

TOWN OF WAYNESVILLE

REBID

Documents for

PIGEON STREET WATER REPLACEMENT PROJECT

Project # 23001

Prepared for

The Town of Waynesville
Public Services Department

By

Mattern & Craig

**All of the foregoing documents, including, but not limited to,
the Standard Drawings, are hereby made a part of and
incorporated herein by reference into the
Contract/Agreement between the Town and the Contractor**

Table of Contents

Advertisement to Bid	1
Miscellaneous Requirements of the Bid	2
Contract Proposal	3
Instruction to Bidders	4
Special Terms and Conditions	14
Contract	19
Contract Signature Page	24
Town Acceptance	25
Notice of Award	26
Notice to Proceed	27
 GENERAL PROVISIONS	
Alterations to the NCDOT 2018 Standard Specifications	28
Pre-Con Meeting	
Change Orders	29
Claims for Additional Compensation	
Alterations of Plans or Details	
Compensation and Record Keeping	30
Day and Time Restrictions	31
Holiday Restrictions	32
Notification of Operations	
No Major Contract Items	
Overruns and Underruns	
Eliminated Contract Items	34
Permits	35
Subsurface Information	
Authority of Project Manager	
Availability of Funds-Contract Termination	
Bankruptcy	
Construction Stakes Lines and Grades	36
Cooperation	
Default of Contract	

Debarment Statement	
Driveways & Private Property	
Inspection	
Interpretation of Quantities in Proposal Form	
Labor & Materials	
Littering and Site Clean Up	
Materials & Testing	37
Progress Schedule	
Prompt Payment	38
Safety Vests	39
Safety & Accident Protection	
Supervision by Contractor	
Traffic Control & Work Zone Safety	40
Utility Conflicts	
Erosion & Sediment Control/Stormwater Certification	41
Work Zone Signing	45
NCDOT Standard Notes	48
Allowable Changes to Standard Specifications	50
PROJECT SPECIAL PROVISIONS	
Mobilization	51
Traffic Control	
Erosion Control	
Asphalt Surface Course S9.5C	
Asphalt Intermediate Course I19.0C	
ABC Stone	52
6" DIP, PC 350 Water Line	
6" Valve	
6" Tapping Sleeve and Valve	
Reconnect Water Meter	
Fire Hydrant	
Fire Hydrant Leg	53
Water Service Line	
Ductile Iron Water Pipe Fittings	
Abandon 6" Water Line	
Remove Fire Hydrant	
4' Diameter Utility Manhole	
Utility Manhole Wall 4' Diameter	54
Remove Utility Manhole	

Sewer Service Line
Abandon 8" Sewer Line
8" DIP, PC 350 Sewer Line

Contract Time and Liquidated Damages 55

No Major Contract Items

No Specialty Items

Fuel and Asphalt Price Adjustments

Disadvantaged Business Enterprise

Certification for Federal Contracts 69

USDOT Hotline 70

Submission of Records 71

Twelve Month Guarantee

Borrow Pit Discharge

Gifts from Vendors and Contractors 74

STANDARD SPECIAL PROVISIONS

Availability of Funds – Termination of Contract 75

Seed Specification for Quality 76

Errata 79

Plant and Pest Quarantines 80

Title VI and Nondiscrimination 81

Minority and Female Employment Requirements 90

Required Contract Provisions Federal Aid Construction Contracts 93

On-the-Job Training 102

Minimum Wages 105

CONTRACTOR SIGNATURE FORMS

Signature Forms 111

Bid Form 115

Bid Proposal 116

Execution, Non-Collusion, Debarment, Gift Ban 117

Bid Bond 125

Payment Bond 132

Performance Bond	141
Sales and Use Tax Report	150
Letter of Intent to Perform as a Subcontractor	152
Listing of DBE Subcontractors	153
Subcontract Approval Form	155
Subcontractor Payment Information	160
E-Verify	161
Drug-Free Workplace	162
Release and Lien Waiver	163
Patching Detail	166
Standard Specifications	167
Project Special Provisions	195

ADVERTISEMENT TO BID

The Town of Waynesville will receive bids for the following Project:

Project Name: Pigeon Street Water Replacement Project

Project Number: 23001

Bid Opening/Due Date and Time: Tuesday, February 1, 2022 at 3:00 P.M.

Bids Shall Be Delivered To and Publicly Opened By: Robert Kun, C/O Mattern & Craig 12 Broad Street Asheville NC 28801.

There will be NO Pre-Bid meeting for this project.

Description of Work: Replacement of existing water line and all related appurtenances along a section of Pigeon Street. Replacement of a section of sewer line and connected manholes.

Bid Documents:

Copies of the bid documents can be viewed or downloaded for reproduction for free, from the Town of Waynesville's Web site or by requesting documents from Robert Kun via email at rjkun@matternandcraig.com.

The Town of Waynesville reserves the right to reject any or all bids and to waive informalities.

Information

All requests for information pertaining to this bid shall be submitted via email to:

Mattern & Craig
Robert Kun
rjkun@matternandcraig.com

Questions pertaining to the bid must be submitted before (2) business days prior to the bid opening and will be answered in the form of a written addenda posted to the Town of Waynesville's bid page no later than **one (1) day before the opening of bids on February 1, 2022 at 3:00 P.M.**

Miscellaneous Requirements of the Bid

License Requirements:

All bidders must have a current North Carolina General Contractor's License with the appropriate classification for the work of the project at the time of the bid.

Certification of a Drug-Free Workplace

Bidders are notified that the Town of Waynesville has adopted a Drug-Free Workplace Policy requiring successful bidders to insure that a drug-free workplace is provided in the performance of any Town of Waynesville construction contracts. By submitting a bid proposal, Bidder certifies that if awarded the Contract, they and their subcontractors shall comply with the Town's Drug-Free Workplace Policy. The policy may be viewed at the following: http://www.ashevillenc.gov/departments/purchasing/drug_free_work_policy.htm

Bid proposals shall include the cost of required insurance and bonds and payment of any applicable local, State and Federal taxes. The Town of Waynesville has adopted a policy that the Town of Waynesville will not enter into contracts with bidders who are delinquent in the payment of ad valorem taxes owed to the Town of Waynesville.

The successful bidder will be required to furnish a performance bond and a payment bond in the amount of one hundred percent (100%) of the contract amount. Those bonds shall meet the requirements of N.C.Gen.Stat. of Article 3 of Chapter 44A of the North Carolina General Statutes.

**** End****

**THE TOWN OF
WAYNESVILLE**

PUBLIC SERVICES DEPARTMENT

CONTRACT PROPOSAL

COUNTY: HAYWOOD

DESCRIPTION: Replacement of existing water line and all related appurtenances along a section of Pigeon Street. Replacement of a section of sewer line and connected manholes.

DATE OF ADVERTISEMENT: January 19th, 2022

PRE-BID MEETING: There will be NO Pre-Bid meeting for this project.

BID OPENING: Tuesday, February 1, 2022 at 3:00 P.M. at Mattern & Craig, 12 Broad Street, Asheville NC 28801.

***** 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. FOR CONTRACTS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD, BIDDERS ARE REQUIRED TO BECOME LICENSED BY THE NC LICENSING BOARD. NON-LICENSED BIDDERS ARE PERMITTED 60 DAYS AFTER BID OPENING TO OBTAIN PROPER LICENSING FOR THE TYPE OF PROJECT BEING LET. 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.

NAME OF BIDDER

ADDRESS OF BIDDER

Return Bids To: MATTERN & CRAIG

Attention: ROBERT KUN

Person's Title: PROJECT MANAGER

Physical Address: 12 BROAD STREET, ASHEVILLE NC 28801

ALL BIDS MUST BE RECEIVED PRIOR TO THE DATE AND TIME LISTED ABOVE.

INSTRUCTIONS TO BIDDERS

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

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

- 1.** The bid form furnished by the **Town of Waynesville** with the proposal shall be used and shall not be altered in any manner. **DO NOT SEPARATE THE BID FORM FROM THE PROPOSAL!**
- 2.** All entries on the bid form, including signatures, shall be written in ink.
- 3.** The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures. *****Unit prices must be limited to TWO decimal places.*****
- 4.** An amount bid shall be entered on the bid form for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the form.
- 5.** The total amount bid shall be written in figures in the proper place on the bid form. The total amount shall be determined by adding the amounts bid for each item.
- 6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do not use "White Out" or similar product to make corrections.
- 7.** The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number
 - e. Contractor's License Number (If available)
- 8.** Bids submitted by corporations shall bear the seal of the corporation.
- 9.** The bid shall not contain any unauthorized additions, deletions, or conditional bids.

10. The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

11. THE PROPOSAL WITH THE BID FORM STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED AT MATTERN & CRAIG, 12 BROAD STREET, ASHEVILLE NC 28801, BY TUESDAY, FEBRUARY 1, 2022 AT 3:00 P.M.

12. The sealed bid must display the following statement on the front of the sealed envelope:

“QUOTATION FOR – PIGEON STREET WATER REPLACEMENT PROJECT TO BE OPENED ON TUESDAY, FEBRUARY 1, 2022 AT 3:00 P.M.

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

**ROBERT KUN
C/O MATTERN & CRAIG
12 BROAD STREET
ASHEVILLE NC
28801**

INSTRUCTIONS TO BIDDERS

All Bids shall be prepared in accordance with the following requirements:

IB-01 PREPARATION OF BIDS:

1. The Bid form furnished by the Town of Waynesville shall be used and shall not be altered.
2. All entries including signatures shall be written in ink.
3. The Bidder shall submit a unit or lump sum price for every item in the Bid form unless specific directions in the Invitation for Bids allow for partial Bids. The unit or lump sum prices bid for the various Contract Items shall be written figures.
4. A Total Bid shall be entered in the Bid form for every item on which a unit price has been submitted. The total Bid for each item other than lump sum items shall be determined by multiplying each unit price bid by the quantity for that item, and shall be written in figures in the "Total Bid" column in the Bid form. In case of a discrepancy between the unit price bid for a Contract Item and the Total Bid for that item, the unit price bid shall govern. In the case of lump sum items, the price shall be written in figures in the "Total Bid" column in the Bid form.
5. The Total Contract Bid Price shall be written in figures in the proper place in the Bid form. The Total Contract Bid Price shall be determined by adding the Total Bid for each item.
6. Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. The individual signing the Bid shall initial the change in ink.
7. The Bid shall be properly executed. In order to constitute proper execution; the Bid shall be executed in strict compliance with the following. No other forms of execution will be accepted.
 - a. If a Bid is by an individual, it shall show the name and address of the individual and shall be signed by the individual.
 - b. If the Bid is by a Corporation, the President or Vice-president of the Corporation shall execute it in the name of the Corporation. The Secretary or Assistant Secretary shall attest the signature(s). The seal of the Corporation shall be affixed. The Bid shall show the address of the principal office of the Corporation.
 - c. If the Bid is made by a Partnership, one of the general partners shall execute it in the name of the Partnership, by the address shown for the Partnership.
 - d. If the Bid is a joint venture, it shall be executed by each of the joint ventures in the appropriate manner set out above. The address for the joint venture shall be shown.

8. The Bid shall not contain any unauthorized additions, deletions or conditional bids.
9. The Bidder shall not add any provisions reserving the right to accept or reject an award, or to enter into a Contract pursuant to an award.
10. The Bid shall not contain irregularities of any kind, which make the Bid incomplete, indefinite, or ambiguous as to its meaning.
11. Alternative Bids will not be considered unless specifically called for. Where numbered Alternate Bid Items are provided under any Contract, each Bidder must submit a bid price for each numbered Alternate Item.
12. All attachments, certifications or acknowledgments attached to the Bid shall be executed in the same manner as the Bid.

IB-02 RECEIPTANDOPENINGOFBIDS:

Each Bid must be submitted in an opaque sealed envelope, plainly marked on the outside, addressed and delivered as shown below. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope addressed to:

ROBERT KUN
C/O MATTERN & CRAIG
12 BROAD STREET
ASHEVILLE NC 28801

The envelope-containing Bid shall be marked as follows:

Upper left hand corner - Bidder's Name Bidder's Address	Lower left hand corner - NC General Contractor's License No. Classification Expiration Date Quotation for – Pigeon Street Water Replacement Project to be opened on TUESDAY, FEBRUARY 1, 2022 AT 3:00 P.M.
---	---

Robert Kun
C/O Mattern & Craig
12 Broad Street
Asheville NC 28801

Bids received prior to the advertised hour of opening will be securely kept sealed. The officer whose duty it is to open them will decide when the specified time has arrived, and no Bid received thereafter will be considered. Mailed Bids will be treated in every respect as though filed in person and will be subject to the same requirements.

Bids received subsequent to the advertised hour of opening will be returned to the Bidder unopened. At the time and place fixed for the opening of Bids, the Owner will cause to be opened and publicly read aloud every Bid received within the time set for receiving Bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present in person or by representative.

IB-03 WITHDRAWAL OR REVISION OF BIDS:

A Bidder may, without prejudice to himself, withdraw a Bid after it has been delivered to the Owner provided the request for such withdrawal is made either in writing or by telegram to the project manager/engineer, presiding over the public opening of Bids before the date and time set for the opening of Bids. The bidder may then submit a revised Bid provided it is received prior to the time set for opening of Bids. Any withdrawal of a bid after the opening of Bids shall be in accordance with N.C. General Statute Section 143-129.1.

Only those persons authorized to sign Bids shall be recognized as being qualified to withdraw a Bid.

IB-04 ADDENDA AND INTERPRETATIONS:

No interpretations of the meaning of the Plans, Specifications or other portions of the Contract Documents will be made orally.

Every request for such interpretation must be addressed to Robert Kun, Project Manager for the project. To be given consideration, such requests must be received at the above address at least five (5) days prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplemental instructions will be in the form of written Addenda which, if issued, will be posted at the Town of Waynesville's web site. Failure of any Bidder to review any such Addenda shall not relieve said Bidder from any obligation under his Bid as submitted. All Addenda so issued shall become part of the Contract Documents.

IB-05 DISCREPANCY IN BIDS:

In the event there is a discrepancy in any Bid between the unit prices and the extended totals, the unit prices shall govern. Bids which do not contain a price for every numbered item contained in the applicable Bid form, will not be accepted unless otherwise specified.

IB-06 QUALIFICATIONS OF BIDDERS:

It is the intention of the Owner to award the Contract(s) to a Bidder competent to perform and complete the work described therein in a satisfactory manner. Accordingly, a Successful Bidder shall submit to the Owner a form, satisfactory to the Owner and within five (5) days following the Bid Opening:

- (1) Evidence of Bidder's Certification and license to perform the work and services.
- (2) Evidence of Bidder's experience to perform the work and financial statements reasonably available for 3 years immediately preceding the date of the Bid Opening.

- (3) Evidence of Safety record of the Bidder to include OSHA 200 Logs for the Bidder's firm for the 5 years prior to the Bid Opening and the most recent Worker's Compensation Rating (or if the Bidder is self-insured, a complete listing shall be submitted of lost time on-the-job accidents for the past 5 years;
- (4) A Preliminary Progress Schedule (hereinafter collectively called "Qualification Information".

The Preliminary Progress Schedule shall consist of a time scaled bar chart and narrative in accordance with appropriate formats as specified by the Owner.

- (5) Bidder's financial resources, adequacy of plant and equipment, organization and prior experience (including a list setting forth ten of the Successful Bidder's most recent projects and the name and address and telephone number of the owner of each such project). Financial information shall be certified by a Certified Public Accountant, and will be submitted on the Associated General Contractors of America Form "Standard Questionnaires and Financial Statement for Bidders" available from AGC, 1975 "E", NW, Washington, DC 20006; "Questionnaire" form Section 00430 (Included in Contract Document Specifications).

The Owner may make such other investigation as it deems necessary to determine the qualifications of the Bidder to perform the work and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may reasonably request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder (1) Fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract, and to complete the work contemplated therein in a reasonable manner and time; or (2) Fails to satisfy the Owner that such Bidder has maintained a satisfactory safety record over the past 5 years. Conditional Bids will not be accepted.

Any arrangement the contractor might have with outside financial companies to finance any aspects of the project shall be detailed in advance, with contact information for the outside company included with the bid package. These arrangements include factoring companies or any other third-party financial institutions that offer cash in exchange for ownership of the unpaid, outstanding invoices. The owner reserves the right to take these arrangements into account as indications that the contractor is a responsible bidder.

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.

All Bidders must be licensed general contractors licensed in the State of North Carolina to perform work of a nature as required by the Contract Documents.

IB-07 BID SECURITY:

Each bid must be accompanied by a Bid Bond consisting of cash, cashier's check or a certified check of the Bidder made payable to the Owner in an amount not less than five percent (5%) of the amount of the Bid. Bid Bonds shall be issued by a corporate surety licensed under the laws of North Carolina to execute such bonds. The bid bond shall be in a separate envelope.

When the Bidder elects to submit a certified check or cashier's check as his Bid Bond, the check shall be drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation.

Where alternate items are included in the Bid, the amount of bid security shall be not less than five percent (5%) of the alternate, or combination of alternates, that result in the highest Bid.

Revised Bids submitted before the opening of Bids, if representing an increase of the original Bid, must have the Bid security adjusted accordingly, otherwise the Bid will not be considered.

The security of the Bidders will be released upon the earlier to occur of (a) the expiration of five days after the Contract has been signed by the accepted Bidder and the Owner; or (b) the expiration of sixty (60) days after the day the bids are opened, upon demand of any such bidders whose bid has not been accepted prior to such demand.

In the event that all Bids are rejected, the security of all Bidders whose security has not been previously returned will be returned at the time of such rejection.

IB-08 RESPONSIBILITIES OF BIDDERS:

Each bidder shall, by careful examination, satisfy himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work or the cost thereof under the Contract.

The Contractor shall make his own determination as to the nature and extent of the utility facilities, including proposed adjustments, new facilities, or temporary work to be performed by the utility owner or his representative; and as to whether or not any utility work is planned by the Owner in conjunction with the project construction. The Contractor shall consider in his Bid all the permanent and temporary utility facilities in their present or relocation positions, whether or not specifically shown on the plans or covered in the project Special Conditions. It will be the Contractor's responsibility to anticipate any additional costs to him resulting from such utility work and to reflect these costs in his Bid for the various items in the Contract.

The failure or omission of any Bidder to thoroughly examine and familiarize himself with the Contract Documents or to receive or examine any form, instrument or document or visit the site and acquaint himself with the conditions there existing shall in no way relieve any Bidder from any obligation in respect to his bid.

No verbal agreement or conversation with any officer, agent or employee of the Owner, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations therein.

IB-09 COLLUSIVE AGREEMENTS:

Each Bidder submitting a Bid to the Owner for any portion of the work contemplated by the documents on which bidding is based, shall execute and attach thereto an affidavit substantially in the form herein provided, to the effect that he has not entered into a collusive agreement with any person, firm or corporation in regard to any Bid submitted.

Before executing any Subcontract, the successful Bidder shall submit the name of any proposed Subcontractor for prior approval and an affidavit substantially as above.

IB-10 TAXES

The Contractor shall include in his Bid the cost of all sales and use taxes and furnish to the Owner at the end of each month and upon completion of his Contract, a statement setting forth all such taxes paid. This statement shall indicate the amount paid to each firm and be adequate for audit by the State Department of Revenue.

IB-11 COMPARISON OF BIDS:

Bids will be compared on the basis of the totals of the approximated quantities comprising all items, at the unit and lump sum prices bid for these items. The resulting total Contract Bid Price will be compared which will include and cover the furnishing of all materials, and the performance of all labor requisite or proper, and completing of all the work called for under the accompanying Contract, and in the manner set forth and described in the Contract Documents.

The lowest Bidder under each Contract will be that Bidder whose Bid totals the lowest number of dollars as determined above.

When numbered Alternate bid items are required, the lowest Bidder is the Bidder whose bid for the Alternate or combination of Alternates, selected by the Owner is the lowest. The Owner reserves the right to select any Alternate or combinations of Alternates.

Where estimated quantities are included in certain items of the Bid, they are for the purpose of comparing bids. While they are believed to be close approximations, they are not guaranteed, and settlement will be made from such items upon the basis of work as actually executed at the unit prices in the Bid as accepted.

IB-12 AWARD OF CONTRACT:

The award of the Contract will be made to the lowest responsible bidder, who, in the opinion of the Owner, is qualified to perform the work required and is responsible and reliable. When Alternate Bid items are required in the Bid, the Contract will be awarded to that responsible Bidder whose Bid for the Alternate or combination of Alternates, selected by the Owner, is the lowest.

These Bids are asked for in good faith, and awards will be made as soon as practicable, provided satisfactory Bids are received.

The Owner may consider informal and reject any Bid not prepared and submitted in accordance with the provisions hereof.

The right is reserved to waive informalities in bidding, to reject any or all Bids, or to accept a Bid other than the lowest submitted if such action is deemed to be in the best interest of the Owner.

IB-13 COMMENCEMENT OF WORK:

Upon execution and delivery of the Contract and the delivery of the required performance and payment bonds and insurance certificates and policies, the Contractor will be notified to proceed with the work of the Contract. The work of the Contract shall be commenced within ten (10) days following such notification or as otherwise specified in the Notice to Proceed.

The Contractor shall notify the Director of Public Services in writing, of his intention to enter upon the site of the work at least five (5) days in advance of such entrance.

IB-14 DAMAGES FOR FAILURE TO EXECUTE CONTRACT:

If an accepted Bidder shall fail or refuse to sign and deliver this Contract and the required surety bonds and insurance documentation within twenty (20) days after he has received Notice of Award of his Bid, the Owner shall retain, as partial damages for such failure or refusal, the Bid security of such defaulting Bidder. In addition to such damages, the Owner reserves whatever other rights and remedies it may have against such defaulting Bidder.

Execution of the Contract shall include submission of a complete original Certificate of Insurance with proof of coverage as required and of the form required by the General and Supplementary Conditions of the Contract Documents, and shall include the execution of Performance and Payment Bonds in the full amount of the Contract.

IB-15 EQUAL EMPLOYMENT OPPORTUNITY

Attention of Bidders is particularly called to the requirements for insuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

IB-16 PROGRESS SCHEDULE/TIME OF COMPLETION

As part of completing the bid proposal, the bidder shall set forth his own progress schedule and stipulate completion dates for all the work. Unreasonable entries, such as, but not limited to, the list below, shall be considered a failure to meet the intent of the Contract Documents and the bid shall be rejected.

1. The same or nearly the same date for all phases of Work.
2. Progress of the Work shall begin as specified in these documents and be continuous, regardless of completion date.
3. A final completion date exceeding 160 calendar days may be considered unreasonable, depending upon comparison of contract costs.

IB-17 Minimum Number of Bids for Public Contracts

No contract to which North Carolina General Statute ("G.S.") 143-129 applies for construction or repairs shall be awarded by the owner, unless at least three competitive bids have been received from reputable and qualified contractors regularly engaged in their respective lines of endeavor; however, this section shall not apply to contracts which are negotiated as provided for in G.S. 143-129.

Provided that if after advertisement for bids as required by G.S. 143-129, less than three competitive bids have been received from reputable and qualified contractors regularly engaged in their respective lines of endeavor, the Owner shall again advertise for bids; and if as a result of such second advertisement, less than three competitive bids from reputable and qualified contractors are received, the Owner may then let the contract to the lowest responsible bidder submitting a bid for the Project, even though only one bid is received.

END OF SECTION

Revised: (06/06)

Special Terms and Conditions for Town of Waynesville

1. **Summary:** Bidders please note: This Request for Bids and Proposals includes provisions for the Town of Waynesville. Bids are to be submitted in accordance with the enclosed specifications and these Special Terms and Conditions, both of which require doing all that is necessary, proper, or incidental to the furnishing of the materials identified herein. All things not expressly stated in the attached specifications or Special Terms and Conditions but involved in carrying them out must be included in bidder's proposal as though they were specifically stated.
2. **Notice to Bidders:** All bids are subject to the provisions of the Special Terms and Conditions specific to this Request for Quotation and the Specifications. The Town of Waynesville objects to and will not evaluate or consider any additional terms and conditions submitted with a bidder response. This applies to any response appearing in or attached to the document as part of the bidder's response. This applies to any response appearing in or attached to the documents as part of the bidder's response. **DO NOT ATTACH ANY ADDITIONAL TERMS AND CONDITIONS.** By execution and delivery of a proposal, the bidder agrees that any additional terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect. It shall be the bidder's responsibility to read this entire document, review all enclosures and attachments, and comply with all requirements specified herein.
3. **Issuing Office:** This bid is issued by the Town of Waynesville Purchasing Department, 129 Legion Drive, Waynesville, North Carolina 28786. All correspondence and inquiry should be made to this address. Telephone number (828) 456-3706, Fax Number (828) 456-2005.
4. **Clarifications/Interpretations:** Any and all questions regarding this document must be addressed to the Town of Waynesville Purchasing Department. Any and all revisions to this document shall be made only by written addendum from the Town of Waynesville Purchasing Department. Therefore, no oral statements by any person shall modify or otherwise affect the terms, conditions, or specifications stated in this request for bids and proposals. The bidder is cautioned that the requirements of this bid can be altered only by written addendum and that verbal communications from whatever source are of no effect.
5. **Minor Deviations/Exceptions to Specifications:** Minor deviations from the provisions of these specifications may be considered to permit manufactures to follow their standard manufacturing processes; however, all proposed minor deviations must be explained in detail and submitted within the exceptions to specifications, time frame identified herein.
6. The Town of Waynesville reserves the right to postpone bid openings for its own convenience.
7. **Nonconforming Terms and Conditions:** A bid response that includes terms and conditions in this bid document is subject to rejection as non-responsive. The Town of

Waynesville reserves the right to permit the bidder/vendor to withdraw nonconforming terms and conditions from its bid response prior to a determination by the Town of Waynesville of non-responsiveness.

8. **Bidders Submittals:** Bidder must furnish all information requested herein including descriptive literature and/or complete specifications covering the products offered. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements will be subject to rejection. All documents submitted should bear the name of the bidder.
9. **Expenses incurred in Preparing Bid:** The Town of Waynesville accepts no responsibility for any expense incurred by the bidder in the preparation and presentation of a bid. Such expenses shall be borne exclusively by the bidder.
10. **Tax Exemptions:** The Town of Waynesville is exempt from Federal Excise Tax but not State and Local Sales Tax. Sales tax should not be included in bid prices but may be added as separate items.
11. **Evaluation and Selection of Bids:** The evaluation of bids shall center on the match between the stated specification requirements in the final bid request and the vendor's proposed materials/equipment including selection of the lowest responsible/responsive bidder with consideration of past performance, service record and reliability.

The statutory provisions controlling purchasing by local governments in N.C. (RE: G.S. 143) includes selection standards for use in making awards. The provision reads, "A: contracts shall be awarded to the lowest responsible bidder taking into consideration quality, performance and the time specified in the bids for performance of the contract.

The Town of Waynesville reserves the right to accept or reject any or all bids and proposals further specifically reserves the right to make the award of awards in the best interest of the Town of Waynesville.
12. **Indemnification:** The bidder/vendor covenants to save, defend, keep harmless and indemnify the Town of Waynesville and all of its officers, departments, agencies, agents and employees from and against all claims, loss, damage, injury, fines, penalties, and cost-including court costs and attorney's fees, charges, liability and exposure, however caused resulting from, arising out of, or in any way connected with the bidder's/vendor's negligent performance or nonperformance of the terms of the contract.
13. **Assignment:** During the performance of the contract, the bidder/vendor shall not assign, transfer, convey, sublet, or otherwise dispose of any award of or any or all of its rights, title, or interest therein, without the prior written consent of the Town of Waynesville.
14. All bids shall be made firm for no less than ninety (90) days.

