

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 14

PROPOSAL

DATE AND TIME OF BID OPENING: SEPTEMBER 8, 2026 AT 2:00 PM

CONTRACT ID: DN01164

WBS ELEMENT NO.: DF18314.2045330

FEDERAL AID NO.: HELENE

COUNTY: HENDERSON

TIP NO.: N/A

MILES: 0.106

ROUTE NO.: SR 1702 (EDNEY INN ROAD)

LOCATION: BRIDGE #440197 OVER REEDY PATCH CREEK ON SR 1702
(EDNEY INN ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$40,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

THIS IS A STRUCTURE PROJECT.

BID BOND IS REQUIRED.

NAME OF BIDDER

ADDRESS OF BIDDER

**PROPOSAL FOR THE CONSTRUCTION OF
CONTRACT No. DN01164 IN HENDERSON COUNTY, NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION,
RALEIGH, NORTH CAROLINA**

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **DN01164**; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with the *2024 Standard Specifications for Roads and Structures* by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete Contract No. **DN01164** in **Henderson County**, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2024* with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer or Division Engineer.

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient.

An increase or decrease in the quantity of an item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the *Standard Specifications*; otherwise said deposit will be returned to the Bidder.



Signed by:

[Signature]

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08/17/2026

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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 may cause the bid to be considered irregular and may be grounds for rejection of the bid.

For preparing and submitting the bid electronically, refer to Subarticle 102-8(B) of the *Standard Specifications*.

Bidders that bid electronically on Raleigh Central-Let projects will need a separate request to bid from the approved electronic bidding website for Division Contracts.

ELECTRONIC ON-LINE BID:

1. Plans and the proposal can be found on the Connect NCDOT website.
2. In accordance with Subarticle 102-8(B)(1) of the *Standard Specifications*, obtain an account and valid Digital Signature to bid with Bid Express (bidx.com)
3. In accordance with Subarticle 102-8(B)(3) of the *Standard Specifications*, if bid bond is required and bid deposit is not chosen register bond with Surety2000 or Tinubu and submit with the online bid.
4. In accordance with Article 102-3 of the *Standard Specifications*, registration on the Interested Parties List is required unless SP1 G02 Interested Parties List Not Required provision is included in the proposal.
5. Prepare and submit a bid electronically using the approved electronic bidding provider website.
4. Electronic bidding website necessary for electronic bidding can be found on the Bid Express website following the directions at: <https://connect.ncdot.gov/letting/Pages/Electronic-Bidding.aspx>.
5. Questions should be emailed 7 calendar days prior to the bid opening to **Jeffrey E. Alsbaugh, EI** at **d14contracts@ncdot.gov**. Contact with any other NCDOT personnel concerning this project is strictly prohibited, unless otherwise noted, and may result in bids being considered non-responsive.

PROJECT SPECIAL PROVISIONS**GENERAL****BOND REQUIREMENTS:**

(6-1-16)(Rev.1-16-24)

102-8, 102-10

SPD 01-420A

A Bid Bond is required in accordance with Article 102-10 of the *Standard Specifications for Roads and Structures*.

Contract Payment and Performance Bonds are required in accordance with Article 103-7 of the *Standard Specifications*.

HAUL ROADS:

(7-16-24)

105

SP1 G04

Revise the *Standard Specifications* as follows:

Page 1-45, Article 105-15 RESTRICTION OF LOAD LIMITS, line 31, add the following after second sentence of the second paragraph:

At least 30 days prior to use, the Contractor shall notify the Engineer of any public road proposed for use as a haul road for the project.

BUILD AMERICA, BUY AMERICA (BABA):

(11-15-22)(Rev. 7-16-24)

106

SP1 G05 A

Revise the *Standard Specifications* as follows:

Page 1-48, Article 106-1 GENERAL REQUIREMENTS, add the following after line 49:

(C) Build America, Buy America (BABA)

All manufactured products and construction materials permanently incorporated into any project must meet requirements of the Build America, Buy America (BABA) Act of the Infrastructure Investment and Jobs Act (IIJA). Before any material or product shown on the Department's Build America, Buy America (BABA) List is included for payment on a monthly estimate, the Contractor shall furnish the Engineer with a notarized certification certifying that the items conform to the BABA Act. The Department's Build America Buy America (BABA) List can be found on the Department's website below.

<https://connect.ncdot.gov/letting/LetCentral/NCDOT%20BABA%20Materials%20List.pdf>

Each purchase order issued by the Contractor or a subcontractor for items on the BABA List to be permanently incorporated into any project shall contain in bold print a statement advising the supplier that the manufactured products and construction materials must be produced in the United States of America. The Contractor and all affected subcontractors shall maintain a separate file for BABA List items so that verification of the Contractor's efforts to purchase items produced in

the United States can readily be verified by an authorized representative of the Department or the Federal Highway Administration (FHWA).

CONTRACT TIME AND LIQUIDATED DAMAGES:

(8-15-00) (Rev. 5-16-23)

108

SP1 G08 A

The date of availability for this contract is **October 5, 2026**, except that work in jurisdictional waters and wetlands shall not begin until a meeting between the DOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **November 1, 2027**.

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

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

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

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

108

SP1 G13 A

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

The date of availability for this intermediate contract time is **October 5, 2026**.

The completion date for this intermediate contract time is **May 1, 2027**.

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

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

INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES:

(2-20-07) (Rev. 10-15-13)

108

SP1 G14 E

The Contractor shall complete the required work of installing, maintaining and removing the traffic control devices for road closures and restoring traffic to the existing traffic pattern. The Contractor shall not close **ANY ROAD** during the following time restrictions:

DAY AND TIME RESTRICTIONS**MONDAY THRU FRIDAY****6:00 A.M. to 9:00 A.M.****AND****3:00 P.M. to 7:00 P.M.**

The maximum allowable time for **traffic shifts, tie-ins, and marking placement** is **15** minutes for **ANY ROAD**. The Contractor shall reopen the travel lanes to traffic until any resulting traffic queue is depleted.

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

The completion time for this intermediate contract time will be the time the Contractor is required to complete the removal of traffic control devices required for the road closures according to the time restrictions stated herein and restore traffic to the existing traffic pattern.

The liquidated damages are **One Thousand Dollars (\$ 1,000.00)** per **15** minute time period.

PERMANENT VEGETATION ESTABLISHMENT:

(2-16-12)(Rev. 1-16-24)

104

SP1 G16

Establish a permanent stand of the vegetation mixture shown in the contract. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish permanent vegetation on all erodible areas within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the applicable section of the *Standard Specifications*. All work required for initial vegetation planting shall be performed as a part of the work necessary for the completion and acceptance of the Intermediate Contract Time (ICT). Between the time of ICT and Final Project acceptance, or otherwise referred to as the vegetation establishment period, the Department will be responsible for preparing the required National Pollutant Discharge Elimination System (NPDES) inspection records.

Once the Engineer has determined that the permanent vegetation establishment requirement has been achieved at an 80% vegetation density (the amount of established vegetation per given area to stabilize the soil) and no erodible areas exist within the project limits, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent

vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

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

MAJOR CONTRACT ITEMS:

(2-19-02)(Rev. 1-16-24)

104

SP1 G28

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

Line #	Description
0020	ASPHALT CONC BASE COURSE, TYPE B25.0C
0048	WATER FILLED BARRIER
0082	CHANNEL EXCAVATION

SPECIALTY ITEMS:

(7-1-95)(Rev. 1-16-24)

108-6

SP1 G37

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

Line #	Description
0029-0033	Guardrail
0038	Signing
0053-0079, 0081	Erosion Control
0080	Reforestation

FUEL PRICE ADJUSTMENT:

(11-15-05)(Rev. 1-16-24)

109-8

SP1 G43

Page 1-82, Article 109-8, FUEL PRICE ADJUSTMENTS, add the following:

The base index price for DIESEL #2 FUEL is \$ **4.3487** per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

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

Description	Units	Fuel Usage Factor Diesel
Unclassified Excavation	Gal/CY	0.29
Borrow Excavation	Gal/CY	0.29
Class IV Subgrade Stabilization	Gal/Ton	0.55
Aggregate Base Course	Gal/Ton	0.55
Sub-Ballast	Gal/Ton	0.55
Erosion Control Stone	Gal/Ton	0.55
Rip Rap, Class _____	Gal/Ton	0.55
Asphalt Concrete Base Course, Type _____	Gal/Ton	0.90 or 2.90
Asphalt Concrete Intermediate Course, Type _____	Gal/Ton	0.90 or 2.90
Asphalt Concrete Surface Course, Type _____	Gal/Ton	0.90 or 2.90
Open-Graded Asphalt Friction Course	Gal/Ton	0.90 or 2.90
Permeable Asphalt Drainage Course, Type _____	Gal/Ton	0.90 or 2.90
Sand Asphalt Surface Course, Type _____	Gal/Ton	0.90 or 2.90
Ultra-thin Bonded Wearing Course	Gal/Ton	0.90 or 2.90
Aggregate for Cement Treated Base Course	Gal/Ton	0.55
Portland Cement for Cement Treated Base Course	Gal/Ton	0.55
> 11" Portland Cement Concrete Pavement	Gal/SY	0.327
Concrete Shoulders Adjacent to > 11" Pavement	Gal/SY	0.327
9" to 11" Portland Cement Concrete Pavement	Gal/SY	0.272
Concrete Shoulders Adjacent to 9" to 11" Pavement	Gal/SY	0.272
< 9" Portland Cement Concrete Pavement	Gal/SY	0.245
Concrete Shoulders Adjacent to < 9" Pavement	Gal/SY	0.245

For the asphalt items noted in the chart as eligible for fuel adjustments, the bidder may include the *Fuel Usage Factor Adjustment Form* with their bid submission if they elect to use the fuel usage factor. The *Fuel Usage Factor Adjustment Form* is found at the following link:

<https://connect.ncdot.gov/letting/LetCentral/Fuel%20Usage%20Factor%20Adjustment%20Form%20-%20Starting%20Nov%202022%20Lettings.pdf>

Select either 2.90 Gal/Ton fuel factor or 0.90 Gal/Ton fuel factor for each asphalt line item on the *Fuel Usage Factor Adjustment Form*. The selected fuel factor for each asphalt item will remain in effect for the duration of the contract.

Failure to complete the *Fuel Usage Factor Adjustment Form* will result in using 2.90 gallons per ton as the Fuel Usage Factor for Diesel for the asphalt items noted above. The contractor will not be permitted to change the Fuel Usage Factor after the bids are submitted.

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08)(Rev. 6-16-26)

108-2

SP1 G58

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

<u>Fiscal Year</u>	<u>Progress (% of Dollar Value)</u>
2027 (7/01/26 - 6/30/27)	95% of Total Amount Bid
2028 (7/01/27 - 6/30/28)	5% of Total Amount Bid

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

DISADVANTAGED BUSINESS ENTERPRISE (DIVISIONS):

(10-16-07)(Rev. 10-21-25)

102-15(J)

SP1 G62

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 Department to the bidder confirming the Contractor's approved, committed DBE participation along with a listing of the committed DBE firms.

Manufacturer - A firm that owns (or leases) and operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor. A firm that makes minor modifications to the materials, supplies, articles, or equipment is not a manufacturer.

Regular Dealer - A firm that owns (or leases), and operates a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in sufficient quantities, 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, concrete or concrete products, gravel, stone, asphalt and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Any supplement of regular dealers' own distribution equipment shall be by a long-term operating lease and not on an ad hoc or contract-by-contract basis.

Distributor - A firm that engages in the regular sale or lease of the items specified by the contract. A distributor assumes responsibility for the items it purchases once they leave the point of origin (e.g., a manufacturer's facility), making it liable for any loss or damage not covered by the carrier's insurance.

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.

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.
<https://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Form%20and%20Instructions.pdf>

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

<https://connect.ncdot.gov/projects/construction/Construction%20Forms/SAF%20Form%20-%20Subcontract%20Approval%20Form%20Revised%2004-19.xlsm>

JC-1 Joint Check Notification Form - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

<https://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%20LGA%20Content/08%20DBE%20Subcontractors%20\(Federal\).docx](http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/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 Regular Dealer/Distributor Affirmation Form – Form is used to make a preliminary counting determination for each DBE listed as a regular dealer or distributor to assess its eligibility for 60 or 40 percent credit, respectively of the cost of materials or supplies based on its demonstrated capacity and intent to perform as a regular dealer or distributor, as defined in section 49 CFR 26.55 under the contract at issue. A Contractor will submit the completed form with the Letter of Intent.

<https://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20Regular%20Dealer-Distributor%20Affirmation%20Form%20-%20USDOT%202024.pdf>

DBE Goal

There is NO goal for participation by Disadvantaged Business Enterprises for this contract.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as 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>

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 Department's 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) Electronic Bids

Bidders shall submit a listing of DBE participation in the appropriate section of the electronic submittal file.

- (1) Submit the names and addresses of DBE firms identified to participate in the contract. If the bidder uses the updated listing of DBE firms shown in the electronic submittal file, the bidder may use the dropdown menu to access the name and address of the DBE firm.
- (2) Submit the contract line numbers of work to be performed by each DBE firm. When no figures or firms are entered, the bidder will be considered to have no DBE participation.
- (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) Paper Bids

- (1) *If the DBE goal is more than zero,*
 - (a) 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.
 - (b) 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 Department will not consider these bids for award and the proposal will be rejected.

- (c) 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.
- (2) *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 Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the 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 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 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 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 Department documentation of adequate good faith efforts made to reach the DBE goal.

One complete set and copies of this information shall be received in the office of the 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 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 Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the 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 the 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 Department 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 Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the 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 Engineer will notify the Contractor verbally and in writing of non-good faith. A Contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a Contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting 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 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 Department'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 Department. The Department'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) Manufacturer, Regular Dealer, Distributor

A Contractor may count toward its DBE requirement 40 percent of its expenditures for materials or supplies (including transportation costs) from a DBE distributor, 60 percent of its expenditures for materials or supplies (including transportation costs) from a DBE regular dealer and 100 percent of such expenditures obtained from a DBE manufacturer.

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

- (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, regular dealer, nor a distributor count the entire amount of fees or commissions charged that the Department deems to be reasonable, including transportation charges for the delivery of materials or supplies. Do not count any portion of the cost of the materials and supplies themselves.

A Contractor will submit a completed *DBE Regular Dealer/Distributor Affirmation Form* with the Letter of Intent to the Engineer. The Engineer will forward to the State Contractor Utilization Engineer or DBE@ncdot.gov. The State Contractor Utilization Engineer will make a preliminary assessment as to whether a DBE supplier has the demonstrated capacity to perform a commercially useful function (CUF) on a contract-by-contract basis *prior* to its participation.

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 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 Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is 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 or any portion of its work 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 Engineer of its intent to request to terminate a DBE subcontractor or any portion of its work, 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 Department 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 or any portion of its work after receiving the Department's written approval based upon a finding of good cause for the proposed termination and/or substitution. Good cause does not exist if the Contractor seeks to terminate a DBE or any portion of its work that it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE was engaged, or so that the Contractor can substitute another DBE or non-DBE contractor after contract award. 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 1200 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; and
 - (j) Other documented good cause that compels the termination of the DBE subcontractor.

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 Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department 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 but not the overall goal.
 - (i) If the DBE's ineligibility is caused solely by its having exceeded the size standard during the performance of the contract. The Department may continue to count participation equal to the remaining work performed by the decertified firm which will count toward the contract goal requirement and overall goal.
 - (ii) If the DBE's ineligibility is caused solely by its acquisition by or merger with a non-DBE during the performance of the contract. The Department may not continue to count the portion of the decertified firm's performance on the contract remaining toward either the contract goal or the overall goal, even if the Contractor has executed a subcontract with the firm or the Department has executed a prime contract with the DBE that was later decertified.
- (2) When a committed DBE is decertified prior to the Department 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 NCDOT (see A herein for required documentation).

All requests for replacement of a committed DBE firm shall be submitted to the 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 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 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 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 Engineer.

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

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a 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 Department 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 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 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 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 Engineer can request written verification of subcontractor payments.

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

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *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.

RESTRICTIONS ON ITS EQUIPMENT AND SERVICES:

(11-17-20)

SP01 G090

All telecommunications, video or other ITS equipment or services installed or utilized on this project must be in conformance with UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS **2 CFR, § 200.216**
Prohibition on certain telecommunications and video surveillance services or equipment.

USE OF UNMANNED AIRCRAFT SYSTEM (UAS):

(8-20-19)(Rev. 3-17-26)

SP1 G092

The Contractor shall adhere to all Federal, State and Local regulations and guidelines for the use of Unmanned Aircraft Systems (UAS). This includes but is not limited to US 14 CFR Part 107, NC GS 15A-300, American Security Drone Act of 2023 (ASDA), Office of Management and Budget (OMB) Memorandum M-26-02, all FAA rules, regulations and policies and all NCDOT UAS Policies. The required operator certifications include possessing a current Federal Aviation Administration (FAA) Remote Pilot Certificate, as well as operating a UAS registered with the FAA.

All UAS operations shall be approved by the Engineer prior to beginning the operations.

All contractors or subcontractors operating UAS shall have UAS specific general liability insurance to cover all operations under this contract.

The use of UAS is at the Contractor's discretion. No measurement or payment will be made for the use of UAS. In the event that the Department directs the Contractor to utilize UAS, payment will be in accordance with Article 104-7 Extra Work.

EQUIPMENT IDLING GUIDELINES:

(1-19-21)

107

SP1 G096

Exercise reduced fuel consumption and reduced equipment emissions during the construction of all work associated with this contract. Employees engaged in the construction of this project should turn off vehicles when stopped for more than thirty (30) minutes and off-highway equipment should idle no longer than fifteen (15) consecutive minutes.

These guidelines for turning off vehicles and equipment when idling do not apply to:

1. Idling when queuing.
2. Idling to verify the vehicle is in safe operating condition.
3. Idling for testing, servicing, repairing or diagnostic purposes.
4. Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane, mixing concrete, etc.).
5. Idling required to bring the machine system to operating temperature.
6. Emergency vehicles, utility company, construction, and maintenance vehicles where the engines must run to perform needed work.
7. Idling to ensure safe operation of the vehicle.

8. Idling when the propulsion engine is providing auxiliary power for other than heating or air conditioning. (such as hydraulic systems for pavers)
9. When specific traffic, safety, or emergency situations arise.
10. If the ambient temperature is less than 32 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants (e.g. to run the heater).
11. If the ambient temperature is greater than 90 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants of off-highway equipment (e.g. to run the air conditioning) no more than 30 minutes.
12. Diesel powered vehicles may idle for up to 30 minutes to minimize restart problems.

Any vehicle, truck, or equipment in which the primary source of fuel is natural gas or electricity is exempt from the idling limitations set forth in this special provision.

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.

ELECTRONIC BIDDING:

(8-18-26)

101, 102, 103

SP1 G140

Revise the *Standard Specifications* as follows:

Page 1-4, Article 101-3, DEFINITIONS, BID (OR PROPOSAL) *Electronic Bid*, line 3, replace “electronic bidding software” with “electronic bidding website”.

Page 1-16, Subarticle 102-8(B), Electronic Bids, lines 13-14, replace “electronic bidding software” with “electronic bidding website”.

Page 1-18, Article 102-10, BID BOND OR BID DEPOSIT, line 43, replace “electronic bidding software” with “electronic bidding website”.

Page 1-18, Article 102-11, DELIVERY OF BIDS, line 47, replace “electronic bidding software” with “electronic bidding website”.

Page 1-25, Subarticle 103-4(B)(2), Electronic Bids, line 20, replace the first paragraph with the following:

This form is located on the electronic submittal website. The bidder shall click on yes or no to indicate whether or not the bidder desires to limit the award, provide the award limit if desiring to

limit the award, and provide the project number and county of the projects associated with the award limit.

NOTES TO CONTRACTOR:

(8-19-25)

SP1 G999B

Bat Conservation

Best management practices (BMP) and sediment and erosion control (SEC) measures will be utilized to prevent non-point source pollution, control storm water runoff, and minimize sediment damage to avoid and reduce overall water quality degradation.

Areas of disturbance, such as tree clearing, grubbing, and grading, will be limited to the maximum extent possible.

Percussive activities will occur only after tree clearing within the action area has been completed, helping to reduce the exposure of any tree-roosting bats within the action area to high decibel noise.

No new lighting will be added to the action area. Any lighting needed for night work will be directed at the work area and shielded from surrounding waters/landscape, only on when needed, no brighter than necessary, and blue light emissions will be limited.

PROJECT SPECIAL PROVISIONS**ROADWAY****CLEARING AND GRUBBING - METHOD II:**

(9-17-02)(Rev. 3-19-24)

200

SP2 R02A

Perform clearing on this project to the limits established by Method - II shown on Standard Drawing No. 200.02 of the *Roadway Standard Drawings*. Conventional clearing methods may be used except where permit drawings or conditions have been included in the proposal which require certain areas to be cleared by hand methods.

INCIDENTAL STONE BASE:

(7-1-95)(Rev.1-16-24)

545

SP5 R28R

Description

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

Materials and Construction

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

Measurement and Payment

Incidental Stone Base will be measured and paid in accordance with Article 545-6 of the *Standard Specifications*.

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00)(Rev. 1-16-24)

620

SP6 R25

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

The base price index for asphalt binder for plant mix is **\$ 765.63** per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **August 1, 2026**.

ELECTRONIC TICKETING SYSTEM:

(7-16-24)(Rev. 12-17-24)

1020

SP10 R20

Description

At the contractor's option, the use of an electronic ticketing system for reporting individual and cumulative asphalt material deliveries may be utilized on this project. At the preconstruction

conference, the contractor shall notify the Engineer if they intend to utilize an electronic ticketing system for reporting individual and cumulative asphalt material deliveries to the project.

Electronic Ticketing Requirements

- a. The electronic ticketing system must be fully integrated with the load read-out system at the plant. The system shall be designed so data inputs from scales cannot be altered by either the Contractor or the Department.
- b. Material supplier must test to confirm that ticketing data can be shared from the originating system no less than 30 days prior to project start.
- c. After each truck is loaded, ticket data must be electronically captured, and ticket information uploaded via Application Programming Interface (API) to the Department.
- d. Obtain security token from NCDOT for access to E-Ticketing portal (to send tickets). To request a Security Key, fill out the below E-Ticketing Security Request Form: <https://forms.office.com/g/XnT7QeRtgt>
- e. Obtain API from NCDOT containing the required e-ticketing data fields and format. Download the API from the NCDOT E-ticketing Webpage: <https://connect.ncdot.gov/projects/construction/E-Ticketing/Pages/default.aspx>
- f. Provide all ticket information in real time and daily summaries to the Department's designated web portal. If the project contains locations with limited cellular service, an alternative course of action must be agreed upon.
- g. Electronic ticketing submissions must be sent between the Material Supplier and the Department.
- h. The electronic ticket shall contain the following information:

Date
Contract Number
Supplier Name
Contractor Name
Material
JMF
Gross Weight
Tare Weight
Net Weight
Load Number
Cumulative Weight
Truck Number
Weighmaster Certification
Weighmaster Expiration
Weighmaster Name
Facility Name

Plant Certification Number
Ticket Number
Hauling Firm (optional)
Voided Ticket Number (if necessary)
Original Ticket Number (if necessary)
Supplier Revision (If necessary)

The Contractor/supplier can use the electronic ticketing system of their choice to meet the requirements of this provision.

Measurement and Payment

No measurement or payment will be made for utilizing an electronic ticketing system as the cost of such shall be included in the contract price bid for the material being provided.

TIMBER AND LUMBER:

(4-21-26)

235, 866, 1046, 1050, 1082, 1084, 1089, 1540

SP10 R82

Revise the *Standard Specifications* as follows:

Page 2-23, Article 235-2 MATERIALS, line 26, add the following as the third sentence of the fourth paragraph.

Use pressure treated wood bases meeting the requirements of Section 1082.

Page 8-45, Article 866-2 MATERIALS, line 26, replace “1076-7” with “1050-8”.

Page 10-73, Subarticle 1046-3(C) Treated Timber Posts, line 8, replace “treated southern pine” with “pressure treated southern pine”.

Page 10-76, Subarticle 1050-2(A) General, line 3, replace “Use treated southern pine meeting Articles 1082-2 and 1082-3” with “Use pressure treated southern pine meeting Articles 1082-2 and 1082-3”.

Page 10-76, Subarticle 1050-2(A) General, lines 15-16, replace “All round posts” with “All round wood posts and braces”.

Page 10-76, Subarticle 1050-2(A) General, lines 19-20, delete the last sentence of the third paragraph and replace with the following:

The pieces shall show at least 3 annual rings per inch and shall be at least 30% summerwood. All timber and lumber shall conform to the material characteristics detailed in the Southern Pine Inspection Bureau (SPIB) grading rules for the designated grade and may bear the mark of an American Lumber Standards Committee (ALSC) accredited agency.

Page 10-177, Article 1082-1 GENERAL, lines 32-33, delete the first sentence of the first paragraph and replace with the following:

Use southern pine timber and lumber graded in accordance with the current grading rules of the SPIB and manufactured by a Department pre-approved producer/supplier. All timber and lumber shall conform to the material characteristics detailed in the SPIB grading rules for No. 1 Dense or Select Structural (Sel Str.) and bear the mark of an ALSC-accredited agency.

Page 10-177 and 10-178, Article 1082-1 GENERAL, lines 38-42 and line 1, delete the second through fourth sentence of the second paragraph and replace with the following:

Use approved inspection companies listed on the Department’s pre-approved producer/suppliers list. The inspection agency must perform inspections of preservative treated materials in accordance with AWP Standard M2. Each item shall bear the brand, hammer mark, ink stamp or tag of the inspection agency to indicate it has been inspected. In lieu of commercial inspection, materials in Section 1082 manufactured by a facility that is audited by an ALSC-accredited agency and bearing the quality mark of that agency shall be acceptable for use. In addition, the Supplier must furnish Type 4 – Certified Test Reports and Type 6 – Supplier’s Certifications in accordance

with Article 106-3. Type 6 – Supplier’s Certifications are required for each producer/supplier to include any chain of custody changes from the mill to the Department.

Page 10-178, Article 1082-2 UNTREATED TIMBER AND LUMBER, line 7, replace “Dense” with “Grade No. 1 Dense MC19”.

Page 10-178, Subarticle 1082-3(A) General, line 13, replace “lumber” with “timber and lumber” and replace “will not” with “with”.

Page 10-178, Subarticle 1082-3(B) Bridges, Fender Systems and Piles, lines 22 and 24, replace “Grade No. 1 Dense” with “Grade No. 1 Dense or Select Structural (Sel Str.)”.

Page 10-178, Subarticle 1082-3(B) Bridges, Fender Systems and Piles, lines 24-27, delete the third and fourth sentence of the first paragraph and replace with the following:

Timbers for bridges or fender systems that are 5 inches and thicker along the least dimension shall conform to Grade No. 1 Dense or Select Structural (Sel Str.).

Page 10-178, Subarticle 1082-3(B) Bridges, Fender Systems and Piles, line 28, delete and replace the second paragraph with the following:

Timber for piles shall be southern pine and meet the requirements of ASTM D25.

Page 10-178, Subarticle 1082-3(C) Guardrail Posts, Blockouts and related components, lines 33-34, replace “Southern Pine, conforming to Grade No. 1. Rough lumber will be acceptable.” with “southern pine, conforming to Grade No. 1 Dense.”.

Page 10-178, Subarticle 1082-3(D) Fence Posts and Braces, lines 37-39, delete the first paragraph and replace with the following:

Sawn fence posts and braces shall be southern pine, S4S, and conform to Grade No. 1 Dense.

Page 10-178, Subarticle 1082-3(E) Sign Posts and Battens, lines 42-44, delete the first and second sentence of the first paragraph and replace with the following:

Lumber or timbers for sign posts shall conform to Structural Light Framing, Grade No. 1 Dense.

Page 10-178, Subarticle 1082-3(E) Sign Posts and Battens, line 46, delete the first sentence of the second paragraph.

Page 10-179, Subarticle 1082-3(F) Poles, lines 2-3, delete the first sentence of the first paragraph and replace with the following:

Timber for poles shall be either treated southern pine or coastal douglas-fir and meet the requirements of ANSI O5.1.

Page 10-179, Subarticle 1082-4(A) General, line 8, replace “AASHTO M 133 or AWP Standards” with “AASHTO M 133 and AWP Standards”.

Page 10-179, Subarticle 1082-4(A) General, lines 14-15, delete the third paragraph.

Page 10-179, Subarticle 1082-4(A) General, line 19, replace “”areas include” with “areas including, but not limited to,”.

Page 10-179, Subarticle 1082-4(B) Timber Preservatives, line 24, replace “AASHTO M 133 or AWP Standards U1” with “AASHTO M 133 and AWP Standards U1”.

Page 10-179, Subarticle 1082-4(C) Bridges, Fender Systems and Piles, lines 27-28, replace “AASHTO M-133 or AWP Standard U1” with “AASHTO M 133 and AWP Standard U1”.

Page 10-179, Subarticle 1082-4(D) Guardrail Posts, Blockouts and Related Components, lines 32-33, replace “AASHTO M-133 or AWP Standard U1” with “AASHTO M 133 and AWP Standard U1”.

Page 10-179, Subarticle 1082-4(E) Fence Posts and Braces, lines 36 and 38, replace “AASHTO M-133 or AWP Standard U1” with “AASHTO M 133 and AWP Standard U1”.

Page 10-179, Subarticle 1082-4(E) Fence Posts and Braces, line 39, replace “except require retention of preservative as below” with “Commodity Specification B. Posts, UC4A”.

Page 10-180, Subarticle 1082-4(F) Sign Posts and Battens, line 2, replace “AASHTO M-133 or AWP Standard U1” with “AASHTO M 133 and AWP Standard U1”.

Page 10-180, Subarticle 1082-4(G) Poles, line 9, replace “AASHTO M-133 or AWP Standard U1” with “AASHTO M 133 and AWP Standard U1”.

Page 10-180, Subarticle 1084-1(A) Treated Timber Pile, line 16-17, delete and replace the first paragraph with the following:

Treated timber piles shall meet the requirements of Section 1082.

Page 10-195, Subarticle 1089-2(A)(1) Work Zone Signs (Stationary), line 44, add the following sentence to the second paragraph:

Pressure treat wood posts in accordance with Section 1082.

Page 15-18, Article 1540-2 MATERIALS, line 8, replace “1082-3” with “1082”.

WORK ZONE INSTALLER:

(7-20-21)(Rev. 4-21-26)

1101

SP11 R04

Revise the *Standard Specifications* as follows:

Page 11-4, Article 1101-14 WORK ZONE INSTALLER, lines 25-26, delete the first sentence of the first paragraph and replace with the following:

When temporary traffic control consists of more than flagging operations, the Contractor shall provide the service of at least one qualified work zone installer during the setup, installation, and removal of temporary traffic control within the highway right of way.

CONES:

(3-19-24)

1135

SP11 R35

Revise the *Standard Specifications* as follows:

Page 11-11, Article 1135-3 CONSTRUCTION METHODS, lines 19-20, delete the third sentence of the first paragraph, "Do not use cones in the upstream taper of lane or shoulder closures for multi-lane roadways."

FLAGGERS:

(12-17-24)(Rev. 12-23-25)

1150

SP11 R50

Revise Section 1150 of the *Standard Specification* as follows:

Page 11-13, Article 1150-1, DESCRIPTION, add the following after line 31:

Alternatively, at the discretion of the Contractor, the Contractor may furnish, install, place in operation, repair, maintain, relocate, and remove remotely controlled Automated Flagging Assistance Devices (AFAD) or Temporary Portable Traffic Signal units (PTS units) to assist, supplement, or replace human flaggers for one-lane, two-way traffic maintenance during construction in accordance with this provision and the *Standard Specifications*.

For the purpose of this provision, an "approach" refers to a single lane of traffic moving in one direction toward a point of control or work zone. Flaggers, AFAD and PTS units are only used to control one lane of approaching traffic in a specific direction.

Page 11-13, Article 1150-2, MATERIALS, add the following after line 34:

Provide documentation to the Engineer that the AFAD or PTS units meets or exceeds the requirements of this special provision and is on the NCDOT APL or ITS and Signals QPL.

(A) Automated Flagging Assistance Devices (AFAD)

(1) AFAD General

Cover the automated gate arm with Department approved Type VII, VIII or IX retroreflective sheeting of vertical alternating red and white stripes at 16 inch intervals measured horizontally. When the gate arm is in the down position the minimum vertical

aspect of the arm and sheeting shall be 4 inches. The retroreflectorized sheeting shall be on both sides of the gate arm. With the AFAD parked or positioned 2 feet outside or in a location deemed acceptable for the lane being controlled, the gate arm shall reach at least to the center of the lane but shall not exceed the width of the lane being controlled.

Design the system to be fail-safe. Provide a conflict monitor, malfunction monitoring unit, or similar device that monitors for malfunctions and prevents the display of conflicting indications. This system shall be electronic and operated by remote control.

(2) AFAD Type I System: RED/YELLOW

Provide a Red/Yellow AFAD with at least one set of CIRCULAR RED and CIRCULAR YELLOW lenses in a vertical configuration that are 12 inches in diameter. The bottom of the housing (including brackets) shall be at least 7 feet (2.1 meters) above the pavement.

This system is required to have yellow 12 inch aluminum or polycarbonate vehicle signal heads with 10 inch tunnel visors, backplates, and Light Emitting Diode (LED) modules. Provide signal heads, backplates, and LED modules listed on the ITS and Signals QPL available on the Department's website.

Provide an automated gate arm on the AFAD that descends to a down position across the approaching lane of traffic when the steady CIRCULAR RED lens is illuminated and then ascends to an upright position when the flashing CIRCULAR YELLOW lens is illuminated. The automated gate arm is to be designed such that if a motorist pulls underneath the gate arm while lowering, no damage to the vehicle occurs.

A STOP HERE ON RED (R10-6 or R10-6a) sign shall be installed on the right-hand side of the approach at the point at which drivers are expected to stop when the steady CIRCULAR RED lens is illuminated.

To stop traffic, the AFAD shall transition from the flashing CIRCULAR YELLOW lens by initiating a minimum 5 second steadily illuminated CIRCULAR YELLOW lens followed by the CIRCULAR RED lens.

Once the CIRCULAR RED lens is displayed, the system is to have a minimum 2 second delay between the time the steady CIRCULAR RED is displayed and the time the gate arm begins to lower. The maximum delay between CIRCULAR RED and the time the gate arm lowers is 4 seconds. To permit stopped road users to proceed, the AFAD shall display the flashing CIRCULAR YELLOW lens and the gate arm shall be placed in the upright position.

Ensure the system monitors for a lack of yellow or red signal voltage, total loss of indication in any direction, presence of multiple indications on any approach and low power conditions.

Additional sets of CIRCULAR RED and CIRCULAR YELLOW lenses located over the roadway or on the left side of the approach and operated in unison with the primary set, may be used to improve visibility of the AFAD. If the set of lenses is located over any

portion of the roadway that can be used by motor vehicles, the bottom of the housing (including brackets) shall be at least 15 feet (4.6 meters) above the pavement.

(3) AFAD Type II System: STOP/SLOW

Provide STOP/SLOW signs that are octagonal in shape, made of rigid material, and at least 36 inch x 36 inch in size. Letters shall be a minimum of 8 inches high. The STOP face shall have a red background with white letters and border.

The SLOW face shall be diamond shaped, orange, or yellow background with black letters and border. Cover both faces in a Department approved Type VII, VIII or IX retroreflective sheeting. The minimum mounting height for the sign faces shall be 7 feet above the pavement to the bottom of the sign.

The AFAD's STOP/SLOW signs shall be supplemented with active conspicuity devices by incorporating a stop beacon (red lens) and a warning beacon (yellow lens). The stop beacon shall be no more than 24 inches above the STOP face. Mount the warning beacon no more than 24 inches above or beside of the SLOW face. Except for the mounting locations, the beacons shall conform to the provisions of Chapter 4L of the MUTCD and have 12 inch signal lenses.

Strobe/flashing lights are an acceptable alternative to flashing beacons. If utilized, they shall be either white or red flashing lights located within the STOP face and white or yellow flashing lights within the SLOW face and conform to the provisions of Chapter 6D of the MUTCD. If used, the lens diameter shall be a minimum of 5 inches with a minimum height of 6 inches. Equip strobes/flashing lights for both dual and quad flash patterns.

