_	_
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-

Page 10-1, Article 1000-2, MATERIALS, line 16; Page 10-8, Subarticle 1000-7(A), MATERIALS, line 8; and Page 10-18, Article 1002-2, MATERIALS, line 9, add the following to the table of item references:

Type IL Blended Cement

Section 1024-1

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

Std. Size #	100	1/2" 90-	AGG	Per 3/4"	ATE C	ige of		ATIO Tota	DATION - COA	ATION - COARS Total by Weigh #4 #8 #10	ATION - COARSE ACTOTAL by Weight Pas	igh:
4	100	90-	20-55	0-15	1	0-5				-	,	
467M	100	95- 100	1	35-70	1	0-30	0-5		1 .	1		,
5	1	100	90-	20-55	0-10	0-5	1		ı			
57	ı	100	95-	1	25-60	1	0-10		0-5	0-5		
57M	1	100	95- 100		25-45	1	0-10		0-5	0-5		1
6M	1		100	90-	20-55	0-20	0-8			1		1
67	ı	,	100	90-	T	20-55	0-10	200	0-5	0-5		,
78M	t	-	ı	100	98-	75- 100	20-45		0-15	0-15		1
14M	1		1	ı	'	100	35- 70		5-20	5-20 -		1
9			ı	1	-	100	85- 100		400	10- 40		ı
ABC	1	100	75-97		55-80	1	35-55		1	- 25-45		25-45
ABC (M)	ľ	100	75- 100	I,	45-79	ı	20-40		ı	- 0- 25		0- 25
Light- weight	1		.	1	100	80- 100	5- 40		0-20	0-20 -		ı

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

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

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

All fencing material and accessories shall meet Section 106.

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

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

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

Page 10-74, TABLE 1056-1 GEOTEXTILE REQUIREMENTS, replace table with the following:

			ABLE 1056-1 LE REQUIREI	MENTS		THE RESIDENCE OF THE PERSON OF
Property		Red	quirement (MA	ARV ^A)		
rioperty	Type 1	Type 2	Type 3 ^B	Type 4	Type 5 ^C	Test
Typical Application	Shoulder Drains	Under Rip Rap	Temporary Silt Fence	Soil Stabilization	Temporary Walls	Method
Elongation (MD & CD)	≥ 50%	≥ 50%	≤ 25%	< 50%	< 50%	ASTM D4632
Grab Strength (MD & CD)			100 lb		-	ASTM D4632
Tear Strength (MD & CD)	Table 1 ^D , Class 3	Table 1 ^D , Class 1	_	Table 1 ^D , Class 3	-	ASTM D4533
Puncture Strength			-		-	ASTM D6241
Ultimate Tensile Strength (MD & CD)	-	-	-	-	2,400 lb/ft (unless required otherwise in the contract)	ASTM D4595
Permittivity	Tobl	e 2 ^D ,			0.20 sec ⁻¹	ASTM D4491
Apparent Opening Size	15% to	e 2 , o 50% <i>u</i> Soil	Table 7 ^D	Table 5 ^D	No. 30 ^E	ASTM D4751
UV Stability (Retained Strength)		No. 200 ^E			70%	ASTM D4355

A. MARV does not apply to elongation

B. Minimum roll width of 36" required

C. Minimum roll width of 13 ft required

D. AASHTO M 288

E. US Sieve No. per AASHTO M 92

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

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lbs.) will be required only when noted on the design documents.

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

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

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

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

Page 10-161, Subarticle 1081-1(A) Classifications, lines 29-33, delete first 3 sentences of the description for Type 2 and replace with the following:

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

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

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 10-163, Table 1081-1 Properties of Mixed Epoxy Resin Systems, replace table with the following:

Property Property Viscosity-Poises at 77°F ± 2°F	Type 1	Table 1081-1 Properties of Mixed Epoxy Resin Systems Type 1 Type 2 Type 3 Type 3A Gel 10-30 25-75 Gel	081-1 boxy Resir Type 3	Type 3A	Type 4A 40-150	Type 4B 40-150	Type 5
Spindle No.	ı	ω	4	I	4	4	2
Speed (RPM)	1	20	20	ı	10	10	50
Pot Life (Minutes)	20-50	30-60	20-50	5-50	40-80	40-80	20-60
Minimum Tensile Strength at 7 days (psi)	1,500	2,000	4,000	4,000	1,500	1,500	4,000
Tensile Elongation at 7 days (%)	30 min.	30 min.	2-5	2-5	5-15	5-15	2-5
Min. Compressive Strength of 2". mortar cubes at 24 hours	3,000 (Neat)	4,000-	6,000-	6,000 (Neat)	3,000	3,000	6,000
Min. Compressive Strength of 2" mortar cubes at 7 days	5,000 (Neat)	ı	1	1	ı	5,000	1
Maximum Water Absorption (%)	1.5	1.0	1.0	. . 5	1.0	1.0	1.0
Min. Bond Strength Slant Shear Test at 14 days (psi)	1,500	1,500	2,000	2,000	1,500	1,500	1,500

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

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

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

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

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

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

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

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

Page 10-170, Article 1081-3 Hot Bitumen, line 9, add the following at the end of Section 1081:

1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

(A) General

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

(B) Classification

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

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

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

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

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

(C) Requirements

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

(D) Prequalification

Refer to Subarticle 1081-1(E).

(E) Acceptance

Refer to Subarticle 1081-1(F).

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

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piling encased in concrete shall receive a barrier coat. The barrier coat shall be an approved waterborne coating with a low-viscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

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

The epoxy shall meet Article 1081-4.

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

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

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

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

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

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

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

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

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

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

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

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 Article 108-13(E), of the North Carolina Department of Transportation Standard Specifications for Roads and Structures, dated July 1, 2012.

ERRATA:

(1-17-12) (Rev. 11-18-14)

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 3

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

Division 4

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

Division 6

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

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

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

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

Division 8

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

Division 10

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

Division 12

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

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

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

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

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

Division 15

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

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

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

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

Division 17

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

Revise the 2012 Roadway Standard Drawings as follows:

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

PLANT AND PEST QUARANTINES:

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds) (3-18-03) (Rev. 10-15-13)

Z-04a

Within Quarantined Area

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

Originating in a Quarantined County

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

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or http://www.ncagr.gov/plantind/ to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.

- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

MINIMUM WAGES:

(7-21-09)

Z-5

FEDERAL:

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

STATE:

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

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

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

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

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

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

ON-THE-JOB TRAINING:

(10-16-07) (Rev. 5-21-13)

Z-10

Description

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

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

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

Minorities and Women

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

Assigning Training Goals

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

Training Classifications

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

> Equipment Operators Office Engineers Truck Drivers **Estimators** Carpenters

Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics Pipe Layers Welders

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

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

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

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

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

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

Records and Reports

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

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

Trainee Interviews

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

Trainee Wages

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

of the journeyman wage for the first half of the training period
of the journeyman wage for the third quarter of the training period
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.

REQUESTS FOR QUOTATIONS WERE SENT TO THE FOLLOWING:

Dan R. Dalton, Inc. 912 Westside Calispell Rd.

Usk, WA 99180 Attn: Dan Dalton Phone: (509) 447-3528 Fax: (509) 447-3373 ddaltoninc@gmail.com

Vendor# 47087

Flame On, Incorporated 12632 Wagner Rd. Monroe, WA 98272 Attn: Darryl Thomas Phone: (425) 397-7039 Fax: (425) 397-7002 Lthomas@flameoninc.com

Vendor# 63459

Lanford Brothers Co., Inc. PO Box 7330
Roanoke, VA 24019
Attn: Patrick McDaniel
Phone: (540) 992-2140
Fax: (540) 992-2139
patm@lanfordbros.com
Vendor# 22139

Carolina Bridge Co., Inc. PO Box 515

Orangeburg, SC 29116 Attn: Melissa Wimberly Phone: (803) 536-1156 Fax: (803) 531-3810

melissa@carolinabridgeinc.com

Vendor# 4289

Mr. J. Trent Rawley (EMAIL) Director of Office of Civil Rights

Mr. Michael McKoy (EMAIL)

NCDOT

Association of General Contractors (EMAIL)

Division 9 Web Page:

https://connect.ncdot.gov/letting/Pages/Letting-List.aspx?let_type=9

NC A & T Plan & Resource Center
Department of Construction Management &

Occupational Safety and Health Price Hall – Room 112M, Laurel Street

Greensboro, NC 27411 Attn: Andrew Davis

Tammy Owens (EMAIL)

