



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

November 30, 2023

MEMORANDUM TO: Division Environmental and Construction Units

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

SUBJECT: Environmental Permits for the Replacement of Bridge 160001 on US 158/
NC 86 over Country Line Creek in Caswell County, Division 7, **TIP: BR-0069.**

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Regional General Permit 50	May 25, 2025
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 4135 [RGP50]	May 25, 2025

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) 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/PermIssued/_General_Conditions_and_Certifications/

PROJECT COMMITMENTS

T.I.P Project No. BR-0069
Replacement of Bridge No. 160001
on US 158/NC 86 over Country Line Creek
Caswell County
WBS Element 67069.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

ESA federally protected species within the Study Area

Completed - A biological conclusion of “May Affect, Not Likely to Adversely Affect” was determined for the James spiny mussel, the Roanoke logperch, and the Atlantic pigtoe, the three federally listed species within the BR-0069 project study area per USFWS IPaC database and NOAA NMFS. An aquatic Species Survey Report was prepared in February 2022. USFWS coordination regarding the requirements of Section 7 (a)(2) was completed in February 2022.

FEMA Floodplains and Floodways (Division 7 Construction, NCDOT SMU)

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

Floodplain Mapping Coordination (NCDOT Hydraulic Design Unit)

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT’S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

COMMITMENTS FROM PERMITTING

No special conditions developed from permitting.

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action Id. **SAW-2023-02216** County: **Caswell County** U.S.G.S. Quad: **Yanceyville**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: **Erin Cheely**
North Carolina Department of Transportation
Address: **1598 Mail Service Center**
Raleigh NC, 27699-1598
Telephone Number: **(919)707-6108**

Size (acres) **N/A** Nearest Town **Yanceyville**
Nearest Waterway **Country Line Creek** River Basin **Roanoke**
USGS HUC **03010104** Coordinates Latitude: **36.4043**; Longitude: **-79.297789**
Location description: **Bridge No.001 over Country Line Creek, on US 158-NC 86, east of Yanceyville, NC.**

Description of projects area and activity: **TIP BR-0069; Bridge replacement impacting 147 linear feet of stream (69 lf (<0.02 acre) bank stabilization and 78 lf temporary riprap construction, causeway, and detour bridge impacts), and 0.02 acre of wetlands (non-404 hand-clearing).**

Applicable Law: ☒ Section 404 (Clean Water Act, 33 USC 1344);
☐ Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number: **GP 50 - NCDOT - Bridge, Road Widening and Interchanges**

SEE ATTACHED RGP GENERAL, REGIONAL AND/OR SPECIAL CONDITIONS

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated November 14, 2023. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

This verification will remain valid until the expiration date identified below unless the nationwide and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide and/or regional general permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact **Eric Alsmeyer at (919) 817-1570 or Eric.C.Alsmeier@usace.army.mil.**

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Matthews* 2023.11.16
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Corps Regulatory Official: _____ Date: **November 16, 2023**
Expiration Date of Verification: **May 25, 2025**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>

SPECIAL CONDITIONS

1. **Tri-colored bat** - No tree clearing will occur within 150 feet of a known maternity roost tree May 1 - July 31 in order to protect non-volant young. Winter roost trees are not considered maternity roost trees. NCDOT will cross-reference information given by USFWS on the locations of maternity roosts (as they are discovered) to stay in compliance with this condition.

2. **NLEB** - The Wilmington District, Federal Highway Administration, U.S. Fish and Wildlife Service (USFWS), and the North Carolina Department of Transportation (NCDOT) have conducted programmatic Section 7(a)(2) consultation for the Northern long-eared bat (NLEB) for NCDOT projects located in Divisions 1-8. The result of this programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS titled, "Programmatic Biological Opinion – Revised, NCDOT Program Effects on the Northern Long-eared Bat in Divisions 1-8", dated December 15, 2022. This PBO contains agreed upon conservation measures which would minimize take of NLEB. As noted in the PBO, applicability of these conservation measures varies depending on the location of the project. The USFWS has documented that no reasonable and prudent measures, nor terms and conditions, are necessary or appropriate to minimize the amount or extent of incidental take of NLEB caused by the Action; therefore, the incidental take statement does not provide reasonable and prudent measures for this species. Department of the Army (DA) authorization under general permit or standard permit (Individual Permit) is conditional upon the permittee's compliance with applicable, agreed upon conservation measures of the PBO, which is incorporated by reference in this verification letter. Failure to comply with the applicable conservation measures, where a take of the NLEB occurs, would constitute an unauthorized take by the permittee, and would also constitute permittee non-compliance with this verification letter. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO and the ESA. All PBOs can be found on our website at: <https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/>.

Action ID Number: SAW-2023-02216

County: Caswell County

Permittee: Erin Cheely
North Carolina Department of Transportation

Project Name: NCDOT / BR-0069 / Bridge 160001 on US 158 / NC 86 over Country Line Creek in Caswell County / Div 7

Date Verification Issued: November 16, 2023

Project Manager: Eric Alsmeyer

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: Eric Alsmeyer
Raleigh Regulatory Field Office
3331 Heritage Trade Drive, Suite 105
Wake Forest, NC 27587
919.554.4884, Ext. 23

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 Corps 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 has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

RICHARD E. ROGERS, JR.

