

U.S. Army Corps of Engineers (USACE)
NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

For use of this form, see 33 CFR 330; the proponent agency is CECW-CO-R.

Form Approved -
OMB No. 0710-
0003
Expires: 2027-10-31

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of Engineers (Corps); Final Rule 33 CFR 320-332.

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

Routine Uses This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of the agency coordination process.

Disclosure Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the 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.

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see *sample drawings and/or instructions*) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED 09/10/2026	4. DATE APPLICATION COMPLETE
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First – Jason Middle – Last – Dilday Company – NCDOT Company Title – E-mail Address – jldilday1@ncdot.gov	8. AUTHORIZED AGENT'S NAME AND TITLE (<i>agent is not required</i>) First – Middle – Last – Company – E-mail Address –
6. APPLICANT'S ADDRESS Address – 1000 Birch Ridge Dr City – Raleigh State – NC ZIP – 27610 Country – US	9. AGENT'S ADDRESS Address – City – State – ZIP – Country –
7. APPLICANT'S PHONE NOS. with AREA CODE a. Business b. c. Fax +19197076111	10. AGENT'S PHONE NOS. with AREA CODE a. b. c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, to act in my behalf as my agent in the processing of this nationwide permit pre-construction notification and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.

SIGNATURE OF APPLICANT_____
DATE**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**12. PROJECT NAME or TITLE (*see instructions*)

NCDOT/BR-0198/Wake Crossroads Lake/Mitchell Mill Rd/Wake/Div 5/67198.1.1

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY13. NAME OF WATERBODY, IF KNOWN (*if applicable*)14. PROPOSED ACTIVITY STREET ADDRESS (*if applicable*)15. LOCATION OF PROPOSED ACTIVITY (*see instructions*)

Latitude: 35.8797085 °N

Longitude: -78.4929782 °W

Address: 4541 Mitchell Mill Rd

City:

Wake Forest

State:

NC

Zip:

27587

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (*see instructions*)

Section –

Township –

Range –

County – Wake County

Project Area – 13.634613 Acres

State Tax Parcel ID –

17. DIRECTIONS TO THE SITE

35.87919, -78.49223

18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

NWP 14 Linear Transportation Projects

19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (*see instructions*)

Replace Bridge 910152 on SR 2224 (Mitchell Mill Road) over Wake Crossroads Lake
State Department of Transportation/ Bridge Replacement Project

20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (*see instructions*)

Replacing existing 3 span bridge with a 2 span bridge, reducing the number of in-water bents. Design standards and sensitive watersheds will be deployed during the construction of the project. Bridge deck runoff is routed to the bridge ends, and no deck drains are used. Vegetative conveyance and energy dissipation are incorporated into the drainage design through grass ditches and rip rap outlet pads for drainage systems.

21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY (*Describe the reason or purpose of the project, see instructions*)

Replace functionally obsolete bridge that is at the end of its useable life.

22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY

(see instructions)

See Appendix B

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

25. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. (see instructions)

26. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and/or the loss of greater than 3/100-acre of stream bed and requires pre-construction notification, explain how the compensatory mitigation requirement in paragraph (c) and/or paragraph (d) of general condition 23 will be satisfied, or explain why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required for the proposed activity.

The unavoidable impact to 0.09 ac. of wetland will be mitigated through the use of the NC Division of Mitigation Services. The 76 linear feet of permanent stream impact is due to bank stabilization and is not considered a "loss of Waters of the U.S. Mitigation is not proposed for this impact.

27. Is any portion of the nationwide permit activity already complete? Yes No

If Yes, describe the completed work:

28. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. (see instructions)

Michaux's sumac, Monarch butterfly, Tricolored bat

ADDITIONAL AFFECTED SPECIES:

Tricolored Bat: Proposed endangered

Monarch Butterfly: Proposed Threatened

Michaux's Sumac: Endangered

Last survey for Michaux's sumac was September 2, 2026 with no specimens found. Biological Conclusion remains No Effect.

Tricolored Bat is MA-LAA and is covered under a PBO for this project.

29. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic property or properties. (see instructions)

See included Section 106 documentation.

A notification letter about this project was mailed to the Catawba Indian Nation on March 6, 2024. They did not respond.

30. For a proposed NWP activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river":

31. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project? Yes No

If "yes", please provide the date your request was submitted to the Corps district:

32. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. (*see instructions*)

33. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that the information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Jason Dilday

09/10/2026

SIGNATURE OF APPLICANT

DATE _____

SIGNATURE OF AGENT

DATE _____

The pre-construction notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in Block 11 has been filled out and signed, the authorized agent.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Instructions for Preparing a
Department of the Army
Nationwide Permit (NWP) Pre-Construction Notification (PCN)**

Blocks 1 through 4. To be completed by the Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant's Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

Block 13. Name of Waterbody. Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

Block 15. Location of Proposed Activity. Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g., a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

Block 21. Purpose of Nationwide Permit Activity. Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 23.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands and/or of Greater Than 3/100-Acre of Stream Bed When Pre-Construction Notification is Required. Paragraphs (c) and (d) of NWP general condition 23 require compensatory mitigation at a minimum one-for-one replacement ratio for all wetland losses that exceed 1/10-acre and/or for all losses of stream bed that exceed 3/100-acre, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity-specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre and/or for losses of stream bed that exceed 3/100-acre, or provide an explanation of why the district engineer should not require wetland and/or stream compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act.

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit <http://www.rivers.gov/>.

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

Block 30. Other Information Required For Nationwide Permit Pre Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

- * NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
- * NWP 31, Maintenance of Existing Flood Control Facilities –a description of the maintenance baseline and the dredged material disposal site.
- * NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre project conditions.
- * NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre construction notification.
- * NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
- * NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
- * NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
- * NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

Block 31. Signature of Applicant or Agent. The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient

drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

Appendix B. Aquatic Resource Inventory:

<i>Aquatic Resource Name</i>	<i>State</i>	<i>Cowardin System</i>	<i>Cowardin Class</i>	<i>HGM Class</i>	<i>Local Waterway Name</i>	<i>Measurement Type</i>	<i>Measurement Amount</i>	<i>Measurement Units</i>	<i>Waters Type</i>	<i>Latitude</i>	<i>Longitude</i>
Wake Crossroads Lake (Harris Creek)	North Carolina			RIVERINE	Harris Creek	Linear	851	FOOT	A3.TRIB-404	35.8794943	-78.4920419
SA	North Carolina			RIVERINE	Harris Creek	Linear	84	FOOT		35.8814251	-78.4944161
Watkins Pond	North Carolina			RIVERINE	Harris Creek	Area	0.16	ACRE		35.8797594	-78.49301
WA	North Carolina			DEPRESS	Harris Creek	Area	0.35	ACRE		35.8814976	-78.494425
WB	North Carolina			DEPRESS	Harris Creek	Area	0.98	ACRE		35.8790047	-78.4925488
WC	North Carolina			DEPRESS	Harris Creek	Area	0.14	ACRE		35.8795018	-78.492037

Appendix C. Impact Inventory:

Water Name	Impact Name	Activity	Type of Material Being Discharged	Resource Type	Permanent Loss (Y/N)	Impact Duration	Amount Type	Proposed Length	Proposed Width	Proposed Amount	Amount Units
WB	Fill	Discharge of fill material	rip-rap	Non-Tidal Wetland	Yes	Permanent	Fill Area			0.01	Acres
WB	Mechanized Clearing	Conversion of waters type (forested wetland to emergent wetland, stream to lake)	wood chips	Non-Tidal Wetland	No	Permanent	Fill Area			0.08	Acres
Wake Crossroads Lake (Harris Creek)	Bank Stabilization	Other (Aquaculture, Work, Aerial or Submarine cable crossings)	rip-rap	River/Stream	No	Permanent	Structure Area	76	56	0.097704	Acres
Wake Crossroads Lake (Harris Creek)	Structure Replacement	Other (Aquaculture, Work, Aerial or Submarine cable crossings)	Temporary Dewatering	River/Stream	No	Permanent	Structure Area	131	56	0.168411	Acres

Provide any additional information you may have about the proposed quantity of wetlands, streams, or other types of waters directly affected by the proposed activity. This level of detail is helpful to better understand the type of impacts that are proposed for your project.

The 76 feet of permanent impact is due to bank stabilization and is not considered a loss of waters of the US. Mitigation is not proposed for this impact.

Power and telecoms are being relocated overhead. Hand clearing in buffer zones for proposed overhead lines is contained within roadway impacts. All utility relocations are co-located within the roadway impacts.

Definitions and help text

Water Name: The name of the wetland, stream, or other type of water that would be impacted.

Impact Name: Useful if entering more than one impact for the same or multiple waters (e.g., linear projects) and name accordingly. This may be different than the Water Name; keep it short and simple. For example, if Stream-1 is the water, the impact name could be “Crossing-1,” “Crossing-2,” “Crossing-3.” A short name helps describe the impact and is useful when looking at a list of impacts.

Activity: Options are:

- Conversion of waters type (forested wetland to emergent wetland, stream to lake)
- Discharge of dredged material
- Discharge of fill material
- Dredging (Section 10)
- Ecological restoration
- Other (Aquaculture, Work, Aerial or Submarine cable crossings)
- Removal (Sec 10 structures)
- Structure (Sec 10 only)
- Transport of dredged material (Sec 103)

Type of Material Being Discharged: Describe the material to be discharged within USACE jurisdiction. Make sure this description is consistent with your illustrations.

Discharge material includes: rock, sand, clay, concrete, etc.

Resource Type: Options are Harbor/Ocean, Lake, Non-Tidal wetland, Other, Pond, River/Stream, and Tidal wetland.

Permanent Loss (Y/N): Only enter “YES” when the ‘discharge of dredged or fill material’ activity types are chosen. A permanent loss means the conversion of an aquatic resource to dry land.

Impact Duration: Options are Permanent or Temporary. An example of a temporary impact is the discharge of fill for temporary access roads that are later removed and returned to pre-construction contours.

Amount Type: Options are Area or Volume.

Amount Units: Options are Acre or Square Feet if Amount Type=Area, Cubic Yards if Amount Type=Volume.

Proposed Length and Proposed Width: Unit is linear feet.

Proposed Amount: Unit is square feet.

Impact Details

Site #	Impact Purpose	Buffer Rule Table of Uses line item/citation	Stream Name?	Zone 1 Impact (square feet)?	Permanent or Temporary?	Buffer Mitigation Required?	Zone 2 Impact (square feet)?	Permanent or Temporary?	Buffer Mitigation Required?
1	Crossing/Culvert/Bridge	15A NCAC 02B .0714, (11)(c)(ii)	Harris Creek	3779	Permanent	No	2959	Permanent	No
2	Road/Temp. Road	15A NCAC 02B .0714, (11)(x)	Harris Creek	Yes	70	Permanent	Yes		

If yes, you must fill out this entire section - please contact DWR for more information.

Zone	Total Impact (square feet)	Multiplier	Required Mitigation (square feet)
2	70	1.5	105

U.S. Army Corps of Engineers (USACE)

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT – PARTNER APPENDIX

For use of this form, see 33 CFR 325. The proponent agency is CECW-COR.

AUTHORITIES: The Department of Army Corps of Engineers (Corps) and partner entities have established a joint process for activities impacting jurisdictional waterways that require review and/or approval of both the Corps and its partners. Department of Army permits are required by Section 10 of the Rivers & Harbors Act of 1899 for any structure(s) or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for the discharge of dredged or fill materials into waters of the United States, including adjacent wetlands. This supplemental information is provided to the partner entity along with the standard regulatory forms.

PARTNER INFORMATION

ORGANIZATION:

NC Division of Water
Resources (DWR)

PARTNER ID:

NAME AND CODE:

Form Name: NATIONWIDE/GENERAL/INDIVIDUAL PERMIT - DWR 401 Application Form
NC Division of Water Resources Application Information
Form Code: NCDWR 401

In North Carolina, many activities covered by Nationwide and Regional General Permits, as well as Individual Permits, also require a 401 Water Quality Certification from the Division of Water Resources. To streamline the application process for both the U.S. Army Corps of Engineers (USACE) and the North Carolina Division of Environmental Quality (NCDEQ) - Division of Water Resources (DWR), we have collaborated on this joint application form.

This joint application form serves to fulfill reporting requirements for both agencies under Sections 401 and 404 of the Clean Water Act, and Section 10 of the Rivers and Harbor Act of 1899, for specific activities permitted through Nationwide Permits (NWP), Regional General Permits (RGPs), and Individual Permits. The RRS is now the preferred method for submitting application information for these permits.

For questions, please contact the USACE at (910) 251-4633.

The Wilmington District and the North Carolina Department of Environmental Quality (NCDEQ) have collaborated to develop a Joint Permit Application (JPA) within the Regulatory Request System (RRS) for use with Nationwide Permits (NWP) and Regional General Permits (RGP), as well as, Individual Permits. This system functions similarly to previous versions of the Pre-Construction Notification form (also known as e-PCN). The RRS is an online platform that enables applicants to electronically upload and submit all required information to the reviewing agencies.

The RRS JPA fulfills the application and reporting requirements for both the U.S. Army Corps of Engineers (USACE) and NCDEQ for activities authorized under Sections 401 and 404 of the Clean Water Act, as well as Section 10 of the Rivers and Harbors Act of 1899.

Projects that fall within the North Carolina Division of Coastal Management (NCDQM) review area, will need to coordinate their application with NCDQM directly. To learn more, visit the [NCDQM website](<https://www.deq.nc.gov/about/divisions/division-coastal-management>).

USACE/NCDWR Joint Application Form for Nationwide Permits, Regional General Permits, and Individual Permits (along with corresponding Water Quality Certifications)

****PLEASE NOTE: THE SYSTEM IS STILL UNDER DEVELOPMENT, AND DATA CURRENTLY DOES NOT TRANSMIT ELECTRONICALLY TO NCDEQ'S DIVISION OF WATER RESOURCES (DWR). UNTIL FURTHER NOTICE, APPLICANTS MUST SUBMIT COMPLETED RRS JPA DOCUMENTS THROUGH [NCDEQ'S "PROJECT SUBMITTAL INTERIM FORM" WEBSITE](<https://edocs.deq.nc.gov/Forms/Supplemental-Information-Form>).****
[Additional Instructions](<https://edocs.deq.nc.gov/WaterResources/Browse.aspx?dbid=0&startid=3890140>)

SUPPLEMENTAL INFORMATION COLLECTED

ADDITIONAL CONTACT INFORMATION - Property Owner

- Is the owner the same as the applicant?
 - Yes

- Provide Primary Property Owner information
 - Please see the JPA_ContactReport.xlsx to review the provided contact data.
- Provide Additional Property Owner information
 - Please see the JPA_ContactReport.xlsx to review the provided contact data.

PROCESSING INFORMATION -

- Does the project involve maintenance dredging funded by the Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund OR involve the distribution or transmission of energy or fuel (including natural gas, diesel, petroleum, or electricity)?
 - No
- Is this project connected with (American Rescue Plan Act) ARPA funding or S.L. 2023-134 (earmark)?
 - No
- Please select:
 - Not Applicable (Question not presented)
- Please provide the DWI ARPA Funding Project Number (ie: SRP-W-ARP-1234 or SRP-W-134-1234):
 *The DWI Funding Project number can be located on the "Letter of Intent to Fund" (LOIF) or "Offer and Acceptance Letter". If you do not know your DWI project #, please contact your DWI project manager or fund recipient (e.g., LGU).
 - Not Applicable (Question not presented)
- Is this a NC Division of Mitigation Services (NCDMS) Project? Note - Select Yes only if NCDMS is the applicant/co-applicant.
 - No
- Is this project a public transportation project?
 - Yes
- Is this a NC Department of Transportation (NCDOT) project?
 - Yes
- (NCDOT only) T.I.P. (Transportation Improvement Program) or state project number:
 - BR-0198
- (NCDOT only) WBS #
 - 67198.1.1
- Application for NC Division of Water Resources (DWR) Certification.
 Type(s) of approval sought from the DWR? (Select all that apply)
 - 401 Water Quality Certification
- Is this a modification OR new project with existing ID?
 - No
- Please provide the DWR ID number.
 - Not Applicable (Question not presented)

- Is the project located in any of NC's twenty coastal counties?
 - No
- Is the project located within a NC Division of Coastal Management (DCM) Area of Environmental Concern (AEC)?
 - Not Applicable (Question not presented)
- Is the project located in a designated trout watershed? [Learn more about Trout](https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx)
 - No
- If yes, attach a copy of existing correspondence from the Wildlife Resource Commission Office.
 - Not Applicable (Question not presented)

WATERS DETAILS -

- Name of nearest waterbody? [Surface Water Lookup](https://experience.arcgis.com/experience/7073e9122ab74588b8c48ded34c3df55/)
 - Harris Creek
- Does the proposed activity impact perennial or intermittent streams?
 - Yes
- Please ensure that the Aquatic Resource Inventory section includes all perennial and intermittent streams and be sure to identify them with appropriate Cowardin codes.
(Click the Aquatic Resources Inventory in the menu on the left to navigate to that section.)