Type B warning lights shall not be used in lieu of the beacons or the strobe lights.

The faces of the AFADs STOP/SLOW sign may include louvers. If louvers are used, design the louvers such that the aspect of the sign face to approaching traffic is a full sign face at a distance of 50 feet or greater.

A WAIT ON STOP (R1-7) sign and a GO ON SLOW (R1-8) sign shall be displayed to traffic approaching the AFAD. Position signs on the same support structure as the AFAD. Both signs shall have black legends and borders on white Type III sheeting backgrounds. Each of these signs shall be rectangular in shape and be at least 24 inch x 30 inch size with letters at least 6 inches high.

Provide an automated gate arm on the AFAD that descends to a down position across the approaching lane of traffic when the STOP face is displayed and then ascends to an upright position when the SLOW face is displayed.

The automated gate arm is to be designed such that if a motorist pulls underneath the gate arm while lowering, no damage to the vehicle occurs.

A STOP HERE ON RED (R10-6 or R10-6a) sign shall be installed on the right-hand side of the approach at the point at which drivers are expected to stop when the STOP face is displayed.

When approaching motorists are to proceed, display the SLOW face and the warning beacon or strobes are to flash on the AFAD. When approaching motorists are will be stopped, display the STOP face and the stop beacon or strobes are to flash on the AFAD.

To stop traffic, the AFAD will transition from the SLOW face to the STOP face by initiating a minimum 5 second change cycle. First, the warning beacon is to be steadily illuminated for the change cycle. If strobes are used in lieu of a warning beacon, they are to be placed in the quad flash pattern. At the end of the change cycle, the STOP face is to be displayed with the stop beacon flashing and the warning beacon or strobes are to stop flashing. Once the STOP face is displayed, the system is to have a minimum 2 second delay between the time the STOP face is displayed and the time the gate arm begins to lower. The maximum delay between the time the STOP face is displayed and the time the gate arm lowers is 4 seconds.

To permit stopped road users to proceed, the gate arm shall be placed in the upright position and the AFAD shall display the SLOW face and the warning beacon or strobes are to flash in the dual flash pattern.

Do not flash the stop beacon when the SLOW face is displayed, and do not flash the warning beacon when the STOP face is displayed.

(B) Portable Traffic Signals (PTS) Units

Provide PTS units with at least one set of CIRCULAR RED, CIRCULAR YELLOW, and CIRCULAR GREEN lenses in a vertical configuration that are 12 inch diameter aluminum or polycarbonate vehicle signal heads with 10 inch tunnel visors, backplates, and Light Emitting Diode (LED) modules. All signal heads, tunnel visors, and backplates shall be yellow in color.

The bottom of the housing (including brackets) shall be at least 7 feet above the pavement for single set units. Additional signal heads on units with more than one signal head shall be capable of extending over the travel lane.

Communication Requirements

All PTS units within the signal set up systems shall maintain communication at all times by either hardwire cable or wireless radio link communication. If the hardwire cable communication is utilized the communication cable shall be deployed in a manner that will not intrude in the direct work area of the project or obstruct vehicular and pedestrian traffic. Utilize radio communication with 900MHz frequency band and frequency hopping capability. The radio link communication system shall have a minimum range of 1 mile.

Fault Mode Requirements

Revert PTS units to a flashing red mode upon system default unless otherwise specified by the Engineer. Equip the PTS units with a remote monitoring system. Where cell communication availability exists, the remote monitoring system shall adhere to the remote monitoring system section of this provision.

Remote Monitoring System

The remote monitoring system (RMS) shall be capable of reporting signal location, battery voltage / battery history and system default. Provide a password protected website viewable from any computer with internet capability for the RMS. In the event of a system default, the RMS shall provide specific information concerning the cause of the system default (i.e. red lamp on signal number 1). Equip the RMS with a mechanism capable of immediately contacting a minimum of three previously designated individuals via text messaging and/or email upon a default.

The running program operating the PTS units shall be always available and viewable through the RMS website. Maintain a history of the RMS operating system in each signal including operating hours and events and the location of the PTS units.

Trailer / Cart

The AFAD and PTS units may be mounted on either a trailer or a moveable cart system.

Finish all exterior metal surfaces with Federal orange enamel per AMS-STD-595, color chip ID# 13538 or 12473 respectively with a minimum paint thickness of 2.5 mils (64 microns).

Design and test the AFAD or PTS units trailer / cart to withstand an 80 MPH wind load while in the operational position. Provide independent certification that the assembly meets the design wind load.

Equip the AFAD or PTS units with leveling jacks capable of stabilizing the unit in a horizontal position when located on slopes 6:1 or flatter.

Equip trailers in compliance with North Carolina Law governing motor vehicles and include a 12-volt trailer lighting system complying with *Federal Motor Carrier Safety Regulations 393*, safety chains and a minimum 2 inch ball hitch.

Provide a minimum 4 inch wide strip of fluorescent conspicuity sheeting retroreflective sheeting to the frame of the trailer. Apply the sheeting to all sides of the trailer. The sheeting shall meet the ASTM requirements of Type VII, VIII or IX.

Power System

Design the systems to operate both with and without an external power source. Furnish transmitters, generators, batteries, controls and all other components necessary to operate the device.

Provide equipment that is solar powered and supplemented with a battery backup system that includes a minimum 110/120 VAC powered on-board charging system capable of powering the unit for 7 continuous days with no solar power. Each unit shall also be capable of being powered by standard 110/120 VAC power sources, if applicable.

Locate batteries and electronic controls in a locked, weather and vandal resistant housings.

Page 11-14, Article 1150-3, CONSTRUCTION METHODS, add the following after line 11:

Flaggers shall have a path to escape an errant approaching vehicle at all times, unimpeded by barrier, guardrail, guiderail, parked vehicles, construction materials, slopes steeper than 2:1, or any other obstruction at all times. If an unimpeded path cannot be maintained, the Contractor shall use AFAD or PTS units in lieu of a flagger.

Provide documentation to the Engineer prior to deploying the device that the AFAD or PTS units operator(s) are qualified flagger(s) that have been properly trained through an NCDOT approved training agency or other NCDOT approved training provider and that the qualified flagger(s) have received manufacturer training to operate that specific device. This training shall include proper installation, remote control operation, central control systems and maintenance of the AFAD or PTS units. The training shall take place off the project site where training conditions are removed from live traffic. The documentation shall include the names of the authorized trainer, the trainees, the device on which they have been trained and the date of the training. Provide updated documentation to the Engineer prior to deploying any additional operators.

Install advance warning signs and operate AFADs in accordance with the attached detail drawings in this provision.

Install advance warning signs and operate PTS units in accordance with *NCDOT Roadway Standard Drawings* No. 1101.02, Sheet 17.

AFAD and PTS units shall only be used in situations where there is only one lane of approaching traffic in the direction to be controlled. **At no time shall an AFAD unit controlling traffic through the work area be placed in an autonomous mode and/or left unattended.**

Signal timing and operation of PTS units shall be field verified and accepted by the Engineer before use.

Do not use AFAD or PTS units in locations where queueing from the AFAD or PTS units will extend to within 150 feet of a signalized intersection or railroad crossing. Do not use AFAD and PTS units as a substitute for or a replacement for a continuously operating temporary traffic control signal as described in Section 6F.84 of the MUTCD.

If used at night, illuminate each AFAD or PTS units as described in Section 6D of the MUTCD.

Provide a complete AFAD or PTS units that is capable of being relocated as traffic conditions demand.

If AFADs or PTS units become inoperative, be prepared at all times to replace the unit with the same type and model of AFAD or PTS units, revert to human flagging operations or terminate all construction activities requiring the use of the AFAD or PTS units until the AFAD or PTS units become operative or qualified human flaggers are available.

When the work requiring the AFAD or PTS units is not pursued for 30 minutes or longer, power off each AFAD or PTS units. Removed the AFAD or PTS units from the travel lane and relocated to a minimum of 5 feet from the edge line. AFAD gate arms shall be in the upright position. Remove all traffic control devices from the road, place two cones by each AFAD or PTS units and all signs associated with the lane closure operation shall be removed or laid down. At the end of each workday, remove all AFADs or PTS units from the roadway and shoulder areas.

Ensure the system's wireless communication links continuously monitor and verify proper transmission and reception of data used to monitor and control each AFAD or PTS units. Ensure ambient mobile or other radio transmissions or adverse weather conditions do not affect the system.

In the event of a loss of communications, immediately display the flashing RED or STOP indication on all AFAD or PTS units.

AFAD Specific Construction Methods

The flagger/operator controlling the AFAD units shall be on the project site at all times. If multiple AFAD units are used, one AFAD unit shall be the Main AFAD unit and all other units shall be remote AFAD units. Ensure that each device meets the physical display and operational characteristics as specified in the MUTCD.

Multiple AFAD units may be controlled with **one** flagger/operator when the AFAD units meet each of the following requirements:

- (1) AFAD units are spaced no greater than the manufacturer's recommendations.
- (2) Both AFAD units can be seen at the same time from the flagger/operator's position, or the AFAD is operating on its own secure network with malfunction detection and notification to the flagger/operator.
- (3) The flagger/operator has an unobstructed view of approaching traffic in both directions from the flagger/operator position or the AFAD is operating on its own secure network, with cameras that provide the flagger/operator an unobstructed view of approaching traffic from both directions. The flagger/operator may control the AFAD units from a pilot vehicle.

If any of the above requirements are not met, flagger/operator control each AFAD unit.

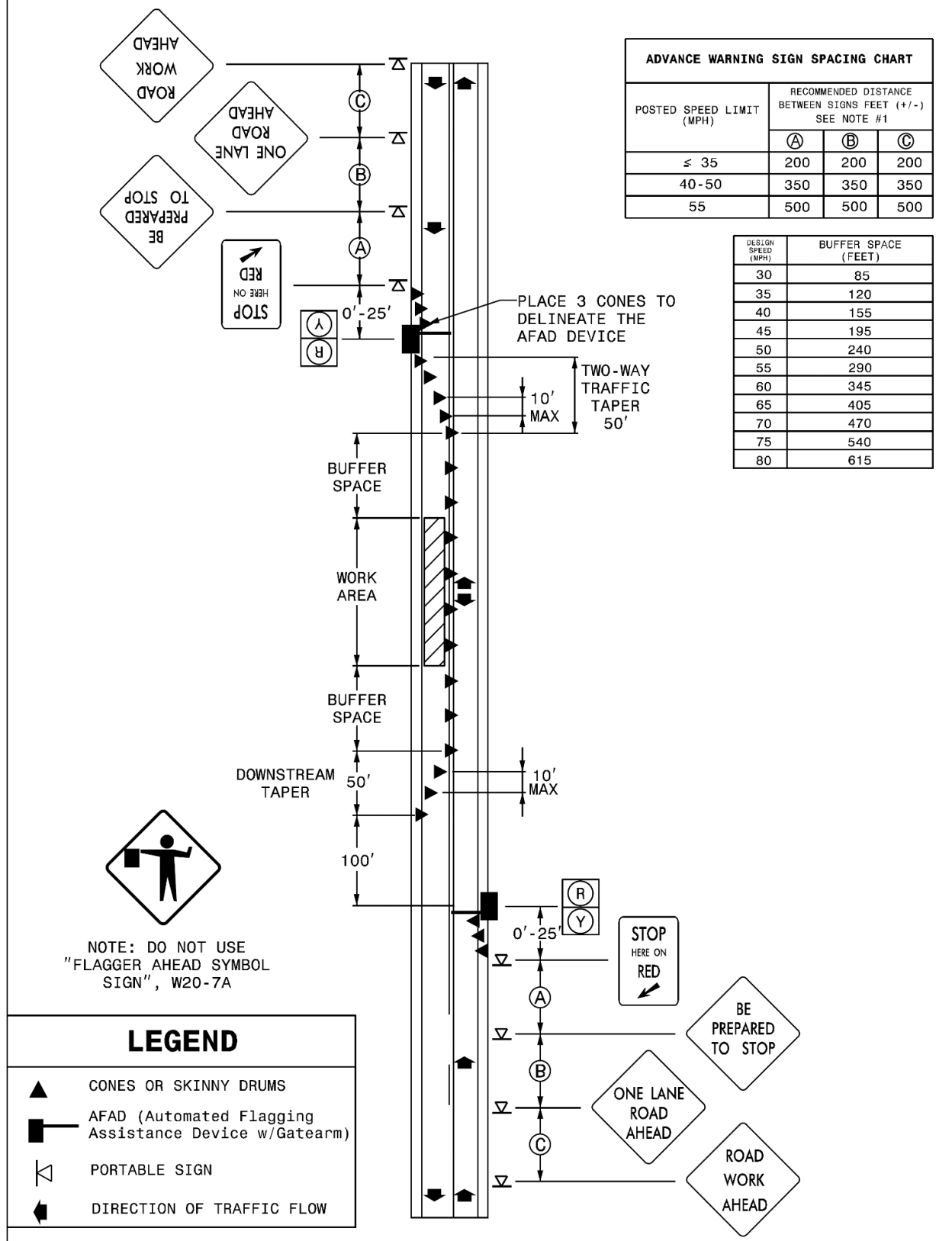
AFAD operators may either control traffic at side streets or driveways between the AFAD units or operate the pilot car while operating the AFAD system if approved by the Engineer. AFAD units must continue to be within clear sight of the operator during these work activities.

Page 11-14, Article 1150-4, MEASUREMENT AND PAYMENT, add the following after line 24:

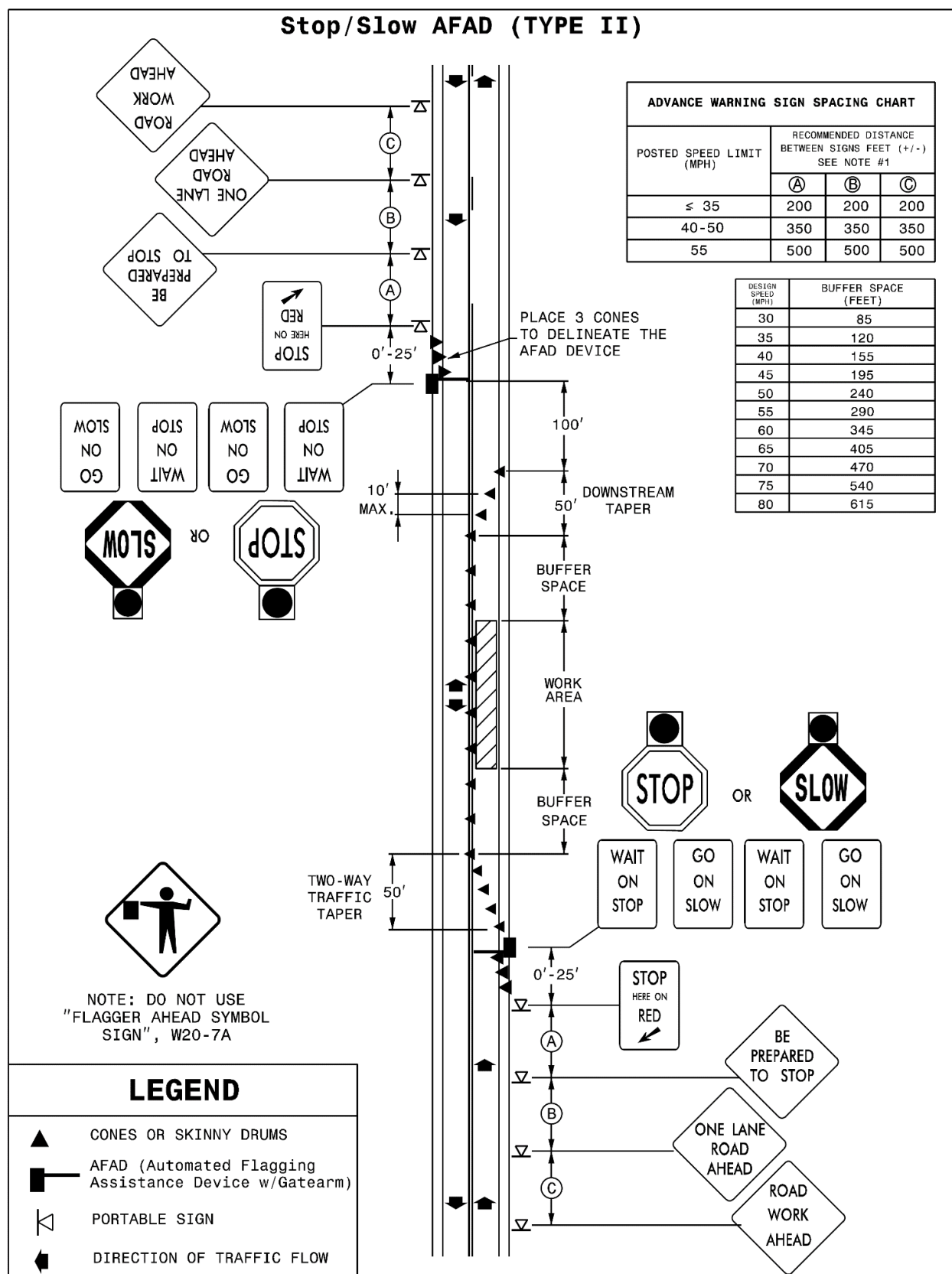
Each AFAD or PTS unit will be measured and paid for as *Flaggers* paid by day in accordance with Article 1150-4 of the *Standard Specifications*. Where the pay item for *Flaggers* is not included in the original contract then no separate payment will be made for this item and payment will be included in the lump sum price bid for *Temporary Traffic Control* found elsewhere in this contract. Each approach controlled by AFAD or PTS units will be measured and paid as one flagger, irrespective of the number of devices used. If multiple PTS units are required to control a single approach, these units will collectively be considered as replacing one flagger.

No separate measurement or payment will be made for AFAD or PTS unit operators, as the cost of such including their training and operational costs shall be included in the unit or lump sum price for *Flaggers* or *Temporary Traffic Control*. Such price and payment also includes the relocation, maintenance, and removal during repair periods of AFAD or PTS units as well as the signal controller, communication, vehicle detection system, traffic signal software of PTS units and any other incidentals necessary to complete the work.

Red/Yellow Lens AFAD (TYPE I)



Stop/Slow AFAD (TYPE II)



PAVEMENT MARKINGS:

(5-19-26)(Rev. 6-16-26)

1087, 1205

SP12 R04

Revise the *Standard Specifications* as follows:

Page 10-185, Subarticle 1087-2(A) Paint Composition, line 15, replace “TT--P-1952” with “TT--P-1952, Type III”.

Page 10-185, Subarticle 1087-2(C) Thermoplastic Composition, lines 28-33, replace the first through third paragraph and the table with the following:

(C) Thermoplastic and Integrated Multipolymer (IMP) Composition

Use thermoplastic alkyd/maleic pavement markings composed of the materials in Table 1087-1A and integrated multipolymer markings composed of the materials in Table 1087-1B.

TABLE 1087-1A PHYSICAL PROPERTIES OF THERMOPLASTIC PAVEMENT MARKINGS	
Component	By Weight
Alkyd/Maleic Binder	18.0% Min
Premixed Glass Beads (AASHTO M 247 – Type 3)	40.0% Min
Titanium Dioxide Pigment (ASTM D476 Type 2)	10.0% Min. (white) 1.5% Min. (yellow)

TABLE 1087-1B PHYSICAL PROPERTIES OF INTEGRATED MULTIPOLYMER (IMP) PAVEMENT MARKINGS	
Component	By Weight
Binder	21.0% Min
Premixed Glass Beads (AASHTO M 247 – Type 3)	40.0% Min
Titanium Dioxide Pigment (ASTM D476 Type 2)	10.0% Min. (white only)
Inert Filler	15% Max white / 24% Max Yellow

Use white material that does not contain anatase titanium dioxide pigment. Use yellow material that does not contain any intentionally added lead chromate.

Calcium carbonate and inert fillers may be used by the manufacturer, providing all other qualifications are met.

Page 10-185, Subarticle 1087-2(C) Thermoplastic Composition, line 34, replace “thermoplastic” with “material”.

Page 10-185, Subarticle 1087-2(C) Thermoplastic Composition, line 36, replace “alkyd/maleic binder” with “binder”.

Page 10-185, Subarticle 1087-2(C) Thermoplastic Composition, line 38, replace “maleic-modified glycerol of resin” with “rosin ester”.

Page 10-186, Subarticle 1087-2(C) Thermoplastic Composition, insert the following paragraph after line 2:

The integrated multipolymer binder shall consist of a mixture of modified rosin ester, polyamide and a copolymer (e.g. EVA) with waxes and/or plasticizers. At least 3% of the total formulation weight shall be 100% polyamide. The binder shall contain no petroleum hydrocarbon resins.

Page 10-186, Subarticle 1087-2(C) Thermoplastic Composition, lines 3, 6, 9 and 11, replace “thermoplastic material” with “material”.

Page 10-186, Article 1087-3 COLOR, after line 27, replace “Crystal: Color No. 17886 (White)” with “White: Color No. 17925”.

Page 10-186, Subarticle 1087-4(A) Composition, lines 31-34, replace the second paragraph with the following:

Manufacture the beads from 100% recycled or virgin non-pigmented glass from a composition designed to be highly resistant to traffic wear and to the effects of weathering. All intermix and drop-on glass beads shall be manufactured using 100% North American recycled glass cullet, virgin North American glass or a combination of the two.

Page 10-187, Subarticle 1087-4(C) Gradation & Roundness, lines 4-6, replace the first paragraph and table with the following:

Use drop-on and intermixed glass beads in all pavement markings with at least 80% true spheres when tested in accordance with ASTM D1155. Drop-on glass beads for permanent pavement markings shall be high performance glass beads listed on the NCDOT APL. If otherwise specified, or at the direction of the Engineer, other drop-on reflective media may be used on permanent markings. Drop-on glass beads used on any interim or temporary pavement markings shall meet Table 1087-2.

TABLE 1087-2 GLASS BEAD GRADATION REQUIREMENTS		
Sieve Size	Gradation Requirements	
	Minimum	Maximum
Passing #20	95%	100%
Retained on #30	5%	20%
Retained on #50	40%	80%
Retained on #80	15%	50%
Passing #80	0%	10%
Retained on #200	0%	5%

Page 10-187, Article 1087-5 PACKAGING FOR SHIPMENT, line 31, replace “Thermoplastic pavement marking materials” with “Thermoplastic and integrated multipolymer pavement marking materials”.

Page 10-188, Subarticle 1087-7(B) Thermoplastic Pavement Marking Material Composition, line 17, replace “(B) Thermoplastic Pavement Marking Material Composition” with “(B) Thermoplastic and Integrated Multipolymer Pavement Marking Material Composition”.

Page 10-188, Subarticle 1087-7(C) Flash Point, line 22, replace “thermoplastic” with “thermoplastic and integrated multipolymer material”.

Page 10-188, Subarticle 1087-7(D) Requirements, line 25, replace “thermoplastic material” with “thermoplastic and integrated multipolymer material”.

Page 10-189, Subarticle 1087-7(D), after line 15, add the following:

(9) Tensile Elongation

The integrated multipolymer material shall have an elongation of at least 10% when tested in accordance with ASTM D638 (1"x 6", 0.25"/min).

(10) Abrasion Resistance

The integrated multipolymer material shall have no more than 0.40 g weight loss following taber abrasion with CS17 wheels for 1000 cycles with 1 kg weight per ASTM D4060.

Page 10-189, Article 1087-8 MATERIAL CERTIFICATION, lines 22-23, replace the third paragraph with the following:

Reflective media not covered in this, or other specifications must meet AASHTO M 247 Type 3 or 4 and a NCDOT Type 2 Material Certification must be provided.

Page 10-189, Article 1087-8 MATERIAL CERTIFICATION, after line 23, add the following to the table:

Integrated Multipolymer	Type 2 Material Certification and Type 3 Material Certification
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Page 12-3, Subarticle 1205-3(F) Surface Preparation and Curing Compound Removal, line 8, add the following as a second sentence of the first paragraph:

Only apply markings to dry clean surfaces.

Page 12-4, Subarticle 1205-3(G)(1) General for all types of Pavement Markings, line 16, replace the first sentence of the eighth paragraph with the following:

Protect the pavement markings until they are track free before exposing them to traffic.

Page 12-4, Subarticle 1205-3(G)(1) General for all types of Pavement Markings, lines 22-24, delete the second sentence of the tenth paragraph.

Page 12-4, Subarticle 1205-3(G)(1) General for all types of Pavement Markings, after line 24, replace “White: Color No. 17886” with “White: Color No. 17295”.

Page 12-5, Subarticle 1205-3(I) Removal of Pavement Markings, line 32, add the following as the third sentence of the seventh paragraph:

Before applying integrated multipolymer (IMP) pavement markings over existing thermoplastic pavement markings, remove at least 85% of the oxidized existing thermoplastic.

Page 12-5, Subarticle 1205-3(I) Removal of Pavement Markings, line 35, replace “thermoplastic” with “thermoplastic or IMP”.

Page 12-6, Article 1205-4 THERMOPLASTIC, line 3, replace “1205-4 THERMOPLASTIC” with “1205-4 THERMOPLASTIC AND INTEGRATED MULTIPOLYMER (IMP)”.

Page 12-6, Subarticle 1205-4(A) Application Equipment, lines 7, 16, 20, 24, 25, 27 and 29, delete “thermoplastic”

Page 12-6, Subarticle 1205-4(B) Weather Limitations and Seasonal Limitations, line 38, replace “thermoplastic pavement markings” with “thermoplastic or integrated multipolymer pavement markings”.

Page 12-6, Subarticle 1205-4(B) Weather Limitations and Seasonal Limitations, line 42, delete “thermoplastic”.

Page 12-7, Subarticle 1205-4(C) Application, lines 2, 3, 10, 21 and 31, delete “thermoplastic”.

Page 12-7, Subarticle 1205-4(C) Application, after line 17, in Table 1205-2 MINIMUM REFLECTOMETER REQUIREMENTS FOR THERMOPLASTIC replace “Standard Glass Beads” with “High Performance Glass Beads” and for the Reflectivity of White replace “375 mcd/lux/m²” with “425 mcd/lux/m²” and Yellow replace “250 mcd/lux/m²” with “325 mcd/lux/m²”

Page 12-7, Subarticle 1205-4(C) Application, line 23, replace “thermoplastic pavement marking” with “final pavement marking”.

Page 12-7, Subarticle 1205-4(C) Application, after line 32, replace “TABLE 1205-3 THICKNESS REQUIREMENTS FOR THERMOPLASTIC” with “TABLE 1205-3 THICKNESS REQUIREMENTS FOR THERMOPLASTIC AND INTEGRATED MULTIPOLYMER”.

Page 12-9, Subarticle 1205-5(C) Observation Period, before line 1, replace “375 mcd/lux/m²” with “425 mcd/lux/m²” and replace “250 mcd/lux/m²” with “325 mcd/lux/m²”.

Page 12-11, Subarticle 1205-8(C) Application, lines 17-20, replace the first paragraph with the following:

Final pavement marking application of paint shall be placed in 1 application of 30 mils wet each

and consist of reflective media applied at a rate to immediately obtain the minimum retroreflective values.

Page 12-11, Subarticle 1205-8(C) Application, line 26, delete “15 mil”.

Page 12-11, Subarticle 1205-8(C) Application, after line 31, replace Table 1205-6 with the following:

TABLE 1205-6 REFLECTOMETER REQUIREMENTS FOR PAINT		
Item	Color	Reflectivity
Standard Glass Beads	White	225 mcd/lux/m ²
	Yellow	200 mcd/lux/m ²
High Performance Glass Beads	White	425 mcd/lux/m ²
	Yellow	325 mcd/lux/m ²

Page 12-12, Article 1205-10 MEASUREMENT AND PAYMENT, lines 5-7, delete and replace the second sentence of the first paragraph with the following:

In addition, *Paint Pavement Marking Lines* will be paid per linear foot for each 15 mil application placed in accordance with Subarticle 1205-8(C) for temporary pavement markings during temporary traffic patterns.

Page 12-12, Article 1205-10 MEASUREMENT AND PAYMENT, lines 12-14, delete and replace the second sentence of the second paragraph with the following:

In addition, *Paint Pavement Marking Symbols* will be paid for each 15 mil application placed in accordance with Subarticle 1205-8(C) for temporary pavement markings during temporary traffic patterns.

Page 12-12, Article 1205-10 MEASUREMENT AND PAYMENT, lines 17-19, delete and replace the third sentence of the third paragraph with the following:

In addition, *Paint Pavement Marking Characters* will be paid for each 15 mil application placed in accordance with Subarticle 1205-8(C) for temporary pavement markings during temporary traffic patterns.

Page 12-12, Article 1205-10 MEASUREMENT AND PAYMENT, lines 17-19, replace the second sentence of the ninth paragraph with the following:

No direct payment will be made for the work involved in applying the lines, including but not limited to surface preparation, reapplication of molten pavement marking crossed by a vehicle, removal of all pavement marking materials spilled on the roadway surface, and repair of markings tracked by a vehicle.

Page 12-13, Article 1205-10 MEASUREMENT AND PAYMENT, after line 12, add the

following to the pay item and pay unit list:

Pay Item

Integrated Multipolymer Pavement Marking Lines, __", __ mils

Integrated Multipolymer Pavement Marking Symbols, __ mils

Integrated Multipolymer Pavement Marking Characters, __ mils

Pay Unit

Linear Foot

Each

Each

COIR FIBER MAT:

(9-16-25)

1629

SP16 R05

Revise the *Standard Specifications* as follows:

Page 16-9, Article 1629-2 MATERIALS, lines 22-24, delete and replace the last paragraph with the following:

Provide #3 or #4 uncoated reinforcing steel anchors, 24 inches in length, bent into a U-shape with a 4-inch diameter bend and a 4-inch straight leg extending from the bend to catch and secure the coir fiber mat.

WATTLE DEVICES:

(1-1-24)(Rev. 9-16-25)

1642

SP16 R10

Revise the *Standard Specifications* as follows:

Page 16-23, Subarticle 1642-2(B) Wattle, lines 10-12, delete and replace with the following:

(B) Wattle and Wattle Barrier

Wattles shall meet Table 1642-1.

TABLE 1642-1 100% CURLED WOOD (EXCELSIOR) FIBERS - WATTLE	
Property	Property Value
Minimum Diameter	12 inches
Minimum Density	2.5 pcf +/- 10%
Net Material	Synthetic
Net Openings	1 inch x 1 inch
Net Configuration	Totally Encased
Minimum Weight	20 lb +/- 10% per 10 foot length

Coir Fiber Wattles shall meet Table 1642-2.

TABLE 1642-2 100% COIR (COCONUT) FIBERS WATTLE	
Property	Property Value
Minimum Diameter	12 inches
Minimum Density	3.5 pcf +/- 10%
Net Material	Coir Fiber
Net Openings	2 inch x 2 inch
Net Strength	90 lb
Minimum Weight	2.6 pcf +/- 10%

Wattle Barriers shall meet Table 1642-3.

TABLE 1642-3 100% CURLED WOOD (EXCELSIOR) FIBERS – WATTLE BARRIER	
Property	Property Value
Minimum Diameter	18 inches
Minimum Density	2.9 pcf +/- 10%
Net Material	Synthetic
Net Openings	1 inch x 1 inch
Net Configuration	Totally Encased
Minimum Weight	5 pcf +/- 10%

Coir Fiber Wattle Barriers shall meet Table 1642-4.

TABLE 1642-4 100% COIR (COCONUT) FIBERS WATTLE BARRIER	
Property	Property Value
Minimum Diameter	18 inches
Minimum Density	5 pcf +/- 10%
Net Material	Coir Fiber
Net Openings	2 inch x 2 inch
Net Strength	90 lb
Minimum Weight	10 pcf +/- 10%

Pages 16-24 & 16-25, Article 1642-5 MEASUREMENT AND PAYMENT, lines 42-47 & lines 1-2, delete and replace with the following:

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

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

Wattle Barrier will be measured and paid as the actual number of linear feet of wattle barrier installed and accepted. Such price and payment will be full compensation for all work covered by this provision, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the *Wattle Barrier*.

Coir Fiber Wattle Barrier will be measured and paid as the actual number of linear feet of coir fiber wattle barrier installed and accepted. Such price and payment will be full compensation for all work covered by this provision, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the *Coir Fiber Wattle Barrier*.

Page 16-25, Article 1642-5 MEASUREMENT AND PAYMENT, after line 9, delete and replace “___ Wattle Check” with “Wattle”.

Page 16-25, Article 1642-5 MEASUREMENT AND PAYMENT, after line 9, delete and replace “___ Wattle Barrier” with “Wattle Barrier”.

Page 16-25, Article 1642-5 MEASUREMENT AND PAYMENT, after line 9, add the following:

Pay Item	Pay Unit
Coir Fiber Wattle	Linear Foot
Coir Fiber Wattle Barrier	Linear Foot

STANDARD SPECIAL PROVISION
AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08)(Rev. 1-16-24)

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 *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 Croton, Smooth Croton, Sickpod, 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

(1-16-24)(Rev. 6-16-26)

Z-4

Revise the *2024 Standard Specifications* as follows:

Division 1

Page 1-1, Article 101-2 ABBREVIATIONS, line 25, replace "American Wood-Preservers' Association" with "American Wood Protection Association".

Page 1-18, Article 102-10 BID BOND OR BID DEPOSIT, line 26, replace " Subarticle 102-8(A)(8)(b)" with "Subarticle 102-8(A)(12)(b)".

Page 1-20, Subarticle 102-14(A) State Funded Projects, line 3, replace "\$30,000" with "\$40,000".

Page 1-20, Subarticle 102-14(B) Federal Aid Projects, line 7, replace "\$30,000" with "\$40,000".

Page 1-36, Subarticle 104-12(B) Evaluation of Proposals, line 21, replace "Design-Build Unit" with "Alternative Delivery Unit".

Page 1-36, Subarticle 104-12(D) Preliminary Review, line 37, replace "Design-Build Unit" with "Alternative Delivery Unit".

Page 1-37, Subarticle 104-12(E) Final Proposal, line 3, replace "Design-Build Unit" with "Alternative Delivery Unit".

Page 1-37, Subarticle 104-12(F) Design-Build VEPs, line 36, replace "Design-Build Unit" with "Alternative Delivery Unit".

Page 1-38, Subarticle 104-12(G) Modifications, line 1, replace "Design-Build Unit" with "Alternative Delivery Unit".

Division 3

Page 3-5, Article 305-2 MATERIALS, after line 16, replace " 1032-3(A)(7)" with "1032-3" and add the item "Galvanized Corrugated Steel Pipe" with Section "1032-3".

Page 3-6, Article 310-2 MATERIALS, after line 9, add the item "Galvanized Corrugated Steel Pipe" with Section "1032-3".

Division 6

Page 6-15, Article 610-1 DESCRIPTION, line 20, replace "The work includes" with "The work includes, but is not limited to,".

Page 6-15, Article 610-1 DESCRIPTION, line 22, replace “applying the tack coat as specified.” with “applying the tack coat in accordance with Section 605.”.

Page 6-30, Article 610-14 DENSITY ACCEPTANCE, line 39, replace “QC process.” with “QC process in accordance with Section 609.”.

Page 6-31, Article 610-16 MEASUREMENT AND PAYMENT, line 13, replace "*Hot Mix Asphalt Pavement*" with "*Asphalt Concrete _____ Course, Type _____*".

Page 6-50, Subarticle 661-4(A) Equipment, lines 4-7, replace the first two sentences of the seventh paragraph with the following:

When an erected fixed stringline is utilized for longitudinal profile and cross slope control furnish and erect the necessary guide line for the equipment.

Division 7

Page 7-18, Subarticle 710-10(A) General, lines 7-8, delete “for *Surface Testing Concrete Pavement*” from the last paragraph.

Division 8

Page 8-27, Article 846-1 DESCRIPTION, line 8, delete “4 inch” from the first paragraph.

Division 9

Page 9-17, Article 904-4 MEASUREMENT AND PAYMENT, prior to line 1, replace " Sign Erection, Relocate Type (Ground Mounted)" with “Sign Erection, Relocate Type ____ (Ground Mounted)”.

Division 10

Page 10-51, Article 1024-4 WATER, prior to line 1, delete the “unpopulated blank row” in Table 1024-2 between “Time of set, deviation from control” and “Chloride Ion Content, Max.”.

Page 10-170, Subarticle 1081-1(C) Requirements, line 4, replace "maximum" with “minimum”.

