

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

PROPOSAL

DATE AND TIME OF BID OPENING: **AUGUST 17, 2004 AT 2:00 PM**

CONTRACT ID C201246

WBS 37445, 37447

FEDERAL-AID NO. STATE FUNDED

COUNTY HERTFORD

T.I.P. NO.

MILES 15.500

ROUTE NO. NC 45

LOCATION NC-461 FROM US-13 TO WCL OF WINTON AND NC-45 FROM ECL OF WINTON TO THE BERTIE COUNTY LINE.

TYPE OF WORK GRADING, DRAINAGE, MILLING, RESURFACING, & GUARDRAIL.

**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 SPECIALITY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

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

THIS IS A ROADWAY

**5% BID BOND OR BID DEPOSIT REQUIRED**

PROPOSAL FORM FOR THE CONSTRUCTION OF CONTRACT NO. C201246

IN HERTFORD COUNTY NORTH CAROLINA

Date \_\_\_\_\_ 20\_\_

DEPARTMENT OF TRANSPORTATION,

RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. C201246; 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 2002 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. C201246

In Hertford County, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled "North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2002 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 any 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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**PROJECT SPECIAL PROVISIONS**

General

7-1-95

RG01

**CONTRACT TIME AND LIQUIDATED DAMAGES:**

7-1-95

The date of availability for this contract is September 27, 2004

The completion date for this contract is November 15, 2005.

The observation period for the thermoplastic pavement markings is not a part of the work to be completed by the completion date for this contract as stated above. Warrant the observation period by the payment and performance bond.

The liquidated damages for this contract are Eight Hundred Dollars (\$800.00) per calendar day.

RG06

**INTERMEDIATE CONTRACT TIME NUMBER 1  
AND LIQUIDATED DAMAGES:**

09-16-03

The Contractor shall not close or narrow a lane of traffic on **NC 461 & NC 45**, 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:

**HOLIDAYS AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS**

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

If **Independence Day** is on a Saturday or Sunday, then between the hours of 6:00 p.m. the Thursday before Independence Day and 7:00 a.m. the Tuesday after Independence Day.

6. For **Labor Day**, between the hours of 6:00 p.m. Friday and 7:00 a.m. Tuesday.
7. For **Thanksgiving Day**, between the hours of 6:00 p.m. Tuesday and 7:00 a.m. Monday.

- 8. For **Christmas**, between the hours of 6:00 p.m. the Friday **before the week of Christmas Day** and 7:00 a.m. the following Monday **after the week of Christmas Day**.

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

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

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

The liquidated damages are **Five Hundred Dollars (\$500.00)** per hour time period.

RG07

**PROSECUTION OF WORK:**

7-1-95

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 \$800.00 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.

RG09

**SAFETY INDEX RATING:**

6-18-02

Revise the 2002 Standard Specifications as follows:

Page 1-10, Article 102-2

Before the last paragraph on this page, add the following paragraph:

"All subcontractors performing work for the Department shall have received a passing grade on the Safety Index Rating form, in accordance with Article 102-2, prior to beginning work.

Subcontractors can request the Safety Index Rating form from the State Contractual Services Engineer."

RG11

**RAILROAD GRADE CROSSING:**

7-1-95

The Contractor's attention is directed to the fact that should the use of slow moving or stopped equipment be required at railroad grade crossings, notify the railroad's local representative of their anticipated time of work at the grade crossing at least 48 hours prior to performing work in that grade crossing location.

RG12

**MAJOR CONTRACT ITEMS:**

2-19-02<sub>C</sub>

The following listed items are the major contract items for this contract (See Articles 101-54 and 104-5 of the Standard Specifications):

<u>Item #</u>	<u>Description</u>
11	Asphalt Concrete Base Course, Type B25.0B
12	Asphalt Concrete Intermediate Course, Type I19.0B
13	Asphalt Concrete Surface Course, Type S9.5B

RG15

**SPECIALTY ITEMS:**

7-1-95<sub>C</sub>

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

<u>Line #</u>	<u>Description</u>
22 thru 23	Guardrail Items
24 thru 30	Thermoplastic Pavement Markings
32	Pavement Markers
33	Seeding & Mulching

RG18

**POSTED WEIGHT LIMITS:**

7-1-95

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

RG24

**SCHEDULE OF ESTIMATED COMPLETION PROGRESS:**

**07-20-04**

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

<u>Fiscal Year</u>	<u>Progress (Dollar Value)</u>
2005 (07/01/04 – 06/30/05)	80% of Total Amount Bid
2006 (07/01/05 – 06/30/06)	20% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the 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.

RG33

**ELECTRONIC BIDDING:**

**03-16-04<sub>R</sub>**

Page 1-2, Article 101-11

Delete this article and replace with the following:

**Bid (Or Proposal):** The electronic offer of a Bidder via Bid Express™ to the Department to perform the work and to furnish the labor and materials at the prices quoted.

Page 1-3, Article 101-20, **Contract**

Add after the second paragraph of this article.

All references to contracts shall include electronic agreements and printed paper agreements. These may include but not be limited to the electronic bid bond, non-collusion statement, debarment certification, and award limits.

Page 1-6, Article 101-64 **Proposal Form**

Delete this article and replace with the following:

**Proposal or Proposal Form:** The electronic or paper form provided by the Department that the Bidder uses to develop his electronic offer to perform the work at designated bid prices.

Page 1-14, Article 102-9

Delete Article 102-9 in its entirety and replace with the following:

**102-9 ELECTRONIC BIDDING.**

The Bidder shall submit bids electronically using the following guidelines:



1. The prequalified Bidder shall have a fully executed *Non-Collusion Affidavit and Debarment Certification* on file in the Contract Office prior to submitting his bid. If the Bidder cannot provide the debarment certification required, he shall provide an explanation as shown in the certification. The explanation will not necessarily result in denial of participation in a contract. Non-collusion and debarment certification forms shall be downloaded at <http://www.NCDOT.org/business>. Forms shall be executed in accordance with Section 102-8. The affidavit and certification shall be received in the Contract Office by 5 p.m. the last business day before the bid letting. The Contract Office address is shown at the end of this provision.

If the prequalified Bidder's *status* changes, he shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change.

Failure to have a fully executed non-collusion affidavit and debarment certification on file in the Contract Office prior to placing bids will cause those bids to be non-responsive.

2. Obtain on-line bidding information from Bid Express™ at [www.bidx.com](http://www.bidx.com) (Note: Obtain an account and valid Digital Signature from Bid Express™ in order to bid electronically).
3. An electronic corporate surety bid bond for at least 5% of the total amount bid shall accompany each electronic bid, or the Contractor may submit a certified check or cashier's check in lieu of an electronic bid bond. The certified check or cashier's check shall be for at least 5% of the total amount bid and shall be received by 5 p.m. the last business day before the bid letting and shall be delivered to the address shown at the end of this provision.

Contact either or both of the following bond management companies in order to acquire the necessary service to submit an electronic bid bond.

- a. Surety 2000 ([www.surety2000.com](http://www.surety2000.com))
  - b. Surepath ([www.insurevision.com](http://www.insurevision.com))
4. Debarment Certification – The Bidder shall provide a debarment certification in the electronic bid submittal. If a Bidder cannot provide the debarment certification required, he shall provide an explanation in the Bid Express™ miscellaneous folder within the .ebs file. The explanation will not necessarily result in denial of participation in a contract. Failure to furnish a certification or an explanation will be grounds for rejection of a bid.
  5. Zero (0) is considered a valid bid. Do Not enter zero (0) in any unit price field unless zero (0) is the intended bid for that item.
  6. Include all addenda in the submitted electronic bid. Bid Express™ will not accept a bid which does not contain all addenda. Section 103-2 (Correction of Bid Errors) will not apply to On-Line Electronic Bidding. All addenda and attachments will be considered part of the bid.

7. The electronic bid may be changed and resubmitted as many times as desired prior to the advertised bid opening time specified in the Invitation to Bid. The latest time stamped electronically submitted bid prior to the advertised bid opening time will constitute the Bid.
8. The provisions of Section 102-8 will apply to the preparation of bids except that the bid shall be submitted via Bid Express™ On-Line Bid Submission.
9. All bids shall be submitted with an electronically affixed digital signature. For the purpose of this provision, affixing a digital ID to the bid shall be the equivalent of signing before a notary public and placing in force the non-collusion affidavit and debarment certification on file with the Department.
10. By submitting an electronic bid, the Bidder certifies that he has read, understands, accepts, acknowledges and agrees to comply with all statements, conditions and Specifications in the electronic bid submittal.
11. Bids will be decrypted, opened, printed to paper and read publicly at the time and place specified in the invitation to bid.
12. The successful Bidder if award be made shall submit a fully executed *Execution of Contract, Non-Collusion Affidavit and Debarment Certification* signature sheet, and payment and performance bonds within 14 calendar days of receipt of award letter.
13. The Department will not be responsible if a Bidder cannot submit his bid to Bid Express™ and claims will not be accepted for this. In the event of technical difficulties, the Department reserves the right to postpone the reading of bids for up to 4 hours past the advertised bid opening time.
14. The pre-bid *Non-Collusion Affidavit, Debarment Certification signature sheet, Execution of Contract, Non-Collusion Affidavit, Debarment Certification signature sheet*, certified check or cashier's check in lieu of electronic bid bond, payment and performance bonds shall be delivered to the Contract Office at the address shown herein:

**Physical Address**  
State Contract Officer  
Project Services Unit  
Century Center Bldg. B  
1020 Birch Ridge Drive  
Raleigh, NC 27610

**Mailing Address:**  
State Contract Officer  
NC Department of Transportation  
Contracts and Proposals  
1591 Mail Service Center  
Raleigh, NC 27699-1591

RG34

**MINORITY AND WOMEN BUSINESS:**

**7-17-01R**

**POLICY**

It is the policy of the North Carolina Department of Transportation that minority and women businesses shall have the maximum opportunity to participate in the performance of contracts financed by Non-Federal Funds.

**The Contractor is also encouraged to give every opportunity to allow MB/WB participation in Supplemental Agreements.**

**OBLIGATION**

The Contractor and any subsequent Subcontractor shall ensure that minority and women businesses have the maximum opportunity to participate in the performance of the work included in this contract. The Contractor and any subsequent Subcontractor shall take all necessary and reasonable steps to ensure that minority and women businesses have the maximum opportunity to compete for and perform a portion of the work included in this contract and shall not discriminate on the basis of race, color, national origin or sex. Failure on the part of the Contractor to carry out the requirements set forth herein shall constitute a breach of contract and after proper notification, may result in award disqualification, termination of the contract, disqualification from bidding, or other appropriate remedy.

**GOALS**

Pursuant to the requirements of North Carolina General Statute 136-28.4, the following goals for participation are established for this contract:

Minority Business Enterprises 5%  
Women Business Enterprises 7%

The Contractor shall exercise all necessary and reasonable steps to ensure that Minority Businesses (MB) and Women Businesses (WB) participate in at least the percents of the contract as set forth above as goals for this contract.

**LISTING OF MB AND WB SUBCONTRACTORS**

All bidders, at the time the bid proposal is submitted, must also submit a listing of MB and WB participation on the appropriate form (or facsimile thereof) contained elsewhere in this proposal in order for the bid to be considered responsive. Bidders must indicate the total dollar value of MB and WB participation of the contract. In the event the bidder has no MB and WB participation, he is still required to indicate this on the forms by entering the word or number zero. Blank forms will not be deemed to represent zero participation. **BIDS SUBMITTED WHICH DO NOT HAVE MB AND WB PARTICIPATION INDICATED ON THE APPROPRIATE FORM WILL NOT BE READ PUBLICLY DURING THE OPENING OF BIDS.** These bids will not be considered for award by the Department and they will be returned to the bidder. Bidders have the option of submitting their MB and WB participation in an abbreviated format as required in Paragraph A below, or the bidders may submit their MB and

WB participation in the additional detail required by Paragraph B below. In the event the bidder elects to submit MB and WB participation in accordance with Paragraph A and is determined to be the apparent lowest responsive bidder, that bidder must deliver to the Department no later than 12:00 noon of the sixth day following the opening of bids, a detailed MB and WB submittal as required by Paragraph B below.

Only those MB and WB firms with current certification by the Department will be considered acceptable for listing in the bidders submittal of MB and WB participation.

- A. The contractor shall indicate on the form for listing of MB and WB Subcontractors the following required information:

REQUIRED INFORMATION

- (1) The names of MB and WB firms committed to participate in the contract;
- (2) The Contract Item Numbers of work to be performed by each MB and WB firm; and
- (3) The total dollar amount to be paid to each MB and WB based on agreed upon unit prices.

Failure to indicate the required information on the specified form will cause the bid to be considered nonresponsive and it may be rejected.

- B. In lieu of submitting the information required by (A) above, the bidder may submit the detailed information required below along with the bid proposal form.

REQUIRED INFORMATION

- (1) The names of MB and WB firms committed to participate in the contract;
- (2) The Contract Item Numbers and Contract Item Descriptions and agreed upon unit prices of work to be performed by each MB and WB firm; and
- (3) The total dollar amount to be paid to each MB and WB based on agreed upon unit prices.

