



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

March 18, 2020

MEMORANDUM TO: Mr. Preston Hunter, P.E.
Division 2 Engineer

DocuSigned by:
Mack C. Rivenbark III

AAAD1248B309416...

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

SUBJECT: Pamlico County; Bridge 38 over Trent Creek on NC 55;
WBS 42328.1.1; **STIP B-4593**

Attached are the U.S. Army Corps of Engineers Nationwide Permit, U.S. Coast Guard Advance Approval, N.C. Division of Coastal Management Coastal Area Management Act Permit, N.C. Division of Water Resources Water Quality Certification, and Riparian 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://xfer.services.ncdot.gov/pdea/PermIssued/>

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

Mr. Ron Davenport, P.E. Contracts Management
Mr. Jay Johnson, Division 2
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Mr. Bo Hemphill, P.E., Utilities
Mr. Stephen Morgan, P.E., Hydraulics
Mr. Brian Hanks, P.E., Structures Management
Mr. Mark Staley, Roadside Environmental
Mr. Lamar Sylvester, P.E., State Roadway Construction Engineer

PROJECT COMMITMENTS

T.I.P Project No. B-4593
Bridge No. 38 on NC 55
Over Trent Creek
Pamlico County
WBS Element No. 42328.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

All Design Groups, Division 2 Resident Construction Engineer

Trent Creek has been identified by the NC Wildlife Resource Commission (NCWRC) as anadromous fish habitat. As a result, a construction moratorium will be in effect from February 15 to June 30 of any given year.

Roadway Design Unit, Structures Management Unit, Bicycle and Pedestrian Division

The proposed project is located along an existing Regional Bicycle Route (Around Pamlico Sound loop route) identified in both the Pamlico Comprehensive Transportation Plan 2012 and the Croatan Regional Bicycle and Trails Plan. The proposed project includes four foot eight and a half inch offset, between the outside of the travel lane and the bridge rail parapet, on the bridge structure. A variable width (four to 8 foot) paved shoulder, which extends approximately 410 feet from the west end of the bridge and 430 feet from the east end of the bridge, also can accommodate bicycles. The structure will provide 2 bar metal railing, as appropriate for bicycle use.

Natural Environment Section

Two Coastal Area Management Act (CAMA) Areas of Environmental Concern (AEC) were identified in the study area. Trent Creek is a designated Public Trust Water, and CAMA coastal marsh is present at wetland sites WA and WB. A CAMA permit from the North Carolina Division of Coastal Management (NCDCM) will be required for all impacts to designated AECs within the study area. A CAMA major development permit will be acquired prior to construction.

Natural Environment Section

Suitable habitat for West Indian manatee exists in the study area. A review of NCNHP records, updated January 2015, indicates there are known West Indian manatee occurrences within 1.0 miles of the study area. Construction activities will adhere to the recommendations outlined in Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters (2003 USFWS).

Roadway Design Unit, Division 2

All remnant piles from the existing bridge or any previous bridges will be removed from Trent Creek during construction of this project. In the event that a pile cannot be removed completely, the pile will be cutoff at the mud line.

Hydraulics Unit, Natural Environment Section

The Neuse River Basin Rule applies to this project.

COMMITMENTS FROM PERMITTING

Division 2 Construction/Roadside Environmental Unit

From the N.C. Division of Coastal Management Major Development Permit

The temporary on-site detour, including temporary sheet piles, temporary toe protection, and associated temporary fill shall be removed in its entirety within 90 days after it is no longer needed and disposed of at an approved high ground site. However, if this timeframe occurs while the moratorium referenced in Condition No. 2 of this permit is in effect, then the temporary on-site detour shall be removed in its entirety within 90 days of the moratorium end date and disposed of at an approved high ground site.

The installation and removal of the piles for the new bridge, temporary on-site detour bridge, and existing bridge shall be accomplished by pile driving and/or the use of a vibratory hammer.

Should the permittee and/or its contractor propose to utilize another type of pile installation, such as jetting or drilled shaft construction, additional authorization from DCM shall be required.

Due to the possibility that compaction, hand clearing, and/or other site alterations might prevent the temporary Coastal Wetland impact areas from re-attaining pre-project wetland functions, the permittee shall provide an annual update on the Coastal Wetland areas temporarily impacted by this project. This annual update shall consist of photographs and a brief written report on the progress of these temporarily impacted areas in re-attaining their pre-project wetland functions. The permittee shall schedule a meeting with DCM to verify the extent and location of temporary impacts upon project completion. Within three years after project completion, the permittee shall hold another agency field meeting with DCM to determine if the Coastal Wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of three years DCM determines that the Coastal Wetland areas temporarily impacted by the project have not re-attained pre-project wetland functions, DCM will determine whether compensatory wetland mitigation shall be required.

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action Id. **SAW-2019-01204** County: **Pamlico County** U.S.G.S. Quad: **Oriental**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: **Chris Rivenbark**

NCDOT-NEU

Address: **1548 Mail Service Center**
Raleigh NC, 27699

Telephone Number:

Size (acres) **5 acres**

Nearest Town **Merrit**

Nearest Waterway **Southwest Fork Trent Creek**

River Basin **Neuse**

USGS HUC **03020204**

Coordinates Latitude: **35.104395**

Longitude: **-76.718223**

Location description: **Bridge 38 over Trent Creek on NC 55 near Merrit, Pamlico County, North Carolina.**

Description of projects area and activity: **Applicant proposes to replace structurally deficient and functionally obsolete bridge on existing location utilizing an onsite detour. 0.11 acres of permanent coastal wetland impacts, 0.15 acres of temporary coastal wetland impacts and 143 sq ft of stream impacts are authorized by this verification.**

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

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

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated July 3, 2019. 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:  DAS

Date: **July 3, 2019**

Expiration Date of Verification: **March 18, 2022**

A. Determination of Jurisdiction:

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

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

C. Remarks:

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.

Corps Regulatory Official: _____


Thomas Steffens

SAW-2019-01204

Date of JD: July 3, 2019

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

1. CONSTRUCTION PLANS: All work authorized by this permit must be performed in strict compliance with the attached plans dated 07-03-2019, 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.

2. 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.

3. 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.

4. 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 Regulatory Field Office prior to any active construction in waters or wetlands.

5. 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.

6. WATER CONTAMINATION: All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

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The Permittee shall fully abide by all conditions of the CAMA Major Development Permit No. 77-19, dated 09-13-2019, issued by the North Carolina Division of Coastal Management, which are incorporated herein by reference.

7. 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).

8. MITIGATION: The permittee will debit 0.22 acres of Brackish Marsh Restoration credits from the Lengyl Mitigation Site located in HUC Unit 03020204 for 0.11 acres of impacts associated with B-4593. The site is on the NCDOT On-site Debit Ledger (ONEID 025-001) and has been approved for use in HUC Unit 03020202.

9. MANATEE CONDITION: In order to further protect the endangered West Indian Manatee, *Trichechus manatus*, the applicant must implement the U.S. Fish and Wildlife Service's Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at http://www.fws.gov/nc-es/mammal/manatee_guidelines.pdf.

10. TEMPORARY FILLS: Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be re-vegetated, as appropriate.

Due to the possibility that compaction and/or other site alterations might prevent the temporary coastal wetland impact area from re-attaining jurisdictional coastal wetland status; the permittee shall provide an update on the wetland areas temporarily impacted by the temporary detour bridge. This update shall be conducted two growing seasons after completion of the work and shall consist of photographs and a brief report on the progress of the areas in re-attaining coastal wetland jurisdictional status. Upon submission of this update to the Corps and NCDWR, the permittee shall schedule an agency field meeting with the Corps and NCDWR to determine if the wetland areas temporarily impacted by this project have re-attained jurisdictional coastal wetland status. If the wetland areas temporarily impacted by this project have not re-attained jurisdictional coastal wetland status, the Corps shall determine if additional compensatory coastal wetland mitigation is to be required.

NATIONWIDE PERMIT 14
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2017

Linear Transportation Projects. Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, “District Engineer’s Decision.” The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

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/NWP2017/2017NWP14.pdf> for the complete reference.

4.0 Additional Regional Conditions for Specific Nationwide Permits

4.1 NWP #14 - Linear Transportation Projects

4.1.1 If appropriate, permittees shall employ natural channel design (see definition below and NOTE below) to the maximum extent practicable for stream relocations. All stream relocation proposals shall include a Relocation and Monitoring Plan and a functional assessment of baseline conditions (e.g., use of the North Carolina Stream Assessment Methodology). Compensatory mitigation may be required for stream relocations.

Natural Channel Design means a geomorphologic approach to stream restoration based on an understanding of valley type, general watershed conditions, dimension, pattern, profile, hydrology and sediment transport of natural, stable channels (reference condition) and applying this understanding to the reconstruction of a stable channel.

NOTE: For more information on Natural Channel Design, permittees should reference North Carolina Stream Mitigation Guidance on the Corps RIBITS (Regulatory In-lieu Fee and Bank Information Tracking System) website or at the following World Wide Web Page:

https://ribits.usace.army.mil/ribits_apex/f?p=107:27:16705499703550::NO:RP:P27_BUTTONKEY:0

4.1.2 This NWP authorizes only upland to upland crossings and cannot be used in combination with Nationwide Permit 18 to create an upland within waters of the United States, including wetlands.

4.1.3 This NWP cannot be used for private projects located in tidal waters or tidal wetlands.

4.1.4 In designated trout watersheds, a PCN is not required for impacts to a maximum of 60 linear feet (150 linear feet for temporary dewatering) or 1/10-acre of jurisdictional aquatic resources for proposed structures not adjoining, adjacent to, or connected to existing structures. In designated trout waters, the permittee shall submit a PCN (see Regional Conditions 2.7 and General Condition 32) to the District Engineer prior to commencing the activity if 1) impacts (other than temporary dewatering to work in dry conditions) to jurisdictional aquatic resources exceed 60 linear feet or 1/10-acre; 2) temporary impacts to streams or waterbodies associated with dewatering to work in dry conditions exceed 150 linear feet; 3) the project will involve impacts to wetlands; 4) the primary purpose of the project is for commercial development; 5) the project involves the replacement of a bridge or spanning structure with a culvert or non-spanning structure in waters of the United States; or 6) the activity will be constructed during the trout waters moratorium (October 15 through April 15).

4.1.5 The permittee shall submit a PCN to the District Engineer prior to commencing the activity if the activity will involve the discharge of dredged or fill material into more than 150 linear feet of stream channel for the construction of temporary access fills and/or temporary road crossings. The PCN must include a restoration plan that thoroughly describes how all temporary fills will be removed, describes how pre-project conditions will be restored, and includes a timetable for all restoration activities.

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 geoengineering 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.

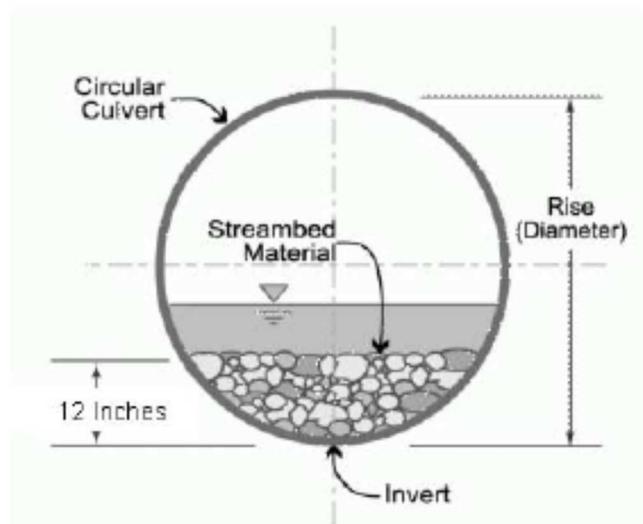
3.5.5. It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

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 NWPs 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.

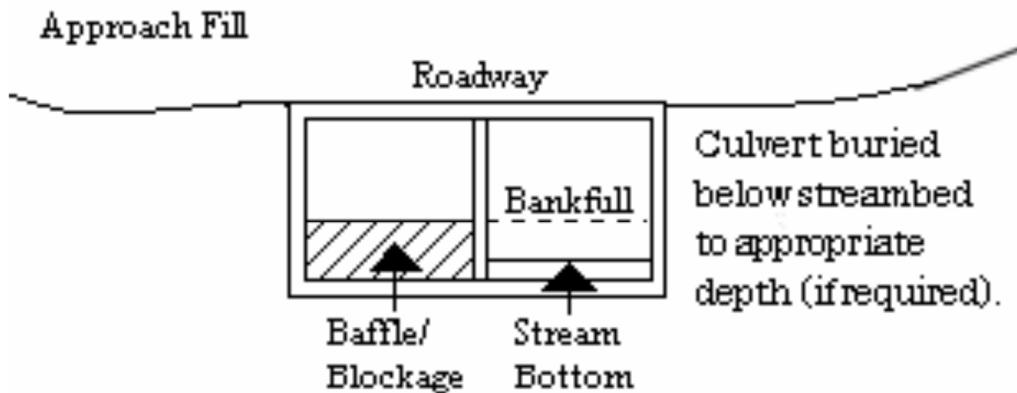
Culverts must be designed and constructed in a manner that minimizes destabilization and head cutting. Destabilizing the channel and head cutting upstream should be considered and appropriate actions incorporated in the design and placement of the culvert.

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 reason(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.

Action ID Number: SAW-2019-01204

County: Pamlico County

Permittee: Chris Rivenbark
NCDOT-NEU

Project Name: NCDOT B-4593 Bridge 38 NC55 Trent Creek

Date Verification Issued: July 3, 2019

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

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

S. DANIEL SMITH
Director



March 16, 2020

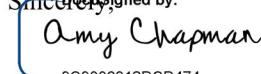
Mr. Philip S. Harris, III, P.E., CPM
Natural Environment Section Head
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Subject: Correction to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and NEUSE BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS for the proposed replacement of Bridge Number 38 over Trent Creek in Pamlico County, TIP B-4593.
NCDWR Project No. 20190585

Dear Mr. Harris:

General Water Quality Certification Numbers 4132 and 4133 were issued for the above referenced project on June 24, 2019. Please replace these with General Water Certification Number 4135 which corresponds to the Nationwide Permit 14 that was issued by the Corps of Engineers.

Please attach a copy of this letter with any copies of the original Water Quality Certification. All other conditions of the original Water Quality Certification dated June 24, 2019 still apply except where superseded by this correction. We apologize for any inconvenience this may have caused. If you have any questions, please contact Garcy Ward at (252) 946-6481.

Sincerely,

Amy Chapman
9C9886312DCD474...
Linda Culpepper, Director
Division of Water Resources

Electronic copy only distribution:

Tom Steffens, US Army Corps of Engineers, Washington Field Office
Jay Johnson, Division 2 Environmental Officer
Chris Rivenbark, NC Department of Transportation
Stephen Lane, NC Division of Coastal Management
Cathy Brittingham, NC Division of Coastal Management
Garcy Ward, NC Division of Water Resources, Washington Regional Office
File Copy



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



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Director

June 24, 2019
Beaufort County
NCDWR Project No. 20190585
TIP B-4593

APPROVAL of 401 WATER QUALITY CERTIFICATION and NEUSE BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS

Mr. Chris Rivenbark
Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

Dear Mr. Rivenbark:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge Number 38 over Trent Creek on NC 55 in Pamlico County:

Wetland and Stream Impacts in the Neuse River Basin

Site	Wetland Fill (ac)	Wetland Excavation (ac)	Wetland Fill Temporary (ac)	Wetland Hand Clearing (ac)	Streams permanent (lf)
Bridge 38	0.09	--	--	0.14	8
Detour bridge	--	--	0.15	0.18	--
Utilities	<0.01	0.02	--	0.65	--
Total	0.09	0.02	0.15	0.97	8
Net Total			1.23		8

Buffer Impacts in the Neuse River Basin

Site	Buffer Zone 1 (sq ft)	Buffer Zone 2 (sq ft)	Total
Bridge 38	425	373	798
Detour bridge	1371	880	2,251
Utilities	2092	1392	3,484
Total	3,888	2,645	6,533

The project shall be constructed in accordance with your application dated received May 3, 2019. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4132 and 4133. These certifications correspond to the Nationwide Permits 3 and 12 respectively issued by the Corps of Engineers. This approval is also valid for the Neuse Riparian Buffer Rules (15A NCAC 2B.0233). 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 300 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.0233. For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s) and any additional conditions listed below.



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1611 Mail Service Center | Raleigh, North Carolina 27699-1611
919.707.9000

Condition(s) of Certification:

1. 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.
2. 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)]
3. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization 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]
4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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]
 - a. 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*.
 - b. 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.
 - c. 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.
 - d. 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]
9. 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)]
10. Erosion control matting in riparian areas shall not contain a plastic or nylon mesh grid which can impinge and entrap small animals. Matting should be secured in place by staples, stakes, or wherever possible live stakes of native trees. Riparian areas are defined as a distance 25 feet from top of stream bank. [15A NCAC 02B.0201]
11. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, then design and placement of temporary erosion control measures shall not be conducted in a manner that may result in dis-

equilibrium of wetlands, stream beds, or banks, adjacent to or upstream and downstream of the above structures. All sediment and erosion control devices shall be removed from wetlands and waters and the natural grade restored within two (2) months of the date that the Division of Energy, Mining and Land Resources (DEMLR) or locally delegated program has released the specific area within the project. [15A NCAC 02H.0506(b)(3) and (c)(3)]

12. 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)]
13. Bridge deck drains shall not discharge directly into the stream to the maximum extent practicable. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) where possible 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)]
14. 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)]
15. 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)]
16. 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)]
17. 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)]
18. 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, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]
19. Pursuant to 15A NCAC 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse 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.
20. 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 including woody species. [15A NCAC 02H .0506(b)(2)]
21. Due to the possibility that compaction and/or other site alterations might prevent the temporary wetland impact area from re-attaining jurisdictional wetland status; the permittee shall provide an update on the wetland areas temporarily impacted by the temporary detour bridge. This update shall be conducted two growing seasons after completion of the work and shall consist of photographs and a brief report on the progress of the areas in re-attaining wetland jurisdictional status. Upon submission of this update to the NCDWR, the permittee shall schedule an agency field meeting with the NCDWR to determine if the wetland areas temporarily impacted by this project have re-attained jurisdictional wetland status. If the wetland areas temporarily impacted by this project have not re-attained jurisdictional wetland status, the NCDWR shall determine if compensatory wetland mitigation is to be required. [15A NCAC 02H.0506(b)(2) and (b)(3)]

22. 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.0233)
23. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. (15A NCAC 2B.0233)
24. New roadside ditches that do not control for nitrogen and attenuate flow before discharging through the riparian buffer are prohibited [15A NCAC 2B.0233(6)]
25. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000.
26. Native riparian vegetation 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.0506(b)(2)]
27. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
28. Adherence to *The Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters* will be required throughout construction.
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. 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)]
31. The NCDOT will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the permit conditions and any potential issues at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]
32. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete the "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
33. 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)]

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

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

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

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

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

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Garcy Ward at (252)946-6481 or garcy.ward@ncdenr.gov.

