



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

March 19, 2021

US Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587

ATTN: Mr. Eric Alsmeyer
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 14, and 401 Water Quality Certification** for the proposed Replacement of the superstructure of Bridge No. 3 and the application of deck preservation treatment to Bridge 8 on NC 8/49 over the Yadkin River (Tuckertown Reservoir) in Davidson, Rowan and Stanly Counties, North Carolina, Division 9, TIP No. B-4626, BRNHP-0049(33). Debit \$570 from WBS 38443.1.FS2

Dear Mr. Alsmeyer:


The North Carolina Department of Transportation (NCDOT) proposes to replace the superstructure on Bridge 3 and apply deck preservation treatment to Bridge 8 on NC 8/49 over the Yadkin River (Tuckertown Reservoir) in Davidson, Rowan, and Stanly Counties with the same span arrangement on the existing alignment. This action will result in 18 feet of permanent impacts to the Yadkin River from bank stabilization and 0.57 ac of temporary impacts from causeways for bridge construction/rehabilitation. No stream mitigation will be required for this project.

Please see enclosed copies of the Pre-Construction Notification (ePCN), Stormwater Management Plan, and Permit Drawings. A Minimum Criteria Determination Checklist (MCDC) was completed in April 2018 and distributed shortly thereafter. Additional copies are available upon request.

A copy of this permit application and its distribution list will be posted on the NCDOT Website at: <https://xfer.services.ncdot.gov/pdea/PermApps/>. If you have any questions or need additional information, please contact Jeff Hemphill at (919) 707-6126.

Sincerely,



 Philip S. Harris III, P.E., C.P.M.
Environmental Analysis Unit Head

cc:
NCDOT Permit Application Standard Distribution List



Pre-Construction Notification (PCN) Form

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

October 26, 2020 Ver 3.3

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/0/edoc/624704/PCN%20Help%20File%202018-1-30.pdf>

A. Processing Information

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

Rowan

Davidson

Stanly

Is this a NCDMS Project?*

Yes No

Click Yes, only if NCDMS is the applicant 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:

B-4626

WBS #*

38443.1.FS2

(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)

This form may be used to initiate the standard/individual permit process with the Corps. Please contact your Corps representative concerning submittals for standard permits. All required items that are not provided in the E-PCN can be added to the miscellaneous upload area located at the bottom of this form.

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

Yes No

Nationwide Permit (NWP) Number:

14 - Linear transportation

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 Permit

401 Water Quality Certification - Express

Riparian Buffer Authorization

Pre-Filing Meeting Information

Before submitting this form please ensure you have submitted the Pre-Filing Meeting Request Form as we will not be able to accept your application without this important first step. The Pre-Filing Meeting Request Form is used in accordance with 40 C.F.R. Section 121.4(a) "At least 30 days prior to submitting a certification request, the project proponent shall request a pre-filing meeting with the certifying agency" and in accordance with 40 C.F.R. Section 121.5(b)(7), and (c)(5) all certification requests shall include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request. Click [here](#) to read more information on when this form is needed prior to application submission or [here](#) to view the form.

ID#

20210345

Version

1

Pre-filing Meeting or Request Date *

2/15/2021

Attach documentation of Pre-Filing Meeting Request here: *

DWR Pre-Filing Meeting Request Form.pdf

56.45KB

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? *

Jeff Hemphill

1b. Primary Contact Email: *

jhemphill@ncdot.gov

1c. Primary Contact Phone: *

(xxx)xxx-xxxx
(919)219-8581

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: *

N/A

2b. Deed book and page no.:

2c. Responsible party:

(for Corporations)

2d. Address *

Street Address

N/A

Address Line 2

City

State / Province / Region

Postal / Zip Code

Country

2e. Telephone Number: *

(xxx)xxx-xxxx

(919)219-8581

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

pharris@ncdot.gov

3. Applicant Information (if different from owner)

3a. Name: *

NCDOT

3b. Business Name:

(if applicable)

3c. Address *

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

State / Province / Region

NC

Postal / Zip Code

27699-1598

Country

US

3d. Telephone Number: *

(919)219-8581

(xxx)xxx-xxxx

3e. Fax Number:

(xxx)xxx-xxxx

3f. Email Address: *

pharris@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project: *

Replace the existing superstructure with a wider superstructure on Bridge 790003 and applying deck preservation treatment to Bridge 790008 on NC 8/NC 49 over Yadkin River and Winston-Salem Southbound railroad in Rowan, Davidson, and Stanly Counties.

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Richfield

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: *

Longitude: *

35.50777
ex: 34.208504

-80.18526
-77.796371

3. Surface Waters

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

Yadkin River (Tuckertown Reservoir)

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

WS-IV,B;CA

[Surface Water Lookup](#)

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

Yadkin-PeeDee

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

030401030604

[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:*

Land use in the project vicinity consists primarily of the Yadkin River/Tuckertown Reservoir surrounded by forestland, including Uwharrie National Forest, with interspersed agricultural and residential land use.

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

Yes No Unknown

4d. Attach an 8 1/2 X 11 excerpt from the most recent version of the USGS topographic map indicating the location of the project site. (for DWR)

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

File type must be pdf

4e. Attach an 8 1/2 X 11 excerpt from the most recent version of the published County NRCS Soil Survey map depicting the project site. (for DWR)

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

File type must be pdf

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

0

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

(intermittent and perennial)

355'

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

The need of the proposed project is to improve public safety by replacing the structurally deficient, functionally obsolete, and fracture critical bridge (Rowan County Bridge No. 3) from the state's transportation infrastructure and maintaining Bridge 8 through deck preservation treatment. The purpose of the project is to construct a new superstructure that meets current NCDOT bridge design standards. This new superstructure will also eliminate the fracture-critical nature of the structure. The bridge substructure (piers) are in good condition and do not need to be replaced.

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

TIP project B-4626 involves the replacement of the eastbound lane bridge superstructure (Bridge 3) and deck preservation treatment to the westbound lane bridge (bridge 8) over Yadkin River (Tuckertown Reservoir) and Winston-Salem southbound railroad and includes 1.136 miles of roadway improvement in Stanly, Rowan and Davidson Counties. The proposed eastbound bridge (bridge 3) will have a superstructure that does not contain deck drains. All stormwater from the bridge and approaches will be collected by a storm drainage system on the west side of the bridge and discharged into a bio-swale in the median. There is one roadside ditch on this project and is located from Sta. 30+50 to 31+00 RT. The existing westbound bridge (bridge 8) does not contain deck drains. All stormwater from the existing bridge and approaches will continue to be collected by a storm drainage system on the west side of the bridge and discharge to the existing Hazardous Spill Basin (HSB). The outfall structure of the HSB will be retrofitted to include a new orifice plat and trash rack to allow the HSB to provide stormwater detention. Cranes and standard construction equipment will be utilized.

4j. Please upload project drawings for the proposed project.

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

B-4626 Final Permit Drawings.pdf

11.05MB

B-4626 Permit Application Cover Letter.pdf

184.68KB

File type must be pdf

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):

Agency/Consultant Company:

Other:

5d1. Jurisdictional determination upload

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

File type must be PDF

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, Open Waters, Streams-tributaries, Pond Construction, Buffers

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".

Table with 9 columns: ID, Reason for impact, Impact type, Type of impact, S. name, Stream Type, Type of Jurisdiction, S. width, Impact length. Rows S1 and S2.

** 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:

18

3i. Total temporary stream impacts:

224

3i. Total stream and ditch impacts:

242

3j. Comments:

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: *

All stormwater from Eastbound Bridge 3 and approaches will be discharged into a bio-swale in the median. All stormwater from Westbound Bridge 8 and approaches will continue to discharge to the existing Hazardous Spill Basin (HSB). The outfall structure of the HSB will be retrofitted to include a new orifice plat and trash rack to allow the HSB to provide stormwater detention.

No impacts from an onsite detour bridge will be necessary as each bridge will function as an onsite detour during the rehabilitation or deck preservation application of the other.

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

Best Management Practices will be adhered to.

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:

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

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

If no, explain why:

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

NEPA or SEPA Final Approval Letter

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

B-4626 Type I Ground Disturbing CE Checklist.pdf 2.02MB

B-4626_Final CIA.pdf 2.43MB

FILETYPE MUST BE PDF

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.

No notably adverse community impacts are anticipated with this project and no Environmental Justice populations appear to be affected; thus, impacts to minority and low income populations do not appear to be disproportionately high and adverse. Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community, and no denial of benefit is expected.

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

5f. Will you cut any trees in order to conduct the work in waters of the U.S.? *

Yes No

5g. Does this project involve bridge maintenance or removal? *

Yes No

5g(1). If yes, have you inspected the bridge for signs of bat use such as staining, guano, bats, etc.? Representative photos of signs of bat use can be found in the NLEB SLOPES, Appendix F, pages 3-7.

Yes No

Link to the NLEB SLOPES document: http://saw-reg.usace.army.mil/NLEB/1-30-17-signed_NLEB-SLOPES&apps.pdf

If you answered "Yes" to 5g(1), did you discover any signs of bat use? *

Yes No Unknown

*** If yes, please show the location of the bridge on the permit drawings/project plans.

5h. Does this project involve the construction/installation of a wind turbine(s)? *

Yes No

5i. Does this project involve (1) blasting, and/or (2) other percussive activities that will be conducted by machines, such as jackhammers, mechanized pile drivers, etc.? *

Yes No

If yes, please provide details to include type of percussive activity, purpose, duration, and specific location of this activity on the property.

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

File must be PDF

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

FWS Website

Schweinitz's sunflower - No Effect, habitat present, last survey 10/21/19

Eagle survey was conducted August 2017 with no nests or birds observed. Another survey will be conducted prior to construction.

Consultation Documentation Upload

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

B-4626_NLEB.pdf

343.78KB

File type must be PDF

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? *

Review of on-line mapping sources

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? *

MCDC, Historical Architecture Final MOA and Archaeology Memo.

Historical Architecture: Through consultation with the NCHPO, it was determined that the undertaking will result in an adverse effect to Rowan County Bridge No. 3 (RW2108) . The undertaking will retain the substructure (piers and bents) of the existing bridge, but replace its superstructure and deck, thereby removing the welded steel elements that define its NRHP-eligibility.

7c. Historic or Prehistoric Information Upload

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

B-4626 ArchNoSurveyRevised.pdf

4.2MB

B-4626_Tribal_Coordination_Letter_Catawba_12-06-2019.pdf

1.87MB

B-4626 Tribal Response.pdf

662.83KB

B-4626FinalMOA.pdf

281.7KB

File must be PDF

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:

No FEMA study is needed as the new superstructure on Bridge 003 is being built on top of the existing interior bents.

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

FEMA Flood Maps

Miscellaneous

Comments

A FERC permit will be required for this project.

This bridge replacements may involve some level of percussive activity in the disassembly of the existing superstructure of Bridge 0003.

Miscellaneous attachments not previously requested.

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

B-4626 Permit Application Cover Letter.pdf

252.74KB

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: *

Michael Anthony Turchy

Signature *

Michael Anthony Turchy

Date

3/19/2021

DWR Pre-Filing Meeting Request Form



ID#* 20210345 **Version*** 1

Regional Office* Winston-Salem Regional Office - (336) 776-9800

Reviewer List* Dave Wanucha

Pre-Filing Meeting Request submitted 2/15/2021

Contact Name* Jeff Hemphill

Contact Email Address* jhemphill@ncdot.gov

Project Name* B-4626

Project Owner* NCDOT

Project County* Rowan

Owner Address:

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699-1598

State / Province / Region

NC

Country

US

Is this a transportation project?* Yes No

Type(s) of approval sought from the DWR:

- 401 Water Quality Certification - Regular 401 Water Quality Certification - Express
 Individual Permit Modification
 Shoreline Stabilization

Does this project have an existing project ID#?*

Yes No

Do you know the name of the staff member you would like to request a meeting with?

Please give a brief project description below.*

The North Carolina Department of Transportation (NCDOT) proposes to replace the superstructure on bridge 0003 and apply deck preservation treatment to Bridge 0008 on NC 8/NC 49 over the Yadkin River (Tuckertown Reservoir) in Davidson, Rowan and Stanly Counties with the same span arrangement on the existing alignment. This action will result in 18 feet of permanent impacts to the Yadkin River from bank stabilization and 0.05 ac of temporary impacts from causeways for bridge construction/rehabilitation. No stream mitigation will be required for this project.

Please give a couple of dates you are available for a meeting.

2/17/2021

2/22/2021

2/24/2021

Please attach the documentation you would like to have the meeting about.