Director

NORTH CAROLINA
Environmental Quality

November 29, 2023

Caswell County

NCDWR Project No. 20231538

NCDOT TIP Project BR-0069

Replace Bridge #160001 on US 158/ NC 86

APPROVAL of 401 WATER QUALITY CERTIFICATION with ADDITIONAL CONDITIONS

Mr. Michael Turchy
 NCDOT, Environmental Coordination and Permitting Group Leader
 Environmental Analysis Unit
 1598 Mail Service Center
 Raleigh, NC 27699-1598

Dear Mr. Turchy:

You have our approval, in accordance with the conditions listed below, for the following impacts regarding the replacement of Bridge #160001 on US 158/ NC 86 over Country Line Creek in Yanceyville, Caswell County.

Stream Impacts in the Roanoke River Basin

Site	Perm. Fill in Perennial Stream (linear ft)	Temp. Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1- Bank Stabilization	63	10	73	-
1- Temporary Causeway		21	21	
1- Bank Stabilization	6	10	16	
1- Detour Bridge		37	37	
Totals	69	78	147	-

Total Stream Impacts: 147 linear feet.**Wetland Impacts in the Roanoke River Basin**

Site	Hand Clearing (ac)	Total Wetland Impact (ac)	Wetland Impacts Requiring Mitigation (ac)
2- Roadway Fill	0.02	0.02	-
Totals	0.02	0.02	-

Total Wetland Impact for Project: 0.02 acres.

The project shall be constructed in accordance with your application dated received on November 14, 2023. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4135. This certification corresponds to the GP 50 issued by the Corps of Engineers. In addition, you should

acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)] The permittee shall report to DWR any noncompliance with, or any violation of, stream or wetland standards [15A NCAC 02B .0200] including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

Should your project change, you must notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to perennial streams (now or in the future) exceed 300 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the General Certification 4135, and any additional conditions listed below.

Condition(s) of Certification:

Project Specific Conditions

1. 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)]
2. 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)]
3. 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)]
4. 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)]
5. 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)]
6. 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 down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the 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)].
7. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases



water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]

8. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
9. 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)]
10. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]
11. 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. 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)]

General Conditions

1. 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]
2. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
3. 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)]
4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
9. 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)]



10. Discharging hydroseed mixtures and washing out hydro seeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
11. 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]
12. 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)]
13. 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)]
14. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization 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]
15. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
16. 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)]
17. Upon completion of the project (including any impacts at associated borrow or waste sites), NCDOT project engineer (or appointee) shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
18. 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)]
19. 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) and (c)(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.



20. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [15A NCAC 02H.0506(b)(3) and (c)(3)]
21. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506 {b)(3) and (c)(3) and 15A NCAC 02B.0200]
22. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*. All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
23. For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission.

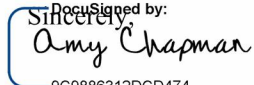
The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Ryan Conchilla at ryan.conchilla@deq.nc.gov.

Sincerely,

9C9886312DCD474...
Richard E. Rogers, Director
Division of Water Resources

Electronic copy only distribution:

Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Jerry Parker, NCDOT Division 7 Environmental Officer
Erin Cheely, NCDOT Division 7



 Highway Stormwater STORMWATER North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS 									
(Version 3.00; Released August 2021)									
WBS Element:		TIP/Proj No:		County(ies):		Page 1 of 2			
General Project Information									
WBS Element:		67069.1.1		TIP Number:		BR-0069		Project Type: Bridge Replacement	
NCDOT Contact:		Galen Cail		Contractor / Designer:		Cameron Long, PE		Date: 9/11/2023	
	Address: Hydraulics Unit 1000 Birch Ridge Drive Raleigh, NC 27610				Address: Moffatt & Nichol 4700 Falls of Neuse Rd, Suite 300 Raleigh, NC 27609				
	Phone: (919)707-6711				Phone: (919) 781-4626				
	Email: gcail@ncdot.gov				Email: clong@moffattnichol.com				
City/Town:		Yanceyville			County(ies):		Caswell		
River Basin(s):		Roanoke			CAMA County?		No		
Wetlands within Project Limits?		Yes							
Project Description									
Project Length (lin. miles or feet):		0.27		Surrounding Land Use:		RURAL, AGRICULTURE, WOODS			
		Proposed Project				Existing Site			
Project Built-Up Area (ac.)		1.3		ac.		1.1		ac.	
Typical Cross Section Description:		THE PROPOSED ROADWAY WILL BE A TWO-WAY ALIGNMENT WITH 12' TRAVEL LANES, 4' PAVED SHOULDERS, AND VARYING SLOPES. THE PROPOSED BRIDGE HAS AN OUT TO OUT OF 47'-3" AND CLEAR ROADWAY OF 44'. THE BRIDGE WILL HAVE 12' TRAVEL LANES AND 10' PAVED SHOULDERS.				THE EXISTING ROADWAY IS A TWO-WAY ALIGNMENT WITH 12' TRAVEL LANES, 3.5' PAVED SHOULDER, AND 4:1 SLOPES. THE EXISTING BRIDGE HAS AN OUT TO OUT OF 43'.			
Annual Avg Daily Traffic (veh/hr/day):		Design/Future:		10,025		Year:		2043	
		Existing:		8,525		Year:		2023	
General Project Narrative: (Description of Minimization of Water Quality Impacts)		The project consists of the replacement of bridge #160001 in Caswell County. The existing bridge carries US-158/NC-86 over County Line Creek between US-158 and NC-62. The creek is called Country Line Creek on the vicinity map, the final survey file, and at the NCDEQ Surface Waters Classification website and is referring to the same stream. The proposed structure for bridge #160001 is 1@80', 1@90', 1@80' 54" Girders with 4'-0" deep caps. The proposed alignment is at the same location as the existing alignment. There are wetlands located within the project limits. The proposed detour alignment is located to the north and on the downstream side of the project. The detour bridge typical is two 11' travel lanes with 4' paved shoulders. STORMWATER CONTROLS: The proposed bridge does not utilize deck drains. Runoff from the bridge roadway and paved shoulders at the bridge approaches drains into inlets. The stormwater is then diffused at riprap pad outlets prior to discharging into County Line Creek. Shoulders will be paved. Bank Stabilization is planned to prevent erosion of the streambanks. MINIMIZATION: The detour bridge was shifted to the north avoiding impacts to the wetlands located south of the existing bridge and alignment. The bridge span and pier locations were selected to minimize the amount of work that would be required in the creek while still being constructable and to reduce the number of bents located in the creek from two to one.							



