




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

November 21, 2025

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 135 over Ivy Creek on SR 2153 (Ivy Hill Road)
Division 13, WBS DF18313.2011306.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	Nationwide Permit 3 Action ID: SAW-2025-01875 Dated November 21, 2025	March 14, 2026*
NC Division of Water Resources Section 401 Water Quality Certification	Individual Water Quality Certification ID: 20251343 Dated October 23, 2025	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.

*All 404 Nationwide Permits expire on March 14, 2026. Since new Nationwide Permits are not issued until the previous set expires, a one-year period exists between March 14, 2026, and March 14, 2027 to complete construction, or renew the permit under the new Nationwide Permit.

ECAP will coordinate with Division Environmental Staff to determine project completion timelines and initiate the renewal process, if necessary.

404 Permit (USACE)



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

November 21, 2025

Regulatory Division
SAW-2025-01875

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 October 6, 2025, 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. 135** over Ivy Creek on SR 2153 in Buncombe County, North Carolina (35.7878, -82.5149) and has been assigned file number SAW-2025-01875. 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 (Ivy Creek)	<u>NWP 3</u>					11' / bank stabilization	127' / bank stabilization
						36' (0.01 ac) / workpad / causeway	
Impact Totals		0	0	0	0	47' (0.02 ac)	127'
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 these 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
- enclosed NWP regional conditions
- 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 **March 14, 2026**, 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 Consultations – Batch Format, Replace Multiple Crossing Structures Destroyed by Tropical Storm Helene in Buncombe, Madison, McDowell, Mitchell, and Yancey Counties, North Carolina, Service Log #25-276 through 25-299” on September 4, 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 any equipment that is placed on the workpad/causeway 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.
3. Upon completion of work that requires the workpad/causeway to be in the stream, the permittee shall remove all readily detectible workpad/causeway material, to the extent practicable, while removing as little of the original streambed as possible.
4. 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 by the U.S. Army Corps of Engineers.
5. The permittee will ensure the following: (1) the contractor is made aware that the stream may be used by paddlers; (2) all onsite staff watch the area for stream users; (3) work is halted if someone is seen floating toward the construction site/bridge site; and (4) all overhead work is paused until stream users safely leave the area.
6. The permittee shall comply with Conditions 1-4 of the attached letter from the North Carolina Wildlife Resources Commission dated October 6, 2025.
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,

A handwritten signature in black ink that reads "M. Scott Jones". The signature is written in a cursive, flowing style.

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

Enclosures

Compliance Certification Form

File Number: SAW-2025-01875

County: Buncombe

Permittee: NCDOT, Mr. Michael Turchy

**Project Name: NCDOT / Hurricane Helene / DF18313.2011306.PR / Br 135 /
SR 2153 / Buncombe / Div 13**

Date Verification Issued: November 21, 2025

Project Manager: Lori Beckwith

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

**US ARMY CORPS OF ENGINEERS
Wilmington District
Attn: Lori Beckwith
151 Patton Avenue, Room 208
Asheville, NC 28801-5006
or
loretta.a.beckwith@usace.army.mil**

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the USACE suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit, and mitigation (if applicable), has been completed in accordance with the terms and conditions of the said permit and verification letter, including all applicable conditions.

Date Authorized Work Started: _____ Completed: _____

Describe any deviations from permit (attach drawing(s) depicting the deviations):

***Note: The description of any deviations on this form does not constitute approval by the USACE.**

Signature of Permittee

Date

401

Certification (NCDWR)

JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



NORTH CAROLINA
Environmental Quality

October 23, 2025

DWR # 20251343
Buncombe County

North Carolina Department of Transportation
Attn: Michael Turchy
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Delivered via email to: maturchy@ncdot.gov

Subject: Approval of Individual 401 Water Quality Certification
Replacement of Bridge 135 over Ivy Creek on SR 2153 (Ivy Hill Road),
WBS DF18313.2011306.PR.

Location: 35.787821, -82.514947

Dear Mr. Michael Turchy:

Attached hereto is a copy of Certification No. WQC008348 issued to Michael Turchy and the North Carolina Department of Transportation, dated October 23, 2025. This approval is for the purpose and design described in your application.

This Water Quality Certification does not relieve the Permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

Upon the presentation of proper credentials, the Division of Water Resources (Division) may inspect the property.

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.

Non-compliance with or violation of the conditions herein set forth may result in revocation of this Water Quality Certification for the project and may also result in criminal and/or civil penalties.



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

This approval and its conditions are final and binding unless contested [G.S. 143-215.5].

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) **within sixty (60) calendar days**. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <https://www.oah.nc.gov> or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

Dan Hirschman, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the Permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S. 150B-23(a).

This letter completes the Division's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Amy Annino at 828-296-4668 or amy.annino@deq.nc.gov if you have any questions or concerns.

Sincerely,

Signed by:

Faith Hardin

3185423002EA45E...

