STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

October 28, 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:
Bridge 36 over Second Broad River on US 74 Business in
Rutherford County, Division 13, WBS DF18113.1081013

Please find enclosed the following permits for this project:

Agency	Permit Type	Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Nationwide Permit 3 Action ID: SAW-2026-01605 Dated October 27, 2026	March 14, 2031
NC Division of Water Resources Section 401 Water Quality Certification	Water Quality Certification No. 8562 [3] Project ID: 20261191 *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.

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/

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

October 27, 2026

Regulatory Division
SAW-2026-01605

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: recrowther@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 September 3, 2026, for a Department of the Army general permit verification to replace a bridge that was damaged by **Hurricane Helene**. This project will replace **Bridge No. 36** over the Second Broad River on US 74 Business in Rutherford County, North Carolina (35.3336, -81.8395) and has been assigned file number SAW-2026-01605. 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 (Second Broad River)	**NPW 3**					**119' (0.08 acre) / work pads/ causeways**	**110' (0.02 acre) / bank stabilization**
Impact Totals		**0**	**0**	**0**	**0**	**119' (0.08 acre)**	**110' (0.02 acre)**
Total Loss of waters of the U.S. (wetlands and/or open waters)		**0**		Total Loss of waters of the U.S.			**0**
Required wetland compensatory mitigation		**0**		Required stream compensatory mitigation			**0**

We have reviewed the proposed activities in waters of the U.S. and have determined that the activities are authorized by Nationwide Permit (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 following:

- enclosed NWP general conditions and regional conditions for NWP 3
- special conditions of the verification letter for this project (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 **March 15, 2031**, unless the subject NWP is suspended, revoked, or is modified prior to that date such that the activity no longer complies with the terms and conditions of the NWP.

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, Madison, McDowell, Rutherford, and Yancey Counties, North Carolina, Service Log #25-236 through 25-248" on July 8, 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 NWP 3 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 NWP 3. 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 ensure that no more than 50% of river flow is constricted at any one time.

3. The permittee shall ensure that any equipment that is placed on the work pads 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.

4. Upon completion of work that requires the work pads to be in the river, the permittee shall remove all readily detectible work pad material, to the extent practicable, while removing as little of the original riverbed as possible.

5. The permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, 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.

6. 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 do 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

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-2026-01605

Permit Type: General Permit

General Permit Number and Name (*if applicable*): NWP 3

Name of Permittee: NCDOT, Division of Highways

Project Name: NCDOT / Hurricane Helene / 18113.1081013 / Br 36 / US 74 / Rutherford / Div 13

Project Location (*physical address*): ~~Bridge 36 Second Broad River US 74 Business Rutherford 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

Excerpted from Biological Opinion as conditioned USACE Special Condition No. 1:

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].

401 Certification (NCDWR)

Written Authorization Not Required

Permitted Drawings

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.03; Released June 1, 2026)

WBS Element: 18113.1081013 **TIP/Proj No:** 18113.1081013 **County(ies):** Rutherford

General Project Information

WBS Element:	18113.1081013	**TIP Number:**	18113.1081013	**Project Type:**	Bridge Replacement	**Date:**	7/27/2026
NCDOT Contact:	Andy Hussey, PE			**Contractor / Designer:**	Sungate Design Group, PA		
Address:	1020 Birch Ridge Drive Raleigh, NC 27610			**Address:**	5400 Etta Burke Ct Raleigh NC, 27606		
Phone:	919-707-6641			**Phone:**	919-859-2243		
Email:	lahussey@ncdot.gov			**Email:**	belam@sungatedesign.com		
City/Town:	Forest City			**County(ies):**	Rutherford		
River Basin(s):	Broad			**CAMA County?**	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.188	**Surrounding Land Use:**	Residential, Commercial, Industrial				
	Proposed Project			**Existing Site**			
Project Built-Upon Area (ac.)	1.25	ac.		0.94	ac.		
Typical Cross Section Description:	3-12ft lanes w/ 4ft paved shoulders			2-11ft lanes w/ 4ft paved shoulders			
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	20,300	Year: 2046	Existing:	10,634	Year:	2026

General Project Narrative: (Description of Minimization of Water Quality Impacts)

The North Carolina Department of Transportation proposes to replace Bridge 36 in Rutherford County after the existing structure was damaged by Hurricane Helene flooding (September 2024). The existing structure is 1@43', 4@42.5', 1@43' (OAL = 256'), RC deck on steel I-beams with concrete piers. The proposed structure is 1@100.1', 1@108', 1@63.1', 54" FIB with 4ft end bent caps. No deck drains are proposed over open water. Existing drainage patterns have been maintained to the maximum extent practical. Further, rip rap will be utilized to stabilize stormwater outfalls and existing stream banks that may be distrubed during construction.