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

(Version 3.00; Released August 2021)

FOR NCDOT PROJECTS

WBS Element: 67069.1.1

TIP/Proj No.: BR-0069

County(ies): Caswell

Page 2 of 2

General Project Information

Waterbody Information

Surface Water Body (1):	Country Line Creek	NCDWR Stream Index No.:	22-56-(3.7)
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C	
	Supplemental Classification:		
Other Stream Classification:			
Impairments:	None		
Aquatic T&E Species?	No	Comments:	
NRTR Stream ID:	Country Line Creek	Buffer Rules in Effect:	N/A
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)	(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, 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?		Comments:	
NRTR Stream ID:		Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		Deck Drains Discharge Over Buffer?	
Deck Drains Discharge Over Water Body?		(If yes, provide justification in the General Project Narrative)	(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)			

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0069	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67069.1.1	N/A	PE	

PERMIT DRAWING
SHEET 1 OF 9

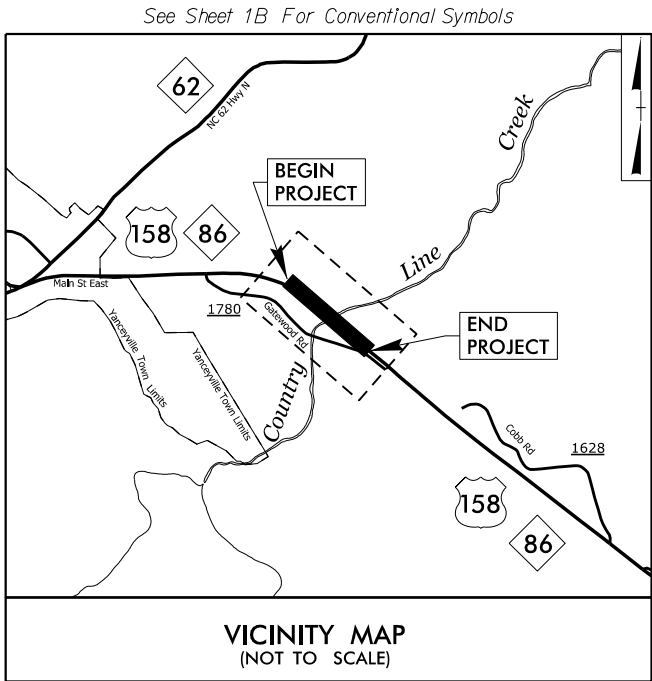
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CASWELL COUNTY