Faith Hardin, Supervisor
401 & Buffer Transportation Permitting Branch

Electronic cc: Lori Beckwith, USACE Asheville Regulatory Field Office
Mike Sanderson, Division 13 Environmental Officer
Holland Youngman, USFWS
Dave McHenry, NCWRC
DWR 401 & Buffer Permitting Branch Electronic file

Filename: 20251343_Bridge 135, WBS DF18313.2011306.PR._APPRV_20251023.docx



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

CERTIFICATION #WQC008348 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina's Regulations in 15 NCAC 02H .0500 and 15A NCAC 02B .0200, to Mr. Michael Turchy and the North Carolina Department of Transportation, who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on October 6, 2025, with additional information received on October 23, 2025, and by Public Notice issued by the Division on October 6, 2025, and within the *Reasonable Period of Time* pursuant to 40 CFR Part 121.6.

The State of North Carolina certifies that this activity will comply with water quality requirements and the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

The following impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

Stream Impacts in the French Broad River Basin

Site	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation (linear feet)
Site 1: Bank stabilization and Temporary impervious dike	127 linear feet	127 linear feet	127 linear feet	0
Site 1a: Temporary fill for impervious dike	-	11 linear feet	11 linear feet	0
Site 2: Temporary work pad	-	36 linear feet	36 linear feet	
<i>Totals:</i>	<i>127 linear feet</i>	<i>47 linear feet</i>	<i>174 linear feet</i>	<i>0</i>

Total Stream Impact for Project: 127 linear feet permanent and 47 linear feet temporary



This approval requires you to follow the conditions listed in the Certification below.

CONDITIONS OF CERTIFICATION [15A NCAC 02H .0507(c)]:

Project Specific Conditions

1. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with the stream at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]
2. The permittee shall use Design Standards in Sensitive Watersheds in areas draining to Trout waters. [15A NCAC 4B.0124(a)-(e)]
3. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000. Please note the extra protections for the sensitive watersheds.
4. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]
5. As a condition of this 401 Water Quality Certification, the bridge demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
6. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
7. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
8. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]
9. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into



position. Under no circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H .0506(b)(3)]

General Conditions

1. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
2. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
3. For all streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
4. During the construction of the project, no staging of equipment of any kind is permitted in waters of the state or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
5. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
6. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
7. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]



8. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
9. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
10. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
11. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
12. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
13. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
14. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
15. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H.0507(c) and 15A NCAC 02H.0506 (b)(2) and (c)(2)]
16. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]



17. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer (or whomever is the authorized agent if a non-NCDOT project) shall complete and return the "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0507]
19. Native riparian vegetation (i.e., herbaceous, trees, and shrubs native to your geographic region) must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0506(b)(2)]
20. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
21. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within jurisdictional wetlands. [15A NCAC 2H.0506; 15A NCAC 2H.0507]
22. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3)]:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the North Carolina Sediment and Erosion Control Manual. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Surface Mining Manual.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.



23. Sediment and erosion control measures shall not be placed in wetlands or surface waters without prior approval from DWR. [15A NCAC 02H.0506(b)(3)]
24. DWR approves the stormwater drainage design as shown in the 401 application, under the assumption that it meets the requirements of the NCDOT NPDES permit #NCS000250. These plans are enforceable by DWR. Changes to the approved plans are prohibited without prior approval from DWR. If sediment or other pollutants are found to be discharged from the stormwater outfalls, DWR may take enforcement action. NCDOT and DWR shall assess the damage to water quality standards and implement an appropriate action plan to address the impacts. The action plan shall provide an appropriate timeline for implementation as agreed upon by both DWR and NCDOT. This may require NCDOT to obtain a modification to its current 401 and 404 permits.

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.

This, the 23rd day of October 2025

Signed by:

Faith Hardin

3185423002EA45E...

Faith Hardin, Supervisor

401 & Buffer Transportation Permitting Branch



Permitted Drawings



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

(Version 3.02; Released April 23, 2024)

FOR NCDOT PROJECTS

WBS Element: DF18313.2011306.F TIP/Proj No: C205028 County(ies): Buncombe Page 1 of 2

General Project Information

WBS Element:	DF18313.2011306.PR	TIP Number:	C205028	Project Type:	Bridge Replacement	Date:	9/30/2025
NCDOT Contact:	Tom Veazey			Contractor / Designer:	John Olinger, PE		
	Address: Resident Engineer's Office - Asheville 11 Old Charlotte Highway Asheville, NC 28803				Address: 8601 Six Forks Road Forum 1, Suite 700 Raleigh, NC 27615		
	Phone: 828-250-3270				Phone: 919-809-6564		
	Email: tveazey@ncdot.gov				Email: jolinger@rkk.com		
City/Town:	Mars Hill			County(ies):	Buncombe		
River Basin(s):	French Broad			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.065 miles	Surrounding Land Use:	Rural, Residential
	Proposed Project		Existing Site
Project Built-Upon Area (ac.)	0.33 ac	ac.	0.3 ac.
Typical Cross Section Description:	The typical section for -L- includes 2-10' lanes (NC) with open shoulders varying from 3' to 7', dependant on the presence of guardrail. -Y1- is similar, but with 9' lanes. Shoulder berm gutter is used at End Bridge to direct runoff from the bridge to modified concrete flumes. 4:1 cut slopes are to be used, with fill slopes varying from 2:1 to 1:1.		
Annual Avg Daily Traffic (veh/hr/day):	Design/Future: 450	Year: 2025	Existing: 300 Year:

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

100135 is an emergency bridge replacement on SR 2153 (Ivy Hill Rd) over Ivy Creek. Hurricane Helene occurred in October 2024 and washed out the existing bridge and roadway. The jurisdictional streams within the study area does have impairments and do not provide habitat for any threatened or endangered aquatic species.

Design Mitigations for streams include:

1. Stormwater was designed to avoid direct discharge into jurisdictional features to the maximum extent possible.
2. Stormwater design velocities entering jurisdictional features have been mitigated to be non-erosive (less than 2 fps).
3. Open shoulder sections were maximized to promote sheet flow from the roadway.
4. Diffuse flow provided at outlets that do not have a well defined outfall.
5. Slopes steepened up to 1:1 with grouted Class VII riprap to minimize stream impacts.



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS



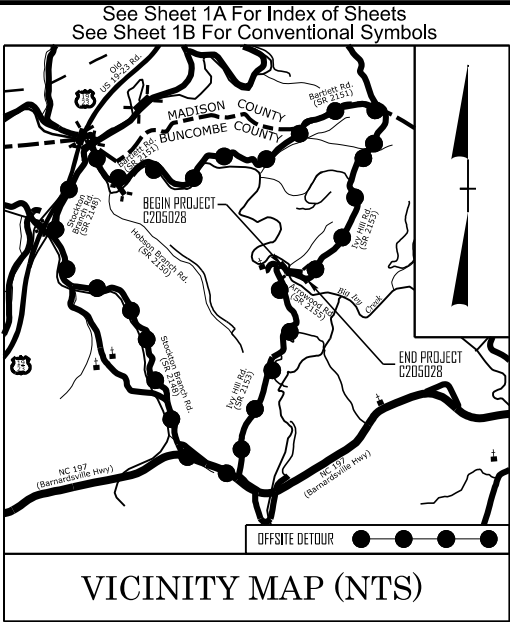
(Version 3.02; Released April 23, 2024)

WBS Element: DF18313.2011306.F TIP/Proj No.: C205028 County(ies): Buncombe Page 2 of 2

General Project Information

Waterbody Information

Surface Water Body (1):	Ivy Creek	NCDWR Stream Index No.:	6-96-(0.5)
NCDWR Surface Water Classification for Water Body	Primary Classification:	Water Supply II (WS-II)	
	Supplemental Classification:	High Quality Waters (HQW)	
Other Stream Classification:	None		
Impairments:	fecal coliform		
Aquatic T&E Species?	No	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, 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?		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, 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?		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, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)			