Division 11

Page 11-15, Article 1160-4 MEASUREMENT AND PAYMENT, line 24, replace “Where barrier units are moved more than one” with “Where barrier units are moved more than once”.

Division 15

Page 15-10, Article 1515-4 MEASUREMENT AND PAYMENT, lines 11, replace " All piping" with “All labor, the manhole, other materials, excavation, backfilling, piping”.

Division 16

Page 16-14, Article 1633-5 MEASUREMENT AND PAYMENT, line 20-24 and prior to line 25, delete and replace with the following " *Flocculant* will be measured and paid in accordance with Article 1642-5 applied to the temporary rock silt checks."

Page 16-3, Article 1609-2 MATERIALS, after line 26, replace "Type 4" with "Type 4a".

Page 16-25, Article 1644-2 MATERIALS, after line 22, replace "Type 4" with "Type 4a".

Page 16-27, Article 1644-5 MEASUREMENT AND PAYMENT, line 31, replace "Article 1630-4" with "Article 1630-3".

Division 17

Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, line 23, delete and replace "1.25" with "1-1/4".

Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, line 24, delete and replace "(1.25" with " , 1-1/4".

STANDARD SPECIAL PROVISION**PLANT AND PEST QUARANTINES**

(Imported Fire Ant, Guava Root Knot Nematode, Spongy Moth (formerly known as gypsy moth), Witchweed, Cogon Grass, And Any Other Regulated Noxious Weed or Plant Pest)

(3-18-03)(Rev. 3-18-25)

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/divisions/plant-industry/plant-protection/plant-industry-plant-pest-quarantines> 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 present a hazard of spreading imported fire ant, guava root knot nematode, spongy moth (formerly known as gypsy moth), witchweed, cogon grass, or other regulated noxious weed or plant pest.

STANDARD SPECIAL PROVISION**TITLE VI AND NONDISCRIMINATION:**

(6-28-77)(Rev 1/16/2024)

Z-6

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 (a) through (f) 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. (Executive Order 13166)
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. (49 U.S.C. 5332(b); 49 U.S.C. 47123)

(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 AreasArea 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 FemaleParticipation in Each Trade

(Statewide) 6.9%

CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Davis-Bacon and Related Act Provisions
- IV. Contract Work Hours and Safety Standards Act Provisions
- V. Subletting or Assigning the Contract
- VI. Safety: Accident Prevention
- VII. False Statements Concerning Highway Projects
- VIII. Implementation of Clean Air Act and Federal Water Pollution Control Act
- IX. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- X. Certification Regarding Use of Contract Funds for Lobbying
- XI. Use of United States-Flag Vessels:

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. Historically, contracting agencies using Federal-aid highway funds were required to ensure Form FHWA-1273 was physically incorporated into all contracts and subcontracts. Effective June 10, 2026, this requirement was eliminated [91 FR 25492]. Future use of Form FHWA-1273 is now optional on the part of the contracting agency using Federal-aid highway funds. FHWA continues to make Form FHWA-1273 available as a convenience to contracting agencies. Contracting agencies must continue to ensure compliance with the provisions cited in Form FHWA-1273 in accordance with the provisions regardless of the use of Form FHWA-1273. Accordingly, the contracting agency retains the authority to determine whether the contractor must use Form FHWA-1273 to physically incorporate required contract provisions in each subcontract and in lower tier contracts. Where permitted by the contracting agency, the contractor may choose other ways to include required contract provisions in each subcontract, besides incorporating Form FHWA-1273. Contract provisions in Form FHWA-1273 are not required to be physically included in subcontracts for design services on Federal-aid design-build contracts, or in 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 or design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents.

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION

The contractor and all subcontractors must comply with the following policies: 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract.

1. Assurances Required:

a. The requirements of 49 CFR Part 26, including any amendments thereto, and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient 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, including any amendments thereto, 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 recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
 - (2) Assessing sanctions;
 - (3) Liquidated damages; and/or
 - (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E, including any amendments thereto, are incorporated by reference. 49 CFR Part 21.

III. 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in

paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) 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 will be sent by the contracting officer by email to DBAconformance@dol.gov. 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.

(4) 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 will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. Fringe benefits not expressed as an hourly rate.

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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. Unfunded plans. 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, in accordance with the criteria set forth in § 5.28, 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.

f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered

necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section IV, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprourement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number

of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must 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.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDLegacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 [29 CFR part 3](#); and

(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with [29 CFR part 30](#), including any amendments thereto.

c. 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 III. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, 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 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 [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

IV. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

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 and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* 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.

* \$33 as of January 15, 2025 (See 90 FR 1859) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section III paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

V. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)

- (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. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph 1. of this section 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. Pursuant to 23 CFR 635.116(c), 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. (based on longstanding interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however,

contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VI. 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 Part 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. 23 CFR 635.108.

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 Part 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). 29 CFR 1926.10.

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).

VII. 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 Part 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 11, 1916, (39 Stat. 355), as amended and supplemented;

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

VIII. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

IX. 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. 2 CFR 180.220 and 1200.220.

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. 2 CFR 180.320.

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. 2 CFR 180.325.

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. 2 CFR 180.345 and 180.350.

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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "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 recipient or subrecipient 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. 2 CFR 180.330.

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. 2 CFR 180.220 and 180.300.

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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

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 CFR 180.325.

* * * * *

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 CFR 180.335;.

(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, 2 CFR 180.800;

(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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.355(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. 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). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.

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, Subpart I, 180.900 – 180.1020, 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 recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.

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. 2 CFR 180.220 and 1200.220.

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 System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

X. 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 Part 20, App. A.

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.

XI. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the

extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (40 U.S.C. sections 14501(d) and 14701) and the Appalachian Regional Commission Code as authorized under 40 U.S.C. section 14302)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 40 U.S.C. 14501 allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

STANDARD SPECIAL PROVISION**ON-THE-JOB TRAINING**

(10-16-07) (Rev. 6-16-26)

Z-10

Description

The North Carolina Department of Transportation administers a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternative OJT Program. All Contractors will be automatically placed in the Alternative OJT Program.

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.

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

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special 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 Unit, will assign annual training goals based on the Contractor's activity over the past three years' on federal projects with the Department. At the beginning of each year, all eligible Contractors 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 implement a self-imposed on-the-job training program for the calendar year. This agreement will specify the annual training goals agreed upon by both parties. The number of training assignments may range from 1 to 15 per Contractor per calendar year, unless a higher number is agreed to by the Contractor. The Contractor shall sign an agreement committing 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.

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 special 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 trainees in each occupation shall be in their first year of 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 at minimum 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 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 NC20260087 05/18/2026 NC87

Z-087

Date: May 18, 2026

General Decision Number: NC20260087 05/18/2026 NC87

Superseded General Decision Numbers: NC20250087

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).

Modification Number

0

1

Publication Date

01/02/2026

05/18/2026

SUNC2014-002 11/13/2014

	Rates	Fringes
TRUCK DRIVER (GVWR of 26,000 Lbs or Less)	12.48	
TRUCK DRIVER (GVWR of 26,001 Lbs or Greater)	13.65	
POWER EQUIPMENT OPERATORS (Milling Machine)	15.08	
POWER EQUIPMENT OPERATORS (Mechanic)	17.86	
POWER EQUIPMENT OPERATORS (Tack Truck/Distributor Operator)	14.81	.02
POWER EQUIPMENT OPERATORS (Slip Form Machine)	20.38	
POWER EQUIPMENT OPERATORS (Scraper Rough)	13.83	
POWER EQUIPMENT OPERATORS (Scraper Finish)	12.86	
POWER EQUIPMENT OPERATORS (Roller Other)	12.51	.03
POWER EQUIPMENT OPERATORS (Roller Asphalt Finish)	16.08	.07
POWER EQUIPMENT OPERATORS (Roller Asphalt Breakdown)	15.00	.08
POWER EQUIPMENT OPERATORS (Paver Concrete)	18.20	
POWER EQUIPMENT OPERATORS (Paver Asphalt)	17.84	.08
POWER EQUIPMENT OPERATORS (Pavement Marking Equipment)	11.99	
POWER EQUIPMENT OPERATORS (Oiler/Greaser)	15.05	
POWER EQUIPMENT OPERATORS (Off-Road Hauler/Water Tanker)	11.95	
POWER EQUIPMENT OPERATORS (Material Transfer Vehicle (Shuttle Buggy))	15.44	
POWER EQUIPMENT OPERATORS (Loader Greater Than 2 Cubic Yards)	17.91	
POWER EQUIPMENT OPERATORS (Loader 2 Cubic Yards or Less)	12.38	
POWER EQUIPMENT OPERATORS (Grader/Blade Rough)	15.12	
POWER EQUIPMENT OPERATORS (Grader/Blade Fine)	19.86	
POWER EQUIPMENT OPERATORS (Excavator Rough)	14.67	
POWER EQUIPMENT OPERATORS (Excavator Fine)	16.02	
POWER EQUIPMENT OPERATORS (Drill Operator Structure)	21.07	

	Rates	Fringes
POWER EQUIPMENT OPERATORS (Drill Operator Rock)	15.00	
POWER EQUIPMENT OPERATORS (Crane Rough/All-Terrain)	19.19	
POWER EQUIPMENT OPERATORS (Crane Other)	18.69	
POWER EQUIPMENT OPERATORS (Crane Boom Trucks)	18.19	
POWER EQUIPMENT OPERATORS (Concrete Grinder/Groover)	19.20	
POWER EQUIPMENT OPERATORS (Bulldozer Rough)	14.51	
POWER EQUIPMENT OPERATORS (Bulldozer Fine)	16.28	
POWER EQUIPMENT OPERATORS (Asphalt Broom Tractor)	10.00	
PAINTER (Bridge)	20.67	
LABORER (Pipelayer)	12.87	
LABORER (Common or General)	11.90	
LABORER (Traffic Signal/Lighting Installer)	15.33	.22
LABORER (Guardrail/Fence Installer)	13.09	
LABORER (Cement Mason/Concrete Finisher Tender)	11.04	
LABORER (Carpenter Tender)	10.50	
LABORER (Asphalt Screed/Jackman)	15.38	.08
LABORER (Asphalt Raker and Spreader)	11.76	
IRONWORKER	12.48	
ELECTRICIAN (Telecommunications Technician)	14.67	1.67
ELECTRICIAN (Electrician)	18.79	2.62
CEMENT MASON/CONCRETE FINISHER	14.40	
CARPENTER	13.48	
BLASTER	20.93	

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 <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 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)(iii)).

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

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA", or "SC" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The "SU" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

"SU" wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The "SA" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R. 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the "SA" identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

- 1) Has there been an initial decision in the matter? This can be:
 - a) a survey underlying a wage determination
 - b) an existing published wage determination
 - c) an initial WHD letter setting forth a position on a wage determination matter
 - d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via mail to dba.reconsideration@dol.gov or by mail 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 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

END OF GENERAL DECISION

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DF18314.2045330

Henderson County

WORK ZONE TRAFFIC CONTROL

Project Special Provisions

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Special Provision

Temporary Portable Traffic Signal System

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Signed by:
Dylan O'Neal
6F785D80DD1E43E...

7/2/2026

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Henderson County

TEMPORARY PORTABLE TRAFFIC SIGNAL SYSTEM:

(07/14/2015) (Rev. 10/20/2026)

Description

Furnish, install, place in operation, repair, maintain, relocate, and remove the temporary portable traffic / driveway signal system for traffic maintenance. The portable traffic / driveway signals will require a system that is coordinated to maintain safe and efficient traffic operations along SR 1702 (Edney Inn Road) during construction. The system will contain (2) trailer mounted traffic signal units along SR 1702 (Edney Inn Road). These units shall communicate and operate with the 2 driveway units.

Materials

Provide:

(2) Temporary Portable Traffic Signals (PTS) - Each shall be a trailer mounted unit with two 12" signal heads per trailer. One signal head shall be mounted on an overhead mast arm capable of extending over the travel lane. The other signal shall be mounted on a vertical upright. Each PTS unit shall be equipped with traffic detection equipment.

(2) Residential Driveway Temporary Signals (DS) – Each shall be a trailer or cart mounted unit with 1 signal head per trailer per the specification contained herein. Each DS shall be equipped with traffic detection equipment.

All signal units must be on the NCDOT Qualified Products List (PTS) and Approved Products List (DS).

(DS) Trailer / Cart Requirements

Each DS trailer shall be equipped with batteries in a lockable, weatherproof compartment and shall be capable of a minimum of 21 days of continuous operation at temperatures at or above (50° F) without charging. The trailer shall also be equipped with a solar charging system to facilitate continuous operation for a minimum of 45 days based on temperatures of (50° F) or greater. The DS trailer shall be painted highway safety orange. Each trailer shall be clearly identified with the manufacturer, serial number and emergency phone number.

Signal Head / Display Requirements

The DS trailer shall be equipped with one three-section signal head in an inverted "T"

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configuration consisting of one 12" steady circular red LED indication on top and two adjacent 8" (minimum) or 12" (maximum) flashing arrow yellow LED indications on the bottom. Signal heads shall be mounted on a retractable vertical upright and equipped with a manual hand crank.

LED indications shall conform to the ITE performance specifications for Vehicle Traffic Control Signal Heads. Signal heads shall be equipped with visors which extend beyond the signal head a minimum of 8". The signal heads shall have the ability to accommodate back plates. The signal head shall be mounted to a vertical upright at a minimum height of 9' measured from the bottom of the green indication to the road surface.

Signage for Driveway Signal Unit

The trailer shall be able to accommodate a minimum of two rigid signs. The signs shall display NO TURN ON RED and TURN ONLY IN DIRECTION OF ARROW. Additional sign legends may be used, as directed by the engineer.

Communication Requirements

All PTS and DS shall maintain communication at all times. Acceptable communication shall be either hardwire cable or wireless radio link communication. If the hardwire cable communication is utilized the communication cable shall be deployed in a manner that will not intrude in the direct work area of the project or obstruct vehicular and pedestrian traffic. If the wireless radio link communication option is utilized clear line of sight between signals within the signal setup shall be maintained. Radio communication shall utilize the 900MHz frequency band and have frequency hopping capability. The radio link communication system shall have a minimum range of (1 mile).

Fault Mode Requirements

The PTS and DS shall revert to a solid red mode upon system default. The default setting shall be solid red unless otherwise specified by the project engineer. The temporary portable traffic / driveway signal system repairs shall be the responsibility of the contractor and shall be rendered in a manner that will return the system to full operation in the most expeditious manner. The PTS shall be equipped with a remote monitoring system. Where cell communication availability exists, the remote monitoring system shall have capabilities as described in the Remote Monitoring System section of this specification.

Remote Monitoring System

The remote monitoring system (RMS) shall be capable of reporting signal location, battery voltage / battery history and system default. The RMS shall include a password protected web site viewable from any computer with internet capability. In the event of a system default the RMS shall provide specific information concerning the cause of the system default (i.e. red lamp on signal number 1). The RMS shall be equipped with a mechanism capable of immediately contacting a minimum of three previously designated individuals via text messaging and/or email upon a default.

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The running program operating the PTS system shall be available and viewable through the RMS website at all times. The RMS shall maintain a history of the operating system in each signal including operating hours and events and the location of the PTS trailer.

Implementation

Notify the Engineer at least thirty (30) calendar days prior to installation so that coordination can begin to provide public notification to all dwellings that will be utilizing the DS. This can be done with a flyer, mailer, or door hanger as described in **Attachment 1**.

The signal system shall operate in a rest in red, first-come, first-served mode, unless specifically directed otherwise by the Engineer. When a DS unit detects a vehicle, it shall input a call to both mainline PTS units.

Deployment and installation of the system shall only be facilitated by personnel that have been factory trained and fully authorized by the manufacturers.

Measurement and Payment

The Temporary Portable Traffic Signal System will be measured as the (2) trailer mounted units (PTS) and the (2) driveway units (DS) furnished, installed, operated, removed and accepted.

No measurement will be made for operation, relocation, maintenance, removal, or use of flaggers during repair periods as these will be considered incidental to furnishing, installing, and operating the temporary portable traffic signal system.

No measurement will be made for signal controllers, communication, vehicle detection system, and traffic signal software as these will be considered incidental to furnishing, installing, and operating the temporary portable traffic signal system.

No payment will be made until signal timing and operation has been field verified and accepted by the Engineer.

Payment will be made under:

Pay Item

Temporary Portable Traffic Signal System

Pay Unit

Each

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Attachment 1: **Public Notice**

Soon, the traffic pattern on Edney Inn Road will change from a two-lane/two-way road into a single lane with drivers in each direction taking turns crossing the single lane. We implement this type of temporary traffic pattern for long-term lane closures needed for construction. As part of this change, temporary portable traffic signals will be placed on either end of Edney Inn Road. To allow you safe access to Edney Inn Road, a temporary signal device will be placed within sight of the end of your road or driveway. This signal will indicate via a flashing yellow arrow which direction the traffic is flowing through the single lane. The direction the arrow is flashing is the direction you may safely turn on to Edney Inn Road. The signal will also include a red light, which instructs you to stop and not make any turns until you see the signal change to a flashing yellow arrow; then you should turn only in the direction of the flashing yellow arrow.

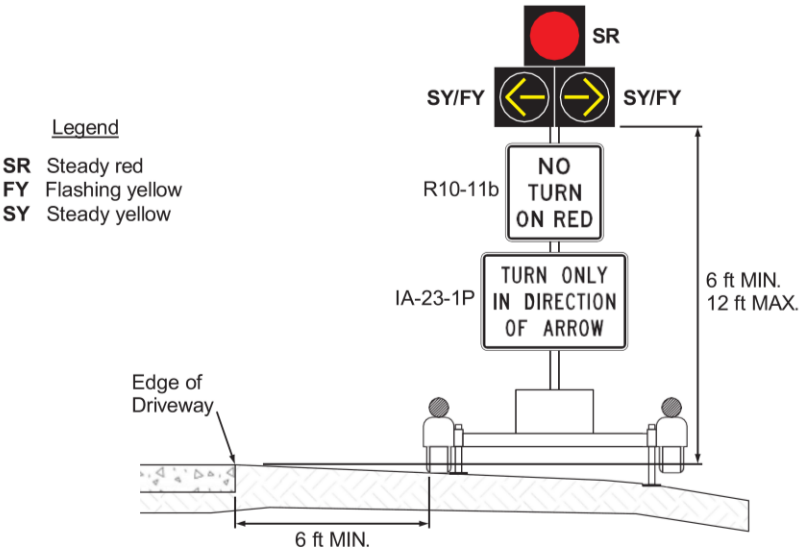
Thank you for your patience while the construction in your area is underway. Please enter the work zone safely and stay alert to the signs and signals as you proceed.

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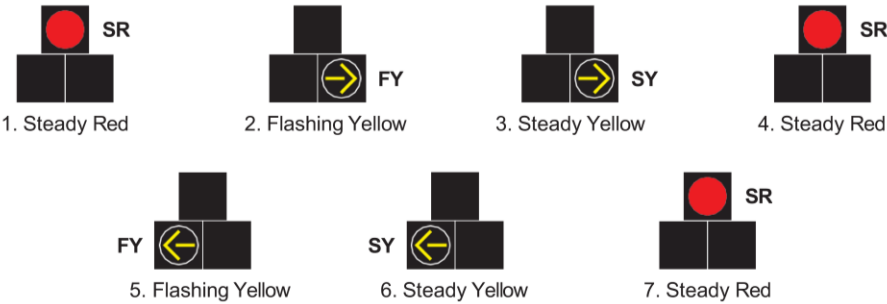
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Residential Driveway Temporary Signal



Phasing Sequence

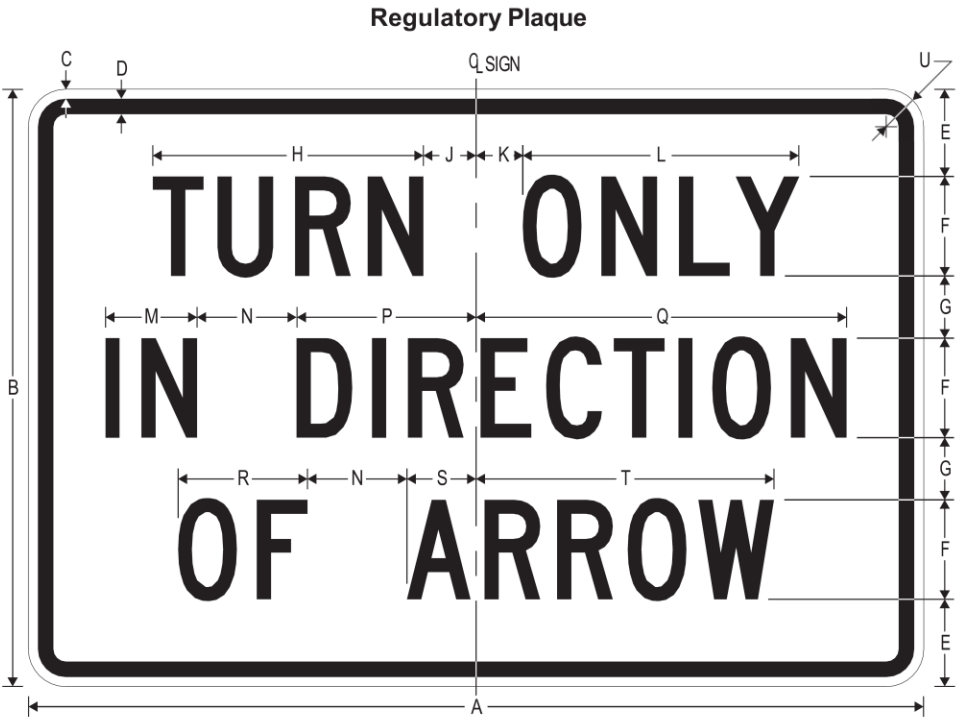


- Legend
- SR Steady red
 - FY Flashing yellow
 - SY Steady yellow

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Henderson County



IA-23-1P

TURN ONLY IN DIRECTION OF ARROW (PLAQUE)

A	B	C	D	E	F	G	H	J	K
36	24	0.375	0.625	3.5	4 C	2.5	10.844	2.120	1.880

L	M	N	P	Q	R	S	T	U
11.124	3.681	4	7.223	14.904	5.202	2.782	11.984	1.5

COLORS: LEGEND, BORDER — BLACK
BACKGROUND — WHITE (RETROREFLECTIVE)

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Dimension Descriptions

- A is the horizontal dimension of the plaque.
- B is the vertical dimension of the plaque.
- C is the inset from the edge of the plaque to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for each line.
- G is the space between the lines.
- H is the width of the first word on the first line.
- J is the distance from the vertical center of the sign to the right edge of the first word on the first line.
- K is the distance from the vertical center of the sign the left edge of the second word on the first line.
- L is the width of the second word on the first line.
- M is the width of the first word on the second line.
- N is the space between the words on the second and third lines.
- P is the distance from the vertical center of the sign to the left edge of the second word on the second line.
- Q is the distance from the vertical center of the sign to the right edge of the second word on the second line.
- R is the width of the first word on the third line.
- S is the distance from the vertical center of the sign to the left edge of the second word on the third line.
- T is the distance from the vertical center of the sign to the right edge of the second word on the third line.
- U is the corner radius.

PROJECT SPECIAL PROVISIONS**EROSION CONTROL****CONCRETE WASHOUT:**

(10-22-15)(Rev. 4-15-25)

Description

Concrete washouts are impermeable enclosures, above or below grade, to contain concrete wastewater and associated concrete mix from cleaning of ready-mix trucks, drums, pumps, tools or other equipment. Concrete washouts must collect and retain all the concrete washout water and solids, so that this material does not migrate to surface waters or into the ground water. These enclosures are not intended for concrete waste not associated with washout operations.

Acceptable concrete washouts may include constructed earthen structures, above or below ground, or commercially available devices designed specifically to capture concrete wash water.

Materials

Refer to Division 10 of the *Standard Specifications*.

Item	Section
Temporary Silt Fence	1605

Safety Fence shall meet the specifications as provided elsewhere in this contract.

Geomembrane basin liner shall consist of a minimum 10 mil thick polypropylene or polyethylene geomembrane.

Construction Methods

Build an enclosed earthen berm or excavate to form an enclosure in accordance with the details and as directed by the Engineer near the project entrance(s) or at location(s) of concrete operations. Structures shall be constructed a minimum of 50 feet from drainage conveyances or jurisdictional streams or wetlands. [Alternate structure designs or plans for management of concrete washout may be submitted for review and approval by the Engineer. Include in the alternate plan the method used to retain, treat and dispose of the concrete washout wastewater generated within the project limits and in accordance with the minimum setback requirements.](#)

Install temporary silt fence around the perimeter of the structure enclosure in accordance with the details and as directed by the Engineer if the structure is not located in an area where existing erosion and sedimentation control devices are capable of containing stormwater runoff.

Post a sign with the words "Concrete Washout" in close proximity of the concrete washout area, so it is clearly visible to site personnel. Install safety fence as directed by the Engineer for visibility to construction traffic.

Install prefabricated concrete washouts, designed specifically to capture concrete wash water, at locations of additional concrete pouring operations. Acceptable systems may include geotextile lined containers, vinyl or plastic containers or roll-off containers, with or without filter bags with a minimum functional holding capacity of 36 cubic feet (1.33 cubic yards). Submit prefabricated concrete washout system for approval by the Engineer prior to installation. Place prefabricated concrete washout devices to a minimum 50 foot setback from drainage conveyances and jurisdictional streams and wetlands. If the minimum setback cannot be achieved, provide secondary containment to prevent accidental release of wastewater from reaching drainage conveyances or streams.

Prefabricated concrete washouts must be clearly and visibly labeled as such, either by the manufacturer on the product itself, or by a sign with the words "Concrete Washout" in close proximity of the concrete washout area so it is clearly visible to site personnel.

Maintenance and Removal

Maintain the concrete washout structure(s) to provide adequate holding capacity plus a minimum freeboard of 12 inches. Remove and dispose of hardened concrete and return the structure to a functional condition after reaching 75% capacity. Inspect concrete washout structures for damage to liner or structure to maintain functionality.

Maintain prefabricated concrete washout systems per manufacturer's recommendations. Inspect concrete washout structures for damage to linings or structure and repair or replace as necessary.

Remove the concrete washout structures and sign upon project completion. Grade the area to match the existing topography and permanently seed and mulch area. Dispose of prefabricated concrete washout structures according to state or local waste regulations.

Measurement and Payment

Concrete Washout Structure will be measured and paid per each enclosure installed in accordance with the details in the plans. If alternate plans or details are approved, those structures will also be paid for per each approved and installed structure. Such price and payment will be full compensation for all work including, but not limited to, furnishing all materials, labor, equipment, signage, slurry solidification and incidentals necessary to construct, maintain and remove *Concrete Washout Structure* and dispose of residual concrete washout wastewater and concrete solids.

Prefabricated Concrete Washout will be measured and paid per each system installed in accordance with the manufacturer's recommendations. Such price and payment will be full compensation for all work including, but not limited to, furnishing all materials, labor, equipment, signage, slurry solidification and incidentals necessary to install, maintain and remove *Prefabricated Concrete Washout*, and dispose of residual concrete washout wastewater and concrete solids.

Temporary Silt Fence will be measured and paid for in accordance with Article 1605-5 of the *Standard Specifications*.

Temporary Silt Fence will be measured and paid for in accordance with Article 1605-5 of the *Standard Specifications*.

Safety Fence shall be measured and paid for as provided elsewhere in this contract.

No measurement will be made for over excavation or stockpiling or other items necessary to complete this work.

Payment will be made under:

Pay Item	Pay Unit
Concrete Washout Structure	Each
Prefabricated Concrete Washout	Each

CONSTRUCTED RIFFLE:**Description**

This work consists of the construction and maintenance of physical barriers placed in and along the stream at locations designated on the plans to provide grade control.

The quantity of constructed riffles to be installed will be affected by the actual conditions that occur during the construction of the project. The quantity of constructed riffles may be increased, decreased, or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

Materials

Item	Section
Boulder	1042 and SP for Structure Stone
#57 Stone	1005
Riprap, Class A and B	1042
Geotextile for Drainage, Type 2	1056

Construction Methods

Constructed riffles shall be constructed according to the Constructed Riffle Detail shown on the plans or as directed.

Measurement and Payment

Boulders will be measured and paid for as provided elsewhere in this contract.

57 Stone will be measured and paid for as provided elsewhere in this contract.

Riprap, Class ____ will be measured and paid for in accordance with Article 876-4 of the Standard Specifications.

Geotextile for Drainage will be measured and paid for in accordance with Article 876-4 of the Standard Specifications.

Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to construct the constructed riffles.

CONSTRUCTION MATERIALS MANAGEMENT

(3-19-19) (rev. 04-27-20)

Description

The requirements set forth shall be adhered to in order to meet the applicable materials handling requirements of the NCG010000 permit. Structural controls installed to manage construction materials stored or used on site shall be shown on the E&SC Plan. Requirements for handling materials on construction sites shall be as follows:

Polyacrylamides (PAMS) and Flocculants

Polyacrylamides (PAMS) and flocculants shall be stored in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures designed to protect adjacent surface waters. PAMS or other flocculants used shall be selected from the NC DWR List of Approved PAMS/Flocculants. The concentration of PAMS and other flocculants used shall not exceed those specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions. The NC DWR List of Approved PAMS/Flocculants is available at:

https://files.nc.gov/ncdeq/Water+Quality/Environmental+Sciences/ATU/PAM8_30_18.pdf

Equipment Fluids

Fuels, lubricants, coolants, and hydraulic fluids, and other petroleum products shall be handled and disposed of in a manner so as not to enter surface or ground waters and in accordance with applicable state and federal regulations. Equipment used on the site must be operated and maintained properly to prevent discharge of fluids. Equipment, vehicle, and other wash waters shall not be discharged into E&SC basins or other E&SC devices. Alternative controls should be provided such that there is no discharge of soaps, solvents, or detergents.

Waste Materials

Construction materials and land clearing waste shall be disposed of in accordance with North Carolina General Statutes, Chapter 130A, Article 9 - Solid Waste Management, and rules governing the disposal of solid waste (15A NCAC 13B). Areas dedicated for managing construction material and land clearing waste shall be at least 50 feet away from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. Paint and other liquid construction material waste shall not be dumped into storm drains. Paint and other liquid construction waste washouts should be located at least 50 feet away from storm drain inlets unless there is no alternative. Other options are to install lined washouts or use portable, removable bags or bins. Hazardous or toxic waste shall be managed in accordance with the federal Resource Conservation and Recovery Act (RCRA) and NC Hazardous Waste Rules at 15A NCAC, Subchapter 13A. Litter and sanitary waste shall be managed in a manner to prevent it from entering jurisdictional waters and shall be disposed of offsite.

Herbicide, Pesticide, and Rodenticides

Herbicide, pesticide, and rodenticides shall be stored and applied in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act, North Carolina Pesticide Law of 1971 and labeling restrictions.

Concrete Materials

Concrete materials onsite, including excess concrete, must be controlled and managed to avoid contact with surface waters, wetlands or buffers. No concrete or cement slurry shall be discharged from the site. (Note that discharges from onsite concrete plants require coverage under a separate NPDES permit – NCG140000.) Concrete wash water shall be managed in accordance with the *Concrete Washout Structure* provision. Concrete slurry shall be managed and disposed of in accordance with *NCDOT DGS and HOS DCAR Distribution of Class A Residuals Statewide* (Permit No. WQ0035749). Any hardened concrete residue will be disposed of, or recycled on site, in accordance with state solid waste regulations.

Earthen Material Stock Piles

Earthen material stock piles shall be located at least 50 feet away from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available.

Measurement and Payment

Conditions set within the *Construction Materials Management* provision are incidental to the project for which no direct compensation will be made.

ENVIRONMENTALLY SENSITIVE AREAS:**Description**

This project is located in an *Environmentally Sensitive Area*. This designation requires special procedures to be used for clearing and grubbing, temporary stream crossings, and grading operations within the Environmentally Sensitive Areas identified on the plans and as designated by the Engineer. This also requires special procedures to be used for seeding and mulching and staged seeding within the project.

The Environmentally Sensitive Area shall be defined as a 50-foot buffer zone on both sides of the stream or depression measured from top of streambank or center of depression.

Construction Methods**(A) Clearing and Grubbing**

In areas identified as Environmentally Sensitive Areas, the Contractor may perform clearing operations, but not grubbing operations until immediately prior to beginning grading operations as described in Article 200-1 of the *Standard Specifications*. Only clearing operations (not grubbing) shall be allowed in this buffer zone until immediately prior to beginning grading operations. Erosion control devices shall be installed immediately following the clearing operation.

(B) Grading

Once grading operations begin in identified Environmentally Sensitive Areas, work shall progress in a continuous manner until complete. All construction within these areas shall progress in a continuous manner such that each phase is complete and areas are permanently stabilized prior to beginning of next phase. Failure on the part of the Contractor to complete any phase of construction in a continuous manner in Environmentally Sensitive Areas will be just cause for the Engineer to direct the suspension of work in accordance with Article 108-7 of the *Standard Specifications*.

(C) Temporary Stream Crossings

Any crossing of streams within the limits of this project shall be accomplished in accordance with the requirements of Subarticle 107-12 of the *Standard Specifications*.

(D) Seeding and Mulching

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

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

(E) Stage Seeding

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

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

IMPERVIOUS DIKE:

(9-9-11)(Rev. 11-15-22)

Description

This work consists of furnishing, installing, maintaining, pumping and removing an *Impervious Dike* for the purpose of diverting normal stream flow around the construction site. The Contractor shall construct an impervious dike in such a manner approved by the Engineer. The impervious dike shall not permit seepage of water into the construction site or contribute to siltation of the stream. The impervious dike shall be constructed of an acceptable material in the locations noted on the plans or as directed by the Engineer.

Materials

Acceptable materials shall include but not be limited to sheet piles, sandbags, and/or the placement of an acceptable size stone lined with polypropylene or other impervious geotextile.

Earth material shall not be used to construct an impervious dike when it is in direct contact with the stream unless vegetation can be established before contact with the stream takes place.

Construction Methods

Where impervious dikes are shown on the plans and used to dewater or lower the water elevation, construct in accordance with Article 410-4 and 410-5.

Measurement and Payment

Impervious Dike will be measured and paid as the actual number of linear feet of impervious dike(s) constructed, measured in place from end to end of each separate installation that has been completed and accepted by the Engineer. Such price and payment will be full compensation for all work including but not limited to furnishing materials, construction, maintenance, pumping and removal of the impervious dike.

Payment will be made under:

Pay Item

Impervious Dike

Pay Unit

Linear Foot

LAWN TYPE APPEARANCE:

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

MINIMIZE REMOVAL OF VEGETATION:

The Contractor shall minimize removal of vegetation within project limits to the maximum extent practicable. Vegetation along stream banks and adjacent to other jurisdictional resources outside the construction limits shall only be removed upon approval of Engineer. No additional payment will be made for this minimization work.

Native Grass Seeding And Mulching**(West)**

Native Grass Seeding and Mulching shall be performed on the disturbed areas of wetlands and riparian areas, and adjacent to Stream Relocation and/or trout stream construction within a 50 foot zone on both sides of the stream or depression, measured from top of stream bank or center of depression. The stream bank of the stream relocation shall be seeded by a method that does not alter the typical cross section of the stream bank. Native Grass Seeding and Mulching shall also be performed in the permanent soil reinforcement mat section of preformed scour holes, and in other areas as directed.

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

August 1 - June 1

18#	Creeping Red Fescue
8#	Big Bluestem
6#	Indiangrass
4#	Switchgrass
35#	Rye Grain
500#	Fertilizer
4000#	Limestone

May 1 – September 1

18#	Creeping Red Fescue
8#	Big Bluestem
6#	Indiangrass
4#	Switchgrass
25#	German or Browntop Millet
500#	Fertilizer
4000#	Limestone

Approved Creeping Red Fescue Cultivars:

Aberdeen

Boreal

Epic

Cindy Lou

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

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

Measurement and Payment

Native Grass *Seeding and Mulching* will be measured and paid for in accordance with Article 1660-8 of the *Standard Specifications*.

PUMP AROUND OPERATION:**Description**

The work covered by this section consists of furnishing, installing, maintaining and removing any and all pump around systems used on this project. The Contractor shall install a pump around system in locations as shown in the plans and in other locations approved by the Engineer. The pump around system shall provide a passageway for the stream flow around the work site. See the Example of Pump Around Operation Detail Sheet in the Erosion Control plans.