Failure to indicate the required information on the specified form will cause the bid to be considered nonresponsive and it may be rejected.

The Department will not allow any substitutions, deletions, or other alterations to the listing of firms committed for MB and WB participation and/or the respective listed contract item numbers after opening of bids. The Department will not allow adjustments to total dollar amount of MB and/or WB participation after the opening of bids which would result in the MB and/or WB participation being less than the contract goal. The only exceptions to the requirements of this paragraph will be: (1) to allow for replacement of a MB or WB firm that had been decertified after opening of bids, and (2) to allow alteration of the listed contract item numbers subject to the Bidder submitting sufficient documentation to verify an obvious error in the initial submittal.

- C. If the bid of the lowest responsive bidder exceeds \$500,000 and if the MB and/or WB participation submitted in response to Paragraph B exceeds the algebraic sum of the MB and WB goals by \$1000 or more, the excess will be placed on deposit by the Department for future use by the bidder. Separate accounts will be maintained for MB and WB participation and these may accumulate for a period not to exceed 24 months.

If the MB and WB participation submitted in response to Paragraph A/B does not meet or exceed the MB and WB contract goals, the apparent lowest responsive bidder must submit information to satisfy the North Carolina Department of Transportation that sufficient reasonable efforts have been made to meet the contract goals. One complete set and nine (9) copies of this information must be received in the office of the State Contractual Services Engineer no later than 12:00 noon of the sixth day following opening of bids. Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms being solicited. Documentation of MB and WB quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Department considers in judging good faith efforts. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Where the bidder fails to provide this information by the deadline, the Department may impose the following sanctions: (1) disqualify the contractor and any affiliated companies from further bidding for a period of time of no more than 90 days from the date of disqualification as established in notification by certified mail; and (2) disqualify the Contractor and any affiliated companies for award of all contracts for which bids have been received and opened.

The following factors are what the Department will consider in judging whether or not the bidder has made adequate good faith effort:

- (1) Whether the bidder attended any pre-bid meetings that were scheduled by the Department to inform MBs and WBs of subcontracting opportunities;
- (2) Whether the bidder provided written notice to a reasonable number of specific MBs and WBs that their interest in the contract is being solicited and whether the firms solicited could have reasonably been expected to quote the work in the contract;
- (3) Whether the bidder followed up on initial solicitations of interests by contacting MBs and WBs to determine with certainty whether they were interested;
- (4) Whether the bidder selected portions of the work to be performed by MBs and WBs in order to increase the likelihood of meeting the contract goals;
- (5) Whether the bidder provided interested MBs and WBs with adequate information about the plans, specifications and requirements of the contract;

- (6) Whether the bidder negotiated in good faith with interested MBs and Wbs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities;
- (7) Whether quotations were received from interested MB and WB firms but rejected as unacceptable without sound reasons why the quotations were considered unacceptable;
- (8) Whether the bidder made efforts to assist interested MBs and WBs in obtaining any required insurance or bonding that may be required by the bid proposal or by the bidder;
- (9) Whether the bidder specifically negotiated with Subcontractors to assume part of the responsibility to meet the contract MB and WB goal when the work to be sublet includes potential for MB and WB participation.

In the event one bidder is the apparent low bidder on two non-federally funded projects within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the MB participation on the two projects so long as the overall MB goal value of both projects is achieved.

In the event one bidder is the apparent low bidder on two non-federally funded projects within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the WB participation on the two projects so long as the overall WB goal value of both projects is achieved.

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

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

Where the apparent lowest responsive bidder fails to submit sufficient participation by MB and WB firms to meet the contract goal and upon a determination by the Goal Compliance Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the Department may reject the bid.

In the event that 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 the Department that the contract goal can be met or that adequate good faith efforts have been made to meet the goal.

#### DIRECTORY OF CERTIFIED BUSINESSES

Included with this Proposal Form is a list of Businesses which have been certified by the North Carolina Department of Transportation. Only those MB firms with current certification may be used to meet the contract MB goal. Only those firms with current certification may be used to meet the contract WB goal.

The listing of an individual firm certified by the Department shall not be construed as an endorsement of the firms capability to perform certain work.

#### REPLACEMENT OF MBs AND WBs

##### (A) Performance Related

If any MB or WB Subcontractor indicated on the form for listing of MB and WB Subcontractors, contained elsewhere in this proposal form, does not perform satisfactorily to the extent indicated or anticipated, the Contractor shall take all necessary, reasonable steps to replace the MB Subcontractor with another MB Subcontractor and/or the Contractor shall take all necessary, reasonable steps to replace the WB Subcontractor with another WB Subcontractor.

Any substitution of MB or WB firms after award of the contract shall be approved by the Department. The Contractor shall submit any requests for substitutions through the Resident Engineer and the request must provide a valid basis or reason for the proposed substitution.

To demonstrate necessary, reasonable efforts, the Contractor shall document the steps he has taken to replace any MB or WB Subcontractor that is unable to perform successfully with another MB or WB Subcontractor. Such documentation shall include but not be limited to the following:

- (a) Copies of written notification to MBs/WBs that their interest is solicited in subcontracting the work defaulted by the previous MB or WB Subcontractor or in subcontracting other items of work in the contract.
- (b) Efforts to negotiate with MBs and WBs for specific subbids including at a minimum:
  - (1) The names, addresses, and telephone numbers of MBs and WBs that were contacted;
  - (2) A description of the information provided to MBs and WBs regarding the plans and specifications for portions of the work to be performed; and

- (3) A statement of why additional agreements with MBs and WBs were not reached.
- (c) For each MB or WB contacted but rejected as unqualified, the reasons for the Contractor's conclusion.
- (d) Efforts made to assist the MBs and WBs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

Failure of the Contractor to demonstrate reasonable efforts to replace a MB or WB firm that does not perform as intended or anticipated, shall be just cause to disqualify the Contractor from further bidding for a period of up to 6 months after notification by certified mail.

(B) Decertification

1. If the Department has approved a Request for Subcontract for a particular MB or WB Subcontractor and that MB or WB Subcontractor is subsequently decertified by the Department; then the Department will not require the Prime Contractor to solicit replacement MB or WB participation equal to the remaining work to be performed by the decertified firm.
2. If a Prime Contractor has listed a MB or WB firm in his low bid submittal and the MB or WB firm is decertified prior to the Department approving a Request for Subcontract for the named MB or WB firm, the Prime Contractor may be required to make a good faith effort to:
  - (a) Replace the decertified firm with a certified firm, or
  - (b) To obtain replacement MB or WB participation in other areas of work.

DEFINITIONS

For purposes of this provision, the following definition will apply:

Minority Business or MB means a small business concern, which is owned and controlled by one or more minorities. Except that such term shall not include any concern or group of concerns controlled by the same minority or minorities which has average annual gross receipts over the preceding 3 fiscal years in excess of \$14,000,000, as adjusted by the Department for inflation. For the purposes of this part, owned and controlled means a business:

- (a) Which is at least 51 percent owned by one or more minorities or in the case of a publicly owned business, at least 51 percent of the stock of which is owned by one or more minorities; and



- (b) Whose management and daily business operations are controlled by one or more such individuals.

Minority is defined as a citizen or lawful permanent resident of the United States and who is:

- (1) Black (a person having origins in any of the black racial groups of Africa);
- (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- (3) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands);
- (4) American Indian

Women Business or WB means a small business concern, which is owned and controlled by one or more women. Except that such term shall not include any concern or group of concerns controlled by the same woman or women which has average annual gross receipts over the preceding 3 fiscal years in excess of \$14,000,000, as adjusted by the Department for inflation. For the purposes of this part, owned and controlled means a business:

- (a) Which is at least 51 percent owned by one or more women or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (b) Whose management and daily business operations are controlled by one or more of the women who own it.

#### COUNTING MB/WB PARTICIPATION TOWARD MEETING THE MB/WB GOAL

- (1) If a firm is determined to be an eligible MB or WB firm and certified by the Department, the total dollar value of the participation by the MB or WB will be counted toward the appropriate MB or WB goal. The total dollar value of participation by a certified MB or WB will be based upon unit prices agreed upon by the Prime Contractor and MB or WB Subcontractor.
- (2) The Contractor may count toward its MB or WB goal a portion of the total dollar value of participation with a joint venture, eligible under the standards of this provision, equal to the percentage of the ownership and controls of the MB or WB partner in the joint venture.
- (3) (a) The Contractor may count toward its MB or WB goal only expenditures to MBs or WBs that perform a commercially useful function in the work of a contract. A MB or WB is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work

involved. To determine whether a MB or WB is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, and other relevant factors.

- (b) Consistent with normal industry practices, a MB or WB may enter into subcontracts. If a MB or WB Contractor or Subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the MB or WB shall be presumed not to be performing a commercially useful function. The MB or WB may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption shall be final.
- (4) A Contractor may count toward its MB or WB goal 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from MB or WB regular dealer and 100 percent of such expenditures to a MB or WB manufacturer.
- (a) For purposes of this provision, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.
  - (b) For purposes of this provision, a regular dealer is 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. To be a regular dealer, the firm must engage in, as its principal business and in its own name, the purchase and sale 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 or operates distribution equipment. Brokers and packagers shall not be regarded as manufacturers or regular dealers within the meaning of this section.
- (5) A contractor may count toward its MB or WB goal the following expenditures to MB or WB firms that are not manufacturers or regular dealers:
- (a) The fees or commissions charged for providing a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for performance of the contract, provided that the fee or commission is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.
  - (b) The fees charged for delivery of materials and supplies required on a job site (but not the cost of the materials and supplies themselves) when the hauler, trucker, or delivery service is not also the manufacturer of or a regular dealer in the materials and supplies, provided that the fee is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.

- (c) The fees or commissions charged for providing any bonds or insurance specifically required for the performance of the contract provided that the fee or commission is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.

## REPORTS

Within 30 days after receipt of materials, supplies, or services from MBs or WBs, not otherwise documented by Request for Subcontracts (RS-1A/RS-1B), the Contractor shall furnish to the Engineer appropriate documentation (canceled checks, paid invoices, etc.) to verify expenditures with MB and WB concerns. The documentation should also indicate the percentage (60% or 100%) of expenditures claimed for MB or WB credit.

All requests for subcontracts involving MB or WB Subcontractors shall be accompanied by a certification executed by both the Prime Contractor and the MB or WB Subcontractor attesting to the agreed upon unit prices and extensions for the affected contract items. This document shall be on the Department's Form RS-1-D, or in lieu of using the Department's Form, copies of the actual executed agreement between the Prime Contractor and the MB or WB Subcontractor may be submitted. In any event, the Department reserves the right to require copies of actual subcontract agreements involving MB and WB Subcontractors.

The RS-1-D certification forms may be obtained from the Department's Resident Engineer.

These certifications shall be considered a part of the project records, and consequently will be subject to any penalties under State Law associated with falsifications of records related to projects.

## REPORTING MINORITY BUSINESS ENTERPRISE OR WOMEN BUSINESS ENTERPRISE PARTICIPATION

When payments are made to Minority Business Enterprise firms or Women Business Enterprise firms, including material suppliers, contractors at all levels (prime, subcontractor, or second tier subcontractor) shall provide the Engineer with an accounting of said payments. This accounting shall be furnished the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in (1) withholding of money due in the next partial pay estimate; or (2) removal of an approved Contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list. The accounting shall list for each payment made to a MB/WB Enterprise firm the following:

DOT Project Number

Payee Contractor Name

Receiving Contractor or Material Supplier

MB/WB Certification Basis, e.g., Woman Owned, Native American, African American, etc.

Amount of Payment

Date of Payment

A responsible fiscal officer of the payee contractor, subcontractor, or second tier subcontractor who can attest to the date and amounts of the payments shall certify that the accounting is correct. A copy of an acceptable report may be obtained from the Engineer.

RG42

**PROMPT PAYMENT:**

**6-19-01c**

Prompt Payment of Monies Due Subcontractors, Second Tier Subcontractors and Material Suppliers and Release of Retainage

Contractors at all levels; prime, subcontractor, or second tier subcontractor, shall within seven calendar days of receipt of monies, resulting from work performed on the project or services rendered, pay subcontractors, second tier subcontractors, or material suppliers as appropriate. This seven-day period begins upon knowledgeable receipt by the contracting firm obligated to make subsequent periodic or final payment. These prompt payment requirements will be met if each firm mails the payment to the next level firm by evidence of postmark within the seven-day period.

This provision for prompt payment shall be incorporated into each subcontract or second tier subcontract issued for work performed on the project or for services provided. If any retainage is held on subcontractors, all retainage shall be released within seven calendar days of release by the Department.

Failure of any entity to make prompt payment as defined herein may result in (1) withholding of money due to that entity in the next partial payment until such assurances are made satisfactory to this provision; or (2) removal of an approved contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list.

RG51

**PARTIAL PAYMENTS**

**1-01-02**

The 2002 Standard Specifications are revised as follows:

Page 1-69, Subarticle 109-4(A)

In the first line of the third paragraph change the amount of "\$200,000.00" to read "\$500,000.00".