Note: Use the Cowardin Code "R2 or R3" for perennial. Use Cowardin Code "R4" for intermittent.
If no code provided, waters will be assumed to be perennial.
 - Not Applicable (Question not presented)

NON-JD IMPACT DETAILS - NOTE: Questions only appear in this section when 'Non-404 Jurisdictional Waters Permit' has been included among the Type(s) of approval sought from the DWR.

- Will the project result in impacts to Non-404 JD waters?
 - Not Applicable (Question not presented)
- Please ensure that the associated Non-404 Jurisdictional Waters have been entered in the Aquatic Resource Inventory section of the Permit Application. Use the Aquatic Resource Type of "DELIN.NOJD-404".
(Click the "Aquatic Resources Inventory" option in the menu on the left to navigate to that section.)
 - Not Applicable (Question not presented)

BUFFER IMPACTS AND MITIGATION SUMMARY - Additional impacts and mitigation not previously covered in this application: Buffers

- Will project occur in an area subject to state riparian buffer regulations?
 - Yes
- Will project result in any impacts within a protected riparian buffer?
 - Yes

- Which protected basin(s) is the project located within?
 - Neuse
- Other Protected Basin
 - Not Applicable (Question not presented)
- Are the buffer regulations implemented by a delegated local government?
 - No / Unknown
- Please specify which local government.
 - Not Applicable (Question not presented)
- Impact Details
 - Please see the JPA_DynamicTableReport.xlsx to review the provided data.
- Total Temporary Buffer Impacts
 - 0
- Total Permanent Buffer Impacts
 - 6808
- Total Combined Buffer Impacts
 - 6808
- Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?
 - Yes
- If yes, you must fill out this entire section - please contact DWR for more information.
 Identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required in the table below.
 - Please see the JPA_DynamicTableReport.xlsx to review the provided data.
- How is buffer mitigation proposed to be met?
 - Payment to NC Division of Mitigation Services
- If payment to mitigation bank or NCDMS, attach a valid statement of availability or DMS acceptance letter. OR Attach mitigation plan for review.
 - Mitigation DMS Acceptance Letter_BR-0198.pdf File(s) Uploaded

STORMWATER MANAGEMENT PLAN -

- Does this project disturb >1 acre of land?
 - Yes
- Is this an NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250?
 - Yes
- Is this project subject to review and approval under a state post-construction stormwater program (DEMLR) or state-approved local government stormwater program?
 - Not Applicable (Question not presented)

- What entity has reviewed/is reviewing the Stormwater Management Plan?
 - Not Applicable (Question not presented)
- What is the Stormwater Management Plan status?
 - Not Applicable (Question not presented)
- Does this project meet the requirements for low density projects as defined in 15A NCAC 02H.1003(2)? For details on how Low Density Projects are characterized, click the help icon.
 - Not Applicable (Question not presented)
- For low density projects, submit documentation including built-upon area (BUA) delineation, percent BUA calculations, stormwater drainage plan, and designs for vegetated conveyances.
 - Not Applicable (Question not presented)
- For all High Density projects submit a Stormwater Management Plan that includes stormwater control measures for water quality treatment.
 - Not Applicable (Question not presented)

STORMWATER MANAGEMENT IN BUFFERED BASINS - All stormwater generated from high ground within regulated buffer basins must be in compliance with the stormwater management requirements of the applicable buffer rules.

NOTE: Questions only appear in this section when 'Will project occur in an area subject to state riparian buffer regulations?' is answered Yes.

- Does the project comply with the stormwater management requirements of the applicable buffer rules?
 - Yes
- Please explain why the project does not comply.
 - Not Applicable (Question not presented)

ENVIRONMENTAL DOCUMENTATION -

- Is an environmental document required under NCEPA (01 NCAC 25 .0100)?
 - Yes
- Has the document review been finalized by the State Clearing House?
 - Yes
- Comments
 - Not Applicable (Question not presented)
- Attach a copy of the SEPA final approval document.
 - BR-0198_CE.pdf File(s) Uploaded

VIOLATIONS -

- Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)?

- No

- Please explain.

- Not Applicable (Question not presented)

CUMULATIVE IMPACTS -

- Will this project (based on past and reasonably anticipated future impacts) result in additional development?

- No

- Provide a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWR policy. [Learn more about Cumulative Impact Policy](https://files.nc.gov/ncdeq/Water%20Quality/Surface%20Water%20Protection/401/Policies_Guides_Manuals/CumulativeImpactPolicy.pdf)

- Not Applicable (Question not presented)

- If not, provide a short narrative description.

- Not Applicable (Question not presented)

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[Additional Instructions](<https://edocs.deq.nc.gov/WaterResources/Browse.aspx?dbid=0&startid=3890140>)

JOSH STEIN
Governor
D. REID WILSON
Secretary
MARC RECKTENWALD
Director



August 25, 2026

Mr. Michael Turchy
Environmental Coordination & Permitting Group
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Wright:

Subject: Mitigation Acceptance Letter: **TIP BR-0198**, Replace Bridge 910152 over Wake Crossroads Lake on SR 2224 (Mitchell Mill Road), Wake County

The purpose of this letter is to notify you that the North Carolina Division of Mitigation Services (NCDMS) will provide the mitigation for the subject project. Based on the information supplied by you on August 24, 2026, the impacts are located in CU 03020201 of the Neuse River basin as follows:

Stream and Wetlands	Service Area	Stream			Wetlands		
		Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh
Impacts	Neuse 03020201	0	0	0	0.090	0	0

*Some of the impacts may be proposed to be mitigated at various ratios. See permit application for details. DMS will provide the amount of stream and wetland mitigation included in the environmental permits.

All buffer mitigation requests and approvals are administrated through the Riparian Restoration Buffer Fund. The NCDOT will be responsible to ensure that appropriate compensation for the riparian buffer mitigation will be provided in the agreed upon method of fund transfer. Upon receipt of the NCDWR's Buffer Authorization Certification, NCDMS will transfer funds from the NCDOT Fund into the Riparian Restoration Buffer Fund. Upon completion of transfer payment, NCDOT will have completed its riparian buffer mitigation responsibility for TIP BR-0198. Subsequently, NCDMS will conduct a review of current NCDOT ILF Program mitigation projects in the river basin to determine if available buffer mitigation credits exist. If there are buffer mitigation credits available, then the Riparian Restoration Buffer Fund will purchase the appropriate amount of buffer mitigation credits from NCDOT ILF Program.



North Carolina Department of Environmental Quality | Division of Mitigation Services
217 West Jones Street | 1652 Mail Service Center | Raleigh, North Carolina 27699-1652
919.707.8976

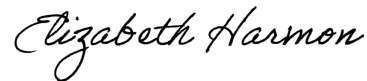
Mr. Turchy
August 25, 2026
Page Two
NCDOT TIP BR-0198

Buffer	Service Area(s)	Buffer Impacts		
		Zone 1	Zone 2	TOTAL
Impacts	Neuse 01 Outside Falls	0.000	70.000	70.000

The impacts and associated mitigation needs were projected by the NCDOT in the 2026 impact data. NCDMS commits to implementing sufficient mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from NCDEQ – DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,



Elizabeth A. Harmon
DMS NCDOT ILF Coordinator

cc: Mr. Scott Jones, USACE
Mr. Faith Hardin, NCDWR
Mr. Brad Chilton, NCDOT – EAU
File: BR-0198



North Carolina Department of Environmental Quality | Division of Mitigation Services
217 West Jones Street | 1652 Mail Service Center | Raleigh, North Carolina 27699-1652
919.707.8976

Appendix D-1. Compensatory Mitigation Inventory for Mitigation Banks/in Lieu Fee (ILF) Program:

<i>Mitigation Entry Name</i>	<i>Mitigation Type</i>	<i>Name</i>	<i>Credit Unit</i>	<i>Proposed Credit Amount</i>
WB	In-lieu Fee		Acre Based	0.09

Appendix H. Supporting Information:

<i>Document Type</i>	<i>Document Created Date (YYYY-MM-DD)</i>	<i>Document Label</i>	<i>Information Source/Citation</i>	<i>Uploaded file name</i>
Project Plans	2026-08-13	Permit Package	Permit Package	BR-0198 Permit Package.pdf
Historic Properties Cultural Resources Information	2024-04-03	Cultural Determinations	Cultural Determinations	PA 23-11-0001 Wake (NHP).pdf

Bridge deck runoff is routed to the bridge ends, and no deck drains are used. Vegetative conveyance and energy dissipation are incorporated into the drainage design through grass ditches and rip rap outlet pads for drainage systems. Grass shoulders are maintained where feasible.



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

(Version 3.02; Released April 23, 2024)

FOR NCDOT PROJECTS

WBS Element: 67198.1.1

TIP/Proj No.: BR-0198

County(ies): Wake

Page 2 of 2

General Project Information

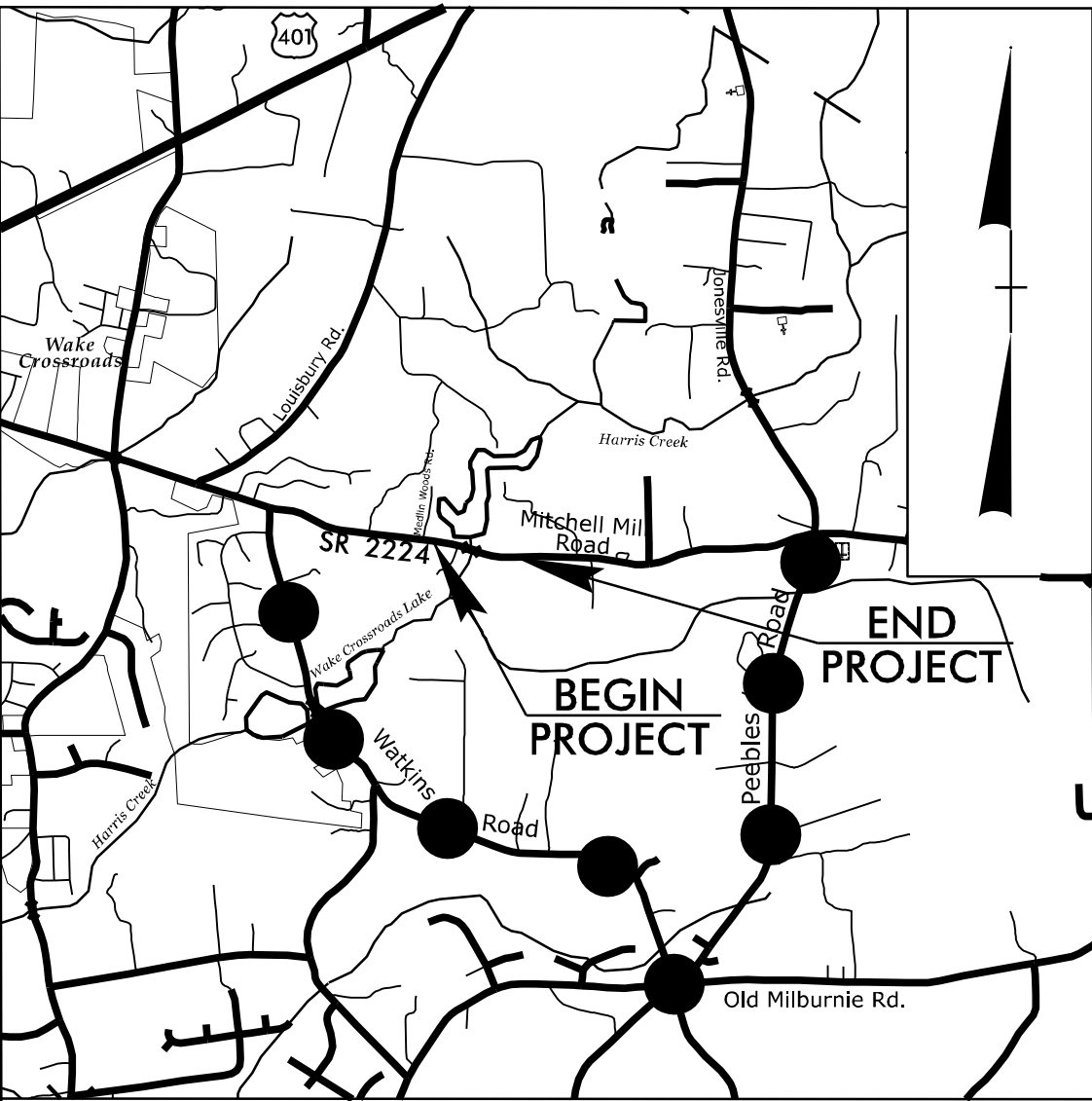
Waterbody Information

Surface Water Body (1):	Harris Creek (Peeples Creek) (Wake Crossroads Lake)	NCDWR Stream Index No.:	27-26		
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C			
	Supplemental Classification:	Nutrient Sensitive Waters (NSW)			
Other Stream Classification:	None				
Impairments:	None				
Aquatic T&E Species?	Yes	Comments:	June 2024 Aquatic Species Survey Report provided Biological Conclusions of MA-NLAA for Atlantic pigtoe, Dwarf wedgemussel, Neuse River waterdog, and Carolina madtom.		
NRTR Stream ID:	Wake Crossroads Lake (Harris Creek)		Buffer Rules in Effect:	Neuse	
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	N/A	Dissipator Pads Provided in Buffer?	No
Deck Drains Discharge Over Water Body?	N/A	(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?		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?		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)					

TIP PROJECT: BR-0198

CONTRACT:

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



VICINITY MAP

DETOUR ROUTE

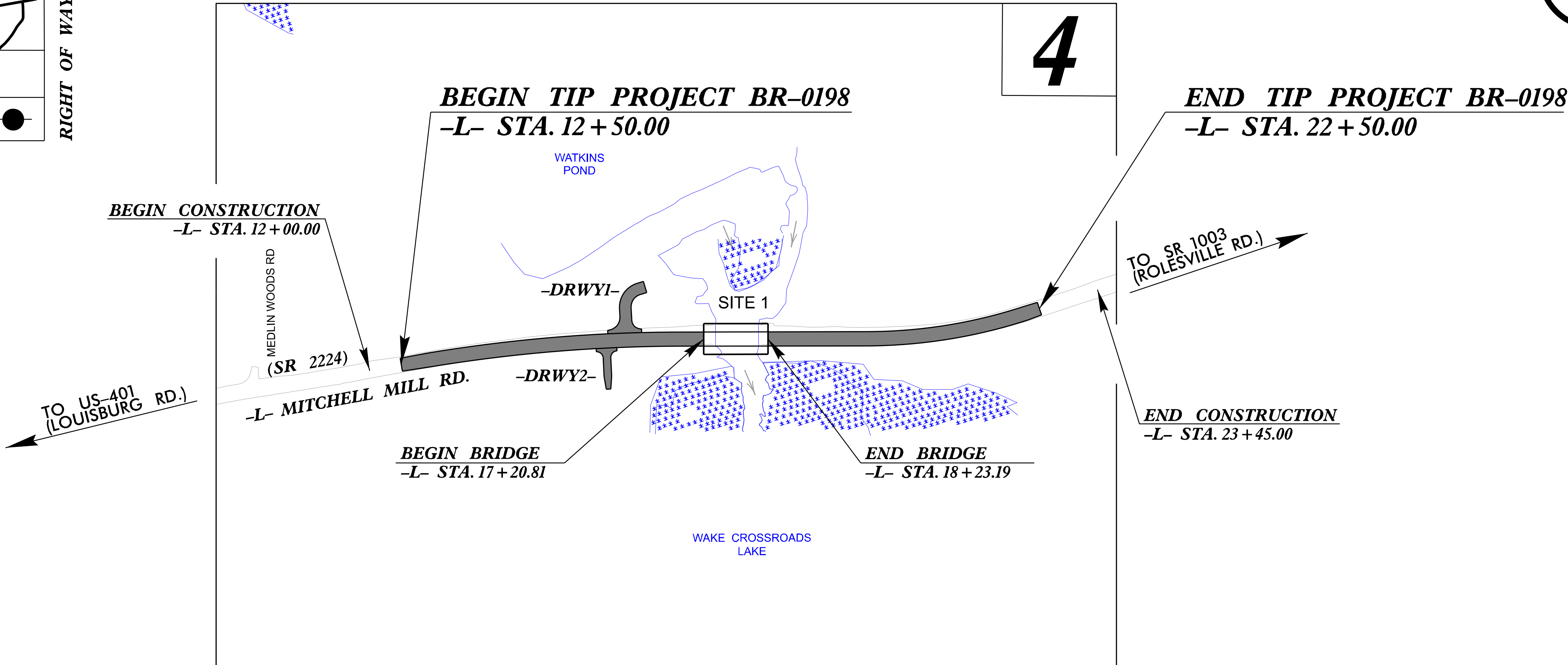
RIGHT OF WAY ACQUISITION PLAN SET

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
WAKE COUNTY

LOCATION: REPLACE BRIDGE 910152 ON SR 2224 OVER WAKE CROSSROADS LAKE

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT



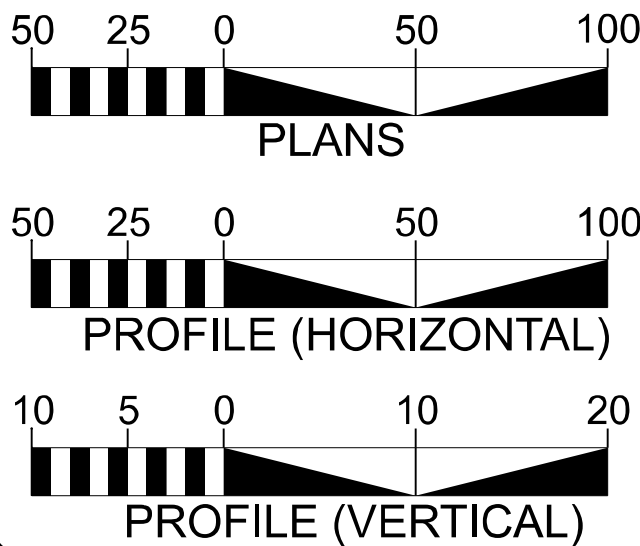
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N.C.	BR-0198	11	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
67198.1.1	N/A	PE	
67198.2.1	N/A	UTIL	
67198.2.2	N/A	RW	
67198.3.1	N/A	CONST.	

NAD 83
NA 2011

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2027 = 6,356
ADT 2047 = 10,133
K = 11 %
D = 70 %
T = 4 % *
V = 50 MPH
* TTST 1% DUAL 3%
FUNC CLASS =
MAJOR COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0198 = 0.170 MILES
LENGTH STRUCTURE TIP PROJECT BR-0198 = 0.019 MILES
TOTAL LENGTH TIP PROJECT BR-0198 = 0.189 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 7, 2025

LETTING DATE:
NOVEMBER 20, 2029

KIM GILLESPIE, PE
PROJECT MANAGER

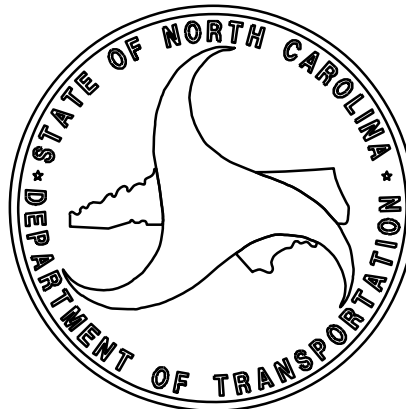
JORDAN WOODARD, PE
ROADWAY GROUP LEAD

HAN NGUYEN, PE
ROADWAY TEAM LEAD

HYDRAULICS ENGINEER

SIGNATURE: P.E.
ROADWAY DESIGN ENGINEER

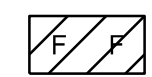
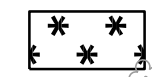
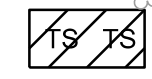
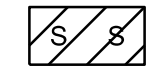
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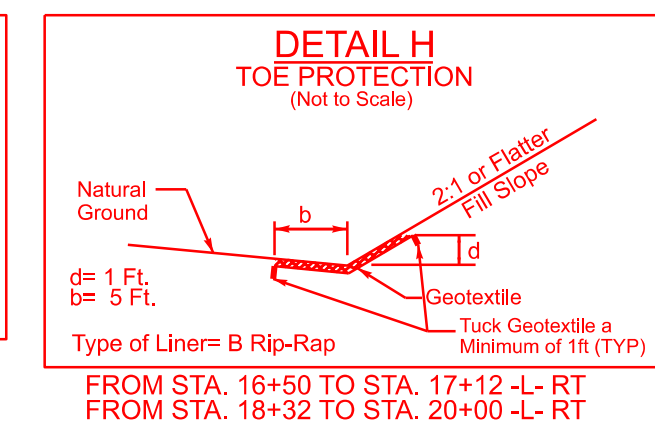
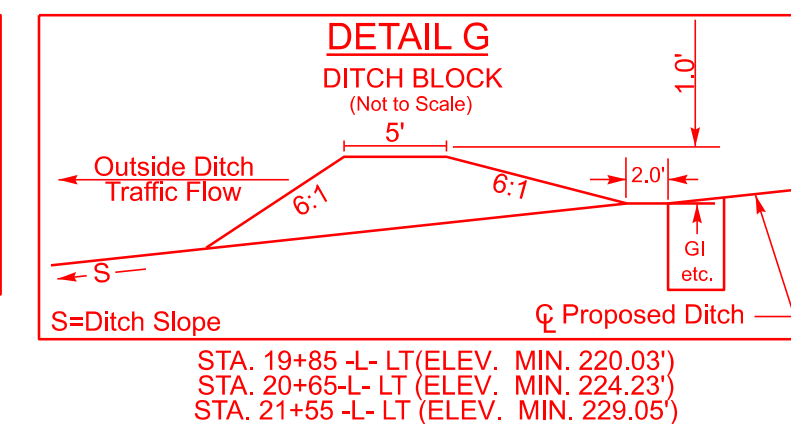
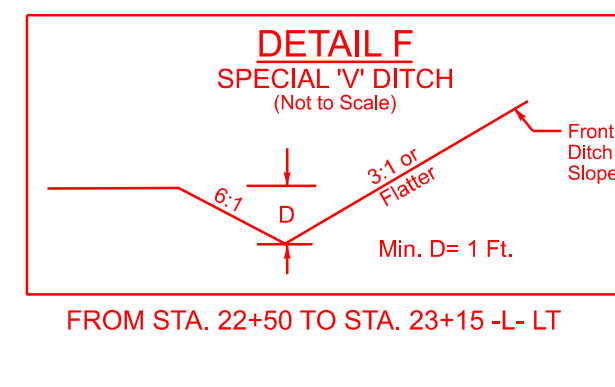
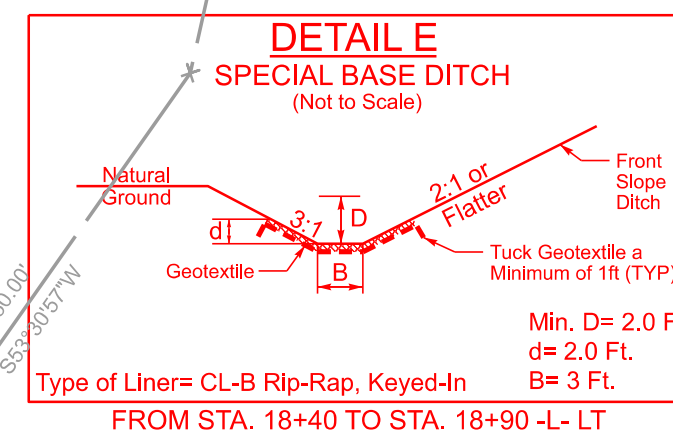
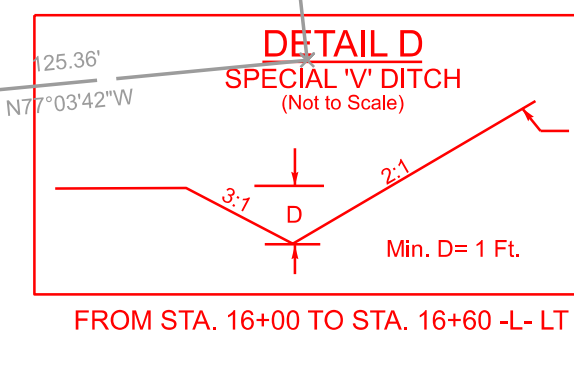
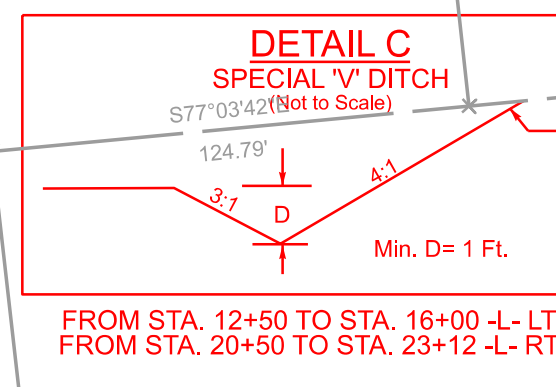
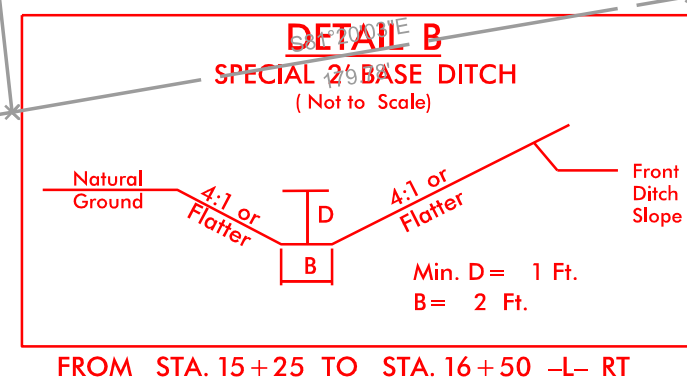
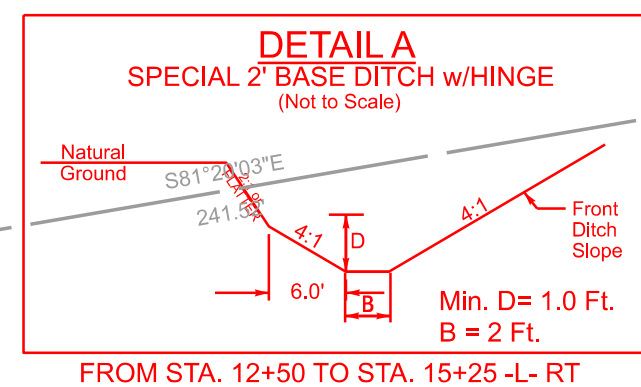


PERMIT DRAWING
SHEET 2 OF 8

SITE 1

WETLAND AND SURFACE WATER IMPACTS PERMIT

-  FILL IN WETLAND
-  MECHANIZED CLEARING
-  TEMPORARY SURFACE WATER IMPACTS
-  SURFACE WATER IMPACTS

BEGIN TIP PROJECT BR-0198
-L- STA. 12 + 50.00BEGIN CONSTRUCTION
-L- STA. 12 + 00.00END TIP PROJECT BR-0198
-L- STA. 22 + 50.00END CONSTRUCTION
-L- STA. 23 + 45.00

Scale: 1" = 50'