B-4626 Final Permit Drawings.pdf

11.05MB

pdf only

By digitally signing below, I certify that I have read and understood that per the Federal Clean Water Act Section 401 Certification Rule the following statements:

- This form completes the requirement of the Pre-Filing Meeting Request in the Clean Water Act Section 401 Certification Rule.
- I understand by signing this form that I cannot submit my application until 30 calendar days after this pre-filing meeting request.
- I also understand that DWR is not required to respond or grant the meeting request.

Your project's thirty-day clock started upon receipt of this application. You will receive notification regarding meeting location and time if a meeting is necessary. You will receive notification when the thirty-day clock has expired, and you can submit an application.

Signature

A rectangular box containing a handwritten signature in cursive script that reads "Jeff Hemphill".

Submittal Date

2/15/2021



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS



(Version 2.07; Released October 2016)

WBS Element: 38443.1.1 TIP No.: B-4626 County(ies): Stanly, Rowan, and Davidson Page 1 of 3

General Project Information

WBS Element:	38443.1.1	TIP Number:	B-4626	Project Type:	Bridge Replacement	Date:	9/25/2019
NCDOT Contact:	Jacquelyn Bowles, P.E.		Contractor / Designer:	HNTB North Carolina, P.C. / Joe Olson, P.E.			
Address:	1000 Birch Ridge Dr. Raleigh, NC 27610		Address:	343 E. Six Forks Road Suite 200 Raleigh, NC 27609			
	Phone:	919-707-6559		Phone:	919-424-0480		
	Email:	jbowles@ncdot.gov		Email:	jsolson@hntb.com		
City/Town:	Richfield		County(ies):	Stanly	Rowan	Davidson	
River Basin(s):	Yadkin-Pee Dee		CAMA County?	No	No	No	
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	1.14	Surrounding Land Use:	Rural and Agriculture					
	Proposed Project			Existing Site				
Project Built-Upon Area (ac.)	7.1	ac.	6.8	ac.				
Typical Cross Section Description:	2 - 12' asphalt paved lanes with 8' paved shoulders outside and 6' paved shoulders inside. Begin and End Bridge: 2 - 12' asphalt paved lanes with 8' paved shoulders and 12' grass shoulders outside and 6' paved shoulders inside.			2 - 11' paved lanes with grass shoulders.				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	8100	Year:	2040	Existing:	6800	Year:	2020
General Project Narrative: (Description of Minimization of Water Quality Impacts)	<p>TIP project B-4626 involves replacement of Bridge 790003 and applying a deck preservation treatment to Bridge 790008 over Yadkin River (Tuckertwon Reservoir) and Winston Salem southbound railroad and 1.136 miles of roadway improvement in Stanly, Rowan and Davidson Counties. This project consists replacing bridge 790003 superstructure only. The existing and proposed bridge consists of 4 @ 67'- 6", and 1 @ 67'-3 1/4", and 1 @ 141'-0 3/4", 1 @ 160' - 0", 1 @ 141' - 0 3/4", 1 @ 67' - 3 1/4", 2 @ 67'-6", and 1 @ 62' -9 1/4" and 1 @ 57'-6". Continuous with composite deck on steel beams.</p> <p>The proposed bridge (EBL) 790003 does not contain deck drains. All storm water from the bridge and approaches will be collected by a storm drainage system on the west side of the bridge and discharged into a bio-swale in the median. There is one roadside ditch on this project and is located from Sta. 30+50 to 31+00 RT.</p> <p>The existing bridge (WBL)790008 does not contain deck drains. All storm water from the existing bridge and approaches will continue to be collected by a storm drainage system on the west side of the bridge and discharge to the existing Hazardous Spill Basin (HSB). The outfall structure of the HSB will be retrofitted to include a new orifice plat and trash rack to allow the HSB to provide stormwater detention.</p>							

Waterbody Information

Surface Water Body (1):	Yadkin River		NCDWR Stream Index No.:	12-(124.5)			
NCDWR Surface Water Classification for Water Body	Primary Classification:	Water Supply IV (WS-IV)		Class B			
	Supplemental Classification:						
Other Stream Classification:							
Impairments:							
Aquatic T&E Species?	Comments:						
NRTR Stream ID:				Buffer Rules in Effect:	N/A		
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No	Dissipator Pads Provided in Buffer?	No		
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)			
	(If yes, provide justification in the General Project Narrative)						



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



(Version 2.07; Released October 2016)

WBS Element: 38443.1.1 TIP No.: B-4626 County(ies): Stanly, Rowan, and Davidson Page 2 of 3

Swales

Sheet No.	Station & Coordinates (Road and Non Road Projects)	Surface Water Body	Base Width (ft)	Front Slope (H:1)	Back Slope (H:1)	Drainage Area (ac)	Recommended Treatm't Length (ft)	Actual Length (ft)	Longitudinal Slope (%)	Q2 (cfs)	V2 (fps)	Q10 (cfs)	V10 (fps)	Rock Checks Used	BMP Associated w/ Buffer Rules?
5	-EBL- Sta. 30+50 RT 35.504051 / -80.186311	(1)Yadkin River	0.0	6.0	4.0	0.1	12	84	0.30%	0.3	0.2	0.4	0.5	No	No
5	-EBL- Sta. 31+00 RT 35.504115 / -80.186156	(1)Yadkin River	0.0	6.0	4.0	0.2	22	50	0.30%	0.6	0.6	0.8	0.7	No	No

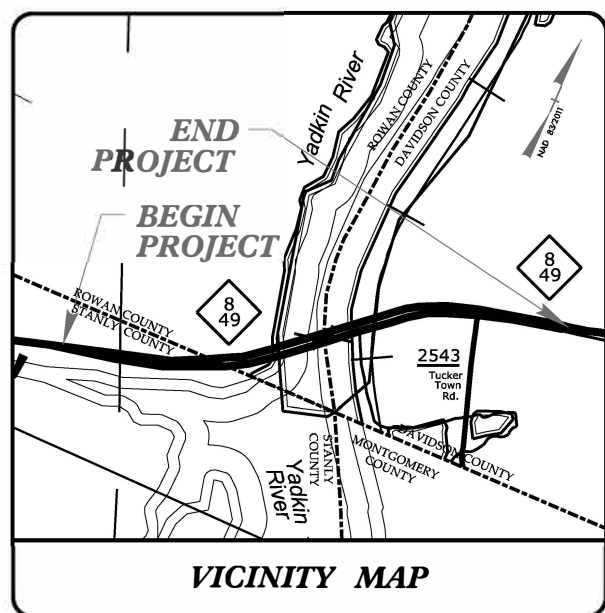
Additional Comments

09/28/19

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4626	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38443.1.FS2	BRNHP-0049(33)	PE	
38443.2.3	BRNHP-0049(33)	RW/UTIL	
38443.3.3	BRNHP-0049(33)	CONST	

TIP PROJECT: B-4626



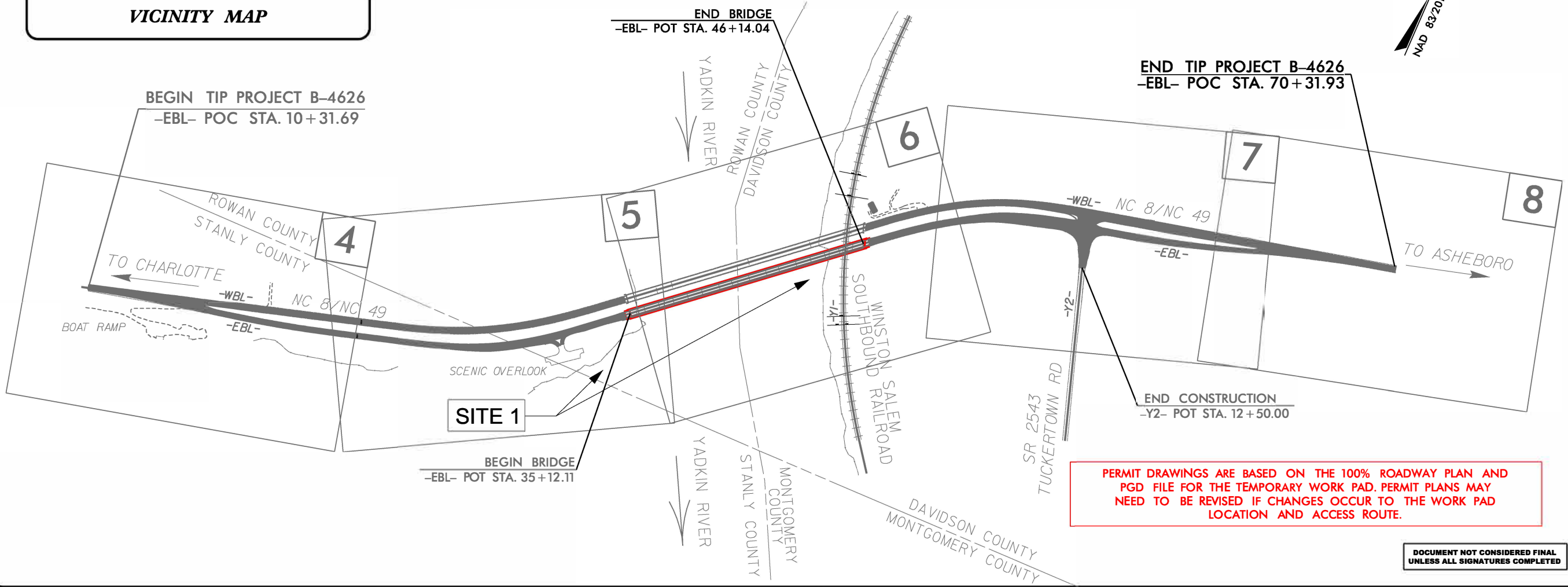
STANLY, ROWAN, AND DAVIDSON COUNTIES

LOCATION: REPLACE BRIDGE 790003 AND APPLY DECK PRESERVATION TREATMENT TO BRIDGE 790008 OVER YADKIN RIVER AND WINSTON-SALEM SOUTHBOUND RAILROAD.

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

WETLAND AND SURFACE WATER IMPACTS PERMIT

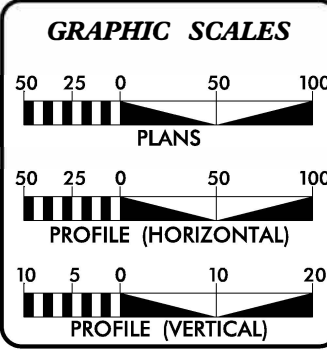
PERMIT DRAWING SHEET 1 OF 9



PERMIT DRAWINGS ARE BASED ON THE 100% ROADWAY PLAN AND PGD FILE FOR THE TEMPORARY WORK PAD. PERMIT PLANS MAY NEED TO BE REVISED IF CHANGES OCCUR TO THE WORK PAD LOCATION AND ACCESS ROUTE.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT: C204446



DESIGN DATA

ADT 2020 =	6,800
ADT 2040 =	8,100
K =	9 %
D =	55 %
T =	7 % *
V =	60 MPH
* TTST = 5% DUAL 2%	
FUNC CLASS =	RURAL ARTERIAL STATEWIDE TIER

PROJECT LENGTH

LENGTH OF ROADWAY T.I.P. PROJECT B-4626	=	0.927 MILES
LENGTH OF STRUCTURE T.I.P. PROJECT B-4626	=	0.209 MILES
TOTAL LENGTH OF T.I.P. PROJECT B-4626	=	1.136 MILES

LENGTH BASED ON -EBL- CENTERLINE

PREPARED IN THE OFFICE OF:

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

FOR DIVISION OF HIGHWAYS

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
FEBRUARY 22, 2019

LETTING DATE:
JUNE 16, 2020

ROY H. TELLIER, PE
PROJECT ENGINEER

ANDREW HALL, PE
PROJECT DESIGN ENGINEER

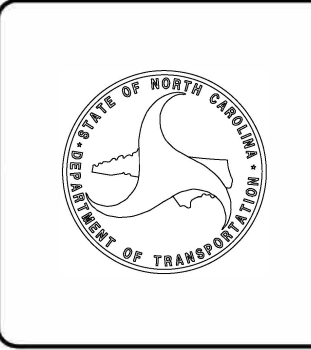
JACQUELYN BOWLES, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