RG54

**DOMESTIC STEEL AND IRON PRODUCTS:**

**7-1-95**

All steel and iron products which 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 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 and iron products permitted for use by this Special Provision is not applicable to fasteners. Domestically produced fasteners are required for this project.

All steel and iron 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 including pig iron and processed pelletized and reduced iron ore used in manufacturing "domestic" steel products may be imported; however, all manufacturing processes to produce the products, including coatings, must occur in the United States.

Before each steel or iron product is incorporated into this project or included for partial payment on a monthly estimate, the Contractor shall furnish the Resident Engineer a notarized certification certifying that the product conforms to the above requirements of this Special Provision. The Resident Engineer will forward a copy of each certification to the Materials and Tests Unit.

Each purchase order issued by the Contractor or a subcontractor for steel and iron 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 or iron 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 and iron products can readily be verified by an authorized representative of the Department or the Federal Highway Administration.

RG63

**RECYCLED STEEL**

**05-17-04**

Recycled steel shall be incorporated into this project provided it meets the following requirements:

1. Recycled steel shall meet the Department's specifications and standards.
2. Recycled steel shall be acquired competitively for a reasonable price, and within a reasonable time period.

RG65

**COMPENSATION AND RECORD KEEPING**

**03-16-04**

Revise the *2002 Standard Specifications* as follows:

104-8 Compensation and Record Keeping

Change Article (A), subarticle 1. with the following:

In line 3 and line 6, change \$15,000.00 to \$25, 000.00.

RG80

**PLANT AND PEST QUARANTINES:**  
**(IMPORTED FIRE ANT, GYPSY MOTH,**  
**WITCHWEED, AND OTHER NOXIOUS WEEDS)**

03-18-03

Within quarantined area:

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

Originating in a quarantined county:

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

Contact:

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

Regulated Articles Include:

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

RG84

**SAFETY VESTS:**

6-19-01

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel must wear an OSHA approved reflective vest or outer garment at all times while on the project.

RG87

**DIRECTOR OF CONSTRUCTION IN LIEU OF CHIEF ENGINEER**

**03-16-04**

Revise the 2002 Standard Specifications as follows:

Wherever the term *Chief Engineer* or *Chief Engineer of Operations* occurs in the Specifications, the actions and responsibilities referred to will be performed by the Director of Construction, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representative.

Revision to Definitions of Terms

Page 1-4, Article 101-35

**101-35 ENGINEER**

The Chief Engineer of Operations, and/or Director of Construction, Division of Highways, North Carolina, Department of Transportation, acting directly or through their duly authorized representative.

RG91

**CONTRACTOR BORROW SOURCE**

**07-20-04**

Revise the 2002 Standard Specifications as follows:

Page 2-17, Article 230-4(C) Contractor Furnished Sources, add the following;

If the Contractor proposes a borrow source, the environmental assessment shall include wetland and stream delineation extending 400 feet beyond the proposed borrow source limits.

1. If wetlands or streams are present within 400 feet of the borrow source and the contractor proposes to dewater:
  - a. .Submit a hydrologic analysis (DRAINMOD or equivalent) to determine if excavation, pump frequency/duration/volume will permanently impact or cause degradation to wetlands or streams. The analysis shall consist of, but not be limited to:
    - Required buffer width to avoid long term impacts to wetlands or stream
    - Return interval to pre-existing hydrologic conditions after pit excavation and dewatering is completed.
  - b. Attach a conservation easement specifying that the completed pit impoundment, upon returning to mean water table elevation, shall not be drained, ditched, used for irrigation, or any other manner that would degrade wetlands and streams.
  - c. Provide copy of recorded conservation easement to Engineer prior to commencement of any work on proposed pit.

- 2. If wetlands or streams are not present within 400 feet, no additional documentation will be required.

During Department review of the proposed borrow area, the hydrologic analysis will be submitted to the U. S. Army Corps of Engineers for evaluation.

RG92

**FUEL PRICE ADJUSTMENT:**

**2-19-02<sub>cc</sub>**

Fuel Price Adjustment for items of work listed below will be made in accordance with Section 109-8 of the Standard Specifications.

The base index price for DIESEL #2 FUEL is \$1.0387 per gallon.

The selected item(s) of work and the fuel factor used in calculating adjustments to be made are as follows:

<u>Line #</u>	<u>Description</u>	<u>Units</u>	<u>Fuel Usage Factor</u> <u>Diesel</u>
11	Asphalt Concrete Base Course, Type B25.0 B	Gal/Ton	2.90
12	Asphalt Concrete Intermediate Course, Type I19.0 B	Gal/Ton	2.90
13	Asphalt Concrete Surface Course, Type S9.5 B	Gal/Ton	2.90

SP1G43



**PROJECT SPECIAL PROVISIONS**  
**ROADWAY**

1-15-02

RR01

**BORROW EXCAVATION:**

1-15-02<sub>R</sub>

Revise the 2002 Standard Specifications as follows:

Page 2-20, Article 230-6

After the first paragraph, insert the following paragraph:

"No direct payment will be made for the work of Evaluation of Potential Wetlands and Endangered Species as outlined above. Payment at the contract unit price for the pay item 'Borrow Excavation', 'Grading – Lump Sum', or 'Shoulder Reconstruction' will be considered full compensation for this work."

RR02

**SHOULDER RECONSTRUCTION:**

1-18-00

The work covered by this provision consists of reconstructing earth shoulders (including median shoulder) in accordance with Roadway Standard Nos. 560.01 and 560.02 from the edge of pavement to the existing shoulder point as directed by the Engineer. Perform this work immediately after the resurfacing operations are completed as directed by the Engineer.

On any map that contains widening, use all suitable material generated from the widening operation to construct the shoulder. Furnish any other earth material necessary for the construction of the shoulders. Provide earth material meeting the approval of the Engineer. No testing will be necessary.

Perform shoulder reconstruction in the following order: scarify the existing shoulder to provide the proper bond; add the earth material to the shoulder; and compact the reconstructed shoulder to the satisfaction of the Engineer.

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

This work is defined as "Shoulder Reconstruction" and the quantity of such work to be paid for will be the actual number of shoulder miles which have been constructed. Measurement will be made along the edge of each shoulder. Measurement will be made to the nearest 0.01 of a mile.

The quantity of shoulder reconstruction measured as provided above, will be paid for at the contract unit price per shoulder mile for "Shoulder Reconstruction".

Incidental Stone will be paid for as provided in Article 545-6 of the Standard Specifications.

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

Such price and payment will be full compensation for furnishing earth material, hauling, placing, compaction, and all incidentals necessary to complete construction of the shoulders.

RR07

Payment will be made under:

Shoulder Reconstruction.....Shoulder Mile

**COMPREHENSIVE GRADING:**

Comprehensive grading on this project involves the work associated with adding a turn lane at the intersection of NC 45 / NC 461 and shall be performed in accordance with Section 226 of the Standard Specifications.

Payment will be made under:

Grading.....Lump Sum

**PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:** 11-21-00

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

The base price index for asphalt binder for plant mix is \$210.28 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on June 1, 2004.

RR19

**INCIDENTAL STONE BASE:** 7-1-95

Description:

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

Materials and Construction:

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

Method of Measurement:

Measurement will be in accordance with Article 545-6 of the Standard Specifications.

Basis of Payment:

Payment will be in accordance with Article 545-7 of the Standard Specification at the contract unit price per ton for "Incidental Stone Base".

RR28

Payment will be made under:

Incidental Stone Base ..... Ton

**ASPHALT PAVEMENTS - SUPERPAVE**

**02-17-04**

Revise the 2002 Standard Specifications as follows:

PRIME COAT

Page 6-2, Article 600-9

Delete the first paragraph under this Article and substitute the following:

The quantity of prime coat to be paid will be the number of gallons (liters) of prime coat material that has been satisfactorily placed on the roadway. Each distributor load of prime coat material delivered and utilized on the project will be measured.

ASPHALT TACK COAT

Page 6-4, Article 605-8

Insert the following after paragraph one in this Article:

Take necessary precautions to limit the tracking and/or accumulation of tack coat material on either existing or newly constructed pavements. Excessive accumulation of tack may require corrective measures.

FIELD VERIFICATION AND JOB MIX FORMULA ADJUSTMENTS

Page 6-7, Article 609-4

Delete the first paragraph under this Article and substitute the following:

Conduct field verification of the mix at each plant within 30 calendar days prior to initial production of each mix design, when required by the Allowable Mix Adjustment Policy and when directed as deemed necessary.

Page 6-8, Article 609-4

Delete the first paragraph on this page and substitute the following:

Retain records of these calibrations and mix verification tests, including Superpave Gyrotory Compactor (SGC) printouts, at the QC laboratory. In addition, furnish copies, including SGC printouts, to the Engineer for review and approval within one working day after beginning production of the mix.

Page 6-8, Article 609-4

Add the following sentence to the end of the last paragraph in this Article:

Any mix produced that is not verified may be assessed a price reduction at the Engineer's discretion in addition to any reduction in pay due to mix and/or density deficiencies.

Quality control minimum sampling and testing schedule:

Page 6-9, Subarticle 609-5(C)1

Delete the second sentence in the second paragraph of this Article and substitute the following:

Retain the QC compacted volumetric test specimens for 5 calendar days, commencing the day the specimens are prepared.

Page 6-9, Subarticle 609-5(C)2

At the bottom of this page, delete the sentence directly above the Accumulative Production Increment and substitute the following:

Sample and test the completed mixture from each mix design at the following minimum frequency during mix production:

Page 6-10, Subarticle 609-5(C)2

Revise Items B, C, D and E on this page as follows:

- B. Gradation on Recovered Blended Aggregate from Mix Sample (AASHTO T 30 Modified) Grade on all sieves specified on JMF
- C. Maximum Specific Gravity (AASHTO T 209 or ASTM D 2041), optional (ASTM D 6857)
- D. Bulk Specific Gravity of Compacted Specimens (AASHTO T166), optional (ASTM D 6752), Average of 3 specimens at  $N_{des}$  gyrations (AASHTO T 312)
- E. Air Voids (VTM) (AASHTO T 269), Average of 3 specimens at  $N_{des}$  gyrations

Page 6-11, Subarticle 609-5(C)2

At the top of this page, delete Item B.,” Reclaimed Asphalt Pavement...” and substitute the following:

- B. Reclaimed Asphalt Pavement (RAP) Binder Content and Gradation (AASHTO T 308 Modified or T 164 and AASHTO T 30 Modified) (sampled from stockpiles or cold feed system at beginning of production and weekly thereafter). Have RAP approved for use in accordance with Article 1012-1(G). (Split Sample Required)

Page 6-11, Subarticle 609-5(C)2

Insert the following sampling and testing at the end of this Subarticle

- F. Uncompacted Void Content of Fine Aggregate, AASHTO T 304, Method A (natural sand only). Performed at Mix Design and when directed as deemed necessary. (Split Sample Required)
- G. Reclaimed Asphalt Shingle Material (RAS) Binder Content and Gradation (AASHTO T 308 Modified or T 164 and AASHTO T 30 Modified) (sampled from stockpiles or cold feed system at beginning of production and weekly thereafter). Have RAS approved for use in accordance with Article 1012-1(F). (Split Sample Required)

#### CONTROL CHARTS

Page 6-11, Subarticle 609-5(C)3

Delete the second sentence of the first paragraph in this Subarticle and substitute the following:

Record all regularly scheduled random sample or directed sample full test series results for mix incorporated into the project on control charts the same day the test results are obtained.

Page 6-12, Subarticle 609-5(C)3

Delete item 3 in the list below the second full paragraph on this page.

**CONTROL LIMITS**

Page 6-12, Subarticle 609-5(C) 4

At the bottom of this page, delete the table and substitute the following:

**CONTROL LIMITS**

<b>Mix Control Criteria</b>	<b>Target Source</b>	<b>Warning Limit</b>	<b>Moving Average Limit</b>	<b>Individual Limit</b>
2.36mm Sieve	JMF	±4.0 %	±5.0 %	±8.0 %
0.075mm Sieve	JMF	±1.5 %	±2.0 %	±2.5 %
Binder Content	JMF	±0.3 %	±0.5 %	±0.7 %
VTM @ N <sub>des</sub>	JMF	±1.0 %	±1.5 %	±2.0 %
VMA @ N <sub>des</sub>	Min. Spec. Limit	-0.5%	-0.8%	-1.0%
P <sub>0.075</sub> / P <sub>be</sub> Ratio	Max. Spec. Limit	0.0	N/A	+0.4%
%G <sub>mm</sub> @ N <sub>ini</sub>	Max. Spec. Limit	N/A	N/A	+2.0%
TSR	Min. Spec. Limit	N/A	N/A	-15.0%

**FIELD COMPACTION QUALITY CONTROL**

Page 6-15, Subarticle 609-5(D)1

Delete the first and second sentences in the fourth paragraph on this page and substitute the following:

Base and intermediate mix types (surface mixes not included) utilized for pavement widening of less than 4.0 feet and all mix types used in tapers, irregular areas and intersections (excluding full width travel lanes of uniform thickness), will not be subject to the sampling and testing frequency specified above provided the pavement is compacted using approved equipment and procedures. However, the Engineer may require occasional density sampling and testing to evaluate the compaction process.

