

# Pre-Construction Notification



## Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits  
(along with corresponding Water Quality Certifications)

December 4, 2023 Ver 4.3

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.

Also, if at any point you wish to print a copy of the E-PCN, all you need to do is right-click on the document and you can print a copy of the form.

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/DocView.aspx?dbid=0&id=2196924>

### A. Processing Information

If this is a courtesy copy, please fill in this with the submission date.

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

☐ Yes ☒ No

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

☐ ARPA ☐ S.L. 2023-134 (earmark) ☒ No

County (or Counties) where the project is located: \*

Wake

Is this a NCDMS Project? \*

☐ Yes ☒ No

Click Yes, only if NCDMS is the applicant or co-applicant.

DO NOT CHECK YES, UNLESS YOU ARE DMS OR CO-APPLICANT.

Is this project a public transportation project? \*

☒ Yes ☐ No

This is any publicly funded by municipal, state or federal funds road, rail, airport transportation project.

Is this a NCDOT Project? \*

☒ Yes ☐ No

(NCDOT only) T.I.P. or state project number:

30001.WIUM.002

WBS # \*

30001.WIUM.002

(for NCDOT use only)

1a. Type(s) of approval sought from the Corps: \*

- ☒ Section 404 Permit (wetlands, streams and waters, Clean Water Act)  
☐ Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

Has this PCN previously been submitted? \*

☐ Yes  
☒ No

1b. What type(s) of permit(s) do you wish to seek authorization? \*

- ☒ Nationwide Permit (NWP)  
☐ Regional General Permit (RGP)  
☐ Standard (IP)

1c. Has the NWP or GP number been verified by the Corps? \*

☐ Yes ☒ No

Nationwide Permit (NWP) Number:

03 - Maintenance

**NWP Numbers (for multiple NWPS):**

List all NW numbers you are applying for not on the drop down list.

**1d. Type(s) of approval sought from the DWR: \***

check all that apply

- ☒ 401 Water Quality Certification - Regular  
☐ Non-404 Jurisdictional General Permit  
☐ Individual 401 Water Quality Certification

- ☐ 401 Water Quality Certification - Express  
☒ Riparian Buffer Authorization

**1e. Is this notification solely for the record because written approval is not required?**

\*

For the record only for DWR 401 Certification:

☐ Yes ☒ No

For the record only for Corps Permit:

☒ Yes ☐ No

**1f. Is this an after-the-fact permit application? \***

☐ Yes ☒ No

**1g. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts?**

If so, attach the acceptance letter from mitigation bank or in-lieu fee program.

☐ Yes ☒ No

**Acceptance Letter Attachment**

Click the upload button or drag and drop files here to attach document

FILE TYPE MUST BE PDF

**1h. Is the project located in any of NC's twenty coastal counties? \***

☐ Yes ☒ No

**1j. Is the project located in a designated trout watershed? \***

☐ Yes ☒ No

Link to trout information: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx>

## B. Applicant Information



**1a. Who is the Primary Contact? \***

Robert Crowther

**1b. Primary Contact Email: \***

recrowther@ncdot.gov

**1c. Primary Contact Phone: \***

(xxx)xxx-xxxx

(919)707-6112

**1d. Who is applying for the permit? \***

☐ Owner

(Check all that apply)

☒ Applicant (other than owner)

**1e. Is there an Agent/Consultant for this project? \***

☐ Yes ☒ No

## 2. Owner Information

**2a. Name(s) on recorded deed: \***

NCDOT

**2b. Deed book and page no.:**

**2c. Contact Person:**

(for Corporations)

**2d. Address \***

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

**2e. Telephone Number: \***

(xxx)xxx-xxxx

(919)707-6108

**2f. Fax Number:**

(xxx)xxx-xxxx

2g. Email Address: \*

ekcheely@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: \*

Robert Crowther

3b. Business Name:

(if applicable)

3c. Address \*

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

3d. Telephone Number: \*

(919)707-6112

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: \*

recrowther@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: \*

30001.WIUM.002 (Umstead State Park Pedestrian Bridge)

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: \*

Raleigh

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

Postal / Zip Code

State / Province / Region

Country

2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

Latitude: \*

35.8454793

ex: 34.208504

Longitude: \*

-78.7245127

-77.796371

3. Surface Waters

3a. Name of the nearest body of water to proposed project: \*

Crabtree Creek

3b. Water Resources Classification of nearest receiving water: \*

B;NSW

[Surface Water Lookup](#)

3c. What river basin(s) is your project located in? \*

Neuse



3d. Please provide the 12-digit HUC in which the project is located. \*

030202010803

River Basin Lookup

4. Project Description and History

4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: \*

The site is located within the right-of-way for Ebenezer Church Road along the eastern boundary of William Umstead State Park. The greenway bridge crosses Crabtree Creek as part of the South Turkey Creek Trail. Land uses in the immediate vicinity of this site are predominately a recreational state park and residential neighborhoods.

4b. Have Corps permits or DWR certifications been obtained for this project (including all prior phases) in the past? \*

☐ Yes ☒ No ☐ Unknown

4f. List the total estimated acreage of all existing wetlands on the property:

4g. List the total estimated linear feet of all existing streams on the property:

(intermittent and perennial)

4h. Explain the purpose of the proposed project: \*

The proposed action is the replacement of bridge 911473, which was previously located on the old alignment of Ebenezer Church Road and is now utilized as a stream crossing for a trail in Umstead State Park. Repairs were attempted on this bridge in 2024, but the structure partially collapsed into Crabtree Creek during removal. A new bridge will be built in-place to accommodate primarily pedestrian use. The only motorized vehicles that will utilize this crossing would be State Park vehicles.

4i. Describe the overall project in detail, including indirect impacts and the type of equipment to be used: \*

This bridge is a replace-in-kind and will be extended 2' on either end. The roadway grade and interior bents will be retained. The bridge will have 2'6" end bent caps with 1.5:1 rip-rap sloping abutments. Both banks will be stabilized with class-II rip-rap.

Existing utilities will be raised within their existing alignment south of the bridge to allow construction access to the site. Up to five new poles are expected to be installed on the existing alignment.

5. Jurisdictional Determinations

5a. Have the wetlands or streams been delineated on the property or proposed impact areas? \*

☒ Yes ☐ No ☐ Unknown

Comments:

5b. If the Corps made a jurisdictional determination, what type of determination was made? \*

☐ Preliminary ☐ Approved ☒ Not Verified ☐ Unknown ☐ N/A

Corps AID Number:

Example: SAW-2017-99999

5c. If 5a is yes, who delineated the jurisdictional areas?

Name (if known): H. Bain / N. Blackford

Agency/Consultant Company: RK&K

Other:

6. Future Project Plans

6a. Is this a phased project? \*

☐ Yes ☒ No

Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

D. Proposed Impacts Inventory

1. Impacts Summary

1a. Where are the impacts associated with your project? (check all that apply):

☒ Wetlands ☒ Streams-tributaries ☒ Buffers ☐ Open Waters ☐ Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

"W." will be used in the table below to represent the word "wetland".

2a. Site # * (?)	2a1 Reason * (?)	2b. Impact type * (?)	2c. Type of W. *	2d. W. name *	2e. Forested *	2f. Type of Jurisdiction * (?)	2g. Impact area *

1	Mechanized Clearing	P	Floodplain Pool	WA	Yes	Corps	0.003 (acres)
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2g. Total Temporary Wetland Impact

0.000

2g. Total Permanent Wetland Impact

0.003

2g. Total Wetland Impact

0.003

2i. Comments:

Mechanized clearing within wetland WA is needed for adequate construction access.

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

"S." will be used in the table below to represent the word "stream".

	3a. Reason for impact <sup>*</sup> (?)	3b. Impact type <sup>*</sup>	3c. Type of impact <sup>*</sup>	3d. S. name <sup>*</sup>	3e. Stream Type <sup>*</sup> (?)	3f. Type of Jurisdiction <sup>*</sup>	3g. S. width <sup>*</sup>	3h. Impact length <sup>*</sup>
S1	Pedestrian Bridge	Permanent	Bank Stabilization	Crabtree Creek	Perennial	Both	60 Average (feet)	56 (linear feet)
S2	Construction Access	Temporary	Other	Crabtree Creek	Perennial	Both	60 Average (feet)	30 (linear feet)

\*\* All Perennial or Intermittent streams must be verified by DWR or delegated local government.

3i. Total jurisdictional ditch impact in square feet:

0

3i. Total permanent stream impacts:

56

3i. Total temporary stream impacts:

30

3i. Total stream and ditch impacts:

86

3j. Comments:

All permanent stream impacts are resulting from bank stabilization and will not result in a permanent loss of function within Crabtree Creek.

6. Buffer Impacts (for DWR)

If project will impact a protected riparian buffer, then complete the chart below. Individually list all buffer impacts below.

6a. Project is in which protect basin(s)?<sup>\*</sup>

Check all that apply.

- ☒ Neuse
- ☐ Catawba
- ☐ Goose Creek
- ☐ Other
- ☐ Tar-Pamlico
- ☐ Randleman
- ☐ Jordan Lake

6b. Impact Type <sup>*</sup> (?)	6c. Per or Temp <sup>*</sup> (?)	6d. Stream name <sup>*</sup>	6e. Buffer mitigation required? <sup>*</sup>	6f. Zone 1 impact <sup>*</sup>	6g. Zone 2 impact <sup>*</sup>
Construction Access (Allowable)	T	Crabtree Creek	No	1,036 (square feet)	721 (square feet)
Bank Stabilization (Allowable)	P	Crabtree Creek	No	168 (square feet)	0 (square feet)

6h. Total buffer impacts:

	Zone 1	Zone 2
Total Temporary impacts:	1,036.00	721.00

	Zone 1	Zone 2
Total Permanent impacts:	168.00	0.00

	Zone 1	Zone 2
--	--------	--------

Total combined buffer impacts:

1,204.00

721.00

#### 6i. Comments:

There is an additional 65 sq ft of Zone 2 buffer impacts that are being classified as wetland impacts within this application.

## E. Impact Justification and Mitigation

### 1. Avoidance and Minimization

#### 1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project: \*

The proposed pedestrian bridge will be constructed within existing right-of-way on the alignment of the previous structure. Clearing for construction access has been limited to what is needed, and the proposed bank stabilization has been minimized to what is required for adequate protection of the new structure.

#### 1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques: \*

The interior bents that are existing will not be removed, and will be used to support the new structure across Crabtree Creek. Sediment and erosion control measures will adhere to the Design Standards in Sensitive Watersheds during construction of the project. The extent of mechanized clearing within wetland WA has been kept to the minimum required for construction access. Existing utilities are not being relocated, and will be moved vertically to create the required construction access.

### 2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

#### 2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?

☐ Yes ☒ No

#### 2b. If this project DOES NOT require Compensatory Mitigation, explain why:

Permanent wetland impacts are below the typical threshold (0.10 acre) that would require compensatory mitigation. Permanent stream impacts are limited to bank stabilization that will not result in permanent loss of stream function.

All proposed permanent riparian buffer impacts are classified as "Allowable Upon Authorization" within the Neuse River as either streambank or shoreline stabilization, or bridges.

NC Stream Temperature Classification Maps can be found under the Mitigation Concepts tab on the Wilmington District's [RIBITS](#) website.

## F. Stormwater Management and Diffuse Flow Plan (required by DWR)

\*\*\* Recent changes to the stormwater rules have required updates to this section .\*\*\*

### 1. Diffuse Flow Plan

#### 1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?

☒ Yes ☐ No

1b. All buffer impacts and high ground impacts require diffuse flow or other form of stormwater treatment. If the project is subject to a state implemented riparian buffer protection program, include a plan that fully documents how diffuse flow will be maintained.

All Stormwater Control Measures (SCM)s must be designed in accordance with the [NC Stormwater Design Manual](#). Associated supplement forms and other documentation shall be provided.

#### What type of SCM are you providing?

- ☐ Level Spreader
  - ☐ Vegetated Conveyance (lower SHWT)
  - ☐ Wetland Swale (higher SHWT)
  - ☐ Other SCM that removes minimum 30% nitrogen
  - ☒ Proposed project will not create concentrated stormwater flow through the buffer
- (check all that apply)

For a list of options to meet the diffuse flow requirements, click [here](#).

### 2. Stormwater Management Plan

#### 2a. Is this a NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250? \*

☒ Yes ☐ No

#### Comments:

## G. Supplementary Information

### 1. Environmental Documentation

#### 1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? \*

☒ Yes ☐ No

1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)? \*

☒ Yes ☐ No

1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) \*

☒ Yes ☐ No

## 2. Violations (DWR Requirement)

2a. 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)? \*

☐ Yes ☒ No

## 3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? \*

☐ Yes ☒ No

3b. If you answered "no," provide a short narrative description.

The proposed project is the replacement of a damaged park trail crossing of Crabtree Creek within Umstead State Park. No additional development would be expected to occur as a result of this action.

## 4. Sewage Disposal (DWR Requirement)

4a. Is sewage disposal required by DWR for this project? \*

☐ Yes ☐ No ☒ N/A

## 5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat? \*

☒ Yes ☐ No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? \*

☐ Yes ☒ No

5d. Is another Federal agency involved? \*

☐ Yes ☒ No ☐ Unknown

5e. Is this a DOT project located within Division's 1-8? \*

☒ Yes ☐ No

5j. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? \*

Natural resource investigations (habitat assessments & surveys) and NHP Element Occurrence database. Please see attached documentation and Minimum Criteria Determination Checklist for additional information.