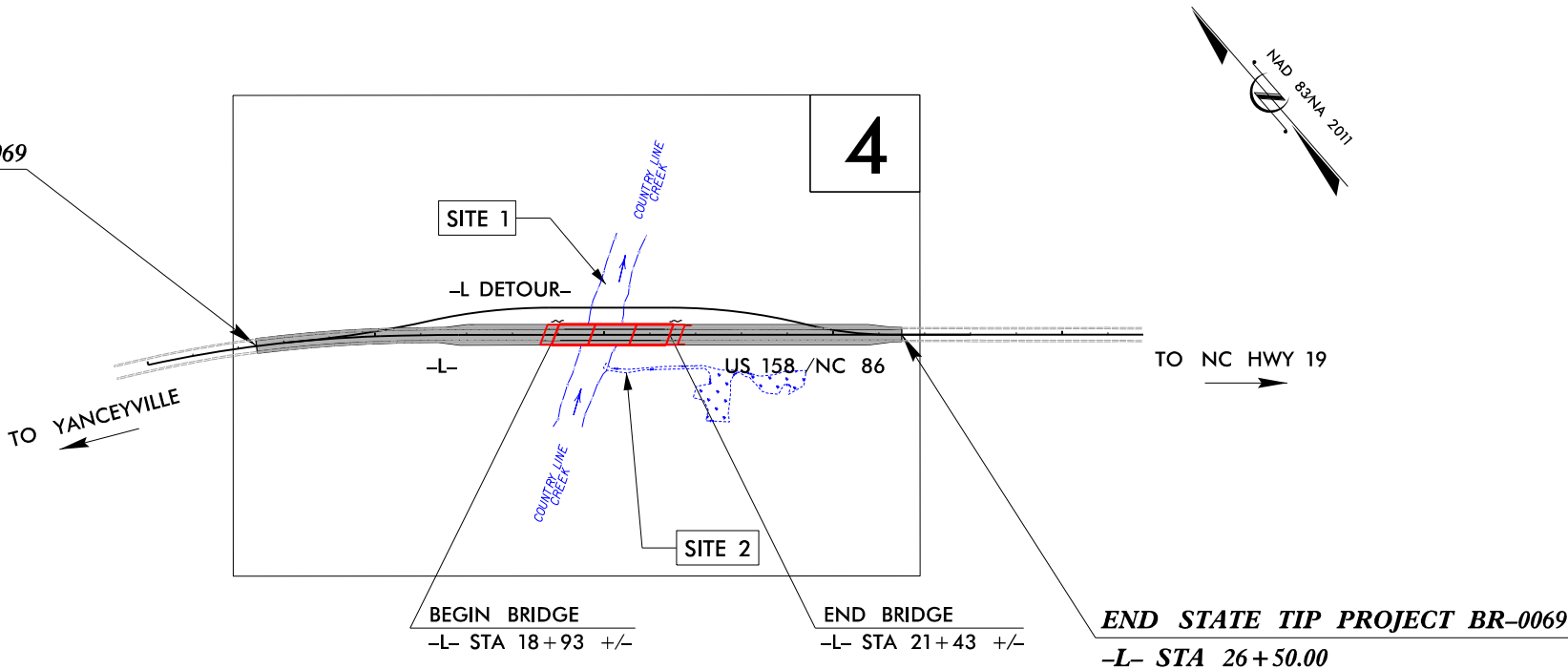
LOCATION: BRIDGE NO.160001 OVER COUNTRY LINE CREEK ON
US 158 /NC 86

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

WETLAND AND SURFACE WATER IMPACTS PERMIT



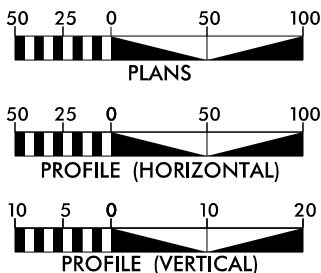
BEGIN STATE TIP PROJECT BR-0069
-L- STA 12+40.00



THIS IS CONTROLLED OF ACCESS PROJECT.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ____

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2023 = 8,525
ADT 2043 = 10,025
K = TBD %
D = TBD %
T = 10 % *
V = 60 MPH
* TTST = 6% DUAL 4%
FUNC CLASS =
PRINCIPAL RURAL ARTERIAL
-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0069 = 0.220
LENGTH STRUCTURE TIP PROJECT BR-0069 = 0.047
TOTAL LENGTH TIP PROJECT BR-0069 = 0.267

Prepared for NCDOT in the Office of:

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919) 781-4625 VOICE (919) 781-4863 FAX
NC License NO.: F-0105