Page 6-16, Subarticle 609-5(D)1

Delete item number 2 at the top of this page. Item number 3 should be re-numbered as 2 after the specified deletion.

## LIMITED PRODUCTION PROCEDURE

Page 6-17, Subarticle 609-5(D) 5

Delete the first paragraph in this Subarticle and substitute the following:

Proceed on limited production when, for the same mix type, one of the following items occur:

- (1) Two consecutive failing lots, excluding lots representing an individual resurfacing map or portion thereof.
- (2) Three consecutive failing lots, with each lot representing an individual resurfacing map or portion thereof.
- (3) Two consecutive failing nuclear control strips.

Pavement within each construction category (New and Other), as defined in Article 610-13, and pavement placed simultaneously by multiple paving crews will be evaluated independently for limited production purposes.

Delete the first sentence in the last paragraph in this Subarticle and substitute the following:

If the Contractor does not operate by the limited production procedures as specified above, the two consecutive failing density lots, three consecutive failing lots with each lot representing an individual resurfacing map or portion thereof, or two consecutive failing nuclear control strips, whichever is applicable, and all mix produced thereafter will be considered unacceptable.

## DOCUMENTATION (RECORDS)

Page 6-18, Subarticle 609-5(E)

Delete the third and fourth sentence in the first full paragraph on this page and substitute the following:

Maintain all QC records, forms and equipment calibrations for a minimum of 3 years from their completion date.

Delete the second full paragraph on this page and substitute the following:

Falsification of test results, documentation of observations, records of inspection, adjustments to the process, discarding of samples and/or test results, or any other deliberate misrepresentation of the facts will result in the revocation of the applicable person's QMS certification. The Engineer will determine acceptability of the mix and/or pavement represented by the falsified results or documentation. If the mix and/or pavement in question is determined to be acceptable, the Engineer may allow the mix to remain in place at no pay for the mix, asphalt binder and other mix components. If the mix and/or pavement represented by the falsified results is determined not to be acceptable, remove and replace with mix, which complies with the Specifications. Payment will be made for the actual quantities of materials required to replace the falsified quantities, not to exceed the original amounts.

QUALITY ASSURANCE

Page 6-18, Article 609-6

In Item 5 under Plant Mix Quality Assurance, add “at a frequency equal to or greater than 5% of the QC sample frequency”.

In the first sentence within the paragraph below Plant Mix Quality Assurance, delete the words “of mix”.

In Item 1 under Density Quality Assurance, delete the wording at the end of the sentence “at a frequency equal to or greater than 10% of the frequency required of the Contractor”.

Page 6-19, Article 609-6

In Item 4 under Density Quality Assurance, add “at a frequency equal to or greater than 5% of the QC sample frequency.”

Insert the following after Item 4 under Density Quality Assurance:

- 6. By periodically directing the recalculation of random numbers for the Quality Control core or nuclear density test locations. The original QC test locations may be tested by QA and evaluated as verification tests.

LIMITS OF PRECISION

Page 6-19, Article 609-6

In the limits of precision table, delete the last three rows and substitute the following:

QA retest of prepared QC Gyratory Compacted

Volumetric Specimens	± 0.015
Retest of QC Core Sample	± 1.2% (% Compaction)
Comparison of QA Core Sample	± 2.0% (% Compaction)
QA Verification Core Sample	± 2.0% (% Compaction)
Nuclear Comparison of QC Test	± 2.0% (% Compaction)
QA Nuclear Verification Test	± 2.0% (% Compaction)

ASPHALT CONCRETE PLANT MIX PAVEMENTS – DESCRIPTION

Page 6-21, Article 610-1

Insert the following after the last paragraph in this Article:

A high frequency of asphalt plant mix, density, or mix and density deficiencies occurring over an extended duration of time may result in future asphalt, which is represented by mix and/or density test results not in compliance with minimum specification requirements, being excluded



from acceptance at an adjusted contract unit price in accordance with Article 105-3. This acceptance process may apply to all asphalt produced and /or placed and may continue until the Engineer determines a history of quality asphalt production and placement is reestablished.

## MATERIALS

Page 6-21, Article 610-2

Delete reference of Anti-strip additive (chemical) to Article 1020-2 and substitute Article 1020-8.

## COMPOSITION OF MIXTURES (MIX DESIGN AND JOB MIX FORMULA)

Page 6-21, Subarticle 610-3(A)

At the end of the second paragraph under this Subarticle, add the following sentence:

In addition, submit Superpave gyratory compactor printouts for all specimens compacted at  $N_{des}$  and  $N_{max}$  during the mix design process.

Insert the following paragraph after the second paragraph under this Subarticle:

For the final surface layer of the specified mix type, use a mix design with an aggregate blend gradation above the maximum density line on the 2.36 mm and larger sieves.

Insert the following at the end of the third paragraph under this Article:

When the percent of binder contributed from RAS or a combination of RAS and RAP exceeds 20 percent of the total binder in the completed mix, the virgin binder PG grade must be one grade below (both high and low temperature grade) the binder grade specified in Table 610-2 for the mix type.

Delete the fourth paragraph in this Subarticle and substitute the following:

For Type S 12.5D mixes, the maximum percentage of reclaimed asphalt material is limited to 15% and must be produced using virgin asphalt binder grade PG 76-22. For all other recycled mix types, when the percentage of RAP is 15 percent or less of the total mixture, the virgin binder PG grade must be as specified in Table 610-2 for the specified mix type. When the percentage of RAP is greater than 15 but not more than 25 percent of the total mixture, the virgin binder PG grade must be one grade below (both high and low temperature grade) the specified grade for the mix type. When the percentage of RAP is greater than 25 percent of the total mixture, the Engineer will establish and approve the asphalt binder grade.

Page 6-22, Subarticle 610-3(A)

Insert the following sentence at the end of the Item 4:

If natural sand is utilized in the proposed mix design, determine and report the Uncompacted Void Content of the natural sand in accordance with AASHTO T-304, Method A.

Page 6-23, Subarticle 610-3(A)

Under the quantities of mix components insert the following sentence:

When requested by the Engineer, submit to the Department's Materials and Tests Unit, in Raleigh, six (6) Superpave Gyrotory Compactor specimens compacted to a height of 75 mm and to a void content (VTM) of 4.0% +/- 0.5% for performance rut testing with the Asphalt Pavement Analyzer.

JOB MIX FORMULA

Page 6-24, Subarticle 610-3(C)

Delete Table 610-1 and associated notes. Substitute the following:

**TABLE 610-1  
SUPERPAVE AGGREGATE GRADATION DESIGN CRITERIA**

Standard Sieves (mm)	Percent Passing Criteria (Control Points)											
	Mix Type (Nominal Maximum Aggregate Size)											
	4.75 mm (a)		9.5 mm (c)		12.5 mm (c)		19.0 mm		25.0 mm		37.5 mm	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
50.0												100.0
37.5										100.0	90.0	100.0
25.0								100.0	90.0	100.0		90.0
19.0						100.0	90.0	100.0		90.0		
12.5				100.0	90.0	100.0		90.0				
9.5		100.0	90.0	100.0		90.0						
4.75	90.0	100.0		90.0								
2.36	65.0	90.0	32.0 <b>(b)</b>	67.0 <b>(b)</b>	28.0	58.0	23.0	49.0	19.0	45.0	15.0	41.0
1.18												
0.600												
0.300												
0.150												
0.075	4.0	8.0	4.0	8.0	4.0	8.0	3.0	8.0	3.0	7.0	3.0	6.0

- (a) For Type S 4.75A, a minimum of 50% of the aggregate components shall be manufactured material from the crushing of stone.
- (b) For Type SF 9.5A, the percent passing the 2.36mm sieve shall be a minimum of 60% and a maximum of 70%.
- (c) For the final surface layer of the specified mix type, use a mix design with an aggregate blend gradation above the maximum density line on the 2.36 mm and larger sieves.

Page 6-25, Subarticle 610-3(C),

Delete Table 610-2 and associated notes. Substitute the following:

**TABLE 610-2  
SUPERPAVE MIX DESIGN CRITERIA**

Mix Type (f)	Design ESALs (a)	Binder PG Grade (b)	Compaction Levels			Volumetric Properties (c)			
	millions		No. Gyration @ N <sub>ini</sub>	N <sub>des</sub>	N <sub>max</sub>	VMA % Min.	VTM %	VFA Min. - Max.	%G <sub>mm</sub> @ N <sub>ini</sub>
S-4.75A	<0.3	64 -22	6	50	75	20.0	7.0-15.0		
SF-9.5A	<0.3	64 -22	6	50	75	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S-9.5B	0.3 - 3	64 -22	7	75	115	15.0	3.0 - 5.0	65 - 80	≤ 90.5
S-9.5C	3 - 30	70 -22	8	100	160	15.0	3.0 - 5.0	65 - 76	≤ 90.0
S-12.5C	3 - 30	70 -22	8	100	160	14.0	3.0 - 5.0	65 - 75	≤ 90.0
S-12.5D	> 30	76 -22	9	125	205	14.0	3.0 - 5.0	65 - 75	≤ 90.0
I-19.0B	< 3	64 -22	7	75	115	13.0	3.0 - 5.0	65 - 78	≤90.5
I-19.0C	3 - 30	64 -22	8	100	160	13.0	3.0 - 5.0	65 - 75	≤ 90.0
I-19.0D	> 30	70 -22	9	125	205	13.0	3.0 - 5.0	65 - 75	≤ 90.0
B-25.0B	< 3	64 -22	7	75	115	12.0	3.0 - 5.0	65 - 78	≤ 90.5
B-25.0C	> 3	64 -22	8	100	160	12.0	3.0 - 5.0	65 - 75	≤ 90.0
B-37.5C	> 3	64 -22	8	100	160	11.0	3.0 - 5.0	63 - 75	≤ 90.0
	<b>Design Parameter</b>					<b>Design Criteria</b>			
All	1. %G <sub>mm</sub> @ N <sub>max</sub>					≤ 98.0% (d)			
Mix	2. Dust to Binder Ratio (P <sub>0.075</sub> / P <sub>be</sub> )					0.6 - 1.4			
Types	3. Retained Tensile Strength (TSR) (AASHTO T 283 Modified)					85 % Min. (e)			

- Notes:**
- (a) Based on 20 year design traffic.
  - (b) When Recycled Mixes are used, select the binder grade to be added in accordance with Subarticle 610-3(A).
  - (c) Volumetric Properties based on specimens compacted to N<sub>des</sub> as modified by the Department.
  - (d) Based on specimens compacted to N<sub>max</sub> at selected optimum asphalt content.
  - (e) AASHTO T 283 Modified (No Freeze-Thaw cycle required). TSR for Type S 4.75A, Type B 25.0 and Type B 37.5 mixes is 80% minimum.
  - (f) Mix Design Criteria for Type S 4.75A may be modified subject to the approval of the Engineer

WEATHER, TEMPERATURE, AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES

Page 6-26, Article 610-4, Table 610-3

Delete the title of Table 610-3 and substitute the following title:

**ASPHALT PLACEMENT- MINIMUM TEMPERATURE REQUIREMENTS**

In the first column, third row; delete reference to the ACSC Types S 9.5A and S 12.5B mix.

Add the following minimum placing temperatures for mix types S 4.75A and SF 9.5A.

<b>Asphalt Concrete Mix Type</b>	<b>Minimum Air Temperature</b>	<b>Minimum Road Surface Temperature</b>
ACSC, Type S 4.75A, SF 9.5A	40°F (5°C)	50°F (10°C)

SPREADING AND FINISHING

Page 6-32, Article 610-8

Insert the following after the second sentence within the sixth paragraph in this Article,

Take necessary precautions during production, loading of trucks, transportation, truck exchanges with paver, folding of the paver hopper wings, and conveying material in front of the screed to prevent segregation of the asphalt mixtures.

Page 6-33, Article 610-8

At the end of the third full paragraph on this page, add the following sentence:

Waiver of the use of automatic screed controls does not relieve the Contractor of achieving plan grades and cross-slopes.

DENSITY REQUIREMENTS

Page 6-34, Article 610-10,

Delete Table 610-4 and substitute the following table and associated notes:

**Table 610-4  
MINIMUM DENSITY REQUIREMENTS**

<b>MIX TYPE</b>	<b>MINIMUM % of <math>G_{mm}</math></b>
<b>SUPERPAVE MIXES</b>	<b>(Maximum Specific Gravity)</b>
S 4.75A	85.0 <sup>(a,b)</sup>
SF 9.5A	90.0
S 9.5X, S 12.5X, I 19.0X, B 25.0X, B 37.5X	92.0

- (a) All S 4.75A pavement will be accepted for density in accordance with Article 105-3
- (b) Compaction to the above specified density will be required when the S 4.75 A mix is applied at a rate of 100 lbs/sy (55 kg/m<sup>2</sup>)

Page 6-34, Article 610-10

Delete the second paragraph in this Article and substitute the following:

Compact base and intermediate mix types (surface mixes not included) utilized for pavement widening of less than 4.0 feet (1.2 meters) and all mix types used in tapers, irregular areas and intersections (excluding full width travel lanes of uniform thickness), using equipment and procedures appropriate for the pavement area width and/or shape. Compaction with equipment other than conventional steel drum rollers may be necessary to achieve adequate compaction. Occasional density sampling and testing to evaluate the compaction process may be required. Densities lower than that specified in Table 610-4 will be accepted, in accordance with Article 105-3, for the specific mix types and areas listed directly above.