Office of Equal Opportunity Workforce Services

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) 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 any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, 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, execution of this bid in the proper manner also constitutes the Bidder's certification of 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 Full name of Corporation Address as prequalified Attest_ President/Vice President/Assistant Vice President Secretary/Assistant Secretary Select appropriate title Select appropriate title Print or type Signer's name Print or type Signer's name CORPORATE SEAL AFFIDAVIT MUST BE NOTARIZED **NOTARY SEAL** Subscribed and sworn to before me this the day of ______, 20_____ Signature of Notary Public Of _____ County State of

My Commission Expires

PARTNERSHIP

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) 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 any bid or contract, that the bidder has not been convicted of violating N.C.G.S. §-133-24 within the last three years, 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, execution of this bid in the proper manner also constitutes the Bidder's certification of 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.

My Commission Expires: _____

LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) 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 any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, 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.

Im addition; execution of this bid in the proper manner also constitutes the Bidder's certification of 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.

W.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.

SIGNATUI	RE OF CONTRACTOR	
Fu	Il Name of Firm	
Addre	ess as Prequalified	
Witness's Signature	Signature of Member/Manager/Authorized Agent Select appropriate title	
Print or type Signer's name	Print or type Signer's name	
AFFIDAVIT	MUST BE NOTARIZED	
	NOTARY SEAL	
Subscribed and sworn to before me this the		
day of, 20		
Signature of Notary Public		
Of County		
State of		

My Commission Expires ____

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) 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 any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, 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, execution of this bid in the proper manner also constitutes the Bidder's certification of 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

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

(1)	Name of Joint Venture	
(2)	Name of Contractor	11 PMT 12: 100
	Address as prequalified	W at the member we see the second of
Signature of Witness or Attest	Ву	Signature of Contractor
Print or type Signer's name		Print or type Signer's name
If Corporation, affix Corporate Seal	and	
(3)		
	Name of Contractor	
	Address as prequalified	
	Ву	
Signature of Witness or Attest		Signature of Contractor
Print or type Signer's name		Print or type Signer's name
If Corporation, affix Corporate Seal	and and	
(4)		
	Name of Contractor (for 3 Joint Venture only)	
	Address as prequalified	**************************************
	By	
Signature of Witness or Attest	,	Signature of Contractor
Print or type Signer's name		Print or type Signer's name
If Corporation, affix Corporate Seal NOTARY SEAL	NOTARY SEAL	NOTARY SEAL
Affidavit must be notarized for Line (2)	Affidavit must be notarized for Line (3)	Affidavit must be notarized for Line (4)
Subscribed and sworn to before me this	Subscribed and sworn to before me this	Subscribed and sworn to before me this
day of20	day of20	day of 20
Signature of Notary Public	Signature of Notary Public	Signature of Notary Public
ofCounty State of	ofCounty State of	ofCounty
My Commission Expires:	My Commission Expires:	My Commission Expires:
iviy Collinission Expires:	iviy Commission Expires:	iviy Commission Expires:

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) 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 any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years; 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, execution of this bid in the proper manner also constitutes the Bidder's certification of 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.

	SIG	SNATURE OF CONTRACTOR
Name of Contractor		
		Individual Name
Trading and doing business as	Section 2	
		Full name of Firm
		Address as Prequalified
Signature of Witne	SS	Signature of Contractor, Individually
Print or type Signer's	name	Print or type Signer's name
	AFFI	DAVIT MUST BE NOTARIZED
		NOTARY SEAL
Subscribed and sworn to before me	this the	
day of	20	
Signature of Notary Public		
Of	County	
State of		

My Commission Expires ___

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) 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 any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, 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, execution of this bid in the proper manner also constitutes the Bidder's certification of 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.

8	SIGNATURE OF CONTRACTOR
Name of Contractor	Print or type individual name
	Time of type marriada name
	Address as Prequalified
	Signature of Contractor, Individually
	Print or type Signer's name
Signature of Witness	
Print or type Signer's name	
AF	FIDAVIT MUST BE NOTARIZED
	NOTARY SEAL
Subscribed and sworn to before me this the	
day of, 20	
Signature of Notary Public	
Of County	
State of	
My Commission Expires	

DEBARMENT CERTIFICATION

Conditions for certification:

- The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file 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.
- The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

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

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

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

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

Check here is an explanation is attached to this certification.