The quantity of pump around systems may be increased, decreased, or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

Materials

Item	Section
Special Stilling Basin	1639

Impervious Dike shall meet the specifications as provided elsewhere in this contract.

Pumps shall be of sufficient size to divert the stream flow around the work area, as approved by the Engineer.

Construction Methods

Install *impervious dike(s)* as shown on the plans or as directed. Pump water around the work site. If the water is turbid or exposed to bare soil, pump through a *special stilling basin*. Once the work is complete in an area remove the *impervious dike(s)* and pump system, and stabilize the area.

Measurement and Payment

Impervious Dike will be measured and paid for as provided elsewhere in this contract.

Special Stilling Basin will be measured and paid for in accordance with Article 1639-4 of the *Standard Specifications*.

Payment for pumping operations shall be considered incidental to the work of installing pipes, culverts and channels. The pumping operations shall include but not be limited to, diverting the stream flow around the work area and pumping runoff from the work area into a stilling basin, special stilling basin or other sediment control device. No additional payment will be made for furnishing materials or maintenance of the pumping operations for the installation of pipes, culverts and channels.

The above prices and payments will be full compensation for all work covered by this section including, but not limited to furnishing all of the necessary materials, construction, maintenance and removal of the impervious dike and pump around system.

ROCK CROSS VANE:**Description**

This work consists of the construction and maintenance of physical barriers placed in and along the stream at locations designated on the plans to direct the stream flow (thalweg) toward the center of the channel and to provide grade control.

The quantity of rock cross vanes to be installed will be affected by the actual conditions that occur during the construction of the project. The quantity of rock cross vanes may be increased, decreased, or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

Materials

Refer to Division 10

Item	Section
Boulders	1042 and SP for Structure Stone
#57 Stone	1005
Riprap, Class A	1042
Geotextile for Drainage, Type 2	1056

Boulders shall be used as header and footer rocks for this device.

Construction Methods

Rock cross vanes shall be constructed in accordance with the Rock Cross Vane Detail shown in the plans or as directed. Two vanes, each approximately 1/3 of the stream channel's bankfull width, will form a 20° – 30° angle out from the streambank toward upstream. The top elevation of both vanes will decrease from bankfull elevation toward the center of the channel at a slope of 4 to 20 percent. A vane running perpendicular to the stream's flow will connect the two outside vanes on the upstream end. Install header and footer rocks according to the detail and plate the upstream side with Type 2 geotextile and # 57 stone. Voids between the header and footer rocks can be filled with hand-placed Class A riprap as directed. Footer rocks shall be placed such that the header rock is at streambed elevation. The rock cross vane shall be keyed into the bank at the downstream end as shown on the Rock Cross Vane Detail.

Measurement and Payment

Boulders will be measured and paid for as provided elsewhere in this contract.

57 Stone will be measured and paid for as provided elsewhere in this contract.

Riprap, Class ____ will be measured and paid for in accordance with Article 876-4 of the Standard Specifications.

Geotextile for Drainage will be measured and paid for in accordance with Article 876-4 of the Standard Specifications.

Such price and payment will be full compensation for all work covered by this section, including, but not limited to furnishing all materials, labor, equipment, and incidentals necessary to construct the rock cross vanes.

STRUCTURE STONE:**Description**

This work consists of furnishing, stockpiling, placing and maintaining approved stone used to construct rock cross-vanes, rock vanes, j-hook vanes, w-rock cross vanes, log vanes, root wad/log vanes, log cross vanes, root wad structures, rock cross vanes for step pools, channel blocks, double wing deflectors, single wing deflectors, stream crossings, rock energy dissipaters, constructed riffles, and for use in other locations as directed.

The quantity of stone to be installed will be affected by the actual conditions that occur during the construction of the project. The quantity of stone may be increased, decreased, or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

Materials

Refer to Division 10

Item	Section
# 57 Stone	1005
Riprap, Class A, B, 1, and 2	1042
Geotextile for Drainage, Type 2	1056

Boulders shall meet the requirements of Section 1042 of the Standard Specifications. Boulders of minimum dimension 48" x 36" x 24" shall be individually picked for use in the structures. Boulders shall be relatively flat on either side in the same dimension, preferably the long dimension.

Construction Methods

The Contractor shall place geotextile and stone in locations and to the thickness, widths, and lengths as shown on the plans or as directed. All stone shall be placed to form a sediment and erosion control device, an in-stream structure, or a channel lining neatly and uniformly with an even surface in accordance with the contract and shall meet the approval of the Engineer.

Measurement and Payment

57 Stone will be measured and paid as the actual number of tons that have been incorporated into the work or have been delivered to and stockpiled on the project as directed. No. 57 stone that has been stockpiled will not be measured a second time.

Riprap, Class ____ will be measured and paid for in accordance with Article 876-4 of the Standard Specifications.

Geotextile for Drainage will be measured and paid for in accordance with Article 876-4 of the Standard Specifications.

Boulders will be measured and paid for as the actual number of tons that have been incorporated into the work or have been delivered to and stockpiled on the project as directed. Stone that has been stockpiled will not be measured a second time.

Such price and payment will be full compensation for all work covered by this section, including but not limited to furnishing, weighing, stockpiling, re-handling, placing, and maintaining the stone and disposal of any materials not incorporated into the project.

Payment will be made under:

Pay Item	Pay Unit
#57 Stone	Ton
Boulders	Ton

REFORESTATION:**Description**

Reforestation will be planted within interchanges and along the outside borders of the road, and in other areas as directed. *Reforestation* is not shown on the plan sheets. See the Reforestation Detail Sheet.

All non-maintained riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species.

The entire *Reforestation* operation shall comply with the requirements of Section 1670 of the *Standard Specifications*.

Materials

Reforestation shall be bare root seedlings 12"-18" tall.

Construction Methods

Reforestation shall be planted as soon as practical following permanent *Seeding and Mulching*. The seedlings shall be planted in a 16-foot wide swath adjacent to mowing pattern line, or as directed.

Root dip: The roots of reforestation seedlings shall be coated with a slurry of water, and either a fine clay (kaolin) or a superabsorbent that is designated as a bare root dip. The type, mixture ratio, method of application, and the time of application shall be submitted to the Engineer for approval.

With the approval of the Engineer, seedlings may be coated before delivery to the job or at the time of planting, but at no time shall the roots of the seedlings be allowed to dry out. The roots shall be moistened immediately prior to planting.

Seasonal Limitations: *Reforestation* shall be planted from November 15 through March 15.

Measurement and Payment

Reforestation will be measured and paid for in accordance with Article 1670-17 of the *Standard Specifications*.

SAFETY FENCE AND JURISDICTIONAL FLAGGING:**Description**

Safety Fence shall consist of furnishing materials, installing and maintaining polyethylene or polypropylene fence along the outside riparian buffer, wetland, or water boundary, or other boundaries located within the construction corridor to mark the areas that have been approved to infringe within the buffer, wetland, endangered vegetation, culturally sensitive areas or water. The fence shall be installed prior to any land disturbing activities.

Interior boundaries for jurisdictional areas noted above shall be delineated by stakes and highly visible flagging.

Jurisdictional boundaries at staging areas, waste sites, or borrow pits, whether considered outside or interior boundaries shall be delineated by stakes and highly visible flagging.

Materials**(A) Safety Fencing**

Polyethylene or polypropylene fence shall be a highly visible preconstructed safety fence approved by the Engineer. The fence material shall have an ultraviolet coating.

Either wood posts or steel posts may be used. Wood posts shall be hardwood with a wedge or pencil tip at one end, and shall be at least 5 ft. in length with a minimum nominal 2" x 2" cross section. Steel posts shall be at least 5 ft. in length, and have a minimum weight of 0.85 lb/ft of length.

(B) Boundary Flagging

Wooden stakes shall be 4 feet in length with a minimum nominal 3/4" x 1-3/4" cross section. The flagging shall be at least 1" in width. The flagging material shall be vinyl and shall be orange in color and highly visible.

Construction Methods

No additional clearing and grubbing is anticipated for the installation of this fence. The fence shall be erected to conform to the general contour of the ground.

(A) Safety Fencing

Posts shall be set at a maximum spacing of 10 ft., maintained in a vertical position and hand set or set with a post driver. Posts shall be installed a minimum of 2 ft. into the ground. If hand set, all backfill material shall be thoroughly tamped. Wood posts may be sharpened to a dull point if power driven. Posts damaged by power driving shall be removed and replaced prior to final

acceptance. The tops of all wood posts shall be cut at a 30-degree angle. The wood posts may, at the option of the Contractor, be cut at this angle either before or after the posts are erected.

The fence geotextile shall be attached to the wood posts with one 2" galvanized wire staple across each cable or to the steel posts with wire or other acceptable means.

Place construction stakes to establish the location of the safety fence in accordance with Article 105-9 or Article 801-1 of the *Standard Specifications*. No direct pay will be made for the staking of the safety fence. All stakeouts for safety fence shall be considered incidental to the work being paid for as "Construction Surveying", except that where there is no pay item for construction surveying, all safety fence stakeout will be performed by state forces.

The Contractor shall be required to maintain the safety fence in a satisfactory condition for the duration of the project as determined by the Engineer.

(B) Boundary Flagging

Boundary flagging delineation of interior boundaries shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Interior boundaries may be staked on a tangent that runs parallel to buffer but must not encroach on the buffer at any location. Interior boundaries of hand clearing shall be identified with a different colored flagging to distinguish it from mechanized clearing.

Boundary flagging delineation of interior boundaries will be placed in accordance with Article 105-9 or Article 801-1 of the *Standard Specifications*. No direct pay will be made for delineation of the interior boundaries. This delineation will be considered incidental to the work being paid for as *Construction Surveying*, except that where there is no pay item or construction surveying the cost of boundary flagging delineation shall be included in the unit prices bid for the various items in the contract. Installation for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Additional flagging may be placed on overhanging vegetation to enhance visibility but does not substitute for installation of stakes.

Installation of boundary flagging for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall be performed in accordance with Subarticle 230-4(B)(5) or Subarticle 802-2(F) of the *Standard Specifications*. No direct pay will be made for this delineation, as the cost of same shall be included in the unit prices bid for the various items in the contract.

The Contractor shall be required to maintain alternative stakes and highly visible flagging in a satisfactory condition for the duration of the project as determined by the Engineer.

Measurement and Payment

Safety Fence will be measured and paid as the actual number of linear feet of polyethylene or polypropylene fence installed in place and accepted. Such payment will be full compensation

including but not limited to furnishing and installing fence geotextile with necessary posts and post bracing, staples, tie wires, tools, equipment and incidentals necessary to complete this work.

Payment will be made under:

Pay Item

Safety Fence

Pay Unit

Linear Foot

STABILIZATION REQUIREMENTS:

(4-30-2019)(Rev. 1-21-2025)

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit issued by the North Carolina Department of Environmental Quality Division of Energy, Mineral, and Land Resources. Temporary or permanent ground cover stabilization shall occur within the following time frames from the last land-disturbing activity:

- Stabilize perimeter dikes, swales, ditches, and perimeter slopes within 7 calendar days.
- Stabilize high quality water (HQW) zones within 7 calendar days.
- Stabilize slopes steeper than 3:1 within 7 calendar days.
 - If slopes are 10 feet or less in length and are not steeper than 2:1, 14 calendar days are allowed.
- Stabilize slopes 3:1 to 4:1 within 14 calendar days.
 - 7 calendar days for slopes greater than 50 feet in length and with slopes steeper than 4:1.
 - 7 calendar days for perimeter dikes, swales, ditches, perimeter slopes, and HQW Zones.
- Stabilize areas with slopes flatter than 4:1 within 14 calendar days.
 - 7 calendar days for perimeter dikes, swales, ditches, perimeter slopes, and HQW Zones.

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

SEEDING AND MULCHING:**(WestEd)**

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

Shoulder and Median Areas**August 1 - June 1**

20# Kentucky Bluegrass
 75# Hard Fescue
 25# Rye Grain
 500# Fertilizer
 4000# Limestone

May 1 - September 1

20# Kentucky Bluegrass
 75# Hard Fescue
 10# German or Browntop Millet
 500# Fertilizer
 4000# Limestone

Areas Beyond the Mowing Pattern, Waste and Borrow Areas:**August 1 - June 1**

100# Tall Fescue

May 1 - September 1

100# Tall Fescue

15#	Kentucky Bluegrass	15#	Kentucky Bluegrass
30#	Hard Fescue	30#	Hard Fescue
25#	Rye Grain	10#	German or Browntop Millet
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000#	Limestone

Approved Tall Fescue Cultivars:

06 Dust	Escalade	Kalahari	Serengeti
2 nd Millennium	Essential	Kitty Hawk 2000	Shelby
3 rd Millennium	Evergreen 2	Legitimate	Shenandoah III
Avenger	Faith	Lexington	Shenandoah Elite
Bar Fa	Falcon IV	LifeGuard	Sheridan
Barlexas	Falson NG	LSD	Sidewinder
Barlexas II	Falcon V	Magellan	Signia
Barrera	Fat Cat	Masterpiece	Silver Hawk
Barrington	Fesnova	Millennium SRP	Skyline
Barrobusto	Fidelity	Monet	Solara
Barvado	Finelawn Elite	Mustang 4	Southern Choice II
Biltmore	Finelawn Xpress	Naturally Green	Speedway
Bingo	Finesse II	Ninja 2	Spyder LS
Bizem	Firebird	Ol' Glory	Sunset Gold
Black Tail	Firecracker LS	Padre	Taccoa
Blackwatch	Firenza	Patagonia	Tahoe II
Blade Runner II	Five Point	Pedigree	Talladega
Bonsai	Focus	Picasso	Tanzania
Braveheart	Forte	Piedmont	Temple
Bravo	Garrison	Plantation	Terrano
Bullseye	Gazelle II	Proseeds 5301	Thor
Cannavaro	GLX Aced	Prospect	Thunderstruck
Catalyst	Gold Medallion	Quest	Titanium LS
Cayenne	Grande 3	RainDance	Titan LTD
Cezanne RZ	Greenbrooks	Raptor II	Tracer
Chipper	Greenkeeper	Rebel IV	Traverse SRP
Cochise IV	Gremlin	Rebel Exeda	Trio
Constitution	Greystone	Rebel Sentry	Tulsa Time
Corgi	Guardian 21	Regenerate	Turbo
Corona	Guardian 41	Regiment II	Turbo RZ
Coyote	Hemi	Rembrandt	Tuxedo
Cumberland	Honky Tonk	Rendition	Ultimate
Darlington	Hot Rod	Reunion	Umbrella
DaVinci	Hunter	Rhambler 2 SRP	Van Gogh
Desire	Inferno	Riverside	Venture
Diablo	Integrity	RNP	Watchdog
Dominion	Jaguar 3	Rocket	Wolfpack II

Dynamic
Dynasty

Jamboree
Justice

Saltillo
Scorpion

Xtremegreen

Approved Kentucky Bluegrass Cultivars:

4-Season	Blue Coat	Granite	Prosperity
Alexa II	Blue Note	Hampton	Quantum Leap
America	Blue Velvet	Harmonie	Rambo
Apollo	Boomerang	Impact	Rhapsody
Aramintha	Cabernet	Jackrabbit	Rhythm
Arcadia	Champagne	Jefferson	Royce
Aries	Champlain	Juliet	Rubicon
Armada	Chicago II	Keeneland	Rugby II
Arrow	Corsair	Langara	Rush
Arrowhead	Courtyard	Legend	Shariz
Aura	Dauntless	Liberator	Showcase
Avid	Delight	Lunar	Skye
Award	Diva	Madison	Solar Eclipse
Awesome	Dynamo	Mazama	Sonoma
Bandera	Eagleton	Mercury	Sorbonne
Barduke	Emblem	Merlot	Starburst
Barnique	Empire	Midnight	Sudden Impact
Baron	Envicta	Midnight II	Thermal Blue
Baroness	Everest	Moon Shadow	Total Eclipse
Barrister	Everglade	Mystere	Touche
Barvette HGT	Excursion	Nu Destiny	Tsunami
Bedazzled	Freedom II	NuChicago	Valor
Belissimo	Freedon III	NuGlade	Washington
Bewitched	Front Page	Oasis	Zedor
Beyond	Futurity	Odyssey	Zinfandel
Blackjack	Gaelic	Perfection	
Bluebank	Ginney II	Pinot	
Blueberry	Gladstone	Princeton 105	

Approved Hard Fescue Cultivars:

Aurora Gold	Firefly	Nordic	Rhino
Azay Blue	Gladiator	Oxford	Scaldis II
Beacon	Granite	Predator	Spartan II
Berkshire	Heron	Quatro	Stonehenge
Beudin	Jetty	Reliant II	Sword
Blueray	Minimus	Reliant IV	Warwick
Chariot	Miser	Rescue 911	
Eureka II	Nancock	Resolute	

On cut and fill slopes 2:1 or steeper add 20# Sericea Lespedeza and 15# Crown Vetch January 1 - December 31.

The Crown Vetch Seed should be double inoculated if applied with a hand seeder. Four times the normal rate of inoculant should be used if applied with a hydroseeder. If a fertilizer-seed slurry is

used, the required limestone should also be included to prevent fertilizer acidity from killing the inoculant bacteria. Caution should be used to keep the inoculant below 80° F to prevent harm to the bacteria. The rates and grades of fertilizer and limestone shall be the same as specified for *Seeding and Mulching*.

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

TEMPORARY SEEDING:

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet, or Browntop Millet shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

FERTILIZER TOPDRESSING:

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

SUPPLEMENTAL SEEDING:

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

MOWING:

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

WASTE AND BORROW SOURCES:

(2-16-11) (Rev. 3-17-22)

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

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

All offsite Staging Areas, Borrow and Waste sites shall be in accordance with "Borrow and Waste Site Reclamation Procedures for Contracted Projects" located at:

<https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/Contract%20Reclamation%20Procedures.pdf>

All forms and documents referenced in the "Borrow and Waste Site Reclamation Procedures for Contracted Projects" shall be included with the reclamation plans for offsite staging areas, and borrow and waste sites.

ST-1

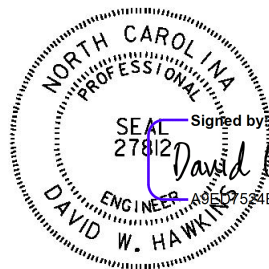
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Henderson County

Project Special Provisions Structures

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HNTB North Carolina, PC
4000 Center at North Hills St.
Suite 500
Raleigh, NC 27609

7/30/2026

ST-2

FALSEWORK AND FORMWORK

(11-30-23)

GENERAL

Use this Special Provision as a guide to develop temporary works submittals required by the *Standard Specifications* or other provisions; no additional submittals are required herein. Such temporary works include, but are not limited to, falsework and formwork.

Falsework is any temporary construction used to support the permanent structure until it becomes self-supporting. Formwork is the temporary structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Access scaffolding is a temporary structure that functions as a work platform that supports construction personnel, materials, and tools, but is not intended to support the structure. Scaffolding systems that are used to temporarily support permanent structures (as opposed to functioning as work platforms) are considered to be falsework under the definitions given. Shoring is a component of falsework such as horizontal, vertical, or inclined support members. Where the term “temporary works” is used, it includes all of the temporary facilities used in bridge construction that do not become part of the permanent structure.

Design and construct safe and adequate temporary works that will support all loads imposed and provide the necessary rigidity to achieve the lines and grades shown on the plans in the final structure.

MATERIALS

Select materials suitable for temporary works; however, select materials that also ensure the safety and quality required by the design assumptions. The Engineer has authority to reject material on the basis of its condition, inappropriate use, safety, or nonconformance with the plans. Clearly identify allowable loads or stresses for all materials or manufactured devices on the plans. Revise the plan and notify the Engineer if any change to materials or material strengths is required.

DESIGN REQUIREMENTS

(A) Working Drawings

Provide working drawings for items as specified in the contract, or as required by the Engineer, with design calculations and supporting data in sufficient detail to permit a structural and safety review of the proposed design of the temporary work.

On the drawings, show all information necessary to allow the design of any component to be checked independently as determined by the Engineer.

When concrete placement is involved, include data such as the drawings of proposed sequence, rate of placement, direction of placement, and location of all construction joints.

When required, have the drawings and calculations prepared under the guidance of, and sealed by, a North Carolina Registered Professional Engineer who is knowledgeable in temporary works design.

ST-3

If requested by the Engineer, submit with the working drawings manufacturer's catalog data listing the weight of all construction equipment that will be supported on the temporary work. Show anticipated total settlements and/or deflections of falsework and forms on the working drawings. Include falsework footing settlements, joint take-up, and deflection of beams or girders.

As an option for the Contractor, overhang falsework hangers may be uniformly spaced, at a maximum of 36 inches, provided the following conditions are met:

Member Type (PCG)	Member Depth, (inches)	Max. Overhang Width, (inches)	Max. Slab Edge Thickness, (inches)	Max. Screed Wheel Weight, (lbs.)	Bracket Min. Vertical Leg Extension, (inches)
II	36	39	14	2000	26
III	45	42	14	2000	35
IV	54	45	14	2000	44
MBT	63	51	12	2000	50
MBT	72	55	12	1700	48

Overhang width is measured from the centerline of the girder to the edge of the deck slab. For Type II, III & IV prestressed concrete girders (PCG), 45-degree cast-in-place half hangers and rods must have a minimum safe working load of 6,000 lbs.

For MBT prestressed concrete girders, 45-degree angle holes for falsework hanger rods shall be cast through the girder top flange and located, measuring along the top of the member, 1'-2 ½" from the edge of the top flange. Hanger hardware and rods must have a minimum safe working load of 6,000 lbs.

For link slabs, the top of girders directly beneath the link slab shall be free of overhang falsework attachments or other hardware. Submit calculations and working drawings for overhang falsework in the link slab region.

The overhang bracket provided for the diagonal leg shall have a minimum safe working load of 3,750 lbs. The vertical leg of the bracket shall extend to the point that the heel bears on the girder bottom flange, no closer than 4 inches from the bottom of the member. However, for 72-inch members, the heel of the bracket shall bear on the web, near the bottom flange transition.

Provide adequate overhang falsework and determine the appropriate adjustments for deck geometry, equipment, casting procedures and casting conditions.

If the optional overhang falsework spacing is used, indicate this on the falsework submittal and advise the girder producer of the proposed details. Failure to notify the Engineer of hanger type and hanger spacing on prestressed concrete girder casting drawings may delay the approval of those drawings.

ST-4

Falsework hangers that support concentrated loads and are installed at the edge of thin top flange concrete girders (such as bulb tee girders) shall be spaced so as not to exceed 75% of the manufacturer's stated safe working load. Use of dual leg hangers (such as Meadow Burke HF-42 and HF-43) are not allowed on concrete girders with thin top flanges. Design the falsework and forms supporting deck slabs and overhangs on girder bridges so that there will be no differential settlement between the girders and the deck forms during placement of deck concrete.

When staged construction of the bridge deck is required, detail falsework and forms for screed and fluid concrete loads to be independent of any previous deck pour components when the mid-span girder deflection due to deck weight is greater than $\frac{3}{4}$ ".

Note on the working drawings any anchorages, connectors, inserts, steel sleeves or other such devices used as part of the falsework or formwork that remains in the permanent structure. If the plan notes indicate that the structure contains the necessary corrosion protection required for a Corrosive Site, epoxy coat, galvanize or metalize these devices. Electroplating will not be allowed. Any coating required by the Engineer will be considered incidental to the various pay items requiring temporary works.

Design falsework and formwork requiring submittals in accordance with the current edition of *AASHTO Guide Design Specifications for Bridge Temporary Works* except as noted herein.

(1) Wind Loads

Table 2.2 of Article 2.2.5.1 is modified to include wind velocities up to 110 mph. In addition, Table 2.2A is included to provide the maximum wind speeds by county in North Carolina.

Table 2.2 - Wind Pressure Values

Height Zone feet above ground	Pressure, lb/ft ² for Indicated Wind Velocity, mph				
	70	80	90	100	110
0 to 30	15	20	25	30	35
30 to 50	20	25	30	35	40
50 to 100	25	30	35	40	45
over 100	30	35	40	45	50

(2) Time of Removal

The following requirements replace those of Article 3.4.8.2.

Do not remove forms until the concrete has attained strengths required in Article 420-16 of the *Standard Specifications* and these Special Provisions.

Do not remove forms until the concrete has sufficient strength to prevent surface damage.

ST-5

Table 2.2A - Steady State Maximum Wind Speeds by Counties in North Carolina

COUNTY	25 YR (mph)	COUNTY	25 YR (mph)	COUNTY	25 YR (mph)
Alamance	70	Franklin	70	Pamlico	100
Alexander	70	Gaston	70	Pasquotank	100
Alleghany	70	Gates	90	Pender	100
Anson	70	Graham	80	Perquimans	100
Ashe	70	Granville	70	Person	70
Avery	70	Greene	80	Pitt	90
Beaufort	100	Guilford	70	Polk	80
Bertie	90	Halifax	80	Randolph	70
Bladen	90	Harnett	70	Richmond	70
Brunswick	100	Haywood	80	Robeson	80
Buncombe	80	Henderson	80	Rockingham	70
Burke	70	Hertford	90	Rowan	70
Cabarrus	70	Hoke	70	Rutherford	70
Caldwell	70	Hyde	110	Sampson	90
Camden	100	Iredell	70	Scotland	70
Carteret	110	Jackson	80	Stanley	70
Caswell	70	Johnston	80	Stokes	70
Catawba	70	Jones	100	Surry	70
Cherokee	80	Lee	70	Swain	80
Chatham	70	Lenoir	90	Transylvania	80
Chowan	90	Lincoln	70	Tyrell	100
Clay	80	Macon	80	Union	70
Cleveland	70	Madison	80	Vance	70
Columbus	90	Martin	90	Wake	70
Craven	100	McDowell	70	Warren	70
Cumberland	80	Mecklenburg	70	Washington	100
Currituck	100	Mitchell	70	Watauga	70
Dare	110	Montgomery	70	Wayne	80
Davidson	70	Moore	70	Wilkes	70
Davie	70	Nash	80	Wilson	80
Duplin	90	New Hanover	100	Yadkin	70
Durham	70	Northampton	80	Yancey	70
Edgecombe	80	Onslow	100		
Forsyth	70	Orange	70		

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(B) Review and Approval

The Engineer is responsible for the review and approval of temporary works' drawings.

Submit the working drawings sufficiently in advance of proposed use to allow for their review, revision (if needed), and approval without delay to the work.

The time period for review of the working drawings does not begin until complete drawings and design calculations, when required, are received by the Engineer.

Do not start construction of any temporary work for which working drawings are required until the drawings have been approved. Such approval does not relieve the Contractor of the responsibility for the accuracy and adequacy of the working drawings.

CONSTRUCTION REQUIREMENTS

All requirements of Section 420 of the *Standard Specifications* apply.

Construct temporary works in conformance with the approved working drawings. Ensure that the quality of materials and workmanship employed is consistent with that assumed in the design of the temporary works. Do not weld falsework members to any portion of the permanent structure unless approved. Show any welding to the permanent structure on the approved construction drawings.

Provide tell-tales attached to the forms and extending to the ground, or other means, for accurate measurement of falsework settlement. Make sure that the anticipated compressive settlement and/or deflection of falsework does not exceed 1 inch. For cast-in-place concrete structures, make sure that the calculated deflection of falsework flexural members does not exceed 1/240 of their span regardless of whether or not the deflection is compensated by camber strips.

(A) Maintenance and Inspection

Inspect and maintain the temporary work in an acceptable condition throughout the period of its use. Certify that the manufactured devices have been maintained in a condition to allow them to safely carry their rated loads. Clearly mark each piece so that its capacity can be readily determined at the job site.

Perform an in-depth inspection of an applicable portion(s) of the temporary works, in the presence of the Engineer, not more than 24 hours prior to the beginning of each concrete placement. Inspect other temporary works at least once a month to ensure that they are functioning properly. Have a North Carolina Registered Professional Engineer inspect the cofferdams, shoring, sheathing, support of excavation structures, and support systems for load tests prior to loading.

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(B) Foundations

Determine the safe bearing capacity of the foundation material on which the supports for temporary works rest. If required by the Engineer, conduct load tests to verify proposed bearing capacity values that are marginal or in other high-risk situations.

The use of the foundation support values shown on the contract plans of the permanent structure is permitted if the foundations are on the same level and on the same soil as those of the permanent structure.

Allow for adequate site drainage or soil protection to prevent soil saturation and washout of the soil supporting the temporary works supports.

If piles are used, the estimation of capacities and later confirmation during construction using standard procedures based on the driving characteristics of the pile is permitted. If preferred, use load tests to confirm the estimated capacities; or, if required by the Engineer conduct load tests to verify bearing capacity values that are marginal or in other high risk situations.

The Engineer reviews and approves the proposed pile and soil bearing capacities.

REMOVAL

Unless otherwise permitted, remove and keep all temporary works upon completion of the work. Do not disturb or otherwise damage the finished work.

Remove temporary works in conformance with the contract documents. Remove them in such a manner as to permit the structure to uniformly and gradually take the stresses due to its own weight.

MEASUREMENT AND PAYMENT

Unless otherwise specified, *Falsework and Formwork* will not be directly measured.

Payment at the contract unit prices for the various pay items requiring temporary works will be full compensation for the above falsework and formwork.

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SUBMITTAL OF WORKING DRAWINGS**(1-31-25)****GENERAL**

Submit working drawings in accordance with Article 105-2 of the *Standard Specifications* and this Special Provision. For this Special Provision, “submittals” refers to only those listed in this Special Provision. The list of submittals contained herein does not represent a list of required submittals for the project. Submittals are only necessary for those items as required by the contract. Make submittals that are not specifically noted in this provision directly to the Engineer. Either the Structures Management Unit or the Geotechnical Engineering Unit or both units will jointly review submittals.

If a submittal contains variations from plan details or specifications or significantly affects project cost, field construction or operations, discuss the submittal with and submit all copies to the Engineer. State the reason for the proposed variation in the submittal. To minimize review time, make sure all submittals are complete when initially submitted. Provide a contact name and information with each submittal. Direct any questions regarding submittal requirements to the Engineer, Structures Management Unit contacts or the Geotechnical Engineering Unit contacts noted below.

To facilitate in-plant inspection by NCDOT and approval of working drawings, provide the name, address and telephone number of the facility where fabrication will actually be done if different than shown on the title block of the submitted working drawings. This includes, but is not limited to, precast concrete items, prestressed concrete items and fabricated steel or aluminum items.

ADDRESSES AND CONTACTS

For submittals to the Structures Management Unit, use the following addresses:

Via Email: SMU-wdr@ncdot.gov (do not cc SMU Working Drawings staff)

Via US mail:

Mr. D. N. Snoke, P. E.
State Structures Engineer
North Carolina Department
of Transportation
Structures Management Unit
1581 Mail Service Center
Raleigh, NC 27699-1581

Attention: Mr. J. L. Bolden, P. E.

Via other delivery service:

Mr. D. N. Snoke, P. E.
State Structures Engineer
North Carolina Department
of Transportation
Structures Management Unit
1000 Birch Ridge Drive
Raleigh, NC 27610

Attention: Mr. J. L. Bolden, P. E.

For submittals to the Geotechnical Engineering Unit, use the following addresses:

For projects in Divisions 1-7 (Eastern Regional Office):

Via Email: EastGeotechnicalSubmittal@ncdot.gov

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Via US mail:

Mr. Thomas Santee, P. E.
Assistant State Geotechnical
Engineer – Eastern Region
North Carolina Department
of Transportation
Geotechnical Engineering Unit
Eastern Regional Office
1570 Mail Service Center
Raleigh, NC 27699-1570

Via other delivery service:

Mr. Thomas Santee, P. E.
Assistant State Geotechnical
Engineer – Eastern Region
North Carolina Department
of Transportation
Geotechnical Engineering Unit
Eastern Regional Office
3301 Jones Sausage Road, Suite 100
Garner, NC 27529

For projects in Divisions 8-14 (Western Regional Office):

Via Email: WestGeotechnicalSubmittal@ncdot.gov

Via US mail or other delivery service:

Mr. Eric Williams, P. E.
Assistant State Geotechnical
Engineer – Western Region
North Carolina Department
of Transportation
Geotechnical Engineering Unit
Western Regional Office
5253 Z Max Boulevard
Harrisburg, NC 28075

The status of the review of structure-related submittals sent to the Structures Management Unit can be viewed from the Unit's website, via the "[Drawing Submittal Status](#)" link.

The status of the review of geotechnical-related submittals sent to the Geotechnical Engineering Unit can be viewed from the Unit's website, via the "[Geotechnical Construction Submittals](#)" link.

Direct any questions concerning submittal review status, review comments or drawing markups to the following contacts:

Primary Structures Contact: James Bolden (919) 707 – 6408
jlbolden@ncdot.gov

Secondary Structures Contacts: Madonna Rorie (919) 707 – 6508
mlrorie@ncdot.gov

Eastern Regional Geotechnical Contact (Divisions 1-7):
Thomas Santee (984) 920-8901
EastGeotechnicalSubmittal@ncdot.gov

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Western Regional Geotechnical Contact (Divisions 8-14):

Eric Williams (980)258-6400

WestGeotechnicalSubmittal@ncdot.gov

SUBMITTAL COPIES

Furnish one complete copy of each submittal, including all attachments, to the Engineer. At the same time, submit a copy of the same complete submittal directly to the Structures Management Unit and/or the Geotechnical Engineering Unit as specified in the tables below.

The first table below covers “Structure Submittals.” The Engineer will receive review comments and drawing markups for these submittals from the Structures Management Unit. The second table in this section covers “Geotechnical Submittals.” The Engineer will receive review comments and drawing markups for these submittals from the Geotechnical Engineering Unit.

Unless otherwise required, submit one set of supporting calculations to either the Structures Management Unit or the Geotechnical Engineering Unit unless both units require submittal copies in which case submit a set of supporting calculations to each unit. Provide additional copies of any submittal as directed.

STRUCTURE SUBMITTALS

Submittal	Submittal Required by Structures Management Unit?	Submittal Required by Geotechnical Engineering Unit?	Contract Reference Requiring Submittal ¹
Arch Culvert Falsework	Y	N	Plan Note, SN Sheet & “Falsework and Formwork”
Box Culvert Falsework ⁷	Y	N	Plan Note, SN Sheet & “Falsework and Formwork”
Cofferdams	Y	Y	Article 410-4
Foam Joint Seals ⁶	Y	N	“Foam Joint Seals”
Expansion Joint Seals (hold down plate type with base angle)	Y	N	“Expansion Joint Seals”
Expansion Joint Seals (modular)	Y	N	“Modular Expansion Joint Seals”
Expansion Joint Seals (strip seals)	Y	N	“Strip Seal Expansion Joints”

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Falsework & Forms ² (substructure)	Y	N	Article 420-3 & “Falsework and Formwork”
Falsework & Forms (superstructure)	Y	N	Article 420-3 & “Falsework and Formwork”
Girder Erection over Railroad	Y	N	Railroad Provisions
Maintenance and Protection of Traffic Beneath Proposed Structure	Y	N	“Maintenance and Protection of Traffic Beneath Proposed Structure at Station ____”
Metal Bridge Railing	Y	N	Plan Note
Metal Stay-in-Place Forms	Y	N	Article 420-3
Metalwork for Elastomeric Bearings ^{4,5}	Y	N	Article 1072-8
Miscellaneous Metalwork ^{4,5}	Y	N	Article 1072-8
Disc Bearings ⁴	Y	N	“Disc Bearings”
Overhead and Digital Message Signs (DMS) (metalwork and foundations)	Y	N	Applicable Provisions
Placement of Equipment on Structures (cranes, etc.)	Y	N	Article 420-20
Prestressed Concrete Box Beam (detensioning sequences) ³	Y	N	Article 1078-11
Precast Concrete Box Culverts	Y	N	“Optional Precast Reinforced Concrete Box Culvert at Station ____”
Prestressed Concrete Cored Slab (detensioning sequences) ³	Y	N	Article 1078-11
Prestressed Concrete Deck Panels	Y	N	Article 420-3
Prestressed Concrete Girder (strand elongation and detensioning sequences)	Y	N	Articles 1078-8 and 1078-11
Removal of Existing Structure over Railroad	Y	N	Railroad Provisions
	Y	N	Article 420-3

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Revised Bridge Deck Plans (adaptation to prestressed deck panels)			
Revised Bridge Deck Plans (adaptation to modular expansion joint seals)	Y	N	“Modular Expansion Joint Seals”
Sound Barrier Wall (precast items)	Y	N	Article 1077-2 & “Sound Barrier Wall”
Sound Barrier Wall Steel Fabrication Plans ⁵	Y	N	Article 1072-8 & “Sound Barrier Wall”
Structural Steel ⁴	Y	N	Article 1072-8
Temporary Detour Structures	Y	Y	Article 400-3 & “Construction, Maintenance and Removal of Temporary Structure at Station _____”
TFE Expansion Bearings ⁴	Y	N	Article 1072-8

FOOTNOTES

1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Articles refer to the *Standard Specifications*.
2. Submittals for these items are necessary only when required by a note on plans.
3. Submittals for these items may not be required. A list of pre-approved sequences is available from the producer or the Materials & Tests Unit.
4. The fabricator may submit these items directly to the Structures Management Unit.
5. The two sets of preliminary submittals required by Article 1072-8 of the *Standard Specifications* are not required for these items.
6. Submittals for Fabrication Drawings are not required. Submittals for Catalogue Cuts of Proposed Material are required. See Section 5.A of the referenced provision.
7. Submittals are necessary only when the top slab thickness is 18” or greater.