## 6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? \*

☐ Yes ☒ No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? \*

NOAA Fisheries EFH Mapper. <https://www.habitat.noaa.gov/apps/efhmapper/>

## 7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? \*

☒ Yes ☐ No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? \*

NCDOT archaeological and historic architecture surveys. Please see attached documentation and Minimum Criteria Determination Checklist for additional information.

## 8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? \*

☒ Yes ☐ No

8b. If yes, explain how project meets FEMA requirements:

This project meets FEMA requirements by obtaining State Floodplain Compliance (SFC) approval through the NCDOT Hydraulics Unit's Highway Floodplain Program.

**8c. What source(s) did you use to make the floodplain determination? \***

FEMA National Flood Hazard Layer (NFHL) Viewer (<https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>).

## Miscellaneous

### Comments

Please use the space below to attach all required documentation or any additional information you feel is helpful for application review. Documents should be combined into one file when possible, with a Cover Letter, Table of Contents, and a Cover Sheet for each Section preferred.

Click the upload button or drag and drop files here to attach document

Umstead Pedestrian Bridge PCN Attachment.pdf

10.36MB

File must be PDF or KMZ

## Signature

\*

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

- The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief; and
- 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 have given true, accurate, and complete information on this form;
- I agree that submission of this PCN 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 PCN form.

**Full Name:** \*

Erin K. Cheely

**Signature** \*

*Erin K. Cheely*

**Date**

5/29/2025

# Permit Drawings



North Carolina Department of Transportation  
Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN  
FOR NCDOT PROJECTS



(Version 3.02; Released April 23, 2024)

WBS Element: 30001.WIUM.002 TIP/Proj No: Umstead Bridge County(ies): Wake Page 1 of 2

General Project Information

WBS Element:	30001.WIUM.002	TIP Number:	Umstead Bridge	Project Type:	Bridge Replacement	Date:	5/14/2025
NCDOT Contact:	Craig Lee, PE	Contractor / Designer:					
	Address:	1020 Birch Ridge Dr Raleigh, NC, 27610			Address:		
	Phone:				Phone:		
	Email:	cilee@ncdot.gov			Email:		
City/Town:	Raleigh, NC			County(ies):	Wake		
River Basin(s):	Neuse			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	.023 miles	Surrounding Land Use:	State Park/Residential		
	Proposed Project		Existing Site		
Project Built-Up Area (ac.)	0.1 ac.	0.1 ac.			
Typical Cross Section Description:	15' wide bridge w/ standard timber railing		26' wide bridge w/ standard timber railing		
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	N/A	Year:	Existing:	Year:

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

This project involves the removal and replacement of bridge 911473 over Crabtree Creek. This is a greenway bridge located on South Turkey Creek Trail in Umstead State Park. Since this is a greenway bridge, there are only pedestrians and cyclists. This bridge is a replace in kind and will be extended 2' on either end. The roadway grade and interior bents will be retained. The bridge will have 2'6" end bent caps with 1.5:1 rip-rap sloping abutments. Both banks will be stabilized with class-II rip-rap.



## North Carolina Department of Transportation

Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN  
FOR NCDOT PROJECTS

(Version 3.02; Released April 23, 2024)

WBS Element: 30001.WIUM.002 TIP/Proj No.: Umstead Bridge County(ies): Wake Page 2 of 2

## General Project Information

## Waterbody Information

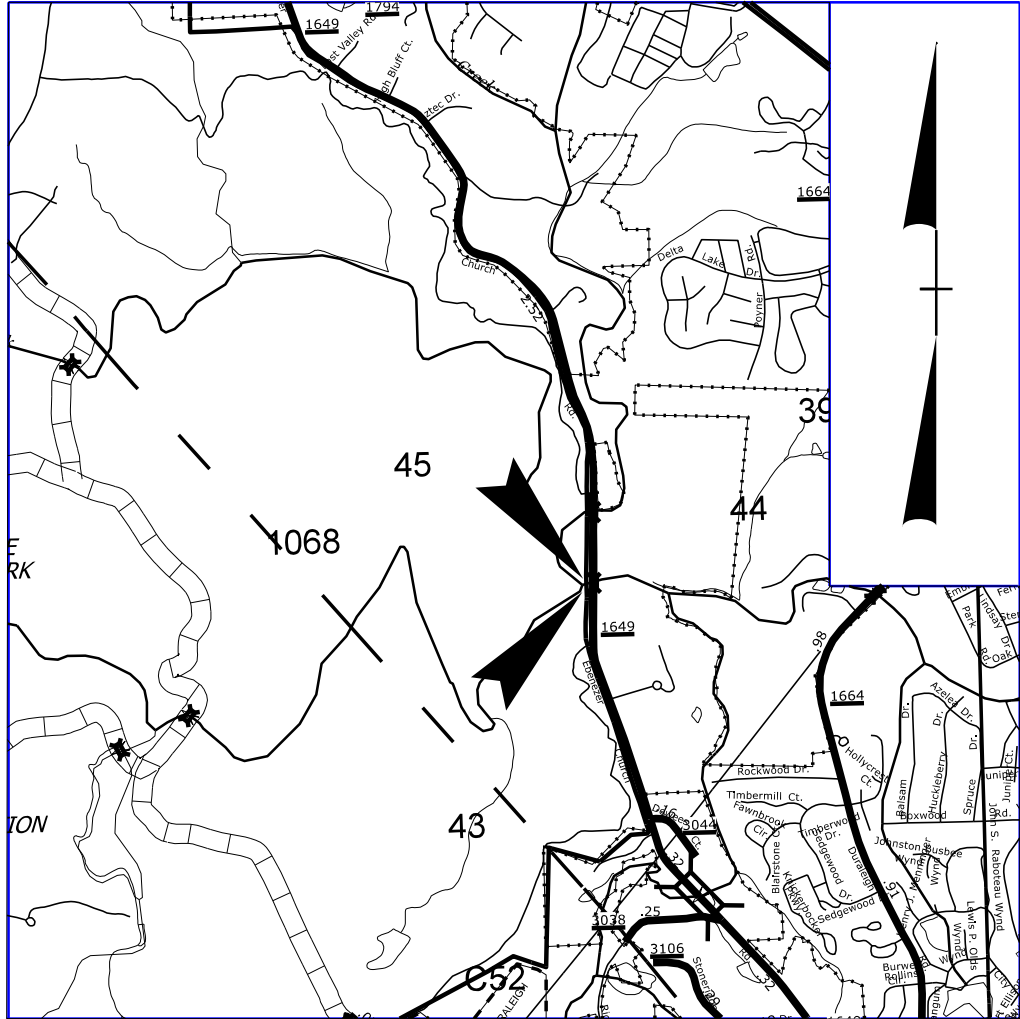
Surface Water Body (1):	Crabtree Creek		NCDWR Stream Index No.:	27-33-(3.5)	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class B		
	Supplemental Classification:		Nutrient Sensitive Waters (NSW)		
Other Stream Classification:	None				
Impairments:	None				
Aquatic T&E Species?	No	Comments:			
NRTR Stream ID:			Buffer Rules in Effect:	Neuse	
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	No	Dissipator Pads Provided in Buffer?	No
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)					
Surface Water Body (2):			NCDWR Stream Index No.:		
NCDWR Surface Water Classification for Water Body	Primary Classification:				
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?		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:

CONTRACT:

See Sheet 1A For Index of Sheets



VICINITY MAP (NTS)

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

WAKE COUNTY

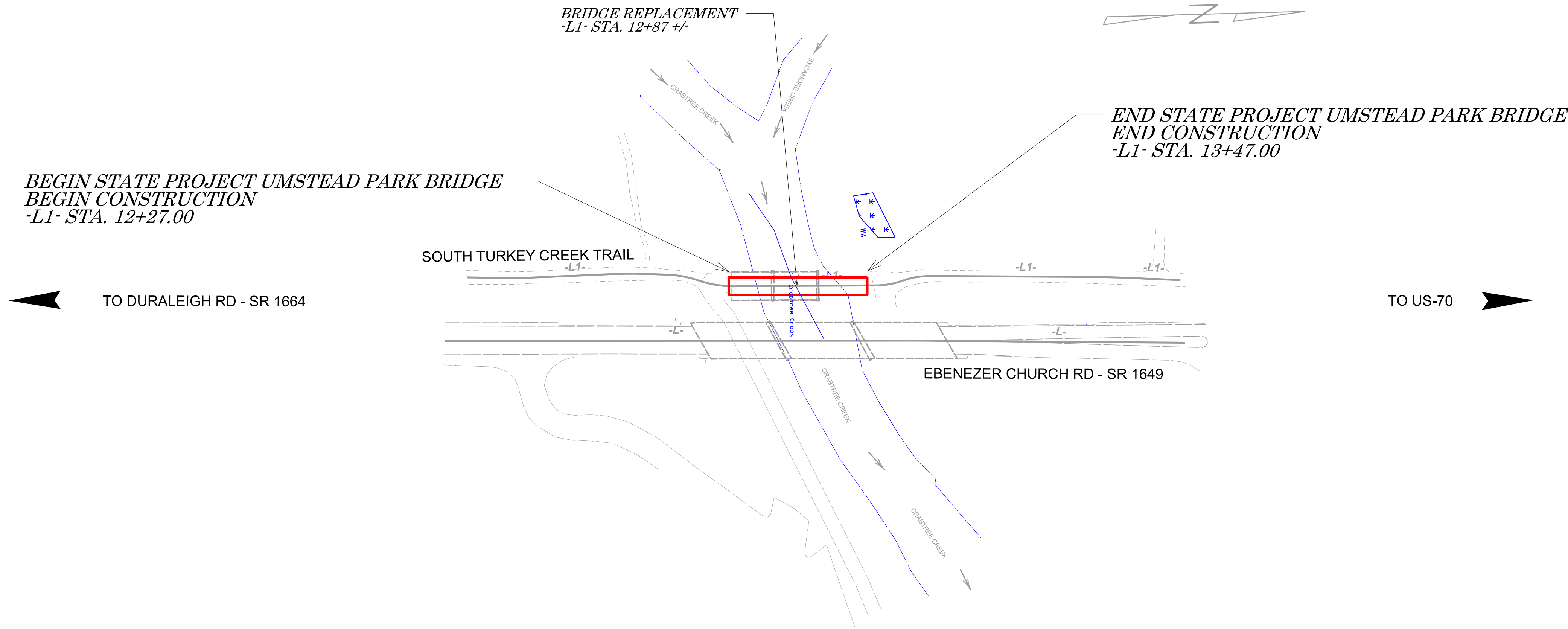
LOCATION: *BRIDGE 91-1473 OVER CRABTREE CREEK*  
*UMSTEAD STATE PARK*  
*SOUTH TURKEY CREEK TRAIL*

TYPE OF WORK: *IN KIND BRIDGE REPLACEMENT*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	30001.WIUM.002	11	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

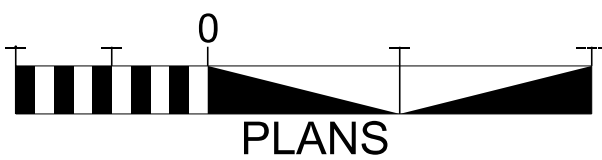
PERMIT DRAWING  
SHEET 1 OF 6

WETLAND AND SURFACE WATER IMPACTS PERMIT



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

GRAPHIC SCALES



PROJECT LENGTH

LENGTH OF ROADWAY UMSTEAD PARK BRIDGE = 0.00 MILES  
LENGTH OF STRUCTURE UMSTEAD PARK BRIDGE = 0.023 MILE  
TOTAL LENGTH OF UMSTEAD PARK BRIDGE = 0.023 MILES

Prepared in the Office of:

**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:  
NOVEMBER 18, 2025

Sara Sherman, PE  
PROJECT ENGINEER

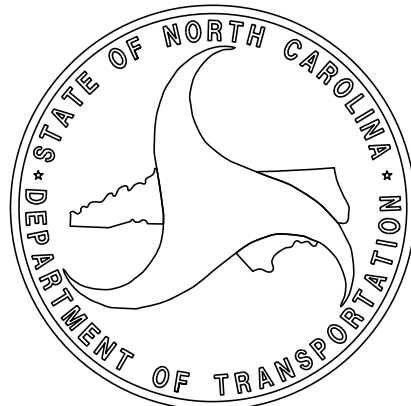
PROJECT DESIGN ENGINEER

Sara Sherman, PE  
NCDOT CONTACT

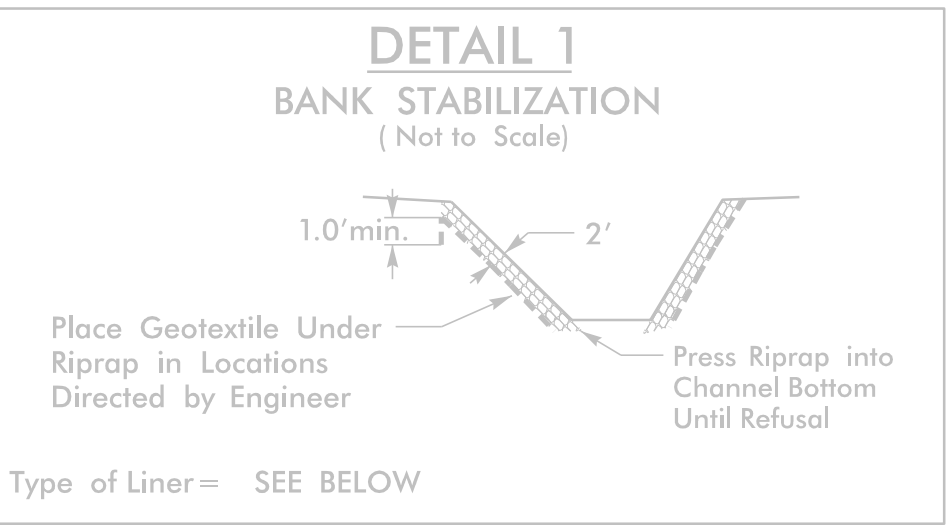
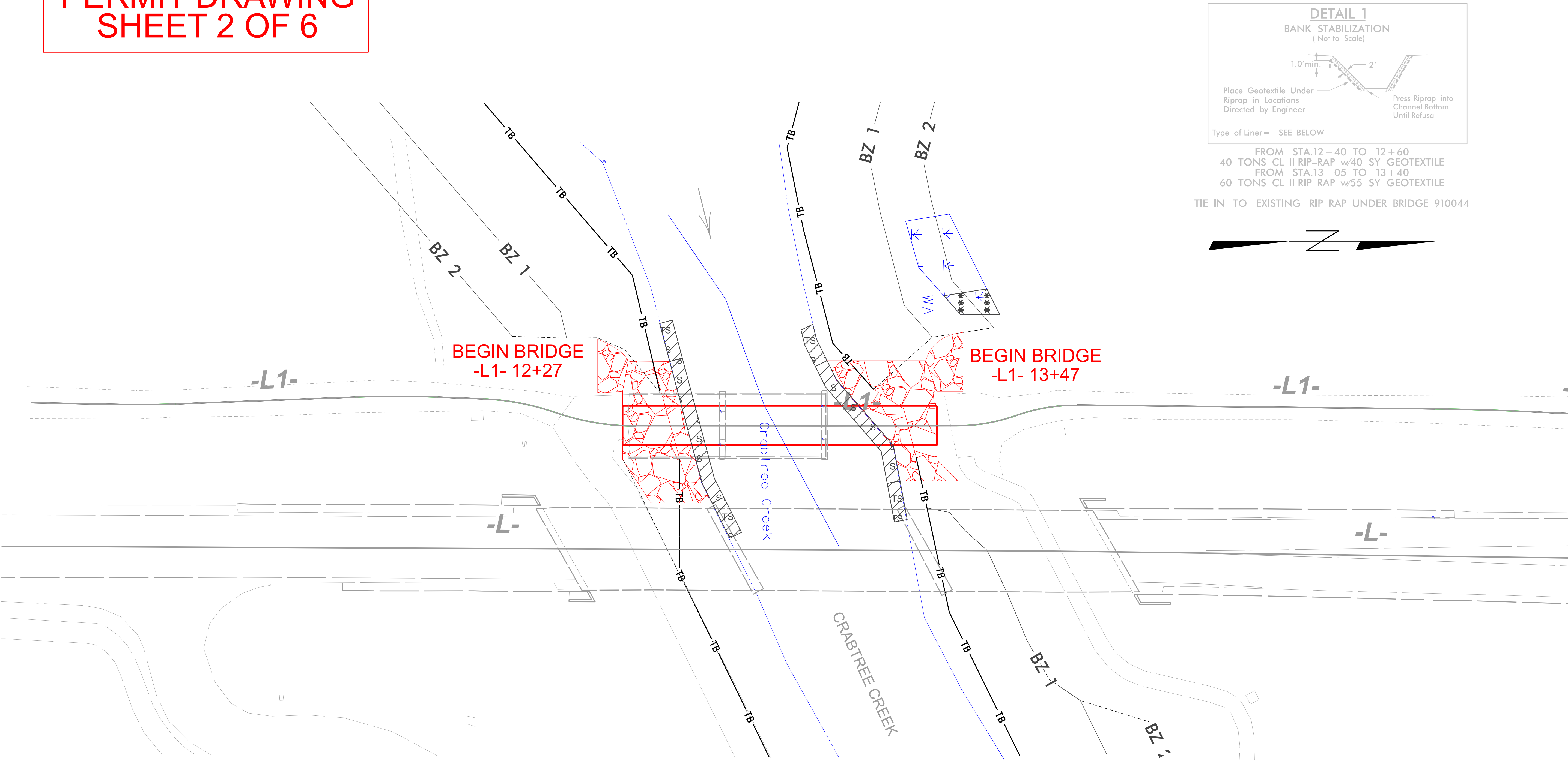
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SIGNATURE: \_\_\_\_\_  
ROADWAY DESIGN ENGINEER

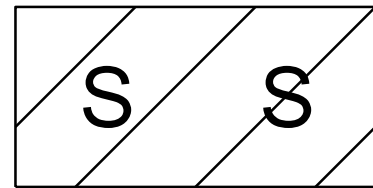
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PERMIT DRAWING  
SHEET 2 OF 6



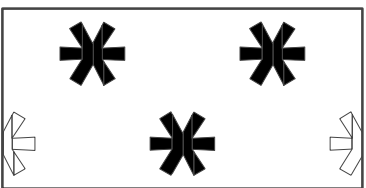
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40 TONS CL II RIP-RAP w/40 SY GEOTEXTILE  
FROM STA.13+05 TO 13+40  
60 TONS CL II RIP-RAP w/55 SY GEOTEXTILE  
TIE IN TO EXISTING RIP RAP UNDER BRIDGE 910044



SURFACE WATER IMPACTS



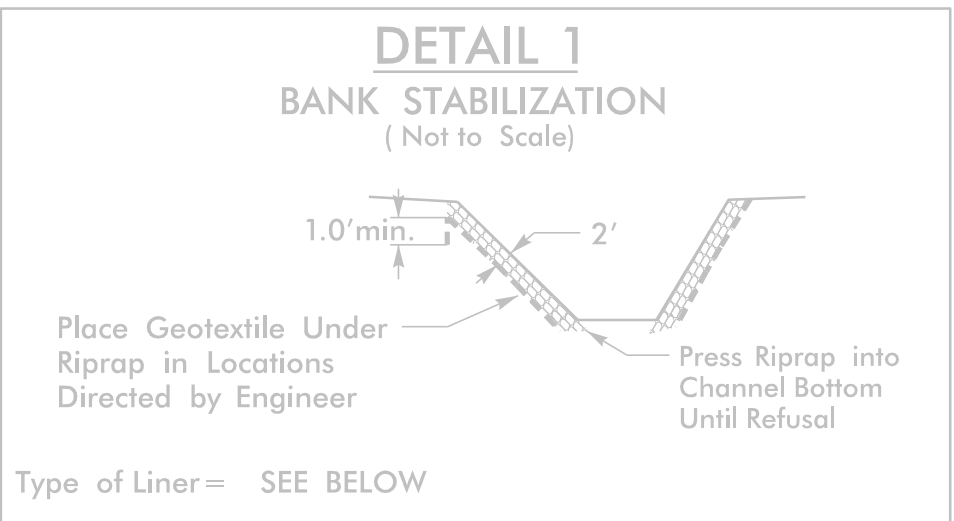
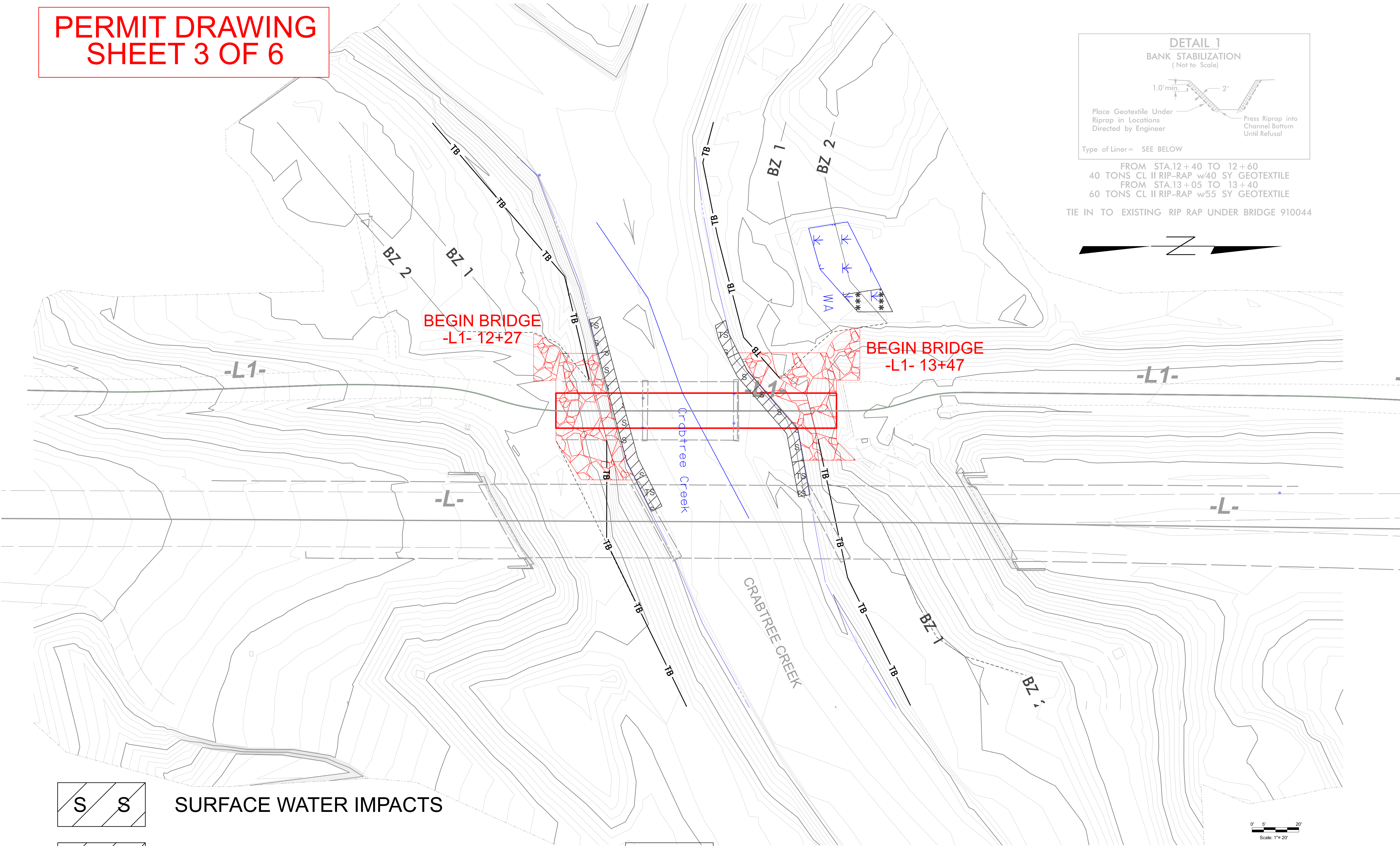
TEMPORARY SURFACE WATER IMPACTS



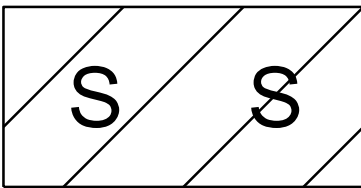
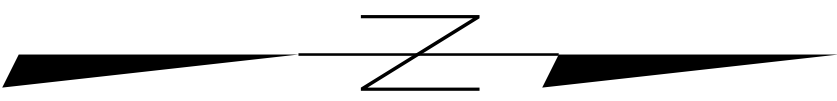
MECHANIZED CLEARING (GRUBBING)



PERMIT DRAWING  
SHEET 3 OF 6



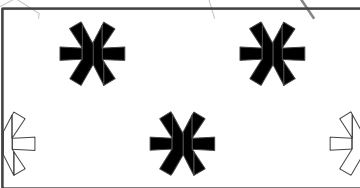
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TIE IN TO EXISTING RIP RAP UNDER BRIDGE 910044



SURFACE WATER IMPACTS



TEMPORARY SURFACE WATER IMPACTS



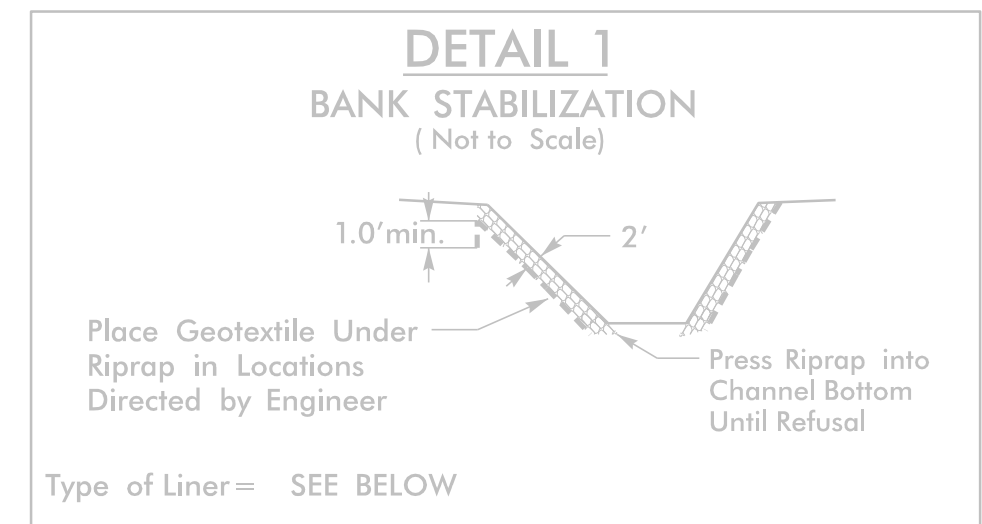
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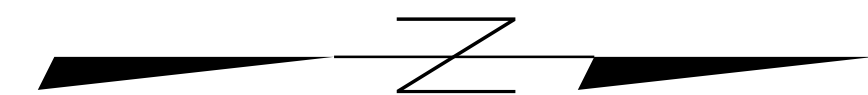
PERMIT DRAWING  
SHEET 4 OF 6