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.03; Released June 1, 2026)

WBS Element: 18113.1081013 **TIP/Proj No.:** 18113.1081013 **County(ies):** Rutherford

General Project Information

Waterbody Information

Surface Water Body (1):	Second Broad River		**NCDWR Stream Index No.:**	9-41-(12.7)		
NCDWR Surface Water Classification for Water Body		**Primary Classification:**	Water Supply V (WS-V)			
		Supplemental Classification:	None			
Other Stream Classification:						
Impairments:	None					
Aquatic T&E Species Habitat?		Comments:				
NRTR Stream ID:	N/A			**Buffer Rules in Effect:**	N/A	
Project Includes Bridge Spanning Water Body?	Yes	**Deck Drains Discharge Over Buffer?**	No	**Dissipator Pads Provided in Buffer?**	No	
Deck Drains Discharge Over Water Body?	No	(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)		
(If yes, provide justification in the General Project Narrative)						

Surface Water Body (2):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species Habitat?		Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**		
Project Includes Bridge Spanning Water Body?		**Deck Drains Discharge Over Buffer?**		**Dissipator Pads Provided in Buffer?**		
Deck Drains Discharge Over Water Body?		(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)		
(If yes, provide justification in the General Project Narrative)						

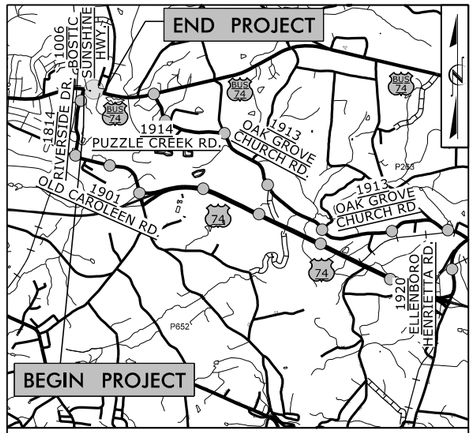
Surface Water Body (3):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species Habitat?		Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**		
Project Includes Bridge Spanning Water Body?		**Deck Drains Discharge Over Buffer?**		**Dissipator Pads Provided in Buffer?**		
Deck Drains Discharge Over Water Body?		(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)		
(If yes, provide justification in the General Project Narrative)						