15. **Invoices and Payments:** All invoices and packaging slip must bear Purchase Order number issued for that order. The Town is not exempt from sales tax. The tax must be shown as separate items on invoice.
16. **Iran Divestment Certification:** The Consultant certifies that it currently complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes, and that at all times during the term of this Contract, it will continue to comply with these requirements. Consultant also certifies that it will require that all of its subcontractors that perform any work pursuant to this Contract to comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Violation of this section shall be deemed a material breach of this Contract.
17. **E-Verify Employer Compliance:** Employers and their subcontractors with 25 or more employees as defined in Article 2 of Chapter 64 of the NC General Statutes must comply with E-Verify requirements to contract with governmental units. E-Verify is a Federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law. E-verify can be accessed via this link: <http://www.uscis.gov/e-verify/employers>
18. **Drug Free Work Place:** The Town of Waynesville has adopted a Drug-Free Workplace Policy requiring the contractor to insure that a drug-free workplace is provided in the performance of this agreement. The requirements of that policy are included in the invitation to bid and included in the agreement for the construction of the Project.
19. **Minority/Woman Business Enterprise (M/WBE) Policy Statement:** It is the policy of the Town of Waynesville to ensure that all businesses, including M/WBEs, are afforded the maximum practical opportunity to participate in the Town's purchasing and contracting processes. Therefore, the Town will not enter into a contract or be engaged in a business relationship with any business entity that has discriminated in the solicitation, selection, hiring or commercial treatment of vendors, suppliers, Subcontractors or commercial customers on the basis of race, color, religion, national origin, sex, age or handicap.
20. **Insurance Requirements:** Insurance during the performance of the services under this Agreement, the Consultant shall maintain the following insurance:
- **General Liability Insurance**, including but not limited to coverage for all premises and non-premises operations, independent contractors, broad form property damage coverage, including explosion, collapse and underground property damage hazards, personal injury liability protection including coverage relating to employment of persons, contractual liability protection, and products and completed operations coverage. This insurance shall provide bodily injury limits of not less than \$1,000,000 for each occurrence and not less than \$2,000,000 in the aggregate, and with property damage limits of not less than \$500,000 for each occurrence and not less than \$500,000 in the aggregate. The General Liability Insurance shall name the Town of Waynesville as an additional

insured, and the insurance shall be primary and non-contributory to any other insurance that may be available to the Town.

- **Professional Liability Insurance** with limits of not less than \$1,000,000 for each occurrence and not less than \$2,000,000 in the aggregate. This Professional Liability Insurance shall provide coverage for the claims concerning the Contractor's errors and omissions for the scope of services provided to the Town under this Agreement, including but not limited to, claims concerning the preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders, or drawings and specifications, and claims relating to supervisory, inspection, architectural or engineering activities.
- **Automobile Liability Insurance**, covering owned, non-owned, hired vehicles and trailers using in connection with this project. This insurance shall provide bodily injury and property damages limits of not less than \$1,000,000 combined single limit/aggregate.
- **Worker's Compensation Insurance** in accordance with statutory requirements and Employer's Liability Insurance with limits of not less than \$100,000 for each occurrence. In case any work is sublet under this Agreement, the Consultant shall require the subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the subcontractor's employees to be engaged in such work. This Agreement shall be void and of no effect unless the Consultant shall secure and keep in effect during the term of this Agreement the Consultant's compliance with the provisions of the Worker's Compensation laws of the State of North Carolina.

21. **Conflict of Interest**: No officer, employee or agent of the Town, and no sub-grantee or sub-recipient of any federal or state funds from the Town shall participate in the selection or in the award or administration of a contract supported by federal, state, or City funds if a conflict of interest, real or apparent, would be involved. Such a conflict of interest would arise when any of the following persons or entities has a financial or other interest in the firm selected for the award:

- The employee, officer, agent
- Any member of his immediate family
- His or her partner; or
- An organization which employs, or is about to employ, anyone listed in (1) through (2) above.

The grantee or sub-grantee's officers, employees or agents will **not** solicit or accept Gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to sub-agreements except as may be allowed in the Town's Gift Policy.

22. **Divestment from Companies Boycotting Israel Certification:** As of the date of this Agreement, the Contractor certifies that it is not listed on the Final Divestment and Do-Not Contract List of Restricted Companies Boycotting Israel created by the State Treasurer pursuant to N.C.G.S. 147-86.81 and that the Contractor will not utilize any subcontractor found on the State Treasurer's Final Divestment and Do-Not-Contract List. All individuals signing this Contract on behalf of the Contractor certify that they are authorized by the Contractor to make this certification.
23. **Federal Funding:** If the source of funds for this contract is federal funds, the following federal provisions apply pursuant to 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II (as applicable):
- Equal Employment Opportunity (41 C.F.R. Part 60); Davis-Bacon Act (40 U.S.C.3141-3148); Copeland "Anti-Kickback" Act (40 U.S.C. 3145); Contract Work Hours and Safety Standards Act(40 U.S.C. 3701-3708); Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387);Debarment and Suspension (Executive Orders 12549 and 12689); Byrd Anti-Lobbying Amendment (31 U.S.C. 1352); Procurement of Recovered Materials (2C.F.R. § 200.322); and Record Retention Requirements (2 CFR § 200.324).*
24. **Uniform Guidance procurement policy:** Contracts funded with federal grant or loan funds must be procured in a manner that conforms with all applicable Federal laws, policies, and standards, including those under the Uniform Guidance (2 C.F.R. Part 200).

STATE OF NORTH CAROLINA
COUNTY OF HAYWOOD

CONTRACT NUMBER _____

this AGREEMENT is entered into this day of, _____ 20____ by and between The Town of Waynesville, (hereinafter referred to as the "Town"), and _____ (hereinafter Referred to as the "Contractor").

W I T N E S S E T H

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows:

1. Scope of Work

The work described within this agreement is embodied in pages 19-23, and all provisions herein.

The Contractor shall furnish all labor, material, equipment, supervision, permits and insurance necessary to perform the work described herein, attached hereto and made a part hereof and shall perform such work in accordance with all drawings and/or the specifications as detailed herein. The Contractor shall inspect the project and be aware of the existing conditions and the extent of the work to be performed. The project will consist of construction of concrete sidewalks, concrete curb and gutter, drive aprons, adjustment/relocation of utilities, installation of traffic signal improvements, pavement markings, and grading. Project details are found in the General Provisions, Special Provisions, and Construction plans.

2. Contract Administration

Jeff Stines, Director of Public Services or the appointed representative shall administer the project, shall have authority to act on behalf of the Town and shall be the interpreter of the requirements of this Agreement and the specifications in General Provisions.

3. Time for Performance

Once the Town has determined the lowest, responsive, responsible bidder for the project, that successful bidder (hereafter, Contractor) will be given a Notice of Award. The Contractor will then have one (1) week, from the date of receiving the Notice of Award, to produce documentation confirming that all of the necessary materials have been ordered. A Notice to Proceed will be issued and the start time for the contract will begin, once the Contractor has received the materials ordered. The completion time for the project will be sixty (60) calendar days after receiving said Notice to Proceed and the materials ordered. The Town shall determine when the work has been completed by its formal and written acceptance of the work. The Contractor shall complete the work within the time specified, such time being of the essence in this Agreement and a material consideration hereof, but the Town retains the right to extend said time period.

Contract Time and Liquidated Damages

The estimated Notice of Award date for this project is February 14, 2022. The Notice to Proceed date will be based on the receipt of ordered materials. The contractor may begin work prior to this date upon approval of the Project Manager or his duly

authorized representative. If the Contractor begins work prior to the date of availability, the Town of Waynesville will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date.

No work will be permitted and no purchase order will be issued until all required bonds and prerequisite conditions and certifications have been satisfied.

The final completion date for this project will be **Sixty (60) Days after the Notice to Proceed.**

No extensions will be authorized except as authorized by Town of Waynesville Project Manager.

Time is an essential element of the contract. Delay in completing the work will result in damages due to public inconvenience, obstruction to traffic, interference with business and the increasing of engineering, inspection and administrative costs to the Department. It is therefore agreed that in view of the difficulty of making a precise determination of such damages, a sum of money in the amount stipulated in the contract will be charged against the Contractor for each calendar day, or portion thereof, that the work or any portion of the work as described in the contract, remains uncompleted after the expiration of the completion date, intermediate completion date, or intermediate completion time shown in the contract, not as a penalty but as liquidated damages.

Liquidated damages related to failure to meet the final completion date shall be Five Hundred Dollars (\$500.00) per calendar day.

4. Contract Sum

The Town shall pay to the Contractor a maximum amount of _____ payable upon completion of the project. Said total sum shall be subject to additions or deductions, if any, by written Change Orders to this Agreement signed by both parties. Acceptance of the work by the Project Manager/ Engineer or the authorized representative shall be noted on the contract documents. The Contractor is solely responsible for the price of any materials or equipment necessary to perform the work as set forth in the Contractor's bid proposal.

5. Amendments and Change Orders

This Agreement constitutes the entire agreement with attached Provisions between the Town and Contractor. This Agreement may be amended, supplemented or modified only by duly executed written instruments as an amendment to this Agreement or a written change order to the Contractor signed by the Town authorizing a change in the work, an adjustment in the contract sum or an adjustment in the time for performance.

6. Compliance with Laws

a. Contractor shall comply with all state, federal or local laws, or ordinances, codes, rules or regulations governing performance of this Agreement, including but not limited to, equal opportunity employment laws, O.S.H.A., minimum wage and hour regulation, North Carolina State Building Code regulations and immigration laws.

b. The contractor shall provide a drug-free workplace, as set forth in the invitation to bid, during the performance of this contract.

7. General Conditions

- a. This Agreement embodies all the representations, rights, duties, and obligations of the parties. Any prior oral or written agreement not embodied herein shall not be binding upon or endure to the benefit of any of the parties.
- b. The Contractor shall be properly licensed and skilled in their respective trade, and shall have been established in the construction field for a minimum of three years and must regularly engage in construction contracting in North Carolina.
- c. The work shall be stated so as to minimize inconvenience to the Town. Access as required by the Town to the facility shall be maintained by the Contractor throughout construction unless prior written approval is otherwise obtained in advance. The Contractor shall provide signs, barricades, and warning devices to ensure safe passage for both vehicular and pedestrian traffic at all times.
- d. The Contractor shall make necessary provisions to protect the surrounding area and shall be responsible for full restoration of any damages and/or costs of restoration to the construction site. All damages on the site, incidental to the installation of the work described in the attached Exhibit shall be repaired or replaced by the Contractor.
- e. The Contractor shall make necessary provisions to protect structures and property from any and all damage arising out of, relating to, or resulting from this work. Also, all debris, rubbish or waste materials shall be removed from the site by the Contractor and at the Contractor's expense.
- f. All sales tax levied on materials entering into this project shall be paid by the Contractor, including the Optional Sales and Use Tax.
- g. Contractors shall obtain any applicable license and/or permits prior to the start of construction and shall notify the necessary inspectors at the proper times during construction.
- h. Contractor shall obtain a written certificate of compliance upon completion of the permitted work and before final payment is made.
- i. The Contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by their employees at work; and at the completion of the work, he shall remove all their rubbish from and about the building and all their tools, scaffolding and surplus materials and shall leave the premises "broom clean" or its equivalent. It is further agreed that all materials and equipment that have been removed and replaced as a part of the work hereunder shall belong to the Contractor, unless otherwise specified in the work described in General Provisions.
- j. The Contractor shall, upon completion of the work, and before final payment is authorized by the Town or its agent, furnish the Town with an affidavit certifying that all charges for materials and any other expenses incurred by the Contractor pertaining to the execution of this Agreement have been paid in full, to the end that no liens of any kind or character (save and

except those between the parties hereto) may be affixed against the above described property. Final payment on the Agreement amount will be made only after final inspection and acceptance of all work to be performed by the Contractor, and the Contractor submits satisfactory releases of liens or claims for liens by the Contractor, subcontractor, laborers, and materials suppliers.

k. The Contractor shall make every effort to ensure that all documents pertaining to supplies, materials and the like are delivered to the Town prior to the relevant pay application submittal. Missing, incomplete, or otherwise insufficient documentation will delay processing of that pay application until the missing documents are provided, to the satisfaction of the Town. These documents include but are not limited to weight tickets, receipts for materials, etc.

8. Warranties and Guarantees

All work is to be warranted and guaranteed against materials, equipment, and workmanship for a period of one (1) year. The warranty period begins once the contractor has received final payment for the project. Any and all manufacturers' warranties shall be assigned to the Town.

9. Termination

The Town may terminate this Agreement upon ten (10) days written notice to the Contractor. In that event, the Contractor shall be paid for any completed work done which is satisfactory to the Town. In the event the Contractor should terminate this Agreement, the expenses which the Town incurs as a result of securing a new Contractor shall be deducted from any payments owed to the Contractor by the Town. The Contractor will be required to provide to the Town, upon termination, an executed release of lien before final payment is processed.

10. DBE Policy

This project will follow the requirements of the U.S. Department of Transportation's Disadvantaged Business Enterprise Policy as described in SP1G63 (contained within this contract).

11. Right to Audit

Contractor shall maintain all fiscal records relating to this Agreement in accordance with generally accepted accounting principles, and shall maintain any other records pertinent to this Agreement in a manner so as to clearly document Contractor's performance. The Town shall have a right to access the fiscal and other records of Contractor that are pertinent to this Agreement to perform examinations and audits. Contractor shall retain and keep accessible all the fiscal and other records for a minimum of three (3) years following final payment and termination of this Agreement, or until the conclusion of any audit or controversy related to this Agreement, whichever is later.

Notwithstanding any other provisions of this Agreement, if the Town does not receive said funding for this Agreement from the Town Council for any fiscal year applicable to this Agreement, then the

Town shall have the right to terminate this Agreement without penalty by giving not less than thirty (30) days' written notice documenting the lack of funding.

12. Non-Appropriation of Funds

Notwithstanding any other provisions of this Agreement, if the Town does not receive said funding for this Agreement from the Town Council for any fiscal year applicable to this Agreement, then the Town shall have the right to terminate this Agreement without penalty by giving not less than thirty (30) days' written notice documenting the lack of funding.

13. Performance and Payment Bond:

At the time the Contractor delivers the executed contract to the Town, the Contractor shall furnish:

A performance bond in the amount of one hundred percent (100%) of the construction contract amount, conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions of the contract. Such bond shall be solely for the protection of the Town.

A payment bond in the amount of one hundred percent (100%) of the construction contract amount, conditioned upon the prompt payment for all labor or materials for which a contractor or subcontractor is liable. The payment bond shall be solely for the protection of the persons furnishing materials or performing labor for which a contractor, subcontractor, or construction manager at risk is liable.

The performance bond and the payment bond shall be executed by one or more surety companies legally authorized to do business in the State of North Carolina and shall become effective upon the awarding of the construction contract. Bonds shall be executed in the form bound with these documents.

Contract Signature Page

Project # 23001

IN WITNESS WHEREOF, each party has caused this agreement to be executed by its duly authorized official as of the day and year written above.

The Department Director by Written Approval conveys that this contract has been reviewed and presented for approval by the Town of Waynesville.

_____**DATE**_____
Department Director

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

_____**DATE**_____
Chief Financial Officer

Town Manager's signature, if required

Attest to: TOWN OF WAYNESVILLE

_____**BY:**_____**DATE**_____
Town Clerk Town Manager
(Corporate Seal)

STATE OF NORTH CAROLINA
COUNTY OF HAYWOOD

I, Notary Public of the County and State aforesaid, certify that _____, personally came before me this day and acknowledged that he/she is the Town Clerk of the Town of Waynesville, a municipal corporation, and that by authority duly given and as the act of the corporation the foregoing instrument was signed in its name by its Town Manager and attested by herself as its Town Clerk.

Witness my hand and notarial seal this _____ day of _____, 20____

Notary Public

Printed Name: _____

My Commission Expires: _____

Project No. 23001

County : **Haywood**

ACCEPTED BY
THE TOWN OF WAYNESVILLE

Town Manager

Date

Execution of Contract and Bonds
Approved as to Form:

Town Attorney

Signature Sheet (Bid - Acceptance by Department)

NOTICE OF AWARD

To: _____

PROJECT: Pigeon Street Water Replacement Project

The Owner has considered the Bid Proposal submitted by you for the above-described Project in response to its receipt of Bids on _____, 20__, and the Instructions to Bidders.

You are hereby notified that your Bid Proposal has been accepted in the amount of
\$ _____

You are required by the Instructions to Bidders to execute the Contract and furnish the required Performance Bond, Payment Bond and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Contract and to furnish said Bonds within ten (10) days from the date of this Notice, said Owner will be notified to consider all your rights arising out of the Owner's acceptance of your Bid Proposal as abandoned. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this _____ day of _____, 20 _____.

TOWN OF WAYNESVILLE

By: _____

NOTICE TO PROCEED

TO: _____ DATE: _____ 20__

PROJECT: Pigeon Street Water Replacement Project

You are hereby notified to commence WORK in accordance with the Contract dated _____ 20__, on or before _____, 20__, and you are to complete the WORK within 60 consecutive calendar days thereafter. The date of completion of all Work is therefore _____, 20__.

TOWN OF WAYNESVILLE

By: _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

this the _____ day of _____ 20__

Contractor

By: _____

Title: _____

GENERAL PROVISIONS

The contract consists of the construction of water and sewer lines and their related appurtenances. All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project General Provisions, the North Carolina Department of Transportation Standard Specifications for Roads and Structures 2018 (Standard Specifications), the North Carolina Department of Transportation Roadway Standards Drawings, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD). If conflict arises between provisions of this Contract and other referenced provisions, this Contract controls.

The Contractor shall keep themselves fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the Standard Specifications.

The 2018 Standard Specifications for Roads and Structures of the North Carolina Department of Transportation hereinafter referred to as the "Standard Specifications" shall apply on all portions of this project unless otherwise specified herein. Where special provisions refer to particular items, materials, procedures or etc., the appropriate section of the Standard Specifications shall still apply. The absence of a description or specification for any item shall automatically refer to the appropriate section of the Standard Specifications.

ALTERATIONS TO THE 2018 STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Division 1 of the Standard Specifications will apply to Contracts with the Town of Waynesville with the below definitions of terms unless specifically referenced herein. Items addressed in Division 1 of the Standard Specifications shall be replaced by conditions set forth in the appropriate General Provisions and Instructions to Bidders herein.

Definition of Terms: The Department, Department of Transportation, or Division of Highways shall be interpreted as The Town of Waynesville or The Town. The Standard Specifications definition of Engineer shall for the purposes of this contract shall be interpreted as Project/Program Manager. Partial Estimates, monthly estimates and Final Estimates shall be interpreted as Pay Application. Supplemental Agreements shall be replaced with Change Order and covered by the appropriate section herein.

PRE-CONSTRUCTION CONFERENCE

The Project Manager and the Contractor will establish a mutually agreeable date and time on which the pre-construction conference will be held. The Contractor's project superintendent and other individuals representing the Contractor who are knowledgeable of the Contractor's proposed progress schedule or who will be in charge of major items of the work shall attend the pre-construction conference.

CHANGE ORDERS

Whenever it is necessary to make amendments to the contract, as determined by the Project Manager and an authorized representative of the Contractor, to satisfactorily complete the proposed construction or to provide authorized time extensions, the Town Manager shall have the authority to enter into a Change Order covering such amendments.

Change Orders shall become a part of the contract when executed by the Town Manager and an authorized representative of the Contractor. The Contractor shall file with the Project Manager a copy of the name or names of representatives who are authorized to sign Change Orders.

CLAIMS FOR ADDITIONAL COMPENSATION

Any claims for additional compensation shall be submitted to the Project Manager with detailed justification within **thirty (30) days** of the time of the event. The failure of the Contractor to submit the claim(s) within **thirty days** shall be a bar to recovery. Failure on the part of the Contractor to furnish bonds or certifications or to satisfy preliminary requirements necessary to issue the contract will not constitute grounds for extension of the contract time. The processing of any claim for additional compensation will be in the form of change orders as outlined above.

In any case that the Contractor and the Town cannot reach mutually agreeable terms for a Change Order, the Contractor shall have the right to file a Verified Claim. In such cases 107-24 of the Standard Specifications will apply with the alterations as follows; replace Department with Town and replace State Highway Administrator with Capital Projects Director.

ALTERATIONS OF PLANS OR DETAILS OF CONSTRUCTION

The Project Manager reserves the right to make, at any time during the progress of the work, such alterations in the plans or in the details of construction as may be found necessary or desirable. Under no circumstances will an alteration involve work beyond the termini of the proposed construction except as may be necessary to satisfactorily complete the project. Such alterations shall not invalidate the contract nor release the Surety, and the Contractor agrees to perform the work as altered at his contract unit or lump sum prices the same as if it had been a part of the original contract except as otherwise herein provided. An adjustment in the affected contract unit or lump sum prices due to alterations in the plans or details of construction that materially change the character of the work and the cost of performing the work will be made by the Project Manager only as provided in this article. If the Project Manager makes an alteration in the plans or details of construction, which he determines will materially change the character of the work and the cost of performing the work, an adjustment will be made and the contract modified in writing accordingly. The Contractor will be paid for performing the affected work in accordance with herein.

When the Contractor is required to perform work that is, in his opinion, an alteration in the plans or details of construction that materially changes the character of the work and the cost of performing the work, he shall notify the Project Manager in writing before performing such work. The Project Manager will investigate and, based upon his determination, one of the following will occur:

- If the Project Manager determines that the affected work is an alteration of the plans or details of construction that materially changes the character of the work and the cost of performing the work, the Contractor will be notified in writing by the Project Manager and compensation will be made in accordance with this contract.
- If the Project Manager determines that the work is not such an alteration in the plans or details of construction that materially changes the character of the work and the cost of performing the work, he will notify the Contractor in writing of his determination. If the Contractor, upon receipt of the Project Manager's written determination, still intends to file a claim for additional compensation by reason of such alteration, he shall notify the Project Manager in writing of such intent before beginning any of the alleged altered work, and the provisions herein shall be strictly adhered to.
- No contract adjustment will be allowed under this article for any effects caused on unaltered work.
- If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted in writing, with sufficient documentation, to the Project Manager.

COMPENSATION AND RECORD KEEPING

- When the Project Manager and Contractor agree that compensation is for additional work payment will be made in accordance with one of the following:
- When the Project Manager and the Contractor agree to the prices to be paid, the agreement will be set forth in a change order. Commencement of this work will be on a case by case basis in a mutually agreeable time by the Project Manager and the Contractor.

Claim for Additional Compensation

- The Contractor's notice of intent to file a claim for additional compensation shall be given to the Project Manager in writing. The Contractor shall keep accurate and detailed cost records. The Contractor's cost records and supporting data shall be complete in every respect and in such form that they may be checked by the Project Manager. The Contractor's cost records and supporting data shall clearly indicate the cost of performing the work in dispute and shall separate the cost of any work for which payment has been made. The Contractor's cost records shall be kept up to date and the Project Manager shall be given the opportunity to review the methods by which the records are being maintained. The cost records shall be prepared weekly for each occurrence for which notice of intent to file a claim has been given and submitted to the Project Manager within 7 calendar days after the end of a given weekly period.
- If the Contractor chooses to pursue the claim after the disputed work is complete, he shall submit a written claim to the Project Manager for an adjustment in compensation based upon his cost records within 120 calendar days after completion of the disputed work. This claim shall summarize previously submitted cost records and clearly describe the Contractor's justification for an adjustment in compensation under the terms of the contract. The claim shall be accompanied by a certification from an officer of the company or person authorized to execute change orders, stating that the claim is truthful and accurate.

- Upon receipt, the Project Manager will review the Contractor's request and supporting documentation and notify the Contractor if the request is complete with all necessary supporting documentation and cost records.
- If the Project Manager determines that the work covered by the claim is in fact compensable under the terms of the contract, an adjustment in compensation will be made based upon the documentation presented and his engineering judgment. The adjustment will be made on the next pay application and reflected on the final pay totals.
- If the Project Manager determines that the work covered by the claim is not compensable under the terms of the contract, the claim will be denied. The Project Manager will notify the Contractor of his determination whether or not an adjustment of the contract is warranted within 120 calendar days after receipt of the complete request, all necessary supporting justification and cost records.
- The failure on the part of the Contractor to perform any of the following shall be a bar to recovery:
 - The failure to notify the Project Manager in writing before performing the work in dispute that he intends to file a claim.
 - The failure of the Contractor to keep records in accordance herein.
 - The failure of the Contractor to give the Project Manager the opportunity to monitor the methods by which records are being maintained.
 - The failure of the Contractor to submit additional documentation requested by the Project Manager, provided documentation requested is available within the Contractor's records.
 - The failure of the Contractor to submit cost records weekly.
 - The failure of the Contractor to submit the written request for an adjustment in compensation with cost records and supporting information within 120 calendar days of completion of the affected work.

Notification of Determination

- The failure on the part of the Project Manager to notify the Contractor of his determination on the requested adjustment in compensation within 120 calendar days after receipt of the complete request, all supporting justification and cost records will result in payment.
- If the Contractor fails to receive such adjustment in compensation for the disputed work as he claims to be entitled to under the terms of the contract, the Contractor may re-submit the written request for an adjustment in compensation to the Project Manager as a part of the final claim after the project is complete. The Contractor will only be allowed to submit the request for an adjustment in compensation one time during the construction of the project.

DAY AND TIME RESTRICTIONS

Construction will be during daylight hours only (7 A.M. to 7 P.M.). Work days are Monday through Friday. If the contractor wishes to work on Saturday or Sunday, prior approval shall be obtained from the Project Manager. Weekend work shall not include any work that will generate noise, excessive dust, or other work effects that will disturb the public, and inspection will not be available.

HOLIDAY RESTRICTIONS

The Town will observe the following days as holidays, and will not provide any construction inspection or staff function on these days:

New Year's Day
Martin Luther King, Jr. Day
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving (two days)
Christmas (three days)

The Contractor may perform incidental items of construction which require minimum inspection; however, no major operations which, in the opinion of the Project Manager, require daily inspections may be performed on these days.

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Project Manager five days in advance of beginning work on this project. The Contractor shall give the Project Manager sufficient notice of all operations for any sampling, inspection, or acceptance testing required.

NO MAJOR CONTRACT ITEMS:

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

OVERRUNS AND UNDERRUNS OF CONTRACT QUANTITIES

General

- The Project Manager reserves the right to make at any time during the work such changes in quantities as are necessary to satisfactorily complete the project. Such changes in quantities shall not invalidate the contract, nor release the Surety, and the Contractor agrees to perform the work as changed. The Project Manager will notify the Contractor in writing of the significant changes in the quantities.
- The Contractor will be entitled to an adjustment in contract unit prices for increased costs incurred over the original bid prices in performing contract items that overrun or underrun the estimated contract quantities only as provided for in this article.

Overruns - Increase in Unit Price

- If the actual quantity of any major contract item overruns the original bid quantity by more than 15% of such original bid quantity, or the actual quantity of any minor contract item overruns the original bid quantity by more than 100% of such original bid quantity, an increase to the contract unit price, excluding loss of anticipated profits, may be authorized by the Project Manager. Revised contract unit prices pertaining to overruns will be applicable only to that portion of the overrun that is in excess of the percentages stated above.

Whenever it is anticipated that an overrun in a major or minor contract item in excess of that described above will occur, the Contractor may make written request for a revision to contract unit prices. It shall be incumbent upon the Contractor to justify the request for a revision to contract unit prices. After reviewing the Contractor's request, the Project Manager will notify the Contractor of his determination as follows:

- If the Project Manager determines a revision to the contract unit price is justified and the Project Manager and the Contractor are in agreement as to the revision to be made to the contract unit price, a change order covering the revised contract unit price will be consummated before performing work on that quantity in excess of the percentage set forth above.
- If the Project Manager determines a revision to the contract unit price is justified and the Project Manager and the Contractor are not in agreement as to the revision to be made to the contract unit price, the Project Manager will issue a force account notice before performing work on that quantity in excess of the percentage set forth above.
- If the Project Manager determines a revision to the contract unit price is not justified he will notify the Contractor of his determination in writing and payments will be made for the work at the contract unit price. Upon completion of the work, the Contractor may request an adjustment to the contract unit price as provided below.

Whenever an overrun in a contract item in excess of the percentages previously set forth has occurred and a change order establishing an increase to the contract unit price has not been executed or the Project Manager has not issued a force account notice, the Contractor may make written request for a revision in the original contract unit price. Any adjustment to the contract unit prices due to overruns will be made by the Project Manager based upon his evaluation and comparison of the Contractor's documented cost records of the contract unit prices for those contract items. The Contractor's documented cost records for the work performed on those quantities beyond the percentages stated above shall be kept. The Contractor's cost records and supporting data shall be complete in every respect and in such form that they can be checked. It shall be incumbent upon the Contractor to satisfy the Project Manager of the validity of any request presented by the Contractor for an adjustment to the contract unit price. After reviewing the Contractor's request, the Project Manager can make such adjustment as he deems warranted based upon his engineering judgment and the payment to the Contractor will be made accordingly.

