STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

April 4, 2026

MEMORANDUM TO: Division Environmental and Construction Units

FROM: Michael A. Turchy, ECAP Group Leader
Environmental Analysis Unit

SUBJECT: Environmental Permits for the Replacement of:
Buncombe Bridge 203 over Beetree Creek on SR 2416 (Warren Wilson Road)
Division 13, WBS DF18313.2011234.PR.

Please find enclosed the following permits for this project:

Agency	Permit Type	Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Regional General Permit 50 Action ID: SAW-2026-02127 Dated April 2, 2026	May 25, 2030
NC Division of Water Resources Section 401 Water Quality Certification	Project ID: 20211435v2 General Certification No. 7679 ***Written authorization not required.***	expires with above Permit

Work is authorized by the above-referenced documents and must be accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group (ECAP) or the Division Environmental Office must be consulted if any deviation from the permit(s) or accompanying drawings is required.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

404 Permit (USACE)

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

April 2, 2026

Regulatory Division
SAW-2021-02127

North Carolina Department of Transportation
Attn: Mr. Michael A. Turchy
Environmental Coordination and Permitting Group Leader
1598 Mail Service Center
Raleigh, North Carolina 27699-1598
Sent Via Email: maturchy@ncdot.gov

Dear Mr. Turchy,

This letter is in response to the application you submitted to the U.S. Army Corps of Engineers (USACE), Wilmington District, WRDA/Transportation Branch on February 2, 2026, for a Department of the Army general permit verification to replace a bridge that was destroyed by **Hurricane Helene**. This project will replace **Bridge No. 203** over Beetree Creek on SR 2416 in Buncombe County, North Carolina (35.6125, -82.4270) and has been assigned file number SAW-2021-02127. In order to perform this work, NCDOT proposes to conduct the following activities in waters of the U.S.:

Summary of Proposed Impacts

Impact ID #	NWP / GP #	Open Water (ac)		Wetland (ac)		Stream (lf)	
		Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
Site 1 (Beetree Creek)	RGP 50					74' (0.02 ac) / workpads for temporary bridge 66' (0.02 ac) / workpad for permanent bridge 62' (0.02 ac) / dewater	36' (0.01 ac) / bank stabilization
Impact Totals		0	0	0	0	202' (0.06 ac)	36' (0.01 ac)

We have reviewed the proposed activities in waters of the U.S. and have determined that these activities are authorized by Regional General Permit (RGP) 50 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 following:

- enclosed terms, general conditions, and special conditions of RGP 50
- special conditions of the verification letter (see below)
- information in the PCN and attachments
- enclosed plans

If the extent of the project area and/or nature of the authorized impacts to waters are modified, a request detailing the proposed changes must be submitted to this office for written approval before work is initiated. Any deviation from the terms and conditions of the permit, the special conditions of this letter, the information contained in the PCN, or your submitted plans, may subject the permittee to enforcement action.

This verification is valid until **May 25, 2030**, unless the subject RGP is suspended, revoked, or is modified prior to that date such that the activity no longer complies with the terms and conditions of the RGP.

Project Specific Special Conditions:

1. This verification letter does not authorize you to take a federally listed species. In order to legally take a federally listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply). The U.S. Fish and Wildlife Service (USFWS) issued a document titled, "Biological and Conference Opinions and Informal Consultions – Batch Format, Replace Multiple Crossing Structures Destroyed by Tropical Storm Helene in Buncombe, McDowell, Yancey Counties, North Carolina, Service Log #25-110 through 25-117" on February 11, 2025. This document contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with incidental take for this project. Your authorization under this verification letter and RGP 50 is conditional upon your compliance with the mandatory terms and conditions associated with incidental take listed in this document for this project. Failure to comply with the terms and conditions associated with incidental take detailed in this document, where a take of a federally listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your verification letter and RGP 50. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its Opinion and with the ESA.

2. The permittee shall comply with the request in the attached email dated February 2, 2026, from the NCWRC concerning topping the rip rap bench with native on-site material or smaller stone, in accordance with the *North Carolina Department of Transportation & North Carolina Wildlife Resources Commission Wildlife Passage Guidance.*

3. The permittee shall ensure that no more than 50% of stream flow is constricted at any one time.

4. The permittee shall ensure that any equipment that is placed on the workpads is removed when either of the following situations are forecasted or anticipated: (1) the water level will rise to a point where the equipment could be flooded (even during work days), and (2) the water level is expected to rise overnight, or over a non-work period of time, to a point where the equipment could be flooded.