Sincerely,
DocuSigned by:


Amy Chapman
Linda Gelpi, Director
Division of Water Resources

Electronic copy only distribution:

Tom Steffens, US Army Corps of Engineers, Washington Field Office
Gordon Cashin, NC DOT
Jay Johnson, NCDOT, Division 2
Stephen Lane, NC DCM
Cathy Brittingham, NC DCM
Garcy Ward, NC Division of Water Resources Washington Regional Office

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

WATER QUALITY GENERAL CERTIFICATION NO. 4135

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS

- **NATIONWIDE PERMIT NUMBER 14 (LINEAR TRANSPORTATION PROJECTS), AND**
- **REGIONAL GENERAL PERMIT 198200031 (NCDOT BRIDGES, WIDENING PROJECTS, INTERCHANGE IMPROVEMENTS)**

Water Quality Certification Number 4135 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) (14) of the US Army Corps of Engineers regulations and Regional General Permit 198200031.

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

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) Any temporary or permanent impacts to wetlands, open waters and/or streams, except for construction of a driveway to a single family residential lot that is determined to not be part of a larger common plan of development, as long as the driveway involves a travel lane of less than 25 feet and total stream impacts of less than 60 feet, including any topographic/slope stabilization or in-stream stabilization needed for the crossing; or
- c) Any stream relocation or stream restoration; or
- d) 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

- e) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-I, WS-II, or North Carolina or National Wild and Scenic River.
- f) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as Trout except for driveway projects that are below threshold (b) above provided that:
 - i. The impacts are not adjacent to any existing structures
 - ii. All conditions of this General Certification can be met, including adherence to any moratoriums as stated in Condition #10; and
 - iii. A *Notification of Work in Trout Watersheds Form* is submitted to the Division at least 60 days prior to commencement of work; or
- g) Any permanent impacts to coastal wetlands [15A NCAC 07H .0205], or Unique Wetlands (UWL); or
- h) 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

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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- i) 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
 - 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. If this Water Quality Certification is used to access residential, commercial or industrial building sites, then all parcels owned by the applicant that are part of the single and complete project authorized by this Certification must be buildable without additional impacts to streams or wetlands. If required in writing by DWR, the applicant shall provide evidence that the parcels are buildable without requiring additional impacts to wetlands, waters, or state regulated riparian buffers. [15A NCAC 02H .0506(b)(4) and (c)(4)]
2. For road and driveway construction purposes, this Certification shall only be utilized from natural high ground to natural high ground. [15A NCAC 02H .0506(b)(2) and (c)(2)]
3. Deed notifications or similar mechanisms shall be placed on all lots with retained jurisdictional wetlands, waters, and state regulated riparian buffers within the project boundaries in order to assure compliance with NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), and/or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200). These mechanisms shall be put in place at the time of recording of the property or individual parcels, whichever is appropriate. [15A NCAC 02H .0506(b)(4) and (c)(4)]
4. 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 (d) above shall comply with one of the following requirements: [15A NCAC 02H .0506(b)(5) and (c)(5)]

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- 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]

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.

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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.

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.

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)]

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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.

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)]

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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)]
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.

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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)]
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)]

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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).
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.

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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 4135 issued December 1, 2017 replaces WQC Number 4088 issued March 3, 2017; WQC 3886 issued March 12, 2012; WQC Number 3820 issued April 6, 2010; WQC Number 3627 issued March 2007; WQC Number 3404 issued March 2003; WQC Number 3375 issued March 18, 2002; WQC Number 3289 issued June 1, 2000; WQC Number 3103 issued February 11, 1997; WQC Number 2732 issued May 1, 1992; WQC Number 2666 issued January 21, 1992; WQC Number 2177 issued November 5, 1987.



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON C. DAVIS
Director

October 3, 2019

N.C. Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

Dear Sir or Madam:

The enclosed permit constitutes authorization under the Coastal Area Management Act, and where applicable, the State Dredge and Fill Law, for you to proceed with your project proposal. The original (buff-colored form) is retained by you and it must be available on site when the project is inspected for compliance. Please sign both the original and the copy and return the copy to this office in the enclosed envelope. Signing the permit and proceeding means you have waived your right of appeal described below.

If you object to the permit or any of the conditions, you may request a hearing pursuant to NCGS 113A-121.1 or 113-229. Your petition for a hearing must be filed in accordance with NCGS Chapter 150B with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27611-6714, (919) 733-2698 within twenty (20) days of this decision on your permit. You should also be aware that another qualified party may submit an objection to the issuance of this permit within twenty (20) days.

The project plan is subject to those conditions appearing on the permit form. Otherwise, all work must be carried out in accordance with your application. Modifications, time extensions, and future maintenance requires additional approval. Please read your permit carefully prior to starting work and review all project plans, as approved. If you are having the work done by a contractor, it would be to your benefit to be sure that he fully understands all permit requirements.

From time to time, Department personnel will visit the project site. To facilitate this review, we request that you complete and mail the enclosed Notice Card just prior to work initiation. However, if questions arise concerning permit conditions, environmental safeguards, or problem areas, you may contact Department personnel at any time for assistance. By working in accordance with the permit, you will be helping to protect our vitally important coastal resources.

Sincerely,

A handwritten signature in black ink that reads "Braxton C. Davis".

Braxton C. Davis
Director
N.C. Division of Coastal Management

Enclosure



Permit Class
NEW

Permit Number
77-19

STATE OF NORTH CAROLINA
Department of Environmental Quality
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1598

Authorizing development in Pamlico County at Trent Creek, Bridge No. 38 on NC 55

, as requested in the permittee's application dated 5/2/19 (MP-1) and 8/16/19 (MP-5), including the attached workplan drawings (36): as referenced in Condition No. 1 of this permit.

This permit, issued on 9/13/19, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

TIP No. B-4593, Bridge Replacement

- 1) Unless specifically altered herein, all work authorized by this permit shall be carried out in accordance with the following attached workplan drawings: 25 dated 7/19/19, 3 dated 3/25/19, 3 dated 4/24/19, 1 dated 4/18/19, and 4 dated 4/26/19.
- 2) In accordance with commitments made by the permittee, in order to protect anadromous fisheries resources in Trent Creek, no in-water work shall be conducted between February 15 through June 30 of any year without prior approval of the N.C. Division of Coastal Management (DCM), in consultation with the appropriate resource agencies.

(See attached sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date.

Signed by the authority of the Secretary of DEQ and the Chair of the Coastal Resources Commission.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

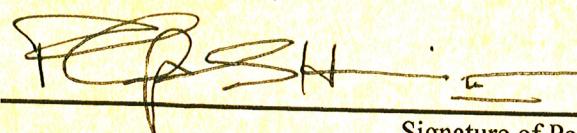
Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on



Braxton C. Davis, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.



Signature of Permittee

No expiration date, pursuant to GS 136-44.7B

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

ADDITIONAL CONDITIONS

- 3) In order to protect the endangered West Indian Manatee, *Trichechus manatus*, the applicant shall implement the U.S. Fish & Wildlife Service's Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at http://www.fws.gov/nc-es/mammal/manatee_guidelines.pdf.
- 4) The new permanent bridge and temporary on-site detour bridge shall be constructed using top down construction. Any other construction method may require additional authorization from DCM.
- 5) All construction access shall be through the use of the existing bridge, the partially constructed new bridge, the temporary on-site detour bridge, and existing high ground areas.
- 6) Construction of the temporary on-site detour within wetlands or waters of the State is prohibited while the moratorium referenced in Condition No. 2 of this permit is in effect, without prior approval of DCM, in consultation with the appropriate resource agencies.
- 7) The authorized sheet pile retaining walls for the temporary on-site detour shall be in place prior to any backfilling activities. The sheet pile retaining walls shall be structurally tight so as to prevent seepage of fill materials through the structure.
- 8) All temporary fill shall be placed on geotextile fabric to facilitate the total removal upon completion of the project.
- 9) The temporary on-site detour, including temporary sheet piles, temporary toe protection, and associated temporary fill shall be removed in its entirety within 90 days after it is no longer needed and disposed of at an approved high ground site. However, if this timeframe occurs while the moratorium referenced in Condition No. 2 of this permit is in effect, then the temporary on-site detour shall be removed in its entirety within 90 days of the moratorium end date and disposed of at an approved high ground site.
- 10) The installation and removal of the piles for the new bridge, temporary on-site detour bridge, and existing bridge shall be accomplished by pile driving and/or the use of a vibratory hammer. Should the permittee and/or its contractor propose to utilize another type of pile installation, such as jetting or drilled shaft construction, additional authorization from DCM shall be required.
- 11) Piling from the existing bridge, temporary on-site detour bridge, as well as any remnant pilings from previous bridges, shall be removed in their entirety, except that if a piling breaks during removal and cannot be removed in its entirety, the piling may be cut off flush with the bed of the water body, and DCM shall be notified of each occurrence within one working day.
- 12) No excavation or filling shall take place at any time in any vegetated wetlands or surrounding waters outside of the alignment of the areas indicated on the attached workplan drawings, without permit modification.
- 13) All fill material shall be clean and free of any pollutants except in trace quantities.
- 14) Material excavated at the project site may be used in fill areas associated with the project once properly dewatered or shall be removed from the site and taken to a high ground location.

ADDITIONAL CONDITIONS

- 15) All excavated materials shall be confined above normal water level and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.
- 16) The temporary placement and double handling of any excavated or fill material within wetlands or waters of the State is not authorized, with the exception of that which is necessary for the construction of the temporary on-site detour.
- 17) The placement of riprap shall be limited to the areas as depicted on the attached workplan drawings. The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities. The riprap material shall consist of clean rock or masonry materials, such as but not limited to, granite, marl, or broken concrete. It shall be of a size sufficient to prevent its movement from the approved alignment by wave or current action.
- 18) All reasonable efforts shall be made to contain all debris and excess materials associated with construction and removal of the temporary on-site detour, removal of the existing bridge, and construction of the new bridge, with the intent that materials/debris do not enter wetlands or waters of the State, even temporarily.
- 19) Any waste materials or debris generated in the demolition and removal of the existing bridge, construction of the new bridge or roadway, and/or construction and removal of the temporary on-site detour, shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations are obtained from any relevant state, federal, or local authorities.
- 20) The demolition plan for removal of the existing bridge structure shall be submitted to DCM for review and approval prior to commencement of the demolition activities.
- 21) Uncured concrete shall not be allowed to contact waters of the State, or water that will enter waters of the State.
- 22) Construction staging areas shall be located only in upland areas, and not in wetlands or waters of the State.
- 23) Bridge deck drains shall not be located over the open waters of Trent Creek and shall not cause erosion of adjacent wetlands.

Impacts to Wetlands and Waters of the State, Riparian Buffers, and Compensatory Mitigation**NOTE:**

This project will permanently impact approximately 0.11 acres (4,600 square feet) of Coastal Wetlands (0.09 acres due to permanent fill, and 0.02 acres due to excavation). This project will temporarily impact approximately 1.12 acres (48,787 square feet) of Coastal Wetlands (0.15 acres due to temporary fill and 0.97 acres due to hand clearing).

ADDITIONAL CONDITIONS**NOTE:**

This project will permanently impact approximately 13 linear feet of stream and approximately 143 square feet of surface waters. This project will permanently impact approximately 6,533 square feet of Neuse Riparian buffer. This project will temporarily impact approximately 199 square feet of surface waters.

- 24) Wetland areas to be temporarily impacted by hand clearing shall not be grubbed.
- 25) There shall be no clearing of wetlands outside of the areas indicated on the attached workplan drawings without prior approval from DCM.
- 26) After the fill material associated with the temporary detour is removed, disturbed areas associated with the temporary detour shall be restored to the pre-existing contour and elevation. Disturbed areas shall be planted with appropriate native Coastal Wetland species during the first planting cycle following removal of the temporary detour.
- 27) In accordance with requirements of the U.S. Army Corps of Engineers, compensatory mitigation for permanent impacts to 0.11 acres of Coastal Wetlands shall be mitigated by debiting 0.22 acres of brackish marsh mitigation credits from the Lengyel Mitigation Site in Craven County.
- 28) Due to the possibility that compaction, hand clearing, and/or other site alterations might prevent the temporary Coastal Wetland impact areas from re-attaining pre-project wetland functions, the permittee shall provide an annual update on the Coastal Wetland areas temporarily impacted by this project. This annual update shall consist of photographs and a brief written report on the progress of these temporarily impacted areas in re-attaining their pre-project wetland functions. The permittee shall schedule a meeting with DCM to verify the extent and location of temporary impacts upon project completion. Within three years after project completion, the permittee shall hold another agency field meeting with DCM to determine if the Coastal Wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of three years DCM determines that the Coastal Wetland areas temporarily impacted by the project have not re-attained pre-project wetland functions, DCM will determine whether compensatory wetland mitigation shall be required.

Utility Impacts**NOTE:**

Construction of the new bridge will also require relocation of cable, communication, electric, sewer, and water utilities. Impacts resulting from these utility relocations have been included in the overall impacts for this project.

- 29) Any waterline relocation or other alterations to the water system must be approved by the Public Water Supply Section (PWS Section, Plan Review Unit, 1634 Mail Service Center, Raleigh, NC 27699-1634) prior to water system alteration.
- 30) Any utility work associated with this project that is not specifically depicted on the attached workplan drawings, or described within the attached permit application, shall require approval from DCM, either under the authority of this permit, or by the utility company obtaining separate authorization.

ADDITIONAL CONDITIONS

31) Construction mats shall be utilized to support equipment within Coastal Wetland areas to minimize temporary wetland impacts. These mats shall be removed immediately when they are no longer necessary.

Sedimentation and Erosion Control

32) Turbidity curtains shall be used to isolate all in-water work areas from the adjacent waters of Trent Creek, including but not limited to the existing bridge removal, pile installation, pile removal, and placement of riprap within or adjacent to surface waters. The turbidity curtains shall encircle the immediate work area, however, they shall not impede navigation. The turbidity curtains shall be properly maintained and retained in the water until construction is complete and shall only be removed when turbidity within the curtains reaches ambient levels.

33) This project shall conform to all requirements of the N.C. Sedimentation Pollution Control Act and the N.C. Department of Transportation's (NCDOT's) Memorandum of Agreement with the N.C. Division of Energy, Mineral and Land Resources.

General

34) During bridge construction, the permittee shall make every attempt to allow the same navigation that is currently possible in Trent Creek, upstream and downstream of the existing bridge.

35) No attempt shall be made by the permittee to prevent the use by the public of all navigable waters at or adjacent to the authorized work following completion of construction.

36) The permittee shall exercise all available precautions in the day-to-day operation of the facility to prevent waste from entering the adjacent waters and wetlands.

37) If it is determined that additional permanent and/or temporary impacts are necessary that are not shown on the attached workplan drawings or described in the authorized permit application, a permit modification and/or additional authorization from DCM may be required. In addition, any changes in the approved plan may also require a permit modification and/or additional authorization from DCM. The permittee shall contact a representative of DCM prior to commencement of any such activity for this determination and any permit modification.

38) Development authorized by this permit shall only be conducted on lands owned by NCDOT, appropriate utility entities, and/or its Right-of-Ways and/or easements.

39) The permittee and/or its contractor shall contact the DCM Transportation Project Field Representative in Morehead City at (252) 808-2808 ext. 208 to request a preconstruction conference prior to project initiation.

ADDITIONAL CONDITIONS

40) The N.C. Division of Water Resources (DWR) authorized the proposed project on 6/24/19 (DWR Project No. 20190585) under General Water Quality Certification Nos. 4132 and 4133, and under the Neuse Riparian Buffer Rules. Any violation of the Certifications approved by DWR shall be considered a violation of this CAMA permit.

NOTE: The U.S. Army Corps of Engineers authorized the proposed project under Nationwide Permit Number 14 (COE Action ID No. SAW-2019-01204), which was issued on 7/3/19.

NOTE: This permit does not eliminate the need to obtain any additional permits, approvals or authorizations that may be required.

NOTE: An application processing fee of \$475 was received by DCM for this project. This fee also satisfied the Section 401 application processing fee requirements of DWR.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

GUIDELINES FOR AVOIDING IMPACTS TO THE WEST INDIAN MANATEE **Precautionary Measures for Construction Activities in North Carolina Waters**

The West Indian manatee (*Trichechus manatus*), also known as the Florida manatee, is a Federally-listed endangered aquatic mammal protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and the Marine Mammal Protection Act of 1972, as amended (16 U.S.C 1461 *et seq.*). The manatee is also listed as endangered under the North Carolina Endangered Species Act of 1987 (Article 25 of Chapter 113 of the General Statutes). The U.S. Fish and Wildlife Service (Service) is the lead Federal agency responsible for the protection and recovery of the West Indian manatee under the provisions of the Endangered Species Act.

Adult manatees average 10 feet long and weigh about 2,200 pounds, although some individuals have been recorded at lengths greater than 13 feet and weighing as much as 3,500 pounds. Manatees are commonly found in fresh, brackish, or marine water habitats, including shallow coastal bays, lagoons, estuaries, and inland rivers of varying salinity extremes. Manatees spend much of their time underwater or partly submerged, making them difficult to detect even in shallow water. While the manatee's principal stronghold in the United States is Florida, the species is considered a seasonal inhabitant of North Carolina with most occurrences reported from June through October.

To protect manatees in North Carolina, the Service's Raleigh Field Office has prepared precautionary measures for general construction activities in waters used by the species. Implementation of these measure will allow in-water projects which do not require blasting to proceed without adverse impacts to manatees. In addition, inclusion of these guidelines as conservation measures in a Biological Assessment or Biological Evaluation, or as part of the determination of impacts on the manatee in an environmental document prepared pursuant to the National Environmental Policy Act, will expedite the Service's review of the document for the fulfillment of requirements under Section 7 of the Endangered Species Act. These measures include:

1. The project manager and/or contractor will inform all personnel associated with the project that manatees may be present in the project area, and the need to avoid any harm to these endangered mammals. The project manager will ensure that all construction personnel know the general appearance of the species and their habit of moving about completely or partially submerged in shallow water. All construction personnel will be informed that they are responsible for observing water-related activities for the presence of manatees.
2. The project manager and/or the contractor will advise all construction personnel that

there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act and the Endangered Species Act.

3. If a manatee is seen within 100 yards of the active construction and/or dredging operation or vessel movement, all appropriate precautions will be implemented to ensure protection of the manatee. These precautions will include the immediate shutdown of moving equipment if a manatee comes within 50 feet of the operational area of the equipment. Activities will not resume until the manatee has departed the project area on its own volition (i.e., it may not be herded or harassed from the area).

4. Any collision with and/or injury to a manatee will be reported immediately. The report must be made to the U.S. Fish and Wildlife Service (ph. 919.856.4520 ext. 16), the National Marine Fisheries Service (ph. 252.728.8762), and the North Carolina Wildlife Resources Commission (ph. 252.448.1546).

5. A sign will be posted in all vessels associated with the project where it is clearly visible to the vessel operator. The sign should state:

CAUTION: The endangered manatee may occur in these waters during the warmer months, primarily from June through October. Idle speed is required if operating this vessel in shallow water during these months. All equipment must be shut down if a manatee comes within 50 feet of the vessel or operating equipment. A collision with and/or injury to the manatee must be reported immediately to the U.S. Fish and Wildlife Service (919-856-4520 ext. 16), the National Marine Fisheries Service (252.728.8762), and the North Carolina Wildlife Resources Commission (252.448.1546).

6. The contractor will maintain a log detailing sightings, collisions, and/or injuries to manatees during project activities. Upon completion of the action, the project manager will prepare a report which summarizes all information on manatees encountered and submit the report to the Service's Raleigh Field Office.

7. All vessels associated with the construction project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than a four foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

8. If siltation barriers must be placed in shallow water, these barriers will be: (a) made of material in which manatees cannot become entangled; (b) secured in a manner that they cannot break free and entangle manatees; and, (c) regularly monitored to ensure that manatees have not become entangled. Barriers will be placed in a manner to allow manatees entry to or exit from essential habitat.

Prepared by (rev. 06/2003):
U.S. Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726
919/856-4520

Figure 1. The whole body of the West Indian manatee may be visible in clear water; but in the dark and muddy waters of coastal North Carolina, one normally sees only a small part of the head when the manatee raises its nose to breathe.

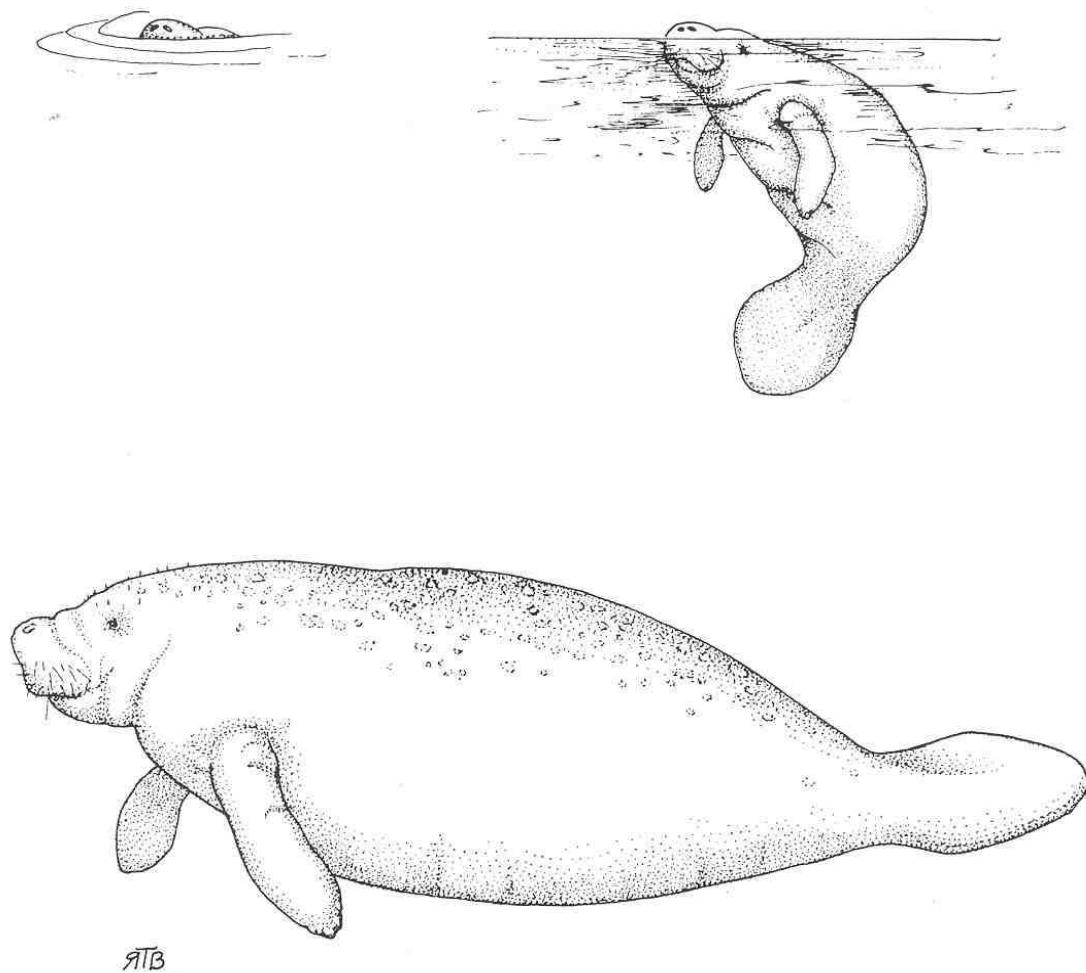


Illustration used with the permission of the North Carolina State Museum of Natural Sciences.
Source: Clark, M. K. 1987. Endangered, Threatened, and Rare Fauna of North Carolina: Part I. A re-evaluation of the mammals. Occasional Papers of the North Carolina Biological Survey 1987-3. North Carolina State Museum of Natural Sciences. Raleigh, NC. pp. 52.



16591

16 AUG 2017

Mr. David Stutts, P.E.
Transportation Engineer Supervisor
NCDOT Structures Management Unit
1581 Mail Service Center
Raleigh, NC 27699-1581

Dear Mr. Stutts:

Coast Guard review of your proposed project as provided in your email dated July 14, 2017, is complete.

Based on the documentation provided and our research, it is determined that a Coast Guard bridge permit will not be required for the proposed Bridge across Trent Creek, at position (35° 38.63N, 76° 48.16W), at Pamlico County, NC.

The project will be placed in our Advance Approval category as per Title 33 Code of Federal Regulations Part 115.70. This Advance Approval determination is for the location and structure described above and **is valid for five years from the date of this letter**. If the construction project does not commence within this time period, you must contact this office for reaffirmation of this authorization. Future bridge projects along the same waterway will have to be independently evaluated before they may be considered for placement in the Advance Approval category.

The fact that a Coast Guard bridge permit is not required does not relieve you of the responsibility for compliance with the requirements of any other Federal, State, or local agency who may have jurisdiction over any aspect of the project. Although the project will not require a bridge permit, other areas of Coast Guard jurisdiction apply. The following must be met:

- a. You or your contractor must notify this office at least 30 days in advance of the start of construction and any other work which may be an obstruction to navigation, so we may issue and update the information in our Local Notice to Mariners and monitor the project. The notice should include details of the project; dates and hours of operation; and vessels, barges and equipment to be used during the project.
- b. At no time during the project will the waterway be closed to navigation without the prior notification and approval of the Coast Guard. The bridge owner or contractor is required to maintain close and regular contact with Coast Guard Sector North Carolina at (910) 772-2230 to keep them informed of activities on the waterway.
- c. The lowest portion of the superstructure of the bridge across the waterway should clear the 100-year flood height elevation, if feasible.

Revised July 19, 2019

R/W REV: REMOVED ROW, ADDED TCE, ADDED PDE ON PARCELS 1,2,3, AND 4. - FEJ 19/03/

8/17/99

4

SKETCH SHOWING BRIDGE TO PAVEMENT RELATIONSHIP

PERMIT DRAWING
SHEET 3 OF 17

PROJECT REFERENCE NO.	SHEET NO.
B-4593	4

FOR PROFILE, SEE SHEET 8

FOR ONSITE DETOUR, SEE SHEET 6

MATCHLINE = STA 19 + 00.00 (SEE SHEET 5)

C HC

~~DENOTES HAN CLEARING~~

F **F**

DENOTES FILL IN WETLAND

DENOTES IMPACTS IN SURFACE WATER

**NOTE: DETOUR IMPACTS
APPEAR GRAY ON THIS SHEET**

SEE SHEETS S-1 THRU S-42 FOR STRUCTURES PLANS

Revised July 19, 2019

R/W REV: REMOVED ROW. ADDED TCE. ADDED PDE ON PARCELS 1, 2, 3, AND 4. - FEJ 19/01/31

8/17/99

MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 4)

SITE

JOHN L. McCOTTER
DB 353 PG 860
20

PAMCAR FARMS, L.
DB 306 PG 447

PROJECT REFERENCE NO.		SHEET NO.
B-4593		5
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
		
		
FOR PROFILE, SEE SHEET 8		
FOR ONSITE DETOUR, SEE SHEET 7		

**PERMIT DRAWING
SHEET 4 OF 17**

REVISIONS

09-JUL-2019 12:08

**NOTE: DETOUR IMPACTS
APPEAR GRAY ON THIS SHEET**

Revised July 19, 2019

R/W REV:REMOVED ROW,ADDED TCE,ADDED PDE ON PARCELS 1,2,3,AND 4.- FEJ 190131

8/17/99

MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 4)

DETAIL 5-1
PSRM TOE PROTECTION
(Not to Scale)

Natural Ground

d_1

$d = 1 \text{ Ft.}$

3:1 Flatter
Fill Slope

PSRM

Type of Liner = 5B SY OF PSRM

FROM STA. 23 + 89 TO STA. 24 + 30 -L RT

**NOTE: DETOUR IMPACTS
APPEAR GRAY ON THIS SHEET**

PROJECT REFERENCE NO.		SHEET NO.
B-4593		5
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
 <p>FAITH E. JAHNKE</p>	 <p>JASON M. PATKOSKI</p>	
FOR PROFILE, SEE SHEET 8		
FOR ONSITE DETOUR, SEE SHEET 7		

FOR PROFILE, SEE SHEET 8

FOR ONSITE DETOUR, SEE SHEET 7

PERMIT DRAWING SHEET 5 OF 17

HC F

DENOTES HAND
CLEARING

DENOTES FILL IN
WETLAND

Revised July 19, 2019

R/W REV: REMOVED ROW, ADDED TCE, ADDED PDE ON PARCELS 1,2,3, AND 4. - FEJ 19031

8/17/98

DETOUR BRIDGE

**PERMIT DRAWING
SHEET 6 OF 17**

**NOTE: ALL DETOUR
IMPACTS ARE TEMPORARY**

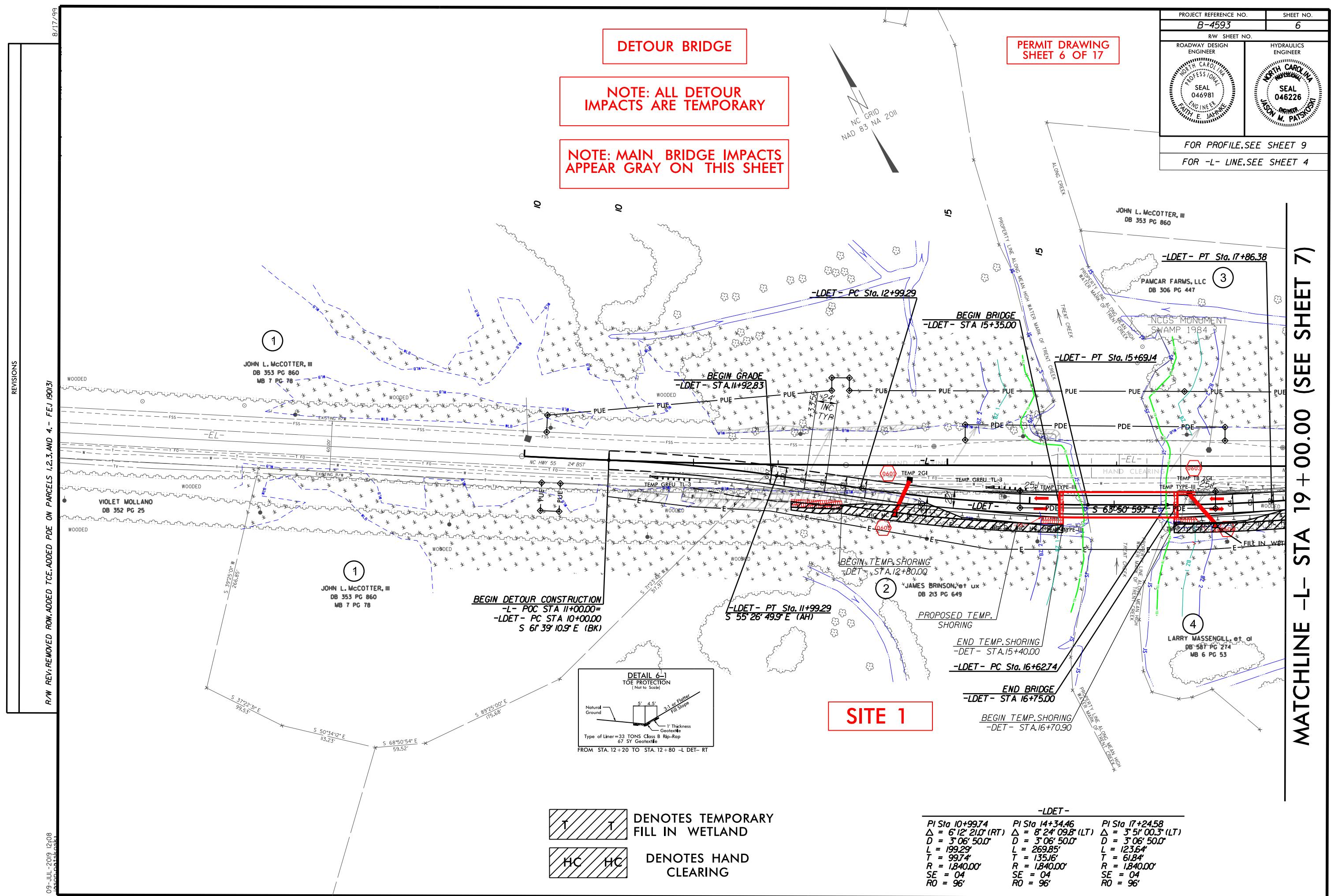
**NOTE: MAIN BRIDGE IMPACTS
APPEAR GRAY ON THIS SHEET**

PROJECT REFERENCE NO.		SHEET NO.
B-4593		6
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
 SEAL 046226		 SEAL 049681
FOR PROFILE, SEE SHEET 9 FOR -L- LINE, SEE SHEET 4		

FOR PROFILE, SEE SHEET 9

FOR -L- LINE, SEE SHEET 4

MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 7)

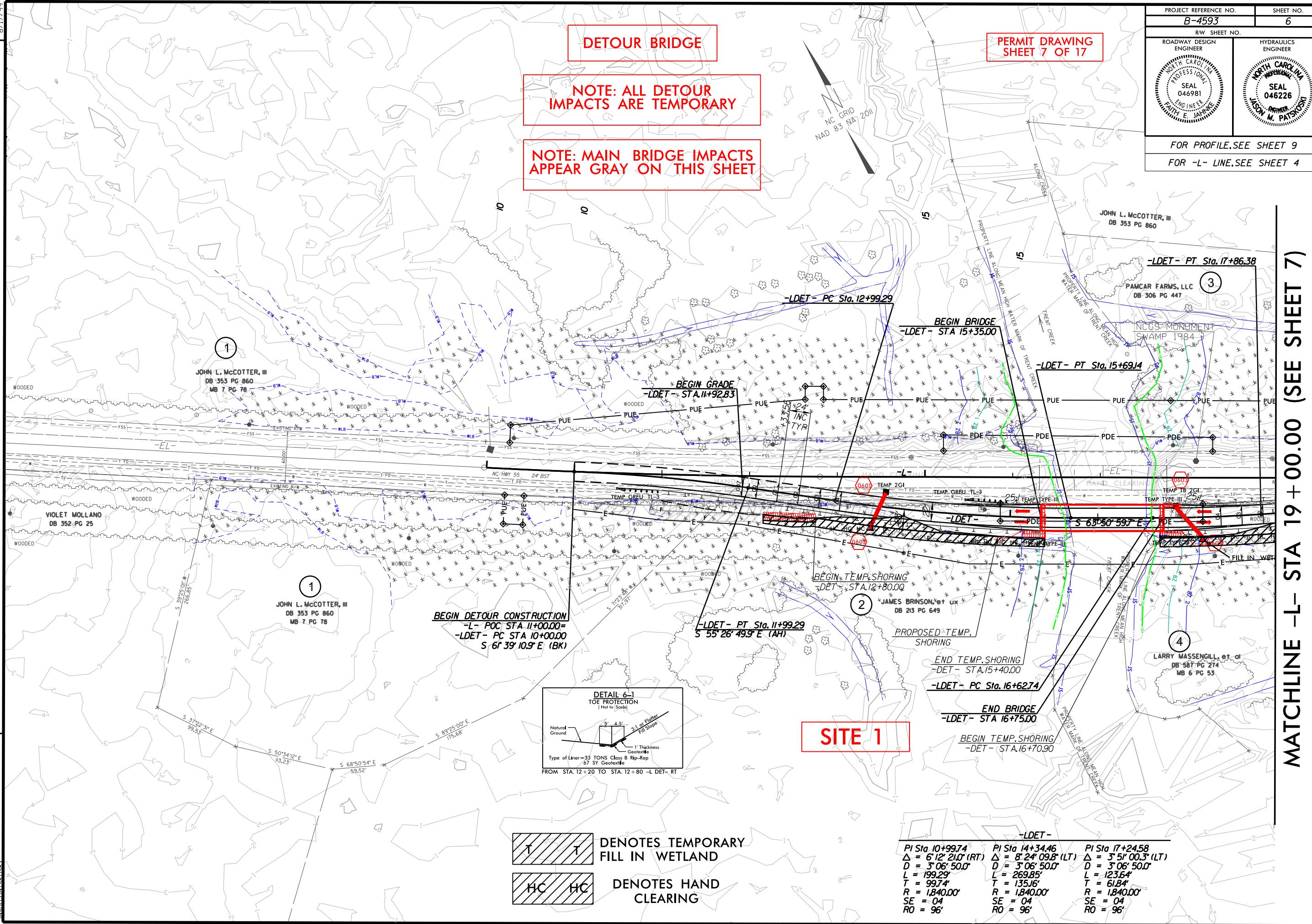


Revised July 19, 2019

REVISIONS

R/W REV: REMOVED ROW, ADDED TCE, ADDED PDE ON PARCELS 1,2,3, AND 4. - FEJ/90/31

09-JUL-2019 12:09
DRAFT

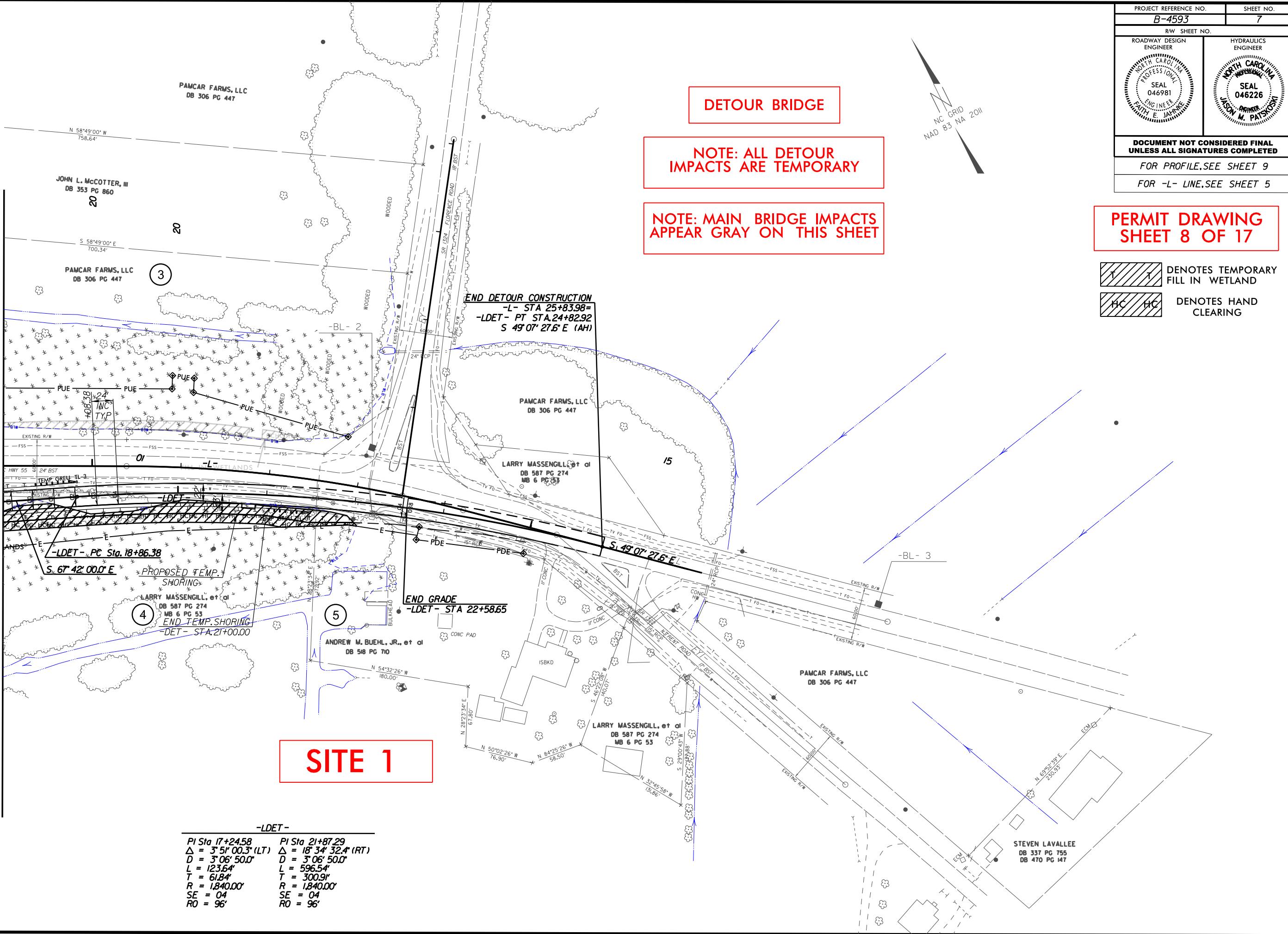


Revised July 19, 2019

R/W REV: REMOVED ROW, ADDED TCE, ADDED PDE ON PARCELS 1,2,3, AND 4. - FEJ 19031

09-Jul-2019 12:09
B4593.Hyd.prm.psh.7.det.dgn
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MATCHLINE -L- STA 19+00.00 (SEE SHEET 6)



Revised July 19, 2019

R/W REV: REMOVED ROW, ADDED TCE, ADDED PDE ON PARCELS 1,2,3, AND 4. - FEJ 19031

MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 6)

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iason.oatskask_

MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 6)

DETOUR BRIDGE

NOTE: ALL DETOUR IMPACTS ARE TEMPORARY

NOTE: MAIN BRIDGE IMPACTS APPEAR GRAY ON THIS SHEET

SITE 1

PERMIT DRAWING SHEET 9 OF 17

END DETOUR CONSTRUCTION
-L- STA 25+83.98=
-LDET- PT STA.24+82.92
S 49° 07' 27.6" E (AH)

END GRADE
-LDET- STA 22+58.65

PI Sta 17+2458
 Δ = 3° 51' 00.3" (LT)
D = 3° 06' 50.0"
L = 123.64'
T = 61.84'
R = 1,840.00'
SE = 04
RO = 96'

PI Sta 21+87.29
 Δ = 18° 34' 32.4" (RT)
D = 3° 06' 50.0"
L = 596.54'
T = 300.91'
R = 1,840.00'
SE = 04
RO = 96'

PROJECT REFERENCE NO. B-4593
RW SHEET NO. 7

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 046981
ENGINEER FAITH E. JAHNKE

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 046226
ENGINEER JASON M. PATKOSKI

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

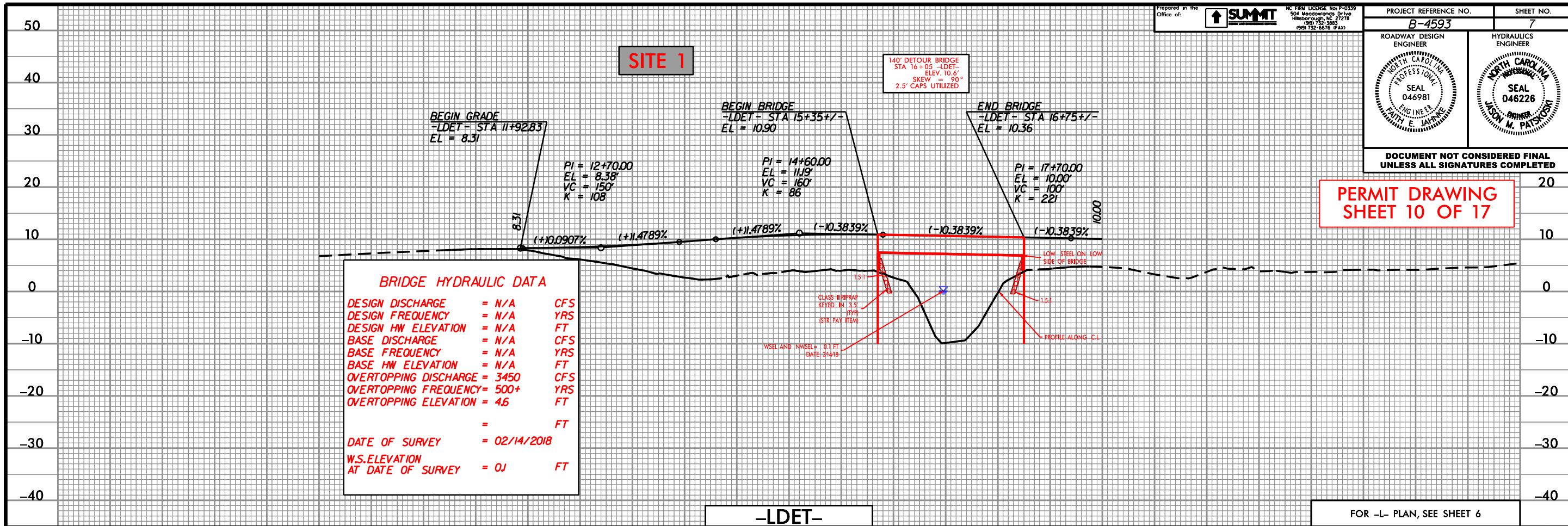
FOR PROFILE, SEE SHEET 9

FOR -L- LINE, SEE SHEET 5

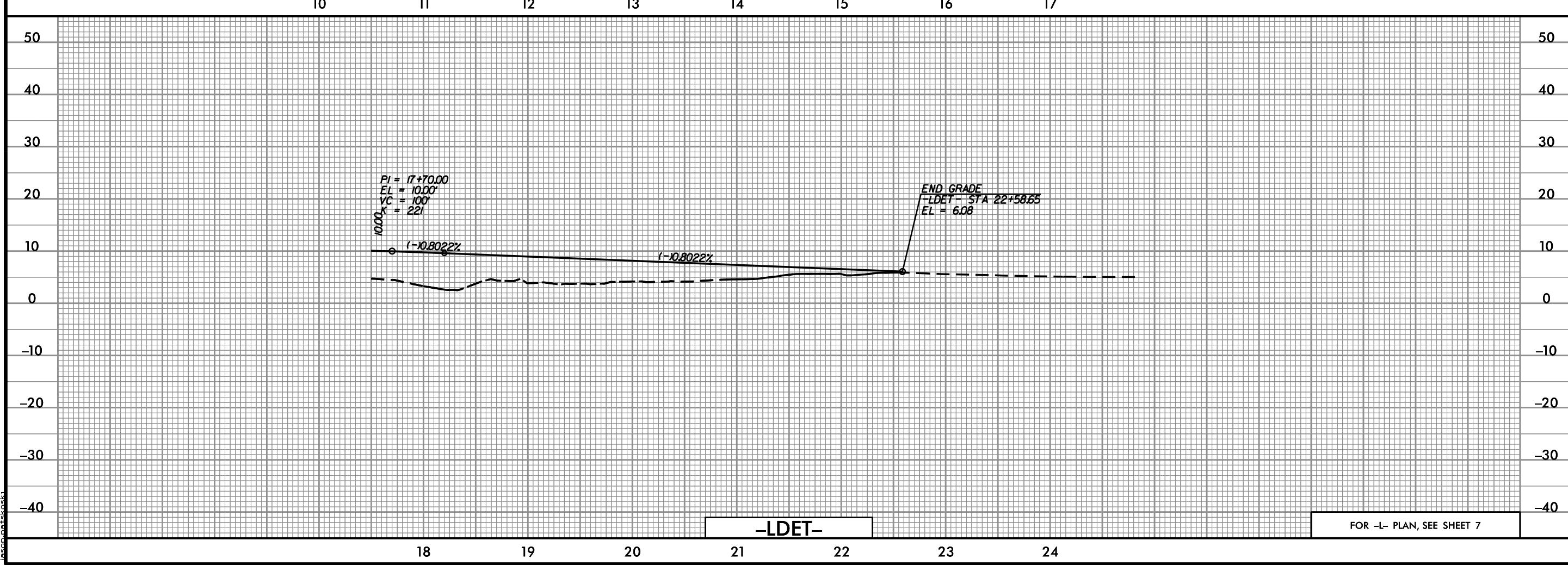
T T DENOTES TEMPORARY FILL IN WETLAND

HC HC DENOTES HAND CLEARING

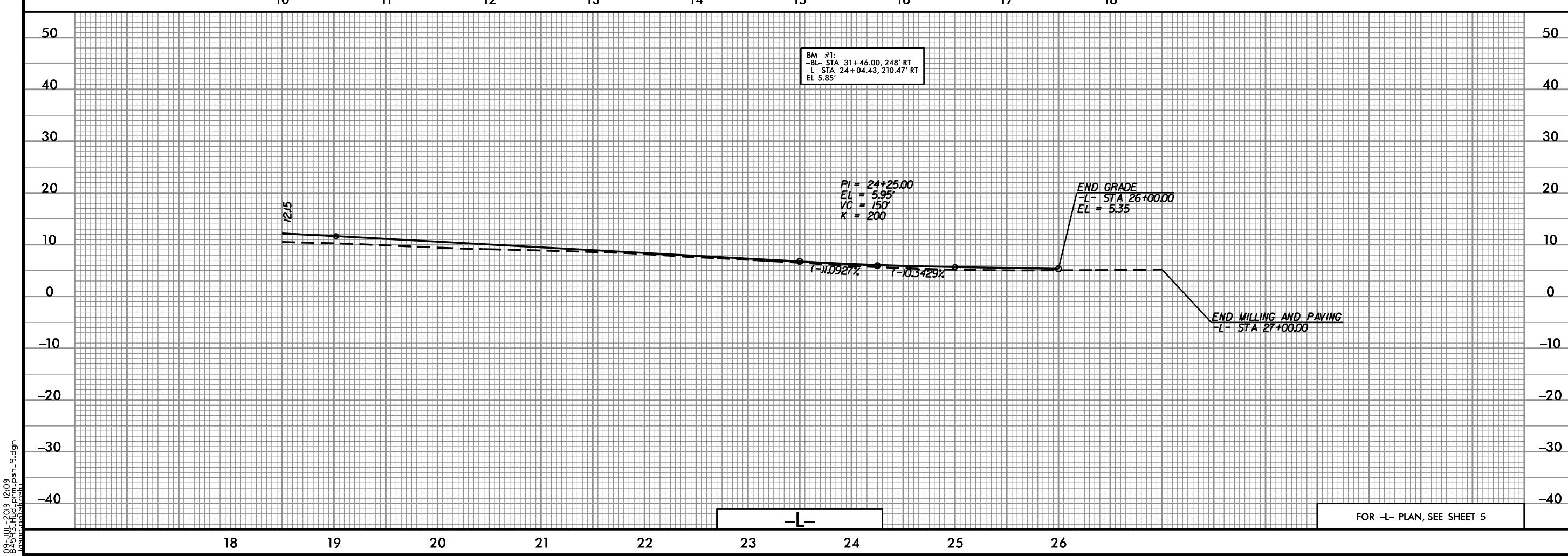
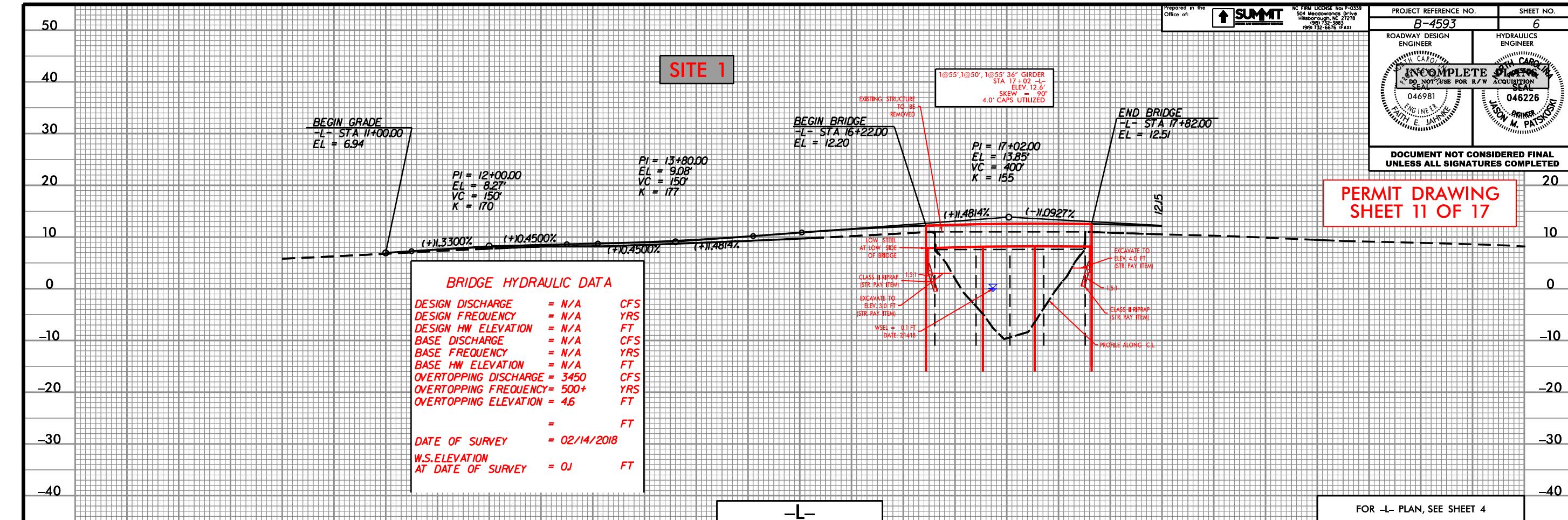
Revised July 19, 2019

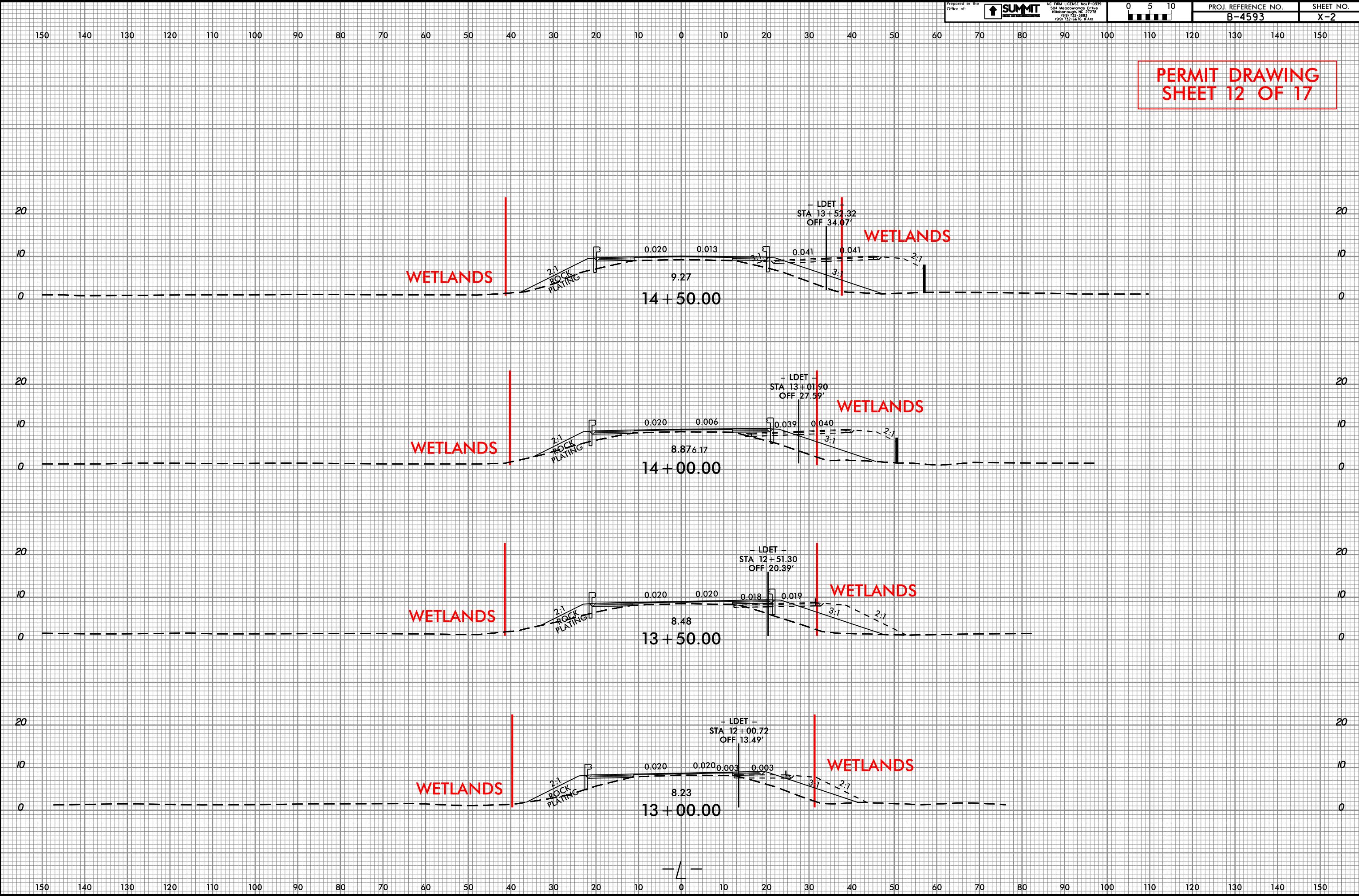


09-53-2019 12:09
Hyd-orm-psn-8.pf1.dgn



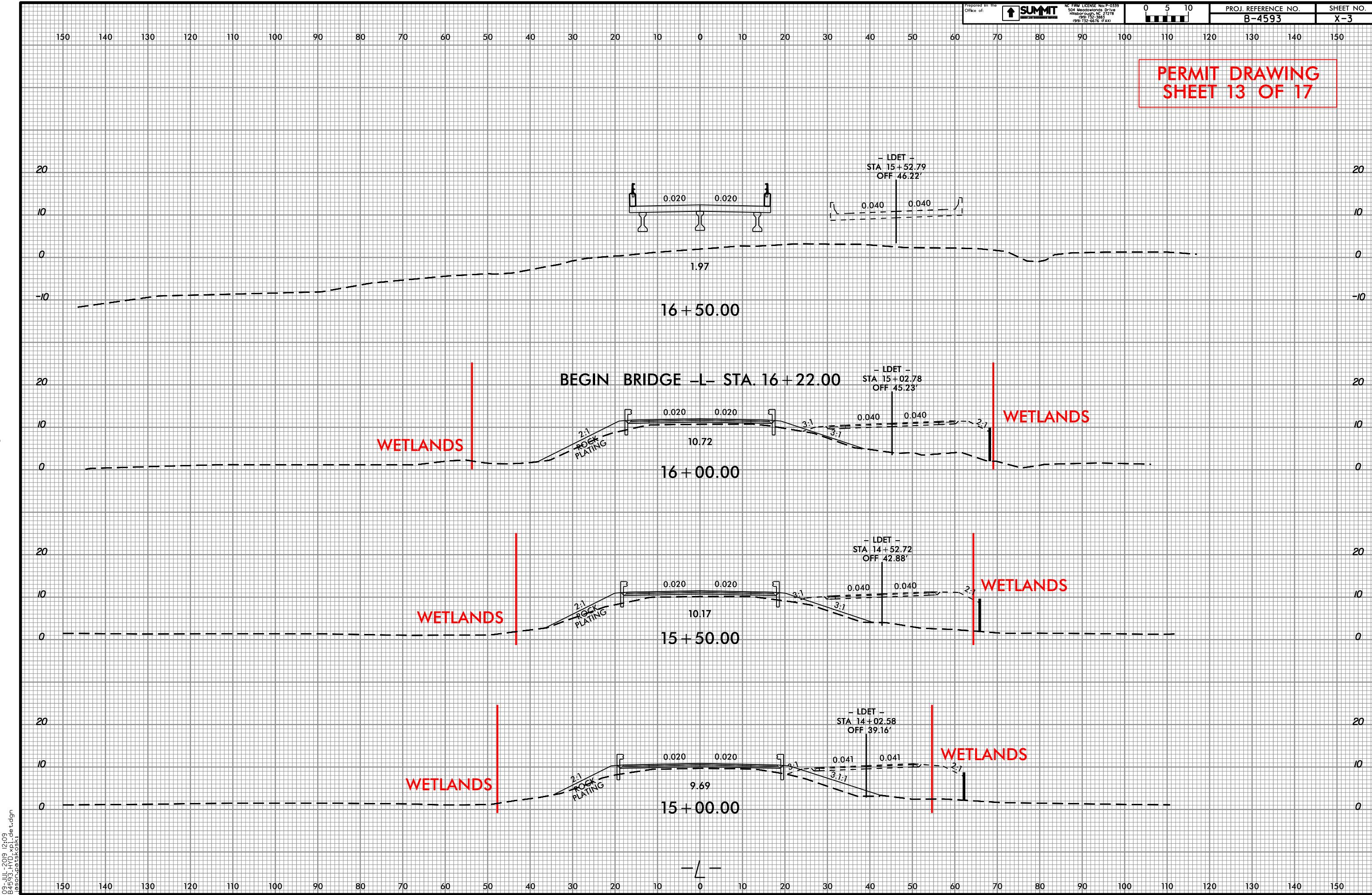
Revised July 19, 2019



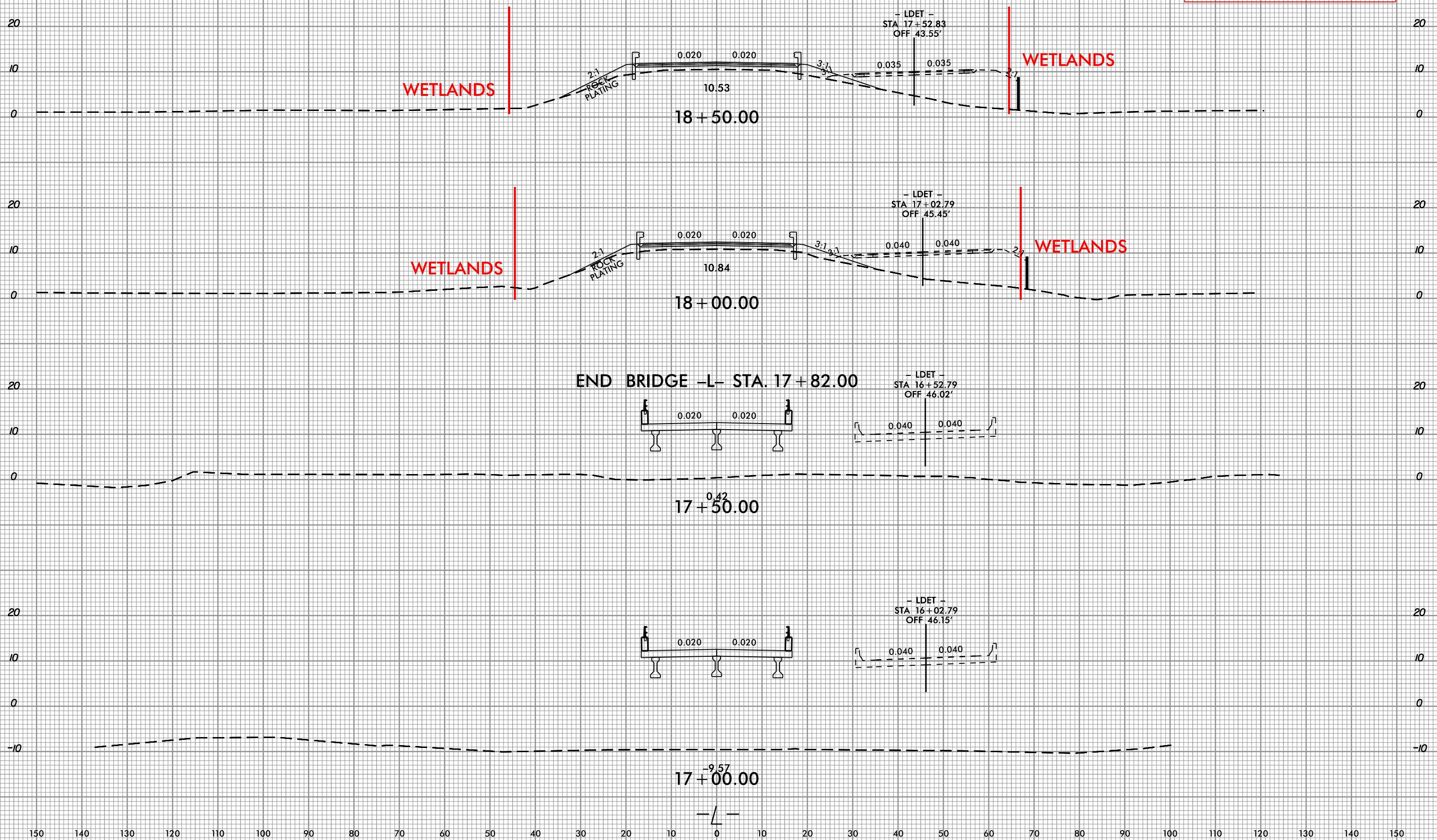


**PERMIT DRAWING
SHEET 12 OF 17**

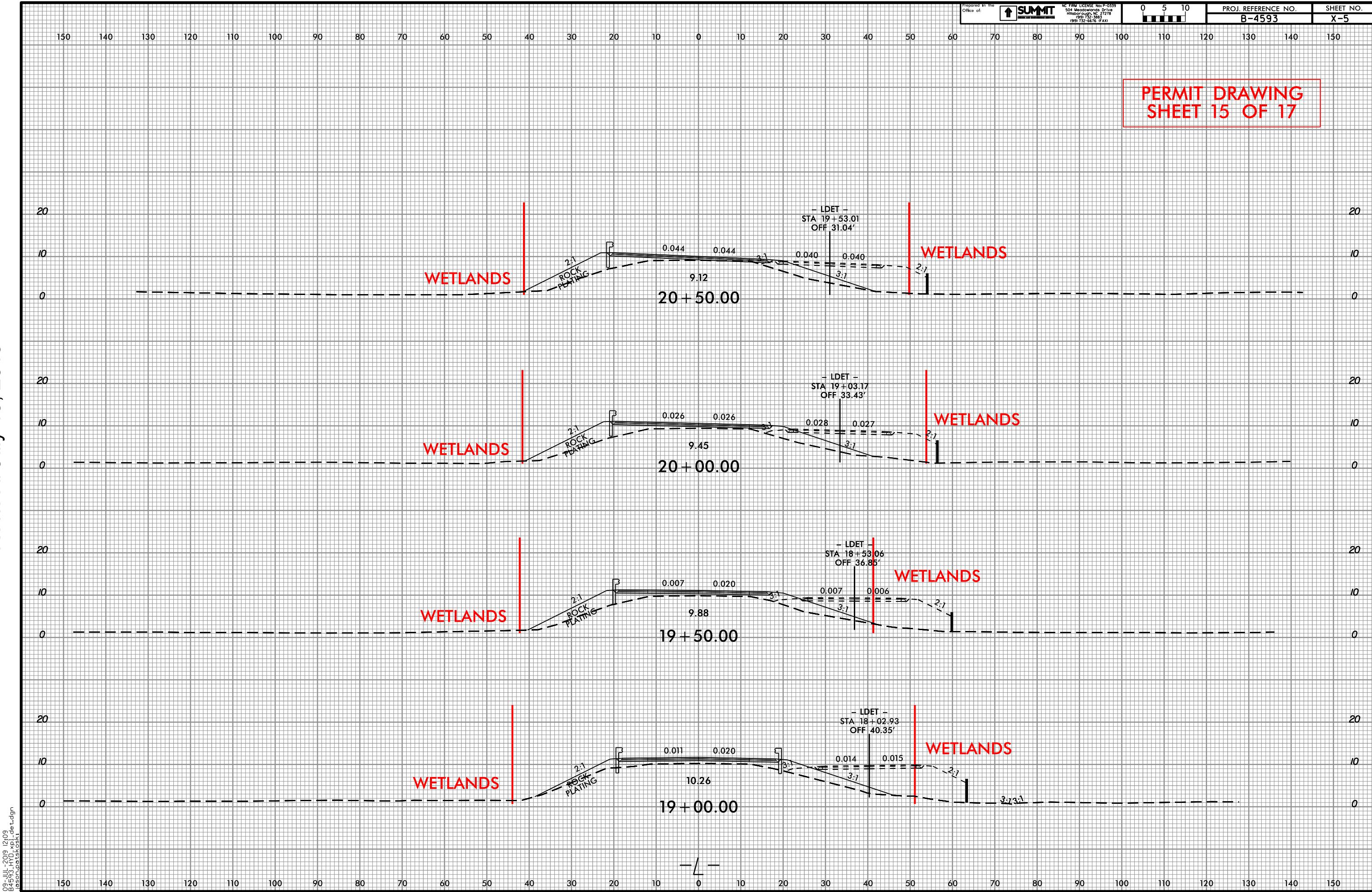
Revised July 19, 2019



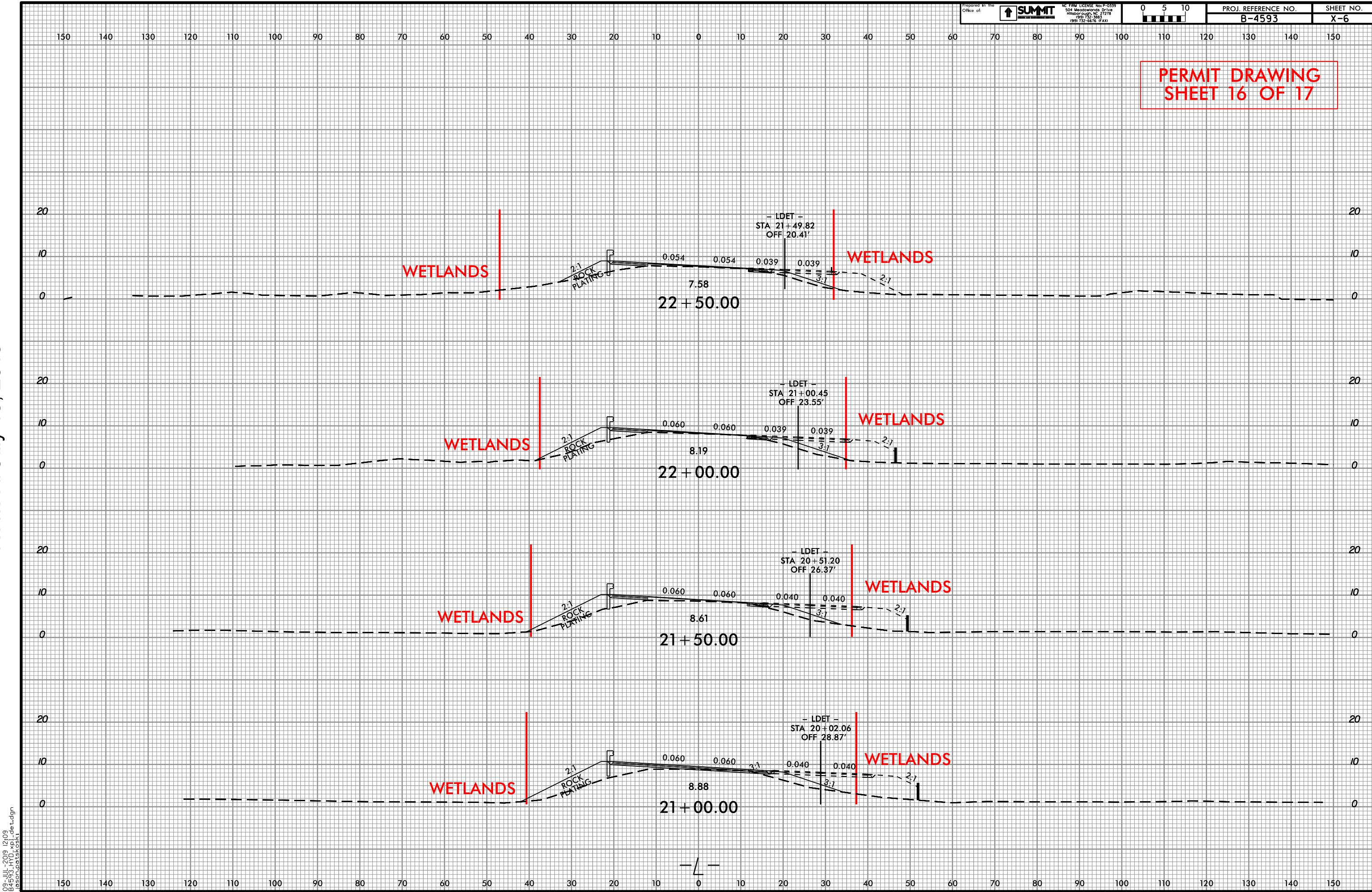
PERMIT DRAWING SHEET 14 OF 17



Revised July 19, 2019



Revised July 19, 2019



WETLAND AND SURACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Temp Fill In Wetlands (ac)	Permanent Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	12+25 to 22+37 -L- LT	Roadway Fill Slope		< 0.01			0.10					
1	11+24 to 22+76 -L- RT	Roadway Fill Slope		0.09			0.04					
1	15+97 to 16+28 -L- LT	Rip Rap						< 0.01	<0.01	8.00	13.00	
1	11+12 to 22+04 -L_DET_RT	Detour Fill Slope	0.15				0.18					
TOTALS*:			0.15	0.09	0.00	0.00	0.32	< 0.01*	<0.01**	8.00	13.00	0.00

Rounded totals are sum of actual impacts

NOTES:

0.09 acre of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures.

*Permanent SW impacts = 143 sf

**Temporary SW impacts = 199 sf

BEGIN APP.SLAB
/-L- STA.15+97.83

END APP.S
-L- STA.18

SKETCH SHOWING BRIDGE TO PAVEMENT RELATIONSHIPS

-L-

PI	STA	II	+90.14
Δ	2° 46' 17.6"	LL	
D	0° 43' 44.2"		
L	380.2'		
T	190.14'		
R	7,860.00'		
SE	= RC		
RO	= 54'		

BUFFER DRAWING SHEET 2 OF 5

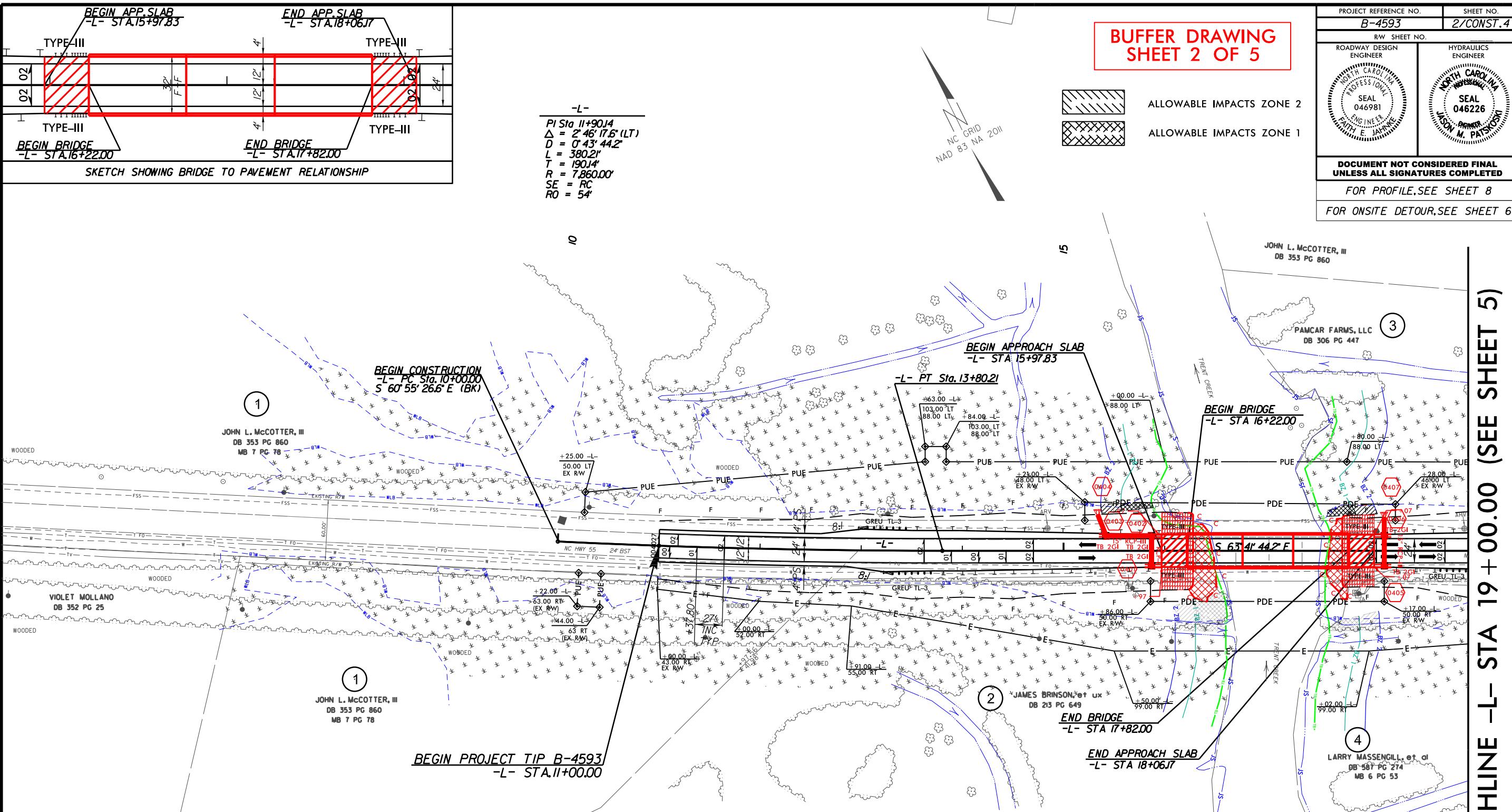
ALLOWABLE IMPACTS ZONE :

ALLOWABLE IMPACTS ZONE

PROJECT REFERENCE NO.		SHEET NO.
B-4593		2/CONST. 4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
 		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		
FOR PROFILE, SEE SHEET 8		
FOR ONSITE DETOUR, SEE SHEET 6		

REVISIONS

AN REVOKED, BOW ADDED TCE ADDED, POE ON PARCELS 1, 2, 3 AND 4 - EEE / 190/31



DETOUR BUFFER IMPACTS APPEAR GRAY ON THIS SHEET

RIPARIAN BUFFER IMPACTS SUMMARY

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
3/25/2019
PAMLICO COUNTY
B-4593
RIDGE REPLACEMENT ON NC HWY 55 BYPASS
OVER TRENT CREEK
SHEET 4 OF 5

WETLANDS IN BUFFER IMPACTS SUMMARY

Revised 2018 Feb

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
3/25/2019
PAMLICO COUNTY
B-4593
RIDGE REPLACEMENT ON NC HWY 55 BYPASS
OVER TRENT CREEK
SHEET 5 OF 5

B-4593 Utility Narrative
Pamlico County, North Carolina
Updated July 9, 2019

Duke Energy

Contact Information: Alex Craig (919) 399-3081 ext. 7304
alex.craig@duke-energy.com

Duke Energy will be changing out (2) poles for taller poles, placing (5) new poles in the new PUE acquired north of NC Hwy 55, removing (5) existing poles north of NC Hwy 55, placing (1) new pole south of NC Hwy 55, and installing (11) and replacing (1) guys and anchors.

Wetland areas will be impacted by the installation of five new poles and 11 guys and anchors in the wetland areas and the clearing required. The clearing for the proposed power lines will be 30 feet wide (15 feet on each side of the lines), and the hand clearing impacts total 0.65 acres. There are also 15 square feet of utility pole impacts are attributed to Duke Energy. Additionally, Duke energy guy wires/anchors account for 33 square feet of impacts.

CentruryLink

Contact Information: Rod Medlin (252) 413-7711
rod.m.medlin@centurylink.com

CenturyLink will be removing (2) poles, installing (4) guys and anchors, and abandoning buried cables south of NC Hwy 55. The replacement copper and fiber cables will be placed on the north side on NC Hwy 55 both buried in the R/W, and aerially west of the project, then both aerially attached to the new Duke poles inside the project, then riser down the existing pole at Florence Road, and buried under NC Hwy 55 to an existing handhole south of NC Hwy 55.

Wetland areas will be impacted by the installation of (2) guys and anchors in the wetland which account for 6 square feet of impacts.

Spectrum

Contact Information: Stan Ramsay (252) 725-1141
stan.ramsay@pintechcorp.com

Spectrum will be abandoning buried cable south of NC Hwy 55, and removed from the aerial crossing attached to CenturyLink's poles (to be removed). Spectrum will be attaching to Duke's new poles north of NC Hwy 55, and to Duke's existing poles until they are east of Florence Rd. Then, they will go buried under NC Hwy 55 to tie back into their existing facilities west of N Trent Rd. Spectrum will be installing (4) guys and anchors.

Wetland areas will be impacted by the installation of (3) guys and anchors in the wetland areas which account for 9 square feet of impacts.

Bay River Metropolitan Sewer

Contact Information: Eric Harper - (252) 670-4055 - (252) 745-4812 (office)
ericbayriver@gmail.com
Chris Venters (252) 670-8236
venters.brmsd@gmail.com

Bay River Metropolitan Sewer will be abandoning approximately 1184 LF of 6-inch PVC sanitary sewer forcemain north on the northside of NC Hwy 55. The abandoned segment will be replaced by approximately 207 LF of 8-inch PVC forcemain, 1050 LF of 8-inch FPVC forcemain, two 8-inch insertion valves, 2 8-inch 11.25-degree bends, one 8-inch 22.5 degree bends, two combination air valve and vaults, and two 10"x8" HDPE Reducers with 8" MJ Adaptors. The new segment will connect to the existing sanitary sewer forcemain east and west of the bridge. The proposed forcemain will cross underneath Trent Creek (maintaining a 20' minimum separation below the bottom of the channel) with 1050 LF of directionally drilled 8-inch FPVC. All open cut sections are outside the wetland boundary, so, there are no wetland impacts associated with this relocation.

Pamlico County Water

Contact Information: Jeff Sanders (252) 670-7519, (252) 745-5453 (office)
jeff.sanders@pamlicocounty.org
Paul Campbell (252) 670-2037, (252) 745-5453 (office)
paul.campbell@pamlicocounty.org

Pamlico County Water will be removing/abandoning approximately 1111 feet of 8-inch PVC waterline on the south side of NC Hwy 55. The existing waterline is suspended from the existing bridge. This segment will be removed. The removed/abandoned segment of waterline will be replaced with approximately 265 LF of 8-inch PVC, 980 LF of 10" HDPE, two 8-inch insertion valves, three 8-inch 90-degree bends, an 8-inch 22.5-degree bend, an 8-inch 45-degree bend, and two 10"x8" HDPE Reducers with 8" MJ Adaptors. The new segment will cross NC Hwy 55 West and East of the bridge, requiring 40 and 60 LF of 16-inch steel casing respectively. The steel casing will be bore and jacked which will require a 30'x15' bore pit at the east and west crossings. Both bore pits will be north of NC Hwy 55. The new segment will connect to the existing waterline at the crossings of NC Hwy 55 which will require 15'x15' receiving pits at both locations. The proposed waterline will cross underneath Trent Creek (maintaining a 20' minimum separation below the bottom of the channel) with 960 LF of directionally drilled 10-inch HDPE. Wetland areas will be impacted by the bore pits at both crossings of NC Hwy 55 (north of NC Hwy 55), the receiving pit south of NC Hwy 55 and east of the bridge, and some open cut installation east of the bridge. These impacts total 0.014 acres (164 square feet in Site 2 and 453 square feet in Site 3). Note it was assumed excavation limits for the open cut section would extend 7.0' from the center of the waterline.

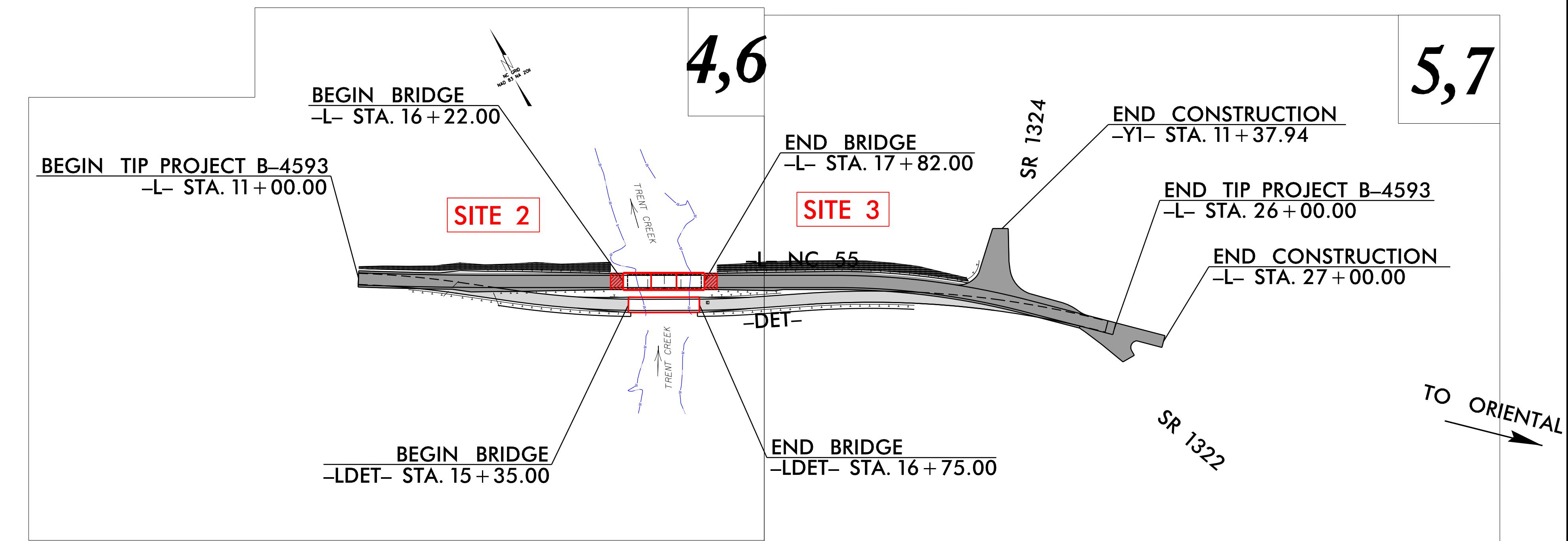
**SITE 1: ROADWAY IMPACTS
(SHOWN IN SEPERATE
PERMIT PACKAGE)
SITE 2&3: UTILITY IMPACTS**

NEU PERMIT PLANS PAMLICO COUNTY

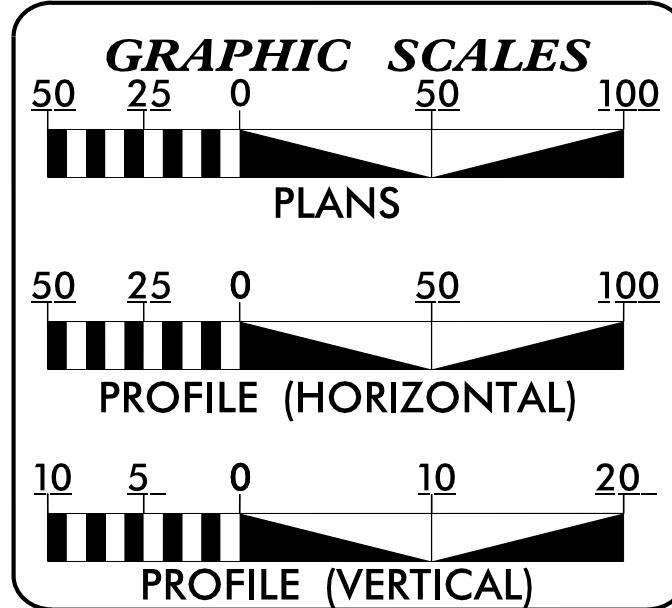
**LOCATION: BRIDGE NO. 38 ON NC 55 OVER TRENT CREEK
TYPE OF WORK: RELOCATION OF POWER, TELEPHONE, CABLE
WATER, AND SANITARY SEWER**

VICINITY MAP

TO BAYBORO



**DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED**



<i>INDEX OF SHEETS</i>	
<u>SHEET NO.:</u>	<u>DESCRIPTION:</u>
<i>UE-1</i>	<i>TITLE SHEET</i>
<i>UE-2 THRU UE-3</i>	<i>UTILITY CONSTRUCTION PLAN</i>

UTILITY OWNERS ON PROJECT

- (A) TELEPHONE - CENTURYLINK
- (B) POWER - DUKE ENERGY
- (C) CABLE - SPECTRUM
- (D) WATER - PAMLICO COUNTY WATER
- (E) SANITARY SEWER - BAY RIVER
METROPOLITAN



PREPARED IN THE OFFICE OF

BRANDON W. JOHNSON, PE PROJECT ENGINEER
FAITH E. JAHNKE, PE PROJECT DESIGNER

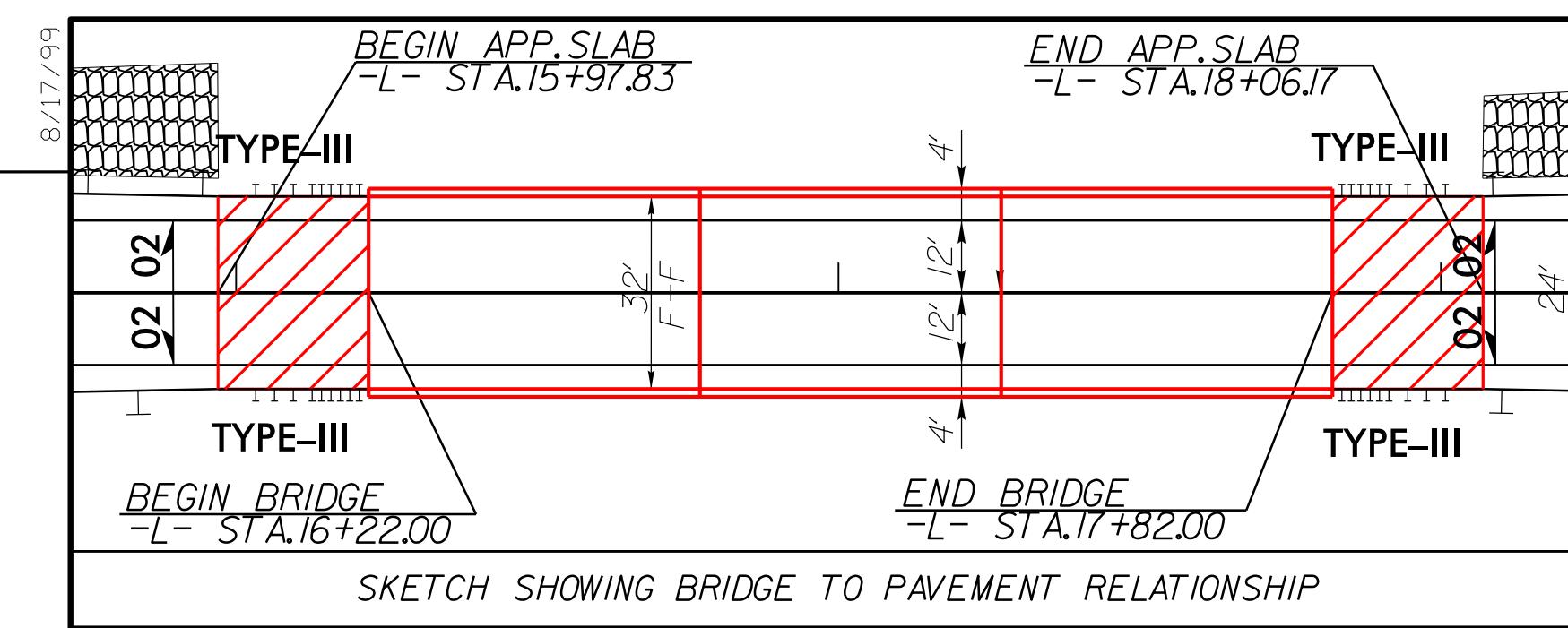


**DIVISION OF HIGHWAYS
UTILITIES UNIT**

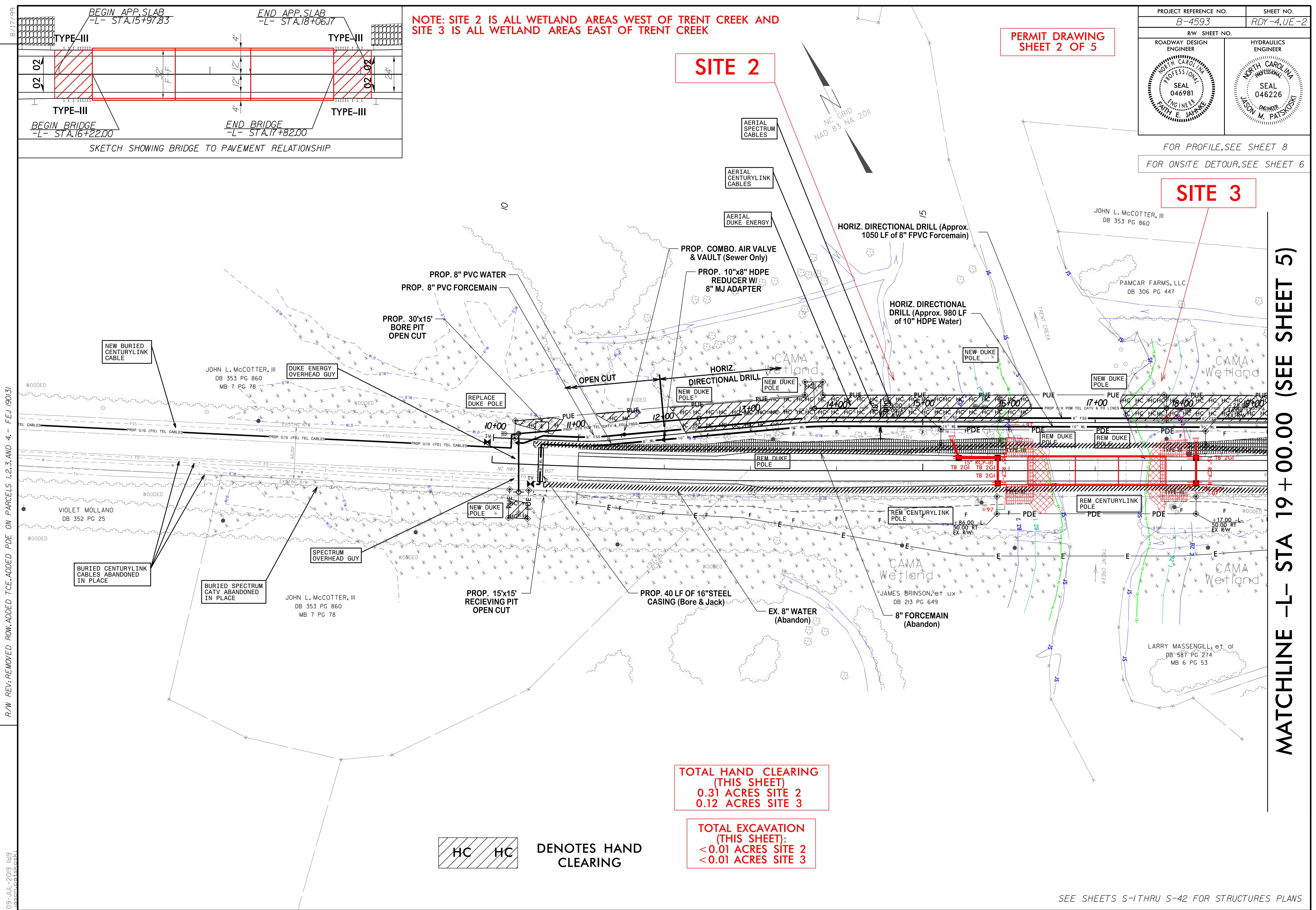
<u>KYLE PLEASANT</u>	<i>REGIONAL UTILITY COORDINATOR</i>
<u>LARRY M. JAMES, JR.</u>	<i>SENIOR UTILITY COORDINATOR</i>
<u>NABIL HAMDAN</u>	<i>REGIONAL UTILITIES ENGINEER</i>
<u>KELVIN S. MARTIN, EI</u>	<i>SENIOR UTILITIES ENGINEER</i>

Revised July 19, 2019

R/W REV: REMOVED ROW, ADDED TCE, ADDED PDE ON PARCELS 1,2,3 AND 4. - FEB 19/03/



NOTE: SITE 2 IS ALL WETLAND AREAS WEST OF TRENT CREEK AND SITE 3 IS ALL WETLAND AREAS EAST OF TRENT CREEK



09-JUL-2019 1:9
DRAFTS

MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 5)

PROJECT REFERENCE NO.	SHEET NO.
B-4593	RDY-4,UE-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: SITE 2 IS ALL WETLAND AREAS WEST OF TRENT CREEK AND
SITE 3 IS ALL WETLAND AREAS EAST OF TRENT CREEK

THEORY OF THE STATE

PERMIT DRAWING SHEET 3 OF 5

**TOTAL EXCAVATION
(THIS SHEET):
0.01 ACRES SITE 3**

**TOTAL HAND CLEARING
(THIS SHEET)
0.22 ACRES HC SITE 3**

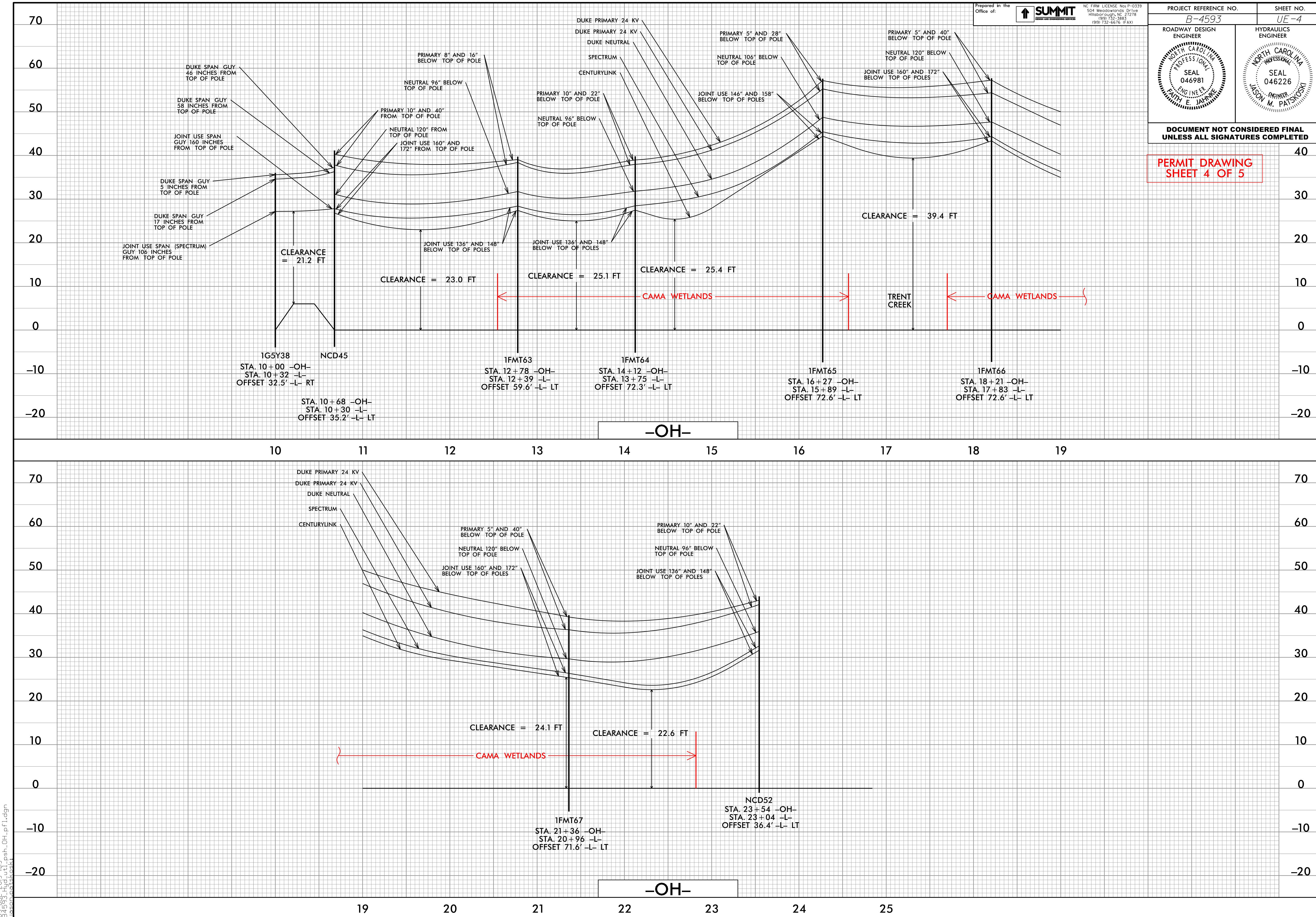
DENOTES HAND CLEARING

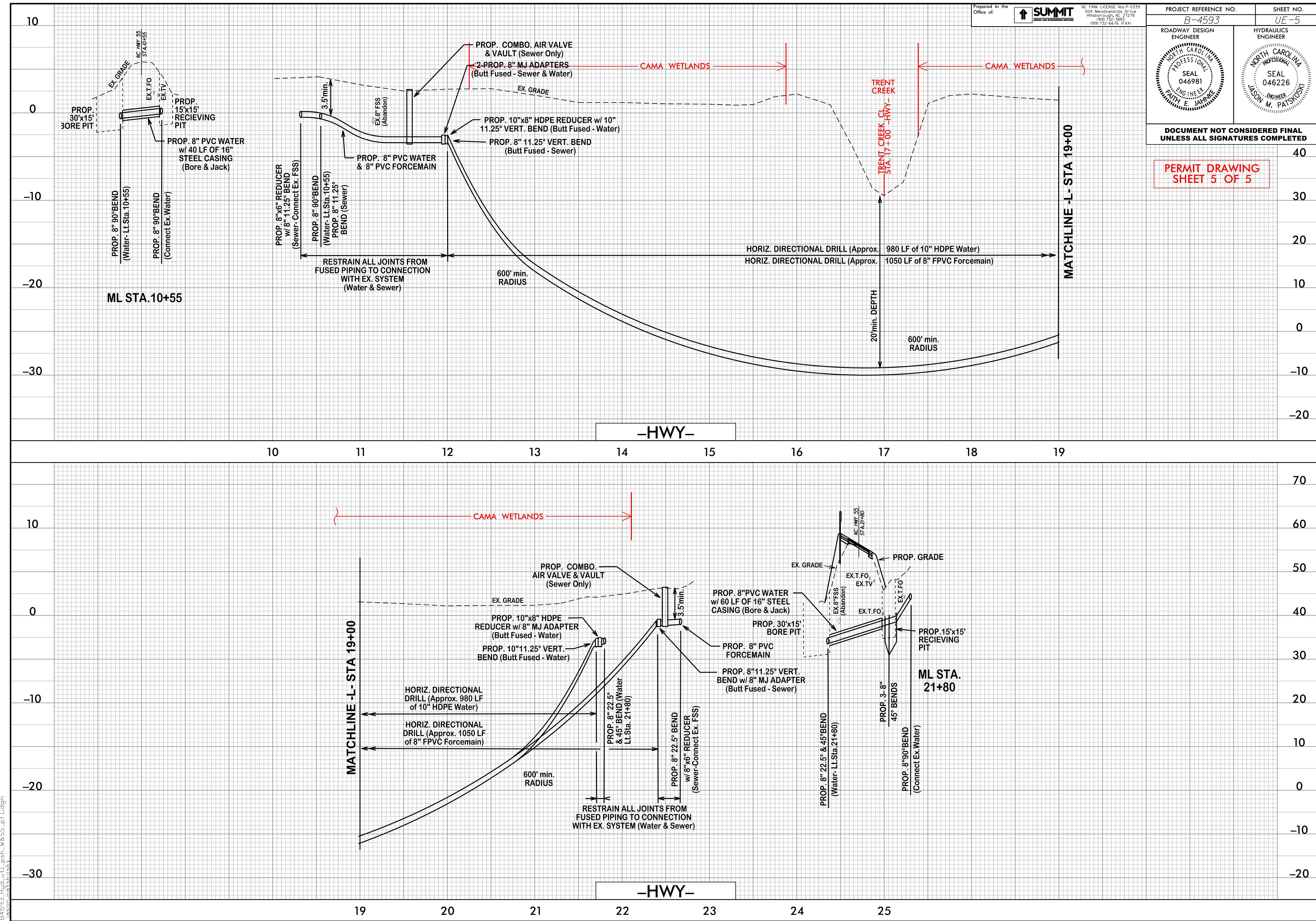
WATCHLINE - STA 19 + 00.00 (SEE SHEET 4)

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REVISIONS

MEASURES OF INEQUALITY 13





WETLAND AND SURACE WATER IMPACTS SUMMARY												
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Temp Fill In Wetlands (ac)	Permanent Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
2	10+00 to 16+30 -L- LT & RT	Utility Easement					0.31					
2	10+00 to 16+30-L- LT & RT	Utility Poles and Guys			< 0.01 **							
2	10+45 to 16+65 -L- LT	Water Main			<0.01***							
3	17+25 to 22+80 -L- LT	Utility Easement					0.34					
3	17+75 to 21+00 -L- LT	Utility Poles and Guy Wires			< 0.01 **							
3	21+62 to 21+91 -L- LT	Water Main			0.01							
3	21+62 to 21+91 -L- RT	Water Main			<0.01***							
TOTALS*:			0.00	0.00	0.02	0.00	0.65	0.00	0.00	0.00	0.00	

Rounded totals are sum of actual impacts

NOTES:

**Utility Pole and Guy Wire Anchor Impacts = 36 SF in Site 2, 27 SF in Site 3 (2 Utility Poles fall within Buffer zones, 1 in Buffer Zone 1, 1 in Buffer Zone 2)

*** Water Main Impacts in Site 2 = 164 SF, in Site 3 = 376 SF north of NC 55 and 77 SF south of NC 55

****Total excavation impacts = 164 SF + 376 SF + 77 SF + 36 SF + 27 SF = 680 SF = 0.016 acres

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

7/10/2019

PAMLICO COUNTY

B-4593

BRIDGE REPLACEMENT ON NC 55 OVER TRENT CREEK

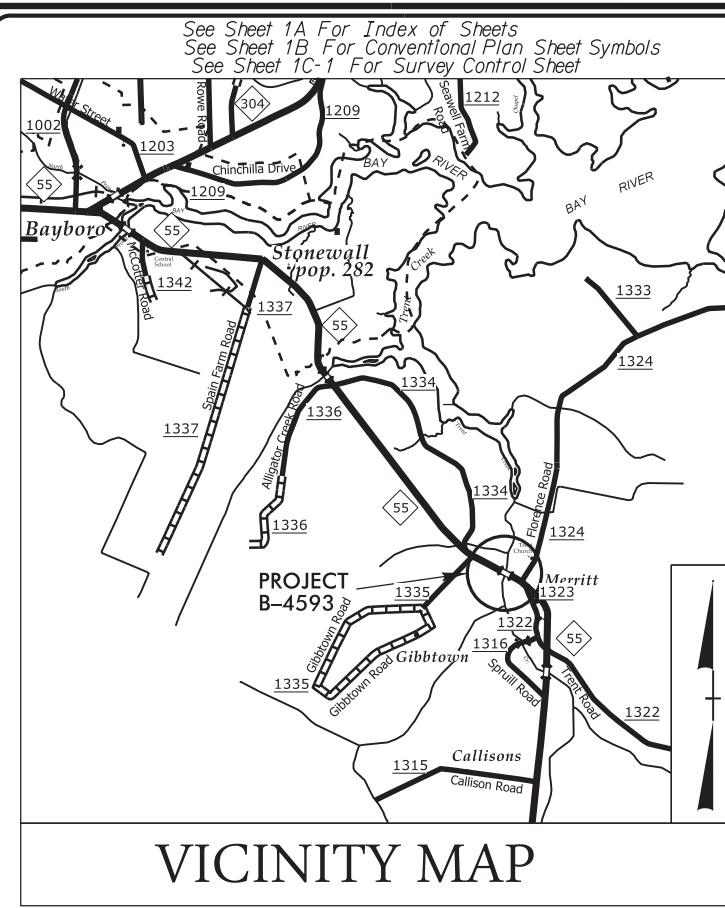
SHEET 1 OF 3

Revised July 19, 2019

26-JUN-2019 13:41
B4593_HydUtil_buff-drm+sn.dgn
jason.davis.koski

09/08/99

PROJECT: B-4593



VICINITY MAP

TO BAYBORO

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

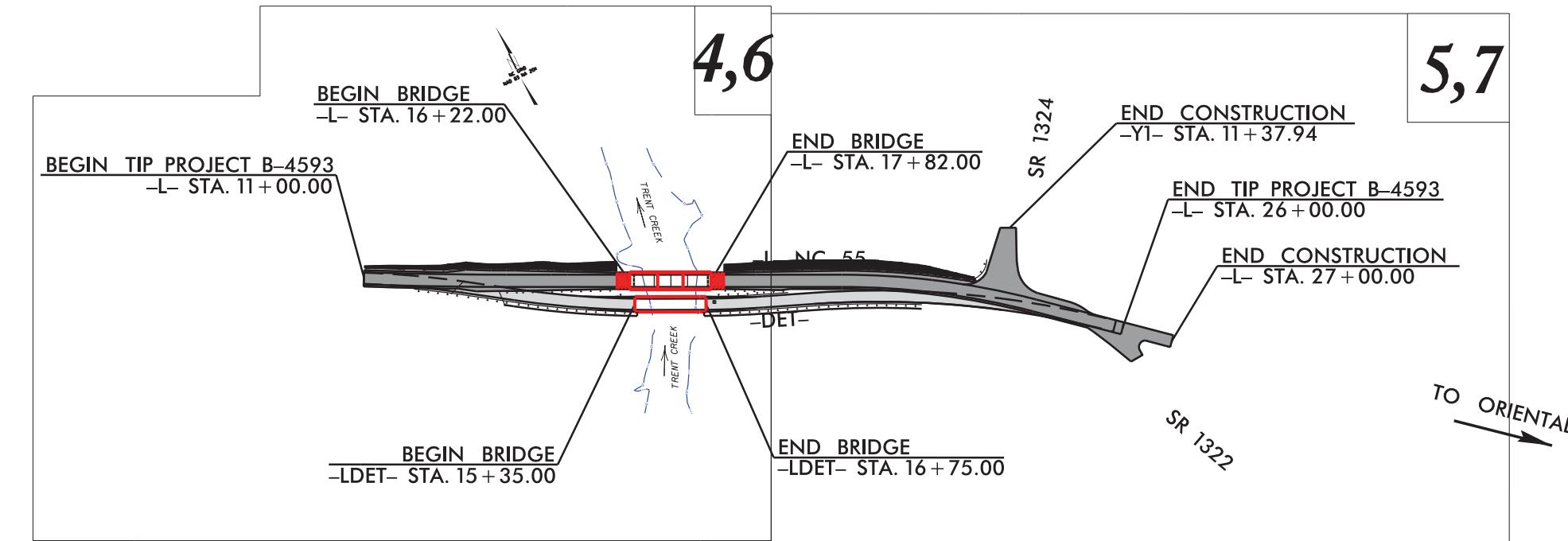
**NEU PERMIT PLANS
PAMLICO COUNTY**

**LOCATION: BRIDGE NO. 38 ON NC 55 OVER TRENT CREEK
TYPE OF WORK: RELOCATION OF POWER, TELEPHONE, CABLE,
WATER, AND SANITARY SEWER**

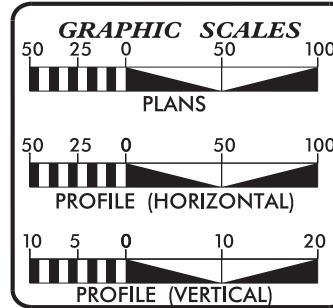
**BUFFER DRAWING
SHEET 1 OF 4**

**BUFFER IMPACTS PERMIT
FOR UTILITIES**

NC GRID
NAD 83 NA 2011



DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



INDEX OF SHEETS	
SHEET NO.:	DESCRIPTION:
UE-1 UE-2 THRU UE-3	TITLE SHEET UTILITY CONSTRUCTION PLAN

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- (C) CABLE - SPECTRUM
- (D) WATER - PAMLICO COUNTY WATER
- (E) SANITARY SEWER - BAY RIVER METROPOLITAN

 SUMMIT DESIGN AND ENGINEERING SERVICES FIRM NO. P-0339	PREPARED IN THE OFFICE OF 504 Meadowland Drive Hillsborough, NC 27278-8551 Voice: (919) 732-3883 Fax: (919) 732-6776 www.summitde.net
BRANDON W. JOHNSON, PE PROJECT ENGINEER	FAITH E. JAHNKE, PE PROJECT DESIGNER

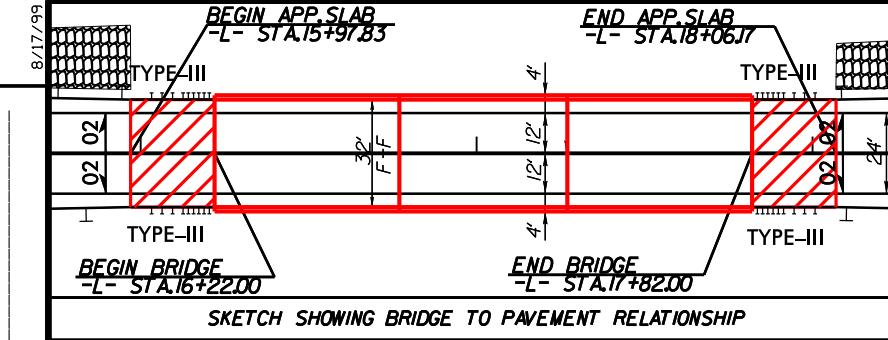


**DIVISION OF HIGHWAYS
UTILITIES UNIT**
1555 MAIL SERVICES CENTER
RALEIGH NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

KYLE PLEASANT REGIONAL UTILITY COORDINATOR
LARRY M. JAMES, JR. SENIOR UTILITY COORDINATOR
NABIL HAMDAN REGIONAL UTILITIES ENGINEER
KELVIN S. MARTIN, EI SENIOR UTILITIES ENGINEER

Revised July 19, 2019

R/W REV: REMOVED ROW,ADDED PDE ON PARCELS 1,2,3,AND 4.- FEJ/90/31



-L-

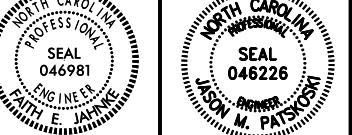
PI Sta 11+90.14
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 D = 0° 43' 44.2"
 L = 380.21'
 T = 190.4'
 R = 7,860.00'
 SE = RC
 RO = 54'

**BUFFER DRAWING
SHEET 2 OF 4**

ALLOWABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

PROJECT REFERENCE NO.	HEET NO.
B-4593	UE-2/RDY-4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



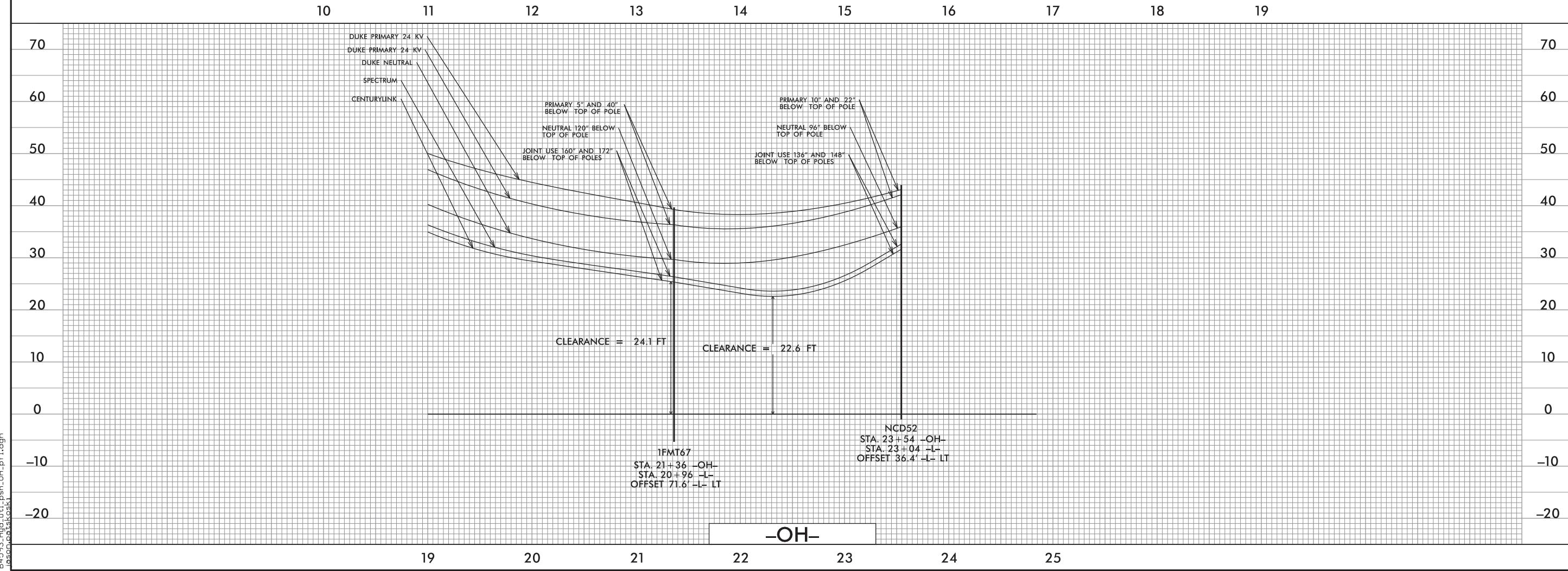
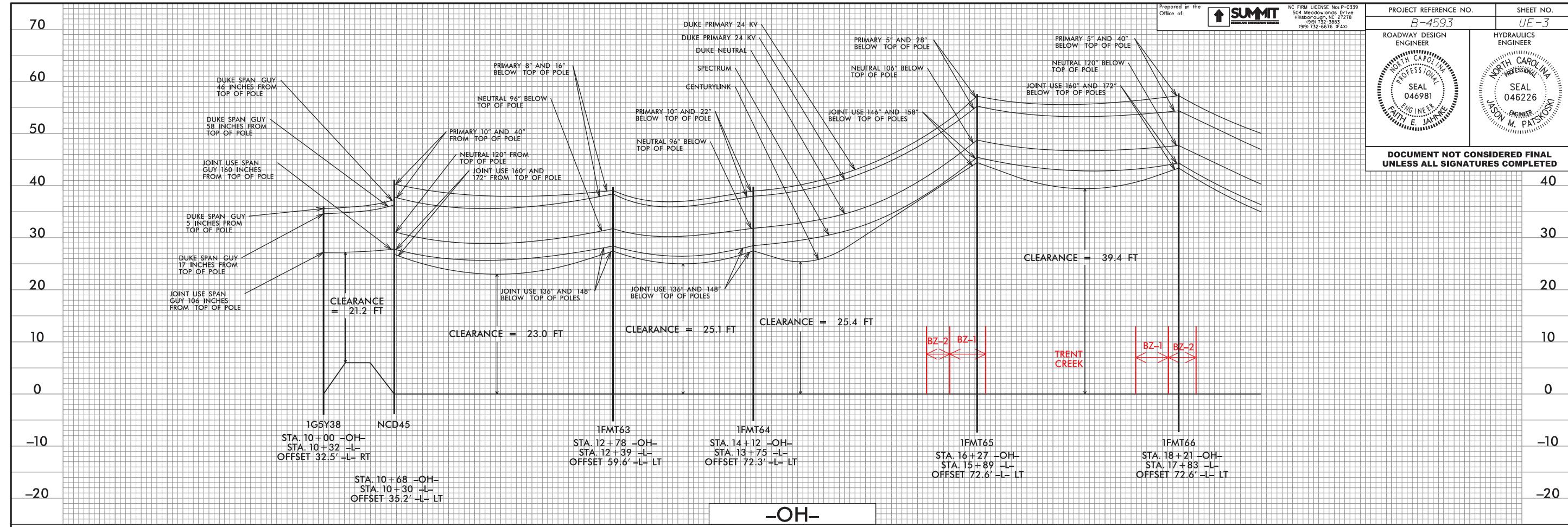
FOR PROFILE, SEE SHEET 8

FOR ONSITE DETOUR, SEE SHEET 6

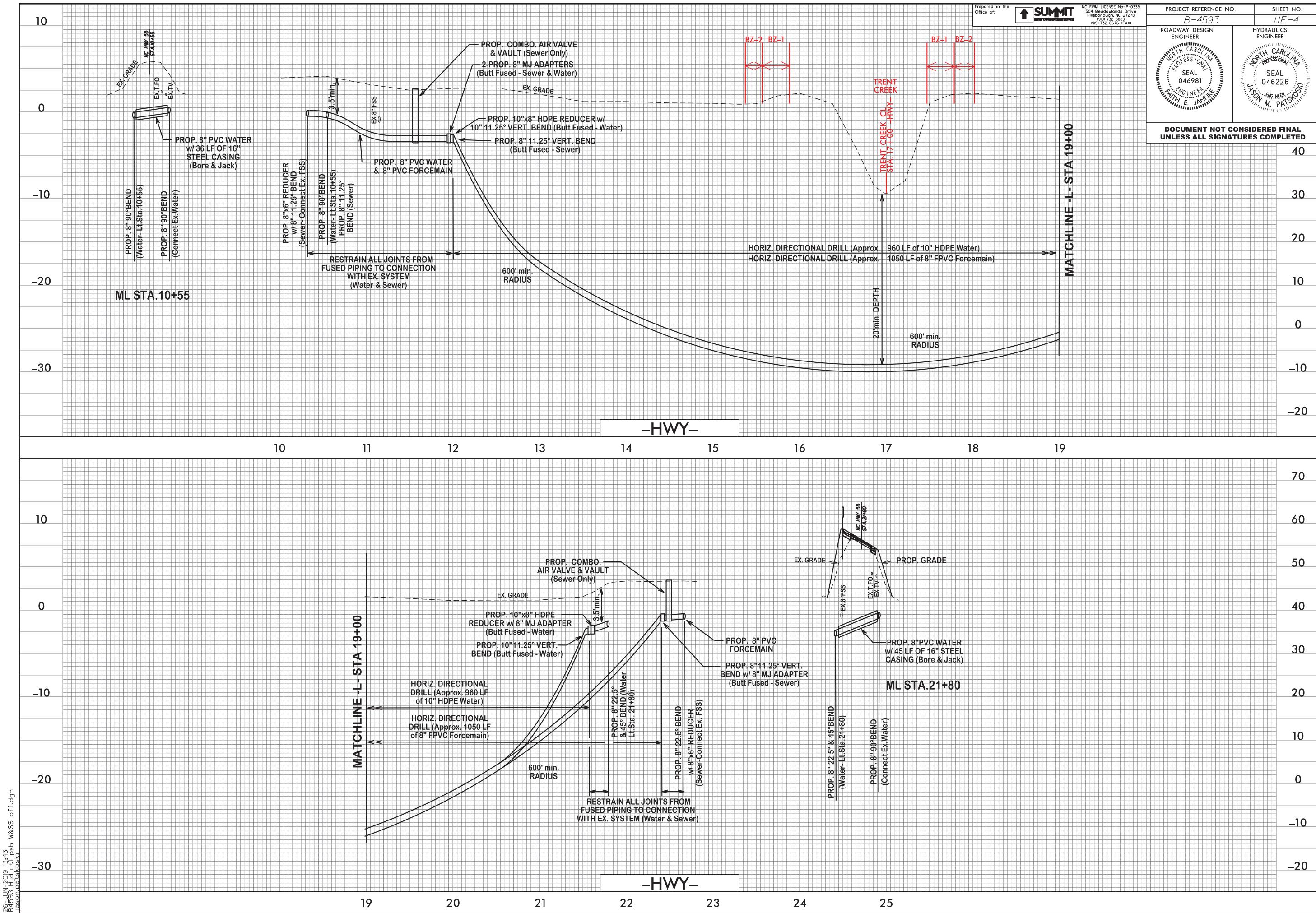
MATCHLINE -L- STA 19 + 00.00 (SEE SHEET 5)

SUMMARY
 ALLOWABLE BZ1: 2092 SF (0.05 ACRES)
 ALLOWABLE BZ2: 1392 SF (0.03 ACRES)

Revised July 19, 2019



Revised July 19, 2019



RIPARIAN BUFFER IMPACTS SUMMARY

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
7/10/2019
PAMLICO COUNTY
B-4593
RIDGE REPLACEMENT ON NC HWY 55 BYPASS
OVER TRENT CREEK
SHEET 2 OF 3

Revised July 19, 2019

WETLANDS IN BUFFER IMPACTS SUMMARY

Revised 2018 Feb

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
7/10/2019
PAMLICO COUNTY
B-4593
RIDGE REPLACEMENT ON NC HWY 55 BYPASS
OVER TRENT CREEK
SHEET 3 OF 3