Underruns - Increase in Unit Price

- If the actual quantity of any major contract item underruns the original bid quantity by more than 15% of such original bid quantity, an increase to the contract unit price, excluding loss of anticipated profit, may be authorized by the Engineer. Revised contract unit prices pertaining to underruns of major contract items will be applicable to the entire quantity of the contract item that underruns. No revision will be made to the contract unit price for any minor contract item that underruns the original bid quantities.

Whenever it is anticipated that an underrun in a major contract item in excess of that described above will occur, the Contractor may make written request for a revision to the contract unit price. If the Project Manager and the Contractor are in agreement as to the revision to be made to the contract unit price, then a change order covering the revised unit price will be entered into. If the

Project Manager and the Contractor are not in agreement, then after performance of the work, a revised unit price may be determined as described below.

Whenever an underrun in a major contract item in excess of the percentage previously set forth has occurred and a change order establishing an increase to the contract unit price has not been executed, the Contractor may make written request for a revision to the original contract unit price. The Contractor shall submit sufficient documentation and analysis of his costs to satisfy the Project Manager of any non-recovered costs included in the item that underran. Any adjustment to the contract unit prices due to underruns will be made by the Project Manager based upon his evaluation of the Contractor's documentation and an analysis showing how changes in contract item cost are attributable to the underrun. An analysis of costs shall be supplemented with the Contractor's documented cost records for work performed on the total quantity of the affected item where the Contractor's request for compensation includes compensation for costs other than recovered fixed costs. The Contractor's cost records shall be complete in every respect and in such form that the Project Manager can check them. It shall be incumbent upon the Contractor to satisfy the Project Manager of the validity of any request presented by the Contractor for adjustment to the contract unit price. After reviewing the Contractor's request, the Project Manager may make such adjustment as he deems warranted, based upon his engineering judgment and payment will be made on the final estimate. The total payment, including any additional compensation granted by the Project Manager due to an underrun in a major contract item, shall not exceed the payment that would have been made for the performance of 100% of the original contract quantity at the original contract unit price.

- Where non-stock fabricated materials are involved in minor items that underrun or in major items that underrun by less than 15%, and where fabrication of such material has begun or been completed before the Contractor is advised of the reduction in the quantity of the pay item, the Department will reimburse the Contractor for the verified fabrication cost, including the cost of material less salvage value, or it may instruct the Contractor to have the fabricated material delivered to a site designated by the Project Manager and make payment for such material in accordance with the Standard Specifications.

Overruns and Underruns - Reduction In Unit Price

- Whenever it is anticipated that an overrun or underrun in a major contract item in excess of 15% or an overrun in a minor contract item in excess of 100% will occur, the Project Manager may make written request for a reduction to the contract unit price. If the Project Manager and the Contractor are in agreement as to the decrease to be made to the contract unit price, a change order covering the revised unit price will be consummated before beginning work on that quantity in excess of the allowable percentages.

ELIMINATED CONTRACT ITEMS

The Project Manager may eliminate any item from the contract, and such action will in no way invalidate the contract. In the event the item of work involves prefabricated materials that are not considered to be stock items and fabrication of such material is begun or completed before the Contractor is advised of the elimination of the contract item, the Department may reimburse the Contractor for the verified fabrication cost including the cost of materials less salvage value or

may instruct the Contractor to have the fabricated material delivered to a site designated by the Project Manager and make payment for such material.

If the Contractor has partially completed a contract item before notification of the elimination of such item, the Department will reimburse the Contractor for the verified actual cost of the partially completed work not to exceed the payment that would have been made at the contract unit or lump sum price for the completed work.

No payment will be made for loss of anticipated profits, and no other allowance will be made for eliminated items except as listed above.

SUBSURFACE INFORMATION

There is no subsurface information available on this project. The Contractor shall make their own investigation of subsurface conditions.

AUTHORITY OF THE PROJECT MANAGER

The Project Manager for this project shall be the Project Manager of the Public Services Department of the Town of Waynesville, acting directly or through their duly authorized representatives. The Project Manager will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. Their decision shall be final, he/she shall have executive authority to enforce, and make effective such decisions and orders that the Contractor fails to carry out promptly.

AVAILABILITY OF FUNDS - CONTRACT TERMINATION

In the event of termination, the Contractor shall be given written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the Contractor shall be paid for work already performed in accordance with the contract specifications.

BANKRUPTCY

The Town of Waynesville, at its option, may terminate the contract upon the filing by the Contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

CONSTRUCTION STAKES LINES AND GRADES

Unless otherwise required in the contract, the Contractor will be responsible for all construction layout and construction staking.

COOPERATION WITH TOWN FORCES AND OTHER CONTRACTORS

The Contractor must cooperate with Town forces and other contractors working within the limits of this project, as directed by the Project Manager.

DEFAULT OF CONTRACT

The Town of Waynesville shall have the right to declare a default of the contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the *Current North Carolina Department of Transportation Standard Specifications for Roads and Structures*. Replace Department with Town.

DEBARMENT STATEMENT

The Contractor certifies and understands that by his/her signature on the Bid Form that he/she and the contracting firm he/she represents has not been banned, debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

DRIVEWAYS AND PRIVATE PROPERTY

The Contractor shall maintain access to driveways and stairways for all residents and property owners throughout the life of the project. The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract.

INSPECTION

All work shall be subject to inspection by the Project Manager at any time. Routinely, the Project Manager will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Project Manager informed of their proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Project Manager. **Pre-pour inspection by the Project Manager or Inspector shall be required before all concrete pours.**

INTERPRETATION OF QUANTITIES IN PROPOSAL FORM

Payment to the Contractor will be made only for the actual quantities of the various items that are completed and accepted by the Inspector in accordance with the terms of the contract.

LABOR AND MATERIALS

All labor and/or materials required to properly complete this project shall be considered incidental to this Contract unless stated as a bid item.

LITTERING AND SITE CLEAN UP

Littering will not be tolerated in any form or fashion. The Contractor shall clean the site of excess excavation, waste packing materials, wire, and all other debris which results from required work. At the end of each workday, the site shall be clean and clear. The Contractor shall be responsible for hauling and disposing of all waste materials, and shall dispose of all waste materials in accordance with the Standard Specifications.

MATERIALS AND TESTING FOR ASPHALT AND CONCRETE

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

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the Standard Specifications. Material which is not properly certified will not be accepted.

Delivery tickets for all asphalt material shall be furnished in accordance with Section 106-7 of the Standard Specifications and shall include the following information:

1. COA Contract Number
2. Date
3. Time issued
4. Type of Material
5. Gross weight
6. Tare Weight
7. Net weight of material
8. Plant Location
9. Truck Number
10. Contractor's name
11. Public weigh master's stamp or number
12. Public weigh master's signature or initials in ink
13. Division of Highways' Job mix formula number, if ticket is for asphalt plant mix.
14. Division of Highways' Asphalt Plant Certification Number, if ticket is for asphalt plant mix.

PROGRESS SCHEDULE

The Contractor shall prepare and submit for review and approval a schedule of proposed working progress. This schedule shall be submitted in a format that will allow accurate progress monitoring and is approved by the Project Manager.

The proposed progress schedule shall be submitted no later than 7 days before the date of the project preconstruction conference and shall be approved before any payments will be processed for the project.

When the Project Manager has extended the completion date or if the project overrun is anticipated to exceed 5%, the Contractor may submit a revised progress schedule to the Project Manager for review and approval. If plan revisions are anticipated to change the sequence of operations in such a manner as will affect the progress but not the completion date, then the Contractor may submit a revised progress schedule for review and approval but the completion date shall remain unchanged.

The proposed progress schedule shall contain the following items:

(A) A time scale diagram with major work activities and milestone dates clearly labeled.

(1) For purposes of composing the progress schedule, major work activities are defined as components comprising more than 5% of the total project cost or occupying more than 10% of total contract time and shall include, if applicable, the following:

- (a) Clearing and grubbing
- (b) Grading
- (c) Drainage
- (d) Soil stabilization
- (e) Aggregate base course
- (f) Pavement
- (g) Culverts
- (h) Bridges (including removal)
- (i) Signals, ITS and lighting
- (j) Overhead signs

(2) For purposes of composing the progress schedule, major milestones are derived from the project construction phasing and shall include, if applicable, the following:

- (a) Start of construction
- (b) Intermediate completion dates or times
- (c) Seasonal limitation/observation periods/moratoriums
- (d) Traffic shifts
- (e) Beginning and end of each traffic control phase or work area
- (f) Road openings
- (g) Completion date

(B) A written narrative that explains the sequence of work, the controlling operations, intermediate completion dates, milestones, project phasing, anticipated work schedule and estimated resources. In addition, explain how permit requirements, submittal tracking and coordination with subcontractors, utility companies and other entities will be performed.

PROMPT PAYMENT

Prompt Payment of Monies due Subcontractors, Second Tier Subcontractors and Material Suppliers and Release of Retainage if held. 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 Town.

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.

SAFETY VESTS

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel shall wear a reflective vest or outer garment conforming to the requirements of MUTCD at all times while on the project.

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

SAFETY AND ACCIDENT PROTECTION

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

SUPERVISION BY CONTRACTOR

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

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Project Manager or their authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Project Manager. The Contractor may, at their option, designate one employee to meet the requirements of both positions. However, when the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

TRAFFIC CONTROL AND WORK ZONE SAFETY

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, Standard Specifications for Roads and Structures 2018, and the current edition of the (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket which meets the color requirements of the (MUTCD).

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on their own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract. Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in sub article 108-7 of the Standard Specifications.

Maintain traffic in accordance with Divisions 10, 11 and 12 of the 2018 Standard Specifications and the following provisions:

Any deviations or alterations of the standards set forth in the above Divisions may be allowed but shall be in a mutually accepted manner between the Project Manager and the Contractor.

UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact 811 and all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or their representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times. The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public. The contractor is responsible for damages to any utilities damaged during construction in the construction work area.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:

(1-16-07) (Rev 04-01-19)

105-16, 225-2, 16

SP1 G180

General

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

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

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

Roles and Responsibilities

- (A) *Certified Erosion and Sediment Control/Stormwater Supervisor* - The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) *Manage Operations* - Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.

- (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (d) Implement the erosion and sediment control/stormwater site plans requested.
 - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
 - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
 - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
 - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
 - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
 - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
 - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.
- (2) Requirements set forth under the NPDES Permit - The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references *NCG010000, General Permit to Discharge Stormwater* under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
- (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
 - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days and within 24 hours after a rainfall event of greater than 1.0 inch that occurs within a 24 hour period. Additional monitoring may be required at the discretion of Division

- of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.
- (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.
 - (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
 - (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
 - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
 - (g) Provide secondary containment for bulk storage of liquid materials.
 - (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
 - (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
- (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
 - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
 - (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
 - (d) Conduct the inspections required by the NPDES permit.
 - (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
 - (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
 - (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
 - (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
 - (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
 - (j) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.

- (B) *Certified Foreman* - At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:

- (1) Foreman in charge of grading activities
- (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
- (3) Foreman in charge of utility activities

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

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

- (C) *Certified Installers* - Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:

- (1) Seeding and Mulching
- (2) Temporary Seeding
- (3) Temporary Mulching
- (4) Sodding
- (5) Silt fence or other perimeter erosion/sediment control device installations
- (6) Erosion control blanket installation
- (7) Hydraulic tackifier installation
- (8) Turbidity curtain installation
- (9) Rock ditch check/sediment dam installation
- (10) Ditch liner/matting installation
- (11) Inlet protection
- (12) Riprap placement
- (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
- (14) Pipe installations within jurisdictional areas

If a Level I *Certified Installer* is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

- (D) *Certified Designer* - Include the certification number of the Level III-B Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III-A Certified Designer on the design of the project erosion and sediment control/stormwater plan.

WORK ZONE SIGNING

(01-17-12)

RWZ-3

Description

Install and maintain signing in accordance with Divisions 11 and 12 of the 2018 Standard Specifications, the 2018 Roadway Standard Drawings and the following provisions:

All work zone signs may be portable.

Construction Methods

(A) General

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

(B) Advance Warning Work Zone Signs

Install advance warning work zone signs in accordance with Standard Drawing No. 1101.01, 1101.02 and 1110.01 of the 2018 Roadway Standard Drawings prior to beginning of work and remove upon final completion of the project. If there is a period of construction inactivity longer than two weeks, remove or cover advance warning work zone signs. Uncover advance warning work zone signs no more than 3 days before work resumes. All other operations could be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

(C) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the 2018 Roadway Standard Drawings.

(D) General Work Zone Warning Signs

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

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

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

Measurement and Payment

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

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

Markings: Two-Lane, Two-Way Facilities

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

Markings: All Facilities

The observation period for pavement markings on a specific map are subject to all requirements as specified in the Project Special Provision entitled "PAVEMENT MARKING LINES" contained elsewhere in the contract and begins with the satisfactory completion of all pavement markings required on that specific map.

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

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

Markers: All Facilities

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

ROADWAY STANDARD DRAWINGS FOR PAVEMENT MARKINGS AND MARKERS

Use the following in conjunction with the 2018 Standard Specifications:

Standard Pavement Markings

2018 Roadway Standard Drawings: 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1205.06, 1205.07, 1205.08, 1205.09, 1205.10, 1205.11, 1205.12, 1205.13

Raised Pavement Markers

2018 Roadway Standard Drawings: 1205.12, 1250.01, 1251.01

Snowplowable Pavement Markers

2018 Roadway Standard Drawings: 1250.01, 1253.01

Milled Rumble Strips

2018 Roadway Standard Drawings: 665.01

NCDOT STANDARD NOTES (Federal Aid)

- A. NCDOT Standard Specifications – The 2018 North Carolina Department of Transportation Standard Specifications for Roads and Structures, herein referred to as the ‘Standard Specifications’, and the 2018 Roadway Standard Drawings, shall apply to all portions of this project except as may be modified by this document.
- B. Bidder Prequalification - Bidders are required to be prequalified with NCDOT for their specific discipline. Contractors wishing to become prequalified may obtain information through the NCDOT website at:
<https://connect.ncdot.gov/business/Pages/default.aspx>
- C. Disadvantaged Business Enterprise References - Since this is a Federal-aid project with DBE participation, only those requirements and goals set forth by NCDOT Goal Setting Committee are applicable. References to any other requirements or to N.C. General Statute 143-128.2 shall not apply to this project. Refer to Special Provision SP1 G63.
- D. Award of Contract - The contract will be awarded to the lowest responsible, responsive bidder. Alternate items will not be considered in determining the low bidder and will only be evaluated after the award of the contract is made.
- E. Contractor Licensing – On all Federal-aid contracts, non-licensed contractors are permitted to submit bids, however they must be licensed prior to performing any work. Bidders are permitted 60 days, after bid opening, to become licensed by the North Carolina Licensing Board. If they fail to do so within 60 days, their bid will be considered non-responsive and will be rejected. If the successful bidder does not hold the proper license to perform any plumbing, heating, air conditioning, or electrical work in this contract, he will be required to sublet such work to a contractor properly licensed in accordance with *Article 2 of Chapter 87 of the General Statutes* (licensing of heating, plumbing, and air conditioning contractors) and *Article 4 of Chapter 87 of the General Statutes* (licensing of electrical contractors).
- F. Bonds - Please note that all Bid Bonds, Payment Bonds, and Performance Bonds required for this project, shall be those found on the NCDOT website. The bonds are located at:

Bid Bonds (M-5):

<https://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/04%20Bid%20Bonds.doc>

Payment Bonds (M-6):

<https://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/05%20Payment%20Bonds.doc>

Performance Bonds (M-7):

<https://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/06%20Performance%20Bonds.doc>

- G. Liability Insurance – In addition to any insurance requirements as may be required by the LGA, the Contractor is obligated to comply with Article 107-15 of the *Standard Specifications* including the dollar limits set forth.
- H. Buy America – This project shall be governed by the Buy America requirements, for the use of domestic steel and iron products, as outlined in the *Standard Specifications*.
- I. Proprietary Items - When a proprietary (brand name) product, whether material, equipment or procedure, are specified in the plans or specifications, they are used only to denote the style, type, character, and quality desired of the product. They do not restrict the bidder from proposing other brands, makes, or manufacturers, which are determined to be of equal quality. The approval, or disapproval of those products, will be made by the Engineer prior to allowing those product(s) or material(s) to be incorporated into the work.
- J. Retainage by LGAs – The LGA for this contract will not retain any amount or percentage from progress payments or final estimates due the contractor.

Retainage by Contractors – Contractors are NOT permitted to retain any amount or percentage from monies due their subcontractors or material suppliers on federally funded projects except as permitted by Subarticle 109-4(B) of the *Standard Specifications*.
- K. Traffic Control –The requirements of the *Manual on Uniform Traffic Control Devices (MUTCD)* – FHWA, as amended by the *NCDOT Supplement to MUTCD*, shall apply. Traffic Control, both vehicular and pedestrian, shall be maintained throughout the project as required by these specifications as modified by the project plans or special provisions.

ALLOWABLE CHANGES TO THE NCDOT 2018 STANDARD SPECIFICATIONS:

1. *Article 102-1 Invitation to Bid, page 1-9*, delete this section in its entirety.
2. *Subarticle 102-8(B) Electronic Bids, page 1-15*, delete this section in its entirety.
3. *Subarticle 102-9(C)2 Electronic Bids, page 1-17*, delete this section in its entirety.
4. *Article 102-10 Bid Bond or Bid Deposit, page 1-17*, line 38, “60” days shall be modified to “_____” days.
5. *Subarticle 102-10 Bid Bond or Bid Deposit, page 1-18*, delete lines 16-27.
6. *Subarticle 102-11 Delivery of Bids, pages 1-18-19*, delete lines 31-32.
7. *Subarticle 102-12(A) Paper Bid, page 1-18*, line 37, the reference to “Contract Officer” shall be changed to “_____”.
8. *Subarticle 102-12(B) Electronic Bid, pages 1-18 and 19*, delete this section in its entirety.
9. *Subarticle 102-13(B)2 Electronic Bids, page 1-19*, delete this section in its entirety.
10. *Subarticle 103-2(B) Electronic Bids, page 1-22*, delete this section in its entirety.
11. *Subarticle 103-3(A) Criteria for Withdrawal of Bid, page 1-22*, modify the reference “G.S.136-28.1” to “G.S.143-129.1”. On page 1-23, in that same subarticle under (5), line 11, modify “State Contract Officer” to “_____”.
12. *Article 103-7 Contract Bonds, page 1-30*, line 5, modify “14” calendar days to “10” calendar days per G.S.143-129.
13. *Article 103-9, Failure to Furnish Contract Bonds, page 1-30*, line 15, modify “14” calendar days to “10” calendar days per G.S.143-129.
14. *Article 105-9 Construction Stakes, Lines and Grades, page 1-48*, delete this section in its entirety and substitute the following: “The Municipality will not set the stakes, lines or grades for this project.”
15. *Article 108-2, Progress Schedule, page 1-68*, add the following requirement as subarticle (D) on page 1-69: “The municipality may add additional requirements as noted in the bid proposal”.
16. *Article 108-3, Preconstruction Conference, page 1-69, line 20*, change “Division Engineer” to “_____”.
17. *Article 108-4, Construction Conferences, page 1-69, line 28*, change “Resident Engineer” to “_____”.
18. *Article 109-8, Fuel Price Adjustments, page 1-87*, delete this article in its entirety and substitute the following: “Fuel Price Adjustments will not apply to this project.”
19. *Article-620-4, Measurement and Payment, page 6-33*, delete lines 38 through line 20 on page 6-34 and substitute the following: “Asphalt Price Adjustments will not apply to this project.”

Project Special Provisions

Line 1 Mobilization

See NCDOT Division 8, Section 800

This line item should include all costs for mobilization including, but not limited to: bonds, permits, fees, insurance, and transportation of equipment and materials to the work site. Payment will be Lump Sum.

Line 2 Traffic Control

See NCDOT Division 11, All Sections

Contractor will use traffic control devices and personnel to insure safe passage of vehicles and pedestrians through/around the work site. See the Transportation Management Plan included in the project plans. Payment will be Lump Sum.

Line 3 Erosion Control

See NCDOT Division 16, All Sections

Contractor will install erosion control devices necessary to prevent sediment from entering the street's drainage system and/or leaving the work site. All labor, equipment and materials are incidental to this pay item. Payment will be Lump Sum.

Line 4 Asphalt Surface Course S9.5C

See NCDOT Division 6, Section 654

This line item includes but is not limited to repairing of existing pavement with asphalt plant mix. Perform the work by cutting the existing pavement to a neat vertical joint and uniform line; remove and dispose of pavement, base, and subgrade material as approved or directed; coat the area to be repaired with a tack coat; furnish, place, and compact asphalt plant mix; furnish asphalt binder for the asphalt plant mix; furnish scales; and replace the removed material with asphalt plant mix. Furnish stone base as needed. Make the repairs in accordance with the plans, or as approved or directed. All labor, equipment and materials are incidental to this pay item. Payment will be by the Ton of asphalt installed.

Line 5 Asphalt Intermediate Course I19.0C

See NCDOT Division 6, Section 654

This line item includes but is not limited to repairing of existing pavement with asphalt plant mix. Perform the work by cutting the existing pavement to a neat vertical joint and uniform line; remove and dispose of pavement, base, and subgrade material as approved or directed; coat the area to be repaired with a tack coat; furnish, place, and compact asphalt plant mix; furnish asphalt binder for the asphalt plant mix; furnish scales; and replace the removed material with asphalt plant mix.

Furnish stone base as needed. Make the repairs in accordance with the plans, or as approved or directed. All labor, equipment and materials are incidental to this pay item. Payment will be by the Ton of asphalt installed.

Line 6 ABC Stone

See NCDOT Division 5, Section 520

This line item includes but is not limited to, constructing a base composed of an approved aggregate material hauled to the road, placed on the road, mixed, compacted, and shaped in accordance with the lines, grades, depths and typical sections shown in the plans; applying a sand seal in accordance with Article 520-5; and maintaining the base. Make the repairs in accordance with the plans, or as approved or directed. All labor, equipment and materials are incidental to this pay item. Payment will be by the Ton of ABC stone installed.

Line 7 6" DIP, PC 350 Water Line

See NCDOT Division 15, Section 1510 and plan details & specifications

Install water line according to NCDOT 15/1510. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of pipe installed.

Line 8 6" Valve

See NCDOT Division 15, Section 1515 and plan details & specifications

Install 6" valve according to NCDOT 15/1515. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by Each 6" valve installed.

Line 9 6" Tapping Sleeve and Valve

See NCDOT Division 15, Section 1515 and plan details & specifications

Install 6" tapping sleeve and valve according to NCDOT 15/1515. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by Each 6" tapping sleeve and valve installed.

Line 10 Reconnect Water Meter

See NCDOT Division 15, Section 1515 and plan details & specifications

Reconnect water meters according to NCDOT 15/1515. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by Each water meter reconnected.

Line 11 Fire Hydrant

See NCDOT Division 15, Section 1515 and plan details & specifications

Install fire hydrant according to NCDOT 15/1515. All work must meet AWWA standards. All

labor, equipment and materials are incidental to this pay item. Payment will be by Each fire hydrant installed.

Line 12 Fire Hydrant Leg

See NCDOT Division 15, Section 1515 and plan details & specifications

Install fire hydrant leg according to NCDOT 15/1515. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of fire hydrant leg installed.

Line 13 Water Service Line

See NCDOT Division 15, Section 1515 and plan details & specifications

Install 1" water service line according to NCDOT 15/1515. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of 1" water service line installed.

Line 14 Ductile Iron Water Pipe Fittings

See NCDOT Division 15, Section 1515 and plan details & specifications

Install ductile iron water pipe fittings according to NCDOT 15/1515. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Pound of ductile iron water pipe fittings installed.

Line 15 Abandon 6" Water Line

See NCDOT Division 15, Section 1530 and plan details & specifications

Abandon 6" water line according to NCDOT 15/1530. All work must meet NCDOT standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of water line abandoned.

Line 16 Remove Fire Hydrant

See NCDOT Division 15, Section 1530 and plan details & specifications

Remove fire hydrant according to NCDOT 15/1530. All work must meet NCDOT standards. All labor, equipment and materials are incidental to this pay item. Payment will be by Each fire hydrant removed.

Line 17 4' Diameter Utility Manhole

See NCDOT Division 15, Section 1525 and plan details & specifications

Install 4' diameter utility manhole according to NCDOT 15/1525. All work must meet NCDOT standards and NCDEQ Gravity Sewer Minimum Design Criteria. All labor, equipment and

materials are incidental to this pay item. Payment will be by Each 4' diameter utility manhole installed.

Line 18 Utility Manhole Wall 4' Diameter

See NCDOT Division 15, Section 1525 and plan details & specifications

Construct utility manhole wall 4' diameter according to NCDOT 15/1525. All work must meet NCDOT standards and NCDEQ Gravity Sewer Minimum Design Criteria. All labor, equipment and materials are incidental to this pay item. Payment will be by Vertical Linear Foot of utility manhole wall 4' diameter installed.

Line 19 Remove Utility Manhole

See NCDOT Division 15, Section 1530 and plan details & specifications

Remove utility manhole according to NCDOT 15/1530. All work must meet NCDOT standards. All labor, equipment and materials are incidental to this pay item. Payment will be by Each utility manhole removed.

Line 20 Sewer Service Line

See NCDOT Division 15, Section 1520 and plan details & specifications

Install sewer service line according to NCDOT 15/1520. All work must meet NCDOT standards and NCDEQ Gravity Sewer Minimum Design Criteria. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of sewer service line installed.

Line 21 Abandon 8" Sewer Line

See NCDOT Division 15, Section 1530 and plan details & specifications

Abandon 8" sewer line according to NCDOT 15/1530. All work must meet NCDOT standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of sewer line abandoned.

Line 22 8" DIP, PC 350 Sewer Line

See NCDOT Division 15, Section 1520 and plan details & specifications

Install sewer line according to NCDOT 15/1520. All work must meet AWWA standards. All labor, equipment and materials are incidental to this pay item. Payment will be by the Linear Foot of pipe installed.

PROJECT SPECIAL PROVISIONS

GENERAL

CONTRACT TIME AND LIQUIDATED DAMAGES:

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

108

SP1 G10 A

The date of availability for this contract is _____.

The completion date for this contract is _____.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Five Hundred Dollars (\$500)** per calendar day.

NO MAJOR CONTRACT ITEMS:

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

104

SP1 G31

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

NO SPECIALTY ITEMS:

(7-1-95)

108-6

SP1 G34

None of the items included in this contract will be specialty items (see Article 108-6 of the *2018 Standard Specifications*).

FUEL AND ASPHALT PRICE ADJUSTMENTS:

(1-3-12)

SP1 G44

No fuel or asphalt price adjustments will be made on this project.

DISADVANTAGED BUSINESS ENTERPRISE (LOCAL GOVERNMENT AGENCIES):

(10-16-07) (Rev. 1-15-19)

102-15(J)

SP1 G63

Description

The purpose of this Special Provision is to carry out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with Federal funds. This provision is guided by 49 CFR Part 26.

Definitions

Additional DBE Subcontractors - Any DBE submitted at the time of bid that will not be used to meet the DBE goal. No submittal of a Letter of Intent is required.

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

Contract Goal Requirement - The approved DBE participation at time of award, but not greater than the advertised contract goal.

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

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

Goal Confirmation Letter - Written documentation from **THE TOWN OF WAYNESVILLE** to the bidder confirming the Contractor's approved, committed DBE participation along with a listing of the committed DBE firms.

Local Government Agencies (THE TOWN OF WAYNESVILLE) - The entity letting the contract.

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

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

Replacement / Substitution – A full or partial reduction in the amount of work subcontracted to a committed (or an approved substitute) DBE firm.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for DBE certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

Standard Specifications - The general term comprising all directions, provisions, and requirements contained or referred to in the *North Carolina Department of Transportation Standard Specifications for Roads and Structures* and any subsequent revisions or additions to such book.