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 15, 2023

LETTING DATE:
FEBRUARY 20, 2024

TRENT HUFFMAN, P.E.
PROJECT ENGINEER

GRAY MODLIN, P.E.
PROJECT DESIGN ENGINEER

DAVID STUTTS, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

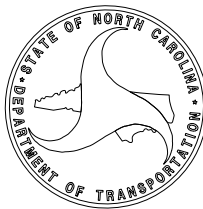
moffatt & nichol

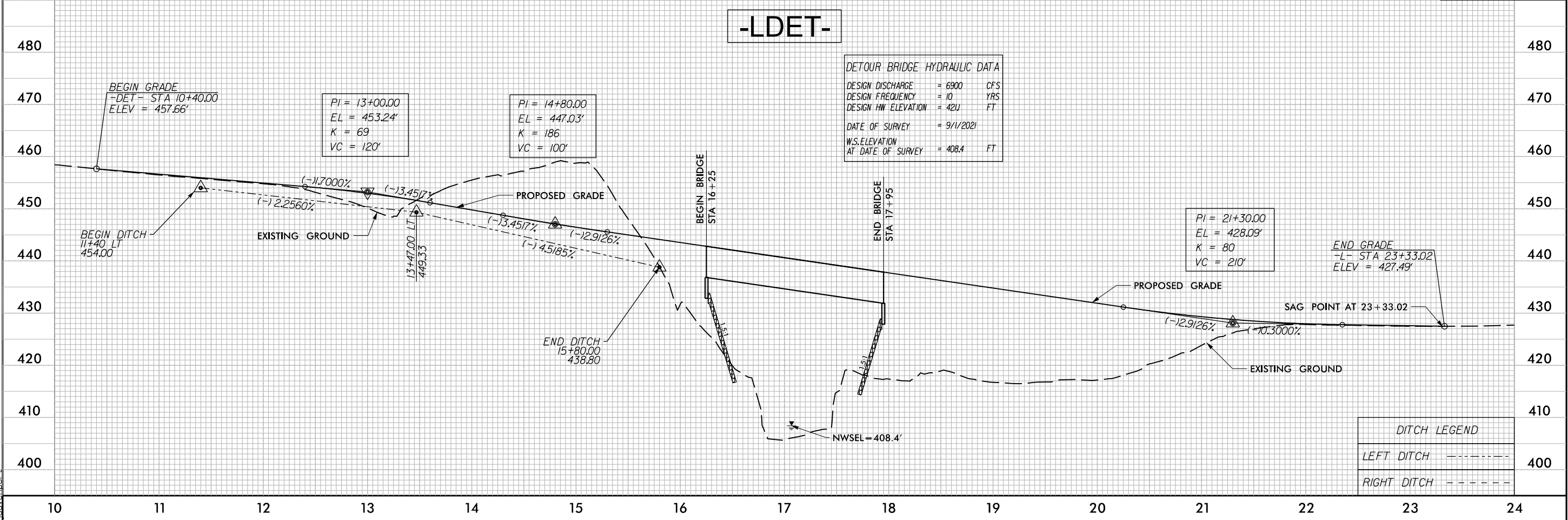
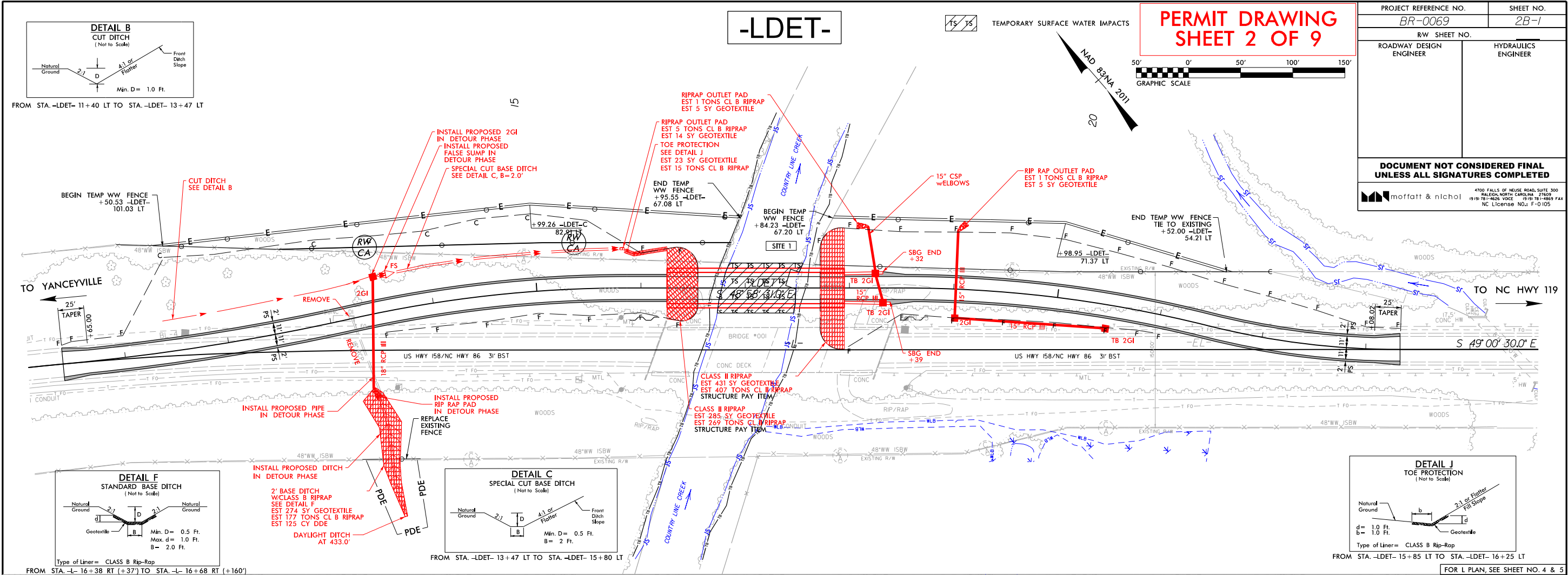
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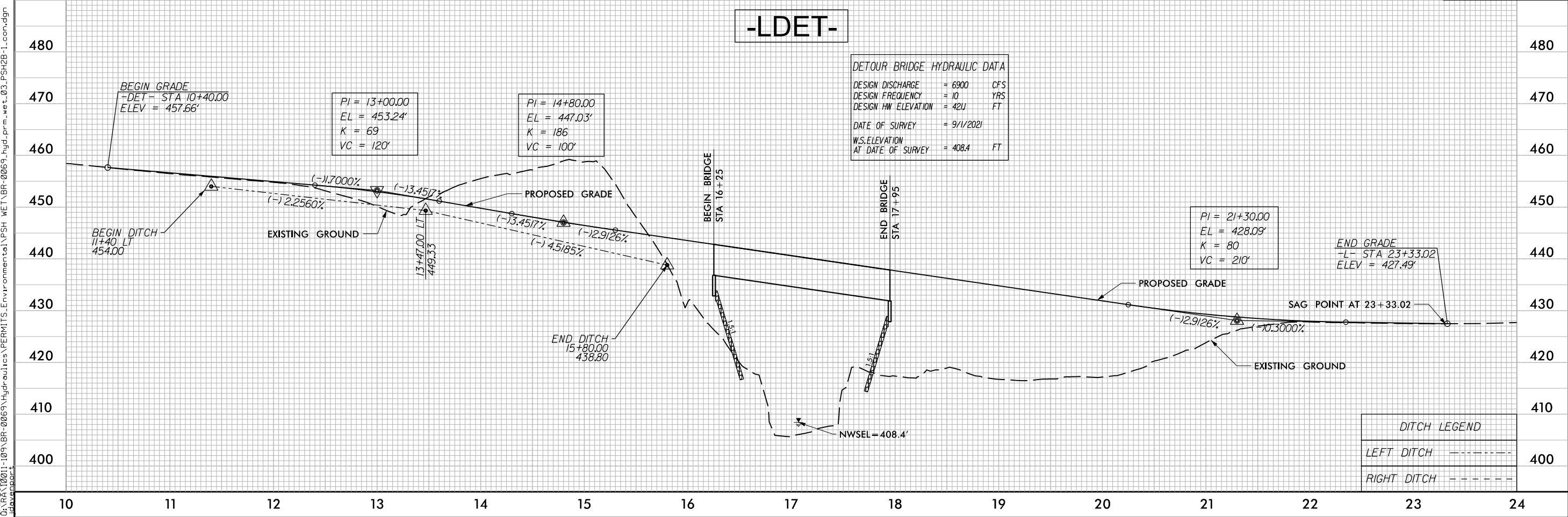
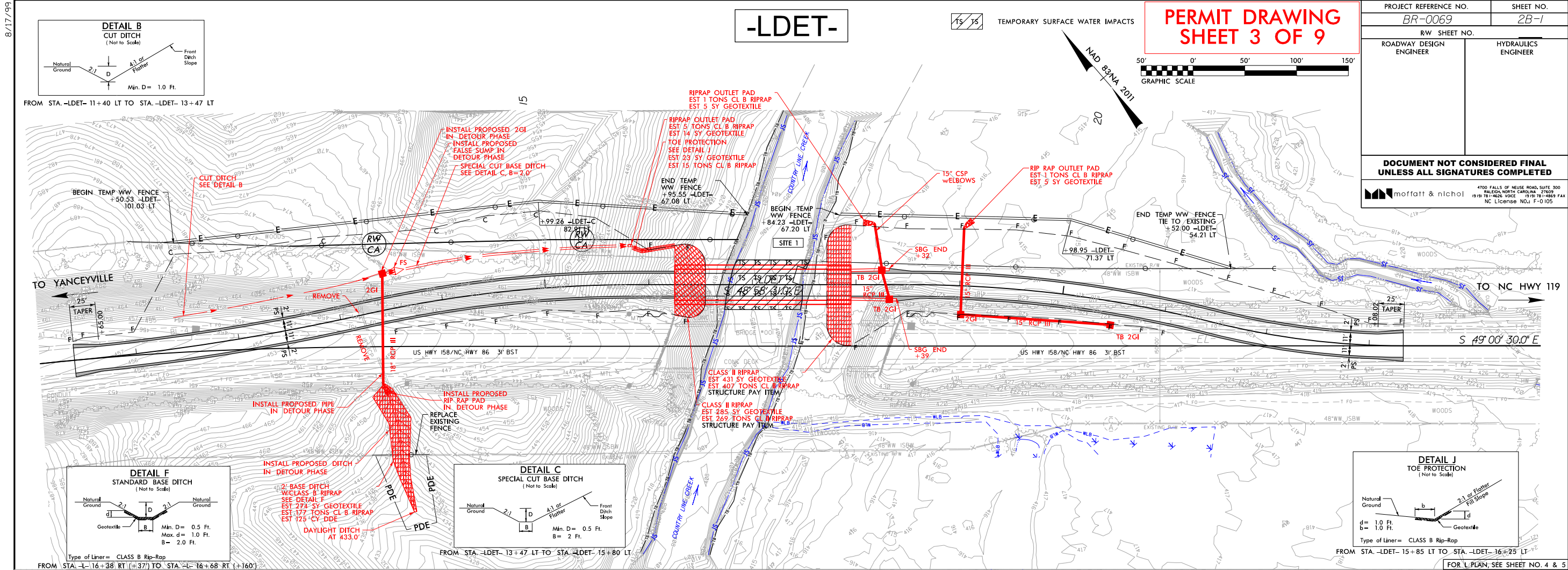
ROADWAY DESIGN
ENGINEER