Forsyth COUNTY

Who Ever Company

NAME OF BIDDER

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

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

State of North Carolina Department of Transportation Subcontractor Payment Information

Submit with	Invoice					
NCDOT PO	e No. Reference //Contract Number State Project No.) pice	12	1231 0001234 40491 /11/2007	• • •	EXA	MPLE
Invoice Line Item Reference (from PO) Eaxmple 1	Payer Name	Payer Federal Tax Id	Subcontractor / Subconsultant/ Material Supplier Name	Subcontractor / Subconsultant / Material Supplier Federal Tax Id	Amount Paid To Subcontractor / Subconsultant / Material Supplier This Invoice	Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice
10	XYZ Trucking	123-45-6789	ABC Company	987-65-4312	\$ 7,000.00	11/16/2007
60	CDF Company	456-78-9123	DEF Paving	789-12-3456	\$ 1,000.00	11/17/2007
Eaxmple 2					0.00	
					Example 1	Example 2
		Total Amount P	aid to Subcontractor	Firms	\$ 8,000.00	0.00
I certify that the		ely reflects actual on the above refere	Territorio de	e dates the paymen	its were made to Sub	contractors/
		Signature –	John !	Doe	Title _	Owner
		Print Name _	John Doe		Date _	12/11/2007

Field	Instructions
	Enter the name and address of the company, firm, governmental entity or
	subgrantee requesting payment form the North Carolina Department of
Subgrantee Letterhead / Name & Address Goes Here	Transportation

Submit with Invoice To:

Firm Invoice No. Reference

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

Signed

Invoice Line Item Reference

Payer Name,
Payer Federal Tax Id

Subcontractor / Subconsultant/ Material Supplier Name

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

Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice

Total Amount Paid to DBE Firms

subgrantee requesting payment form the North Carolina Department of Transportation

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

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

Enter the NCDOT Purchase Order or Contract number that corresponds with the information contained on this form.

Enter the NCDOT WB\$ element number assigned to this project.

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

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

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

Enter the name of the company, firm, governmental entity or subgrantee that is responsible for paying the DBE subcontractor.

Enter the Federal Tax Identification number of the Payer (See Payer Name) Enter the name of the DBE Subcontractor, Subconsultant or Material Supplier that is being paid for goods or services related to the NCDOT PO / Contract Number.

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

Enter the amount paid to the DBE Subconfractor, Subconsultant or Material Supplier for the invoice referenced.

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

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

SUBSTITUTE FORM W-9

VENDOR REGISTRATION FORM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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

INDIVIDUAL AND SOLE PROPRIETOR: ENTER NAME AS SHOWN ON SOCIAL SECURITY CARD CORPORATION OR PARTNERSHIP : ENTER YOUR LEGAL BUSINESS NAME NAME: MAILING ADDRESS: STREET/PO-BOX: CITY, STATE, ZIP: DBA / TRADE NAME (IF APPLICABLE): BUSINESS DESIGNATION: INDIVIDUAL (use Social Security No.) SOLE PROPRIETER (use SS No. or Fed ID No.) CORPORATION (use Federal ID No.) PARTNERSHIP (use Federal ID No.) ☐ ESTATE/TRUST (use Federal ID no.) STATE OR LOCAL GOVT. (use Federal ID No.) ☐ OTHER / SPECIFY SOCIAL SECURITY NO. ___ - __ - __ _ _ (Social Security #) OR FED.EMPLOYER IDENTIFICATION NO. ____ - ____ - ____ (Employer Identification #) COMPLETE THIS SECTION IF PAYMENTS ARE MADE TO AN ADDRESS OTHER THAN THE ONE LISTED ABOVE: REMIT TO ADDRESS: STREET / PO BOX: CITY, STATE, ZIP: Participation in this section is voluntary. You are not required to complete this section to become a registered vendor. The information below will in no way affect the vendor registration process and its sole purpose is to collect statistical data on those vendors doing business with NCDOT. If you choose to participate, circle the answer that best fits your firm's group definition. What is your firm's ethnicity? (Prefer Not To Answer, African American, Native American, Caucasian American, Asian American, ☐ Hispanic American, ☐ Asian-Indian American, ☐ Other: What is your firm's gender? (Prefer Not to Answer, Male, Female) Disabled-Owned Business? (Prefer Not to Answer, Yes, No **IRS** Certification Under penalties of perjury, I certify that: The number shown on this form is my correct taxpayer identification and I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the IRS that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and I am a U.S. person (including a U.S. resident alien). The IRS does not require your consent to any provision of this document other than the certifications required to avoid backup withholding. For complete certification instructions please see IRS FORM W-9 at http://www.irs.gov/pub/irs-pdf/fw9.pdf. NAME (Print or Type) TITLE (Print or Type)