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

Forms and Websites Referenced in this Provision

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

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all DBE firms working on the project. This form is for paper bid projects only.
<https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf>

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

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

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

Letter of Intent - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE for the estimated amount (based on quantities and unit prices) listed at the time of bid.
<http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf>

Listing of DBE Subcontractors Form - Form for entering DBE subcontractors on a project that will meet this DBE goal. This form is for paper bids only.
[http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA20Content/08%20DBE%20Subcontractors%20\(Federal\).docx](http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA20Content/08%20DBE%20Subcontractors%20(Federal).docx)

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

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

DBE Goal

The following DBE goal for participation by Disadvantaged Business Enterprises is established for this contract:

Disadvantaged Business Enterprises **10.0 %**

- (A) *If the DBE goal is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth above as the DBE goal.
- (B) *If the DBE goal is zero*, the Contractor shall make an effort to recruit and use DBEs during the performance of the contract. Any DBE participation obtained shall be reported to **THE TOWN OF WAYNESVILLE**.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the NCDOT and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as DBE certified shall be used to meet the DBE goal. The Directory can be found at the following link. [https:// www.ebs.nc.gov/VendorDirectory/default.html](https://www.ebs.nc.gov/VendorDirectory/default.html)

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

Listing of DBE Subcontractors

At the time of bid, bidders shall submit all DBE participation that they anticipate to use during the life of the contract. Only those identified to meet the DBE goal will be considered committed, even though the listing shall include both committed DBE subcontractors and additional DBE subcontractors. Additional DBE subcontractor participation submitted at the time of bid will be used toward the overall race-neutral goal. Only those firms with current DBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of DBE participation. The Contractor shall indicate the following required information:

- (A) *If the DBE goal is more than zero*,
 - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of DBE participation, including the names and addresses on *Listing of DBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the DBE participation for the contract.

- (2) If bidders have no DBE participation, they shall indicate this on the *Listing of DBE Subcontractors* by entering the word “None” or the number “0.” This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have DBE participation indicated on the appropriate form will not be read publicly during the opening of bids. **THE TOWN OF WAYNESVILLE** will not consider these bids for award and the proposal will be rejected.
 - (3) The bidder shall be responsible for ensuring that the DBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that DBE’s participation will not count towards achieving the DBE goal.
- (B) *If the DBE goal is zero*, entries on the *Listing of DBE Subcontractors* are not required, however any DBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

DBE Prime Contractor

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

For example, if the DBE goal is 45% and the DBE bidder will only perform 40% of the contract work, the prime will list itself at 40%, and the additional 5% shall be obtained through additional DBE participation with DBE subcontractors or documented through a good faith effort.

DBE prime contractors shall also follow Sections A or B listed under *Listing of DBE Subcontractor* just as a non-DBE bidder would.

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each DBE that will be used to meet the DBE goal of the contract, indicating the bidder’s commitment to use the DBE in the contract. This documentation shall be submitted on the NCDOT’s form titled *Letter of Intent*.

The documentation shall be received in the office of **THE TOWN OF WAYNESVILLE** no later than

2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the **Town Engineer** no later than 10:00 a.m. on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed DBE to be used toward the DBE goal, or if the form is incomplete (i.e. both signatures are not present), the DBE participation will not count toward meeting the DBE goal. If the lack of this participation drops the commitment below the DBE goal, the Contractor shall submit evidence of good faith efforts, completed in its entirety, to the **Town Engineer** no later than 2:00 p.m. on the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the **Town Engineer** no later than 10:00 a.m. on the next official state business day.

Submission of Good Faith Effort

If the bidder fails to meet or exceed the DBE goal, the apparent lowest responsive bidder shall submit to **THE TOWN OF WAYNESVILLE** documentation of adequate good faith efforts made to reach the DBE goal.

One complete set and _____ of this information shall be received in the office of the **Town Engineer**

no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the **Town Engineer** no later than 10:00 a.m. on the next official state business day.

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

Consideration of Good Faith Effort for Projects with DBE Goals More Than Zero

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

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

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the DBEs to respond to the solicitation. Solicitation shall provide the opportunity to DBEs within the Division and surrounding

Divisions where the project is located. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

- (B) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be sublet includes potential for DBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D)
 - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.

- (G) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs. Contact within 7 days from the bid opening NCDOT's Business Opportunity and Work Force Development Unit at BOWD@ncdot.gov to give notification of the bidder's inability to get DBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the DBE goal.

In addition, **THE TOWN OF WAYNESVILLE** may take into account the following:

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

If **THE TOWN OF WAYNESVILLE** does not award the contract to the apparent lowest responsive bidder, **THE TOWN OF WAYNESVILLE** reserves the right to award the contract to the next lowest responsive bidder that can satisfy to **THE TOWN OF WAYNESVILLE** that the DBE goal can be met or that an adequate good faith effort has been made to meet the DBE goal.

Non-Good Faith Appeal

The **Town Engineer** will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the **Town Engineer**. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting DBE Participation Toward Meeting DBE Goal

(A) Participation

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

(B) Joint Checks

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

(C) Subcontracts (Non-Trucking)

A DBE may enter into subcontracts. Work that a DBE subcontracts to another DBE firm may be counted toward the contract goal requirement. Work that a DBE subcontracts to a non-DBE firm does not count toward the contract goal requirement. If a DBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the DBE is not performing a commercially useful function. The DBE may present evidence to rebut this presumption to **THE TOWN OF WAYNESVILLE**. **THE TOWN OF WAYNESVILLE**'s decision on the rebuttal of this presumption is subject to review by the Federal Highway Administration but is not administratively appealable to USDOT.

(D) Joint Venture

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

(E) Suppliers

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

(F) Manufacturers and Regular Dealers

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

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

Commercially Useful Function

(A) DBE Utilization

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

(B) DBE Utilization in Trucking

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

- (1) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting DBE goals.

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

DBE Replacement

When a Contractor has relied on a commitment to a DBE subcontractor (or an approved substitute DBE subcontractor) to meet all or part of a contract goal requirement, the contractor shall not terminate the DBE subcontractor for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another DBE subcontractor, a non-DBE subcontractor, or with the Contractor's own forces or those of an affiliate.

The Contractor must give notice in writing both by certified mail and email to the DBE subcontractor, with a copy to the **Town Engineer** of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor must give the DBE subcontractor five (5) business days to respond to the Contractor's Notice of Intent to Request Termination and/or

Substitution. If the DBE subcontractor objects to the intended termination/substitution, the DBE, within five (5) business days must advise the Contractor and **THE TOWN OF WAYNESVILLE** of the reasons why the action should not be approved. The five-day notice period shall begin on the next business day after written notice is provided to the DBE subcontractor.

A committed DBE subcontractor may only be terminated after receiving **THE TOWN OF WAYNESVILLE**'s written approval based upon a finding of good cause for the proposed termination and/or substitution. For purposes of this section, good cause shall include the following circumstances:

- (a) The listed DBE subcontractor fails or refuses to execute a written contract;
- (b) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (c) The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
- (d) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (e) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1,200 or applicable state law;
- (f) The listed DBE subcontractor is not a responsible contractor;
- (g) The listed DBE voluntarily withdraws from the project and provides written notice of withdrawal;
- (h) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (i) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (j) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime contractor can self-perform the work for which the DBE contractor was engaged or so that the prime contractor can substitute another DBE or non-DBE contractor after contract award.

The Contractor shall comply with the following for replacement of a committed DBE:

(A) Performance Related Replacement

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

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

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

(B) Decertification Replacement

- (1) When a committed DBE is decertified by the NCDOT after the SAF (*Subcontract Approval Form*) has been received by **THE TOWN OF WAYNESVILLE**, **THE TOWN OF WAYNESVILLE** will not require the Contractor to solicit replacement DBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
- (2) When a committed DBE is decertified prior to **THE TOWN OF WAYNESVILLE** receiving the SAF (*Subcontract Approval Form*) for the named DBE firm, the Contractor shall take all necessary and reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work to meet the DBE goal requirement. If a DBE firm is not found to do the same amount of work, a good faith effort must be submitted to the **Town Engineer** (see A herein for required documentation).

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

Changes in the Work

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

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

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

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

Reports and Documentation

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a DBE subcontractor. **THE TOWN OF WAYNESVILLE** reserves the right to require copies of actual subcontract agreements involving DBE subcontractors.

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

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

Reporting Disadvantaged Business Enterprise Participation

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

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

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

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

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

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

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

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

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *2018 Standard Specifications* may be cause to disqualify the Contractor.

CERTIFICATION FOR FEDERAL-AID CONTRACTS:

(3-21-90)

SP1 G85

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (A) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (B) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal

agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by *Section 1352, Title 31, U.S. Code*. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

U.S. DEPARTMENT OF TRANSPORTATION HOTLINE:

(11-22-94)

108-5

SP1 G100

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free hotline Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the hotline to report such activities.

The hotline is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SUBMISSION OF RECORDS - FEDERAL-AID PROJECTS:

(7-17-07) (8-21-12)

SP1 G103

The Contractor's attention is directed to the Standard Special Provision entitled *Required Contract Provisions-Federal-Aid Construction Contracts* contained elsewhere in this proposal.

This project is located on a roadway classified as a local road or rural minor collector, therefore the requirements of Paragraph IV - Davis Bacon and Related Act Provisions are exempt from this contract.

TWELVE MONTH GUARANTEE – LGA Projects

(10-7-13)

108

SP1 G146

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

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

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

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:

(2-20-07) (Rev. 4-5-19)

105-16, 230, 801

SP1 G181

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

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

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

During the Environmental Assessment required by Article 230-4 of the *2018 Standard Specifications*, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

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

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

The Contractor shall use the *NC DOT Turbidity Reduction Options for Borrow Pits Matrix*, available at <https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/TurbidityReductionOptionSheet.pdf> to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the

stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

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

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

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09)

SP1 G152

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

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

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

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

STANDARD SPECIAL PROVISION AVAILABILITY OF FUNDS
– TERMINATION OF CONTRACTS

(5-20-08)

Z-2

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

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

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(D) of the *2018 Standard Specifications*.

STANDARD SPECIAL PROVISION
NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11)

Z-3

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

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

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

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the 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	Cornflower (Ragged Robin)	27 seeds
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds
Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

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

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

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

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

Sericea Lespedeza
Oats (seeds)

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

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

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

Common or Sweet Sundangrass

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

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

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

Centipedegrass
Crownvetch
Pensacola Bahiagrass
Creeping Red Fescue

Japanese Millet
Reed Canary Grass
Zoysia

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

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

STANDARD SPECIAL PROVISION

ERRATA

(10-16-18) (Rev.1-15-19)

Z-4

Revise the *2018 Standard Specifications* as follows:

Division 6

Page 6-7, Article 609-1 DESCRIPTION, line 29, replace article number “609-10” with “609-9”.

Division 7

Page 7-27, Article 725-1 MEASUREMENT AND PAYMENT, line 4, replace article number “725-1” with “724-4”.

Page 7-28, Article 725-1 MEASUREMENT AND PAYMENT, line 10, replace article number “725-1” with “725-3”.

Division 10

Page 10-78, Article 1056-4 GEOTEXTILES, TABLE 1056-1, Permittivity, Type 2, replace “Table 6^D” with “Table 7^D” and **Permittivity, Type 3^B,** replace “Table 7^D” with “Table 8^D”.

Page 10-162, Article 1080-50 PAINT FOR VERTICAL MARKERS, line 1, replace article number “1080-50” with “1080-10”.

Page 10-162, Article 1080-61 EPOXY RESIN FOR REINFORCING STEEL, line 5, replace article number “1080-61” with “1080-11”.

Page 10-162, Article 1080-72 ABRASIVE MATERIALS FOR BLAST CLEANING STEEL, line 22, replace article number “1080-72” with “1080-12”.

Page 10-163, Article 1080-83 FIELD PERFORMANCE AND SERVICES, line 25, replace article number “1080-83” with “1080-13”.

Division 17

Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, lines 42-44, replace the second sentence with the following:

An example is an installation of a single 1.25 inch HDPE conduit would be paid as:

Directional Drill (1)(1.25[̄]) Linear Foot

STANDARD SPECIAL PROVISION

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, Emerald Ash Borer, Guava Root Knot Nematode, And Other Noxious Weeds)

(3-18-03) (Rev. 5-21-19)

Z-04a

Within Quarantined Area

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

Originating in a Quarantined County

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

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-707-3730, or <https://www.ncagr.gov/plantindustry/Plant/quaran/table2.htm> 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, emerald ash borer, guava root knot nematode, or other noxious weeds.

STANDARD SPECIAL PROVISION

TITLE VI AND NONDISCRIMINATION:

(6-28-77)(Rev 6/19/2018)

Z-6

Revise the *2018 Standard Specifications* as follows:

Replace Article 103-4(B) with the following:

The North Carolina Department of Transportation is committed to carrying out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts.

The provisions of this section related to United States Department of Transportation (US DOT) Order 1050.2A, Title 49 Code of Federal Regulations (CFR) part 21, 23 United States Code (U.S.C.) 140 and 23 CFR part 200 (or 49 CFR 303, 49 U.S.C. 5332 or 49 U.S.C. 47123) are applicable to all North Carolina Department of Transportation (NCDOT) contracts and to all related subcontracts, material supply, engineering, architectural and other service contracts, regardless of dollar amount. Any Federal provision that is specifically required not specifically set forth is hereby incorporated by reference.

(1) Title VI Assurances (USDOT Order 1050.2A, Appendix A)

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(a) Compliance with Regulations

The contractor (hereinafter includes consultants) shall comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

(b) Nondiscrimination

The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

(c) Solicitations for Subcontractors, Including Procurements of Materials and Equipment

In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

(d) Information and Reports

The contractor shall provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor shall so certify to the Recipient or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(e) Sanctions for Noncompliance:

In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it and/or the FHWA may determine to be appropriate, including, but not limited to:

- (i) Withholding payments to the contractor under the contract until the contractor complies; and/or
- (ii) Cancelling, terminating, or suspending a contract, in whole or in part.

(f) Incorporation of Provisions

The contractor shall include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

(2) Title VI Nondiscrimination Program (23 CFR 200.5(p))

The North Carolina Department of Transportation (NCDOT) has assured the USDOT that, as a condition to receiving federal financial assistance, NCDOT will comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by Title 49 CFR part 21 and related nondiscrimination authorities to ensure that no person shall, on the ground of race, color, national origin, limited English proficiency, sex, age, or disability (including religion/creed or income-level, where applicable), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs, activities, or services conducted or funded by NCDOT. Contractors and other organizations under contract or agreement with NCDOT must also comply with Title VI and related authorities, therefore:

- (a) During the performance of this contract or agreement, contractors (e.g., subcontractors, consultants, vendors, prime contractors) are responsible for complying with NCDOT's Title VI Program. Contractors are not required to prepare or submit Title VI Programs. To comply with this section, the prime contractor shall:

1. Post NCDOT's Notice of Nondiscrimination and the Contractor's own Equal Employment Opportunity (EEO) Policy in conspicuous locations accessible to all employees, applicants and subcontractors on the jobsite.
 2. Physically incorporate the required Title VI clauses into all subcontracts on federally-assisted and state-funded NCDOT projects, and ensure inclusion by subcontractors into all lower-tier subcontracts.
 3. Required Solicitation Language. The Contractor shall include the following notification in all solicitations for bids and requests for work or material, regardless of funding source:

“The North Carolina Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. In accordance with other related nondiscrimination authorities, bidders and contractors will also not be discriminated against on the grounds of sex, age, disability, low-income level, creed/religion, or limited English proficiency in consideration for an award.”
 4. Physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only.
 5. Provide language assistance services (i.e., written translation and oral interpretation), free of charge, to LEP employees and applicants. Contact NCDOT OCR for further assistance, if needed.
 6. For assistance with these Title VI requirements, contact the NCDOT Title VI Nondiscrimination Program at 1-800-522-0453.
- (b) Subrecipients (e.g. cities, counties, LGAs, planning organizations) may be required to prepare and submit a Title VI Plan to NCDOT, including Title VI Assurances and/or agreements. Subrecipients must also ensure compliance by their contractors and subrecipients with Title VI. (23 CFR 200.9(b)(7))
 - (c) If reviewed or investigated by NCDOT, the contractor or subrecipient agrees to take affirmative action to correct any deficiencies found within a reasonable time period, not to exceed 90 calendar days, unless additional time is granted by NCDOT. (23 CFR 200.9(b)(15))
 - (d) The Contractor is responsible for notifying subcontractors of NCDOT's External Discrimination Complaints Process.
 1. Applicability

Title VI and related laws protect participants and beneficiaries (e.g., members of the public and contractors) from discrimination by NCDOT employees, subrecipients and contractors, regardless of funding source.

2. Eligibility

Any person—or class of persons—who believes he/she has been subjected to discrimination based on race, color, national origin, Limited English Proficiency (LEP), sex, age, or disability (and religion in the context of employment, aviation, or transit) may file a written complaint. The law also prohibits intimidation or retaliation of any sort.

3. Time Limits and Filing Options

Complaints may be filed by the affected individual(s) or a representative and must be filed no later than 180 calendar days after the following:

- (i) The date of the alleged act of discrimination; or
- (ii) The date when the person(s) became aware of the alleged discrimination; or
- (iii) Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

Title VI and related discrimination complaints may be submitted to the following entities:

- North Carolina Department of Transportation, Office of Civil Rights, Title VI Program, 1511 Mail Service Center, Raleigh, NC 27699-1511; toll free 1-800-522-0453
- Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010
- US Department of Transportation, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070

4. Format for Complaints

Complaints must be in writing and signed by the complainant(s) or a representative, and include the complainant's name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone will be reduced to writing and provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages, including Braille.

5. Discrimination Complaint Form

Contact NCDOT Civil Rights to receive a full copy of the Discrimination Complaint Form and procedures.

6. Complaint Basis

Allegations must be based on issues involving race, color, national origin (LEP), sex, age, disability, or religion (in the context of employment, aviation or transit). "Basis" refers to the complainant's membership in a protected group category.

**TABLE 103-1
COMPLAINT BASIS**

Protected Categories	Definition	Examples	Applicable Nondiscrimination Authorities
Race and Ethnicity	An individual belonging to one of the accepted racial groups; or the perception, based usually on physical characteristics that a person is a member of a racial group	Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, White	Title VI of the Civil Rights Act of 1964; 49 CFR Part 21; 23 CFR 200; 49 U.S.C. 5332(b); 49 U.S.C. 47123. <i>(Executive Order 13166)</i>
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.	
National Origin <i>(Limited English Proficiency)</i>	Place of birth. Citizenship is not a factor. <i>(Discrimination based on language or a person's accent is also covered)</i>	Mexican, Cuban, Japanese, Vietnamese, Chinese	
Sex	Gender. The sex of an individual. <i>Note:</i> Sex under this program does not include sexual orientation.	Women and Men	1973 Federal-Aid Highway Act; 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Age	Persons of any age	21-year-old person	Age Discrimination Act of 1975 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Disability	Physical or mental impairment, permanent or temporary, or perceived.	Blind, alcoholic, para-amputee, epileptic, diabetic, arthritic	Section 504 of the Rehabilitation Act of 1973; Americans with Disabilities Act of 1990
Religion (in the context of employment) <i>(Religion/ Creed in all aspects of any aviation or transit-related construction)</i>	An individual belonging to a religious group; or the perception, based on distinguishable characteristics that a person is a member of a religious group. In practice, actions taken as a result of the moral and ethical beliefs as to what is right and wrong, which are sincerely held with the strength of traditional religious views. <i>Note:</i> Does not have to be associated with a recognized religious group or church; if an individual sincerely holds to the belief, it is a protected religious practice.	Muslim, Christian, Sikh, Hindu, etc.	Title VII of the Civil Rights Act of 1964; 23 CFR 230; FHWA-1273 Required Contract Provisions. <i>(49 U.S.C. 5332(b); 49 U.S.C. 47123)</i>

(3) Pertinent Nondiscrimination Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

- (a) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

- (b) The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- (c) Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- (d) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability) and 49 CFR Part 27;
- (e) The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- (f) Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- (g) The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- (h) Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- (i) The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- (j) Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- (k) Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- (l) Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
- (m) Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e et seq., Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin).

(4) Additional Title VI Assurances

***The following Title VI Assurances (Appendices B, C and D) shall apply, as applicable*

- (a) Clauses for Deeds Transferring United States Property (1050.2A, Appendix B)

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4.

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the North Carolina Department of Transportation (NCDOT) will accept title to the lands and maintain the project constructed thereon in accordance with the North Carolina General Assembly, the Regulations for the Administration of the Federal-Aid Highway Program, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the NCDOT all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the North Carolina Department of Transportation (NCDOT) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the NCDOT, its successors and assigns.

The NCDOT, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the NCDOT will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

(b) Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program (1050.2A, Appendix C)

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(a):

1. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
 - (i.) In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. *
3. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

(c) Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program (1050.2A, Appendix D)

The following clauses will be included in deeds, licenses, permits, or similar instruments/ agreements entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(b):

1. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
2. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non- discrimination covenants, the NCDOT will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued. *
3. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

STANDARD SPECIAL PROVISION

MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS

Z-7

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (*EXECUTIVE NUMBER 11246*)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, see as shown on the attached sheet entitled "Employment Goals for Minority and Female participation".

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in *41 CFR Part 60-4* shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in *41 CFR 60-4.3(a)*, and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive Order and the regulations in *41 CFR Part 60-4*. Compliance with the goals will be measured against the total work hours performed.

2. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the cover sheet of the proposal form and contract.

**EMPLOYMENT GOALS FOR MINORITY
AND FEMALE PARTICIPATION**

Economic Areas

Area 023 29.7%

Bertie County
Camden County
Chowan County
Gates County
Hertford County
Pasquotank County
Perquimans County

Area 024 31.7%

Beaufort County
Carteret County
Craven County
Dare County
Edgecombe County
Green County
Halifax County
Hyde County
Jones County
Lenoir County
Martin County
Nash County
Northampton County
Pamlico County
Pitt County
Tyrrell County
Washington County
Wayne County
Wilson County

Area 025 23.5%

Columbus County
Duplin County
Onslow County
Pender County

Area 026 33.5%

Bladen County
Hoke County
Richmond County
Robeson County
Sampson County
Scotland County

Area 027 24.7%

Chatham County
Franklin County
Granville County
Harnett County
Johnston County
Lee County
Person County
Vance County
Warren County

Area 028 15.5%

Alleghany County
Ashe County
Caswell County
Davie County
Montgomery County
Moore County
Rockingham County
Surry County
Watauga County
Wilkes County

Area 029 15.7%

Alexander County
Anson County
Burke County
Cabarrus County
Caldwell County
Catawba County
Cleveland County
Iredell County
Lincoln County
Polk County
Rowan County
Rutherford County
Stanly County

Area 0480 8.5%

Buncombe County
Madison County

Area 030 6.3%

Avery County
Cherokee County
Clay County
Graham County
Haywood County
Henderson County
Jackson County
McDowell County
Macon County
Mitchell County
Swain County
Transylvania County
Yancey County

SMSA Areas

Area 5720 26.6%

Currituck County

Area 9200 20.7%

Brunswick County

New Hanover County

Area 2560 24.2%

Cumberland County

Area 6640 22.8%

Durham County

Orange County

Wake County

Area 1300 16.2%

Alamance County

Area 3120 16.4%

Davidson County

Forsyth County

Guilford County

Randolph County

Stokes County

Yadkin County

Area 1520 18.3%

Gaston County

Mecklenburg County

Union County

Goals for Female

Participation in Each Trade

(Statewide) 6.9%

STANDARD SPECIAL PROVISION

REQUIRED CONTRACT PROVISIONS FEDERAL - AID CONSTRUCTION CONTRACTS

FHWA - 1273 Electronic Version - May 1, 2012

Z-8

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

- A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).
The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.
Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.
Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).
2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
 - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
 - c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
 - a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.
6. **Training and Promotion:**
 - a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
 - b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
 - c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
 - d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
 - a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
 - b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
8. **Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
9. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
 - a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
 - b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.
10. **Assurance Required by 49 CFR 26.13(b):**
 - a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
 - b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
11. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
 - a. The records kept by the contractor shall document the following:
 - (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
 - b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

- a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents

thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
 - c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
 - d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
2. **Withholding.** The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
3. **Payrolls and basic records**
- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
 - b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for

this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
 - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

- a. Apprentices (programs of the USDOL). Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- b. Trainees (programs of the USDOL). Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. Apprentices and Trainees (programs of the U.S. DOT). Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs

are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
6. **Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
7. **Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
10. **Certification of eligibility.**
 - a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
3. **Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
 - a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees

from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
 - (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
 - (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
 - (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
 - (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies

available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

STANDARD SPECIAL PROVISION

ON-THE-JOB TRAINING

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

Z-10

Description

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

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

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

Minorities and Women

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

Assigning Training Goals

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

Training Classifications

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

Equipment Operators	Office Engineers
Truck Drivers	Estimators
Carpenters	Iron / Reinforcing Steel Workers
Concrete Finishers	Mechanics
Pipe Layers	Welders

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

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

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

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

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

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

Records and Reports

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

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

Trainee Interviews

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

Trainee Wages

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

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

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

Achieving or Failing to Meet Training Goals

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

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

Measurement and Payment

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

STANDARD SPECIAL PROVISION
MINIMUM WAGES
GENERAL DECISION NC190087 01/04/2019 NC87

Z-087

Date: January 4, 2019

General Decision Number: NC190087 01/4/2019 NC87

Superseded General Decision Numbers: NC20180100

State: North Carolina

Construction Type: HIGHWAY

COUNTIES:

Alexander	Caldwell	Henderson
Buncombe	Catawba	Madison
Burke	Haywood	

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract for calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR.5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2) – (60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number
0

Publication Date
01/04/2019

SUNC2014-002 11/13/2014

	Rates	Fringes
BLASTER	20.93	
CARPENTER	13.48	
CEMENT MASON/CONCRETE FINISHER	14.40	
ELECTRICIAN		
Electrician	18.79	2.62
Telecommunications Technician	14.67	1.67

	Rates	Fringes
IRONWORKER	12.48	
LABORER		
Asphalt Raker and Spreader	11.76	
Asphalt Screed/Jackman	15.38	.08
Carpenter Tender	10.50	
Cement Mason/Concrete Finisher Tender	11.04	
Common or General	11.90	
Guardrail/Fence Installer	13.09	
Pipelaye	12.87	
Traffic Signal/Lighting Installer	15.33	.22
PAINTER		
Bridge	20.67	
POWER EQUIPMENT OPERATORS		
Asphalt Broom Tractor	10.00	
Bulldozer Fine	16.28	
Bulldozer Rough	14.51	
Concrete Grinder/Groover	19.20	
Crane Boom Trucks	18.19	
Crane Other	18.69	
Crane Rough/All-Terrain	19.19	
Drill Operator Rock	15.00	
Drill Operator Structure	21.07	
Excavator Fine	16.02	
Excavator Rough	14.67	
Grader/Blade Fine	19.86	
Grader/Blade Rough	15.12	
Loader 2 Cubic Yards or Less	12.38	
Loader Greater Than 2 Cubic Yards	17.91	
Material Transfer Vehicle (Shuttle Buggy)	15.44	
Mechanic	17.86	
Milling Machine	15.08	
Off-Road Hauler/Water Tanker	11.95	
Oiler/Greaser	15.05	
Pavement Marking Equipment	11.99	
Paver Asphalt	17.84	.08
Paver Concrete	18.20	
Roller Asphalt Breakdown	15.00	.08
Roller Asphalt Finish	16.08	.07
Roller Other	12.51	.03
Scraper Finish	12.86	
Scraper Rough	13.83	
Slip Form Machine	20.38	
Tack Truck/Distributor Operator	14.81	.02
TRUCK DRIVER		
GVWR of 26,000 Lbs or Greater	13.65	
GVWR of 26,000 Lbs or Less	12.48	

Welders – Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

- 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

- 4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

CONTRACTOR SIGNATURE FORMS

Town of Waynesville Contract Number_____

INDIVIDUAL PERSON / SOLE PROPRIETORSHIP SIGNATURE FORM

Signature: _____
Owner

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public of the county and State, do hereby certify that
_____ personally appeared before me this day and acknowledged the due execution
of the foregoing instrument.