SITE 1

PERMIT DRAWING SHEET 3 OF 8

WETLAND AND SURFACE WATER IMPACTS PERMIT

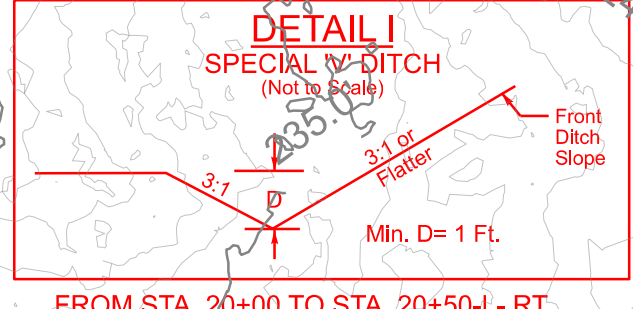
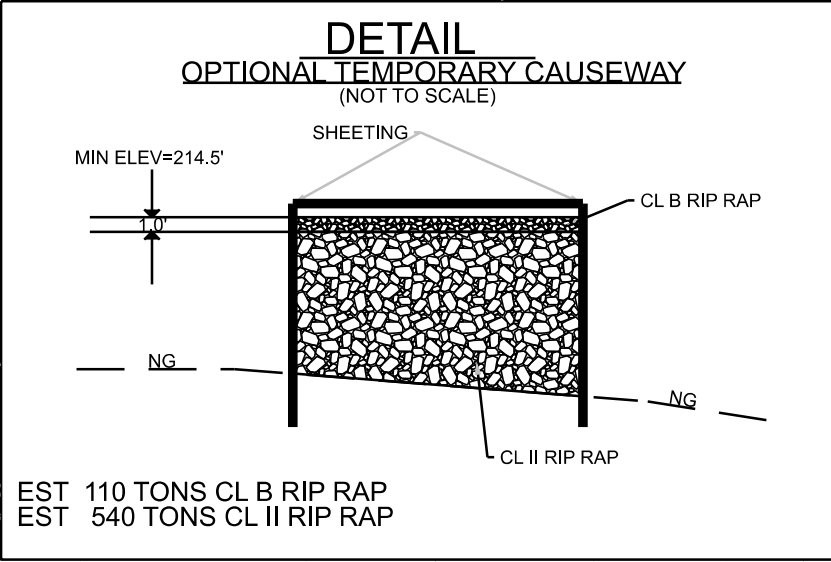
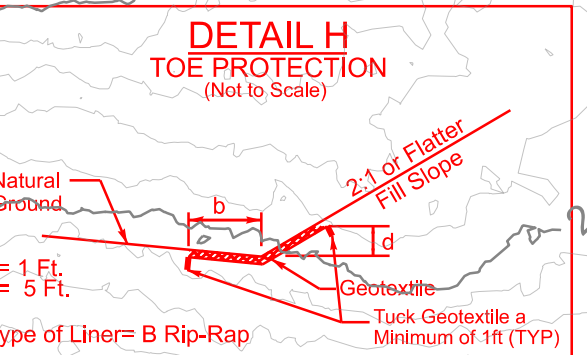
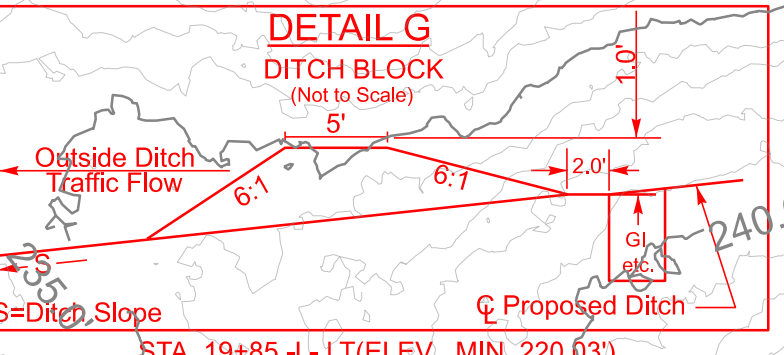
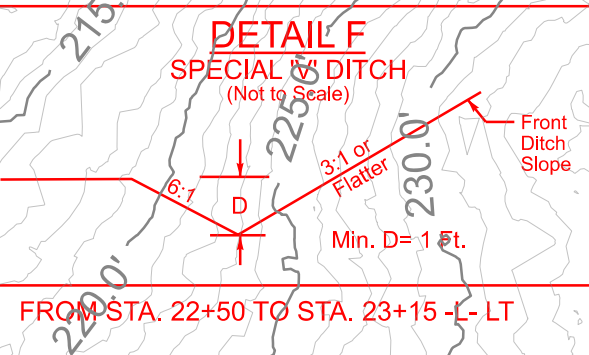
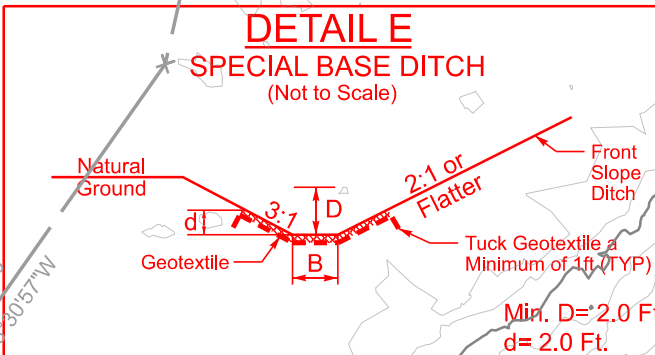
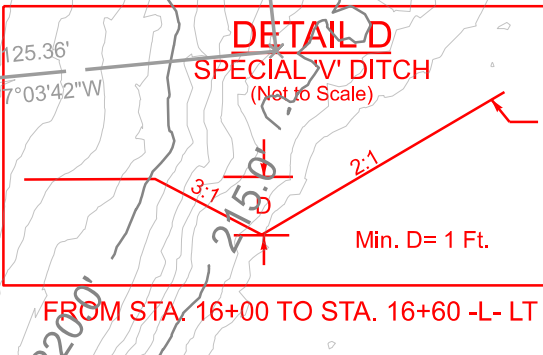
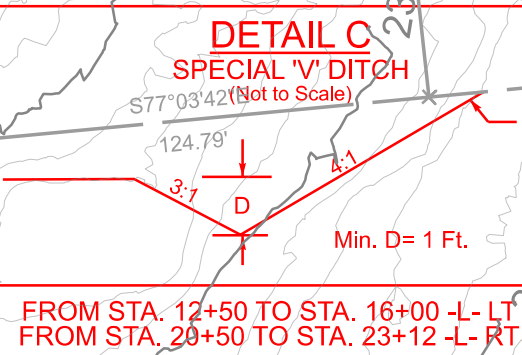
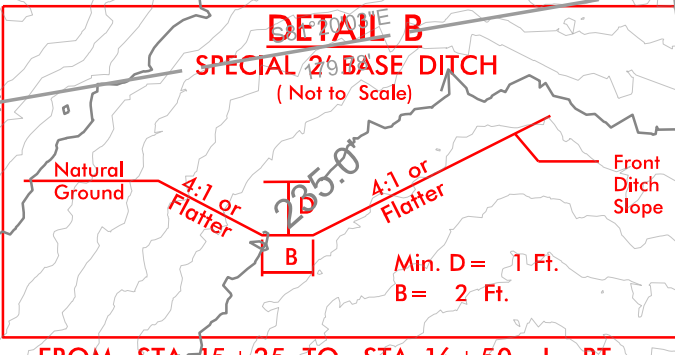
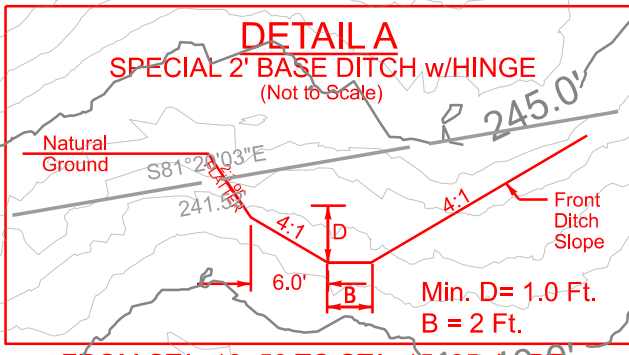
- FILL IN WETLAND
- MECHANIZED CLEARING
- TEMPORARY SURFACE WATER IMPACTS
- SURFACE WATER IMPACTS

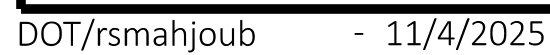
BEGIN TIP PROJECT BR-0198
-L- STA. 12 + 50.00

BEGIN CONSTRUCTION
-L- STA. 12 + 00.00

END TIP PROJECT BR-0198
-L- STA. 22 + 50.00

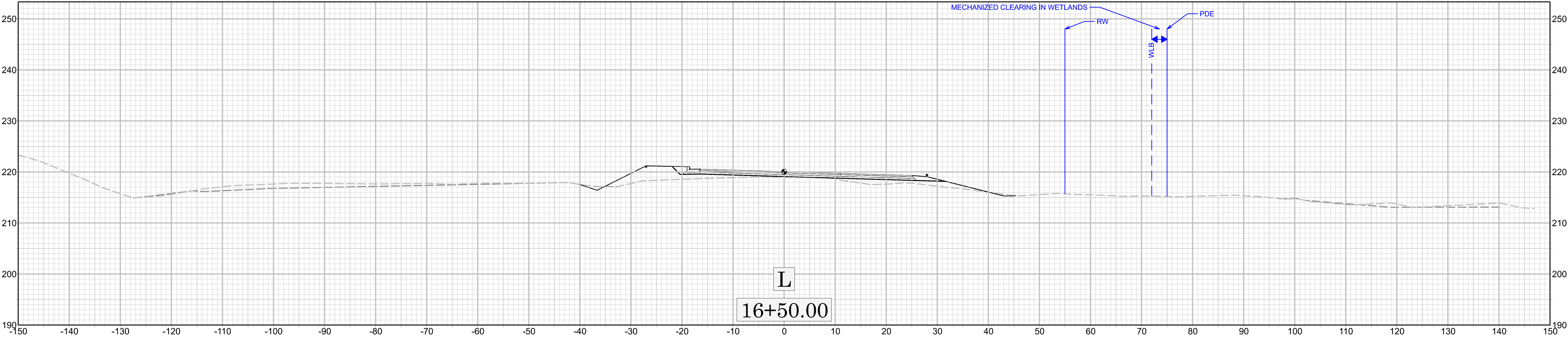
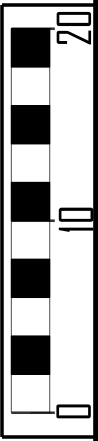
END CONSTRUCTION
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WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING
SHEET 5 OF 8

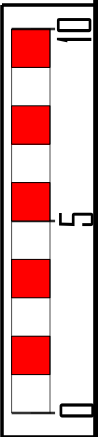
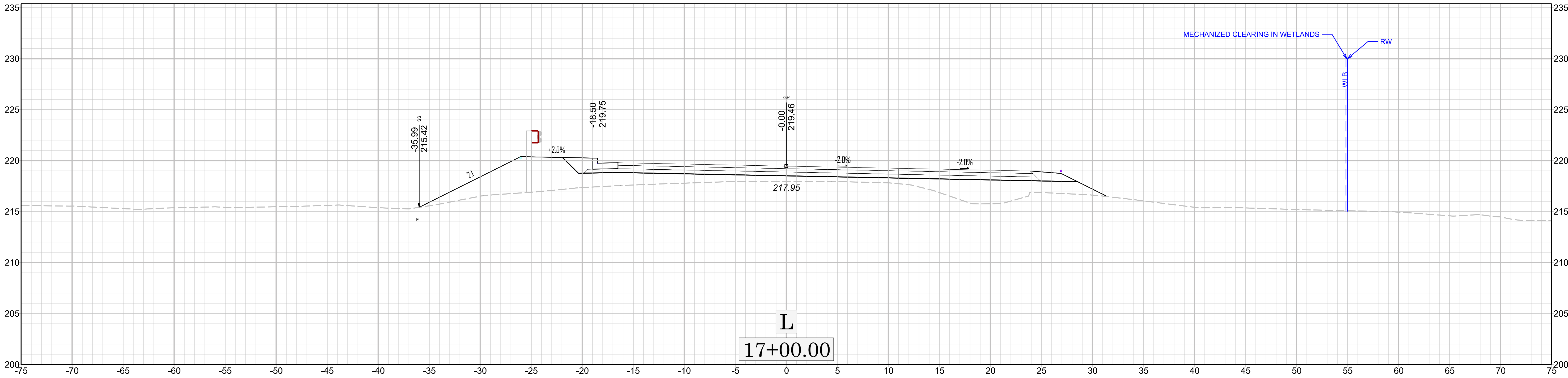
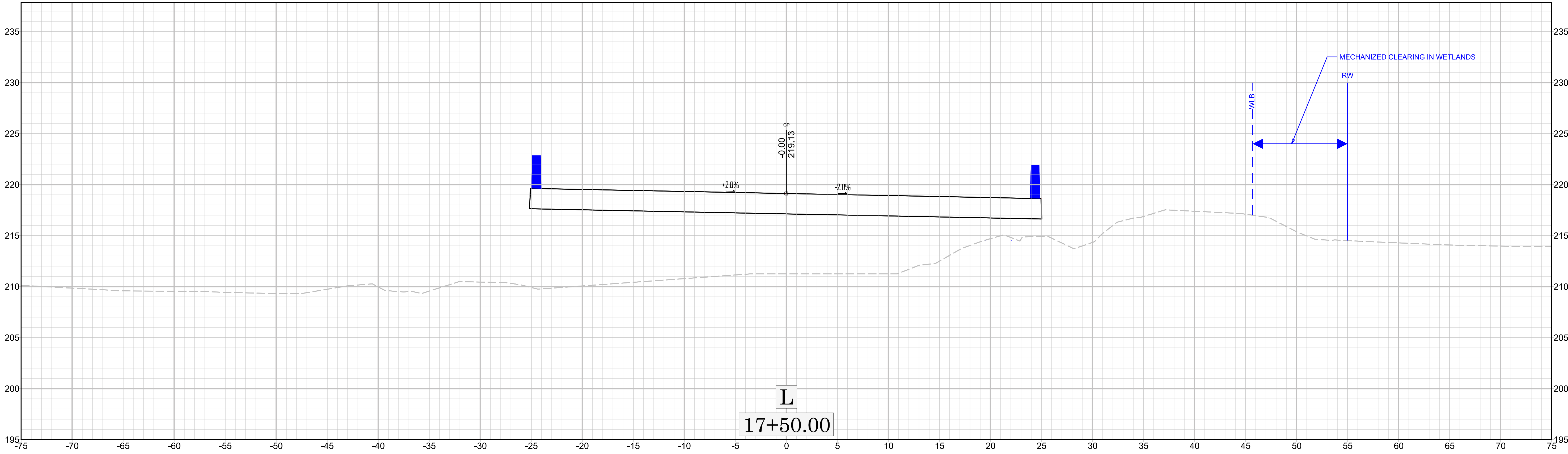


X 16+50.00

BR-0198

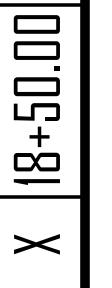
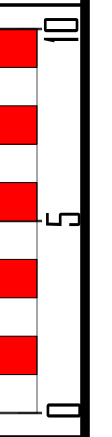
WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING
SHEET 6 OF 8



X 17+00.00

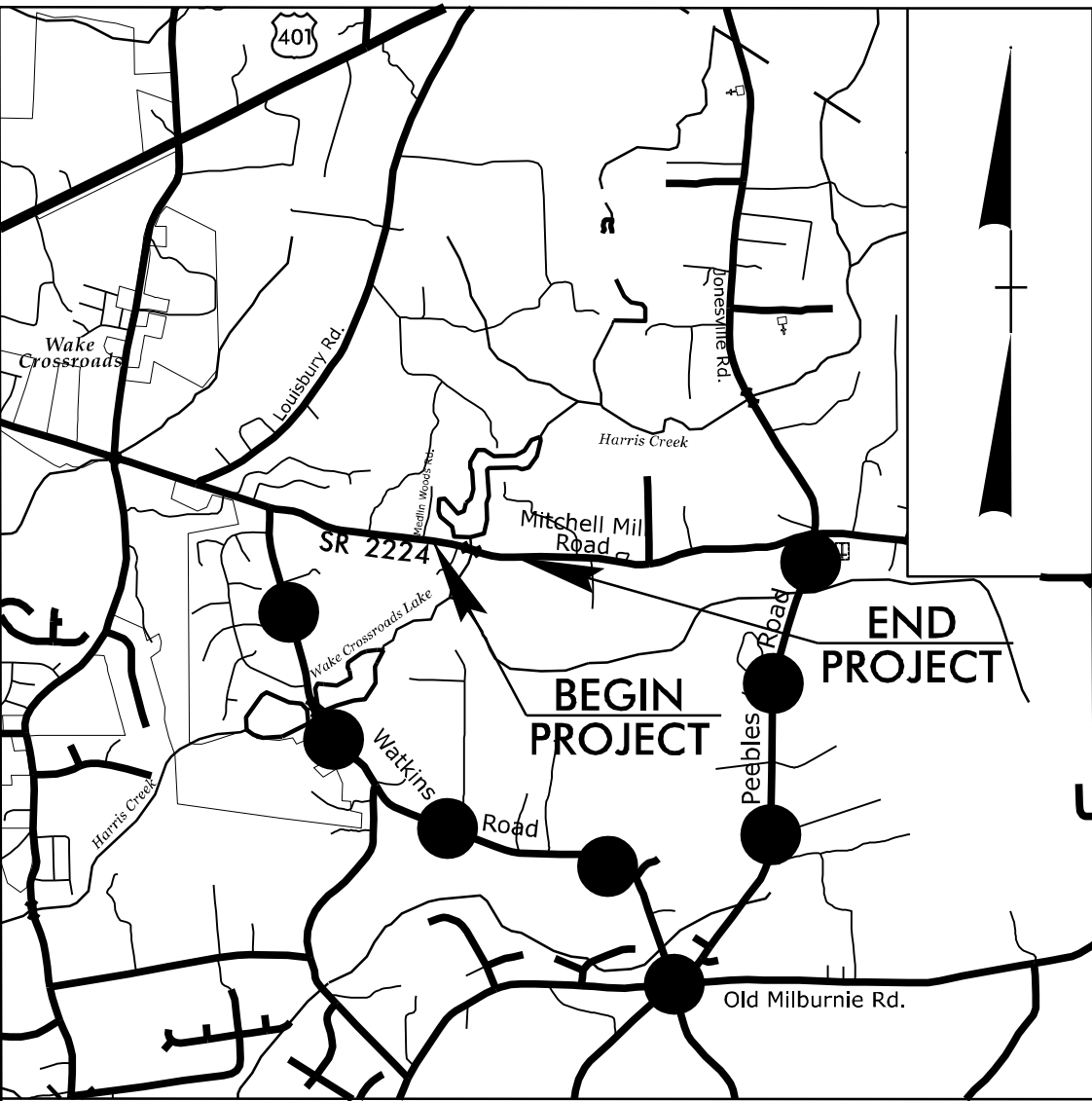
BR-0198



TIP PROJECT: BR-0198

CONTRACT:

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



VICINITY MAP

DETOUR ROUTE

RIGHT OF WAY ACQUISITION PLAN SET

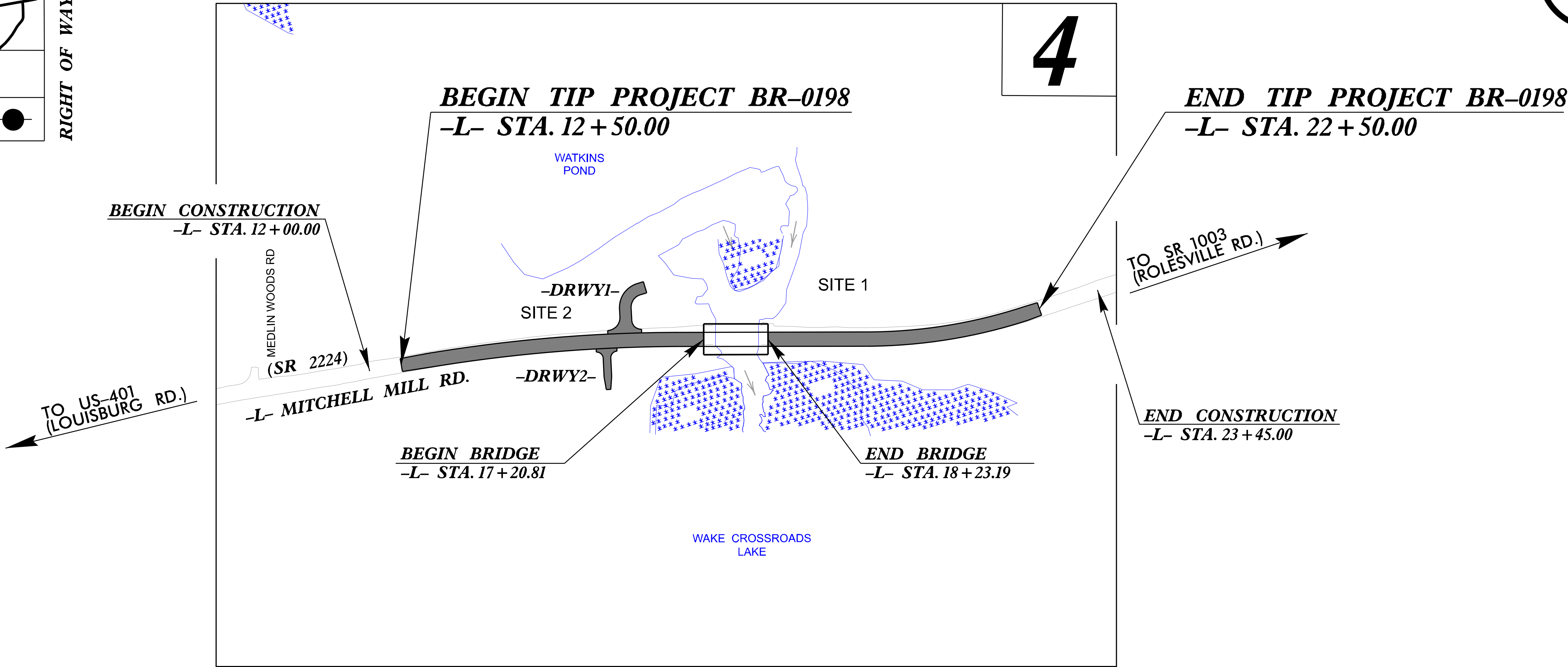
BUFFER DRAWING
SHEET 1 OF 4

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
WAKE COUNTY

LOCATION: *REPLACE BRIDGE 910152 ON SR 2224 OVER WAKE CROSSROADS LAKE*

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

BUFFER IMPACTS PERMIT



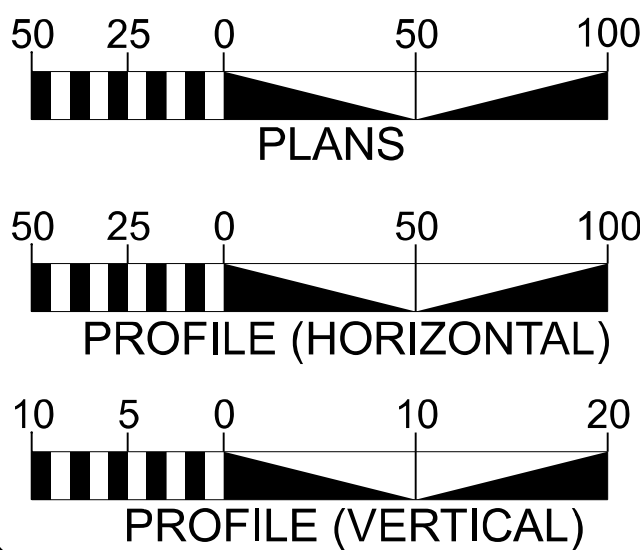
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0198	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
67198.1.1	N/A	PE	
67198.2.1	N/A	UTIL	
67198.2.2	N/A	RW	
67198.3.1	N/A	CONST.	

NAD 83
NA 2011

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2027 = 6,356
ADT 2047 = 10,133
K = 11 %
D = 70 %
T = 4 % *
V = 50 MPH
* TTST 1% DUAL 3%
FUNC CLASS =
MAJOR COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0198 = 0.170 MILES
LENGTH STRUCTURE TIP PROJECT BR-0198 = 0.019 MILES
TOTAL LENGTH TIP PROJECT BR-0198 = 0.189 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 7, 2025

LETTING DATE:
NOVEMBER 20, 2029

KIM GILLESPIE, PE
PROJECT MANAGER

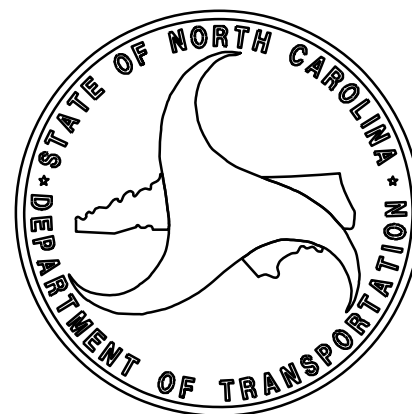
JORDAN WOODARD, PE
ROADWAY GROUP LEAD

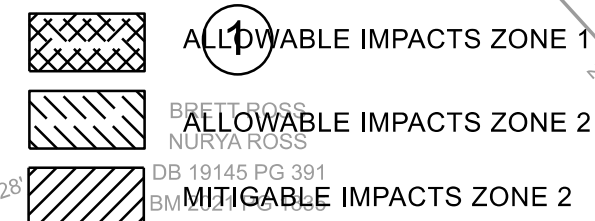
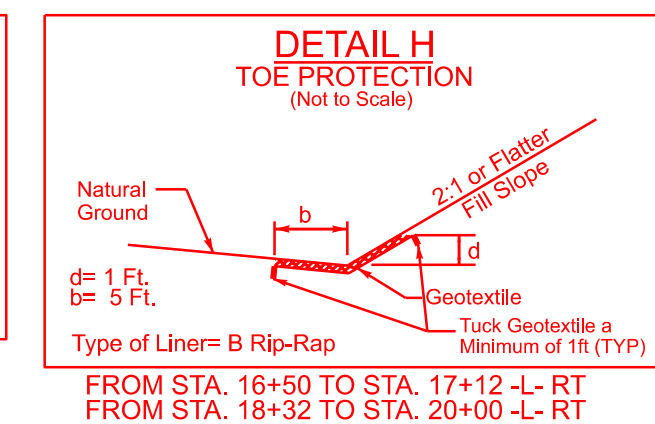
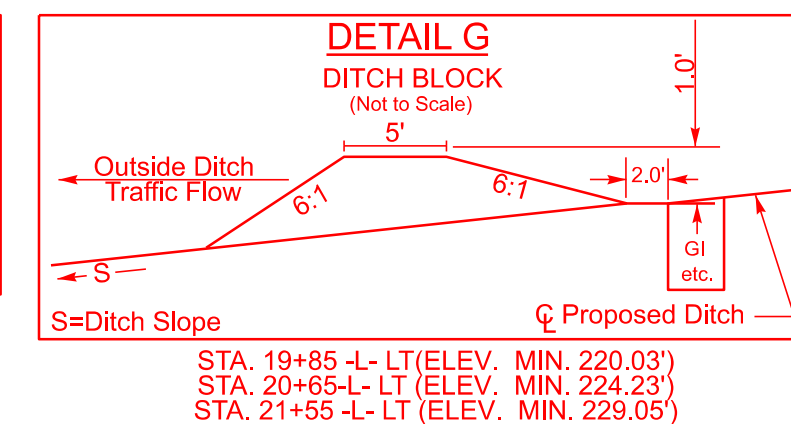
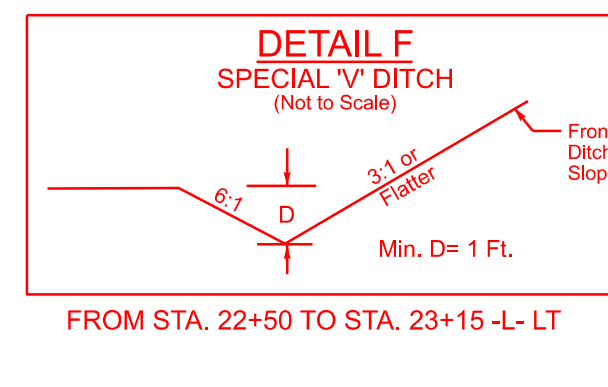
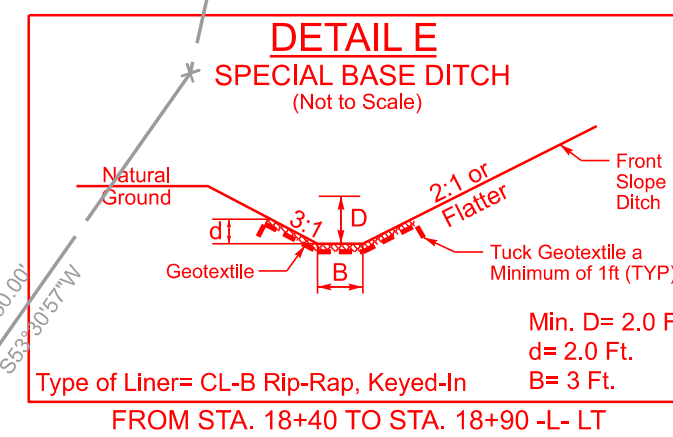
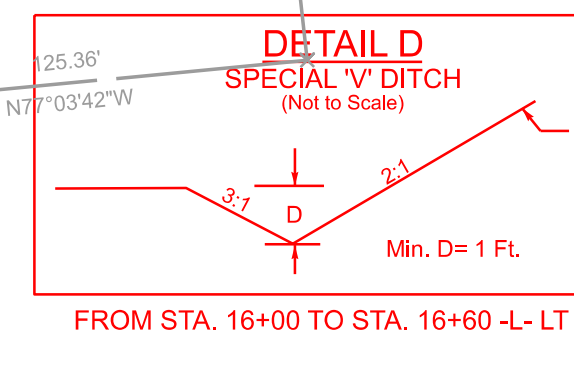
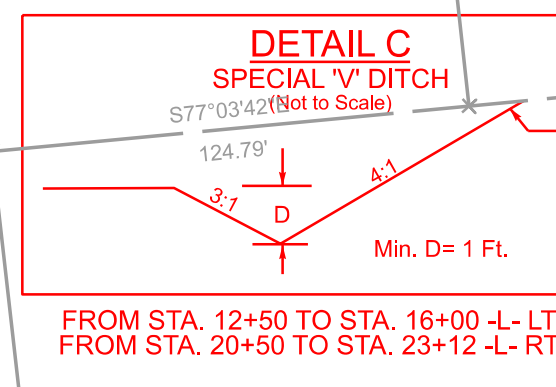
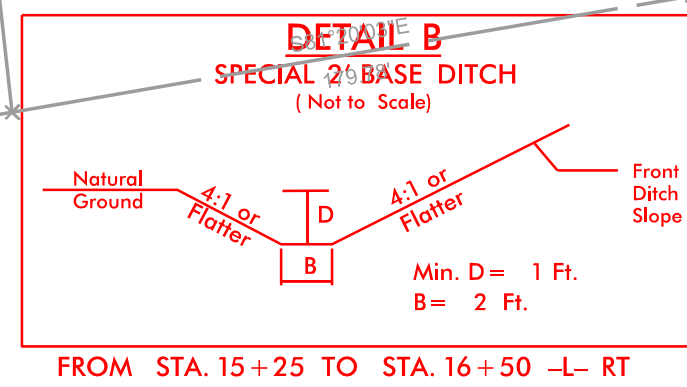
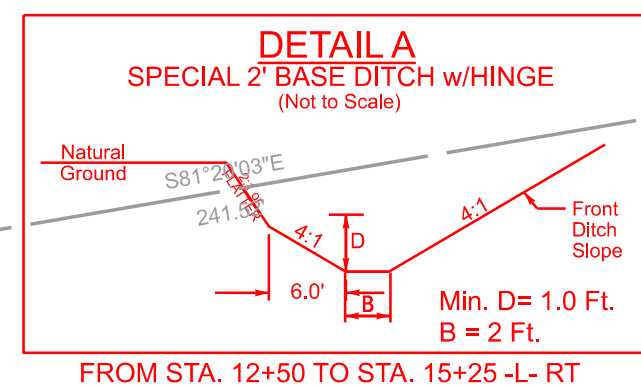
HAN NGUYEN, PE
ROADWAY TEAM LEAD

HYDRAULICS ENGINEER

SIGNATURE: P.E.
ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.



**BUFFER DRAWING
SHEET 2 OF 4****BUFFER IMPACTS PERMIT****SITE 1****SITE 2****BEGIN TIP PROJECT BR-0198**
-L- STA. 12 + 50.00**BEGIN CONSTRUCTION**
-L- STA. 12 + 00.00**END TIP PROJECT BR-0198**
-L- STA. 22 + 50.00**END CONSTRUCTION**
-L- STA. 23 + 45.00

Scale: 1" = 50'

RIPARIAN BUFFER IMPACTS SUMMARY

			IMPACTS									BUFFER REPLACEMENT	
Site No.	Station (From/To)	Structure Size / Type	TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft²)	ZONE 2 (ft²)
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)		
1	L 16+52 to 18+96	2 @ 50' 21" Cored Slab		x		3779	2959	6738					
2	L 14+67 to 14+95 LT	Roadway			x					70	70		
TOTALS* :						3779	2959	6738	0	70	70	0	0

Site 2 is in Parallel Impacts for Watkins Pond

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
12/8/2025
WAKE
BR-0198
67198.1.1
SHEET 3 OF 4

WETLANDS IN BUFFER IMPACTS SUMMARY

			WETLANDS IN BUFFERS	
SITE NO.	STATION (FROM/TO)			
1	L 18+15	L 18+73	1005	472
		</		

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
12/8/2025
WAKE
BR-0198
67198.1.1
4 OF 4

Type I or II Categorical Exclusion Action Classification Form

STIP Project No.	BR-0198
WBS Element	67198.1.1
Federal Project No.	Federal Aid Number

A. Project Description:

The project proposes to replace Bridge No. 152 over Wake Crossroads Lake on SR 2224 (Mitchell Mill Road) in Wake County (Division 5). (See Figure 1 – Vicinity Map.) The recommended structure is 102'-4 ½" long x 51' wide, 2-span, 21" Cored Slab Prestressed Units superstructure on 2'-9" end bent on piles (assumed) and drilled shaft bent (assumed) with a 90° degree skew with 5'8" paved shoulders on both sides, and a grass berm to provide space for a future sidewalk. Traffic will be maintained on an off-site detour during construction of the project. The 2027 and 2047 ADT values are 6,356 and 10,133, respectively.