SURFACE REQUIREMENTS AND ACCEPTANCE

Page 6-35, Article 610-12

Delete the first paragraph in this Article and substitute the following:

Construct pavements using quality paving practices as detailed herein. Construct the pavement surface smooth and true to the plan grade and cross slope. Immediately correct any defective areas with satisfactory material compacted to conform with the surrounding area. Pavement imperfections resulting from unsatisfactory workmanship such as segregation, improper longitudinal joint placement or alignment, non-uniform edge alignment and excessive pavement repairs will be considered unsatisfactory and if allowed to remain in place will be accepted in accordance with Article 105-3.

When directed due to unsatisfactory laydown or workmanship, operate under the limited production procedures. Limited production for unsatisfactory laydown is defined as being restricted to the production, placement, compaction, and final surface testing (if applicable) of a sufficient quantity of mix necessary to construct only 2500 feet (750 meter) of pavement at the laydown width.

Remain on limited production until such time as satisfactory laydown results are obtained or until three consecutive 2500 foot (750 meter) sections have been attempted without achieving satisfactory laydown results. If the Contractor fails to achieve satisfactory laydown results after three consecutive 2500 foot (750 meter) sections have been attempted, cease production of that mix type until such time as the cause of the unsatisfactory laydown results can be determined. As an exception, the Engineer may grant approval to produce a different mix design of the same mix type if the cause is related to mix problem(s) rather than laydown procedures.

Mix placed under the limited production procedures for unsatisfactory laydown or workmanship will be evaluated for acceptance in accordance with Article 105-3.

#### DENSITY ACCEPTANCE

Page 6-36, Article 610-13

Delete the second paragraph on this page and substitute the following:

The pavement will be accepted for density on a lot by lot basis. A lot will consist of one day's production of a given job mix formula on a contract. As an exception, separate lots will be established when the one of the following occurs:

- (6) Portions of pavement are placed in both "New" and "Other" construction categories as defined below. A lot will be established for the portion of the pavement in the "New" construction category and a separate lot for the portion of pavement in the "Other" construction category.
- (7) Pavement is placed on multiple resurfacing maps, unless otherwise approved prior to paving. A lot will be established for each individual resurfacing map or portion thereof.
- (8) Pavement is placed simultaneously by multiple paving crews. A lot will be established for the pavement placed by each paving crew.
- (9) Pavement is placed in different layers. A lot will be established for each layer.
- (10) Control strips are placed during limited production.

The Engineer will determine the final category and quantity of each lot for acceptance purposes.

Page 6-36, Article 610-13

Delete the first sentence in the third paragraph on this page and insert the following:

The “New” construction category will be defined as pavements of uniform thickness, exclusive of irregular areas, meeting all three of the following criteria:

Delete the sixth paragraph in this Article and substitute the following:

A failing lot for density acceptance purposes is defined as a lot for which the average of all test sections, and portions thereof, fails to meet the minimum specification requirement. If additional density sampling and testing, beyond the minimum requirement, is performed and additional test sections are thereby created, then all test results shall be included in the lot average. In addition, any lot or portion of a lot that is obviously unacceptable will be rejected for use in the work.

Page 6-36, Article 610-13

Delete the last paragraph on this page and substitute the following:

Any density lot not meeting minimum density requirements detailed in Table 610-4 will be evaluated for acceptance by the Engineer. If the lot is determined to be reasonably acceptable, the mix will be paid at an adjusted contract price in accordance with Article 105-3. If the lot is determined not to be acceptable, the mix will be removed and replaced with mix meeting and compacted to the requirement of these specifications.

**BASIS OF PAYMENT, ASPHALT PAVEMENTS**

Page 6-37, Article 610-16

Add the following to the second paragraph:

The quantity of hot mix asphalt pavement, measured as provided in Article 610-15, will be paid for at the contract unit prices per ton (metric ton) for “Asphalt Concrete Surface Course, Type S 4.75A, and SF 9.5A”.

Add the following to the payment item description:

Asphalt Concrete Surface Course, Type S 4.75A .....	Ton (Metric Ton)
Asphalt Concrete Surface Course, Type SF 9.5A.....	Ton (Metric Ton)

Delete reference to the Asphalt Concrete Surface Course, Types S 9.5A and S 12.5B in both the second paragraph and in the payment description.



## ASPHALT BINDER FOR PLANT MIX - METHOD OF MEASUREMENT

Page 6-39, Article 620-4

Delete the first sentence of the second paragraph on this page and substitute the following:

Where recycled plant mix is being produced, the grade of asphalt binder to be paid for will be the grade for the specified mix type as required in Table 610-2 unless otherwise approved.

## CONSTRUCTION REQUIREMENTS

Page 6-43, Article 650-5

Add the following paragraph after the first paragraph under this Article:

Do not place open-graded asphalt friction course between October 31 and April 1 of the next year, unless otherwise approved. Place friction course, Type FC-1 mixes, only when the road surface temperature is 50°F (10°C) or higher and the air temperature is 50°F (10°C) or higher. The minimum air temperature for Type FC-1 Modified and FC-2 Modified mixes will be 60°F (15°C).

## AGGREGATES FOR ASPHALT PLANT MIXES

Page 10-34, Subarticle 1012-1(B)4

Delete this Subarticle and substitute the following:

(4) Flat and Elongated Pieces:

Use coarse aggregate meeting the requirements of Table 1012-1 for flat and elongated pieces when tested in accordance with ASTM D 4791 (Section 8.4) on the No. 4 (4.75 mm) sieve and larger with a 5:1 aspect ratio (maximum to minimum) for all pavement types, except there is no requirement for Types S 4.75A, SF 9.5A, and S 9.5B.

Delete Table 1012-1 and substitute the following:

**Table 1012-1  
AGGREGATE CONSENSUS PROPERTIES<sup>(a)</sup>**

Mix Type	Course	Fine	Sand	Flat &
	Aggregate	Aggregate	Equivalent	Elongated
	Angularities <sup>(b)</sup>	Angularities		5 : 1 Ratio
		% Minimum	% Minimum	% Maximum
	ASTM D 5821	AASHTO T 304 Method A	AASHTO T 176	ASTM D 4791 Section 8.4
S 4.75 A		40	40	
SF 9.5 A S 9.5 B I 19.0 B B 25.0 B	75 / -	40	40	10 <sup>(c)</sup>
S 9.5 C S 12.5 C I 19.0 C B 25.0 C B 37.5 C	95 / 90	45	45	10
S 12.5 D I 19.0 D	100 / 100	45	50	10
OGAFC	100 / 100	N/A	N/A	10

- (a) Requirements apply to the course aggregate blend and/or fine aggregate blend
- (b) 95/90 denotes that 95% of the course aggregate (+No.4 or + 4.75mm sieve)has one fractured face and 90% has two or more fractured faces.
- (c) Does not apply to Mix Types SF 9.5 A or S 9.5 B

Page 10-36, Subarticle 1012-1(C)1

Insert the following after the fourth paragraph on this page:

When natural sand is utilized in “C” or “D” level asphalt mixes, do not exceed the maximum natural sand percentage in the mix design and/or production aggregate blend detailed in Table 1012-1A.

**Table 1012-1A**

<b>Uncompacted Void Content of Fine Aggregate AASHTO T 304 Method A</b>	<b>Maximum Percent Natural Sand Included in Mix Design and/or Production*</b>
Less than 42.0	10
Equal to 42.0 to 44.9	15
Equal to 45.0 and greater	20

\*Maximum percent natural sand may be exceeded with approval from Pavement Construction Engineer upon satisfactory evaluation of pavement performance testing

**FINE AGGREGATE ANGULARITY**

Page 10-36, Subarticle 1012-1(C)6

Delete reference to AASHTO TP 33 Method A and substitute AASHTO T 304, Method A.

Page 10-37, Subarticle 1012-1(H)

Delete this Subarticle. It is a duplicate of Subarticle 1012-1(F) located on Page 10-36.

**ASPHALT BINDER**

Page 10-46, Article 1020-2

Delete the first paragraph under this Article and substitute the following:

Use Performance Graded Asphalt Binder meeting the requirements of AASHTO M 320. See Article 610-3 for the specified grades. Submit a Quality Control Plan for asphalt binder production in conformance with the requirements of AASHTO R 26 to the Materials and Tests Unit.

RR31

**VARIABLE DEPTH MILLING:**

On maps where asphalt has been placed in the gutter or where asphalt is higher than the gutter, mill asphalt pavement to a depth 1.5” below the top edge of the gutter. Establish a cross slope of 0.025 from that point back towards the center of the road. Milling depth will vary from 1.5” to 6”. Remove asphalt from gutter where it exists.

All other provisions of section 607 of the Standard Specifications shall apply.

Payment will be made under:

Milling Asphalt Pavement 1.5” to 6” .....Square Yard

**ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:** 1-01-02<sub>R</sub>

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

Asphalt Concrete Base Course, Type B 25.0_	4.3%
Asphalt Concrete Intermediate Course, Type I 19.0_	4.7%
Asphalt Concrete Surface Course, Type S 4.75A	7.0%
Asphalt Concrete Surface Course, Type SF 9.5A	6.5%
Asphalt Concrete Surface Course, Type S 9.5_	6.0%
Asphalt Concrete Surface Course, Type S 12.5_	5.5%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the Standard Specifications or Project Special Provisions.

RR43

**ASPHALT PLANT MIXTURES:** 7-1-95

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

RR46

**BORROW MATERIAL** 02-17-04

Revise the 2002 Standard Specifications as follows:

Page 10-44

Section 1018-2 II (b) Delete the last sentence in its entirety.

RR51

**PAVING INTERSECTIONS, DRIVEWAYS, AND MAILBOX TURNOUTS:** 7-1-95

Surface all unpaved intersections back from the edge of the pavement on the main line of the project a minimum distance of 50 feet. Surface all driveway and mailbox turnouts as directed by the Engineer. The pavement placed in the intersections must be of the same material and thickness as being used on the main line. Use material to pave driveway and mailbox turnouts that is being used on the project and place it in depths directed by the Engineer.

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

The unpaved intersections, driveways, and mailbox turnouts will be prepared for surfacing by State Forces.

Widen the pavement on curves as directed by the Engineer.

RR70

**TRENCHING FOR BASE COURSE:**

7-1-95

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

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

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

Density tests may be taken every 2000 feet in the widened areas as directed by the Engineer. Shape and compact the subgrade in the widened areas to the satisfaction of the Engineer. Compact the asphalt concrete base course in the widened areas in accordance with the provisions of Article 610-9 of the Standard Specifications.

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

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

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

RR79

**PATCHING EXISTING PAVEMENT:****1-15-02****Description:**

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

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

**Construction Methods:**

The patching consists of Asphalt Concrete Base Course, Asphalt Concrete Intermediate Course, Asphalt Concrete Surface Course, or a combination of base, binder and surface course, and pavement removal, as directed by the Engineer.

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

Place Asphalt Concrete Base Course, in lifts not exceeding 5 1/2 inches. Utilize compaction equipment suitable for compacting patches as small as 3.5 feet by 6 feet on each lift. Use an approved compaction pattern to achieve proper compaction. If patched pavement is to be open to traffic for more than 48 hours prior to overlay, then use Asphalt Surface Course in the top 1.25 inches of the patch.

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

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

**Method of Measurement:**

The quantity of patching existing pavement to be paid for will be the actual number of tons of asphalt plant mix, complete in place, which has been used to make completed and accepted repairs. The asphalt plant mixed material will be measured by being weighed in trucks on certified platform scales or other certified weighing devices.

**Basis of Payment:**

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

The above price and payment will be full compensation for all work covered by this provision, including but not limited to removal and disposal of pavement; furnishing and applying tack coat; furnishing, placing, and compacting of asphalt plant mix; furnishing of asphalt binder for the asphalt plant mix; and furnishing scales.

Any provisions included in the contract in the form of project special provisions or in any other form which provide for adjustments in compensation due to variations in the price of asphalt binder will not be applicable to payment for the work covered by this provision.

The item of "Patching Existing Pavement" will be considered to be a minor item. In the event that the item of "Patching Existing Pavement" overruns the original bid quantity by more than 100 percent, the provisions of Article 104-5 pertaining to revised contract unit price for overrunning minor items will not apply to this item.

RR88

Payment will be made under:

Patching Existing Pavement.....Ton

**VALVE BOX RELOCATION:**

Relocate existing water valve located at the intersection of NC 45 / 461 (Area where proposed turn lane is to be constructed). The existing water valve should be relocated outside of proposed pavement. The Contractor shall furnish all materials, equipment and labor necessary for relocation of existing water valve.

The work of "Valve Box Relocation" shall be paid for as "Adjustment of Meter Boxes or Valve Boxes".