PROJECT: 18113.1081013

CONTRACT: C205141

8/21/2026

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



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

RUTHERFORD COUNTY

PERMIT DRAWING
SHEET 1 OF 5
DATE: 8/21/2026

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	18113.1081013	1	

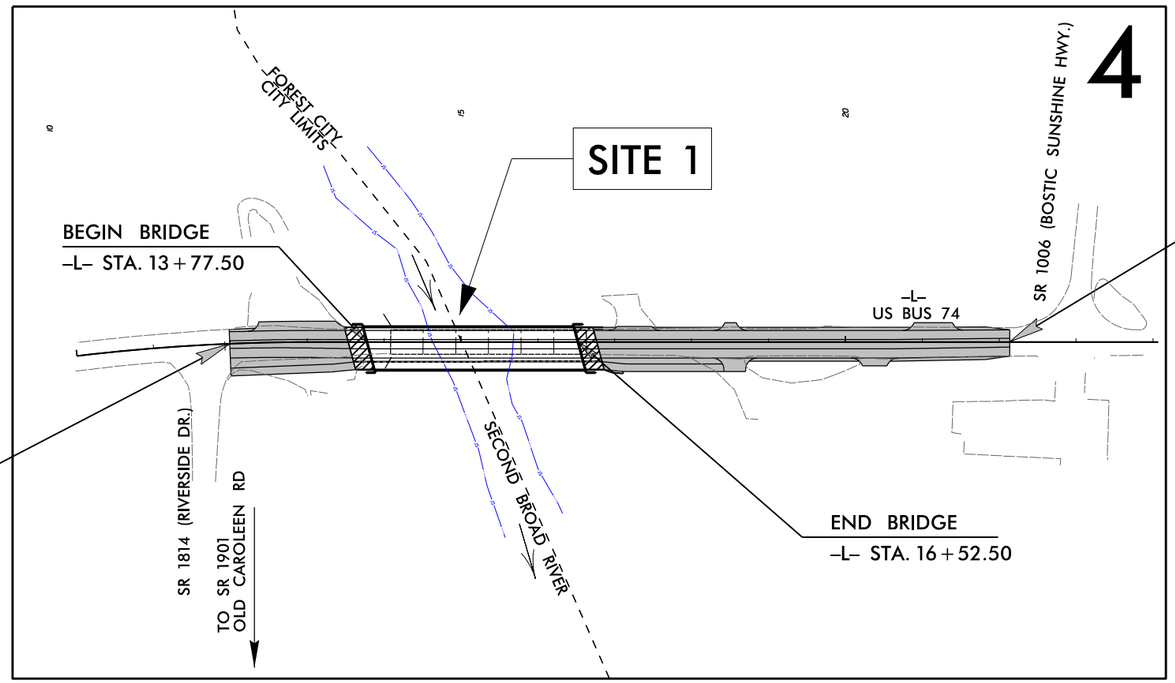
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
18113.1081013		PE,ROW,UTL,CONST.

LOCATION: *REPLACE BRIDGE 036 ON US 74 BUSINESS OVER SECOND BROAD RIVER FROM EAST OF SR 1814 (RIVERSIDE DRIVE) TO WEST OF SR 1006 (BOSTIC SUNSHINE HWY)*

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



WETLAND AND SURFACE WATER IMPACTS PERMIT



S–008
ROW PLANS

THIS IS NOT A CONTROLLED–ACCESS PROJECT.
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF FOREST CITY.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2026 = 10,634
ADT 2046 = 20,300
K = %
D = %
T = 6%
V = 50 MPH

FUNC CLASS = MINOR ARTERIAL
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT 18113.1081013 = 0.140 MILES
LENGTH STRUCTURE PROJECT 18113.1081013 = 0.052 MILES
TOTAL LENGTH OF PROJECT 18113.1081013 = 0.192 MILES

NCDOT CONTACT: DAVID STARK, PE
ALTERNATIVE DELIVERY UNIT

PLANS PREPARED FOR THE NCDOT BY:

SMITH–ROWE, LLC
2024 STANDARD SPECIFICATIONS

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F–0991

RIGHT OF WAY DATE:
06–05–2026

LETTING DATE:
12–16–2026

CURTIS HALL, PE
PROJECT ENGINEER

JOANNA MCCORMACK, EI
PROJECT DESIGNER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION

8/17/99

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
18113.1081013	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 2 OF 5

DATE: 8/21/2026

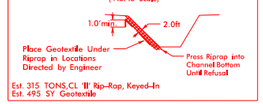
50' 25' 0 50' 100'
SCALE: 1" = 100'

NAD 83 NA 2011

S S SURFACE WATER IMPACTS

TS TS TEMPORARY SURFACE WATER IMPACTS

DETAIL 2
BANK STABILIZATION
(Not to Scale)



Est. 315 TONS CL 'II' Rip-Rap, Keyed-In
Est. 495 SY Geotextile
FROM STA. 14+38 TO STA. 14+85 -L-
FROM STA. 15+58 TO STA. 15+84 -L-