Witness my hand and notarial seal this _____ day of _____, 20_____

Notary Public

Printed Name: _____

My Commission Expires: _____

Town of Waynesville Contract Number_____

PARTNERSHIP SIGNATURE FORM

Signature: _____

General Partner

Name of Partnership

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public for said County and State, do hereby certify that
_____, General Partner of _____ Partnership,

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and notarial seal this _____ day of _____, 20_____

Notary Public

Printed Name: _____

My Commission Expires: _____

Town of Waynesville Contract Number _____

CORPORATION SIGNATURE FORM

IN WITNESS WHEREFORE, the parties hereto have made and executed this Agreement as of the day and year first above written.

(Insert Name of Corporation)

By: _____
(Insert signature and title of officer)

STATE OF _____

COUNTY OF _____

I, _____, Notary Public of the aforesaid County and State,

Certify that _____ personally came before me this day and
(Insert Name of Person Signing)

Acknowledged that he/she is _____ of _____
(Insert Title of Office) (Insert Name of Corporation)

Corporation, and that he/she, as _____, being authorized to do so,
(Insert Title of Person Signing)

Executed the foregoing on behalf of the said corporation.

Witness my hand and notarial seal this _____ day of _____, 20_____

Notary Public

Printed Name: _____

My Commission Expires: _____

Town of Waynesville Contract Number _____

LIMITED LIABILITY CORPORATION (LLC) FORM

BY: _____
Name of Limited Liability Corporation

Signature: _____
Member/Manager

STATE OF _____
COUNTY OF _____

I, _____, a Notary Public for said County and State do hereby certify that
_____, Member/Manager of _____, a limited liability company,
personally appeared before me this day and acknowledged the due execution of the foregoing instrument
on behalf of the company.

Witness my hand and notarial seal this _____ day of _____, 20_____

Notary Public

Printed Name: _____

My Commission Expires: _____

		Pigeon Street Water Replacement Project BID FORM				
LINE	DIVISION/ SECTION	DESCRIPTION	QTY.	UNIT	UNIT PRICE	AMOUNT
1	8/800	Mobilization	1	L.S.		
2	11/All	Traffic Control	1	L.S.		
3	16/All	Erosion Control	1	L.S.		
4	6/654	Asphalt Surface Course S9.5C	150	Tons		
5	6/654	Asphalt Base Course I19.0C	230	Tons		
6	5/520	ABC Stone	400	Tons		
7	15/1510	6" DIP, PC 350 Water Line	1,500	L.F.		
8	15/1515	6" Valve	14	EA.		
9	15/1515	6" Tapping Sleeve and Valve	1	EA.		
10	15/1515	Reconnect Water Meter	10	EA.		
11	15/1515	Fire Hydrant	3	EA.		
12	15/1515	Fire Hydrant Leg	90	L.F.		
13	15/1515	Water Service Line	160	L.F.		
14	15/1515	Ductile Iron Water Pipe Fittings	1,450	LB.		
15	15/1530	Abandon 6" Water Line	1,400	L.F.		
16	15/1530	Remove Fire Hydrant	3	EA.		
17	15/1525	4' Diameter Utility Manhole	3	EA.		
18	15/1525	Utility Manhole Wall 4' Diameter	8	L.F.		
19	15/1530.	Remove Utility Manhole	3	EA.		
20	15/1520	Sewer Service Line	80	L.F.		
21	15/1530	Abandon 8" Sewer Line	410	L.F.		
22	15/1520	8" DIP, PC 350	400	L.F.		

TOTAL _____

Contractor: _____

Address: _____

Federal ID Number: _____

License #: _____

Authorized Agent: _____

Title: _____

Signature: _____

Date: _____

Witness: _____

Title: _____

Signature: _____

Date: _____

BID PROPOSAL

Date: _____

In compliance with your Advertisement for Bids, dated _____, the undersigned hereby proposes to furnish all labor, equipment and materials and to perform all work for the construction of improvements referred to herein as:

Pigeon Street Water Replacement Project Project number: TBD

In strict accordance with the Contract Documents and in consideration of the amounts shown on the Itemized Bid Form attached hereto and totaling:

\$ _____
and _____/100 dollars

(\$ _____).

The undersigned hereby agrees that, upon written acceptance of this Bid Proposal, he will, within ten (10) days of receipt of such notice, execute a Contract with the Owner and that he will provide any bonds or guarantees and certificates of insurance required by the Contract Documents.

The undersigned agrees that, if awarded the Contract, he will commence the work within ten (10) calendar days after the date of receipt of written Notice to Proceed, and that he will complete the work within ? calendar days thereafter.

The undersigned acknowledges receipt of the following addenda (If issued):

Respectfully submitted,

Firm Name _____

Attest to: _____

Address _____

By: _____

Secretary (Corporate Seal)

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

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full name of Corporation

Address as Prequalified

Attest _____

Secretary/Assistant Secretary
Select appropriate title

By _____

President/Vice President/Assistant Vice President
Select appropriate title

Print or type Signer's name

Print or type Signer's name

CORPORATE SEAL

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

_____ day of _____ 20__.

NOTARY SEAL

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

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

PARTNERSHIP

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full Name of Partnership

Address as Prequalified

Signature of Witness

By

Signature of Partner

Print or type Signer's name

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

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

LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full Name of Firm

Address as Prequalified

Signature of Witness

Signature of Member/Manager/Authorized Agent
Select appropriate title

Print or type Signer's name

Print or type Signer's Name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

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

JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

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

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

Address as Prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal and

(3) _____
Name of Contractor

Address as Prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal and

(4) _____
Name of Contractor (for 3 Joint Venture only)

Address as Prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

NOTARY SEAL

Affidavit must be notarized for Line (2)

Subscribed and sworn to before me this

_____ day of _____ 20____

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

NOTARY SEAL

Affidavit must be notarized for Line (3)

Subscribed and sworn to before me this

_____ day of _____ 20____

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

NOTARY SEAL

Affidavit must be notarized for Line (4)

Subscribed and sworn to before me this

_____ day of _____ 20____

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

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

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor

Individual name

Trading and doing business as

Full name of Firm

Address as Prequalified

Signature of Witness

Signature of Contractor, Individually

Print or type Signer's name

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

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

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor _____
Print or type Individual name

Address as Prequalified

Signature of Contractor, Individually

Print or type Signer's Name

Signature of Witness

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

DEBARMENT CERTIFICATION

Conditions for certification:

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

DEBARMENT CERTIFICATION

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

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

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

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

☐

Check here if an explanation is attached to this certification.

**STATE OF NORTH CAROLINA
THE TOWN OF WAYNESVILLE
RALEIGH, NC**

BID BOND

Principal: _____
Name of Principal Contractor

Surety: _____
Name of Surety

Contract Number: _____ County: _____

Date of Bid: _____

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the **THE TOWN OF WAYNESVILLE** in the full and just sum of five (5) percent of the total amount bid by the Principal for the project stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

NOW, THEREFORE, the condition of this obligation is: the Principal shall not withdraw its bid within sixty (60) days after the opening of the bids, or within such other time period as may be provided in the proposal, and if the **THE TOWN OF WAYNESVILLE** shall award a contract to the Principal, the Principal shall, within ten (10) calendar days after written notice of award is received by him, provide bonds with good and sufficient surety, as required for the faithful performance of the contract and for the protection of all persons supplying labor, material, and equipment for the prosecution of the work. In the event the Principal requests permission to withdraw his bid due to mistake in accordance with the provisions of Article 103-3 of the *Standard Specifications for Roads and Structures*, the conditions and obligations of this Bid Bond shall remain in full force and effect until the **THE TOWN OF WAYNESVILLE** makes a final determination to either allow the bid to be withdrawn or to proceed with award of the contract. In the event a determination is made to award the contract, the Principal shall have ten (10) calendar days to comply with the requirements set forth above. In the event the Principal withdraws its bid after bids are opened except as provided in Article 103-3, or after award of the contract has been made fails to execute such additional documents as may be required and to provide the required bonds within the time period specified above, then the amount of the bid bond shall be immediately paid to the **THE TOWN OF WAYNESVILLE** as liquidated damages.

IN TESTIMONY WHEREOF, the Principal and Surety have caused these presents to be duly signed and sealed.

This the _____ day of _____, 20 _____

Surety

By _____
General Agent or Attorney-in-Fact Signature

Seal of Surety

Print or type Signer's Name

BID BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

Full name of Corporation

Address as prequalified

By

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

Print or type Signer's name

Affix Corporate Seal

Attest

Signature of **Secretary, Assistant Secretary**
Select appropriate title

Print or type Signer's name

BID BOND

LIMITED LIABILITY COMPANY

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Full name of Firm

Address as prequalified

**Signature of Member/
Manager/Authorized Agent**

Individually

Print or type Signer's name

BID BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Individual Name

Trading and doing business as

Full name of Firm

Address as prequalified

Signature of Contractor

Individually

Print or type Signer's name

Signature of Witness

Print or type Signer's name

BID BOND

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Print or type Individual Name

Address as prequalified

Signature of Contractor

Individually

Print or type Signer's name

Signature of Witness

Print or type Signer's name

BID BOND

PARTNERSHIP

SIGNATURE OF CONTRACTOR (Principal)

Full name of Partnership

Address as prequalified

By _____
Signature of Partner

Print or type Signer's name

Signature of Witness

Print or type Signer's name

BID BOND
JOINT VENTURE (2 or 3)
SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

and

(3) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

and

(4) _____
Name of Contractor (*for 3 Joint Venture only*)

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

THE TOWN OF WAYNESVILLE

PAYMENT BOND

Date of Payment Bond Execution _____

Name of Principal Contractor _____

Name of Surety: _____

Name of Contracting Body: _____

Amount of Bond: _____

Contract ID No.: _____

County Name: _____

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACT PAYMENT BOND

Affix Seal of Surety Company

Print or type Surety Company Name

By

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

Signature of Attorney-in-Fact

Signature of Witness

Print or type Signer's name

Address of Attorney-in-Fact

CONTRACT PAYMENT BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

Full name of Corporation

Address as prequalified

By

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

Print or type Signer's name

Affix Corporate Seal

Attest

Signature of **Secretary, Assistant Secretary**
Select appropriate title

Print or type Signer's name

CONTRACT PAYMENT BOND
LIMITED LIABILITY COMPANY

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Full name of Firm

Address as prequalified

By: _____

Signature of Member, Manager, Authorized Agent
Select appropriate title

Print or type Signer's name

**CONTRACT PAYMENT BOND INDIVIDUAL DOING
BUSINESS UNDER A FIRM NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Individual Name

Trading and doing business as

Full name of Firm

Address as prequalified

Signature of Contractor

Individually

Print or type Signer's name

Signature of Witness

Print or type Signer's name

**CONTRACT PAYMENT BOND INDIVIDUAL DOING
BUSINESS IN HIS OWN NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Print or type Individual name

Address as prequalified

Signature of Contractor

Individually

Print or type Signer's name

Signature of Witness

Print or type Signer's name

CONTRACT PAYMENT BOND

PARTNERSHIP

SIGNATURE OF CONTRACTOR (Principal)

Full name of Partnership

Address as prequalified

By _____
Signature of Partner

Print or type Signer's name

Signature of Witness

Print or type Signer's name

CONTRACT PAYMENT BOND
JOINT VENTURE (2) or (3)
SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. On Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *NCDOT Standard Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

and

(3) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

and

(4) _____
Name of Contractor (*for 3 Joint Venture only*)

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

CONTRACT PAYMENT BOND

Attach certified copy of Power of Attorney to this sheet

THE TOWN OF WAYNESVILLE

CONTRACT PERFORMANCE BOND

Date of Performance Bond Execution: _____

Name of Principal Contractor: _____

Name of Surety: _____

Name of Contracting Body: _____

Amount of Bond: _____

Contract ID No.: _____

County Name: _____

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACT PERFORMANCE BOND

Affix Seal of Surety Company

Print or type Surety Company Name

By

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

Signature of Attorney-in-Fact

Signature of Witness

Print or type Signer's name

Address of Attorney-in-Fact

CONTRACT PERFORMANCE BOND

CORPORATION

SIGNATURE OF CONTRACTOR (Principal)

Full name of Corporation

Address as prequalified

By

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

Print or type Signer's name

Affix Corporate Seal

Attest

Signature of **Secretary, Assistant Secretary**
Select appropriate title

Print or type Signer's name

CONTRACT PERFORMANCE BOND

LIMITED LIABILITY COMPANY

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Full name of Firm

Address as prequalified

By: _____

Signature of **Member, Manager, Authorized Agent**
Select appropriate title

Print or type Signer's name

CONTRACT PERFORMANCE BOND INDIVIDUAL

DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Individual Name

Trading and doing business as

Full name of Firm

Address as prequalified

Signature of Contractor

Individually

Print or type Signer's name

Signature of Witness

Print or type Signer's name

CONTRACT PERFORMANCE BOND INDIVIDUAL

DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Print or type Individual name

Address as prequalified

Signature of Contractor

Individually

Print or type Signer's name

Signature of Witness

Print or type Signer's name

CONTRACT PERFORMANCE BOND

PARTNERSHIP

SIGNATURE OF CONTRACTOR (Principal)

Full name of Partnership

Address as prequalified

By _____
Signature of Partner

Print or type Signer's name

Signature of Witness

Print or type Signer's name

CONTRACT PERFORMANCE BOND
JOINT VENTURE (2) OR (3)
SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. On Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *NCDOT Standard Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

and

(3) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

and

(4) _____
Name of Contractor *(for 3 Joint Venture only)*

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

CONTRACT PERFORMANCE BOND

Attach certified copy of Power of Attorney to this sheet

Instructions for Completing Contractors Sales and Use Detail Tax Report

The Town of Waynesville is eligible for a refund of NC sales and/or use taxes paid in North Carolina by the Town's contractors ("contractors" hereinafter also refers to sub-contractors) on purchases

of building materials, supplies, fixtures and equipment which become a part of or are annexed to any building or structure being erected, altered or repaired under contract with the Town.

Contractors shall include and must pay all taxes imposed by governmental authorities which are applicable to the contract work. Examples of property on which sales and use tax has been paid by the contractor for which the contractor shall not include on this schedule are scaffolding, forms for concrete, fuel for the operation of machinery and equipment, tools, equipment repair parts and equipment rentals, blueprints, etc., or any other items which do not become a part of or are not annexed to the building or structure being erected, altered, or repaired.

The general contractor is responsible for obtaining the Contractor's Sales and Use Detail Tax Report from its subcontractors. Each payment application must be accompanied with a certified Contractors Sales and Use Detail Tax Report. If no purchases of building materials, supplies, fixtures and equipment occurred in which sales and use tax was paid for a period covering a payment application, the contractor shall file a negative report indicating **"No State or County Sales Tax Paid"**.

Contractor: The name of your company.

Project: The name of the project, or the Town Contract Number.

Payment Application No.: The numerical sequence associated with the pay application (i.e. 1, 2, 3, etc.)

For Period: The beginning and ending period stated as month/day/year

Invoice Date: The date the materials were purchased.

Vendor Name: The vendor's name.

Invoice Number: The vendor's invoice number.

Invoice Total: The sum of the invoice to include State Tax and County Tax.

State Tax Paid: The North Carolina State tax, currently 4.75% of the item cost.

County Tax Paid: The County tax, currently 2.00% to 2.25% of the item cost (Buncombe currently 2.25%).

Total Tax Paid: The sum of State Tax and County Tax

County Name: County where material was purchased and sales tax paid, e.g., Buncombe, Haywood, Mecklenburg, etc.

The owner or an officer of the company must certify that the statement is correct. The signature should also be notarized.

Town of Waynesville, North Carolina							
Contractor Sales and use Detail tax report (must accompany each payment application)							
Contractor: _____ Payment application No: _____							
Project: _____ For period: _____							
Invoice Date	Vendor name	Invoice No.	Invoice total include tax	State tax paid	County tax paid	Total paid	County of sale

Grand total \$ _____ \$ _____ \$ _____ \$ _____

If this is an out-of-state vendor, the county of state should be the county to which the merchandise was shipped.

I certify that the above figures do not include any tax paid on supplies, tools and equipment which were used to perform this contract and only includes those building materials, supplies, fixtures and equipment which actually became a part of or annexed to the building or structure. I certify that, to the best of my knowledge, the information provided here is true, correct, and complete.

Subscribed and sworn to before me this the _____
 _____ Day of _____, 20_____.

 (Signature of Notary Public)
 Of _____ County.
 State of _____.
 My Commission Expires: _____
 Signed: _____

NOTARY SEAL

Owner: Print or Type name below:

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

CONTRACT:	NAME OF BIDDER:
------------------	------------------------

The undersigned intends to perform work in connection with the above contract upon execution of the bid and subsequent award of contract by the Local Public Agency as:

Name of MBE/WBE/DBE Subcontractor _____
Address _____
City _____ State _____ Zip _____

Please check all that apply:
Minority Business Enterprise (MBE) _____
Women Business Enterprise (WBE) _____
Disadvantaged Business Enterprise (DBE) _____

The MBE /WBE /DBE status of the above named subcontractor is certified by the North Carolina Department of Transportation. The above named subcontractor is prepared to perform the described work listed on the attached MBE/WBE/DBE Commitment Items sheet, in connection with the above contract upon execution of the bid and subsequent award of contract by the Local Public Agency. The above named subcontractor is prepared to perform the described work at the estimated Commitment Total for Subcontractor Price identified on the MBE/WBE/DBE Commitment Items sheet and amount indicated below.

Commitment Total based on estimated Unit Prices and Quantities on the “attached” MBE/WBE/DBE Commitment Items sheet:

Amount \$ _____

The above named bidder and subcontractor mutually accepts the Commitment Total estimated for the Unit Prices and Quantities. This commitment total is based on estimated quantities only and most likely will vary up or down as the project is completed. Final compensation will be based on actual quantities of work performed and accepted during the pursuance of work. The above listed amount represents the entire dollar amount quoted based on these estimated quantities. No conversations, verbal agreements, and/or other forms of non-written representations shall serve to add, delete, or modify the terms as stated.

This document shall not serve in any manner as an actual subcontract between the two parties. A separate subcontractor agreement will describe in detail the contractual obligations of the bidder and the MBE/WBE/DBE subcontractor.

Affirmation

The above named MBE/ WBE/ DBE subcontractor affirms that it will perform the portion(s) of the contract for the estimated dollar value as stated above.

Name of MBE/ WBE/ DBE Subcontractor	Name of Bidder
Signature / Title	Signature / Title
Date	Date

LISTING OF DBE SUBCONTRACTORS			Sheet _____ of _____	
Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the DBE subcontractor, and these prices will be used to determine the percentage of the DBE participation in the contract.

** Dollar Volume of DBE Subcontractor Percentage of Total Contract Bid Price:
If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.
If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.

LISTING OF DBE SUBCONTRACTORS			Sheet _____ of _____	
Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the DBE subcontractor, and these prices will be used to determine the percentage of the DBE participation in the contract.

**** Dollar Volume of DBE Subcontractor \$ _____**
Percentage of Total Contract Bid Price
 _____%

**** Dollar Volume of DBE Subcontractor Percentage of Total Contract Bid Price:**
If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.
If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.

Subcontract Approval Form (SAF)

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

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

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

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

5. Partial Item of Work and Portion of Work

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

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

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

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

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

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

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

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

9. DBE/MBE/WBE Sublet Amount is the DBE/MBE/WBE Unit Price multiplied by the Quantity. For committed firms, the DBE/MBE/WBE Sublet Amount shall be the same or higher than the amount listed in the contract.
10. Subcontract Unit Price - The Subcontract Unit Price must be the same as the contract unit price unless the Subcontractor is performing a partial item of work. When a partial item of work is sublet, the unit price must be less than the contract unit price. When only a portion of the quantity of an item is sublet, the unit price shall be the same as the contract unit price. If an item of work is designated as both a partial and a portion, refer to Item 5 of these instructions. A Subcontract Unit Price must be entered for every line item, including an item of work performed by a DBE/MBE/WBE Subcontractor.
11. The Total Subcontract Amount is the Subcontract Unit Price multiplied by the Quantity.
12. The Subcontract Amount is the amount subcontracted by the Contractor. The amount is used to determine the percent of work performed by the Prime Contractor. (Refer to Article 108-6 of the Standard Specifications for subletting percentages.) The Subcontract Amount is calculated by summing the Total Subcontract Amounts for the Subcontractor. Any items listed on the Attachment sheet for the Subcontractor is also included in the Subcontract Amount. The line items for 2nd Tier Subcontractor(s) are not included.
13. When any item requested to be sublet has been previously included in an approved subcontract, the following statement shall be included above the listing of these items: "The following items are being deleted from "Subcontract Request Number ____."
14. The Contractor, Subcontractor and 2nd Tier Subcontractor shall sign the original Subcontract Approval Form and the Contractor shall submit the form to the Resident Engineer.
15. By signing the Subcontract Approval Form, the contractor is in agreement that the FHWA 1273, "Required Contract Provisions," (federal projects) and Title VI and Nondiscrimination Assurances (all projects) have been included in the subcontract / 2nd tier subcontract in its entirety.

Sublet Percentages

FOR USE BY NCDOT PERSONNEL (for non HiCAMS contracts)

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

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



SUBCONTRACT APPROVAL FORM

Contract No.: _____ F.A. No.: _____ Subcontract Request Number: _____

WBS Element:	T.I.P. No.:	County:
--------------	-------------	---------

APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:

Retainage	Certification	Reporting No.
<input type="checkbox"/>		

Retainage	Certification	Reporting No.
<input type="checkbox"/>		

Subcontractor Name and Address

2nd Tier-1 Subcontractor Name and Address

[illegible]

SUBCONTRACT CERTIFICATION (applies only to Federal projects)

The Contractor / Subcontractor certifies that the subcontract is in writing and that FHWA 1273, "Required Contract Provisions," and Title VI and Nondiscrimination Assurances have been included in the subcontract / 2nd tier subcontract in its entirety.

SUBCONTRACT CERTIFICATION (applies only to State projects)

The Contractor / Subcontractor certifies that the subcontract is in writing and Title VI and Nondiscrimination Assurances have been included in the subcontract/2nd tier subcontract in its entirety.

Contractor: Signature: Title:		APPROVED: Date	Date
			Resident Engineer

Date _____

Approved with the understanding that the Contractor will be responsible for the satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made to the Contractor.

2 nd Tier	
Subcontractor:	
Signature:	
Title:	
Date	



SUBCONTRACT APPROVAL FORM

Contract No.: _____ F.A. No.: _____ Subcontract Request Number: _____

[illegible]

Indicates a Portion of Work (●)	Indicates a Partial Item (◆)
---------------------------------	------------------------------



SUBCONTRACT APPROVAL FORM

Contract No.: _____

F.A. No.:

Subcontract Request Number:

WBS Element:

T.I.P. No.:

County: _____

APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:

2nd Tier-2 Subcontractor Name and Address

2nd Tier-2 Subcontractor Name and Address

2nd Tier-3 Subcontractor Name and Address

2nd Tier-3 Subcontractor Name and Address

Retainage	Certification	Reporting No.
<input type="checkbox"/>		

Retainage	Certification	Reporting No.
<input type="checkbox"/>		

Retainage	Certification	Reporting No.
<input type="checkbox"/>		

Retainage	Certification	Reporting No.
<input type="checkbox"/>		

[illegible]

Indicates a Portion of Work (●)	Indicates a Partial Item (◆)
---------------------------------	------------------------------

SUBCONTRACT CERTIFICATION (applies only to Federal projects)

SUBCONTRACT CERTIFICATION (applies only to Federal projects)

The Contractor / Subcontractor certifies that the subcontract is in writing and that FHWA 1273, "Required Contract Provisions," and Title VI and Nondiscrimination Assurances have been included in the subcontract / 2nd tier subcontract in its entirety.

SUBCONTRACT CERTIFICATION (applies only to State projects)

The Contractor / Subcontractor certifies that the subcontract is in writing and Title VI and Nondiscrimination Assurances have been included in the subcontract/2nd tier subcontract in its entirety.

Contractor:			
Signature:			
Title:			
		APPROVED:	
		Date	
		Resident Engineer	Date

Date _____

Subcontractor: _____
 Signature: _____
 Title: _____

Date _____

Approved with the understanding that the Contractor will be responsible for the satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made directly to the Contractor.

Subcontractor: _____
 Signature: _____
 Title: _____

Date _____

Approved with the understanding that the Contractor will be responsible for the satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made directly to the Contractor.

2nd Tier
 Subcontractor: _____
 Signature: _____
 Title: _____
 Date: _____

Date _____

Town of Waynesville

Subcontractor Payment Information

Submit with Invoice To: Invoice Coordinator
 North Carolina Department of Transportation
 Division / Branch
 Address
 Raleigh, NC XXXXX-XXXX

Firm Invoice No. Reference _____
 NCDOT PO / Contract Number _____
 WBS No. (State Project No.) _____
 Date of Invoice _____
 Signed _____

Invoice Line Item Reference	Payer Name	Payer Federal Tax Id	Subcontractor / Subconsultant/ Material Supplier Name	Subcontractor / Subconsultant / Material Supplier Federal Tax Id	Amount Paid To Subcontractor / Subconsultant / Material Supplier This Invoice	Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
Total Amount Paid to Subcontractor Firms					\$ _____	

NOTE: - These documents are scanned into our Fiscal program. Please do not highlight or shade the figures.

I certify that this information accurately reflects actual payments made and the dates the payments were made to Subcontractors/
 Subconsultants/Material Suppliers on the above referenced project.

Signature _____

Title _____

**STATE OF NORTH CAROLINA
E-VERIFY AFFIDAVIT
THE TOWN OF
WAYNESVILLE**

NOW COMES Affiant, first being sworn, deposes and says as follows:

1. I have submitted a bid for contract or desire to enter into a contract with the TOWN OF WAYNESVILLE;

2. As part of my duties and responsibilities pursuant to said bid and/or contract, I attest that I am aware of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

___ After hiring an employee to work in the United States I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or

___ I employ less than twenty-five (25) employees in the State of North Carolina.

3. As part of my duties and responsibilities pursuant to said bid and/or contract, I attest that to the best of my knowledge any subcontractors employed as a part of this bid and/or contract are in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

___ After hiring an employee to work in the United States the subcontractor verifies the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or

___ Employ less than twenty-five (25) employees in the State of North Carolina.

Specify subcontractor: _____

This the _____ day of _____, 20____.

Affiant

Sworn to and subscribed before me, this the _____ day of _____, 20____.

[OFFICIAL SEAL]

_____, Notary Public

My Commission Expires: _____

DRUG-FREE WORKPLACE CERTIFICATION

_____, Contractor with the Town of Waynesville
for _____
(Contractor's name)
the project known as _____, certifies that the Town's
Drug-Free Workplace Policy, as set forth in the Bid Documents ("Policy"), has been
reviewed by or explained to the officers, agents and employees of _____
_____, and _____
(Contractor's name)
hereby agrees that the Policy is a part of the Contract and _____
(Contractor's name)
further certifies that _____ will comply with the
requirements thereof.

This the _____ day of _____, 20__.

Attest: _____
Contractor's Name

Secretary/Treasurer
(Corporate Seal)

By: _____
President / Vice President

SWORN TO AND SUBSCRIBED before me this _____ day of _____, 20__.

Notary Public
My Commission Expires: _____

CONTRACTOR/VENDOR FINAL RELEASE AND LIEN WAIVER

The undersigned represents and warrants that it has been paid and has received (or that it will be paid and will receive via proceeds from this pay application) \$_____ as full and final settlement under the contract/agreement dated _____ (including any amendments or modifications thereto) (the "**Contract**") between the undersigned and _____ ("**Contractor/Vendor**") for the _____ Project owned by the Town of Waynesville ("**Owner**")

In consideration for this final payment, and other good and valuable consideration, receipt of which is acknowledged, the undersigned makes the following representations and warranties:

1. The undersigned and Owner have fully settled all terms and conditions of the Contract (including any amendments or modifications thereto), as well as any other written or oral commitments, agreements, and/or understandings in connection with the Project.

2. The undersigned has been paid in full (or it will be paid in full via proceeds from this pay application) for the labor, services, and materials in connection with the Contract, including all work performed or any materials provided by its subcontractors, vendors, suppliers, materialmen, laborers, or other persons or entities.