**WHEELCHAIR RAMPS FOR RESURFACING PROJECTS:**

08-19-03

**DESCRIPTION**

The work covered by this provision consists of the construction of Portland cement concrete wheelchair ramps with detectable warnings on resurfacing projects and includes but is not limited to the removal and disposal of any existing sidewalk, curb and/or gutter, and pavement which is necessary for construction of wheelchair ramps as well as the repair of the existing curb and/or gutter after construction of the wheelchair ramp.

**MATERIALS**

Provide materials meeting the requirements of Division 10 of the Standard Specification shown below:

- Portland Cement Concrete..... Section 1000
- Curing Agents..... Section 1026
- Joint Fillers .....Article 1028-1
- Joint Sealers .....Article 1028-2

Detectable warnings may be either truncated dome concrete paving blocks or stamped concrete. Use Class B concrete in accordance with the Standard Specifications. Raised Truncated Domes shall conform to the following:

Truncated Domes shall have a base diameter of no less than 0.9 inches to no more than 1.4 inches, a top diameter of no less than 50% to no more than 65% of the base diameter, and a height of 0.2 inches. Truncated domes shall have center-to-center spacing of no less than 1.6 inches to no more than 2.4 inches, and a base to base spacing of 0.65 inches minimum, measured between the most adjacent domes on square grid.

## **CONSTRUCTION REQUIREMENTS**

Construct wheelchair ramps in accordance with details in the plans and make all repairs prior to the resurfacing operation.

Construct wheelchair ramps at all locations that contain curb and gutter. Retrofit existing sidewalks only. Connect the ramp to the existing sidewalk when the sidewalk is in the right of way. Where it is necessary to remove a portion of existing sidewalks, curb and/or gutter and pavement, furnish a neat edge along the surface to be retained by sawing a neat cut approximately 2 inches deep with a concrete saw prior to removing the existing materials.

Construct concrete in accordance with Section 825 of the Standard Specifications and give it a sidewalk finish, except as otherwise provided. Perform brooming of the concrete surface transverse to the direction of traffic. Use a minimum joint spacing of 5 feet. Where existing sidewalks are being connected to the ramp, locate transverse joints so as to line up with existing joints in the adjacent sidewalk. Do not seal grooved joints.

Obtain 70 percent contrast visibility with adjoining surfaces, either light-on-dark, or dark-on-light sequence covering the entire surface of the ramp.

Do not place backfill adjacent to the constructed sidewalk, or wheelchair ramp until at least 3 curing days have elapsed as defined in Article 825-9 of the Standard Specifications. Place backfill no later than 4 calendar days after the completion of this 3 curing day time period. Compact backfill to a degree comparable to the adjacent undisturbed material.

## **METHOD OF MEASUREMENT**

The quantity of wheelchair ramps to be paid for will be the actual number of wheelchair ramps installed, which have been completed and accepted. No separate measurement will be made for the removal and disposal or repair of existing curb and gutter, sidewalk and pavement or the connection to existing sidewalk in the right of way.

## **BASIS OF PAYMENT**

The quantity of wheelchair ramps, measured as provided for above, will be paid for at the contract unit price each for Wheelchair Ramps. Such price and payment will be full compensation for all work covered by this provision including but not limited to excavation and backfilling; sawing, repairing and/or replacing the existing sidewalk or curbs within the pay



limits for retrofit shown on the detail; pavement repairs; furnishing and placing concrete; furnishing and placing detectable warnings, construction joints and removal and disposal of existing sidewalk and curb and gutter when required and for all materials labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

Wheelchair Ramps.....Each

Payment for and construction of sidewalk necessary outside the pay limits shown on the detail will be in accordance with Section 848.

RR107

**AGGREGATE PRODUCTION:**

**11-20-01**

Provide aggregate from a producer who utilizes the new Aggregate Quality Control/Quality Assurance Program which is in effect at the time of shipment.

No price adjustment is allowed to contractors or producers who utilize the new program. Participation in the new program does not relieve the producer of the responsibility of complying with all requirements of the Standard Specifications. Copies of this procedure are available upon request from the Materials and Test Unit.

RR109

**CONCRETE BRICK AND BLOCK PRODUCTION:**

**11-20-01**

Provide concrete brick and block from a producer who utilizes the new Solid Concrete Masonry Brick/Unit Quality Control/Quality Assurance Program which is in effect on the date that material is received on the project.

No price adjustment is allowed to contractors or producers who utilize the new program. Participation in the new program does not relieve the producer of the responsibility of complying with all requirements of the Standard Specifications. Copies of this procedure are available upon request from the Materials and Test Unit.

RR112

**DRUMS:**

**07-16-02**

Revise the 2002 Standard Specifications as follows:

Page 10-195, Subarticle 1089-5(C)

Delete the first (1<sup>st</sup>) sentence of the first (1<sup>st</sup>) paragraph and insert the following:

“Provide a minimum of three orange and two white alternating horizontal circumferential stripes covering the entire outside with each drum.”

RR116

**REMOVAL OF EXISTING PAVEMENT MARKERS:**

7-1-95

The Contractor's attention is directed to the fact that there are pavement markers on this project.

Remove and dispose of these markers prior to the paving operation.

No direct payment will be made for this work, as it will be incidental to the paving operation and payment at the contract unit price for the various asphalt items in the contract will be full compensation for such work.

RR118

**PAVEMENT MARKING GENERAL REQUIREMENTS:**

07-16-02

Revise the 2002 Standard Specifications as follows:

Page 12-10, Subarticle 1205-3(J)

Delete the first (1<sup>st</sup>) sentence of the first (1<sup>st</sup>) paragraph and insert the following:

“Have at least one member of every pavement marking crew working on a project certified through the NCDOT Pavement Marking Technician Certification Process. For more information contact the Traffic Control, Marking and Delineation Section of the North Carolina Department of Transportation at 919-250-4151 or <http://www.doh.dot.state.nc.us/preconstruct/traffic/congestion/TC/>”

RR119

**GUARDRAIL POSTS AND OFFSET BLOCKS:**

06-22-04

Revise the *2002 Standard Specifications* as follows:

Page 10-69, Subarticle 1046-3

Delete this sub-article in its entirety and replace with the following:

**1046-3 POSTS AND OFFSET BLOCKS.****(A) General:**

The Contractor may at his option furnish either of the following types of steel guardrail posts. Only one type of post will be permitted at any one continuous installation. Use structural steel posts throughout the project, unless otherwise directed or detailed in the plans.

1. Steel W6 x 8.5 or W6 x 9.0 posts
2. Steel 4.5" x 6.0" "C" shape posts (C150 x 12.2 kg/m)

The Contractor may at his option furnish either of the following types of treated timber posts if specifically directed or detailed in the plans. Only one type of post will be permitted at any one continuous installation.

- 1. Timber 6" x 8" (152 mm x 203 mm) posts.
- 2. Timber 8" x 8" (203 mm x 203 mm) posts.

**(B) Structural Steel Posts:**

Fabricate steel posts for guardrail of the size and weight shown on the plans from structural steel complying with the requirements of Section 1072. Metal from which C shape posts are fabricated shall meet the requirements of ASTM A570 for any grade of steel, except that mechanical requirements shall meet the requirements of ASTM A36. Punch or drill the holes for connecting bolts. Burning will not be permitted. After fabrication, the posts shall be galvanized in accordance with Section 1076.

**(C) Treated Timber Posts:**

Timber guardrail posts shall be of treated southern pine meeting the requirements of Article 1082-2 and 1082-3.

Bore bolt holes to a driving fit for the bolts. A minus tolerance of 1 percent will be allowed in the length of the post. Perform all framing and boring before the posts receive preservative treatment.

**(D) Offset Blocks:**

Provide 8-inch deep recycled plastic or composite offset blocks that have been approved for use with the guardrail shown in the standard drawings and/or plans. Only one type of offset block will be permitted at any one continuous installation. Prior to beginning the installation of recycled offset block, submit the FHWA acceptance letter for each type of block to the Engineer for approval.

Treated timber offset blocks with steel beam guardrail will not be allowed unless required by Specifications, directed by the Engineer or detailed in the plans. Steel offset blocks with steel beam guardrail will not be allowed.

Recycled plastic or composite offset blocks shall be made from no less than 50% recycled plastic or composite, and shall meet the following minimum requirements:

- Specific Gravity: .....0.950
- Compressive Strength in Lateral Direction:.....1600 psi (11 MPa)
- Maximum Water Absorption: .....10% by weight
- Maximum Termite and Ant Infestation: .....10%
- Testing.....Shall pass NCHRP Report 350,  
Test Level 3 by CRASH TESTING  
RR120

**GUARDRAIL ANCHOR UNITS, TYPE 350:**

**04-20-04**

**DESCRIPTION**

Furnish and install guardrail anchor units in accordance with the details in the plans, the applicable requirements of Section 862 of the Standard Specifications, and at locations shown in the plans.

**MATERIALS**

The Contractor may at his option, furnish any one of the guardrail anchor units.

Guardrail anchor unit (ET-2000) as manufactured by:

TRINITY INDUSTRIES, INC.  
2525 N. STEMMONS FREEWAY  
DALLAS, TEXAS 75207  
TELEPHONE: 1-800-644-7976

The guardrail anchor unit (SKT 350) as manufactured by:

ROAD SYSTEMS, INC.  
3616 OLD HOWARD COUNTY AIRPORT  
BIG SPRING, TEXAS 79720  
TELEPHONE: (915) 263-2435

Prior to installation the Contractor shall submit to the Engineer:

1. FHWA acceptance letter for each guardrail anchor unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Section 106-2 of the Standard Specifications.
2. Certified working drawings and assembling instructions from the manufacturer for each guardrail anchor unit in accordance with Section 105-2 of the Specifications.

No modifications shall be made to the guardrail anchor unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

**CONSTRUCTION**

Guardrail end delineation is required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Section 1088-3 of the Standard Specifications and is incidental to the cost of the guardrail anchor unit.

**MEASUREMENT AND PAYMENT**

Measurement and payment will be made in accordance with Articles 862.5 and 862-6 of the Standard Specifications.

Payment will be made under:

Guardrail Anchor Units, Type 350..... Each

SP8R65

**EROSION CONTROL****Seeding And Mulching:**

(2B)

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

## All Roadway Areas

March 1 - August 31

September 1 - February 28

50# (55kg)	Tall Fescue	50# (55kg)	Tall Fescue
5# (6kg)	Centipede	5# (6kg)	Centipede
25# (28kg)	Bermudagrass (hulled)	35# (40kg)	Bermudagrass (unhulled)
500# (560kg)	Fertilizer	500# (560kg)	Fertilizer
4000# (4500kg)	Limestone	4000# (4500kg)	Limestone

## Waste and Borrow Locations

January 1 - December 31

75# (85kg) Tall Fescue  
 50# (55kg) Bahia  
 500# (560kg) Fertilizer  
 4000# (4500kg) Limestone

## Approved Tall Fescue Cultivars:

Adventure	Adventure II	Amigo	Anthem
Apache	Apache II	Arid	Austin
Brookstone	Bonanza	Bonanza II	Chapel Hill
Chesapeake	Chieftain	Coronado	Crossfire II
Debutante	Duster	Falcon	Falcon II
Finelawn Petite	Finelawn	Finelawn I	Genesis
Grande	Guardian	Houndog	Jaguar
Jaguar III	Kentucky 31	Kitty Hawk	Monarch
Montauk	Mustang	Olympic	Pacer
Phoenix	Pixie	Pyramid	Rebel
Rebel Jr.	Rebel II	Renegade	Safari
Shenandoah	Tempo	Titan	Tomahawk
Trailblazer	Tribute	Vegas	Wolfpack

Wrangler

On cut and fill slopes 2:1 or steeper add 30# (35kg) Sericea Lespedeza January 1 - December 31.

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

WBS#: 37445 & 37447  
Date: 06-29-2004  
Revised:

Hertford County

**TRAFFIC CONTROL:**

Maintain traffic in accordance with Divisions 11 and 12 of the North Carolina Department of Transportation January 2002 Standard Specifications for Roads and Structures, and the following provisions:

Use a lane closure (refer to North Carolina Department of Transportation January 2002 Highway Design Branch Roadway Standard Drawings Nos. 1101.02, 1101.11, 1110.02, Detail for 1130D01 and details for the Advance Work Zone signing in contract) or a slow-moving operation as shown in details of this contract. Use a moving operation only if the minimum speed maintained at all times is 3 mph with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than 3 mph at any time, install a lane closure. Maintain the existing traffic pattern at all times, except in the immediate work zone where lane closures are allowed as determined by the Engineer.

Refer to Attached Detail(s) and North Carolina Department of Transportation January 2002 Highway Design Branch Roadway Standard Drawings Nos. 1101.02, 1101.03, 1101.04, 1101.05, 1101.07, 1101.11, 1110.01, 1110.02, 1115.01, 1135.01, 1145.01, 1150.01, 1165.01 and 1170.01 when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal, etc. Properly ballasted cones may be used instead of drums for lane closures during daylight hours. The stationary work zone shall be a maximum of 3 miles in length at any given time unless otherwise directed by the Engineer. A "pilot vehicle" operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the Specifications and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to an undivided facility and within 5 feet of an open travel lane, close the nearest open travel lane using Roadway Standard Drawing No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working on the shoulder, adjacent to a divided facility and within 10 feet of an open travel lane, close the nearest open travel lane using Roadway Standard Drawing No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, roadway standard drawings or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Do not perform work involving heavy equipment within



15 feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way.

