

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

Action Id. SAW-2021-00611 County: Davidson County U.S.G.S. Quad: High Rock

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: Jeff Hemphill  
NCDOT  
Address: 1598 Mail Service Center  
Raleigh, North Carolina 27699  
Telephone Number: (919) 707-6126

Size (acres) 7.1 (approximate) Nearest Town New London  
Nearest Waterway Yadkin River River Basin Upper Pee Dee  
USGS HUC 03040103 Coordinates Latitude: 35.505836  
Longitude: -80.183851

Location description: The site is located along NC 8/49 over the Yadkin River at NCDOT Bridge #3 in Rowan and Stanly Counties, North Carolina. The site is approximately 1600 feet southwest of NC 8/49, Tuckertown Road intersection. NCDOT has identified the project as B-4626.

Description of projects area and activity: This authorization is for the permanent and temporary discharge of clean fill material associated with an existing bridge replacement project. Permanent impacts include the placement of rip rap within 18 linear feet of stream channel for bank stabilization. Temporary impacts are within 0.57 acre of jurisdictional tributary/stream and is associated with the installation of a temporary causeway for construction (see attached plans).

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

Authorization: Regional General Permit Number and/or Nationwide Permit Number: NWP 14 Linear Transportation Projects  
SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND/OR SPECIAL CONDITIONS

**Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated March 19, 2021. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.**

**Special Conditions:**

- 1. The Permittee shall fully implement the Memorandum of Agreement between the Permittee, the North Carolina State Historic Preservation Officer and the Federal Highway Administration, dated, April 12, 2018, including Appendix A, which is incorporated herein by reference.**

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

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management in Morehead City, NC, at (252) 808-2808.

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

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact **Andrew Williams at (919) 554-4884 or Andrew.E.Williams2@usace.army.mil.**

Corps Regulatory Official: Maide Matthews Date: 2021.05.04  
13:37:41 -04'00' Date: **May 4, 2021**  
Expiration Date of Verification: **March 18, 2022**

#### **A. Determination of Jurisdiction:**

1.  There are waters, including wetlands, on the above described project area that may be subject to Section 404 of the Clean Water Act (CWA) (33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction. Please note, if work is authorized by either a general or nationwide permit, and you wish to request an appeal of an approved JD, the appeal must be received by the Corps and the appeal process concluded prior to the commencement of any work in waters of the United States and prior to any work that could alter the hydrology of waters of the United States.
2.  There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
3.  There are waters, including wetlands, within the above described project area that are subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
4.  A jurisdiction determination was not completed with this request. Therefore, this is not an appealable action. However, you may request an approved JD, which is an appealable action, by contacting the Corps for further instruction.
5.  The aquatic resources within the above described project area have been identified under a previous action. Please reference the approved jurisdictional determination issued . Action ID: **SAW-** .

**B. Basis For Jurisdictional Determination:** N/A. An Approved JD has not been completed.

**C. Remarks:** USACE has verified the delineation associated with this project, based on a desktop review of information submitted with the application and contained in the administrative record for this project.

#### **D. Attention USDA Program Participants**

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

#### **E. Appeals Information for Approved Jurisdiction Determinations (as indicated in A2 and A3 above).**

If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers  
South Atlantic Division  
Attn: Philip Shannin, Appeal Review Officer  
60 Forsyth Street SW, FLOOR M9  
Atlanta, Georgia 30303-8803

Phone: (404) 562-5136

EMAIL: [PHILIP.A.SHANNIN@USACE.ARMY.MIL](mailto:PHILIP.A.SHANNIN@USACE.ARMY.MIL)

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by: **Not Applicable**.

**It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.**

*Monte  
Matthews*

Date: 2021.05.04

13:38:28 -04'00'

Corps Regulatory Official: \_\_\_\_\_

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at

[http://corpsmapu.usace.army.mil/cm\\_apex/f?p=136:4:0](http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0).

Copy furnished (via email):

**Amy Euliss**  
NCDOT Division 9  
[aeuliss@ncdot.gov](mailto:aeuliss@ncdot.gov)

**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.

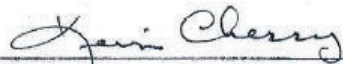
Unless terminated pursuant to Stipulation V, this MOA will be in effect until December 31, 2027.


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.



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)							





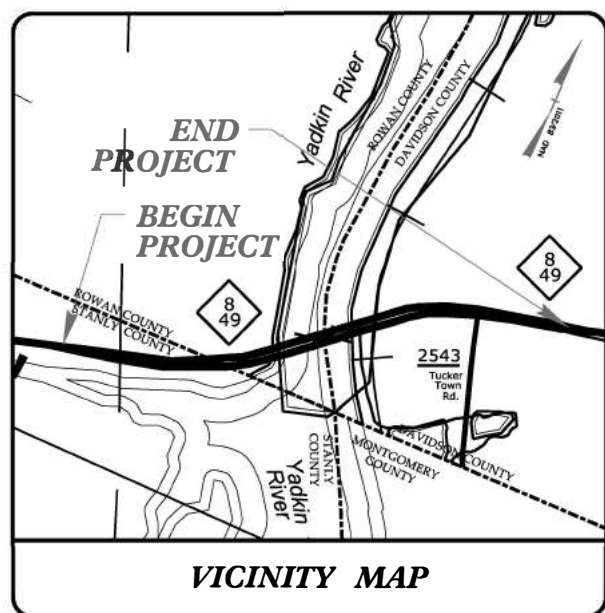


09/28/19

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



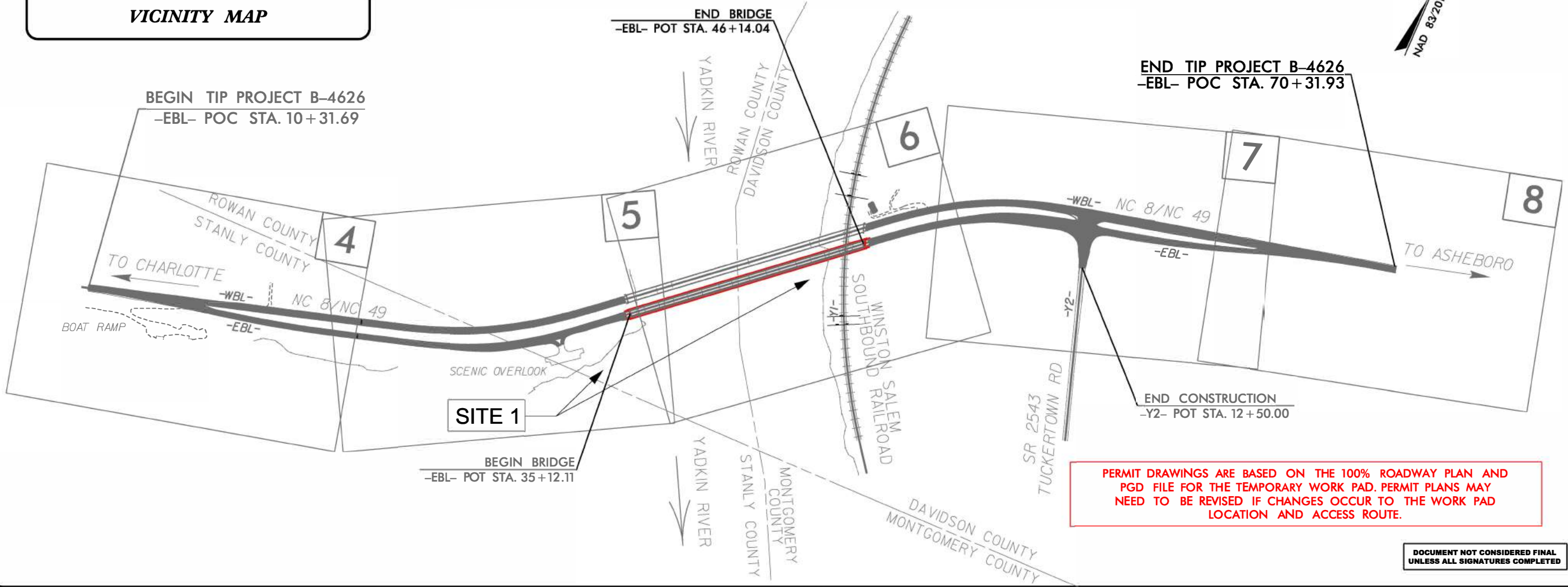
**STANLY, ROWAN, AND DAVIDSON COUNTIES**

**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**

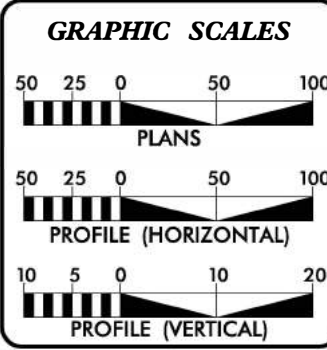
**PERMIT DRAWING SHEET 1 OF 9**



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

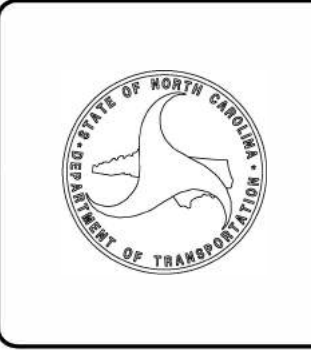
**JACQUELYN BOWLES, PE**  
NCDOT CONTACT

**HYDRAULICS ENGINEER**

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

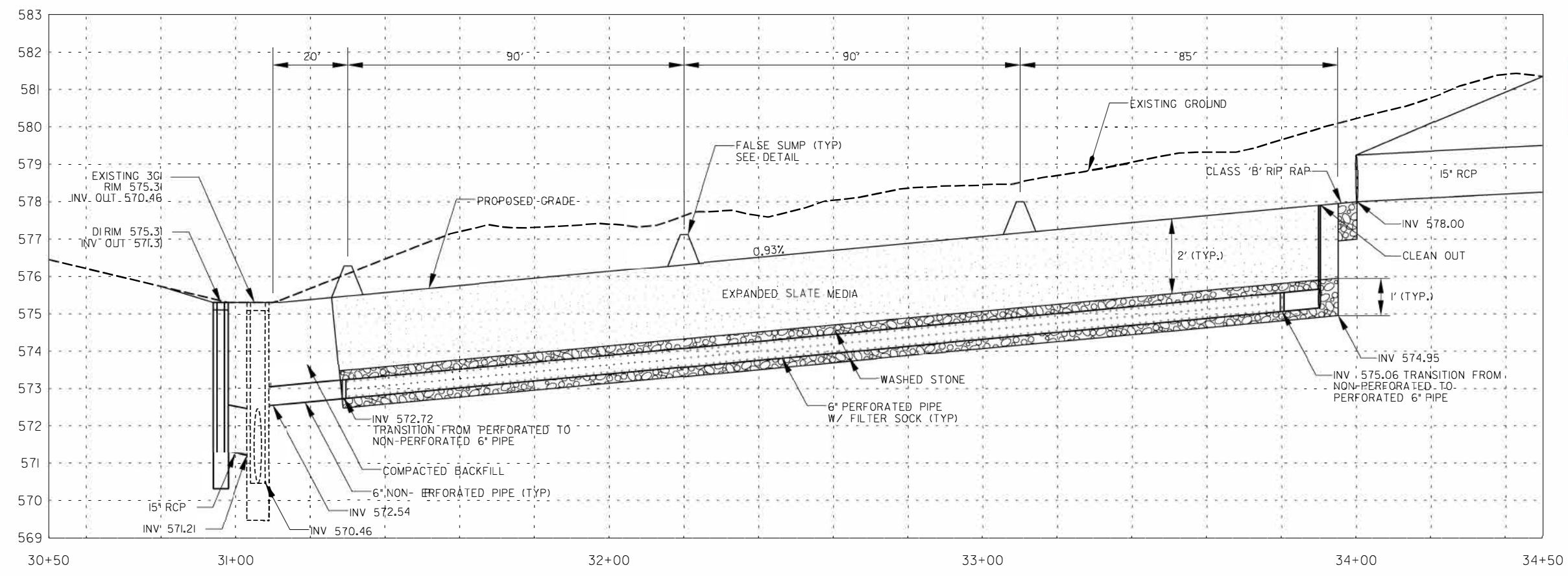


1/28/2020  
N:\B-4626-HYD-PRM\_PSHIL\_TSH.dgn  
HNTB

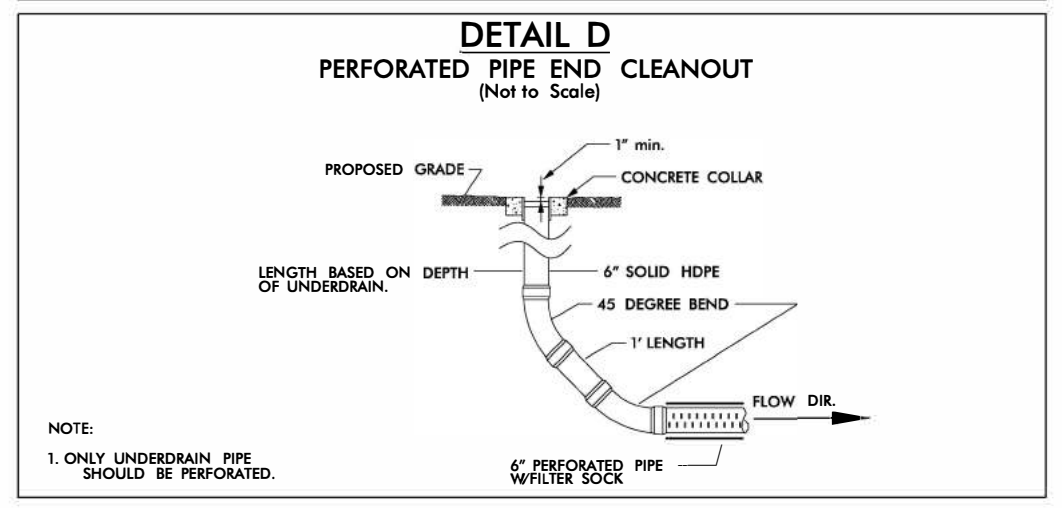
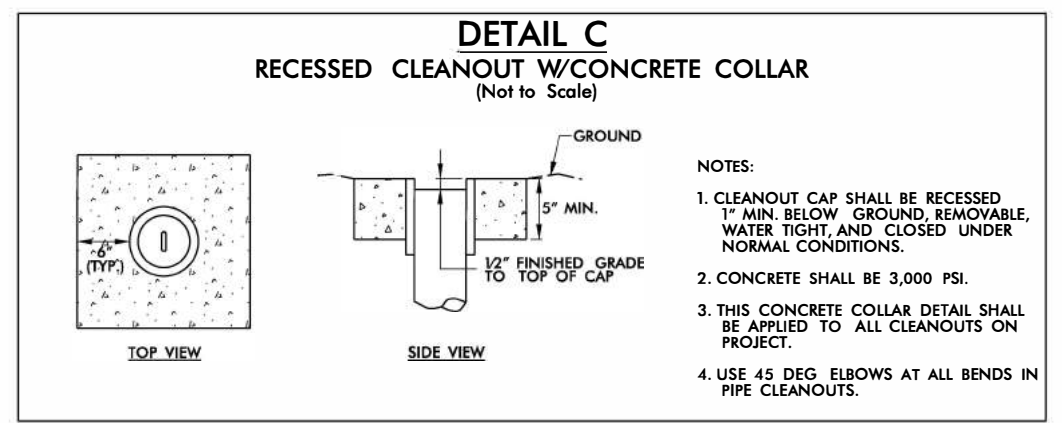
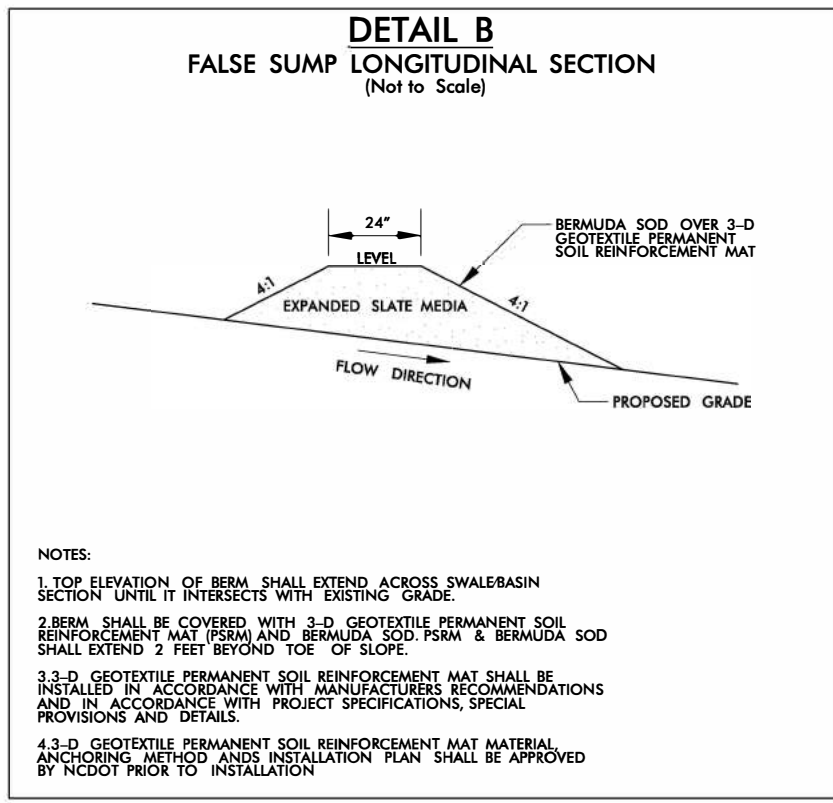
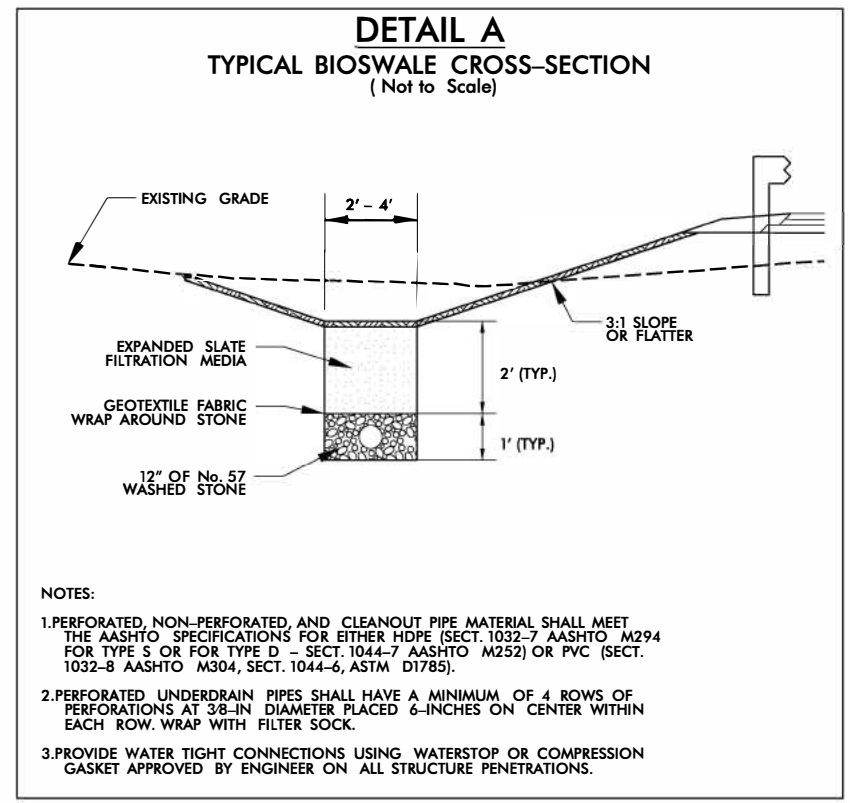
8/17/99

PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>2D-1</b>
RW SHEET NO.	HYDRAULICS ENGINEER

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



**PERMIT DRAWING  
 SHEET 2 OF 9**



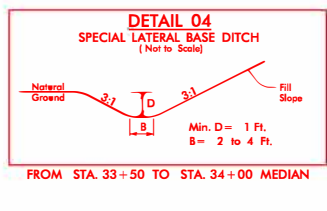
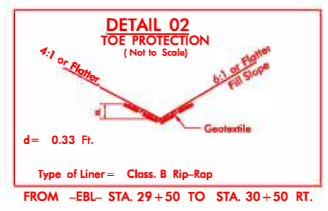
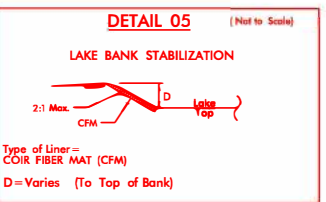
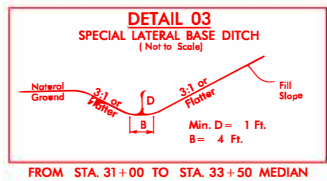
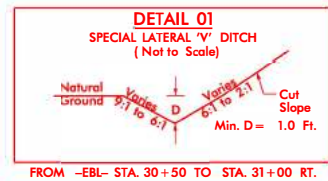
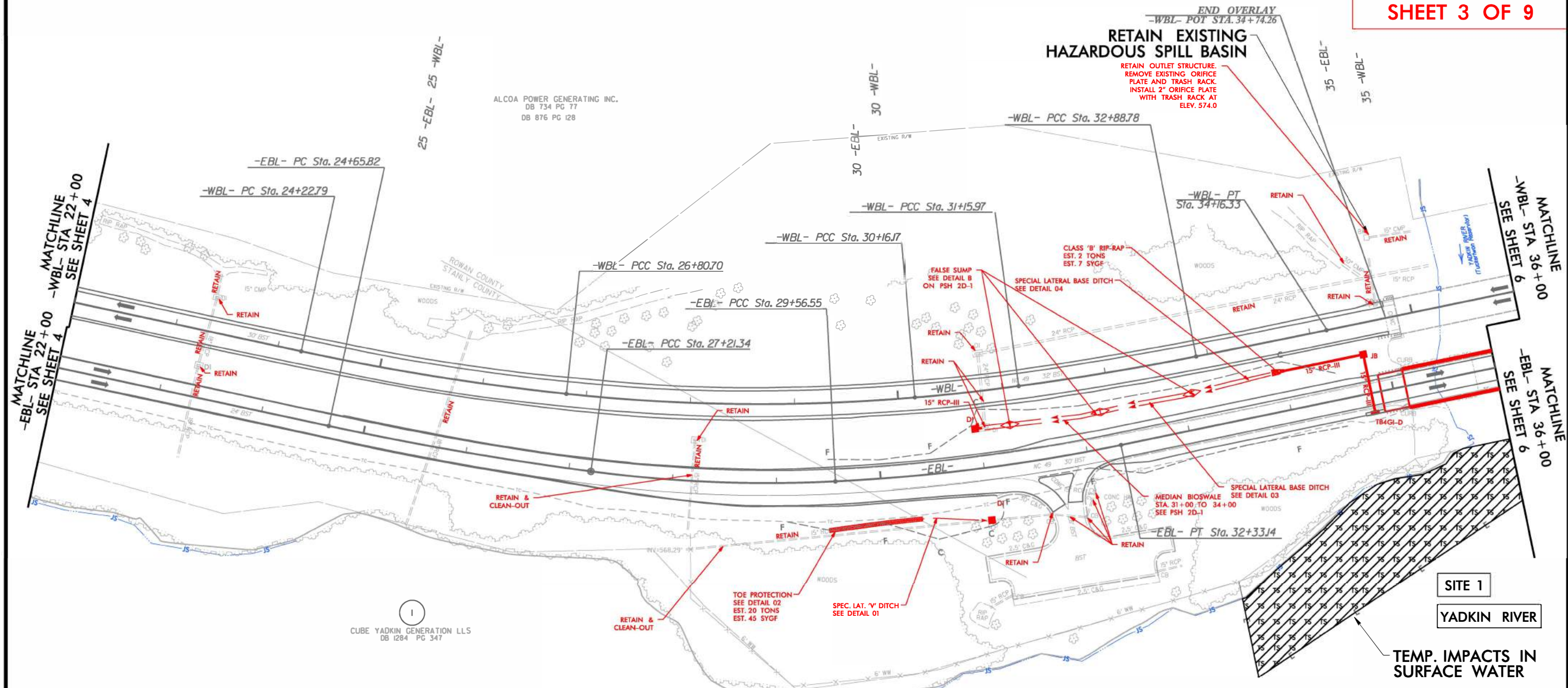
3/16/2008  
 4:28:26\_HYD\_PRRM\_PSH2\_detail.dgn  
 HNTB



**LEGEND**  
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

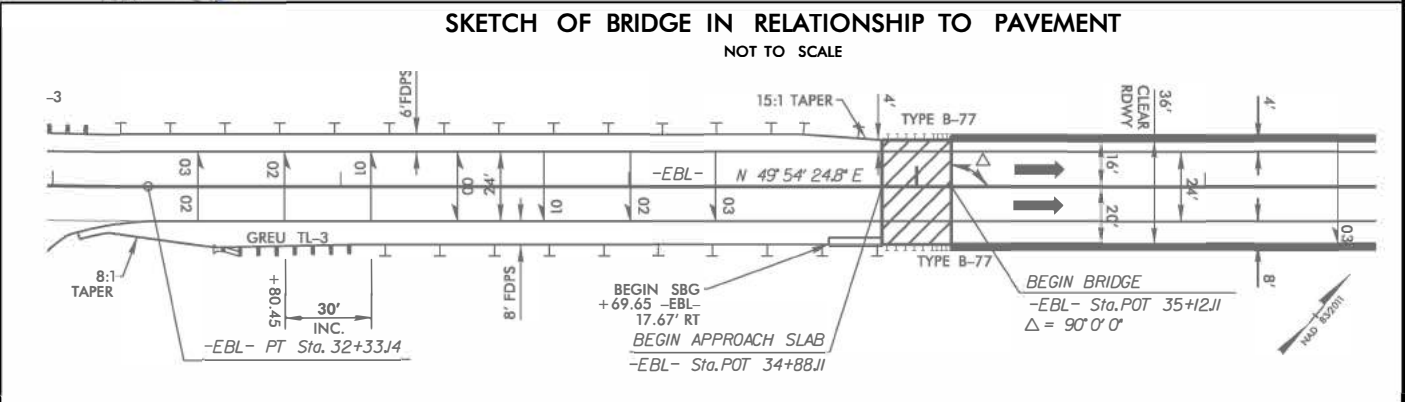
**PERMIT DRAWING SHEET 3 OF 9**

# WETLAND & STREAM IMPACTS



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

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



**TEMP. IMPACTS IN SURFACE WATER**

4/2/2019 10:36:16 -HYD\_PRM\_PSH.dgn



8/17/99

**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>B-4626</b>	SHEET NO. <b>5</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

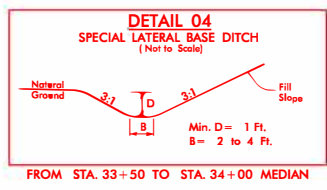
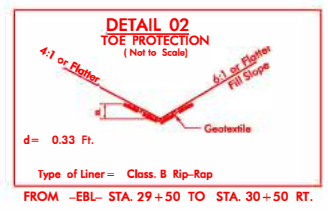
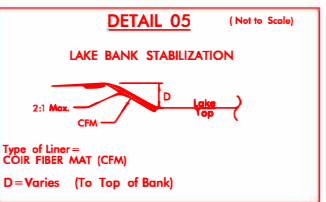
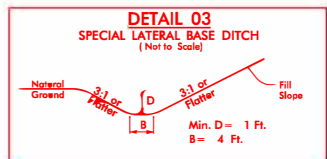
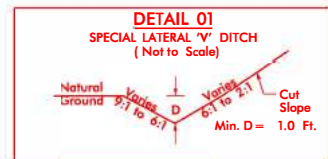
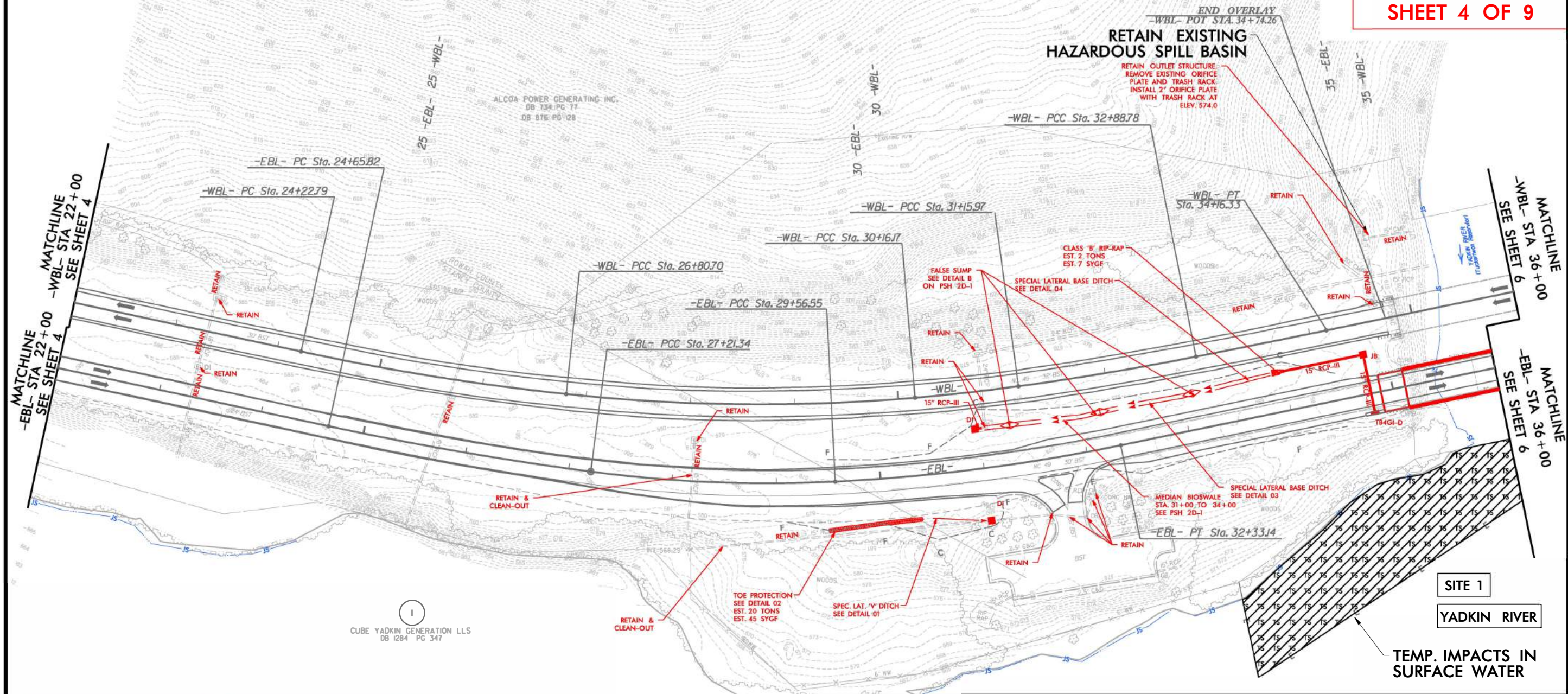
# WETLAND & STREAM IMPACTS

**LEGEND**

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

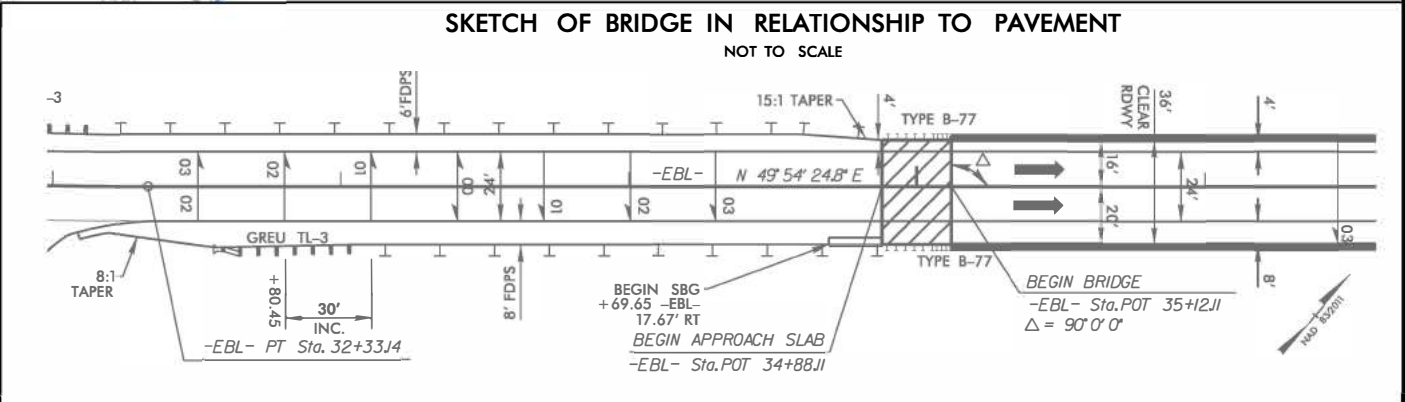
NAD 83/2011

**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 10:36:36 -HYD\_PRM\_PSHS.dgn



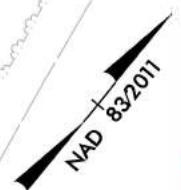
8/17/99

# 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>B-4626</b>	SHEET NO. <b>6</b>
RW SHEET NO	
ROADWAY DESIGN ENGINEER	HYDRAULIC ENGINEER

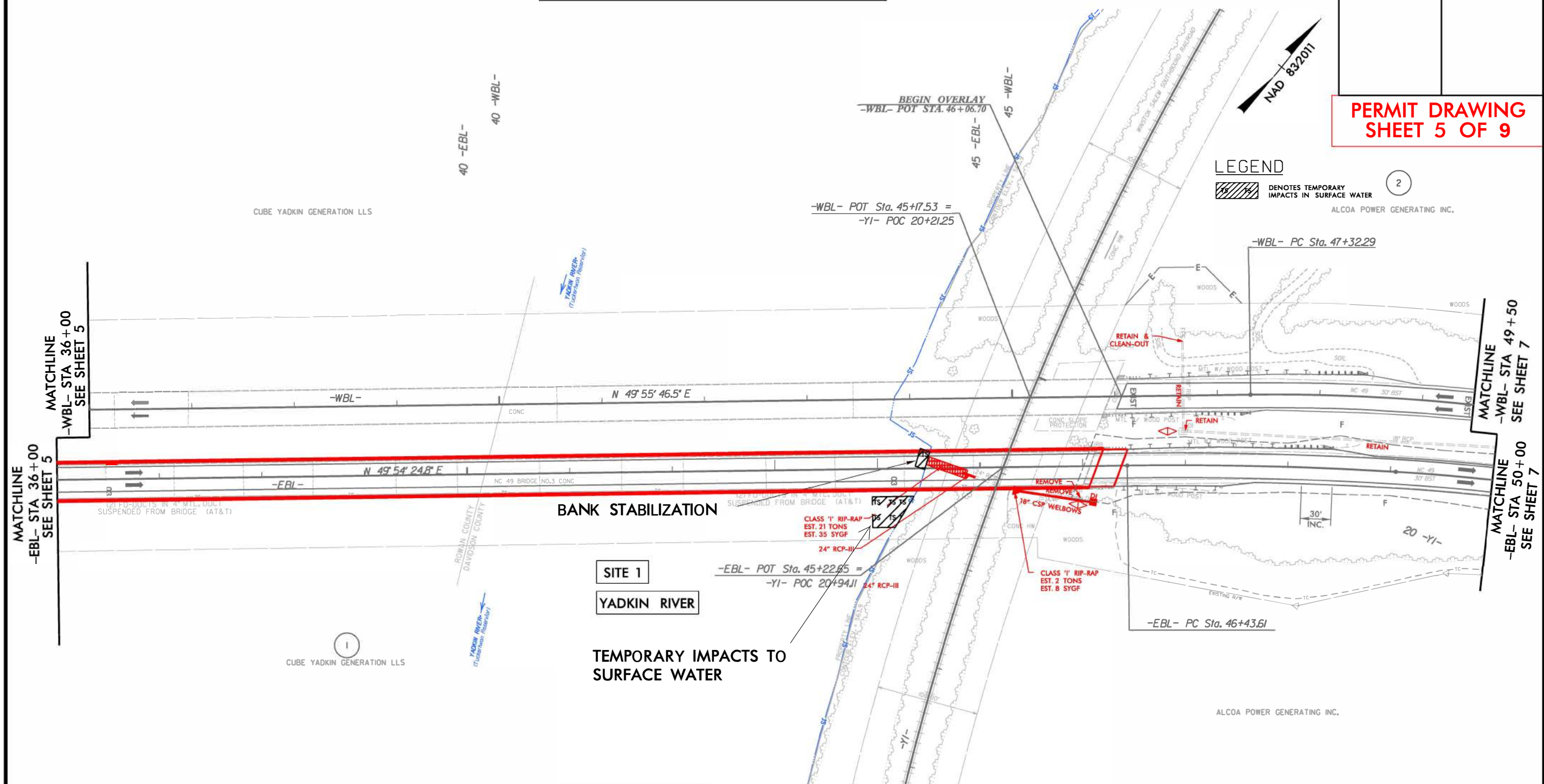
**PERMIT DRAWING  
SHEET 5 OF 9**



### LEGEND

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 ALCOA POWER GENERATING INC.

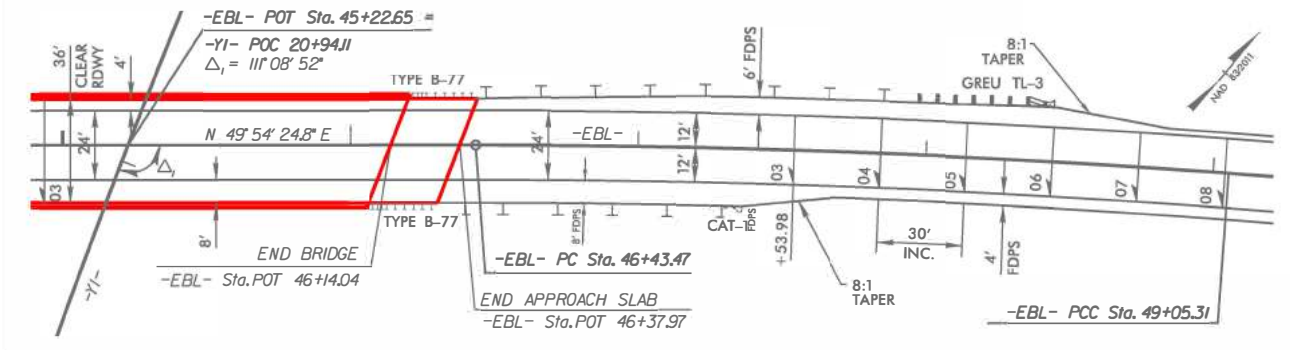


### BANK STABILIZATION

**SITE 1  
YADKIN RIVER**

### TEMPORARY IMPACTS TO SURFACE WATER

### SKETCH OF BRIDGE IN RELATIONSHIP TO PAVEMENT NOT TO SCALE



9/17/2008  
4:26:26-HYD\_PRL\_PSH6.dgn  
HNTB



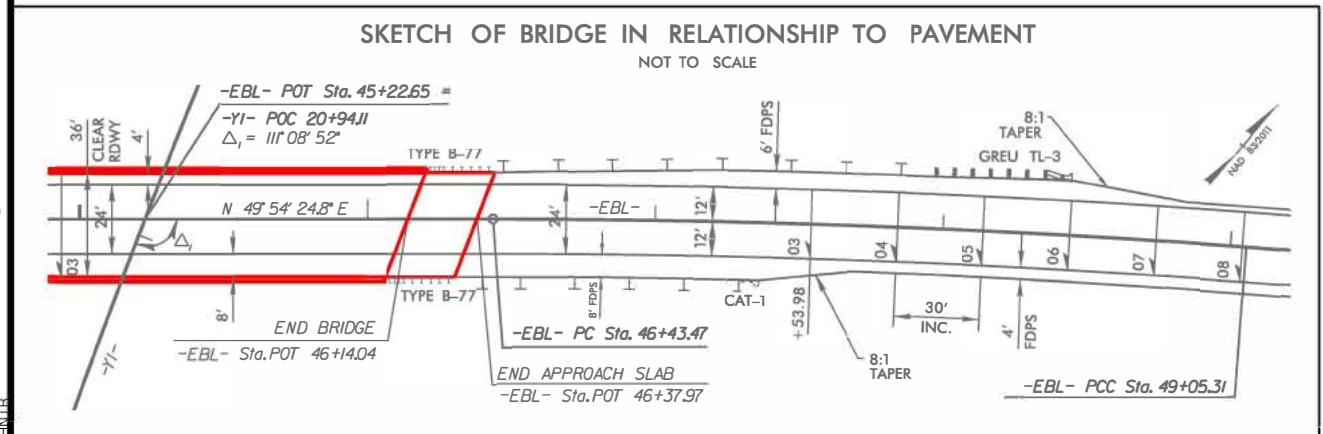
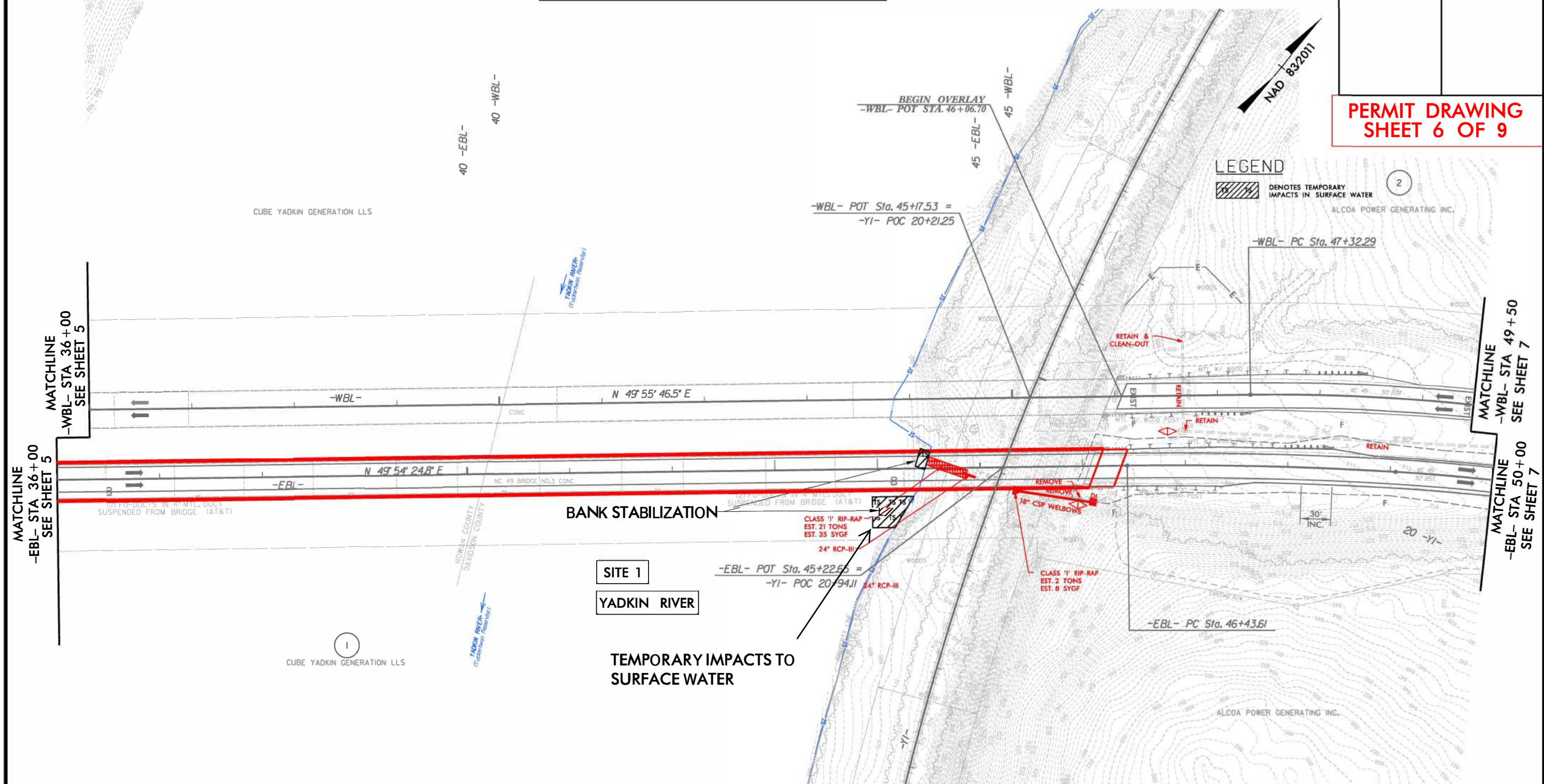
8/17/99

# 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>B-4626</b>	SHEET NO. <b>6</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**PERMIT DRAWING  
SHEET 6 OF 9**



9/17/2008  
B-4626-HYD-PRM\_PSHG.dgn



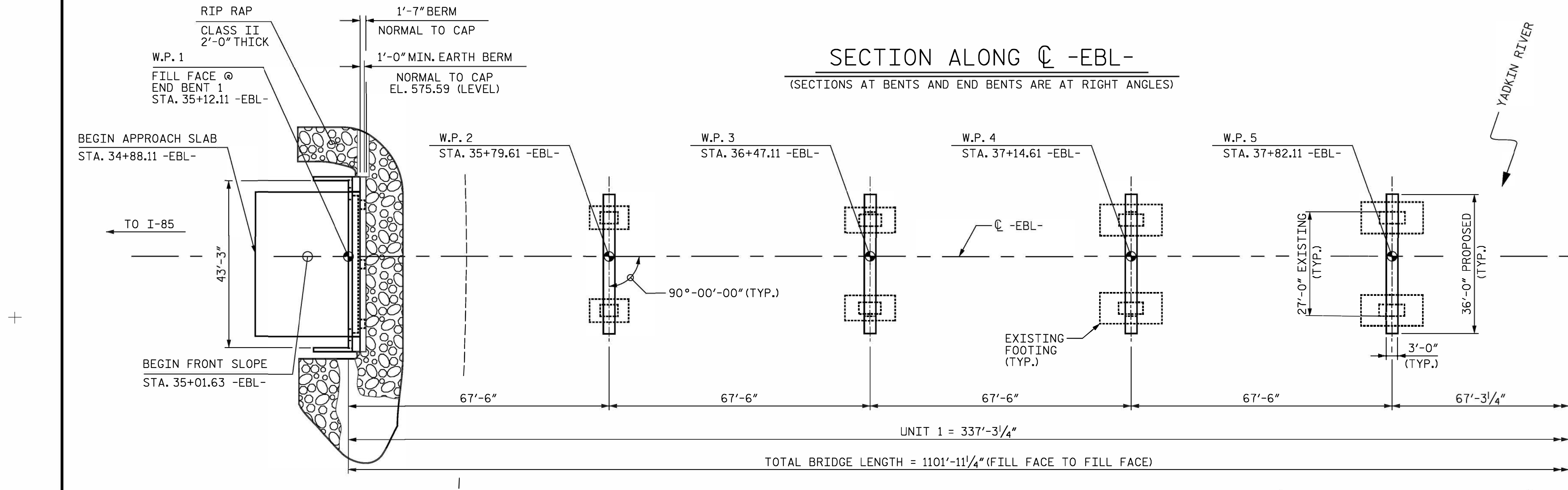
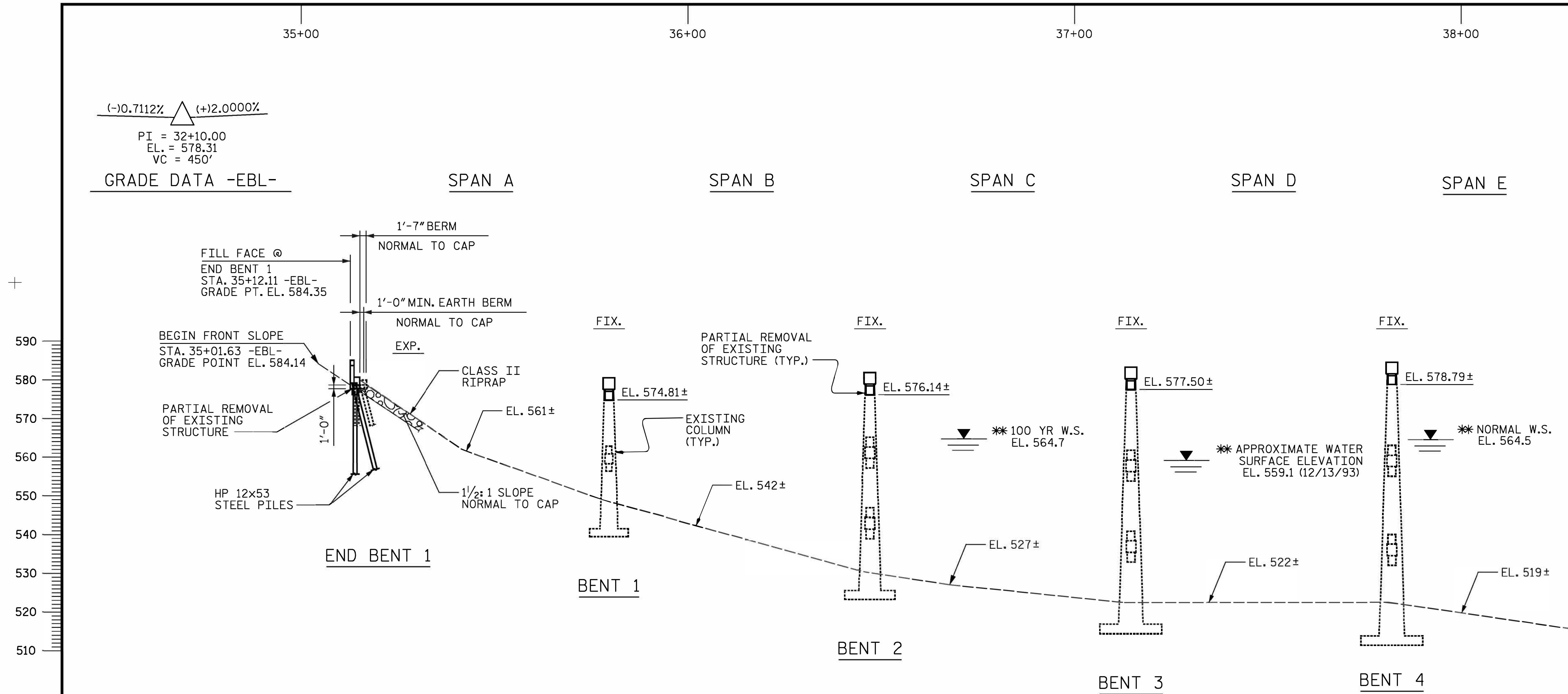
\*\*HYDRULIC DATA OBTAINED FROM ADJACENT BRIDGE PERMIT DRAWING (BRIDGE NO. 790008) PLANS DATED MARCH 1996. SHEET 7 OF 9

**\*\*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



**PARTIAL PLAN**

(PILES NOT SHOWN IN PLAN VIEW)

**PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION**

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

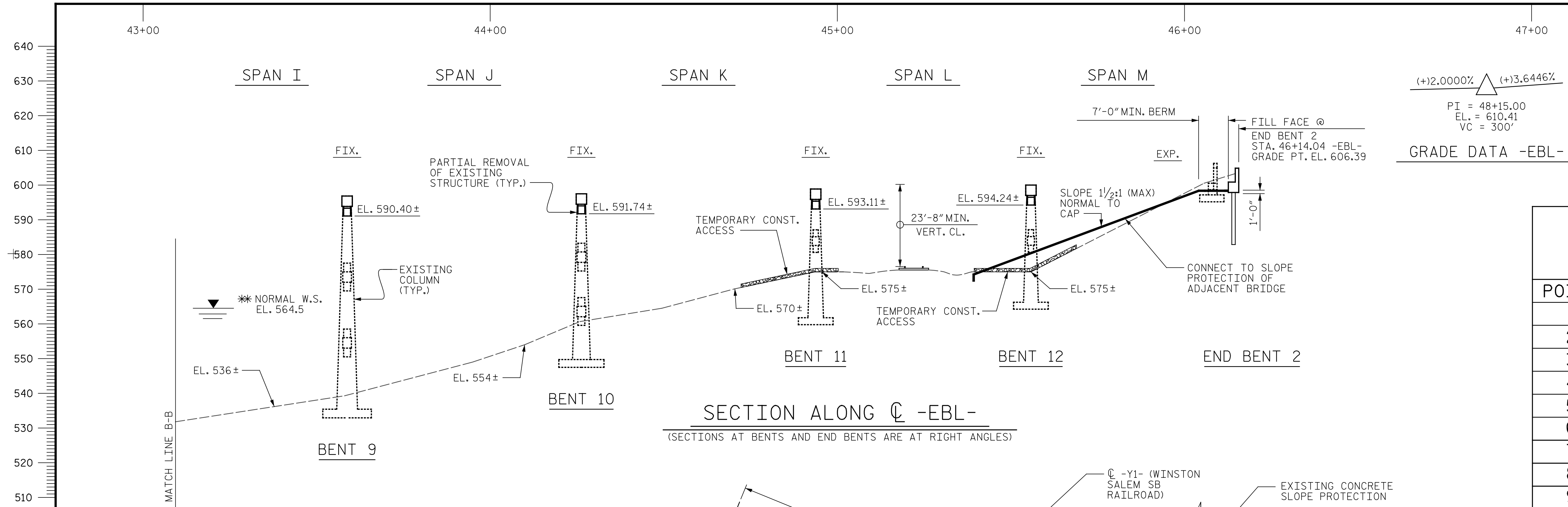
PROJECT NO. B-4626  
 STANLY, ROWAN AND DAVIDSON COUNTIES  
 STATION: 45+22.65 -EBL-  
20+94.11 -Y1-  
 REHABILITATION OF BRIDGE #790003 MILEPOST W 44.80

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

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

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

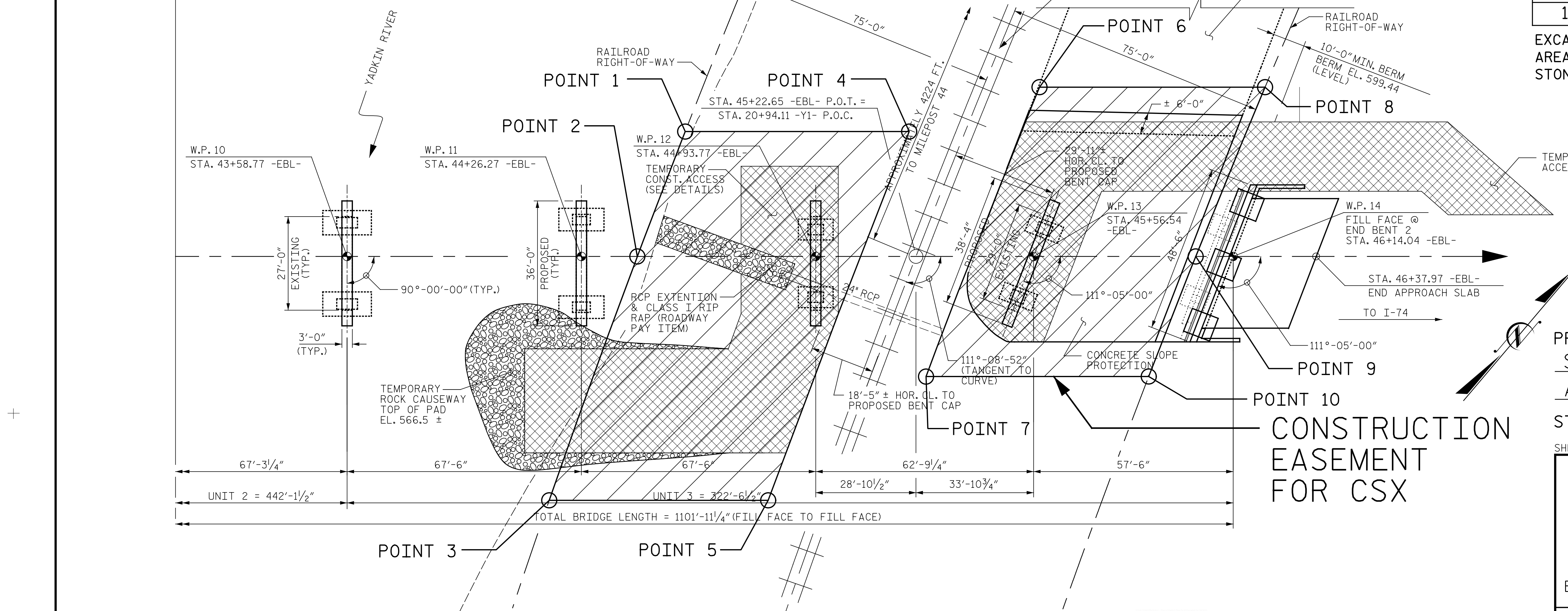




### CSX CONST. EASEMENT

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: 0.14 AC. 159 TONS



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

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**  
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			
<b>TOTALS*:</b>								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





NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

DIONNE DELLI-GATTI  
Secretary

S. DANIEL SMITH  
Director

April 22, 2021  
Davidson County  
NCDWR Project No. 20210345  
Bridges 3 and 8 Yadkin River  
TIP No. B-4626

### APPROVAL of 401 WATER QUALITY CERTIFICATION with ADDITIONAL CONDITIONS

Mr. Philip S. Harris III  
NCDOT Environmental Analysis Unit  
1598 MSC  
Raleigh, NC 27699

Dear Mr. Harris:

You have our approval, in accordance with the conditions listed below, for the following impacts related to the replacement of Bridge 3 superstructure and deck preservation treatment to Bridge 8 on NC 8/49 over the Yadkin River (Tuckertown Reservoir) in Davidson, Rowan and Stanly Counties.

#### Stream Impacts in the Yadkin PeeDee River Basin

Site	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
	Bank Stabilization	Work Pad/Causeway		
1	18	224	242	-
<b>Totals</b>	<b>18</b>	<b>224</b>	<b>242</b>	<b>-</b>

**Total Stream Impacts: 242 linear feet**

The project shall be constructed in accordance with your application dated received March 19, 2021 and subsequent information received on April 19, 2021. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4135. This certification corresponds to the Corps Nationwide Permit 14. In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total



North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617  
919.707.9000

impacts to perennial streams (now or in the future) exceed 300 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s) and any additional conditions listed below.

**Condition(s) of Certification:**

**Project Specific Conditions**

1. The post-construction removal of the workpad/causeway must return the project site to its preconstruction contours and elevations and all riprap removed. The impacted areas along the banks shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]
2. Bridge superstructure demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
3. All necessary precautions and management practices shall be in place during deck preservation operations to ensure that discharges of waste materials do not enter surface waters. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
4. Bridge deck drains shall not discharge directly into the river. Stormwater shall be directed across the bridges and pre-treated through site-appropriate means as described in the application. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]

**General Conditions**

1. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
2. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S. or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
3. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
4. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
5. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
6. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
7. Heavy equipment shall be operated from the banks rather than in the stream channel to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
8. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]





9. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
10. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
11. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
12. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
13. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
14. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
15. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer (or appointee) shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
16. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
17. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3)]:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
  - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
18. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [15A NCAC 02H.0506(b)(3) and (c)(3)]

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition





with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

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

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

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

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

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Dave Wanucha at (336) 403-5655 or [dave.wanucha@ncdenr.gov](mailto:dave.wanucha@ncdenr.gov).

Sincerely,

DocuSigned by:  
  
9C9886312DCD474...  
S. Daniel Smith, Director  
Division of Water Resources

Electronic copy only distribution:

Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office  
Janet Mizzi, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Jeffery Hemphill, NCDOT, EAU ([jhemphill@ncdot.gov](mailto:jhemphill@ncdot.gov))  
Amy Euliss, NCDOT Division 9  
File Copy



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](mailto:caitlinh@ccppcrafts.com).

Sincerely,

Wenonah G. Haire  
Tribal Historic Preservation Officer

## Hemphill, Jeffrey L

---

**From:** Jim Brooks <ticswnst@bellsouth.net>  
**Sent:** Tuesday, February 19, 2019 8:01 PM  
**To:** Trantham, Randall D  
**Subject:** [External] Fwd: Bridge on highway 49

**CAUTION:** External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [report.spam@nc.gov](mailto:report.spam@nc.gov)

David  
See below  
Jim  
Sent from my iPhone

Confidentiality Notice: This email may contain confidential and privileged material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by others is strictly prohibited. If you have received this communication in error, please notify the sender immediately by email and delete the message and any file attachments from your computer. Thank you.



Please consider the environment before you print.

Begin forwarded message:

**From:** Hmarona <[hmarona@embarqmail.com](mailto:hmarona@embarqmail.com)>  
**Date:** February 19, 2019 at 7:09:31 PM EST  
**To:** [ticswnst@bellsouth.net](mailto:ticswnst@bellsouth.net)  
**Subject:** Bridge on highway 49

Jim  
Bridge on highway 49 ( Davidson county) at tucker st reservoir  
Eastbound lanes has retired AT&T  
Greensboro-Charlotte long haul fiber  
Cable in pipe attached to bridge

Thanks  
Homer  
FE-AT&T LONG HAUL

Sent from my iPhone



## 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:***

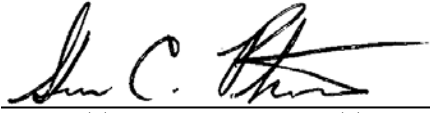
As noted on the soil mapping for Stanly County, the portion of expanded APE still falls within the area mapped as Goldston very channery silt loam, 15 to 45 percent slopes. Nevertheless, topographic mapping of the area suggested that portions of this additional APE might exhibit far less slope than suggested 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.

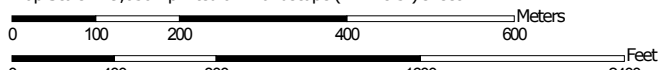


Soil Map—Davidson County, North Carolina, Rowan County, North Carolina, and Stanly County, North Carolina  
(Replacement of Bridge No. 3 over the Yadkin River)



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%
<b>Subtotals for Soil Survey Area</b>		<b>14.0</b>	<b>50.7%</b>
<b>Totals for Area of Interest</b>		<b>27.5</b>	<b>100.0%</b>

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%
<b>Subtotals for Soil Survey Area</b>		<b>4.4</b>	<b>16.2%</b>
<b>Totals for Area of Interest</b>		<b>27.5</b>	<b>100.0%</b>

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%
<b>Subtotals for Soil Survey Area</b>		<b>9.1</b>	<b>33.1%</b>
<b>Totals for Area of Interest</b>		<b>27.5</b>	<b>100.0%</b>



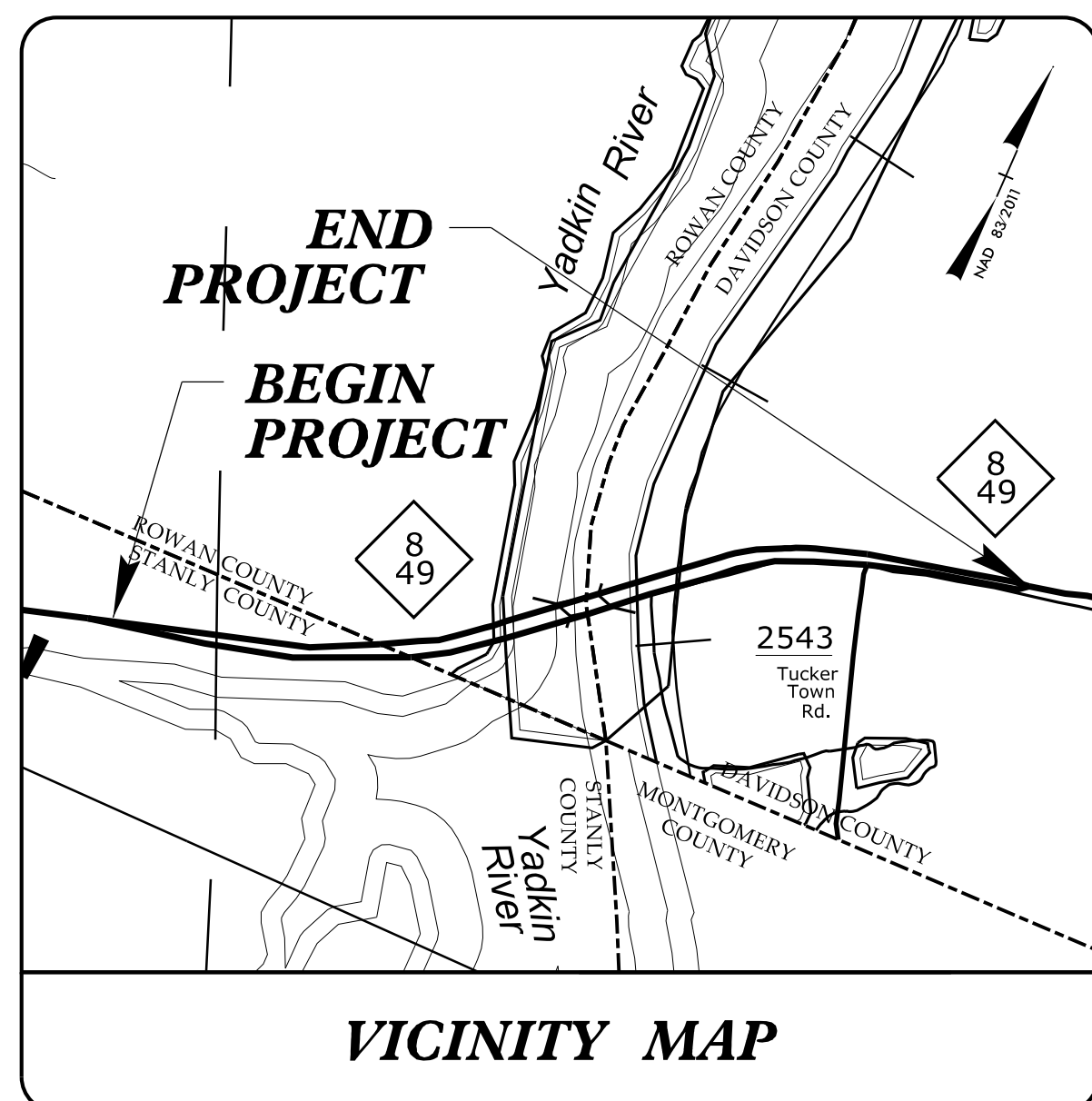
See Sheet 1A For Index of Sheets  
 See Sheet 1B For Conventional Symbols  
 See Sheet 1C-1 Thru 1C-4 For Survey Control Sheets

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)	RWUTIL	
38443.3.3	BRNHP-0049(33)	CONST	

TIP PROJECT: B-4626

CONTRACT: C204446

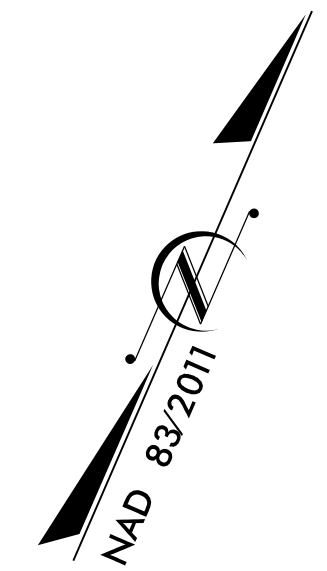
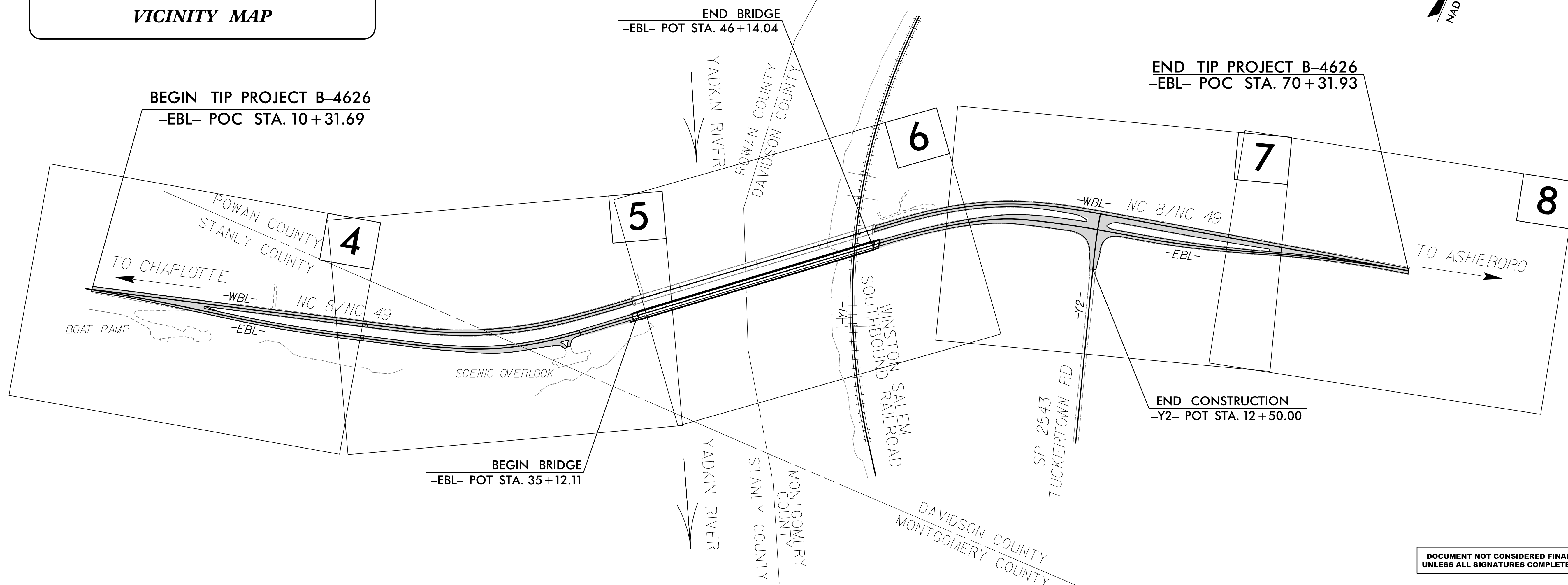


FINAL PLANS

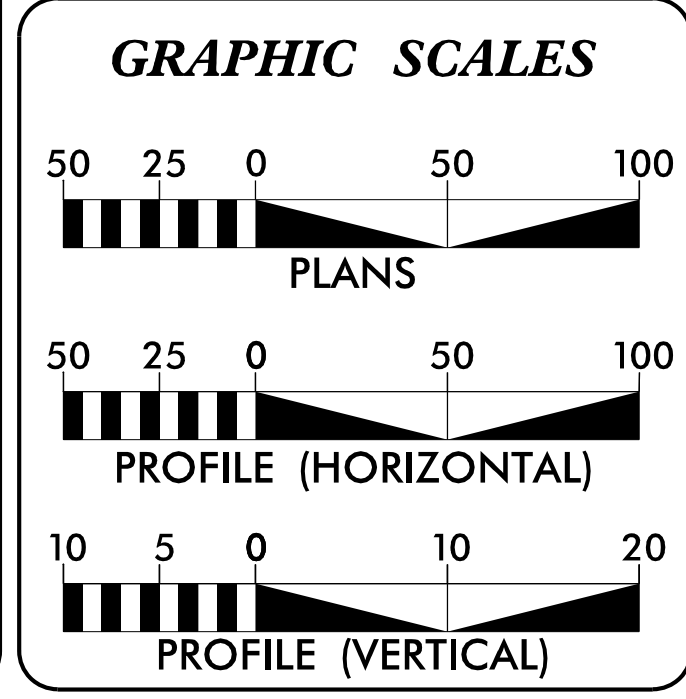
**STANLY, ROWAN, AND DAVIDSON COUNTIES**

**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**



DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



**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**

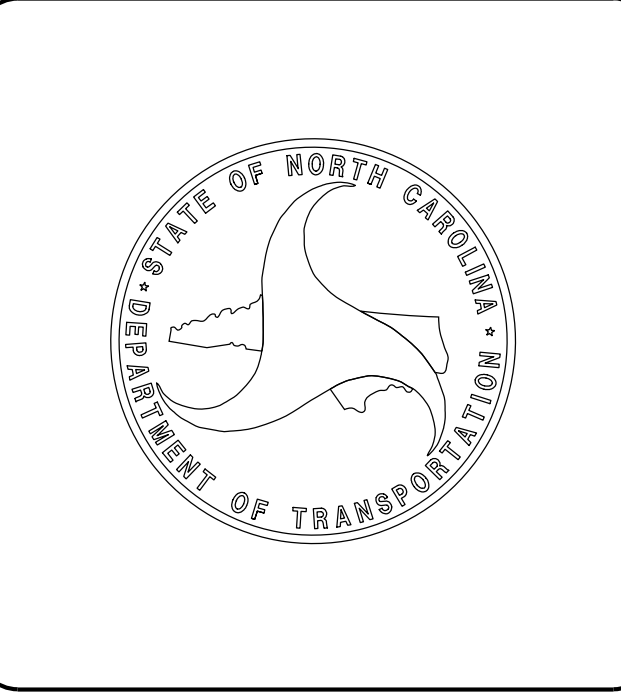
**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_

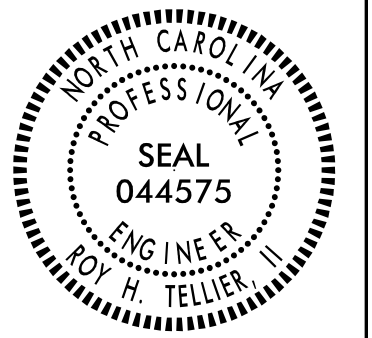

SIGNATURE: \_\_\_\_\_

P.E. (Seal for Roy H. Tellier)

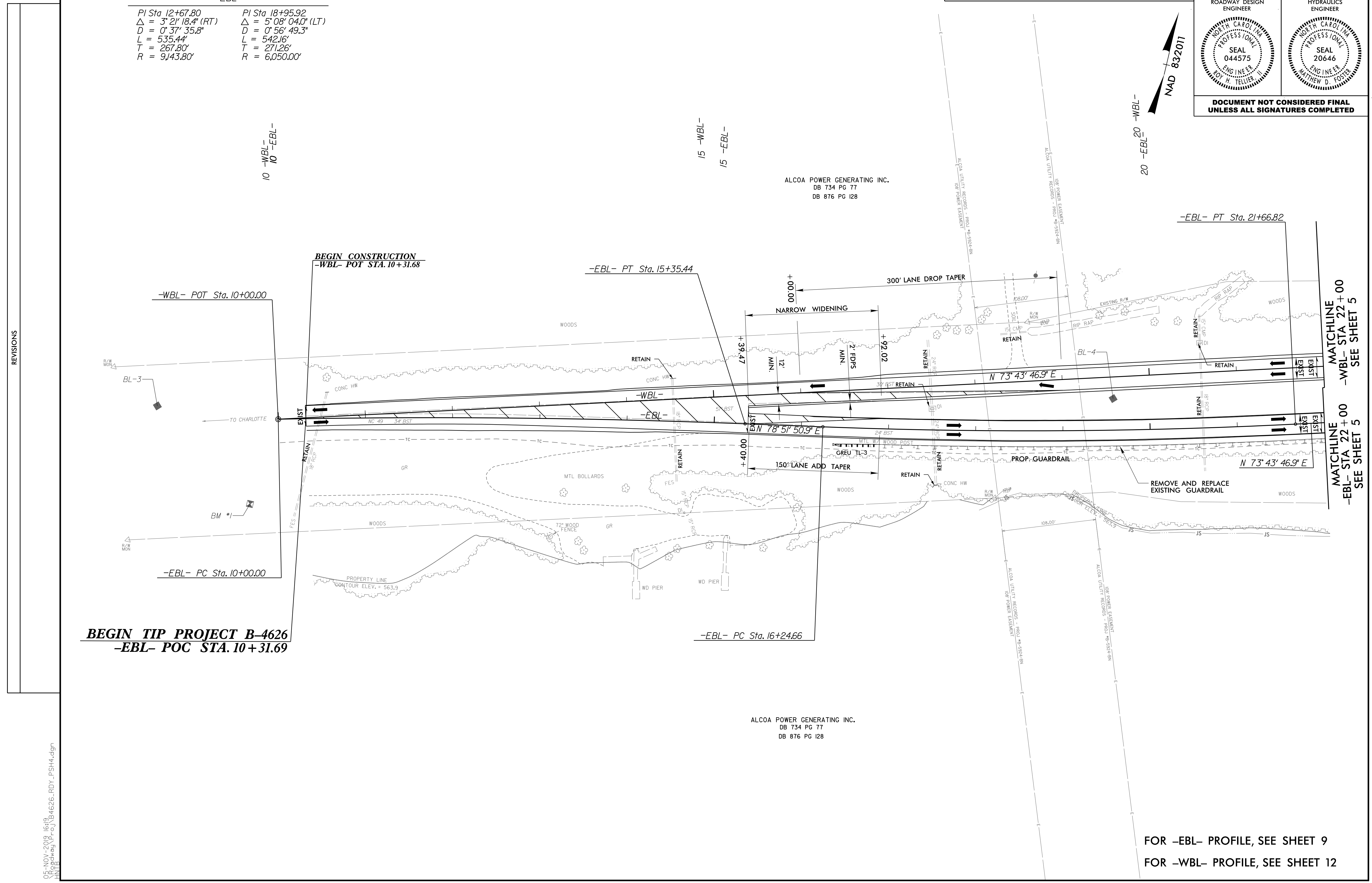
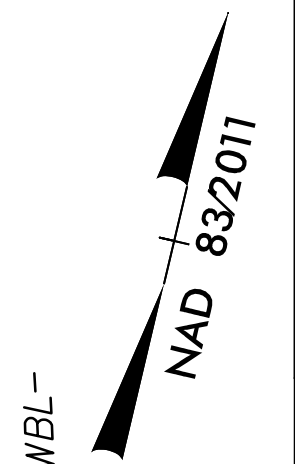
P.E. (Seal for Andrew Hall)





PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>4</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

-EBL-	
PI Sta 12+67.80	PI Sta 18+95.92
$\Delta = 3^{\circ} 21' 18.4''$ (RT)	$\Delta = 5^{\circ} 08' 04.0''$ (LT)
$D = 0^{\circ} 37' 35.8''$	$D = 0^{\circ} 56' 49.3''$
$L = 535.44'$	$L = 542.16'$
$T = 267.80'$	$T = 271.26'$
$R = 9,143.80'$	$R = 6,050.00'$



**BEGIN TIP PROJECT B-4626**  
**-EBL- POC STA. 10+31.69**

-EBL- PC Sta. 16+24.66

-EBL- PT Sta. 21+66.82

MATCHLINE  
 -WBL- STA 22+00  
 SEE SHEET 5  
 MATCHLINE  
 -EBL- STA 22+00  
 SEE SHEET 5



REVISIONS

8/17/99

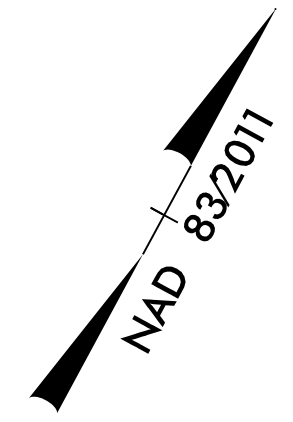
05-NOV-2019 16:19  
 (P:\oadway\p-oj\B4626-RD\PSH4.dgn  
 HNTB

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

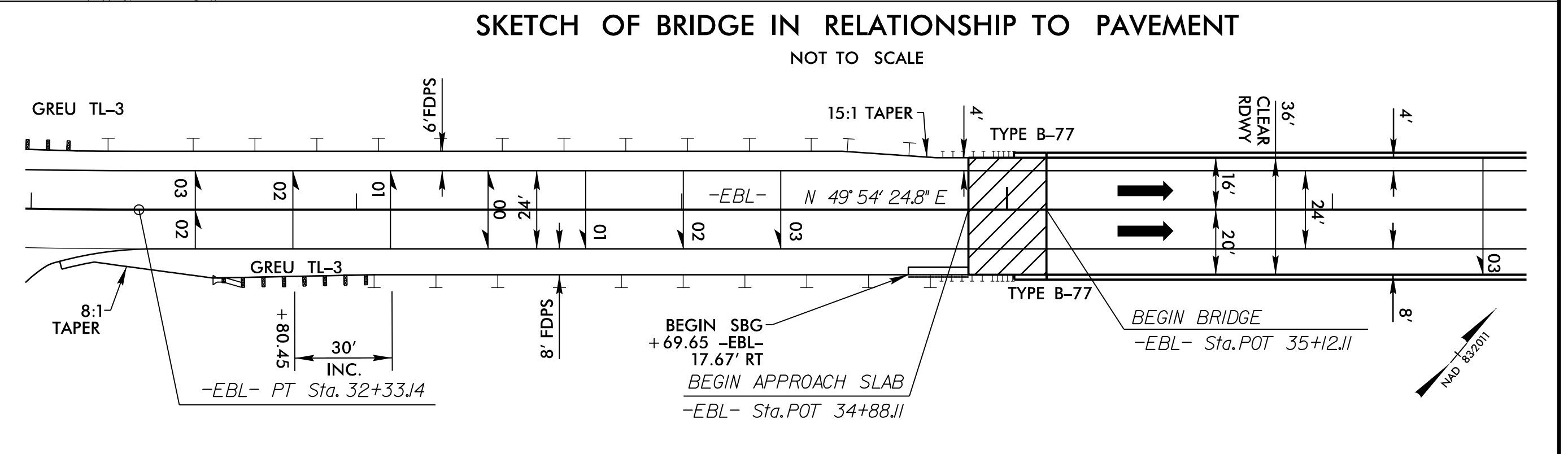
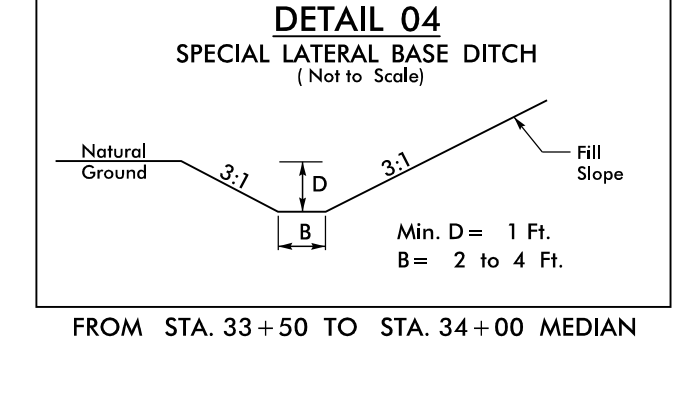
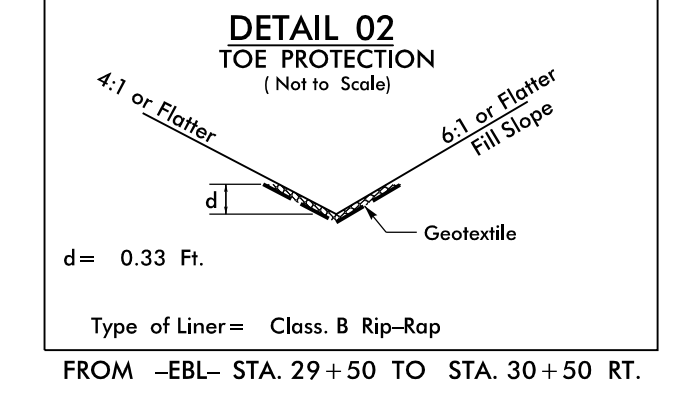
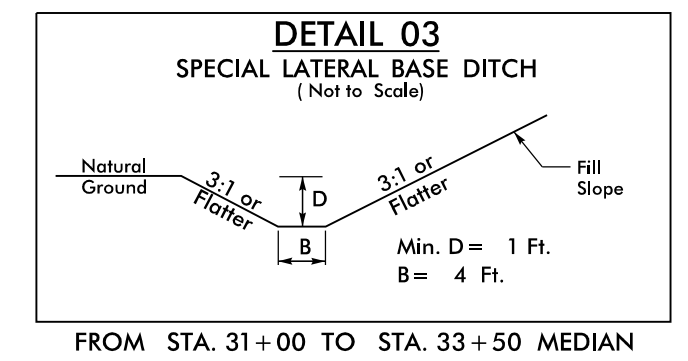
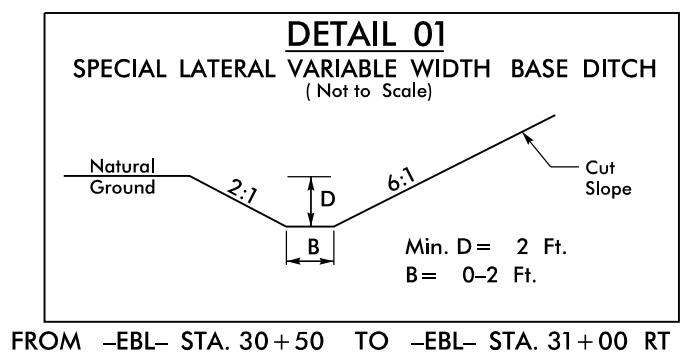
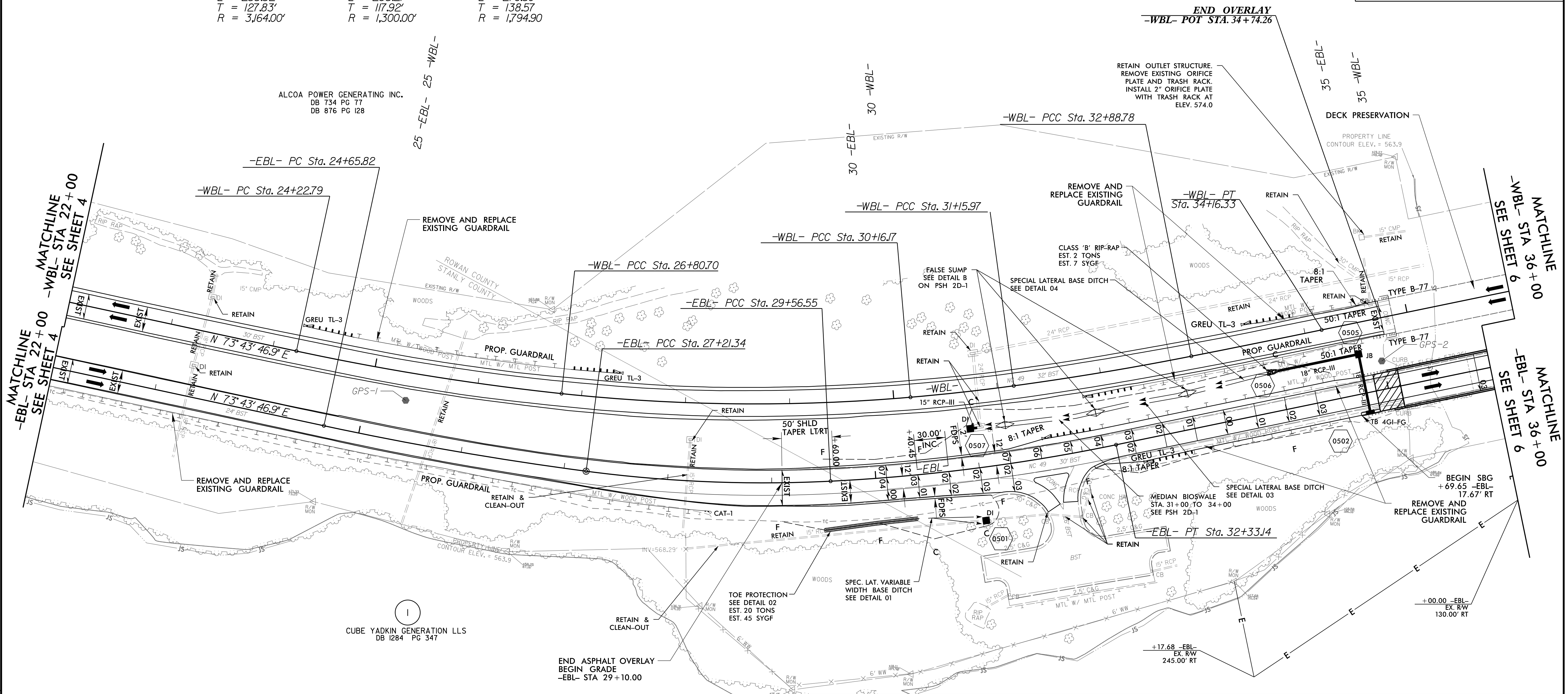
8/17/99

PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>5</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-WBL-				
PI Sta 25+51.87 Δ = 6° 03' 22.4" (LT) D = 2° 20' 53.5" L = 257.9' T = 129.08' R = 2,440.00'	PI Sta 28+48.95 Δ = 10° 59' 00.6" (LT) D = 3° 16' 26.6" L = 335.47' T = 168.25' R = 1,750.00'	PI Sta 30+66.08 Δ = 2° 51' 32.7" (LT) D = 2° 51' 53.2" L = 99.80' T = 49.91' R = 2,000.00'	PI Sta 32+02.40 Δ = 3° 24' 50.7" (LT) D = 1° 58' 32.6" L = 172.80' T = 86.43' R = 2,900.00'	PI Sta 33+52.55 Δ = 0° 29' 13.9" (LT) D = 0° 22' 55.1" L = 127.55' T = 63.77' R = 15,000.00'
-EBL-				
PI Sta 25+93.65 Δ = 4° 37' 37.7" (LT) D = 1° 48' 39.1" L = 255.52' T = 127.83' R = 3,164.00'	PI Sta 28+39.26 Δ = 10° 21' 59.0" (LT) D = 4° 24' 26.5" L = 235.21' T = 117.92' R = 1,300.00'	PI Sta 30+95.12 Δ = 8° 49' 45.4" (LT) D = 3° 11' 31.7" L = 276.59' T = 138.57' R = 1,794.90'		



REVISIONS





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

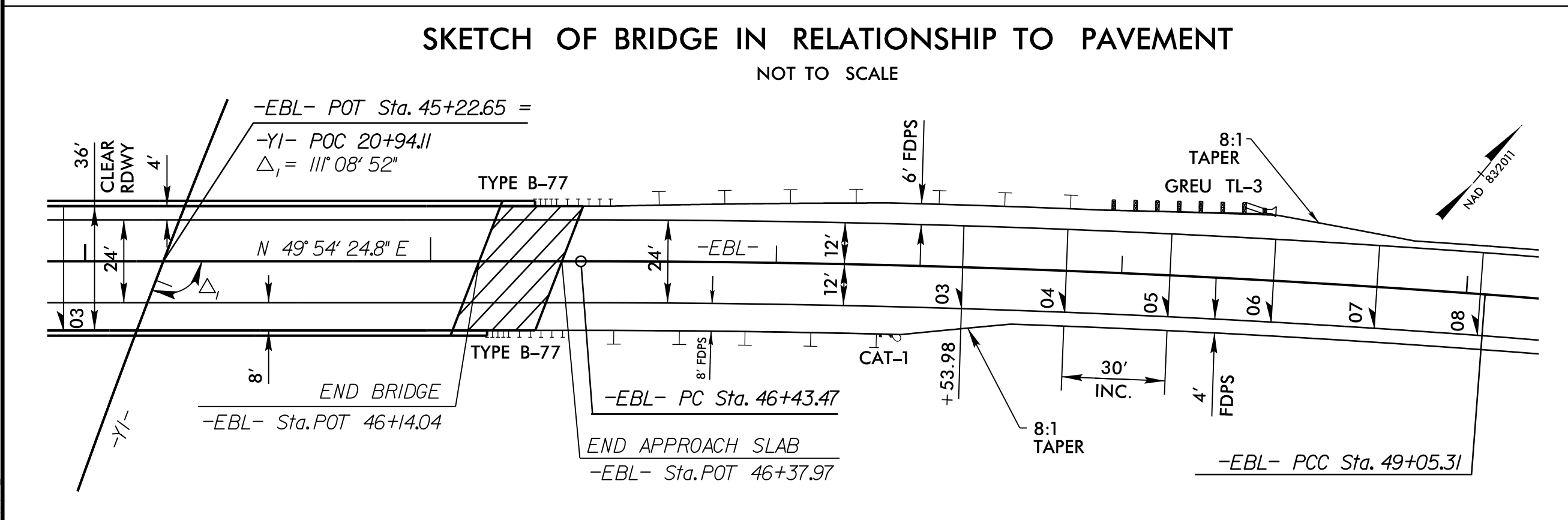
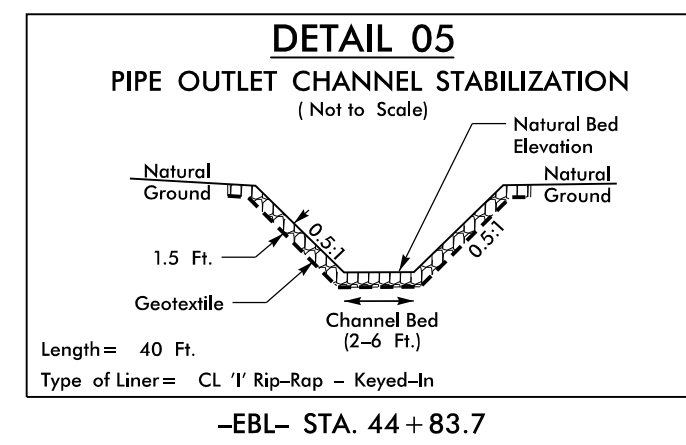
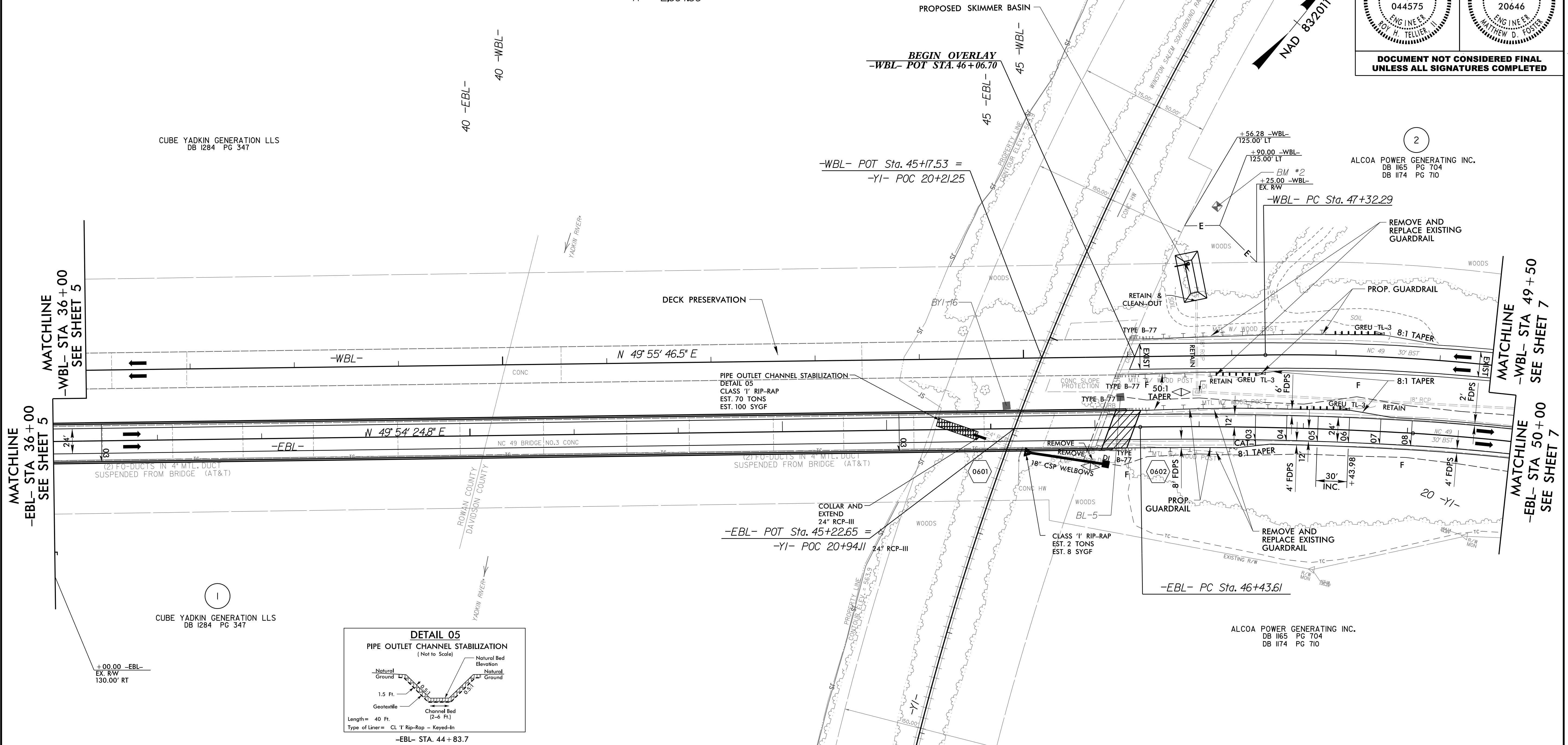
FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-

07-NOV-2019 17:47  
 (Roadway) Proj: B4626-RD-Y\_PSH5.dgn  
 HNTB

8/17/99

PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>6</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

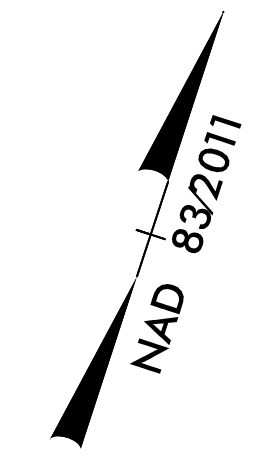
-EBL-	-WBL-	-YI-
PI Sta 47+74.47 $\Delta = 4' 11'' 21.0''$ (RT) $D = 1' 35' 59.1''$ $L = 261.86'$ $T = 130.99'$ $R = 3,581.52'$	PI Sta 50+27.67 $\Delta = 6' 59' 59.5''$ (RT) $D = 2' 51' 53.2''$ $L = 244.34'$ $T = 122.32'$ $R = 2,000.00'$	PI Sta 48+92.67 $\Delta = 9' 48' 13.6''$ (RT) $D = 3' 03' 50.2''$ $L = 319.97'$ $T = 160.38'$ $R = 1,870.00'$
		PI Sta 20+18.62 $\Delta = 39' 08' 15.2''$ (LT) $D = 2' 00' 01.0''$ $T = 1,018.20'$ $L = 1,956.60'$ $R = 2,864.38'$



FOR -EBL- PROFILE, SEE SHEETS 9 & 10  
 FOR -WBL- PROFILE, SEE SHEETS 12 & 13  
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-  
 -YI- ALIGNMENT SHOWN FOR INFORMATION ONLY

08-NOV-2019 13:51  
 (P:\adway\p-oj\B4626-RD\Y\_PSH6.dgn)



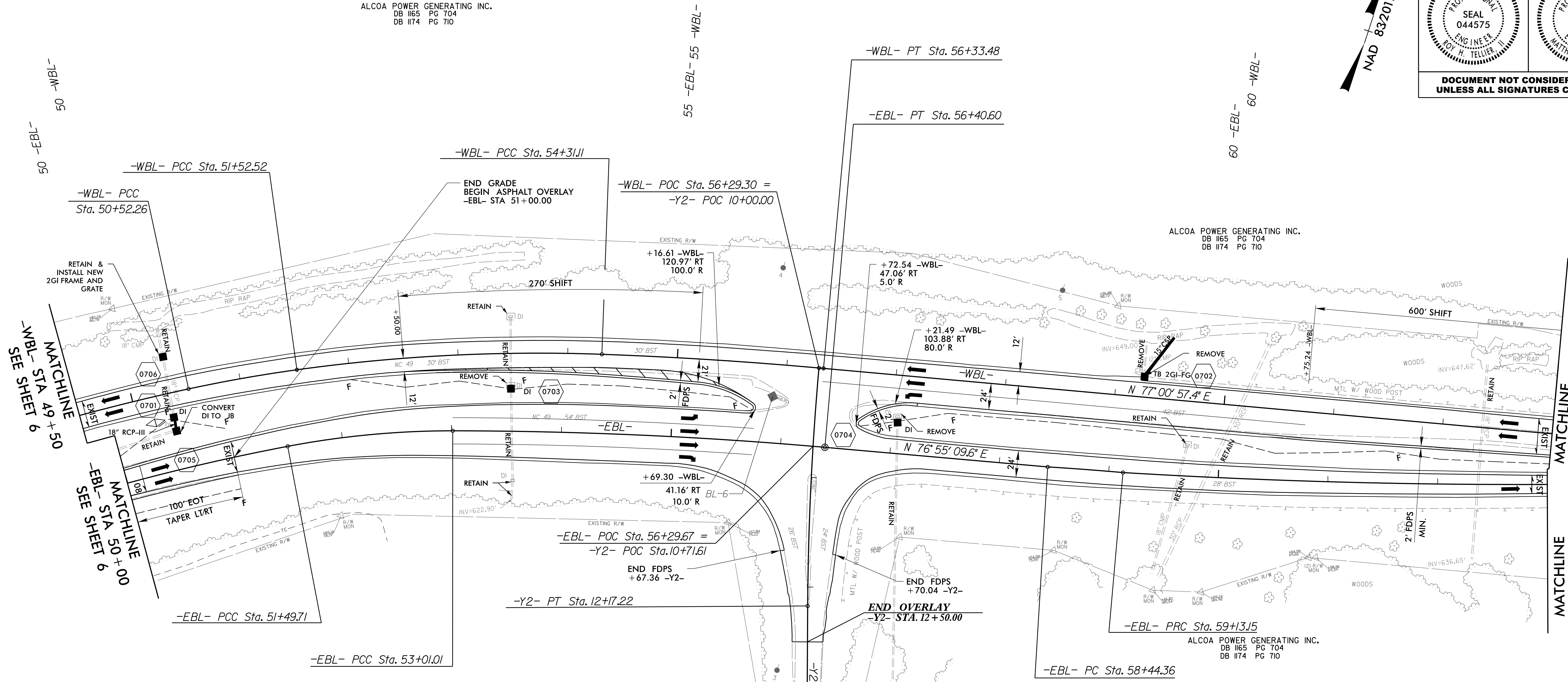


ALCOA POWER GENERATING INC.  
 DB 1165 PG 704  
 DB 1174 PG 710

ALCOA POWER GENERATING INC.  
 DB 1165 PG 704  
 DB 1174 PG 710

ALCOA POWER GENERATING INC.  
 DB 1165 PG 704  
 DB 1174 PG 710

ALCOA POWER GENERATING INC.  
 DB 1165 PG 704  
 DB 1174 PG 710



-WBL-			-Y2-	
PI Sta 51+02.41	PI Sta 52+92.17	PI Sta 55+32.32	PI Sta 11+08.67	
$\Delta = 4' 15'' 18.2''$ (RT)	$\Delta = 9' 58'' 34.1''$ (RT)	$\Delta = 3' 07'' 00.2''$ (RT)	$\Delta = 4' 47'' 12.6''$ (LT)	
$D = 4' 14'' 38.9''$	$D = 3' 34'' 51.6''$	$D = 1' 32'' 24.4''$	$D = 2' 12'' 13.3''$	
$L = 100.26'$	$L = 278.59'$	$L = 202.37'$	$L = 217.22'$	
$T = 50.15'$	$T = 139.65'$	$T = 101.21'$	$T = 108.67'$	
$R = 1,350.00'$	$R = 1,600.00'$	$R = 3,720.27'$	$R = 2,600.00'$	

-EBL-				
PI Sta 50+27.67	PI Sta 52+25.56	PI Sta 54+70.84	PI Sta 58+78.63	PI Sta 61+54.30
$\Delta = 6' 59'' 59.5''$ (RT)	$\Delta = 10' 50'' 09.3''$ (RT)	$\Delta = 4' 59'' 15.0''$ (RT)	$\Delta = 1' 34'' 36.2''$ (RT)	$\Delta = 4' 36'' 19.3''$ (LT)
$D = 2' 51'' 53.2''$	$D = 7' 09'' 43.1''$	$D = 1' 28'' 08.8''$	$D = 2' 17'' 30.6''$	$D = 0' 57'' 17.7''$
$L = 244.34'$	$L = 151.30'$	$L = 339.49'$	$L = 68.80'$	$L = 482.27'$
$T = 122.32'$	$T = 75.88'$	$T = 169.85'$	$T = 34.40'$	$T = 241.27'$
$R = 2,000.00'$	$R = 800.00'$	$R = 3,900.00'$	$R = 2,500.00'$	$R = 6,000.00'$

FOR -EBL- PROFILE, SEE SHEET 10  
 FOR -WBL- PROFILE, SEE SHEET 13  
 -Y2- ALIGNMENT SHOWN FOR INFORMATION ONLY

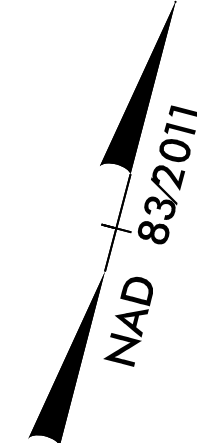
REVISIONS

8/17/99  
 05-NOV-2019 16:19  
 (P:\gadm\p\p\p\B4626-RD\Y\_PSH7.dgn)



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>B-4626</b>	SHEET NO. <b>8</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

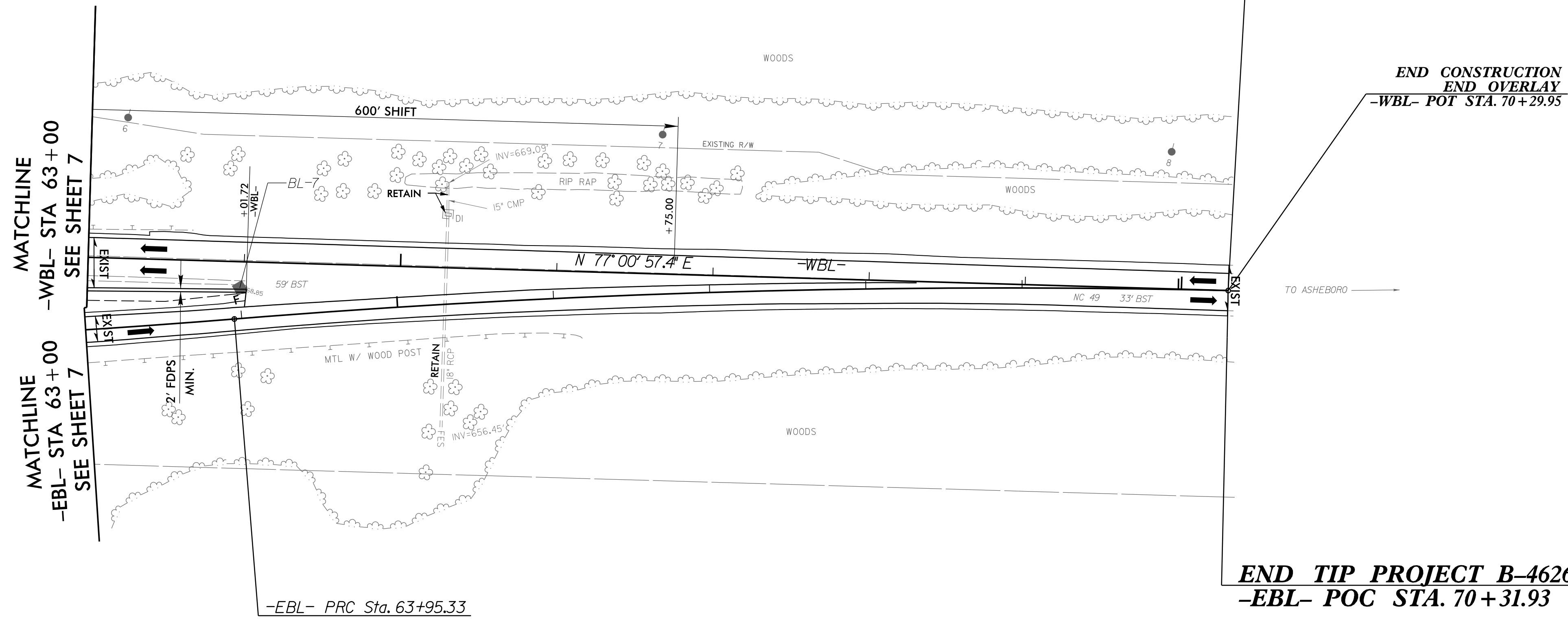


2

ALCOA POWER GENERATING INC.  
 DB 1165 PG 704  
 DB 1174 PG 710

65 -EBL-  
 65 -WBL-

70 -WBL-  
 70 -EBL-



**END CONSTRUCTION  
 END OVERLAY**  
 -WBL- POT STA. 70+29.95

**END TIP PROJECT B-4626**  
 -EBL- POC STA. 70+31.93

ALCOA POWER GENERATING INC.  
 DB 1165 PG 704  
 DB 1174 PG 710

-EBL-

PI Sta 61+54.30	PI Sta 67+13.90
$\Delta = 4' 36'' 19.3''$ (LT)	$\Delta = 5' 56'' 22.4''$ (RT)
$D = 0' 57'' 17.7''$	$D = 0' 55'' 58.7''$
$L = 482.27'$	$L = 636.63'$
$T = 241.27'$	$T = 318.60'$
$R = 6,000.00'$	$R = 6,441.19'$

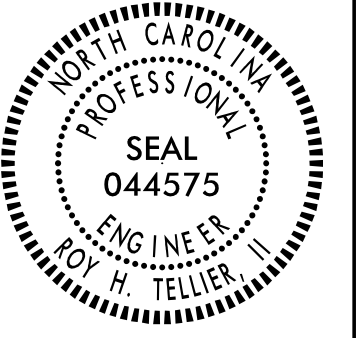

FOR -EBL- PROFILE, SEE SHEETS 10 & 11  
 FOR -WBL- PROFILE, SEE SHEETS 13 & 14

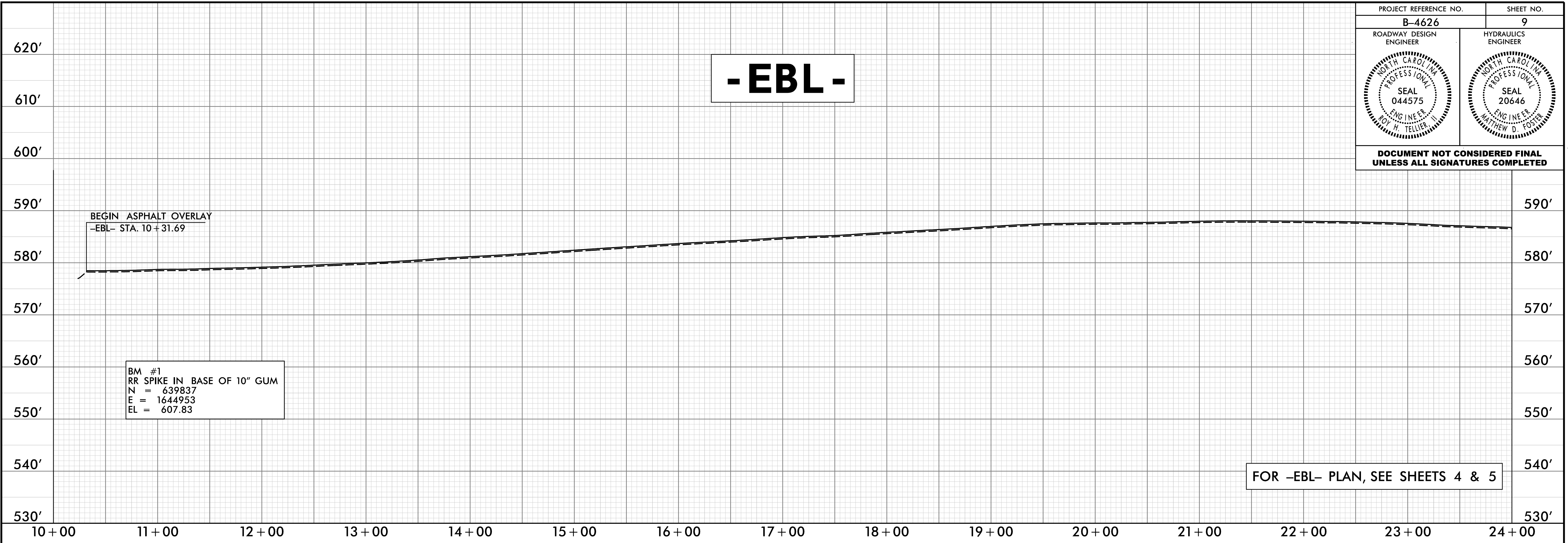
REVISIONS

8/17/99

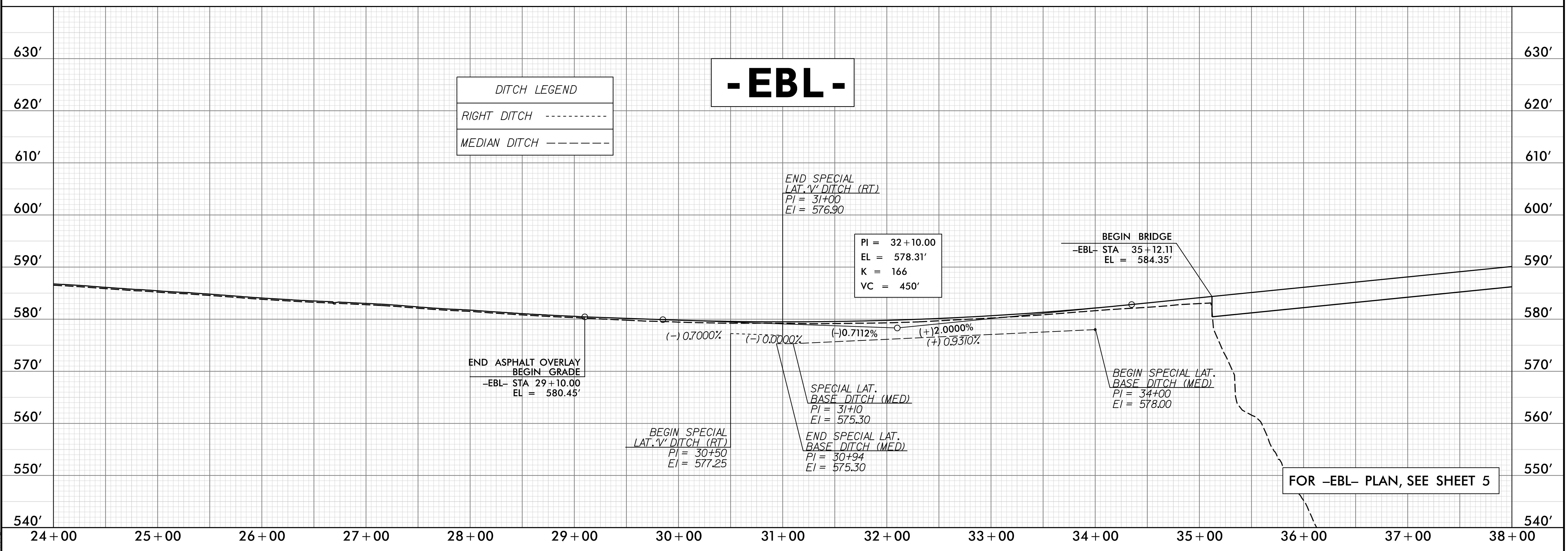
05-NOV-2019 16:19  
 (P:\oadway\Proj\B4626-RD\FSHB.dgn  
 HNTB

5/28/99

PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>9</b>
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

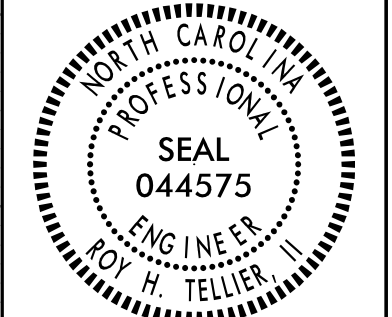



05-NOV-2019 16:20  
N:\Roadway\Projects\B4626-RD\FLL\_PSH9.dgn

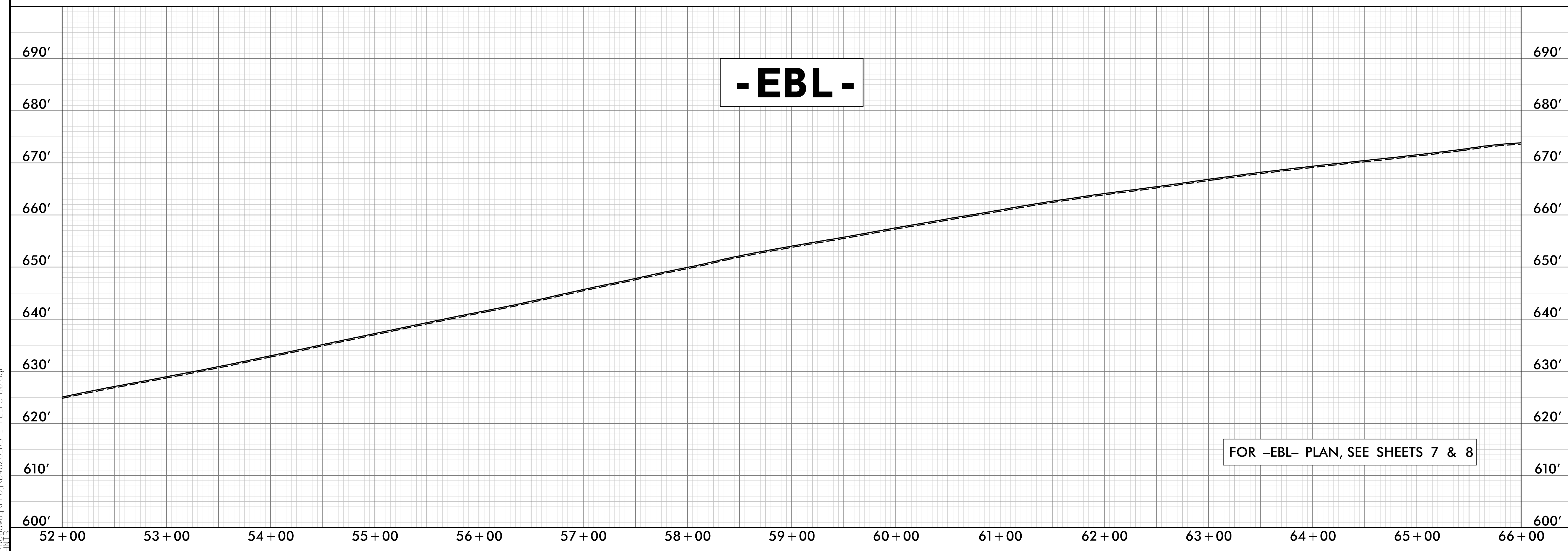




5/28/99

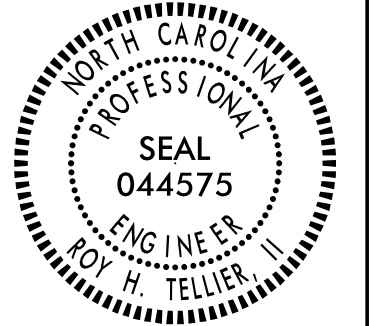
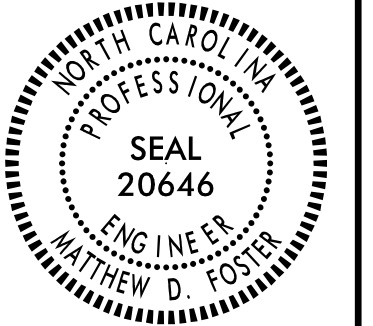
PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>10</b>
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



05-NOV-2019 16:20  
N:\Roadway\Proj\B4626-RD\F\_L\_PSH10.dgn

5/28/99

PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>11</b>
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

**- EBL -**





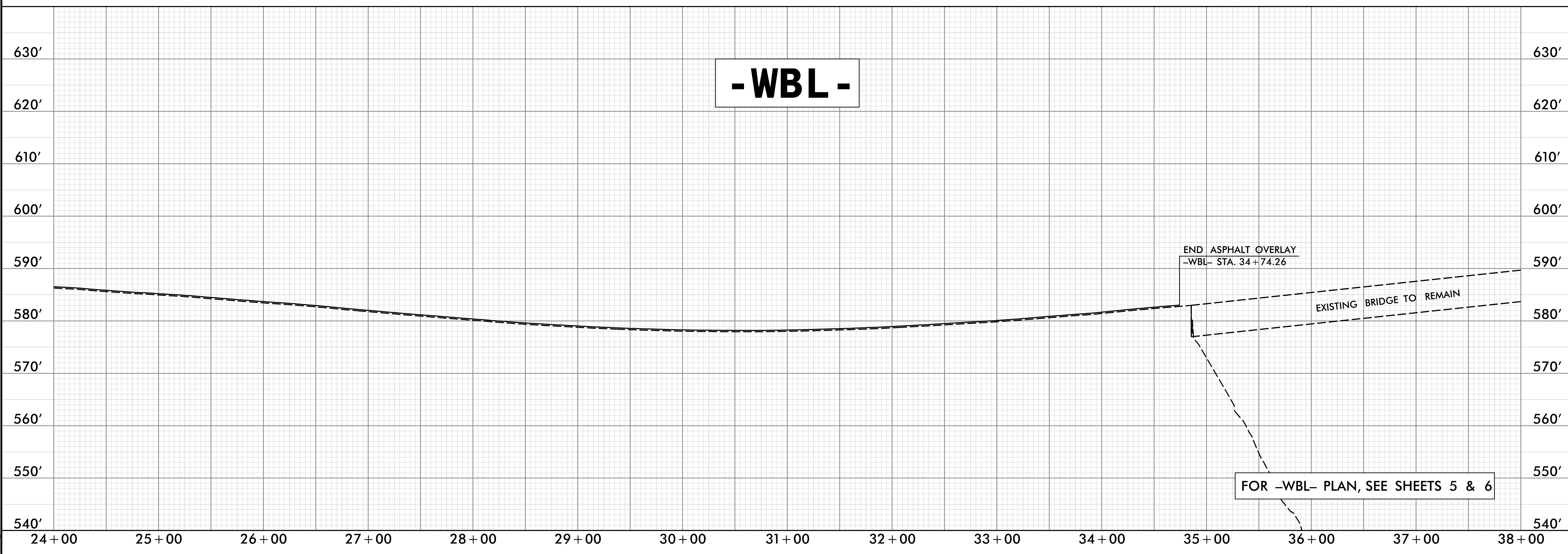
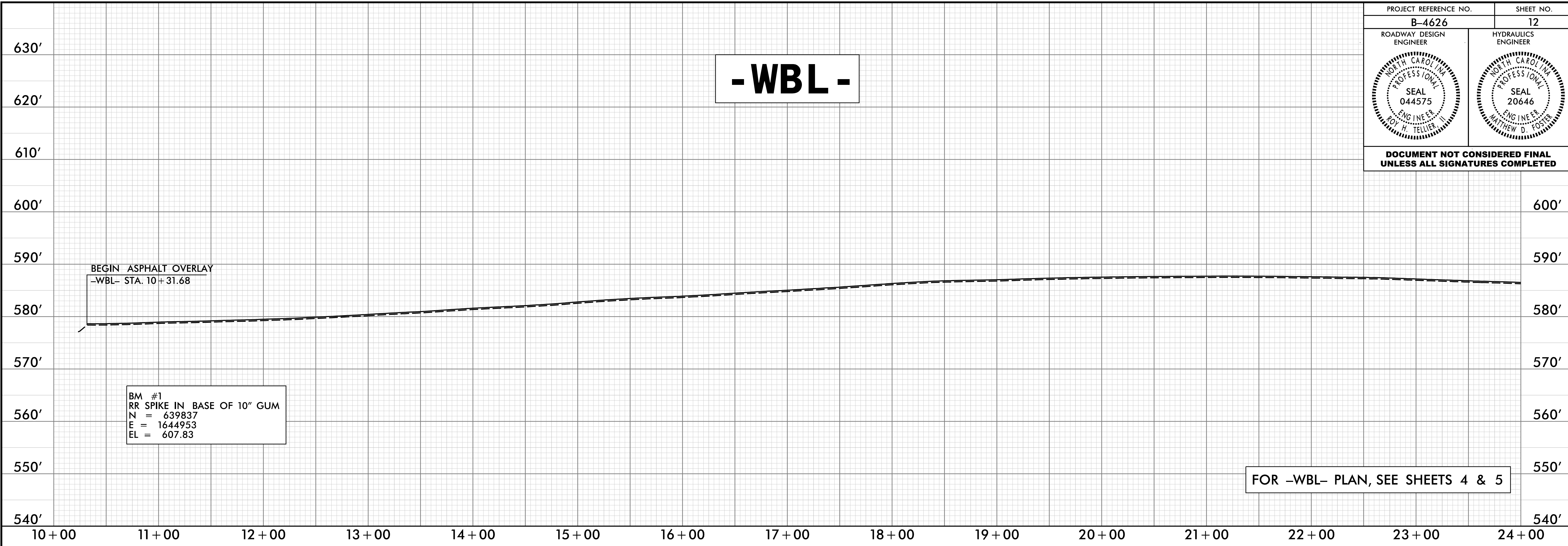
FOR -EBL- PLAN, SEE SHEET 8

THIS PAGE INTENTIONALLY LEFT BLANK

05-NOV-2019 16:20  
N:\Roadway\Proj\B4626-RD\F\_L\_PSH11.dgn  
PH11



5/28/99

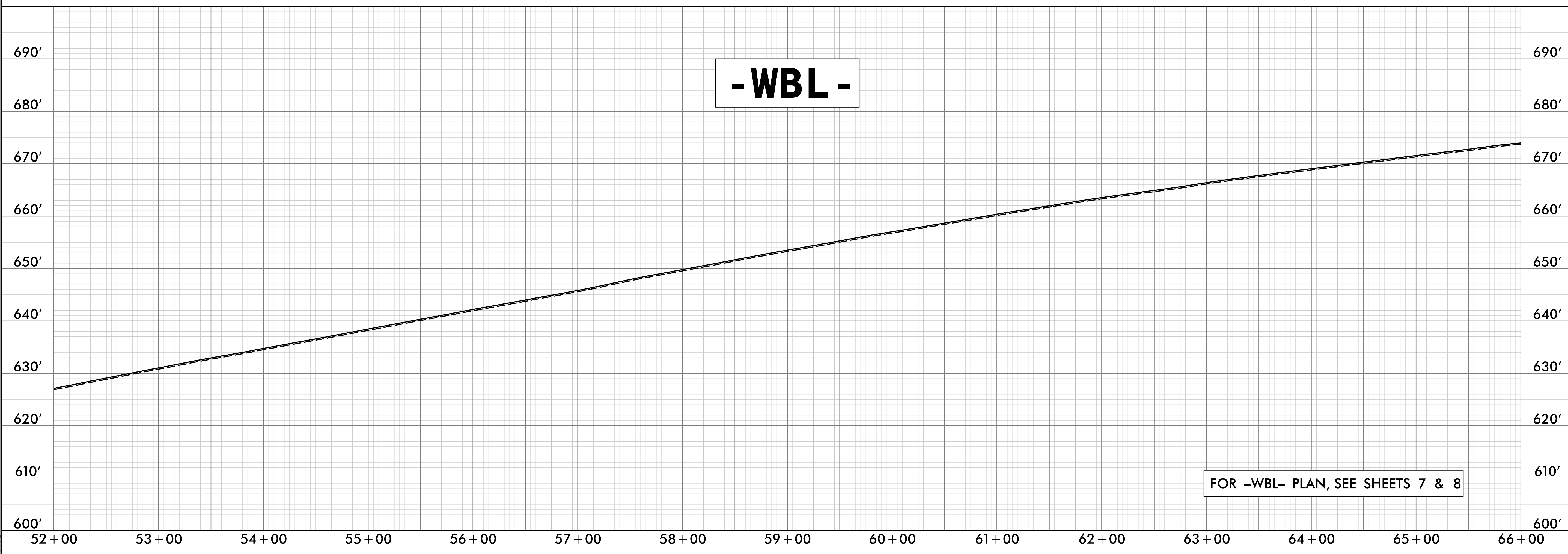
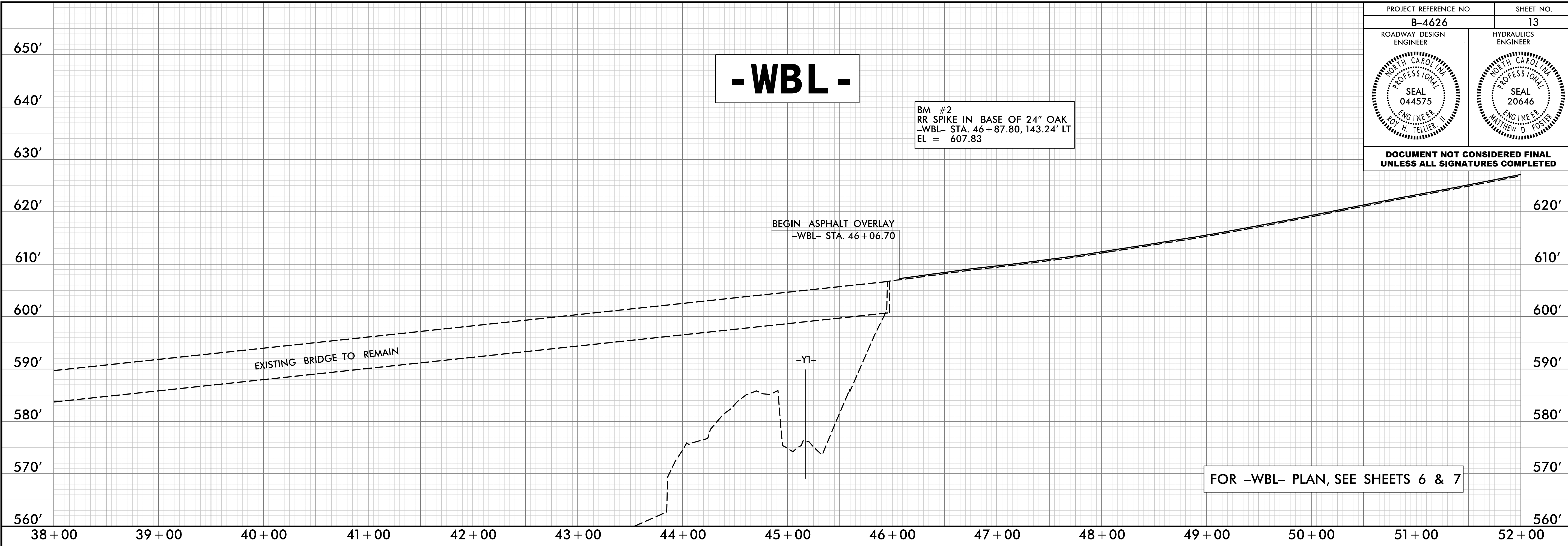
PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>12</b>
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



05-NOV-2019 16:20  
N:\Roadway\Projects\B4626-RD\F\_L\_PSH12.dgn

5/28/99

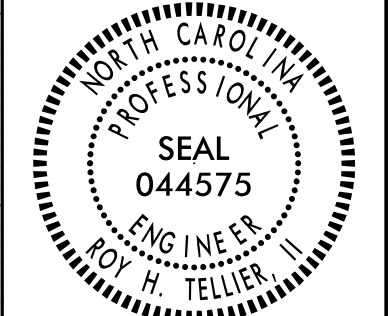

PROJECT REFERENCE NO. <b>B-4626</b>	SHEET NO. <b>13</b>
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



05-NOV-2019 16:20  
N:\Roadway\Projects\B4626-RD\Y\_PFL\_PSH13.dgn



5/28/99

PROJECT REFERENCE NO.	SHEET NO.
B-4626	14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**-WBL-**

720'  
710'  
700'  
690'  
680'  
670'  
660'  
650'  
640'  
630'

690'  
680'  
670'  
660'  
650'  
640'  
630'

END ASPHALT OVERLAY  
-WBL- STA. 70+29.95

66+00      67+00      68+00      69+00      70+00

FOR -WBL- PLAN, SEE SHEET 8

THIS PAGE INTENTIONALLY LEFT BLANK

05-NOV-2019 16:20  
N:\Roadway\Proj\B4626-RD\FILE\_PSH14.dgn