3. The undersigned has paid in full (or it will pay in full via proceeds from this pay application) all its subcontractors, vendors, suppliers, materialmen, laborers, and other person or entity providing services, labor, or materials to the Project; there are no outstanding claims, demands, or rights to liens against the undersigned, the Project, or the Owner in connection with the Contract on the part of any person or entity; and no claims, demands, or liens have been filed against the undersigned, the Project, or the Owner relating to the Contract.

4. The undersigned releases and discharges Owner from all claims, demands, or causes of action (including all lien claims and rights) that the undersigned has, or might have, under any present or future law, against Owner in connection with the Contract. The undersigned hereby specifically waives and releases any lien or claim or right to lien in connection with the Contract against Owner, Owner's property, and the Project, and also specifically waives, to the extent allowed by law, all liens, claims, or rights of lien in connection with the Contract by the undersigned's subcontractors, materialmen, laborers, and all other persons or entities furnishing services, labor, or materials in connection with the Contract.

5. The undersigned shall indemnify, defend, and hold harmless Owner from any action, proceeding, arbitration, claim, demand, lien, or right to lien relating to the Contract, and shall pay any costs, expenses, and/or attorneys' fees incurred by Owner in connection therewith.

The undersigned makes the foregoing representations and warranties with full knowledge that Owner shall be entitled to rely upon the truth and accuracy thereof.

DATED: _____ **(CONTRACTOR/VENDOR COMPANY NAME)**

By: _____
Title: _____

STATE OF _____
COUNTY OF _____

I, a Notary Public for the above County and State, certify that _____ personally came before me this day and acknowledged that he/she is _____ [title] of _____ [company name], and that he/she, as _____ [title], being authorized to do so, executed the foregoing on behalf of _____ [company name].

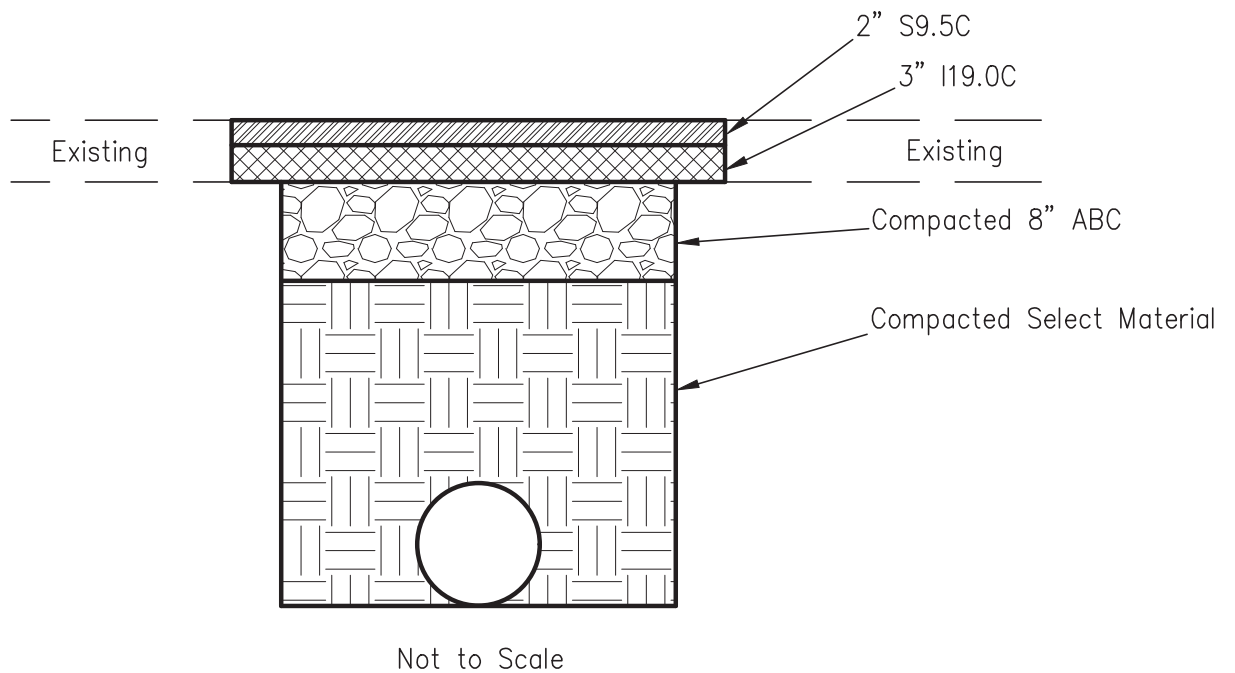
Witness my hand and notarial seal this _____ day of _____, 20____

Notary Public
Printed Name: _____
My Commission Expires: _____

NOTICE: THIS DOCUMENT WAIVES RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID.

PATCHING DETAIL and SPECIFICATIONS

PATCHING DETAIL



Notes:

1. Patching specifications provided by NCDOT Division 14, District 2 engineer.
2. All work and all compaction of materials installed must meet NCDOT standards.



12 BROAD ST.
ASHEVILLE, NORTH CAROLINA 28806
(828) 254-2201
FAX (828) 254-4562

**NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH**

**STANDARD SPECIFICATIONS
FOR
ROADS AND STRUCTURES**



Sections 1034, 1036, and
Division 15

JANUARY 2018

SECTION 1034 SANITARY SEWER PIPE AND FITTINGS

1034-1 CLAY PIPE

Use extra strength vitrified clay sewer pipe conforming to ASTM C700. Manufacture all joints and seals in accordance with ASTM C425.

1034-2 PLASTIC PIPE

(A) PVC Gravity Flow Sewer Pipe

Use PVC pipe that conforms to ASTM D3034 with a minimum SDR of 35. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3212.

(B) PVC Force Main Sewer Pipe

(1) Pressure Rated Pipe

Use PVC pipe conforming to ASTM D2241 or to ANSI/AWWA C905 with a minimum SDR of 21 and minimum pressure rating of 200 psi. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3139 or pipe with butt fused joints made from ASTM D1784 Class 12454B plastic formulated for fusing.

Use PVCO pipe conforming to ASTM F1483 or to ANSI/AWWA C909 for molecularly oriented pipe with a minimum pressure rating of 200 psi. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3139.

(2) Pressure Class Pipe

Use PVC pipe conforming to ANSI/AWWA C900 with a minimum DR of 18 and a minimum pressure class of 235 psi. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3139 or pipe with butt fused joints made from ASTM D1784 Class 12454B plastic formulated for fusing.

(C) Polyethylene (PE) Pipe Force Main Sewer Pipe

Use PE pipe and tubing that conforms to AWWA C901 or AWWA C906 with a minimum pressure class of 200 psi.

1034-3 CONCRETE SEWER PIPE

Use reinforced concrete sewer pipe conforming to ASTM C76 or AASHTO M 170 with a Class III minimum rating. Use pipe with gasket joints conforming to ASTM C443 or AASHTO M 198 Type A or B.

1034-4 DUCTILE IRON PIPE

(A) Gravity Flow Sewer Pipe

Use ductile iron pipe that conforms to ASTM A746 or ANSI/AWWA C151/A21.51.

Use ductile iron pipe fittings and specials conforming to ANSI/AWWA C110/A21.10 for standard size fittings or ANSI/AWWA C153/A21.53 for compact fittings.

Use pipe and fittings with push-on joints conforming to ANSI/AWWA C111/A21.11.

(B) Force Main Sewer Pipe

Use ductile iron pipe that conforms to ANSI/AWWA C151/A21.51.

Use ductile iron pipe fittings and specials conforming to ANSI/AWWA C110/A21.10 for standard size fittings or ANSI/AWWA C153/A21.53 for compact fittings. Manufacture

Section 1036

fittings with a cement mortar lining and a seal coat in accordance with ANSI/AWWA C104/A21.4.

Use pipe and fittings with either mechanical joints or push-on joints conforming to ANSI/AWWA C111/A21.11. When required or necessary, use approved type joint restraint devices with a minimum working pressure rating of 200 psi and a factor of safety of 2.

SECTION 1036 WATER PIPE AND FITTINGS

1036-1 GENERAL

All materials when used to convey potable drinking water shall meet the National Sanitation Foundation Standard No. 61. All materials in contact with potable water shall be in conformance with Section 1417 of the Safe Drinking Water Act.

1036-2 COPPER PIPE

For indoor plumbing use copper pipe and sweated fittings conforming to ASTM B88 for the type and temper called for in the plans and Specifications. Cast fittings for copper pipe shall meet ASTM B61 or ASTM B62.

For buried service, use copper water pipe and tube conforming to ASTM B88 soft annealed Type K. Use flared or compression type fittings conforming to ANSI/AWWA C800 and local plumbing codes to connect pipe and tube.

1036-3 PLASTIC PIPE

(A) PVC Pipe

(1) Pressure Rated Pipe

Use PVC pipe conforming to ASTM D2241 or to ANSI/AWWA C905 with a minimum SDR of 21 and minimum pressure rating of 200 psi. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3139 or pipe with butt fused joints made from ASTM D1784 Class 12454B plastic formulated for fusing.

Use PVCO pipe conforming to ASTM F1483 or to ANSI/AWWA C909 for molecularly oriented pipe with a minimum pressure rating of 200 psi. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3139.

(2) Pressure Class Pipe

Use PVC pipe conforming to ANSI/AWWA C900 with a minimum DR of 18 and a minimum pressure class of 235 psi. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3139 or pipe with butt-fused joints made from ASTM D1784 Class 12454B plastic formulated for fusing.

(B) Polyethylene (PE) Pipe

Use PE water pipe and tubing that conforms to AWWA C901 or AWWA C906 with a minimum pressure class of 200 psi.

1036-4 STEEL PIPE

(A) Water Pipe

Use galvanized steel pipe meeting ASTM A53 for standard weight. Fittings for steel water pipe shall meet ASTM A126 for Class B iron or of ASTM A197. Galvanize all fittings in accordance with ASTM A153.

(B) Encasement Pipe

Use steel pipe meeting an ASTM specification with the minimum yield strength of 35,000 psi. Use pipe that is circular in shape and straight in length.

1036-5 DUCTILE IRON PIPE AND FITTINGS

Use ductile iron pipe that conforms to ANSI/AWWA C151/A21.51.

Use ductile iron pipe fittings and specials conforming to ANSI/AWWA C110/A21.10 for standard size fittings or ANSI/AWWA C153/A21.53 for compact fittings. Manufacture fittings with a cement mortar lining and a seal coat in accordance with ANSI/AWWA C104/A21.4.

Use either mechanical joints or push-on joints conforming to ANSI/AWWA C111/A21.11. When required or necessary, use approved type joint restraint devices with a minimum working pressure rating of 200 psi and a factor of safety of 2.

1036-6 FIRE HYDRANTS

Use dry barrel type fire hydrants conforming to ANSI/AWWA C502 with a minimum 4 1/2 inch diameter valve opening with a 6 inch mechanical joint inlet connection, with two 2 1/2 inch hose connections and with one 4 1/2 inch pumper connection. Outlets shall have national standard fire hose coupling threads. Use fire hydrants with a minimum bury length of 36 inches. Securely chain nipple caps to the barrel. Paint hydrants with one coat of primer paint and two coats of an approved paint of the owner's standard color. Apply the final coat after hydrant installation.

1036-7 WATER VALVES**(A) Gate Valves**

Use iron body gate valves which conform to ANSI/AWWA C500 for bronze mounted, double disc, parallel seat type valves or to ANSI/AWWA C509 for resilient seat-type valves or to ANSI/AWWA C515 for reduced-wall, resilient seat gate valves. For buried service use gate valves with non-rising stems, 2 inch square operating nuts, O-ring seals and which open by turning counter clockwise. Gate valves shall have mechanical joint ends conforming to ANSI/AWWA C111/A21.11. Gate valves shall have a design working water pressure of 200 psi.

(B) Bronze Gate Valves

Use bronze gate valves conforming to ASTM B62 with tee head operating nuts and solid wedges. Use valves with a design working pressure of 200 psi.

(C) Tapping Valves

Use tapping valves conforming to Subarticle 1036-7(A) with appropriately sized openings, with flanged by mechanical joint ends and pressure rated at 200 psi.

1036-8 SLEEVES, COUPLINGS AND MISCELLANEOUS**(A) Tapping Sleeves**

Use cast iron, ductile iron or Type 304 stainless steel tapping sleeves pressure rated at 200 psi. Use either the split sleeve type with mechanical joint ends or the full circle type with double seals. Manufacture the outlet flange to mate with the tapping valve flange.

(B) Transition Sleeves and Couplings

Use sleeve type couplings for transitioning between plain ends of different pipe types. Manufacture couplings in conformance with ANSI/AWWA C219 for a rated working

Section 1040

pressure of 200 psi. Coat the coupling at the factory with an epoxy in conformance with ANSI/AWWA C210 or ANSI/AWWA C213.

1036-9 SERVICE LINE VALVES AND FITTINGS

Use corporation stops and curb stops of all bronze material and high-pressure construction conforming to ANSI/AWWA C800.

Use tapping saddles of high-pressure construction, shaped to conform to the pipe and in conformance with ANSI/AWWA C800.

Use high-pressure fittings manufactured in conformance with ANSI/AWWA C800.

SECTION 1040 MASONRY

1040-1 BRICK

Use clay or shale brick that meets ASTM C62 for Grade SW, except as otherwise provided herein.

Use brick of uniform standard commercial size, with straight and parallel edges and square corners that are burned hard and entirely true, free from injurious cracks and flaws, tough, strong and have a clear ring when struck together. The sides, ends and faces of all brick shall be plane surfaces at right angles and parallel to each other.

Brick of the same manufacturer shall not vary more than $\pm 1/16$ inch in thickness, $\pm 1/8$ inch in width and $\pm 1/4$ inch in length.

Concrete brick may be used instead of clay or shale brick when designated in the plans or in the specifications. Concrete brick shall meet ASTM C55 for Grade S-II except that the absorption of brick used in minor drainage structures shall not exceed 10 lbs/cf.

1040-2 CONCRETE BUILDING BLOCK

Use concrete building block from sources that participate in the Department's Solid Concrete Masonry Brick/Unit QC/QA Program. A list of these sources in North Carolina and adjoining states is available from the Materials and Tests Unit in Raleigh.

Use concrete building block that meets ASTM C90. Block shall be pink in color and substantially free from chips and cracks.

Use solid concrete block instead of clay brick for minor drainage structures that meet ASTM C139 except that the nominal dimensions shall be 4 inches x 8 inches x 16 inches.

Concrete block for block manholes shall meet ASTM C139.

1040-3 CONCRETE PAVING BLOCK

Use concrete paving block from sources that participate in the Department's Solid Concrete Masonry Brick/Unit QC/QA Program. A list of these sources in North Carolina and adjoining states is available from the Materials and Tests Unit in Raleigh.

Use concrete paving block that meet ASTM C139, except that the nominal dimensions shall be 4 inches x 8 inches x 16 inches. The block shall have a uniform surface color and texture.

1040-4 SEGMENTAL RETAINING WALL UNITS

Use segmental retaining wall (SRW) units from sources that participate in the Department's Solid Concrete Masonry Segmental Retaining Wall Units QC/QA Program. A list of these sources in North Carolina and adjoining states is available from the Materials and Tests Unit in Raleigh.

Use freeze-thaw durable SRW units when noted in the plans. Unless required otherwise in the contract, provide SRW units with a vertical straight face and a concrete gray color with no

DIVISION 15

UTILITY CONSTRUCTION

SECTION 1500

GENERAL UTILITY REQUIREMENTS

1500-1 DESCRIPTION

Construct various utilities as required by the contract or as directed.

Apply the applicable provisions of the rules and regulations of the NCDEQ to the construction of water lines and sanitary sewer lines. Perform all work in accordance with the applicable plumbing codes.

1500-2 COOPERATION WITH THE UTILITY OWNER

The utility owner owns the existing utility facilities and will own the new utility facilities after acceptance by the Department. The Department owns the construction contract and has administrative authority. Communications and decisions between the contractor and utility owner are not binding upon the Department or this contract unless authorized by the Engineer. Agreements between the utility owner and contractor for work that is not part of this contract or is secondary to this contract are allowed, but are not binding upon the Department.

Provide access for Department personnel and the owner's representatives to all phases of construction. Notify Department personnel and the utility owner 2 weeks before commencement of any work and one week before service interruption. Keep utility owners' representatives informed of work progress and provide opportunity for inspection of construction and testing.

Except in an emergency, do not operate any of the controls on the existing systems without prior approval of the owner.

Notify the utility owner at least 24 hours in advance of all arrangements for temporary service and for agreement with the owner as to the time that service may be interrupted.

1500-3 UTILITY LOCATIONS AND CONTRACTOR'S RESPONSIBILITY

The plans depict the best available information for the location, size and type of material for all existing utilities. Make investigations for determining the exact location, size and type of material of the existing facilities as necessary for the construction of the proposed utilities and for avoiding damage to existing facilities. Repair any contractor caused damage of existing facilities to the original or better condition at no additional cost to the Department.

1500-4 WEEKEND, NIGHT AND HOLIDAY WORK

Make connections between existing and proposed utilities at times most convenient to the public, without endangering the utility service and in accordance with the utility owner's requirements. Make connections on weekends, at night and on holidays, if necessary.

1500-5 RELATION OF WATER MAINS TO SEWERS

Lay water mains at least 10 feet laterally from existing or proposed sewers. If local conditions or barriers prevent a 10 foot separation, lay the water main with at least 18 inches vertical separation above the top of the sewer pipe either in a separate trench or in the same trench on a bench of undisturbed earth.

Section 1500

When a proposed water main crosses over a proposed or existing sewer, lay the water main with at least 18 inches vertical separation above the top of the sewer. If local conditions or barriers prevent an 18 inch vertical separation, construct both the water main and the sewer for a distance of 10 feet on each side of the point crossing with ferrous pipe having water main quality joints.

When a proposed water main crosses under a proposed or existing sewer, construct both the water main and the sewer of ferrous materials with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. Center the section of water pipe at the point of crossing.

1500-6 PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC

During the progress of the work, keep sidewalks and crossings open for the passage of pedestrians. Take necessary measures to keep roadways open for traffic unless lane or roadway closures are approved.

Construct and maintain adequate and approved bridges over excavations as necessary for the purpose of accommodating pedestrians or vehicles.

When open cut installation is allowed across a roadway and traffic is to be maintained, construct the installation in sections so that half the width of the roadway will be available to traffic. Provide all traffic control measures necessary to provide for safe traffic passage.

1500-7 SUBMITTALS AND RECORDS

Deliver only approved materials to the project. Provide sufficient information as required under Sections 105 and 106 to demonstrate the materials meet the specifications and intended use. Provide 2 copies to the utility owner and 6 copies to the Engineer or provide electronic submittals if accepted by the Engineer. Identify each item's intended use. As a minimum, the submitted information shall show the material description, brand name, stock number, size, rating and manufacturing specification.

Provide working drawings of thrust restraint designs and connection details along with schedules for performing the work.

Provide as-built plans of the installed utility. The plans shall include notations of the size and type material installed, coordinates of utility controls and horizontal and vertical locations of the piping. Provide 2 copies to the utility owner and 2 copies to the Engineer.

1500-8 LOCATING AND MARKING

Tape a continuous locator wire along the top of all piping. Mechanically fasten locator wire to valve boxes, meter boxes, fire hydrants, manhole covers and other above grade appurtenances. Install marking tape 18 inches to 24 inches below finished grade above all pipelines.

1500-9 PLACING PIPELINES INTO SERVICE

Make final connections of the new work to the existing mains where indicated in the plans, as required to fit the actual conditions or as directed. Provide sufficient work crews, equipment and materials on site to assure quick and efficient connections.

Schedule and notify owners and customers in advance of any interruptions of water service with ample time to make arrangements. Limit interruption of service to water customers to no more than 8 hours. Provide temporary connections as needed to maintain service. Obtain approval from the NCDEQ-Water Resources Section prior to placing a new water line into service. Use backflow prevention assemblies for temporary connections to isolate new water lines from existing water line.

1500-10 MEASUREMENT AND PAYMENT

The general utility construction work will be incidental and will be paid at the contract unit prices of the various utility items included in the contract.

**SECTION 1505
EXCAVATION, TRENCHING, PIPE LAYING
AND BACKFILLING FOR UTILITIES**

1505-1 DESCRIPTION

Perform all excavation, undercut, foundation conditioning, pipe laying, bedding, backfill and pavement, sidewalk and driveway repair necessary for installation of utilities.

1505-2 MATERIALS

Refer to Division 10.

Item	Section
Portland Cement Concrete, Class B	1000
Select Material	1016

Use Class III, IV, V or VI select material for foundation conditioning and bedding.

1505-3 CONSTRUCTION METHODS

Excavate, trench, lay pipe, bed and backfill utilities in conformance with the applicable requirements of Division 1, Division 2 and Articles 300-1, 300-4 and 300-6. Comply with AWWA and ASTM standards along with the product manufacturer requirements for installing utilities.

(A) Shoring

Excavate trenches and pits for the installation of utilities that are safe for the workers and roadway users and that protect the roadway and other property from damage. Provide appropriate groundwater and surface water controls to stabilize the excavation and foundation and to provide a clean working area.

(1) Worker Safety

Provide any necessary shielding or shoring to protect workers.

(2) Roadway Users

Provide shielding or shoring as required under Section 150 or as required elsewhere in the contract.

(3) Roadbed and Foundation Protection

Provide shoring of excavations less than one horizontal to one vertical from existing or proposed pavement to prevent failure or weakening of the roadbed. Provide plans and designs demonstrating the methods and techniques proposed and their adequacy. Provide engineered shoring systems as required for the actual conditions.

(4) Building and Structure Protection

Provide shoring of excavations less than one horizontal to one vertical from existing structures and buildings, on or off the right of way, to prevent foundation damage. Provide plans and designs demonstrating the methods and techniques proposed and their adequacy. Provide engineered shoring systems as required for the actual conditions.

Section 1505

(B) Foundation Conditioning

Undercut and replace weak or saturated soils below the pipe trench with select material to provide a firm foundation.

(C) Bedding

Provide excavations with sufficient width for placing and compacting bedding around the utility. Bed utilities in select material. Place bedding material to stable ground on both sides and to at least 2 inches below and above the pipe bells. Provide at least 6 inches of bedding material between rock and piping. Shape the bottom of trenches to fit the pipe. Compact bedding material completely in the pipe haunches. Provide recesses in the bedding to accommodate pipe joints.

(D) Pipe Laying

Lay pipe in accordance with the specifications and the manufacturer's recommendations. Except where necessary in making connections with other lines or as authorized by the Engineer, lay pressurized pipe with the bells facing in the direction of laying.

Where possible, keep joints exposed for visual inspection during testing.

During the progress of the work and until the completion and final acceptance, keep the pipelines and their appurtenances clean throughout and remove any obstructions or deposits. Provide secure watertight seals on pipe when work is not in progress.

Lay gravity sewer pipe upgrade with the spigot ends pointing in the direction of flow. Lay each pipe to form a close concentric joint with the adjoining pipe and to prevent sudden offsets of the flow line.

(E) Thrust Restraint

Provide thrust restraint for pressurized pipelines and appurtenances. When shown in the plans, construct as specified with modifications to match the actual field conditions. When not shown, engineer the thrust restraint system with a factor of safety of 1.25 for the test pressure specified and for the actual field conditions.

Provide thrust restraint on the existing piping system as necessary.

Use joint restraint methods, such as integral restraining bells and spigots, restraining retainer glands, restraining gaskets or restraining clamps and lugs with tie rods. Use concrete reaction backing and thrust collars where joint restraint is impractical.

Where any section of a main is provided with concrete thrust restraint for fittings, controls or hydrants, perform the hydrostatic pressure test after the concrete reaches appropriate strength.

(F) Backfilling

Backfill in accordance with Article 300-7 and compact to the density required by Subarticle 235-3(C).

1505-4 REPAIR OF PAVEMENTS, SIDEWALKS AND DRIVEWAYS

Repair sidewalks and driveways that are disturbed by excavation and trenching to an original or better condition in accordance with Section 848.

Use asphalt plant mix to repair or replace pavement damaged by utility work. Perform all work in accordance with Section 654. Immediately upon completion of the utility removal or installation, make repairs to the pavement.

1505-5 CONCRETE ENCASUREMENT OF UTILITY LINES

Encase existing or proposed utility lines in concrete for protection in areas as shown on the utility plans or as directed. Place the concrete completely around the line with a minimum thickness of 6 inches.

1505-6 MEASUREMENT AND PAYMENT

Foundation Conditioning material will be measured and paid as provided in Article 300-9.

Asphalt Plant Mix for pavement repair will be measured and paid as provided in Article 654-4.

Class B Concrete for Encasing Utility Lines will be measured and paid in cubic yards of concrete, measured in place.

___" Concrete Sidewalk and *___" Concrete Driveways* will be measured and paid in accordance with Article 848-4.

Trenching, excavation, pipe laying, bedding, backfilling and disposal of unsuitable materials for utility construction are included in the contract price for the applicable utility item and no separate measurement or payment will be made.

The following work and items are included in the contract price for the applicable utility item and no separate measurement or payment will be made for items (A) through (F) below:

(A) Undercut or Wet Excavation,

(B) Dewatering of Excavation,

(C) Shoring and Sheet piling (except temporary shoring for maintenance of traffic covered elsewhere in the contract and protection of structures and buildings),

(D) Thrust Restraint,

(E) Bedding Material, or

(F) Select Material for Backfill.

Payment will be made under:

Pay Item

Class B Concrete for Encasing Utility Lines

Pay Unit

Cubic Yard

SECTION 1510 WATER LINES

1510-1 DESCRIPTION

Provide water lines suitable for use in transporting potable water.

1510-2 MATERIALS

Refer to Division 10.

Item

Water Pipe and Fittings

Section

1036

The Contractor may use any of the water pipe specified under Section 1036 except where a particular type pipe is specified in the plans or required by environmental regulations or Departmental policy. The Contractor shall verify that the pipe is appropriate for the test pressure of the system and the external loading.

Use ductile iron fittings on water lines 4 inches or larger.

Use #12 AWG solid-copper wire with blue insulation for the utility locator wires.

Section 1510

Use 2 inch plastic marking tape colored blue with “Caution Water Line” or similar wording, permanently printed at 36 inch centers.

Protect steel rods and other metal clamps and lugs by galvanizing or painting with approved bituminous paint.

1510-3 CONSTRUCTION METHODS

(A) General

Meet the installation standards of AWWA or ASTM for water line construction.

Apply Section 1505 for excavation, trenching, pipe laying and backfill to water line installation.

Install small diameter pipe (4 inches or less) under existing pavement by a trenchless method at no additional cost to the Department.

Connect the ends of the water service piping using AWWA C800 type couplings or fittings. Make NPT screw joints with a double wrap of a polytetrafluoroethylene (PTFE) tape and torque as required by the manufacturer.

Store plastic pipe out of direct sunlight until burying. All plastic pipe showing discoloration or deterioration will be rejected for use and replaced with suitable pipe as specified under Article 106-9.

Install water lines with 36 inches to 42 inches of cover to finished grade unless otherwise directed or approved. Install water lines with greater cover for short distances to accommodate utility controls, to make tie-ins to existing facilities, to eliminate high points in the pipeline or to provide clearance between existing and proposed utilities, drainage, other obstacles or actual field conditions.

(B) Testing and Sterilization

Perform pressure and leakage tests and sterilization on newly installed water mains and altered water mains prior to placing such pipelines into service. Provide all equipment, piping, controls, pumps, water and safety devices necessary for performing the tests and sterilization.

Obtain clean water for cleaning, testing and sterilization from approved sources. Provide connections to potable water sources with approved backflow preventors until acceptance of all test results.

Perform tests using clean water and provide certified results demonstrating leakage less than the following amount when pressurized at 200 ± 5 psi for 2 hours.

$$W = LD\sqrt{P} \div 148,000$$

Where:

- W** = allowable leakage in gallons per hour
- L** = length of pipeline tested, in feet
- D** = nominal diameter of the pipe, in inches
- P** = average test pressure during the leakage test, in lb/sq.in.

Repair using approved methods or replace pipe, controls or appurtenances as necessary to reduce leakage below acceptable levels. Additionally, repair any leaks that are visible after 2 hours duration.