moffatt & nichol

SIGNATURE: P.E.

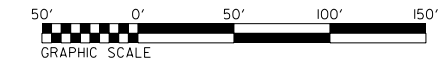






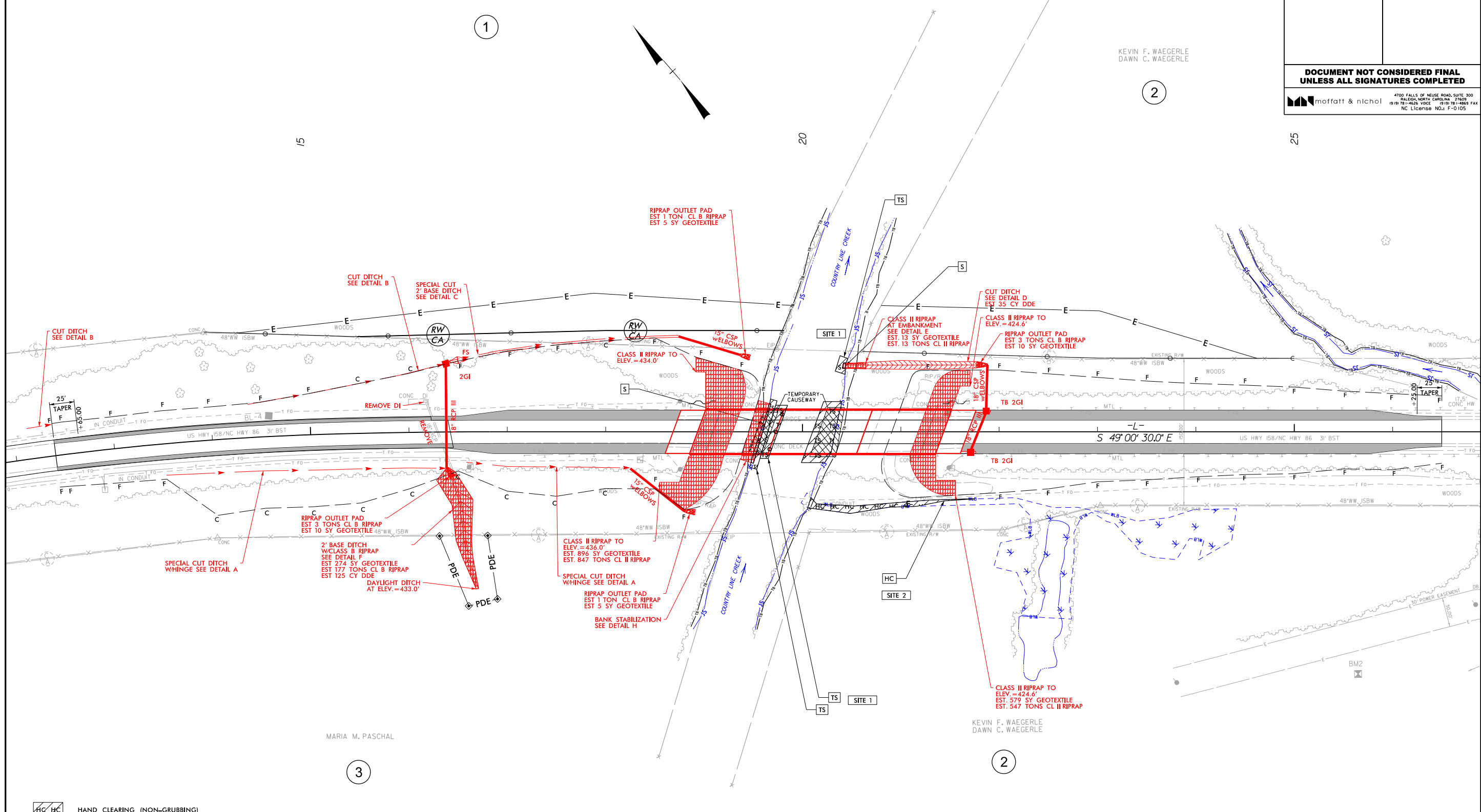
8/17/99
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8/14/2023
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W. MAYNARD GREGORY REVOCABLE TRUST
OF 2014 DATED JANUARY 16, 2014