B. Description of Need and Purpose:

The purpose of the project is to replace an obsolete bridge. NCDOT Structure Management Unit records indicate Bridge 910152 has a sufficiency rating of 47.00 out of a possible 100 for a new structure. The bridge's aging structure is approaching the end of its useful life and needs replacement.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

D. Proposed Improvements:

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

Costs & Schedule

Current cost estimates, based on the preliminary design:

Right-of-Way: \$111,500
Construction: \$2,650,000
Utility: \$117,000
Total Cost: \$2,878,500

Current project schedule:

Right-of-Way Acquisition: October 2025
Construction: November 2027

During construction, traffic will be detoured offsite using Watkins Road and Peebles Road, an additional distance of 1.8 miles.

Public Involvement

A project newsletter was sent to 17 local businesses and landowners on March 25, 2024. Additionally, a public outreach project website was created in May 2024. It can be found at the following location: BR-0198: PublicInput.com/Mitchell-Mill-Bridge. NCDOT received minimal public response; none of the outreach warranted follow-up or design changes.

Cultural Resources

In November 2023, NCDOT's cultural resources staff reviewed the project and found no Historic Architecture nor Landscapes surveys were required. Also in November of 2023, cultural resources

staff determined that an Archaeological survey was required; this work was completed in April of 2024 and found that there were no National Register listed archaeological sites present within the Area of Potential Effects. NCDOT notified the Catawba Indian Nation of the project on March 06, 2024; however, we have not received any notice from the Catawba Indian Nation regarding any concerns it may have with the project.

Community Studies

A Direct and Indirect Screening Tool report was completed in August 2024. There were no notable direct or indirect impacts to the community that were identified. However, there was a recommendation for the NCDOT PM to coordinate with Wake County EMS and the Wake County Public School System to provide advanced notice of construction activities that may impact emergency response and school transportation. USDA Farmland of Statewide Importance and Farmland of Local Importance are in the additional right-of-way. If the project funding changes to federal, the Preliminary Screening of Farmland Conversion Impacts will be completed and sent to NRCS if warranted.

Natural Resources

Floodplains

The project involves construction activities on or adjacent to a FEMA-regulated stream.

Water Quality

There are none designated as Outstanding Resource Waters (ORW), High Quality Waters (HQW), or water supply watersheds (WS-I or WS-II) within, or within 1.0 mile downstream of the study area. The North Carolina 2022 Final 303(d) list of impaired waters does not identify any streams within or within 1.0 mile of the study area as an impaired water.

Streams and Wetlands

Two streams were identified in the NRTR Study Area for a total of 105 linear feet. Three wetlands were also identified in the NRTR Study Area for a total of 1.47 acres.

Table 1. Streams within the Study Area (NRTR: July 26, 2024)

Stream Name	Map ID	NCDWR Index Number	Best Usage Classification	Bank Height (ft)	Bankfull width (ft)	Depth (in)
SA	SA	27-26	C;NSW	2	3	10
SB	SB	27-26	C;NSW	1.5	2	8

Table 2. Wetlands within the Study Area (NRTR: July 26, 2024)

Map ID	NCWAM Classification	Forested	NCWAM Rating	Hydrologic Classification	Area (ac.) in Study Area
WA	Headwater Forest	Y	High	Riparian	0.35
WB	Non-Tidal Freshwater Marsh	Y	High	Riparian	0.98
WC	Non-Tidal Freshwater Marsh	Y	High	Riparian	0.14
Total					1.47

Open Surface Waters

Wake Crossroads Lake and Watkins Pond are located in the study area for a total of 0.65 acres

Protected Species

Table 3. ESA federally protected species within the Study Area. (IPaC: August 27, 2025 and Aquatic Species Survey Report: June 2024)

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Perimyotis subflavus</i>	tricolored bat	PE	Yes	MA-LAA
<i>Leuconotopicus borealis</i>	red-cockaded woodpecker	T	No	NE
<i>Necturus lewisi</i>	Neuse River waterdog	T	Yes	MA-NLAA
<i>Noturus furiosus</i>	Carolina madtom	E	Yes	MA-NLAA
<i>Fusconaia masoni</i>	Atlantic pigtoe	T	Yes	MA-NLAA
<i>Rhus michauxii</i>	Michaux's sumac	E	Yes	NE

IPaC - Information for Planning and Consultation

E - Endangered; T – Threatened; MA-LAA - May Affect, Likely to Adversely Affect; MA-NLAA - May Affect, Not Likely to Adversely Affect; NE - No Effect

The US Fish and Wildlife Service has issued a programmatic conference opinion (PCO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the tricolored bat (TCB) (*Perimyotis subflavus*) in eastern North Carolina. The PCO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. NCDOT, FHWA, and USACE have agreed to three conservation measures (listed in the PCO) which will avoid/minimize take to TCBs. These conservation measures apply to all counties in Divisions 1-8. The programmatic determination for TCB for the NCDOT program is **May Affect, Likely to Adversely Affect**. Once the TCB is officially listed, the PCO will become the programmatic biological opinion (PBO) by formal request from FHWA and USACE. The PBO will ensure compliance with Section 7 of the Endangered Species Act for approximately five years (effective through December 31, 2028) for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake County, where BR-0198 is located.

Bald and Golden Eagle Protection Act

A desktop-GIS assessment of the project study area, as well as the area within a 1.0-mile radius of the study area, was performed on April 4, 2024 using 2021 color aerials. Multiple water bodies (Harris Creek, Wake Crossroads Lake, and three unnamed ponds) large enough or sufficiently open to be considered potential feeding sources were identified. Since foraging habitat was found within the review area, a survey of the project study area and the area within 660 feet of the project limits was conducted on April 5, 2024. No individuals or nests were identified. Additionally, a review of the NCNHP database records (updated April 2024) revealed no known occurrences of this species within 1.13-miles of the project study area.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)			
Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22, 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8–31. • If any question 1-7 is checked “Yes” then NCDOT certification for FHWA approval is required. • If any question 1-30 is checked “Yes” then additional information will be required for those questions in Section G. <i>Source documents should be cited for each question as appropriate. If no source is needed or available, denote as “n/a”. Please note that some “no” answers should have a corresponding email/memo/report cited for that NCDOT discipline. Project reports or memos/emails should be linked to their location on the project’s Precon site; other publications (e.g. the STIP) can be linked directly. Example: (Source: NCDOT HE-0001 NRTR [HE-0001 NRTR.pdf, 2022])</i>			
PROJECT IMPACT THRESHOLDS (FHWA signature required if any of the questions 1-7 are marked “Yes.”)		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) in which a “likely to adversely affect determination” has been made? (Source: NRTR, July 2024; Aquatic Species Survey Report, June 2024)	☐	☒
2	Does the project result in effects subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)? (Source: NRTR, July 2024)	☐	☒
3	Does the project generate substantial controversy or public opposition, regarding human and/or natural environment concerns, following appropriate public involvement?	☐	☒
4	[REDACTED]	☒	☒
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	☐	☒
6	Does the project require an Individual Section 4(f) approval?(Source: <i>DIST</i> , August 2024)	☐	☒
7	Does the project result in adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or result in an adverse effect on a National Historic Landmark (NHL)? (Source: <i>No National Register Eligible or Listed Archaeological Sites Present</i> form, 04/23/2024 and <i>Historic Architecture and Landscapes NO SURVEY REQUIRED</i> form, 11/02/2023)	☐	☒
Other Considerations		Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or resolved utilizing a Section 7 programmatic agreement? Include in Section G any utilization of a Section 7 Programmatic Agreement. (Source: NRTR, July 2024; Aquatic Species Survey Report, June 2024)	☒	☐
9	Is the project located in anadromous fish spawning waters?	☐	☒
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)? (Source: NRTR, July 2024)	☒	☐

11	Does the project impact waters of the United States in any of the designated mountain trout streams?	☐	☒
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	☐	☒
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	☐	☒
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects findings other than a No Effect, including archaeological remains? No matter the effect finding, list any commitments (conditions) in Appendix I made in association with the effect finding detailed in Appendix G. (Source: <i>No National Register Eligible or Listed Archaeological Sites Present</i> form, 04/23/2024 and <i>Historic Architecture and Landscapes NO SURVEY REQUIRED</i> form, 11/02/2023))	☐	☒
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	☐	☒
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	☐	☒
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	☐	☒
18	Does the project require a U.S. Coast Guard (USCG) permit?	☐	☒
19	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	☐	☒
20	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River?	☐	☒
21	Does the project impact federal lands (e.g., U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	☐	☒
22	Does the project involve any changes in access control to the interstate (modification or construction of an interchange)?	☐	☒
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	☐	☒
24	Will maintenance of traffic or detours cause substantial disruption?	☐	☒
25	Is the project inconsistent with the NCDOT's federally approved 4-year STIP or NCDOT's BMIP, and where applicable, the Metropolitan Planning Organization's (MPO) Transportation Improvement Program (TIP)?	☐	☒
26	Does the project require the acquisition of lands under the protection of the Land and Water Conservation Fund, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, Dedicated Nature Preserves, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	☐	☒
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	☐	☒
28	Does the project "use" Section 4(f) property, and/or result in a <i>de minimis</i> determination? (Source: <i>DIST</i> , August 2024)	☐	☒
29	Is the project considered a Type I under the NCDOT Noise Policy?	☐	☒
30	Does the project impact VAD-enrolled property, or prime or important farmland soil, as defined by the Farmland Protection Policy Act (FPPA)? (Source: <i>DIST</i> , August 2024)	☒	☐

- G. Additional documentation as required from Section F; documentation should address the context and intensity (or severity) of the impact. (Required for all questions marked 'Yes.')

8. Tricolored bat

To avoid/minimize mortality, no tree clearing will occur within 150 feet of a known maternity roost tree May 1 – July 15 in order to protect non-volant young. Winter roost trees are not considered maternity roost trees. NCDOT will cross-reference information provided by the Service for locations of maternity roosts.

If dead bats suspected of being TCB are observed during clearing, demolition, or construction activities of the Action, such bats should be collected and preserved for identification. Gary Jordan of the Service's Raleigh Field Office should be contacted at gary_jordan@fws.gov to arrange a transfer of the bats. Dead bats should be placed in a freezer until they can be transferred.

Structure bat surveys will be performed during the Natural Resource Technical Report phase of projects that are to replace a bridge or culvert > 5 feet in diameter. This information will then be recorded in NCDOT's database on bridges and culverts. NCDOT staff and/or consultants must follow the NCDOT Bat Habitat Assessment SOP by filling out Bat Habitat Assessment Forms for projects that affect bridges and culverts. These forms will be submitted to the NCDOT Biological Surveys Group and entered into its database even if no bat presence is detected. If TCBs are detected at a bridge or culvert, the Service will be notified via email at gary_jordan@fws.gov.

10. Streamside riparian zones within the study area are protected under provisions of the Neuse River Basin Riparian Buffer Rules administered by NCDWR. Potential impacts to protected stream buffers will be determined once a final alignment and design have been determined.

30. USDA Natural Resources Conservation Service (NRCS) Farmland of Statewide Importance and Farmland of Local Importance are located in the additional right-of-way. The extent of farmland soil conversion impacts will depend on the exact location of right-of-way acquisition and easements. However, no further action is needed at this time as the project is anticipated to remain state-funded. The Farmland Protection Policy Act (FPPA) does not apply to state-funded projects. There are no VADs or EVADs in the project study area.

If the project funding changes to federal, then the Preliminary Screening of Farmland Conversion Impacts will need to be completed and sent to NRCS if warranted.

H. Categorical Exclusion Approval:

STIP Project No.	BR-0198
WBS Element	67198.1.1
Federal Project No.	Federal Aid Number

Prepared By:

08/27/2025	DocuSigned by: <i>Hannah Headrick</i> 821C76C4D61C42A
Date	Hannah Headrick, Environmental Policy Consultant NCDOT - EPU

Prepared For: Kim Gillespie, Project Manager, NCDOT - PMU

Reviewed By:

08/27/2025	DocuSigned by: <i>Morgan Weatherford</i> B9ED386C5CED44E
Date	Morgan Weatherford, Eastern Regional Team Lead NCDOT - EPU

- | | | |
|-------------------------------------|------------------|--|
| ☒ | Approved | <ul style="list-style-type: none">If NO grey boxes are checked in Section F, NCDOT approves the Type I or Type II Categorical Exclusion. |
| ☐ | Certified | <ul style="list-style-type: none">If ANY grey boxes are checked in Section F, NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval. |

08/27/2025	Signed by: <i>John Jamison</i> C4084B4A64137432
Date	John Jamison, EPU Manager North Carolina Department of Transportation

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

	<u>N/A</u>
Date	for Yolonda K. Jordan, Division Administrator Federal Highway Administration

Note: Prior to ROW or Construction authorization, a [consultation](#) may be required (please see Section VIII of the NCDOT-FHWA CE Programmatic Agreement for more details). Upload final documentation to ATLAS workbench and add commitments to the green sheet and Commitments dashboard.

PROJECT COMMITMENTS

REPLACE BRIDGE 910152 ON SR 2224 (Mitchell Mill Rd) OVER WAKE CROSSROADS LAKE
TIP Number: BR-0198
County: Wake
WBS: 67198.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Division Office - Highway Division Commitment: As-Built Construction Plans

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall: (1) construct all vertical and horizontal elements within the floodplain as designed; and (2) consult with the Hydraulics Unit of any planned deviation of these elements within the floodplain prior to commencing any such changes; and (3) submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction. The Hydraulics Unit will then verify either: (1) the drainage structure(s) and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically; or (2) any changes made to the plans were reviewed and approved to meet FEMA SFHA compliance; or (3) appropriate mitigation measures will be achieved prior to project close-out.