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GEOTECHNICAL SUBMITTALS

Submittal	Submittals Required by Geotechnical Engineering Unit	Submittals Required by Structures Management Unit	Contract Reference Requiring Submittal ¹
Drilled Pier Construction Plans ²	Y	N	Subarticle 411-3(A)
Crosshole Sonic Logging (CSL) Reports ²	Y	N	Subarticle 411-5(A)(2)
Pile Driving Equipment Data Forms ^{2,3}	Y	N	Subarticle 450-3(D)(2)
Pile Driving Analyzer (PDA) Reports ²	Y	N	Subarticle 450-3(F)(3)
Retaining Walls ⁴	Y; drawings and calculations	Y; drawings	Applicable Provisions
Temporary Shoring ⁴	Y; drawings and calculations	Y; drawings	“Temporary Shoring” & “Temporary Soil Nail Walls”

FOOTNOTES

- F) References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Subarticles refer to the *Standard Specifications*.
- G) Submit one hard copy of submittal to the Engineer. Submit a second copy of submittal electronically (PDF via email), US mail or other delivery service to the appropriate Geotechnical Engineering Unit regional office. Electronic submission is preferred.
- H) The Pile Driving Equipment Data Form is available from:
<https://connect.ncdot.gov/projects/construction/ConstManRefDocs/PILE%20DRIVING%20EQUIPMENT%20DATA%20FORM.pdf>
 See second page of form for submittal instructions.
- I) Electronic copy of submittal is required. See referenced provision.

ST-14

CRANE SAFETY**(12-5-25)****GENERAL**

Comply with the manufacturer specifications and limitations applicable to the operation of any and all cranes and derricks. Prime contractors, sub-contractors, and fully operated rental companies shall comply with the current Occupational Safety and Health Administration (OSHA) regulations.

Submit all items listed below to the Engineer prior to beginning crane operations. Changes in personnel or equipment must be reported to the Engineer and all applicable items listed below must be updated and submitted prior to continuing with crane operations.

CRANE SAFETY SUBMITTAL LIST

- (A) Competent Person:** Provide the name and qualifications of the “Competent Person” responsible for crane safety and lifting operations. The named competent person will have the responsibility and authority to stop any work activity due to safety concerns.
- (B) Riggers:** Provide the qualifications and experience of the persons responsible for rigging operations. Qualifications and experience should include, but not be limited to, weight calculations, center of gravity determinations, selection and inspection of sling and rigging equipment, and safe rigging practices.
- (C) Crane Inspections:** Inspection records for all cranes shall be current and readily accessible for review upon request.
- (D) Certifications:** Crane operators shall be certified by the National Commission for the Certification of Crane Operators (NCCCO) or the National Center for Construction Education and Research (NCCER). Other approved nationally accredited programs will be considered upon request. In addition, crane operators shall have a current CDL medical card. Submit a list of crane operator(s) and include current certification for each type of crane operated (small hydraulic, large hydraulic, small lattice, large lattice) and medical evaluations for each operator.

MEASUREMENT AND PAYMENT

No direct payment will be made for providing information, certifications and documentation required for *Crane Safety*.

ST-15

GROUT FOR STRUCTURES**(12-1-17)****GENERAL**

This Special Provision addresses grout for use in pile blockouts, grout pockets, shear keys, dowel holes and recesses for structures. This Special Provision does not apply to grout placed in post-tensioning ducts for bridge beams, girders, decks, end bent caps, or bent caps. Mix and place grout in accordance with the manufacturer's recommendations, the applicable sections of the *Standard Specifications* and this Special Provision.

MATERIAL REQUIREMENT

Unless otherwise noted on the plans, use a Type 3 Grout in accordance with Section 1003 of the *Standard Specifications*.

Initial setting time shall not be less than 10 minutes when tested in accordance with ASTM C266.

Construction loading and traffic loading shall not be allowed until the 3-day compressive strength is achieved.

SAMPLING AND PLACEMENT

Place and maintain components in final position until grout placement is complete and accepted. Concrete surfaces to receive grout shall be free of defective concrete, laitance, oil, grease, and other foreign matter. Saturate concrete surfaces with clean water and remove excess water prior to placing grout.

MEASUREMENT AND PAYMENT

No separate payment will be made for *Grout for Structures*. The cost of the material, equipment, labor, placement, and any incidentals necessary to complete the work shall be considered incidental to the structure item requiring grout.

ST-16

CONCRETE REPAIRS

(11-30-23)

GENERAL

Work includes removal of concrete in spalled, delaminated and/or cracked areas of the existing bent caps, bent columns, underside of bridge decks, deck slabs, girders, and bridge rails in reasonably close conformity with the lines, depth, and details shown on the plans, described herein and as established by the Engineer. This work also includes straightening, cleaning, and replacement of reinforcing steel, doweling new reinforcing steel, removing all loose materials, removing and disposing of debris, formwork, applying repair material, and protecting adjacent areas of the bridge and environment from material leakage. The repair material shall be one of the materials described in this Special Provision, unless otherwise noted in the plans or Special Provisions.

The location and extent of repairs shown on the plans described herein are general in nature. The Engineer shall determine the extent of removal in the field based on an evaluation of the condition of the exposed surfaces. The Contractor shall coordinate removal operations with the Engineer. No more than 30% of a round or square column or 30% of the bearing area under a beam shall be removed without a temporary support system and approval from the Engineer.

Repair, to the Engineer's satisfaction, any portion of the structure that is damaged from construction operations. No extra payment is provided for these repairs.

SURFACE PREPARATION

Adhere to the following surface preparation requirements or the repair material manufacturer's requirements, whichever is more stringent.

Prior to starting the repair operation, delineate all surfaces and areas assumed to be deteriorated by visually examining and sounding the concrete surface with a hammer or other approved method. The Engineer is the sole judge in determining the limits of deterioration.

Prior to concrete removal, introduce a shallow saw cut, 1/2" in depth, around the repair area at right angles to the concrete surface. Sawcut should be located a minimum 2" beyond the perimeter of the deteriorated concrete area to be repaired. Remove all concrete within the sawcut to a minimum depth of 1/2". If concrete removal exposes reinforcing steel, remove all deteriorated concrete 1" below the reinforcing steel with a 17 lb (maximum) pneumatic hammer, with points that do not exceed the width of the shank, or with hand picks or chisels, as directed by the Engineer. Do not cut or remove the existing reinforcing steel. Unless specifically directed by the Engineer, do not remove concrete deeper than 1" below the reinforcing steel.

Abrasive blast all exposed concrete surfaces and existing reinforcing steel in repair areas to remove all debris, loose concrete, loose mortar, rust, scale, etc. After blasting, examine the reinforcing steel to ensure at least 90% of the original diameter remains. If there is more than 10% reduction in the rebar diameter, splice in and securely tie supplemental reinforcing bars as directed by the Engineer. This might require additional removal of concrete, in order to achieve an appropriate splice length of the reinforcing steel.

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Thoroughly clean the repair area of all dirt, grease, oil, or foreign matter, and remove all loose or weakened material by abrasive blasting before applying concrete repair material. Acid etch with 15% hydrochloric acid, only if approved by the Engineer. Follow acid etching by scrubbing and flushing with copious amounts of clean water. Check the cleaning using moist pH paper. Water cleaning is complete when the paper reads ten (10) or higher.

Follow all abrasive blasting with vacuum cleaning.

The time between removal of deteriorated concrete and applying concrete repair material shall not exceed 72 hours. If the time allowance exceeds 72 hours, prepare the surface at the direction of the Engineer before applying concrete repair material.

APPLICATION AND SURFACE FINISH

Apply repair material to damp surfaces only when allowed by repair material recommendations and approved by the Engineer. Prepare damp surfaces in accordance with the *Standard Specifications* and/ or repair material manufacturer's recommendations. Use a blowpipe to facilitate removal of free surface water. Only oil-free compressed air is to be used in the blowpipe.

When surface preparation is completed, mix and apply repair material in accordance with the *Standard Specifications* and/ or repair material manufacturer's recommendations.

Use aggregate that is washed, kiln-dried, and bagged. Maximum size of aggregate shall not exceed 2/3 of the minimum depth of the repair area, or 3/4 of the depth of excavation behind the reinforcing steel, whichever is smaller.

Unless otherwise required by the repair material manufacturer, apply bonding agent to all repair areas immediately prior to placing repair material.

Repair areas shall be formed unless otherwise approved by the Engineer. Form and finish all repaired areas, including chamfered edges, as close as practicable to their original "As Built" dimensions and configuration. After applying the repair material, remove excessive material and provide a smooth, flush surface, unless directed otherwise.

Cure finished Class A concrete repair material by maintaining 95% relative humidity at the repair and surrounding areas by fogging, moist curing, or other approved means for seven (7) days. Cure polymer modified concrete repair material in accordance with manufacturer's recommendations.

REPAIR MATERIAL OPTIONS

(A) Polymer Modified Concrete Repair Material

Repair material shall be polymer modified cement mortar for vertical or overhead applications and shall be suitable for applications in marine environments. Material shall be approved for use by NCDOT. Submit repair material to the Engineer for review and approval prior to beginning the work. Color of repair material shall be concrete gray.

(B) Class A Concrete Repair Material

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Repair material shall be Class A Portland Cement Concrete as described in Article 1000-3 of the *Standard Specifications*.

TEMPORARY WORK PLATFORM

Prior to beginning any repair work, provide details for a sufficiently sized temporary work platform at each repair location. Design steel members to meet the requirements of the *American Institute of Steel Construction Manual*. Design timber members in accordance with the *National Design Specification for Stress-Grade Lumber and Its Fastenings* of the National Forest Products Association. Submit the platform design and plans for review and approval. The design and plans shall be sealed and signed by a North Carolina registered Professional Engineer. Do not install the platform until the design and plans are approved. Drilling holes in the superstructure for the purpose of attaching the platform is prohibited. Upon completion of work, remove all anchorages in the substructure and repair the substructure at no additional cost to the Department.

MEASUREMENT AND PAYMENT

Concrete Repairs will be measured and paid for at the contract unit price bid per cubic foot and will be full compensation for removal, containment and disposal off-site of unsound concrete including the cost of materials, reinforcing steel, labor, tools, equipment and incidentals necessary to complete the repair work. Depth will be measured from the original outside concrete face. The Contractor and Engineer will measure quantities after removal of unsound concrete and before application of repair material. Payment will also include the cost of abrasive blasting, surface cleaning and preparation, blast cleaning of reinforcing steel, placement of new reinforcing steel, cost of temporary work platform, testing of the soundness of the exposed concrete surface, furnishing and installation of repair mortar material, curing and sampling of concrete, and protection/cleaning of adjacent areas from splatter or leakage.

Reinforcing Steel that is required for the repairs will be in accordance with Section 425 of the *Standard Specifications*.

Payment will be made under:

Pay Item	Pay Unit
Concrete Repairs	Cubic Feet

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REMOVAL OF EXISTING BRIDGE GUARDRAIL

(SPECIAL)

The Existing Bridge Guardrail shall be removed to the limits shown on the Plans and in accordance with Section 402 of the NCDOT Standard Specifications for Roads and Structures. Payment for Removal of the Existing Bridge Guardrail will be made at the contract lump sum price bid for "Removal of Existing Bridge Guardrail". Such lump sum price shall be full compensation for furnishing all materials and labor to remove the existing bridge guardrail and remove asphalt wearing surface within the limits of the existing bridge guardrail as required.

ST-20

BRIDGE GUARDRAIL

(SPECIAL)

The Bridge Guardrail shall be as shown on the Plans. The quantity of Bridge Guardrail to be paid for will be the actual number of linear feet of Bridge Guardrail measured continuously along the top rail from end to end which has been completed and accepted. Full compensation for the work shall include, but is not limited to, furnishing posts, rails, fittings and all other materials and fabricating and erecting the Bridge Guardrail. The quantity of Bridge Guardrail as measured above will be paid for at the contract unit price per linear foot for "Bridge Guardrail".

PROJECT SPECIAL PROVISION

(10-18-95) (Rev. 10-15-24)

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PERMITS

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<u>PERMIT</u>	<u>AUTHORITY GRANTING THE PERMIT</u>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Water Resources, DEQ State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the restricted waters, wetlands or buffer zones, provided that activities outside those areas is done in such a manner as to not affect the restricted waters, wetlands or buffer zones.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

July 16, 2026

MEMORANDUM TO: Division Construction Units
Contract Standards and Development Unit

FROM: Robert Lepsic, Embedded Environmental Specialist, Division PDEA
Division Environmental Unit

SUBJECT: Environmental Permits for the replacement of Bridge 197 over Reedy
Patch Creek on SR 1702 (Edney Inn Road),
Henderson County, Division 14.
WBS Number: DF18314.2045330

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Nationwide Permit 3 Action ID: SAW-2026-01001 dated July 14, 2026.	March 15, 2031
NC Division of Water Resources Section 401 Water Quality Certification	General Water Quality Certification Project ID: 20260677 Certification # WQ 8562 Dated June 2, 2026.	<i>expires with above permit</i>

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at:
https://xfer.services.ncdot.gov/pdea/EnvironmentalPermits/General_Conditions_and_Certifications/

**404 PERMIT
USACE**



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT
WRDA TRANSPORTATION BRANCH
69 DARLINGTON AVENUE
WILMINGTON NORTH CAROLINA 28403

July 14, 2026

Regulatory Division
SAW-2026-01001

Sent Via email: pjbreedlove@ncdot.gov

North Carolina Department of Transportation
Mr. Patrick Breedlove
345 Toot Hollow Road
Bryson City, NC 28713

Dear Mr. Breedlove:

This letter is in response to the Pre-Construction Notification (PCN) you submitted to the Wilmington District, WRDA/Transportation Branch on May 29, 2026, for a Department of the Army Nationwide Permit (NWP) verification. This project has been assigned the file number SAW-2026-01001 and is known as Bridge 197 replacement project. This file number should be referenced in all correspondence concerning this project.

A review of the information provided indicates that the proposed work would include the replacement of a bridge damaged by Hurricane Helene and will result in the permanent impact to 334 lf of stream channel due to bank stabilization and back fill and the temporary impact to 194 lf of stream channel due to dewatering. The project is located where Edney Inn Road crosses Reedy Patch Creek and a UT to Reedy Patch Creek, at the intersection of Edney Inn Road and Angelwood Lane in Hendersonville, Henderson County, North Carolina; Latitude 35.4373568 and Longitude -82.2947609.

We have determined that the proposed work is authorized by NWP 3 pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C § 1344). The proposed work must be accomplished in strict accordance with the general permit conditions, any regional conditions, the special conditions listed in this letter, the application materials, and the enclosed plans. If the extent of the project area and/or nature of the authorized impacts to waters are modified, a revised PCN must be submitted to this office for written approval before work is initiated. Any violation of permit conditions or deviation from your submitted plans may subject the permittee to enforcement action.

This verification is valid until March 15, 2031, unless prior to this date the subject NWP(s) is suspended, revoked, or is modified such that the activity no longer complies with the terms and conditions of this NWP. If you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

Project Specific Special Conditions:

1. This Department of the Army permit does not authorize you to take an endangered species, in particular the federally listed or proposed gray bat (*Myotis grisescens*), northern long-eared bat (*Myotis septentrionalis*) and tricolored bat (*Perimyotis subflavus*). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service Biological Opinion (BO) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

This NWP verification does not preclude the necessity to obtain any other Federal, State, or local permits, licenses, and/or certifications, which may be required.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Crystal Amschler, Project Manager of the WRDA/Transportation Branch at 828-526-6013, by mail at the above address, or by email at crystal.c.amschler@usace.army.mil. Please take a moment to complete our customer satisfaction survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,

A handwritten signature in black ink that reads "M. Scott Jones". The signature is written in a cursive style with a large, stylized "M" and "J".

M. Scott Jones, PWS
WRDA / Transportation Branch Chief
USACE - Wilmington District

Enclosures

U.S. Army Corps of Engineers (USACE) CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.		Form Approved - OMB No. 0710-0003 Expires 2027-10-31
The Agency Disclosure Notice (ADN)		
The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.		
PURPOSE: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions. Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.		
Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, Wilmington District, Regulatory Office. The certification can be submitted by email at crystal.c.amschler@usace.army.mil or by mail at the below address: U.S. Army Corps of Engineers Wilmington District Office Street Address: 151 Patton Ave Room 208 City: Asheville State: North Carolina Zip Code: 28801		
COMPLETED BY THE CORPS		
Corps Action Number:	SAW-2026-01001	
Permit Type: General Permit		
General Permit Number and Name (if applicable):		
Name of Permittee:	NCDOT Division 14	
Project Name:	Bridge 197 replacement project	
Project Location (physical address):	located where Edney Inn Road crosses Reedy Patch Creek and a UT to Reedy Patch Creek, Henderson County, North Carolina	
PERMITTEE'S CERTIFICATION		
Date Work Started: _____		
Date Work Completed: _____		
Enclose photographs showing the completed project (if available).		
I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.		
Name	Date	Signature

 North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS 									
(Version 3.02; Released April 23, 2024)									
WBS Element:		TIP/Proj No: DF18314.2045330		County(ies): Henderson			Page 1 of 2		
General Project Information									
WBS Element:		TIP Number: DF18314.2045330		Project Type: Bridge Replacement		Date: 3/2/2026			
NCDOT Contact:		Jared Bond		Contractor / Designer:		HNTB - Paul Cameron, PE			
		Address: 253 Webster Rd Sylva, NC 28779				Address: 4000 Center at North Hills St. Suite 500 Raleigh, NC 27609			
		Phone: (828) 331-5234				Phone: (919)-424-0418			
		Email: ext-imbond@ncdot.gov				Email: pcameron@hntb.com			
City/Town:				County(ies):		Henderson			
River Basin(s):		Broad		CAMA County?		No			
Wetlands within Project Limits?		No							
Project Description									
Project Length (lin. miles or feet):		0.11		Surrounding Land Use:		Low density residential. Wooded prior to Helene with farm fields to the east.			
		Proposed Project				Existing Site			
Project Built-Up Area (ac.)		0.3 ac.				0.4 ac.			
Typical Cross Section Description:		2.9' lanes with 5' FDPS and guardrail on the bridge approaches. Open shoulders are provided throughout.				Existing alignment destroyed by Hurricane Helene. Emergency repairs completed in the aftermath of the storm. The current typical is unpaved with a mix of ABC and crush and run providing approximately 18' to 20' in width. There are not dedicated lanes. The typical has open shoulders.			
Annual Avg Daily Traffic (veh/hr/day):		Design/Future: 350		Year: 2046		Existing: 250		Year: 2026	
General Project Narrative: (Description of Minimization of Water Quality Impacts)		NCDOT Project DF18314.2045330 is part of the NCDOT Hurricane Helene Recovery Program and is intended to restore the damaged Edney Inn Road corridor to pre-Helene conditions. Edney Inn Road and the Reedy patch Creek floodplain were severely impacted by storm flooding. Resultant upstream washouts caused Bridge 197 to become plugged with debris and sediment, blocking all flow through the structure. This obstruction led to significant roadway failure, with Edney Inn Road washing out on both sides of Bridge 197. Reedy patch Creek cut through Edney Inn Road west of Bridge 197, while Little Creek—flowing along the south side of Edney Inn Road toward its confluence with Reedy patch Creek at the upstream face of Bridge 197—cut through the roadway to the east. Additionally, Little Creek established a new flow path through the roadway and across the Pryor parcel, creating a new confluence point approximately 125 feet downstream of Edney Inn Road. This shift occurred because the privately owned bridge at Angelwood Lane, located just upstream of the original Reedy patch Creek—Little Creek confluence, also became plugged with sediment and debris. Bridge 197 sustained minimal structural damage and does not require replacement. However, damaged guardrail and exterior cored slab units will be replaced, and the bridge deck will be resurfaced. Immediately following Hurricane Helene, NCDOT and other agencies performed emergency repairs to reopen Edney Inn Road using a temporary solution. These efforts included removing most of the debris and sediment from the bridge opening to allow Reedy patch Creek to be realigned through Bridge 197 and to reconstruct Edney Inn Road. Project DF18314.2045330 will provide a permanent bridge opening through engineered design, with conveyance capacity that will slightly exceed pre-storm conditions. This will be achieved through additional excavation of Reedy patch Creek to establish positive downstream thalweg elevations, channel benching, and placement of Class II riprap to stabilize slopes. Little Creek will be reestablished to approximate pre-storm conditions with long-term stability as a primary objective. The realigned channel will utilize a natural cross-section with a defined 5-foot thalweg and an 18-foot bed width. A 10-foot-wide bench will be constructed along the southern side of the channel at an elevation 2 feet above the thalweg. In-stream structures, including rock vanes and riffle-pool sequences, will be incorporated to maintain grade control and channel stability. NCDOT will not repair or clean out the private bridge at Angelwood Lane as part of this project. That bridge falls under the North Carolina Emergency Management (NCEM) Private Roads and Bridges Program and is expected to be cleaned out prior to the start of construction for Project DF18314.2045330. Little Creek has been designed to maintain upstream and downstream channel connectivity through private bridge location, and coordination has been completed with the NCEM team to establish cleanup elevation requirements. Detouring Edney Inn Road is proposed to facilitate removal of the temporary pipe east of Bridge 197. The detour alignment will be located on the north side of Edney Inn Road and will require placement of fill within the Helene-induced alignment of Little Creek downstream. This detour fill will remain in place following construction. No backfill of the remaining temporary channel downstream of the project limits is proposed under this scope of service. Drainage improvements will be minimal and designed to maintain pre-storm drainage conditions. Primary treatment will consist of open shoulders draining to grassed fill slopes. Ditching will be provided in the northeast quadrant to match pre-storm drainage patterns.							



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 3.02; Released April 23, 2024)

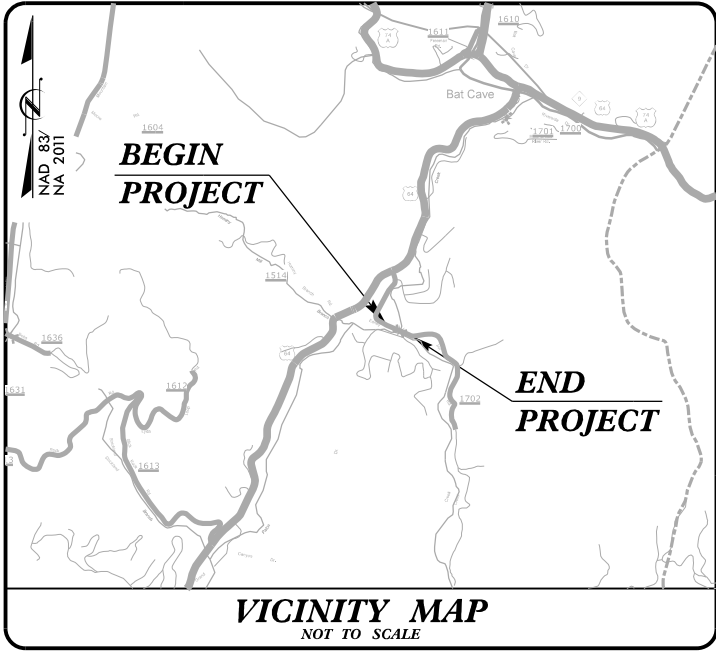
WBS Element:	TIP/Proj No.: DF18314.2045330	County(ies): Henderson	Page 2 of 2
General Project Information			
Waterbody Information			
Surface Water Body (1):	Little Creek	NCDWR Stream Index No.:	9-15-4
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C	
	Supplemental Classification:	Trout Waters (Tr)	
Other Stream Classification:			
Impairments:			
Aquatic T&E Species?	Comments:		
NRTR Stream ID:		Buffer Rules in Effect:	N/A
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	N/A
Deck Drains Discharge Over Water Body?	N/A	(If yes, provide justification in the General Project Narrative)	Dissipator Pads Provided in Buffer?
(If yes, provide justification in the General Project Narrative)			(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)
Waterbody Information			
Surface Water Body (2):	Reedypatch Creek	NCDWR Stream Index No.:	9-15
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C	
	Supplemental Classification:	Trout Waters (Tr)	
Other Stream Classification:			
Impairments:			
Aquatic T&E Species?	Comments:		
NRTR Stream ID:		Buffer Rules in Effect:	N/A
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)	Dissipator Pads Provided in Buffer?
(If yes, provide justification in the General Project Narrative)			(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)
Waterbody Information			
Surface Water Body (3):		NCDWR Stream Index No.:	
NCDWR Surface Water Classification for Water Body	Primary Classification:		
	Supplemental Classification:		
Other Stream Classification:			
Impairments:			
Aquatic T&E Species?	Comments:		
NRTR Stream ID:		Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		Deck Drains Discharge Over Buffer?	
Deck Drains Discharge Over Water Body?		(If yes, provide justification in the General Project Narrative)	Dissipator Pads Provided in Buffer?
(If yes, provide justification in the General Project Narrative)			(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)

09/08/99

PROJECT: DF18314.2045330

CONTRACT:

See Sheet 1B For Conventional Symbols



FINAL ROW ACQUISITION PLAN
SET SUBMITTAL - FEBRUARY 25, 2026

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HENDERSON COUNTY

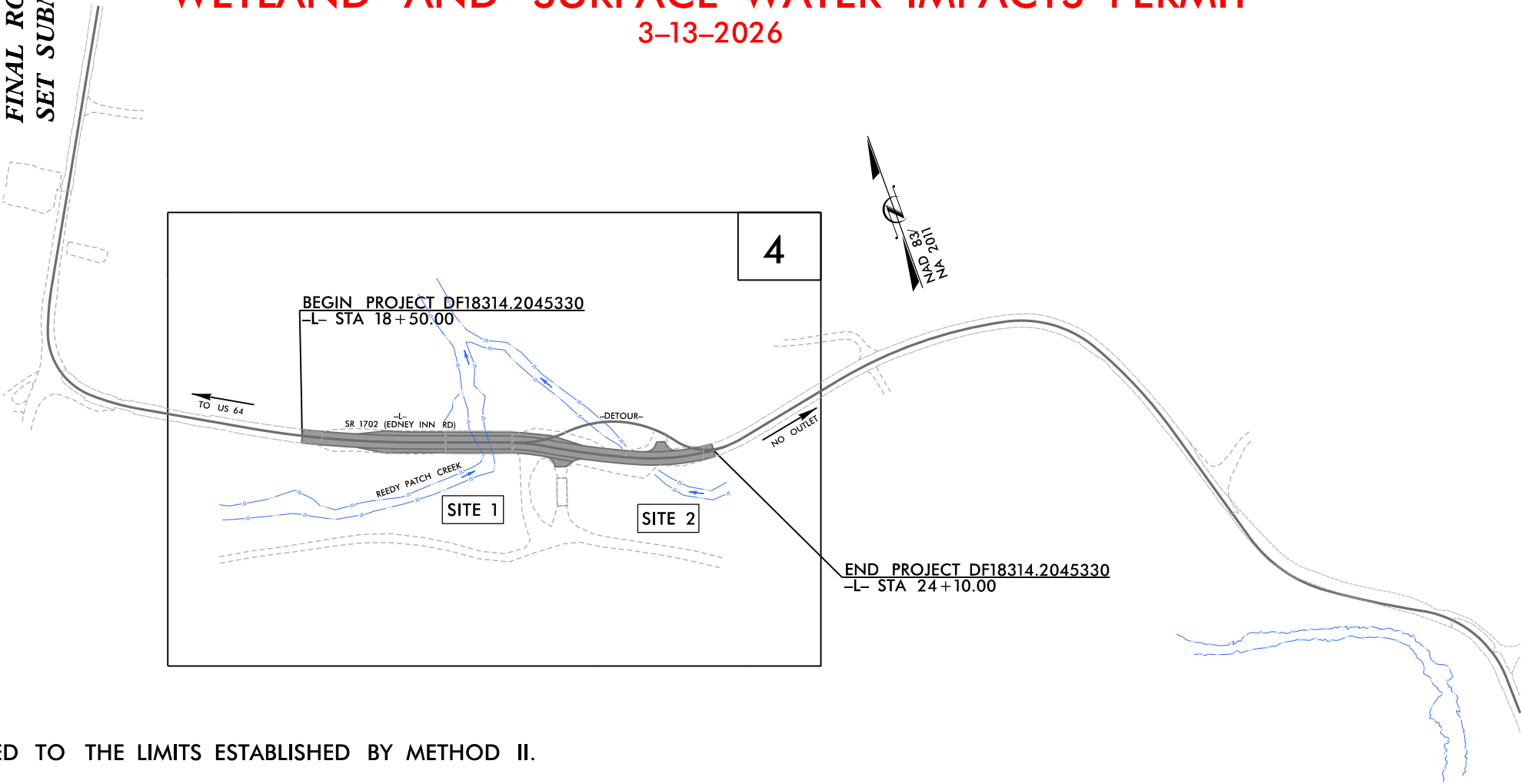
LOCATION: BRIDGE #440197 OVER REEDY PATCH CREEK
ON SR 1702 (EDNEY INN ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING

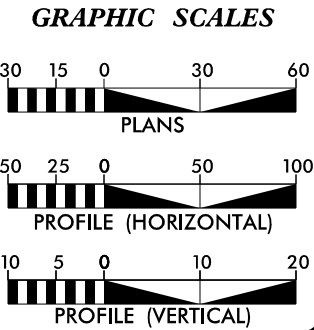
WETLAND AND SURFACE WATER IMPACTS PERMIT
3-13-2026

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	DF18314.2045330	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
DF18314.2045330		PE	
DF18314.2045330		ROW	
DF18314.2045330		CONST.	

PERMIT DRAWING
SHEET 1 OF 6



- NOTES:
- CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 - THIS IS NOT A CONTROLLED ACCESS PROJECT.
 - THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.



DESIGN DATA

ADT 2026 = 250

ADT 2046 = 350

T = 6%

V = 40 MPH

FUNC CLASS =
LOCAL RURAL
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT DF18314.2045330 = 0.106 MILES

TOTAL LENGTH OF PROJECT DF18314.2045330 = 0.106 MILES

Prepared In the Office of:

HNTB

HNTB NORTH CAROLINA, P.C.
4000 Center at North Hills St.
Suite 500
Raleigh, North Carolina 27609
NC License No: C-1554

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
FEBRUARY 25, 2026

LETTING DATE:
JUNE 9, 2026

J. MATTHEW PICKENS, PE
PROJECT ENGINEER

ANDREW McOMBER, PE
PROJECT DESIGN ENGINEER

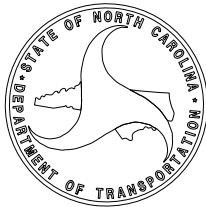
JARED BOND, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

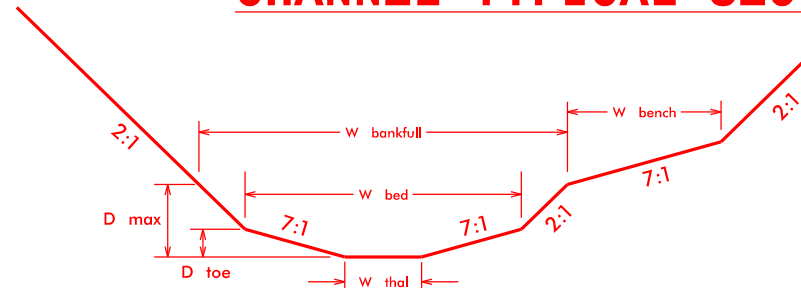
SIGNATURE: _____ P.E.



LITTLE CREEK RELOCATION DETAIL

PERMIT DRAWING
SHEET 2 OF 6

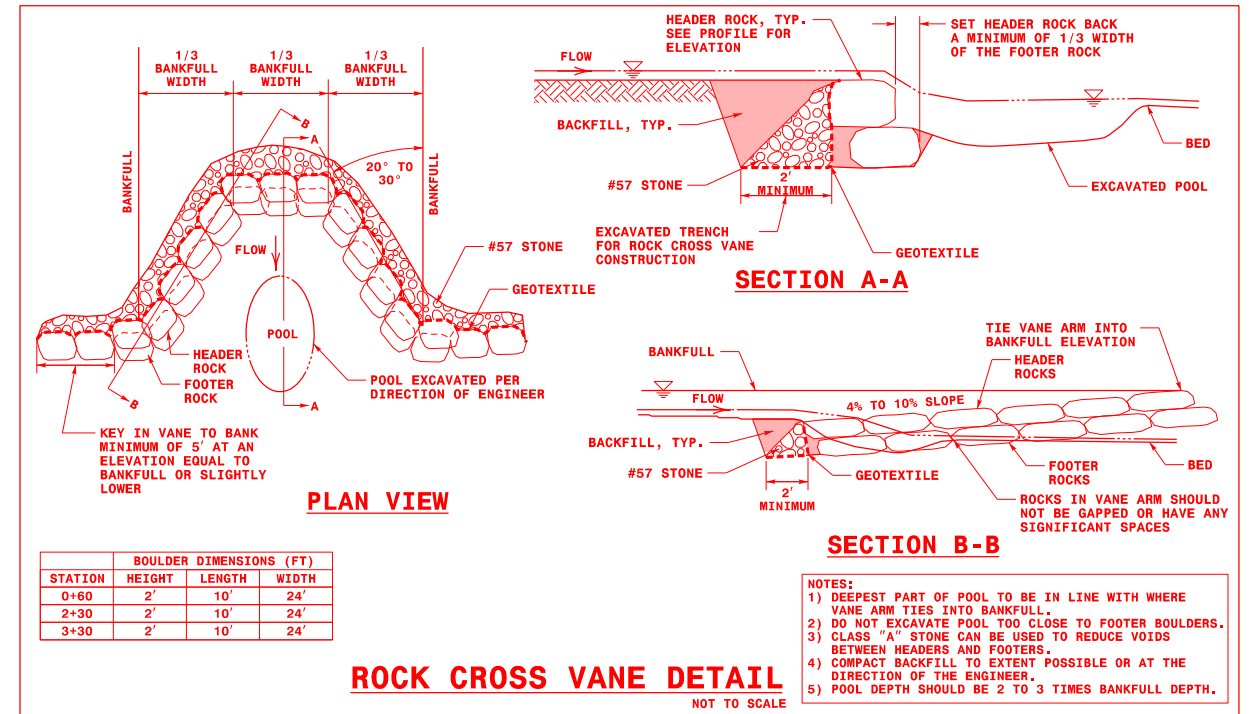
CHANNEL TYPICAL SECTION



W_{thal} = 5 ft.
 W_{bed} = 18 ft.
 $W_{bankfull}$ = 24 ft.
 W_{bench} = 10 ft.
 D_{toe} = 0.5 ft.
 D_{max} = 2 ft.