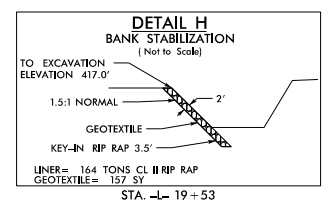
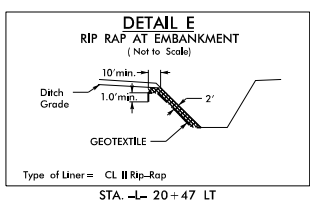
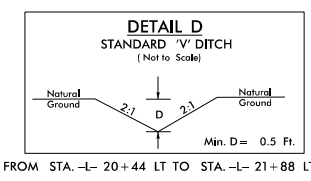


PERMIT DRAWING
SHEET 4 OF 9

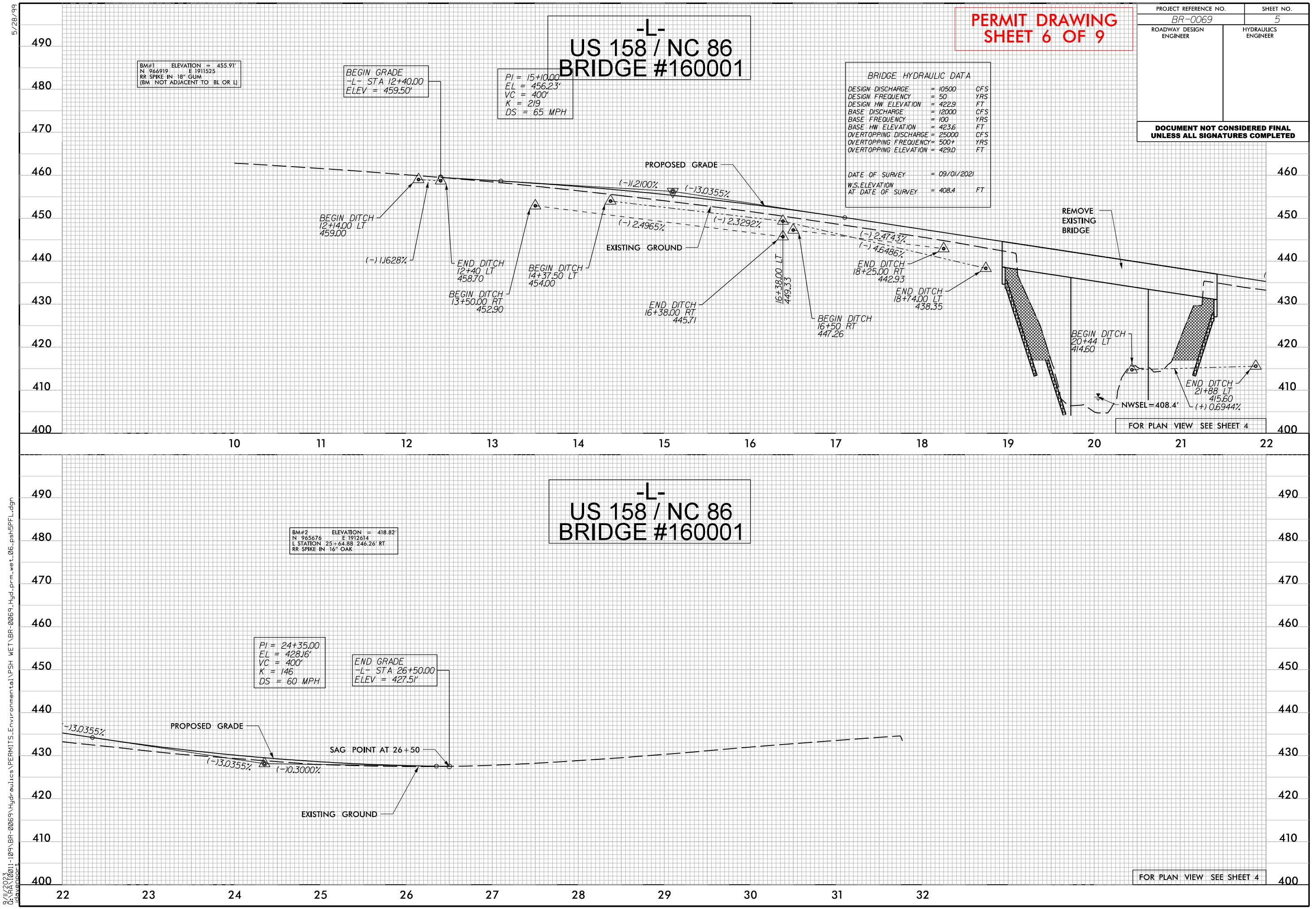
PROJECT REFERENCE NO. <i>BR-0069</i>		SHEET NO. <i>4</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
 moffatt & nichol		4700 FALLS OF NEUSE ROAD, SUITE 300 RALEIGH, NORTH CAROLINA 27609 (919) 781-4626 VOICE (919) 781-4669 FAX NC License NO.: F-0105	