The maximum acceptable difference in elevation between open lanes of travel is 1.5 inches. The maximum acceptable edge of pavement drop-off is 2 inches. Backfill at a 6:1 slope up to the edge and elevation of existing pavement in areas adjacent to an open travel lane if the drop-off exceeds 2 inches at no expense to the Department.

When utilizing a slow-moving operation for such items as pavement marking placement, pavement marker installation and pesticide spraying, the slow moving operation caravan shall consist, as a minimum, of the vehicles and devices shown on the Moving Operation Caravan Detail(s) herein. Traffic cones may be used when necessary to provide additional protection of wet pavement markings. Ballast all traffic cones so they will not be blown over by traffic.

**Submit a sequence of operation for all maps to the Engineer at the first pre-construction meeting for approval by the Engineer. Approved sequence can not be altered without written permission of the Engineer.**

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

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

Notify the Engineer forty-eight (48) hours before resurfacing the areas of existing pavement that require patching. Patch these areas before resurfacing occurs. Coordinate the resurfacing operations of the patched areas with the Engineer

During a resurfacing only operation, bring all newly resurfaced lanes to the same elevation within 72 hours.

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

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

- 1) Mill a single lane and pave back by the end of each work day
- 2) Mill the entire width of roadway and pave back within 72 hours

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

- 1) Mill the entire width of pavement for all lanes to be milled in any given direction daily and pave back within 72 hours.
- 2) Mill a single lane and pave back by the end of each work day
- 3) Mill a single lane, leave a lane closure in and pave back within 72 hours.

Slope the pavement at the beginning and ending of the daily milling operation as directed by the Engineer. Sweep and remove all milled material from the roadway as soon as the daily milling operation is completed. Maintain all accesses where milling is conducted using suitable backfill material approved by the Engineer. Continue milling operations until the particular section of roadway being milled is complete.

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

Review and record the existing pavement markings and markers prior to resurfacing. Use the record of existing pavement markings and markers in conjunction with North Carolina Department of Transportation January 2002 Highway Design Branch Roadway Standard Drawings to re-establish the proposed pavement markings and markers unless otherwise directed by the Engineer.

Provide appropriate lighting in accordance with Section 1413 of the North Carolina Department of Transportation January 2002 Standard Specifications for Roads and Structures when electing to perform paving at night at no expense to the Department.

Remove existing pavement markers in preparation for paving. Repair any pavement damage due to existing pavement marker removal **prior to the end of the work day**. Dispose of existing pavement markers as directed by the Engineer.

No direct payment will be made for the signing and traffic control items including Truck Mounted Impact Attenuators (TMIA – see Section 1165 of the NCDOT January 2002 Standard Specifications for Roads and Structures and January 2002 Highway Design Branch Roadway Standard Drawings). This work will be considered incidental to the various other bid items in the Contract.

**R-1Revised**

**PROJECT SPECIAL PROVISIONS****Traffic****WORK ZONE SIGNING:**

09-16-03

**1- DESCRIPTION.**

Install and maintain signing in accordance with Divisions 11 and 12 of the North Carolina Department of Transportation January 2002 Standard Specifications for Roads and Structures, the North Carolina Department of Transportation January 2002 Highway Design Branch Roadway Standard Drawings and the following provisions:

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

Furnish, install, and maintain general work zone warning signs for resurfacing and/or milling such as "Rough Road" (W8-8 at 48" X 48") (for milling only), "Uneven Pavement" (W8-15 at 48" X 48"), "Low Shoulder" (W8-9 at 48" X 48"), "Low / Soft Shoulder" (W8-9B at 48" X 48"), "Unmarked Pavement Ahead" (W16-10 at 48" X 48"), and "Do Not Pass"(R4-1 at 24" X 30". When construction is completed in any given area of the project, relocate signs to the next work site, as directed by the Engineer. Remove these signs at the completion of the project.

All work zone signs may be portable.

**2- CONSTRUCTION METHODS.****(A) General:**

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

**(B) Advance warning work zone signs:**

Install advance warning work zone signs (see attached Detail(s) and North Carolina Department of Transportation January 2002 Highway Design Branch Roadway Standard Drawings Nos. 1101.02 and 1110.01) prior to beginning of work and remove upon final completion of the project. If there is a period of construction inactivity longer than two weeks, remove or cover advance warning work zone signs. Uncover advance warning work zone signs no more than 3 days before work resumes. All other operations could be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

**(C) Lane closure work zone signs:**

Install any required lane closure signing needed during the life of the project (see North Carolina Department of Transportation January 2002 Highway Design Branch Roadway Standard Drawings Nos. 1101.02, 1101.11 and 1110.02).

**(D) General work zone warning signs:**

Install general work zone warning signs for resurfacing and/or milling such as "Rough Road" (W8-8 at 48" X 48") (for milling only), "Uneven Pavement" (W8-15 at 48" X 48"), "Low Shoulder" (W8-9 at 48" X 48") and "Low / Soft Shoulder" (W8-9B at 48" X 48") at 1 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer.

Install the "Low Shoulder" (W8-9 at 48" X 48") or "Low / Soft Shoulder" (W8-9B at 48" X 48") signs prior to any resurfacing in an area where shoulder construction will be performed. Install general work zone warning signs such as "Unmarked Pavement Ahead" (W16-10 at 48" X 48") and "Do Not Pass" (R4-1 at 24" X 30") alternately at 1/2 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer. Install signs prior to the obliteration of any pavement markings. Remove these signs at the completion of the project.

**3- BASIS OF PAYMENT.**

No direct payment will be made for Work Zone Signing as such work will be considered incidental to the various other bid items in the Contract.

R-3

WBS#: 37445 & 37447

Hertford County

Date: 06-29-2004

Revised:

**TIME LIMITATION FOR PLACEMENT AND REPLACEMENT  
OF PAVEMENT MARKINGS AND MARKERS COMPLETED BY CONTRACTORS  
ON NEWLY RESURFACED AREAS**

**MARKING BY CONTRACTOR: DIVIDED AND MULTI-LANE FACILITIES**

For all Interstate highways and access ramps, place all markings including symbols and legends, by the end of each workday's operation.

For all divided and multi-lane facilities, place all center line and lane line markings and railroad and school symbols by the end of each workday's operation. Place all edge lines, gore lines, and other symbols within 3 calendar days after they have been obliterated by the resurfacing operation.

**A Multi-lane facility is defined as any roadway having more than two lanes to include a two-lane/ two-way with a center two-way left turn lane.**

**MARKING BY CONTRACTOR: TWO-LANE, TWO-WAY FACILITIES**

For all two-lane, two-way facilities, place all center line markings, railroad and school symbols within 5 calendar days after they have been obliterated by the resurfacing operation. Place all edge lines and other symbols within 30 calendar days after they have been obliterated by the resurfacing operation.

**MARKING BY CONTRACTOR: ALL FACILITIES**

Place two applications of paint on newly resurfaced asphalt which will remain in place over three (3) months. Place the second application of paint upon ample drying time of the first, as determined by the Engineer.

**MARKERS BY CONTRACTOR: ALL FACILITIES**

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

R-4Revised

WBS#: 37445 & 37447

Hertford County

Date: 06-29-2004

Revised:

**USE IN CONJUNCTION WITH 2002 STANDARD SPECIFICATIONS**

THE FOLLOWING ROADWAY STANDARDS DRAWINGS AS THEY APPEAR IN THE "HIGHWAY DESIGN BRANCH ROADWAY STANDARD DRAWINGS" - ROADWAY DESIGN UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY, 2002 AND THE LATEST REVISIONS THERETO ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STANDARD PAVEMENT MARKINGS

ROADWAY STANDARD DRAWINGS: 1205.01, 1205.02, 1205.03, 1205.04, 1205.05,  
1205.06, 1205.07, 1205.08, 1205.09, 1205.10,  
1205.11, 1205.12

RAISED PAVEMENT MARKERS

ROADWAY STANDARD DRAWINGS: 1250.01, 1251.01

WBS#: 37445 & 37447  
Date: 06-29-2004  
Revised:

Hertford County

## **NORTH CAROLINA MOVING AHEAD SIGNS**

**08-17-04**

### **DESCRIPTION**

The Department will furnish the Contractor with the North Carolina Moving Ahead (NCMA) logo signs. The Contractor shall procure these signs from either the local Traffic Services office or directly from the Bunn Sign Plant. These signs shall be installed as shown elsewhere in the contract documents and shall be left in place at the completion of the project. The NCMA signs and supports shall remain the property of NCDOT. Division forces will remove the NCMA logo signs.

The Contractor shall have a sign fabricated with the name of his company, which will be mounted under the NCMA logo sign. The Contractor shall remove them after final project acceptance.

The Contractor shall furnish all material, labor, hardware and supports necessary to erect the NCMA logo and Prime Contractor's name signs. There will only be one set of NCMA logo and Prime Contractor name signs in each direction on the mainline unless the Department identifies extenuating circumstances. These signs shall be erected prior to any work beginning on the project and shall not be installed more than three days prior to the beginning of work. After construction begins, the Contractor shall cover the NCMA signs if inactivity on the project site occurs for at least 7 days. All other required standard work zone signs shall be provided as described in Section 1110 of the 2002 Standard Specifications and elsewhere in the contract documents.

### **MATERIALS**

The materials for the Contractor's Company name sign and standard work zone signing shall meet the requirements of Article 1110 of the *2002 Standard Specifications*.

The sign sheeting for the Contractor's Name Sign shall be black on orange Type I (Engineer's Grade) with 4 inch C Copy lettering. When the name of the Contractor with 4 inch C Copy lettering exceeds the maximum 60 inch width of the sign, the size of the letters shall be reduced to meet this maximum 60 inch width requirement.

### **CONSTRUCTION METHODS**

Construction of signs shall conform to the requirements of Article 1110-3 of the *2002 Standard Specifications*.

### **MAINTENANCE**

Maintenance of the signs shall conform to the requirements of Article 1110-4 of the *2002 Standard Specifications*. Maintenance for the NCMA signs will end upon final acceptance of the project.

**MEASUREMENT AND PAYMENT**

There will be no measurement and payment for the NCMA signs or the Contractor's Company name signs. All material, hardware, supports, and labor necessary shall be incidental to other items in the contract.

R-6



**GENERAL NOTES**

(1) THE FOLLOWING OPTIONS MAY BE USED AS ADVANCE WARNING SIGNS:

- A. TRUCK MOUNTED ADVANCE WARNING SIGNS
- B. MOVING CHANGEABLE MESSAGE SIGN (CMS)
- C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST USE 'NEXT 10 MILES' AND MAKE CIRCLE TO PICK UP SIGNS)
- D. STATIONARY CHANGEABLE MESSAGE SIGN (CMS) (MUST USE 'NEXT 10 MILES' AND MAKE CIRCLE TO PICK UP CMS)

(2) ADDITIONAL VEHICLES SHOULD BE USED IN WORK CARAVAN TO FACILITATE DRYING OF PAVEMENT MARKING MATERIAL - TMA'S ARE OPTIONAL ON THESE ADDITIONAL VEHICLES. HOWEVER, THE FIRST VEHICLE MOTORISTS SEE SHOULD HAVE A TMA.

(3) ROUND UP MILEAGE TO NEXT WHOLE MILE. WORK ZONE SHOULD NOT EXCEED TEN (10) MILES IN LENGTH.

(4) DISTANCE BETWEEN APPLICATION VEHICLE AND PROTECTION VEHICLE WILL VARY AS DRYING TIMES VARY, HOWEVER, THE CRITICAL FACTOR IS PASSING MOTORISTS. IF THE GAP BETWEEN VEHICLES IS TOO GREAT, MOTORISTS WILL ATTEMPT TO PASS AND ULTIMATELY APPEAR IN THE MIDDLE OF THE OPERATION.

(5) MOUNTING HEIGHT DIMENSIONS FROM ROADWAY TO SIGN SHOULD BE A MINIMUM OF FIVE (5) FEET FOR INTERSTATES, OTHER HIGH VOLUME ROADWAYS OR ROADWAYS THAT MAY REQUIRE A MOUNTING HEIGHT OF FIVE (5) FEET FOR INCREASED VISIBILITY AND A MINIMUM OF ONE (1) FOOT FOR ALL OTHER ROADWAYS.

(6) SIGN SPACING SHOULD BE ADJUSTED FOR HORIZONTAL AND VERTICAL CURVES, ETC. TO IMPROVE SIGHT DISTANCES.

(7) SIGN W26-1BSP OR R4-7A SHOULD BE PLACED ON FRONT OF APPLICATION VEHICLE AND SIGN W26-1BSP OR INFORMATIONAL SIGN ON BACK OF APPLICATION VEHICLE. IN TWO-LANE ROADWAYS, THE MOUNTING HEIGHT OF SIGNS APPROACHING FROM FRONT AND REAR ARE NOTIFIED OF OPERATION.