FROM STA. 00+15 TO STA. 1+00
FROM STA. 01+30 TO STA. 3+40

Type of Liner = NATURAL CHANNEL MATERIAL



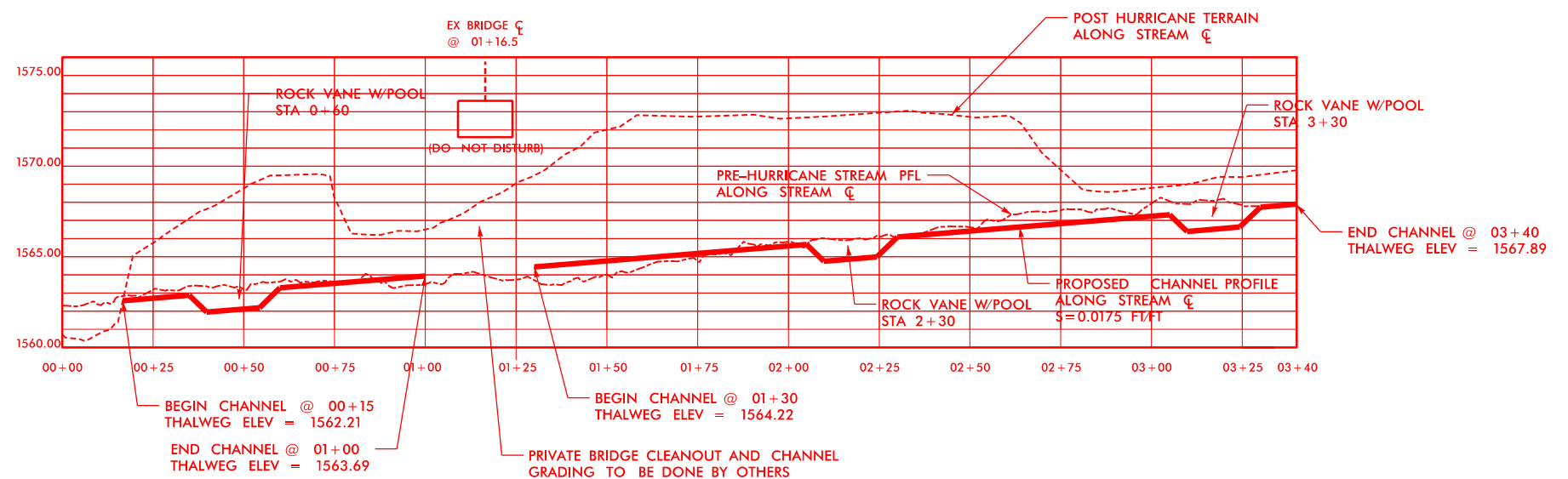
BOULDER DIMENSIONS (FT)			
STATION	HEIGHT	LENGTH	WIDTH
0+60	2'	10'	24'
2+30	2'	10'	24'
3+30	2'	10'	24'

ROCK CROSS VANE DETAIL
NOT TO SCALE

- NOTES:
- 1) DEEPEST PART OF POOL TO BE IN LINE WITH WHERE VANE ARM TIES INTO BANKFULL.
 - 2) DO NOT EXCAVATE POOL TOO CLOSE TO FOOTER BOULDERS.
 - 3) CLASS "A" STONE CAN BE USED TO REDUCE VOIDS BETWEEN HEADERS AND FOOTERS.
 - 4) COMPACT BACKFILL TO EXTENT POSSIBLE OR AT THE DIRECTION OF THE ENGINEER.
 - 5) POOL DEPTH SHOULD BE 2 TO 3 TIMES BANKFULL DEPTH.

EARTHWORK QUANTITIES		
STA	XS EXCAVATION AREA (SF)	XS FILL AREA (SF)
3+25	85.1	—
3+00	47.4	8.7
2+75	97.3	61.2
2+50	176.6	143.3
2+25	222.8	—
2+00	237.4	—
1+75	257.2	—
1+50	282.5	—
1+25	—	—
1+00	97.5	—
0+75	192.5	—
0+50	165.6	—
0+25	97.1	8.2
0+00	—	—
TOTAL	1,729	205
APPROX. NET EXCAVATION = 1,524 CY*		

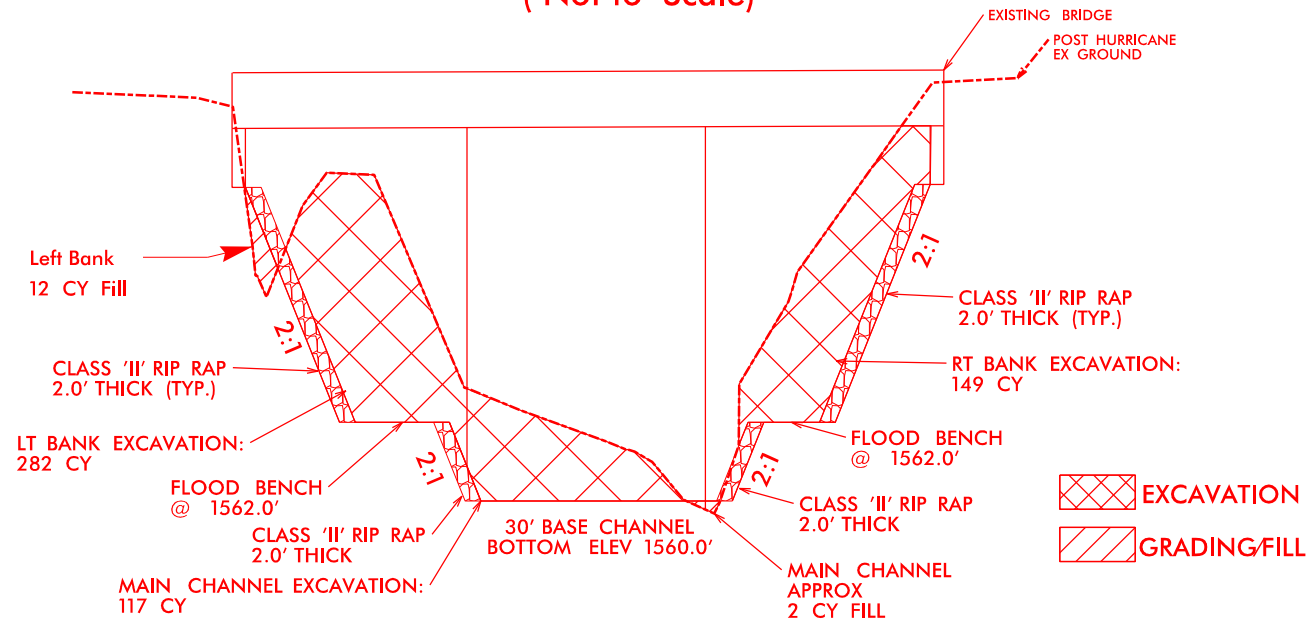
*CALCULATED USING AVERAGE END AREA METHOD



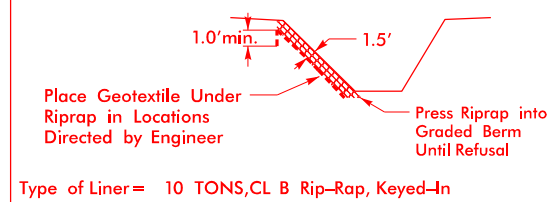
PROJECT REFERENCE NO.		SHEET NO.
DF18314.2045330		2D-2
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

PERMIT DRAWING
SHEET 3 OF 6

DETAIL 4-3
UPSTREAM EXCAVATION AND BANK STABILIZATION
(Not to Scale)

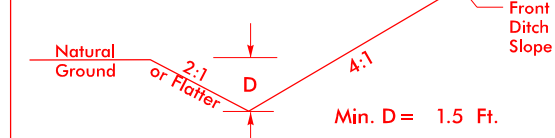


DETAIL E1
EMBANKMENT STABILIZATION
(Not to Scale)



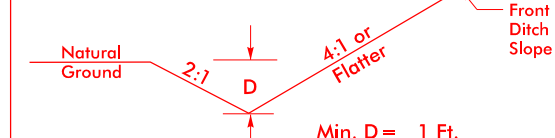
FROM -DETOUR- STA. 11+37 TO STA. 11+50 LT

DETAIL SC1
SPECIAL CUT 'V' DITCH
(Not to Scale)



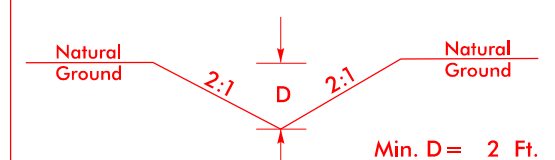
FROM -L- STA. 21+25 TO STA. 23+25 LT

DETAIL SC2
SPECIAL CUT 'V' DITCH
(Not to Scale)



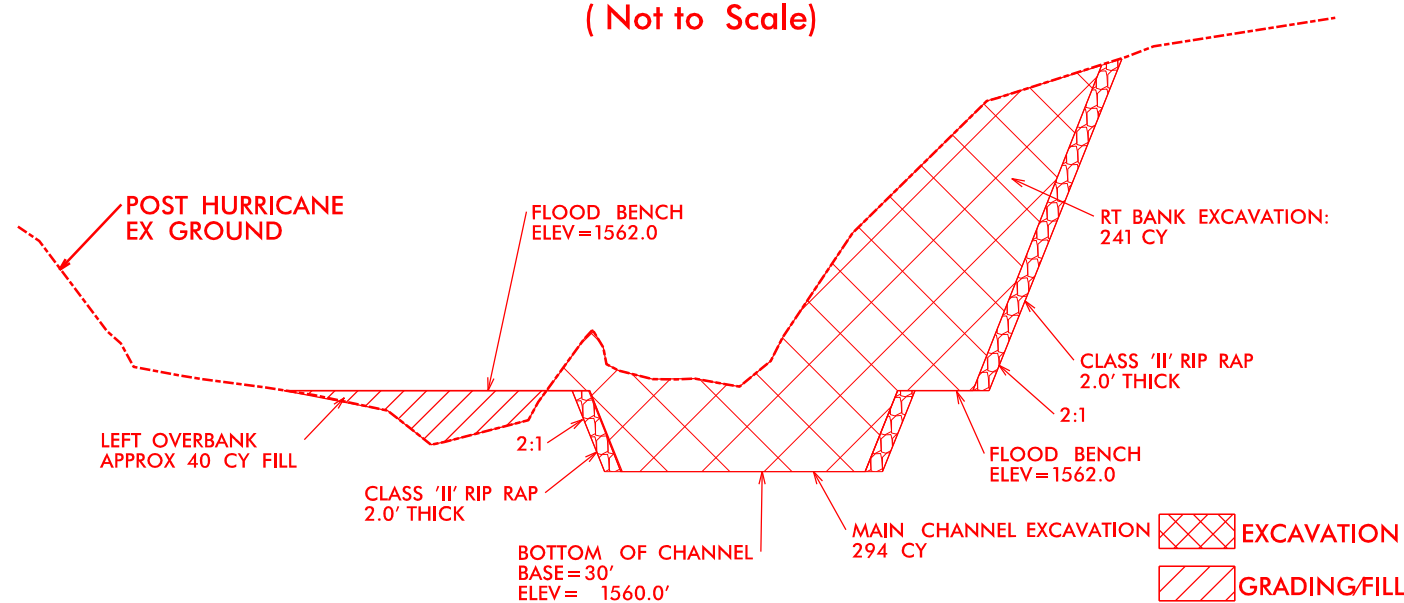
FROM -DETOUR- STA. 11+50 TO STA. 11+75 LT
FROM -DETOUR- STA. 12+25 TO STA. 12+57 LT

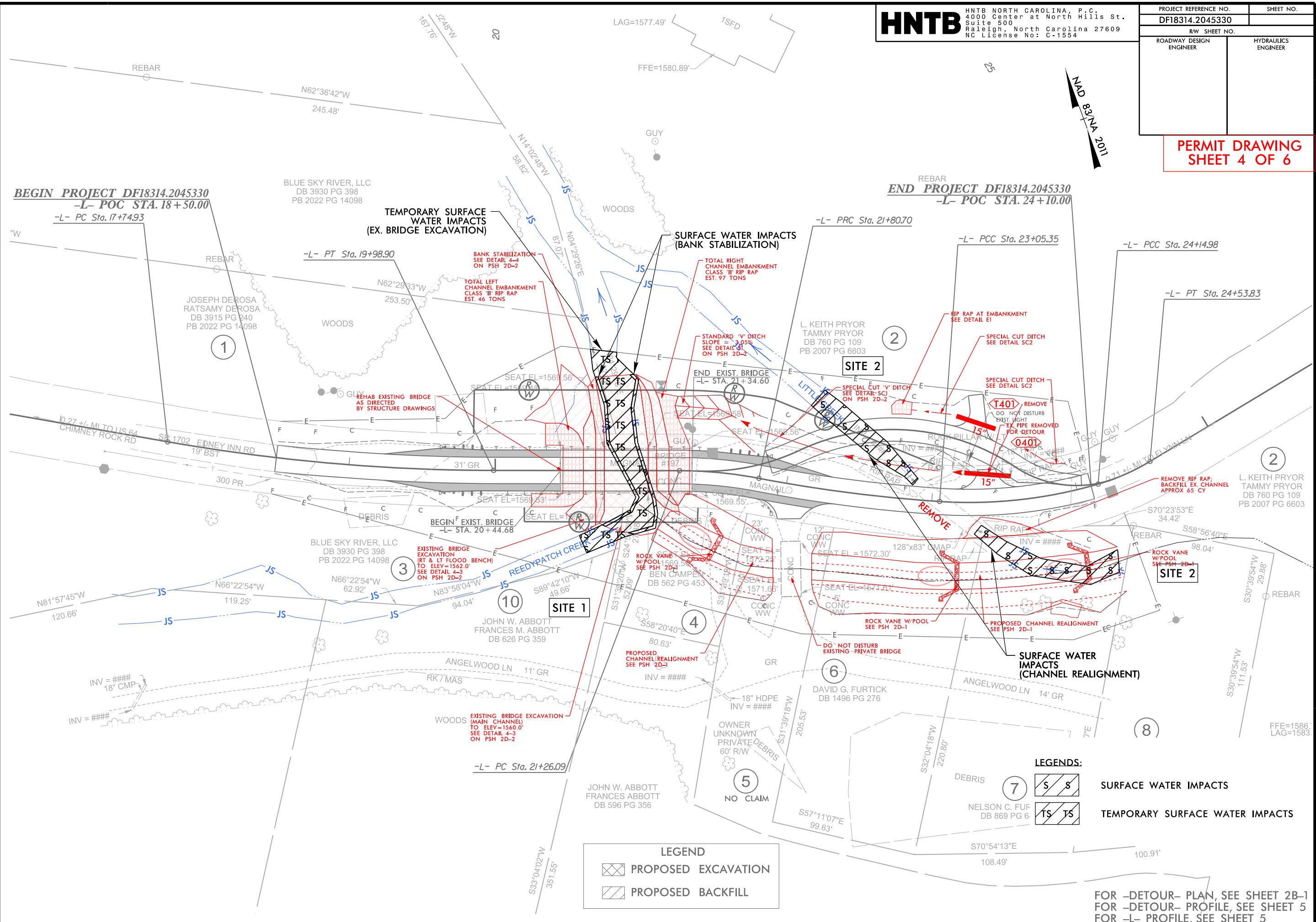
DETAIL S1
STANDARD 'V' DITCH
(Not to Scale)

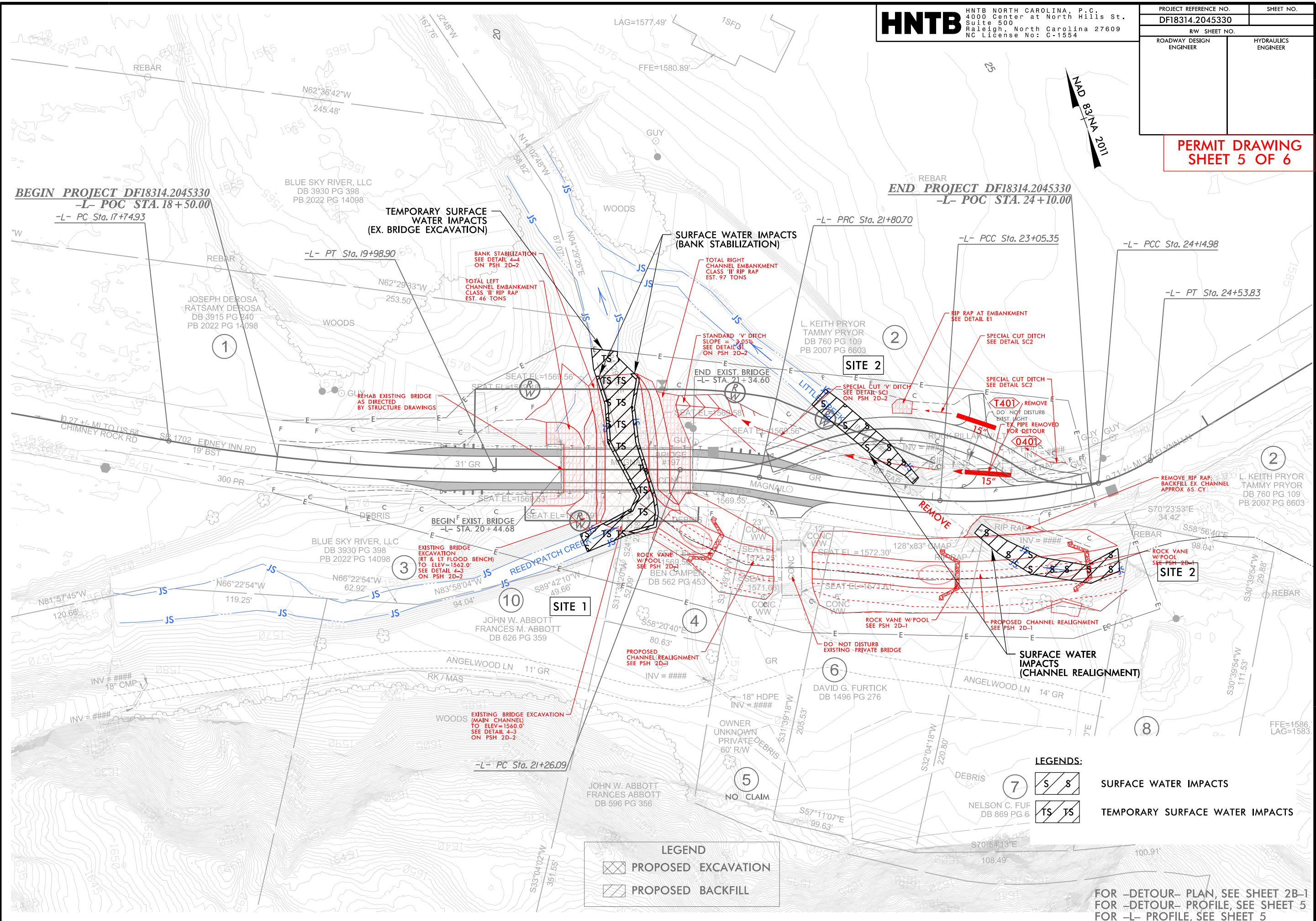


FROM -L- STA. 21+23 (44.4' LT) TO STA. 21+75 (32.5' LT)

DETAIL 4-4
DOWNSTREAM EXCAVATION AND BANK STABILIZATION
(Not to Scale)







WETLAND AND SURFACE WATER IMPACTS SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	L Sta. 20+52 to 21+11 LT/RT	Temp. Dewatering due to excavation under existing bridge							0.057		43	
1	L Sta. 20+52 to 21+11 LT/RT	Bank stabilization						0.011		140		
2	L Sta. 22+17 to 24+29LT/RT	Backfill existing channel due to channel re-establishment						0.054		194		
TOTALS*:								0.065	0.057	334	43	

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
3/2/2026
Henderson County BR 197

SHEET 6 OF 6

Biological and Conference Opinions and Informal Consultations – Batch Format

**Replace Multiple Crossing Structures Destroyed by Tropical Storm Helene in
Haywood, Henderson, Polk, Transylvania Counties, North Carolina**

Service Log #25-133 through 25-162



Prepared by:

U.S. Fish and Wildlife Service
Asheville Ecological Services Office
160 Zillicoa Street
Asheville, North Carolina 28801

GARY PEEPLES

Digitally signed by GARY
PEEPLES

Date: 2025.05.13 12:05:20 -04'00'

Gary Peeples
Acting Field Supervisor
Asheville Ecological Services Field Office
Asheville, North Carolina

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Consultation History

December 2, 2024: Discussion between U.S. Fish and Wildlife Service (Service) and North Carolina Department of Transportation (NCDOT) regarding consultation batching processes and applicable avoidance and minimization and conservations measures for projects related to Tropical Storm (TS) Helene damage.

December 3-6, 2024: Email correspondence between the Service and NCDOT discussing aspects of batching process and need for a virtual discussion.

December 11, 2024: Virtual meeting between NCDOT and the Service to discuss batching process and avoidance and minimization and conservations measures.

December 30-31, 2024: Service asked NCDOT questions about project impact estimates and NCDOT provided responses.

January 2, 2025: Phone discussion between NCDOT and the Service regarding aquatic impact area estimates.

January 7, 2025: NCDOT provided needed information on aquatic impact area estimates.

March 20, 2025: NCDOT submitted batched request for informal and formal consultation to the Service.

April 3, 2025: Service asked NCDOT questions on bridge information and related effect determinations.

April 9, 2025: NCDOT provided requested information.

April 10, 2025: NCDOT requested updates to the project information and effect determination for a bridge site.

April 16, 2025: NCDOT submitted three additional bridge locations to the batched request.

Background

On September 27, 2024, TS Helene moved across a large swath of Western North Carolina (WNC). Extreme rainfall and high winds resulted in catastrophic damage across much of the region. Record flooding occurred throughout several watersheds, destroying thousands of transportation sites as well as homes and entire communities. Widespread landslides and timber fall contributed to the damage. In the wake of this disastrous event, the North Carolina Department of Transportation (NCDOT) is tasked with responding to, repairing, and [to the extent possible] replacing the transportation infrastructure destroyed by TS Helene. The following informal and formal consultations are presented in batched format to streamline and expedite review of one group of many similar projects. The format utilized in this consultation is intended for TS Helene-related projects and is tailored to the unique challenges and constraints precipitated by this event. Biological determinations presented below are based on the best available scientific data at the time of this document and incorporate the expertise of WNC's Service and partner resource agency biologists.

Projects

The table below represents the projects reviewed in this batch of TS Helene-related projects. Work will involve the replacement of damaged or wholly destroyed crossing structures, which may include minimal tree clearing, grading, demolition, and in-water construction. The Express Design Build bridges are slated for completion in 2025, construction of some Design Bid Build bridges is expected to begin that year, with all construction concluding by late 2026 based on best-case scenarios. Additional description of the project-associated activities is provided in Section 2 of this document.

Table 1. Batched Consultation Projects – Crossing Structures

Structure Number	Waterbody	County	Location	Status	Service Log No.
440055	Hungry River	Henderson	35.29855, - 82.3506	Severe sub damage, span two gone, east approach washed	25-133
440091	North Fork Big Willow Creek	Henderson	35.28937, - 82.55027	Bridge gone	25-134
440095	Reedypatch Creek	Henderson	35.44973, - 82.28779	Bridge gone; temporary bridge installed	25-135
440109	Clear Creek	Henderson	35.37995, - 82.39918	Bridge gone	25-136
440198	Clear Creek	Henderson	35.42464, - 82.34445	Bridge gone	25-137
440214	Broad River	Henderson	35.45092, - 82.2873	Severe sub damage, approach slabs, piles, bent caps	25-138
440263	Hickory Creek	Henderson	35.47757, - 82.34517	Bridge gone; temporary culvert installed	25-139
440262	Hickory Creek	Henderson	35.47692, - 82.34277	Bridge gone, temporary culvert and bridge installed	25-140
440250	Perry Creek	Henderson	35.28145, - 82.48741	Bridge gone; temporary bridge installed	25-141
440197	Reedypatch Creek	Henderson	35.43759, - 82.29491	Severe sub damage, approach slabs, railing, piles, temporary culvert installed	25-142
440186	South Fork Mills River	Henderson	35.37579, - 82.61464	Severe sub damage, decking, railing, bent caps, slope protection, approach slabs	25-143
440245	Featherstone Creek	Henderson	35.39394, - 82.44225	Bridge destroyed; three temporary culverts installed	25-144
440156	Little Hungry River	Henderson	35.38353, - 82.29722	Moderate damage, bent caps, slope protection	25-145
440166	Kyles Creek	Henderson	35.41837, - 82.40537	Severe sub damage, approach slabs, end bent, bridge settled one foot	25-146
440336	Clear Creek	Henderson	35.43633, - 82.32203	Bridge gone; temporary culvert installed	25-147
440024	Cane Creek	Henderson	35.43541, - 82.48887	Severe sub damage, severe erosion and undermining	25-148
430002	Cold Creek	Haywood	35.42304, - 82.82276	Bridge gone; temporary culverts installed	25-149
430034	Bald Creek	Haywood	35.61458, - 82.89736	Severe sub damage, half of the bridge is missing	25-150
430219	Jonathan's Creek	Haywood	35.5181, - 83.08622	Bridge gone; temporary bridge installed	25-151
430042	Pigeon River	Haywood	35.61439, - 82.96665	Severe sub damage, approach slabs, railing	25-152
430178	Liner Creek	Haywood	35.61996, - 82.86757	Severe sub damage, decking, railing, piles, bent caps, girders, bearing plates, slope protection.	25-153

430062	Cove Creek	Haywood	35.67633, - 82.93224	Bridge gone, temporary replacement with two corrugated metal pipes	25-154
430011	Crawford Creek	Haywood	35.39952, - 82.82522	Severe sub damage, decking, railing, piles, bent caps, girders, bearing plates, slope protection.	25-155
430031	Liner Creek	Haywood	35.61479, - 82.87074	Severe sub damage, decking, railing, piles, bent caps, girders, bearing plates, slope protection.	25-156
430163	West Fork Pigeon River Overflow	Haywood	35.47129, - 82.88723	Erosion around end bent	25-157
740112	North Pacolet River	Polk	35.22396, - 82.27063	Bridge gone	25-158
870066	North Fork French Broad River	Transylvania	35.15461, - 82.84002	Bridge gone	25-159
430266	Campbell Creek	Haywood	35.51388, - 83.09998	Bridge gone; temporary bridge installed	25-160
430046	Jonathan's Creek	Haywood	35.59170, - 83.00759	Bridge gone	25-161
430041	Crabtree Creek	Haywood	35.60272, - 82.93927	Bridge gone	25-162

Informal Consultation

The NCDOT assessed each project location addressed in this document for the presence of suitable habitat for listed species and for the potential effects of project work on listed species with suitable habitat present. The following table outlines the project locations and associated “No Effect” (NE) and “May Affect, Not Likely to Adversely Affect” NLAA determinations, with supporting biological rationale.

Table 2. Species NLAA and NE Determinations

Structure Number	Waterbody	Service Log No.	NE and NLAA Species
440091	North Fork Big Willow Creek	25-134	NE: Gray bat, mountain sweet pitcher-plant (<i>Sarracenia rubra</i> ssp. <i>jonesii</i>), small whorled pogonia, swamp pink (<i>Helonias bullata</i>), Appalachian elktoe (<i>Alasmidonta raveneliana</i>). Rationale: For bats, absence of roosting habitat – bridge structure completely gone. For plants and Appalachian elktoe, absence of suitable habitat.
440095	Reedypatch Creek	25-135	NLAA: Gray bat, northern long-eared bat (<i>Myotis septentrionalis</i>), tricolored bat. Rationale: Lack of suitable roosting habitat, no tree clearing NE: rock gnome lichen (<i>Gymnoderma lineare</i>), small whorled pogonia, White irisette, swamp pink. Rationale: Absence of suitable habitat.

440109	Clear Creek	25-136	NE: Gray bat, northern long-eared bat, tricolored bat, small whorled pogonia, white irisette. Rationale: For bats, absence of roosting habitat – bridge structure completely gone, no tree clearing. For plants, absence of suitable habitat.
440198	Clear Creek	25-137	NE: Gray bat, northern long-eared bat, tricolored bat, rock gnome lichen, small whorled pogonia, white irisette. Rationale: For bats, absence of roosting habitat – bridge structure completely gone, no tree clearing. For plants, absence of suitable habitat.
440263	Hickory Creek	25-139	NE: Gray bat, northern long-eared bat, tricolored bat, rock gnome lichen, small whorled pogonia, white irisette. Rationale: For bats, absence of roosting habitat, no tree clearing. For plants, absence of suitable habitat.
440262	Hickory Creek	25-140	NE: Gray bat, northern long-eared bat, tricolored bat, rock gnome lichen, small whorled pogonia, white irisette. Rationale: For bats, absence of roosting habitat, no tree clearing. For plants, absence of suitable habitat.
440250	Perry Creek	25-141	NE: Gray bat, tricolored bat, bunched arrowhead, mountain sweet pitcher-plant, rock gnome lichen, small whorled pogonia, swamp pink. Rationale: For bats, absence of roosting habitat, no tree clearing. For plants, absence of suitable habitat.
440245	Featherstone Creek	25-144	NE: Gray bat, northern long-eared bat, tricolored bat, small whorled pogonia, white irisette. Rationale: For bats, absence of roosting habitat, no tree clearing. For plants, absence of suitable habitat.
440156	Little Hungry River	25-145	NE: Gray bat, northern long-eared bat, tricolored bat, small whorled pogonia, white irisette. Rationale: For bats, absence of roosting habitat, no tree clearing. For plants, absence of suitable habitat.
440166	Kyles Creek	25-146	NE: Gray bat, northern long-eared bat, tricolored bat, small whorled pogonia, white irisette, rock gnome lichen. Rationale: For bats, absence of roosting habitat, no tree clearing. For plants, absence of suitable habitat.
440336	Clear Creek	25-147	NE: Gray bat, northern long-eared bat, tricolored bat, small whorled pogonia, white irisette, rock gnome lichen. Rationale: For bats, absence of roosting habitat. For plants, absence of suitable habitat.
440024	Cane Creek	25-148	NLAA: Gray bat, northern long-eared bat, tricolored bat. Rationale: Existing cored slab bridge will remain, only provides marginal habitat, no tree clearing. NE: Small whorled pogonia, white irisette, Appalachian elktoe. Rationale: Absence of suitable habitat.
430034	Bald Creek	25-150	NE: Gray bat, Indiana bat, tricolored bat, small whorled pogonia, rock gnome lichen, Appalachian elktoe. Rationale: For bats, absence of roosting habitat, no tree removal. For plants and Appalachian elktoe, absence of suitable habitat.

430178	Liner Creek	25-153	NE: Gray bat, Indiana bat, tricolored bat, small whorled pogonia, rock gnome lichen, Appalachian elktoe. Rationale: For bats, existing timber bridge provides only marginal habitat, no tree removal. For plants and Appalachian elktoe, absence of suitable habitat.
430163	West Fork Pigeon River Overflow	25-157	NE: Gray bat, Indiana bat, northern long-eared bat, tricolored bat, small whorled pogonia, rock gnome lichen, Appalachian elktoe. Rationale: For bats, no evidence of bat use, no tree clearing. For plants and Appalachian elktoe, absence of suitable habitat.
740112	North Pacolet River	25-158	NE: Northern long-eared bat, tricolored bat, dwarf-flowered heartleaf (<i>Hexastylis naniflora</i>), white irisette. Rationale: For bats, absence of roosting habitat – bridge structure completely gone, no tree clearing. For plants, absence of suitable habitat.

In instances where suitable habitat is absent from the action area, or where project actions would not result in impacts to suitable habitat within the action area, we agree that NE determinations are appropriate.

The NLAA determinations for listed bats are based on the presence of suitable riparian roosting, commuting, or foraging habitat and the lack of suitable structure-based roosting habitat; or on the presence of marginally suitable roosting habitat on temporary bridges where roosting would be considered unlikely, as addressed in the table. For these projects, adverse impacts to the noted bat species are not expected – that is, any impacts from the clearing of riparian vegetation or the removal of marginally suitable bridge structures is considered discountable, meaning extremely unlikely to occur based on what is known about the species, the site conditions, and the anticipated activities. Additionally, general protective measures will be implemented to the maximum extent possible. These measures are listed in Section 2.3 of this document, below, and further serve to reduce the likelihood that project work could adversely affect any bats occurring within the action areas.

We believe the requirements under section 7 of the ESA are fulfilled for the species addressed above in relation to the designated projects. However, obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) this proposed action is subsequently modified in a manner that was not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the proposed action.

A species proposed for listing under the Endangered Species Act (ESA) is one that the Service or the National Marine Fisheries Service has determined, based on the best available scientific and commercial data, may warrant listing as either endangered or threatened. This proposal is a formal step in the process of providing federal protection to species facing potential extinction across all or a significant portion of their range. Species proposed for listing are not afforded protection under the ESA; however, as soon as a listing becomes effective, the prohibitions against jeopardizing its continued existence and “take” will apply.

On September 14, 2022, the Service published a proposal in the Federal Register to list the tricolored bat as endangered under the ESA. As a result, NCDOT has requested a conference for the tricolored bat as the projects may be on-going after the effective date of any final listing rule, if one is published. Based on the information provided and the analysis discussed for listed bat species above which also has applicability

here, we have determined that the proposed projects will not jeopardize the continued existence of the tricolored bat. Additionally, we would concur with the NCDOT's determination that the projects are NLAA the tricolored bat should the species become listed.

On December 13, 2024, eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*) was proposed for listing as endangered under the ESA. Information provided by NCDOT after the originally submitted consultation request for the subject projects indicates that NCDOT has chosen not to conference on eastern hellbender but will consider the species and coordinate with partner resource agencies as project actions move forward.

Biological Opinion and Conference Opinion

1. Introduction

A biological and conference opinion (Opinion) is the document that states the opinion of the Service in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (ESA), as to whether a Federal action is likely to jeopardize the continued existence of species listed as endangered or threatened; or result in the destruction or adverse modification of designated critical habitat.

This document transmits the Service's Opinion and is based on our review of the proposal to replace several crossing structures (Table 1) and the effects on the federally endangered Appalachian elktoe (*Alasmidonta raveneliana*), gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), and northern long-eared bat (*Myotis septentrionalis*), and federally proposed endangered tricolored bat (*Perimyotis subflavus*). This Opinion is based on information provided in the assessment submitted to the Service by the NCDOT, field investigations, correspondence between NCDOT and the Service, communications with experts on the affected species, and other sources of information as cited. The Federal Highway Administration is the lead Federal action agency for these projects, with consultation authority delegated to the NCDOT.

2. Proposed Action

As defined in the Service's section 7 regulations (50 CFR 402.02), "action" means "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas." The "action area" is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The direct and indirect effects of the actions and activities must be considered in conjunction with the effects of other past and present Federal, state, or private activities, as well as the cumulative effects of reasonably certain future state or private activities within the action areas.

2.1 Action Areas

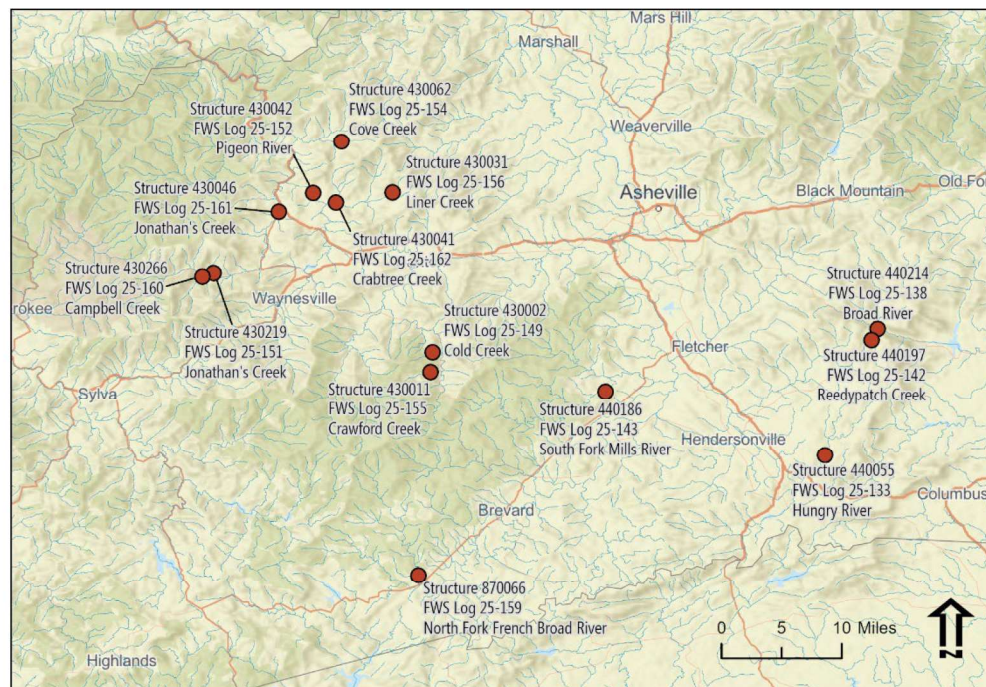
The project action areas are all areas of construction and include any portions of the project waterbodies, as indicated in Table 1, that may be affected by direct or indirect effects. The action areas are comprised of the:

- 1.) Project construction limits including all project related work such as tree-clearing and grading.
- 2.) Limits of sedimentation effect, anticipated to extend 100 meters (m) (328 feet (ft)) upstream from each bridge and 400 m (1,314 ft) downstream from each crossing structure in each respective river.