SIGNATURE: _____

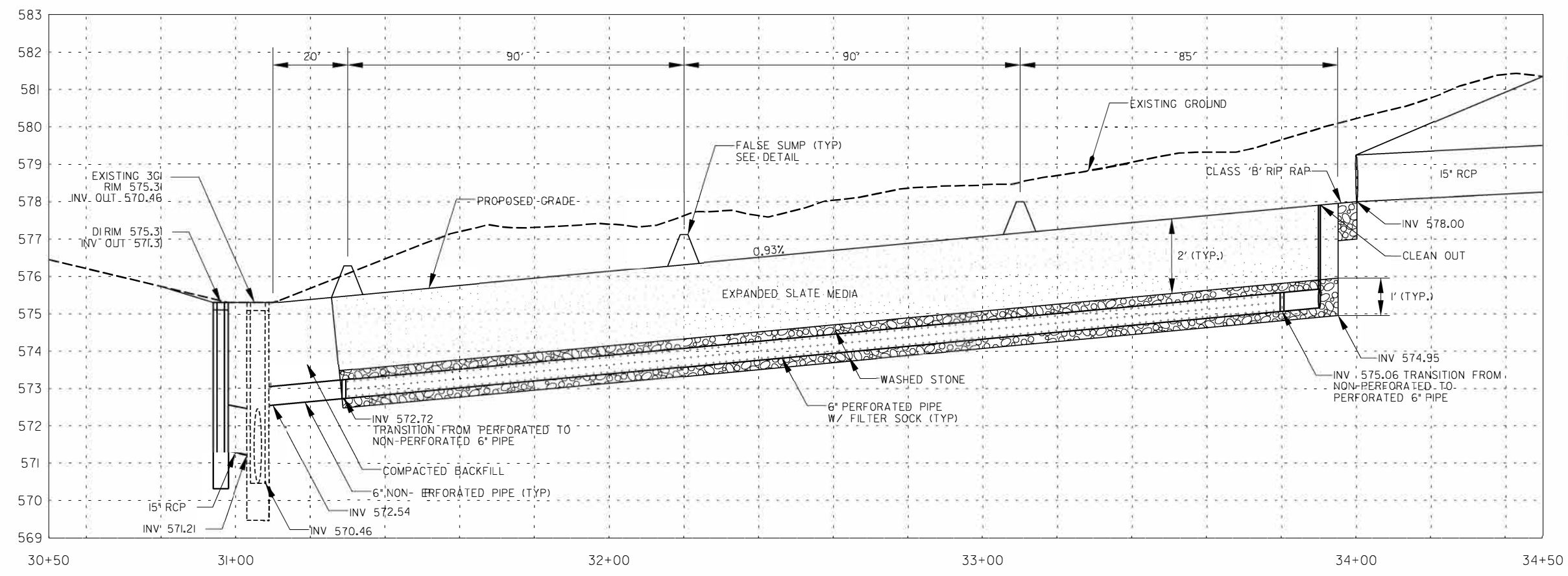
SIGNATURE: _____



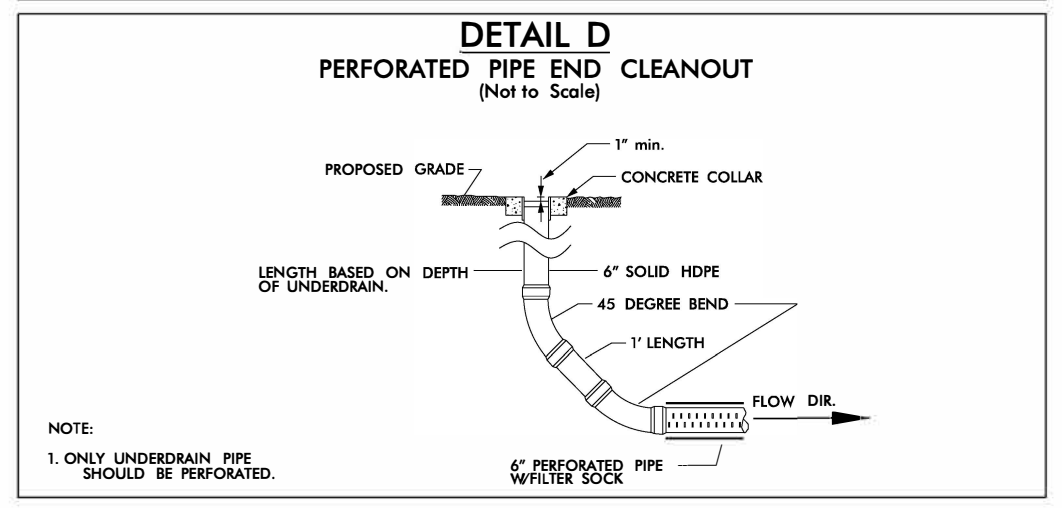
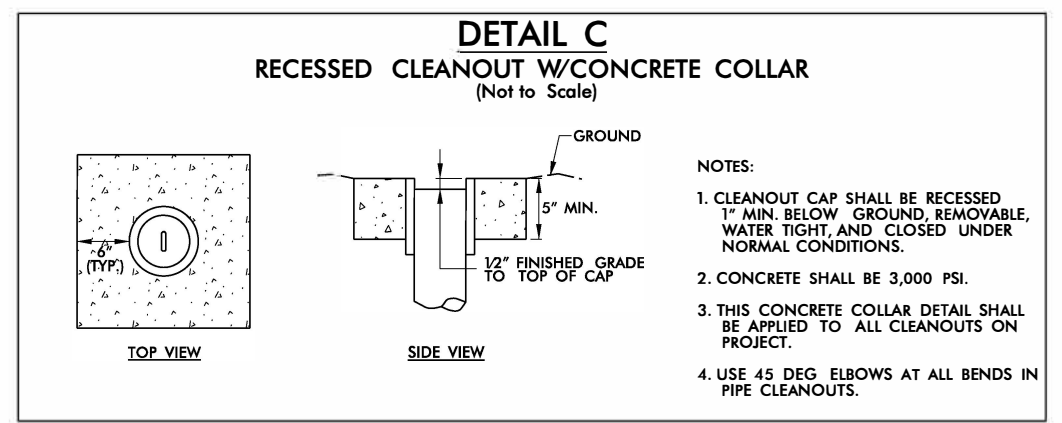
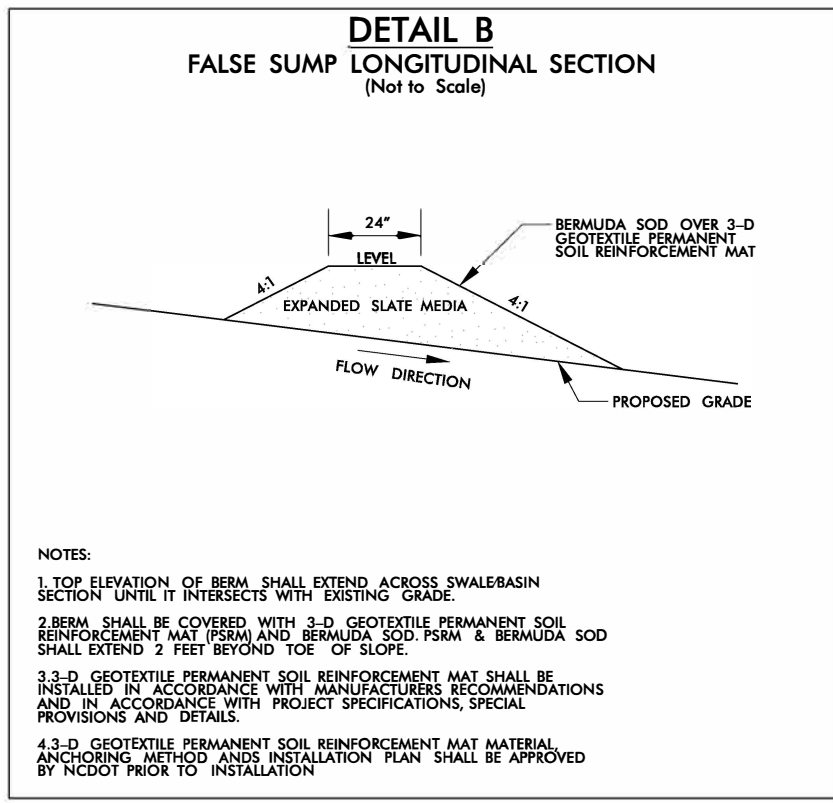
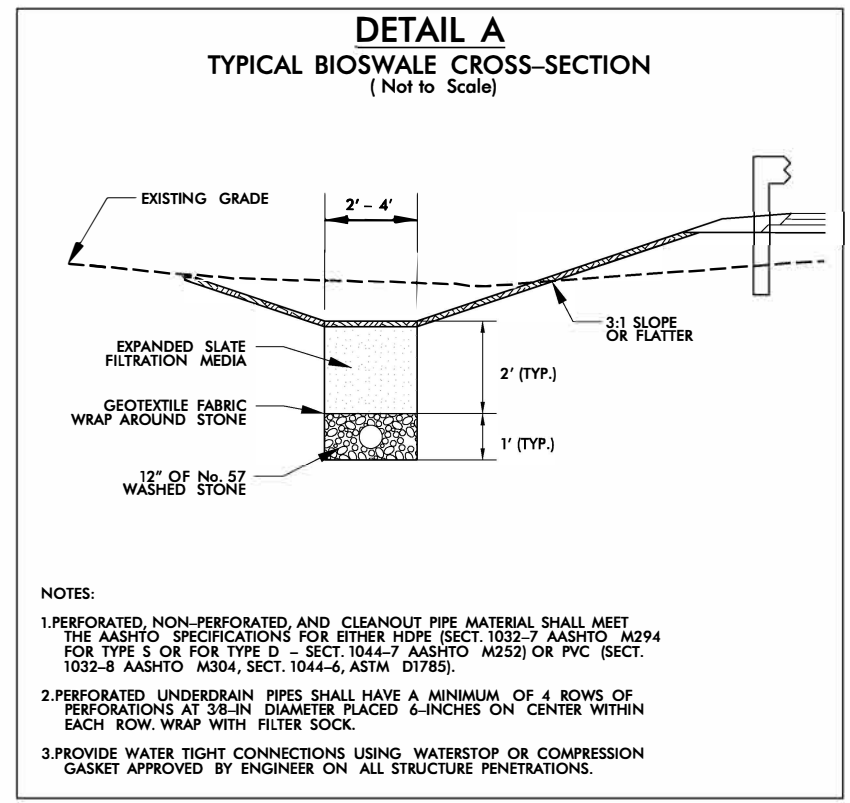
1/28/2020
N:\B-4626-HYD-PRM_PSHIL_TSH.dgn
HNTB

8/17/99

BIOSWALE PROFILE – STA. 31+00 to STA. 34+00 MEDIAN



**PERMIT DRAWING
SHEET 2 OF 9**



3/16/2008
 4:28:26
 HYD_PRRM_PSH2_detail.dgn

PROJECT REFERENCE NO. B-4626	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