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

SIGNATURE

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

DATE

PHONE NUMBER

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

Date

LETTER OF INTENT TO PE	ERFORM AS A SUBCONTRACTOR
CONTRACT:	NAME OF BIDDER:
The undersigned intends to perform work in conne and subsequent award of contract by the Board of	ection with the above contract upon execution of the bid Transportation as:
Name of MBE/WBE/DBE Subcontractor	
Address	
CityS	tateZip
Please chec	ck all that apply:
Minority Business	Enterprise (MBE)
Women Business	Enterprise (WBE)
Disadvantaged Busin	ess Enterprise (DBE)
listed on the attached MBE/WBE/DBE Commitmupon execution of the bid and subsequent award named subcontractor is prepared to perform the distance of the subcontractor.	subcontractor is prepared to perform the described work tent Items sheet, in connection with the above contract of contract by the Board of Transportation. The above described work at the estimated Commitment Total for /DBE Commitment Items sheet and amount indicated
	es and Quantities on the "attached" MBE/WBE/DBE
Commitment Items sheet. Amount \$	
Unit Prices and Quantities. This commitment tota will vary up or down as the project is completed. I work performed and accepted during the pursuar entire dollar amount quoted based on these estim	ally accepts the Commitment Total estimated for the l is based on estimated quantities only and most likely Final compensation will be based on actual quantities of acc of work. The above listed amount represents the ated quantities. No conversations, verbal agreements, hall serve to add, delete, or modify the terms as stated.
	actual subcontract between the two parties. A separate the contractual obligations of the bidder and the
Affirmation	
The above named MBE/ WBE/ DBE subcontract contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the estimated dollar value as stated about the contract for the contra	etor affirms that it will perform the portion(s) of the ove.
Name of MBE/ WBE/ DBE Subcontractor	Name of Bidder
Signature / Title	Signature / Title

Date

Form SAF Rev. 2A Revised 11-2012

Subcontract Approval Form (SAF)

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

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

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

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

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

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

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

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

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

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

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

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

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

Sublet Percentages

FOR USE BY NCDOT PERSONNEL (for non HiCAMS contracts)

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

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

Rev. 5-2012

SUBCONTRACT APPROVAL FORM

>=+=>=+ N> -			1								
Contract No.:			F.A. No.:	0.				Subcontract R	Subcontract Request Number:		
WBS Element:			T.I.P. No.:	ю.				County:			200
APPROVAL IS RE	APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:	WING IT	EMS C	F WORK	ON THIS PRO	JECT 1	Ö				
-								Retainage	Certification	Reporting No.	ng No.
Subcontractor Name and Address	d Address	rice)						Retainage	Certification	Reporting No	ng No.
nd Tier-1 Subcontractor Name and Address	Name and Address			1.2							
Line Code Number	Item Description	Portion (•)	Partial (*)	Sub or 2nd Tier	Quantity	MOU	* 유	DBE/MBE/WBE Unit Price	DBE/MBE/WBE Sublet Amount	Subcontract Unit Price	Total Subcontract Amount
			3				-				
ndicates a Portion of Work (●)	of Work (•)		ndica	De a Part	Indicates a Partial Item (•)		ÓUN	DENAIDE Amount			
		55796 F		a a a	dilielli(▼)		 	DBE/MBE/WBE Amount		Subcontract Amt.	
he Contractor / Sunthe subcontract /	The Contractor / Subcontractor certifies that the subcontract is in writing and that FHWA 1273, "Required Contract Provisions," have been included the subcontract / 2 nd tier subcontract in its entirety.	ral proje act is in	cts) writing	and that I	-HWA 1273, "R	equirec	Contr	act Provisions," I	have been includ	ed	
Sontractor:			Date			APPR	APPROVED:				
itle:						Reside	Resident Engineer	ineer			Date
subcontractor: signature: itle:		_	Date_			Appro satisfa terms	ctory po	h the understandir erformance and co ontract and that al	ng that the Contrac impletion of the wo I payments will be i	Approved with the understanding that the Contractor will be responsible for the satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made to the Contractor.	le for the n the tor.
nd Tier hubcontractor:		27.			12 P						
ignature:		111	Date_			-					
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Form
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Contract No.:

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Rev. 5-2012

SUBCONTRACT APPROVAL FORM

F.A. No.:

Subcontract Request Number:

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SUBCONTRACT APPROVAL FORM

WBS Element:				<u>-</u>							.1.
APPROVAL IS RE	APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:	VING ITE	NS OF	WORK	ON THIS PRO	ECT TO	Ö	Coulity			
d.								Retainage	Certification	Report	Reporting No.
∠ i iei -∠ Subcontractor Name and Address	r Name and Address		a gradu					Retainage	Certification	Reporting	ting No.
2 nd Tier-3 Subcontractor Name and Address	r Name and Address									E 1 2	
Line Code Number	Item Description	Portion (•)	Partial (*)	Sub or 2nd Tier	Quantity	MOM.	* 유	DBE/MBE/WBE Unit Price	DBE/MBE/WBE Subjet Amount	Subcontract Unit Price	Total Subcontract
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Indicates a Portion of Work (•)	of Work (●)		ndicate	s a Parti	Indicates a Partial Item (♦)	A i					
UBCONTRACT C	SUBCONTRACT CERTIFICATION (applies only to Federal projects)	al project	s		¥						
in the subcontract / School for the subcontract / Contractor:	in the subcontract / 2 nd tier subcontract in its entirety. [APPROVED: APPROVED:]	ict is in w	riting a	nd that F	HWA 1273, "Re	APPROVED:	Contra OVED:	act Provisions," h	ave been includer		
Title:		se Call				Resident Engineer	nt Eng	ineer			Date
Subcontractor:						Approved with	/ed wit	h the understandin	the understanding that the Contractor will be responsible for the	or will be responsi	ble for the
Signature:			Date			satisfac	stary po	erformance and co	satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made directly to the Contractor.	on ade directly to the	ith the
1d +:			R		S.				•		
2" Tier Subcontractor:				5.2							
Signature:		1 1	Date								3
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Execution of Contract

CONTRACT NO.: BRIDGE MAINT-15
COUNTY: Forsyth & Rowan
ACCEPTED BY THE
Proposals Engineer
Date
EXECUTION OF CONTRACT AND BONDS APPROVED AS TO FORM:
Division Engineer
Date

Signature Sheet (Bid) - ACCEPTANCE SHEET

North Carolina Department of Transportation BID FORM

CONTRACT NO.: BRIDGE MAINT-15

DESCRIPTION: REPAIR DAMAGED STEEL BRIDGE BEAMS BY HEAT STRAIGHTENING ON BRIDGE NO. 790094 (ROWAN) ON US-29 ACROSS I-85 AND BRIDGE NO. 330048 (FORSYTH) ON NC-8 ACROSS US-52

ITEM	ACTIVITY NUMBER	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
1	SP	SP	FLAME STRAIGHTENING & WELDING REPAIRS TO BRIDGE #790094 (ROWAN)	1	LS		
2	SP	SP	FLAME STRAIGHTENING & WELDING REPAIRS TO BRIDGE #330048 (FORSYTH)	1	LS		

TOTAL BID FOR PROJECT:	
CONTRACTOR	
ADDRESS	
Federal Identification Number	Contractor's License Number
Authorized Agent	Title
Signature	Date
Witness	Title
Signature	Date
THIS SECTION TO BE COMPLETED BY NORTH CAROLI This bid has been reviewed in accordance with Article 1 Reviewed by Accepted by NCDOT	NA DEPARTMENT OF TRANSPORTATION 03-1 of the Standard Specifications for Roads and Structures 2012. (date)