PERMIT DRAWING
SHEET 1 OF 5

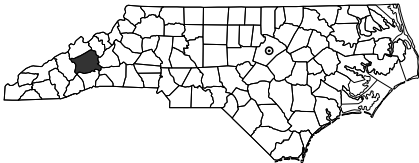
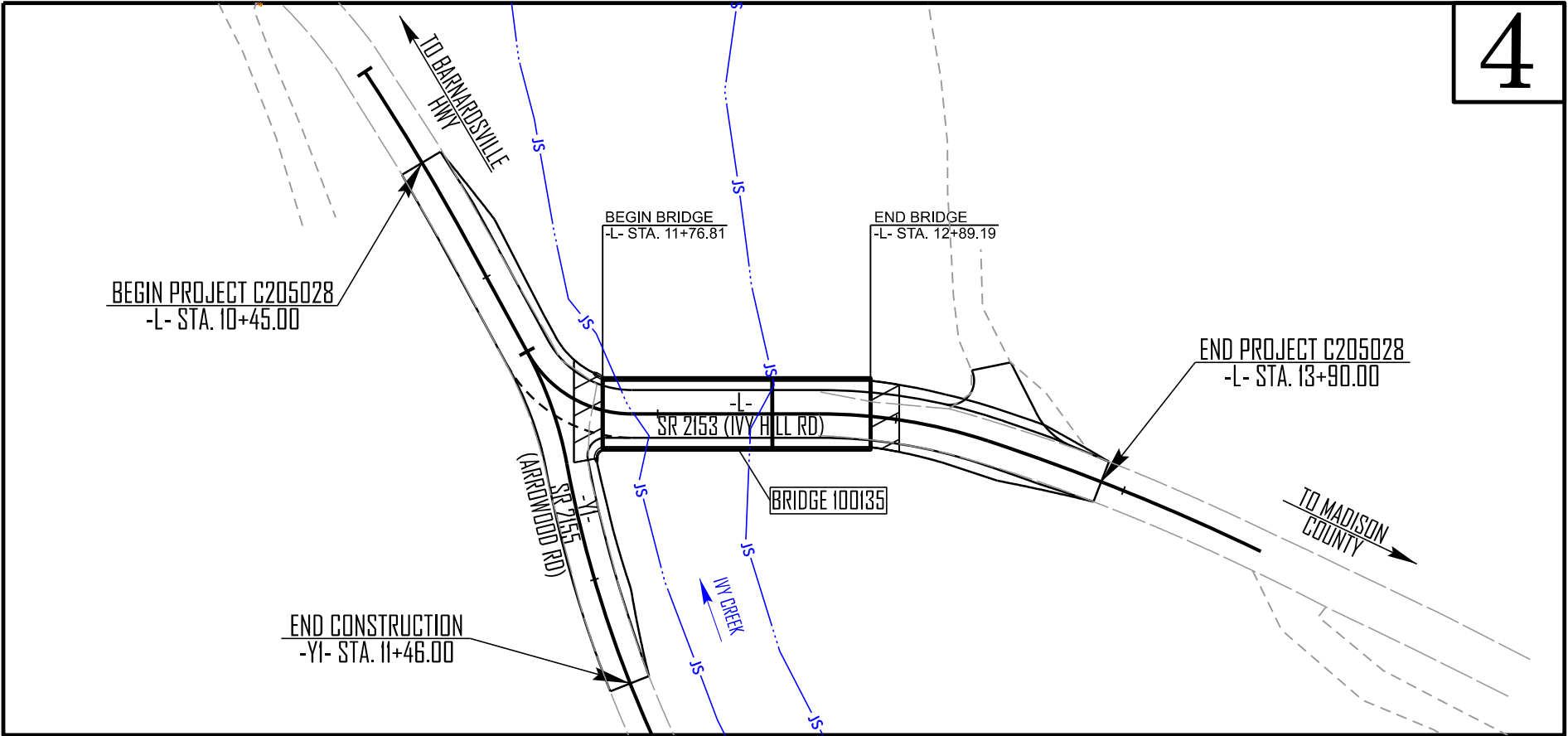
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE COUNTY

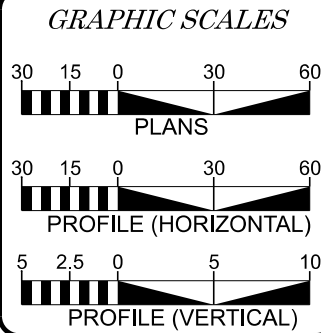
LOCATION: *BRIDGE 100135 ON SR 2153 (IVY HILL RD.)
OVER IVY CREEK*

TYPE OF WORK: *BRIDGE REPLACEMENT, GRADING, DRAINAGE,
PAVING & RESURFACING.*

WETLAND AND SURFACE WATER IMPACTS PERMIT



PERMIT PLANS
SUBMITTAL NO. S-014R1
DATE: 09-30-2025



DESIGN DATA

ADT ____ = 450

K = N/A %
D = N/A %
T = 6 % *
V = 40 MPH

* TTST = 3% DUAL = 3%
FUNC CLASS =
LOCAL RURAL
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT C205028 = 0.044 MILES
LENGTH OF STRUCTURE PROJECT C205028 = 0.021 MILES
TOTAL LENGTH OF PROJECT C205028 = 0.065 MILES

PLANS PREPARED BY:
RK&K
RUMMEL, KLEPPER & KAHL, LLP
8601 Six Forks Road, Fourth Floor, Suite 700
RALEIGH, NORTH CAROLINA 27615-3960
NC LICENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2024 STANDARD SPECIFICATIONS

LETTING DATE:
February 10, 2025

John R. Olinger, PE
PROJECT ENGINEER

Haylee Townsend, EI
PROJECT DESIGN ENGINEER

Todd Lapham
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____
ROADWAY DESIGN ENGINEER

SIGNATURE: _____
P.E.