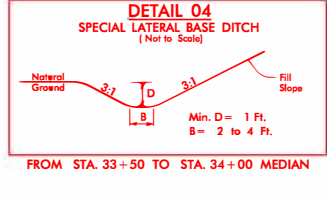
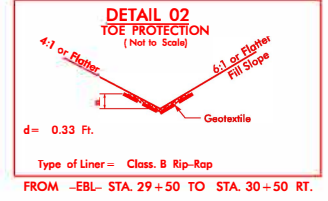
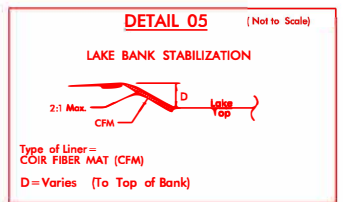
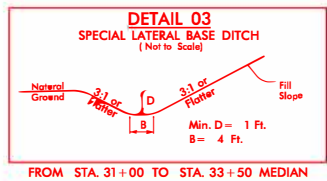
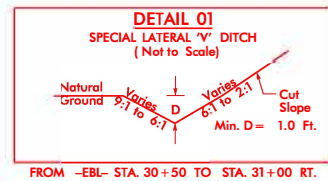
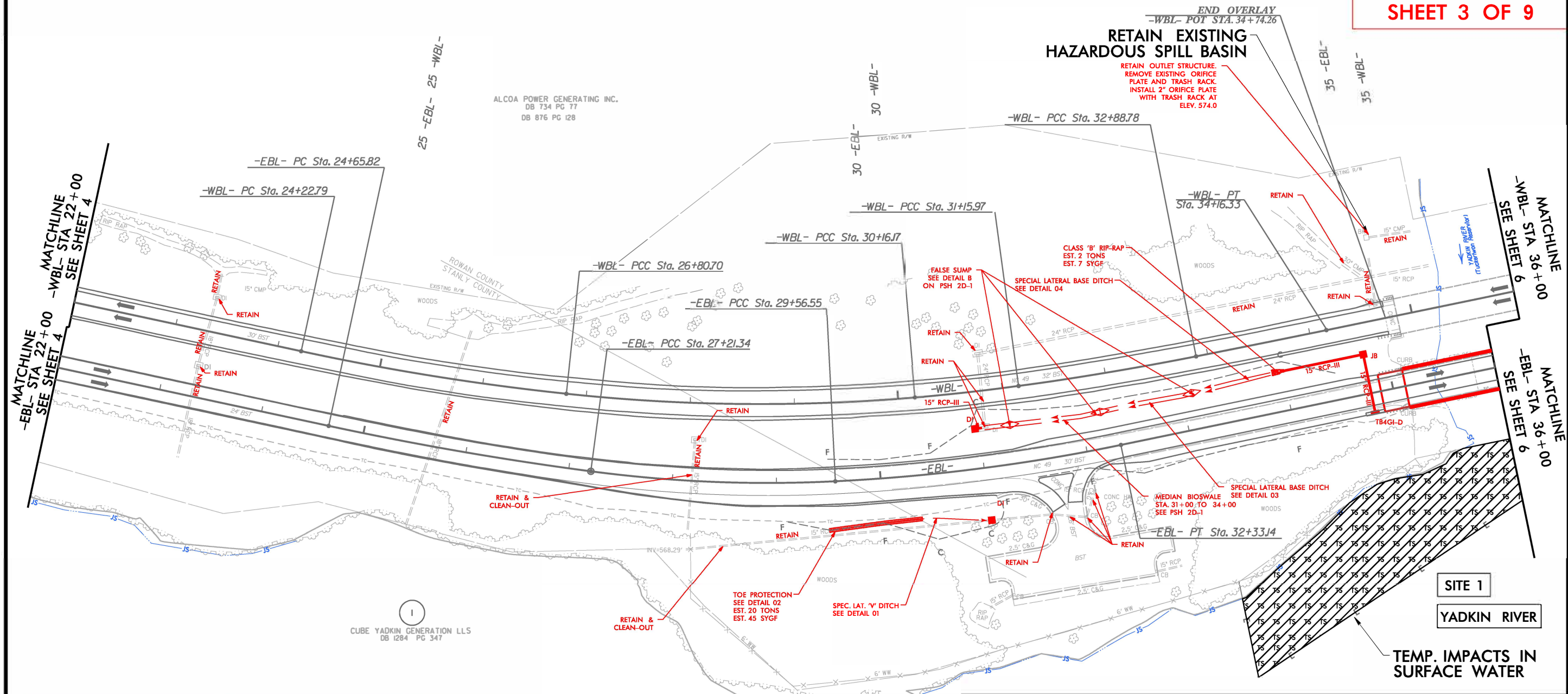
WETLAND & STREAM IMPACTS

LEGEND

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

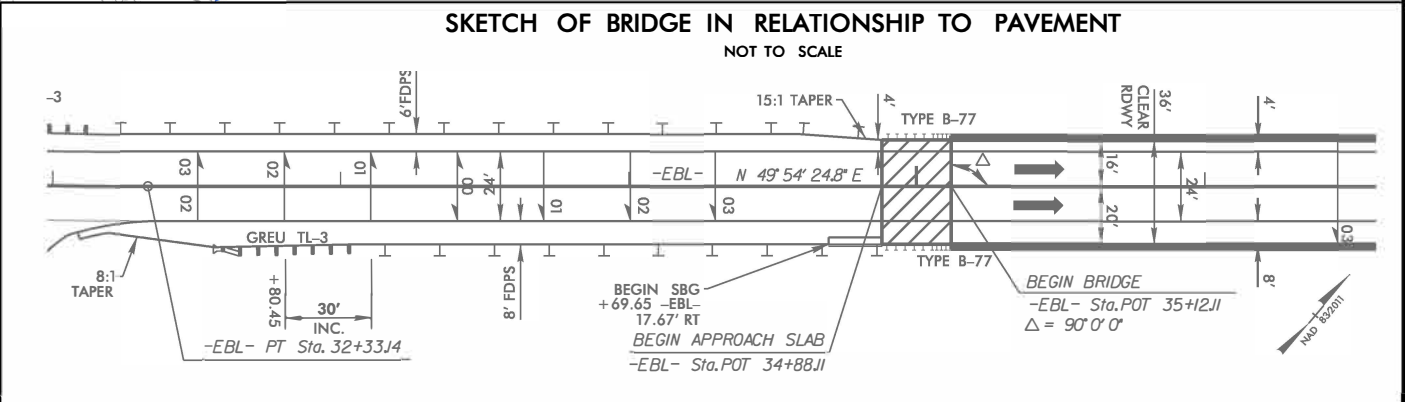
NAD 83/2011

**PERMIT DRAWING
SHEET 3 OF 9**



FOR -EBL- PROFILE, SEE SHEET 9
 FOR -WBL- PROFILE, SEE SHEET 12

FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-



4/2/2019 10:36:06 -HYD_PRRM_PSH.dgn

B.17/99

PROJECT REFERENCE NO. B-4626	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

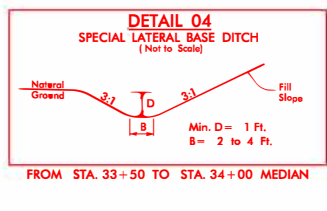
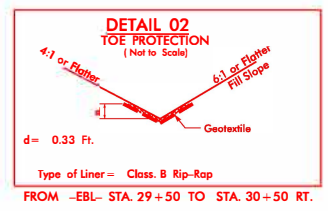
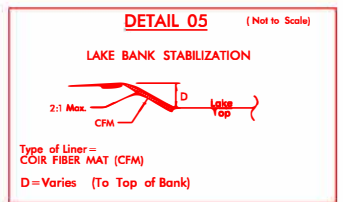
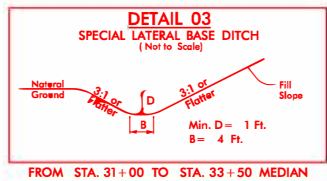
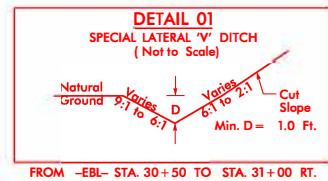
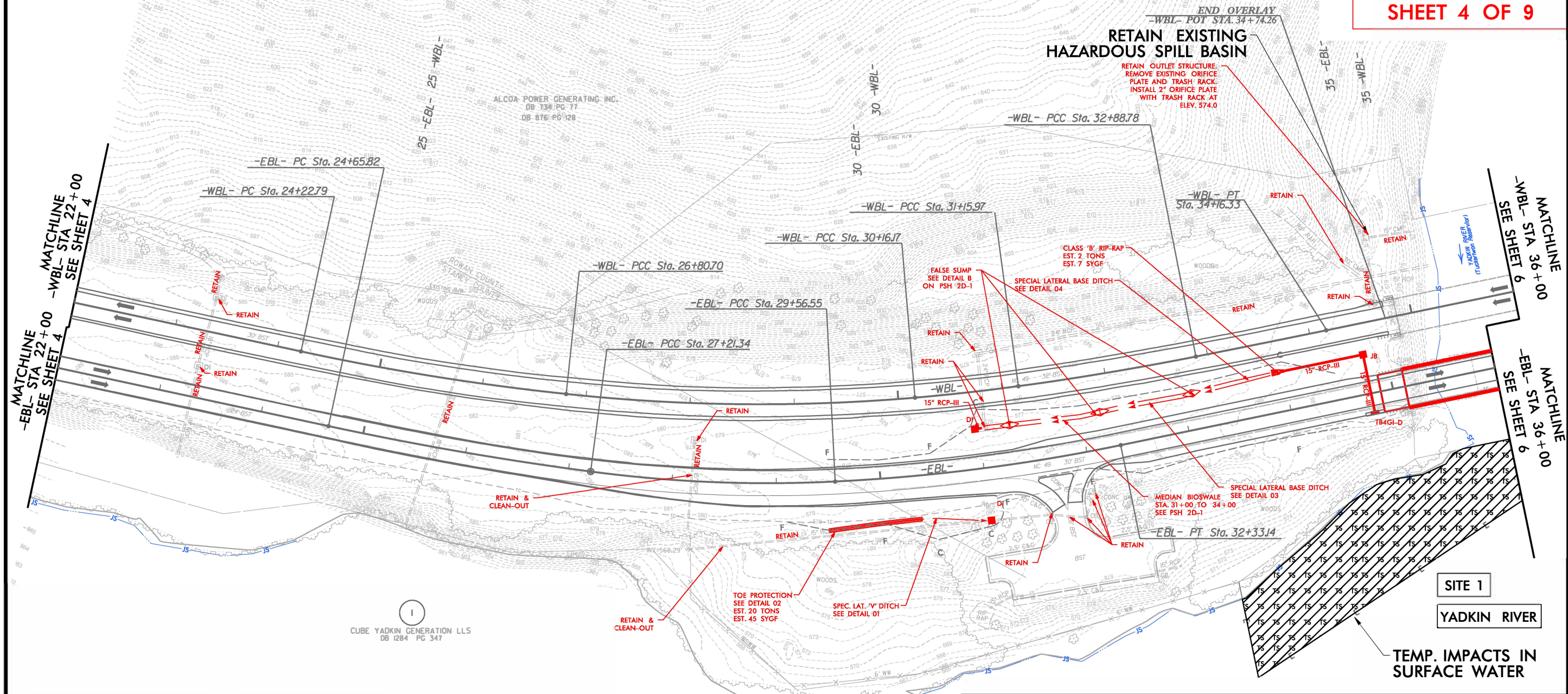
WETLAND & STREAM IMPACTS

LEGEND

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

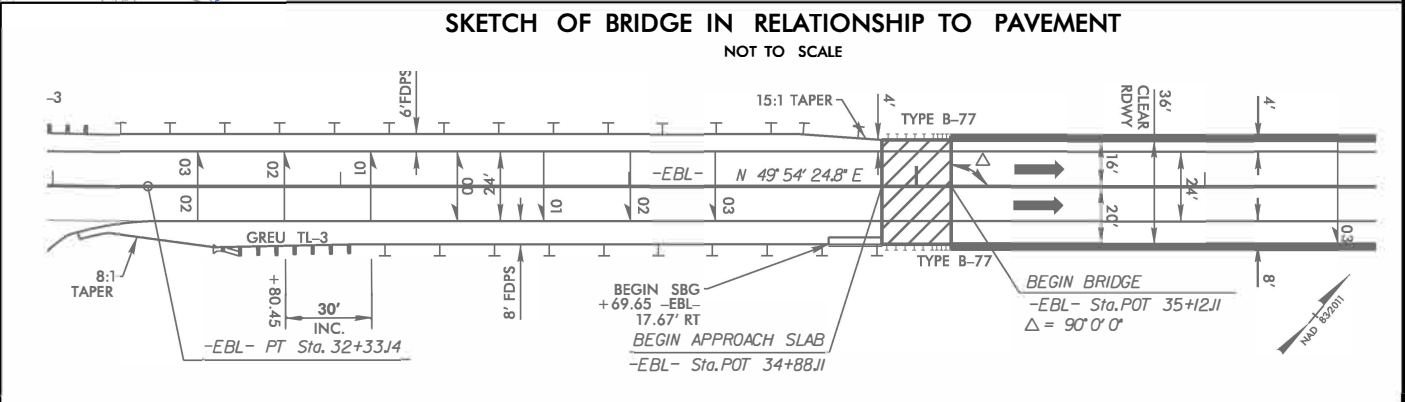
NAD 83/2011

**PERMIT DRAWING
SHEET 4 OF 9**



FOR -EBL- PROFILE, SEE SHEET 9
 FOR -WBL- PROFILE, SEE SHEET 12

FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-



4/2/2019
 4/2/2019 10:36:36 -HYD_PRL_PSH.dgn

8/17/99

WETLAND & STREAM IMPACTS

HNTB HNTB NORTH CAROLINA, P.C. Suite 200
343 E. Six Forks Road, Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO. B-4626	SHEET NO. 6
RW SHEET NO	
ROADWAY DESIGN ENGINEER	HYDRAULIC ENGINEER