5. Upon completion of work that requires the workpads to be in the stream, the permittee shall remove all readily detectible workpad material, to the extent practicable, while removing as little of the original riverbed as possible.

6. The permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, workpads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization the U.S. Army Corps of Engineers.

7. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this authorization letter in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this authorization letter, all conditions, and any authorized modifications. A copy of this authorization letter, all conditions, and any authorized modifications, shall be available at the project site during construction and maintenance of this project.

This general permit verification and any associated authorizations 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 Lori Beckwith, Regulatory Project Manager of the WRDA/Transportation Branch at 828-230-0483, by mail at the above address, or by email at loretta.a.beckwith@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,

M. Scott Jones, PWS
WRDA / Transportation Branch Chief
USACE, Wilmington District

Enclosures

the replacement bridges will be concrete box beam or cored slab structures and the culvert structures will be the same or similar materials to those previously in place. The general and expected elements of these crossing structure replacement projects are described below. The current estimated timeline is for these projects to be carried out over the next two years.

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 at structure replacement locations 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. 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.

2.3 Avoidance and Minimization and Conservation Measures

NCDOT will employ the following agency Standards, Guides, 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 that 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- The General AMMs above will minimize impacts to listed/proposed aquatic species. **To the maximum extent possible**, the following AMMs will also 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 [such as in-water bents] to water resource, built to NCDOT's current 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 included in 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 - The General AMMs will minimize impacts to listed and proposed bat species. **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 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 Likely to Adversely Affect (LAA) aquatic species, the NCDOT will contribute* $10,000 for each project structure to the N.C. Nongame Aquatic Species Fund (or subsequently renamed fund).

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, Northern Long-eared Bat, and Tricolored Bat

The Service anticipates incidental take of the gray bat, northern long-eared bay, and tricolored bat may occur as a result of the demolition (if applicable) and construction of Buncombe County Bridges 203, 396, 464, and 716; and McDowell County Bridge 111. 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 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 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 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 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, 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.

8. Conservation Recommendations

Section 7(a)(l) 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**: Occurrence records for eastern hellbender exist at Yancey Country structure 097 in the South Toe River. Ahead of work at this location, 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**: Several aquatic species with North Carolina designations occur at Yancey County structure 194 in the North Toe River. 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.
- **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

WRC Comments as incorporated by USACE Special Condition #2

Outlook

WRC Comments for NCDOT / Helene Bridge 203 / Beetree Creek / Warren Wilson Road (SR 2416) / Buncombe / Div 13 / DF18313.2011234

From McHenry, David G <david.mchenry@ncwildlife.gov>
Date Mon 2/2/2026 8:00 PM
To Beckwith, Loretta A CIV USARMY CESAW (USA) <loretta.a.beckwith@usace.army.mil>; Annino, Amy <amy.annino@deq.nc.gov>; Allen, Yates <ryallen@ncdot.gov>; Sanderson, Mike <jmsanderson@ncdot.gov>
Cc Turchy, Michael A <maturchy@ncdot.gov>

There are, or were, wild rainbow and brook trout upstream of this bridge and the reservoir, but old records are negative for trout in BeeTree Creek downstream. As noted in scoping comments, a trout spawning moratorium should not be necessary with this project.

The design includes full rip rap plating of a bench on the east side of the bridge using class II rip rap. The WRC requests that this bench be topped with native on-site material or smaller stone to fill the voids in the class II. Details on topping plated benching are in *North Carolina Department of Transportation & North Carolina Wildlife Resources Commission Wildlife Passage Guidance* (see Wildlife_Passage_Guidance.pdf).

The WRC appreciates the opportunity to review the application and does not have and other comments or recommendations.

Thanks

Dave McHenry
NCWRC Western DOT Coordinator
828-476-1966, david.mchenry@ncwildlife.gov

From: NCDEQ.Laserfiche@mccicloud.io <NCDEQ.Laserfiche@mccicloud.io>
Sent: Monday, February 2, 2026 6:12 PM
To: McHenry, David G <david.mchenry@ncwildlife.gov>
Subject: [External] Request for Comments for NCDOT / Helene Bridge 203 / Beetree Creek / Warren Wilson Road (SR 2416) / Buncombe / Div 13 / DF18313.2011234

The North Carolina Division of Water Resources (DWR) has just received a new application that may be related to your agency's work.

The application can be found here: https://edocs.deq.nc.gov/WaterResources/Browse.aspx?dbid=0&startid=4277417

If you wish to offer DWR feedback on this application, please upload your comments at https://edocs.deq.nc.gov/Forms/Supplemental-Information-Form).