BEGIN BRIDGE  
-L1- 12+27

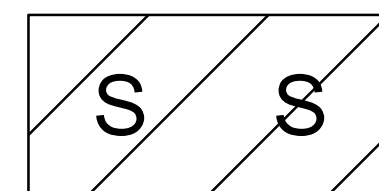
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-L1- 13+47



FROM STA.12+40 TO 12+60  
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TIE IN TO EXISTING RIP RAP UNDER BRIDGE 910044



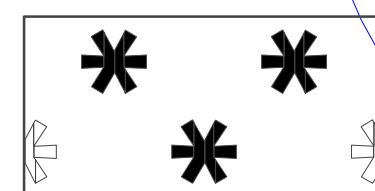
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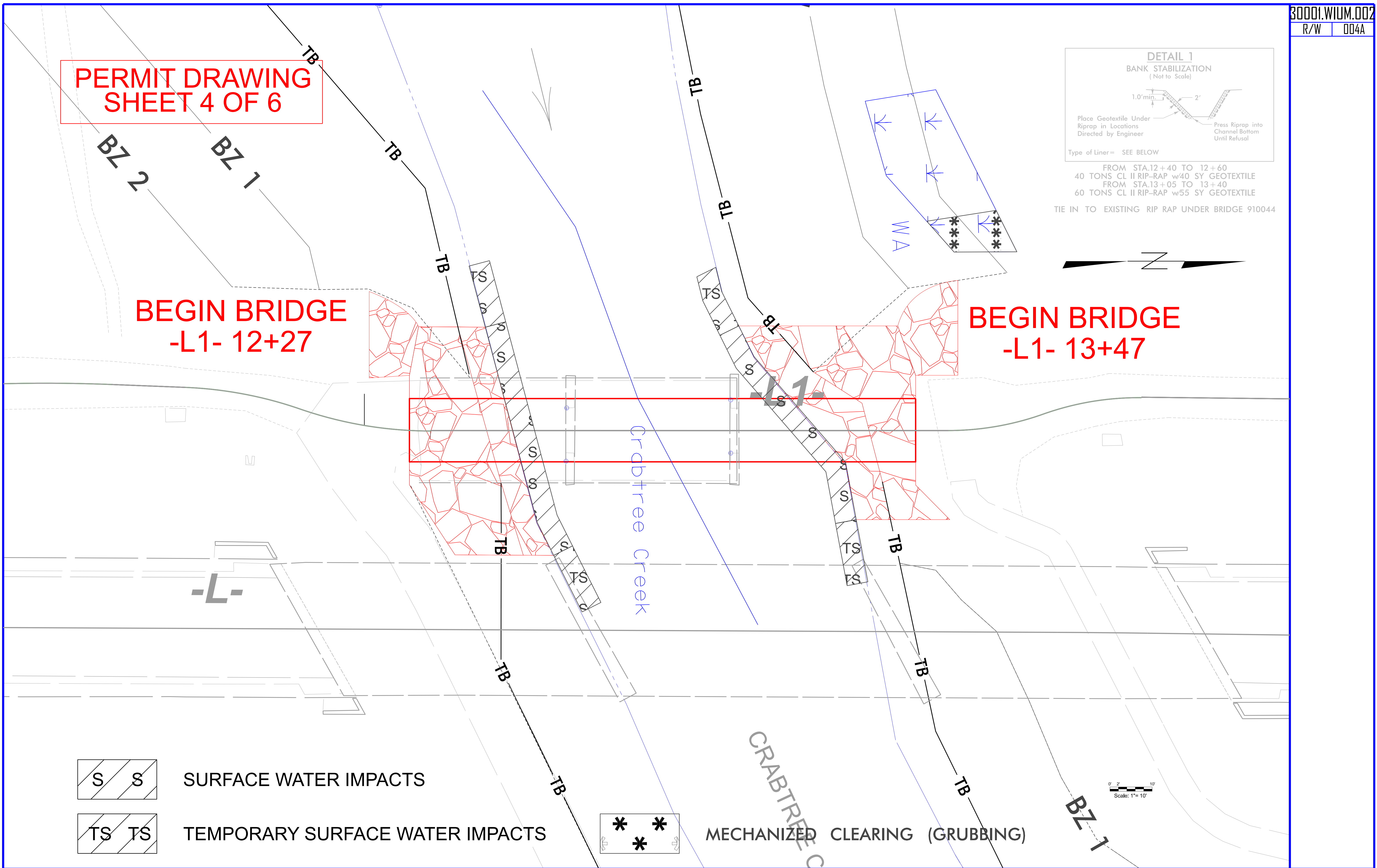
SURFACE WATER IMPACTS



TEMPORARY SURFACE WATER IMPACTS

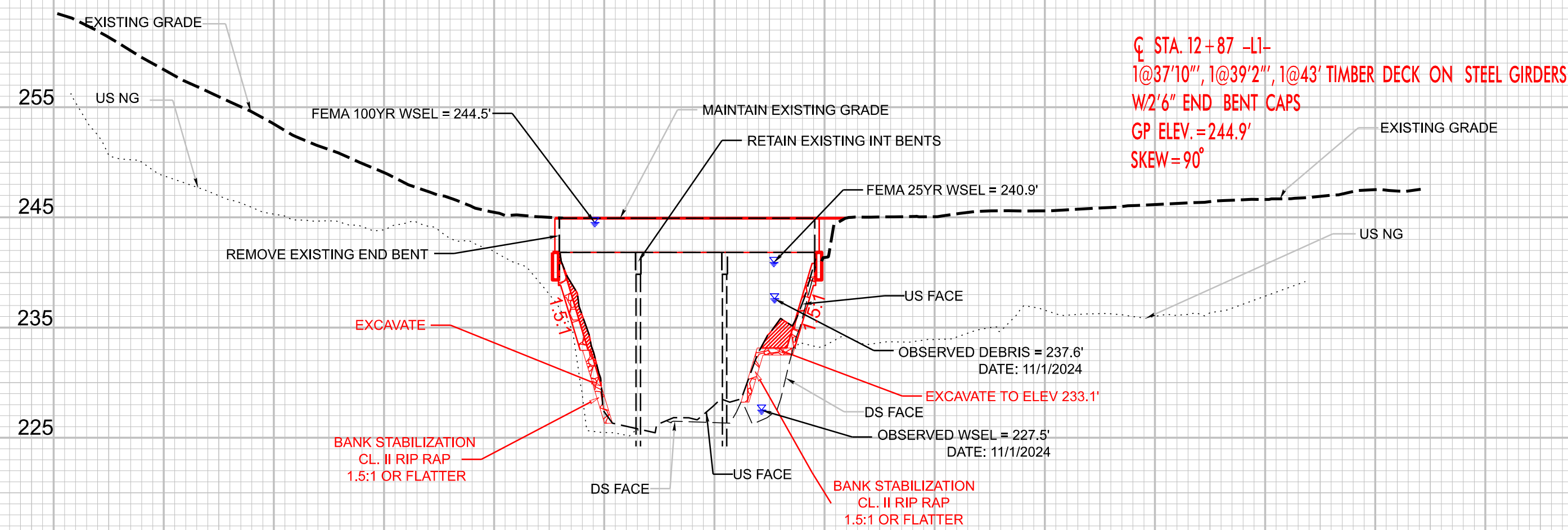


MECHANIZED CLEARING (GRUBBING)



PERMIT DRAWING  
SHEET 5 OF 6

PROJECT REFERENCE NO.	SHEET NO.
30001.WIUM.002	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



## WETLAND AND SURFACE WATER IMPACTS SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	12+87	Bank Stabilization						0.01	< 0.01	56	30	
1	13+50, 49' L to 13+78, 40' L	Construction Access				< 0.01						
TOTALS*:						< 0.01		0.01	< 0.01	56	30	0

\*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
5/14/2025  
Wake  
30001.WIUM.002

30001.WIUM.002

SHEET

6

OF

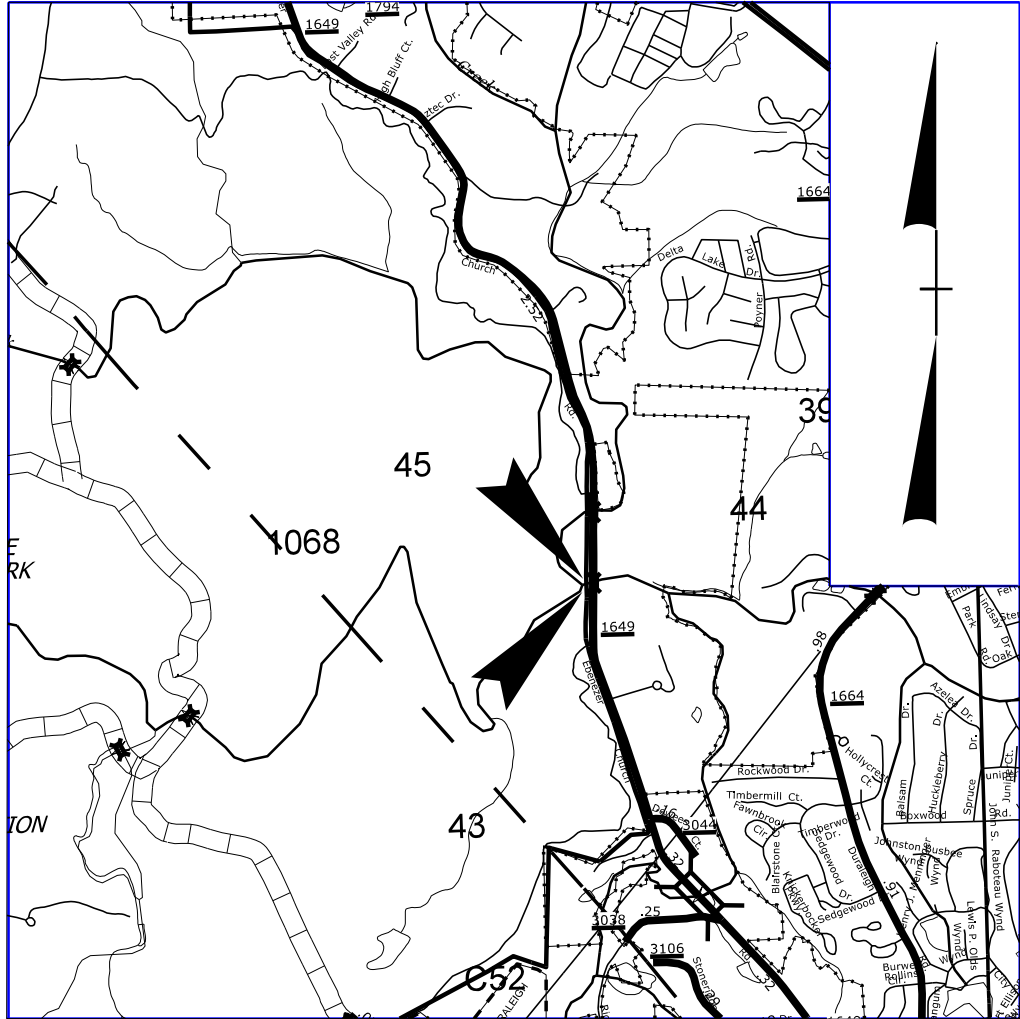
6



TIP PROJECT:

CONTRACT:

See Sheet 1A For Index of Sheets



VICINITY MAP (NTS)

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

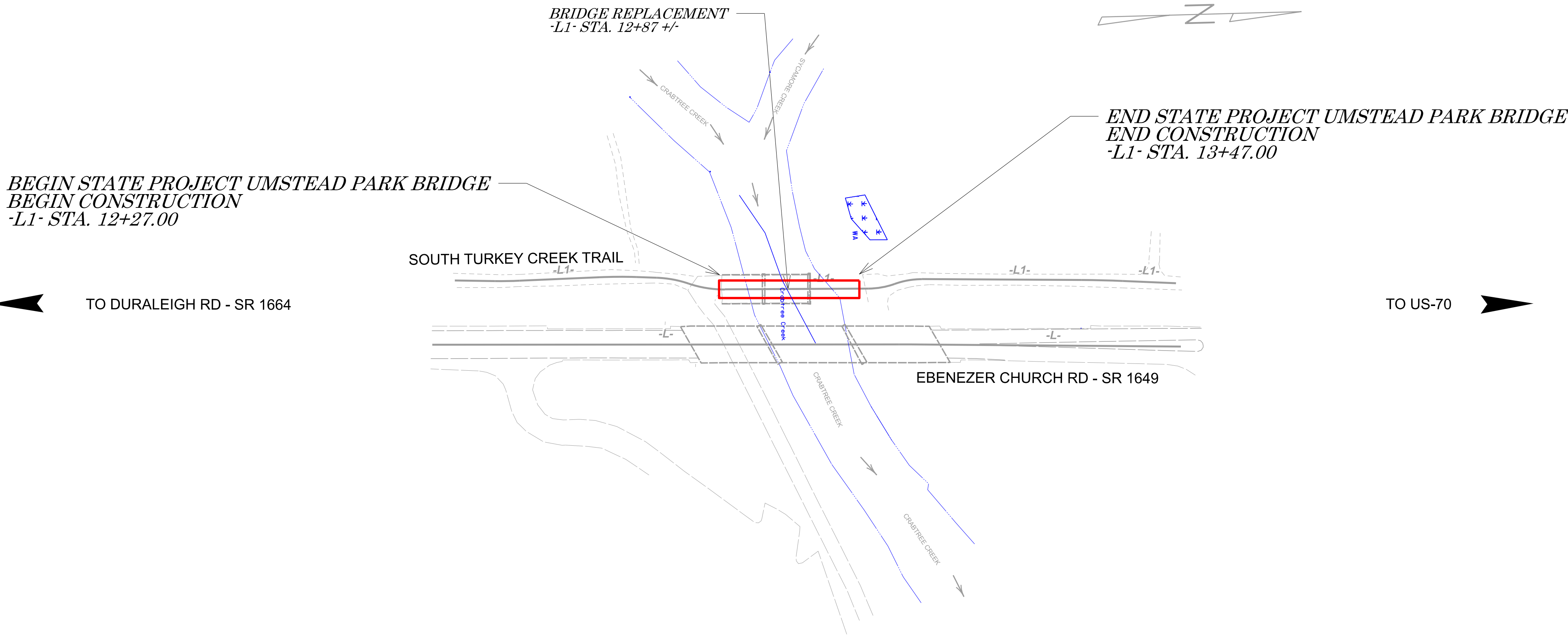
WAKE COUNTY

LOCATION: *BRIDGE 91-1473 OVER CRABTREE CREEK*  
*UMSTEAD STATE PARK*  
*SOUTH TURKEY CREEK TRAIL*

TYPE OF WORK: *IN KIND BRIDGE REPLACEMENT*

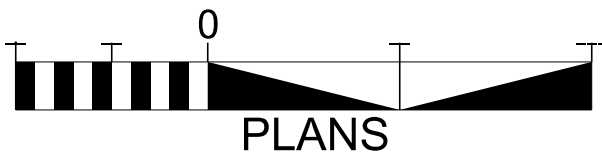
BUFFER IMPACTS PERMIT

PERMIT DRAWING  
SHEET 1 OF 6



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

GRAPHIC SCALES



PROJECT LENGTH

LENGTH OF ROADWAY UMSTEAD PARK BRIDGE = 0.00 MILES  
LENGTH OF STRUCTURE UMSTEAD PARK BRIDGE = 0.023 MILE  
TOTAL LENGTH OF UMSTEAD PARK BRIDGE = 0.023 MILES

Prepared in the Office of:

**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:  
NOVEMBER 18, 2025

Sara Sherman, PE  
PROJECT ENGINEER

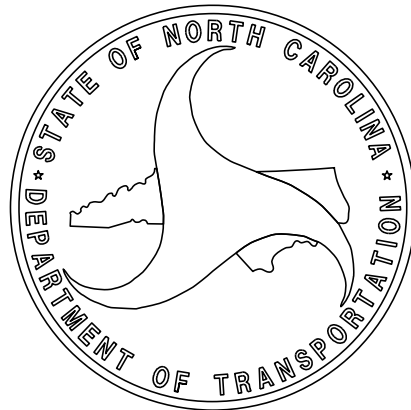
PROJECT DESIGN ENGINEER

Sara Sherman, PE  
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_  
ROADWAY DESIGN ENGINEER

SIGNATURE: \_\_\_\_\_  
P.E.



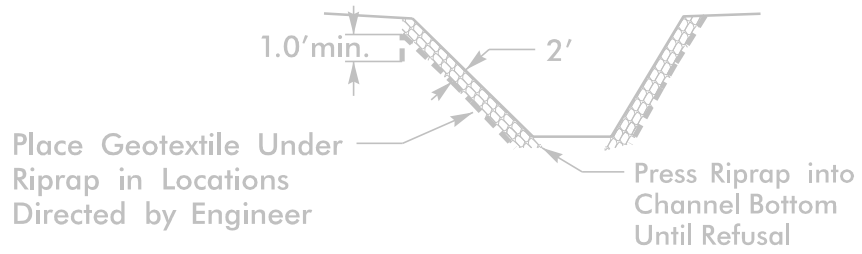
PERMIT DRAWING  
SHEET 2 OF 6

CRABTREE CREEK

SYCAMORE CREEK

DETAIL 1

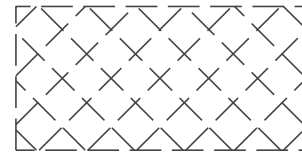
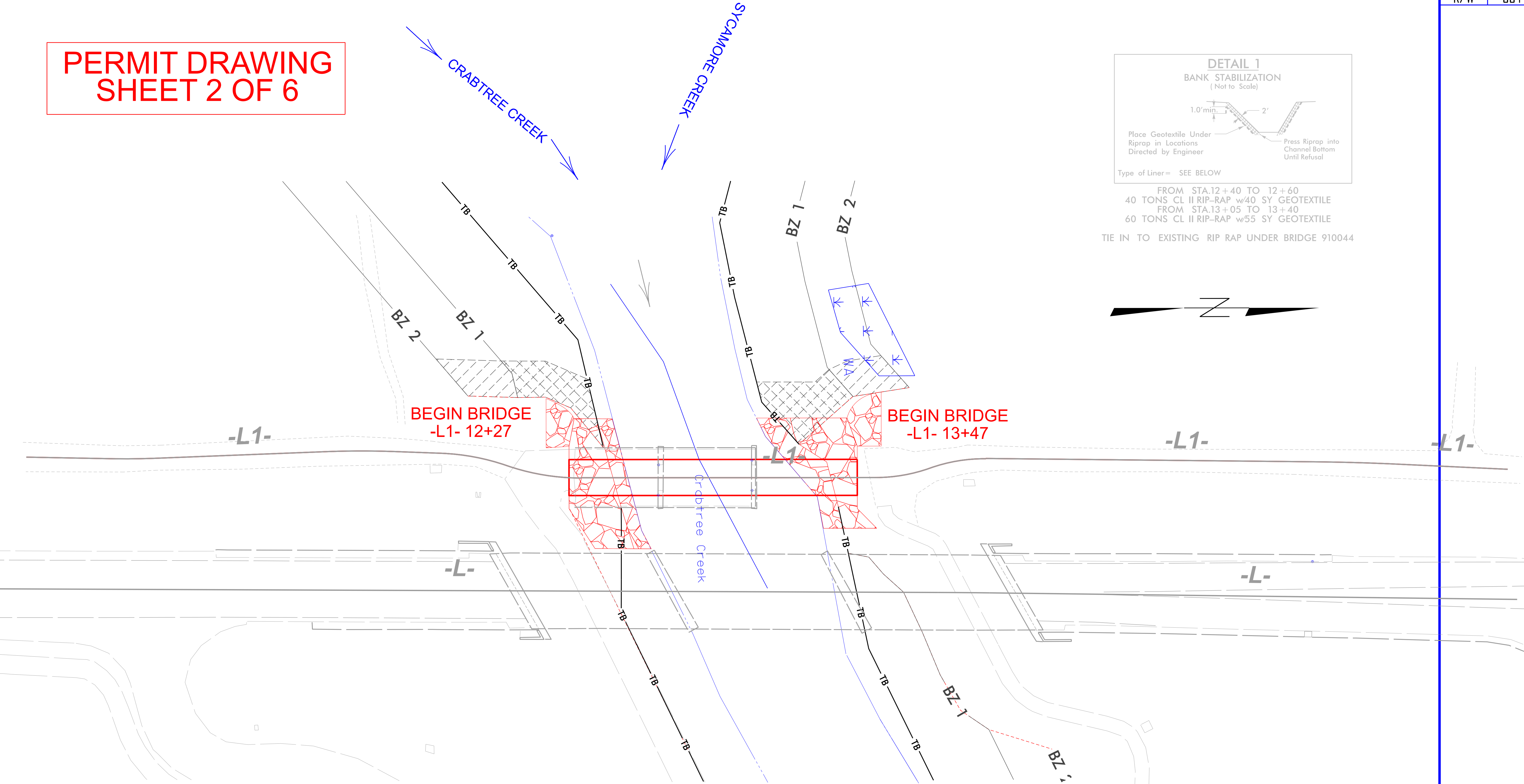
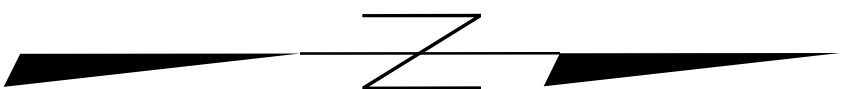
BANK STABILIZATION  
(Not to Scale)



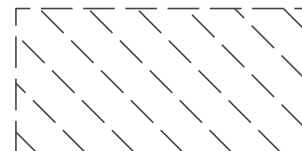
Type of Liner= SEE BELOW

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40 TONS CL II RIP-RAP w/40 SY GEOTEXTILE  
FROM STA.13+05 TO 13+40  
60 TONS CL II RIP-RAP w/55 SY GEOTEXTILE

TIE IN TO EXISTING RIP RAP UNDER BRIDGE 910044



ALLOWABLE IMPACTS ZONE 1

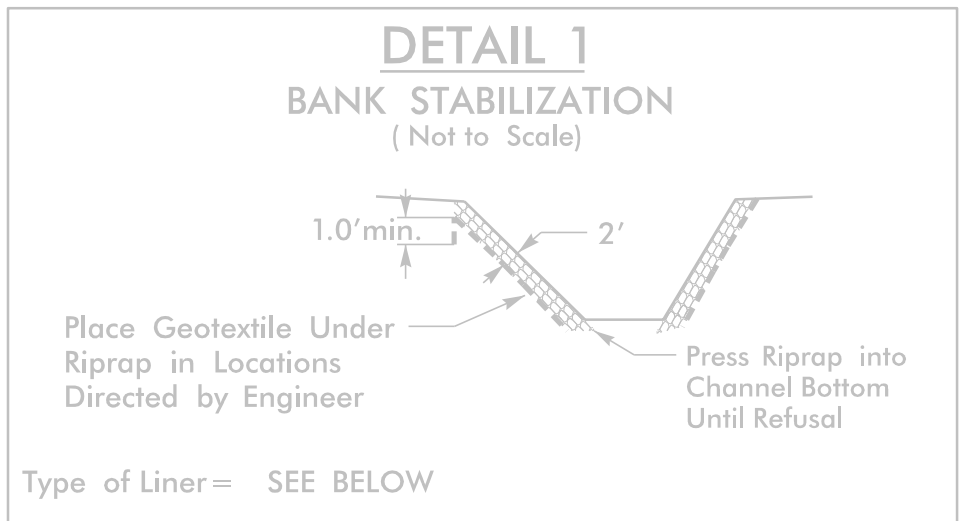


ALLOWABLE IMPACTS ZONE 2

0' 5' 20'  
Scale: 1"= 20'



PERMIT DRAWING  
SHEET 3 OF 6



FROM STA.12+40 TO 12+60  
40 TONS CL II RIP-RAP w/40 SY GEOTEXTILE  
FROM STA.13+05 TO 13+40  
60 TONS CL II RIP-RAP w/55 SY GEOTEXTILE

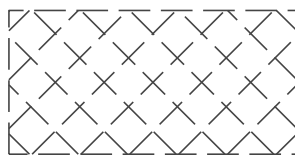
NE IN TO EXISTING RIP RAP UNDER BRIDGE 910044

BEGIN BRIDGE  
-L1- 12+27

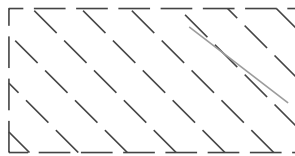
BEGIN BRIDGE  
-L1- 13+47

-L1-

Creditree Creek



ALLOWABLE IMPACTS ZONE 1



ALLOWABLE IMPACTS ZONE 2

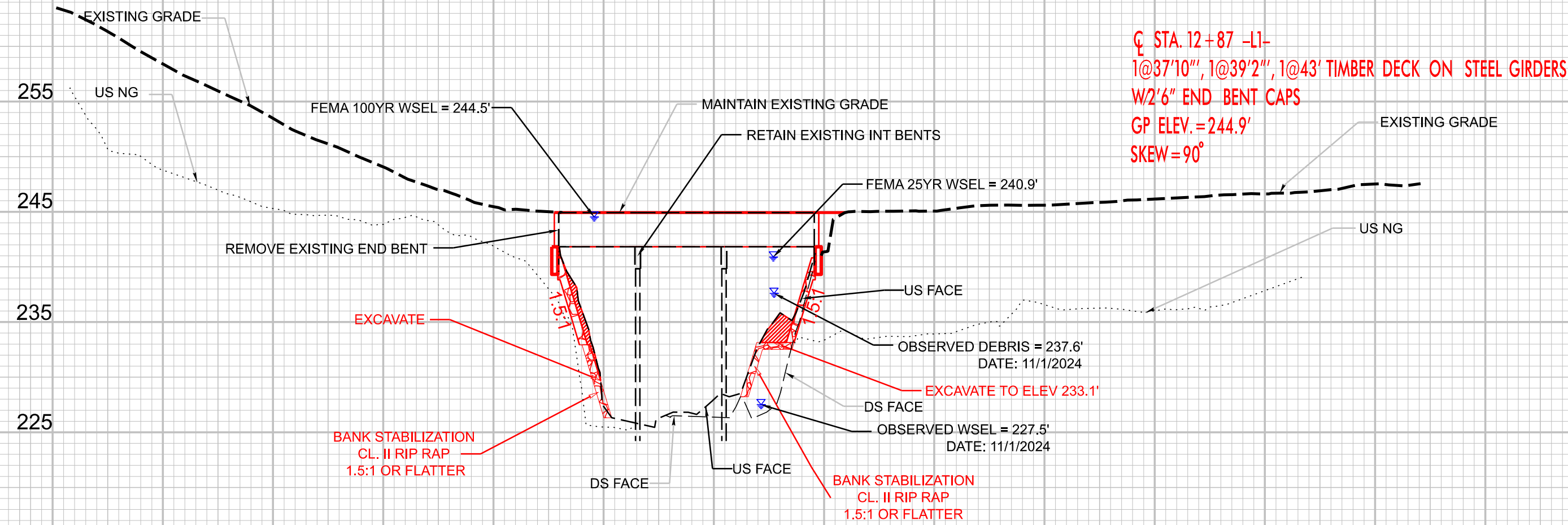
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5/14/99

5/14/99

PERMIT DRAWING  
SHEET 4 OF 6

PROJECT REFERENCE NO.	SHEET NO.
30001.WIUM.002	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



PERMIT DRAWING  
SHEET 5 OF 6

[illegible]

NOTES:

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
5/14/2025  
Wake

30001.WIUM.002

SHEET 5 OF 6

# PERMIT DRAWING SHEET 6 OF 6

## WETLANDS IN BUFFER IMPACTS SUMMARY

SITE NO.	STATION (FROM/TO)		WETLANDS IN BUFFERS	
			ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )
1	13+50, 49' LT to 13+78, 40' LT			65
TOTAL:			0	65

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
5/14/2025  
Wake

30001.WIUM.002  
SHEET 6 OF 6

# Archaeology



**ER 96-9164**

Other #s -  
ER 98-8120  
ER 98-9430

**North Carolina Department of Cultural Resources**

James B. Hunt Jr., Governor  
Betty Ray McCain, Secretary

Division of Archives and History  
Jeffrey J. Crow, Director

July 15, 1998

Nicholas L. Graf  
Division Administrator  
Federal Highway Administration  
Department of Transportation  
310 New Bern Avenue  
Raleigh, N.C. 27601-1442

Re: Bridge 44 over Crabtree Creek and Bridge 45  
over Turkey Creek on SR 1649, Wake County,  
Federal Aid Project BRZ-1649(1), State Project  
8.2505201, TIP B-3259, ER 98-9430

Dear Mr. Graf:

We have received the Categorical Exclusion (CE) for the above project from the North Carolina Department of Transportation by their letter of June 26, 1998. We believe the CE adequately addresses our concerns for historic resources.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

Sincerely,

A handwritten signature in dark ink, appearing to read "DB", is written over a light blue horizontal line.

David Brook  
Deputy State Historic Preservation Officer

DB:slw

cc: W. D. Gilmore  
B. Church  
T. Padgett

bc: File  
Brown/Bevin  
Claggett/Hall  
County  
RF







## North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor  
Betty Ray McCain, Secretary

Division of Archives and History  
Jeffrey J. Crow, Director

January 7, 1998

Nicholas L. Graf, PE  
Division Administrator  
Federal Highway Administration  
310 New Bern Avenue, Suite 410  
Raleigh, NC 27601

Re: Archaeological Survey Report, Replacement of  
Bridge 44 over Crabtree Creek and Bridge 45  
over Turkey Creek on SR 1649 (Ebenezer  
Church Road), Wake County, TIP B-3259, State  
Project 8.2405201, Federal-aid BRZ-1649(1),  
ER96-9164 & ER98-8120

Dear Mr. Graf:

Thank you for your letter of December 1, 1997, transmitting the archaeological survey report by Deborah Joy and Megan O'Connell of the NC Department of Transportation concerning the above project.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following property is not eligible for the National Register of Historic Places under Criterion D:

31WA1400

This prehistoric site has been destroyed by past excavation of a large borrow pit and retains no integrity.

Until additional testing is conducted at prehistoric site 31WA1399, we are unable to make a determination concerning its National Register eligibility. If Alternate 2 is selected for implementation, 31WA1399 will be affected and test excavations sufficient to determine its eligibility should be conducted as soon as possible.

In general the report meets our guidelines and those of the Secretary of the Interior. Specific concerns and/or corrections which need to be addressed are attached.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.



Nicholas L. Graf  
January 7, 1998, Page 2

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

Sincerely,



David Brook  
Deputy State Historic Preservation Officer

DB:slw

cc: Frank Vick, NCDOT  
Tom Padgett, NCDOT  
Deborah Joy, NCDOT  
Megan O'Connell, NCDOT

bc:  File  
Claggett/Hall  
County  
RF



Specific Comments, Archaeological Survey Report  
Replacement of Bridge 44 and Bridge 45, Wake County  
ER 96-9164 and ER 98-8120

1. Page 5, 2nd full paragraph: The following reports listed as "non-compliance" were conducted in compliance with Section 106 of the National Historic Preservation Act: Cantley 1992, Claggett & Cable 1982, Cultural Resource Group 1990, Eastman and Lautzenheiser 1992, Gossett and Gossett 1975, McCormick 1970, Gunn et al 1997a-b, and Little-Stokes 1979. While most of these reports are not the result of typical archaeological surveys, all of these investigations were conducted as part of the compliance process. While we do not recommend revision of this report, we offer this comment for future reference.
2. The archaeological site form for 31WA1400 is incomplete. Only pages 1 and 3 were submitted, along with a location map. Please forward a completed site form for this site as soon as possible.

Federal Aid # BR2-1649 (1) TIP # B-3259 County WAKE

CONCURRENCE FORM  
FOR  
ASSESSMENT OF EFFECTS

Brief Project Description

REPLACE BRIDGES NO. 44 AND 45 ON SR 1649 OVER TURKEY CREEK

On July 24, 1997, representatives of the

NE  
→

☒ North Carolina Department of Transportation (NCDOT)  
☐ Federal Highway Administration (FHWA)  
☒ North Carolina State Historic Preservation Office (SHPO)  
☐ Other \_\_\_\_\_

reviewed the subject project and agreed

☒ there are no effects on the National Register-listed property within the project's area of potential effect and listed on the reverse.

☐ there are no effects on the National Register-eligible properties located within the project's area of potential effect and listed on the reverse.

☐ there is an effect on the National Register-listed property/properties within the project's area of potential effect. The property-properties and the effect(s) are listed on the reverse.

☐ there is an effect on the National Register-eligible property/properties within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Clay Gifford July 24, 1997  
Representative, NCDOT, Historic Architectural Resources Section Date

Wm. E. Sadeis 8/2/97  
FHWA, for the Division Administrator, or other Federal Agency Date

Debra K. Bevin 7/24/97  
Representative, SHPO Date

David Wood 8/6/97  
State Historic Preservation Officer Date  
(over)

Federal Aid # BRZ-1649 (1) TIP # B-3259 County WAKE

Properties within area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

CRABTREE CREEK RECREATIONAL DEMONSTRATION AREA (NR)

Properties within area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe effect.

Reason(s) why effect is not adverse (if applicable).

Initialed:

NCDOT

cy

FHWA

Wj

SHPO

WIS



OCT 15 1996

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.  
GOVERNOR

DIVISION OF HIGHWAYS  
P.O. BOX 25201, RALEIGH, N.C. 27611-5201

GARLAND B. GARRETT JR.  
SECRETARY

October 11, 1996

MEMO TO: Project File

FROM: Bill Goodwin, P. E. *BG*  
Project Planning Engineer

SUBJECT: Scoping Meeting for Replacement of Bridge No. 44 on SR 1649 over  
Crabtree Creek and Bridge No. 45 on SR 1649 over Turkey Creek, Wake  
County, Federal Aid Project No. BRZ-1649(1), State Project No.  
8.2405201, TIP No. B-3259

A scoping meeting for the subject project was held on July 17, 1996. The following persons were in attendance:

Sue Regier	Div. of Parks and Rec.
Edward Farr	Div. of Parks and Rec.
Cherri Smith	Div. of Parks and Rec.
Darryl McBane	Div. of Parks and Rec.
David Cox	NC WRC
Eric Galamb	DEM - Water Quality
→ Debbie Bevin	SHPO
Don Sellers	Right of Way
Sid Autry	Location and Surveys
Roy Girolami	Structure Design
Ray Moore	Structure Design
Charles Mullen	Traffic Control
Eric Rysdon	Traffic Control
Ray McIntyre	Program Development
Lanette Cook	Program Development
Jerry Snead	Hydraulics
Tony Houser	Roadway Design
Jason Moore	Roadway Design
Bill Goodwin	Planning and Environmental

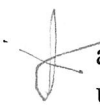
The following is a summary of comments made at the scoping meeting and through correspondence prior to the meeting.



The design speed will be 100 km/h (60 mph). Utility conflicts will be low for this project. There is overhead electrical service along the east side of SR 1649, with overhead telephone service lines attached to the same poles. There is a 36 inch sewer line along the east side of SR 1649 between the two bridges.

Mr. Eric Galamb of DEM indicated that both creeks are classified as Class B, Nutrient Sensitive. Implementation of High Quality Water - Soil and Erosion Control Measures was suggested. He also asked that the new bridges not have weepholes in the deck. If an on-site detour is used, the detour fill should be removed after project completion and the area planted with native tree species.

Mr. David Cox of NC WRC indicated that both creeks contain a number of mussel species, and asked that High Quality Water - Soil and Erosion Control Measures be implemented.

 Ms. Debbie Bevin of the State Historic Preservation Office (SHPO) indicated that there are no known architectural or archaeological sites in the immediate project area. No previously unknown sites are likely to be found therefore, no architectural or archaeological survey will be required.

Mr. Jerry Snead of the Hydraulics Unit indicated that a new culvert will be required to replace existing Bridge No. 45 over Turkey Creek. The new culvert should be a triple barreled reinforced concrete box culvert; with each barrel measuring 3.4 meters (11 feet) by 2.4 meters (8 feet). Bridge No. 44, over Crabtree Creek, should be replaced with a new bridge approximately 44.2 meters (145 feet) in length. The new bridge will be 9.0 meters (30 feet) wide, including two 3.6 meter (12 foot) travel lanes and a 0.9 meter (1.0 foot) offset on each side. The approach roadway and both structures could be placed at approximately the same elevation as the existing roadway from a hydraulic standpoint.

All of the property along the western side of SR 1649, in the project area, is part of Umstead State Park. Impacts to the park need to be avoided. Alternate two described below is intended to completely avoid the park property. Ms. Sue Regier of the DEHNR-Division of Parks and Recreation expressed concerns about hikers and bicyclists attempting to cross the creeks on the roadway bridges and horseback riders walking their horses through the creeks. She indicated at the meeting that the park might be interested in taking possession of both bridges if alternate two is chosen. Ms. Cherri Smith confirmed, by letter after the meeting, that the Division of Parks and Recreation is interested in acquiring both existing bridges and the right-of-way between to improve the trail system around SR 1649.

SR 1649 has a posted speed limit of 45 mph; therefore, the design speed will be 80 km/h (50 mph). The roadway approaches will have two 3.6 meter (12 ft) travel lanes and a shoulder width of at least 2.4 meters (8 ft). The shoulder will be 0.9 meters (3 feet) wider where guardrail is warranted. SR 1649 is classified as an Urban Local Route in the Statewide Functional Classification System.

The Wake County School Bus Transportation Coordinator has indicated that 4 busses use this route twice each per day. Detouring traffic off-site would create some inconvenience, but would not cause major problems in school bus operations.

The Traffic Forecasting Unit has indicated that near Bridge No. 44 and Bridge No. 45, SR 1649 carries 1800 vehicles per day at present [1995]. This figure is expected to increase to 4000 vehicles per day by the year 2020. These traffic figures include 2% dual tired vehicles [DUAL], and 1% truck-tractor semi-trailers [TTST]. The design hourly volume [DHV] is 12%.

The Division Engineer has indicated that an on-site detour or realignment of SR 1649 would be preferred.

Two alternates will be evaluated for replacing Bridge No. 44 over Crabtree Creek and Bridge No. 45 over Turkey Creek.

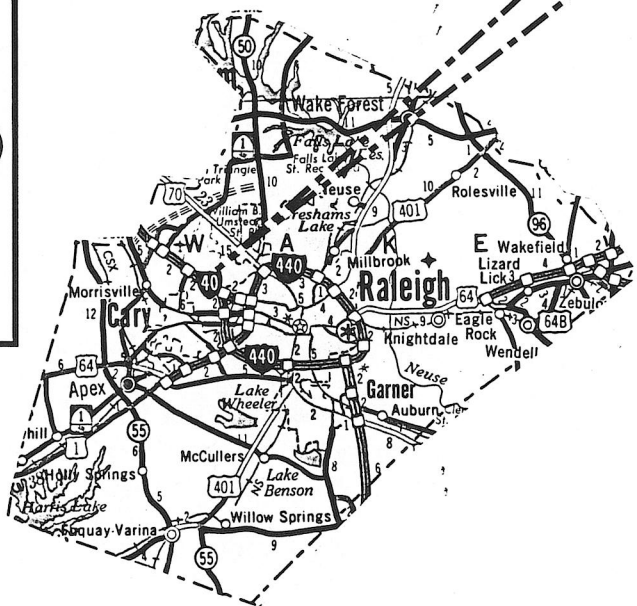
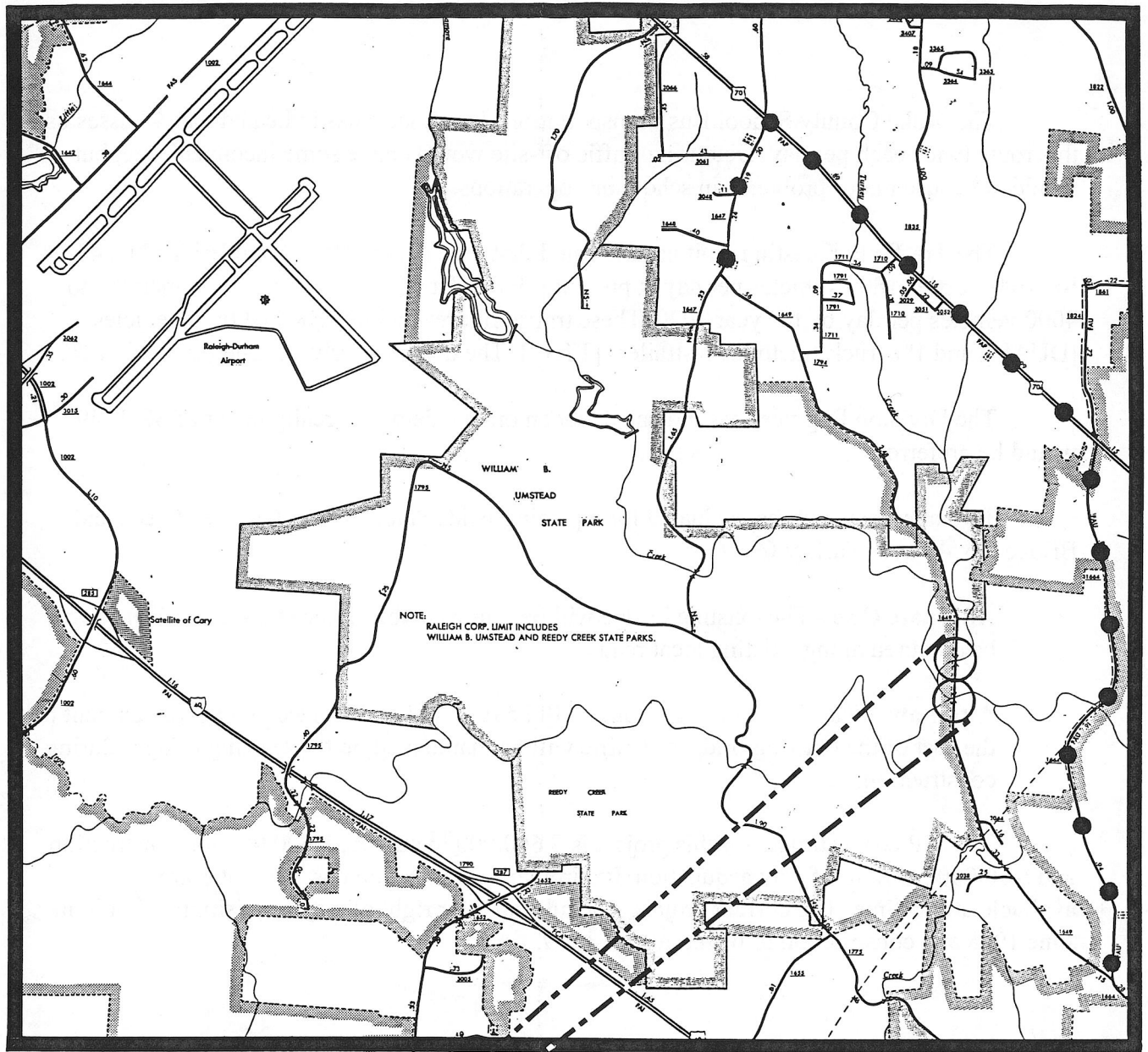
**Alternate One** - The existing bridge will be removed and replaced in-place. Traffic will be detoured along existing local roads.

**Alternate Two** - The existing bridges will be removed and replaced on new alignment to the east of the existing bridges. Traffic will be maintained on the existing bridges during construction.

The TIP cost estimate for this project is \$ 660,000 including, \$ 600,000 for construction and \$ 60,000 for right of way acquisition. Preliminary construction cost estimates are not available at this time. The current project schedule calls for right of way acquisition to begin in June 1998 and construction to begin in June 1999.

BG/

cc: Scoping Meeting Participants



Studied Detour Route —●—●—●—



North Carolina Department of  
 Transportation  
 Division of Highways  
 Planning & Environmental Branch

Wake County  
 Replace Bridges No. 44 and No. 45 on SR 1649  
 Over Crabtree Creek and Turkey Creek  
 B-3259

Figure One





## North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor  
Betty Ray McCain, Secretary  
August 9, 1996

Division of Archives and History  
Jeffrey J. Crow, Director

Nicholas L. Graf  
Division Administrator  
Federal Highway Administration  
Department of Transportation  
310 New Bern Avenue  
Raleigh, N.C. 27601-1442

Re: Bridges 44 and 45 on SR 1649 over Turkey  
Creek, Wake County, B-3259, Federal Aid  
Project BRZ-1649(1), State Project 8.2405201,  
ER 96-9164

Dear Mr. Graf:

On July 17, 1996, Debbie Bevin of our staff met with North Carolina Department of Transportation (NCDOT) staff for a meeting of the minds concerning the above project. We reported our available information on historic architectural and archaeological surveys and resources along with our recommendations. NCDOT provided project area photographs and aerial photographs at the meeting.

Based upon our review of the photographs and the information discussed at the meeting, we offer our preliminary comments regarding this project.

In terms of historic architectural resources, Umstead Park is located within the project's area of potential effect and is listed in the National Register of Historic Places. We are aware of no other historic architectural resources in the project area and recommend no additional survey for this project.

If the proposed bridge projects involve a replacement or detour structure to the east that will involve areas containing Congaree soils, these areas should be surveyed by an archaeologist. If the entire road is to be relocated to the east, we recommend that plans be forwarded for our review.

Having provided this information, we look forward to receipt of either a Categorical Exclusion or Environmental Assessment which indicates how NCDOT addressed our comments.

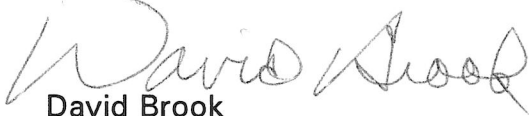
The above comments are made pursuant to Section 106 of the National Historic Preservation Act of 1966 and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at 36 CFR Part 800.





Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Brook", written in a cursive style.

David Brook  
Deputy State Historic Preservation Officer

DB:slw

cc: H. F. Vick  
C. Bruton  
T. Padgett  
Wake County Historic Preservation Commission

bc: ✓ File  
Brown/Bevin  
Claggett/Hall  
County  
RF

over Crabtree Creek

RGE file c.

Wake B3259 Br #44 + 45 on SR 1649 over Turkey Creek

7/17/96

- Bill Goodwin, project engineer
- Umstead Park (NR) adjacent to project. No other historic structures. No survey recommended — Archaeology needs more info. before commenting.
- Br 44 - 1962 - Sufficiency 30  
Br 45 - 1955 - Sufficiency 44
- 1800 VPD → 4000 VPD by 2020
- Alternates — <sup>①</sup> Replace in place w/ on-site detour to east (away from Umstead). <sup>②</sup> Also consider off-site detour using 70 + Duraleigh Road. <sup>③</sup> Maybe relocate whole road to east rather than build 2 detour structures. Leave old road + bridges for use by Umstead?
- Div. of Parks + Recreation wants provision for bicycles/horses/pedestrians. Also maybe passage under?



July 17  
1996  
2:30

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.  
GOVERNOR

DIVISION OF HIGHWAYS  
P.O. BOX 25201, RALEIGH, N.C. 27611-5201

GARLAND B. GARRETT JR.  
SECRETARY

June 13, 1996

CR 96-9164

due 7/2

DKB  
JS

MEMORANDUM TO: Ms. Renee Gledhill-Earley  
Dept. of Cultural Resources

FROM: H. Franklin Vick, P. E., Manager  
Planning and Environmental Branch

SUBJECT: Review of Scoping Sheets for Wake County, SR 1649,  
Replacement of Bridge No. 45 over Turkey Creek, State  
Project 8.2405201, Federal Aid Project BRZ-1649(1),  
TIP Project B-3259

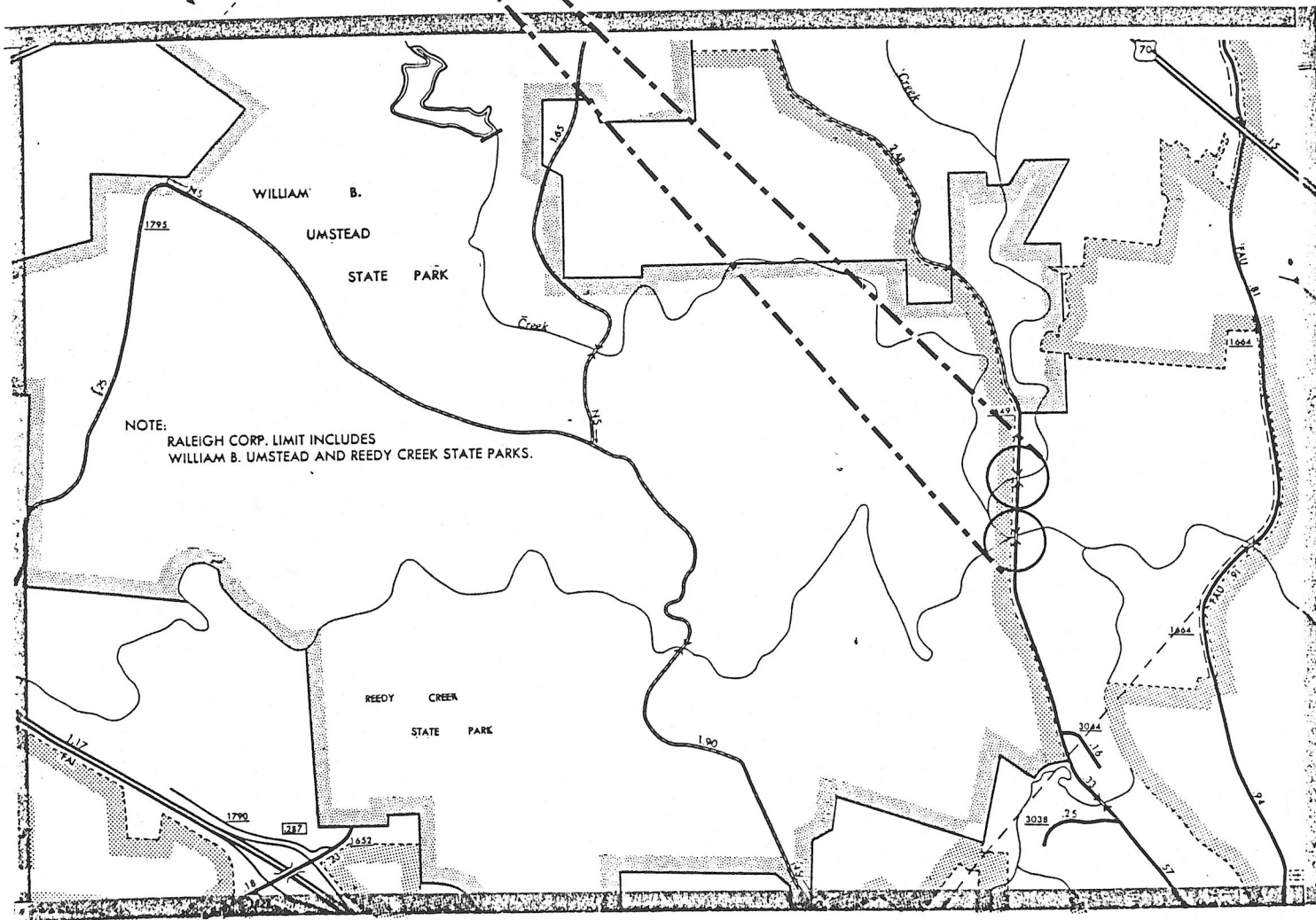
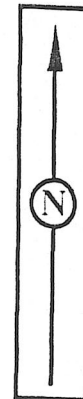
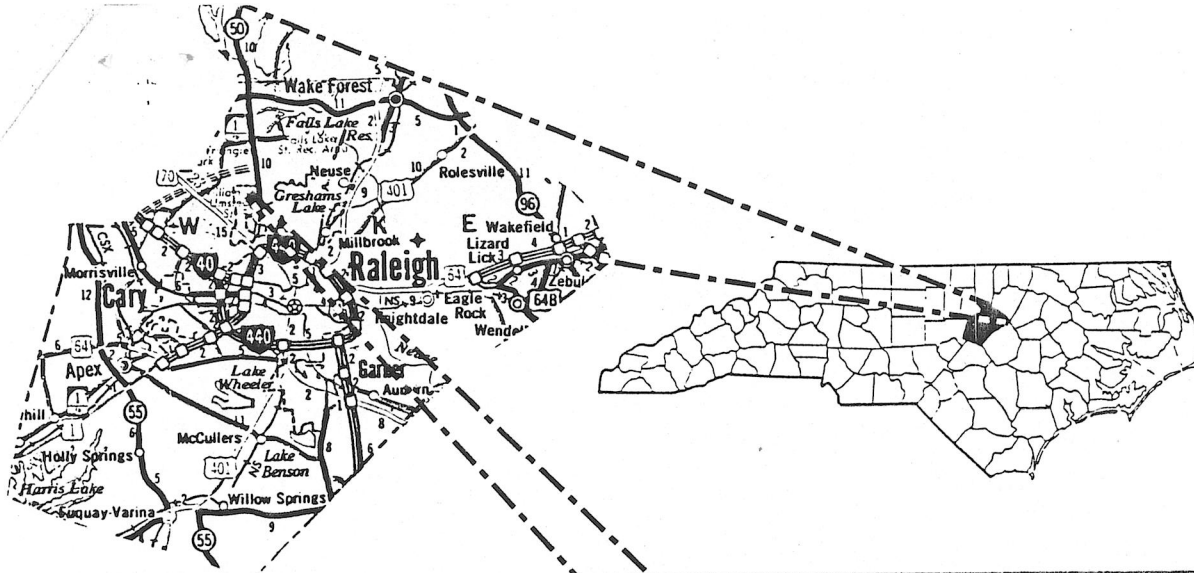
Attached for your review and comments are the scoping sheets for the subject project (See attached map for project location). The purpose of these sheets and the related review procedure is to have an early "meeting of the minds" as to the scope of work that should be performed and thereby enable us to better implement the project. A scoping meeting for this project is scheduled for July 17, 1996 at 2:30 pm in the Planning and Environmental Branch Conference Room (Room 434). You may provide us with your comments at the meeting or mail them to us prior to that date.

Thank you for your assistance in this part of our planning process. If there are any questions about the meeting or the scoping sheets, please call Bill Goodwin, Project Planning Engineer, at 733-7844, Ext. 238.

WTG/plr

Attachment





	<p>North Carolina Department of          Transportation          Division of Highways          Planning &amp; Environmental Branch</p>
	<p>Wake County          Replace Bridges No. 44 and No. 45 on SR 1649          Over Crabtree Creek and Turkey Creek          B-3259</p>
<p>Figure One</p>	

# BRIDGE PROJECT SCOPING SHEET

6/13/96

TIP PROJECT: B-3259 DIVISION: Five

F. A. PROJECT: BRZ-1649(1) COUNTY: Wake

STATE PROJECT: 8.2405201 ROUTE: SR 1649

DESCRIPTION: Replace Bridge No. 44 on SR 1649 over Crabtree Creek  
And Bridge No. 45 on SR 1649 over Turkey Creek

PROJECT PURPOSE: replace obsolete bridge

PROJECT U.S.G.S. QUAD SHEET(S): Raleigh West

ROADWAY CLASSIFICATION: Rural Local Route

TIP CONSTRUCTION COST .....	\$	600,000
TIP RIGHT OF WAY COST .....	\$	60,000
PRIOR YEARS COST .....	\$	0,000
<hr/>		
TIP TOTAL COST.....	\$	660,000

TRAFFIC: CURRENT	<u>        </u>	VPD;	DESIGN YEAR (2020)	<u>        </u>	VPD
TTST	<u>        </u> %		DUAL	<u>        </u> %	

EXISTING ROADWAY TYPICAL SECTION: Two lane shoulder section, 19 feet of pavement, grassed shoulders.

Bridge No. 44 EXISTING STRUCTURE:

LENGTH	<u>35.4</u>	METERS	WIDTH	<u>7.9</u>	METERS
	<u>116</u>	FEET		<u>25.9</u>	FEET

Bridge No. 45 EXISTING STRUCTURE:

LENGTH	<u>21.6</u>	METERS	WIDTH	<u>6.2</u>	METERS
	<u>71</u>	FEET		<u>20.2</u>	FEET

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# NEPA/SEPA Document

## NCDOT MINIMUM CRITERIA DETERMINATION CHECKLIST

The following questions provide direction in determining when the Department is required to prepare [SEPA](#) environmental documents for state-funded construction and maintenance activities. Answer questions for Parts A through C by checking either “Yes” or “No”. Complete Part D of the checklist when NCDOT’s [Minimum Criteria Rule](#) categories #8, 12(i) or #15 are used.

**TIP Project No:** n/a

**State Project No.:** 30001.WIUM.002

**Project Location:** William Umstead State Park/Ebenezer Church Rd, Wake County, Division 5.  
See Vicinity Map.

### **Project Description:**

The purpose of this project is to replace the old Ebenezer Church Rd bridge #911473 that was being used by Umstead State Park as a greenway bridge. Repairs were attempted on the bridge in 2024 but it collapsed during removal. A new bridge is being replaced-in-place for pedestrian use. Only State Park vehicles will be driving across the bridge.

This project involves the removal and replacement of bridge #911473 over Crabtree Creek. This is a greenway bridge located on South Turkey Creek Trail in Umstead State Park. This bridge is a replace in kind and will be extended 2' on either end. The roadway grade and interior bents will be retained. The bridge will have 2'6" end bent caps with 1.5:1 rip-rap sloping abutments. Both banks will be stabilized with class-II rip-rap.

Existing utility lines will be raised in the existing alignment south of the bridge to allow construction access to the site. Up to 5 new poles will be installed in the existing alignment.

### **Anticipated Permit or Consultation Requirements:**

The project is located within the Neuse River basin and requires a buffer authorization from NC DWR. The buffer authorization is for surfacewater impacts as well as impacts associated with temporary construction access. A pre-construction notification (PCN) will be submitted for the buffer authorization. The work is anticipated to be covered under a Nationwide Permit (NWP) 3 with a 401 General Certification (GC) 7466.

### **Special Project Information:**

The bridge is located within the right of way (ROW) of Ebenezer Church Road over Crabtree Creek. This portion of ROW was intended to be transferred to NC Department of Natural & Cultural Resources (DNCR), Division of Parks & Recreation (DPR)/State Parks (SP) in 2006 after the new Ebenezer Church Road bridge was constructed to the east under project # B-3259. The purpose of the land transfer was to allow DPR to utilize the old structure as a pedestrian bridge for the South Turkey Creek Trail at Umstead State Park. However, an agreement specifying the land transfer and maintenance of the bridge was never finalized and the land was never transferred to DPR.

Upon completion, a maintenance agreement will be signed between NCDOT and DPR for NCDOT to continue maintenance inspections of the bridge. The bridge will remain within NCDOT ROW with an interagency agreement for Umstead State Park to continue using the

bridge as part of their trail system and to allow trail maintenance activities by park staff to continue inside NCDOT ROW. NCDOT is coordinating with DPR throughout this process.

Umstead State Park is listed on the National Register of Historic Places (NRHP). The bridge was originally surveyed by NCDOT Cultural Resources Unit and State Historic Preservation Office (SHPO) in 1998 (see project site). This was done under TIP # B-3259 and included the replacement of two bridges on Ebenezer Church Road that were relocated to the east of where the remaining bridge now stands. The 1998 surveys indicated that the current location of the bridge does not have any archeological or historic architecture concerns.

NCDOT conducted field surveys for the presence of streams, wetlands, and rare and threatened species between September 2024 and May 2025. It was determined that the project will not have adverse effects to threatened or endangered species. The following species are known to exist within the project area:

**ESA federally protected species within the Study Area. (IPaC: May 6, 2025)**

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Perimyotis subflavus</i>	Tricolored bat	PE	Yes	MA-LAA
<i>Picoides borealis</i>	Red-cockaded woodpecker	T	No	No Effect
<i>Necturus lewisi</i>	Neuse River waterdog	T	Yes	MA-LAA
<i>Noturus furiosus</i>	Carolina madtom	E	Yes	MA-LAA
<i>Fusconaia masoni</i>	Atlantic pigtoe	T	Yes	MA-LAA
<i>Danaus plexippus</i>	Monarch butterfly	PT	N/A	Not Required
<i>Rhus michauxii</i>	Michaux's sumac	E	Yes	No Effect

IPaC - Information for Planning and Consultation

E - Endangered; P – Proposed; T – Threatened

MA-NLAA - May Affect, Not Likely to Adversely Affect

MA-LAA - May Affect, Likely to Adversely Affect

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 conservation measures 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 the William Umstead State Park project is located.

Section 7 compliance for the Atlantic pigtoe, Neuse River waterdog, and Carolina madtom will be met through the Programmatic Biological Opinion(s) (PBO) issued by the U.S. Fish & Wildlife Service (USFWS). The use of the PBOs indicates the following biological conclusions: Atlantic pigtoe: May Affect, Likely to Adversely Affect; Neuse River waterdog: May Affect, Likely to Adversely Affect; Carolina madtom: May Affect, Likely to Adversely Affect. The



Department will adhere to all PBO project-specific requirements as well as all monitoring and reporting requirements. Payments are made quarterly to the NC Nongame Aquatic Species Fund by NCDOT.

The Monarch Butterfly was proposed for federal listing in December 2024. However, no restrictions will take effect until the proposal is finalized, which is expected in late 2025 or early 2026. Until then, proposed species do not receive protection under the Endangered Species Act (ESA), except that federal action agencies must ensure their actions do not jeopardize the species' existence. These agencies may also consult with the U.S. Fish and Wildlife Service (USFWS) to obtain a conference opinion, which will automatically convert to a biological opinion upon the final listing decision.

Field surveys for Michaux's sumac were completed on September 19, 2024, within suitable habitat, with no target plants observed. A review of NHP records on April 19, 2025, indicates one known occurrence of Neuse River waterdog (E.O. # 12592 – Historic) and Atlantic pigtoe (E.O. # 14599) within the project study area. Both element occurrences also extended to within one mile of the project. One known occurrence of Tricolored bat (E.O. # 36282) is located within 1.0 mile of the project study area.

#### **Water Resources**

One stream (Crabtree Creek) and one wetland were identified within the project study area.

#### **Status of Streams in the Study Area**

<b>Stream Name</b>	<b>NCDWR Index Number</b>	<b>Best Usage Classification</b>	<b>Length (ft)</b>	<b>Classification</b>	<b>River Basin Buffer</b>
Crabtree Creek	27-33-(3.5)	B;NSW	135	Perennial	Subject

#### **Characteristics of Wetlands in the Study Area**

<b>Map ID</b>	<b>NCWAM Classification</b>	<b>Forested</b>	<b>NCWAM Rating</b>	<b>Hydrologic Classification</b>	<b>Area (ac.) in Study Area</b>
WA	Floodplain Pool	No	High	Riparian	0.02

The North Carolina 2022 Final 303(d) list of impaired waters identifies Crabtree Creek as an impaired water due to PCB Fish Tissue Advisory present in, or located within 1.0 mile downstream of, the study area.

## **PART A: MINIMUM CRITERIA**

### ***Item 1 to be completed by the Project Manager.***

**YES****NO**

1. Is the proposed project listed as a type and class of activity allowed under the Minimum Criteria Rule in which environmental documentation is not required?

☒☐

If the answer to number 1 is “no”, then the project does not qualify as a minimum criteria project. A state Environmental Assessment is required.

If yes, under which category? **29**

*If either category #8, #12(i) or #15 is used complete Part D of this checklist.*

## **PART B: MINIMUM CRITERIA EXCEPTIONS**

### ***Items 2 – 4 to be completed by the Project Manager.***

**YES****NO**

2. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts?
3. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment?
4. Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the Department?

☐☒☐☒☐☒

### ***Item 5-8 to be completed by Division Environmental Officer.***

5. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value?
6. Will the proposed activity endanger the existence of a species on the Department of Interior's threatened and endangered species list?
7. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or ground water impacts?
8. Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits or shellfish, finfish, wildlife, or their natural habitats?

☐☒☐☒☐☒☐☒

*If any questions 2 through 8 are answered “yes”, the proposed project may not qualify as a Minimum Criteria project. A state Environmental Assessment (EA) may be required. For assistance, contact the Environmental Policy Unit at (919) 707-6253 or [EPU@ncdot.gov](mailto:EPU@ncdot.gov).*

## **PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS**

### ***Items 9- 12 to be completed by Division Environmental Officer.***

- |  | <b>YES</b>                          | <b>NO</b>                           |
|--|-------------------------------------|-------------------------------------|
| 9. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10. Does the action require the placement of temporary or permanent fill in waters of the United States?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 11. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 12. Is the proposed action located in an Area of Environmental Concern, as defined in the coastal Area Management Act?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### ***Items 13 – 15 to be completed by the Project Manager.***

- |  |                          |                                     |
|--|--------------------------|-------------------------------------|
| 13. Does the project require stream relocation or channel changes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|-------------------------------------|

### **Cultural Resources**

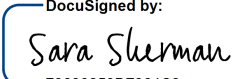
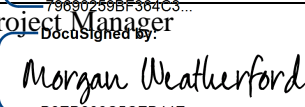
- |   |                          |                                     |
|---|--------------------------|-------------------------------------|
| 14. Will the project have an “effect” on a property or site listed on the National Register of Historic Places?                 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 15. Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

*Questions in Part “C” are designed to assist the Project Manager and the Division Environmental Officer in determining whether a permit or consultation with a state or federal resource agency may be required. If any questions in Part “C” are answered “yes”, follow the appropriate permitting procedures prior to beginning project construction.*

**PART D:( To be completed when either category #8, 12(i) or #15 of the rules are used.)**

***Items 16- 22 to be completed by Division Environmental Officer.***

16. Project length: \_\_\_\_\_
17. Right of Way width: \_\_\_\_\_
18. Project completion date: \_\_\_\_\_
19. Total acres of newly disturbed ground surface: \_\_\_\_\_
20. Total acres of wetland impacts: \_\_\_\_\_
21. Total linear feet of stream impacts: \_\_\_\_\_
22. Project purpose: \_\_\_\_\_

Reviewed by:  \_\_\_\_\_ Date: 05/14/2025  
Project Manager  
Approved by:  \_\_\_\_\_ Date: 05/14/2025  
EPU, NCDOT

## **NCDOT PROJECT COMMITMENTS**

STIP Project No. n/a  
Replace bridge #911473 (Old Ebenezer Church Rd bridge) for pedestrian use at William Umstead  
State Park  
Wake County  
Federal Aid Project No. n/a  
WBS Element 30001.WIUM.002

## **COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN**

No commitments