- HC HC HAND CLEARING (NON-GRUBBING)
- TS TS TEMPORARY SURFACE WATER IMPACTS
- S S SURFACE WATER IMPACTS



FOR -L- PROFILE, SEE SHEET NO. 5

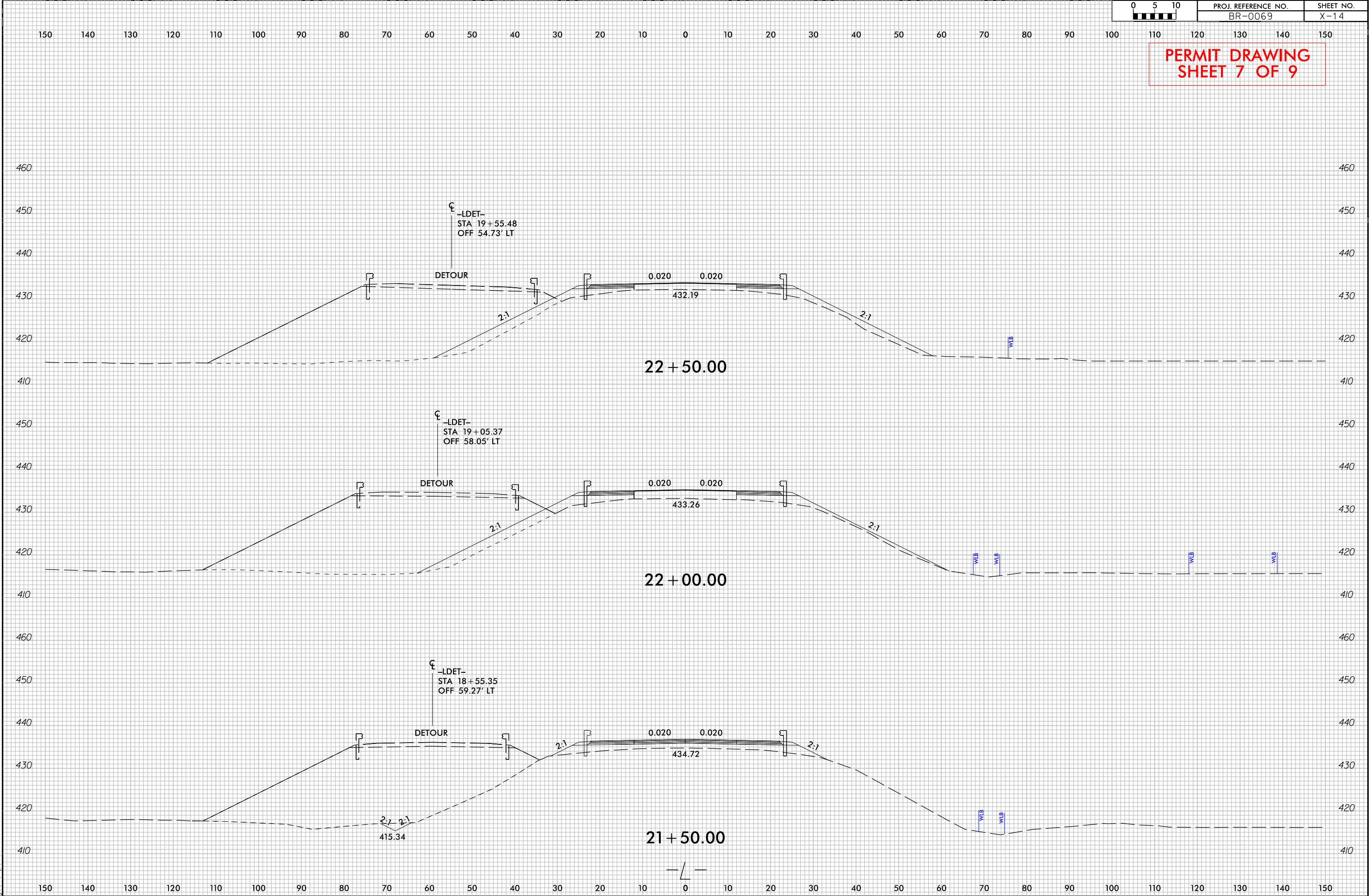


6/23/16

9/11/2023
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davenport

0 5 10 	PROJ. REFERENCE NO.	SHEET NO.
	BR-0069	X-14

PERMIT DRAWING
SHEET 7 OF 9



WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- 19+45 RT to 19+78 LT	Bank Stabilization						< 0.01	< 0.01	63	10	
1	-L- 19+57 RT to 20+40 LT	Temporary Causeway							0.05		21	
1	-L- 20+33 LT to 20+46 LT	Bank Stabilization						< 0.01	< 0.01	6	10	
1	-DET- 16+73RT to 17+56LT	Detour Bridge							0.08		37	
2	-L- 20+05 RT to 21+75 RT	Roadway Fill					0.02					
TOTALS*:							0.02	< 0.01	0.13	69	78	0

*Rounded totals are sum of actual impacts

NOTES:
 INTERIOR BENT - PERMANENT STREAM IMPACTS AREA = 29 SQUARE FEET

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 9/11/2023
 CASWELL COUNTY
 BR-0069
 67069.1.1
 SHEET 9 OF 9