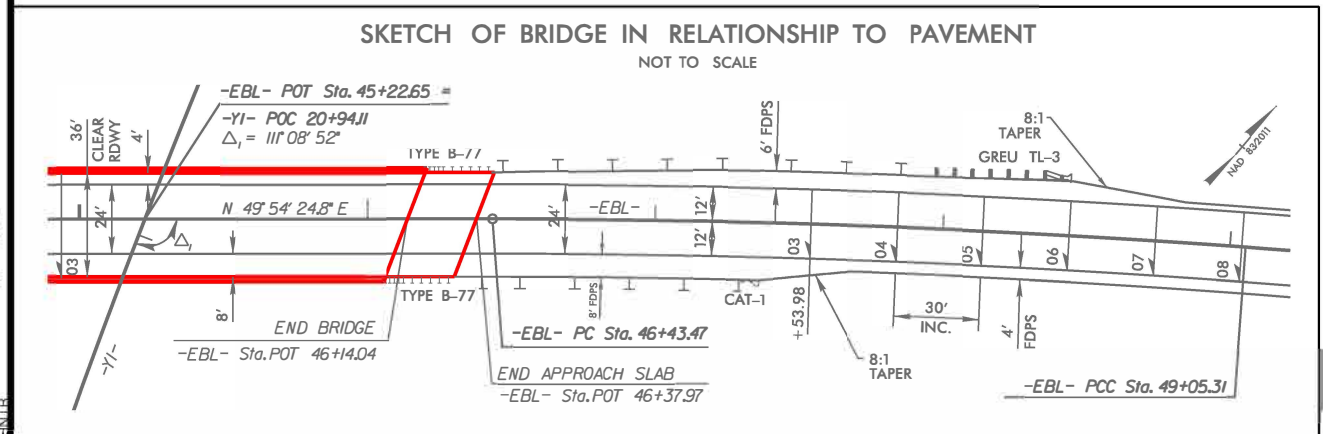
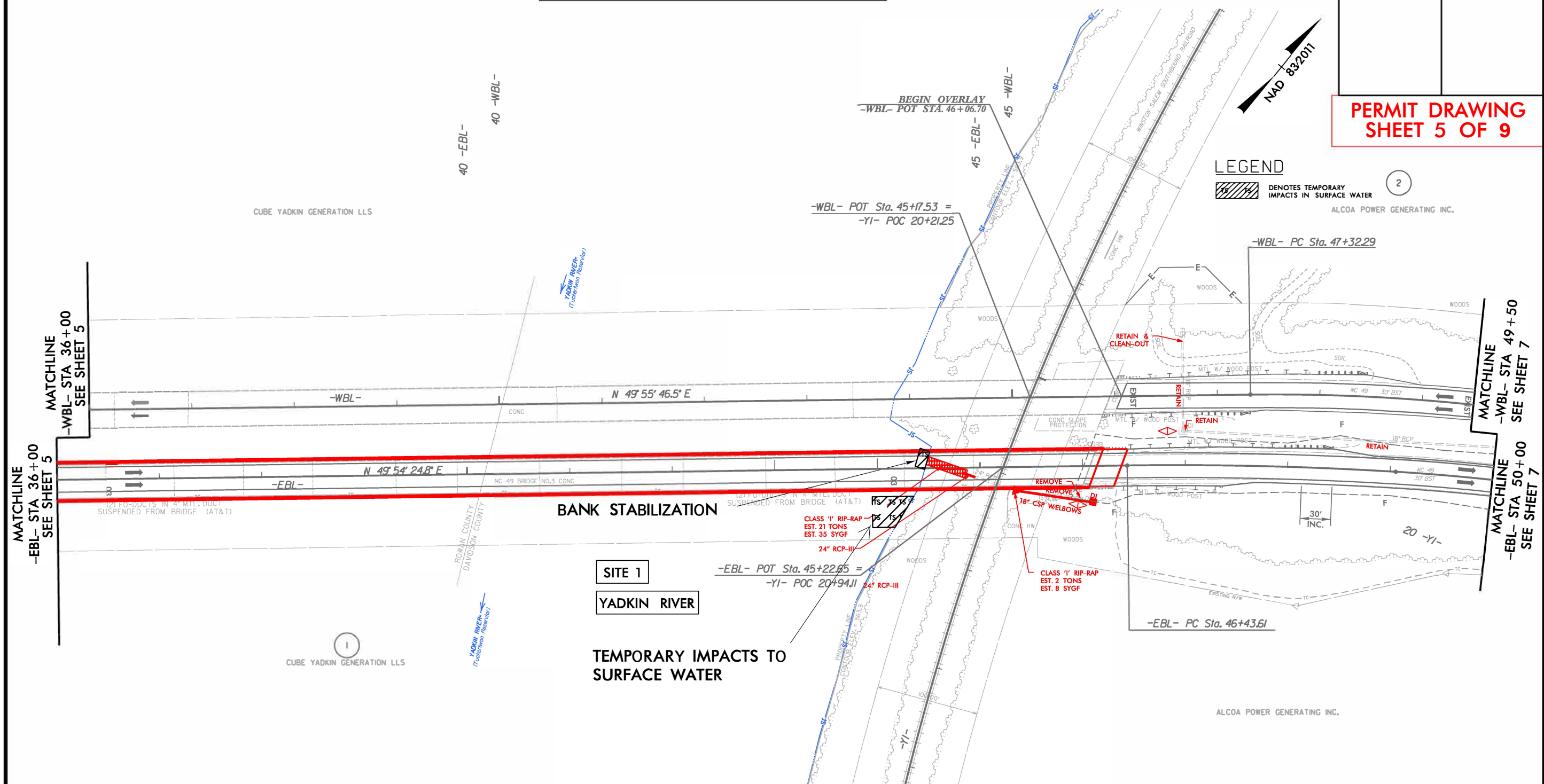
**PERMIT DRAWING
SHEET 5 OF 9**

LEGEND

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 2

ALCOA POWER GENERATING INC.



9/17/2008
4:26:26-HYD_PRL_PSH6.dgn
HNTB

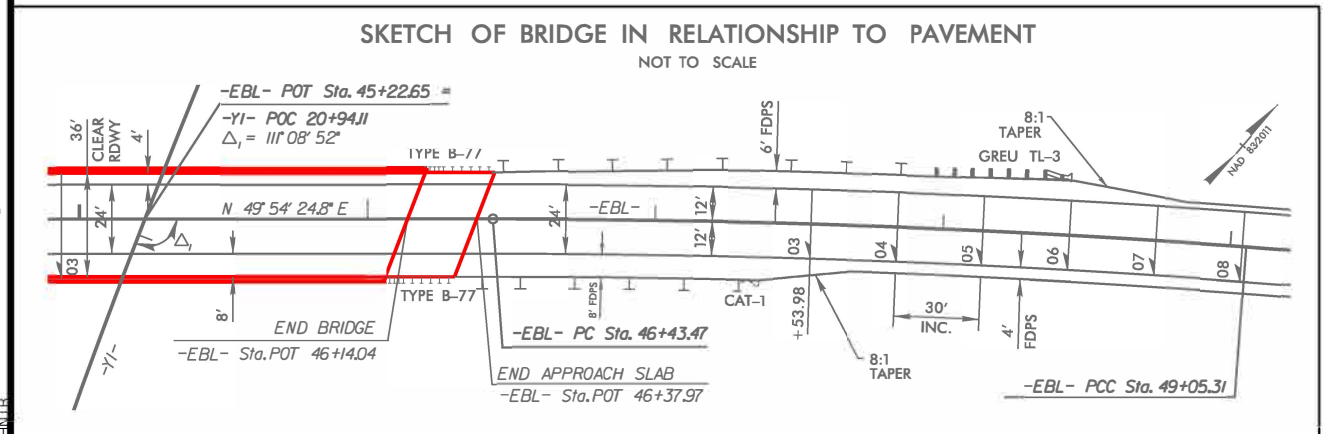
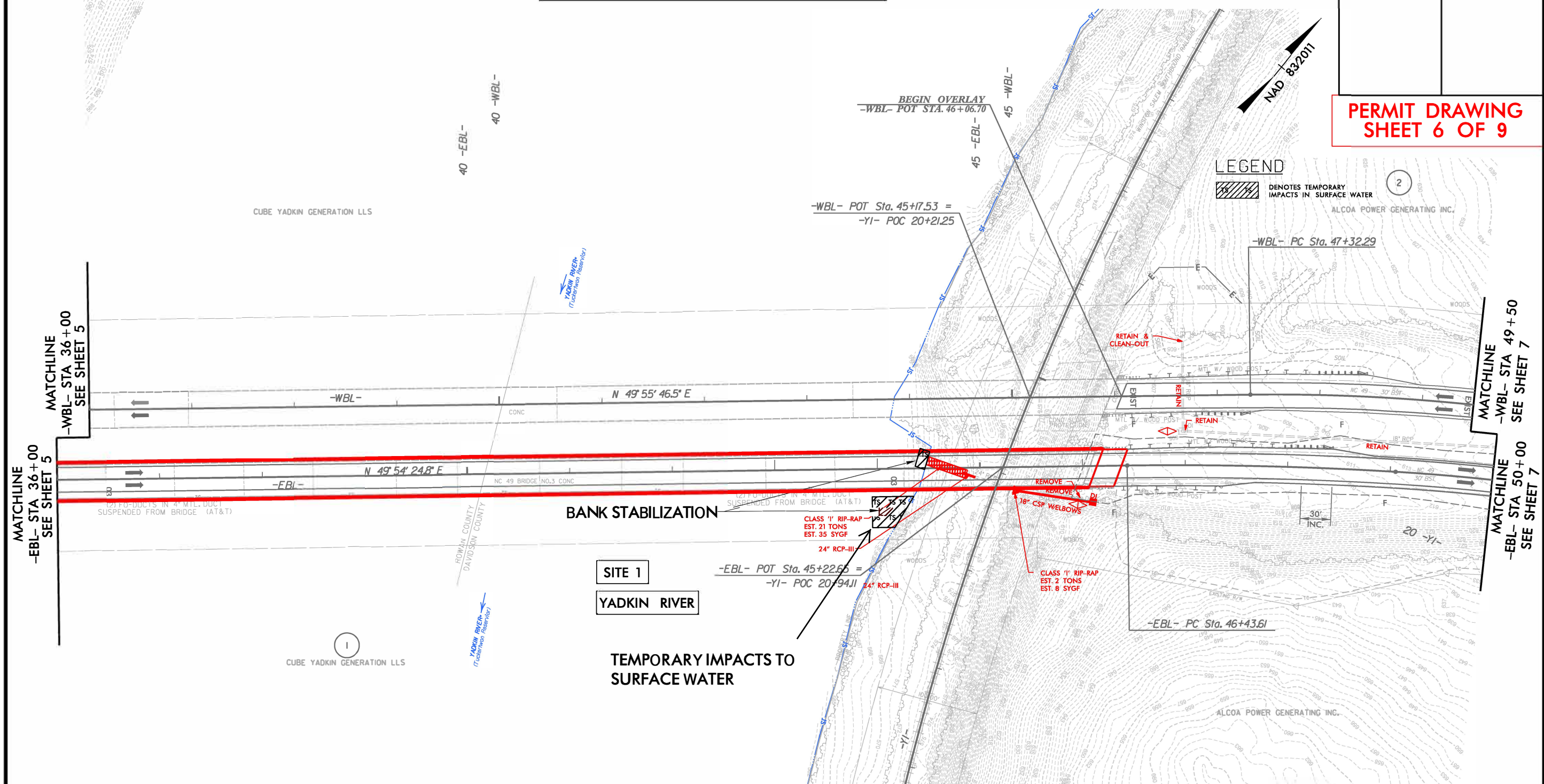
8/17/99