Table 3. Projects that are Likely to Adversely Affect (LAA) Listed Species

Structure Number	Waterbody	County	Location	Service Log No.	Taxa Determination
440055	Hungry River	Henderson	35.29855, - 82.35060	25-133	Plants: NE Bats: LAA Aquatics: NE
440214	Broad River	Henderson	35.45092, - 82.2873	25-138	Plants: NE Bats: LAA Aquatics: NE
440197	Reedypatch Creek	Henderson	35.43759, - 82.29491	25-142	Plants: NE Bats: LAA Aquatics: NE
440186	South Fork Mills River	Henderson	35.37579, - 82.61464	25-143	Plants: NE Bats: LAA Aquatics: LAA
430002	Cold Creek	Haywood	35.42304, - 82.82276	25-149	Plants: NE Bats: LAA Aquatics: NE
430219	Jonathan's Creek	Haywood	35.5181, - 83.08622	25-151	Plants: NE Bats: LAA Aquatics: NE
430042	Pigeon River	Haywood	35.61439, - 82.96665	25-152	Plants: NE Bats: LAA Aquatics: NE
430062	Cove Creek	Haywood	35.67633, - 82.93224	25-154	Plants: NE Bats: LAA Aquatics: NE
430011	Crawford Creek	Haywood	35.39952, - 82.82522	25-155	Plants: NE Bats: LAA Aquatics: NE
430031	Liner Creek	Haywood	35.61479, - 82.87074	25-156	Plants: NE Bats: LAA Aquatics: NE
870066	North Fork French Broad River	Transylvania	35.15461, - 82.84002	25-159	Plants: NE Bats: LAA Aquatics: NE
430266	Campbell Creek	Haywood	35.51388, - 83.09998	25-160	Plants: NE Bats: LAA Aquatics: NE
430046	Jonathan's Creek	Haywood	35.59170, - 83.00759	25-161	Plants: NE Bats: LAA Aquatics: NE
430041	Crabtree Creek	Haywood	35.60272, - 82.93927	25-162	Plants: NE Bats: LAA Aquatics: NE

Figure 1. Projects that are Likely to Adversely Affect (LAA) Listed Species



2.2 Project Description

The widespread infrastructure failure of numerous DOT bridges and roadways due to TS Helene necessitates an expedited design build repair/replacement process and batched consultation response. Consequently, specific details regarding the proposed project designs in Table 1 and associated action area impact details are not yet finalized. However, project activities and estimated impacts, based on the established practices of NCDOT's crossing structure replacement work, are available. At the time of this consultation, it is anticipated that most replacement bridges will be constructed using concrete box beam or cored slab designs. The general and expected elements of these crossing structure replacement projects are described below. The current estimated timeline for completion of these projects is late fall of 2026.

In-water impacts

Considering the range in structure and waterbody sizes analyzed in this review, and basing amounts on past similarly-sized structure and waterbody NCDOT crossing structure projects in WNC, the estimate of combined temporary and permanent in-water impacts for these projects range from 0.01 – 0.35 acres (or 4,356 – 15,246 square feet) per structure. Some structure replacements will fall in the lower portion of that range of in-water impacts while some will fall in the higher range. These impacts may be in the form of work pad causeways, bent removal and/or placement, and placement of stream-bank stabilization materials.

Tree Clearing, Access Roads, and Demolition

The maximum estimate for tree clearing per structure replacement location is 0.10 acre. That amount will likely be less at most locations, given the variability in site conditions and the extreme scour (and resulting loss of riparian vegetation) during TS Helene flooding. The season during which clearing will

occur is not known for each location but is assumed to occur during any time of year, including summer months. Clearing and grading will occur to allow for access roads and general construction functionality.

Where damaged structures or portions of damaged structures remain in place, demolition will occur. The details of demolition activities and seasonality of demolition will vary by project, with an assumption that these activities will occur during any time of year, including summer months.

2.3 Avoidance and Minimization and Conservation Measures

NCDOT will employ the following agency Standards, Guidelines, and Best Practices to avoid and minimize project mediated activities that could negatively impact listed/proposed species or their habitat.

2.3.1 Avoidance and minimization measures (AMMs)

General (regardless of species): The following General AMMs will be implemented on all projects to minimize impacts to listed/proposed species and habitat:

General AMM1. NCDOT will ensure all operators, employees, and contractors working in areas of suitable habitat for federally listed/proposed species are aware of all NCDOT environmental commitments, including all applicable AMMs and all associated NCDOT guidance documents.

General AMM2. Best management practices (BMP) and sediment and erosion control (SEC) measures will be utilized to prevent non-point source pollution, control storm water runoff, and minimize sediment damage to avoid and reduce overall water quality degradation.

General AMM3. Areas of disturbance, such as tree clearing, grubbing, and grading, will be limited to the maximum extent possible.

Aquatics- General AMMs will minimize impacts to listed/proposed aquatic species and **to the maximum extent possible** the following AMMs be incorporated into project work – though implementation of all aquatic AMMs below cannot be guaranteed at the time of this consultation, given the scale, scope, and timeline constraints addressed previously:

- Aquatic AMM Structure – To the maximum extent possible, structure will be built in the same location as the previous structure, with minimal impact [bents] to water resource, built to today's improved highway and hydraulic standards.
- Aquatic AMM Equipment – To the maximum extent possible, heavy machinery will not be utilized within the waterbody. Additionally, staging and storage areas for equipment and materials will be managed in such a way to ensure that potential spills and leaks do not have access to the waterbody.
- Aquatic AMM Temporary and Permanent Fill – Any temporary fill (i.e. causeways) or permanent (i.e. bents/piers) fill in excess of what was previously present will be avoided and minimized to the maximum extent possible.
- Aquatic AMM Abutments - Existing abutments will be completely removed unless removal results in destabilizing of banks or increases the adverse effect to listed/proposed aquatic species.

- Aquatic AMM Deck Drains – Deck drains that empty directly to the waterbody below will not be implemented on new bridge designs. Surface water drainage transport will be designed to incorporate improved treatment prior to drainage entering the waterbody.
- Aquatic AMM Erosion Control Matting – Coir fiber matting will be utilized instead of plastic or other synthetic matting.

Bats - General AMMs will minimize impacts to listed/proposed bats. **To the maximum extent possible**, the following AMMs will also be incorporated into project work – though implementation of all bat AMMs below cannot be guaranteed at the time of this consultation, given the scale, scope, and timeline constraints addressed previously:

- Bat AMM Noise - Percussive activities will occur only after the tree clearing within the action area has been completed, helping to reduce the exposure of any tree-roosting bats within the action area to high decibel noise.
- Bat AMM Lighting - No new lighting will be added to the action area. Any lighting needed for night work will be directed at the work area and shielded from surrounding waters/landscape, only on when needed, no brighter than necessary, and blue light emissions will be limited.
- Bat AMM Riparian Planting – Disturbed riparian areas will be replanted with native, fast-growing tree and shrub species where feasible, with the understanding that plantings likely cannot be done in utility/drainage/construction easements.

2.3.2 Conservation Measures (CMs)

CMs represent actions, pledged in the project description, that the action agency will implement to further the recovery of the species under review. The beneficial effects of CMs are considered in making determinations of whether the projects will jeopardize the species under consideration in this document.

Aquatic CM: Aquatics Contribution - For individual bridge projects that are LAA aquatic species, the NCDOT will contribute \$10,000 for each project structure to the N.C. Nongame Aquatic Species Fund.

Aquatic CM: Relocation - For projects that are LAA aquatic species, prior to project construction, the Service Asheville Field Office NCDOT liaison and the NC Wildlife Resources Commission NCDOT liaison will be contacted to discuss the potential for aquatic species relocation, if applicable and practicable.

Bat CM - Tree Clearing Bat Fund Contribution: For individual bridge projects that are likely to adversely affect bat species during tree removal, the NCDOT will contribute a payment* to the N.C. Nongame Terrestrial Species Fund (or other Service-approved Fund) in support of the recovery of federally protected bat species.

Bat CM Structure Removal Bat Fund Contribution: For individual bridge projects that are LAA bat species during structure removal, the NCDOT will contribute a payment** to the N.C. Nongame Terrestrial Species Fund (or other Service-approved Fund) in support of the recovery of federally listed bat species.

*Contributions made will be based on a 2:1 ratio multiplier specified for the non-volant pup season (May 15-July 31). This ratio offers the most protective coverage as time of year clearing will occur is unknown. The amount will be determined using the United States Department of Agriculture Farm Real Estate Value for North Carolina for 2024 (\$5,190/acre).

https://www.nass.usda.gov/Publications/Todays_Reports/reports/land0824.pdf

If tree clearing is unknown, an assumed clearing acreage of 0.1 acre will be used based on estimates from previous clearing work at bridges (NCDOT 2015). The formula is calculated as follows:

$\$5,190 \times 0.1 \text{ ac} = 519 \times 2 \text{ (critical life stage multiplier)} = \$1,038 \text{ contribution}$

**Structures with documented bat use are generally larger than the average bridge, with a median size of 0.10 acre (length x width) (KYTC 2019). Therefore 0.10 acre per bridge is used to calculate the amount of suitable bat habitat lost for projects involving structure impacts. However, the displacement affects to bats that must find a new roost while a new structure is being constructed are considered temporary in nature because the new structure will be replaced with a similar structure that will provide adequate roosting habitat again. Therefore, the ratio multiplier was reduced to 1.5:1 vs 2:1 used in the tree clearing contribution explained above. If the structure is demolished after March 15 when bats return to the landscape, a payment will be required, if not, no payment is required. The formula is calculated as follows:

$\$5,190 \times 0.1 \text{ ac} = 519 \times 1.5 \text{ (temporary affect multiplier)} = \$779 \text{ contribution/structure}$

3. Status of the Species

This section summarizes best available data about the biology and current condition of the Appalachian elktoe, gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), and tricolored bat (*Perimyotis subflavus*) throughout their ranges that are relevant to formulating an opinion about the actions. More in-depth species information such as species status assessments can be found at the species-specific pages at the Service's Environmental Conservation Online System (ECOS): ecos.fws.gov/ecp/

3.1 Appalachian Elktoe

Scientific Name:	<i>Alasmidonta raveneliana</i>
Status:	Endangered
Date of Listing:	November 23, 1994
Critical Habitat:	Designated in 2002

3.1.1 Description and Life History

The Appalachian elktoe is a freshwater mussel endemic to the Blue Ridge Physiographic Province of WNC. This species exists in several small populations in the Upper Tennessee River system of North Carolina and Tennessee, inhabiting relatively shallow medium-sized creeks and rivers with cool, well-oxygenated, and moderate- to fast-flowing water.

Lea (1834) described the Appalachian elktoe from the French Broad River (FBR) system in North Carolina. Its shell is thin but not fragile, oblong, and somewhat kidney-shaped, with a sharply rounded anterior margin and a broadly rounded posterior margin. The periostracum (outer shell) of the Appalachian elktoe varies in color from dark brown to yellowish-brown in color. Rays may be prominent in some individuals, usually on the posterior slope, and nearly obscure in other specimens. The reproductive cycle of the Appalachian elktoe is similar to that of other native freshwater mussels. Males

release sperm into the water column, which is then taken in by the female through their siphons during feeding and respiration. The females retain the fertilized eggs in their gills until the larvae (glochidia) fully develop, after which they are released into the water and attach to appropriate species of fish hosts. Juveniles then detach from their fish host and sink to the stream bottom where they may continue to develop, provided that suitable substrate and water conditions are present (Service 2002).

3.1.2 Status and Distribution

The Appalachian elktoe is known only from the mountain streams of WNC and eastern Tennessee. It is found in gravelly substrates often mixed with cobble and boulders, in cracks of bedrock, and in relatively silt-free, coarse sandy substrates (Service 1996).

Although the complete historic range of the Appalachian elktoe is unknown, available information suggests that the species once lived in most of the rivers and larger creeks of the upper Tennessee River system in North Carolina, with the possible exception of the Hiwassee and Watauga River systems. In Tennessee, the species is known only from its present range in the main stem of the Nolichucky River. At the time of listing, two known populations of the Appalachian elktoe existed: the Nolichucky River, including its tributaries (the Cane River and the North Toe River); and the Little Tennessee River and its tributaries. The record in the Cane River was represented by one specimen found just above its confluence with the North Toe River (Service 1996). Since listing, the Appalachian elktoe has been found in additional areas. These occurrences include extensions of the known ranges in the Nolichucky River (North Toe River, South Toe River, and Cane River) and the Little Tennessee River (Tuckasegee River and Cheoah River) as well as a rediscovery in the FBR basin (Pigeon River, Little River, Mills River, and the main stem of the FBR). Many of these newly discovered populations are relatively small in number and range.

The Appalachian elktoe has experienced declines in two populations across its range. A sudden die-off in the Little Tennessee River, (once considered the largest and most secure population), occurred from 2005 – 2015. Surveys in 2017, 2018 and 2019 produced very low numbers, indicating a remnant population only a tiny fraction of its previous size. The species has also declined in the lower portion of the Nolichucky River. Appalachian elktoe were once common in all three tributaries of the Nolichucky River: North Toe, South Toe and Cane Rivers. In 2008, a fish kill resulted in the death of most of the Appalachian elktoe in the Cane River. Beginning in 2013, the Appalachian elktoe population in the lower South Toe River declined steeply which coincided with a major highway construction project and only occurred downstream of receiving streams in the project footprint. Appalachian elktoe are still present in the North and South Toe Rivers, but at reduced densities. It appears that the North Toe population is limited by urban runoff and mining effects to the river. The other populations of Appalachian elktoe appear to be stable (Tuckasegee, Cheoah, and Pigeon Rivers) or expanding (FBR). Prior to 2004, the FBR population appeared to be confined to two tributary streams (Little River and Mills River), but over the last few years the known range of Appalachian elktoe in the main stem of the FBR has expanded and it now appears to be well established, albeit at low density, over a broad area. At the time of this document, impacts to Appalachian elktoe from TS Helene in September of 2024 remain largely unknown. Extreme flooding and scour in many of the rivers occupied by the species is believed to have resulted in reduced abundance in several locations, while other areas likely lost fewer individuals.

3.1.3 Threats

The decline of the Appalachian elktoe throughout its historic range has been attributed to a variety of factors, including sedimentation, point and nonpoint-source pollution, and habitat modification (impoundments, channelization etc.). The low numbers of individuals and the restricted range of most of

the surviving populations make them extremely vulnerable to extirpation from a single catastrophic event or activity. Catastrophic events may consist of natural events, such as flooding or drought, as well as human influenced events, such as toxic spills associated with highways or railroads.

Natural flooding events combined with alteration of watersheds can lead to large fluctuations in abundance observed in Appalachian elktoe populations. Record catastrophic flooding in the range of Appalachian elktoe occurred during TS Helene during late September 2024. Many areas inhabited by Appalachian elktoe were severely damaged by erosive flooding, bedload scour, and bank failures. Observations immediately after the flooding in October 2024 revealed that despite severe flooding, certain portions of Appalachian elktoe occurrences in North Carolina, such as the upper Pigeon River, were relatively intact. Those observations indicate that the species is likely to remain in most of the affected areas, though individual numbers were likely greatly reduced in many inhabited locations. Portions of the FBR basin experienced catastrophic flooding in late summer 2021 due to the remnants of Tropical Storm Fred. The flooding likely resulted in loss of Appalachian elktoe individuals within populations in the hardest-hit portions of the Pigeon, Mills and French Broad Rivers.

Siltation resulting from improper erosion control of various types of land use, including agriculture, forestry, road construction, and development, has been recognized as a major contributing factor to the degradation of mussel populations (Service 1996). Siltation degrades substrate and water quality, increasing potential exposure to other pollutants, and direct smothering of mussels (Ellis 1936). The abrasive action of sediment on mussel shells has been shown to cause erosion of the outer shell, which allows acids to reach and corrode underlying layers (Harman 1974).

Sewage treatment effluent has been documented to significantly affect the diversity and abundance of mussel fauna (Goudreau *et al.* 1988). Goudreau *et al.* found that recovery of mussel populations might not occur for up to 2 river miles (3.22 kilometers) below points of chlorinated sewage effluent. Most of the water bodies where Appalachian elktoe still exist have relatively few point source discharges within the watershed and are rated as having "good" to "excellent" water quality by the North Carolina Division of Water Resources.

The introduction of exotic species, such as the Asian clam (*Corbicula fluminea*) and zebra mussel (*Dreissena polymorpha*), pose significant threats to native freshwater mussels. Competitive interactions for space, food, and oxygen between these species and native mussels, possibly at the juvenile stages (Neves and Widlak 1987) are the main concerns. At the time the Appalachian elktoe was listed, the Asian clam was not known from the stretch of the Little Tennessee River that it occupies; however, it has been observed in the Little Tennessee River in recent years and as mentioned earlier, may be a contributing factor to the decline of that population. When the Appalachian elktoe was listed, it was speculated that, due to its restricted distribution, it "may not be able to withstand vigorous competition" (Service 1996).

3.2 Gray Bat

Scientific Name:	<i>Myotis grisescens</i>
Status:	Endangered
Date of Listing:	April 28, 1976
Critical Habitat:	None designated

3.2.1 Description and Life History

The gray bat is a medium-sized insectivorous bat with an overall length of about 3.5 inches and a wingspan of 10 to 11 inches. As the name implies, gray bats have gray fur, but the hair often bleaches to

reddish-brown by early summer. The gray bat largely occurs in limestone karst areas, meaning a landscape marked by caves, sinkholes, springs and other features, of the southeastern and midwestern United States.

Gray bats use caves year-round for roosting and hibernating. Seasonal occupancy of caves differs between summer roost and winter hibernacula, and gray bats are known to migrate more than 300 miles between the two. While gray bats are predominantly found roosting in caves, they are known to roost in structures including buildings, bridges and culverts. Bats emerge from summer roosts early in the evening and forage along waterbodies adjacent to forested areas. The species has been documented traveling from a few miles to 20 or more miles between their day roosts and nightly foraging areas.

Adult bats mate upon arrival at the wintering caves in September or early October. Hibernation occurs in deep vertical caves in the winter, where colder temperatures are preferable. Gray bats require consistently cold temperatures to maintain hibernation and conserve energy in the winter months. The adult females will emerge from hibernation in late March or early April. At that time, the females who have mated will begin their pregnancy, while dispersing to maternity caves. Males and juveniles emerge shortly after the females and disperse to bachelor caves. Gray bats are documented using bridges and culverts as roosting habitat during the spring, summer, and fall and show strong philopatry to their summer ranges and typically use the same roost sites year after year (Tuttle 1976; Martin 2007). Gray bats are most commonly observed in bridges of concrete material and their preferred roosting location is in the vertical expansion joints of a bridge deck above piers (NCDOT 2023a), though they can also roost in clogged deck drains and other sheltered areas on crossing structures. According to approximately 2,000 bridge surveys conducted throughout WNC from 2000 - 2023, gray bats have been recorded roosting in bridges at a usage rate of 3% (NCDOT 2023a), with bridge use observed in the covered area from March – November. Up to 1,000 individuals, including males and females, have been observed day-roosting throughout the summer in expansion joints between box beams at two separate bridges (Weber et al. 2020). Sporadic summer use of other concrete type bridges has also been noted for smaller numbers of day-roosting gray bats (NCDOT, 2023a). Gray bats have also been observed within culverts, most commonly of concrete material.

Gray bats primarily forage over open water bodies, such as rivers, streams, lakes, and reservoirs, and associated riparian areas (Tuttle 1976; LaVal et al. 1977; Weber et al. 2020). While foraging, the gray bat consumes a variety of insects, most of which are aquatic (Brack and LaVal 2006). Bats typically travel individually or in small groups that forage in an area for a short period before moving to another area. Studies suggest that gray bats visit multiple foraging areas during the night and travel frequently between these areas.

3.2.2 Status and Distribution

The primary range of gray bats is concentrated in the cave regions of Alabama, Arkansas, Kentucky, Missouri and Tennessee, though its overall range stretches from Virginia to Oklahoma, and Missouri to Alabama. WNC is on the eastern edge of the bat's range. In North Carolina, the gray bat is currently documented from 14 western counties and is possible in an additional 10 counties. Most gray bat occurrences in WNC are centered on the French Broad and Pigeon River watersheds. Gray bats are generally present in North Carolina from March 15 to November 15, when they leave for winter hibernacula. It is believed that many of the gray bats in North Carolina migrate to hibernacula in Tennessee, using the French Broad River as a commuting pathway. The closest active hibernaculum is near Newport, Tennessee (Weber et al. 2020), approximately 20 miles from the border with Haywood and Madison Counties in North Carolina.

Ellison et al. (2003) of the U.S. Geological Survey (USGS) statistically analyzed 1,879 observations of gray bats obtained from 334 roost locations in 14 south-central and southeastern states. They determined that 94.4% of the populations showed stable or increasing populations while 6% revealed a decreasing population. For populations where there was a downward population trend, decreases in population numbers were mostly attributed to continued problems with human disturbance. This increasing population trend has been reflected in the work of Sasse et al. (2007), Martin (2007), and again by Elliott in 2008 in looking at high-priority caves. It is estimated that more than 95% of the species range-wide population hibernate in only 9 caves.

Emergence counts conducted by Indiana State University researchers at known roosts in WNC from 2018-2019 suggested there were at least 2,820 gray bats in the French Broad River basin (Weber et al. 2020). Due to 2024 flooding associated with TS Helene, these numbers may be significantly lower now, though at the time of this document, the impacts from Helene on imperiled species numbers are still unknown. Throughout WNC, there are 58 current element occurrences of the gray bat based on N.C. Natural Heritage Program, NCWRC, and NCDOT records; most are from built structures (largely bridges). The number of gray bats found at each occurrence range from 1 to about 1,500 bats, with some roosts surveyed in the Weber et al. (2020) study hosting >1,000 gray bats during certain times of the season. The most recent winter population estimate of gray bats in the closest hibernaculum to the action area (Rattling Cave, near Newport TN) was 250,689 bats (TWRA 2019).

3.2.3 Threats

Cave disturbance and alteration, loss of forested habitat, pollution of waterways, and significant natural factors including those caused by climate change (flooding, freezing, and forest destruction) are threats to gray bats. Gray bats have been infected by the invasive fungus *Pseudogymnoascus destructans*, the causative agent of white-nose syndrome (WNS), a fungal disease contributing to the declines of several bat species in the U.S.; however, WNS is not considered a major threat to the species.

3.3 Indiana Bat

Scientific Name:	<i>Myotis sodalis</i>
Status:	Endangered
Date of Listing:	March 11, 1967
Critical Habitat:	Established in 1976

3.3.1 Description and Life History

The Indiana bat is a temperate, insectivorous, migratory bat that hibernates colonially in caves and mines in the winter. The species is widely distributed in a variety of wooded habitats, ranging from highly fragmented woodlands in agricultural landscapes to extensively forested areas. Roosting areas are preferred in forest stands with uneven-aged trees that can supply the canopy with large, dead trees in more direct sunlight and are near foraging areas and water sources. Some roosts do occur in living trees (primarily shagbark hickory) or damaged trees from several species. During winter, Indiana bats are restricted to suitable underground hibernacula. Most of these sites are caves located in karst areas of the east-central United States; however, Indiana bats also hibernate in other cave-like locations, including abandoned mines.

Maternity colonies form in early May and remain together until August. Females will rear a single pup from May into July. Temperatures and weather will alter the length of the time a pup will stay in the primary roost and females will relocate the pup to another snag to manage temperatures and

environmental conditions. In summer, most reproductive females occupy roost sites under the exfoliating bark of dead trees that retain large, thick slabs of peeling bark. Habitats in which maternity roosts occur include riparian zones, bottomland and floodplain habitats, wooded wetlands, and upland communities. Indiana bats typically forage in semi-open to closed (open understory) forested habitats, forest edges, and riparian areas.

Fall swarming and mating takes place between August and November and are at different sites from the actual hibernaculum. Typically, hibernation begins in November and lasts through March. Several variables influence hibernacula selection, but generally Indiana bats prefer caves with stable temperatures that remain below 50°F with humidity greater than 74 percent. Indiana bats emerge from hibernation in March or April and remain near the hibernacula to refuel before migrating to summer ranges. Migration distances vary but have been observed greater than 300 miles. Bats may be concentrated near hibernacula and often roost in trees during fall swarming and spring staging.

Indiana bats primarily feed on flying insects, including some from orders with both an aquatic and terrestrial stage. Numerous foraging habitat studies have found that Indiana bats often forage in closed to semi-open forested habitats and forest edges located in floodplains, riparian areas, lowlands, and uplands; however, old fields and agricultural fields are also used (Service 2007). Drinking water is essential, especially when bats actively forage. Indiana bats obtain water from streams, ponds, and water-filled road ruts in forest uplands. Consistent use of moths, flies, beetles, and caddisflies throughout the year at various colonies suggests that Indiana bats are selective predators to a certain degree, but incorporation of other insects into the diet also indicates that these bats can be opportunistic (Murray and Kurta 2002).

3.3.2 Status and Distribution

Indiana bats can be found primarily in the midwestern and eastern part of the United States, with a range stretching east to west from Vermont to Oklahoma, and north to south from Michigan to Alabama, and comprising approximately 403,883 square miles. WNC falls on the southeast edge of their range. No known active hibernacula are present in WNC, and summer maternity colonies are widely dispersed, with most locations unknown (Service 2019a).

According to the 2024 population status updated (Service 2024), range-wide there are approximately 631,786 Indiana bats, using 194 hibernacula across 15 states. The nine most populous hibernacula are home to 91% of Indiana bats, though none are in North Carolina or adjacent states. The Service divides the Indiana bat range into four recovery units, delineating evidence of population discreteness and genetic differentiation, differences in population trends, and broad-level differences in macrohabitats and land use. North Carolina is part of the Appalachia Recovery Unit, which includes all of West Virginia, as well as portions of Pennsylvania, Virginia, and Tennessee. The Appalachian recovery unit represents 0.2% of the overall Indiana bat population.

There are 20 element occurrences of the Indiana bat in WNC based on NCNHP records, five of these are considered historical. There are several records of Indiana bats roosting in concrete-material bridges associated with a water crossing and of concrete material (NCDOT 2023a). According to approximately 2,000 bridge surveys conducted throughout WNC from 2000 - 2023, Indiana bats have been recorded roosting in WNC bridges at a usage rate of 0.2% (NCDOT 2023a) with use documented to occur from March - July. There are currently no records in North Carolina of Indiana bats roosting in culverts (NCDOT 2023b), though they have been found in culverts in other states. White Oak Blowhole cave in Tennessee (Great Smoky Mountains National Park) is located within five miles of the North Carolina

border. Therefore, part of the designated spring staging and fall swarming habitat associated with this hibernaculum extends into Swain County, NC.

3.3.3 Threats

Threats to the Indiana bat include modifications to caves, mines, and surrounding areas that change airflow and alter microclimate in the hibernacula. Human disturbance and vandalism pose significant threats during hibernation through direct mortality and by inducing arousal and consequent depletion of fat reserves. Natural catastrophes can also have a significant effect during winter because of the concentration of individuals in a relatively few sites. During summer months, possible threats relate to the loss and degradation of forested habitat. Migration pathways and swarming sites may also be affected by habitat loss and degradation. Although populations have increased in recent years, WNS poses an additional threat that has caused and may continue to cause population declines.

3.4 Northern long-eared Bat

Scientific Name:	<i>Myotis septentrionalis</i>
Status:	Endangered
Date of Listing:	April 1, 2015 as Threatened; November 30, 2022 as Endangered
Critical Habitat:	None designated

3.4.1 Description and Life History

The northern long-eared bat is a wide-ranging species, found in 37 states and eight provinces in North America. The species typically overwinters in caves and mines and spends the remainder of the year in forested habitats. As its name suggests, the northern long-eared bat is distinguished by its long ears, particularly as compared to other bats in the genus *Myotis*.

Northern long-eared bats are a forest bat species that roosts in a variety of forest types and structures. They are known to roost in trees and have also been documented using roost sites such as buildings, artificial roosts, and bridges. During the active season, northern long-eared bats typically roost singly or in maternity colonies underneath bark or more often in cavities or crevices of both live trees and snags (Service 2023). Males' and non-reproductive females' summer roost sites may also include cooler locations, such as caves and mines (Service 2023). With one exception, all bridge roost records in Northern Carolina are associated with a water crossing. There are no records of northern long-eared bats roosting in culverts in North Carolina, though they have been documented using culverts in other states. Northern long-eared bats will overwinter in caves or mines and have been documented using railroad tunnels, storm sewers, and bunkers. Length of hibernation varies depending on location. They may hibernate singly or in small groups and can be found hibernating in open areas but typically prefer caves with deep crevices, cracks, and bore holes that protect from drafts. They typically hibernate from September or October to March or April. More than 780 hibernacula have been documented within the northern long-eared bat range.

Prior to hibernation between mid-August and mid-November, bat activity will increase during the evenings at the entrance of a hibernaculum (fall swarming). Suitable fall swarming habitat is similar to roosting, foraging, and commuting habitat selected during the summer and is most typically within 4-5 miles of a hibernaculum (Service 2023). Likewise, in the spring they emerge from and stage near hibernacula before moving to maternity areas typically in early April to mid-May; however, they may leave as early as March. Northern long-eared bats also roost in trees near hibernacula during spring staging, and Thalken et al. (2018) found that roost trees were situated within 1.2 miles (2km) of

hibernacula during spring staging and the early maternity season. The species migrates relatively short distances between maternity areas and hibernacula.

Northern long-eared bats are more likely to forage under the canopy on forested hillsides and ridges (Nagorsen and Brigham 1993) rather than along riparian areas (Brack and Whitaker 2001; LaVal et al. 1977). Because of this, alternative water sources like seasonal woodland pools may be an important source of drinking water for these bats (rather than just streams and ponds; Franci 2008). Mature forests may be an important habitat type for foraging (Service 2015). Northern long-eared bats have a diverse diet including moths, beetles, flies, leafhoppers, caddisflies, and arachnids (Service 2020a), which they catch while in flight or by gleaning insects off vegetation (Ratcliffe and Dawson 2003).

3.4.2 Status and Distribution

The species' range includes all or portions of 37 eastern and mid-western states and the District of Columbia in the U.S. The northern long-eared bat's range also includes eight Canadian provinces. In WNC, the species range includes all or portions of 26 counties in the western portion of the state.

Prior to the emergence of WNS, northern long-eared bat was abundant and widespread throughout much of its range with 737 occupied hibernacula, a maximum count of 38,181 individuals and its range being spread across >1.2 billion acres in 29 states and 3 Canadian provinces. Numbers vary temporally and spatially, but abundance and occurrence on the landscape were stable (Cheng et al. 2022, p. 204; Wiens et al. 2022, p. 233). Currently, declining trends in abundance and occurrence are evident across much of northern long-eared bat's summer range. Range-wide summer occupancy declined by 80% from 2010–2019. Data collected from mobile acoustic transects found a 79% decline in range-wide relative abundance from 2009–2019 and summer mist-net captures declined by 43–77% compared to pre-WNS capture rates.

There are approximately 169 element occurrences for northern long-eared bat in NC, based on N.C. Natural Heritage Program records, 19 of which are considered historical. The number of bats found at each occurrence ranges from one to more than 80. There have been 22 documented hibernacula, all in caves or mines; however, northern long-eared bats have not been observed using hibernacula in North Carolina since 2014 (NCWRC personal communication September 2022). The Service estimates that there has been an occupancy drop of 85% and a 24% loss of winter colony sites across the Southeast Representation Unit (RPU) overall since 2006 when white-nose syndrome was first documented (Service 2022a).

3.4.3 Threats

The primary factor influencing the viability of the northern long-eared bat range-wide population is WNS. Other primary factors that influence the decline in northern long-eared bat numbers include wind energy mortality, effects from climate change, and habitat loss.

3.5 Tricolored Bat

Scientific Name:	<i>Perimyotis subflavus</i>
Status:	Proposed Endangered
Date of Proposed Listing:	September 14, 2022
Critical Habitat:	None proposed

3.5.1 Description and Life History

The tricolored bat is one of the smallest bats in North America. The once common species is wide-ranging across the eastern and central US and portions of southern Canada, Mexico and Central America. As its name suggests, the tricolored bat is distinguished by its unique tricolored fur that appears dark at the base, lighter in the middle and dark at the tip.

During the winter, tricolored bats are found in caves and mines, although in the southern US, where caves are sparse, tricolored bats are often found roosting in culverts. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. Additionally, tricolored bats have been observed roosting among pine needles, eastern red cedar (*Juniperus virginiana*), within artificial roost structures, beneath porch roofs, bridges, concrete bunkers, and rarely within caves. Female tricolored bats form maternity colonies and switch roost trees regularly. Maternity colonies typically consist of 1 to several females and pups. They usually have twins in late spring or early summer, which are capable of flight in four weeks.

During the winter, across much of their range tricolored bats hibernate in caves and mines; although, in the southern United States, where caves are sparse, they often hibernate in culverts, as well as sometimes in tree cavities and abandoned water wells. In the southern US, hibernation length is shorter compared to northern portions of the range and in the warmest portions of its range. Hibernating tricolored bats do not typically form large clusters; most commonly roost singly, but sometimes in pairs, or in small clusters of both sexes away from other bats (Service 2021). Tricolored bat hibernacula following population crashes from WNS generally host <100 individuals (Service 2021), though solitary hibernation can often occur with this species (Whitaker and Hamilton 1998).

Before entering hibernacula for the winter, tricolored bats demonstrate ‘swarming’ behavior. The peak swarming period for tricolored bats in much of WNC/eastern Tennessee generally starts in mid to late August and extends into November and is a sensitive period for bats. Suitable fall swarming habitat is similar to roosting, foraging, and commuting habitat selected during the summer. Spring staging is the time period between winter hibernation and spring migration to summer habitat (Service 2023). During this time, bats begin to gradually emerge from hibernation, exit the hibernacula to feed, but re-enter the same or alternative hibernacula to resume daily bouts of torpor (state of mental or physical inactivity). Tricolored bats also roost in trees near hibernacula during spring staging.

Tricolored bats are opportunistic feeders and consume small insects including caddisflies, moths, beetles, wasps, flying ants and flies. The species most commonly forages over waterways and along forest edges

3.5.2 Status and Distribution

Tricolored bats have a very wide range that encompasses most of the eastern US from Canada to Florida and west to New Mexico (39 states). They can be found throughout North Carolina and are one of the most commonly encountered cave-dwelling species seen in winter, albeit at much lower densities than prior to the arrival of WNS in the state.

There are 147 NC element occurrences of the tricolored bat based on N.C. Natural Heritage Program records, seven of which are considered historical. The number of bats found at each occurrence range from 1 to 3,000 bats. There have been 79 tricolored bat hibernacula documented, including caves (50), mines (22), root cellars (4), and culverts (3).

For tricolored bats, the Service split the bat's range into three Representation Units (RPU), two of which, the Northern and Southern RPUs, include the western and eastern halves of WNC, respectively. The Service estimates that, since 2006, the Northern RPU has experienced a 17% decline in summer occupancy and a 57% decline in the number of winter colonies, while the Southern RPU has experienced a 37% decline in summer occupancy and a 24% decline in the number of winter colonies (Service 2021).

3.5.3 Threats

WNS is the primary driver of the species' decline and is predicted to continue to be the primary influence into the future. Wind energy-related mortality is also considered a consequential driver to the bat's viability. Although habitat loss is considered pervasive across the species' range, severity has likely been low given historical abundance and spatial extent; however, as tricolored bat's spatial extent is projected to decline in the future (i.e., consolidation into fewer winter and summer colonies) negative impacts (e.g., loss of a hibernaculum or maternity colony) may be significant.

4. Environmental Baseline

The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process [50 CFR §402.02].