TEMPORARY WORK PAD DETAIL

NOT TO SCALE

PERMIT DRAWING
SHEET 2 OF 5

C205028

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
BUNCOMBE COUNTY



ROADWAY DESIGN UNIT
ROADWAY DESIGN
ENGINEER

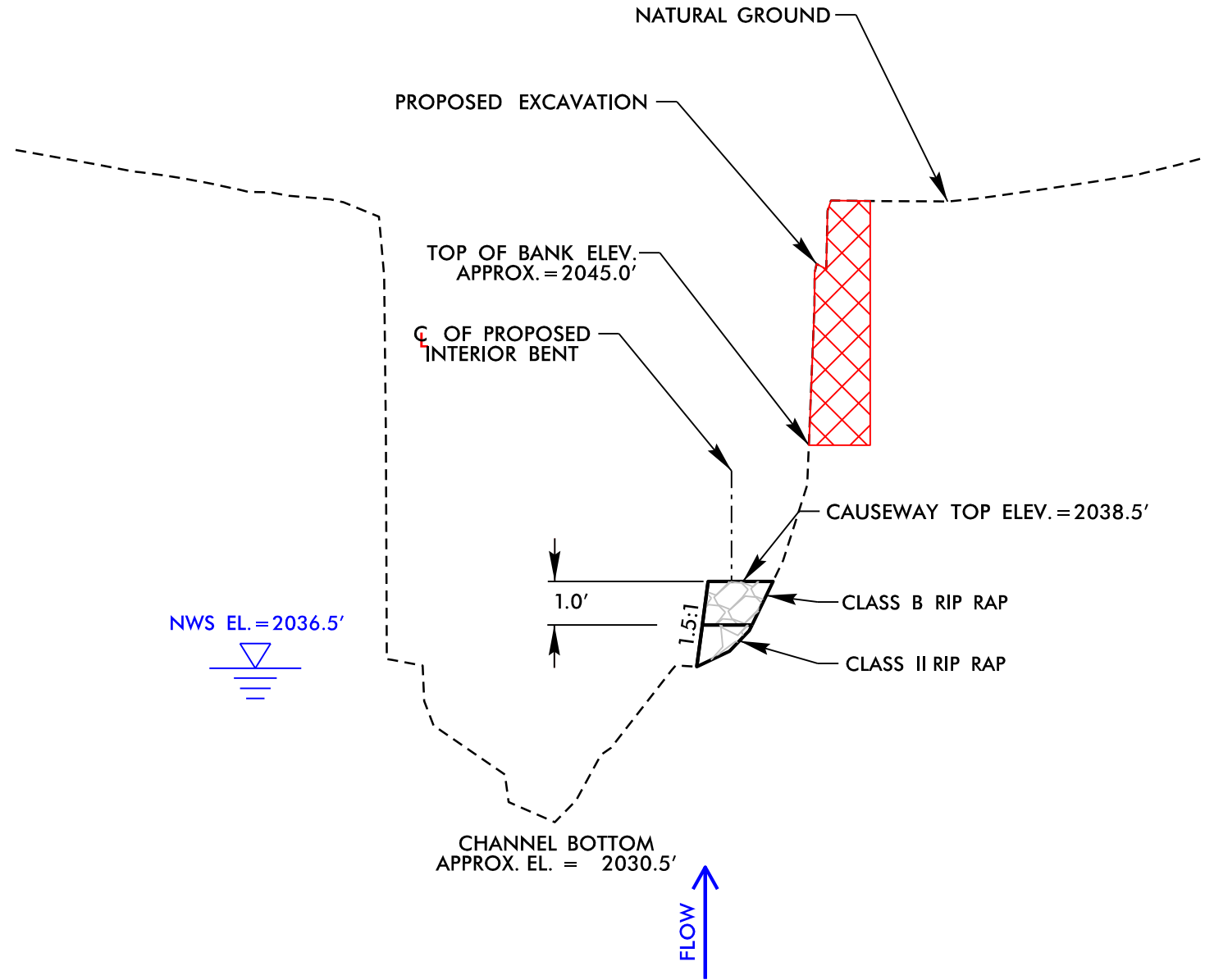
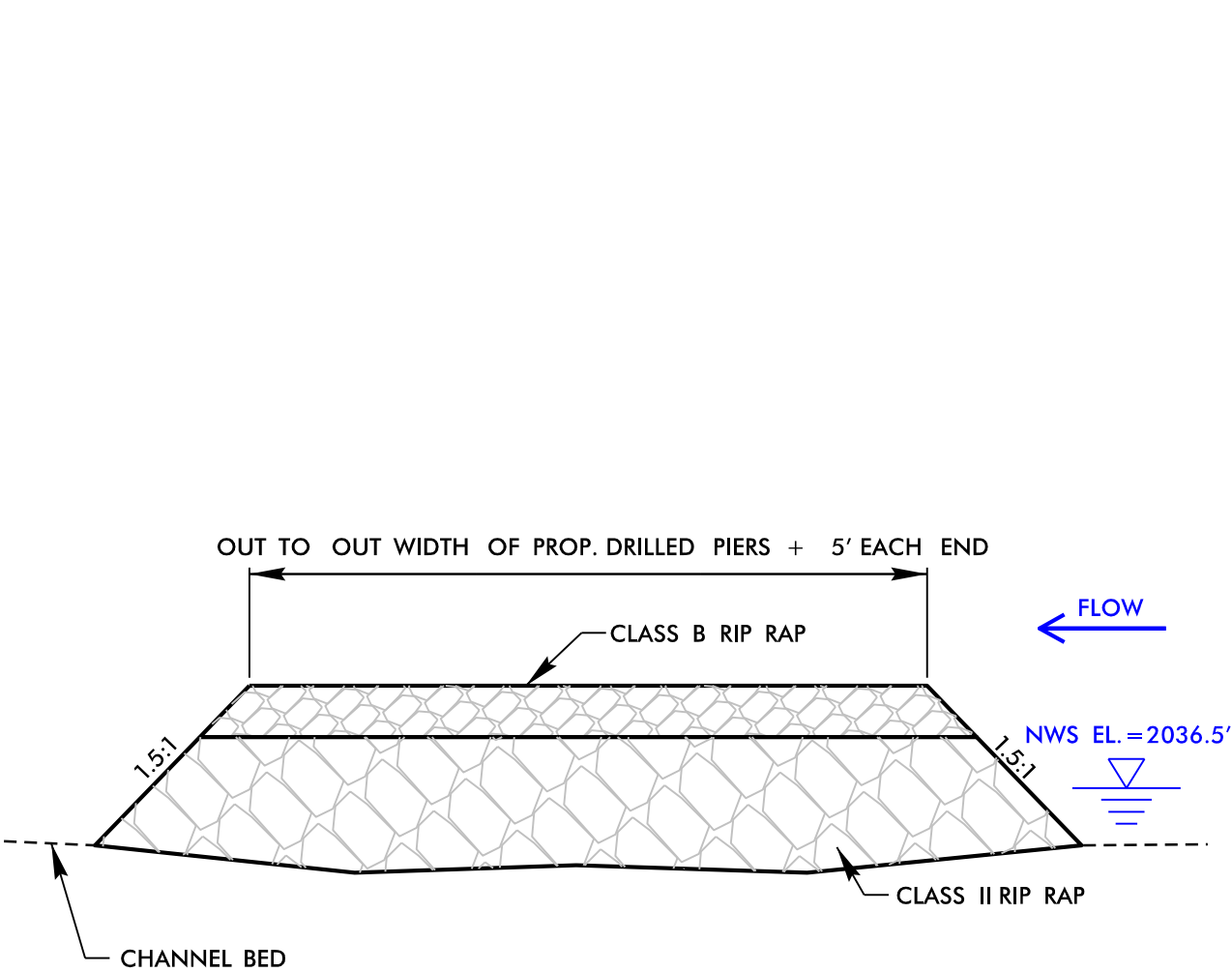
HYDRAULICS
ENGINEER