WETLAND & STREAM IMPACTS

HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

PROJECT REFERENCE NO. B-4626	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**PERMIT DRAWING
SHEET 6 OF 9**



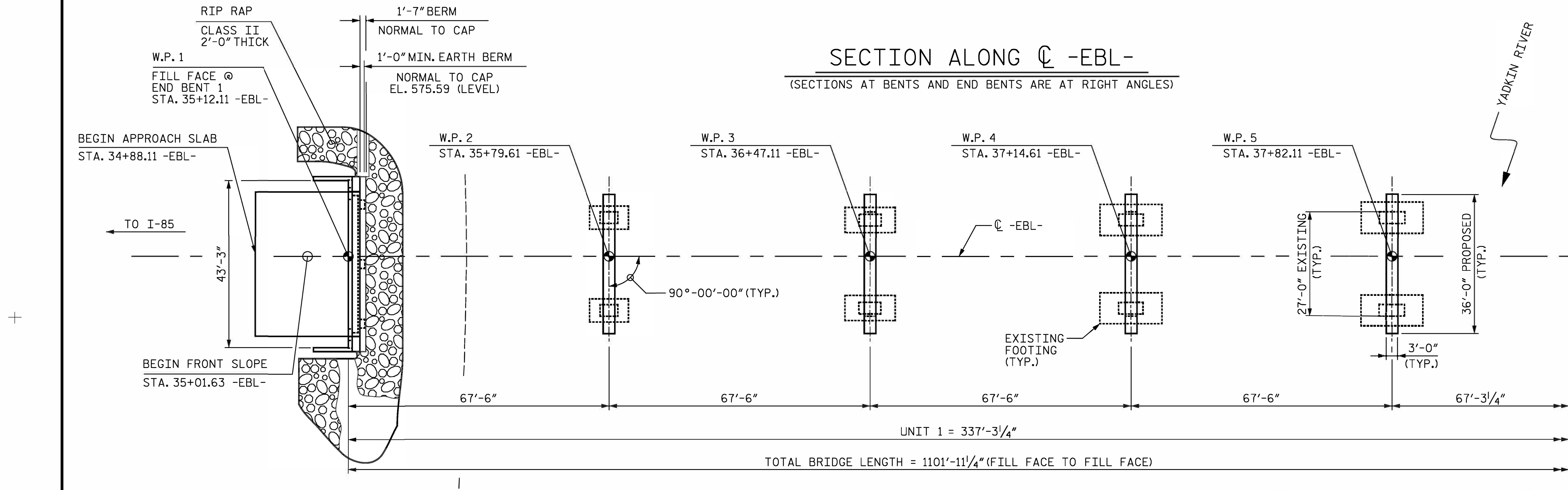
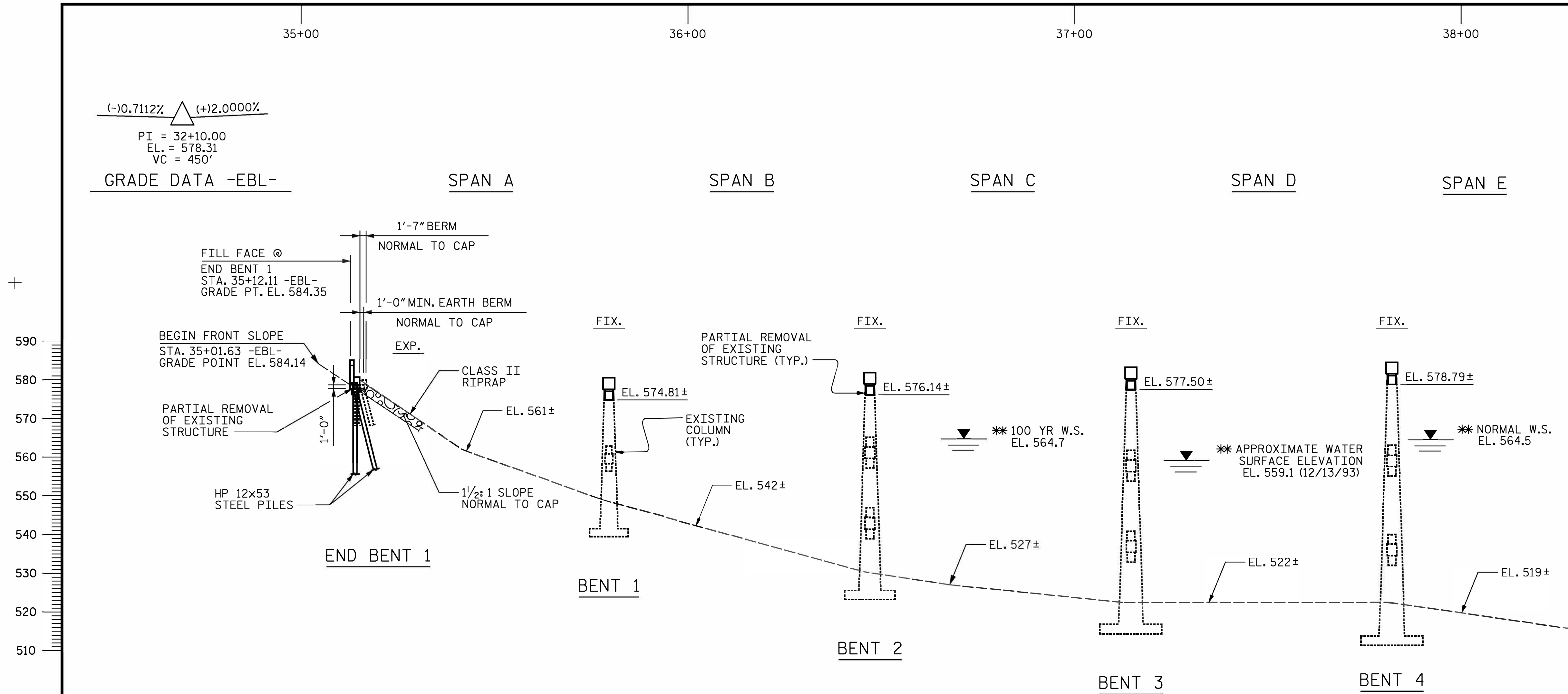
9/17/2008
4:26:26-HYD_PRRM_PSHG.dgn
HNTB

****HYDRAULIC DATA**

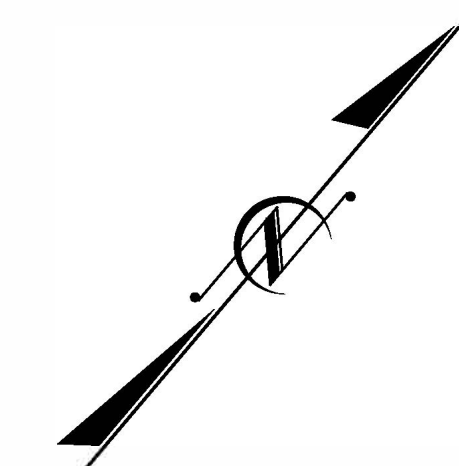
DESIGN DISCHARGE	=	129,271 CFS
FREQUENCY OF DESIGN DISCHARGE	=	50 YEAR
DESIGN HIGH WATER ELEVATION	=	564.7
DRAINAGE AREA	=	4,120 SQ. MI.
BASE DISCHARGE (Q100)	=	150,816 CFS
BASE HIGH WATER ELEVATION	=	564.7

****OVERTOPPING FLOOD DATA**

OVERTOPPING DISCHARGE	=	N/A
FREQUENCY OF OVERTOPPING FLOOD	=	>500 YR
OVERTOPPING ELEVATION	=	581.4



MATCH LINE A-A



PROJECT NO. B-4626
 STANLY, ROWAN
 AND DAVIDSON COUNTIES
 STATION: 45+22.65 -EBL-
20+94.11 -Y1-
 REHABILITATION OF BRIDGE #790003
 SHEET 1 OF 5 MILEPOST W 44.80

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 PRELIMINARY
 GENERAL DRAWING
 FOR BRIDGE OVER YADKIN
 RIVER AND WINSTON-SALEM
 SOUTHBOUND RR ON NC 8/49
 BETWEEN SR 1578 AND SR 2543

DRAWN BY : I. HARTLEY DATE : 2/19
 CHECKED BY : R. FISHER DATE : 2/19
 DESIGN ENGINEER OF RECORD : - DATE : -

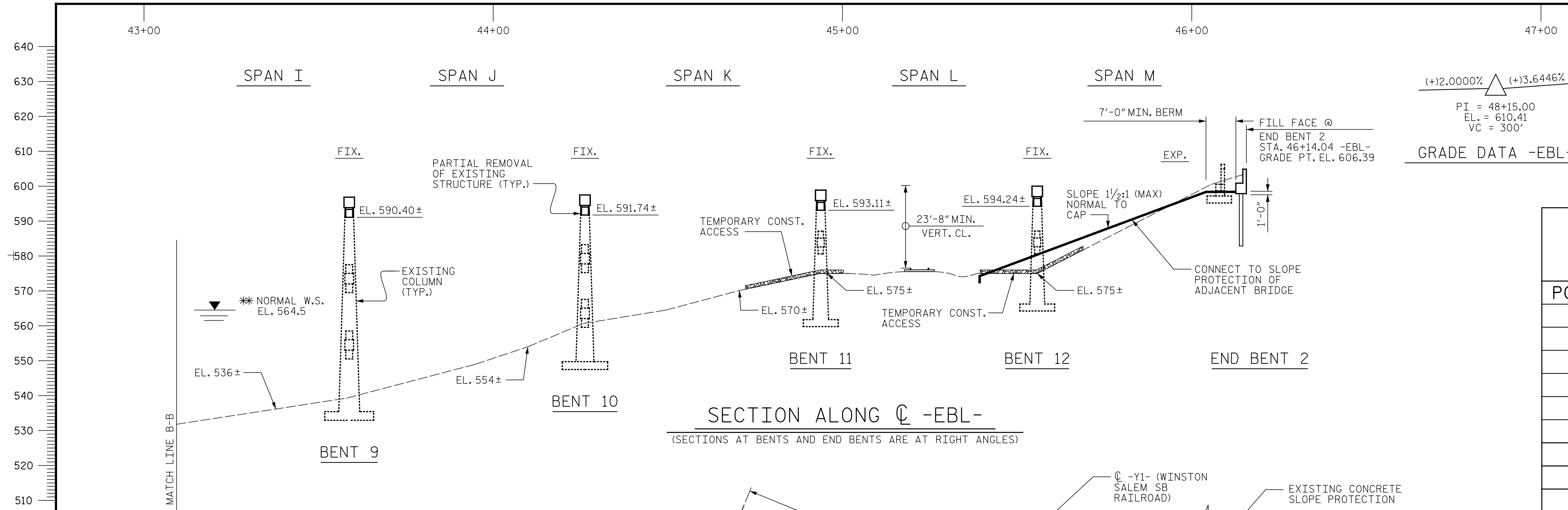
PARTIAL PLAN
 (PILES NOT SHOWN IN PLAN VIEW)

**PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION**

PLANS PREPARED BY: One Glenwood Avenue Suite 900 Raleigh, NC 27603 (919) 420-7660
Gannett Fleming
 Excellence Delivered As Promised NCLic. No. F-0270

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

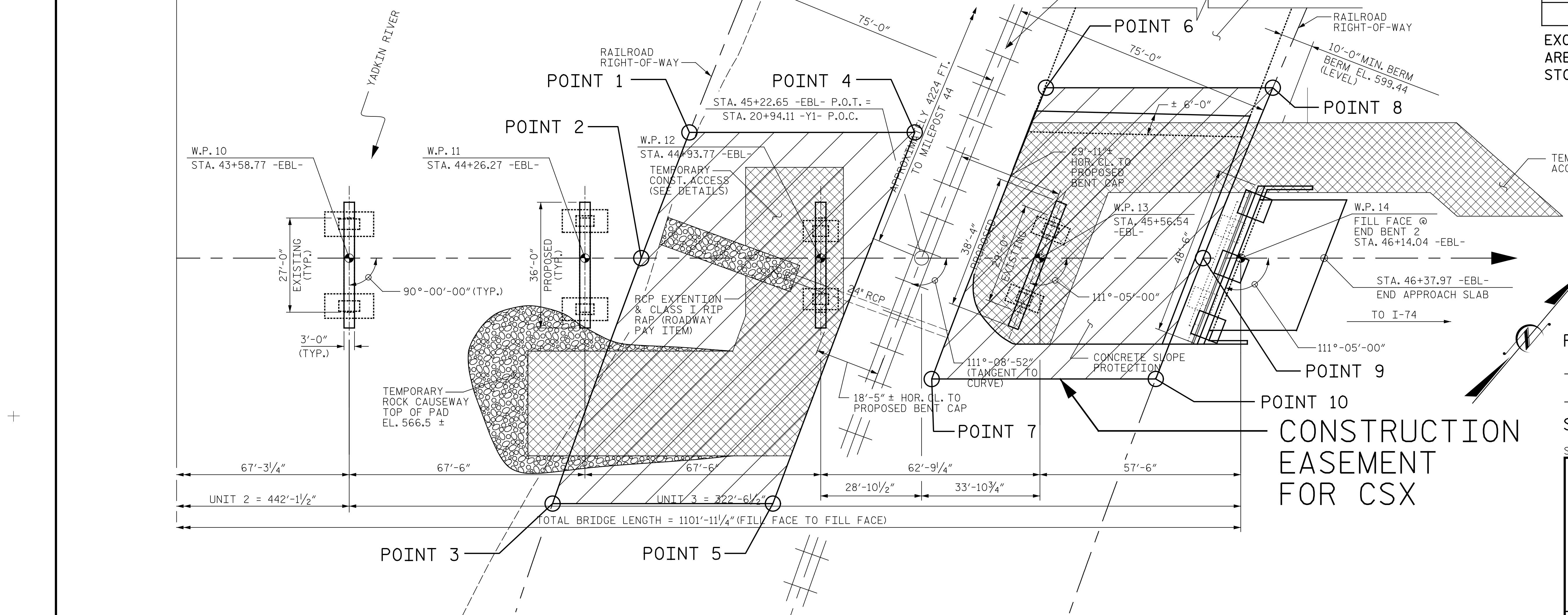
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-1
1			3			TOTAL SHEETS 5
2			4			