Project Name: NCDOT / Helene Bridge 203 / Beetree Creek / Warren Wilson Road (SR 2416) / Buncombe / Div 13 / DF18313.2011234
ID #: 20211435 Version: 2

This email was automatically generated by Laserfiche workflow as a courtesy. Please do not respond to this email address, as responses aren't monitored.

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 loretta.a.beckwith@usace.army.mil or by mail at the below address:

U.S. Army Corps of Engineers, Wilmington District
Asheville Field Office
Street Address: 151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006

Corps Action Number: SAW-2021-02127

Permit Type: General Permit

General Permit Number and Name (*if applicable*): RGP 50

Name of Permittee: NCDOT, Division of Highways

Project Name: NCDOT/Hurricane Helene/DF18313.2011234.PR/ Br 203 /SR 2416 /Buncombe/Div 13

Project Location (*physical address*): Bridge 203 over Beetree Creek on SR 2416 Buncombe Co. NC

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

401 Certification (NCDWR)

Written Authorization Not Required

Permitted Drawings

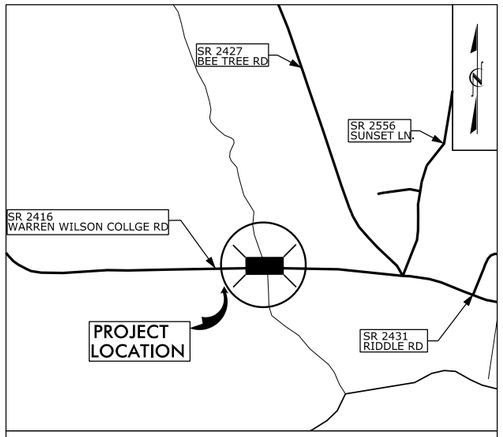
09/08/99

TIP PROJECT: DF18313.2011234

CONTRACT:

\$\$\$\$\$\$SYSTIME\$\$\$\$\$\$
\$\$\$\$\$\$USERNAME\$\$\$\$\$\$
\$\$\$\$\$\$DGN\$\$\$\$\$\$

See Sheet 1A For Index of Sheets
See Sheet 1B For Symbology Sheet



VICINITY MAP N.T.S.

DRPS PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	DF18313.2011234	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
DF18313.2011234.1.1		PE

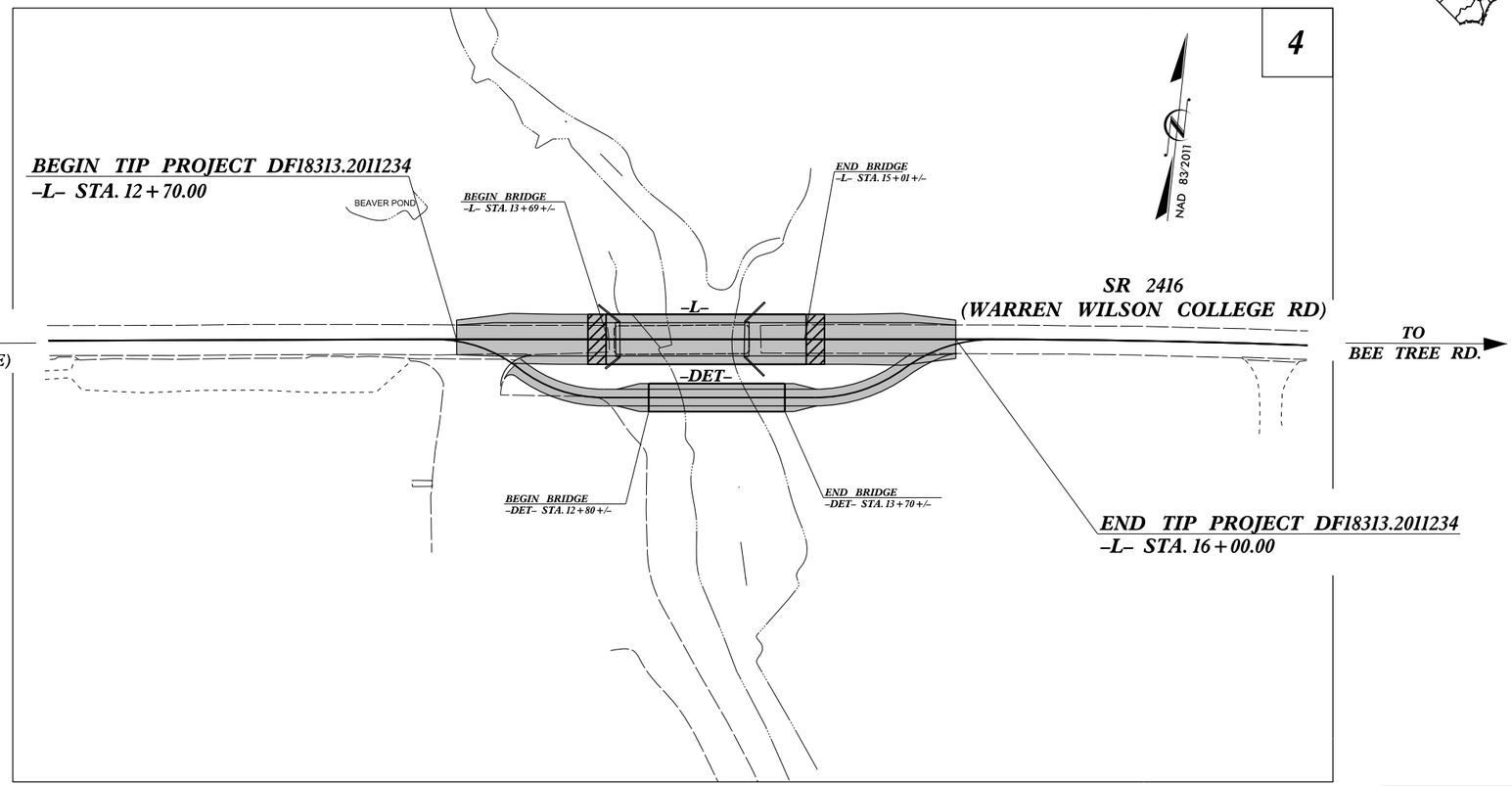
LOCATION: REPLACEMENT OF BRIDGE NO. 203 ON SR 2416 (WARREN WILSON COLLEGE ROAD) OVER BEE TREE CREEK

TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT

DIVISION 13

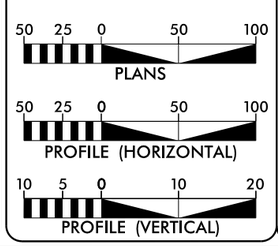
PERMIT DRAWING
SHEET 1 OF 6



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II MODIFIED.
THIS PROJECT IS NOT LOCATED WITHIN ANY MUNICIPAL BOUNDARIES.
THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2025 = 3,400
ADT 2045 = 4,200
V = 40 MPH
FUNC CLASS = LOCAL SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT DF18313.2011234 = 0.038 MI
LENGTH STRUCTURES PROJECT DF18313.2011234 = 0.025 MI
TOTAL LENGTH PROJECT DF18313.2011234 = 0.063 MI

Prepared in the Office of:

GANNETT FLEMING
One Glenwood Avenue
Suite 900
Raleigh, NC 27603
919-420-7660
NC Lic. No. F-0270

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
N/A

LETTING DATE:
FEBRUARY 18, 2025

ERIC B. NELSON, PE
PROJECT ENGINEER

ANGELA B. PRIDGEN, PE
PROJECT DESIGN ENGINEER

JUSTIN R. RICE, EI
NCDOT DIVISION 13 BRIDGE PROGRAM MANAGER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

8/17/99

PERMIT DRAWING
SHEET 2 OF 6

S S — SURFACE WATER IMPACTS

TS TS — TEMPORARY SURFACE WATER IMPACTS

NAD 83/2001

PROJECT REFERENCE NO.	SHEET NO.
DF18313.2011234.PR	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GFT Infrastructure, Inc.
One Glenwood Avenue, Suite 900
Raleigh, NC 27603
919-420-7660
NC Lic. No. F-0270

SITE 1A
SITE 1B
SITE 1C
SITE 1D
SITE 1E
SITE 1F

BEGIN TIP PROJECT DF18313.2011234
-L- STA. 7+03.00

BEGIN CONSTRUCTION
-DET- STA. 11+72.15 =
-L- STA. 12+96.29
OFFSET = 9.68'

END CONSTRUCTION
-DET- STA. 14+72.34 =
-L- STA. 15+82.51
OFFSET = 9.45'

CL II RIPRAP WITH GEOTEXTILE (TYP.) (STRUCTURES PAY ITEM)

PLACE CL II RIPRAP TO ELEV. 2155.3' +/- (TYP.)

2 TON CL B RIP RAP 7 SY GEOTEXTILE

END BRIDGE -DET- STA.13+70+/-

BEGIN BRIDGE -DET- STA.12+80+/-

TEMP. CAUSEWAY

BEAVER POND

WOODS

8" HDPE

SR 2416 (WARREN WILSON COLLEGE RD.)