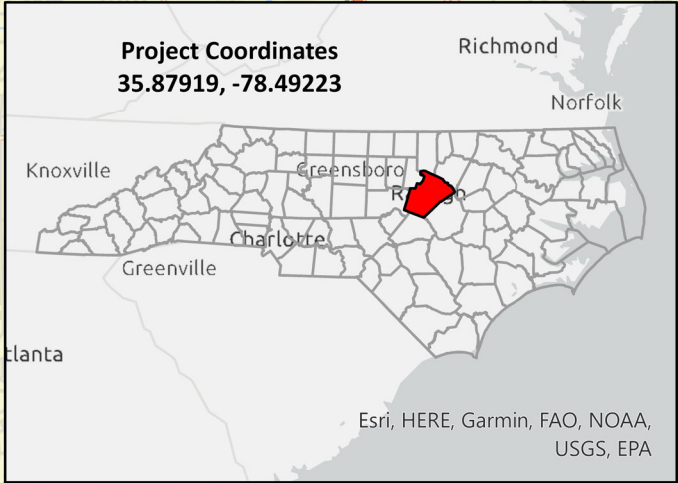
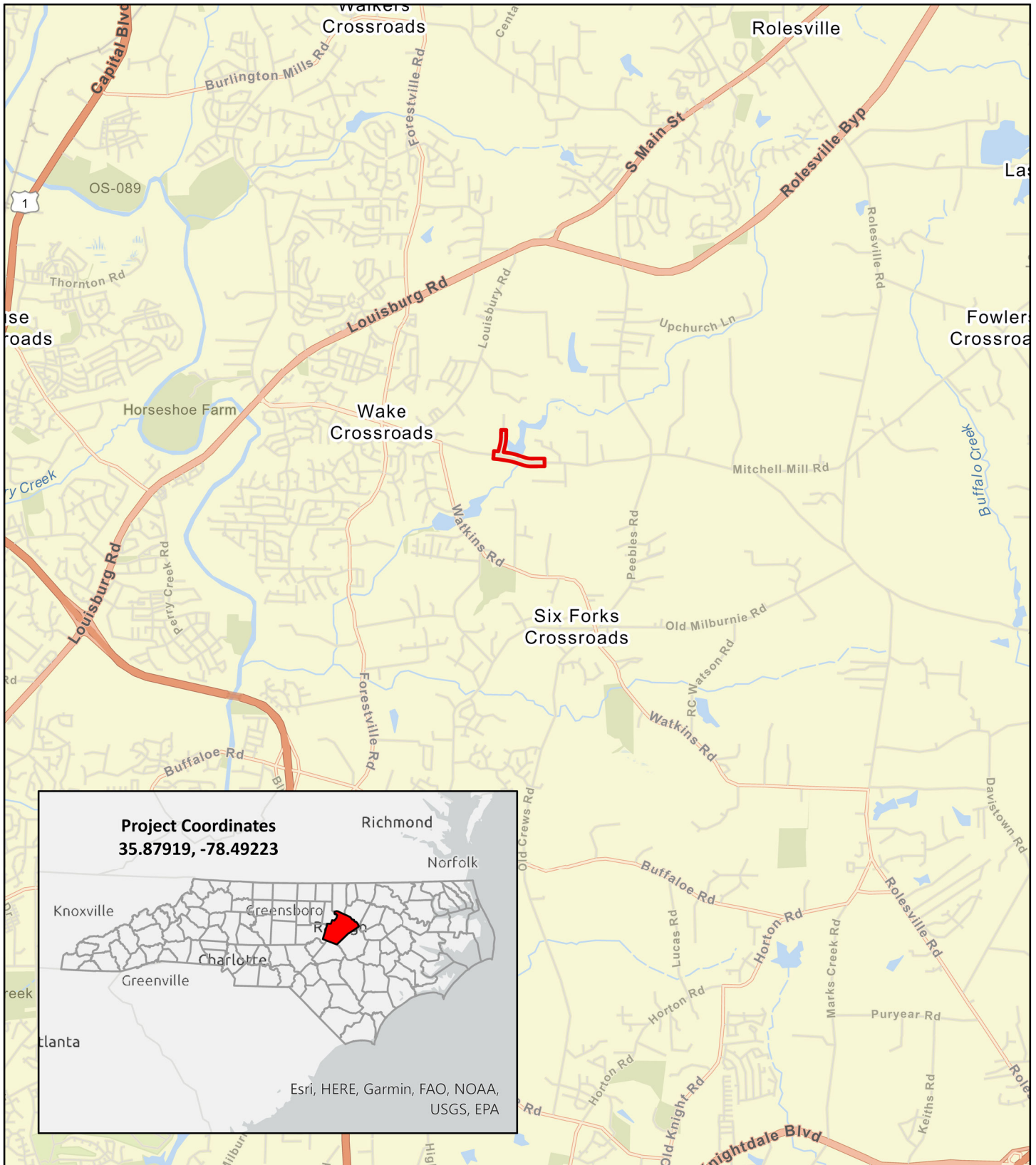
COMMITMENTS FROM PERMITTING

No permitting commitments developed to date.

*****END OF PROJECT COMMITMENTS*****

REPLACE BRIDGE 910152 ON SR 2224 (Mitchell Mill Rd) OVER WAKE CROSSROADS LAKE
67198.1.1

Last Modified Date: 08/13/2025



 BR-0198 Study Area



TIP BR-0198
 Replace Bridge 910152 on
 SR 2224 (Mitchell Mill Rd)
 over Wake Crossroads Lake
 Wake County, NC

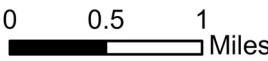


Figure Date: October 25, 2023

Figure: Project Vicinity



**NO NATIONAL REGISTER OF HISTORIC PLACES
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES
PRESENT FORM**

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project.
It is not valid for Historic Architecture and Landscapes. You must consult
separately with the Historic Architecture and Landscapes Team.



PROJECT INFORMATION

Project No: **BR-0198** *County:* Wake
WBS No: 67198.1.1 *Document:* Federal CE
F.A. No: *Funding:* ☒ State ☐ Federal

Federal Permit Required? ☒ Yes ☐ No *Permit Type:* NWP 3 / NWP 14

Project Description: The project proposes to replace Bridge No. 152 over Wake Crossroads Lake on SR 2224 (Mitchell Mill Road) in Wake County, North Carolina. The archaeological Area of Potential Effects (APE) encompasses all areas of potential disturbance as presented on the accompanying ARC-GIS/study project area mapping. The APE measures roughly 10.0 acres in area.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

The North Carolina Department of Transportation (NCDOT) Archaeology Team has reviewed the subject project and determined:

- ☒ There are no National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects. (Attach any notes or documents as needed.)
- ☐ No subsurface archaeological investigations were required for this project.
- ☐ Subsurface investigations did not reveal the presence of any archaeological resources.
- ☒ Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- ☒ All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.

Brief description of review activities, results of review, and conclusions:

Permitting and funding information was reviewed for determining the level of archaeological input required by state and federal laws. Section 106 of the National Historic Preservation Act will apply because the project will utilize federal documentation and permits. The (FHWA) will serve as the lead federal agency. Next, construction design and other data was examined (when applicable) to define the character and extent of potential impacts to the ground surfaces embracing the improvement work. At this juncture, the APE was designed to capture all areas of potential impact within the project study area.

Once an APE was defined, a map review and site file search was conducted utilizing on-line resources available from the Office of State Archaeology on Thursday, November 9, 2023. No previously documented archaeological sites are situated within the APE. There are two sites (31WA722 & 31WA790) located a very short distance south of the current project study area. 31WA722 is a large multicomponent site consisting of Late Paleo Indian, Early Archaic, and

Woodland occupations. 31WA790 is a small prehistoric site with little information contained on its site form. Due to the relative proximity of these two resources, the project study area has an elevated potential for similar sites and artifacts.

Examination of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing resources available on the NCSHPO website is important in establishing the location of noteworthy historic occupations related to a perspective construction impact area. A cross-check of these mapped resources concluded that none of the above properties with potential contributing archaeological components are situated within the APE.

In addition, historic maps of Wake County were appraised to identify former structure locations, land use patterns, cemeteries, or other confirmation of historic occupation in the project vicinity. Archaeological/historical reference materials were inspected as well. In general, the cultural background review established that no previously recorded archaeological sites, cemeteries or NRHP listed resources are located within the APE.

Next, the APE was referenced on topographic, geologic, flood boundary, lidar and NRCS soil survey maps (see attached mapping) for the evaluation of environmental, geomorphological, hydrological, and other correlatives that may have resulted in past occupation in the project corridor. Also, aerial photographs (NCDOT Spatial Data Viewer & other on-line sources) were examined and the Google Street View map application was utilized (when amenable) for gaining a virtual, first-hand perspective of the overall study area and for assessing disturbances, both natural and human induced, which compromise the integrity of archaeological sites/deposits. Environmental determinants suggest a heightened potential for archaeological resource recovery within the APE. Many of the project ground surfaces contain archaeologically testable lands.

The archaeological survey was completed by NCDOT staff archaeologists Scott Halvorsen and Paul Mohler on Tuesday, December 5, 2023 and Scott Halvorsen and Brian Overton on Wednesday, December 13, 2023. First, the APE was divided into four directional quadrants separated by SR 2224 and Wake Crossroads Lake. At this time, each quadrant was independently inspected for artifacts on the land surfaces and descriptive notes were taken. No archaeological artifacts or sites were identified during the initial inspection. The methodology employed for the subsurface survey was standard for the majority of counties in North Carolina. Shovel test pits were spaced on transects 30 meters (50 feet) from one another and each test measured approximately 35cm by 35 cm in diameter. Soils were screened through a 1/4 inch mesh screen. Transects were established approximately 50 feet from the SR 2224 center-line. For the purposes of covering the APE, between five and seven shovel test pits were excavated in each project quadrant. In total, 24 shovel test pits were excavated as a constituent of the environmental study. Two of these locations returned cultural artifacts.

First, the southwestern quadrant was surveyed. Upon establishment of a transect 50 feet from the SR 2224 center-line, five shovel test pits were excavated at 30 meter intervals. The five shovel test pits were nearly identical in soil stratigraphy. The first soil level was 10YR6/2 light brownish gray sandy loam to about 25cmbs atop a second soil layer containing 10YR6/4 light yellowish brown sand to 50-80cmbs. From 80-100cmbs a compact, coarse sand and small pea gravel layer was encountered. Two cultural artifacts were documented in the first shovel test pit excavated along the transect. It was dug approximately 30 meters from Wake Crossroads Lake. The two metavolcanic flake fragments were extracted from the first soil layer at depths of 20-30cmbs. Due to the presence

of underground utility lines, Wake Crossroads Lake, and SR 2224, the small subsurface artifact presence could not be delineated in the traditional fashion. Based on all available information and the excavation of additional shovel test pits in the quadrant, the site (field site # BR-0198-01) constitutes an isolated find in the southwestern quadrant.

Next, the northwestern quadrant saw the excavation of eleven shovel test pits. Two transects were established to cover the APE in this quadrant. Six tests were completed on transect #1, located 50 feet from the SR 2224 center-line. Five additional tests were dug along transect #2 which was located 50 meters west of Medlin Woods Road. Shovel test pits were not excavated along the eastern side of Medlin Woods Road due to residential and landscaping alterations to the land surfaces. A typical stp along transect #1 contained a first soil layer of 10YR4/2 dark grayish brown sandy loam to 30-40cmbs atop a second soil stratum of 5YR5/8 yellowish red sandy clay to 50cmbs. A typical STP along transect #2 consisted of a first soil layer of 10YR 5/4 yellowish brown sand to 60cmbs. The second soil layer was 10YR5/8 yellowish brown sandy clay. No artifacts were recovered from the shovel test pits in the northwestern quadrant.

The two eastern project quadrants were characterized as a mostly residential area (NE) and a wooded expanse (SE). Because of disturbances, only four shovel test pits were dug along the NE quadrant transect. Primarily, these tests revealed a first soil layer of 10YR4/1 dark gray sandy loam to 10cmbs atop 10YR6/4 light yellowish brown sand to 25-35cmbs. Next a strong brown clay subsoil was encountered. The four tests completed in this quadrant revealed no evidence of historic or prehistoric occupations. Finally, five stp's were completed in the southeastern quadrant. While excavating the third test pit, located approximately 60m from Wake Crossroads Lake on the transect, one prehistoric flake fragment was recovered from third stratum depths of 30-80cmbs. No other artifacts were identified in this quadrant's test pits. SR 2224, Wake Crossroads Lake wetland and negative test pit locations were used to delineate the site. For the purposes of this investigation the isolate prehistoric artifact find was designated BR-0198-2).

(This project falls within a North Carolina County in which the following federally recognized tribes have expressed an interest: Catawba Indian Nation. We recommend that you ensure that this documentation is forwarded to these tribes using the process described in the current NCDOT Tribal Protocol and PA Procedures Manual.)

SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☒ Previous Survey Info ☒ Photos ☐ Correspondence

Other:

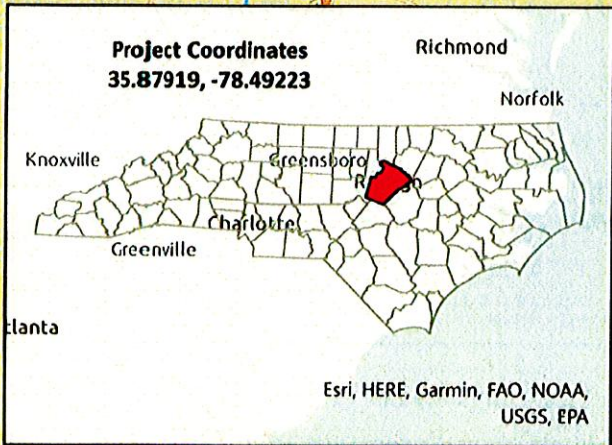
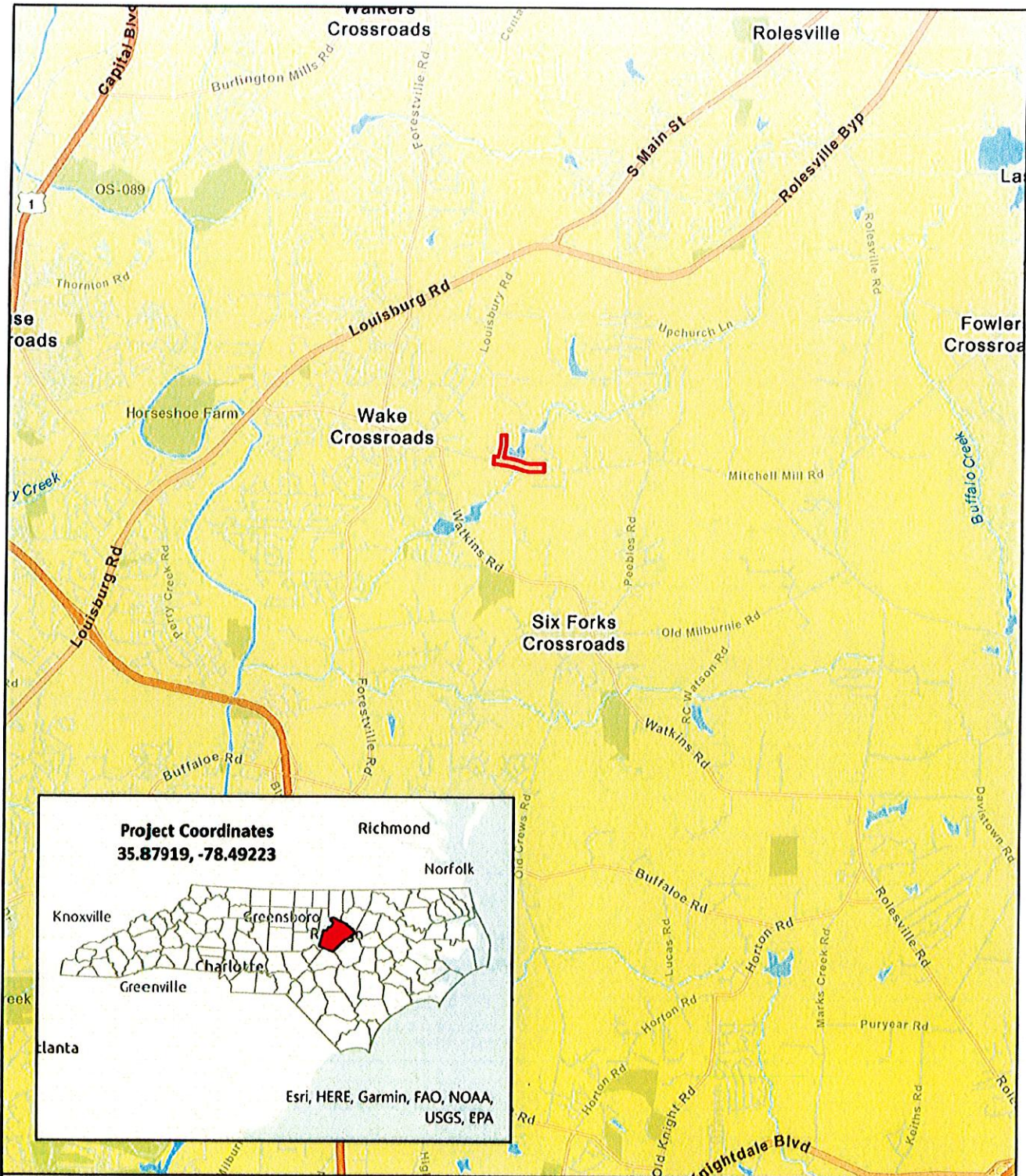
Signed:

SCOTT HALVORSEN *Scott Halvorsen*

4/3/2024

NCDOT ARCHAEOLOGIST

Date



 BR-0198 Study Area

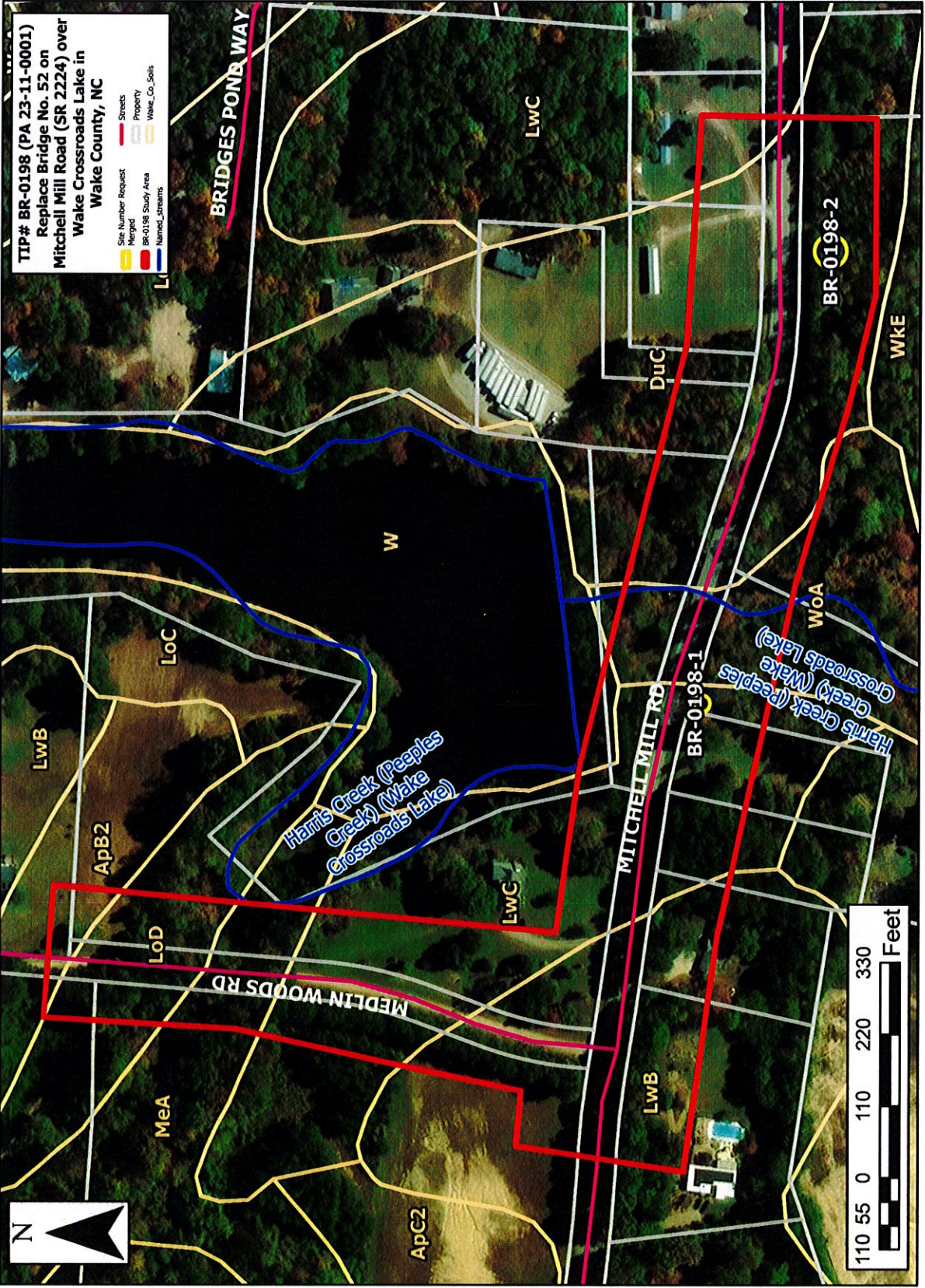


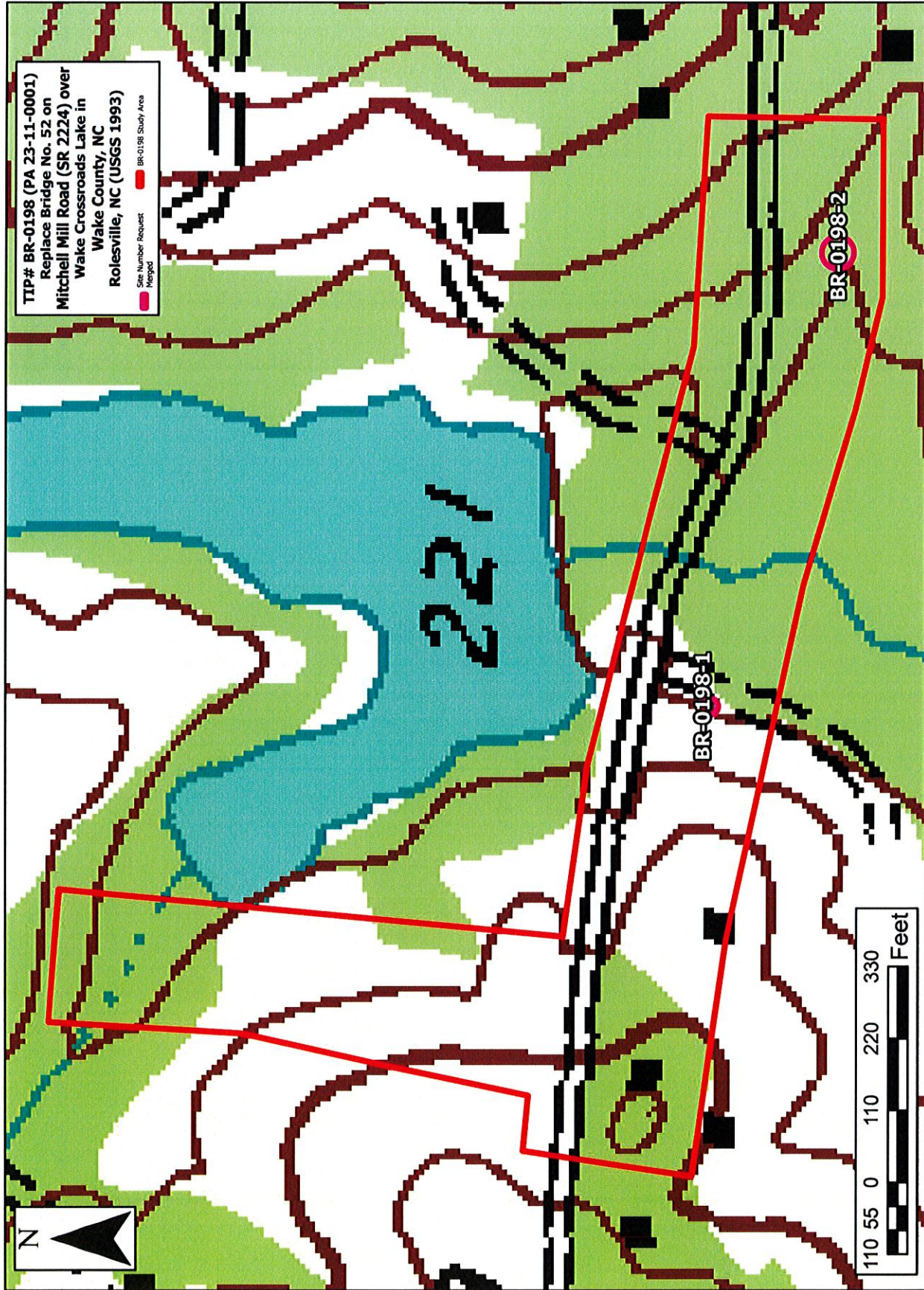
TIP BR-0198
 Replace Bridge 910152 on
 SR 2224 (Mitchell Mill Rd)
 over Wake Crossroads Lake
 Wake County, NC

0 0.5 1 Miles 

Figure Date: October 25, 2023

Figure: Project Vicinity





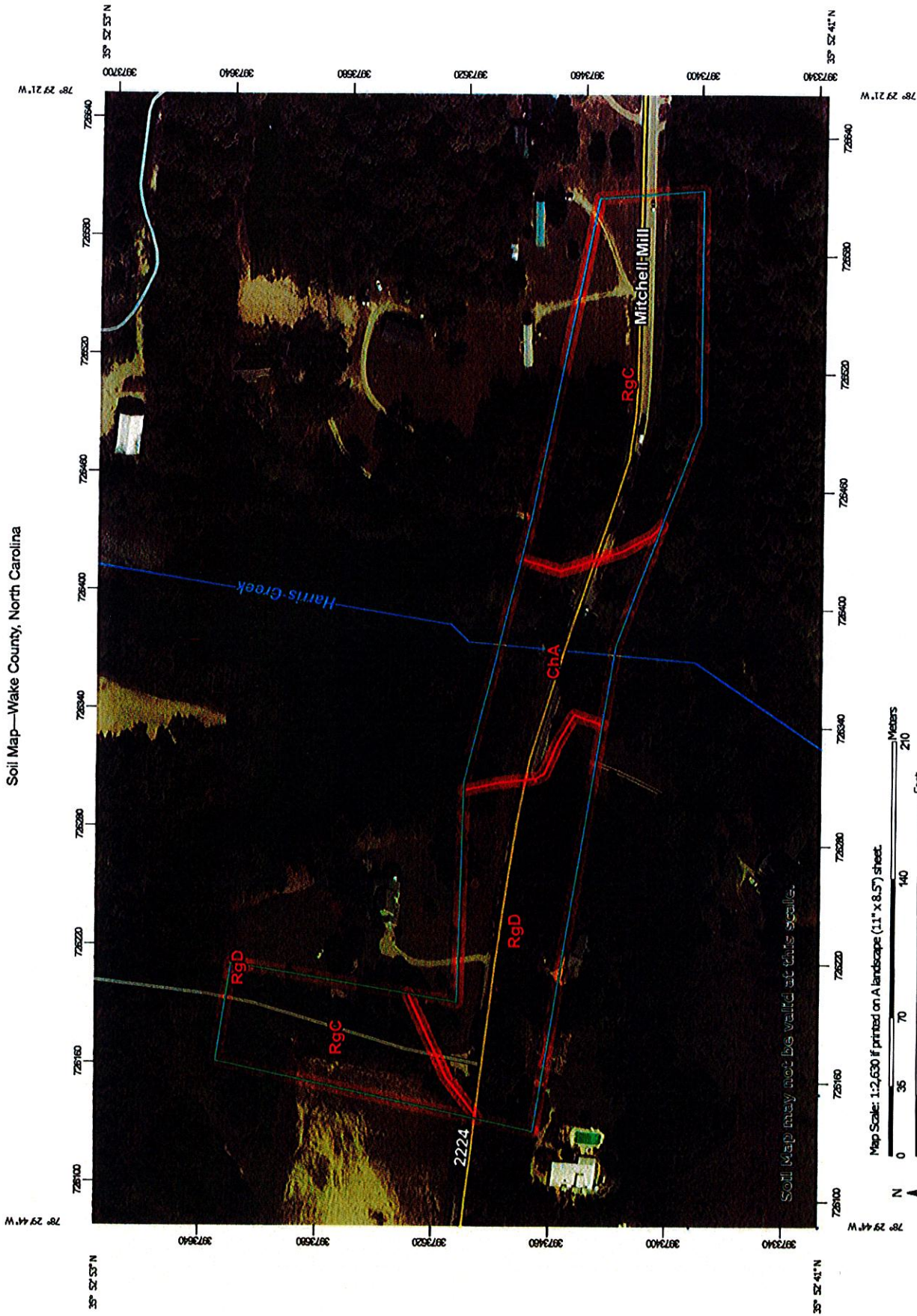
TIP# BR-0198 (PA 23-11-0001)
Replace Bridge No. 52 on
Mitchell Mill Road (SR 2224) over
Wake Crossroads Lake in
Wake County, NC
Rolesville, NC (USGS 1993)

Site Number Request
Merged

BR-0198 Study Area



Soil Map—Wake County, North Carolina



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ChA	Chewacla and Wehadkee soils, 0 to 2 percent slopes, frequently flooded	1.6	18.4%
RgC	Rawlings-Rion complex, 6 to 10 percent slopes	4.5	51.9%
RgD	Rawlings-Rion complex, 10 to 15 percent slopes	2.6	29.7%
Totals for Area of Interest		8.8	100.0%

Project Submittal Interim Form



Updated March 16, 2026

*Please note: fields marked with a red asterisk * below are required. You will not be able to submit the form until all mandatory questions are answered.*

Project Type: *

- | | |
|---|---|
| ☐ For the Record Only (Courtesy Copy) | ☒ New Project |
| ☐ Modification/New Project with Existing ID | ☐ More Information Response |
| ☐ Other Agency Comments | ☐ Pre-Application Submittal |
| ☐ Re-Issuance\Renewal Request | ☐ Stream or Buffer Appeal |

*** If this is a GP reissuance/renewal please reference the date of the plans and PCN that were originally verified.**

New Project - Please check the new project type if you are trying to submit a new project that needs an official approval decision.

Pre-Application Submittal – Please check the pre-application submittal if you just want feedback on your submittal and do not have the expectation that your submittal will be considered a complete application requiring a formal decision.

Modification/New Project With An Existing ID - Please check this box if you are submitting for a new phase of an existing project, a modification to an existing project or for any additional impacts to an existing project for an official approval decision.

More Information Response - Please check this type if you are responding to a request for information from staff and you have an ID# and version for this response.

Other Agency Comments - Please check this if you are submitting comments on an existing project.

Re-issuance\Renewal Request – Please check this if you are submitting for a re-issuance\renewal prior to expiration date for the corresponding 401/404. If submitting after the expiration date or if modification needed use Modification\New Project with Existing ID option.

Submittal Type: *

401 Application - Individual Certification (IC/WQC)

Is buffer approval also required? *

- ☒ Yes ☐ No

Project Contact Information

Name:

Jason Dilday

Who is submitting the information?

Email Address: *

jldilday1@ncdot.gov

Project Information

Project Name: *

NCDOT/BR-0198/Wake Crossroads Lake/Mitchell Mill Rd/Wake/Div 5/67198.1.1

Is this a public transportation project? *

☒ Yes ☐ No

Is this a DOT project? *

☒ Yes ☐ No

TIP#:

BR-0198

WBS#:

67198.1.1

(Applies to DOT projects only)

Project Status

If you selected "Re-Issuance/Renewal Request" or "Modification/New Project with Existing ID" for your project type at the top of this form, please enter the current status of your project.

☒ Pre-let ☐ Under Construction
☐ Utility Relocation Underway ☐ In-Field Adjustment

Only choose "In-Field Adjustment" if directed to do so by 401 staff

Is this application for a project associated with emergency response/repairs from Hurricane Helene impacts to your project or property? *

☐ Yes ☒ No

Is the project located within a NC DCM Area of Environmental Concern (AEC)? *

☐ Yes ☒ No ☐ Unknown

Does this project involve maintenance dredging funded by the Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund, electric generation projects located at an existing or former electric generating facility, or involve the distribution or transmission of energy or fuel, including natural gas, diesel, petroleum, or electricity? *

☐ Yes ☒ No

Is this project connected with ARPA funding or S.L. 2023-134 (earmark)? *

☐ ARPA ☐ S.L. 2023-134 (earmark) ☒ No

Is this application being filed jointly with another party involved with this project? *

☐ Yes ☒ No

County (ies) *

Wake

Please upload all files that need to be submitted.

[Click the upload button or drag and drop files here to attach document](#)

BR-0198 Permit Package.pdf	3.76MB
BR-0198_CE.pdf	1.2MB
Generated_Dilday_55882_65830_0_Appx_B_Aquatic_Resources.pdf	51.48KB
Generated_Dilday_55882_65830_0_Appx_C_Impacts.pdf	70.25KB
Generated_Dilday_55882_65830_0_Appx_D1_MB_ILF.pdf	46.41KB
Generated_Dilday_55882_65830_0_Appx_H_Supporting_Files.pdf	48.46KB
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Generated_Dilday_55882_65830_0_NCDWR 401_JPA_DynamicTableReport.pdf	36.04KB

[Only pdf or kmz files are accepted.](#)

Describe the attachments or add comments:

*

☒ By checking the box and signing box below, I certify that:

- I, the project proponent, hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief.
- I, the project proponent, hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I agree that submission of this online form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the online form.

Signature: *



Submittal Date:

9/10/2026