TEMP. WORK PAD

BRIDGE INTERIOR BENT 3@4.5FT DIAMETER SHAFTS

SITE 1

SECOND BROAD RIVER

STD 2' BASE DITCH W/CL 'B' RIP RAP SEE DETAIL 4

SPEC LAT 2' BASE DITCH W/CL 'B' RIP RAP SEE DETAIL 3

EXCAVATE TO EL 801.0

CLASS 'II' RIP RAP TO TOP OF BERM

CL 'II' RIP RAP BANK STABILIZATION SEE DETAIL 2

CL 'B' RIP RAP EST 1 TON EST 5 SY GF

SPEC LAT 'V' DITCH SEE DETAIL 1

SHOULDER BERM GUTTER FROM END APPROACH SLAB TO STA. 17+11 -L- RT AND 16+85 -L- LT

GRADE TO DRAIN

US HWY 74 BST VARIES

SR 1914 - RIVERSIDE DR VARIABLE WIDTH BST

EXISTING RW

PUE

1 212 NUWAY PACKING DRIVE, LLC DB 2056 PG 58

2 WILSON REVOCABLE TRUST DB 1080 PG 321 PB 41 PG 125

3 JOHN R, LENTZ, SR, JUANITA M, LENTZ DB 682 PG 800 PB 41 PG 125

4 TEENA ERVIN DB 745 PG 109 PB 40 PG 252

5 ARROWOOD VENTURE PROPERTIES, LLC DB 2029 PG 733 DB 2041 PG 557 PB 2 PG 1005

KIMBERLY A. MCCURRY DB 1031 PG 180 DB 1041 PG 762 PB 40 PG 252

J AND G BROOKS REAL ESTATE, LLC DB 2038 PG 3106

TOWN OF FOREST CITY 95CVS-791 DB 654 PG 19 DB 594 PG 90

BK WAREHOUSE

1 SBRK & BLK BLD

1 SBLK BUS

1 SBRK BUS

1 S BUS

1 SMTLBUS

1 SBKD

1 SBKLD

1 SFD

MTL BUS

MTL S

CARGO CONTAINERS

ROCK RET WALL

CONC RETAINING WALL

PLANTER/ FISH POND

A/G TANK

U/G TANK

OLD A/G POOL

BILLBOARD

WOODS

BST

CONC

GR

W/LT

EIP

EOI

FSS

SSV

METER

AIR COMPRESSOR

WM PIT

MB

BO

TS

18" RCP DIR. ONLY

18" CMP

48" RCP DIR. ONLY

72" CMP

72" CHL & SBW

48" CHL

60" CHL

72" CHL

72" HANDRAIL W/DITCH

144 ST 900 PR CONDUIT DUCT BANK REBAR 48" VINYL

48" VDOT TYPE MASTER

TH 1
N 588495.26'
E 1152932.60'
Top Utility Elv. 819.46'
12" DIP

TH 2
N 588480.05'
E 1152924.61'
Top Utility Elv. 818.89'
6" DIP

TH 3
N 588352.34'
E 1153639.72'
Top Utility Elv. 807.40'
6" DIP

TH 4
N 588352.16'
E 1153612.91'
Top Utility Elv. 808.36'
12" DIP

TB 2GI

S 77° 41' 26.8" E

S79°02'06"W 183.00'

N23°39'57"W 120.50'

N74°08'58"E 155.05'

N27°08'58"E 140.85'

S37°41'17"E 66.01'

S44°43'05"E 132.00'

S55°35'59"E 65.85'

S73°24'40"E 395.00'

S73°24'40"E 30.00'

N39°39'04"E 72.19'

S57°33'21"E 52.62'

S58°41'37"E 61.35'

S58°41'37"E 180.17'

N23°39'57"W 335.28'

N02°12'54"W 342.37'

S01°49'36"W 292.36'

N71°21'34"W 11.75'

N27°21'34"W 120.78'

S89°08'26"W 251.33'

S01°32'05"E 162.37'

S89°08'26"W 73.27'

S18°22'39"W 158.86'

N12°19'59"E 178.35'

S50°54'56"E 33.36'

S76°53'23"E 197.66'

0.3 MILES +/- TO SR 1579 MCCALL DR

0.4 MILES +/- TO SR 1301 OLD CAROLEEN RD

SEE SHEET 5 FOR -L- PROFILE

8/21/2026
800036_hyd_prm_wet_psh04.dgn
Balam

8/17/99

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
18113.1081013	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

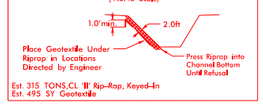
PERMIT DRAWING SHEET 3 OF 5

DATE: 8/21/2026

50' 25' 0 50' 100'
SCALE: 1"=100'

NAD 83 NA 2011

DETAIL 2
BANK STABILIZATION
(Not to Scale)



Est. 315 TONS,CL 'II' Rip-Rap, Keyed-In
Est. 495 SY Geotextile
FROM STA. 14+38 TO STA. 14+85 -L-
FROM STA. 15+58 TO STA. 15+84 -L-