The project action areas contain the existing crossing structures and the roadway approaches, along with the existing utilities and surrounding riparian areas in which project work will occur and are located in the Environmental Protection Agency Blue Ridge Ecoregion in WNC. Past impacts include the original construction and placement of the crossing structures within waterbodies to facilitate transportation in the surrounding locations. Because this document addresses several projects, more detailed information regarding other human activities at each location is not included for the purposes of this consultation review.

4.1 Appalachian Elktoe Within the Action Areas

Flooding and scour from TS Helene impacted all waterbodies included in this consultation. Appalachian elktoe presence within an action area was identified at only one bridge: Henderson County bridge 186. Henderson County bridge 186 that spans South Fork Mills River experienced severe substructure, decking, approach slab, and railing damage, as well as damage to the sloped land surrounding the bridge. Post-storm in-water surveys have not been conducted at this time, given all the constraints already addressed, though discussions regarding site conditions as observed by the Service's Asheville Field Office aquatics recovery lead and/or aquatic biologists with NCWRC and NCDOT's Biological Surveys Group have occurred. While the major flood and scour event damaged the crossing structure and degraded the habitat, the potential for individual Appalachian elktoe to still occur within the action area remains. At the time of this consultation, those individual numbers are believed to be reduced from pre-Helene conditions but are not believed to be zero. One Appalachian elktoe is estimated based on pre-TS Helene estimates and anticipated storm losses.

4.2 Listed and Proposed Bats Within the Action Areas

Structures

Twenty-one of the thirty bridges included in this batch of TS Helene-related projects were completely destroyed. Of the remaining nine bridges, Henderson County structures 055, 186, 197, and 214, and

Haywood County structures and 042, still provide suitable roosting habitat, although significantly reduced and degraded from pre-storm conditions. For gray bats, primary roost structures can support several hundred to over 1,000 individuals, while most structures with observed roosting gray bats in WNC contain 1 to 10 individuals. The structures supporting those higher numbers of gray bats, whether culvert or bridge, are larger than average. The northern long-eared bats and Indiana bats observed roosting on bridges in WNC is between 1 and 2 individuals at any given time. In more detail, Natural Heritage data shows 2 gray bat bridge roost locations in Henderson County, 9 gray bat and 1 Indiana bat bridge roost locations in Haywood County, and 3 gray bat bridge roost locations in Transylvania County. There are currently no culvert roosting records for northern long-eared bat or Indiana bat in NC. Records of tricolored bat roosting in bridges and culverts in WNC consist mainly of 1-2 individual per structure. Within the action area of these damaged crossing structures, given size of the structures, the degraded and reduced roosting habitat available, and based on existing WNC data, it is estimated that 1 individual per species could be present within each structure at these crossing locations.

Trees

Gray bats are not considered “tree-roosting” species. While individuals have been observed utilizing trees in rare occasions, they are generally considered a cave/structure-specific roosting species; therefore, no gray bats are expected to be roosting in trees within the action areas. Northern long-eared bats and tricolored bats roost in trees during the warmer months. Of the 30 TS Helene-related bridge projects, 20 require no tree clearing. The remaining ten projects—Henderson County structure 197, Haywood County structures 002, 011, 031, 041, 046, 062, and 219, 266, and Transylvania County structure 066—may involve tree clearing, but no project anticipates clearing more than 0.1 acres. Given the minimal amount of riparian vegetation and trees remaining within the action areas, it is unlikely that a high number of bats would be utilizing the small amount of available habitat. Based on that rationale, 1 individual per species (of northern long-eared bat or tricolored bat) could be present in trees within the action area per crossing structure location.

5. Effects of the Action

Under section 7(a)(2) of the ESA, "effects of the action" refers to the consequences, both direct and indirect, of an action on the species or critical habitat. The effects of the proposed action are added to the environmental baseline to determine the future baseline, which serves as the basis for the determination in this Opinion. Should the effects of the Federal action result in a situation that would jeopardize the continued existence of the species, we may propose reasonable and prudent alternatives that the Federal agency can take to avoid a violation of section 7(a)(2).

5.1 Appalachian Elktoe

5.1.1 Proximity of the Action, Nature of the Effect, and Disturbance Duration

Based on the description of the action and the species' biology, stressors to the Appalachian elktoe have been identified and are outlined below. The proximity of these actions will be within the waters occupied by Appalachian elktoe [within the action area] and duration of disturbance is expected during the construction phase of project work.

5.1.2 Effects Analysis

Direct Impacts – Direct effects are caused by the action and occur at the same time and place (50 CFR 402.02).

In-water Work

In-water work, such as the placement of causeways, demolition of remnant structures (if any), and placement of hard materials for new bents/structures or for bank stabilization, is likely to occur at the project locations. Installation of a temporary causeway may result in adverse effects to Appalachian elktoe and their fish host species due to the potential to bury individuals and harm fish host individuals or disrupt passage or other behavior while they are in place. Causeways also constrict river flows, which could potentially modify the hydrology and physical habitat conditions upstream and downstream of the respective fill areas. Causeways may impact hydrology and the physical habitat of the river. Rock causeway material may be washed away during extremely high flow events, which may kill, crush, or bury individuals, or otherwise degrade mussel habitat downstream of the footprint. Causeways increase the risk of stream bed and bank scour. The habitat downstream of causeways may experience higher velocities until removal. Temporary causeways may also act as physical and high-velocity barriers to fish movement. Demolition and construction may result in the loss of materials in the waterbody. While this isn't expected, given the implementation of BMPs, it is still possible. Materials that aren't effectively contained during demolition or construction could serve to crush or bury aquatic species. Similarly, the placement of hard materials within the waterbody may result in crushing or burying Appalachian elktoe.

Alteration of Flows and Channel Stability

The initial construction of a crossing structure is known to cause changes in the flow of the stream and corresponding erosive processes that can alter the adjacent habitat. Channel instability occurs when scour results in degradation or when sediment deposition leads to aggradation (Rosgen 1996). Since most structures are being replaced in the same locations, any alteration of flows and channel stability associated with the new structures are anticipated to be minor and localized. That said, altering the existing in-water structures has the potential to create flow instability which could impact downstream habitat.

Turbidity and Sedimentation

Increases in turbidity and sedimentation within the action area during demolition and construction are expected. This can occur from in-water work and from the erosion of bare soil in and surrounding the construction zone, especially during heavy rain events. Sediment accumulations of less than one inch have been shown to cause high mortality in most mussel species (Ellis 1936). Adverse effects to mussels resulting from the accumulation of sediments include smothering, disruption of feeding and breeding activity, alteration of habitat, or some combination. Sediment and erosion control (SEC) devices, when properly designed and maintained, are expected to greatly reduce influxes of turbidity; however, heavy rain events can exceed SEC capacity, resulting in sediment releases which degrade mussel habitat in the vicinity.

In summary, the in-water work, flow and channel stability alteration, and turbidity and sedimentation within the action areas are likely to adversely affect Appalachian elktoe and take is expected. Take may occur in the form of killing, wounding, or harming individuals of the species.

Accidental Spills

The inadvertent spill or discharge of toxic pollutants, such as diesel fuel, hydraulic oil, and uncured concrete into action area waterbodies could occur during demolition and construction activities and result in mortality of Appalachian elktoe. The type, timing, amount, and proximity to the river of any accidental spills would determine the magnitude of effect to Appalachian elktoe, but may result in death, disrupt feeding or reproductive behaviors, influence animals to expend energy relocating to more favorable habitats, or otherwise reduce fitness. Significant spills resulting from negligent operation are possible, but unlikely to occur. Adhering to measures outlined in the AMMs and CMs will minimize the potential for accidental spills to occur.

Indirect Impacts – Indirect effects are defined as those that are caused by the proposed action and are later in time but are still reasonably certain to occur (50 CFR 402.02).

Operational Effects

Because these projects are limited to the replacement of damaged or destroyed crossing structures and their approaches, which will not result in changes to traffic volumes, any operational effects above the existing baseline conditions are not expected to occur; or, if they do occur, are expected to be minimal.

5.2 Gray Bat, Indiana Bat, Northern Long-eared Bat, and Tricolored Bat

5.2.1 Proximity of the Action, Nature of the Effect, and Disturbance Duration for Bats

Based on the description of the action and the species' biology, stressors to gray bat, northern long-eared bat, and tricolored bat have been identified and are shared below. The proximity of these actions will be within the entire action area of each project, including the structures, waterways, riparian zone, and any existing forested areas. Duration of disturbance is expected primarily during the construction phase of project work.

5.2.2 Effects Analysis for Bats

Replacement structures: Due to the constraints associated with the TS Helene response, such as the high volume of projects and timeline unknowns, the exact designs of replacement crossing structures are not known at the time of this document. However, according to information provided by NCDOT, most replacement bridge structures are expected to be either cored slab or box beam bridges. Such precast concrete bridges may provide suitable bat roosting habitat depending on factors such as spacing between beams/girders, arrangement above any bents, and other design elements that could result in potential roosting crevices. Generally, concrete is a favorable material for roosting due to its thermal stability.

Direct Impacts – Direct effects are caused by the action and occur at the same time and place (50 CFR 402.02).

Structure Work

The demolition of remaining portions of structures, if conducted while bats are present, could result in causing bats to flush, which would expose them to risk of predation and would cause increased energy expenditure and create the need for bats to find alternative roost locations. It could also result in physical wounding or death. High-decibel percussive noises associated with demolition or construction may cause nearby roosting bats to flush, exposing them to harm and increased energy expenditure. Additionally, if non-volant pups are present, while adults may be able to flush, pups would be left behind with mortality as the likely outcome. In summary, these activities, should they occur while bats are present, are likely to adversely affect gray bat, Indiana bat, northern long-eared bat, and tricolored bat in the form of harm.

Tree Removal

The removal of suitable roost trees, if conducted while Indiana bats, northern long-eared bats or tricolored bats are present, could result in causing bats to flush, which would expose them to risk of predation and would cause increased energy expenditure and create the need for bats to find alternative roost locations. It could also result in physical wounding or death. Given the presence of alternative forested habitat near the action areas, bats could likely find trees for roosting. Harm would be expected in the increased exposure to predation from flushing and from the potential for wounding or killing when trees are felled. Additionally, if non-volant pups are present, while adults may be able to flush, pups would be left behind with mortality as the likely outcome. In summary, these activities, should they occur while bats are present, are likely to adversely affect Indiana bat, northern long-eared bat and tricolored bat in the form of

harm.

Indirect Impacts – Indirect effects are defined as those that are caused by the proposed action and are later in time but are still reasonably certain to occur (50 CFR 402.02).

If bats were utilizing structures or trees (when considering Indiana bats, northern long-eared bat, and tricolored bat) within the action areas as roost sites prior to demolition/clearing/construction and return to those roost sites to find the habitat gone or altered, the bats may then have to expend extra energy in finding alternative roosting areas. While this could occur, it is considered unlikely to result in adverse effects given that replacement structures are expected to offer suitable roosting features, and alternative forested habitat is available near the action areas.

Operational Effects

Because these projects are limited to the replacement of damaged or destroyed crossing structures and their approaches, which will not result in changes to traffic volumes, any operational effects above the existing baseline conditions are not expected to occur; or, if they do occur, are expected to be minimal.

5.3 Cumulative Effects

Cumulative effects are defined as "those effects of future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation" (50 CFR 402.02). Future federal actions unrelated to the proposed action are not considered because they require separate consultation pursuant to Section 7 of the ESA.

These structure replacements are not expected to induce land development or substantially change the function of the roadways. Any potential effects are anticipated to be localized and consistent with baseline land use patterns. Many private landowners and local governments are recovering from TS Helene and rebuilding homes/businesses and infrastructure. Therefore, there will likely be increased construction in WNC Counties for an undefined period of time. Some of this work will be conducted during seasons when bats are active on the landscape, potentially increasing exposure to construction-related stressors. However, other effects from these private actions cannot be determined at this time.

6. Conclusion and Jeopardy Determination

After reviewing the current status of Appalachian elktoe, gray bat, Indiana bat, northern long-eared bat, and tricolored bat, the environmental baselines for the action areas, the effects analyses and cumulative effects, the Service's biological and conference opinions are shared below.

6.1 Appalachian elktoe

It is the Service's biological opinion that the proposed actions are not likely to jeopardize the continued existence of the Appalachian elktoe. This opinion is based on the following factors: Effects of the actions occur as a result the planned replacement of Henderson County bridge 186. The species occurs in approximately 162 river miles in WNC and Eastern Tennessee (as understood pre-Helene); thus, impacts are likely to be limited to about 0.2% of the range-wide occupied habitat. Crossing structure construction activities are likely to negatively affect Appalachian elktoe within the action areas, but the incorporated conservation measures are expected to reduce impacts; notably, relocation efforts that could remove and relocate individual mussels prior to work taking place.

6.2 Gray Bat, Indiana Bat, Northern Long-eared Bat, and Tricolored Bat

It is the Service's biological and conference opinion that the proposed actions are not likely to jeopardize the continued existence of gray bat, Indiana bat, northern long-eared bat, or tricolored bat. This opinion is based on the following factors: Effects from these actions stem from the replacement of the following crossing structures and/or associated tree clearing: Henderson County structures 055, 186, 197, and 214; Haywood County structures 002, 011, 031, 041, 042, 046, 062, 219, and 266; and Transylvania County structure 066. These action areas comprise only a small amount of active season habitat within the overall ranges of these species. No changes in the long-term viability of gray bat, Indiana bat, northern long-eared bat, or tricolored bat are expected because, given the low numbers of each species which could be expected to occur at each crossing structure location (that is, an estimate of 1 individual per species per structure and an estimate of 1 Indiana bat, 1 northern long-eared bat, and 1 tricolored bat per forested area within each action area), and the occurrence range-wide of each species – gray bat in 14 states, Indiana bat in 27 states, northern long-eared bat in 37 states, and tricolored bat in 39 states as well as in portions of other North and Central American countries – only a miniscule percentage of those overall populations may be affected. Crossing structure construction activities are likely to negatively affect gray bat, Indiana bat, northern long-eared bat, and tricolored bat within the action areas but the incorporated conservation measures are expected to reduce impacts.

7. Incidental Take Statement

Section 9 of the Endangered Species Act and Federal regulations pursuant to section 4(d) of the Endangered Species Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take “means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C §1532). Harm is further defined by the Service as “an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR 17.3). Incidental taking “means any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity” (50 CFR 17.3). Harass is defined by the Service as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering” (50 CFR 17.3). Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered to be prohibited under the Endangered Species Act, provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

7.1 Amount of Take for Appalachian Elktoe

The Service anticipates incidental take of the Appalachian elktoe may occur as a result of the demolition (if applicable) and construction of Henderson County bridge 186. Specifically, take of the species may occur as a result of 1) riverbed disturbance in the form of bent removal and causeway construction, operation, and removal, 2) the resulting river instability, scour, sediment movement, and turbidity produced from those activities, and 3) demolition and construction activities around the crossings. During these activities, individual mussels may be crushed; harmed by increases in turbidity and scour, sediment movement, or other water quality degradation; or dislocated because of physical changes in their habitat. These impacts are expected to occur primarily within the structure construction footprints, with the potential for more minor impacts to occur 100 meters upstream and 400 meters downstream of the current structure locations.

Incidental take of Appalachian elktoe is difficult to measure or detect given that 1) mussels are small, aquatic, cryptic, and generally difficult to observe, 2) finding dead or injured mussels during or following project implementation is unlikely, 3) some incidental take is in the form of non-lethal harm and not directly observable; and 4) losses may be masked by seasonal fluctuations in numbers or other causes. Given this, the estimated amount of riverbed disturbance in acres or square feet is used as a surrogate measure of take for this Opinion. Additionally, as discussed in the Environmental Baseline, no more than one Appalachian elktoe is estimated to be present within the construction footprint immediately surrounding the structures and, to the best of situational abilities, efforts will be made to relocate individuals if found prior to construction in an effort to reduce mortality.

Therefore, the incidental take permitted by the Opinion would be exceeded if either of the following occurs:

1. The construction footprint (placement of permanent fill, causeways, and associated actions) exceeds 0.35 acres (15,226 square feet) at any crossing structure construction location.
2. Take of greater than one Appalachian elktoe is observed.

Exceedance of take as defined above will represent new information that was not considered in this Opinion and shall result in reinitiation of this consultation. The incidental take of Appalachian elktoe is expected to be in the form of harm, wounding, or death.

7.2 Amount of Take for Gray Bat, Indiana Bat, Northern Long-eared Bat, and Tricolored Bat

The Service anticipates incidental take of gray, Indiana, northern long-eared, and tricolored bats may result from the demolition (if applicable) and construction of crossing structures 055, 186, 197, and 214 (Henderson County); 002, 011, 031, 041, 042, 046, 062, 219, and 266 (Haywood County); and 066 (Transylvania County), as well as any associated tree clearing. Specifically, take of these species may occur as a result of flushing, wounding, or direct mortality during demolition activities (if applicable); or, for northern long-eared bat Indiana bat, and tricolored bat, take may occur as a result of clearing suitable roost trees during times of year that these bats could be tree-roosting within the action area, which may similarly result in flushing, wounding, or direct mortality during clearing activities.

Incidental take of bats is difficult to measure or detect given that 1) the animals are small, cryptic, and generally difficult to observe, 2) finding dead or injured bats during or following project implementation is unlikely, and 3) some incidental take is in the form of non-lethal harm and not directly observable. Given this, the 1) maximum estimated tree clearing (for northern long-eared bat, Indiana bat, and tricolored bat only) and 2) number of structures replaced, are used as surrogate measures of take for this Opinion. Additionally, as discussed in the Environmental Baseline, no more than 1 individual of gray bat or 2 individuals of northern long-eared bat, Indiana bat, or tricolored bat (given structure and tree roosting) are estimated to be present within the action areas of each crossing structure.

Therefore, the incidental take permitted by the Opinion would be exceeded if:

1. *Tree clearing amount exceeds 0.10 acre at a single structure location for the crossing structures listed at the beginning of section 7.2.
2. Any more than one structure is demolished/replaced per crossing structure, as listed at the beginning of section 7.2.

**For Indiana bat, northern long-eared bat, and tricolored bat only*

Exceedance of take as defined above will represent new information that was not considered in this

Opinion and shall result in reinitiation of this consultation. The incidental take of gray bat, northern long-eared bat, and tricolored bat is expected to be in the form of harm, wounding, or death.

7.3 Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize take of Appalachian elktoe, gray bat, Indiana bat, northern long-eared bat, and tricolored bat. These non-discretionary measures reduce the level of take associated with project activities and include only actions that occur within the action area.

1. NCDOT shall ensure that the contractor(s) understands and follows the measures listed in the “Conservation Measures”, “Reasonable and Prudent Measures,” and “Terms and Conditions” sections of this Opinion.
2. NCDOT shall minimize the area of disturbance within the action areas to only the area necessary for the safe and successful implementation of the proposed actions.
3. NCDOT shall monitor and document any take numbers and the surrogate measures of take and report those to the Service in a batched format.

7.4 Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Applicant must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting and/or monitoring requirements. When incidental take is anticipated, the terms and conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). These terms and conditions are nondiscretionary. If this conference opinion is adopted as a biological opinion following a listing or designation, these terms and conditions will be non-discretionary.

1. NCDOT shall adhere to all measures as listed in the Avoidance and Minimization and Conservation Measures section as summarized in this Opinion.
2. The NCDOT will immediately inform the Service if the amount or extent of incidental take in the incidental take statement is exceeded.
3. When incidental take is anticipated, the Terms and Conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). In order to monitor the impact of incidental take, the NDOT must report the action impacts on the species to the Service according to the following:
 - a. The NCDOT will submit a report each year not later than September 30 identifying, per individual project (via Service Log # and NCDOT identifiers), the following for the preceding calendar year ending December 31:
 - i. Acreage of in-water impacts, if LAA for Appalachian elktoe.
 - ii. Acreage and dates of tree removal (if any), if LAA for bats (excepting gray bat).
 - iii. Dates of structure removal (if any), if LAA for bats.
 - iv. List of implemented AMMs and BMPs [as listed in Section 2.3].

8. Conservation Recommendations

Section 7(a)(1) of the Endangered Species ESA directs Federal agencies to use their authorities to further the purposes of the Endangered Species ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- **Eastern Hellbender:** Proximity to eastern hellbender occurrence records was noted for the following crossing structures: Henderson County structure 186, Haywood County structure 163, and Transylvania County structure 066. Ahead of work at these locations, coordinate with the NCWRC and the Service to survey for/relocate any hellbender that may be within the action area and vulnerable to impacts from project work.
- **State Species of Concern:** Close proximity to several aquatic species with North Carolina designations was noted for crossing structures: 024, 109, 186, and 198 in Henderson County; 002, 006, 042, 046, 163, and 266 in Haywood County; and 164 in Transylvania County. While these species are not currently afforded legal protection under the ESA, we recommend the most protective sediment and erosion control measures possible be used in waters occupied by these species, and we encourage you to coordinate any relocation efforts of such species with the NCWRC.
- **Refueling and Materials Storage:** Refuel construction equipment outside the 100-year floodplain or at least 200 feet from all water bodies (whichever distance is greater) and protected with secondary containment. Store hazardous materials, fuel, lubricating oils, or other chemicals outside the 100-year floodplain or at least 200 feet from all water bodies (whichever distance is greater).
- **Provide Terrestrial Wildlife Passage:** Where riparian corridors suitable for wildlife movement occur adjacent to a project, a spanning structure that also spans a portion of the floodplain and provides or maintains a riprap-free level path underneath for wildlife passage would provide a safer roadway and facilitate wildlife passage. A 10-foot strip may be ideal, though smaller widths can also be beneficial. Alternatively, a “wildlife path” can be constructed with a top-dressing of finer stone (such as smaller aggregate or on-site alluvial material) to fill riprap voids if full bank plating is required. If a multi-barrel culvert is used, the low flow barrel(s) should accommodate the entire stream width and the other barrel should have sills to the floodplain level and be back-filled to provide dry, riprap-free wildlife passage and well as periodic floodwater passage.

For the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, we request notification of the implementation of any conservation recommendations.

9. Reinitiation Notice

This concludes formal consultation on the action(s) outlined in the consultation request dated December 12, 2024. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

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401 CERTIFICATION
NCDWR

JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



June 2, 2026

DWR # 20260677
Henderson County

Patrick J. Breedlove, PDEA Engineer
NCDOT Division 14
253 Webster Road
Sylva, NC 28779
pjbreedlove@ncdot.gov

Subject: Certificate of Coverage Approval under Water Quality General Certification No. 8562
NCDOT Project DF18314.2045330: Bridge 197 on SR 1702
Location: Lat 35437356, Long -82.29476

Dear Mr. Breedlove:

This Certificate of Coverage approval is issued to the North Carolina Department of Transportation, Division 14, dated June 2, 2026.. This Certificate of Coverage authorizes work under General Certification No. 8562 for the impacts listed below and described in your application which was received by the N.C. Division of Water Resources (Division or DWR) with fee May 29, 2026. This certificate is for the purpose and design described in your application. This approval requires you to follow all the conditions listed in the enclosed General Certification No. 8562.

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

Upon completion of the proposed project, the applicant shall submit a Certificate of Completion and/or shall provide as-built documentation. Certificates of Completion and/or as-built documentation can be submitted via the DWR website: <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>.

The following impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

Type of Impact	Amount Approved Permanent	Amount Approved Temporary
Perennial Streams		
Site 1: Bank Stabilization	140 linear feet	0 linear feet
Site 1: Dewatering	0 linear feet	43 linear feet
Site 2: Fill	194 linear feet	0 linear feet
Totals:	334 linear feet	43 linear feet

Notice regarding the right to contest this 401 Water Quality Certification decision is attached to this letter.

This letter completes the Division's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Rob Ridings at 919-707-8786 or rob.ridings@deq.nc.gov if you have any questions or concerns.

Sincerely,

Signed by:

 3185423002EA45E...

Faith Hardin, Supervisor
 401 & Buffer Transportation Permitting Branch
 Division of Water Resources, NCDEQ

Enclosures: Notice Regarding The Right To Contest A DWR 401 Water Quality Certification Decision
 GC 8562

Electronic cc:

Crystal Amschler, USACE Asheville Regulatory Field Office (Crystal.C.Amschler@usace.army.mil)

Amy Annino, NCDWR Transportation Permitting Branch, Asheville (amy.annino@deq.nc.gov)

Dave McHenry, NCWRC (david.mchenry@ncwildlife.gov)

DWR 401 & Buffer Permitting Branch Electronic file



**NOTICE REGARDING THE RIGHT TO CONTEST A DWR DECISION ON A 401 WATER QUALITY
CERTIFICATION AND/OR BUFFER AUTHORIZATION**

Right of Persons Aggrieved to File a Contested Case for the Decision on a 401 Water Quality Certification and/or Buffer Authorization:

The Division's decision is subject to review under NCGS 150B-23.

Rights of Persons Aggrieved to File a Contested Case: Pursuant to NCGS 150B, Article 3, a party or person aggrieved may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 60 days after the Division provides notice of its decision on an application, as provided in NCGS 150B-23(f). If no contested case is commenced within the required time, the Division's decision is final and is not subject to review.

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at <https://www.oah.nc.gov/hearings-division/filing/hearing-forms>. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

Daniel Hirschman, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the recipient of the certificate (the "Permittee"), the party **must also** serve the Permittee in accordance with NCGS 150B-23(a).

Be aware that other rules or laws may apply to the filing of a petition for a contested case. Additional information is available at <https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case>. Please contact the Office of Administrative Hearings at (984) 236-1850 with all questions regarding the filing fee and/or the details of the filing process.



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				

** Dollar Volume of DBE Subcontractor \$ _____

Percentage of Total Contract Bid Price _____%

* 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.

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, NC**

BID BOND

Principal:

Name of Principal Contractor

Surety:

Name of Surety

Contract Number:

DN01164

County:

Henderson

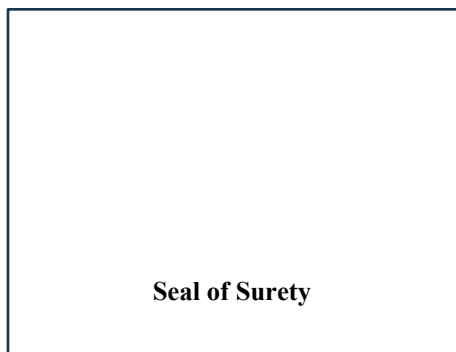
Date of Bid:

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the Department of Transportation 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, in accordance with Article 102-10 of the *Standard Specifications*, 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 Board of Transportation shall award a contract to the Principal, the Principal shall, within fourteen (14) 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*, the conditions and obligations of this Bid Bond shall remain in full force and effect until the Department of Transportation 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 fourteen (14) 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 of the *Standard Specifications*, 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 Department of Transportation 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 _____



Print or type Surety Company Name

NAIC #

By

General Agent or Attorney-in-Fact Signature

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



Affix Corporate Seal

Print or type Signer's name

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

By:

Signature of Member, Manager, Authorized Agent
Select appropriate title

Print or type Signer's name

BID BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

Print or type 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 *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

If Corporation, affix Corporate Seal

Print or type Signer's name

and

(3) _____
Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name

If Corporation, affix Corporate Seal

Print or type Signer's name

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

If Corporation, affix Corporate Seal

Print or type Signer's name

CORPORATE SEAL(S)

ADDENDA

ADDENDUM #1

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #1.

ADDENDUM #2

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #2.

ADDENDUM #3

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #3.

AWARD LIMITS ON MULTIPLE PROJECTS

It is the desire of the Proposer to be awarded contracts, the value of which will not exceed a total of \$ _____, for those projects indicated below on which bids are being opened on the same date as shown in the Proposal Form. Individual projects shall be indicated by placing the project number and county in the appropriate place below. Projects not selected will not be subject to an award limit.

(Project Number)

(County)

(Project Number)

(County)

(Project Number)

(County)

(Project Number)

(County)

*If a Proposer desires to limit the total amount of work awarded to him in this letting, he shall state such limit in the space provided above in the second line of this form.

It is agreed that in the event that I am (we are) the successful bidder on indicated projects, the total value of which is more than the above stipulated award limits, the Board of Transportation will award me (us) projects from among those indicated which have a total value not exceeding the award limit and which will result in the best advantage to the Department of Transportation.

**Signature of Authorized Person

**Only those persons authorized to sign bids under Subarticle 102-8(A)(12) of the *Standard Specifications* shall be authorized to sign this form.

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**CORPORATION**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. §133-24* within the last three years, and that the prequalified bidder intends to do the work with his own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the prequalified bidder is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF PREQUALIFIED BIDDER

Full name of Corporation

Address as prequalified

Attest _____

Signature of **Secretary, Assistant Secretary**

Select appropriate title

By _____

Signature of **President, Vice President, Assistant Vice President**

Select appropriate title

Print or type Signer's name

Print or type Signer's name

CORPORATE SEAL

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**PARTNERSHIP**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the prequalified bidder is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF PREQUALIFIED BIDDER

Full name of
Partnership

Address as
prequalified

Signature of Witness

Signature of Partner

Print or type Signer's name

Print or type Signer's name

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**LIMITED LIABILITY COMPANY**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the prequalified bidder is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF PREQUALIFIED BIDDER

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

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**JOINT VENTURE (2) or (3)**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the prequalified bidder is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF PREQUALIFIED BIDDER

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
	By
Signature of Witness or Attest	Signature of Contractor
Print or type Signer's Name	Print or type Signer's Name
	and
(3)	Name of Contractor
	Address as prequalified
	By
Signature of Witness or Attest	Signature of Contractor
Print or type Signer's Name	Print or type Signer's Name
	and
(4)	Name of Contractor
	Address as prequalified
	By
Signature of Witness or Attest	Signature of Contractor
Print or type Signer's Name	Print or type Signer's Name
	and

CORPORATE SEAL(S)

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the prequalified bidder is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF PREQUALIFIED BIDDER

Name of Prequalified Bidder

Print or type Individual Name

Trading and doing business as

Full name of Firm

Address as prequalified

Signature of Witness

Signature of Prequalified Bidder, Individual

Print or type Signer's Name

Print or type Signer's Name

NON-COLLUSION, DEBARMENT GIFT BAN CERTIFICATION**INDIVIDUAL DOING BUSINESS IN HIS OWN NAME**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the prequalified bidder is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF PREQUALIFIED BIDDER

Name of Prequalified Bidder

Print or type Individual Name_____
Address as prequalified_____
Signature of Prequalified Bidder, Individually_____
Print or type Signer's Name_____
Signature of Witness_____
Print or type Signer's name

DEBARMENT CERTIFICATION

Conditions for certification:

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

DEBARMENT CERTIFICATION

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

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

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

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

☐

Check here if an explanation is attached to this certification.

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
ROADWAY ITEMS						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0036000000-E	225	UNDERCUT EXCAVATION	250 CY		
0004	0043000000-N	226	GRADING	Lump Sum	L.S.	
0005	0050000000-E	226	SUPPLEMENTARY CLEARING & GRUBBING	0.5 ACR		
0006	0134000000-E	240	DRAINAGE DITCH EXCAVATION	51 CY		
0007	0195000000-E	265	SELECT GRANULAR MATERIAL	200 CY		
0008	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	200 SY		
0009	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	10 TON		
0010	0321000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	30 SY		
0011	0335200000-E	305	15" DRAINAGE PIPE	64 LF		
0012	0995000000-E	340	PIPE REMOVAL	92 LF		
0013	1077000000-E	SP	#57 STONE	75 TON		
0014	1099500000-E	505	SHALLOW UNDERCUT	75 CY		
0015	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	150 TON		
0016	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	225 SY		
0017	1121000000-E	520	AGGREGATE BASE COURSE	155 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	1220000000-E	545	INCIDENTAL STONE BASE	25 TON		
0019	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH 1.5	310 SY		
0020	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	290 TON		
0021	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	240 TON		
0022	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	30 TON		
0023	2022000000-E	815	SUBDRAIN EXCAVATION	33.6 CY		
0024	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	150 SY		
0025	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	25.2 CY		
0026	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	150 LF		
0027	2070000000-N	815	SUBDRAIN PIPE OUTLET	1 EA		
0028	2077000000-E	815	6" OUTLET PIPE	6 LF		
0029	3030000000-E	862	STEEL BEAM GUARDRAIL	175 LF		
0030	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	12.5 LF		
0031	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	5 EA		
0032	3195000000-N	862	GUARDRAIL END UNITS, TYPE AT-1	1 EA		
0033	3288000000-N	862	GUARDRAIL END UNITS, TYPE TL-2	3 EA		
0034	3635000000-E	876	RIP RAP, CLASS II	150 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	3649000000-E	876	RIP RAP, CLASS B	10 TON		
0036	3651000000-E	SP	BOULDERS	50 TON		
0037	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	1,200 SY		
0038	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	1 EA		
0039	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	416 SF		
0040	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	192 SF		
0041	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	60 SF		
0042	4424500000-N	SP	TEMPORARY PORTABLE TRAFFIC SIGNAL SYSTEM	1 EA		
0043	4430000000-N	1130	DRUMS	36 EA		
0044	4435000000-N	1135	CONES	29 EA		
0045	4445000000-E	1145	BARRICADES (TYPE III)	152 LF		
0046	4455000000-N	1150	FLAGGER	23 DAY		
0047	4480000000-N	1165	TMA	1 EA		
0048	4507000000-E	1170	WATER FILLED BARRIER	805 LF		
0049	4508000000-E	1170	REMOVE AND RESET WATER FILLED BARRIER	1,021 LF		
0050	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	4,480 LF		
0051	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	72 LF		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0052	4870000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (24")	24 LF		
0053	6000000000-E	1605	TEMPORARY SILT FENCE	1,480 LF		
0054	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	115 TON		
0055	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	160 TON		
0056	6012000000-E	1610	SEDIMENT CONTROL STONE	275 TON		
0057	6015000000-E	1615	TEMPORARY MULCHING	1.5 ACR		
0058	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	100 LB		
0059	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	0.5 TON		
0060	6024000000-E	1622	TEMPORARY SLOPE DRAINS	200 LF		
0061	6029000000-E	SP	SAFETY FENCE	260 LF		
0062	6030000000-E	1630	SILT EXCAVATION	230 CY		
0063	6036000000-E	1631	MATTING FOR EROSION CONTROL	5,000 SY		
0064	6037000000-E	1629	COIR FIBER MAT	1,245 SY		
0065	6042000000-E	1632	1/4" HARDWARE CLOTH	275 LF		
0066	6070000000-N	1639	SPECIAL STILLING BASINS	8 EA		
0067	6071002000-E	1642	FLOCCULANT	25 LB		
0068	6071012000-E	1642	COIR FIBER WATTLE	30 LF		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0069	6071014000-E	1642	COIR FIBER WATTLE BARRIER	220 LF		
0070	6084000000-E	1660	SEEDING & MULCHING	1.5 ACR		
0071	6087000000-E	1660	MOWING	1 ACR		
0072	6090000000-E	1661	SEED FOR REPAIR SEEDING	50 LB		
0073	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.25 TON		
0074	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50 LB		
0075	6108000000-E	1665	FERTILIZER TOPDRESSING	0.75 TON		
0076	6111000000-E	SP	IMPERVIOUS DIKE	150 LF		
0077	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0078	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	25 EA		
0079	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	1 EA		
0080	6123000000-E	1670	REFORESTATION	0.25 ACR		
0081	6132000000-N	SP	GENERIC EROSION CONTROL ITEM PREFABRICATED CONCRETE WASHOUT	5 EA		
0082	8140000000-E	416	CHANNEL EXCAVATION	2,650 CY		
STRUCTURE ITEMS						
0083	8660000000-E	SP	CONCRETE REPAIRS	6.5 CF		
0084	8860000000-N	SP	GENERIC STRUCTURE ITEM REMOVAL OF EXISTING BRIDGE GUARDRAIL	Lump Sum	L.S.	

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0085	8867000000-E	SP	GENERIC STRUCTURE ITEM BRIDGE GUARDRAIL	92 LF		

1526/Aug17/Q24430.05/D335740428000/E85

Total Amount Of Bid For Entire Project :

Execution of Contract

Contract No: DN01164

County: Henderson

ACCEPTED BY THE DEPARTMENT

Proposals Engineer

Date

EXECUTION OF CONTRACT AND BONDS
APPROVED AS TO FORM:

Division Engineer

Date

Signature Sheet (Bid) - ACCEPTANCE SHEET