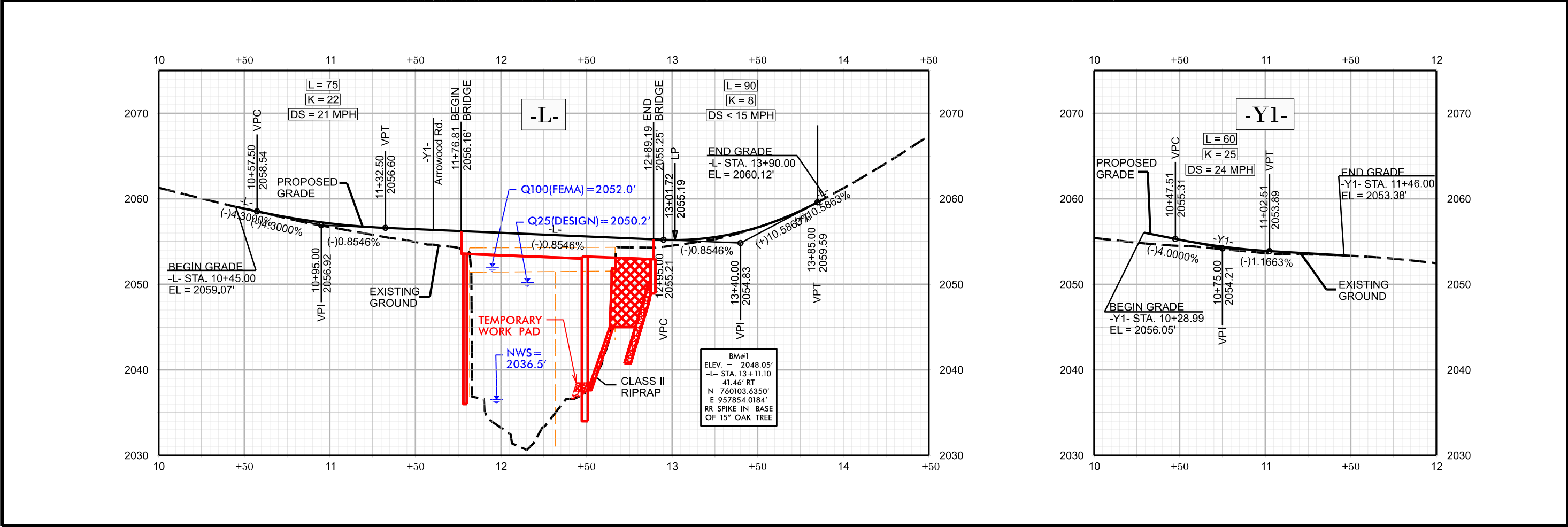
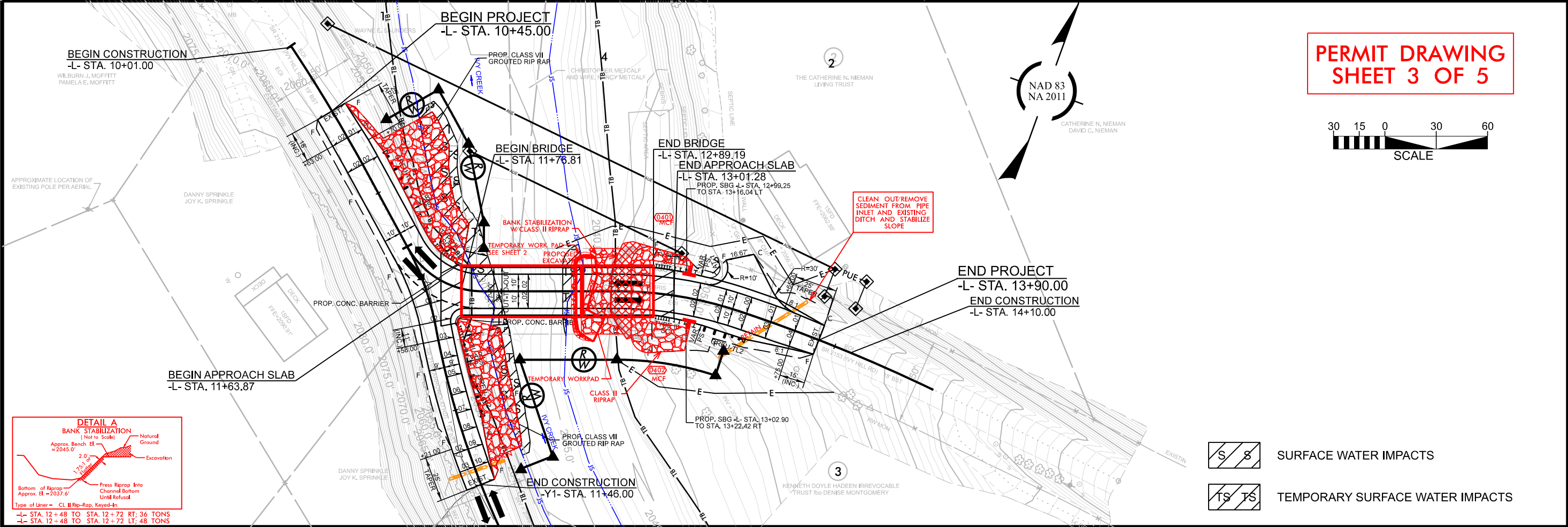
INCOMPLETE PLANS
FOR REVIEW ONLY