(8) RADIO COMMUNICATION BETWEEN VEHICLES IS RECOMMENDED.

(9) USE OF A LIGHT BAR ON THE ADVANCE WARNING VEHICLE IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.

(10) USE OF A CMS WITH ADVANCED WARNING VEHICLES IS OPTIONAL.

(11) IF WORK IS PERFORMED AT NIGHT, THE FOLLOWING PROVISIONS MUST BE MADE:  
 A. GROUND MOUNTED SIGNS MUST HAVE TYPE B FLASHING LIGHTS ATTACHED (TRUCK MOUNTED SIGNS DO NOT REQUIRE TYPE B FLASHING LIGHTS)  
 B. OPERATION MUST INCLUDE A CHANGEABLE MESSAGE SIGN (CMS)  
 C. WORK AREA MUST BE ILLUMINATED WITH MACHINE AND/OR TOWER LIGHTS AS APPROVED BY THE ENGINEER.

(12) USE A TYPE "B" FLASHING ARROW PANEL.

PANEL TYPE MIN. SIZE  
 B 60" X 30"

(13) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

**LEGEND**

- K PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW
- ☐ APPLICATION VEHICLE WITH ROTATING BEACON
- ☐ PROTECTION VEHICLE WITH TRUCK MOUNTED ADVANCE WARNING SIGN (TMA) AND BEACON (SEE ROADWAY STANDARD NO. 1185-01)
- ⚡ FLASHING ARROW PANEL, TYPE "B"
- ⚡ CAUTION MODE

MAY BE SIGNS OR CMS AND EITHER GROUND MOUNTED OR TRUCK MOUNTED

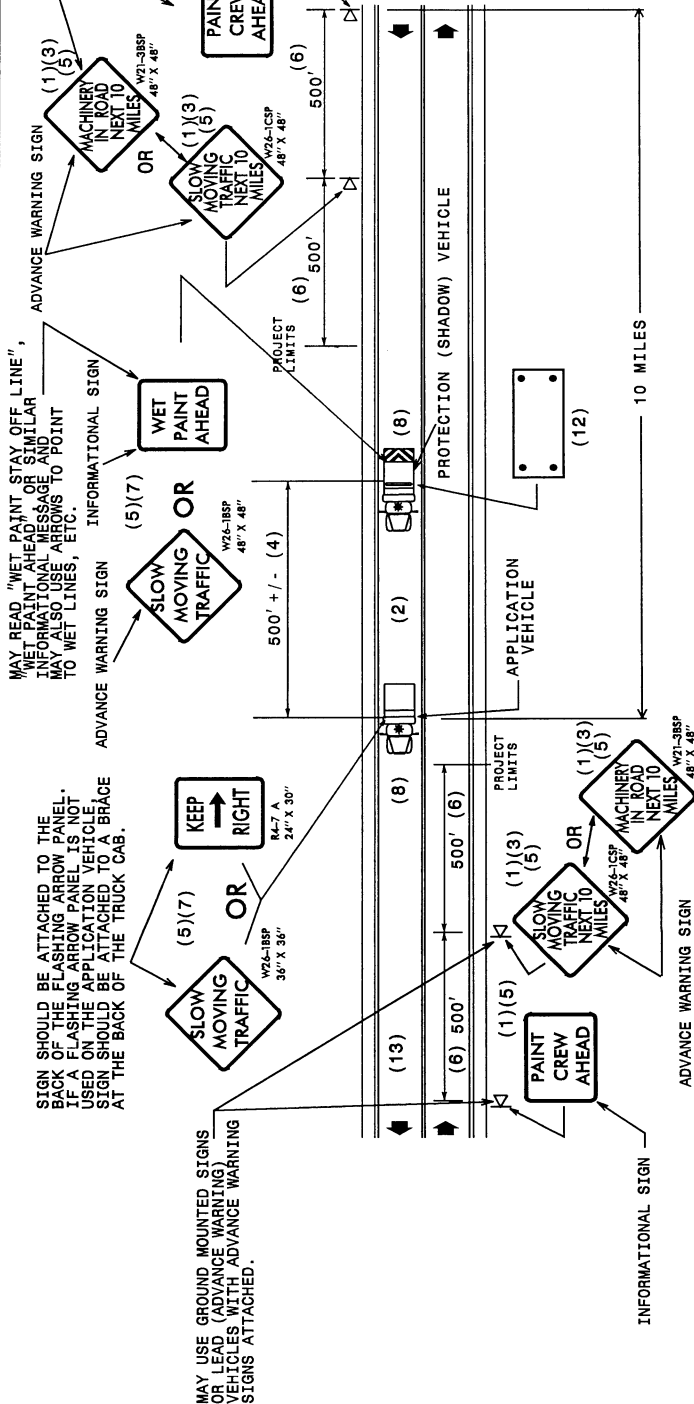
MAY READ "WET PAINT AHEAD" PAINT CREW AHEAD OR SIMILAR INFORMATIONAL MESSAGE AND MAY SUBSTITUTED TO POINT TO WET LINES, ETC.

INFORMATIONAL SIGN

**NOTE:**

ALL ADVANCE WARNING SIGNS MUST BE 48" X 48" BLACK ON ORANGE.

INFORMATIONAL SIGNS MAY BE RECTANGULAR OR DIAMOND SHAPED. THERE IS NO MINIMUM AREA FOR THESE SIGNS. HOWEVER, GOOD JUDGEMENT SHOULD BE USED SO THAT MOTORISTS CAN SEE THE SIGNS WHILE TRAVELING 60-65 MPH.



**MOVING OPERATION CARAVAN**  
 (OPERATIONS TRAVELING 3 MPH OR FASTER)  
 PLACING MARKING OR MARKERS ON TWO-LANE TWO-WAY ROADWAYS

**DRAWING NUMBER 6**  
 IMPLEMENTATION DATE: 07/01/97  
 REVISED: 04/25/97

**STANDARD SPECIAL PROVISION**

**AVAILABILITY OF FUNDS - TERMINATION OF CONTRACTS**

In accordance with G.S. 143.18.1 (6), Subsection (5) of G.S. 143-28.1 is hereby incorporated verbatim in this contract. G.S. 143-28.1(5) is as follows:

“(5). Amounts Obligated - Payments subject to the Availability of Funds - Termination of Contracts. Highway maintenance and construction appropriations may be obligated in the amount of allotments made to the Department of Transportation by the Office of State Budget and Management for the estimated payments for maintenance and construction contract work to be performed in the appropriation fiscal year. The allotments shall be multi-year allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in subdivision (2) above. Payment for highway maintenance and construction work performed pursuant to contract in any fiscal year other than the current fiscal year will be subject to appropriations by the General Assembly. Highway maintenance and construction 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 highway maintenance or construction contract and any highway maintenance or construction 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 schedule 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, Item 5, of the North Carolina Department of Transportation Standard Specifications for Roads and Structures, dated January 1, 2002.

**STANDARD SPECIAL PROVISIONS**  
**(ENGLISH AND METRIC)**  
**NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY**

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

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

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

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

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

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

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

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

Further specifications for each seed group are give below:

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

Sericea Lespedeza  
Oats (seeds)

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

Tall Fescue (all approved varieties)	Bermudagrass
Kobe Lespedeza	Browntop Millet
Korean Lespedeza	German Millet - Strain R
Weeping Lovegrass	Centipedegrass
Carpetgrass	Clover - Red/White/Crimson

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

Common or Sweet Sundangrass

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

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

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

Crownvetch  
Pensacola Bahiagrass  
Japanese Millet  
Switchgrass  
Reed Canary Grass

**STANDARD SPECIAL PROVISIONS**  
**ERRATA**

Correct the *2002 Standard Specifications* as follows:

**Page 1-61, Subarticle 108-10(A)**

In the first sentence, change the Article reference from 101-24 to 101-25.

**Page 2-21, Subarticle 235-4(B)**

In the third sub-bullet under the eighth bullet in this subarticle, delete the word "subgrade" and insert the words "finished grade".

**Page 3-4, Article 300-10**

Change all references to 300-8 to 300-9.

**Page 5-9, Subarticle 520-3(A)**

Delete the words "at your option".

**Page 5-10, Subarticle 520-6(A)**

In the first sentence, add a period after "(B)" and delete the words "and (C)."

Delete the last sentence of the subarticle.

**Page 8-47, Subarticle 862-6**

Change the subarticle number from 862-6 to **862-7**.

**Page 8-49, Subarticle 864-4**

In the first paragraph, change the Article reference from 862-3 to **864-3**.

**Page 8-55, Subarticle 866-5(G)**

In the third pay item, insert the words "with Posts" after the word "Fence".

**Page 10-1, Subarticle 1000-3(A)**

In the second paragraph, change 550 psi to 600 psi (4.1 MPa).

**Page 10-2, Subarticle 1000-3(A)**

In the last sentence of the second paragraph on this page, change 550 psi to 600 psi (4.1 MPa).

**Page 10-5, Table 1000-1**

Under the column "Consistency Max. Slump" change the sub-heading 'Non-Vibrated' to 'Vibrated' and change the sub-heading 'Vibrated' to 'Non-Vibrated'. Under the column "Min. Cement Content" change the sub-heading 'Non-Vibrated' to 'Vibrated' and change the sub-heading 'Vibrated' to 'Non-Vibrated'.

**Page 10-7, Table 1005-2**

For Std. Size # 2S make the following changes:

- #50 (0.300) Sieve change the limits from 8 - 30 to **5 - 30**.
- #100 (0.150) Sieve change the limits from 0.5 - 10 to **0 - 10**.

For Std. Size # 2MS make the following changes:

- #50 (0.300) Sieve change the limits from 8 - 35 to **5 - 35**.
- #100 (0.150) Sieve change the limits from 0.5 - 20 to **0 - 20**.

**Page 15-3, Article 1505-3**

In the last paragraph of this article, change Article 300-6 to Article 300-7.

**Page 15-10, Article 1510-5**

In the fourth paragraph, insert a comma after the word "water".

**Page 15-18, Article 1530-2**

In the third paragraph on the page, change "Section 812" to "Section 340".

**Page 16-15, Article 1635-3(A)**

Substitute the second paragraph with the following:

Construct the rock pipe inlet sediment trap type-A with a minimum height of 18 inches (457.2 mm) and a minimum of 12 inches (304.8 mm) below the roadway shoulder or diversion point.

**MINIMUM WAGES**

**Federal:** The Fair Labor Standards Act provides that with certain exceptions every employer must pay wages at the rate of not less than FIVE DOLLARS AND FIFTEEN CENTS (\$5.15) 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 FIVE DOLLARS AND FIFTEEN CENTS (\$5.15) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be FIVE DOLLARS AND FIFTEEN CENTS (\$5.15) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be FIVE DOLLARS AND FIFTEEN CENTS (\$5.15) per hour.

The minimum wage paid to all unskilled labor on this contract shall be FIVE DOLLARS AND FIFTEEN CENTS (\$5.15) 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, State or Federal. It is the responsibility of the Contractor to keep himself fully informed of all Federal and State Laws affecting his contract.



County : Hertford

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
<b>ROADWAY ITEMS</b>						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0043000000-N	226	GRADING	Lump Sum	L.S.	
0003	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRS	28 TON		
0004	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	80 LF		
0005	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	96 LF		
0006	0378000000-E	310	24" RC PIPE CULVERTS, CLASS III	88 LF		
0007	1220000000-E	545	INCIDENTAL STONE BASE	1,550 TON		
0008	1245000000-E	SP	SHOULDER RECONSTRUCTION	30.2 SMI		
0009	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (2-1/2")	16,896 SY		
0010	1308000000-E	607	MILLING ASPHALT PAVEMENT, **** TO ***** DEPTH (1-1/2" TO 6")	15,880 SY		
0011	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	17,857 TON		
0012	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	11,768 TON		
0013	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	23,269 TON		
0014	1560000000-E	620	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22	2,717 TON		
0015	1704000000-E	SP	PATCHING EXISTING PAVEMENT	33 TON		
0016	2209000000-E	838	ENDWALLS	3.5 CY		
0017	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	5 EA		

County : Hertford

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	5 EA		
0019	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	6,472 LF		
0020	2605000000-N	SP	WHEELCHAIR RAMPS	3 EA		
0021	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	1 EA		
0022	3030000000-E	862	STEEL BM GUARDRAIL	3,650 LF		
0023	3270000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE 350	69 EA		
0024	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	162,980 LF		
0025	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	102,700 LF		
0026	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	210 LF		
0027	4705000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS)	200 LF		
0028	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	80 LF		
0029	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120MIL)	4 EA		
0030	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	6 EA		
0031	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	286,572 LF		
0032	4900000000-N	1252	PERMANENT RAISED PAVEMENT MARKERS	1,123 EA		
0033	6084000000-E	1660	SEEDING & MULCHING	12.5 ACR		

**C201246**  
**Hertford County**

2/16/99

Contract No: C201246

Counties: Hertford

ACCEPTED BY THE  
DEPARTMENT OF TRANSPORTATION

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Contract Officer

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Date

Execution of Contract and Bonds  
Approved as to Form:

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Attorney General