Clean water lines by flushing with water at least 2.5 feet per second velocity. Remove all debris and dirt from water mains larger than 4 inches by passing a medium density foam pig with abrasive strips through the lines.

Sterilize water lines in accordance with Section 1003 of the Rules Governing Public Water supply and AWWA C651 Section 4.4.3, the Continuous Feed Method. Provide a

chlorine solution with between 50 parts per million and 100 parts per million in the initial feed. If the chlorine level drops below 10 parts per million during a 24 hour period, then flush, refill with fresh chlorine solution, and repeat for 24 hours. Provide certified bacteriological and contaminant test results from a state-approved or state-certified laboratory. Operate all valves and controls to assure thorough sterilization. Testing, cleaning and sterilization shall be performed consecutively.

Dispose of waste water in accordance with all environmental regulations.

For short sections (less than 100 feet) and tie-in sections of water lines perform visual tests for leakage after installation instead of separate pressure and leakage tests. Sterilize according to AWWA C651 Sections 4.6 and 4.7.

Provide copies of the test results to the Engineer and to the water line owner.

Flush with clean water until the residual chlorine is reduced to the same level as in the existing water mains.

Place new water lines into service after approval of all testing and flushing and authorization by the Engineer.

1510-4 MEASUREMENT AND PAYMENT

Water lines of the various sizes will be measured from end to end in place with no deduction for length through valves or other fixtures and paid by the horizontal linear foot.

The quantity of *Ductile Iron Water Pipe Fittings* will be measured and paid per pound based on the published weights for ductile iron fittings, exclusive of the weights of any accessories, as listed in the "DI Fittings Weight Chart" located on the Utilities Unit web site. If the Contractor elects to use compact ductile iron water pipe fittings, measurement will be based on the weight of standard size ductile iron water pipe fittings. Any fitting not listed will be measured based on the published weights for ductile iron fittings listed in ANSI/AWWA C-110/A21.10. This is limited to pressure pipe 4 inches or larger.

If the contract does not include such pay items, measurement will not be made and the work will be incidental to other contract pay items.

Payment will be made under:

Pay Item	Pay Unit
" Water Line	Linear Foot
Ductile Iron Water Pipe Fittings	Pound

SECTION 1515 UTILITY CONTROLS

1515-1 DESCRIPTION

Provide appropriate control devices, valves, meters, backflow prevention assembly and hydrants on water lines and force main sewers.

1515-2 MATERIALS

Refer to Division 10.

Item	Section
Sanitary Sewer	1034
Water	1036

Deliver only approved materials to the project.

Air release valves shall meet AWWA C512. In addition, air release valves for sanitary sewer force mains shall have long bodies, shall be equipped with back flushing connections and shall have a hood over the outlet.

Section 1515

Double check valves (DCV) and Reduced Pressure Zone principal (RPZ) backflow prevention assemblies shall be listed on the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research list of approved backflow devices. Line stops consist of a sleeve, temporary valve and closure cap. The sleeve and cap shall meet applicable AWWA standards, shall be made of cast iron or stainless steel, shall be pressure rated at 200 psi and shall be sized for the type pipe to be tapped. The temporary valve shall be suitable for contact with potable water with NSF certification and designed to match the actual field conditions.

Line stop bypass pipe shall be pressure rated at 200 psi, shall be NSF certified and shall be adequately restrained.

Use screw or slip type valve boxes with a base to fit the valve yoke and a removable plug cap with the word "Water" or "Sewer" cast therein.

Precast manholes in accordance with Section 1525.

1515-3 CONSTRUCTION METHODS

Apply Section 1505 for excavation, trenching, pipe laying and backfill.

Place two 4 inch x 8 inch x 16 inch concrete blocks beneath valves and fire hydrants for support.

When necessary, due to project staging, install valves, meters and fire hydrants as appropriate for the current grade and make adjustments to finished grade as work progresses.

Provide enclosures with positive drainage for utility controls.

(A) Valves

Install all valves with an approved valve box set flush with the ground or pavement. Place a 24 inch diameter precast concrete ring flush with the ground around all valve boxes not in pavement.

Test and sterilize tapping valves before making the tap. Do not allow cuttings to enter the tapped main.

(B) Meters

Install water meters adjacent to the right of way or as shown in the plans.

Place meter boxes with the top of the meter box flush with finished grade of the project.

(C) Backflow Prevention Assembly

Install backflow prevention assembly off the highway right of way or as shown in the plans.

Licensed installers shall test and certify RPZ backflow preventer installations. Enclose RPZ backflow prevention assembly above grade in a hot box.

Enclose DCV backflow prevention assembly below grade in a precast concrete vault with positive drainage or above grade in a hot box.

Install the hot box on a 4 inch thick concrete slab that is 6 inches larger than the box and 2 inches to 4 inches above finished grade.

(D) Fire Hydrants

Install fire hydrants outside of the vehicle recovery area of the roadway, adjacent to the right-of-way line or in protected areas.

Connect fire hydrants to the main with a 6 inch valve and branch line having at least as much cover as the distribution main. Set hydrants plumb with the pumper nozzle facing the roadway and with the breakaway safety flange between 1 inch and 4 inches above the

finished surrounding grade. Except where otherwise approved, place hydrants into service as soon as practicable. Place at least 7 cf of clean crushed stone around the base of the hydrant to insure drainage of the hydrant barrel.

Where necessary, remove the hydrant shoe and replace with the appropriate type to connect a relocated hydrant to the new pipe. Furnish and install or remove hydrant extension pieces to provide the proper bury of the pipe and hydrant.

(E) Line Stops

Provide line stop valves to temporarily shut down the flow in pressurized pipes. Provide line stops to temporarily dead end a pipeline when there are no available working valves on the existing piping. Provide line stops with bypass to isolate a section of the existing pipeline while maintaining the flow.

After line stop valves are removed, permanently cap the tapping sleeve and backfill the entire excavation with compacted select material.

(F) Air Release Valves

Install air release valves at the high point of pressurized pipelines. Place a precast manhole around air release valves.

(G) Miscellaneous Controls

Install corporation stops with tapping saddles for connecting 2 inches or smaller water lines to larger water lines. Install corporation stops at 45 ± 10 degrees from vertical on the larger line.

To aid in testing and flushing, install corporation stops at all elevated points along the pipeline to bleed off all entrapped air.

1515-4 MEASUREMENT AND PAYMENT

Valves, Water Meters, Fire Hydrants, Line Stops and other items listed in the pay items will be measured and paid per each for the appropriate size and type. *Fire Hydrant Leg* will be paid per linear foot.

The term *Relocate* in a pay item means to physically move the existing item, either vertically or horizontally, using the appropriate materials to place the item into working order. Measurement and payment will be made per each for the appropriate size and type. When relocating a fire hydrant, valves will only be paid for if there is no properly functioning existing valve.

No additional compensation will be made for adjustments due to project staging on new or relocated items.

Reconnect Water Meter means to transfer or replace the piping from a new water line to an existing water meter that is not relocated. Measurement and payment for meters will be made per each.

___ *Water Service Line* will be paid per linear foot for pipes 2 inches or greater.

Water Service Line will be paid per linear foot for pipes less than 2 inches

Valve boxes, meter boxes, hot boxes, vaults and manholes for protecting and servicing utility controls are incidental to the appropriate pay item.

A line stop with bypass consists of installing line stops on opposite ends of the piping to be isolated, tapping the piping beyond the line stops and providing temporary bypass piping between the taps. The entire assembly of valves and piping will be measured as one unit and paid per each.

Section 1520

Corporation stops or other items to aid in testing and flushing of the piping are incidental items.

If the contract does not include such pay items, measurement will not be done and the items will be incidental to other contract pay items. All piping, controls, certifications, appurtenances and other miscellaneous items necessary to place the new or relocated item in proper working condition are incidental.

Payment will be made under:

Pay Item	Pay Unit
___" Valve	Each
___" Tapping Sleeve and Valve	Each
___" Air release Valve	Each
___" Blow Off	Each
___" Water Meter	Each
Relocate Water Meter	Each
Reconnect Water Meter	Each
___" DCV Backflow Prevention Assembly	Each
Relocate ___" DCV Backflow Prevention Assembly	Each
___" RPZ Backflow Prevention Assembly	Each
Relocate ___" RPZ Backflow Prevention Assembly	Each
Fire Hydrant	Each
Relocate Fire Hydrant	Each
___" Line Stop	Each
___" Line Stop with Bypass	Each
Fire Hydrant Leg	Linear Foot
___" Water Service Line	Linear Foot
Water Service Line	Linear Foot

SECTION 1520 SANITARY SEWER

1520-1 DESCRIPTION

Provide sanitary sewers suitable for transporting sewage.

1520-2 MATERIALS

Refer to Division 10.

Item	Section
Sanitary Sewer Pipe and Fittings	1034

Use any pipe specified under Section 1034 except where a particular type pipe is specified in the plans or required by environmental regulations or Departmental policy. Verify the pipe is appropriate for the test pressure of the system and the external loading.

Use ductile iron fittings on pressurized (force main) pipelines 4 inches or larger.

Use screw type plastic or brass clean-out covers.

Use #12 AWG solid-copper wire with green insulation for the utility locator wires.

Use 2 inch plastic marking tape colored green with "Caution Sewer Line," or similar wording, permanently printed at 36 inch centers.

1520-3 CONSTRUCTION METHODS

Apply Section 1505 for excavation, trenching, pipe laying and backfill to sanitary sewer installation.

Assemble pipe in accordance with the recommendations of the manufacturer.

- 1 Install PVC pipe in accordance with approved bedding methods.
- 2 Install vitrified clay sewer pipe in accordance with ASTM C12.
- 3 Install 4 inch minimum diameter sanitary sewer clean-outs flush with finished grade on 4 inch
- 4 and 6 inch service lines. Provide clean-outs at the right-of-way line and at changes in
- 5 direction. Do not locate clean-outs within the roadway pavement or shoulders. Provide
- 6 clean-outs no more than 50 feet apart when beyond the roadway shoulders.
- 7 Use ductile iron pipe for sewers with 10% or greater slope.
- 8 Install sewer lines entering manholes with the crown at or higher than the sewer line leaving
- 9 the manhole.
- 10 Install small diameter pipe (4 inches or less) under existing pavement by a trenchless method
- 11 at no additional compensation.

12 (A) Gravity Sanitary Sewer

- 13 Construct gravity sanitary sewers in conformance with *NCDEQ Gravity Sewer Minimum*
- 14 *Design Criteria*.

15 (1) Pipe Installation

- 16 Use fittings or saddles to connect service lines to the sewer main.
- 17 Maintain sewer flow at all times. Use temporary diversions or pumping to maintain
- 18 flow when connecting proposed sewers to existing sewers. Use engineered
- 19 temporary pumping systems capable of handling full pipe flow. Use pumping
- 20 systems with automatic reliable operation or constantly tended manual operation.

21 (2) Testing

- 22 Perform tests on newly installed sewers and altered sewers before placing into
- 23 service. Provide all equipment, piping, controls, pumps, water and safety devices
- 24 necessary for performing the tests.

- 25 Test all 24 inches and smaller gravity sewer lines for leakage using infiltration,
- 26 exfiltration, or air test. Perform visual inspection on gravity sewer lines larger than
- 27 24 inches. Perform line and grade testing and deflection testing on all gravity sewer
- 28 lines.

29 (a) Infiltration

- 30 For sewer lines greater than 3 feet below groundwater, measure the amount of
- 31 water infiltrating into the pipeline between manholes in at least 24 hours. Repair
- 32 leaks or replace piping when the rate of infiltration exceeds the following
- 33 equation:

$$W = 0.000789LD$$

Where:

- W** = maximum allowable leakage in gallons per hour
- L** = length of pipeline tested, in feet
- D** = nominal diameter of the pipe, in inches

34 (b) Exfiltration

- 35 For sewer lines above groundwater, perform an exfiltration test on the pipeline
- 36 between manholes. Repair leaks or replace piping when the rate of exfiltration
- 37 exceeds maximum allowable leakage calculated in Subarticle 1520-3(A)(2)(a).

- 38 The exfiltration test shall consist of securely plugging the pipe at the lower
- 39 manhole and filling the pipeline with water. Allow the water to sit for 24 hours
- 40 in clay or concrete pipes. Raise the water level in the upstream manhole

Section 1520

to 3 feet above the top of pipe. After 4 hours, measure the amount of water required to bring the water level back to the level at the start of the test and record the time.

Perform exfiltration tests through a series of manhole to manhole segments to limit the length of pipe tested to between 300 feet and 1,500 feet. Shorter sections may be tested with longer test times. No additional leakage allowance for manholes permitted.

(c) Air Test

Instead of hydrostatic testing, sewer lines 24 inches in diameter or smaller may be air tested in accordance with ASTM C828, ASTM C924 and the following. Securely plug the sewer pipe at the manholes. Fill the pipe with air to 4.0 psi and hold this pressure for 5 minutes. Reduce the pressure to 3.5 psi. Measure the time for the pressure to drop 1.0 psi to the new pressure of 2.5 psi. Exceed the minimum test time in Table 1520-1 for the appropriate nominal pipe diameter.

**TABLE 1520-1
AIR TEST TIME**

Pipe Size (Inches)	Test Time (Minutes/100 ft)	Pipe Size (Inches)	Test Time (Minutes/100 ft)
8	1.2	18	2.4
10	1.5	21	3.0
12	1.8	24	3.6

(d) Visual Inspection

Visually inspect sewer lines larger than 24 inches from the inside using approved cameras. Correct any leakage, rolled gaskets or defects.

(e) Line and Grade

Test all sewers for straight alignment by lamping or using a laser.

(f) Deflection Testing

Perform deflection tests on all flexible pipes. Conduct the test after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. As an alternative to waiting 30 days to permit stabilization of the soil-pipe system, provide certified soil testing verifying the backfill of the trench has been compacted to at least 95% maximum density.

No pipe shall exceed a deflection of 5%. If deflection exceeds 5%, relay the pipe.

The rigid ball or nine-point mandrel used for the deflection test shall have a diameter not less than 95% of the base inside diameter or average inside diameter of the pipe depending on which is specified in the ASTM, to which the pipe is manufactured. The pipe shall be measured in compliance with ASTM D2122. The test shall be performed without mechanical pulling devices.

(B) Force Main Sanitary Sewer

Construct force main sewers in conformance with *NCDEQ Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains*.

(1) Installation

Install lines with 36 inches to 42 inches of cover to finished grade unless otherwise directed or approved. Install lines with greater cover for short distances to accommodate utility controls, to make tie-ins to existing facilities, to eliminate high

- 1 points in the pipeline or to provide clearance from existing or proposed utilities,
 2 drainage, other obstacles or actual field conditions.
- 3 Provide automatic air release valves at all high points.
- 4 (2) Testing
- 5 Perform pressure and leakage tests on newly installed force mains and altered sewers
 6 before placing such pipelines into service. Provide all equipment, piping, controls,
 7 pumps, water and safety devices necessary for performing the tests and sterilization.
- 8 Test all new sewer force mains with clean water at 200 ± 5 psi for a 2 hour duration.
 9 Vent all high points and expel all air. Provide certified results demonstrating leakage
 10 less than:

$$W = 0.000106LD$$

Where:

- W** = allowable leakage in gallons per hour
L = length of pipeline tested, in feet
D = nominal diameter of the pipe, in inches

- 11 Repair leaks using approved methods or replace pipe, controls or appurtenances as
 12 necessary to reduce leakage. Additionally, repair any leaks that are visible after
 13 2 hours duration.

14 **1520-4 MEASUREMENT AND PAYMENT**

- 15 ___" *Sanitary Gravity Sewer* and ___" *Force Main Sewer* will be measured from end to end in
 16 place with no deduction for length through manholes, valves or fittings and paid per linear
 17 foot for the appropriate size. Where two different sizes enter or go from a manhole, each size
 18 will be measured to the center of the manhole. Unless otherwise shown in the plans, branch
 19 connections, ells or other fixtures will be included in the length measurement. All fittings will
 20 be incidental on *Sanitary Gravity Sewer*.

- 21 *Sanitary Sewer Clean-Out* will be measured and paid per each.

- 22 *Sewer Service Line* will be paid per linear foot.

- 23 The quantity of *Ductile Iron Sewer Pipe Fittings* will be measured and paid per pound based
 24 on the published weights for ductile iron fittings, exclusive of the weights of any accessories,
 25 as listed in the "DI Fittings Weight Chart" located on the Utilities Unit web site. If the
 26 Contractor elects to use compact ductile iron sewer pipe fittings, measurement will be based
 27 on the weight of standard size ductile iron sewer pipe fittings. Any fitting not listed will be
 28 measured based on the published weights for ductile iron fittings listed in ANSI/AWWA C-
 29 110/A21.10. This is limited to pressure pipe 4 inches or larger.

- 30 Payment will be made under:

Pay Item

___" Sanitary Gravity Sewer
 ___" Force Main Sewer
 Sanitary Sewer Clean-Out
 Sewer Service Line
 Ductile Iron Sewer Pipe Fittings

Pay Unit

Linear Foot
 Linear Foot
 Each
 Linear Foot
 Pound

Section 1525

SECTION 1525 UTILITY MANHOLES

1525-1 DESCRIPTION

Provide utility manholes on water and sanitary sewer lines.

1525-2 MATERIALS.

Refer to Division 10.

Item	Section
Brick	1040-1
Concrete Block	1040-2
Curing Agents	1026
Gray Iron Castings	1074-7(B)
Grout, Type 2	1003
Mortar	1040-9
Portland Cement Concrete	1000
Precast Concrete Units	1077
Reinforcing Steel	1070
Select Materials	1016
Steps	1074-8
Structural Steel	1072

Use precast concrete manholes with monolithic bottoms which conform to ASTM C478, AASHTO M 199 and are as shown in the plans or in *Roadway Standard Drawings*. Use ASTM C443 gaskets or AASHTO M 198 flexible sealants for joints between precast manhole sections. Use resilient connectors for piping conforming to ASTM C923. Use ASTM A48, Class 35 cast iron or Grade 60 steel reinforcement steps with polypropylene plastic coating.

Use manhole frames and covers made of cast iron conforming to ASTM A48 Class 35, which are traffic bearing, have machined contact surfaces and are sized as shown. Use covers with two 1 inch diameter air vents for vented manholes and use solid, non-vented covers with gaskets for watertight installation. Use covers with "Sanitary Sewer" or "Water" cast in large letters as appropriate for the type of utility.

Use Type 2 grout with properties that meet Table 1003-2 in the *Grout Production and Delivery* provision except provide grout with a plastic consistency in accordance with ASTM C1107.

1525-3 CONSTRUCTION METHODS

Apply Section 1505 for excavation, trenching, pipe laying and backfill.

Make connections of pipe to manholes in cored or precast holes using a resilient connector. Use horseshoe type holes only when approved. For horseshoe type holes wrap the pipe with a butyl rubber gasket and fill the space between the pipe and manhole with a non-shrinking grout.

Provide an outside drop assembly on manholes for sewer pipes entering with 2.5 feet or more vertical drop. Inside drop assemblies may be used for connections to existing manholes when the drop exceeds 5 feet and the manhole diameter is greater than 4 feet.

In sewer manholes over 3 feet in depth, provide steps spaced 16 inches on center. Install steps in line with the effluent opening unless otherwise specified.

Construct invert channels to confine and direct the flow through sanitary sewer manholes. Use smooth finished invert channels that provide easy transition from inlet to outlet. Finish the benches or shelves to a non-slip texture and slope toward the invert channel. Precast invert channels are recommended but not required.

On deep manholes, a transition type manhole may be used provided there is at least 6 feet from the manhole bench to the transition cone.

Construct manholes with the top of the cover as shown in Table 1525-1.

TABLE 1525-1 MANHOLE CONSTRUCTION	
Location	Top height above finished grade
Roadway pavement, Driveways, Sidewalks, Parking lots	Flush $\pm 1/4"$
Vehicle Recovery Area	Flush $\pm 3"$
Manicured Areas, such as lawns	Flush to + 2" with concrete pad
Flood Zones less than 3 ft above finished grade	1 ft above 100 year flood elevation
Flood Zones greater than 3 ft above finished grade	2 ft above finished grade with watertight frame and cover and vent pipe to 1 ft above 100 year flood
Other areas	2 ft above finished grade

For manholes installed before finished grading or paving, construct the top flush with the current grade to provide access during all phases of construction and adjust as grading and paving work progresses in accordance with Section 858.

(A) Cast-In-Place Concrete, Brick and Block Masonry

Construct concrete manholes in accordance with Section 825 with an ordinary surface finish. Construct brick masonry in accordance with Section 830. Furnish and place reinforcing steel in accordance with Section 425. Construct block masonry in accordance with Section 834 except that reinforcing will not be required.

Where necessary to fit field conditions, vary the dimensions of the manhole and footings as directed.

(B) Installation of Precast Units

Assemble precast manhole units in accordance with the manufacturer's instructions and grout together to form a sound structural unit. Fill all lifting holes with grout. Where it is necessary to use cast-in-place, brick masonry or block masonry construction as part of the structure, apply Subarticle 1525-3(A) to such construction.

(C) Fittings and Connections

Where fittings enter the manhole, place them as the work is built up, thoroughly bonded and accurately spaced and aligned.

Make pipe connections so that the pipe does not project beyond the inside wall of the manhole and grout smooth and uniform surfaces on the inside of the manhole.

Set metal frames for covers in full mortar beds and mechanically secure by an approved method.

(D) Testing

Vacuum test all manholes before grouting and backfilling. Test according to ASTM C1244.

1525-4 MEASUREMENT AND PAYMENT

The height of the manhole will be measured and paid to the nearest tenth of a foot from the inside bottom (invert) of the manhole to the final finished top of the manhole ring.

Utility manholes will be measured and paid by appropriate diameter per each for manholes of 0 to 6 feet height and per linear foot of height over 6 feet. Adjustment of existing manholes

Section 1530

will be measured and paid in accordance with Article 858-4. Drop assemblies will be incidental to the work being performed.

Payment will be made under:

Pay Item

___' Dia Utility Manhole
Utility Manhole Wall ___' Dia

Pay Unit

Each
Linear Foot

SECTION 1530

ABANDON OR REMOVE UTILITIES

1530-1 DESCRIPTION

Abandon or remove utility facilities.

1530-2 MATERIALS

Refer to Division 10.

Item

Flowable Fill
Portland Cement Concrete
Select Materials

Section

1000-6
1000
1016

1530-3 CONSTRUCTION METHODS

Apply Section 1505 for excavation, trenching, pipe laying and backfill.

(A) Abandoning Pipe

Abandon utility pipes shown in the plans or designated by the Engineer by emptying the pipeline contents and plugging the ends with grout or flowable fill. Prepare grout to a consistency that will flow and be vibrated in order for the mix to flow uniformly into the pipe to be filled. Use the construction methods in Article 340-3.

Fill or remove the following abandoned utility pipes:

(1) Pipe larger than 24 inches.

(2) Pipe located within the roadway typical section or the project slope stake line and one of the following:

(a) Pipe 12 inches to 24 inches diameter located less than 20 feet below finished grade.

(b) Pipe 6 inches to 12 inches diameter located less than 12 feet below finished grade and not made of cast iron, ductile iron, HDPE or PVC.

(c) Located below groundwater table that could become a conduit for water movement.

Excavate, remove and dispose of properly any abandoned pipe to be removed. Backfill the resulting trench and properly compact using local excavated material or select backfill as required.

Fill abandoned pipe with grout or flowable fill to at least 90% full or completely when on railroad right of way.

Remove any abandoned utility pipe exposed by grading operations to a minimum depth of 12 inches below subgrade elevation of the proposed roadbed or completed grading template.

Plug all abandoned utility pipes. Use grout to plug all abandoned utility pipes at the entrance to all manholes whether the manhole is to be abandoned or not. Use grout to

1 plug all abandoned water mains after new mains are placed in service. Abandon valves
2 by removing valve box and backfilling with approved material.

3 **(B) Abandoning Manholes**

4 Abandon utility manholes in the construction limits by removing the top of the manhole
5 to the manhole spring line or to an elevation of 2 feet below the roadway subgrade,
6 whichever is greater and filling the manhole barrel with approved material.

7 Plug connecting utility pipes before filling or removing the manhole.

8 Remove the manhole taper, wall and base on all manholes to be removed.

9 Removed frames and covers become the property of the Contractor for proper disposal.

10 **(C) Remove Water Meter**

11 Remove water meters by disconnecting and plugging the water service piping at the
12 source main and plugging the piping at the right-of-way line. Return the meter to the
13 utility owner. Dispose of all other parts, piping and boxes.

14 **(D) Remove Fire Hydrant**

15 Remove fire hydrants by disconnecting and plugging the hydrant leg piping as close to
16 the water main as possible. If the hydrant valve is within 4 feet of the main, close the
17 valve, plug the outlet side of the valve and remove the valve box.

18 Removed hydrants become the property of the Contractor for proper disposal.

19 **1530-4 MEASUREMENT AND PAYMENT**

20 Utility pipe that is abandoned by filling or removal will be measured and paid by the linear
21 foot for the size of pipe. Utility pipe that is abandoned by plugging the ends only and leaving
22 in place will not be measured or paid. Abandoned valves will not be measured and paid.
23 Grout used for plugging of abandoned utility pipe is incidental to the work being performed.
24 Utility pipe that is removed by other work of the contract will be incidental to the other work.

25 *Abandon Utility Manhole* will be measured and paid per each.

26 *Remove Utility Manhole* will be measured and paid per each.

27 *Remove Water Meter* and *Remove Fire Hydrant* will be measured and paid per each.

28 Payment will be made under:

Pay Item	Pay Unit
Abandon ___" Utility Pipe	Linear Foot
Abandon Utility Manhole	Each
Remove Utility Manhole	Each
Remove Water Meter	Each
Remove Fire Hydrant	Each

29 **SECTION 1540**
30 **ENCASEMENT**

31 **1540-1 DESCRIPTION**

32 Furnish and install encasement or casing pipes. For the purposes of this specification the
33 words encasement, casing, encasement pipe and casing pipe are interchangeable.

Section 1540

1540-2 MATERIAL

Refer to Division 10.

Item	Section
Concrete Pipe	1034-3
Flowable Fill	1000-6
Grout	1003
PVC Pipe	1034-2
Select Materials	1016
Steel Encasement Pipe	1036-4(B)
Treated Timber	1082-3
Clay Pipe	1034-1

Other pipe as designed by an engineer licensed by the State of North Carolina.

Submit material certifications and obtain approval from the Engineer before installation.

1540-3 CONSTRUCTION METHODS

(A) Open Cut

Apply Section 1505 for excavation, trenching, pipe laying and backfill.

(B) Welding

Weld in accordance with Article 1032-5.

(C) Encasements for Future Use

Mark encasements for future use with a treated wooden marker post. Place wooden marker post at the right of way or at the ends of encasements if encasements extend beyond the right of way. Encasements 24 inches and larger require certification of durability and a design life of 100 years.

(D) Carrier Pipe Installation

Install carrier pipe through casing using spacers or insulators to support the carrier pipe. Place spacers at intervals sufficient to support the carrier pipe without sagging. Install spacers sized to raise the carrier pipe bells above the encasement pipe invert.

Seal ends of casing with concrete, brick or other approved materials. Ensure drainage of encasement by leaving a 1 inch diameter weep hole in the seal of the lower end of the encasement.

(E) Casing Pipe Fill

Pump or place flowable fill; grout; or Class III, Class IV or Class V select materials into the annular void between the carrier pipe and casing pipes 24 inches or larger. Otherwise, certification of durability and a design life of 100 years is required.

1540-4 MEASUREMENT AND PAYMENT

" Encasement Pipe will be measured from end to end and paid at the contract unit price per linear foot for each size.

Payment will be made under:

Pay Item	Pay Unit
" Encasement Pipe	Linear Foot

SECTION 1550 TRENCHLESS INSTALLATION OF UTILITIES

1550-1 DESCRIPTION

Install pipe using a trenchless method. Pipe refers to the specified pipe, which may be the primary carrier pipe or an encasement pipe. Shoring means the earth support system used for installing the pipe. The terms for encasement, casing, encasement pipe and casing pipe are interchangeable.

An engineer licensed by the State of North Carolina shall design the method and certify the work will not damage the roadway above or endanger the roadway user.

1550-2 MATERIAL

Refer to Division 10.

Item	Section
Concrete	1000
Encasement Pipe	1540
Flowable Fill	1000-6
Structural Timber	1082
Structural Steel	1072
Treated Timber	1082-3

Use pipe joints that are modified to suit the installation method. Provide engineering calculations for piping and shoring. Submit material certifications and obtain approval from the Department's Engineer before installation.

Use steel or concrete liner plates. Steel tunnel liner plates shall meet Sections 16 and 25 in *AASHTO LRFD Bridge Design Specifications*. Concrete liner plates shall meet AASHTO specifications.

Drilling fluids consist of water, bentonite and polymer additives.

Other materials will be considered with adequate design and quality control.

1550-3 CONSTRUCTION METHODS

(A) General

Apply Section 1505 for excavation, trenching, pipe laying and backfill.

Install the pipe to the lines and grades shown in the plans. Use workers that are skilled in the method of construction. Construct with good workmanship by skilled workers along with proper safety precautions.

Locate ends of trenchless construction and pits beyond the vehicle recovery area of the roadway. The vehicle recovery area may be reduced using acceptable traffic control methods.

(B) Design

Contract plans will show a trenchless method including but not limited to length, profile and bore pit locations based on available information. The Contractor's design shall confirm this method is appropriate for the field conditions and for the specified pipe. Subsurface information in the vicinity of the trenchless installation may be available in accordance with Section 102-7.

Assess soil conditions expected during trenchless operations.

Design the method to minimize the vertical movement of the pipe or the completed roadway section. Use methods of construction and installation that will not disturb the soils outside of the immediate vicinity of the pipeline or pits.

Section 1550

Before construction, provide detailed plans for the method of installation certified by an engineer licensed by the State of North Carolina. Provide certified calculations demonstrating the method of installation as safe and of minimal risk. Provide certified calculations of the structural adequacy of all materials. The design shall meet *AASHTO LRFD Bridge Design Specifications*. An engineer licensed by the State of North Carolina shall certify changes or modifications to the designed method as needed for actual field conditions.

(C) Water Control

Provide groundwater control and removal as appropriate for the method of excavation and installation. Remove the groundwater using an engineered dewatering system provided in the design submittal. Keep surface waters out of the excavation and pits.

(D) Shoring

Provide temporary or permanent shoring, as needed. Provide temporary shoring to maintain the hole or pit excavation for the duration of the work. Casing pipe 24 inches and larger, tunnel liner, and shoring that is not certified for permanent use is considered temporary. Fill the annular space between the specified pipe and temporary shoring. Provide permanent shoring when desired or specified to maintain the open hole for an indefinite time. Permanent shoring requires certification of durability and a design life of 100+ years.

Fill all voids around the excavation and shoring with structural fill material as work progresses.

Either work continuously (24 hours/day and 7 days/week) on the operations from the time the excavation begins through the filling of voids or use an engineered system for shoring the excavation during work stoppage.

(E) Pre-Construction Meeting

The Contractor shall conduct a pre-construction meeting with the Department's Engineer to review the proposed method for installation of the pipe. Conduct the meeting at least 48 hours before beginning installation. The meeting shall consist of, but is not limited to:

- (1) Presentation of the construction methods for understanding by all involved,
- (2) Presentation of methods for filling any potential voids around the pipe,
- (3) Demonstrating that appropriate equipment and materials are on site,
- (4) Providing a progress schedule, and
- (5) Demonstrating ability to react to failures or roadway settlement or heave.

1550-4 TRENCHLESS METHODS

(A) Bore and Jack

For bore holes up to 6 inches in diameter in stable ground, the hole may be augured and the pipe pushed or jacked through the cleaned out hole. For bore holes greater than 6 inches, provide continuous support of the hole by simultaneously jacking the pipe or casing into the hole.

Use equipment suitably sized and designed to simultaneously bore or drill the soil or rock while pushing or jacking pipe on a controlled grade. Position the cutter head within one diameter of the leading edge of the pipe. In cohesive, dense and dry soils and rock, position the cutter head in front of the leading edge. In non-cohesive or loose soils, position the cutter head inside the pipe.

Dry bore only, do not use jetting or wet boring methods. Use drilling fluids only on the outside of pipe for lubrication or hole stabilization.

Minimize over bore, match cutter diameter to the outside diameter of the encasement pipe. Limit overbore to the O.D. + 2 inches.

Provide steering controls as necessary to maintain line and grade.

If conditions allow and with the approval of the Engineer, the Contractor may elect to use the pipe ramming method in lieu of bore and jack. Payment for the pipe ramming method will be paid as bore and jack.

(B) Directional Drilling

For drilled holes up to 6 inches in diameter in stable ground, the hole may be drilled and reamed followed by pulling the pipe into the hole within 8 hours. For drilled holes greater than 6 inches, simultaneously pull the pipe or casing into the hole as reaming occurs

When under pavement or within a one horizontal to one vertical distance from pavement, maintain the depth of cover in Table 1550-1.

TABLE 1550-1 DEPTH OF COVER FOR DIRECTIONAL DRILLING	
Drilled Hole Diameter	Minimum Depth of Cover
2" to 6"	6 ft
> 6" to 15"	12 times the hole diameter
> 15" to 36"	15 ft

Begin bores at locations that allow transitioning the bore to meet the above depths.

Use drilling fluids as appropriate for the type soils. Pump drilling fluids only while drilling or reaming. Monitor flow rates to match the amount leaving the bore hole. Do not increase pressure or flow to free stuck drillheads, reamers or piping.

Limit drilled or reamed holes to 1.5 x O.D. for pipe 12 inches or less and O.D. + 6 inches for pipes larger than 12 inches.

(C) Tunneling

Tunnel using hand mining, mechanical excavation, tunnel boring machine (TBM), microtunneling, or other accepted tunneling method. Use tunnel shields or fore poling along with benched excavation and breast boarding as appropriate for the field conditions. Alternatively, the Contractor's engineer may certify that the soils are self-supporting of the dead and live loads and design tunneling methods as appropriate.

Provide active support to the tunnel walls. Shore tunnel walls using liner plates, steel ribs with lagging or other engineered method or by jacking piping into place.

Limit over excavation to 2 inches larger than the liner or shield. Grout the external voids as work progresses and as specified by the Contractor's engineer.

(D) Pipe Ramming

Use pipe ramming only where soils are homogeneous and free of rock, boulders, stumps and debris. Do not use in the vicinity of quick or liquefiable soils.

Steel bands 1/2 inch thick are allowed on the outside of the leading edge of the pipe or casing to oversize the hole to reduce friction. Steel bands 1/2 inch thick may be used on the inside to compact the spoil and to prevent plugging.

Install at the following minimum depth of cover.

TABLE 1550-2
DEPTH OF COVER FOR PIPE RAMMING

Pipe or Casing Diameter	Minimum Depth of Cover
2" to 6"	4 ft
> 6" to 14"	6 pipe diameters
>14" to 72"	8 ft

Contain spoil within the casing during ramming. After completion, use compressed air or augers to remove the spoil. Clean the interior using a pig. Provide appropriate safety devices. Limit air pressure to less than the rating of the pipe or casing.

Use lubricants and surfactants as needed and ensure vibration induced consolidation of soils does not result in settlement greater than 0.02 feet.

(E) Other Methods

Other methods will be considered on a case by case basis when thoroughly engineered.

(F) Lubrication and Drilling Fluids

Use drilling fluids for lubrication. Do not use water alone.

1550-5 QUALITY CONTROL

The Contractor, at no cost to the Department, shall replace or repair damaged or defective installations. The method to be used shall be designed by the Contractor's engineer and approved by the Engineer.

(A) Ground Movement

Before excavation, establish control points for measuring vertical movement of the road at 10 feet intervals along the centerline and 10 feet each side of the pipeline. A land surveyor licensed in the State of North Carolina shall monitor these points daily until construction is complete.

Cease trenchless operations when measured movement exceeds 0.02 feet. Determine cause of settlement and repair as necessary. Modify trenchless methods as needed.

(B) Leakage

Limit leakage through tunnel walls to minor seepage. All leaks in pipes, casing or other permanent shoring shall be sealed.

(C) Roundness

Provide permanent shoring maintaining at least 95% of nominal diameter in all directions.

(D) External Voids

Fill all external voids greater than 2 inches high or 2 feet wide. Fill with flowable fill, grout or Class II or III select material.

1550-6 MEASUREMENT AND PAYMENT

Bore and Jack of ____ will be measured and paid in linear feet. Measurement will be made horizontally to the nearest tenth of a linear foot.

Directional Drilling of ____ will be measured and paid in linear feet. Measurement will be made horizontally to the nearest tenth of a linear foot.

Tunneling of ____ will be measured and paid in linear feet. Measurement will be made horizontally to the nearest tenth of a linear foot.

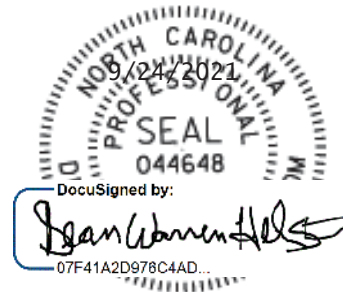
Measurement will be made along utility pipes with required trenchless installation. Payment for trenchless installation will be made as additional compensation for utility piping with

Section 1550

- 1 contract pay items of the various sizes. No additional payment will be made for access pits or
- 2 shoring required for the installation. Shoring required for the maintenance of traffic or the
- 3 protection of building or other structures, on or off the right of way, shall be paid under
- 4 *Temporary Shoring*. No payment will be made for abandoning defective installations.
- 5 Payment will be made under:

Pay Item	Pay Unit
Bore and Jack of ____"	Linear Foot
Directional Drilling of ____"	Linear Foot
Tunneling of ____"	Linear Foot

PROJECT SPECIAL PROVISIONS



Utility Construction

(Seal)

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

Revise the 2018 Standard Specifications as follows:

Division 8, Incidentals

Division 8, Section 858, Adjustment of Catch Basins, Manholes, Drop Inlets, Meter Boxes and Valve Boxes

Page 8-37, Section 858-3, Construction Methods:

Add the following provisions to the second paragraph:

Adjustment of Valve Boxes:

The top section of the valve box shall be raised or lowered as required to meet the final grade. If the height of the final grade exceeds the length of the existing top section, remove the existing valve box and install a new one at final grade.

1. installed ring and cover will be at final grade. The Contractor shall remove all necessary sections of the existing manhole to make the adjustment.
2. Visually inspect joints and frame to cone seal to ensure water-tightness.

Division 10-Materials

Section 1034, Sanitary Sewer Pipe and Fittings

Page 10-61, Sub-article 1034-1 General

Add the following sentences:

Sewer service laterals shall match existing (minimum 4-inches) and contractor shall use ductile iron fittings i.e. wyes and bends.

Section 1036, Water Pipe and Fittings

Page 10-62, Sub-article 1036-1 General

Add the following sentences:

Contractor shall verify make and model of the following items with the City of Waynesville:

Fire Hydrant, Gate Valves, Valve Boxes, Corporation Stops, Tapping Saddle and Angle Stops

Page 10-63, Sub-article 1036-6 Fire Hydrant

Replace with the following:

All fire hydrants shall be dry barrel, traffic type and conform to the latest revision of AWWA C502 except as listed below or as otherwise directed by the Waynesville. All working parts shall be bronzed. The size of the fire hydrants (designated by the nominal diameter of the valve opening) shall not be less than four and one-half inches (4 1/2"). All hydrants shall be able to deliver 1,000 gallons per minute with a friction loss of not more than five (5) pounds per square inch total head loss through the hydrant. Hydrants shall be of compression type (opening shall be of such design that when the barrel is broken off the hydrant valve will remain closed and reasonably tight against leakage). All hydrants shall be mechanical joint to accommodate the spigot end of six-inch (6") Class 150, AWWA Standard, ductile iron pipe.

All hydrants shall be furnished with two (2) two and one-half inch (2 1/2") nozzles and one (1) four and one-half inch (4 1/2") pumper nozzle. Outlets shall have American National Standard fire hose coupling thread, in accordance with the Waynesville standard, and shall be provided with nozzle caps securely chained to the body of the hydrant. The base of the hydrant shall have two (2) cast lugs suitable for use in strapping the hydrant to the connecting pipe. The operating nut shall be pentagonal in shape, finished with a slight taper to one and one-half inches (1 1/2") from point to flat to conform to the standard now in use by the Waynesville. All hydrants shall open left or counter-clockwise. Hydrants shall be suitable for working pressure of one hundred and fifty (150) pounds per square inch and test pressure of twice the working pressure. Fire hydrants shall be specific models manufactured by Mueller Company (Model Centurion 200), Clow Corporation (Medallion), American Darling (Model Mark 73-1) or approved equal. The interior of the hydrant shoe shall be coated with a 4 mil thickness FDA approved epoxy coating. Paint hydrants with one coat of primer paint and two coats of an approved paint of the Owner's standard color. Apply the final coat after hydrant installation.

Page 10-63, Sub-article 1036-8 (A) Tapping Sleeves

Replace with the following:

Water tapping sleeves shall be ductile iron mechanical joint or type 304 stainless steel full gasket and have a minimum working pressure of 150 psi for all tapping of mains up to and including 24" inch diameter with a branch less than or equal to 12" diameter. Branch diameter greater than 12" on 16" diameter pipe and larger shall require full body ductile iron mechanical joint tapping sleeve.

Ductile iron mechanical joint tapping sleeves shall be as manufactured by Clow, M&H, Mueller, American, or an approved equal and shall be furnished with complete joint accessories. The mechanical joint sleeve shall be compatible with type and class of pipe being tapped. The outlet flange shall be class 125 per ANSI B16.1 compatible with approved tapping valves.

Stainless steel tapping sleeves shall be as manufactured by Romac, Smith-Blair, or approved equal, and shall be furnished with all accessories. The sleeve, lugs, bolts and nuts shall be 18-8 type 304

stainless steel, as provided by the manufacturer. The outlet flange shall be ductile iron or stainless steel. The gasket shall be a grid pattern design and shall provide full circumferential sealing around pipe to be tapped. The sleeve shall include a 3/4 NPT test plug. All welds shall be passivated. The outlet flange shall be class case D per AWWA C207-ANSI 150 lb. drilling compatible with approved tapping sleeves.

The tapping sleeve and valve shall be in accordance with the standard details.

Page 10-63, Sub-article 1036-8 (B), Transition Sleeves and Couplings:

Add the following material to this sub-article:

Use mechanical joint full body solid sleeves conforming to MJ fittings of this special provision

Division 15, Section 1500-General Utility Requirements

Page 15-1, Sub-article 1500-1 Description

Add the following sentences:

Construction of all water systems shall be in accordance with the standard details and Special Provisions in effect at the time of bid.

Page 15-1, Sub-article 1500-2 Cooperation with the Utility Owner, paragraph 2:

add the following sentences:

The utility owner is the Town of Waynesville. The contact person is Mr. Jeff Stines and can be reached by phone at (828) 456-3706.

Add the following provision for fire hydrant accessibility:

Existing fire hydrants shall be accessible to the Fire Department at all times. Fire hydrants shall not be taken out of service without the utility owner's written approval. The Fire Department shall be notified of any fire hydrant taken out of service.

If the fire hydrants are in need of replacement, relocation, or connected to a new water main, utility owner, the Engineer, and the appropriate Fire Department shall be notified and coordinated with prior to commencing work. Fire hydrants shall not be removed from service without prior approval from the utility owner.

Contractor shall notify the applicable Fire Department of when and what area they will be working. Contractor shall notify the Fire Department a minimum of 48 hours prior to commencing work. The Contractor shall coordinate with the appropriate Fire Department regarding the placement of the temporary fire hydrants.

Page 15-1, Sub-article 1500-4 Weekend, Night and Holiday Work:

Add the following sentences:

Contractor shall coordinate the scheduling of weekend, night and holiday work with the Engineer and utility owner at least one week in advance of the proposed work to allow for communication of any outages to those affected and to allow utility owner to be present for the outage.

Page 15-1, Add Sub-article 1500-5-A, Crossing Existing or Proposed Utilities:

Add the following sub-article:

The Contractor shall conduct their operations so that the following requirements are adhered to:

1. Underground telephone, cable TV, and gas utilities or conduit banks shall be crossed maintaining a minimum of 12-inch separation or clearance.
2. Electrical crossings shall be performed while the conductor is de-energized and at all times in the presence of the utility owner. Electrical crossings shall be in accordance with NESC requirements. Electrical primary conductor crossings shall be as follows:
 - a. Crossing over a conductor, maintain a minimum of 12-inches of undisturbed soil encasing the conductor.
 - b. Crossing under a conductor shall be accomplished by boring, maintaining 12-inches of undisturbed soil encasing the conductor.

Page 15-2, Sub-article 1500-9 Placing Pipelines into Service

Replace the last two sentences of paragraph 2 with the following sentences:

Obtain approval from Waynesville prior to placing a new water and/or sewer line into service. Use backflow prevention assemblies for temporary connections to isolate new water lines from existing water line. A representative from Waynesville shall witness all tests performed on their water and sewer facilities.

Page 15-2, Sub-article 1500-9 Placing Pipelines into Service

Add the following sentences:

Water Work:

- Verify all valves are fully open.
- Verify all valves are accessible and can be operated.

Page 15-2, Sub-article 1500-9 Placing Pipelines into Service:

Testing and Disinfection

The Contractor shall coordinate and fully cooperate with the Engineer when scheduling testing. The Contractor shall provide a minimum of two (2) business days' notice when scheduling testing with the Engineer. All testing shall be in accordance with these special provisions.

All temporary water piping, newly lined mains, and newly installed mains shall be flushed and disinfected prior to placing into service. The Engineer shall take the appropriate sample(s) to Waynesville lab for analysis. Upon successful completion of the disinfection process, the water lines can be placed into service. Disinfection shall be in accordance with these special provisions.

The Contractor shall provide all equipment, materials, personnel, traffic control and all means necessary to perform all testing and inspection at no additional costs to the Department. If the same line segment fails the required testing more than two (2) times, Waynesville will charge a fee of \$100.00 per test, beginning with the third attempt, until a passing test achieved.

NCDEQ limits the amount of chlorinated water that may be allowed to enter a live stream, creek, etc. or other body of water (lake, pond, etc.). The acceptable level of residual chlorine is less than 0.2 parts per million. The Contractor is responsible for reducing the residual chlorine to the acceptable level.

The Contractor will be required to flush and remove the chlorine from the main 24 hours after initial chlorination. The cost of main disinfection and disposal of the chlorinated water shall be included in the appropriate measurement and payment item.

Division 15, Section 1505-Excavation, Trenching, Pipe Laying and Backfilling for Utilities

Page 15-4, Sub-article 1505-3 (C) Bedding

Add the following sentence:

Water main bedding shall also conform to the requirements of the standard details for water main bedding.

Page 15-4, Sub-article 1505-3 (D) Pipe Laying

Add the following sentences:

All pipes and fittings shall be carefully lowered into the trench in such a manner to prevent damage to the protective coatings and linings. Under no circumstances shall pipe materials be dropped or dumped into the trench. Pipe shall be carried into position and not dragged.

All dust, dirt, oil, tar (other than standard coating), or other foreign matter shall be cleaned from the jointing surfaces, and the gasket, bell, and spigot shall be lubricated with lubricant recommended by the manufacturer.

All pipe shall be installed in accordance with the approved plans and cut sheets, unless otherwise directed by the Engineer.

For water pipe and sewer force main pipes sizes up to 12-inches, mechanical equipment shall not be used to assemble the pipe. For water pipe and sewer force main pipes sizes over 12-inches, mechanical equipment may be used, in accordance with the pipe manufacturer's instructions. Any damage resulting from the use of mechanical equipment shall be replaced as directed by and at no additional cost to the Department or utility owner.

Gravity flow sewer pipe shall be laid upgrade, beginning at the lower end with the tongue or spigot ends pointing in the direction of the flow to the correct line and grade, unless otherwise approved by the utility owner. The sewer pipe section to be installed shall be aligned by batter board or laser beam with the last installed pipe section. Mechanical equipment should not be used to assemble the pipe. Pipe shall be assembled in accordance with the pipe manufacturer's instructions. Any damage resulting from the use of mechanical equipment shall be replaced as directed by and at no additional cost to the Department or utility owner.

Adjustments in grade by exerting force on the barrel of the pipe with excavating equipment shall not be allowed. The Contractor shall verify line and grade after assembling each joint.

No pipe shall be laid in water or where in the Engineer's opinion trench conditions are unsuitable. Every precaution shall be taken to prevent material from entering the pipe while it is being installed.

Page 15-4, Sub-article 1505-3 (E) Thrust Restraint paragraph 3

Replace with the following:

At locations where restrained joints are shown on the plans, use ductile iron pipe and fittings with push-on restrained joints. The pipe, joints, and gaskets shall be in accordance with ANSI/AWWA Standards as previously specified for ductile iron pipe in Sub-article 1036-5. Restrained joints, fittings and valves shall be rated for a working pressure of 350 psi for sizes 4" through 24" and 250 psi for larger sizes. All factory restrained joint pipe, valves, and fittings shall have the restraints internal to the pipe (i.e., "boltless"). The use of mechanical restraints (i.e., mega-lugs, grip-rings, etc.) is not allowed, unless otherwise specifically directed in writing by the

Waynesville. All valves, pipe, and fittings shall be compatible with the factory restraint system. All push-on restrained joint ductile iron pipe and fittings shall be as manufactured by U.S. Pipe's TR-Flex, Griffin Pipe Products SNAP-LOK, American Cast Iron Pipe Company's Flex-Ring Joint, or approved equal.

Special accessories such as mechanical joint retainer glands, mega-lugs, US Pipe's Field-LOK gasket, or Romac's Grip-Ring are acceptable on pipe 12" and less in diameter, upon approval from the Waynesville. Use concrete reaction blocking and thrust collars only where joint restraint is impractical with the approval of the Engineer.

Division 15, Section 1510-Water Lines

Page 15-5, Sub-article 1510-2 Materials, Paragraph 5

Add the following sentences:

Splices shall be accomplished using a corrosion proof wire connector. The connectors shall "lock" the wires in place and contain a dielectric sealant to prevent corrosion. The connector shall be the "Snake Bite" connector manufactured by Copperhead Industries, LLC, or approved equal. The attachment location shall be readily available from finished grade without special equipment.

Page 15-6, Sub-article 1510-3 (B) Testing and Sterilization

Replace the third paragraph with:

Perform tests using clean water and provide certified results demonstrating no loss of pressure when pressurized at 200 ± 5 psi for two (2) hours.

In the fifth paragraph, revise the flushing velocity from 2.5 feet per second to 3.0 feet per second.

Page 15-6, Sub-article 1510-3 (B) Testing and Sterilization

Replace the sixth paragraph with the following:

Sterilize water lines in accordance with Section 1003 of The Rules Governing Public Water supply and AWWA C651 Section 4.4.3, the Continuous Feed Method. Provide a chlorine solution with between 50 parts per million and 100 parts per million in the initial feed. Solid sterilization agent is not allowed. The chlorine solution must remain in contact with all interior surfaces for 24 hours. If the chlorine level drops below 10 parts per million during a 24-hour period, then flush, refill with fresh chlorine solution, and repeat for 24 hours. Provide certified bacteriological and contaminant test results from a state-approved or state-certified laboratory. Operate all valves and controls to assure thorough sterilization. During the flushing period, open and close each fire hydrant several times to flush the hydrant. Provide all chlorinating equipment, sterilization solution, taps, corporation stops, and blow offs necessary to complete testing and sterilization. If any disruption to the disinfection process occurs, or if any repair procedure is necessary then the disinfection process shall start over.

Each valved section shall be tested individually. Where any section of a water line is installed with concrete thrust blocking for fittings or hydrants, the hydrostatic test shall not be made until at least five (5) days after installation of the blocking.

Each valved section of pipe shall be slowly filled with water and to the specified test pressure based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test gauge, shall be applied by means of a pump connected to the pipe in a manner satisfactory to the utility owner. Before applying the specified test pressure, all air shall be expelled

from the pipe. If hydrants or blow offs are not available at the high places, taps shall be made to provide blow offs.

Any taps which are not to be used in the final build out (i.e. testing/blow off taps) shall be killed out at the main. If these taps are converted to irrigation taps they must be installed according to the standard details and be witnessed by utility owner. The utility owner shall be present and observe all valve operation by the Contractor. Under no circumstances shall a Contractor tamper with any valves not installed by him unless it is an emergency.

Damaged or defective materials discovered as a result of the pressure test shall be removed and replaced with new material, and the test shall be repeated until the test results are satisfactory to the utility owner.

All replacement, repair or retesting shall be accomplished by the Contractor at no additional cost to the Department or the utility owner. All repairs shall be reviewed and approved by utility owner prior to backfill. The use of couplings, fittings, sleeves, etc. shall be reviewed and approved by the utility owner prior to use. The main must successfully pass the hydrostatic test prior to sterilization.

After disinfection, the water supply shall not be accepted or placed into service until bacteriological tests results or representative water samples analyzed in a laboratory approved by Waynesville. The disinfection shall be repeated until tests indicate the absence of pollution for at least two (2) full days. The utility owner shall be responsible for taking the sample(s) and transporting them to the laboratory.

Use the procedures for disinfecting of the new installation and the existing main at the cut-in point in accordance with AWWA C651-14, Section 4.11.

Division 15, Section 1515-Utility Controls

Page 15-8, Sub-article 1515-3 (A) Valves

Replace with the following:

Install all valves with an approved valve box set flush with the finished ground or finished pavement elevation. Place a 24-inch diameter 2500 psi precast concrete ring flush with the finished ground around all valve boxes not in pavement. Place a 24-inch diameter 3000 psi poured in place concrete collar flush with the finished pavement around all valve boxes in a traffic area.

Page 15-8, Sub-article 1515-3(B) Meters:

Add the following paragraphs:

Connect or reconnect meter to the customer's plumbing using brass fittings. A composite, H-20 rated meter box shall be used if the meter is to be located in asphalt, concrete pavement or any traffic area.

Page 15-8, Sub-article 1515-3(C) Backflow Prevention Assembly:

Add the following paragraph:

Provide a minimum of five (5) feet between the meter and the backflow preventer.

Page 15-8, Sub-article 1515-3 (D) Fire Hydrants

Add the following sentences:

Fire hydrants shall be located and installed as shown on the approved drawings. Each fire hydrant shall have a minimum of 42-inches of cover. Fittings between the valve and fire hydrant may be used with prior approval from utility owner. The valve shall be located at the main unless otherwise approved by the utility owner. Each fire hydrant shall be restrained to the pipe with suitable mechanical joint restraint, in accordance with standard details. Concrete thrust blocking shall be placed in accordance with standard details. The hydrant branch shall not be backfilled until inspected and approved by utility owner. Fire hydrants shall be installed in accordance with standard details.

Page 15-9, Sub-article 1515-3(E) Line Stops:

Add the following paragraph:

Unless otherwise indicated on the Drawings, do not use line stops without the authorization of the Engineer and utility owner.

Section 1530-Abandon or Remove Utilities**Page 15-16, Sub-article 1530-3(A) Abandoning Pipe:**

Add the following paragraphs:

Perform kill-outs of existing mains to be abandoned as designated on the Drawings. Kill-outs shall consist of the following requirements:

1. Kill out shall be done a minimum of 5 feet from any fitting on the existing water main that is to remain in service.
2. Ductile iron pipe stiff knee shall be 4" diameter for mains 12" or less. Utilize 8" ductile iron pipe or larger for mains larger than 12". Minimum length of 5 feet of stiff knee shall be provided. Stiff knee shall be encased in concrete. Concrete shall cover the abandoned pipe but it shall not come in contact with the active water main or any fittings on the active water main. Place blocks rated as the same compressive strength as the concrete under the stiff knee to provide support during concrete placement.
3. On the active water main side of the stiff knee, provide full body mechanical joint sleeve with restraining gland and restraining plug or cap.
4. On the abandoned water main side, provide minimum 1/4" steel plate or ductile iron cap or plug.
5. Coordinate outages with Engineer and other work to minimize number of planned outages.
6. Abandoned pipe shall be grout filled or removed in accordance with Section 1530.

Remove valves, or close valves and remove the top of the valve box to an elevation 2-feet below the roadway subgrade or finished grade and backfill.