CSX CONST. EASEMENT

POINT	STATION	OFFSET
1	44+56.17	36.000'
2	44+42.38	0.000'
3	44+17.00	70.293'
4	45+20.69	36.000'
5	44+80.07	70.293'
6	45+58.24	48.788'
7	45+25.55	34.598'
8	46+23.22	48.788'
9	46+03.26	0.000'
10	45+89.70	34.598'

EXCAVATION AREA OF IMPACT 9.3 C.Y.
STONE QUANTITY 159 TONS



PROJECT NO. B-4626
STANLY, ROWAN
AND DAVIDSON COUNTIES
 STATION: 45+22.65 -EBL-
 SHEET 3 OF 5

CONSTRUCTION EASEMENT FOR CSX

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 FOR BRIDGE OVER YADKIN RIVER AND WINSTON-SALEM SOUTHBOUND RR ON NC 8/49 BETWEEN SR 1578 AND SR 2543

DRAWN BY : T. HARTLEY DATE : 2/19
 CHECKED BY : R. FISHER DATE : 2/19
 DESIGN ENGINEER OF RECORD : DATE :

PLANS PREPARED BY:
Gannett Fleming
 Excellence Delivered As Promised
 One Glenwood Avenue Suite 900 Raleigh, NC 27603 (919) 420-7660 NCLic. No. F-0270

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	EBL Sta. 33+18 to Sta. 36+00 RT	Temp. loading pad						0.54		189		
1	EBL Sta. 43+95 to Sta. 44+35 RT	Temp. loading pad / Class'I Rip-Rap						0.02		35		
1	EBL Sta. 44+37 to Sta. 44+51 Med	Bank Stabilization						<0.01	18			
TOTALS*:								0.57	18	224		

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 1/29/2020
 Stanly, Rowan, and Davidson Counties Bridge
 B-4626
 SHEET 9 OF 9



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

April 11, 2017

TO: Jason Dilday, Environmental Senior Specialist
Environmental Coordination & Permitting Group – Eastern Region, NES -
PDEA

CC: John Williams, Project Engineer
Project Development Group - Western Region, PDEA

FROM: Chris Manley, Environmental Program Consultant
Biological Surveys Group, NES - PDEA

SUBJECT: *Streamline Section 7 Consultation for the Northern Long-Eared Bat* associated
with the replacement of Bridge No. 3 over the Yadkin River and the Winston
Salem SB Railroad on NC 49 in Rowan County, **TIP No. B-4626**.

The North Carolina Department of Transportation (NCDOT, Division 9) proposes to replace Bridge No. 3 over the Yadkin River and the Winston Salem SB Railroad NC 49 in Rowan County, TIP No. B-4626. The existing bridge is a 13 span, reinforced concrete deck superstructure with I-beams, steel girders, reinforced concrete caps, piles, abutments, and concrete guardrails. The overall length of the structure is 1094 feet. Construction plans for the new structure have not been finalized as of this writing.

The project to replace Bridge No. 3 has been reviewed for effects on the northern long-eared bat (NLEB). As of May 4, 2015, NLEB is listed by the U.S. Fish and Wildlife Service (USFWS) as “Threatened” under the Endangered Species Act of 1973. As of April 11, 2017, NLEB is listed by USFWS (http://www.fws.gov/raleigh/species/cntylist/nc_counties.html) as “Probable/Potential” in Rowan County. USFWS also established a final rule under the authority of section 4(d) of the Endangered Species Act that provides measures for the conservation of NLEB. The USFWS has tailored the final 4(d) rule to prohibit the take of NLEB from certain activities within areas where they are in decline. This incidental take protection applies only to known NLEB occupied maternity roost trees and known NLEB hibernacula. Effective February 16, 2016, incidental take resulting from tree removal is prohibited if it 1) occurs within a ¼ mile radius of known NLEB hibernacula; or 2) cuts or destroys known occupied maternity roost trees, or any other trees within a 150-foot radius from the known maternity tree during the pup season (June 1-July 31).

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: NCDOT.GOV

Location:
CENTURY CENTER, BUILDING B
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated January 2017, **the nearest NLEB hibernacula record is 99 miles northwest of the project (EO ID 32171) and no known NLEB roost trees occur within 150 feet of the project area.** EO 32171 represents Black Rock Cliffs cave site with multiple observations from 1986 to 2011.

NCDOT has also reviewed the USFWS Asheville Field office website (http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html) for consistency with NHP records. This project is located entirely outside of the red highlighted areas (12-digit HUC) that the USFWS Asheville Field Office has determined to be representative of an area that may require consultation.

For the proposed action, NCDOT has committed to the conservation measures listed below:

- 1) No alterations of a known hibernacula entrance or interior environment if it impairs an essential behavioral pattern, including sheltering northern long-eared bats (January 1 through December 31);
- 2) No tree removal within a 0.25 mile radius of a known hibernacula (January 1 through December 31); and
- 3) No cutting or destroying a known, occupied maternity roost tree, or any other trees within a 150-foot radius from the known, occupied maternity tree during the period from June 1 through and including July 31.

NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

If you need any additional information, please contact Chris Manley at 919-707-6135.



NO ARCHAEOLOGICAL SURVEY REQUIRED 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 Group.



PROJECT INFORMATION

Project No: **B-4626** County: **Davidson, Rowan, Stanly**
 WBS No: **38443.1.FS2** Document: **PCE or CE**
 F.A. No: **BRNHP-0049(33)** Funding: State Federal

Federal Permit Required? Yes No Permit Type: ?

Project Description: NCDOT intends to replace Bridge No. 3 on NC 49/NC 8 over the Yadkin River near the intersection of the Davidson, Rowan, and Stanly County lines. The original request for cultural resources review did not include preliminary design, but proposed a study area 1100 feet long and 300 feet wide. Based on updated mapping, a revised corridor roughly 6000 feet (1828.8 meters) long was subsequently established along with preliminary designs that reduce the project footprint to existing right-of-way (ROW) with the exception of two areas along the south side of the project, close to the bridge footings where additional ROW is anticipated. Additionally, a 25-foot easement for construction and utilities was added to that revised area of potential effects (APE). Based on further planning, an additional area along the south side of NC 49 in Stanly County (west of the Yadkin River) was added to the proposed APE to accommodate a proposed haul road for launching a work barge, and for construction equipment to reach the water's edge during the bridge replacement and construction along the bridge approaches. This revised APE is now estimated to encompass 27.5 acres (nearly 11.13 hectares).

SUMMARY OF CULTURAL RESOURCES REVIEW

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

The initial review of the site maps and files archived at the North Carolina Office of State Archaeology was conducted on March 5, 2015. While no previously identified archaeological sites are recorded within the proposed APE, some landforms within the project APE appear to retain potential for archaeological resources. Additionally, several known sites are documented in similar settings, outside the current APE, but in the general vicinity (i.e. 31Dv500, 31Dv501, 31Dv269, 31Dv490, 31Dv491, 31St97, 31St98). Soils documented in the area are consistent with expectations for steeply sloped, well-drained, areas in the Uwharries region. Some of these soils are not dissimilar to those encountered in areas surrounding more significant archaeological sites identified to the south (i.e. Doerschuk). It was noted that portions of the proposed APE have clearly been modified by the construction of highway and bridge facilities, as well as nearby parking areas.

An examination of the data presented on the North Carolina State Historic Preservation Office HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) reveals that historic property locations within .5-mile of the proposed project are the former location of the Stokes Ferry Bridge (RW0653) and the current Bridge No. 3 over the Yadkin River (RW2108). No previously documented cemeteries are located within the same .5-mile radius.

An examination of soils in Davidson County presented on the National Resources Conservation Service Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>) indicates the following soil types are mapped within the proposed APE: Georgeville silt loam, 4 to 15 percent slopes, extremely boulder (GmD); and Georgeville silt loam, 15 to 45 percent slopes, extremely boulder (GmF). For the portion of the

APE within Rowan County, the following soils are mapped: Badin channery silt loam, 15 to 30 percent slopes (BaD); and Uwharrie loam, 15 to 45 percent slopes, very stony (UhE). For the portion of the proposed APE that falls within Stanly County, the following soil types are mapped: Badin channery silt loam, 8 to 15 percent slopes (BaD); Goldston very channery silt loam, 15 to 45 percent slopes (GoF). The most recent additions to the proposed APE all fall within areas mapped as possessing GoF soils.

The first (preliminary) APE for the project included a 300-foot wide corridor and, as a result, an archaeological reconnaissance to determine the scope for any further investigations seemed prudent. Archaeological Survey Required form was submitted on March 27, 2015. In 2017, the APE was revised (along with preliminary design) to reflect a much narrower project footprint that would largely remain within existing ROW. It was determined, at that time, to conduct the archaeological reconnaissance on the portions of the proposed project footprint that would extend outside the severely disturbed ROW.

An archaeological reconnaissance, consisting largely of windshield survey with visual inspection in the areas added to accommodate a 25-foot easement for construction and utilities was conducted on March 10, 2017 by NCDOT archaeologists, Shane Petersen and Brian Overton. As expected, existing ROW areas are dominated by steep slopes, cut banks, and terracing. Exposed soils appear to suggest moderate to severe erosion in some areas. In other areas outside existing ROW, exposed and exfoliating bedrock is visible in areas that are not severely sloped. None of the APE investigated in 2017 was considered to have a reasonable potential for intact significant archaeological resources. On March 14, 2017, a No Archaeological Survey Required form was produced based on these results.

On January 31, 2018, revised mapping was received based on information used to support NCDOT's permit applications (United States Army Corps of Engineers and Federal Energy Regulatory Commission permits) for the project. This mapping was used to revise the APE to its current dimensions and was used to guide further archaeological reconnaissance investigations along the south side of NC 40 in Stanly County. These reconnaissance investigations were conducted by NCDOT archaeologists, Shane Petersen and Brian Overton on April, 12, 2018. The archaeological reconnaissance was accomplished through the visual inspection (including walkover examination) of the entire portion of APE added in the January 2017 mapping.

No further archaeological investigations are required for the project within the area established as the current APE. Should the project expand outside the archaeological APE, as defined herein, further consultation will be necessary.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

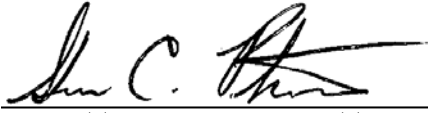
As noted on the soil mapping for Stanly County, the portion of expanded APE still falls within the area mapped as Goldston very channery silt loam, 15 to 45 percent slopes. Nevertheless, topographic mapping of the area suggested that portions of this additional APE might exhibit far less slope than suggested by the soil mapping. While portions of the additional APE do exhibit little slope, the vast majority of the additional APE is steeply sloped from the existing highway facility shoulders. Aerial photographs taken in 1026, in advance of the creation of the Tuckertown Reservoir reveal that much of this area was cleared at one time and may have been used for agricultural purposes. Nevertheless, the portion of APE that stretches between the easement for NC 49 in Stanly County and the edge of Tuckertown Reservoir/Yadkin River, is very narrow (no more than 24 meters at its widest point; generally far more narrow). This area is still considered to be very unlikely to possess intact archaeological deposits that would be considered eligible for the National Register of Historic Places.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Other: soil map

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



NCDOT ARCHAEOLOGIST

July 10, 2018

Date



Aerial photograph illustrating the updated APE (orange lines) for the proposed replacement of Bridge No. 3 over the Yadkin River on NC 49.



Aerial photograph with 2-foot contours illustrating the western end of the proposed project, the original APE (yellow) and the updated APE (orange) accommodating temporary water access.



Detail of the 1926 aerial photograph of the Tuckertown Reservoir vicinity along the Yadkin River at the Stokes Ferry location
(<https://library.digitalnc.org/cdm/compoundobject/collection/ncimages/id/11874/rec/6>).



Photograph illustrating the location of additional ROW south of NC 49, facing east.



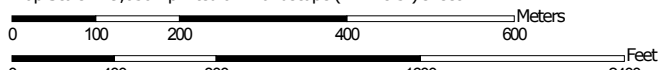
Photograph of the base of the sloped easement east of the Yadkin River boat access, facing east.