S/S SURFACE WATER IMPACTS
TS/TS TEMPORARY SURFACE WATER IMPACTS

TEMP. WORK PAD
BRIDGE INTERIOR BENT 3@4.5FT DIAMETER SHAFTS
EXCAVATE TO EL 801.0
CLASS 'II' RIP RAP TO TOP OF BERM
BST/GRAVEL P/A
GRADE TO DRAIN
STD. 2' BASE DITCH W/CL 'B' RIP RAP SEE DETAIL 3
SPEC LAT 2' BASE DITCH W/CL 'B' RIP RAP SEE DETAIL 3
CL II RIP RAP BANK STABILIZATION SEE DETAIL 2
CLASS 'B' RIP RAP TO TOP OF BERM
EXCAVATE TO EL 801.0
CL 'B' RIP RAP EST 1 TON EST 5 SY GF
SPEC LAT 'V' DITCH SEE DETAIL 1
SHOULDER BERM GUTTER FROM END APPROACH SLAB TO STA. 17+11 -L- RT AND 16+85 -L- LT
SECOND BROAD RIVER
SITE 1
PUE
WOODS
CARGO CONTAINERS
1 KIMBERLY A. MCCURRY DB 1031 PG 180 DB 1041 PG 762 PB 40 PG 252
TEENA ERVIN DB 745 PG 109 PB 40 PG 252
ARROWOOD VENTURE PROPERTIES, LLC DB 2029 PG 733 DB 2041 PG 857 PB 2 PG 105
212 NUWAY PACKING DRIVE, LLC DB 7058 PG 59
TOWN OF FOREST CITY 95CVS 981 DB 5614 PG 19 DB 594 PG 90
WILSON REVOCABLE TRUST DB 1080 PG 321 PB 41 PG 125
JOHN R. LENTZ, SR. JUANITA M. LENTZ DB 680 PG 800 PB 41 PG 125
BK WAREHOUSE
1 SBRK & BLK BLD
1 SBLK BUS
1 SBRK BUS
1 SMTLBUS
MTL BUS
MTL SHED
PLANTER/ FISHPOND
A/G TANK
1 SFD
1 SBLK/D
BILLBOARD
METER
TS
MB(2)
BO(4)
BOL(3)
SSV
WM PIT
AIR COMPRESSOR
ELECTRIC SUNSHINE HWY
18" RCP DIR. ONLY
18" CMP
24" RCP
8" BST
12" DIP
15" RCP
20" CEDAR
CEDAR STUMP
TH 1 N 588495.28' E 1532392.90 Top Utility Elv. 819.46
TH 2 N 588480.05' E 1532924.68' Top Utility Elv. 818.89
TH 3 N 588352.34' E 1533639.72' Top Utility Elv. 807.40'
TH 4 N 588352.16' E 1533621.91' Top Utility Elv. 808.36'
0.3 MILES +/- TO SR 1579 MCCALL DR
0.4 MILES +/- TO SR 1301 OLD CAROLEEN RD
S79°02'06"W 183.00'
N01°12'54"W 362.57'
N23°29'57"W 120.50'
N74°08'58"E 155.05'
S27°08'56"E 140.85'
S37°41'17"E 66.01'
S44°43'05"E 132.00'
S58°41'37"E 61.35'
S57°33'21"E 52.62'
N39°39'04"E 72.19'
S55°35'59"E 65.85'
S73°24'40"E 395.00'
S73°24'40"E 30.00'
S 77° 41' 26.8" E
N71°21'34"W 11.75'
N27°21'34"W 120.76'
S89°08'26"W 251.33'
S89°08'26"W 73.27'
S50°54'56"E 33.36'
S76°53'23"E 197.66'
N12°13'59"E 178.35'
S18°22'39"W 158.96'

SEE SHEET 5 FOR -L- PROFILE

8/21/2026
800036_hyd_prm_wet_psh04-1.dgn
Balam

5/14/99

-L-

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
18113.1081013	5

ROADWAY DESIGN ENGINEER

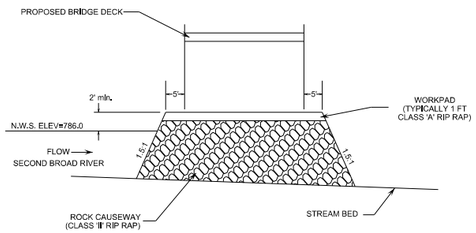
HYDRAULICS ENGINEER

PERMIT DRAWING
SHEET 4 OF 5
DATE: 8/21/2026

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

WORKPAD #1 DETAIL (NOT TO SCALE)