PREPARED BY

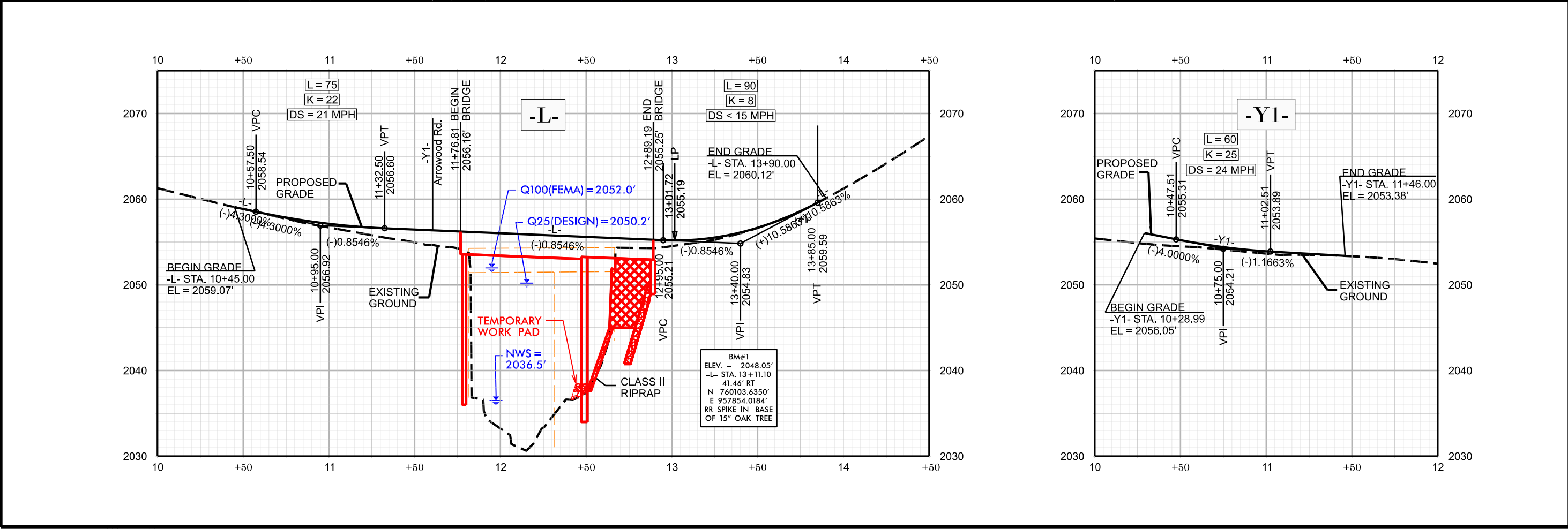
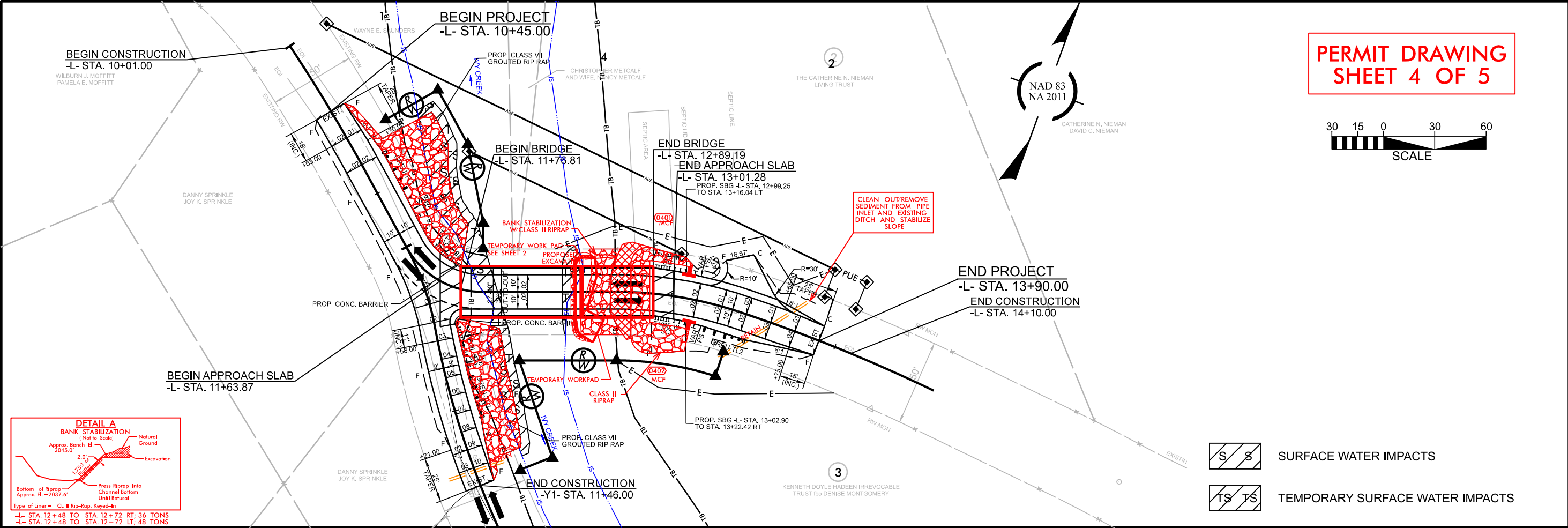
RK&K
P: 919.878.3560
8801 Six Forks Road, Forum 1, Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
www.rk.com

Engineers | Construction Managers | Planners | Scientists
Responsive People | Creative Solutions





C205028	
	04
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BUNCOMBE COUNTY	
	
ROADWAY DESIGN UNIT	
ROADWAY DESIGN ENGINEER	
INCOMPLETE PLANS (SEE NOTE 100-100-000, 100-100-001, 100-100-002)	
HYDRAULICS ENGINEER	
INCOMPLETE PLANS (SEE NOTE 100-100-000, 100-100-001, 100-100-002)	
PREPARED BY	
	
P: 919.878.6660 801 Six Forks Road, Forum 1, Suite 700 Raleigh, North Carolina 27615-3960 NC License No. F-0112	
Engineers Construction Managers Planners Scientists www.rk.com	
Responsive People Creative Solutions	



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)
1	-Y1- 10+55 - 11+39 LT	Bank Stabilization						0.01	< 0.01	68	5	
	-L- 13+55 - 14+34	Causeway/Impervious Dike						< 0.01**			36	
	-L- 12+54 - 13+77 LT	Bank Stabilization						0.02	0.01	59	6	
TOTALS*:								0.03	0.02	127	47	0

NOTES:
Jurisdictional Stream Within Project Limits
No Wetlands Within Project Limits
**Permanent Impact Due to Interior Bent with Partial Encroachment of 3' Drilled Shaft within JS = 5.2 sf of Permanent SW Impacts

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
9/30/2025
BUNCOMBE COUNTY

SHEET 5 OF 5