Soil Map—Davidson County, North Carolina, Rowan County, North Carolina, and Stanly County, North Carolina
(Replacement of Bridge No. 3 over the Yadkin River)



Soil Map may not be valid at this scale.


Map Scale: 1:9,030 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Davidson County, North Carolina

Survey Area Data: Version 18, Sep 26, 2017

Soil Survey Area: Rowan County, North Carolina

Survey Area Data: Version 14, Oct 3, 2017

Soil Survey Area: Stanly County, North Carolina

Survey Area Data: Version 19, Oct 3, 2017

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

MAP LEGEND

MAP INFORMATION

Date(s) aerial images were photographed: Jul 18, 2011—Oct 25, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GmD	Georgeville silt loam, 4 to 15 percent slopes, extremely bouldery	6.4	23.2%
GmF	Georgeville silt loam, 15 to 45 percent slopes, extremely bouldery	5.9	21.5%
W	Water	1.6	5.9%
Subtotals for Soil Survey Area		14.0	50.7%
Totals for Area of Interest		27.5	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaD	Badin channery silt loam, 15 to 30 percent slopes	1.5	5.5%
UhE	Uwharrie loam, 15 to 45 percent slopes, very stony	0.9	3.3%
W	Water	2.0	7.4%
Subtotals for Soil Survey Area		4.4	16.2%
Totals for Area of Interest		27.5	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaD	Badin channery silt loam, 8 to 15 percent slopes	1.2	4.2%
GoF	Goldston very channery silt loam, 15 to 45 percent slopes	7.1	25.9%
W	Water	0.8	3.0%
Subtotals for Soil Survey Area		9.1	33.1%
Totals for Area of Interest		27.5	100.0%

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
REGARDING
TIP NO. B-4626
REPLACEMENT OF ROWAN COUNTY BRIDGE NO. 3
ON NC 49/NC 8 OVER THE TUCKERTOWN RESERVOIR/YADKIN RIVER
AND THE WINSTON SALEM SOUTHBOUND RAILWAY
DAVIDSON, ROWAN, AND STANLY COUNTIES, NORTH CAROLINA

WHEREAS, the Federal Highway Administration (FHWA) proposes to fund the replacement of Rowan County Bridge No. 3 over the Tuckertown Reservoir/Yadkin River and Winston Salem Southbound Railway in North Carolina (hereafter, the Undertaking) through the Federal Highway Bridge Replacement and Rehabilitation Program; and

WHEREAS, the FHWA has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. 300101 et seq.); and

WHEREAS, the FHWA has determined that the Undertaking will have an adverse effect upon Rowan County Bridge No. 3, a property determined eligible for listing in the National Register of Historic Places (NRHP); and

WHEREAS, the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect and the ACHP has chosen not to participate in the consultation; and

WHEREAS, the North Carolina Department of Transportation (NCDOT) has participated in the consultation and has been invited by the FHWA and SHPO to be a signatory to this Memorandum of Agreement (MOA); and

WHEREAS, the FHWA has consulted with Cube Hydro Carolinas, the Catawba Indian Nation Tribal Historic Preservation Officer, the Trading Ford Historic District Preservation Association, the Badin Museum, and the United States

Forest Service regarding the effects of the Undertaking on Rowan County Bridge No. 3 and has invited them to be concurring parties to this MOA;

NOW, THEREFORE, the FHWA, SHPO, and NCDOT agree that the Undertaking will be implemented in accordance with the following stipulations to take into account the effects of the Undertaking on Rowan County Bridge No. 3.

STIPULATIONS

The FHWA will ensure that the following measures are made part of any approval or funding issued to the NCDOT for the Undertaking to fulfill the FHWA's responsibilities under 36 CRF Part 800, regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. 300101 et seq.).

I. Rowan County Bridge No. 3.

- A. Photodocumentation. Prior to the initiation of construction, the NCDOT will record the existing condition of Rowan County Bridge No. 3 in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A).

The results of the photographic recordation will be submitted to the SHPO in advance of any work taking place. The SHPO will have fifteen (15) days from receipt of the materials to review and comment. If no comments are received by the NCDOT after the fifteen (15) days, work may commence.

Additional photography may be undertaken during demolition if feasible. Dismantling of the superstructure may allow enhanced views of those structural elements for which the bridge is considered significant.

- B. Historical Record. Rowan County Bridge No. 3 is represented in the North Carolina Historic Bridge Inventory and the state architectural survey. Documentation and findings established for the B-4626 project will be added to both records. As Rowan County Bridge No. 3 derives its significance from its engineering, it will appear on NCDOT's "Historic Bridges of North Carolina" website as the first featured example in a new section devoted to technological innovation. By highlighting specific bridges, the educational utility of the website should achieve increased focus and effectiveness in

alerting the public to historic bridges, as well as NCDOT's efforts to preserve and record them.

SHPO and the concurring parties will be afforded opportunity to review and comment on the Rowan County Bridge No. 3 website feature. If no comments are received from the SHPO or concurring parties within thirty (30) days of confirmed receipt, the NCDOT can assume that the SHPO and concurring parties do not object to the feature.

Should any of the parties notified have questions, comments or desire a meeting to discuss the feature, the FHWA and NCDOT will arrange a joint consultation to address such questions and comments. If the questions and/or comments cannot be resolved, the parties will use Stipulation III below to resolve any disputes.

II. Unanticipated Discovery.

In accordance with 36 CFR 800.11(a) if the NCDOT identifies additional cultural resources during construction and determines them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the FHWA and SHPO contacted within forty-eight (48) hours. If after consultation with the Signatory Parties additional mitigation is determined necessary, the NCDOT, in consultation with the other Signatory Parties, will develop and implement appropriate protection/mitigation measures for the resource(s). The NCDOT will notify the SHPO and FHWA of any additional cultural resources that are determined to be not eligible for NRHP listing. Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

III. Dispute Resolution.

Should any of the Signatory or Concurring Parties object within thirty (30) days to any plans or documentation provided for review pursuant to this MOA, the FHWA will consult with the objecting party(ies) to resolve the objection. If the FHWA or the objecting party(ies) determines that the objection cannot be resolved, the FHWA will forward all documentation relevant to the dispute to the ACHP. Within thirty (30) days after receipt of all pertinent documentation, the ACHP will either:

Provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding the dispute, or

Notify the FHWA that it will comment pursuant to 36 CFR 800.7(c) and proceed to comment. The FHWA will take into account any ACHP comment provided in response to such a request in accordance with 36 CFR 800.7(c)(4) with reference to the subject of the dispute. Any recommendation or comment provided by the ACHP will be understood to pertain only to the subject of the dispute; the FHWA's and NCDOT's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

IV. Amendments.

Should any of the Signatory or Concurring Parties to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, that (those) party(ies) will immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation III will be followed.

V. Termination.

Any of the Signatory Parties may terminate the MOA by providing thirty (30) days written notice to the other parties, provided that the signatories will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

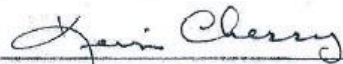
VI. Duration.

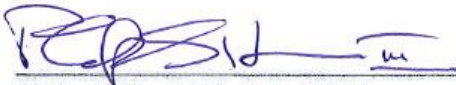
Unless terminated pursuant to Stipulation V, this MOA will be in effect until December 31, 2027.

Execution of this Memorandum of Agreement by the FHWA, SHPO, and NCDOT, its subsequent filing with the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking and that the FHWA has taken into account the effects of the Undertaking on Rowan County Bridge No. 3.

AGREE:

 26 March 2018
for John F. Sullivan III, P.E. Date
North Carolina Division Administrator
Federal Highway Administration

 3/26/2018 +
Kevin Cherry, Ph.D Date
North Carolina State Historic Preservation Officer
North Carolina Department of Cultural Resources

 04/12/2018
Philip S. Harris III, P.E., C.P.M. Date
Environmental Analysis Unit Head
North Carolina Department of Transportation

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
REGARDING
TIP NO. B-4626
REPLACEMENT OF ROWAN COUNTY BRIDGE NO. 3
ON NC 49/NC 8 OVER THE TUCKERTOWN RESERVOIR/YADKIN RIVER
AND THE WINSTON SALEM SOUTHBOUND RAILWAY
DAVIDSON, ROWAN, AND STANLY COUNTIES, NORTH CAROLINA

Execution of this Memorandum of Agreement by the FHWA, SHPO, and NCDOT, its subsequent filing with the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking, defined above, and that the FHWA has taken into account the effects of the Undertaking on the historic property.

CONCUR:

Cube Hydro Carolinas

Date

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
REGARDING
TIP NO. B-4626
REPLACEMENT OF ROWAN COUNTY BRIDGE NO. 3
ON NC 49/NC 8 OVER THE TUCKERTOWN RESERVOIR/YADKIN RIVER
AND THE WINSTON SALEM SOUTHBOUND RAILWAY
DAVIDSON, ROWAN, AND STANLY COUNTIES, NORTH CAROLINA

Execution of this Memorandum of Agreement by the FHWA, SHPO, and NCDOT, its subsequent filing with the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking, defined above, and that the FHWA has taken into account the effects of the Undertaking on the historic property.

CONCUR:

The Catawba Indian Nation Tribal Historic Preservation Office

Date

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
REGARDING
TIP NO. B-4626
REPLACEMENT OF ROWAN COUNTY BRIDGE NO. 3
ON NC 49/NC 8 OVER THE TUCKERTOWN RESERVOIR/YADKIN RIVER
AND THE WINSTON SALEM SOUTHBOUND RAILWAY
DAVIDSON, ROWAN, AND STANLY COUNTIES, NORTH CAROLINA

Execution of this Memorandum of Agreement by the FHWA, SHPO, and NCDOT, its subsequent filing with the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking, defined above, and that the FHWA has taken into account the effects of the Undertaking on the historic property.

CONCUR:

Trading Ford Historic District Preservation Association

Date

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
REGARDING
TIP NO. B-4626
REPLACEMENT OF ROWAN COUNTY BRIDGE NO. 3
ON NC 49/NC 8 OVER THE TUCKERTOWN RESERVOIR/YADKIN RIVER
AND THE WINSTON SALEM SOUTHBOUND RAILWAY
DAVIDSON, ROWAN, AND STANLY COUNTIES, NORTH CAROLINA

Execution of this Memorandum of Agreement by the FHWA, SHPO, and NCDOT, its subsequent filing with the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking, defined above, and that the FHWA has taken into account the effects of the Undertaking on the historic property.

CONCUR:

Badin Museum

Date

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
REGARDING
TIP NO. B-4626
REPLACEMENT OF ROWAN COUNTY BRIDGE NO. 3
ON NC 49/NC 8 OVER THE TUCKERTOWN RESERVOIR/YADKIN RIVER
AND THE WINSTON SALEM SOUTHBOUND RAILWAY
DAVIDSON, ROWAN, AND STANLY COUNTIES, NORTH CAROLINA

Execution of this Memorandum of Agreement by the FHWA, SHPO, and NCDOT, its subsequent filing with the ACHP, and implementation of its terms evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking, defined above, and that the FHWA has taken into account the effects of the Undertaking on the historic property.

CONCUR:

United States Forest Service

Date

APPENDIX A

Historic Structures and Landscape Recordation Plan Replacement of Rowan County Bridge No. 3 on NC 49/NC8 over the Tuckertown Reservoir/Yadkin River and the Winston Salem Southbound Railway Davidson, Rowan, and Stanly Counties, North Carolina TIP Project B-4626

PHOTOGRAPHIC REQUIREMENTS

- Overall views of Rowan County Bridge Number 3 and its surroundings.
- Images showing the details of the superstructure and substructure of Rowan County Bridge Number 3.

PHOTOGRAPHIC FORMAT

- All images will be captured, labeled, and stored according to the North Carolina State Historic Preservation Office's, "Policy and Guidelines for Digital Photography for Historic Property Surveys, National Register Nominations and NRAC PowerPoint Presentations, Revised November 2008."

COPIES AND CURATION

- One (1) set each of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation, and the Historic Architecture Group of NCDOT.
- Any existing mechanical or engineering drawings of or related to Rowan County Bridge Number 3 will be gathered, stored, and curated by HPO.

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



January 15, 2020

Attention: David Stutts
NC Department of Transportation
1581 Mail Service Center
Raleigh, NC 27699

Re. THPO #	Project #	Project Description
2020-193-66	B-4626	Replacement of Bridge No. 3 on NC 49 over Yadkin River and Winston Salem South-bound Railroad in Davidson, Rowan and Stanly Counties

Dear Mr. Stutts,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail caitlinh@ccppcrafts.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer