



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR


JAMES H. TROGDON, III
SECRETARY

May 11, 2018

MEMORANDUM TO: Mr. Ronnie Keeter, P.E.
Division 4 Engineer

FROM: Philip S. Harris, III, P.E., Manager
for Environmental Analysis Unit

SUBJECT: Edgecombe County; Replace Bridge No. 28 on NC 42 over the Tar River; Federal Aid Proj. BRSTP-0042 (19); WBS 40137.1.1; **TIP B-4932.**

DocuSigned by:

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Attached are the US Army Corps of Engineers Nationwide Permit, N.C. Division of Water Resources (NCDWR) Water Quality Certification, and Tar-Pamlico Buffer Authorization. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:

<https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>

Quick Links>Permit Documents> Issued Permits.

cc: w/o attachment (see website for attachments)

Mr. Ron Davenport, P.E. State Contract Officer
Mr. Chad Coggins, Division Environmental Officer
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Mr. Gary Lovering, P.E., Roadway Design
Mr. Carl Barclay, P.E., Utilities Unit
Mr. Stephen Morgan, P.E., Hydraulics
Mr. Brian Hanks, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Lamar Sylvester, P.E., State Construction Engineer

PROJECT COMMITMENTS

Edgecombe County
Bridge No. 28 on NC 42 over the Tar River
Federal Aid Project No. BRSTP-0042(19)
W.B.S. No. 40137.1.1
T.I.P. No. B-4932

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Roadway Design Unit, Structures Management Unit, Division 4

Bridge No. 28 is located along a designated bicycle route; therefore, 4-foot minimum offsets, between the outside of the travel lane and the bridge rail parapet, are included in the design. Additionally, the structure will provide 42 inch F-shape bridge railing, as appropriate for bicycle and pedestrian use.

All Design Groups/Division 4 Resident Construction Engineer

The Tar River has been designated class C;NSW waters of the State by NCDWR and an Inland Primary Nursery Area by NCWRC. As such, NCDOT's *Best Management practices for Protection of Surface Waters* (March 1997) and *Design Standards for Sensitive Watersheds* will be incorporated throughout design and construction of the project.

All Design Groups/Division 4 Resident Construction Engineer

The NCWRC has identified this portion of the Tar River as an Inland Primary Nursery Area (PNA). NCDOT will follow all stream crossing guidelines for anadromous fish passage, including an in-water work moratorium from February 15 to September 30 for the Tar River.

This commitment has been revised. See Commitments from Permitting below.

Environmental Analysis Unit – Natural Environment Section

The NCDOT Natural Environment Section will monitor the potential listing of the Atlantic Pigtoe (no later than April 2017) and Green Floater (schedule unknown) to avoid potential project delays. Additional coordination with USFWS and a Section 7 Conference will be required, if either species is officially proposed for listing prior to Construction. NCDOT will need to demonstrate avoidance and minimization efforts throughout the project planning and design phase.

Hydraulics Unit

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

Roadway Design Unit, Environmental Analysis Unit

Impact to one FEMA buyout property is anticipated to result from this project. Impacts will be limited to minor right-of-way acquisition (approximately 0.01 acres) and permanent fill required to raise the grade of NC 42. Due to its proximity to NC 42 the parcel would likely be impacted by all alternatives discussed in this document, therefore, no avoidance alternative is practicable. NCDOT will coordinate with the North Carolina Department of Public Safety - Emergency Management Department and FEMA to request appropriate approvals prior to construction.

Division 4 Construction

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

Division 4 Construction

Access to the NCWRC Old Sparta Boating Access Area should be maintained at all times, if possible; however, if a closure is required during construction it must be coordinated with NCWRC.

Geotechnical Unit

Preliminary site assessments will be conducted for potentially contaminated sites within the proposed right of way prior to right of way acquisition.

Division 4 Construction, Environmental Analysis Unit – Human Environment Section – Archaeology Group

Site 0019TRR/Old Sparta Vessel has been determined eligible for listing in the National Register of Historic Places. As such, impacts to the site must be avoided during construction. The site will be defined, visually marked and the contractors informed that they are not to enter the area with any equipment or personnel.

Project Development and Environmental Analysis Unit – Human Environment Section – Archaeology Group

Per NCHPO recommendations, the cemetery – comprised of the Rosa Tompkins gravesite and the burials believed to be in its vicinity – will be delineated to ascertain both its size and probable number of interments, followed by the cemetery's removal and relocation in accordance with NC General Statute 65.

Division 4 Construction

After project completion, the contract administrator for construction must submit the actual amount of tree clearing reported in tenths of acres. This information should be submitted at: <https://connect.ncdot.gov/site/construction/biosurveys/Lists/Northern%20Long%20Eared%20Bat/AllItems.aspx>

COMMITMENTS FROM PERMITTING

Division 4 Construction

The N.C. Department of Environmental Quality's Section 401 Water Quality Certification includes:

The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission, the US Fish and Wildlife Service, National Marine Fisheries Service and NC Division of Marine Fisheries. No in-water work is permitted between February 15 and June 30 of any year, nor between August 15 and October 31 of any year, without prior approval from the NC Division of Water Resources, National Marine Fisheries Service, and the NC Wildlife Resources Commission. In addition, the permittee shall conform to the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997) at all times.

The U.S. Army Corps of Engineers Section 404 Nationwide Permit verification includes:

All in-water work done during the allowed time periods (i.e., November 1- February 14 and July 1-August 14) will occur during daytime hours only.

The NCDOT has agreed to provide an additional measure of protection by requiring in-water construction activities to stop if a sturgeon is spotted within 50 feet of operations.

In addition to the above Section 401 and 404 commitments, the following was included in the Section 7 Concurrence letter from the National Marine Fisheries Service dated May 2, 2018.

Before the start of each day's full-force, in-water impact driving of piles (during the available inwater work windows), some form of low-level in-water noise will be generated that is loud enough to cause Atlantic sturgeon to leave the project area, but not loud enough to cause harm to the sturgeon (options include ramp-up, dry firing, or airguns). The low-level noise technique would be conducted for 5-10 minutes prior to full-force impact pile driving to allow animals the opportunity to leave the area. The chosen technique would be done before the beginning of the day's in-water impact driving, but would need to be repeated if a break in impact pile driving lasted more than 1 hour. Ramp-up involves slowly increasing the power of the impact hammer, and the noise it produces, over a pre-determined period of time. Dry-firing involves the raising and dropping of the impact hammer, but without any compression on the piston. Airguns are devices that produce in-water noise when they rapidly release pressurized air into the water column. The amount of noise produced by an airgun can be controlled based on pressure of the air that is released (i.e., higher air pressures produce louder noises).

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

Action Id. SAW-2016-02419 County: Edgecombe County U.S.G.S. Quad: Old Sparta

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: Phil Harris
NC Department of Transportation
Address: 1598 Mail Service Center
Raleigh NC, 27699-1598

Telephone Number:

Size (acres)

25 acres

Nearest Waterway

Tar River

USGS HUC

03020103

Nearest Town Old Sparta

River Basin Tar-Pamlico

Coordinates Latitude: 35.790557

Longitude: -77.550289

Location description: Bridge 28 on NC 42 over Tar River near Old Sparta, Edgecombe County, North Carolina.

Description of projects area and activity: Applicant proposes to replace structurally deficient and functional obsolete 13-span, 606 foot structure on a new location alignment northwest of the existing bridge. The new 6-span bridge will be 610 feet long, with a deck width of 34 feet. The new roadway grade will be approximately 6 feet above the existing structure. The existing bridge structure will serve as an onsite detour for traffic during construction. A temporary bridge will be used instead of a causeway for construction access.

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 23 Approved Categorical Exclusions
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 May 10, 2018. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

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

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 Thomas Steffens at (910) 251-4615 or Thomas.A.Steffens@usace.army.mil.

Corps Regulatory Official: STEFFENS.THOMAS.ANCRU

Date: May 10, 2018

M.1284706273

Expiration Date of Verification: March 18, 2022

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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: This waterbody exhibits an Ordinary High Water Mark as indicated by changes in soil character and absence of terrestrial vegetation and is considered a TNW.

C. Remarks:

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: Jason Steele, Review Officer
60 Forsyth Street SW, Room 10M15
Atlanta, Georgia 30303-8801
Phone: (404) 562-5137

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 _____.

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

STEFFENS.THOMAS.ANCRU

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SAW-2016-02419

Corps Regulatory Official: **M.1284706273**

Thomas Steffens

Date of JD: **May 10, 2018**

Expiration Date of JD:

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.

Copy furnished:

SPECIAL CONDITIONS

ANADROMOUS FISH

To avoid adverse impacts to spawning populations of fish species at this project site, no in-water work will be conducted between the dates noted below in the Tar River and its associated perennial tributaries. For the purpose of this moratorium, in water is defined as those waters within the Tar River, and its associated perennial tributaries, and its adjacent wetlands that during periods of inundation have an active connection to these tributaries. In order to protect anadromous fish, no excavation or filling associated with construction activities will be permitted between the dates noted below of any year without the prior approval of the Corps of Engineers.

No in-water work will be allowed in the Tar River between February 15 and June 30 based on the NCWRC's designation of this portion of the Tar River as an Inland Primary Nursery Area for juvenile anadromous fish.

The February 15-June 30 moratorium period would also protect a spring spawning run by Atlantic sturgeon and the resulting downstream movement of larval and small juvenile sturgeon shortly thereafter.

An additional in-water work moratorium will start on August 15 and end on October 31 to prevent the disruption of a possible fall spawning migration by Atlantic sturgeon and the subsequent downstream movement of larval and small juvenile Sturgeon.

All in-water work done during the allowed time periods (i.e., November 1- February 14 and July 1-August 14) will occur during daytime hours only.

The NCDOT has agreed to provide an additional measure of protection by requiring in-water construction activities to stop if a sturgeon is spotted within 50 feet of operations.

CONSTRUCTION PLANS: All work authorized by this permit must be performed in strict compliance with the attached plans dated May 3, 2018, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

UNAUTHORIZED DREDGE OR FILL: Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

MAINTAIN CIRCULATION AND FLOW OF WATERS: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

DEVIATION FROM PERMITTED PLANS: The permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Mr. Tom Steffens; Washington Regulatory Field Office prior to any active construction in waters or wetlands.

PRECONSTRUCTION MEETING: The Permittee shall schedule an onsite preconstruction meeting between its representatives, the contractor's representatives and the appropriate Corps of Engineers Project Manager prior to undertaking any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions contained within the Department of the Army permit. The Permittee shall notify the Corps of Engineers Project Manager a minimum of thirty (30) days in advance of the scheduled meeting in order to provide that individual with ample opportunity to schedule and participate in the required meeting.

CLEAN FILL: Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.

PERMIT DISTRIBUTION: The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

SILT-FENCING: The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

EROSION CONTROL MEASURES IN WETLANDS

During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the plan drawings and specifically authorized by this permit.

The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades on those areas, prior to project completion.

COMPLIANCE INSPECTION: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

NAVIGATION

This permit does not authorize the interference with any existing or proposed Federal project, and the Permittee will not be entitled to compensation for damage or injury to the authorized structure or work which may be caused from existing or future operations undertaken by the United States in the public interest.

No attempt will be made by the Permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

BORROW AND WASTE

To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands.

MITIGATION: In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

Action ID Number: SAW-2016-02419

County: Edgecombe County

Permittee: Phil Harris
NC Department of Transportation

Project Name: NCDOT B-4932 Bridge 28 NC 42 Tar River Bridge Replacement

Date Verification Issued: May 10, 2018

Project Manager: Thomas Steffens

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
Attn: Thomas Steffens
Washington Regulatory Field Office
2407 West 5th Street
Washington, North Carolina
27889

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

MEMORANDUM FOR RECORD

SUBJECT: Section 408 – Bridge Replacement over the Tar River in Edgecombe County, North Carolina

1. Project Description: The Wilmington District, Regulatory Division, received an application from the NCDOT seeking a Department of the Army (DA) authorization (Section 10 permit) to replace Edgecombe County Bridge 28 over the Tar River. Edgecombe County Bridge 28 is located on the Tar River in Edgecombe County, North Carolina (Figure 1). The Tar River is a Federal Navigation Project (Figure 2).

The NCDOT plans to replace the Edgecombe County Bridge 28 with a different class of bridge (Figures 3 to 5) that will be of sufficient height to provide adequate clearance for navigation. Runoff from the new bridge will be discharged into a class II riprap dissipater pad to reduce stream pollution. In addition, the NCDOT will use 3:1 side slopes on roadway ditches and riprap energy dissipaters to reduce or eliminate impacts to surrounding properties and jurisdictional waters located within project limits. There will potentially be temporary impacts to channel navigation, but no long-term effects. The proposed project will temporarily increase turbidity in the vicinity of the work; however, the proposed project should not adversely affect significant resources.

2. SAW Evaluation: The Wilmington District Operations (Justin Arnette) and Planning Branches (Jenny Owens) have reviewed the plans for the proposed bridge replacement, and have concluded that there is no evidence to indicate that the proposed project will have any negative effects on the Federal project. The proposed action will not impair the usefulness of the Federal Navigation Project and will not be injurious to the public interest.

3. Activities proposed in, over, or under, navigable waters within a USACE Navigation project will typically require authorization pursuant to both Section 10 of the Rivers and Harbors Act of 1899 and Section 408. However, for many activities altering navigation projects, the scope of analysis for Section 10 and Section 408 will be duplicative. Having reviewed the application and associated material, it is our determination that the scope and information needs for this Section 408 review would be fully addressed as part of the Section 10 review. Therefore, a single authorization, under Section 10, would be sufficient to address the requirements of both authorities.

4. It is our further determination that the alteration will not impair the usefulness of the project and satisfies the requirement to ensure that the alteration is “compatible” with the purposes of the project set forth at 33 CFR 320.4(g)(5).

5. Regulatory staff must include in the Section 10 permit document that is provided to the applicant the following statement: “It has been determined that the activities authorized do not impair the usefulness of the USACE Navigation project and are not injurious to the public interest.”

6. Conclusion: The U. S. Army Corps of Engineers, Wilmington District, has performed an evaluation of the proposed action, as described above, in accordance with Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408) and has concluded that a separate Section 408 permission is not required and the action may proceed. This determination was performed in coordination with Wilmington District, Office of Counsel (Carl Pruitt).

7. Point of Contact: If you have questions regarding this evaluation, please contact Ms. Jenny Owens, Wilmington District Section 408 Coordinator, at (910) 251-4757 or at Jennifer.l.owens@usace.army.mil.

Jennifer L. Owens
Section 408 Coordinator
Wilmington District

NATIONWIDE PERMIT 23
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2017

Approved Categorical Exclusions. Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where:

(a) That agency or department has determined, pursuant to the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (40 CFR part 1500 et seq.), that the activity is categorically excluded from environmental documentation, because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment; and

(b) The Office of the Chief of Engineers (Attn: CECW-CO) has concurred with that agency's or department's determination that the activity is categorically excluded and approved the activity for authorization under NWP 23.

The Office of the Chief of Engineers may require additional conditions, including pre-construction notification, for authorization of an agency's categorical exclusions under this NWP.

Notification: Certain categorical exclusions approved for authorization under this NWP require the permittee to submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The activities that require pre-construction notification are listed in the appropriate Regulatory Guidance Letters. (Sections 10 and 404)

Note: The agency or department may submit an application for an activity believed to be categorically excluded to the Office of the Chief of Engineers (Attn: CECW-CO). Prior to approval for authorization under this NWP of any agency's activity, the Office of the Chief of Engineers will solicit public comment. As of the date of issuance of this NWP, agencies with approved categorical exclusions are the: Bureau of Reclamation, Federal Highway Administration, and U.S. Coast Guard. Activities approved for authorization under this NWP as of the date of this notice are found in Corps Regulatory Guidance Letter 05-07, which is available at: <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/GuidanceLetters.aspx>. Any future approved categorical exclusions will be announced in Regulatory Guidance Letters and posted on this same web site.

4.0 Additional Regional Conditions for Specific Nationwide Permits

4.1 NWP #23 - Approved Categorical Exclusions

4.1.1 The discharge of dredged or fill material associated with this NWP must not cause the loss of greater than 1 acre of waters of the United States or 500 linear feet of stream bed for each single and complete project.

4.1.2 No development activities authorized by this NWP may begin until the permittee obtains a consistency concurrence or a CAMA permit from the North Carolina Division of Coastal Management, if either is required.

The following list of General Conditions has been adapted for work in North Carolina for NCDOT projects. Information related to USACE notification requirements has been removed. Therefore, numbering and lettering below may not be consecutive. Please refer to <http://saw-reg.usace.army.mil/NWP2017/2017NWP23.pdf> for the complete reference.

NATIONWIDE PERMIT GENERAL CONDITIONS

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.
(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre- construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre- construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA- approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

FINAL REGIONAL CONDITIONS 2017

Final 2017 Regional Conditions for Nationwide Permits (NWP) in the Wilmington District

1.0 Excluded Waters

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

1.1 Anadromous Fish Spawning Areas

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from the Corps and either NCDMF or NCWRC.

1.2 Trout Waters Moratorium

Waters of the United States in the designated trout watersheds of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC, or from the Eastern Band of Cherokee Indians (EBCI) Fisheries and Wildlife Management (FWM) office if the project is located on EBCI trust land. (See Section 2.7 for information on the designated trout watersheds).

1.3 Sturgeon Spawning Areas as Designated by the National Marine Fisheries Service (NMFS)

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the NMFS.

3.0 List of Corps Regional Conditions for All Nationwide Permits

The following conditions apply to all Nationwide Permits in the Wilmington District:

3.1 Limitation of Loss of Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of more than 300 total linear feet of stream bed, unless the District Engineer has waived the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis and has determined that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Waivers for the loss of ephemeral and intermittent streams must be in writing and documented by appropriate/accepted stream quality assessments*. This waiver only applies to the 300 linear feet threshold for NWPs.

This Regional Condition does not apply to NWP 23 (Approved Categorical Exclusions).

*NOTE: Permittees should utilize the most current methodology prescribed by Wilmington District to assess stream function and quality. Information can be found at:

https://ribits.usace.army.mil/ribits_apex/f?p=107:27:0::NO

3.2 Mitigation for Loss of Stream Bed

For any NWP that results in a loss of more than 150 linear feet of stream, the permittee shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment. For stream losses of 150 linear feet or less that require a PCN, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

3.3 Pre-construction Notification for Loss of Streambed Exceeding 150 Feet

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream, intermittent or ephemeral stream, the permittee shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). This applies to NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

3.4 Restriction on Use of Live Concrete

For all NWPs which allow the use of concrete as a building material, live or fresh concrete, including bags of uncured concrete, may not come into contact with the water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with wet concrete shall only be returned to waters of the United States after the concrete is set and cured and when it no longer poses a threat to aquatic organisms.

3.5 Requirements for Using Riprap for Bank Stabilization

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

3.5.1. Where bank stabilization is conducted as part of an activity, natural design, bioengineering and/or geoen지니어ing methods that incorporate natural durable materials, native seed mixes, and native plants and shrubs are to be utilized to the maximum extent practicable.

3.5.2. Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters. The placement of filter fabric is not required if the riprap will be pushed or “keyed” into the bank of the waterbody. A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional Condition would result in greater adverse impacts to the aquatic environment.

3.5.3. The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

3.5.4. The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

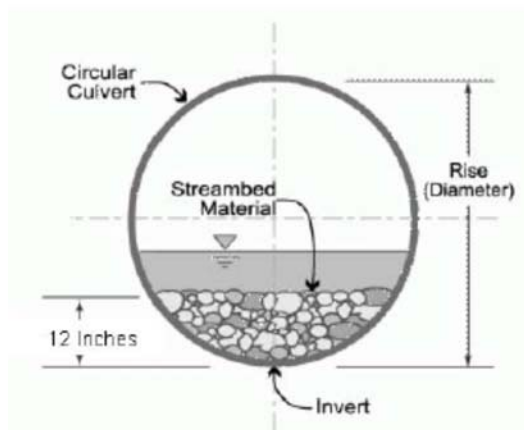
3.5.5. It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

3.5.6. The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

3.6 Requirements for Culvert Placement

3.6.1 For all NWP’s that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by altering the width or depth of the stream profile in connection with the construction activity. The width, height, and gradient of a proposed culvert should be sufficient to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow is the seasonal sustained high flow that typically occurs in the spring. Spring flows should be determined from gage data, if available. In the absence of such data, bank-full flow can be used as a comparable indicator.

In Public Trust Areas of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by the Coastal Area Management Act (CAMA): All pipes/culverts must be sufficiently sized to allow for the burial of the bottom of the culvert at least one foot below normal bed elevation.



In all other areas: Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried to maintain aquatic passage and to maintain passage during drought or low flow conditions, and every effort shall be made to maintain the existing channel slope.

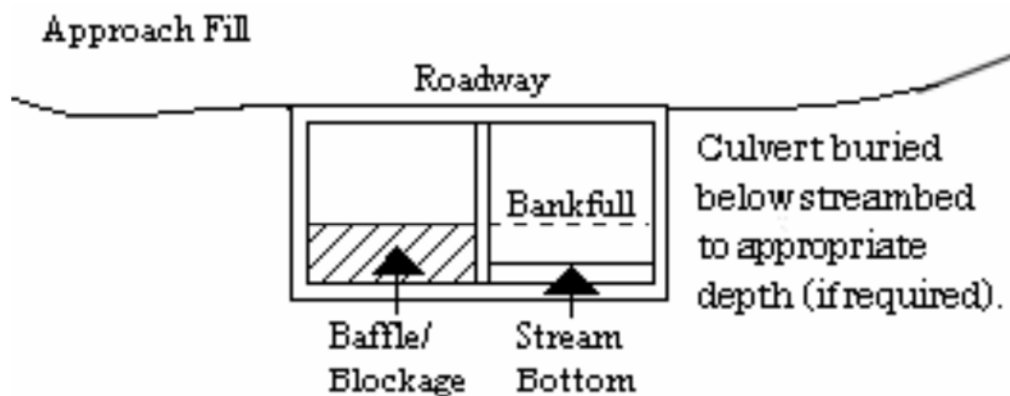
Culverts must be designed and constructed in a manner that minimizes destabilization and head cutting. Destabilizing the channel and head cutting upstream should be considered and appropriate actions incorporated in the design and placement of the culvert.

A waiver from the depth specifications in this condition may be requested, in writing, by the permittee and issued by the Corp; this request must be specific as to the reasons(s) for the request. The waiver will be issued if it can be demonstrated that the proposed design would result in less impacts to the aquatic environment.

All counties: Culverts placed within riparian and/or riverine wetlands must be installed in a manner that does not restrict the flow and circulation patterns of waters of the United States.

Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

3.6.2 Bank-full flows (or less) shall be accommodated through maintenance of the existing bank- full channel cross sectional area. Additional culverts or culvert barrels at such crossings shall be allowed only to receive bank-full flows.



3.6.3 Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation. Additional culverts or culvert barrels at such crossings should not be buried, or if buried, must have sills at the inlets to ensure that they only receive flows exceeding bank-full.

3.6.4 Excavation of existing stream channels shall be limited to the minimum necessary to construct or install the proposed culvert. The final width of the impacted stream at the culvert inlet and outlet should be no greater than the original stream width. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if the proposed design would result in less impacts to the aquatic environment and/or if it can be demonstrated that it is not practicable to restore the final width of the impacted stream at the culvert inlet and outlet to the width of the original stream channel.

3.6.5 The width of the culvert shall be comparable to the width of the stream channel. If the width of the culvert is wider than the stream channel, the culvert shall include baffles, benches and/or sills to maintain the width of the stream channel. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable or necessary to include baffles, benches or sills and the design would result in less impacts to the aquatic environment.

3.7 Notification to NCDEQ Shellfish Sanitation Section

Permittees shall notify the NCDEQ Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued by the permittee.

3.8 Submerged Aquatic Vegetation

Impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP, except NWP 48, unless EFH Consultation has been completed pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). Permittees shall submit a PCN (See NWP General Condition 32) to the District Engineer prior to commencing the activity if the project would affect SAV. The permittee may not begin work until notified by the Corps that the requirements of the Magnuson-Stevens Act have been satisfied and that the activity is authorized.

3.9 Sedimentation and Erosion Control Structures and Measures

All PCNs will identify and describe sedimentation and erosion control structures and measures proposed for placement in waters of the United States. The structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams.

3.10 Restoration of Temporary Impacts to Stream Beds

Upon completion of work that involves temporary stream impacts, streambeds are to be restored to pre-project elevations and widths using natural streambed material such that the impacted stream reach mimics the adjacent upstream and downstream reach. The impacted area shall be backfilled with natural streambed material to a depth of at least 12 inches or to the bottom depth of the impacted area if shallower than 12 inches. An engineered in-stream structure or material can be used to provide protection of a buried structure if it provides benefits to the aquatic environment and can be accomplished by a natural streambed design. A permittee may request a waiver of this condition if it is determined a buried structure needs significant physical protection beyond those provided in this condition. This condition does not apply to NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities.

3.11 Restoration of Temporary Impacts to Stream Banks

Upon completion of work involving temporary stream bank impacts, stream banks are to be restored to pre-project grade and contours or beneficial grade and contours if the original bank slope is steep and unstable. Natural durable materials, native seed mixes, and native plants and shrubs are to be utilized in the restoration. Natural designs which use bioengineered and/or geo-engineered methods are to be applied. An engineered structure or material can be used to provide protection of a buried structure if it provides benefits to the stream bank environment, provided it is not in excess of the minimum amount needed for protection and does not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark. A permittee may request a waiver of this condition if it is determined a buried structure needs significant physical protection beyond those provided in this condition. This condition does not apply to NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities.



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Interim Director

May 7, 2018
Edgecombe County
NCDWR Project No. 20180609
Bridge 28 on NC 42
TIP No. B-4932

APPROVAL of 401 WATER QUALITY CERTIFICATION and TAR-PAMLICO BUFFER AUTHORIZATION, with ADDITIONAL CONDITIONS

Mr. Philip S. Harris, III, P.E., CPM
Natural Environment Section Head
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Dear Mr. Harris:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 28 in Edgecombe County:

Stream Impacts in the Tar-Pamlico River Basin

Site	Permanent Fill in Perennial Stream (linear ft)	Relocation of Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)
1	48	0	17	65
2	0	271	36	307
5	36	0	7	43
Total	84	271	60	415

Total Stream Impact for Project: 415 linear feet.

Wetland Impacts in the Tar-Pamlico River Basin

Site	Permanent Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
1	< 0.01	0	0.02	0	0.02
2	0	0.06	0.04	0	0.10
2A	0	0	0	<0.01	0.01
4	0	0	0.05	0	0.05
5	0.02	0	0.01	0	0.03
6	< 0.01	0	0.02	0	0.02
7	< 0.01	0	< 0.01	0	0.01
8	0	0	< 0.01	0	0.01
Total	0.03	0.06	0.15	0.01	0.25

Total Wetland Impact for Project: 0.25 acres.

Open Water (River) Impacts in the Tar-Pamlico River Basin

Site	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
3	0.01	0.01	0.02
Total	0.01	0.01	0.02

Total Open Water Impact for Project: 0.02 acres.

Tar-Pamlico Riparian Buffer Impacts

Site	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
1	4286	720	3566	N/A	2039	136	1903	N/A
2 (Tar)	7205	0	7205	N/A	2337	0	2337	N/A
2 (UT)	14469	0	14469	43407	6316	1312	5004	7506
3	4468	0	4468	N/A	2932	0	2932	N/A
4	4367	1033	3334	N/A	3469	40	3429	N/A
5	0	0	0	N/A	1022	164	858	N/A
Totals	34795	1753	33042	43407	18115	1652	16463	7506

* n/a = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required

Total Buffer Impact for Project: 52910 square feet.

The project shall be constructed in accordance with your application received May 3, 2018. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4140. This certification corresponds to the Nationwide Permit 23 issued by the Corps of Engineers. This approval is also valid for the Tar-Pamlico Riparian Buffer Rules (15A NCAC 2B.0259). 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 impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC 2B.0259. For this approval to remain valid, you must adhere to the conditions listed in the General Certification and any additional conditions listed below.

Conditions of Certification:

1. Compensatory mitigation for impacts to 14469 square feet of protected riparian buffers in Zone 1 and 5004 square feet of protected riparian buffers in Zone 2 shall be required. We understand that you have chosen to perform compensatory mitigation for impacts to protected buffers through use of the North Carolina Division of Mitigation Services (DMS) (formerly NCEEP). Mitigation for unavoidable impacts to Tar Riparian Buffers shall be provided in the Tar-Pamlico River Basin and done in accordance with 15A NCAC 2B.0295. The DMS has indicated in a letter dated April 19, 2018 that they will assume responsibility for satisfying the compensatory mitigation requirements for the above-referenced project, in accordance with DMS's Mitigation Banking Instrument signed June 14, 2016.

2. The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission, the US Fish and Wildlife Service, National Marine Fisheries Service and NC Division of Marine Fisheries. No in-water work is permitted between February 15 and June 30 of any year, nor between August 15 and October 31 of any year, without prior approval from the NC Division of Water Resources, National Marine Fisheries Service, and the NC Wildlife Resources Commission. In addition, the permittee shall conform to the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997) at all times.
3. Channel relocations shall be completed and stabilized, and approved on site by NCDWR staff, prior to diverting water into the new channel. Stream banks shall be matted with coir-fiber matting. Vegetation used for bank stabilization shall be limited to native riparian vegetation, and should include establishment of a vegetated buffer on both sides of the relocated channel to the maximum extent practical. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. Once the stream has been turned into the new channel, it may be necessary to relocate stranded fish to the new channel to prevent fish kills. [15A NCAC 02H .0506(b)(3)]
4. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]
5. As a condition of this 401 Water Quality Certification, the bridge demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
6. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
7. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
8. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]
9. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]
10. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H .0506(b)(3)]
11. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. [15A NCAC 2B.0259]
12. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. [15A NCAC 2B.0259]
13. Pursuant to 15A NCAC 2B.0259(6), sediment and erosion control devices shall not be placed in Zone 1 of any Tar-Pamlico Buffer without prior approval by the NCDWR. At this time, the NCDWR has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.

14. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams, shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
15. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]
16. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
17. For all streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
18. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]
19. 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]
20. 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)]
21. 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)]
22. 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)]
23. 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)]
24. 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)]
25. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
26. 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)]
27. 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)]

28. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]

29. 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]

30. 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)]

31. 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)]

32. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]

33. 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.

34. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]

35. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer (or whomever is the authorized agent if a non-NCDOT project) 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)]

36. Native riparian vegetation (i.e., trees and shrubs native to your geographic region) must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0259(10)] & [15A NCAC 02B.0506(b)(2)]

37. 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)]

38. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3)]:

- a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
- b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
- d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

39. Sediment and erosion control measures shall not be placed in wetlands or surface waters, or within 5 feet of the top of bank, without prior approval from DWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]

40. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506{b)(3) and (c)(3) and 15A NCAC 02B.0200]

41. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-1, WS-11, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watershed*. [15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]

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. Sam M.Hayes, 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 Rob Ridings at 919-707-8786.

Sincerely,


ba Linda Culpepper, Interim Director
Division of Water Resources

Electronic copy only distribution:

Tom Steffens, US Army Corps of Engineers, Washington Field Office
Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
Chad Coggins, Division 4 Environmental Officer
Chris Rivenbark, NC Department of Transportation
Travis Wilson, NC Wildlife Resources Commission
Beth Harmon, Division of Mitigation Services
File Copy



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Interim Director

NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES**

WATER QUALITY GENERAL CERTIFICATION NO. 4140

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS

- **NATIONWIDE PERMIT NUMBER 23 (APPROVED CATEGORICAL EXCLUSIONS)**


Water Quality Certification Number 4140 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (23) of the US Army Corps of Engineers regulations.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Effective date: December 1, 2017

Signed this day: December 1, 2017

By


for Linda Culpepper
Interim Director

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Activities meeting any one (1) of the following thresholds or circumstances require written approval for a 401 Water Quality Certification from the Division of Water Resources (DWR):

- a) If any of the conditions of this Certification (listed below) cannot be met; or
- b) Total permanent impacts to streams equal or greater than 40 linear feet; or
- c) Any stream relocation or stream restoration; or
- d) Any impacts to streams from excavation or dredging other than excavation that is conducted as preparation for installing permanent fill or structures; or
- e) Total temporary or permanent impacts to wetlands and/or open waters equal to or greater than one-tenth (1/10) acre; or
- f) Any high-density project, as defined in 15A NCAC 02H .1003(2)(a) and by the density thresholds specified in 15A NCAC 02H .1017, which:
 - i. Disturbs one acre or more of land (including a project that disturbs less than one acre of land that is part of a larger common plan of development or sale); and
 - ii. Has permanent wetland, stream or open water impacts; and
 - iii. Is proposing new built-upon area; and
 - iv. Does not have a stormwater management plan reviewed and approved under a state stormwater program¹ or a state-approved local government stormwater program².

Projects that have vested rights, exemptions, or grandfathering from state or locally-implemented stormwater programs and projects that satisfy state or locally-implemented stormwater programs through use of community in-lieu programs **require written approval**; or

- g) Any permanent impacts to waters, or wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-I, WS-II, Trout, or a North Carolina or National Wild and Scenic River; or
- h) Any permanent impacts to coastal wetlands [15A NCAC 7H .0205], or Unique Wetlands (UWL) [15A NCAC 2H .0506]; or
- i) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or
- j) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless*:
 - i. The activities are listed as "EXEMPT" from these rules; or
 - ii. A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or

¹ e.g. Coastal Counties, HQW, ORW, or state-implemented Phase II NPDES

² e.g. Delegated Phase II NPDES, Water Supply Watershed, Nutrient-Sensitive Waters, or Universal Stormwater Management Program

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- iii. A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval.

I. ACTIVITY SPECIFIC CONDITIONS:

1. For the North Carolina Department of Transportation, compliance with the NCDOT's individual NPDES permit NCS000250 shall serve to satisfy this condition. All other high-density projects that trigger threshold Item (f) above shall comply with the following requirements [15A NCAC 02H .0506 (b)(5) and (c)(5)]:
 - a. Provide a completed Stormwater Management Plan (SMP) for review and approval, including all appropriate stormwater control measure (SCM) supplemental forms and associated items, that complies with the high-density development requirements of 15A NCAC 02H .1003. Stormwater management shall be provided throughout the entire project area in accordance with 15A NCAC 02H .1003. For the purposes of 15A NCAC 02H .1003(2)(a), density thresholds shall be determined in accordance with 15A NCAC 02H .1017.
 - b. Provide documentation (including calculations, photos, etc.) that the project will not cause degradation of downstream surface waters. Documentation shall include a detailed analysis of the hydrological impacts from stormwater runoff when considering the volume and velocity of stormwater runoff from the project built upon area and the size and existing condition of the receiving stream(s).

Exceptions to this condition require application to and written approval from DWR.

II. GENERAL CONDITIONS:

1. When written authorization is required, the plans and specifications for the project are incorporated into the authorization by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters, beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]

No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 02B .0200]

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3. In accordance with 15A NCAC 02H .0506(h) and Session Law 2017-10, compensatory mitigation may be required for losses of greater than 300 linear feet of perennial streams and/or greater than one (1) acre of wetlands. Impacts associated with the removal of a dam shall not require mitigation when the removal complies with the requirements of Part 3 of Article 21 in Chapter 143 of the North Carolina General Statutes. Impacts to isolated and other non-404 jurisdictional wetlands shall not be combined with 404 jurisdictional wetlands for the purpose of determining when impact thresholds trigger a mitigation requirement. For linear publicly owned and maintained transportation projects that are not determined to be part of a larger common plan of development by the US Army Corps of Engineers, compensatory mitigation may be required for losses of greater than 300 linear feet per perennial stream.

Compensatory stream and/or wetland mitigation shall be proposed and completed in compliance with G.S. 143-214.11. For applicants proposing to conduct mitigation within a project site, a complete mitigation proposal developed in accordance with the most recent guidance issued by the US Army Corps of Engineers Wilmington District shall be submitted for review and approval with the application for impacts.

4. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2 of Title 15A.
5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0200]

Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

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If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

6. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]
8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit. [15A NCAC 02H .0506(b)(5) and (c)(5)]

9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]
10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506 (b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

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Work within a designated trout watershed of North Carolina (as identified by the Wilmington District of the US Army Corps of Engineers), or identified state or federal endangered or threatened species habitat, shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

11. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. [15A NCAC 02H .0506(b)(2) and (c)(2)]

Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life.

If multiple pipes or barrels are required, they shall be designed to mimic the existing stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided.

When topographic constraints indicate culvert slopes of greater than 5%, culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross vanes, etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 60 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as, a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 60 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

If other site-specific topographic constraints preclude the ability to bury the culverts as described above and/or it can be demonstrated that burying the culvert would result in destabilization of the channel, then exceptions to this condition require application to and written approval from DWR.

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Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(5)]
13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]
16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]

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17. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original stream elevation and streambank contours are restored and maintained. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
18. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]
19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H .1405.
20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 (12)]
21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506(b)(3) and (c)(3)]
22. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
23. If an environmental document is required under the State Environmental Policy Act (SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act (NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency. [15A NCAC 01C .0107(a)]

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24. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
25. The applicant and their authorized agents shall conduct all 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 DWR determines that such standards or laws are not being met, including 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, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507(d)]
26. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this Certification. A copy of this Certification, including all conditions shall be available at the project site during the construction and maintenance of this project. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
27. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
28. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
29. If the property or project is sold or transferred, the new permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

III. GENERAL CERTIFICATION ADMINISTRATION:

1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).

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2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.
5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is deemed in the public's best interest or determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.

History Note: Water Quality Certification (WQC) Number 4140 issued December 1, 2017 replaces WQC4093 issued March 3, 2017; WQC 3891 issued March 19, 2012; WQC 3701 issued November 1, 2007; WQC Number 3632 issued March 2007; WQC Number 3403 issued March 2003; WQC Number 3361 issued March 18, 2002; WQC Number 3107 issued February 11, 1997; WQC Number 2734 issued May 1 1993; and WQC Number 2670 issued on January 21, 1992.



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
 Southeast Regional Office
 263 13th Avenue South
 St. Petersburg, Florida 33701-5505
<http://sero.nmfs.noaa.gov>

F/SER46:DR

MAY 2 - 2018

Mr. Philip S. Harris III, P.E., CPM, Unit Head
 Environmental Analysis Unit
 North Carolina Department of Transportation
 1598 Mail Service Center
 Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

This letter responds to your request for consultation with us, the National Marine Fisheries Service (NMFS), pursuant to Section 7 of the Endangered Species Act (ESA) for the following action.

SER Number	Project Type
SER-2017-18937	North Carolina Highway 42 (NC 42) Tar River Bridge replacement

Consultation History

We received your letter requesting consultation and a completed ESA Section 7 checklist on October 12, 2017. We requested additional information on February 1, 2018. We received a response on March 16, 2018. NMFS staff had a conference call with staff from the North Carolina Department of Transportation (NCDOT) and the North Carolina Wildlife Resource Commission (NCWRC) on April 5, 2018, to discuss finding in-water work moratorium windows and noise protection measures that would be suitable for all parties involved. We sent an email to NCDOT staff outlining the proposed measures to protect Atlantic sturgeon (based on the conference call discussions) on April 6, 2018, and requested their concurrence with the use of those measures. We received a final response agreeing to the measures on April 20, 2018, and we initiated consultation that day.

Project Location

Address	Latitude/Longitude	Water body
NC 42 Tar River Bridge, Edgecombe County, North Carolina	35.790534°N, 77.550389°W (North American Datum 1983)	Tar River



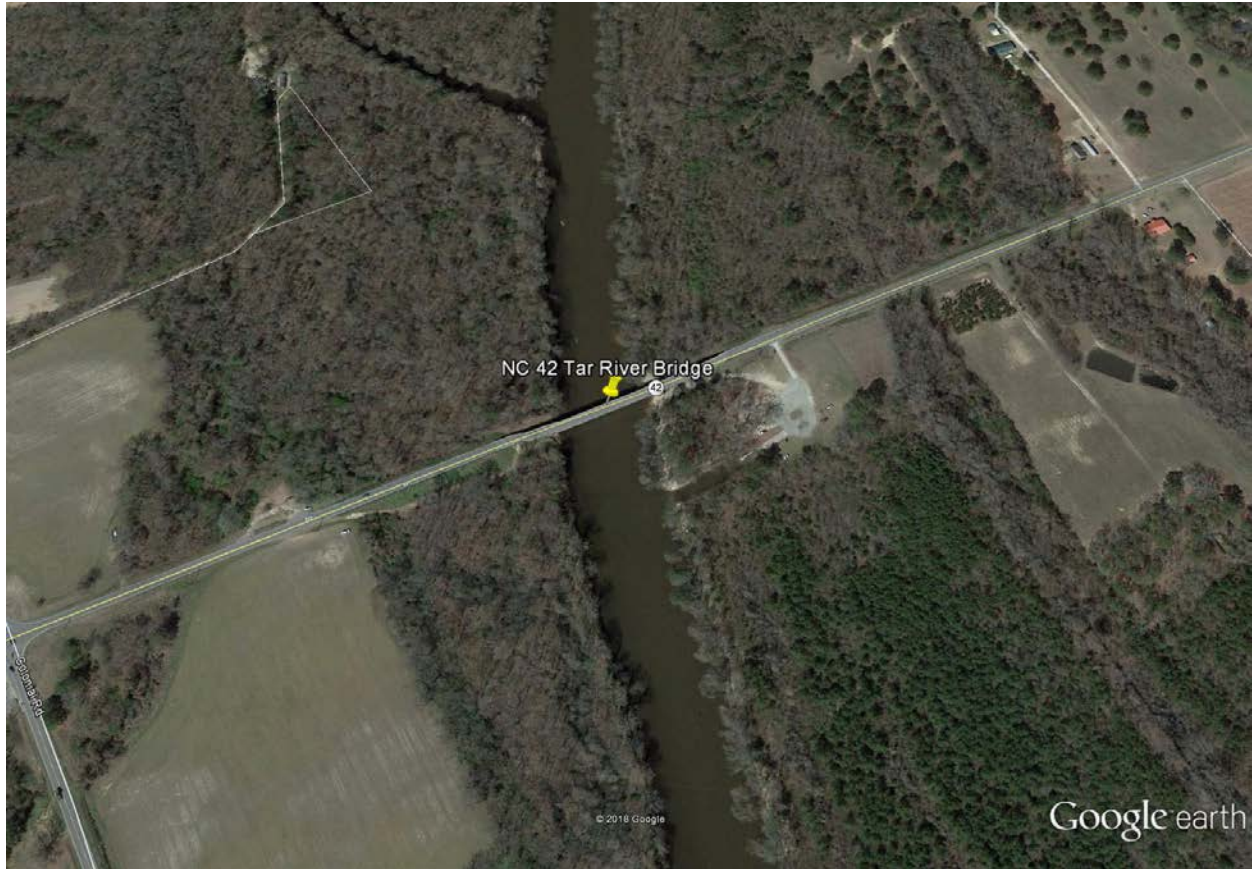


Image of the project location and surrounding area (©2018 Google)

Existing Site Conditions

The existing NC 42 Bridge spans the Tar River in Edgecombe County, approximately 12 miles northwest of Greenville, North Carolina. The NC 42 Tar River Bridge is located approximately 77.5 river miles upstream of mouth of the Tar River where it meets Pamlico Sound.

Under typical conditions the width of the river at the bridge is about 188.5 feet (ft). Water depths at the project location range from 0.5 to 4 ft deep. Bottom sediments at the project site consist of coarse sand and pebbles. Water quality is considered good.

Project Description

The NCDOT proposes replacing the existing 2-lane, 605-ft-long bridge with a new 2-lane 610-ft-long concrete fixed span bridge. The new bridge will be 37.25 ft wide with an overwater area of 7,022 square feet (ft²), and the bridge will be approximately 29 ft above the river's mean water elevation. The new bridge will be built slightly north of the existing (old) bridge. Upon completion of the new bridge, traffic will be routed onto the new bridge and the old bridge will be demolished.

In-water and over-water construction and demolition work will be accomplished from temporary work bridges. The use of barges is not anticipated. As with similar bridge and transportation projects, it is expected that heavy equipment such as cranes, trucks, and bulldozers will be used to accomplish demolition and construction activities. It is estimated that demolition of the old

bridge and construction of the new bridge will take 27 months to complete. Pile driving operations are expected to take about 60 days to complete for the new bridge and work bridges (includes both in-water and land pile driving). Removal of the old bridge is estimated to take 60 days to complete. The new bridge will be supported by 39 steel pipe piles with diameters of 36 inches (in) that will be installed by impact hammer. Ten of these piles will be installed within the Tar River. The temporary bridges may require impact hammer installation of up to 120 steel piles, that may be H piles or 30-in pipe piles.

The demolition of the old bridge is expected to involve sawing the superstructure into manageable pieces that would be removed by crane for appropriate upland disposal. The use of jack hammers and/or hoe rams may be required to demolish the other portions of the bridge. The substructural elements (e.g., piles) are typically removed using a crane possibly in association with a vibratory device. Some parts of the substructure demolition may use sawing or shattering equipment as well. The use of explosives is not anticipated as part of the demolition process.

The construction of the new bridge will require the installation of 2 concrete bridge bents in the Tar River. Each bent will be supported by 5 steel pipe piles that have 36-in diameters (a total of 10 in-water pipe piles for the new bridge). About 6-10 piles may be driven each day. Based on data for past projects involving the impact driving of 36-in pipe piles, it will take up to 675 hammer strikes to install each pile resulting in up to 6,750 total strikes per day. It will take up to 1 week to install all 10 in-water bridge pipe piles. The 10 bridge pipe piles will displace about 70.7 square feet (ft²) of river bottom.

The construction of the temporary work bridges will require the installation of steel H or pipe piles. About 6-10 piles may be driven each day. Based on data for past projects involving the impact driving of 30-in pipe piles, it will take up to 114 hammer strikes to install each pile resulting in up to 1,140 total strikes per day. It will take up to 20 days of impact driving to install up to 120 in-water temporary bridge piles. The temporary bridge pipe piles will temporarily displace up to 589 ft² of river bottom.

File Installation

Pile type	Number of Piles	Installation Method	Confined Space or Open Water
Steel pipe piles (36-in diameter)	10 in the river	Impact hammer	Open water
Steel H piles or 30-in diameter steel pipe piles	Up to 120 in the river	Impact hammer	Open water

Construction Conditions

The contractor will comply with NCDOT’s Best Management Practices. The NCDOT has agreed to provide an additional measure of protection by requiring in-water construction activities to stop if a sturgeon is spotted within 50 ft of operations. No in-water work will be allowed in the Tar River between February 15 and June 30 based on the NCWRC’s designation of this portion of the Tar River as an Inland Primary Nursery Area for juvenile anadromous fish. The NCWRC’s principal concern is preventing the potential disruption of shad and herring spawning in the river, but the February 15-June 30 moratorium period would also protect a

spring spawning run by Atlantic sturgeon and the resulting downstream movement of larval and small juvenile sturgeon shortly thereafter. An additional in-water work moratorium will start on August 15 and end on October 31 to prevent the disruption of a possible fall spawning migration by Atlantic sturgeon and the subsequent downstream movement of larval and small juvenile sturgeon produced by the spawning event. Because of the lack of data on Atlantic sturgeon in the Tar River, NMFS is basing the in-water work moratoria on data from other river systems in the southeast, including the Roanoke River in North Carolina, where Atlantic sturgeon are known to spawn. All in-water work done during the allowed time periods (i.e., November 1-February 14 and July 1-August 14) will occur during daytime hours only.

Before the start of each day’s full-force, in-water impact driving of piles (during the available in-water work windows), some form of low-level in-water noise will be generated that is loud enough to cause Atlantic sturgeon to leave the project area, but not loud enough to cause harm to the sturgeon (options include ramp-up, dry firing, or airguns). The low-level noise technique would be conducted for 5-10 minutes prior to full-force impact pile driving to allow animals the opportunity to leave the area. The chosen technique would be done before the beginning of the day’s in-water impact driving, but would need to be repeated if a break in impact pile driving lasted more than 1 hour. Ramp-up involves slowly increasing the power of the impact hammer, and the noise it produces, over a pre-determined period of time. Dry-firing involves the raising and dropping of the impact hammer, but without any compression on the piston. Airguns are devices that produce in-water noise when they rapidly release pressurized air into the water column. The amount of noise produced by an airgun can be controlled based on pressure of the air that is released (i.e., higher air pressures produce louder noises).

Effects Determinations for Species the Action Agency or NMFS Believes May Be Affected by the Proposed Action

Species	ESA Listing Status	Action Agency Effect Determination	NMFS Effect Determination
Fish			
Atlantic sturgeon (Carolina DPS)	E	NLAA	NLAA
E = endangered; NLAA = may affect, not likely to adversely affect			

Critical Habitat

The project is located in Atlantic sturgeon critical habitat Carolina Unit 2 (Tar-Pamlico Unit). The physical and biological features (PBFs) of the critical habitat are described in the table below. We believe the proposed action may affect the salinity gradient and soft substrate, unobstructed water of appropriate depth, and water quality PBFs.

Atlantic Sturgeon Critical Habitat PBFs and their Purpose/Function		
	PBF	Purpose/Role of PBF
<i>Hard Substrate (PBF 1)</i>	Hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand range)	Necessary for settlement of fertilized eggs, refuge, growth, and development of early life stages
<i>Salinity Gradient and Soft Substrate (PBF 2)</i>	Aquatic habitat with a gradual downstream salinity gradient of 0.5 up to as high as 30 parts per thousand and soft substrate (e.g., sand, mud) between the river mouth and spawning sites	Necessary for juvenile foraging and physiological development
<i>Unobstructed Water of Appropriate Depth (PBF 3)</i>	Water of appropriate depth and absent physical barriers to passage (e.g., locks, dams, thermal plumes, turbidity, sound, reservoirs, gear, etc.) between the river mouth and spawning sites	Necessary to support: <ul style="list-style-type: none"> • Unimpeded movement of adults to and from spawning sites; • Seasonal and physiologically-dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary; and • Staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (at least 1.2 meters) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river
<i>Water Quality (PBF 4)</i>	Water quality conditions, especially in the bottom meter of the water column, with the appropriate combination of temperature and oxygen values	Necessary to support: <ul style="list-style-type: none"> • Spawning; • Annual and inter-annual adult, subadult, larval, and juvenile survival; and • Larval, juvenile, and subadult growth, development, and recruitment. Appropriate temperature and oxygen values will vary interdependently, and depending on salinity in a particular habitat. For example, 6.0 mg/L dissolved oxygen or greater likely supports juvenile rearing habitat, whereas dissolved oxygen less than 5.0 mg/L for longer than 30 days is less likely to support rearing when water temperature is greater than 25°C. In temperatures greater than 26°C, dissolved oxygen greater than 4.3 mg/L is needed to protect survival and growth. Temperatures of 13 to 26 °C likely to support spawning habitat.

Analysis of Potential Routes of Effects to Species

Atlantic sturgeon may be affected by (1) the potential risk of injury from direct impact by construction machinery and associated in-water activities (e.g., crane and impact hammer operations), (2) the risk of exposure to noise or turbidity from in-water demolition and construction activities, (3) the effects of temporarily avoiding the project site due to construction activities, and (4) noise related to in-water pile driving. We believe these effects are discountable due to the complete moratorium on in-water work from February 15-June 30 and August 15-October 31. Because of the moratoria, Atlantic sturgeon (adult, larval, and small juvenile sturgeon) will not be exposed to the risk of injury because they are extremely unlikely to be in the action area.

The permanent installation of 10 in-water steel pipe piles (36-in diameter) will result in the permanent loss of 70.7 ft² of unvegetated river bottom (i.e., coarse sand and pebbles) where sturgeon might forage for invertebrate prey. In addition, up to 589 ft² of river bottom will be temporarily displaced by the piles (up to 30-in diameter) installed for the temporary work bridges. We believe the effects on sturgeon caused by the loss of river bottom due to this project will be insignificant. Because sturgeon are opportunistic feeders and forage over large areas, they would be able to locate prey beyond the immediate area of the piles. The temporary work bridge piles will be removed once the new bridge is built and demolition of the old bridge is completed. Additionally, 440 ft² of river bottom will be once again made available for use by sturgeon when the old bridge's substructural elements (i.e., piles) are removed during the demolition process. Invertebrates, which are prey for Atlantic sturgeon, will quickly recolonize this river bottom upon removal of these substructures.

Analysis of Potential Routes of Effect to Critical Habitat

The project may affect aquatic habitat with a gradual salinity gradient and soft substrate (PBF 2) by covering soft substrate with new bridge piles and temporary work bridge piles. However, we believe this effect to PBF 2 will be insignificant. The soft substrate in the river bottom surrounding the bridge piles will continue to support juvenile foraging and development. Similarly, once the temporary work bridge piles are removed those areas of soft substrate will immediately become accessible again as foraging or developmental habitat. Also, more soft substrate will become available when the old bridge's substructural elements are removed from the river bottom during demolition. The project's demolition and construction activities will have no effect on the salinity gradient in the project area.

Unobstructed water of appropriate depth (PBF 3) that supports staging, resting, holding, or movement of various life stages of Atlantic sturgeon may be affected by the installation of steel piles. We believe the obstructions created by the installation of piles will have an insignificant effect on PBF 3 because the new bridge will have fewer supports (i.e., structures in the water) than the existing bridge. Additionally, the temporary work bridge piles and permanent new bridge piles will only affect small portions of the main channel. The temporary work bridge piles will be removed at the end of the project's construction and demolition activities, and the old bridge's in-water piles will be removed as part of the demolition process. The project's demolition and construction activities will have no effect on the water depth in the project area.

Water quality (PBF 4) supporting important life functions, such as growth and reproduction, of various life stages of Atlantic sturgeon may be affected by temporary and highly localized turbidity and associated effects on suitable water temperature and oxygen values caused during installation of piles for the temporary work bridges and the new bridge, and demolition activities. However, we believe the effects to PBF 4 will be discountable because all work will be completed from November 1-February 14 and July 1-August 14, to prevent adult, larval, and small juvenile sturgeon from being exposed to elevated turbidity levels during times of the year when they might be present in the project area.

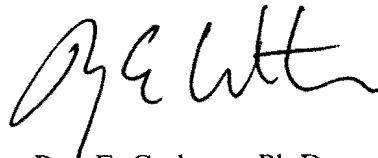
Conclusion

Because all potential project effects to listed species were found to be discountable, insignificant, or beneficial, we conclude that the proposed action is not likely to adversely affect listed species

under NMFS's purview. This concludes your consultation responsibilities under the ESA for species under NMFS's purview. Consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action. NMFS's findings on the project's potential effects are based on the project description in this response. Any changes to the proposed action may negate the findings of this consultation and may require reinitiation of consultation with NMFS.

We have enclosed additional relevant information for your review. We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions regarding this consultation, please contact Dr. Dave Rydene, Consultation Biologist, at (727) 824-5379, or by email at David.Rydene@noaa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Roy E. Crabtree', written in a cursive style.

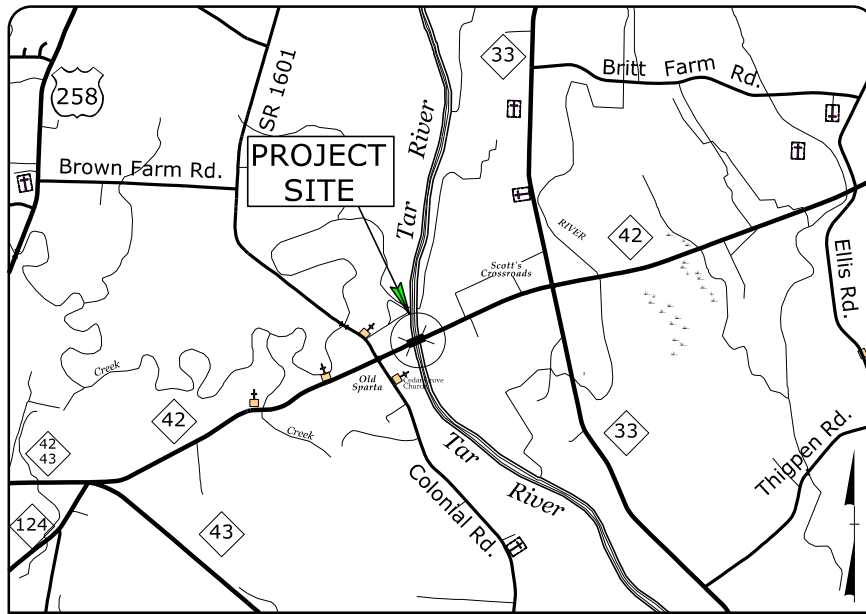
Roy E. Crabtree, Ph.D.
Regional Administrator

Enc.: 1. *PCTS Access and Additional Considerations for ESA Section 7 Consultations*
(Revised March 10, 2015)

File: 1514-22.L.1

09.08/199

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



VICINITY MAP
NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
EDGEcombe COUNTY

LOCATION: BRIDGE NO. 28 OVER TAR RIVER ON NC 42
TYPE OF WORK: GRADING, PAVING, DRAINAGE, TEMPORARY SIGNALS AND STRUCTURE
RIGHT OF WAY PLANS

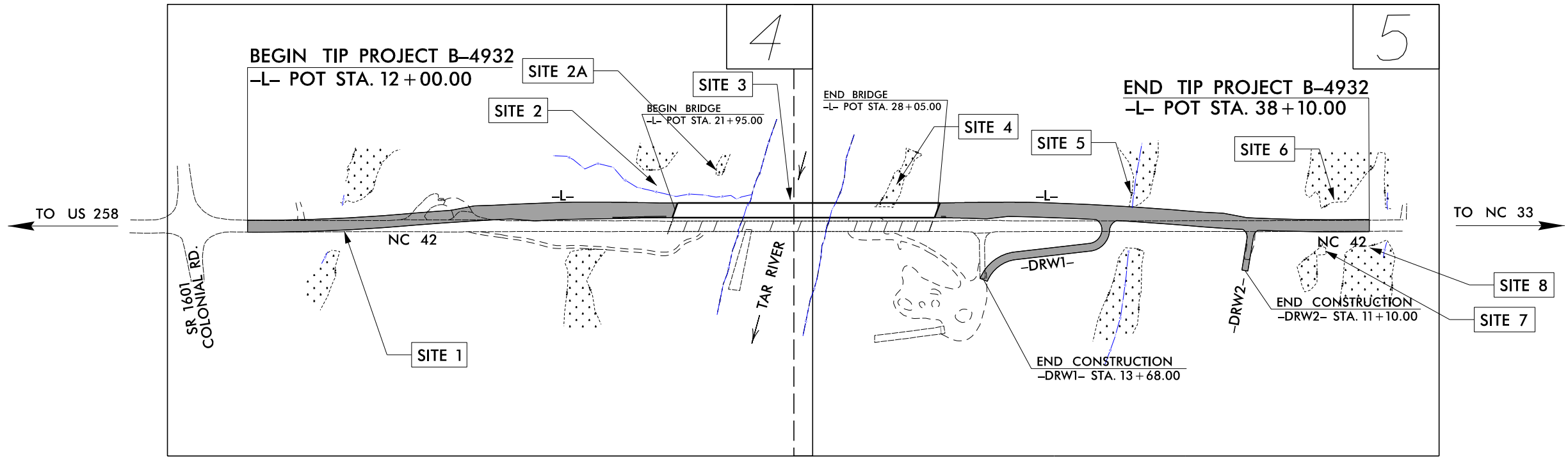
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40137.2.1		R/W, UTIL.	

PERMIT DRAWING SHEET 1 OF 12

WETLAND AND SURFACE WATER IMPACTS PERMIT

NAD 83/NSRS 2007

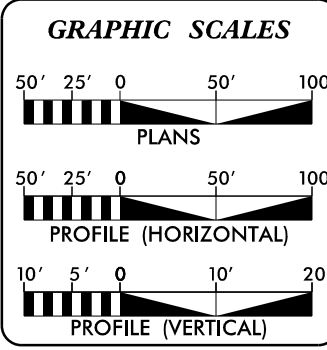
TIP PROJECT: B-4932



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA

ADT 2017 =	2410
ADT 2037 =	3180
K =	9 %
D =	60 %
T =	32 % *
V =	60 MPH
* TTST =	22% DUAL 10%
FUNC CLASS =	MAJOR COLLECTOR REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4932	=	0.378 MI.
LENGTH STRUCTURE TIP PROJECT B-4932	=	0.116 MI.
TOTAL LENGTH OF TIP PROJECT B-4932	=	0.494 MI.

Prepared for the North Carolina Department of Transportation
In the Office of:
Venture I
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
NC License No. C-3705

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MARCH 17, 2017
LETTING DATE: MARCH 20, 2018

NCDOT CONTACT: TATIA L. WHITE, PE, PLS
ROADWAY DESIGN PROJECT DESIGN ENGINEER

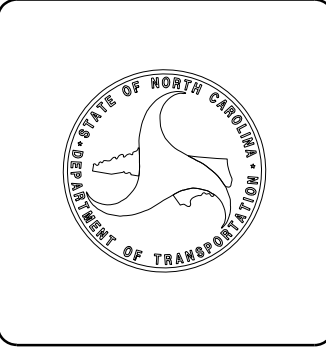
SUNGATE DESIGN GROUP, P.A.
ONE JONES FRANKLIN HOOD
RALEIGH, NORTH CAROLINA 27608
TEL: 919.486.2200 FAX: 919.486.2201

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER



SIGNATURE: _____ P.E.

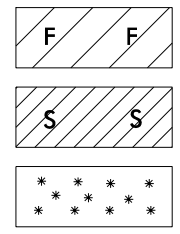
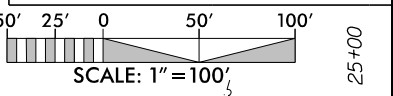


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jnarvey

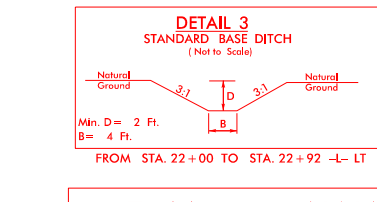
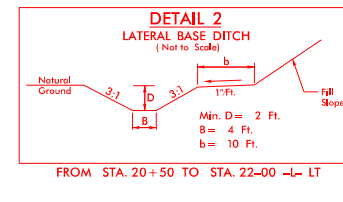
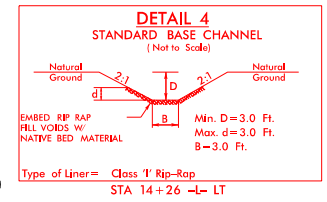
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RW SHEET NO.	
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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 4000 West Chase Boulevard, Suite 530
 Raleigh, NC 27607
 NC License No. C-3705

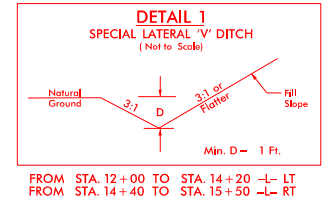


F F DENOTES FILL IN WETLAND
S S DENOTES IMPACTS IN SURFACE WATER
***** DENOTES MECHANIZED CLEARING

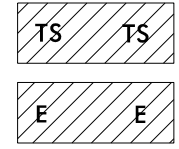


PERMIT DRAWING
SHEET 2 OF 12

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 s = 1.8%
 n = 0.045



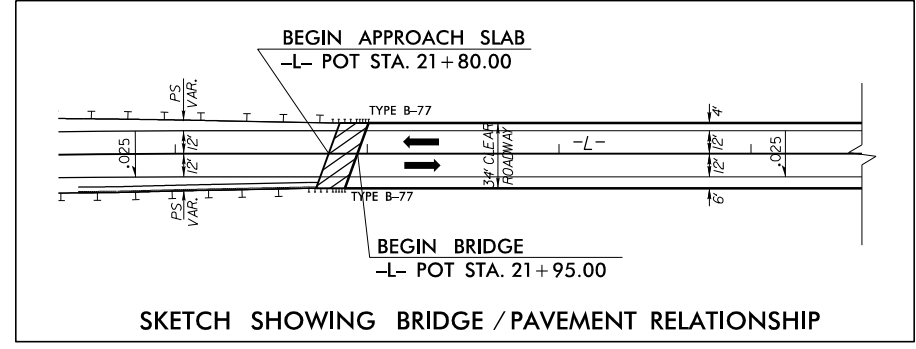
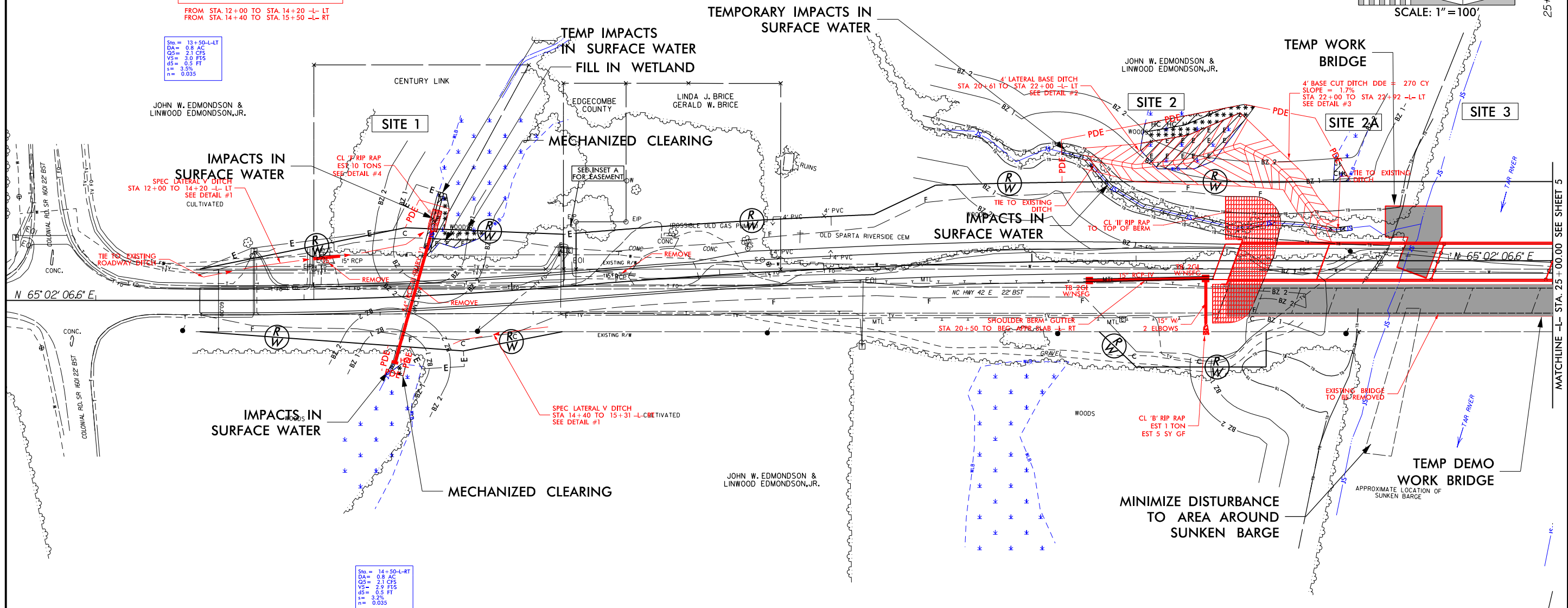
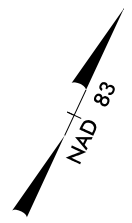
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TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER
E E DENOTES EXCAVATION IN WETLAND



HC HC DENOTES HAND CLEARING



DECK DRAINS REQUIRED
 6" DECK DRAINS ON 12' CENTERS
 FROM STA. 26+90 TO STA. 27+02 RT.
 FROM STA. 27+20 TO STA. 27+92 RT.

NOTE: TEMPORARY SIGNAL WILL BE USED FOR ONSITE DETOUR

FOR -L- PROFILE SEE SHEET 6

REVISIONS

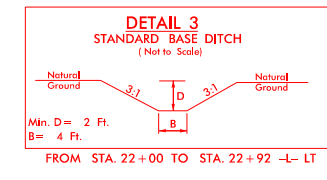
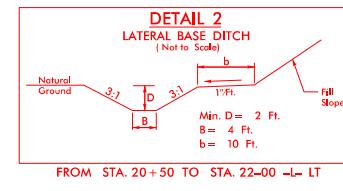
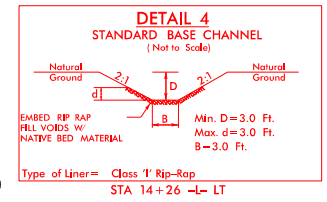
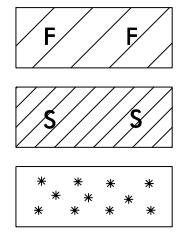
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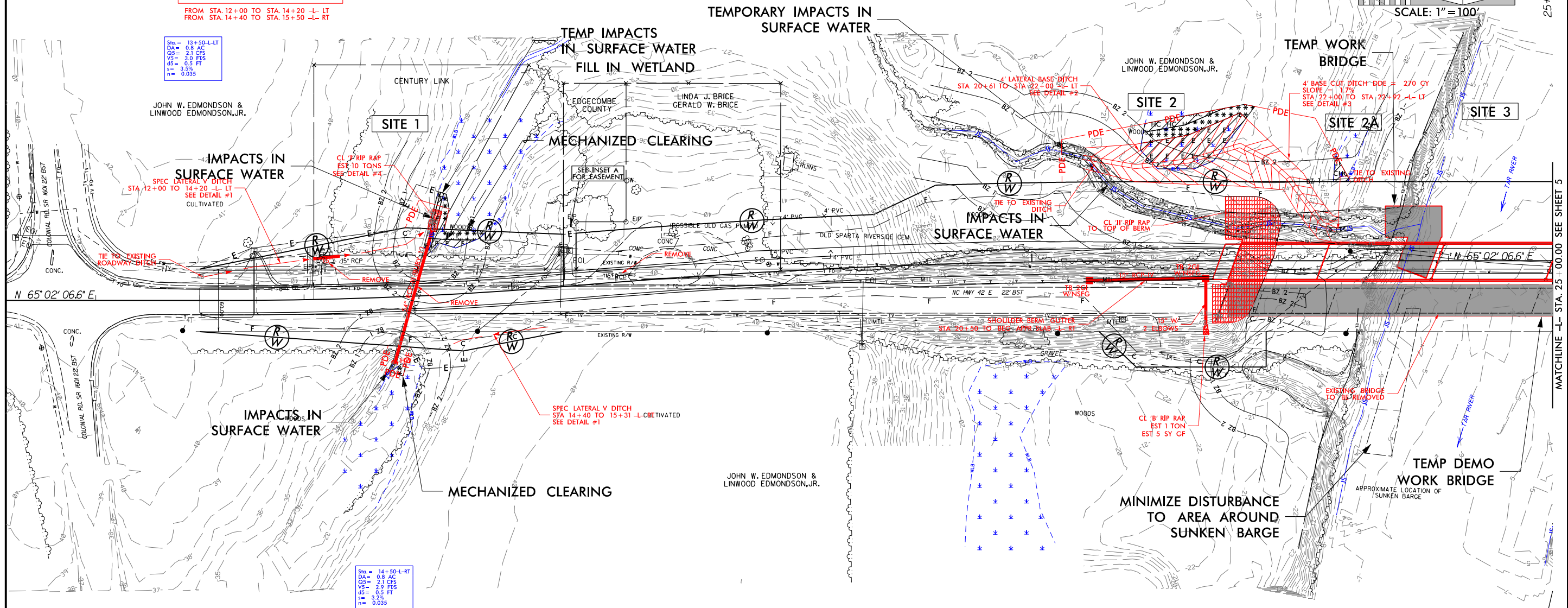
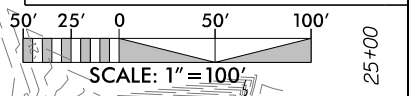
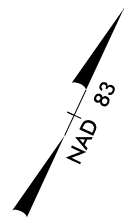
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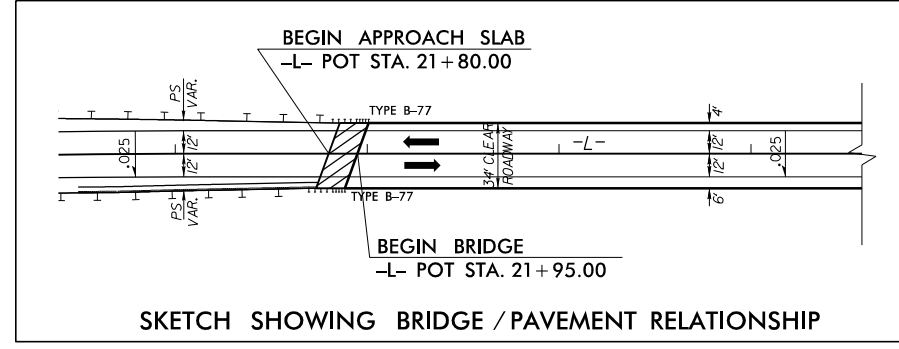
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SHEET 3 OF 12

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 s = 1.8%
 n = 0.045



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 Q5 = 2.1 CFS
 V5 = 3.0 FT/S
 d5 = 0.6 FT
 s = 3.5%
 n = 0.035

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 s = 3.2%
 n = 0.035



DECK DRAINS REQUIRED
 6" DECK DRAINS ON 12' CENTERS
 FROM STA. 26+90 TO STA. 27+02 RT.
 FROM STA. 27+20 TO STA. 27+92 RT.

NOTE: TEMPORARY SIGNAL WILL BE USED FOR ONSITE DETOUR

FOR -L- PROFILE SEE SHEET 6

REVISIONS

10/14/2017 Hyd_prm_wet_psh_04a.dgn

8/23/99



PROJ. REFERENCE NO.
B-4932

SHEET NO.
X-1

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

WETLAND

SITE 1

PERMIT DRAWING
SHEET 4 OF 12

FILL IN WETLAND

WETLAND

14 + 50.00

14 + 00.00

13 + 50.00

13 + 00.00

12 + 50.00

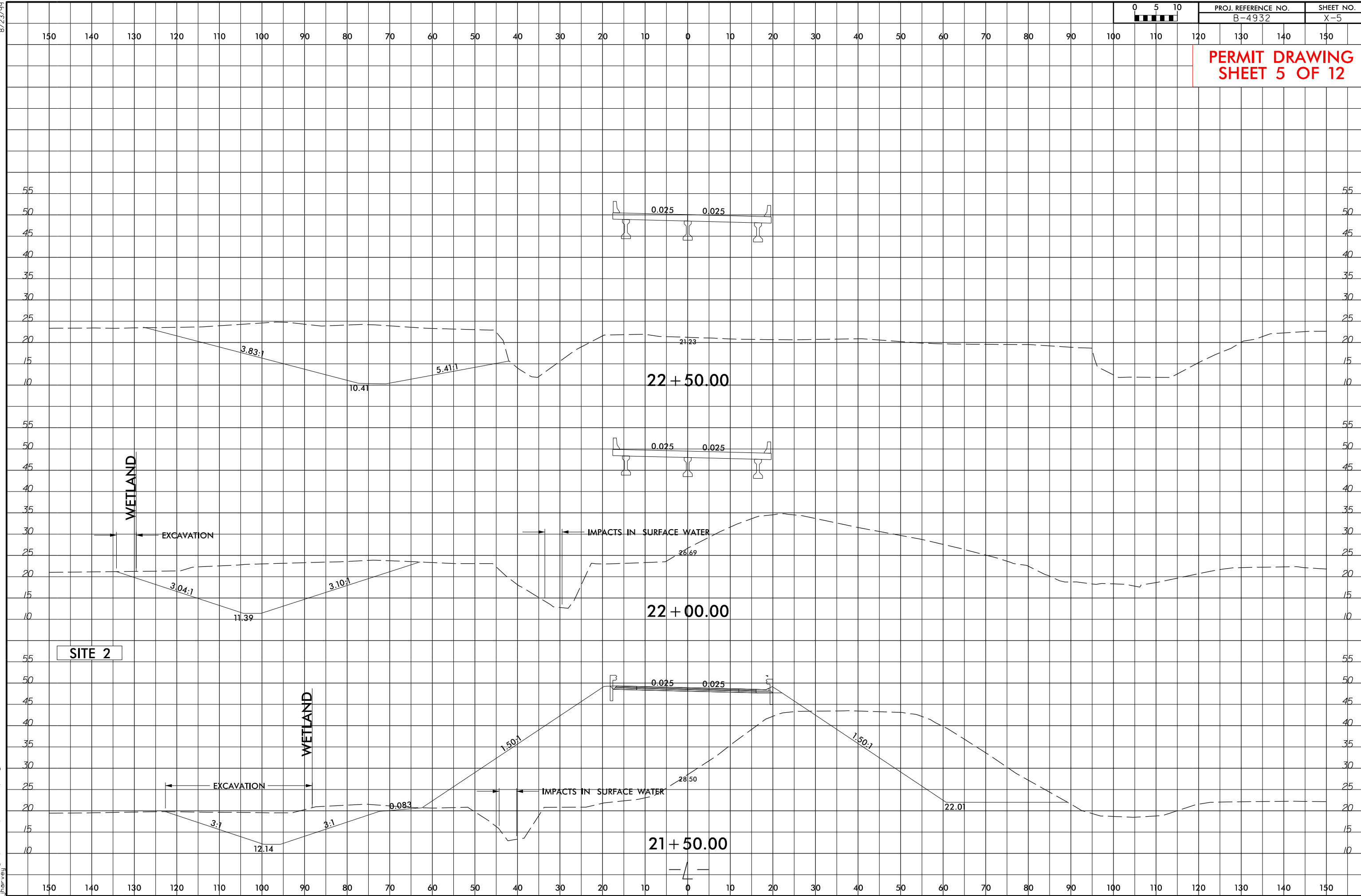
EXIST. EXIST.
12 + 00.00

EXIST.
11 + 50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

10/11/2017
B4932_Hyd_prm_wet_psh_04b_xpl.dgn
jbarve

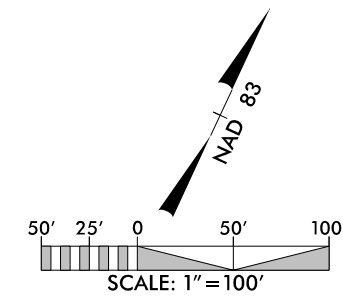
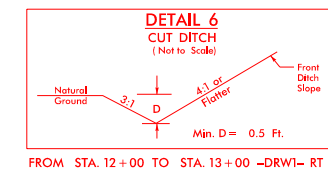
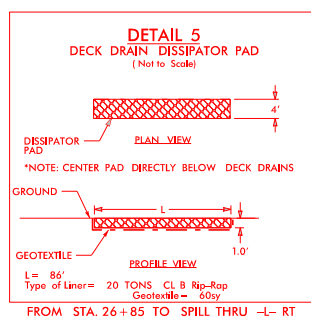
**PERMIT DRAWING
SHEET 5 OF 12**



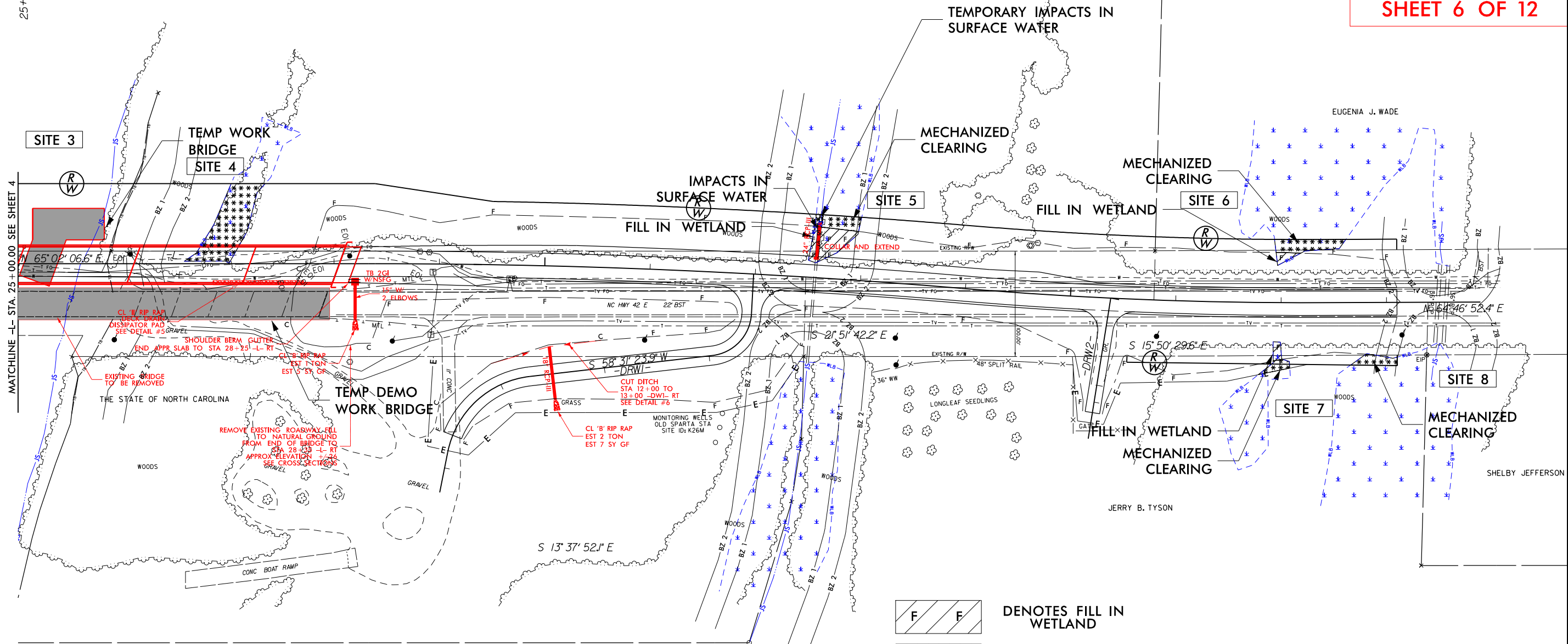
PROJECT REFERENCE NO. B-4932	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

Prepared by
 
 4000 West Chase Boulevard, Suite 530
 Raleigh, NC 27607
 NC License No. C-5705

PERMIT DRAWING
SHEET 6 OF 12

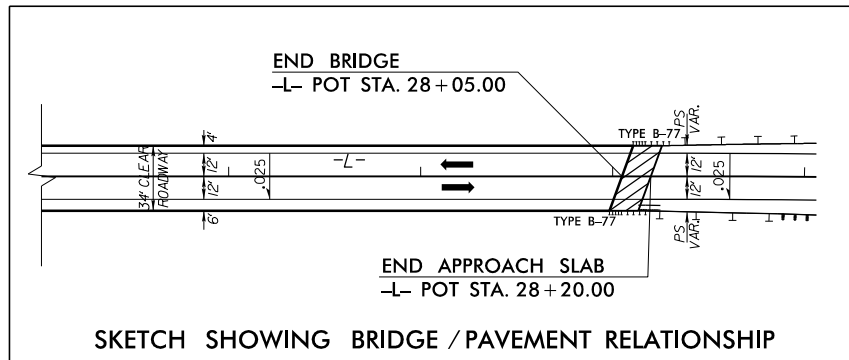


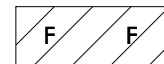


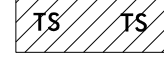
DECK DRAINS REQUIRED
 4" DECK DRAINS ON 12' CENTERS
 FROM STA. 26+90 TO STA. 27+02 RT.
 FROM STA. 27+20 TO STA. 27+92 RT.



REVISIONS

MATCHLINE -L- STA. 25+00.00 SEE SHEET 4



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

NOTE: TEMPORARY SIGNAL WILL BE USED FOR ONSITE DETOUR

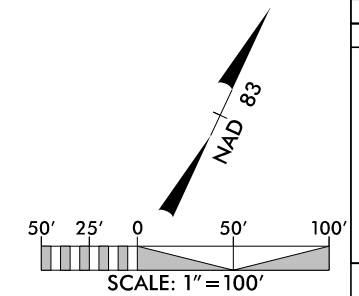
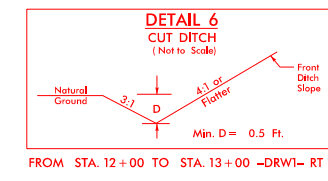
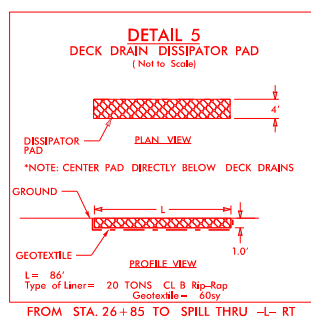
FOR -L- PROFILE SEE SHEET 6
 FOR -DRW1- & -DRW2- PROFILES SEE SHEET 7

8/17/99

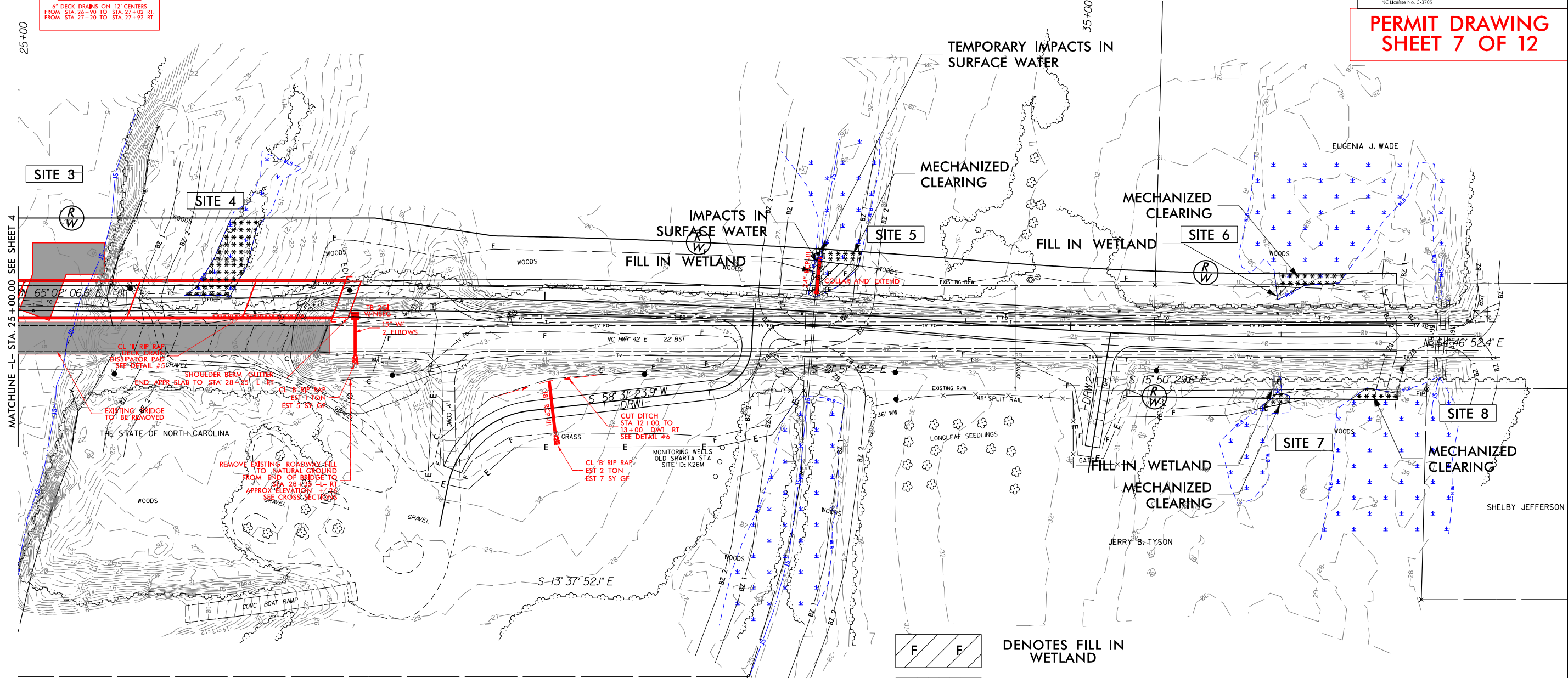
PROJECT REFERENCE NO. B-4932	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

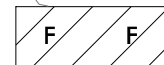


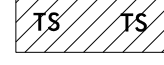
Prepared by
 
 4000 West Chase Boulevard, Suite 530
 Raleigh, NC 27607
 NC License No. C-5705

PERMIT DRAWING
SHEET 7 OF 12

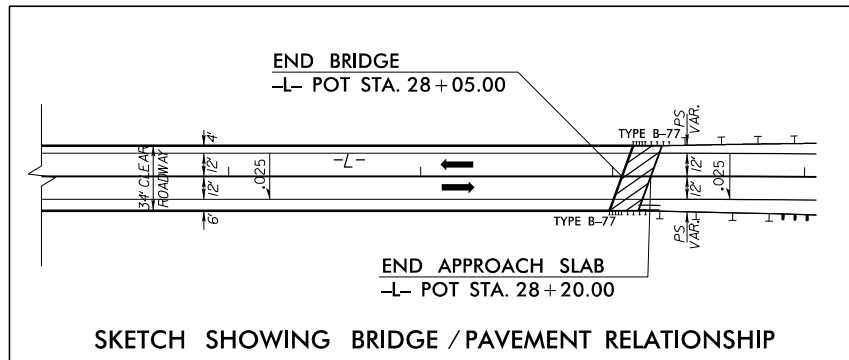


DECK DRAINS REQUIRED
4" DECK DRAINS ON 12' CENTERS
FROM STA. 26+90 TO STA. 27+02 RT.
FROM STA. 27+20 TO STA. 27+92 RT.



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

NOTE: TEMPORARY SIGNAL WILL BE USED FOR ONSITE DETOUR



FOR -L- PROFILE SEE SHEET 6
 FOR -DRW1- & -DRW2- PROFILES SEE SHEET 7

REVISIONS

10/14/2017
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10/14/2017

8/23/99



PROJ. REFERENCE NO. B-4932	SHEET NO. X-8
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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

**PERMIT DRAWING
SHEET 8 OF 12**

SITE 4

WETLAND

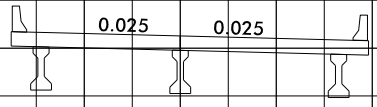
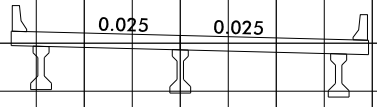
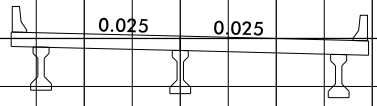
WETLAND

MECHANIZED CLEARING

18.51
27 + 00.00

18.96
26 + 50.00

18.75
26 + 00.00



10/11/2017
B4932_Hyd_prm_wet_psh_05b_xpl.dgn
jbarvef

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

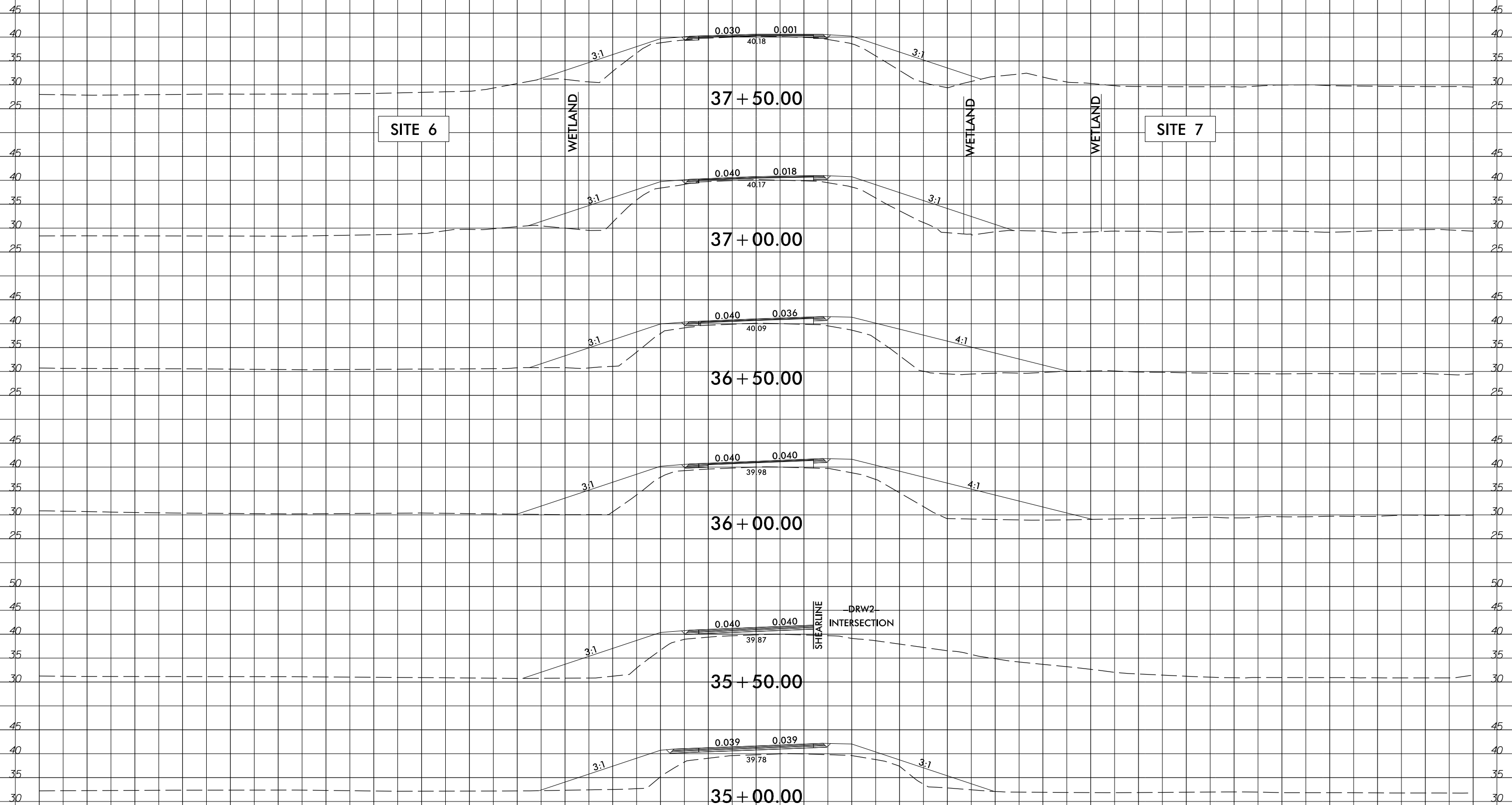
8/23/99



PROJ. REFERENCE NO. B-4932	SHEET NO. X-12
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**PERMIT DRAWING
SHEET 9 OF 12**



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

10/11/2017
B4932_Hyd_prm_wet_psh_05c_xpl.dgn
jharvey

8/23/99

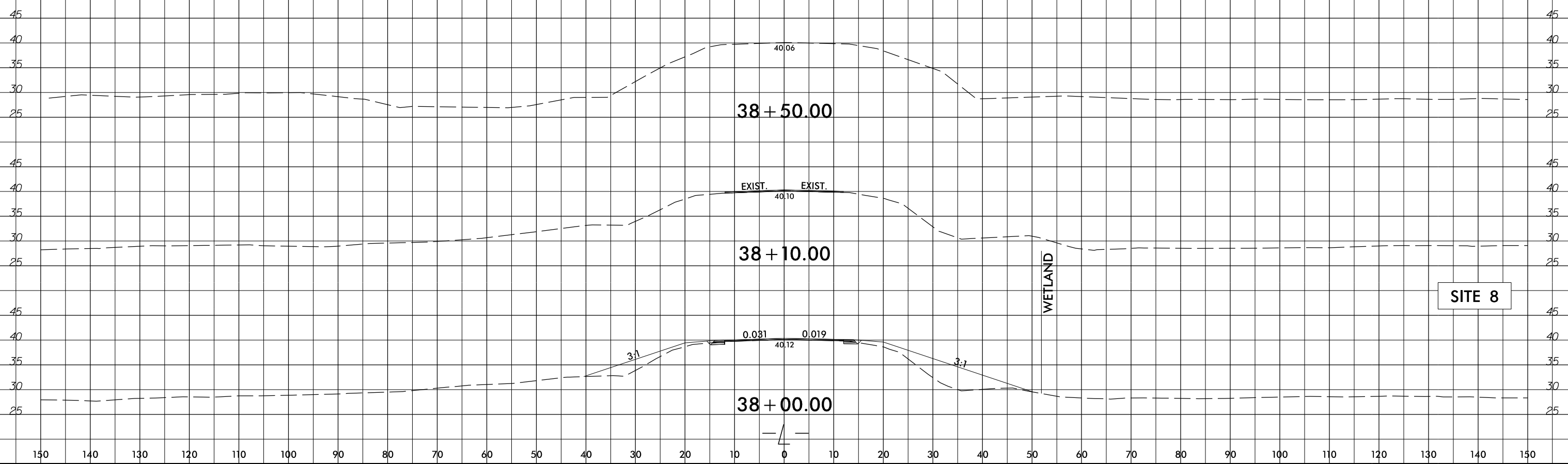


PROJ. REFERENCE NO.
B-4932

SHEET NO.
X-13

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PERMIT DRAWING
SHEET 10 OF 12



SITE 8

10/11/2017
B4932_Hyd_prm_wet_psh_05d_xpl.dgn
jbarvef

5/28/99



PROJECT REFERENCE NO. B-4932	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 42,400	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 38.6	FT
BASE DISCHARGE	= 49,600	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 40.2	FT
OVERTOPPING DISCHARGE	= 67,000	CFS
OVERTOPPING FREQUENCY	= <500	YRS
OVERTOPPING ELEVATION	= 40.5	FT
DATE OF SURVEY	= 11-24-15	
W.S. ELEVATION AT DATE OF SURVEY	= 15.4	FT

PIPE HYDRAULIC DATA
54" RCP Sta. 14+06 -L-

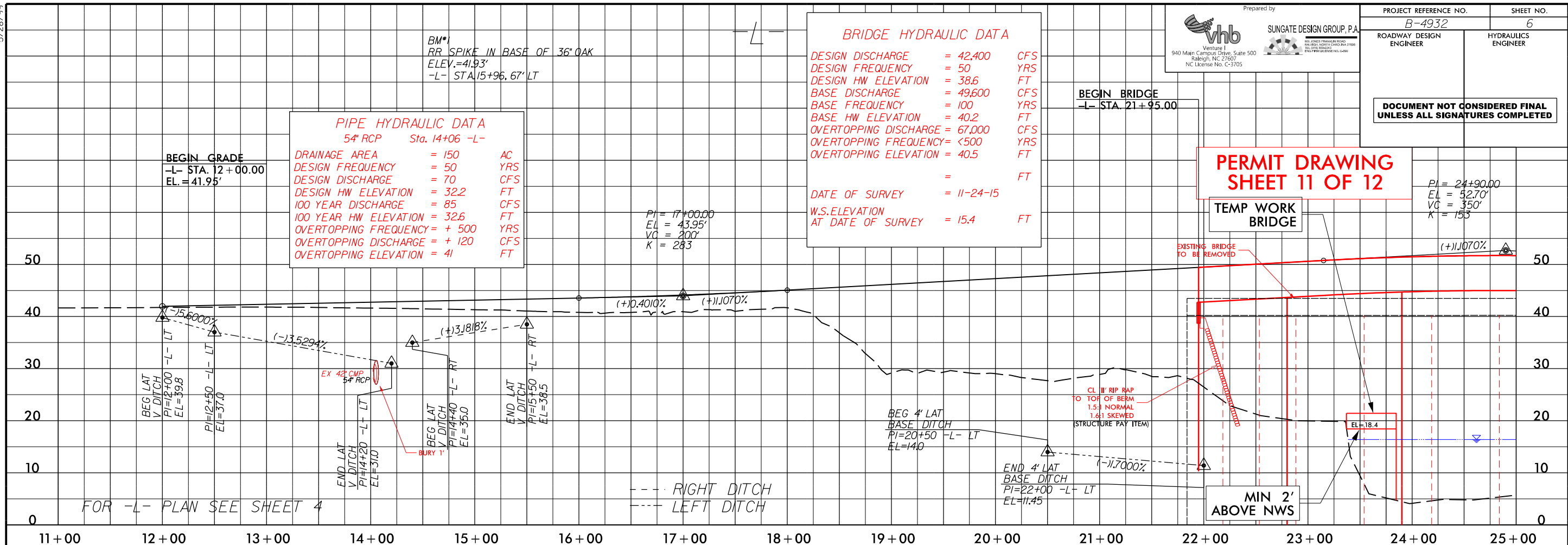
DRAINAGE AREA	= 150	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 70	CFS
DESIGN HW ELEVATION	= 32.2	FT
100 YEAR DISCHARGE	= 85	CFS
100 YEAR HW ELEVATION	= 32.6	FT
OVERTOPPING FREQUENCY	= + 500	YRS
OVERTOPPING DISCHARGE	= + 120	CFS
OVERTOPPING ELEVATION	= 41	FT

BEGIN GRADE
-L- STA. 12+00.00
EL. = 41.95'

BM#1
RR SPIKE IN BASE OF 36" OAK
ELEV. = 41.93'
-L- STA. 15+96.67' LT

PI = 17+00.00
EL = 43.95'
VC = 200'
K = 283

PI = 24+90.00
EL = 52.70'
VC = 350'
K = 153



BM#2
RR SPIKE IN BASE OF 14" GUM
ELEV. = 22.03'
-L- STA. 25+93.43' LT

CL STA. 25+00 -L-
1085.4 @ 110.1 @ 85'
SKEW = 110 DEG

END BRIDGE
-L- STA. 28+05.00

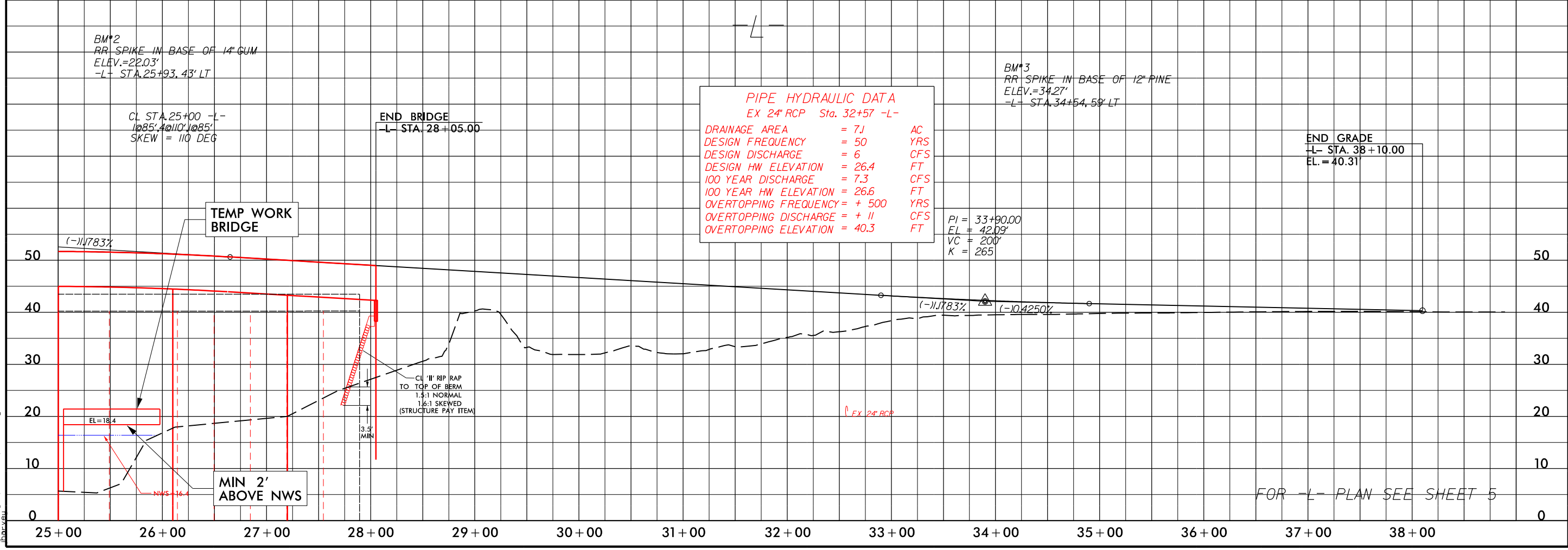
PIPE HYDRAULIC DATA
EX 24" RCP Sta. 32+57 -L-

DRAINAGE AREA	= 7.1	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 6	CFS
DESIGN HW ELEVATION	= 26.4	FT
100 YEAR DISCHARGE	= 7.3	CFS
100 YEAR HW ELEVATION	= 26.6	FT
OVERTOPPING FREQUENCY	= + 500	YRS
OVERTOPPING DISCHARGE	= + 11	CFS
OVERTOPPING ELEVATION	= 40.3	FT

BM#3
RR SPIKE IN BASE OF 12" PINE
ELEV. = 34.27'
-L- STA. 34+54.59' LT

PI = 33+90.00
EL = 42.09'
VC = 200'
K = 265

END GRADE
-L- STA. 38+10.00
EL. = 40.31'



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09.08/199

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

EDGEcombe COUNTY

LOCATION: BRIDGE NO. 28 OVER TAR RIVER ON NC 42

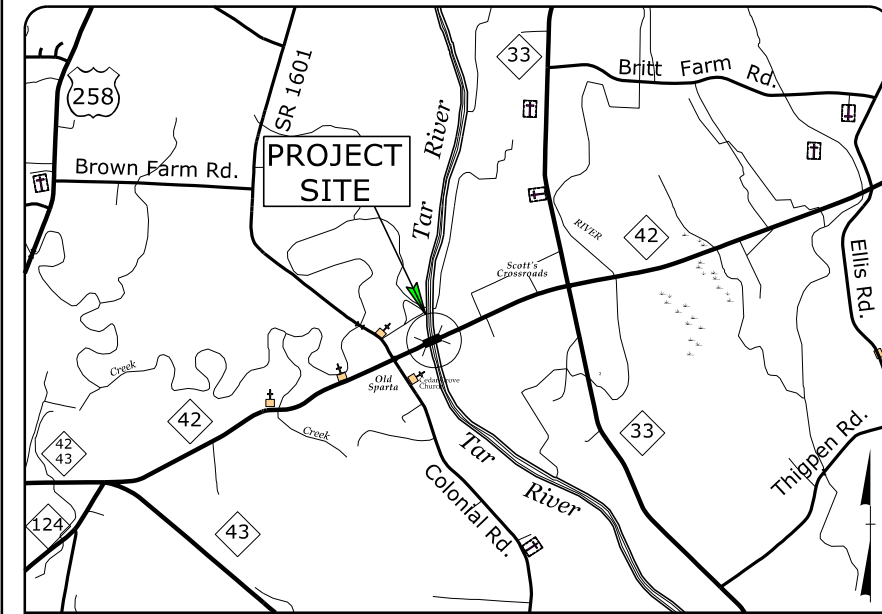
**TYPE OF WORK: GRADING, PAVING, DRAINAGE, TEMPORARY SIGNALS
AND STRUCTURE**

RIGHT OF WAY PLANS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4932	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40137.1.1	BRSTP-0042(19)	PE	
40137.2.1		R/W, UTIL.	

**BUFFER DRAWING
SHEET 1 OF 5**

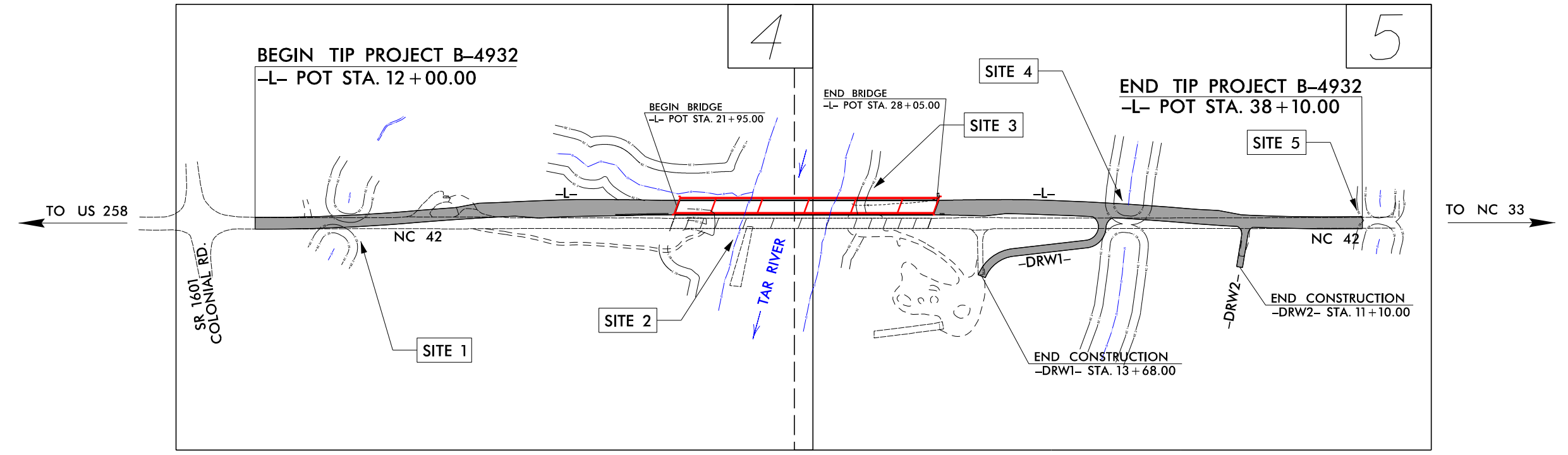
TIP PROJECT: B-4932



VICINITY MAP
NOT TO SCALE

BUFFER IMPACTS PERMIT

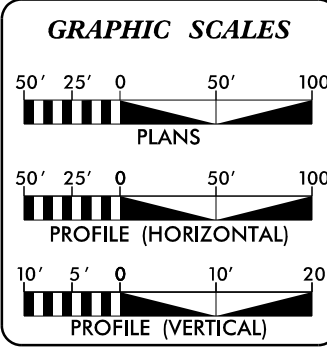
NAD 83/NSRS 2007



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA

ADT 2017 =	2410
ADT 2037 =	3180
K =	9 %
D =	60 %
T =	32 % *
V =	60 MPH
* TTST =	22% DUAL 10%
FUNC CLASS =	MAJOR COLLECTOR REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4932	=	0.378 MI.
LENGTH STRUCTURE TIP PROJECT B-4932	=	0.116 MI.
TOTAL LENGTH OF TIP PROJECT B-4932	=	0.494 MI.

Prepared for the North Carolina Department of Transportation
In the Office of:
Venture I
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
NC License No. C-3705

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MARCH 17, 2017

LETTING DATE: MARCH 20, 2018

NCDOT CONTACT: TATIA L. WHITE, PE, PLS
ROADWAY DESIGN PROJECT DESIGN ENGINEER

SUNGATE DESIGN GROUP, P.A.
JIMMY GOODNIGHT, PE
PROJECT ENGINEER

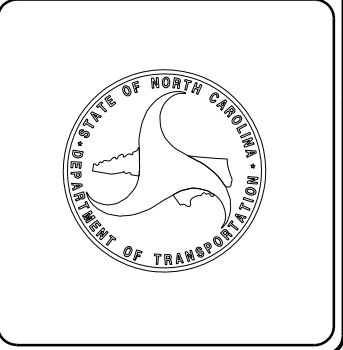
JERRY JAVELLANA, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.



ROADWAY DESIGN ENGINEER

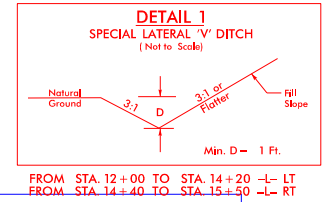
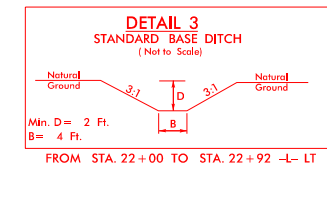
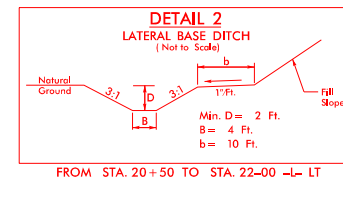
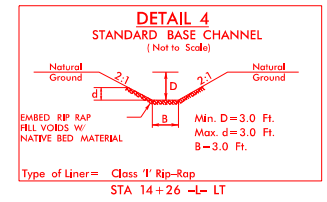
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10/11/2017
B4932-Hyd_prm_buf_psh_01.dgn
jnarvey

8/17/99

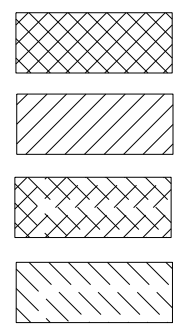
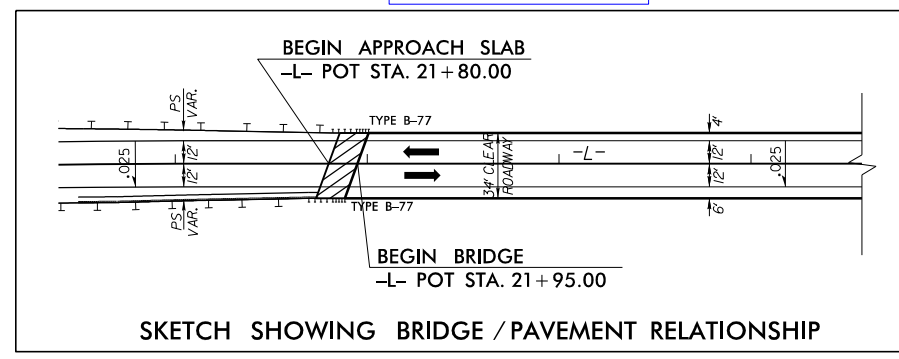
PROJECT REFERENCE NO. B-4932	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by SUNGATE DESIGN GROUP, P.A.	
 	



Sta. = 13+50 -L- LT
DA=0.8 AC
Q10=2.4 Q2=1.4
V10=5.8 V2=5.1
s= 3.5%
n=0.035

JOHN W. EDMONDSON &
LINWOOD EDMONDSON, JR.

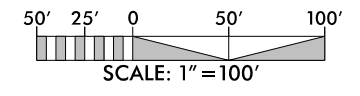
Sta. = 14+50 -L- RT
DA=0.8 AC
Q10=2.4 Q2=1.4
V10=2.1 V2=1.9
s= 3.2%
n=0.035



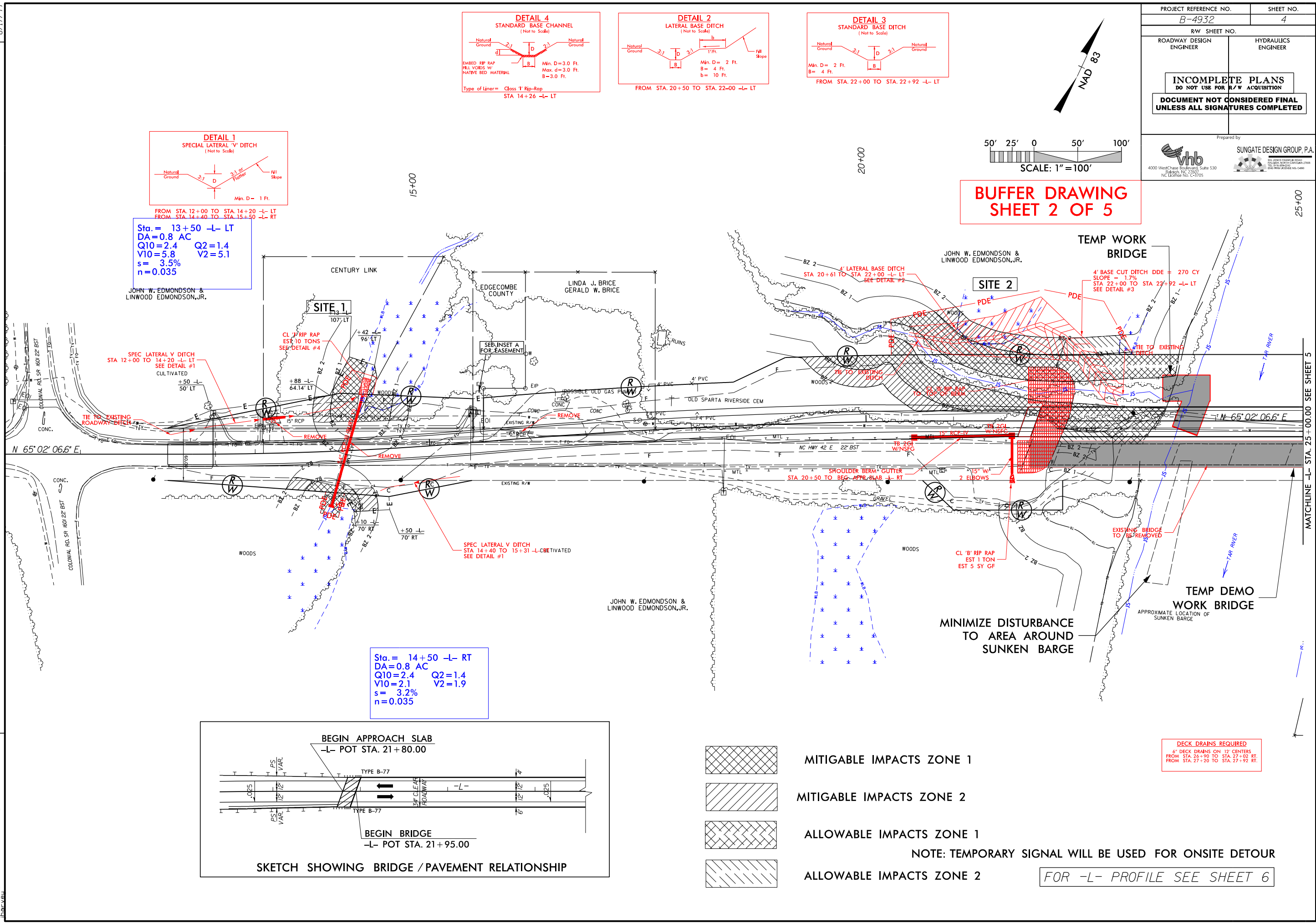
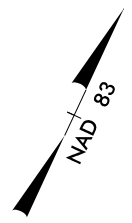
- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2
- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2

NOTE: TEMPORARY SIGNAL WILL BE USED FOR ONSITE DETOUR

FOR -L- PROFILE SEE SHEET 6



BUFFER DRAWING
SHEET 2 OF 5



REVISIONS

10/14/2017
B:\4932\Hyd_prm_buf_psh_04.dgn

RIPARIAN BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT									BUFFER REPLACEMENT			
			TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft ²)	ZONE 2 (ft ²)		
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)				
1	54" RCP	13+38 to 14+78 -L-	X					0	4286	2039	6325				
2	BRIDGE	19+24 to 23+43 -L-		X				0	14469	6316	20785				
				X							0				
3	BRIDGE	25+85 to 26+63 -L-		X							0				
4	ROADWAY	32+02 to 33+12 -L-	X					0	4367	3469	7836				
5	ROADWAY	37+89 to 38+19 -L-	X					0		1022	1022				
TOTAL:								11673	5269	16942	23122	12846	35968	0.0	0.0

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 B-4932
 EDGEcombe COUNTY
 PROJECT: 40137.1.1

 DATE 04/07/17
 SHEET 4 OF 5

WETLANDS IN BUFFER IMPACTS SUMMARY

SITE NO.	STATION (FROM/TO)	WETLANDS IN BUFFERS	
		ZONE 1 (ft ²)	ZONE 2 (ft ²)
1	13+38 to 14+78 -L-	720	136
2	19+24 to 23+43 -L-		1312
4	32+02 to 33+12 -L-	1033	40
5	37+89 to 38+19 -L-		164
TOTAL:		1753	1652

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 B-4932
 EDGECOMBE COUNTY
 PROJECT: 40137.1.1

 DATE 04/07/17
 SHEET 5 OF 5

Date: 25 October 2016
TIP Number: B-4932
County: Edgecombe
Description: Bridge #28 over Tar River on NC 42

B-4932 NEU Environmental Permit Narrative

This roadway project is located in the Tar-Pamlico River Basin. The adjacent area contains some delineated wetland areas.

Edgecombe County Public Utilities (Water)

The existing underground water main along the north side of NC 42 is in conflict with the proposed new bridge and must be relocated. Edgecombe County Public Utilities will install new valves at the beginning and end of the project limits to allow the existing water main to be isolated and abandoned. A new water main will be installed along the south side of the new bridge after the project is complete. The new water main will be bored under the Tar River to eliminate impacts to the river and buffer zones. The path of the proposed water main will follow the current alignment of NC 42 inside the existing ROW and will not create any wetland impacts.

Edgecombe Martin EMC (Power)

The existing overhead power lines the cross the Tar River will remain in place. There will be no environmental impacts from power.

CenturyLink (Telephone)

The existing underground telephone cables along the north side of the NC 42 are in conflict with the proposed new bridge and must be relocated. CenturyLink will bore under NC 42 at \pm STA 12+50. They will then install new telephone cables along the south side on NC 42 staying approximately 5' inside the existing ROW. The creek crossing at \pm STA 14+00 will be bored to eliminate impacts to the creek and buffer zones. There are no wetland impacts on this segment of CenturyLink's relocation route.

CenturyLink will bore under NC 42 at \pm STA 19+08 to get back to the north side. A bore pit will be established inside the proposed ROW approximately 105' north of the existing centerline of NC 42. From there CenturyLink will bore under the Tar River, following approximately 5' inside the proposed ROW, to a receiving pit in an existing clearing at \pm STA 35+00. The proposed telephone cables will be tied back to the existing underground telephone at \pm STA 35+50. The crossing of the Tar River and wetland areas on the north side of NC 42 will be bored to eliminate impacts to the wetlands and buffer zones.

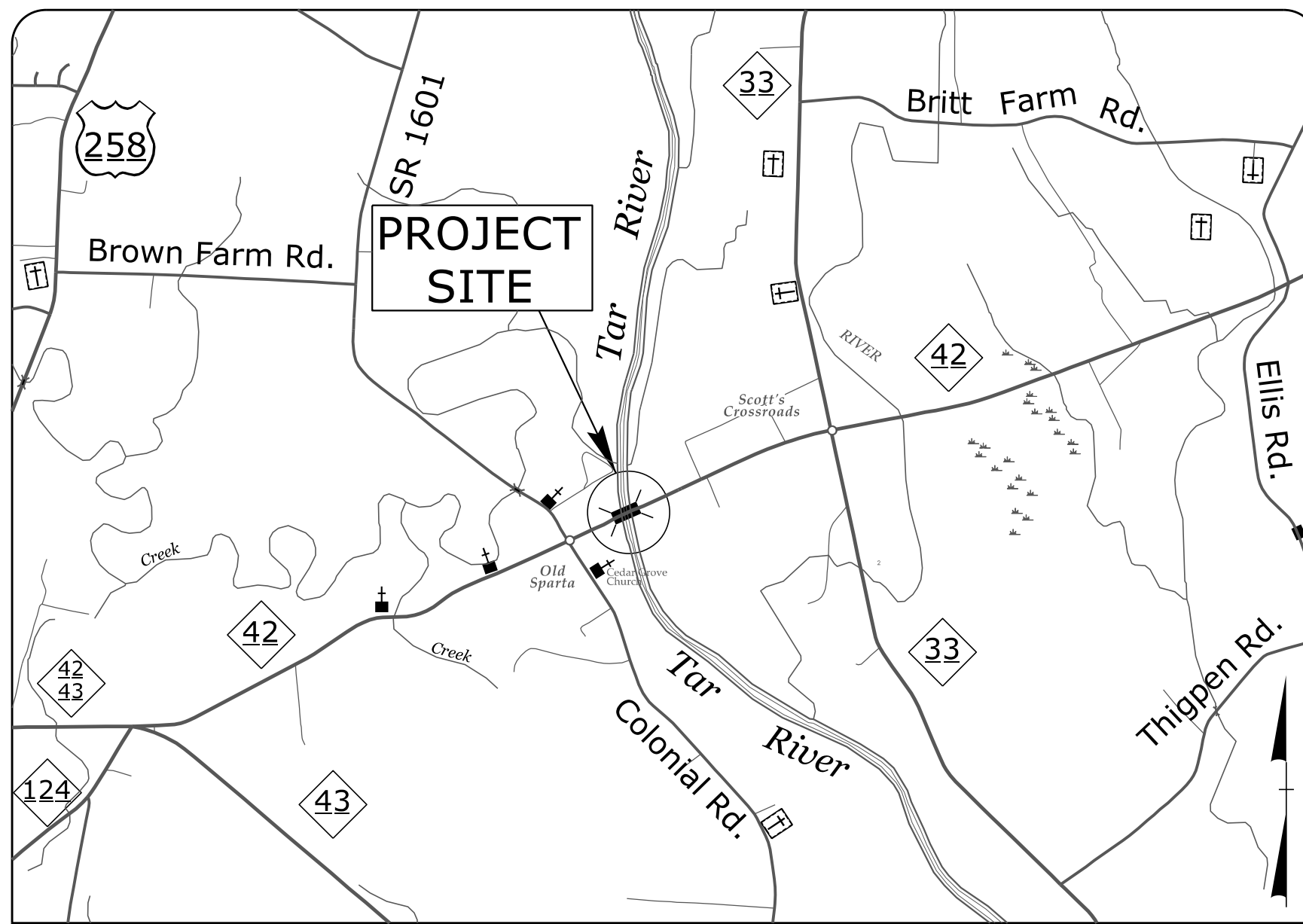
There will be hand clearing to create space for the bore pits and a path for equipment to reach the bore pits from the road. All of the proposed clearing will be outside the buffer zones and wetland areas.

Suddenlink (CATV)

The existing overhead CATV lines that cross the river will remain in place. The existing underground CATV lines on the east side of the Tar River will be relocated to the existing power poles. There will be no environmental impacts from CATV.

09/08/99

TIP PROJECT: B-4932



VICINITY MAP
NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

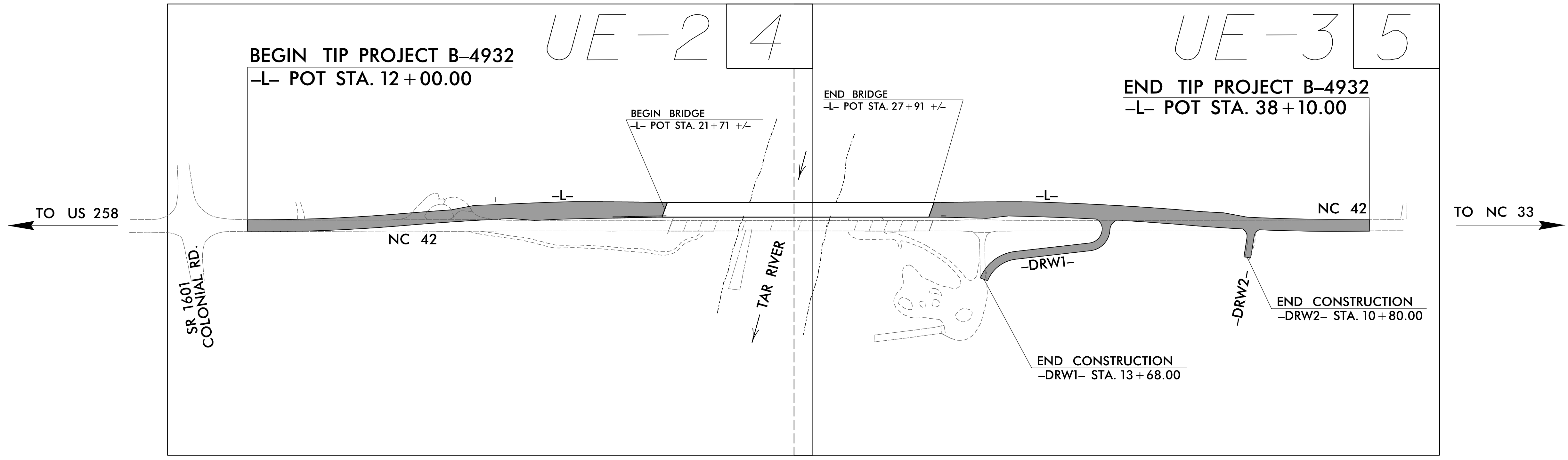
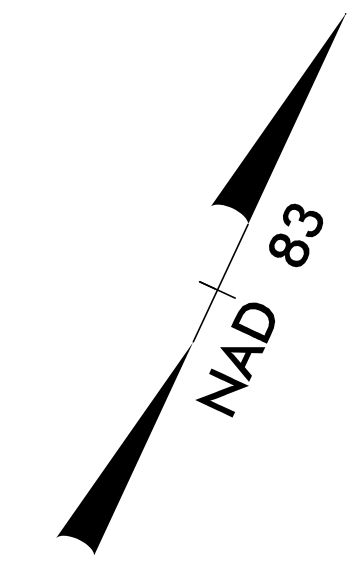
NEU PERMIT PLANS
EDGECOMBE COUNTY

LOCATION: BRIDGE NO. 28 OVER TAR RIVER ON NC 42

TYPE OF WORK: WATER, TELEPHONE, POWER, AND
CATV RELOCATION

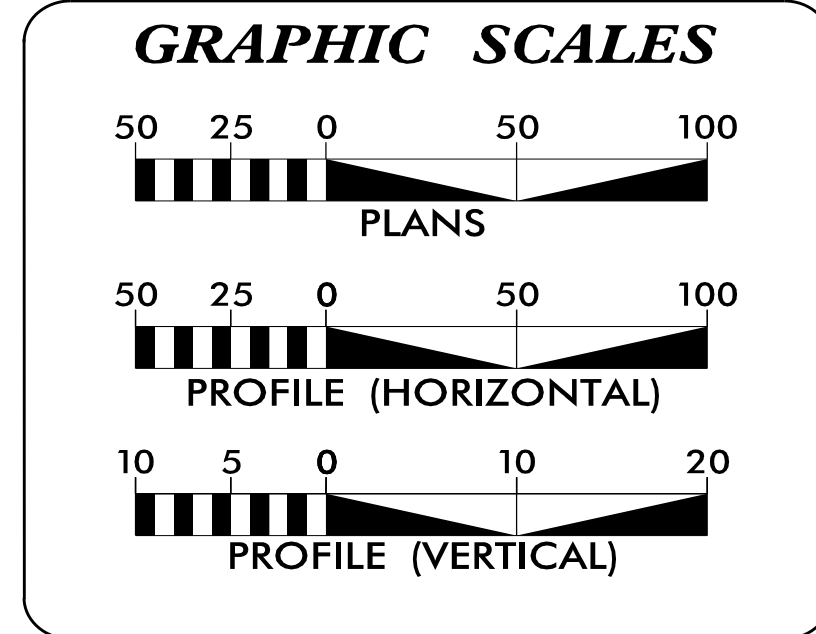
T.I.P. NO.	SHEET NO.
B-4932	UE-1

NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET IS DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UE-1	TITLE SHEET
UE-2 THRU UE-3	NEU PLAN SHEETS

UTILITY OWNERS WITH CONFLICTS

- (A) WATER - EDGECOMBE COUNTY
- (B) POWER - EDGECOMBE MARTIN EMC
- (C) TELEPHONE - CENTURYLINK
- (D) CATV - SUDDENLINK

PREPARED IN THE OFFICE OF:

1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

John D. Schriener, PLS PROJECT UTILITY COORDINATOR

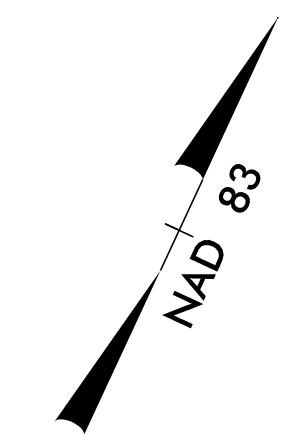
**DIVISION OF HIGHWAYS
UTILITIES UNIT**
1555 MAIL SERVICES CENTER
RALEIGH NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

Bo Hemphill, PE UTILITIES REGIONAL ENGINEER
Kelvin Martin UTILITIES ENGINEER
Ed Reams UTILITIES AREA COORDINATOR
Larry James UTILITIES COORDINATOR

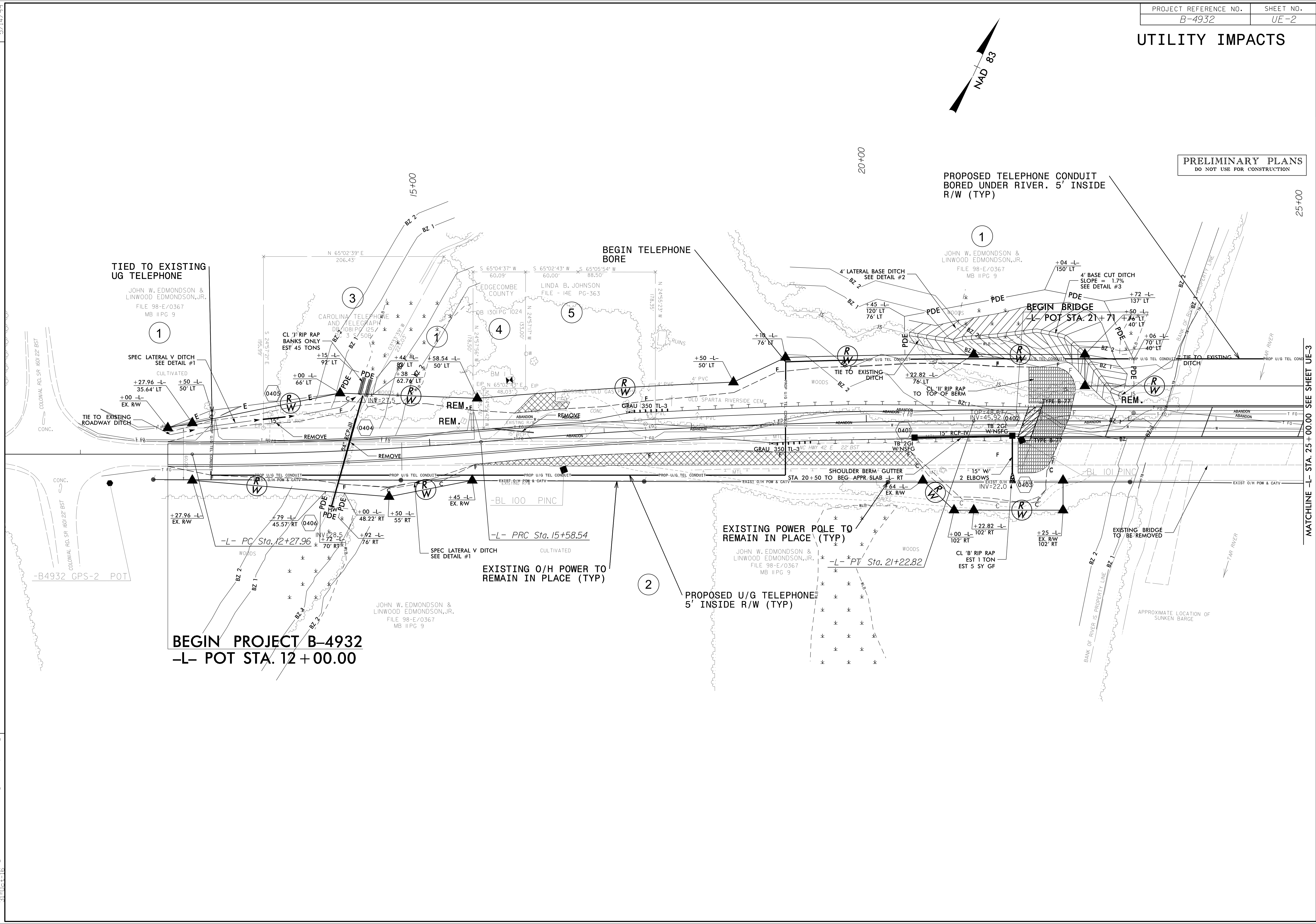
\$\$\$\$\$ SYSTEMS \$\$\$
\$\$\$\$\$ DGN \$\$\$
\$\$\$\$\$ USER NAME \$\$\$

UTILITY IMPACTS

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

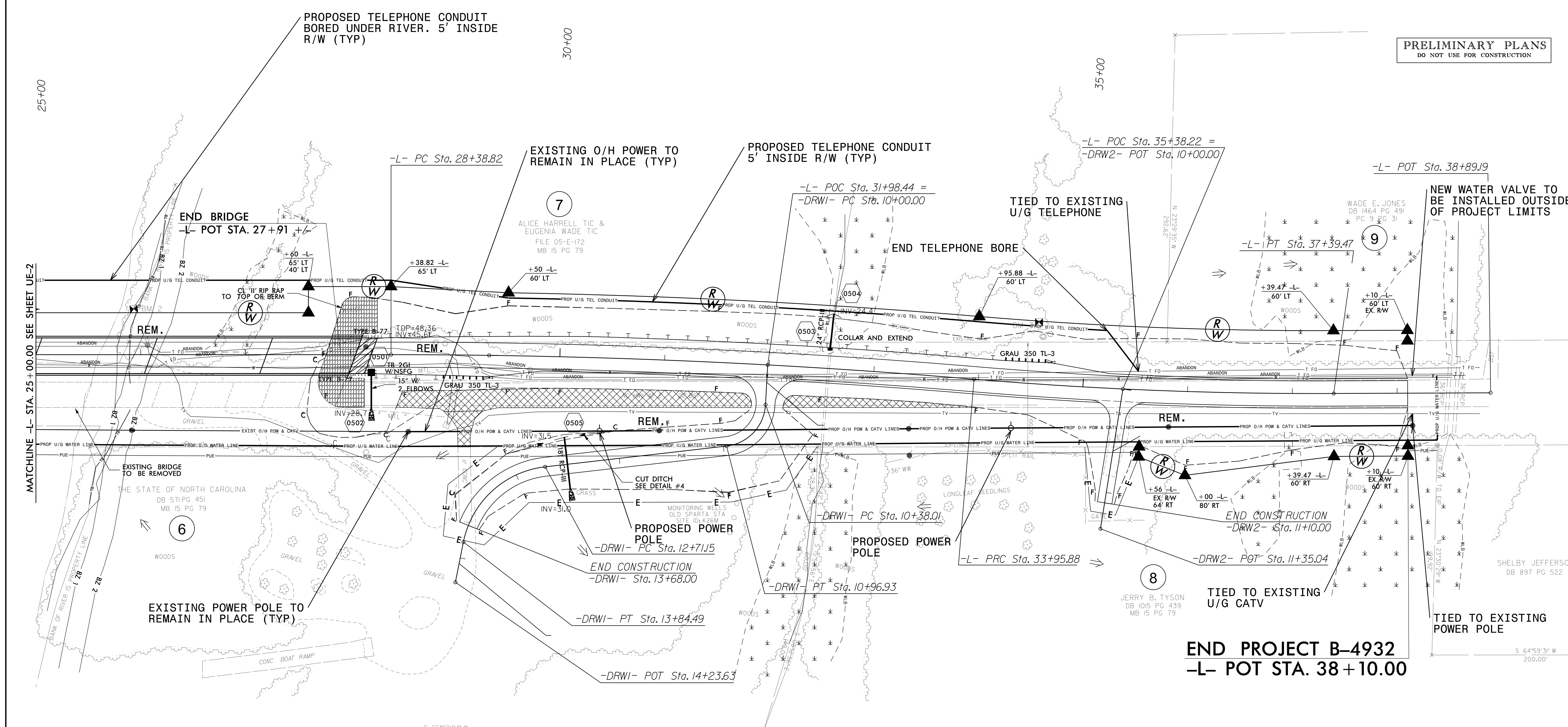
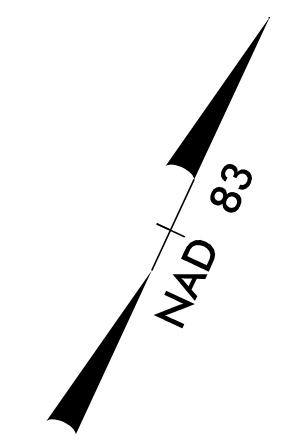


REVISIONS
 5/14/99
 Utilities 3:04:38 PM
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UTILITY IMPACTS

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



MATCHLINE -L- STA. 25+00.00 SEE SHEET UE-2

- NOTES:
- 1) THE EXISTING OVERHEAD POWER WILL BE DE-ENERGIZED AND GROUNDED FROM STA 12+00 TO STA 38+10 UNTIL THE PROJECT IS COMPLETE.
 - 2) THE EXISTING OVERHEAD POWER AND CATV WILL BE ALLOWED TO REMAIN IN PLACE UNDER THE CONDITION THAT THEY ACCEPT LIABILITY FOR ANY DAMAGE THAT MAY OCCUR DURING CONSTRUCTION.

REVISIONS

5/14/99

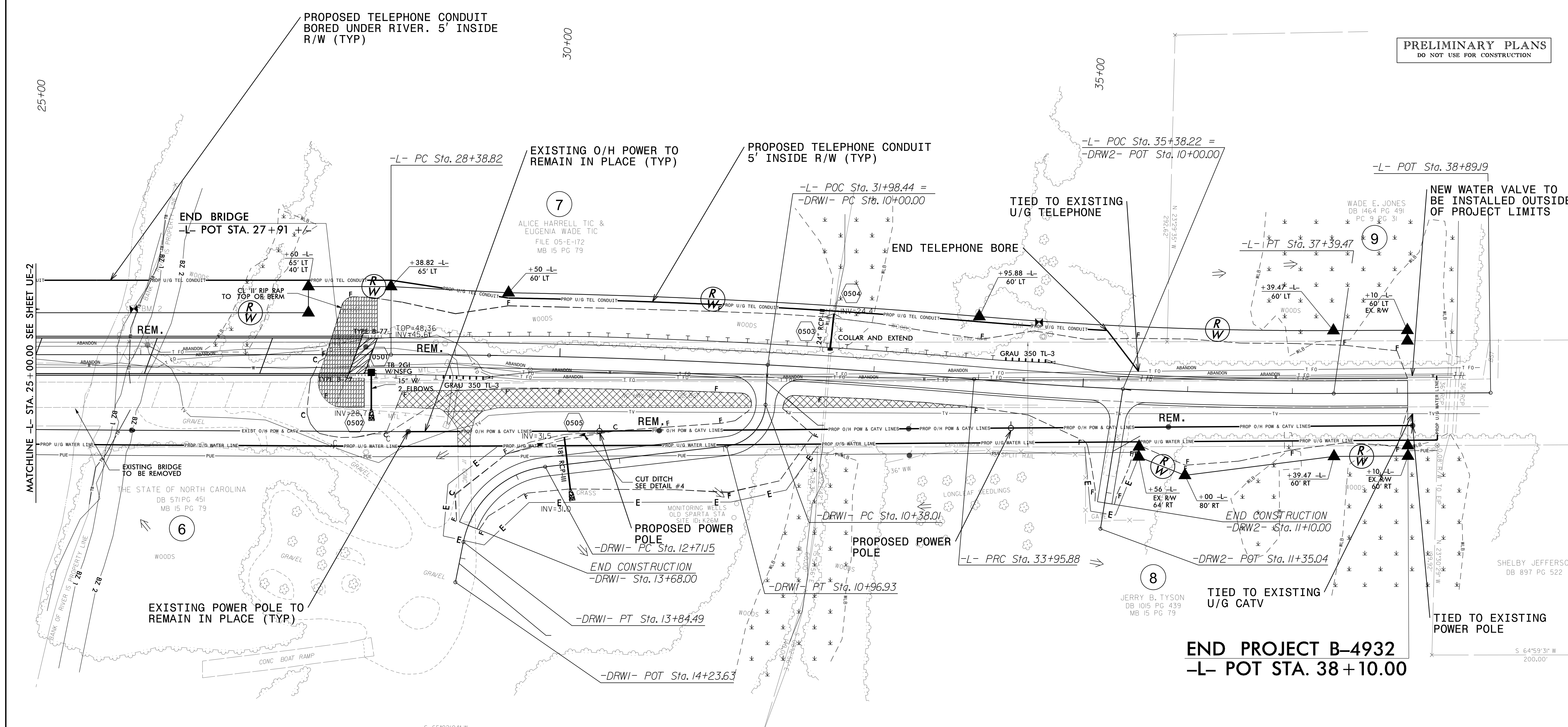
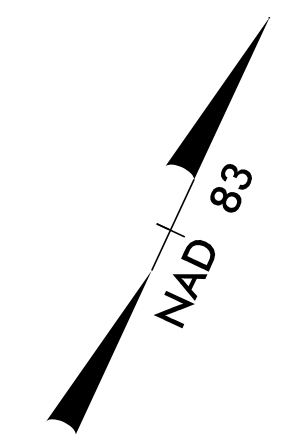
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SHELBY JEFFERSON
DB 897 PG 522

S 64°59'31" W
200.00'

UTILITY IMPACTS

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



- NOTES:
- 1) THE EXISTING OVERHEAD POWER WILL BE DE-ENERGIZED AND GROUNDED FROM STA 12+00 TO STA 38+10 UNTIL THE PROJECT IS COMPLETE.
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REVISIONS

5/14/99
Utilities\p\mg\NEUV\B4932_ut.rd\5_UE3_esh.dgn