RETAIN

BEGIN APPROACH SLAB -L- STA.13+57.94

BEGIN BRIDGE -L- STA.13+68.81

END APPROACH SLAB -L- STA.15+12.07

END BRIDGE -L- STA.15+01.19

FOR ROW & EASEMENTS, SEE SHEET 4A

FOR -DET- PLAN VIEW, SEE SHEET 2B-1

NOTES:
SEE TYPICAL SECTIONS FOR SBG STATIONING
DRIVEWAY RADIUS IS 20' UNLESS OTHERWISE NOTED.
ALL PAVED SHOULDER TAPERS ARE 8:1 UNLESS OTHERWISE NOTED.
ALL STRUCTURE ANCHOR UNITS ARE TYPE III UNLESS OTHERWISE NOTED.
ALL GUARDRAIL END TREATMENT ARE TYPE TL-2 UNLESS OTHERISE NOTED.

-L-

-L- STA. 14+35
1@55', 1@75' MULTI-SPAN
21" AND 24" CORED SLAB BRIDGE
ELEV. 2161.84'
SKEW 90°

BEGIN GRADE -L- STA.12+70.000 EL = 2159.55'

BEGIN BRIDGE -L- STA.13+69+/-

HIGH POINT STA.14+22.19 EL 2161.85'

END BRIDGE -L- STA.15+01+/-

END GRADE -L- STA.16+00.00 EL = 2158.88'

REV FEMA 100-YR WSEL=2157.01'

PRE-HELENE BRIDGE

(+)2.2258%

(-)2.3543%

POST-HELENE GROUND

PROP NCDOT 100-YR WSEL=2155.6'

PROP NCDOT 25-YR WSEL=2154.3'

POST-HELENE NWS WSEL = 2149.42' DATE: 04-08-2025

BENCH ELEVATION = 2151.5'

RIPRAP CLASS II (TYP.)

TOTAL APPROXIMATE EXCAVATION = 280 CY

PI = 14+25.00
EL = 2163.00'
VC = 200'
K = 44

BM#1 N 695395.2751 E 981625.8331
ELEV. = 2,152.54
RR SPIKE IN 15" RIVER BIRCH
-L- STA.S 14+14.71 OFF 60.4246' RT

FOR -DET- PROFILE, SEE SHEET 2B-1

HYDRAULIC DATA

DESIGN DISCHARGE	= 2220 C.F.S.
FREQUENCY OF DESIGN FLOOD	= 25 YRS.
DESIGN HIGH WATER ELEVATION	= 2154.3
DRAINAGE AREA	= 14.0 SQ. MI.
BASIC DISCHARGE (Q100)	= 3300 C.F.S.
BASIC HIGH WATER ELEVATION	= 2155.5

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 3000 C.F.S.
FREQUENCY OF OVERRTOPPING FLOOD	= 50+ YRS.
OVERTOPPING FLOOD ELEVATION	= 2155.3 *

*OVERTOPS AT RDY LOW POINT OFF PROJECT

WS EL. Taken @ River Station 1077

2,170 2,160 2,150 2,140 2,130 2,120

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00

$$$$$$$SYSTIME$$$$$
$$$$$$$USERNAME$$$$DGN$$$$$$$$$$$$$$$$$

8/17/99

PERMIT DRAWING SHEET 3 OF 6

S S SURFACE WATER IMPACTS

TS TS TEMPORARY SURFACE WATER IMPACTS

NAD 83/2001

PROJECT REFERENCE NO.	SHEET NO.
DF18313.2011234.PR	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GFT Infrastructure, Inc.
One Glenwood Avenue, Suite 900
Raleigh, NC 27603
919-420-7660
NC Lic. No. F-0270

BEGIN TIP PROJECT DF18313.2011234
-L- STA. 7+03.00

SITE 1A
SITE 1B
SITE 1C
SITE 1D
SITE 1E
SITE 1F

BEGIN CONSTRUCTION
-DET- STA. 11+72.15 =
-L- STA. 12+96.29
OFFSET = 9.68'

CL II RIPRAP WITH GEOTEXTILE (TYP.) (STRUCTURES PAY ITEM)

PLACE CL II RIPRAP TO ELEV. 2155.3' +/- (TYP.)

2 TON CL B RIP RAP
7 SY GEOTEXTILE

TEMP. CAUSEWAY

BEGIN BRIDGE
-DET- STA.12+80+/-

END BRIDGE
-DET- STA.13+70+/-

END CONSTRUCTION
-DET- STA. 14+72.34 =
-L- STA. 15+82.51
OFFSET = 9.45'

BEGIN APPROACH SLAB
-L- STA.13+57.94
BEGIN BRIDGE
-L- STA.13+68.81

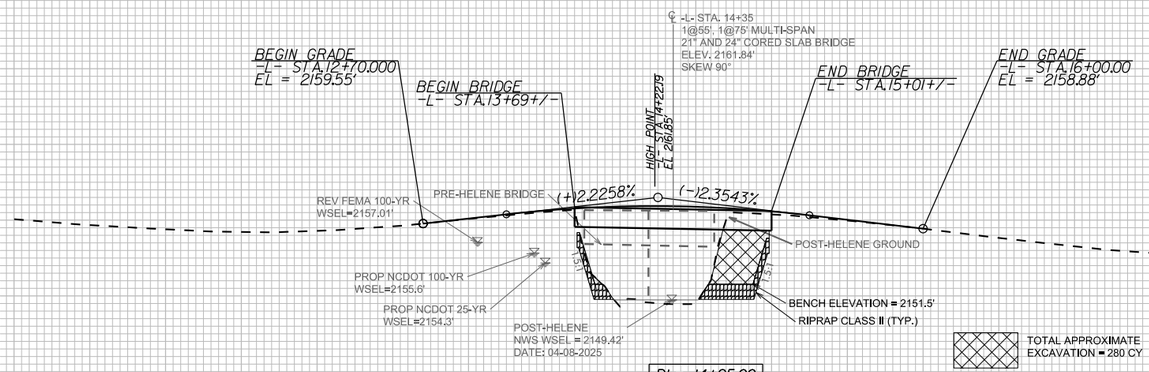
END BRIDGE
-L- STA.15+01.19

END APPROACH SLAB
-L- STA.15+12.07

FOR ROW & EASEMENTS, SEE SHEET 4A
FOR -DET- PLAN VIEW, SEE SHEET 2B-1

NOTES:
SEE TYPICAL SECTIONS FOR SBG STATIONING
DRIVEWAY RADIUS IS 20' UNLESS OTHERWISE NOTED.
ALL PAVED SHOULDER TAPERS ARE 8:1 UNLESS OTHERWISE NOTED.
ALL STRUCTURE ANCHOR UNITS ARE TYPE III UNLESS OTHERWISE NOTED.
ALL GUARDRAIL END TREATMENT ARE TYPE TL-2 UNLESS OTHERISE NOTED.

-L-



PI = 14+25.00
EL = 2163.00'
VC = 200'
K = 44

BM#1 N 695395.2751 E 981625.8331
ELEV. = 2,152.54
RR SPIKE IN 15" RIVER BIRCH
-L- STA.S 14+14.71 OFF 60.4246' RT

HYDRAULIC DATA

DESIGN DISCHARGE	= 2220 C.F.S.
FREQUENCY OF DESIGN FLOOD	= 25 YRS.
DESIGN HIGH WATER ELEVATION	= 2154.3
DRAINAGE AREA	= 14.0 SQ. MI.
BASIC DISCHARGE (Q100)	= 3300 C.F.S.
BASIC HIGH WATER ELEVATION	= 2155.5

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 3000 C.F.S.
FREQUENCY OF OVERRTOPPING FLOOD	= 50+ YRS.
OVERTOPPING FLOOD ELEVATION	= 2155.3 *

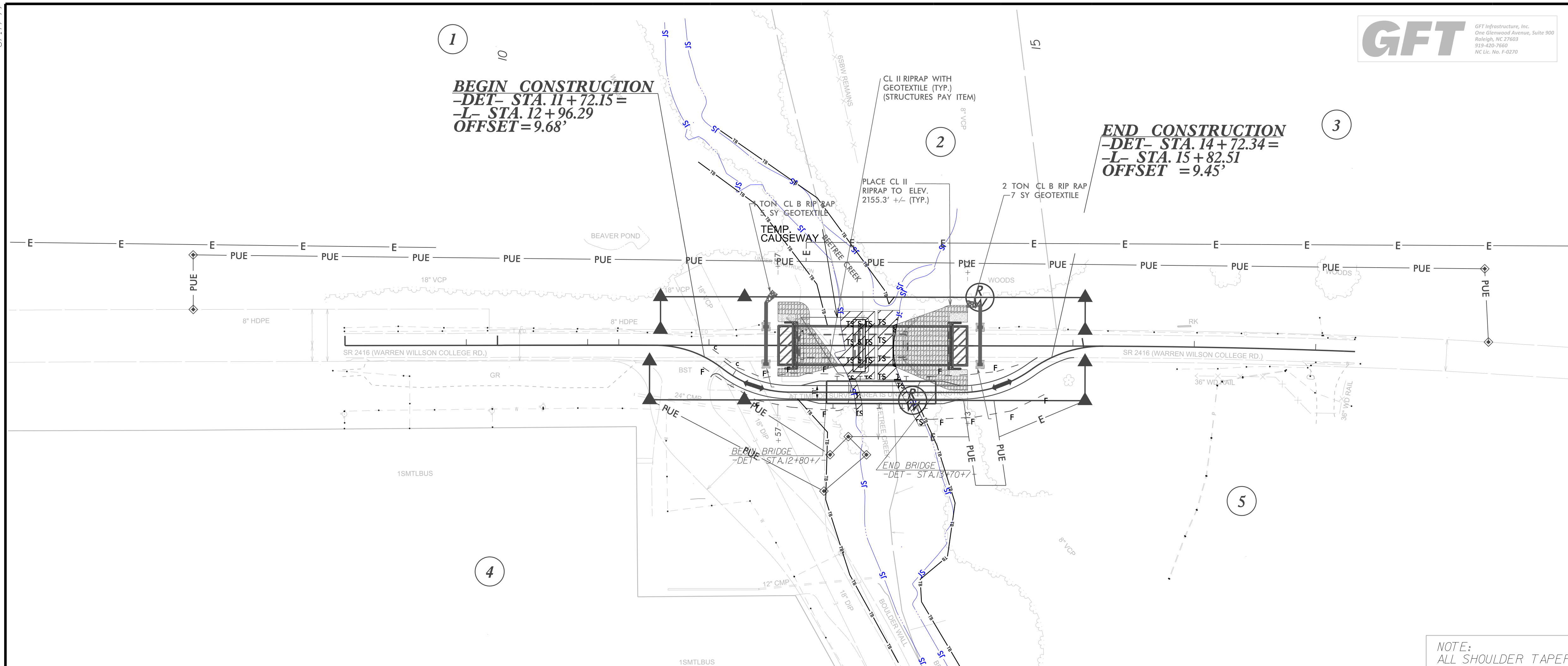
*OVERTOPS AT RDY LOW POINT OFF PROJECT

WS EL. Taken @ River Station 1077

FOR -DET- PROFILE, SEE SHEET 2B-1

$$$$$$$$SYSTIME$$$$$
$$$$$$$$USERNAME$$$$
$$$$$$$$DGN$$$$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.
DF18313.2011234.PR	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

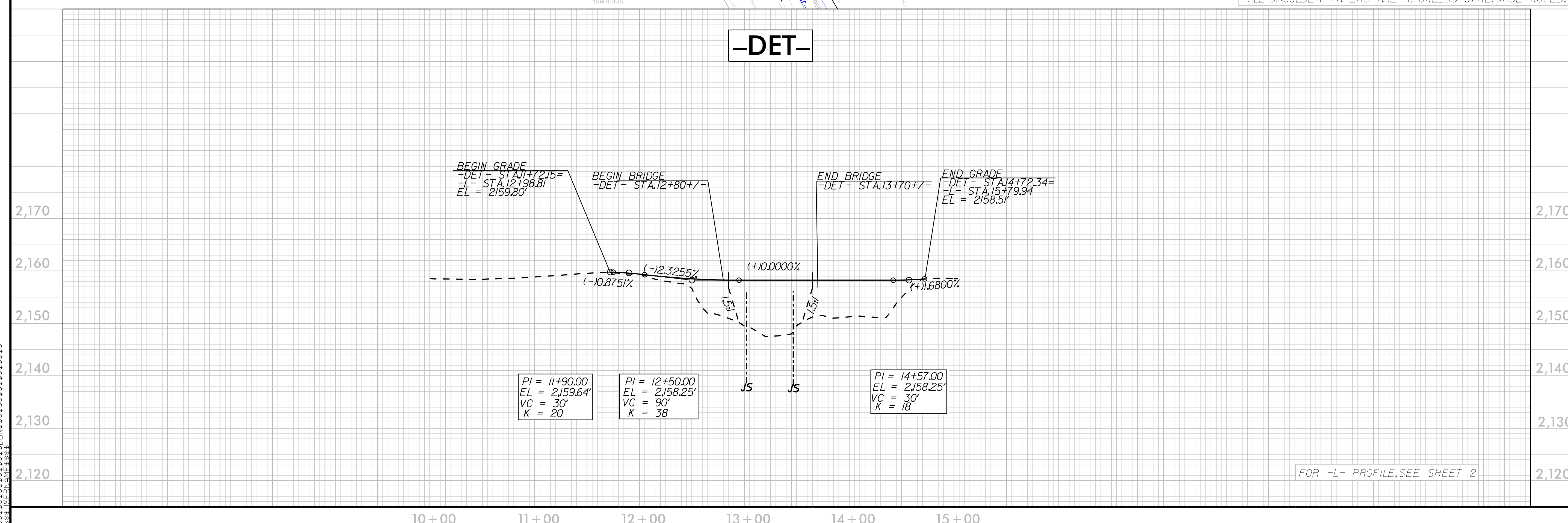


S S	SURFACE WATER IMPACTS
TS TS	TEMPORARY SURFACE WATER IMPACTS

PERMIT DRAWING SHEET 4 OF 6

FOR -L- PLAN VIEW,SEE SHEET 2

NOTE:
ALL SHOULDER TAPERS ARE 4:1 UNLESS OTHERWISE NOTED.



FOR -L- PROFILE,SEE SHEET 2

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
DF18313.2011234.PR	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GFT Infrastructure, Inc.
One Glenwood Avenue, Suite 900
Raleigh NC 27603
919-420-7688
NC Lic No. P-0290

1

BEGIN CONSTRUCTION
-DET- STA. 11+72.15 =
-L- STA. 12+96.29
OFFSET = 9.68'

2

CL II RIPRAP WITH GEOTEXTILE (TYP.) (STRUCTURES PAY ITEM)

PLACE CL II RIPRAP TO ELEV. 2155.3' +/- (TYP.)

2 TON CL B RIP RAP 7 SY GEOTEXTILE

END CONSTRUCTION
-DET- STA. 14+72.34 =
-L- STA. 15+82.51
OFFSET = 9.45'

3

TEMP. CAUSEWAY

BEAVER POND

SILVER TREE CREEK

WOODS

SR 2416 (WARREN WILSON COLLEGE RD.)

BEGIN BRIDGE -DET- STA.12+80+/-

END BRIDGE -DET- STA.13+70+/-

4

5

NAD 83/2001

S/S SURFACE WATER IMPACTS

TS/TS TEMPORARY SURFACE WATER IMPACTS

PERMIT DRAWING SHEET 5 OF 6

FOR -L- PLAN VIEW, SEE SHEET 2

NOTE:
ALL SHOULDER TAPERS ARE 4:1 UNLESS OTHERWISE NOTED.

-DET-

BEGIN GRADE
-DET- STA.11+72.15=
-L- STA.12+98.81
EL = 2159.80'

BEGIN BRIDGE
-DET- STA.12+80+/-

END BRIDGE
-DET- STA.13+70+/-

END GRADE
-DET- STA.14+72.34=
-L- STA.15+79.54
EL = 2158.51'

(-)12.3255%
(-)0.8751%
(+)0.0000%
(+)11.6800%

1.5H
1.5H

JS
JS

PI = 11+90.00
EL = 2,159.64'
VC = 30'
K = 20

PI = 12+50.00
EL = 2,158.25'
VC = 90'
K = 38

PI = 14+57.00
EL = 2,158.25'
VC = 30'
K = 18

FOR -L- PROFILE, SEE SHEET 2

2,170
2,160
2,150
2,140
2,130
2,120

10+00 11+00 12+00 13+00 14+00 15+00

$$$$$$$$LSTIME$$$$$$$$LSEND$$$$$$$$$$$$$$$$$$$$

WETLAND AND SURACE 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)
1A	-L- 14+01 - 14+29	TEMP. CAUSEWAY							0.02		66	
1B	-L- 14+19 - 14+29	PROP. BRIDGE INTERIOR BENT						< 0.01		43		
1C	-L- 14+40 - 14+56	EROSION CONTROL DEVICES FOR DEWATERING							0.02		62	
1D	-L- 14+51 - 14+54	BANK STABILIZATION						< 0.01		36		
1E	-DET- 13+04 - 13+09	TEMP. DETOUR 1.5:1 SPILL-THROUGH ABUTMENT							< 0.01		31	
1F	-DET- 13+46 - 13+52	TEMP. DETOUR 1.5:1 SPILL-THROUGH ABUTMENT							< 0.01		43	
TOTALS*:								0.01	0.05	79	202	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
01/22/2026
BUNCOMBE
DF18313.2011234