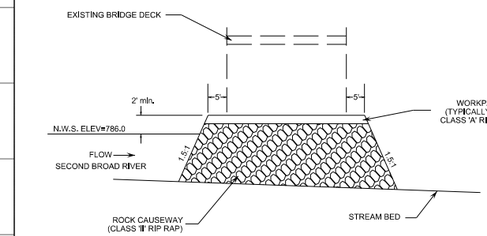


QUANTITIES OF ESTIMATES

VOLUME OF CLASS II RIP RAP = 220yds^3
AREA OF CLASS II RIP RAP = 0.06 ac
Estimate 310 Tons Class 'II' Rip Rap
Estimate 100 Tons Class 'A' Rip Rap

NOTE:
AT NO TIME SHALL THE WORKPAD OR COMBINATION OF WORKPADS INUNDATE MORE THAN HALF THE WIDTH OF THE CHANNEL.

WORKPAD #2 DETAIL (NOT TO SCALE)



QUANTITIES OF ESTIMATES

VOLUME OF CLASS II RIP RAP = 150yds^3
AREA OF CLASS II RIP RAP = 0.03 ac
Estimate 210 Tons Class 'II' Rip Rap
Estimate 65 Tons Class 'A' Rip Rap

NOTE:
AT NO TIME SHALL THE WORKPAD OR COMBINATION OF WORKPADS INUNDATE MORE THAN HALF THE WIDTH OF THE CHANNEL.

CENTERLINE -L- STA 15+15.00
CENTERLINE GP EL = 818.00'
3 SPANS @102',@108',@65'
(54") FIB GIRDERS
W/ VERTICAL ABUTMENTS
SKEW = 75 DEGREES

℄

BEGIN GRADE
-L- STA.12+23.00
EL = 824.15'

PI = 13+17.00
K = 64
EL = 820.38'
VC = 180'
DS = 40

BEGIN BRIDGE
-L- STA.13+77.50+/-

END BRIDGE
-L- STA.16+52.50 +/-

PI = 17+10.00
K = 156
EL = 815.66'
VC = 124'

END GRADE
-L- STA.18+50.00
EL = 812.86'

END 3" MILL/OVERLAY
-L- STA.22+13.76
EL = 808.67'

EXISTING GROUND

(-)4.0074%

(-)1.2008%

PROPOSED GRADE

(-)1.2008%

(-)1.9970%

END DITCH
PI STA 16+80 -L- LT
ELEV=810.6

(+) 12.001%

(+) 29.00%

(+) 10.067%

(+) 0.4348%

EXCAVATE TO EL 801.0
EST. 630 CY

CL 'II' RIP RAP
TO TOP OF BERM
1.5:1 NORMAL
1.55:1 SKEWED

PI STA 16+50 -L- LT
ELEV=807.0

EXCAVATE TO EL 801.0
EST. 760 CY

CL 'II' RIP RAP
TO TOP OF BERM
1.5:1 NORMAL
1.55:1 SKEWED

PI STA 16+25 -L- LT
ELEV=800.0

BEG DITCH
PI STA 18+85 -L- RT
ELEV=808.50

END DITCH
PI STA 20+00 -L- RT
ELEV=809.00

BEG DITCH
PI STA 15+75 -L- LT
ELEV=795.0

BM=1
STA = 12+72.76
OFFSET = 81.07' LT
ELEV = 822.65'

BANK STABILIZATION
W/CL 'II' RIP RAP
SEE DETAIL

NWSE & WSE
ON 12-18-2025 =786.0

TEMP. WORK PAD #1
SEE DETAIL

TEMP. WORK PAD #2
SEE DETAIL

SEE SHEET 4 FOR -L- PLAN

950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780 770 760 750

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00

8/21/2026
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Admin

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	14+52 to 15+69 -L-	BANK STABILIZATION						0.023		110		
		TEMP. WORK PAD / DEWATERING							0.081		119	