



Transportation

PAT McCrory
Governor

NICHOLAS J. TENNYSON
Secretary

October 13, 2016

MEMORANDUM TO: Ms. Karen Collette, P.E.
Division 3 Engineer

FROM: Philip S. Harris, III, P.E., Manager 
Natural Environment Section

SUBJECT: Pender County; Bridge No. 16 on NC 50-210 over the
Intracoastal Waterway; Federal Aid No. BRSTP-50(10); WBS
40233.1.1; **TIP B-4929**

Attached are the U.S. Army Corps of Engineers General and Nationwide Permits, N.C. Division of Water Resources (NCDWR) Water Quality Certification, N.C. Division of Coastal Management Major Development Permit, and U.S. Coast Guard Permit. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:
<https://connect.ncdot.gov/resources/Environmental/> under
Quick Links>Permit Documents> Issued Permits.

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

Mr. Randy Garris, P.E. State Contract Officer
Mr. Mason Herndon, Division Environmental Officer
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Mr. Glenn Mumford, P.E., Roadway Design
Mr. Ron Wilkins, P.E., Utilities Unit
Mr. Jay Twisdale, P.E., Hydraulics
Mr. Tom Koch, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Ron Hancock, P.E., State Roadway Construction Engineer
Mr. Kevin G. Bowen, P.E., State Bridge Construction Engineer
Ms. Beth Harmon, NCDMS
Mr. Philp Ayscue, Single Audit Compliance

 Nothing ComparesSM

PROJECT COMMITMENTS

STIP Project No. B-4929
Replacement of Bridge No. 16 over the Intracoastal Waterway
Pender County
Federal Aid Project BRSTP-50(10)
WBS No. 40233.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Roadway Design Unit

The North Carolina Department of Transportation (NCDOT) will continue efforts to reduce Coastal Area Management Act (CAMA) wetland total impacts during final design, not to exceed 0.1 acre.

Total permanent impacts in coastal wetlands is 0.05 acre

NCDOT Structures Management Unit

NCDOT Structures Management Unit will design bridge pier locations so that at least a 120-foot wide area of Submerged Aquatic Vegetation (SAV) habitat is spanned. Further design measures will be explored to avoid any other bottom-disturbing activities in the SAV habitat area.

NCDOT Division 3 Construction

NCDOT will adhere to Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters for this project. For Primary Nursery Area (PNA) protection, all bottom-disturbing activities will occur outside the in-water work moratorium of April 1 to September 30. In the vicinity of SAV habitat, a temporary work bridge will be constructed on the south side of the Preferred Alternative to avoid impacts to SAV habitat. NCDOT will grade the old roadbed of Roland Avenue in the vicinity of the existing bridge to match the surrounding elevation and consider abandoning the right-of-way currently used for the bridge approaches to the Town of Surf City.

NCDOT will repave and restripe Roland Avenue on the island between the proposed cul-de-sac on Roland Avenue (near the existing bridge) and NC 210 (New River Drive). NCDOT will construct a 10-foot paved multi-use path on the southwest side of Roland Avenue from the proposed cul-de-sac on Roland Avenue to just south of the intersection of Roland Avenue and NC 210. The multi-use path will connect with the existing boardwalk bridge to Soundside Park and the multi-use path along the proposed bridge (Alternative 17).

NCDOT Project Development and Environmental Analysis Unit

NCDOT Project Development and Environmental Analysis Unit (PDEA) will complete photography and archiving records of the existing bridge, in coordination with the State Historic Preservation Office (SHPO), as specified in the Section 106 Memorandum of Agreement (included in Appendix D).

NCDOT Natural Environment Section

NCDOT Natural Environment Section (NES) will conduct additional SAV surveys before and

after construction using methodologies (to be described in detail in future correspondence) recommended by the North Carolina Department of the Environment and Natural Resources (NCDENR) - Division of Coastal Management (NCDCM).

SAV surveys have been scheduled for the summer of 2016 and will be completed prior to the Let Date.

NCDOT NES will coordinate appropriately with the National Oceanic and Atmospheric Administration (NOAA) – National Marine Fisheries Service (NMFS) regarding the Atlantic sturgeon and loggerhead sea turtle prior to submittal of the 404 permit application, in compliance with Section 7 of the Endangered Species Act (ESA). Based on feedback from the Preliminary Public Notice and coordination with the United States Coast Guard (USCG), a USCG Permit is anticipated. The proposed bridge must provide the following clearances underneath the bridge: a vertical clearance of 65 feet above mean high water (MHW) and a horizontal clearance of 120 feet. NCDOT NES will coordinate with NCDOT Structures Management Unit, upon completion of their design, to obtain the Advanced Approval for the project.

Per personal communication on February 18, 2016 with Fritz Rohde of NOAA Fisheries regarding the ESA, he agreed based on our commitments to the in-water work moratorium of April 1 to September 30, the use of drilled shafts, and spanning of the SAV habitat area, the project will have "No Effect" on either Atlantic sturgeon or loggerhead sea turtle. Under section 7 of the ESA, a biological conclusion of "No Effect" does not require written concurrence from the agency.

NCDOT Local Programs Management Office

NCDOT will provide 100% funding for the multi-use path along Roland Avenue. The Town of Surf City will be responsible for maintenance of the multi-use path along Roland Avenue after construction. NCDOT Local Programs Management Office will facilitate a formal municipal agreement between the Town of Surf City and NCDOT regarding maintenance of this path.

COMMITMENTS FROM PERMITTING

NCDOT Division 3 Construction

The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with permits conditions, water quality regulations and NCDOT NPDES permit requirements. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 2H.0506 (b)(2) and (b)(3)]

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)]

Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Riparian areas are defined as a distance 25 feet

landward from top of stream bank. [15A NCAC 02H.0506 (b)(3) and (c)(3)]

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)]

No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H.0506(b)(3) 9. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, infiltration basins, etc.) before entering the stream to the maximum extent practical as described in the Stormwater Management Plan dated January 28, 2016. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]

The existing bridge, fender system, and temporary work bridge, including piles, shall be removed in their entirety within 90 days after they are no longer needed. However, if this timeframe occurs while the moratorium referenced in Condition Number 2 of the CAMA permit is in effect, then the existing bridge, fender system, and temporary work bridge, including piles, shall be removed in their entirety within 30 days of the moratorium end date.

Any voids in wetlands caused by the removal of the temporary work bridge shall be restored to the elevation of pre-existing conditions with suitable wetland or organic substrate compatible with the naturally occurring surrounding substrate to ensure revegetation of the impacted areas. The permittee shall notify DCM's Transportation Project Field Representative in Morehead City to provide DCM with an opportunity to inspect the material for suitability prior to backfilling.

NOTE: Any wetland material that is accidentally extracted with the removal of temporary work bridge piles should be used to the maximum extent practicable to help backfill any voids that are created in wetlands.

Due to the possibility that shading, compaction, hand clearing, mechanized clearing, excavation, and/or other site alterations might prevent the temporary Coastal Wetland impacts 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 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 mitigation shall be required for these impacts.

The permittee and/or his contractor shall contact the DCM Transportation Project Coordinator in Morehead City at (252) 808-2808 to request a preconstruction conference prior to project initiation.

Conditions from the US Coast Guard Permit

- a. The Contractor shall submit the plans and schedule of operation for approval at least 45 days prior to commencement of work in the waterway. One copy of such information shall be submitted concurrently to your Resident Engineer, the United States Coast Guard Commander (dpb); Federal Building, 4th Floor, 431 Crawford Street; Portsmouth, VA 23704-5004, and the U. S. Coast Guard Sector North Carolina at 721 Medical Center Drive, Wilmington, NC 28401. The information shall include a sketch of the waterway; the bridge; the location of any restrictions that will be placed in the waterway such as barges, anchors, and anchor lines; the location and height above mean high water and detailed description of any scaffolding, or netting; detailed description indicating the placement, type and dimension of any cofferdams if used. The schedule should also include the hours of operation and whether or not the equipment will be removed at night. The contractor shall comply with all provisions of the Navigation Rules International - Inland, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. The Contractor shall submit to the Resident Engineer a copy of all correspondence with the Coast Guard. No deviation from the approved plans and schedule of operation may be made unless the modification has previously been submitted and approved by the Coast Guard.
- b. All bridge closures for the existing-to-be-replaced bridge shall be requested in writing to be received at this office at least 15 days in advance. If any closures will exceed three consecutive days, we must be advised at least 30 days in advance so that we may make the appropriate marine notifications. Time restrictions for the navigational traffic shutdown shall be strictly adhered to. Any request for an extension of the closure dates stated above shall be forwarded at least 30 days in advance to the Coast Guard for approval.
- c. At no time during the work will the waterway be closed to navigation without prior approval from the Coast Guard. You are required to maintain close and regular contact with Coast Guard Sector North Carolina to keep them informed to activities in waterway at (252) 247-4570.
- d. Barges that are used in the waterway during the project must be marked. Enclosure (2) outlines temporary marking and lighting requirements for barges and structures not part of the bridge that will be used during construction. If barge or float anchor lines are used, they must be marked by buoys, which should be lighted. If you should have any questions, regarding lights on the barges or work floats, please contact the Chief, Waterways Management Section, at (757) 398-6230. Floating equipment shall have a radiotelephone capable of operation from its main control station in accordance with Part 26 of Title 33, Code of Federal Regulations and shall be monitored during all periods the floating equipment is on station.
- e. During the progress of work, while the channel is in operation, should any material, machinery or equipment be lost, dumped, thrown overboard, sunk or misplaced which may be dangerous to or obstruct navigation, immediate notice shall be given to the Coast Guard and the object removed with the utmost dispatch. Until removal can be effected, the objects shall be properly marked in order to protect navigation. Notice to the Coast Guard shall give a description and location of any such object and the action taken or being taken to protect navigation.
- f. Upon completion of the proposed project, an inspection of the waterway bottom shall be performed to insure that all construction waste materials have been completely removed.

Certification will be required in writing by a licensed engineer or licensed surveyor that the waterways have not been impaired and all construction related debris has been cleared from it. The certification shall include the actual method used to conduct the inspection. The Contractor shall remove any bridge related debris, resulting from the current or prior work or occurrences, discovered during this survey.

g. Upon completion of the bridgework, a responsible official of the North Carolina Department of Transportation shall verify as-built clearances and a statement attesting to the correctness of the clearances shall be forwarded to this office for record purpose. In lieu of verification by the above listed official, certification by a licensed surveyor or registered professional engineer registered in the State of North Carolina will be accepted.

h. Except as shown on the plans, no dredging, excavation, filling, rip-rap, or other work affecting the bottoms, shall be done in conjunction with this work.

i. If during the periods of construction, permanent lighting cannot be maintained operable, the fenders of each pier shall be marked with a battery or power operated white light of not less than 60 flashes per minute and visible for a range of 2,000 yards on 90% of the nights of the year. Generally, a lamp of 20-candle power will meet these requirements. If necessary to obtain coverage required, a light or lights on the upstream and downstream sides shall be installed. The piers shall be so marked until the construction has been completed and permanent navigational lighting has been installed and determined to be operating satisfactorily. Written approval from the Coast Guard of temporary lighting during periods of construction is required. No existing bridge navigation lights shall be impaired or blocked during darkness or periods of reduced visibility.

j. Compliance with the requirements stated herein does not relieve the contractor of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the State of North Carolina, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge. It is advised that the Coast Guard can levy monetary civil penalties for violations of bridge regulations and statutes.

k. In accordance with Title 33 Code of Federal Regulations Part 118.25- Application procedure, approval of lights and other signals required shall be obtained prior to construction. Application shall be by letter accompanied by duplicate sets of drawings showing (1) the plan and elevation of the structure showing lights and signals proposed, and (2) a small scale vicinity chart showing proposed bridge and all other bridges within 1,000 feet above or below the proposed bridge. See attached "LIGHTING REQUIREMENTS FOR BARGES AND STRUCTURES NOT PART OF A BRIDGE OR APPROACH STRUCTURE"

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant.

2. The construction of falsework, pilings, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, Fifth Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall

be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the construction work has reached a point where such action should be taken.

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the State of North Carolina, Department of Environmental Quality: Division of Marine Fisheries; Division of Water Resources; Division of Coastal Management, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. Construction of the temporary work platforms in the Atlantic Intracoastal Waterway shall be in accordance with approved plan sheets 5, 6, 7 and 8 (of 8) dated 26 August 2016.

5. A bridge protection system shall be installed and maintained in good condition by and at the expense of the owner of the bridge. Said installation and maintenance shall be for the safety of navigation and be in accordance with plans submitted to and approved by the District Commander prior to its construction.

6. Clearance gauges shall be installed and maintained in a good and legible condition by and at the expense of the owner of the bridge. The type of gauges and the locations in which they are to be installed will be submitted to the District Commander for approval.

7. All parts of the existing to-be-replaced NC 50/NC 210 Bridge and temporary work platforms across the Atlantic Intracoastal Waterway, mile 260.7, not utilized in the new bridge shall be removed in their entirety and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed when the District Commander determines that the construction of the new bridge, mile 260.9, has reached a point where such action should be taken.

8. When the proposed bridge is no longer used for transportation purposes, it shall be removed in its entirety or to an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

9. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within three years and completed within five years after the date of this permit.

The office of the Bridge Program Manager, Fifth Coast Guard District, shall be notified immediately upon completion of the project.

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

Action Id. SAW-2007-03646-071 County: Pender U.S.G.S. Quad: NC-HOLLY RIDGE

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: NCDOT – NES- Section Head Agent: NCDOT-NES- Env. Program Consultant
attn.: Mr. Phil S. Harris III, P.E. attn.: Mr. Tyler Stanton
Address: 1548 Mail Service Center 1548 Mail Service Center
Raleigh, NC, 27699 Raleigh, NC 27699

Size (acres) 30 Nearest Town Surf City
Nearest Waterway Onslow Bay River Basin New River
USGS HUC 03020302 Coordinates Latitude: 34.4309120891728
Longitude: -77.5501422522781

Location description: The project area is along NC Hwy 50-210 where Bridge # 16 crosses the Intracoastal Waterway leaving the mainland side of Surf City on to the island side of Surf City, Pender County.

Description of projects area and activity: The NCDOT looks to replace the existing swing span bridge (B-4929) with a new 3,773-foot, multi-span high-rise bridge on new alignment. This verification covers permanent impacts to 0.72 of an acre of riparian wetlands and 0.05 of an acre of coastal wetlands. Additional non-mitigable impacts noted in the impact summary sheet dated 2/4/2016 including utility impact summary sheet dated 1/13/2016 are further authorized.

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

Authorization: Regional General Permit Number or Nationwide Permit Number: **RGP-198200031 and NW-12**
SEE ATTACHED RGP and NW GENERAL, REGIONAL AND 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, application dated February 4, 2016, plan sheets 1-21 of 21 dated 2/4/2016, and Utility plan sheets 1-18 of 18 attached. 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 authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide 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 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 permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide 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 Quality (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 Wilmington, NC, at (910) 796-7215.

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 **Brad Shaver at 910-251-4611 or Brad.E.Shaver@usace.army.mil.**

Corps Regulatory Official: Brad E. Shaver Date: **3/24/2016**
Expiration Date of Verification: **4/30/2020**

Digitally signed by SHAVER.BRAD.E.1276601756
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=USA, cn=SHAVER.BRAD.E.1276601756
Date: 2016.03.24 14:54:19 -04'00'

Determination of Jurisdiction:

- A. ☒ Based on preliminary information, there appear to be waters of the US including wetlands within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).
- B. ☐ 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 and Section 404 of the Clean Water Act. 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.
- C. ☐ There are waters of the US and/or wetlands within the above described project area 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.
- D. ☒ The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued 10/21/2011. Action ID: **SAW-2007-03646**.

Basis For Determination: The subject area exhibits both an ordinary high water mark and has characteristics as described in the 1987 Corps Delineation Manual and is abutting the Intracoastal Waterway, a navigable water of the US.

Remarks: See special Conditions.

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 online at <http://regulatory.usacesurvey.com/>.

Copy furnished (electronic w/o attachments):

NCDOT – Mr. Rodger Rochelle, P.E.
NCDEQ-DCM attn.: Ms. Kathy Brittingham
US EPA – attn.: Dr. Cynthia Van Der Wiele
NCWRC – attn.: Mr. Travis Wilson
US FWS – attn.: Mr. Gary Jordan
NOAA Fisheries attn.: Mr. Fritz Rhode

Copy furnished (electronic with attachments):

NC Division of Mitigation Services attn.: Ms. Beth Harmon
USACE – attn.: Mr. Monte Matthews
USACE – attn.: Mr. Todd Tugwell
USACE – attn.: Ms. Cindy Corbett
NCDOT- NES attn.: Mr. Chris Rivenbark
NCDOT-Division 3 DEO attn.: Mr. Stonewall Mathis
NCDEQ – DWR attn.: Mr. Mason Herndon
NCDEQ-DCM attn.: Mr. Stephen Lane

SPECIAL CONDITIONS**B-4929, Bridge # 16**

****** Development activities may not commence until a copy of the approved CAMA permit is furnished to the Wilmington Field Office- 69 Darlington Avenue, Wilmington, NC 28403. The CAMA permit conditions will be incorporated as part of the Corps permit once issued.

In accordance with 33 U.S.C. 1341(d), all conditions of the North Carolina Division of Water Resources 401 Water Quality Certification dated March 4, 2016, are incorporated as part of the Department of the Army permit. Therefore they are not listed as special conditions.

1. Plans:

A. All work authorized by this permit must be performed in strict compliance with the application dated February 4, 2016, Wetland and Surface Water Impacts Permit (Permit Drawings sheets 1-21 of 21 dated 2/4/2016), and Utility permit drawings sheets 1-18 of 18 dated 2/3/2016, which are part of the permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

B. The permittee will 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, Wilmington Regulatory Field Office prior to any active construction in waters or wetlands.

2. Pre Construction Meetings:

The permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors representatives, and the Corps of Engineers, Wilmington Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions contained with this Department of Army Permit. The permittee shall provide the USACE, Wilmington Field Office, NCDOT Project Manager, with a copy of the final permit plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the preconstruction meeting for a time frame when the USACE, NCDOT, and NCDWR Project Managers can attend. The permittee shall invite the Corps, NCDOT, and NCDWQ Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.

3. Threatened and Endangered Species:

A. All necessary precautions and measures will be implemented so that any activity will not kill, injure, capture, harass, or otherwise harm any protected federally listed species. While accomplishing the authorized work, if the permittee discovers or observes a damaged or hurt listed endangered or threatened species, the District Engineer will be immediately notified to initiate the required Federal coordination.

B. The Permittee shall utilize “The Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters” during construction.

4 . Moratoria:

To avoid adverse impacts to ESA and EFH, no in-water work will be conducted from April 1 to September 30. Additionally, a commitment has been made to span the known SAV habitat and utilize drilled shafts for further resource protection.

5. Culverts:

A. Culverts must be installed to avoid any interruption of flow and circulation of the waters of the US. For this project, equalizer culverts will be installed which can be set at the wetland grade.

6. Sediment Erosion Control:

A. During the clearing phase of the project, heavy equipment must not be operated in surface waters. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

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

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

D. The permittee shall use appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the “North Carolina Sediment and Erosion Control Planning and Design Manual” to assure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standards. 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). Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

E. 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.

7. Project Maintenance

A. The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

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

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

D. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

8. Enforcement

A. Violation of these conditions or violation of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

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

C. The permittee shall take measures to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with any water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms (concrete is set and cured).

9. Navigation - Section 10

A. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with this direction, the Secretary or his representative may restore the waterway, by contract or otherwise, and recover the cost from the permittee.

B. The authorized structure and associated activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reasons other than safety.

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 U.S. Army 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, relocation, or alteration. The permittee shall notify NOAA/NATIONAL OCEAN SERVICE Chief Source Data Unit N CS261, 1315 E West HWY- RM 7316, Silver Spring, MD 20910-3282 at least two weeks prior to beginning work and upon completion of work.

D. The permittee must install and maintain, at his expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. For further information, the permittee should contact the U.S. Coast Guard Marine Safety Office at (252) 247-4525.

E. It is possible that the authorized structure may be damaged by wavewash from passing vessels. The issuance of this permit does not relieve the Permittee from taking all proper steps to ensure the integrity of the permitted structure and the safety of moored boats and barges. The Permittee will not hold the United States liable for any such damage.

10. Temporary Bridge Crossing

A. Once the temporary bridge is no longer needed it should be removed in its entirety to allow revegetation of the natural wetland impacted through the temporary shading. Any voids in the wetland caused by the removal of the work bridge or pile templates should be restored to pre-existing conditions.

B. There should be no staging of equipment within wetlands outside the authorized footprint.

11. Borrow and Waste

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

B. To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent waters and wetlands, except as authorized by this permit, the permittee shall

require its contractors and/or agents to identify all areas to be used to borrow material or to dispose of dredged, fill or waste material. The permittee shall provide the Corps of Engineers with appropriate maps indicating the locations of proposed borrow or waste sites as soon as such information is available.

The permittee will coordinate with the Corps of Engineers before approving any borrow or waste sites that are within 400 feet of any stream or wetland. All jurisdictional wetland delineations on borrow and waste areas shall be verified by the Corps of Engineers and shown on the approved reclamation plans.

C. 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, or shall any activities take place that cause the degradation of waters or wetlands. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters **associated** with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project. In addition, 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, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

12. 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.

13. Mitigation

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

14. Cultural Resources

A. NCDOT shall abide by all stipulations identified in the Memorandum of Agreement between the Federal Highway Administration, the North Carolina Department of Transportation, and the North Carolina State Historic Preservation Officer, executed 1/7/2014, copy contained within the Finding of No Significant Impact.



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Action ID Number: SAW-2007-03646-071

County: Pender

Permittee: NCDOT - PDEA
Mr. Phil Harris, P.E.

Project Name: NCDOT/ B-4929 / NC 50-210 / Br 16 / Division 3

Date Verification Issued: 3/24/2016

Project Manager: Brad Shaver

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: Brad Shaver
69 Darlington Ave
Wilmington, NC 28403

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

Compensatory Mitigation Responsibility Transfer Form

Permittee: NCDOT

Project Name: Br# 16 (B-4929)

Action ID: SAW-2007-03646

County: Pender

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation*

8-digit HUC and Basin: 03030001, White Oak River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
				0.72		0.05

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements:

8-digit HUC and Basin: 03030001, White Oak River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
				1.44		0.10

Mitigation Site Debited: NC Division of Mitigation Services

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

Conditions for Transfer of Compensatory Mitigation Credit:

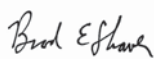
- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. ***Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 11405 Falls of Neuse Road, Wake Forest, NC 27587 (email: todd.tugwell@usace.army.mil).*** Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

USACE Project Manager: Brad Shaver
USACE Field Office: Wilmington Regulatory Field Office
 US Army Corps of Engineers
 69 Darlington Avenue
 Wilmington, NC 28403

Email:



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USACE Project Manager Signature

March 24, 2016

Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

**NATIONWIDE PERMIT 5
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2012**

Scientific Measurement Devices. Devices, whose purpose is to measure and record scientific data, such as staff gages, tide and current gages, meteorological stations, water recording and biological observation devices, water quality testing and improvement devices, and similar structures. Small weirs and flumes constructed primarily to record water quantity and velocity are also authorized provided the discharge is limited to 25 cubic yards. Upon completion of the use of the device to measure and record scientific data, the measuring device and any other structures or fills associated with that device (e.g., foundations, anchors, buoys, lines, etc.) must be removed to the maximum extent practicable and the site restored to pre-construction elevations. (Sections 10 and 404)

NATIONWIDE PERMIT 12
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2012

Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-

tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. 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.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 31.) (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 4: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

NATIONWIDE PERMIT 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.

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.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

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 and storm water management activities, 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.

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.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA

section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

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.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, 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 effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of

the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWP.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

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 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 work 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 work and mitigation.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; 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. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the

vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific

conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

FURTHER INFORMATION

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

DEFINITIONS

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence

of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or

flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through

which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent

mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent – meaning bordering, contiguous, or neighboring – to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

Final Regional Conditions 2012

NOTICE ABOUT WEB LINKS IN THIS DOCUMENT:

The web links (both internal to our District and any external links to collaborating agencies) in this document are valid at the time of publication. However, the Wilmington District Regulatory Program web page addresses, as with other agency web sites, may change over the timeframe of the five-year Nationwide Permit renewal cycle, in response to policy mandates or technology advances. While we will make every effort to check on the integrity of our web links and provide re-direct pages whenever possible, we ask that you report any broken links to us so we can keep the page information current and usable. We apologize in advanced for any broken links that you may encounter, and we ask that you navigate from the regulatory home page (wetlands and stream permits) of the Wilmington District Corps of Engineers, to the “Permits” section of our web site to find links for pages that cannot be found by clicking directly on the listed web link in this document.

Final 2012 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 NCDMF or NCWRC and the Corps.

1.2 Trout Waters Moratorium

Waters of the United States in the twenty-five designated trout counties of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC. (See Section 2.7 for a list of the twenty-five trout counties).

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.

2.0 Waters Requiring Additional Notification

The Corps has identified waters that will be subject to additional notification requirements for activities authorized by all NWP's. These waters are:

2.1 Western NC Counties that Drain to Designated Critical Habitat

For proposed activities within Waters of the U.S. that require a Pre-Construction Notification pursuant to General Condition 31 (PCN) and are located in the sixteen counties listed below, applicants must provide a copy of the PCN to the US Fish and Wildlife Service, 160 Zillicoa Street, Asheville, North Carolina 28801. This PCN must be sent concurrently to the US Fish and Wildlife Service and the Corps Asheville Regulatory Field Office. Please see General Condition 18 for specific notification requirements related to Federally Endangered Species and the following website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville US Fish and Wildlife Service: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for applicants which provides guidelines on how to review linked websites and maps in order to fulfill NWP general condition 18 requirements: <http://www.saw.usace.army.mil/wetlands/ESA>

Applicants who do not have internet access may contact the appropriate US Fish and Wildlife Service offices listed below or the US Army Corps of Engineers at (910) 251- 4633:

US Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
Telephone: (828) 258-3939

Asheville US Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties

US Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, NC 27636-3726
Telephone: (919) 856-4520

Raleigh US Fish and Wildlife Service Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

2.2 Special Designation Waters

Prior to the use of any NWP in any of the following identified waters and contiguous wetlands in North Carolina, applicants must comply with Nationwide Permit General Condition 31 (PCN). The North Carolina waters and contiguous wetlands that require additional notification requirements are:

“Outstanding Resource Waters” (ORW) or “High Quality Waters” (HQW) as designated by the North Carolina Environmental Management Commission; “Inland Primary Nursery Areas” (IPNA) as designated by the NCWRC; “Contiguous Wetlands” as defined by the North Carolina Environmental Management Commission; or “Primary Nursery Areas” (PNA) as designated by the North Carolina Marine Fisheries Commission.

2.3 Coastal Area Management Act (CAMA) Areas of Environmental Concern

Non-federal applicants for any NWP in a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA) must also obtain the required CAMA permit. Development activities for non-federal projects may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889).

2.4 Barrier Islands

Prior to the use of any NWP on a barrier island of North Carolina, applicants must comply with Nationwide Permit General Condition 31 (PCN).

2.5 Mountain or Piedmont Bogs

Prior to the use of any NWP in a Bog classified by the North Carolina Wetland Assessment Methodology (NCWAM), applicants shall comply with Nationwide Permit General Condition 31 (PCN). The latest version of NCWAM is located on the NC DWQ web site at: <http://portal.ncdenr.org/web/wq/swp/ws/pdu/ncwam> .

2.6 Animal Waste Facilities

Prior to use of any NWP for construction of animal waste facilities in waters of the US, including wetlands, applicants shall comply with Nationwide Permit General Condition 31 (PCN).

2.7 Trout Waters

Prior to any discharge of dredge or fill material into streams or waterbodies within the twenty-five (25) designated trout counties of North Carolina, the applicant shall comply with Nationwide Permit General Condition 31 (PCN). The applicant shall also provide a copy of the notification to the appropriate NCWRC office to facilitate the determination of any potential

impacts to designated Trout Waters. Notification to the Corps of Engineers will include a statement with the name of the NCWRC biologist contacted, the date of the notification, the location of work, a delineation of wetlands, a discussion of alternatives to working in the mountain trout waters, why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to mountain trout waters.

NCWRC and NC Trout Counties

Western Piedmont Region Coordinator	Alleghany	Caldwell	Watauga
20830 Great Smoky Mtn. Expressway	Ashe	Mitchell	Wilkes
Waynesville, NC 28786	Avery	Stokes	
Telephone: (828) 452-2546	Burke	Surry	

Mountain Region Coordinator	Buncombe	Henderson	Polk
20830 Great Smoky Mtn. Expressway	Cherokee	Jackson	Rutherford
Waynesville, NC 28786	Clay	Macon	Swain
Telephone: (828) 452-2546	Graham	Madison	Transylvania
Fax: (828) 452-7772	Haywood	McDowell	Yancey

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 Perennial Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of perennial, intermittent or ephemeral stream, unless the District Commander has waived the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis and he determines that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Loss of stream includes the linear feet of stream bed that is filled, excavated, or flooded by the proposed activity. 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.

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

<http://www.saw.usace.army.mil/wetlands/permits/nwp/nwp2012> (see “Quick Links”)

3.2 Mitigation for Loss of Stream Bed

For any NWP that results in a loss of more than 150 linear feet of perennial and/or ephemeral/intermittent stream, the applicant shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment. For stream losses less than 150 linear feet, that require a PCN, the District Commander 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 or ephemeral/ intermittent stream, the applicant must comply with Nationwide Permit General Condition 31 (PCN). 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 US. Water inside coffer dams or casings that has been in contact with wet concrete shall only be returned to waters of the US when it is 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. Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.

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

3.5.3. 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.

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

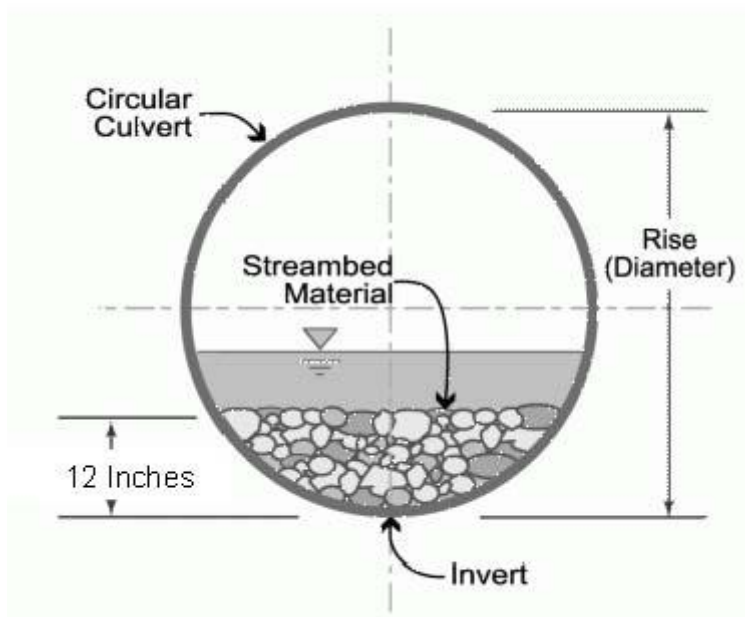
3.5.5. The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

3.5.6. 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.

3.6 Safe Passage Requirements for Culvert Placement

For all NWP's that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by 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 should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

In the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA): All pipes/culverts must be sufficiently sized to allow for the burial of the bottom of the pipe/culvert at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by CAMA, and/or all streams appearing as blue lines on United States Geological Survey (USGS) 7.5-minute quadrangle maps.



In all other counties: 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 or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a

depth below the natural stream bottom to provide for passage during drought or low flow conditions.

Culverts are to 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. The waiver will be issued if it can be demonstrated that the proposal would result in the least 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.

3.7 Notification to NCDENR Shellfish Sanitation Section

Applicants shall notify the NCDENR 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 of Engineers 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 Preservation of Submerged Aquatic Vegetation

Adverse impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP within any of the twenty coastal counties defined by North Carolina's Coastal Area Management Act of 1974 (CAMA).

3.9 Sedimentation and Erosion Control Structures and Measures

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

4.0 Additional Regional Conditions for Specific Nationwide Permits

4.1 NWP #5 – Scientific Measurement Devices

4.1.1. All weirs and flumes authorized by this NWP must be removed immediately upon completion of their intended use.

4.1.2. Weirs and flumes are not authorized by this NWP in areas identified by the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas, designated “Inland Primary Nursery Areas” or Public Trout Waters.

4.0 Additional Regional Conditions for Specific Nationwide Permits

4.1 NWP #12 - Utility Line Activities

4.1.1. Pipeline/utility line construction through jurisdictional waters and wetlands will be accomplished utilizing directional drilling/boring methods to the maximum extent practicable.

4.1.2. Temporary discharge of excavated or fill material into wetlands and waters of the United States will be for the absolute minimum period of time necessary to accomplish the work. Temporary discharges will be fully contained with appropriate erosion control or containment methods or otherwise such fills will consist of non-erodible materials.

4.1.3. The work area authorized by this permit, including temporary and/or permanent fills, will be minimized to the greatest extent practicable. Justification for work corridors exceeding forty (40) feet in width is required and will be based on pipeline diameter and length, size of equipment required to construct the utility line, and other construction information deemed necessary to support the request. The applicant is required to provide this information to the Corps with the initial notification package.

4.1.4. In areas where a sub-aqueous utility line is to cross a federally-maintained channel, (i.e., the Atlantic Intracoastal Waterway [AIWW]), the line will be buried at least six (6) feet below the allowable overdepth of the authorized channel, including all side slopes. For areas outside federally-maintained channels, sub-aqueous lines must be installed at a minimum depth of two (2) feet below the substrate when such lines might interfere with navigation.

4.1.5. The minimum clearance*(see NOTE in 4.3.6.) for aerial communication lines, or any lines not transmitting electrical power, will be ten (10) feet above the clearance required for nearby stationary bridges as established by the U.S. Coast Guard. In the event the U.S. Coast Guard has not established a bridge clearance, minimum vertical clearances for power and aerial lines will not be less than required by Section 23, Rule 232, of the latest revision of the National Electrical Safety Code (ANSI C2). Clearances will not be less than shown in Table 232-1, Item 7, ANSI C2.

4.1.6. The minimum clearance* for an aerial line, transmitting electrical power, is based on the low point of the line under conditions that produce the greatest sag, taking into consideration temperature, load, wind, length or span and the type of supports. The minimum clearance for an aerial electrical power transmission line crossing navigable waters of the US shall be governed by the system voltage, as indicated below:

Nominal System Voltage, kilovolt	Minimum Clearance Above Bridge Clearance (As Established by the U.S. Coast Guard)
115 and below	20 feet
138	22
161	24
230	26
350	30
500	35
700	42
750 to 765	45

*NOTE: Minimum clearance is the distance measured between the lowest point of a stationary bridge, including any infrastructure attached to underside of the bridge, and the Mean High Water (MHW) of the navigable waters of the US beneath the bridge.

4.1.7. On navigable waters of the US, including all federal navigation projects, where there is no bridge for reference for minimum clearance, the proposed project will need to be reviewed by the US Army Corps of Engineers in order to determine the minimum clearance between the line and MHW necessary to protect navigational interests.

4.1.8. A plan to restore and re-vegetate wetland areas cleared for construction must be submitted with the required PCN. Cleared wetland areas shall be re-vegetated to the maximum extent practicable with native species of canopy, shrub, and herbaceous species. Fescue grass shall not be used.

4.1.9. For the purposes of this NWP, any permanently maintained corridor along the utility ROW within forested wetlands shall be considered a permanent impact and a compensatory mitigation plan will be required for all such impacts associated with the requested activity.

4.1.10. Use of rip-rap or any other engineered structures to stabilize a stream bed should be avoided to the maximum extent practicable. If riprap stabilization is needed, it should be placed only on the stream banks, or, if it is necessary to be placed in the stream bed, the finished top elevation of the riprap should not exceed that of the original stream bed.

4.1.11. When directional boring or horizontal directional drilling (HDD) under waters of the U.S., including wetlands, permittees shall closely monitor the project for hydraulic fracturing or “fracking.” Any discharge from hydraulic fracturing or “fracking” into waters of the U.S., including wetlands, shall be reported to the appropriate Corps Regulatory Field Office within 48 hours. Restoration and/or mitigation may be required as a result from any unintended discharges.

DEPARTMENT OF THE ARMY
Wilmington District, Corps of Engineers
69 Darlington Avenue
Wilmington, North Carolina 28403-1343
April 30, 2015

Regional General Permit No. 198200031

Name of Permittee: North Carolina Department of Transportation

Effective Date: April 30, 2015

Expiration Date: April 30, 2020

**DEPARTMENT OF THE ARMY
REGIONAL GENERAL PERMIT**

A regional general permit (RGP) to perform work in or affecting navigable waters of the United States and waters of the United States, upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby modified and re-issued by authority of the Secretary of the Army by the

District Commander
U.S. Army Engineer District, Wilmington
Corps of Engineers
69 Darlington Avenue
Wilmington, North Carolina 28403-1343

TO AUTHORIZE THE DISCHARGE OF DREDGED OR FILL MATERIAL IN WATERS OF THE UNITED STATES (U.S.), INCLUDING WETLANDS, ASSOCIATED WITH MAINTENANCE, REPAIR, AND CONSTRUCTION PROJECTS CONDUCTED BY THE VARIOUS DIVISIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) INCLUDING THE NCDOT DIVISION OF HIGHWAYS, RAIL, BICYCLE/PEDESTRIAN, ECT.

Activities authorized are:

a. Construction, maintenance, and repair of bridges, to include work on the approaches, where permanent impacts resulting in a loss of waters of the U.S. will be less than or equal to 500 linear feet (lf) of stream and/or one (1) acre of wetland/non-tidal open water for each single and complete linear project*.

b. Best-fit widening projects that have undergone interagency review and completed the current interagency Merger Process, which merges the requirements of the National Environmental Policy Act (NEPA) with those found within Section 404 of the Clean Water Act (CWA).

While there is no impact threshold for these widening projects, the Corps has the discretion to require an individual permit if it determines that the proposed impacts will have more than a minimal impact on the aquatic environment or on other environmental factors, or if the project would normally require an Environmental Impact Statement (EIS) under current Federal Highway Administration (FHWA) guidelines. Best-fit projects may include a small amount of new location roadway for components such as interchanges or intersections, provided the new location portion has been concurred upon by the merger team.

c. Minor widening projects, such as paving and/or widening secondary roads, or interchange improvements, when permanent impacts which result in a loss of waters of the U.S. from installation and/or extension of culverts and/or pipes will be less than or equal to 500 lf of stream and/or one (1) acre of wetland/non-tidal open water for each single and complete linear project*.

d. Stream relocation(s) associated with projects identified in a-c above. Stream relocation lengths are to be evaluated independently and are not included within each respective maximum limit threshold for the authorized actions stated above.

***Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of this RGP. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Generally, off-site detours are preferred to avoid and minimize impacts to the human and natural environment. However, if an off-site detour is considered impracticable, then an on-site detour may be considered as a necessary component of the actions described above. Impacts from the detour may be considered temporary and may not require compensatory mitigation if the impacted area is restored to its pre-project condition after construction is complete. If the construction of a detour (on-site or off-site) includes standard undercutting methods, removal of all material and backfilling with suitable material is required.

1. Special Conditions.

a. The applicant must submit a pre-construction notification (PCN) with specified attachments to the District Engineer and receive written verification from the Corps that the proposed work complies with this RGP prior to commencing any activity authorized by this RGP.

b. If the project will not impact a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of North Carolina covered by the North Carolina Coastal Area Management Act (CAMA), then a consistency submission is not required. If the project will impact a designated AEC and meets the definition of “development”, then the applicant must

obtain the required CAMA permit. Development activities may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889).

The twenty (20) CAMA counties in North Carolina include Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, and Washington.

c. Discharges into Waters of the U.S. designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are prohibited during the period between February 1 and June 30, without prior written approval from NCDMF, NCWRC, National Marine Fisheries Service (NMFS), and the Corps. Discharges into waters of the U.S. designated by NCDMF as primary nursery areas and discharges into waters of the U.S. designated by NCWRC as primary nursery areas in inland waters shall be coordinated with NCDMF (per existing agreement with NCDMF) and NCWRC prior to being authorized by this RGP. Coordination with NCDMF and NCWRC may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

The applicant should contact:

**NC Division of Marine Fisheries
3441 Arendell Street
Morehead City, NC 28557
Telephone 252-726-7021
or 800-682-2632**

**North Carolina Wildlife Resources Commission
Habitat Conservation Program Manager
1721 Mail Service Center
Raleigh, NC 27699-1721
Telephone (919) 733-7638**

d. This permit does not authorize the use of culverts in areas designated as anadromous fish spawning areas by the NCDMF or the NCWRC.

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

f. If the project is located within the twenty (20) counties of North Carolina designated as coastal counties by CAMA, then all pipe and culvert inverts will be buried at least one foot below normal bed elevation when they are placed within the Public Trust AEC and/or the Estuarine Waters AEC as designated by CAMA. If the project is not located within the twenty (20) counties of North Carolina designated as coastal counties by CAMA, then culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The potential for destabilization of the channel and head cutting upstream should be considered in the placement of the culvert. A waiver from the depth specifications in this condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this condition would result in more adverse impacts to the aquatic environment. Culverts placed in wetlands do not have to be buried.

g. No work shall be authorized by this RGP within the twenty coastal counties, as defined by the NCDCM, without prior consultation with NOAA Fisheries. For each activity reviewed by the Corps where it is determined that the activity may affect Essential Fish Habitat (EFH) for federally managed species, an EFH Assessment shall be prepared by the applicant and forwarded to the Corps and NOAA Fisheries for review and comment prior to authorization of work.

h. Discharges of dredged or fill material into waters of the U.S., including wetlands, must be minimized or avoided to the maximum extent practicable.

i. No activity may result in substantial permanent disruption of the movement of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. It is acceptable to use rock vanes at culvert outlets to ensure, enhance, or maintain aquatic passage. Pre-formed scour holes are acceptable when designed for velocity reduction. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level. Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation, if practicable. If multiple culverts are used, the construction of floodplain benches and/or sills to maintain base flow is required, if practicable.

j. Upon completion of any work authorized by this RGP, all temporary fills (to include culverts, etc.) will be completely removed from waters of the U.S. and the areas will be restored to preconstruction conditions, to include pre-project elevations and contours, restoring natural hydrology and stream corridors, and reestablishing native vegetation/riparian corridors. This work will be completed within 60 days of completion of project construction. If this timeframe occurs while a required moratorium of this permit is in effect, the temporary fill shall be removed in its entirety within 60 days of the moratorium end date. If vegetation cannot be planted due to the time of the year, all disturbed areas will be seeded with a native mix appropriate for the impacted area, and vegetation will be planted in the fall. A native seed mix may contain non-invasive small grain annuals (e.g. millet and rye grain) to ensure adequate cover while native vegetation becomes established. The PCN must include a restoration plan showing how all temporary fills and structures will be removed and how the area will be restored to pre-project conditions.

k. All activities authorized by this RGP shall, to the extent practicable, be conducted "in the dry", with barriers installed between work areas and aquatic habitat to protect that habitat from sediment, concrete, and other pollutants. Where concrete is utilized, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the U.S. until the concrete has cured/hardened. All water in the work area that has been in contact with concrete shall only be returned to waters of the U.S. when it no longer poses a threat to aquatic organisms (concrete is set and cured).

l. In cases where new alignment approaches are to be constructed and the existing approach fill in waters of the U.S. is to be abandoned and no longer maintained as a roadway, the

abandoned fill shall be removed and the area will be restored to preexisting wetland/stream conditions and elevations, to include restoring natural hydrology and stream corridors, and reestablishing native vegetation/riparian corridors, to the extent practicable. This activity may qualify as compensatory mitigation credit for the project and will be assessed on a case-by-case basis in accordance with Special Conditions "q" and "r" below. A restoration plan detailing this activity will be required with the submittal of the PCN.

m. 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 and storm water management activities, 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. 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).

n. The project must be implemented and/or conducted so that all reasonable and practicable measures to ensure that equipment, structures, fill pads, and work associated with the project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or shoreline/streambank erosion. During construction, the permittee shall routinely monitor for these effects, cease all work if/when detected, take initial corrective measures to correct actively eroding areas, and notify the Corps immediately. Permanent corrective measures may require additional authorization from the Corps.

o. All PCNs will describe sedimentation and erosion control structures and measures proposed for placement in waters of the U.S. To the extent practicable, structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams. In addition, appropriate soil and erosion control measures must be established and maintained during construction. All fills, temporary and permanent, must be adequately stabilized at the earliest practicable date to prevent erosion of fill material into adjacent waters or wetlands.

p. Before discharging dredged or fill material into waters of the U.S. in the twenty-five (25) mountain counties of North Carolina, the applicant will submit a PCN to the NCWRC and the Corps concurrently. The PCN shall summarize alternatives to conducting work in mountain trout waters considered during the planning process, detail why alternatives were or were not selected, and contain a compensatory mitigation plan for all unavoidable adverse impacts to mountain trout waters. For proposals where a bridge is replaced with a culvert, the PCN must also include details of any on-site evaluations that were conducted to determine that installation of a culvert will not adversely affect passage of fish or other aquatic biota at the project site. This information must include factors such as the proposed slope of the culvert and determinations of how the slope will be expected to allow or impede passage, the necessity of baffles and/or sills to ensure passage, design considerations to ensure that expected baseflow will be maintained for passage and that post-construction velocities will not prevent passage, site conditions that will or will not allow proper burial of the culvert, existing structures (e.g., perched culverts, waterfalls, etc.) and/or stream patterns up and downstream of the culvert site that could affect passage and bank stability, and any other considerations regarding passage. The level of detail for this information should be based on site conditions (i.e., culverts on a slope over 3% will most likely

require more information than culverts on a slope that is less than 1%, etc.). Also, in order to evaluate potential impacts, describe bedforms that will be impacted by the proposed culvert – e.g., pools, glides, riffles, etc. The NCWRC will respond both to the proponent and directly to the Corps.

The twenty-five (25) designated trout counties of North Carolina include Alleghany, Caldwell, Watauga, Ashe, Mitchell, Wilkes, Avery, Burke, Stokes, Surry, Buncombe, Henderson, Polk, Cherokee, Jackson, Rutherford, Clay, Macon, Swain, Graham, Madison, Transylvania, Haywood, McDowell, and Yancey.

The applicant may contact NCWRC at:

North Carolina Wildlife Resources
Commission
Ms. Marla Chambers
Western NCDOT Permit Coordinator
206 Charter Street
Albemarle, NC 28001
Office: 704-982-9181

q. Compensatory mitigation will be required for permanent impacts resulting in a loss of waters of the U.S., including wetlands, from culverts/pipes and associated fill. Mitigation will also be required for stream relocation projects. The applicant will attach a proposed mitigation plan to the PCN. Mitigation proposals will be in accordance with currently approved Wilmington District and/or Corps-wide mitigation regulations and guidance. The Corps Project Manager will make the final determination concerning the appropriate amount and type of mitigation.

r. Stream relocation(s) associated with projects may be authorized under this RGP. As stated above, mitigation will be required for all relocation projects. If the stream relocation is conducted in accordance with the requirements stated below in 1-5, the relocated segment of stream may* be considered toward reducing the amount of compensatory mitigation required. A relocation plan must be submitted with the PCN that addresses all factors required within the current Wilmington District, Corps of Engineers Stream Mitigation Guidelines, which can include, but may not be limited to:

(1) The relocated stream has pattern, profile, and dimension based on natural channel design. If natural channel design construction is not possible due to site constraints, the relocated stream must have pattern, profile, and dimension similar to, or better than, the existing stream. Note that site constraints do not include those situations where NCDOT chooses not to acquire additional adjacent property that is available for purchase.

(2) The new stream meets the current buffer requirements as stated in current District stream mitigation guidance. If the required buffer widths cannot be obtained, a project-by-project decision will be completed to determine if additional compensatory mitigation is required.

(3) The new location allows the relocated stream to remain stable (e.g., in a

valley vs. on a slope, no bends that will impact stability, etc.).

(4) There is no loss of channel for any reason (e.g., old channel is 200' and new channel is 150' = 50' channel loss; part of the new channel is put in a culvert; the new channel (sides and bottom) is hardened with concrete, rip rap, etc.).

(5) The Corps will determine if monitoring and reporting will be required for a specific project and the parameters of any required monitoring and reporting. If monitoring is required, a monitoring plan must be included with the PCN and meet current requirements.

All relocation plans must clearly depict both the existing channel and the proposed (relocated) channel.

* Conducting stream relocation(s) in accordance with 1-5 above may not fully compensate for the impact and may require additional compensatory mitigation. The Corps Project Manager will determine if the proposed amount of mitigation is adequate on a project-by-project basis.

If stream relocation cannot be conducted in accordance with 1-5 above, mitigation at a 2:1 ratio will typically be required unless: (1) the applicant provides a Stream Quality Assessment Worksheet or NCSAM documentation (when available) that supports a different mitigation ratio; (2) the Corps Project Manager determines that the relocated stream, while not in full compliance with 1-5 above, warrants partial mitigation, or; (3) the Corps determines that the existing stream is an excellent quality stream, in which case a 3:1 mitigation ratio may be required. The Corps Project Manager will make the final determination concerning the appropriate amount and type of mitigation.

If the Corps determines that the proposed stream relocation is of such a magnitude that it cannot be authorized by this RGP, an Individual Permit will be required.

s. The applicant shall sign and return the compliance certificate that is attached to the RGP verification letter.

t. In the event that any Federal agency maintains an objection or any required State authorization is outstanding, no notice to proceed will be given until objections are resolved and State authorizations are issued.

u. The Corps may place additional special conditions, limitations, or restrictions on any verification of the use of RGP 31 on a project-by-project basis.

2. General Conditions.

a. Except as authorized by this RGP or any Corps approved modification to this RGP, no excavation, fill or mechanized land-clearing activities shall take place within waters or wetlands, at any time in the construction or maintenance of this project. 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.

b. Authorization under this RGP does not obviate the need to obtain other federal, state, or local authorizations.

c. All work authorized by this RGP must comply with the terms and conditions of the applicable CWA Section 401 Water Quality Certification for this RGP issued by the NCDWR.

d. 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).

e. The activities authorized by this RGP must not interfere with the public's right to free navigation on all navigable waters of the U.S. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for a reason other than safety.

f. The permittee understands and agrees that, if future operations by the U.S. 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 U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

g. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the U.S. and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the affected water of the U.S. to its former conditions.

h. The permittee will allow the Wilmington District Engineer or his representative to inspect the authorized activity at any time deemed necessary to assure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.

i. This RGP does not grant any property rights or exclusive privileges.

j. This permit does not authorize any injury to the property or rights of others.

k. This RGP does not authorize the interference with any existing or proposed federal project.

l. In issuing this permit, the Federal Government does not assume any liability for the following:

(1) Damages to the permitted project or uses thereof as a result of other permitted

or unpermitted activities or from natural causes.

(2) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest.

(3) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

(4) Design or construction deficiencies associated with the permitted work.

(5) Damage claims associated with any future modification, suspension, or revocation of this permit.

m. Authorization provided by this RGP may be modified, suspended or revoked in whole or in part if the Wilmington District Engineer, acting for the Secretary of the Army, determines that such action is in the best public interest. The term of this RGP shall be five (5) years unless subject to modification, suspension or revocation. Any modification, suspension or revocation of this authorization will not be the basis for any claim for damages against the U.S. Government.

n. This RGP does not authorize any activity, which the District Engineer determines, after any necessary investigations, will adversely affect:

(1) Rivers named in Section 3 of the Wild and Scenic Rivers Act (15 U.S.C. 1273), those proposed for inclusion as provided by Sections 4 and 5 of the Act, and wild, scenic and recreational rivers established by state and local entities.

(2) Sites included in or determined eligible for listing in the National Registry of Natural Landmarks.

(3) NOAA designated marine sanctuaries, National Estuarine Research Reserves, and coral reefs.

(4) Submerged Aquatic Vegetation (SAV) as defined by the N.C. Division of Marine Fisheries at 15A NCAC 03I .0101(4)(i)).

o. Endangered Species.

(1) No activity is authorized under this RGP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under this RGP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(2) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees (and when FHWA is the lead federal agency) must provide the district engineer with the appropriate documentation to demonstrate compliance with

those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the RGP activity, or whether additional ESA consultation is necessary.

(3) Non-federal permittees must submit a PCN to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-federal applicant of the Corps’ determination within 45 days of receipt of a complete PCN notification. In cases where the non-federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(4) As a result of formal or informal consultation with the U.S. Fish and Wildlife Service (USFWS) or NMFS, the district engineer may add species-specific endangered species conditions to the RGP.

(5) Authorization of an activity by a RGP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the USFWS or the NMFS, the ESA prohibits any person subject to the jurisdiction of the U.S. to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(6) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

p. The permittee is responsible for obtaining any “take” permits required under the USFWS’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such “take” permits are required for a particular activity.

q. For proposed activities the sixteen counties listed below, applicants must provide a

copy of the PCN to the USFWS, 160 Zillicoa Street, Asheville, North Carolina 28801. This PCN must be sent concurrently to the USFWS and the Corps Project Manager for that specific county.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville USFWS: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon, Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Applicants may contact the appropriate USFWS office listed below or the US Army Corps of Engineers:

US Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
Telephone: (828) 258-3939

Asheville USFWS Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties.

US Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, NC 27636-3726
Telephone: (919) 856-4520

Raleigh USFWS Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

r. Permittees are advised that development activities in or near a floodway may be subject to the National Flood Insurance Program that prohibits any development, including fill, within a floodway that results in any increase in base flood elevations. This RGP does not authorize any activity prohibited by the National Flood Insurance Program.

s. The permittee must make every reasonable effort to perform the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife and natural environmental values.

t. All activities authorized by this RGP that involve the use of riprap material for bank stabilization, the following measures shall be applied:

(1) Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.

(2) The placement of riprap shall be limited to the areas depicted on submitted work plan drawings and not be placed in a manner that prevents or impedes fish passage.

(3) The riprap material shall be clean and free from loose dirt or any pollutant

except in trace quantities that will not have an adverse environmental effect.

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

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

(6) A waiver from the specifications in this general condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this condition will result in greater adverse impacts to the aquatic environment.

u. The permittee must install and maintain, at his expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. For further information, the permittee should contact the U.S. Coast Guard Marine Safety Office at (910) 772-2191.

v. The permittee must maintain any structure or work authorized by this permit in good condition and in conformance with the terms and conditions of this permit. The Permittee is not relieved of this requirement if the Permittee abandons the structure or work. Transfer in fee simple of the work authorized by this permit will automatically transfer this permit to the property's new owner, with all of the rights and responsibilities enumerated herein. The permittee must inform any subsequent owner of all activities undertaken under the authority of this permit and provide the subsequent owner with a copy of the terms and conditions of this permit.

w. At his sole discretion, any time during the processing cycle, the Wilmington District Engineer may determine that this RGP will not be applicable to a specific proposal. In such case, the procedures for processing an individual permit in accordance with 33 CFR 325 will be available.

x. The activity must comply with applicable FEMA approved state or local floodplain management requirements.

y. All fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

z. All excavated material will be disposed of in approved upland disposal areas.

aa. Historic Properties.

(1) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(2) Federal permittees (or when FHWA is the lead federal agency) should follow their own procedures for complying with the requirements of Section 106 of the NHPA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address Section 106 compliance for this RGP activity, or whether additional Section 106 consultation is necessary.

(3) Non-federal permittees must submit a PCN to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the NRHP, including previously unidentified properties. For such activities, the PCN must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), as appropriate, and the NRHP (see 33 CFR 330.4(g)). When reviewing PCNs, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the NHPA. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(4) The district engineer will notify the prospective permittee within 45 days of receipt of a complete PCN whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA Section 106 consultation is required and will occur, the district engineer will notify the non-federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(5) Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit will relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the

undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

bb. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the NRHP.

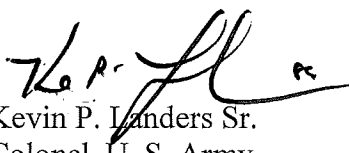
cc. There will be no unreasonable interference with navigation or the right of the public to riparian access by the existence or use of activities authorized by this RGP.

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

ee. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines that the proposed activity will significantly affect the quality of the human environment and determines that an EIS must be prepared.

ff. Activities which have commenced (i.e. are under construction) or are under contract to commence in reliance upon this general permit will remain authorized provided the activity is completed within twelve months of the date of the general permit's expiration, modification, or revocation. Activities completed under the authorization of this general permit which were in effect at the time the activity was completed continue to be authorized by the general permit.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:



Kevin P. Landers Sr.
Colonel, U. S. Army
District Commander

March 4, 2016
Pender County
NCDWR Project No. 20150955v.2
Bridge 16 on NC 210/50
TIP/State Project No. B-4929

APPROVAL of 401 WATER QUALITY CERTIFICATION, with ADDITIONAL CONDITIONS

Mr. Colin Mellor, Group Leader
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Dear Mr. Mellor

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge No. 16 over the Intracoastal Waterway on NC 210/50 in Pender County:

Wetland Impacts in the White Oak River Basin

Site	Station	Wetland Type	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
1	12+93 to 13+23 -L1-	R	0	0	< 0.01	< 0.01	0	0.01
2	18+81 to 19+19 -L2- RT	R	0	0	0	0.01	0	0.01
2	18+57 to 19+10 -L2- LT/RT	R	0	0	0	0.03	0	0.03
2	18+71 to 19+40 -L2-	R/CM	0.07	0	0	0.04	0	0.11
3	12+32 to 12+45 -Y1- RT	R	< 0.01	0	0	0	0	< 0.01
3	12+62 to 15+98 -Y1-	R	0.45	0	0	0	0	0.45
3	13+02 to 16+03 -Y1- LT	R	0	0	0	0.04	0	0.04
3	12+28 to 15+28 -Y1- RT	R	0	0	0	0.05	0	0.05
4	19+26 to 57+00 -L2-	R/CM	0.04	0.03	0	0	0	0.07
5	55+76 to 56+10 -L2- RT	CM	0	0	< 0.01	< 0.01	0	0.01
6	13+57 to 13+81 -Y3- RT	CM	0	0	0	0	< 0.01	< 0.01
7	39+88 to 40+07 -Y2- RT	CM	0	0	0	0	< 0.01	< 0.01
UTILITIES								
U1	10+74 to 11+08 -L1-	R	0	0	0	0	< 0.01	< 0.01
U2	11+53 to 13+26 -L1-	R	0	< 0.01	< 0.01	0	0.14	0.14
U3	18+52 to 21+04 -L2-	R	0	< 0.01	< 0.01	0	0.17	0.17
U3C	19+49 to 21+04 -L-	CM	0	< 0.01	< 0.01	0	0.10	0.10
Total			0.57	0.03	0.01	0.19	0.41	1.21

Total Wetland Impact for Project: 1.21 acres.

Open Water (Sound) Impacts in the White Oak River Basin

Site	Station	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
4	19+26 to 57+00 -L2-	0.02	0	0.02
Total		0.02	0	0.02

Total Open Water Impact for Project: 0.02 acres.

The project shall be constructed in accordance with your application dated received February 4, 2016 and revision received on February 10, 2016. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3886 and 3884. This certification corresponds to the General Permit 31 and Nationwide Permit 12 issued by the Corps of Engineers. In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s) and any additional conditions listed below.

Condition(s) of Certification:

Project Specific Conditions

1. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with permits conditions, water quality regulations and NCDOT NPDES permit requirements. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]
2. 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)].
3. The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Division of Marine Fisheries. No in-water work is permitted between April 1 and September 30 of any year, without prior approval from the NC Division of Water Resources and the NC Division of Marine Fisheries. In addition, the permittee shall conform to the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997) at all times. [15A NCAC 02H.0506(b)(2) and 15A NCAC 04B.0125]
4. 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. [15A NCAC 02H.0506(b)(2) and 15A NCAC 04B.0125]
5. 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)]

6. Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Riparian areas are defined as a distance 25 feet landward from top of stream bank. [15A NCAC 02H.0506(b)(3) and (c)(3)]
7. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
8. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]
9. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, infiltration basins, etc.) before entering the stream to the maximum extent practical as described in the Stormwater Management Plan dated January 28, 2016. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
10. The project shall be constructed in accordance with the provisions of the NCDOT's National Pollutant Discharge Elimination (NPDES) Stormwater Permit NCS000250, including the applicable requirements of the NCG01000. Please note the extra protections for the sensitive watersheds. [15A NCAC 02B.0211].

General Conditions

11. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
12. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
13. 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)]
14. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
15. 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)]
16. 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)]
17. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]

18. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
19. 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)]
20. 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)]
21. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
22. 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]
23. 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)]
24. 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)]
25. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and wastes sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
26. 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.
27. 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)]
28. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
29. 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)]
30. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.[15A NCAC 02H.0506(b)(3) and (c)(3)]
31. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3)]:

- a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
32. Where placement of sediment and erosion control devices in wetlands and/or waters is unavoidable at site, they shall be removed and the natural grade restored upon completion of the project. [15A NCAC 02H.0506(b)(3) and (c)(3)]

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

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

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

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

Mr. Sam M. Hayes, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Mason Herndon at (910) 308-4021 or mason.herndon@ncdenr.gov.

Sincerely,



S. Jay Zimmerman, Director
Division of Water Resources

Electronic copy only distribution:

Brad Shaver, US Army Corps of Engineers, Wilmington Field Office
Stoney Mathis, Division 3 Environmental Officer
Chris Rivenbark, NC Department of Transportation

Dr. Cynthia Van Der Wiele, US Environmental Protection Agency
Travis Wilson, NC Wildlife Resources Commission
Cathy Brittingham, NC Division of Coastal Management
Stephen Lane, NC Division of Coastal Management
Beth Harmon, Division of Mitigation Services
File Copy



PAT MCCRORY

Governor

DONALD R. VAN DER VAART

Secretary

S. JAY ZIMMERMAN

Director

NCDWR Project No.: _____

County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

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

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

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

Signature _____ Registration No. _____

Date _____

Water Quality Certification No. 3886

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 14 (LINEAR TRANSPORTATION PROJECTS) AND REGIONAL GENERAL PERMIT 198200031 (WORK ASSOCIATED WITH BRIDGE CONSTRUCTION, MAINTENANCE OR REPAIR CONDUCTED BY NCDOT OR OTHER GOVERNMENT AGENCIES) AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)

Water Quality Certification Number 3886 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 Division of Water Quality (DWQ) Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to waters and adjacent wetland areas or to wetland areas that are not a part of the surface tributary system to interstate waters or navigable waters of the United States (as described in 33 CFR 330 Appendix A (B) (14) of the Corps of Engineers regulations (Nationwide Permit No. 14 and Regional General Permit 198200031) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 02B .0200.

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.

Any proposed fill or modification of wetlands and/or waters, including streams, under this General Certification requires application to, and written approval from the Division of Water Quality except for the single family lot exemption described below.

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 Quality (the "Division"):

- a) Any temporary or permanent impacts to wetlands, open waters and/or streams, including stream relocations, except for construction of a driveway to a single family lot as long as the driveway involves *less than 25 feet* of temporary and/or permanent stream channel impacts, including any in-stream stabilization needed for the crossing; or
- b) Any impact associated with a high density project (as defined in Item (A)(iv) of the **401 Stormwater Requirements**) that is not subject to either a state stormwater program (such as, but not limited to, Coastal Counties, HQW, ORW or state-implemented Phase II NPDES) or a certified community's stormwater program; or
- c) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of DWQ Wetland Rules (15A NCAC 02H .0500), Isolated Wetland Rules (15A NCAC 02H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 02B .0200); or
- d) Any impacts to streams and/or buffers in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman, Jordan or Goose Creek Watersheds (or any other basin or watershed with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless* the activities are listed as "EXEMPT" from these rules or a Buffer Authorization Certificate is issued through N.C. Division of Coastal Management (DCM) delegation for "ALLOWABLE" activities.

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. If a project also requires a CAMA Permit, then one payment to both agencies shall be submitted and will be the higher of the two fees.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval from the Division as long as they comply with

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the Conditions of Certification listed below. If any of these Conditions cannot be met, then written approval from the Division is required.

Conditions of Certification:

1. No Impacts Beyond those Authorized in the Written Approval or Beyond the Threshold of Use of this Certification

No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification, as authorized in the written approval from the Division or beyond the thresholds established for use of this Certification without written authorization, including incidental impacts. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices shall be performed so that no violations of state water quality standards, statutes, or rules occur. Approved plans and specifications for this project are incorporated by reference and are enforceable parts of this permit.

2. Standard Erosion and Sediment Control Practices

Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices and if applicable, comply with the specific conditions and requirements of the NPDES Construction Stormwater Permit issued to the site:

- a. Design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- b. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
- c. Reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
- d. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
- e. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality (HQW), or Outstanding Resource (ORW) waters, then the sedimentation and erosion control designs must comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

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3. No Sediment and Erosion Control Measures in Wetlands or Waters

Sediment and erosion control measures shall not be placed in wetlands or waters. Exceptions to this condition require application submittal to and written approval by the Division. 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 and the natural grade restored within two (2) months of the date that the Division of Land Resources (DLR) or locally delegated program has released the specific area within the project.

4. Construction Stormwater Permit NCG010000

An NPDES Construction Stormwater Permit is required for construction projects that disturb one (1) or more acres of land. This Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If your 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. A copy of the general permit (NCG010000), inspection log sheets, and other information may be found at <http://portal.ncdenr.org/web/wq/ws/su/npdessw#tab-w>.

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.

5. Construction Moratoriums and Coordination

If activities must occur during periods of high biological activity (i.e. 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.

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) to lessen impacts on trout, anadromous fish, larval/post-larval fishes and crustaceans, or other aquatic species of concern shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium.

Work within the twenty-five (25) designated trout counties or identified state or federal endangered or threatened species habitat shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

6. Work in the Dry

All work in or adjacent to stream waters 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 submittal to and written approval by the Division.

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7. Riparian Area Protection (Buffer) Rules

Activities located in the protected riparian areas (whether jurisdictional wetlands or not), within the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman, Jordan, or Goose Creek Watersheds (or any other basin or watershed with buffer rules) shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 02B .0233, .0259, .0243, .0250, .0267 and .0605, and shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices. All buffer rule requirements, including diffuse flow requirements, must be met.

8. If concrete is used during the 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 due to the potential for elevated pH and possible aquatic life/ fish kills.
9. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*. Exceptions to this condition require written approval by the Division.

10. Compensatory Mitigation

In accordance with 15A NCAC 02H .0506 (h), compensatory mitigation may be required for losses of equal to or greater than 150 linear feet of streams (intermittent and perennial) and/or equal to or greater than one (1) acre of wetlands. For linear public transportation projects, impacts equal to or exceeding 150 linear feet per stream shall require mitigation.

Buffer mitigation may be required for any project with Buffer Rules in effect at the time of application for activities classified as "Allowable with Mitigation" or "Prohibited" within the Table of Uses.

A determination of buffer, wetland, and stream mitigation requirements shall be made for any General Water Quality Certification for this Nationwide and/or Regional General Permit. Design and monitoring protocols shall follow the US Army Corps of Engineers Wilmington District *Stream Mitigation Guidelines* (April 2003) or its subsequent updates. Compensatory mitigation plans shall be submitted to the Division for written approval as required in those protocols. The mitigation plan must be implemented and/or constructed before any impacts occur on site. Alternatively, the Division will accept payment into an in-lieu fee program or a mitigation bank. In these cases, proof of payment shall be provided to the Division before any impacts occur on site.

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11. Relocated stream designs should include the same dimensions, patterns, and profiles as the existing channel (or a stable reference reach if the existing channel is unstable), to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30-foot wide wooded and an adjacent 20-foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating appropriate erosion control matting materials and seedling establishment is allowable, however matting that incorporates plastic mesh and/or plastic twine shall not be used in wetlands, riparian buffers or floodplains as recommended by the North Carolina Sediment and Erosion Control Manual. Rip-rap, A-Jacks, concrete, gabions or other hard structures may be allowed if it is necessary to maintain the physical integrity of the stream; however, the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage. Please note that if the stream relocation is conducted as a stream restoration as defined in the US Army Corps of Engineers Wilmington District, April 2003 *Stream Mitigation Guidelines* (or its subsequent updates), the restored length may be used as compensatory mitigation for the impacts resulting from the relocation.

12. Stormwater Management Plan Requirements

All applications shall address stormwater management throughout the entire project area per the 401 Stormwater Requirements, referenced herein as "**Attachment A**" at the end of this Certification.

13. Placement of Culverts and Other Structures in Waters and Wetlands

Culverts required for this project 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. Existing stream dimensions (including the cross section dimensions, pattern, and longitudinal profile) must be maintained above and below locations of each culvert.

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

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 (rock ladders, crossvanes, etc). Notification to the Division including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations shall be provided to the Division 60 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 to the Division including supporting documentation such as, but not limited to, a location map of the culvert, geotechnical reports, photographs, etc shall be provided to the Division a minimum of 60 days prior to the installation of the culvert. If bedrock is discovered during construction, then the Division 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 submittal to, and written approval by, the Division of Water Quality, regardless of the total impacts to streams or wetlands from the project.

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Installation of culverts in wetlands must ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. Additionally, when roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must 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 must be used where practicable instead of riprap or other bank hardening methods.

14. All temporary fill and culverts shall be removed and the impacted area returned to natural conditions within 60 days of the determination that the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, plan form pattern, and longitudinal bed and bed profile, and the various sites shall be stabilized with natural woody vegetation (except for the approved maintenance areas) and restored to prevent erosion.
15. All temporary pipes/ culverts/ riprap pads etc, shall be installed in all streams 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* so as not to restrict stream flow or cause dis-equilibrium during use of this General Certification.
16. Any riprap 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 buried and/or "keyed in" 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.
17. Any rip-rap used for stream stabilization shall be of a size and density so as not to be able to be carried off by wave, current action, or stream flows and 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.
18. A one-time application of fertilizer to re-establish vegetation is allowed in disturbed areas including riparian buffers, but is restricted to no closer than 10 feet from top of bank of streams. Any fertilizer application must comply with all other Federal, State and Local regulations.
19. If this Water Quality Certification is used to access building sites, then all lots owned by the applicant must be buildable without additional impacts to streams or wetlands. The applicant is required to provide evidence that the lots are buildable without requiring additional impacts to wetlands, waters, or buffers if required to do so in writing by the Division. For road construction purposes, this Certification shall only be utilized from natural high ground to natural high ground.
20. Deed notifications or similar mechanisms shall be placed on all retained jurisdictional wetlands, waters, and protective buffers within the project boundaries in order to assure compliance for future wetland, water, and buffer impact. These mechanisms shall be put in place at the time of recording of the property or of individual lots, whichever is appropriate. A sample deed notification can be downloaded from the 401/Wetlands Unit web site at <http://portal.ncdenr.org/web/wq/swp/ws/401/certsandpermits/apply/forms>. The text of the sample deed notification may be modified as appropriate to suit to a specific project. Documentation of deed notifications shall be provided to the Division upon request.

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21. If an environmental document is required under the National or State Environmental Policy Act (NEPA or 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.
22. In the twenty (20) coastal counties, the appropriate DWQ Regional Office must be contacted to determine if Coastal Stormwater Regulations will be required.
23. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals.
24. The applicant/permittee 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 the Division 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 the Division may reevaluate and modify this General Water Quality Certification.
25. 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 the certificate of completion attached to the approval. One copy of the certificate shall be sent to the DWQ Central Office in Raleigh at 1650 Mail Service Center, Raleigh, NC, 27699-1650.
26. 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.
27. This certification grants permission to the director, an authorized representative of the Director, or DENR staff, upon the presentation of proper credentials, to enter the property during normal business hours.

This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide 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.

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.

The Director of the North Carolina Division of Water Quality may require submission of a formal application for Individual Certification for any project in this category of activity if it is 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 wetland or downstream waters are precluded.

Water Quality Certification No. 3886

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: March 19, 2012

DIVISION OF WATER QUALITY

By

A handwritten signature in blue ink, appearing to read "Matt M. Wakild" followed by a stylized flourish.

Charles Wakild, P.E.

Director

History Note: Water Quality Certification (WQC) Number 3886 issued March 12, 2012 replaces 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. This WQC is rescinded when the Corps of Engineers reauthorizes any of the corresponding Nationwide and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Quality.

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Attachment A: 401 Stormwater Requirements

The requirements listed below shall be implemented in order to comply with Condition 12 of this General Certification. For the North Carolina Department of Transportation, compliance with NCDOT's Individual NPDES permit NCS000250 shall serve to satisfy the 401 and Isolated Wetland Stormwater Requirements.¹

- A. **Design and Implementation Requirements.** All projects, regardless of project area, amount of built-upon area or amount of jurisdictional impact, shall meet the following stormwater design requirements:
- i. **Non-Erosive Discharge to Streams and Wetlands.** Stormwater conveyances that discharge to streams and wetlands must discharge at a non-erosive velocity prior to entering the stream or wetland during the peak flow from the ten-year storm.²
 - ii. **Vegetated Setbacks.** A 30-foot wide vegetated setback must be maintained adjacent to streams, rivers and tidal waters in areas that are not subject to a state Riparian Area Protection Rule or other more stringent vegetated setback requirements. The width of the setback shall be measured horizontally from the normal pool elevation of impounded structures, the top-of-bank of streams and rivers, and the mean high waterline of tidal waters, perpendicular to shoreline. Vegetated setback and filters required by state rules or local governments may be met concurrently with this requirement and may contain coastal, isolated or 404 jurisdictional wetlands. Non-jurisdictional portions of the vegetated setback may be cleared and graded, but must be planted with and maintained in grass or other vegetative or plant material.³
 - iii. **Construction and Operation.** The stormwater management plan must be constructed and operational before any permanent building or other structure is occupied or utilized at the site. The stormwater management plan, including drainage patterns, must be maintained in perpetuity.⁴
 - iv. **Coordination with Other Stormwater Programs.** Projects that are subject to another Division of Water Quality (DWQ) stormwater program, including (but not limited to) the 20 Coastal Counties, HQW, ORW or state-implemented Phase II NPDES, or a Certified Community's stormwater management program, must be constructed and maintained in compliance with the approved stormwater management plan.⁵
 - v. **Stormwater Design Requirements for Projects Not Covered Under Item (iv).** Projects that are not subject to another DWQ stormwater program or a Certified Community's stormwater program shall meet all of the following requirements:
 - a. **Low Density.** A site is low density if all the following requirements are met:
 - 1. The development has a built upon area of twenty-four percent (24%) or less, considering both current and future development. When determining the amount of built upon area, coastal wetlands shall be included; however, ponds, lakes and rivers as specified in North Carolina's Schedule of Classifications shall be excluded. If a portion of project has a density greater than 24%, the higher density area must be located in an upland area and away from surface waters and drainageways to the maximum extent practicable.⁶
 - 2. All stormwater runoff from the built upon areas is transported primarily via vegetated conveyances designed in accordance with the most recent version of the *NC DWQ Stormwater Best Management Practices Manual*. Alternative designs may be approved if the applicant can show that the design provides

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equal or better water quality protection than the practices specified in the manual. The project must not include a stormwater collection system (such as piped conveyances) as defined in 15A NCAC 02B .0202(60).⁷

- b. **High Density.** Projects that do not meet the Low Density requirements shall meet the following requirements:
1. Stormwater runoff from the entire site must be treated by structural stormwater controls (BMPs) that are designed to remove eighty-five percent (85%) of the average annual amount of Total Suspended Solids (TSS). Stormwater runoff that drains directly to Nutrient Sensitive Waters (NSW) must also be treated to remove thirty percent (30%) of Total Nitrogen (TN) and Total Phosphorus (TP).⁸
 2. All BMPs must be designed in accordance with the version of the *NC DWQ Stormwater Best Management Practices Manual* that is in place on the date of stormwater management plan submittal. Alternative designs may be approved if the applicant can show that the design provides equal or better water quality protection than the practices specified in the manual.⁹
 3. DWQ may add specific stormwater management requirements on a case-by-case basis in order to ensure that a proposed activity will not violate water quality standards.¹⁰
 4. DWQ may approve Low Impact Developments (LIDs) that meet the guidance set forth in the *Low Impact Development: A Guidebook for North Carolina*.¹¹
 5. Proposed new development undertaken by a local government solely as a public road project shall follow the requirements of the NC DOT BMP Toolbox rather than Items (1)-(4) above.¹²

B. **Submittal Requirements.** The submittal requirements listed below apply only to projects that require written authorization as indicated in the applicable General Certification as well as projects that require an Isolated Wetlands Permit. **Any required documentation shall be sent to the Wetlands, Buffers and Stormwater Compliance and Permitting Unit at 1650 Mail Service Center, Raleigh, NC 27699-1650.**

- i. **Projects that are Subject to Another DWQ Stormwater Program:** If the project is subject to another DWQ stormwater program, such as the 20 Coastal Counties, HQW, ORW or state-implemented Phase II NPDES, then the applicant shall submit a copy of the stormwater approval letter before any impacts occur on site.¹³
- ii. **Projects that are Subject to a Certified Community's Stormwater Program.** If the project is subject to a certified local government's stormwater program, then the applicant shall submit one set of approved stormwater management plan details and calculations with documentation of the local government's approval before any impacts occur on site.⁵
- iii. **Projects Not Covered Under Items (i) or (ii).** If the project is not subject to another DWQ Stormwater Program or a Certified Community's stormwater program, then it shall be reviewed and approved by the DWQ through the Water Quality Certification authorization process.
 - a. **Low Density.** For low density projects, the applicant shall submit two copies of the DWQ Low Density Supplement Form with all required items.¹³

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- b. **High Density.** For high density projects, the applicant shall submit two copies of a DWQ BMP Supplement Form and all required items at the specified scales for each BMP that is proposed.¹³
- iv. **Phasing.** Stormwater management plans may be phased on a case-by-case basis, with the submittal of a final stormwater management plan per Items (i)-(iii) above required for the current phase and a conceptual stormwater management plan for the future phase(s). The stormwater management plan for each future phase must be approved by the appropriate entity before construction of that phase is commenced. The approved stormwater management plan for each future phase must be constructed and operational before any permanent building or other structure associated with that phase is occupied.¹⁴
- v. **Stormwater Management Plan Modifications.** The stormwater management plan may not be modified without prior written authorization from the entity that approved the plan. If the project is within a Certified Community, then the applicant shall submit one set of approved stormwater management plan details and calculations with documentation of the local government's approval for record-keeping purposes. If the project is subject to DWQ review, then the applicant shall submit two copies of the appropriate Supplement Forms per Item (iii) above for any BMPs that have been modified for DWQ's review and approval.¹⁵

¹ The stormwater requirement for 401 applications is codified in 15A NCAC 02H .0506(b)(5) and (c)(5).

² Non erosive discharge rates are required in SL 2008-211§2(b)(1). The 10-year design storm standard is codified in 15A NCAC 02H .1008(f)(2) and .1008(g)(1).

³ 30-foot vegetated setbacks are required in SL 2006-246§9(d), SL 2008-211§2(b), 15A NCAC 02H .1006(2)(c) and .1007(1)(a).

⁴ Construction and maintenance of the stormwater plan is necessary to satisfy 15A NCAC 02H .0506(b)(5).

⁵ Conveys application procedure to streamline the permitting process and reduce any unnecessary duplication in the review of stormwater management plans.

⁶ Low density built upon area thresholds are set in SL 2006-246§9(c) and SL 2008-211§2(b).

⁷ The requirement for low density development to use vegetated conveyances is codified in SL 2006-246§9(c), SL 2008-211§2(b), 15A NCAC 02H .1006(2)(b) and .1007(1)(a). The Stormwater BMP Manual is also referenced in 15A NCAC 02B .0265(3)(a) and .0277(4)(e).

⁸ 85% TSS removal is required in SL 2006-246§9(d), SL 2008-211§2(b), 15A NCAC 02H .1006(2)(c), 15A NCAC 02H .1007(1)(a). The 30% TN and TP removal requirements for NSW waters are set forth in 15A NCAC 02B .0232, 15A NCAC 02B .0257(a)(1), 15A NCAC 02B .0265(3)(a) and 15A NCAC 02B .0277(4).

⁹ The Stormwater BMP Manual is also referenced in 15A NCAC 02B .0265(3)(a) and .0277(4)(e).

¹⁰ The requirement for DWQ to ensure that water quality standards are protected before issuing a 401 certification is codified in 15A NCAC 02H .0506.

¹¹ The LID Toolbox is also referenced in 15A NCAC 02B .0277(4)(g).

¹² The term "public road project" is defined in 15A NCAC 02B .0265(3)(a).

¹³ Conveys application procedure to streamline the permitting process.

¹⁴ Phased development is addressed as a "common plan of development" in 15A NCAC 02H .1003(3).

¹⁵ Procedures for modifying stormwater plans are set forth in 15A NCAC 02H .1011.

Water Quality Certification No. 3883

**GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR U.S. ARMY CORPS OF
ENGINEERS NATIONWIDE PERMIT NUMBERS: 3 (MAINTENANCE),
4 (FISH AND WILDLIFE HARVESTING, ENHANCEMENT, AND ATTRACTION DEVICES AND
ACTIVITIES), 5 (SCIENTIFIC MEASUREMENT DEVICES—25 CUBIC YARDS FOR WEIRS
AND FLUMES), 6 (SURVEY ACTIVITIES—25 CUBIC YARDS FOR TEMPORARY PADS),
7 (OUTFALL STRUCTURES AND ASSOCIATED INTAKE STRUCTURES),
19 (MINOR DREDGING), 20 (OIL SPILL CLEANUP), 22 (REMOVAL OF VESSELS),
25 (STRUCTURAL DISCHARGE), 30(MOIST SOIL MANAGEMENT FOR WILDLIFE),
32 (COMPLETED ENFORCEMENT ACTIONS), 36 (BOAT RAMPS [IN NONWETLAND
SITES]), AND REGIONAL PERMIT 197800056 (PIERS, DOCKS AND BOATHOUSES), AND
REGIONAL PERMIT 197800125 (BOAT RAMPS)
AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)**

Water Quality Certification Number 3883 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 Division of Water Quality (DWQ) Regulations in 15 NCAC 02H .0500 and 15 NCAC 02B .0200 for the discharge of fill material to waters and wetland areas which are waters of the United States as described in 33 CFR 330 Appendix A (B) (3, 4, 5, 6, 7, 19, 20, 22, 25, 30, 32, and 36) and Regional Permits 197800056 and 19780125 and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 02B .0200.

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.

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 Quality (the "Division"):

- a. Impacts equal to or greater than 40 linear feet of additional permanent stream impact (including stream relocations) at an existing stream impact location; or
- b. Temporary or permanent impacts equal to or greater than one-tenth (1/10) of an acre of wetlands; or
- c. Any impact associated with a Notice of Violation or an enforcement action for violation(s) of DWQ Wetland Rules (15A NCAC 02H .0500), Isolated Wetland Rules (15A NCAC 02H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 02B .0200); or
- d. Any impacts to streams and/or buffers in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman, Jordan or Goose Creek Watersheds (or any other basin or watershed with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless* the activities are listed as "EXEMPT" from these rules or a Buffer Authorization Certificate is issued through N.C. Division of Coastal Management (DCM) delegation for "ALLOWABLE" activities.

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. If a project also requires a CAMA Permit, then one payment to both agencies shall be submitted and will be the higher of the two fees.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval from the Division as long as they comply with the Conditions of Certification listed below. If any of these Conditions cannot be met, then written approval from the Division is required.

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Conditions of Certification:

1. No Impacts Beyond those Authorized in the Written Approval or Beyond the Threshold of Use of this Certification

No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification, as authorized in the written approval from the Division or beyond the thresholds established for use of this Certification without written authorization, including incidental impacts. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices shall be performed so that no violations of state water quality standards, statutes, or rules occur. Approved plans and specifications for this project are incorporated by reference and are enforceable parts of this permit.

2. Standard Erosion and Sediment Control Practices

Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices and if applicable, comply with the specific conditions and requirements of the NPDES Construction Stormwater Permit issued to the site:

- a. Design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - b. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - c. Reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
 - d. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
 - e. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality (HQW), or Outstanding Resource (ORW) waters, then the sedimentation and erosion control designs must comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.
3. No Sediment and Erosion Control Measures in Wetlands or Waters

Sediment and erosion control measures shall not be placed in wetlands or waters. Exceptions to this condition require application submittal to and written approval by the Division. 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 and the natural grade restored within two (2) months of the date that the Division of Land Resources (DLR) or locally delegated program has released the specific area within the project.

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4. Construction Stormwater Permit NCG010000

An NPDES Construction Stormwater Permit is required for construction projects that disturb one (1) or more acres of land. This Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If your 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. A copy of the general permit (NCG010000), inspection log sheets, and other information may be found at <http://portal.ncdenr.org/web/wq/ws/su/npdessw#tab-w>.

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.

5. Work in the Dry

All work in or adjacent to stream waters 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 submittal to and written approval by the Division.

6. Construction Moratoriums and Coordination

If activities must occur during periods of high biological activity (i.e. 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.

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) to lessen impacts on trout, anadromous fish, larval/post-larval fishes and crustaceans, or other aquatic species of concern shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium.

Work within the twenty-five (25) designated trout counties or identified state or federal endangered or threatened species habitat shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

7. Riparian Area Protection Rules (Buffer Rules)

Activities located in the protected riparian areas (whether jurisdictional wetlands or not), within the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman, Jordan, or Goose Creek Watersheds (or any other basin or watershed with buffer rules) shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 02B .0233, .0259, .0243, .0250, .0267 and .0605, and shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices. All buffer rule requirements, including diffuse flow requirements, must be met.

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8. Placement of Culverts and Other Structures in Waters and Wetlands

Culverts required for this project 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. Existing stream dimensions (including the cross section dimensions, pattern, and longitudinal profile) must be maintained above and below locations of each culvert.

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

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 (rock ladders, crossvanes, etc). Notification to the Division including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations shall be provided to the Division 60 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 to the Division including supporting documentation such as, but not limited to, a location map of the culvert, geotechnical reports, photographs, etc shall be provided to the Division a minimum of 60 days prior to the installation of the culvert. If bedrock is discovered during construction, then the Division 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 submittal to, and written approval by, the Division of Water Quality, regardless of the total impacts to streams or wetlands from the project.

Installation of culverts in wetlands must ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. Additionally, when roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must 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 must be used where practicable instead of riprap or other bank hardening methods.

9. If concrete is used during the 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 due to the potential for elevated pH and possible aquatic life/ fish kills.
10. Applications for riprap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Riprap Groins in Estuarine and Public Trust Waters) must meet all the specific conditions for design and construction specified in 15A NCAC 07H .1405.

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11. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*. Exceptions to this condition require written approval by the Division.

12. Compensatory Mitigation

In accordance with 15A NCAC 02H .0506 (h), compensatory mitigation may be required for losses of equal to or greater than 150 linear feet of streams (intermittent and perennial) and/or equal to or greater than one (1) acre of wetlands. For linear public transportation projects, impacts equal to or exceeding 150 linear feet per stream shall require mitigation.

Buffer mitigation may be required for any project with Buffer Rules in effect at the time of application for activities classified as "Allowable with Mitigation" or "Prohibited" within the Table of Uses.

A determination of buffer, wetland, and stream mitigation requirements shall be made for any General Water Quality Certification for this Nationwide and/or Regional General Permit. Design and monitoring protocols shall follow the US Army Corps of Engineers Wilmington District *Stream Mitigation Guidelines* (April 2003) or its subsequent updates. Compensatory mitigation plans shall be submitted to the Division for written approval as required in those protocols. The mitigation plan must be implemented and/or constructed before any impacts occur on site. Alternatively, the Division will accept payment into an in-lieu fee program or a mitigation bank. In these cases, proof of payment shall be provided to the Division before any impacts occur on site.

13. All temporary fill and culverts shall be removed and the impacted area returned to natural conditions within 60 days of the determination that the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, plan form pattern, and longitudinal bed and bed profile, and the various sites shall be stabilized with natural woody vegetation (except for the approved maintenance areas) and restored to prevent erosion.
14. All temporary pipes/ culverts/ riprap pads etc, shall be installed in all streams 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* so as not to restrict stream flow or cause dis-equilibrium during use of this General Certification.
15. Any riprap 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 buried and/or "keyed in" 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.
16. Any rip-rap used for stream stabilization shall be of a size and density so as not to be able to be carried off by wave, current action, or stream flows and 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.
17. A one-time application of fertilizer to re-establish vegetation is allowed in disturbed areas including riparian buffers, but is restricted to no closer than 10 feet from top of bank of streams. Any fertilizer application must comply with all other Federal, State and Local regulations.

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18. If an environmental document is required under the National or State Environmental Policy Act (NEPA or 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.
19. In the twenty (20) coastal counties, the appropriate DWQ Regional Office must be contacted to determine if Coastal Stormwater Regulations will be required.
20. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals.
21. The applicant/permittee 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 the Division 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 the Division may reevaluate and modify this General Water Quality Certification.
22. 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 the certificate of completion attached to the approval. One copy of the certificate shall be sent to the DWQ Central Office in Raleigh at 1650 Mail Service Center, Raleigh, NC, 27699-1650.
23. 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.
24. This certification grants permission to the director, an authorized representative of the Director, or DENR staff, upon the presentation of proper credentials, to enter the property during normal business hours.

This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide 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.

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.

The Director of the North Carolina Division of Water Quality may require submission of a formal application for Individual Certification for any project in this category of activity if it is 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 wetland or downstream waters are precluded.

Water Quality Certification No. 3883

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: March 19, 2012

DIVISION OF WATER QUALITY

By

A handwritten signature in blue ink, appearing to read "Charles Wakild for".

Charles Wakild, P.E.

Director

History Note: Water Quality Certification (WQC) Number 3883 issued March 19, 2012 replaces WQC Number 3687 issued November 1, 2007; WQC Number 3624 issued March 19, 2007; WQC Number 3494 issued December 31, 2004; and WQC Number 3376 issued March 18, 2002. This General Certification is rescinded when the Corps of Engineers reauthorizes any of the corresponding Nationwide and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Quality.

Water Quality Certification No. 3884

**GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE
FOR U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT
NUMBERS 12 (UTILITY LINE ACTIVITIES) AND 47 (PIPELINE SAFETY PROGRAM
DESIGNATED TIME SENSITIVE INSPECTIONS AND REPAIRS),
AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)**

Water Quality Certification Number 3884 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 Division of Water Quality (DWQ) Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to waters and wetland areas as described in 33 CFR 330 Appendix A (B) (12 and 47) of the Corps of Engineers regulations including any fill activity for utility line backfill and bedding, and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 02B .0200.

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.

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 Quality (the "Division"):

- a) Permanent impacts to any wetlands and/or waters, including streams; or
- b) Any stream relocation; or
- c) Impacts to any wetlands and/or waters if the maintenance corridor in a wetland or at a stream crossing is greater than 15 feet wide (except activities located in areas with Riparian Area Protection Rules when the maintenance corridor at stream crossing must be 10 feet wide or less). Gas pipelines may have a maintenance corridor wider than fifteen feet if mitigation is provided for these additional wetland fills.
- d) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of DWQ Wetland Rules (15A NCAC 02H .0500), Isolated Wetland Rules (15A NCAC 02H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 02B .0200); or
- e) Any impacts to streams and/or buffers in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman, Jordan or Goose Creek Watersheds (or any other basin or watershed with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless* the activities are listed as "EXEMPT" from these rules or a Buffer Authorization Certificate is issued through N.C. Division of Coastal Management (DCM) delegation for "ALLOWABLE" activities.

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. If a project also requires a CAMA Permit, then one payment to both agencies shall be submitted and will be the higher of the two fees.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval from the Division as long as they comply with the Conditions of Certification listed below. If any of these Conditions cannot be met, then written approval from the Division is required.

Water Quality Certification No. 3884

Conditions of Certification:

1. No Impacts Beyond those Authorized in the Written Approval or Beyond the Threshold of Use of this Certification

No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification, as authorized in the written approval from the Division or beyond the thresholds established for use of this Certification without written authorization, including incidental impacts. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices shall be performed so that no violations of state water quality standards, statutes, or rules occur. Approved plans and specifications for this project are incorporated by reference and are enforceable parts of this permit.

2. Standard Erosion and Sediment Control Practices

Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices and if applicable, comply with the specific conditions and requirements of the NPDES Construction Stormwater Permit issued to the site:

- a. Design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- b. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
- c. Reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
- d. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
- e. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality (HQW), or Outstanding Resource (ORW) waters, then the sedimentation and erosion control designs must comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

3. No Sediment and Erosion Control Measures in Wetlands or Waters

Sediment and erosion control measures shall not be placed in wetlands or waters. Exceptions to this condition require application submittal to and written approval by the Division. 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 and the natural grade restored within two (2) months of the date that the Division of Land Resources (DLR) or locally delegated program has released the specific area within the project.

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4. Construction Stormwater Permit NCG010000

An NPDES Construction Stormwater Permit is required for construction projects that disturb one (1) or more acres of land. This Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If your 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. A copy of the general permit (NCG010000), inspection log sheets, and other information may be found at <http://portal.ncdenr.org/web/wq/ws/su/npdessw#tab-w>.

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.

5. Construction Moratoriums and Coordination

If activities must occur during periods of high biological activity (i.e. 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.

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) to lessen impacts on trout, anadromous fish, larval/post-larval fishes and crustaceans, or other aquatic species of concern shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium.

Work within the twenty-five (25) designated trout counties or identified state or federal endangered or threatened species habitat shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

6. Work in the Dry

All work in or adjacent to stream waters 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 submittal to and written approval by the Division.

7. Riparian Area Protection (Buffer) Rule

Activities located in the protected riparian areas (whether jurisdictional wetlands or not), within the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman, Jordan, or Goose Creek Watersheds (or any other basin or watershed with buffer rules) shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 02B .0233, .0259, .0243, .0250, .0267 and .0605, and shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices. All buffer rule requirements, including diffuse flow requirements, must be met.

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8. Compensatory Mitigation

In accordance with 15A NCAC 02H .0506 (h), compensatory mitigation may be required for losses of equal to or greater than 150 linear feet of streams (intermittent and perennial) and/or equal to or greater than one (1) acre of wetlands. For linear public transportation projects, impacts equal to or exceeding 150 linear feet per stream shall require mitigation.

Buffer mitigation may be required for any project with Buffer Rules in effect at the time of application for activities classified as "Allowable with Mitigation" or "Prohibited" within the Table of Uses.

A determination of buffer, wetland, and stream mitigation requirements shall be made for any General Water Quality Certification for this Nationwide and/or Regional General Permit. Design and monitoring protocols shall follow the US Army Corps of Engineers Wilmington District *Stream Mitigation Guidelines* (April 2003) or its subsequent updates. Compensatory mitigation plans shall be submitted to the Division for written approval as required in those protocols. The mitigation plan must be implemented and/or constructed before any impacts occur on site. Alternatively, the Division will accept payment into an in-lieu fee program or a mitigation bank. In these cases, proof of payment shall be provided to the Division before any impacts occur on site.

9. Relocated stream designs should include the same dimensions, patterns, and profiles as the existing channel (or a stable reference reach if the existing channel is unstable), to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30-foot wide wooded and an adjacent 20-foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating appropriate erosion control matting materials and seedling establishment is allowable, however matting that incorporates plastic mesh and/or plastic twine shall not be used in wetlands, riparian buffers or floodplains as recommended by the North Carolina Sediment and Erosion Control Manual. Rip-rap, A-Jacks, concrete, gabions or other hard structures may be allowed if it is necessary to maintain the physical integrity of the stream; however, the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage. Please note that if the stream relocation is conducted as a stream restoration as defined in the US Army Corps of Engineers Wilmington District, April 2003 *Stream Mitigation Guidelines* (or its subsequent updates), the restored length may be used as compensatory mitigation for the impacts resulting from the relocation.

10. For sewer lines, when the construction corridor is parallel to a stream, then the edge of the construction corridor shall not be closer than 10 feet from top of bank. For streams classified as WS (except WS-IV or WS-V), B, SA, ORW, HQW, or SB from normal high water (or tide elevation) and wetlands, the edge of the construction corridor shall not be closer than 50 feet to a stream; or 100 feet to private or public water supply sources or waters classified as WS-I waters or Class I or Class II impounded reservoirs used as a source of drinking water in accordance with 15A NCAC 02T .0305(f).

Utility lines within the Riparian Buffers shall be installed in accordance with the Table of uses in the most recent version of the appropriate buffer rules.

Utility lines shall not cross a stream channel at other than a near-perpendicular direction (i.e., stream channel crossings shall not be at an angle of less than 75 degrees or more than 105 degrees to the stream bank).

11. Any wastewater line that crosses any stream shall be installed in accordance with the most recent version of the Gravity Sewer minimum Design Criteria or the most recent version of

Water Quality Certification No. 3884

the Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Main published on the Division of Water Quality's website. Exceptions to this condition require application submittal to, and written approval by, the Division.

12. If concrete is used during the 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 due to the potential for elevated pH and possible aquatic life/ fish kills.
13. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the the area directly impacted by approved construction activity. All rip-rap shall be buried and/or "keyed in" 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
14. Annual native species suitable for wet locations shall be planted and established within jurisdictional wetlands for soil and erosion control. Non-native perennials such as fescue are prohibited.
15. A one-time application of fertilizer to re-establish vegetation is allowed in disturbed areas including riparian buffers, but is restricted to no closer than 10 feet from top of bank of streams. Any fertilizer application must comply with all other Federal, State and Local regulations.
16. The construction corridor (including access roads, sediment and erosion control measures and stockpiling of materials) is limited to 40 feet (12.2 meters) in width in wetlands and across stream channels and must be minimized to the maximum extent practicable.
17. Permanent, maintained access corridors shall be restricted to the minimum width practicable and shall not exceed 15 feet in width except at manhole locations. A 15-foot by 15-foot perpendicular vehicle turnaround must be spaced at least 500 feet (152.4 meters) apart.
18. An anti-seep collar shall be placed at the downstream (utility line gradient) wetland boundary and every 150 feet (45.7 meters) up the gradient until the utility exits the wetland for buried utility lines. Anti-seep collars may be constructed with class B concrete, compacted clay, PVC pipe, or metal collars. Wetland crossings that are directionally drilled, and perpendicular wetland crossings that are open cut and less than 150 feet (45.7 meters) long do not require anti-seep collars. The compacted clay shall have a specific infiltration of 1 X 10- 5 cm/sec or less. A section and plan view diagram is attached for the anti-seep collars.

The following specifications shall apply to class B concrete:

- a) Minimum cement content, sacks per cubic yard with rounded course aggregate 5.0
 - b) Minimum cement content, sacks per cubic yard with angular course aggregate 5.5
 - c) Maximum water-cement ratio gallons per sack 6.8
 - d) Slump range 2" to 4"
 - e) Minimum strength - 28 day psi 2,500
19. The applicant shall have a specific plan for restoring wetland contours. Any excess material will be removed to a high ground disposal area.

The mixing of topsoil and subsoils within the wetlands along utility corridors shall be minimized to the greatest extent practical. During excavation, the soils shall be placed on fabric to minimize impacts whenever possible. Topsoil excavated from utility trenches will be

Water Quality Certification No. 3884

piled separately from subsoils and will be backfilled into the trench only after the subsoils have been placed and compacted.

Along utility corridors within wetlands, grub stumps only as needed to install the utility and cut remaining stumps off at grade level. The general stripping of topsoil within wetlands along the utility corridor is not permitted.

20. If an environmental document is required under the National or State Environmental Policy Act (NEPA or 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.
21. In the twenty (20) coastal counties, the appropriate DWQ Regional Office must be contacted to determine if Coastal Stormwater Regulations will be required.
22. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals.
23. The applicant/permittee 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 the Division 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 the Division may reevaluate and modify this General Water Quality Certification.
24. 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 the certificate of completion attached to the approval. One copy of the certificate shall be sent to the DWQ Central Office in Raleigh at 1650 Mail Service Center, Raleigh, NC, 27699-1650.
25. 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.
26. This certification grants permission to the director, an authorized representative of the Director, or DENR staff, upon the presentation of proper credentials, to enter the property during normal business hours.

This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide 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.

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.

The Director of the North Carolina Division of Water Quality may require submission of a formal application for Individual Certification for any project in this category of activity if it is 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 wetland or downstream waters are precluded.

Water Quality Certification No. 3884

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: March 19, 2012

DIVISION OF WATER QUALITY

By

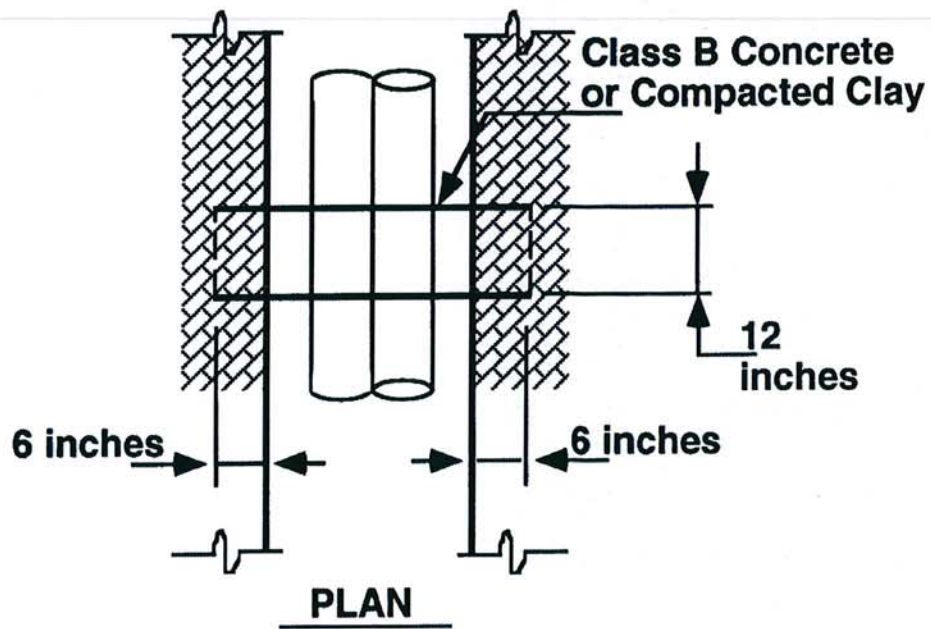
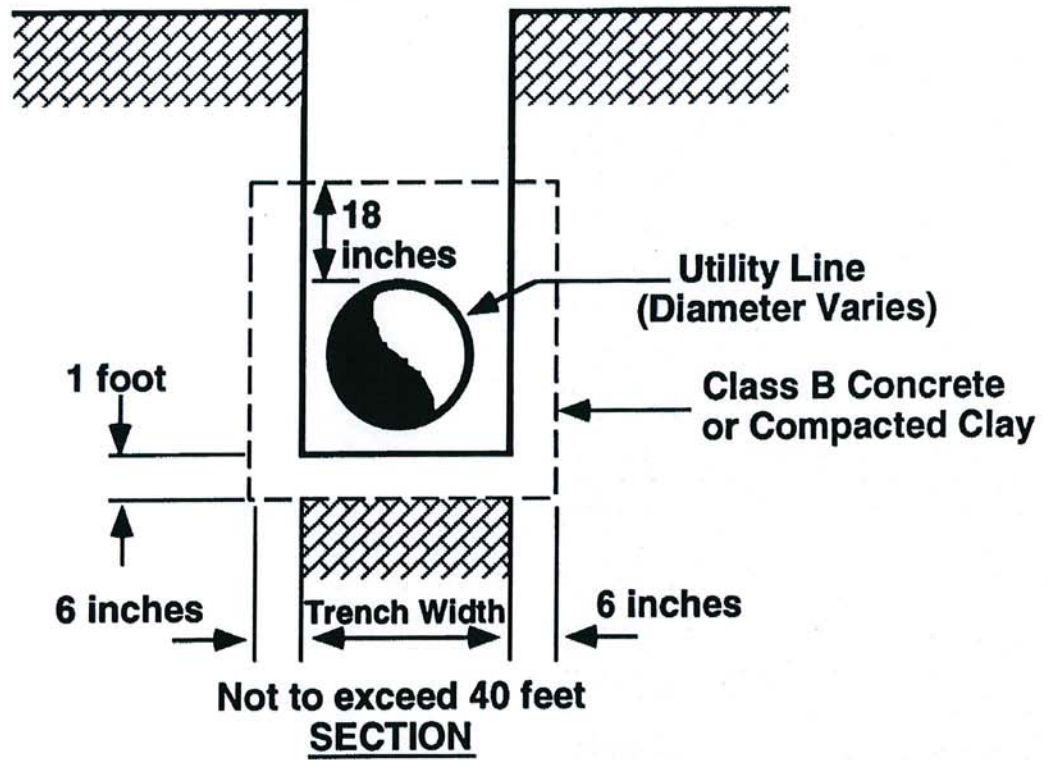
A handwritten signature in blue ink, appearing to read "Charles Wakild", followed by a small "L.O.I." or similar notation.

Charles Wakild, P.E.

Director

History Note: Water Quality Certification (WQC) Number 3884 issued March 19, 2012 replaces WQC Number 3819 issued March 19, 2010; WQC Number 3699 issued November 1, 2007; WQC Number 3625 issued March 19, 2007; WQC Number 3374 issued March 18, 2002; WQC Number 3288 issued June 1, 2000; WQC Number 3101 issued February 11, 1997; WQC Number 3022 issued September 6, 1995; WQC Number 2664 issued January 21, 1992. This General Certification is rescinded when the Corps of Engineers reauthorizes any of the corresponding Nationwide and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Quality.

ANTI-SEEP COLLAR





PAT MCCRORY

Governor

DONALD R. VAN DER VAART

Secretary

BRAXTON DAVIS

Director

June 3, 2016

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

Douglas V. Huggett
Major Permits Manager
N.C. Division of Coastal Management

Enclosure



Permit Class
AMENDED

Permit Number
60-16

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 Pender County at Topsail Sound and AIWW, Bridge No. 16
on NC-50/NC-210, as requested in the permittee's application dated 2/4/16, including the
attached workplan drawings (43) as referenced in Condition No. 1 of this permit.

This permit, issued on 6/2/16, 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-4929, Topsail Island Beach Bridge Replacement over the AIWW

- 1) All work authorized by this permit shall be carried out in accordance with the following attached workplan drawings (43), except as modified herein: 19 permit drawings dated 2/4/16; 7 roadway design drawings (1 dated 8/24/15, 2 dated 8/27/15, 1 dated 8/21/15, and 3 dated 10/21/15); 16 utility drawings (14 dated 2/3/16, and 2 dated 11/20/15), and 1 structures drawing dated 9/18/15.
- 2) In accordance with commitments made by the permittee, due to the classification of Topsail Sound as a Primary Nursery Area, all bottom-disturbing activities shall occur outside the in-water work moratorium of April 1 to September 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.

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

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.

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

Douglas V. Haggitt for

Braxton C. Davis, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

Philip S. Harris for

PHILIP S. HARRIS, P.E. Signature of Permittee

ADDITIONAL CONDITIONS

- 3) The authorized project is located within a primary nursery area (PNA). Therefore, in accordance with T15A:07H.0208 of the rules of the Coastal Resources Commission, no new dredging or excavation within the PNA shall be permitted. Dredging in any manner, including "kicking" with boat propellers, is not authorized. This prohibition shall be applied and enforced throughout the entire existence of the permitted structure.
- 4) In accordance with commitments made by the permittee, in order to further 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.
- 5) All construction access shall be through the use of the existing bridge, temporary work bridges, platforms, barges, partially constructed new bridges, and existing high ground areas.
- 6) Construction staging areas shall be located only in upland areas, and not in wetlands or waters of the State.
- 7) Barges shall be utilized only in areas of sufficient depth such that the barges avoid contact with the bottom and do not rest on the bottom during periods of low tide.
- 8) The installation of the piles for the permanent and temporary bridges shall be accomplished by pile driving and/or drilled shaft construction. Should the permittee and/or its contractor propose to utilize another type of pile installation, such as jetting, additional authorization from DCM shall be required.
- 9) If drilled shaft construction is implemented, then excavated material from the drilled-shaft construction shall be removed from the encasements directly into containment vessels.
- 10) No drill slurry or water that has been in contact with uncured concrete shall be allowed to contact waters of the State or waters that will enter waters of the State. Drilling fluids shall be disposed of in an upland disposal site. Water returning to the surrounding waters shall be of sufficient quality so as to not pose a threat to aquatic organisms or otherwise violate State water quality standards.
- 11) The removal of the piles for the existing bridge, temporary work bridge and existing fender system shall be accomplished by use of vibratory hammer. Should the permittee and/or its contractor propose to utilize another type of pile extraction, such as jetting, additional authorization from DCM shall be required.
- 12) The existing bridge, fender system, and temporary work bridge, including piles, shall be removed in their entirety within 90 days after they are no longer needed. However, if this timeframe occurs while the moratorium referenced in Condition Number 2 of this permit is in effect, then the existing bridge, fender system, and temporary work bridge, including piles, shall be removed in their entirety within 90 days of the moratorium end date.

ADDITIONAL CONDITIONS

- 13) Pilings from the existing bridge, temporary work bridge, and existing fender system, as well as any remnant pilings from previous bridges or fender systems, shall be removed in their entirety, except that in the event that a piling or other component breaks during removal and cannot be removed in its entirety, the piling or other component may be cut off flush with the bed of the water body, and DCM shall be notified of each occurrence within one working day.
- 14) The retaining walls shall be in place prior to any backfilling activities. The retaining walls shall be structurally tight so as to prevent seepage of fill materials through the structure.
- 15) Placement of riprap material 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 be of a size sufficient to prevent its movement from the approved alignment by wave or current action. The riprap material shall consist of clean rock or masonry materials such as but not limited to granite, marl, or broken concrete.
- 16) 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.
- 17) All fill material shall be clean and free of any pollutants except in trace quantities.
- 18) Material excavated from high ground areas at the project site may be used in fill areas associated with the project or shall be removed from the site and taken to a high ground location.
- 19) 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.
- 20) The temporary placement or double handling of any excavated or fill material within wetlands or waters of the State is not authorized. This condition also applies to the authorized removal of the existing bridge, fender system, tender house, pavement, wood pier, and associated materials.
- 21) Any waste materials or debris generated in the demolition and removal of the existing bridge and/or construction of the new bridge or roadway shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations from any relevant state, federal, or local authorities are obtained.

ADDITIONAL CONDITIONS**Submerged Aquatic Vegetation**

- 22) In accordance with commitments made by the permittee (Finding of No Significant Impact page 35), to ensure that SAV habitat is not impacted, the permittee shall conduct additional SAV surveys within the area shaded by the authorized project and a nearby reference site, before and after construction using methodologies recommended by DCM. SAV surveys shall continue in the spring/summer prior to construction to gather data. After construction is completed, NCDOT shall perform SAV surveys for two additional years. After these surveys, NCDOT shall provide the results to DCM and work with DCM to determine if there is a need for mitigation.

Impacts to Wetlands and Waters of the State and Compensatory Mitigation

NOTE: In accordance with the N.C. Division of Mitigation Services (DMS) letter dated 2/10/16, compensatory mitigation for permanent impacts of 0.72 acres of riparian wetlands and 0.05 acres of Coastal Wetlands associated with the authorized project shall be provided by the DMS in accordance with the In-Lieu Fee Instrument dated 7/28/10.

- 23) Construction of the bridge footers shall not result in impacts to Coastal Wetlands.
- 24) Any voids in wetlands caused by the removal of the temporary work bridge shall be restored to the elevation of pre-existing conditions with suitable wetland or organic substrate compatible with the naturally occurring surrounding substrate to ensure revegetation of the impacted areas. The permittee shall notify DCM's Transportation Project Field Representative in Morehead City to provide DCM with an opportunity to inspect the material for suitability prior to backfilling.

NOTE: Any wetland material that is accidentally extracted with the removal of temporary work bridge piles should be used to the maximum extent practicable to help backfill any voids that are created in wetlands.

- 25) Due to the possibility that shading, compaction, hand clearing, mechanized clearing, excavation, and/or other site alterations might prevent the temporary Coastal Wetland impacts 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 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 mitigation shall be required for these impacts.
- 26) There shall be no clearing or grubbing of wetlands outside of the areas indicated for impacts on the attached workplan drawings without prior approval from DCM.

ADDITIONAL CONDITIONS

- 27) The permittee shall minimize the need to cross wetlands in transporting equipment to the maximum extent practicable.

Navigation

- 28) At the location where the authorized temporary work bridge crosses the boat access channel, the temporary work bridge shall be elevated to provide a minimum of 12 feet vertical navigational clearance above mean high water as measured from the bottom of the decking, and the temporary work bridge shall provide a minimum of thirty feet of horizontal navigational clearance centered on the boat access channel.
- 29) In accordance with commitments made by the permittee, the completed bridge project shall provide a minimum of 120 feet of horizontal navigational clearance and 65 feet of vertical navigational clearance above mean high water over the AIWW.
- 30) No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work following completion of construction.
- 31) During bridge construction, and removal of the existing bridge and fender system, the permittee shall make every attempt to maintain the same navigation that is currently possible in Topsail Sound and the AIWW. If this is not possible, then adequate notice shall be provided to the public that navigation will be limited during construction. The notice shall include an estimate of the amount of time that the limited navigation will occur.
- 32) The permittee shall install and maintain, at his expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. For further information, the permittee should contact the U.S. Coast Guard Marine Safety Office. At a minimum, permanent reflectors shall be attached to the structure in order to make it more visible during hours of darkness or inclement weather.

Cultural Resource Protection

- 33) The permittee shall adhere to stipulations contained within the Memorandum of Agreement dated 1/7/14 among the Federal Highway Administration, N.C. Department of Transportation, and the North Carolina State Historic Preservation Officer for the Replacement of Bridge No. 16 over the AIWW on NC 50/210 in Surf City, Pender County, North Carolina.

General

- 34) This project shall be constructed in accordance with the permittee's Stormwater Management Plan dated 1/28/16, and the provisions of the NCDOT's National Pollutant Discharge Elimination (NPDES) Stormwater Permit NCS000250, including the applicable requirements of the NCG01000.

ADDITIONAL CONDITIONS

NOTE: The construction of the new bridge will also require the relocation and/or installation of utility lines for water, sewer, electric, communication, and cable. Wetland impacts resulting from the utility work have been included in the total wetland impacts for this project.

NOTE: Plans and specifications should be submitted and approved by the Public Water Supply Section before relocation of water lines begins.

- 35) 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.
- 36) 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.
- 37) The permittee and/or his contractor shall contact the DCM Transportation Project Coordinator in Morehead City at (252) 808-2808 to request a preconstruction conference prior to project initiation.
- 38) The permittee shall exercise all available precautions in the day-to-day operation of the facility to prevent waste from entering the adjacent wetlands and waters of the State.
- 39) Development authorized by this permit shall only be conducted on lands owned by NCDOT and/or its right-of-ways and/or easements.
- 40) 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. The permittee shall contact a representative of DCM prior to commencement of any such activity for this determination and any permit modification.
- 41) The N.C. Division of Water Resources (DWR) authorized the proposed project on 3/4/16 (DWR Project No. 20150955 v.2) under General Water Quality Certification Nos. 3886 and 3884.
- 42) This permit does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.

NOTE: The U.S. Army Corps of Engineers authorized the proposed project under Regional General Permit Number 198200031 and Nationwide Permit Number 12 (COE Action ID No. SAW-2007-03646-071), which was issued on 3/24/16.

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 the Division of Water Resources.

**MEMORANDUM OF AGREEMENT
AMONG THE FEDERAL HIGHWAY ADMINISTRATION,
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
THE REPLACEMENT OF BRIDGE NO. 16 OVER THE INTRACOASTAL
WATERWAY ON
NC 50/210 IN SURF CITY, PENDER COUNTY, NORTH CAROLINA
TIP PROJECT B-4929
FEDERAL AID PROJECT NO. BRSTP-50(10)**

WHEREAS, the Federal Highway Administration (FHWA) has determined that the replacement of Bridge No. 16 over the Intracoastal Waterway on NC 50/210 in Surf City (Undertaking), will have an adverse effect upon Pender County Bridge No. 16, a Warren thru truss, center-bearing swing span bridge that is eligible for listing in the National Register of Historic Places (NRHP) because the undertaking will require the removal of the historic bridge; and

WHEREAS, the FHWA has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

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

WHEREAS, the Town of Surf City and Pender County have participated in the consultation and been invited to concur with this MOA; and

WHEREAS, the FHWA has notified the Advisory Council on Historic Preservation (Council) of the adverse effect and the Council has declined to comment or participate in the consultation;

NOW, THEREFORE, FHWA, NCDOT, and the North Carolina SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on Pender County Bridge No. 16.

STIPULATIONS

The FHWA and NCDOT shall ensure that the following measures are carried out:

I. Photodocumentation of Pender County Bridge No. 16

Prior to the initiation of work, NCDOT shall record Bridge No. 16 and its surroundings in accordance with the attached Recordation Plan (Appendix A). NCDOT shall deposit copies of the documentation with the SHPO and Historic Architecture Group of NCDOT within three (3) years of the execution of this MOA.

II. Inclusion of Bridge No. 16 in the Historic Bridges of North Carolina Website

NCDOT is currently developing a public website that will provide information about historic bridges and the history of bridge construction in North Carolina. Pender County Bridge No. 16 will be included in the inventory of bridges with photographs and a narrative history.

III. Relocation of Pender County Bridge No. 16

NCDOT, in accordance with its Bridge Reuse and Relocation Program, shall attempt to find a new owner for Pender County Bridge No. 16. A new owner must be willing to accept all future financial and legal responsibility for the bridge, including title, liability and maintenance. NCDOT will assist the new owner(s) in the identification of and application for financial resources to maintain the bridge if requested in writing by the new owner. The Town of Surf City has expressed interest in obtaining the bridge.

NCDOT and FHWA will comply with Section 114(o) of Title 23 of the U.S. Code, entitled "Historic Bridge Program," which provides for the reasonable costs associated with actions to preserve, or reduce the impact of a project on the integrity of historic bridges. However, if the Town of Surf City chooses not to acquire the bridge before completion of the Right Of Way Consultation, NCDOT may elect to remove the bridge as part of the Undertaking.

IV. Unanticipated Discovery

In accordance with 36 CFR 800.13, if NCDOT identifies additional cultural resource(s) during construction and determine them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the FHWA and SHPO contacted. If after consultation with the Signatory Party(ies) additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory Party(ies), will develop and implement appropriate protection/mitigation measures for the resource(s). Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

V. Dispute Resolution

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

1. Provide the FHWA with recommendations which the FHWA will take into account in reaching a final decision regarding the dispute, or
2. Notify the FHWA that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the FHWA, in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USACE and NCDOT's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

VI. Amendments

If any Signatory to this MOA believes that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agree upon, the dispute resolution process set forth in Stipulation VIII will be followed.

VII. Termination

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

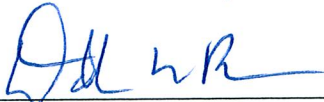
VIII. Duration

Unless terminated pursuant to Stipulation VI above, this MOA will be in effect until FHWA, in consultation with the other Signatory Party(ies), determines that all of its terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to construct the Undertaking.

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

AGREE:

Federal Highway Administration

for 

John F. Sullivan, III, P.E.
Division Administrator

1-7-14
Date

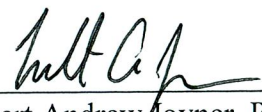
State Historic Preservation Officer:



Dr. Kevin Cherry
North Carolina State Historic Preservation Officer

12-20-2013
Date

North Carolina Department of Transportation:



Robert Andrew Joyner, P.E.
Human Environment Section Head

12/9/13
Date

FILED:

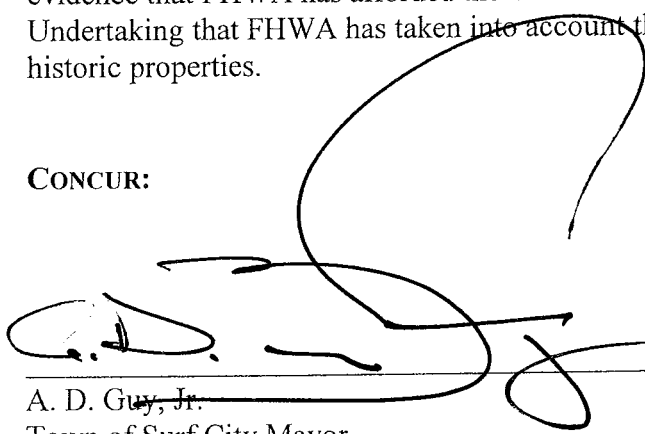
By: _____
Advisory Council on Historic Preservation

Date

**MEMORANDUM OF AGREEMENT
AMONG THE FEDERAL HIGHWAY ADMINISTRATION,
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
REPLACE BRIDGE NO. 16 OVER THE INTRACOASTAL WATERWAY ON
NC 50/210 IN SURF CITY, PENDER COUNTY, NC
TIP PROJECT B-4929
FEDERAL AID PROJECT NO. BRSTP-50(10)**

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

CONCUR:



A. D. Guy, Jr.
Town of Surf City Mayor

5-14-14
Date

**MEMORANDUM OF AGREEMENT
AMONG THE FEDERAL HIGHWAY ADMINISTRATION,
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
REPLACE BRIDGE NO. 16 OVER THE INTRACOASTAL WATERWAY ON
NC 50/210 IN SURF CITY, PENDER COUNTY, NC
TIP PROJECT B-4929
FEDERAL AID PROJECT NO. BRSTP-50(10)**

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

CONCUR:



Mickey Duvall
Pender County Manager

5/12/2014
Date

APPENDIX A

Historic Structures and Landscape Recordation Plan Replace Bridge No. 16 over the Intracoastal Waterway on NC 50/210 in Surf City, Pender County, NC TIP Project B-4929 Federal Aid Project BRSTP-50(10)

PHOTOGRAPHIC REQUIREMENTS

- ❑ Overall views of Pender County Bridge No. 16 and its surroundings.
- ❑ Images showing the details of the superstructure and substructure of Pender County Bridge No. 16, including the bridge in the closed and open positions.

PHOTOGRAPHIC FORMAT

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

COPIES AND CURATION

- ❑ One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- ❑ One (1) set of all photographic documentation will be deposited in the files of the Historic Architecture Group of NCDOT.
- ❑ Any existing mechanical or engineering drawing of Pender County Bridge No. 16 will be gathered, stored, and curated.



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.

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.

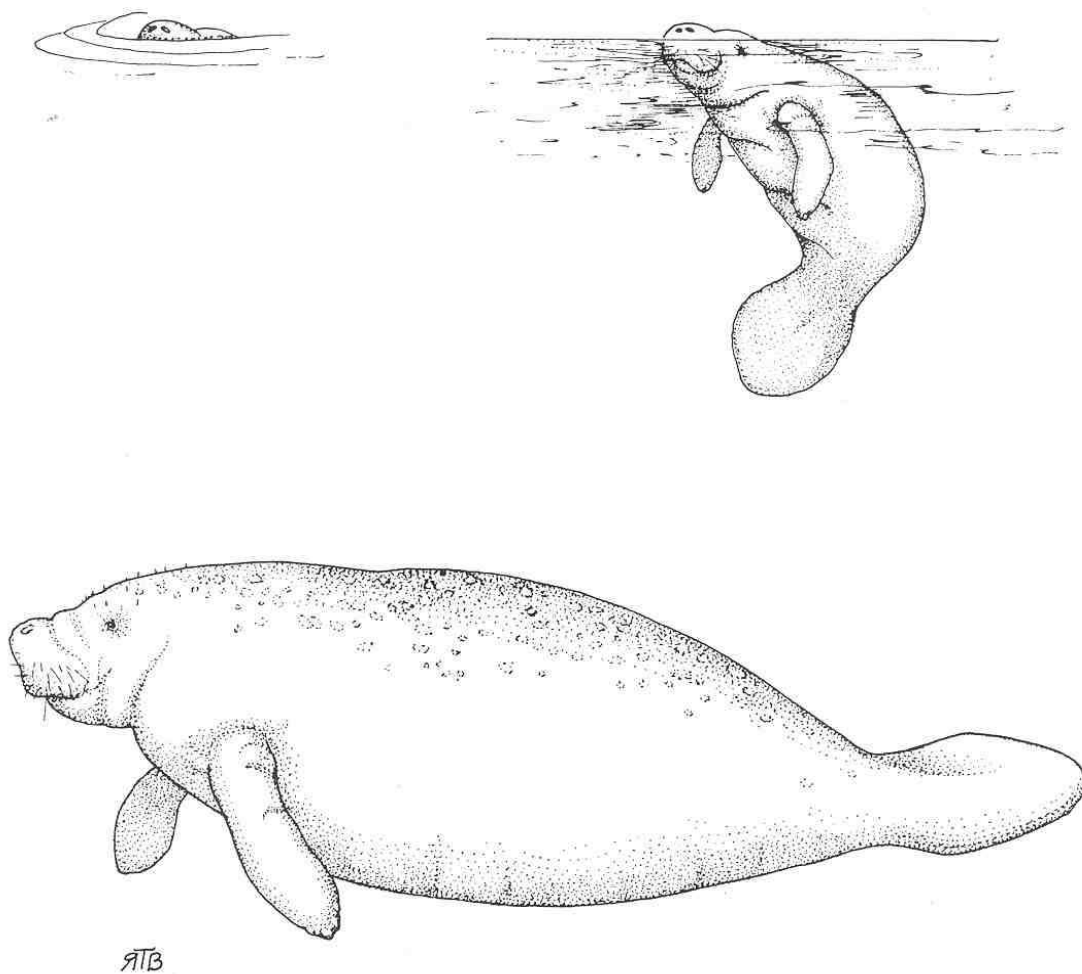


Illustration used with the permission of the North Carolina State Museum of Natural Sciences.
Source: Clark, M. K. 1987. Endangered, Threatened, and Rare Fauna of North Carolina: Part I. A re-evaluation of the mammals. Occasional Papers of the North Carolina Biological Survey 1987-3. North Carolina State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

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, VA 23704-5004
Staff Symbol: (dpb)
Phone: (757) 398-6557
Fax: (757) 398-6227
Email: kashanda.l.booker@uscg.mil

16591
28 SEP 2016

Mr. Colin Mellor
Project Development & Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Dear Mr. Mellor:

Enclosed is the Coast Guard Bridge Permit 2-16-05 dated September 27, 2016, approving the proposed replacement of the NC 210/50 Bridge across the Atlantic Intracoastal Waterway (AICW), mile 260.7, at Surf City, Pender County, NC. The following stipulations shall be adhered to:

a. The Contractor shall submit the plans and schedule of operation for approval at least 45 days prior to commencement of work in the waterway. One copy of such information shall be submitted concurrently to your Resident Engineer, the United States Coast Guard Commander (dpb); Federal Building, 4th Floor, 431 Crawford Street; Portsmouth, VA 23704-5004, and the U. S. Coast Guard Sector North Carolina at 721 Medical Center Drive, Wilmington, NC 28401. The information shall include a sketch of the waterway; the bridge; the location of any restrictions that will be placed in the waterway such as barges, anchors, and anchor lines; the location and height above mean high water and detailed description of any scaffolding, or netting; detailed description indicating the placement, type and dimension of any cofferdams if used. The schedule should also include the hours of operation and whether or not the equipment will be removed at night. The contractor shall comply with all provisions of the Navigation Rules International - Inland, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. The Contractor shall submit to the Resident Engineer a copy of all correspondence with the Coast Guard. No deviation from the approved plans and schedule of operation may be made unless the modification has previously been submitted and approved by the Coast Guard.

b. All bridge closures for the existing-to-be-replaced bridge shall be requested in writing to be received at this office at least 15 days in advance. If any closures will exceed three consecutive days, we must be advised at least 30 days in advance so that we may make the appropriate marine notifications. Time restrictions for the navigational traffic shutdown shall be strictly adhered to. Any request for an extension of the closure dates stated above shall be forwarded at least 30 days in advance to the Coast Guard for approval.

c. At no time during the work will the waterway be closed to navigation without prior approval from the Coast Guard. You are required to maintain close and regular contact with Coast Guard Sector North Carolina to keep them informed to activities in waterway at (252) 247-4570.

d. Barges that are used in the waterway during the project must be marked. Enclosure (2) outlines temporary marking and lighting requirements for barges and structures not part of the bridge that will be used during construction. If barge or float anchor lines are used, they must be marked by buoys, which should be lighted. If you should have any questions, regarding lights on the barges or work floats, please contact the Chief, Waterways Management Section, at (757) 398-6230. Floating equipment shall have a radiotelephone capable of operation from its main control station in accordance with Part 26 of Title 33, Code of Federal Regulations and shall be monitored during all periods the floating equipment is on station.

e. During the progress of work, while the channel is in operation, should any material, machinery or equipment be lost, dumped, thrown overboard, sunk or misplaced which may be dangerous to or obstruct navigation, immediate notice shall be given to the Coast Guard and the object removed with the utmost dispatch. Until removal can be effected, the objects shall be properly marked in order to protect navigation. Notice to the Coast Guard shall give a description and location of any such object and the action taken or being taken to protect navigation.

f. Upon completion of the proposed project, an inspection of the waterway bottom shall be performed to insure that all construction waste materials have been completely removed. Certification will be required in writing by a licensed engineer or licensed surveyor that the waterways have not been impaired and all construction related debris has been cleared from it. The certification shall include the actual method used to conduct the inspection. The Contractor shall remove any bridge related debris, resulting from the current or prior work or occurrences, discovered during this survey.

g. Upon completion of the bridgework, a responsible official of the North Carolina Department of Transportation shall verify as-built clearances and a statement attesting to the correctness of the clearances shall be forwarded to this office for record purpose. In lieu of verification by the above listed official, certification by a licensed surveyor or registered professional engineer registered in the State of North Carolina will be accepted.

h. Except as shown on the plans, no dredging, excavation, filling, rip-rap, or other work affecting the bottoms, shall be done in conjunction with this work.

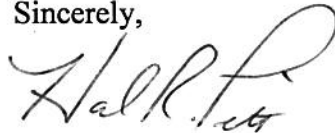
i. If during the periods of construction, permanent lighting cannot be maintained operable, the fenders of each pier shall be marked with a battery or power operated white light of not less than 60 flashes per minute and visible for a range of 2,000 yards on 90% of the nights of the year. Generally, a lamp of 20-candle power will meet these requirements. If necessary to obtain coverage required, a light or lights on the upstream and downstream sides shall be installed. The piers shall be so marked until the construction has been completed and permanent navigational lighting has been installed and determined to be operating satisfactorily. Written approval from the Coast Guard of temporary lighting during periods of construction is required. No existing bridge navigation lights shall be impaired or blocked during darkness or periods of reduced visibility.

j. Compliance with the requirements stated herein does not relieve the contractor of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the State of North Carolina, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge. It is advised that the Coast Guard can levy monetary civil penalties for violations of bridge regulations and statutes.

k. In accordance with Title 33 Code of Federal Regulations Part 118.25 – Application procedure, approval of lights and other signals required shall be obtained prior to construction. Application shall be by letter accompanied by duplicate sets of drawings showing (1) the plan and elevation of the structure showing lights and signals proposed, and (2) a small scale vicinity chart showing proposed bridge and all other bridges within 1,000 feet above or below the proposed bridge.

The office of the Bridge Program Manager, Fifth Coast Guard District, shall be notified immediately upon completion of the project. If you should have any questions regarding this matter, please contact Ms. Kashanda Booker at the above listed address or telephone number.

Sincerely,



HAL R. PITTS
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

Encl: (1) Bridge Permit 2-16-05 dated September 27, 2016
(2) Temporary marking and lighting requirements

Copy: Commander, Fifth Coast Guard District (dpw)
Commander, Coast Guard Sector North Carolina, Waterways Management

***LIGHTING REQUIREMENTS FOR BARGES AND STRUCTURES
NOT PART OF A BRIDGE OR APPROACH STRUCTURE***

33 CFR 88.13 Lights on barges.

- (a) The following barges shall display at night and if practicable in periods of restricted visibility the lights described in paragraph (b) of this section:
 - (1) Every barge projecting into a buoyed or restricted channel.
 - (2) Every barge so moored that it reduces the available navigable width of any channel to less than 80 meters.
 - (3) Barges moored in group's more than two barges wide or to a maximum width of over 25 meters.
 - (4) Every barge not moored parallel to the bank or dock.
- (b) Barges described in paragraph (a) of this section shall carry two unobstructed all-round white lights of an intensity to be visible for at least 1 nautical mile and meeting the technical requirements as prescribed in 33 CFR 84.15.
- (c) A barge or group of barges at anchor or made fast to one or more mooring buoys or other similar device, in lieu of the provisions of Inland Navigation Rule 30, may carry unobstructed all-round white lights of an intensity to be visible for at least 1 nautical mile that meet the requirements of 33 CFR 84.15 and shall be arranged as follows:
 - (1) Any barge that projects from a group formation shall be lighted on its outboard corners.
 - (2) On a single barge moored in water where other vessels normally navigate on both sides of the barge, lights shall be placed to mark the corner extremities of the barge.
 - (3) On barges moored in group formation, moored in water where other vessels normally navigate on both sides of the group, lights shall be placed to mark the corner extremities of the group.
- (d) The following are exempt from the requirements of this section:
 - (1) A barge or group of barges moored in a slip or slough used primarily for mooring purposes.
 - (2) A barge or group of barges moored behind a pier head.
 - (3) A barge less than 20 meters in length when moored in a special anchorage area designated in accordance with 33 CFR 109.10.

33 CFR 118.95 Lights on structures not part of a bridge or approach structure.

Lights on sheer booms, isolated piers, obstructions, and other structures not part of a bridge or approach structure must meet the requirements for aids to navigation in Subpart 66.01 of Part 66 of this chapter.



27 SEP 2016

BRIDGE PERMIT (2-16-5)

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

AND WHEREAS the Secretary of Homeland Security has delegated the authority of Section 502(b) of that act to the Commandant, U.S. Coast Guard by Department of Homeland Security Delegation Number: 0170.1;

AND WHEREAS before construction is commenced, the Commandant must approve the location and plans of any such bridge and may impose any specific conditions relating to the construction, maintenance and operation of the structure deemed necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the - STATE OF NORTH CAROLINA - has submitted for approval the location and plans of a bridge to be constructed across the Atlantic Intracoastal Waterway near Surf City, North Carolina;

NOW THEREFORE, This is to certify that the location and plans dated 26 August 2016 are hereby approved by the Commandant, subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant.

2. The construction of falsework, pilings, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, Fifth Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the construction work has reached a point where such action should be taken.

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or

**Bridge across the Atlantic Intracoastal Waterway
near Surf City, North Carolina****27 SEP 2016**
BRIDGE PERMIT
(2-16-5)

regulation as may be under the jurisdiction of the State of North Carolina, Department of Environmental Quality: Division of Marine Fisheries; Division of Water Resources; Division of Coastal Management, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. Construction of the temporary work platforms in the Atlantic Intracoastal Waterway shall be in accordance with approved plan sheets 5, 6, 7 and 8 (of 8) dated 26 August 2016.

5. A bridge protection system shall be installed and maintained in good condition by and at the expense of the owner of the bridge. Said installation and maintenance shall be for the safety of navigation and be in accordance with plans submitted to and approved by the District Commander prior to its construction.

6. Clearance gauges shall be installed and maintained in a good and legible condition by and at the expense of the owner of the bridge. The type of gauges and the locations in which they are to be installed will be submitted to the District Commander for approval.

7. All parts of the existing to-be-replaced NC 50/NC 210 Bridge and temporary work platforms across the Atlantic Intracoastal Waterway, mile 260.7, not utilized in the new bridge shall be removed in their entirety and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed when the District Commander determines that the construction of the new bridge, mile 260.9, has reached a point where such action should be taken.

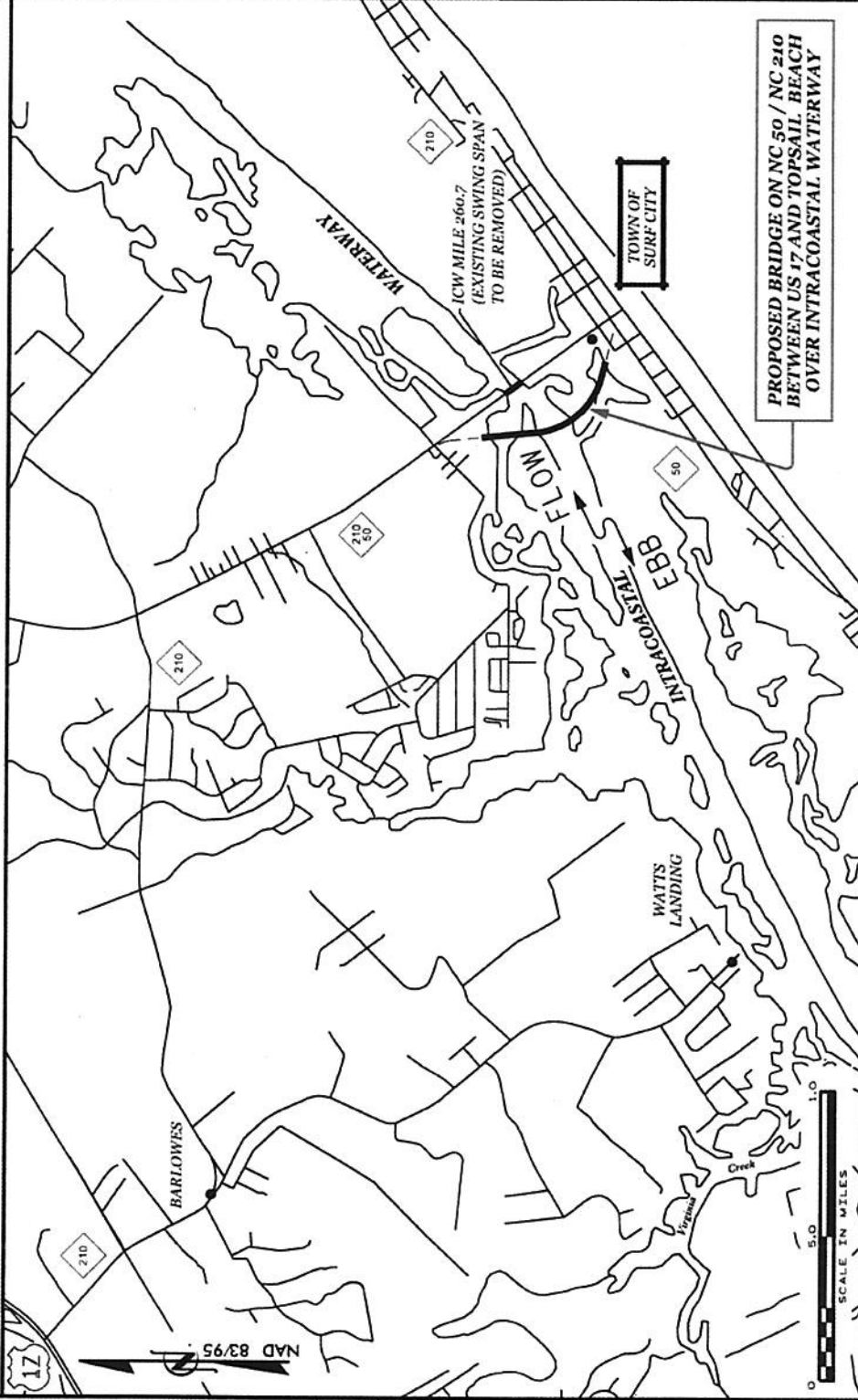
8. When the proposed bridge is no longer used for transportation purposes, it shall be removed in its entirety or to an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

9. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within three years and completed within five years after the date of this permit.



Brian L. Dunn
Chief, Office of Bridge Programs
U.S. Coast Guard
By direction of the Commandant

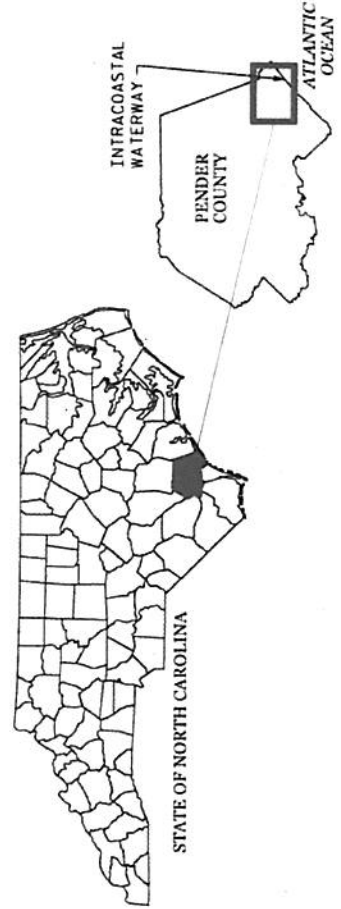
VICINITY MAP



A VESSEL IMPACT STUDY WAS PERFORMED FOR THE PROPOSED BRIDGE OVER THE INTRACOASTAL WATERWAY. NCDOT HAS SPECIFIED THAT, FOR THE PURPOSES OF VESSEL IMPACT RISK ANALYSIS, THE PROPOSED BRIDGE HAS AN OPERATIONAL CLASSIFICATION OF "CRITICAL". SITE-SPECIFIC DATA WAS COLLECTED AND AN ANALYSIS WAS PERFORMED IN ACCORDANCE WITH SECTION 3.14 - VESSEL COLLISION OF THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. MINIMUM DESIGN FORCE IS ASSOCIATED WITH A SINGLE 35' x 195' EMPTY, DRIFTING HOPPER BARGE IN ACCORDANCE WITH THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.



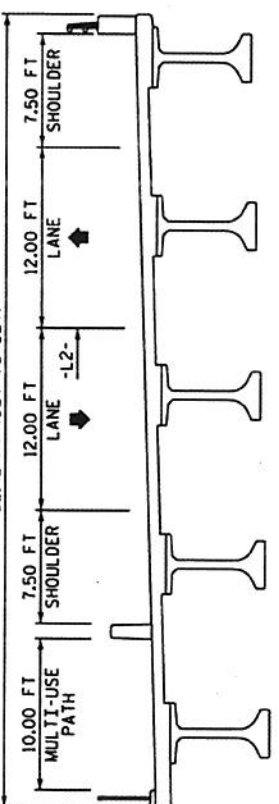
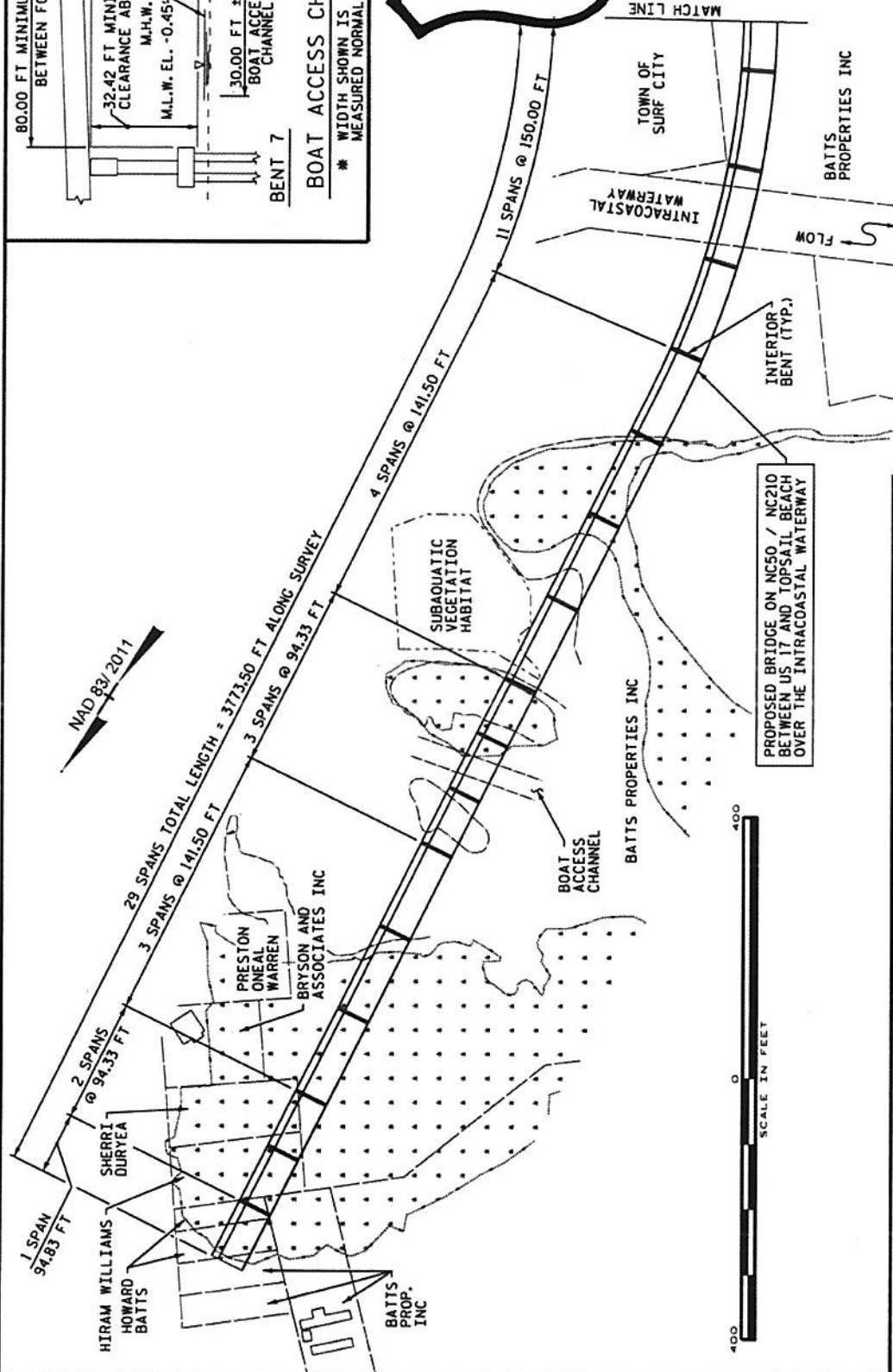
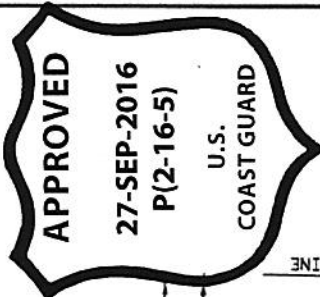
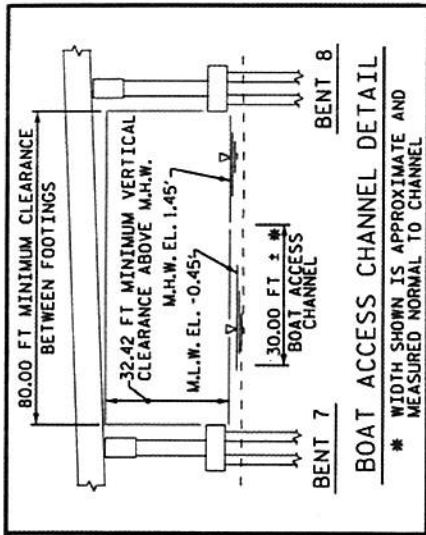
THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS FOR VESSEL COLLISION.



State of North Carolina
Department of Transportation
Raleigh, NC

Proposed Bridge
on
NC 50 / NC 210
between
US 17 and Topsail Beach
over the
near
Intracoastal Waterway, Mile Point 260.9
Surf City, NC
Pender County

State Project No.: B-4929
August 26, 2016
Sheet 1 of 8



THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF NORTH CAROLINA BRIDGE DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS FOR VESSEL COLLISION.

NORTH CAROLINA PROFESSIONAL SEAL

031988

JACOB P. SHERMAN

PROPOSED Bridge on NC 50 / NC 210 between US 17 and Topsail Beach over the Intracoastal Waterway, Mile Point 260.9 near Surf City, NC

Pender County

State Project No.: B-4929

August 26, 2016

Sheet 3 of 8

State of North Carolina
Department of Transportation
Raleigh, NC

Proposed Bridge on NC 50 / NC 210 between US 17 and Topsail Beach over the Intracoastal Waterway, Mile Point 260.9 near Surf City, NC

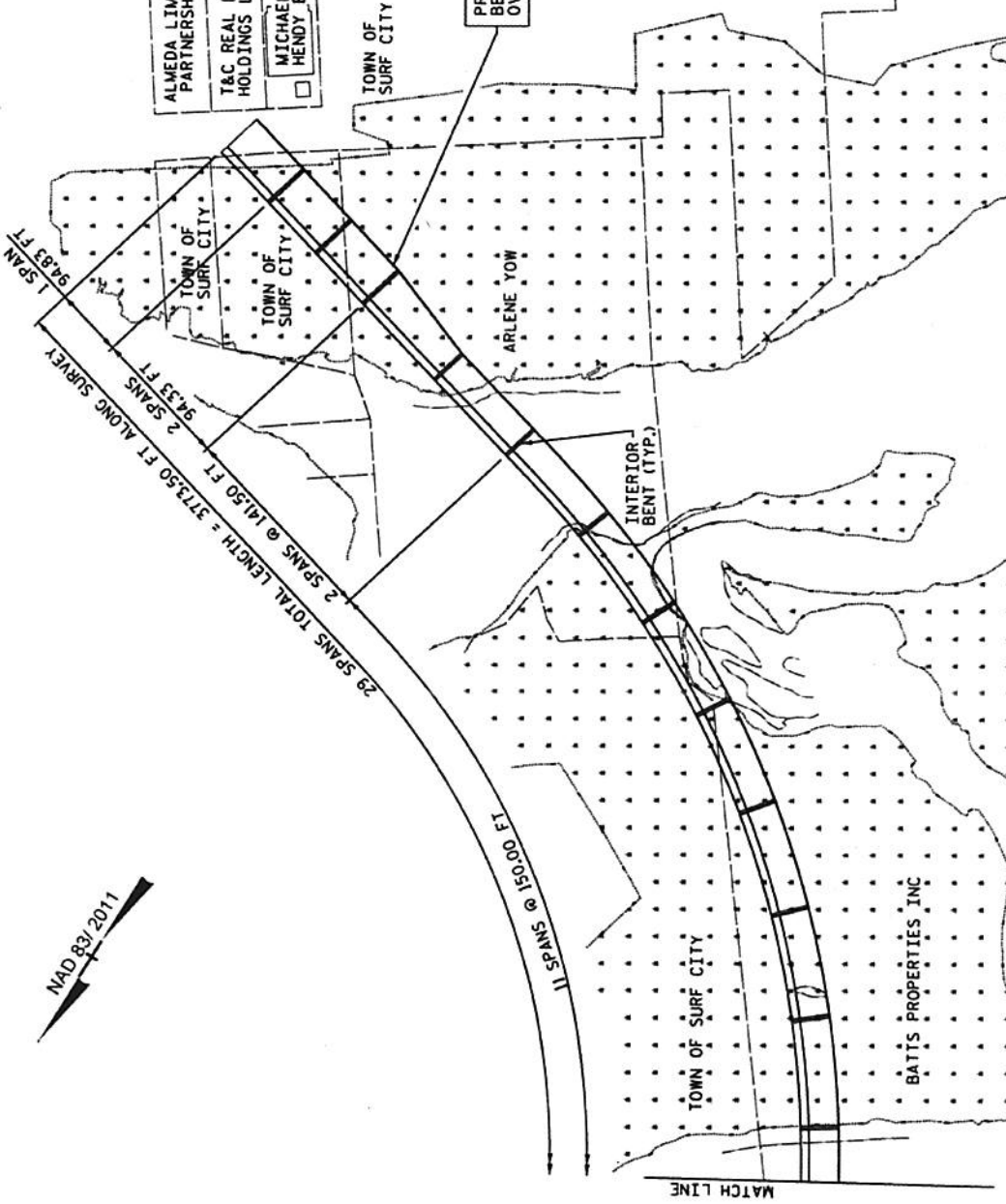
Pender County

State Project No.: B-4929

August 26, 2016

Sheet 3 of 8

NAD 83/ 2011



ALMEDA LIMITED
PARTNERSHIP
T&C REAL ESTATE
HOLDINGS LLC
MICHAEL
HENRY ET AL

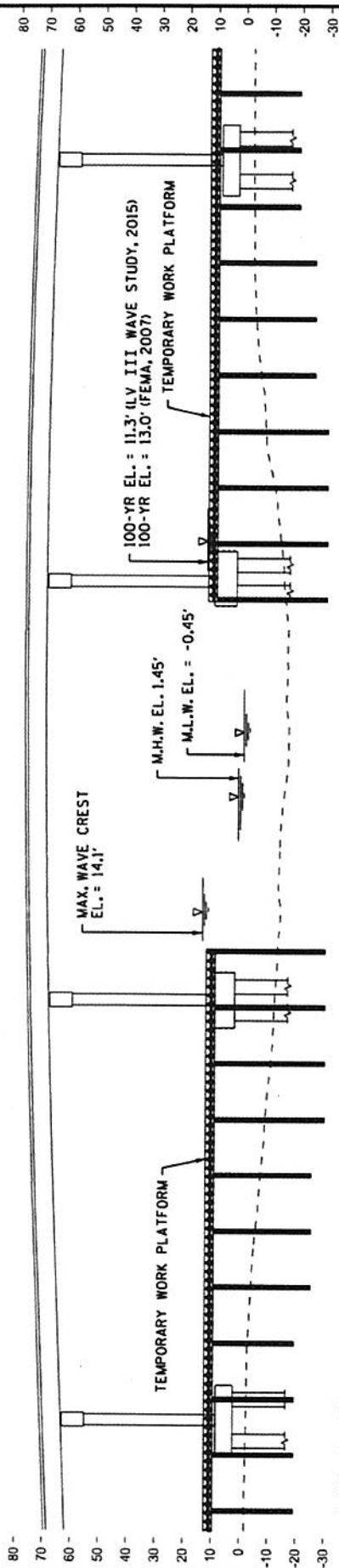
PROPOSED BRIDGE ON NC50 / NC210
BETWEEN US 17 AND TOPSAIL BEACH
OVER THE INTRACOASTAL WATERWAY



THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE
WITH THE REQUIREMENTS OF AASHTO LRFD BRIDGE
DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS
FOR VESSEL COLLISION



State of North Carolina
Department of Transportation
Raleigh, NC
Proposed Bridge
NC 50 / NC 210
between
US 17 and Topsail Beach
over the
Intracoastal Waterway, Mile Point 260.9
near
Surf City, NC
Pender County
State Project No. : B-4929
August 26, 2016
Sheet 4 of 8



100-YR EL. = 11.3' (LV III WAVE STUDY, 2015)
100-YR EL. = 13.0' (FEMA, 2007)

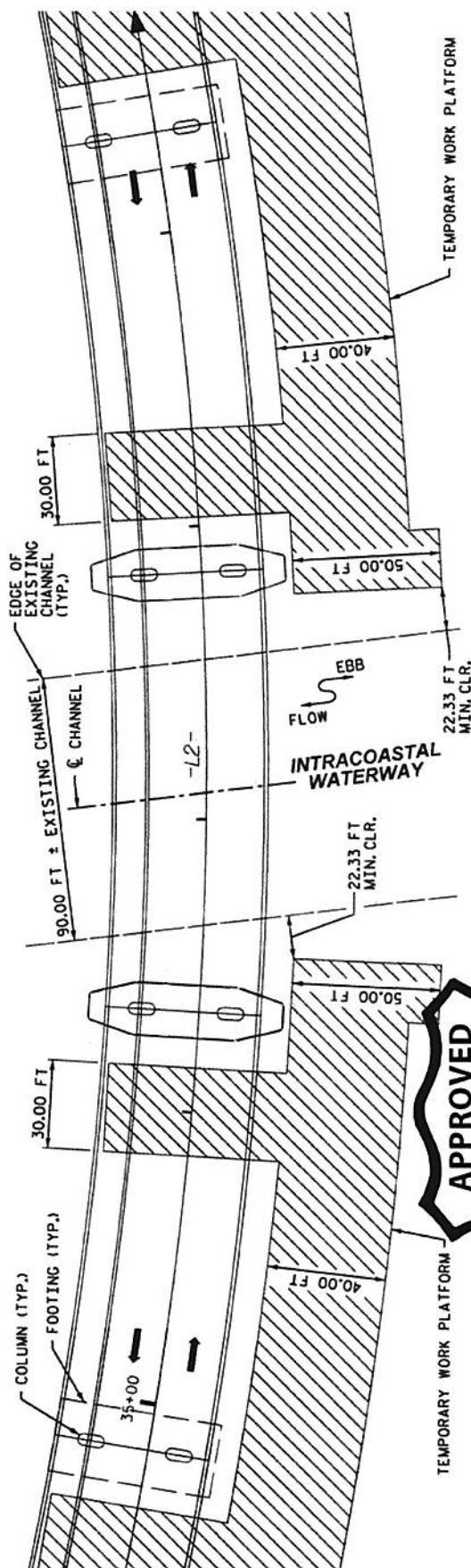
TEMPORARY WORK PLATFORM

M.H.W. EL. 1.45'

MAX. WAVE CREST
EL. = 14.1'

NOTE: ELEVATIONS ARE SHOWN IN DECIMAL FEET
DATUM: NAVD 1988

ELEVATION



THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS FOR VESSEL COLLISION.

State of North Carolina
Department of Transportation
Raleigh, NC

Proposed Bridge

NC 50 / NC 210

between
US 17 and Topsail Beach

Intracoastal Waterway, Mile Point 260.9
over the

near
Surf City, NC

Pender County

State Project No.: B-4929

August 26, 2016 Sheet 5 of 8

PLAN

APPROVED

27-SEP-2016

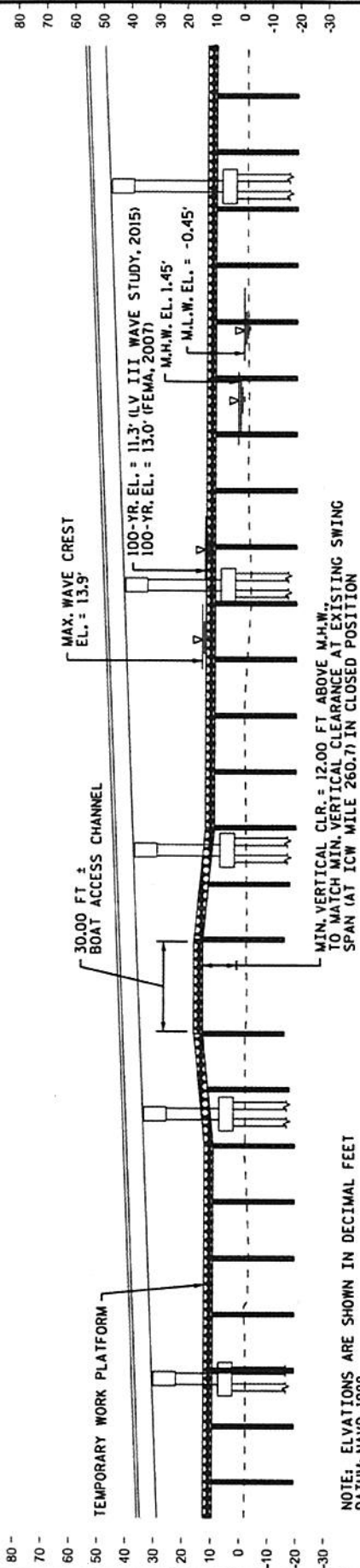
P(2-16-5)

U.S.

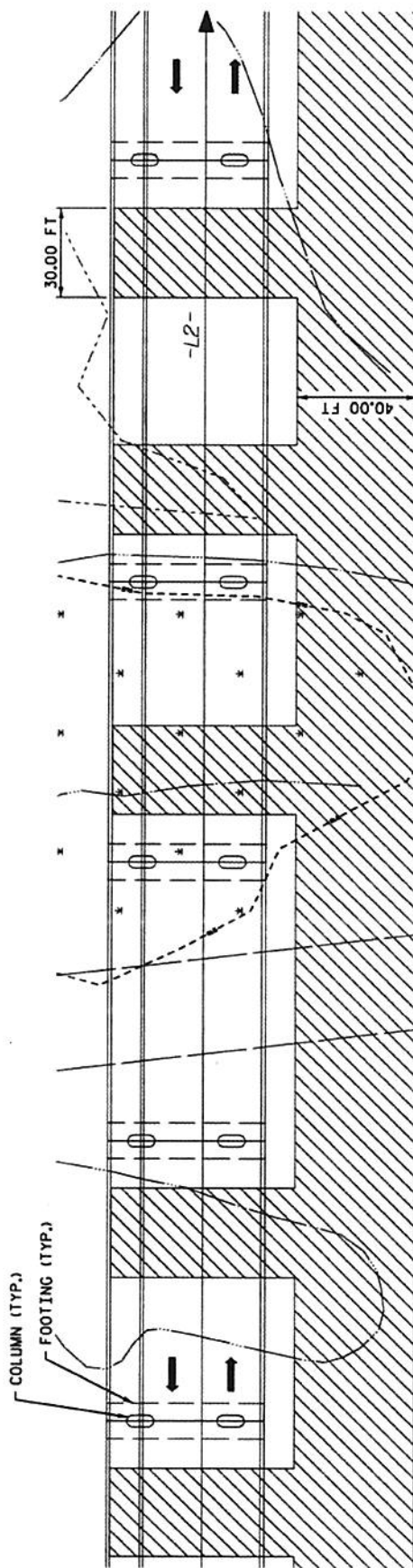
COAST GUARD

~~NAD 83/2017~~





ELEVATION



PLAN



THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE
WITH THE REQUIREMENTS OF ASHTO LRFD BRIDGE
DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS
FOR VESSEL COLLISION



State of North Carolina

Department of Transportation
Raleigh, NC

Proposed Bridge

on

NC 50 / NC 210

between

US 17 and Topsail Beach

over the

Intracoastal Waterway, Mile Point 260.9

near

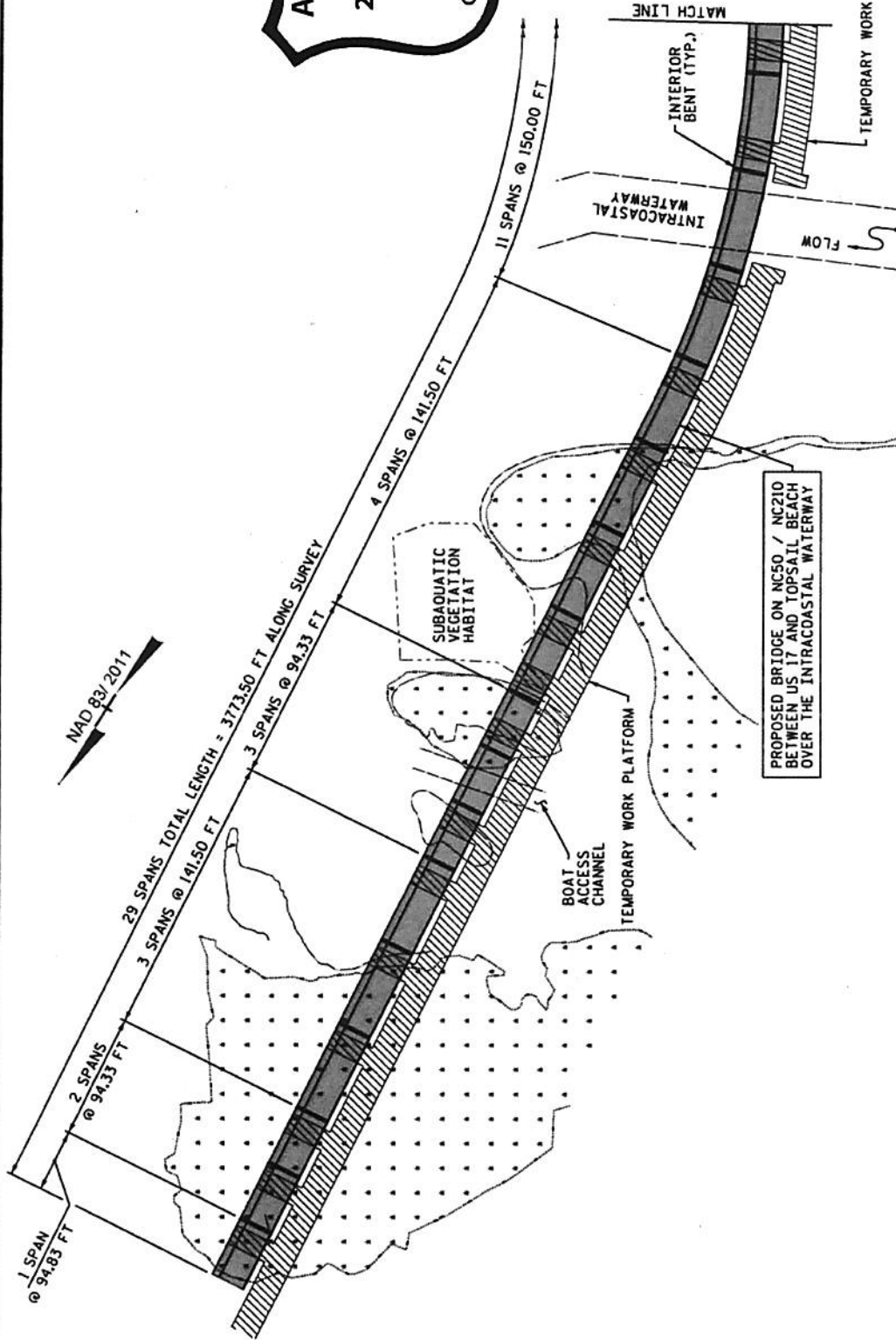
Surf City, NC

Pender County

State Project No. : B-4929

August 26, 2016

Sheet 5 of 8



PROPOSED BRIDGE ON NC50 / NC210
 BETWEEN US 17 AND TOPSAIL BEACH
 OVER THE INTRACASTAL WATERWAY



THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE
 WITH THE REQUIREMENTS OF ASHOTO BRIDGE
 DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS
 FOR VESSEL COLLISION



State of North Carolina Department of Transportation Raleigh, NC	Proposed Bridge on NC 50 / NC 210 between US 17 and Topsail Beach over the Intracoastal Waterway, Mile Point 260.9 near Surf City, NC
Pender County	State Project No. : B-4929
August 26, 2016	Sheet 7 of 8

PROPOSED BRIDGE ON NC50 / NC210
BETWEEN US 17 AND TOPSAIL BEACH
OVER THE INTRACOASTAL WATERWAY



State of North Carolina

Department of Transportation
Raleigh, NC

Proposed Bridge

NC 50 / NC 210

between

US 17 and Topsail Beach

over the

Intracoastal Waterway, Mile Point 260.9

near

Surf City, NC

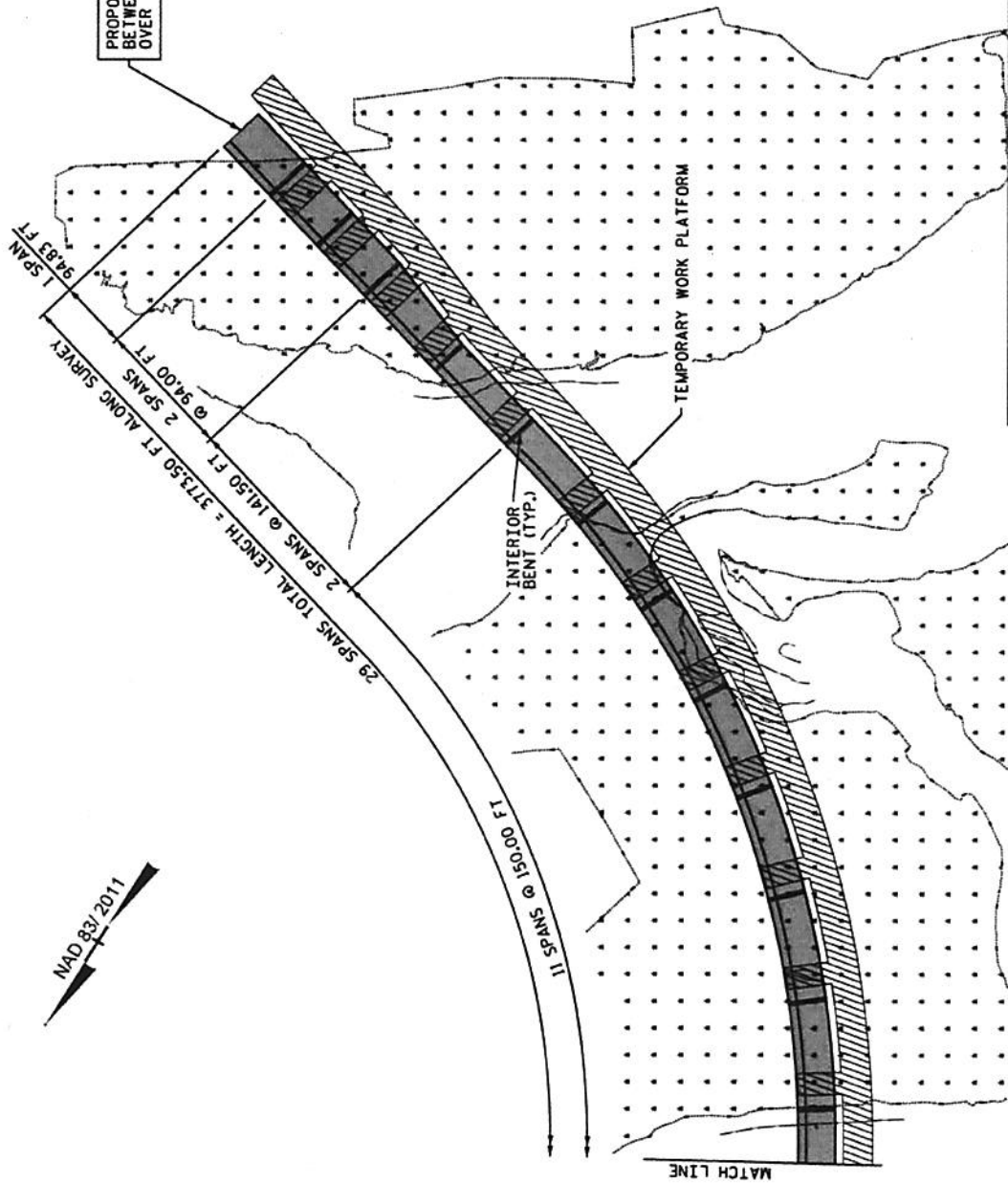
Pender County

State Project No. : B-4829

August 26, 2016

Sheet 8 of 8

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE
WITH THE REQUIREMENTS OF AASHTO LRFD BRIDGE
DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS
FOR VESSEL COLLISION



U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, VA 23704-5004
Staff Symbol: (dpb)
Phone: (757) 398-6629
Fax: (757) 398-6334
Email : traci.g.whitfield@uscg.mil
or CGDFiveBridges@uscg.mil

16591
22 AUG 2016

Mr. Chris Rivenbark
North Carolina Department of Transportation
Natural Environment Section
1598 Main Service Center
Raleigh, NC 27699-1598

Dear Mr. Rivenbark:

We reviewed the bridge lighting plan for the NC 210/50 Bridge over Intracoastal Waterway in Pender County, NC. The bridge lighting plan is approved and a copy is enclosed for your files. No deviation from the approved plan may be made unless the modifications are submitted to and approved by this office.

If you should have any questions regarding this matter, please contact Traci Whitfield at the above listed address or telephone number.

Sincerely,

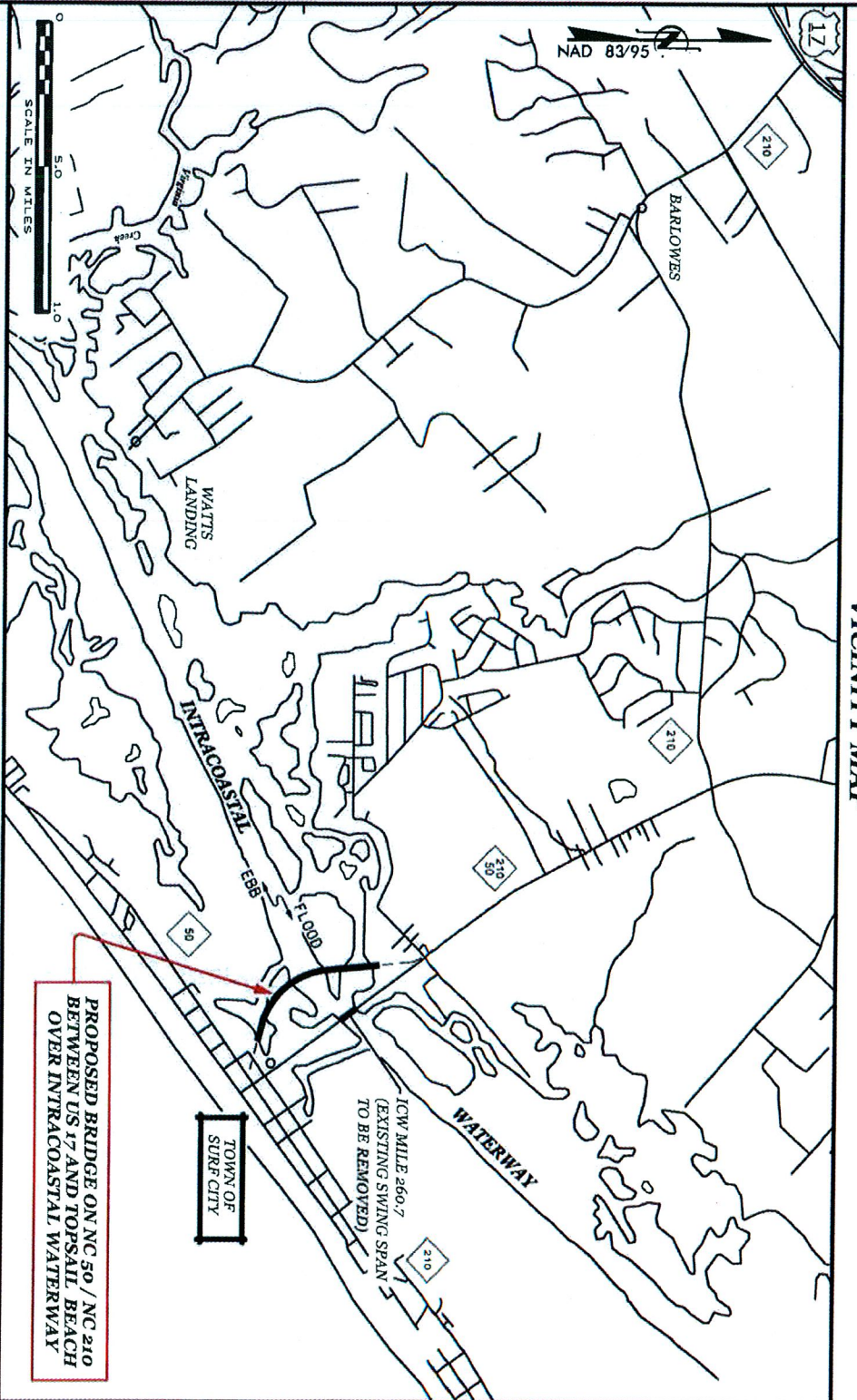
A handwritten signature in blue ink that reads "Hal R. Pitts".

HAL R. PITTS
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

Encl: Copy of approved navigational lighting plan

Copy: CG Sector North Carolina, Waterways Management w/encl

VICINITY MAP



PROPOSED BRIDGE ON NC 50 / NC 210
BETWEEN US 17 AND TOPSAIL BEACH
OVER INTRACOASTAL WATERWAY

A VESSEL IMPACT STUDY WAS PERFORMED FOR THE PROPOSED BRIDGE OVER THE INTRACOASTAL WATERWAY. NCDOT HAS SPECIFIED THAT, FOR THE PURPOSES OF VESSEL IMPACT RISK ANALYSIS, THE PROPOSED BRIDGE HAS AN OPERATIONAL CLASSIFICATION OF "CRITICAL". SITE-SPECIFIC DATA WAS COLLECTED AND AN ANALYSIS WAS PERFORMED IN ACCORDANCE WITH SECTION 3.14 - VESSEL COLLISION OF THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. MINIMUM DESIGN FORCE IS ASSOCIATED WITH A SINGLE 35' x 195' EMPTY, DRIFTING HOPPER BARGE IN ACCORDANCE WITH THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

Replaces Bridge No. 16

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS FOR VESSEL COLLISION.

State of North Carolina

Department of Transportation

Raleigh, NC

Proposed Bridge

NC 50 / NC 210

between

US 17 and Topsail Beach

over the

Intracoastal Waterway

near

Surf City, NC

Pender County

State Project No. : B-4928

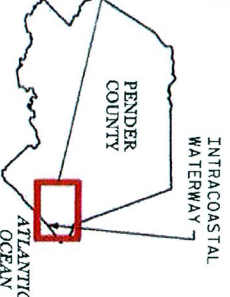
July 7, 2016 Sheet 1 of 2

Office, Commander, Fifth Coast Guard District
431 Crawford Street
Portsmouth, VA 23705

Navigational lights and/or other signs
approved as shown.

Chief, Bridge Administrator

Date



7/7/16

SEE SHEET 3 OF 7

150'-0"

ALONG SURVEY LINE

150'-0"

SEE SHEET 3 OF 7

3.9000% Δ -3.6000%
PI = 37+50.00
EL = 81.30'
VC = 400'

65'-0" MINIMUM VERTICAL
CLEARANCE ABOVE M.H.W.

0100 WSEL = 11.3'

EL -2.7 ±

EL -6.8 ±

EL -12.8 ±

EL -13.6 ±

EL -12.9 ±

EL -13.4 ±

EL -16.0 ±

EL -16.3 ±

EL -15.2 ±

EL -16.0 ±

EL -14.4 ±

EL -7.8 ±

EL -5.0 ±

EL -3.0 ±

EL -3.1 ±

M.T.L. ELEV. = -0.45'

MAX. WAVE CREST
ELEV. = 14.1'

NOTE: ELEVATIONS ARE SHOWN IN DECIMAL FEET
DATUM: NAVD 1988

ELEVATION

Δ MEASURED NORMAL TO CHANNEL

120'-0"
MINIMUM CLEARANCE BETWEEN FOOTINGS

90'-0"
NAVIGABLE CHANNEL Δ

TOWN OF SEAB

Office, Commander, Fifth Coast Guard District
431 Crawford Street
Portsmouth, VA 23705
Navigational lights and/or other signals
approved as shown.
Chief Bridge Administrator
Date 6/14/16

-L2- CURVE DATA

PI STA. 43+66.28
 Δ = 69°48'47.1" (L.T.)
D = 4°10'55.8"
L = 1,669.30'
T = 955.95'
R = 1,370.00'

- A 360° GREEN NAVIGATION LIGHT
CHANNEL CENTERLINE
- B 180° RED NAVIGATION LIGHT
CHANNEL MARGIN
- DENOTES APPROXIMATE WATER
DEPTH AT MEAN LOW WATER

PLAN



THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE
WITH THE REQUIREMENTS OF AASHTO LRFD BRIDGE
DESIGN SPECIFICATIONS, INCLUDING REQUIREMENTS
FOR VESSEL COLLISION.

State of North Carolina
Department of Transportation
Raleigh, NC

Proposed Bridge
on
NC 50 / NC 210
between

US 17 and Topsail Beach
over the
Intracoastal Waterway
near
Surf City, NC

Pender County

State Project No.: B-4929
July 7, 2016 Sheet 2 of 2

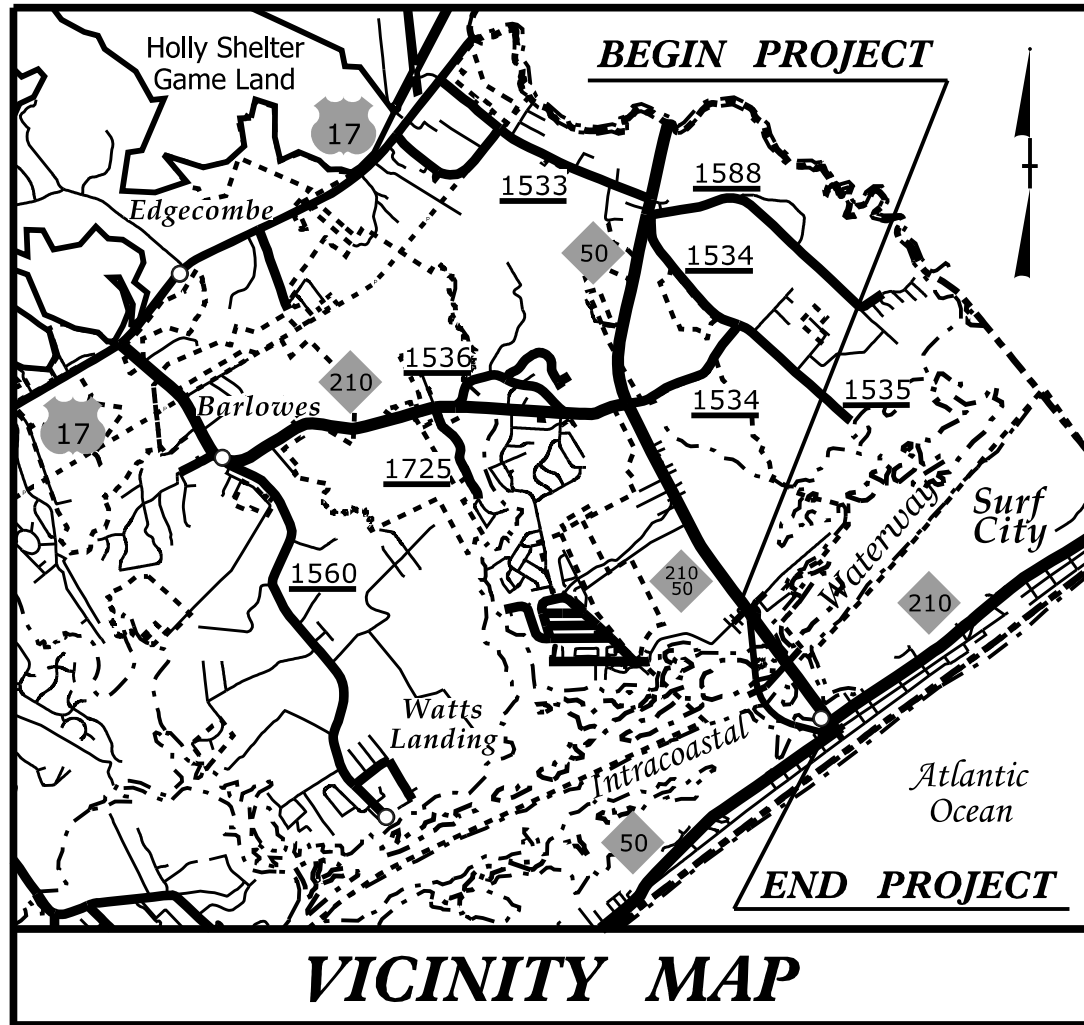
2/4/16

I:\19\2016
R:\Hydraulics\PERMITS-Environmental\Drawings\B4929_hyd_prm.tsh.dgn
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09/08/99

CONTRACT:

TIP PROJECT: B-4929



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PENDER COUNTY

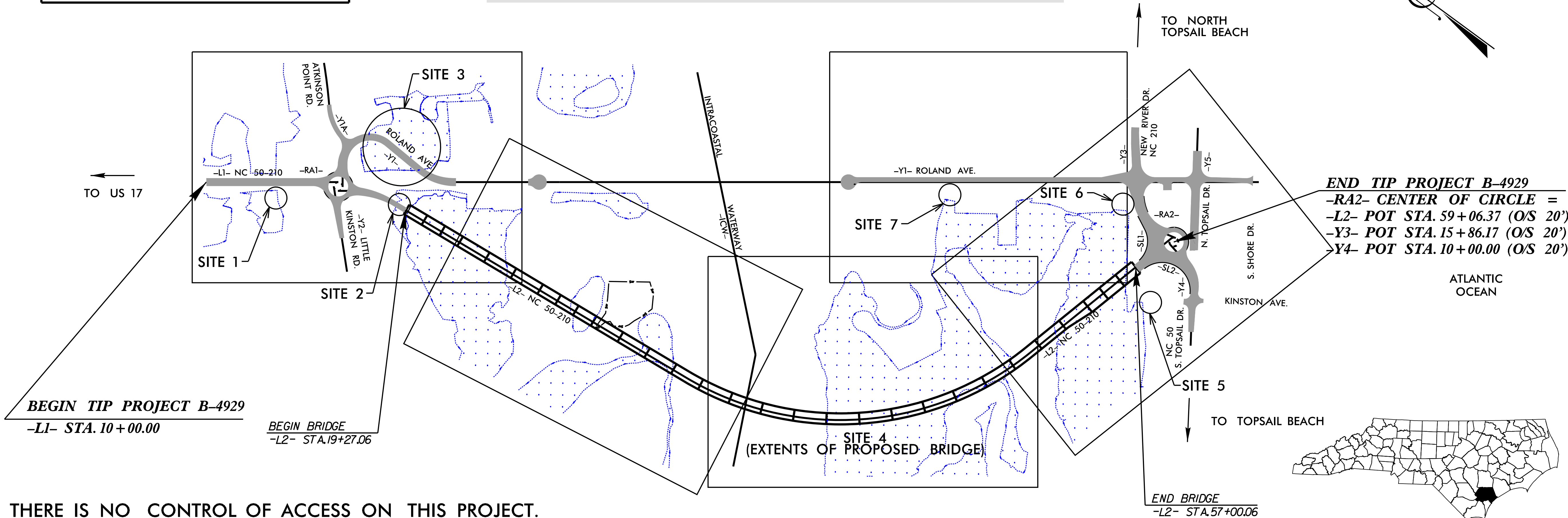
LOCATION: BRIDGE NO.16 OVER THE INTRACOASTAL
WATERWAY ON NC 50-210

TYPE OF WORK: GRADING, PAVING, RESURFACING,
DRAINAGE, STRUCTURE, AND WALLS

WETLAND AND SURFACE WATER IMPACTS PERMIT

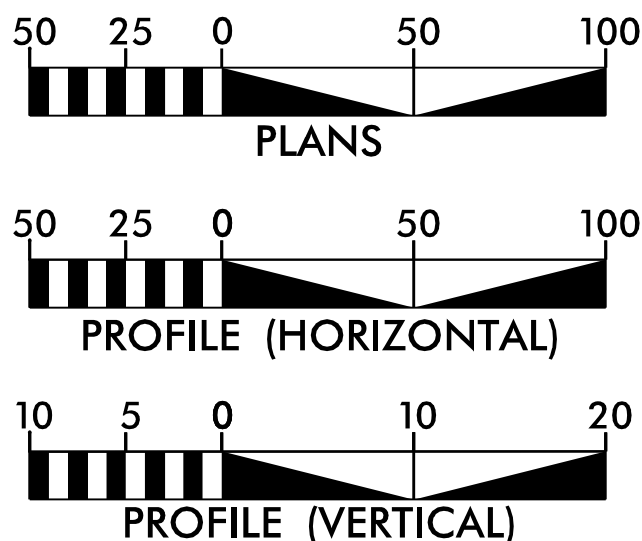
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4929	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40233.1.1	N/A	PE	
40233.2.1	N/A	R/W	
40233.2.U1	N/A	UTL	

PERMIT DRAWING
SHEET 1 OF 21



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
THIS PROJECT IS WITHIN THE MUNICIPAL ETJ BOUNDARIES OF SURF CITY.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

GRAPHIC SCALES



DESIGN DATA

ADT 2017 = 17,200
ADT 2035 = 30,000
K = 9 %
D = 55 %
T = 3 % *
V = 40 MPH
* TTST =1% DUAL =2%
FUNC CLASS =
MAJOR COLLECTOR
STATEWIDE TIER

PROJECT LENGTH

TIP B-4929 LENGTH ROADWAY = 0.215 MILES
TIP B-4929 LENGTH STRUCTURE = 0.715 MILES
TIP B-4929 TOTAL LENGTH = 0.930 MILES

-L1- AND -L2- USED TO CALCULATE PROJECT LENGTH

PLANS PREPARED BY:

RS&H

1520 SOUTH BOULEVARD
SUITE 200
CHARLOTTE, NC 28203
(704) 940-4780

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

AUGUST 31, 2015

LETTING DATE:

FEBRUARY 21, 2017

JENNIFER FARINO, PE
PROJECT ENGINEER

SEAN KORTOVICH, EI
PROJECT DESIGNER

TONY HOUSER, PE
NCDOT CONTACT

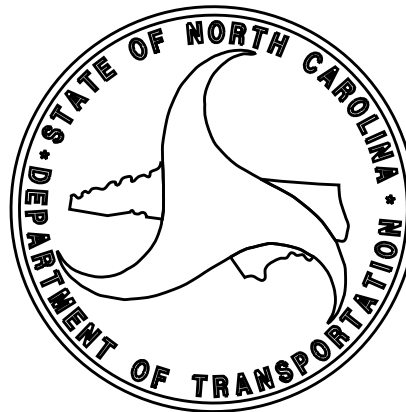
HYDRAULICS
ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.

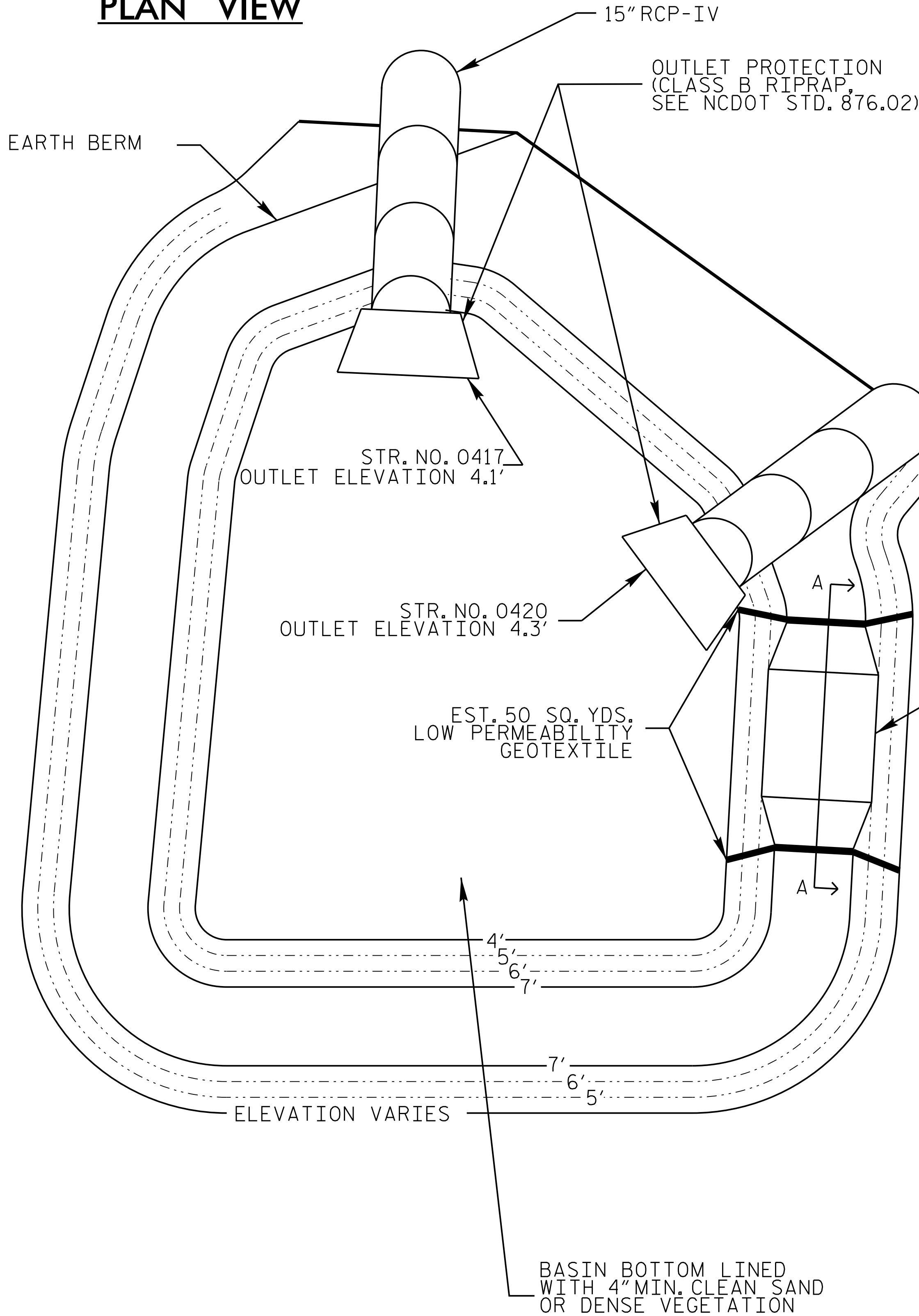
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



2/4/16

INFILTRATION BASIN NO. 1 DETAIL

PLAN VIEW



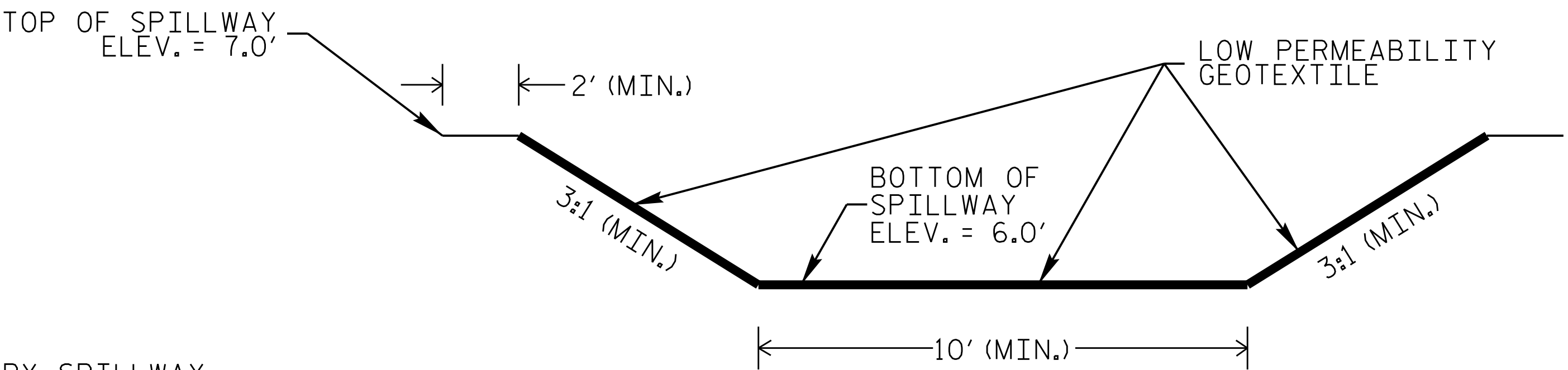
EXCAVATION (CY)	300
EARTH BERM (CY)	265
SAND (CY)	50
GEOTEXTILE (SY)	50

PROJECT REFERENCE NO. B-4929	SHEET NO. 2D-1
HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

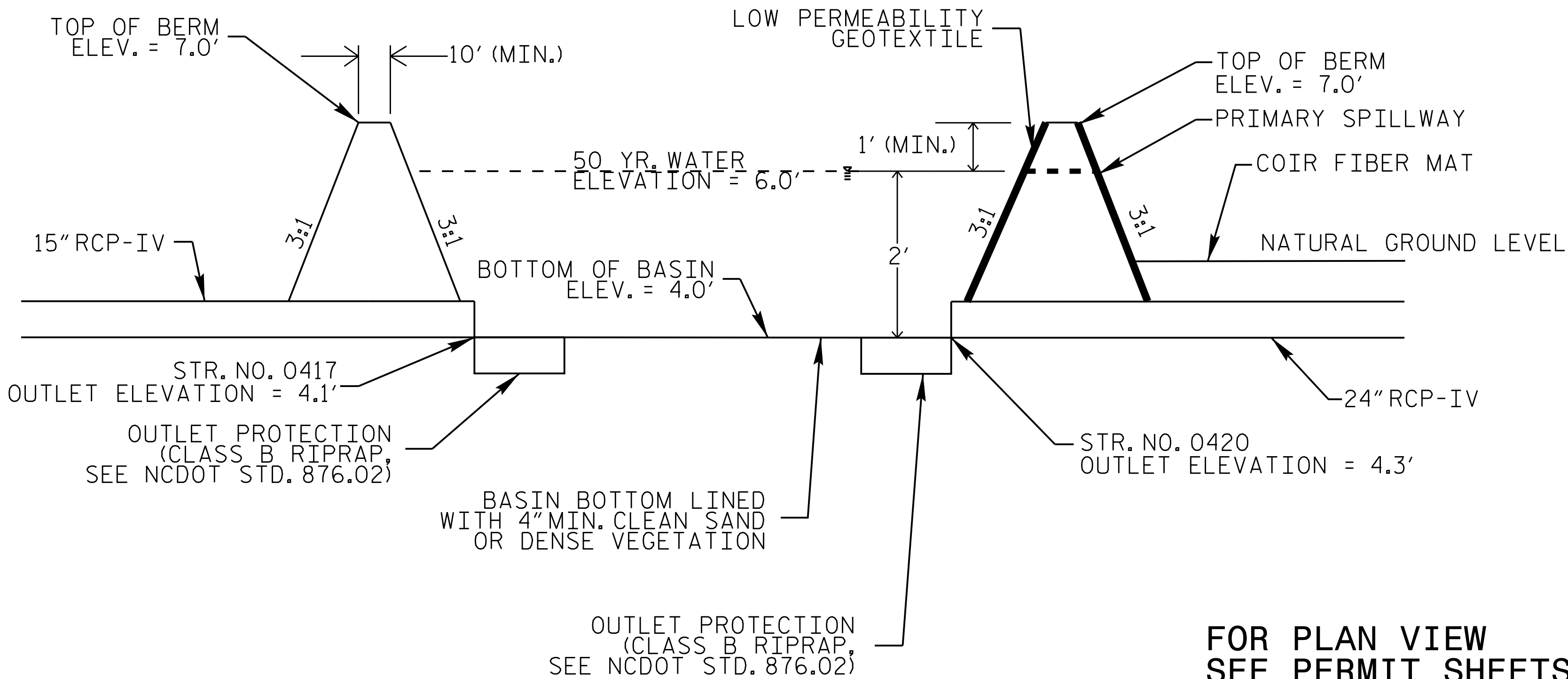
RS&H

**PERMIT DRAWING
SHEET 2 OF 21**

PRIMARY SPILLWAY SECT A-A



PROFILE VIEW (TYPICAL SECTION)



NOTES

1. DO NOT EXCAVATE BELOW SEASONAL HIGH WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.

FOR PLAN VIEW
SEE PERMIT SHEETS
5 AND 6

NOT TO SCALE

2/4/16

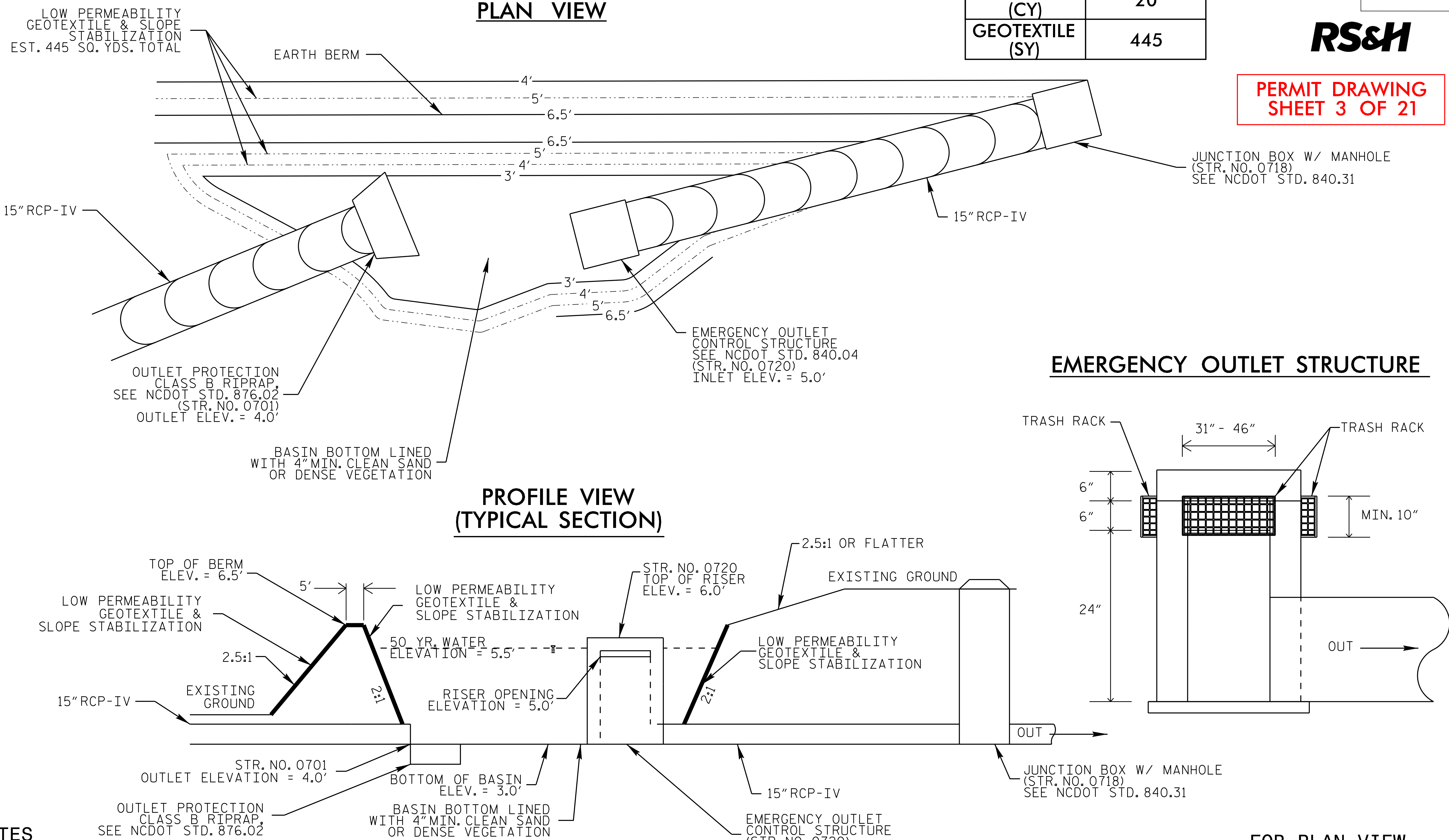
INFILTRATION BASIN NO. 2 DETAIL

PROJECT REFERENCE NO.	SHEET NO.
B-4929	2D-2
HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

EXCAVATION (CY)	215
EARTH BERM (CY)	130
SAND (CY)	20
GEOTEXTILE (SY)	445

RS&H

PERMIT DRAWING
SHEET 3 OF 21



NOTES

1. DO NOT EXCAVATE WITHIN ONE FOOT OF SEASONAL HIGH WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3.5 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.

FOR PLAN VIEW
SEE PERMIT SHEETS
14 AND 15

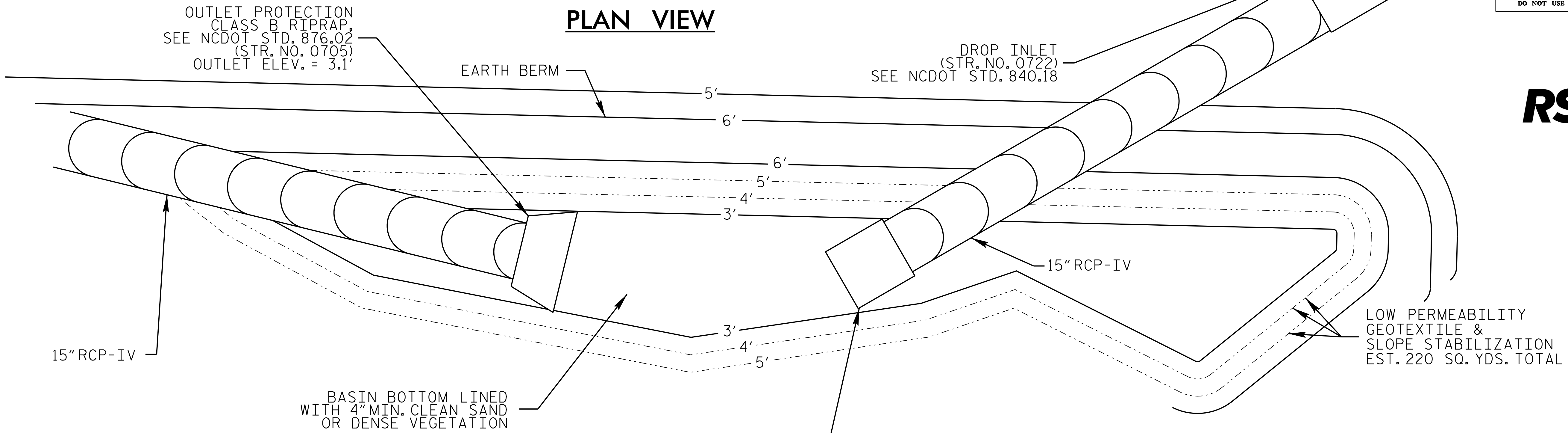
NOT TO SCALE

2/4/16

INFILTRATION BASIN NO. 3 DETAIL

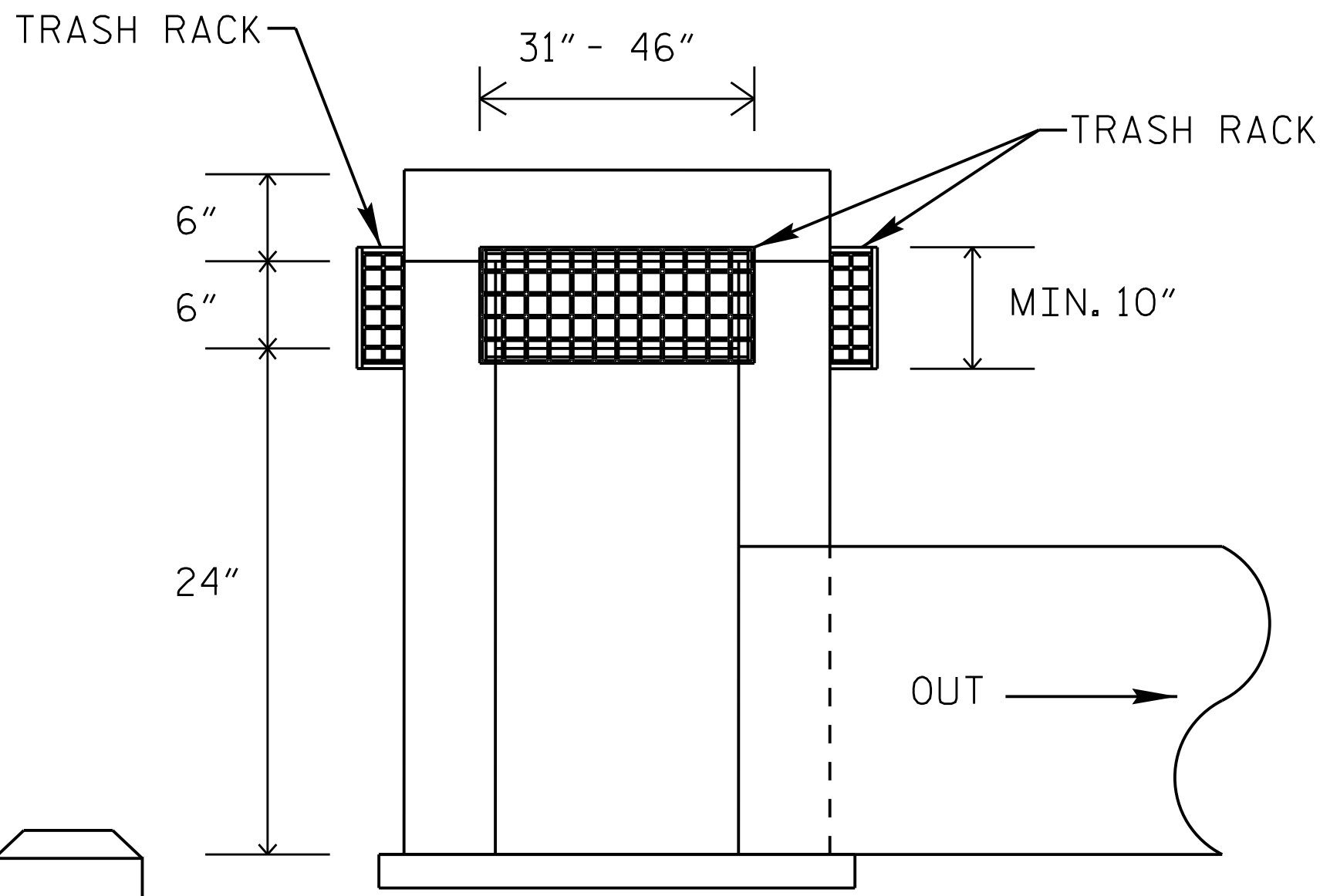
PROJECT REFERENCE NO.	SHEET NO.
B-4929	2D-3
HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

RS&H

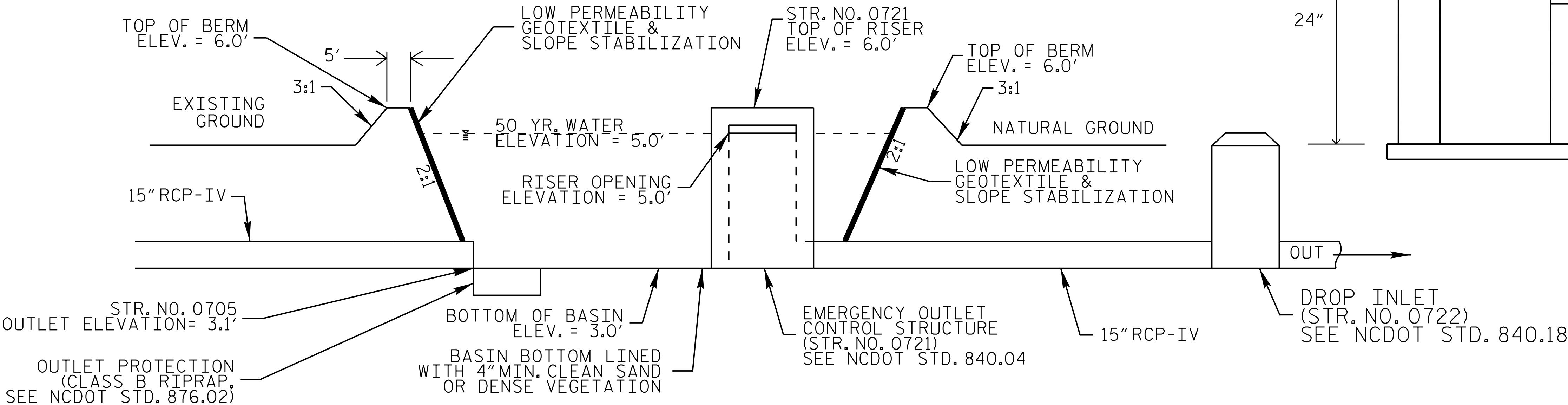


EXCAVATION (CY)	190
EARTH BERM (CY)	55
SAND (CY)	17
GEOTEXTILE (SY)	220

EMERGENCY OUTLET STRUCTURE



PROFILE VIEW (TYPICAL SECTION)



NOTES

- DO NOT EXCAVATE WITHIN ONE FOOT OF SEASONAL HIGH WATER TABLE.
- LIMIT EARTH BERM HEIGHT TO 3 FT.
- AVOID COMPACTING BOTTOM OF BASIN.

**PERMIT DRAWING
SHEET 4 OF 21**

FOR PLAN VIEW
SEE PERMIT SHEETS
14 AND 15

NOT TO SCALE

PERMIT DRAWING
SHEET 5 OF 21

DETAIL A
STANDARD 'V' DITCH
(Not to Scale)

S = 0.3%
DDE = 4.8 C.Y.

Min. D = 1.0 Ft.

FROM -Y1- STA. 11+22 TO 11+26 (RT)

20

-YI- SIA. 20+00

MATCH TO SHEET 8

GRAVEL

SITE 2

(SEE ENLARGEMENT 1 ON PERMIT DRAWING
SHEET 7 OF 21)

	DENOTES FILL IN WETLAND
	DENOTES HAND CLEARING
	DENOTES MECHANIZED CLEARING
	DENOTES EXCAVATION WETLAND

DETAIL B
SPECIAL LATERAL "V" DITCH
(Not to Scale)

Natural Ground

3:1

D

3:1 or Flatter

Fill Slope

Min. D= 1.0 Ft.

FROM -L1- STA. 13+00 RT TO STA. 13+75 RT

**SPECIAL LATERAL "V" DITCH
SEE DETAIL "B"
GRASSED SWALE DITCH**

**-L- STA. 13+00 TO 13+75 R
DA=0.5 ACRES C=0.75
Q10=CIA=(0.75)(2.4)(.5)=0.96
SLOPE:FRONT=3:1 BACK=3:1
LONGITUDINAL=0.30%
REQUIRED LENGTH=50 FT.
ACTUAL LENGTH=51 FT.
V10=1.8FPS D10=0.41FT.**

-L- STA. 11+22 TO 11+26 RT
 DA=0.4 ACRES C=0.75
 Q10=CIA=(0.75)(4.33)(.4)=1.3C
 SLOPE:FRONT=3:1 BACK=3:1
 LONGITUDINAL=0.30%
 REQUIRED LENGTH=40 FT.
 ACTUAL LENGTH=43 FT.
 V10=1.1FPS D10=0.64FT

15% RCB-IV

EST 2 TONS CL B RIP RAP
EST 7 SY GEOTEXTILE

STANDARD V DITCH
SEE DETAIL A
TIE TO EXISTING SWALE

EXISTING R/L

EST 2 TONS CL B RIP RAP
EST 7 SY GEOTEXTILE

NO GRADING
PAVEMENT REMOVAL ONLY

2/4/16

REVISIONS

3/17/99

\\031-3\313\Hydraulics\PERMITS-Environmental\Drawings\B4929_hyd-prm_psh-05.dgn
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PERMIT DRAWING
SHEET 6 OF 21

DETAIL A
STANDARD 'V' DITCH
(Not to Scale)

S = 0.3%
DDE = 4.8 C.Y.

Min. D = 1.0 Ft.

FROM -Y1- STA. 11+22 TO 11+26 (RT)

20

2

1

ATT

8/17/99

R:\Hydraulics\PERMITS-Environmental\Drawings\B4929_hyd-prm-psh-06-con.dgn
11/13/2016 11:12:24 AM

	DENOTES FILL IN WETLAND
	DENOTES HAND CLEARING
	DENOTES MECHANIZED CLEARING
	DENOTES EXCAVATION IN WETLAND

DETAIL B
SPECIAL LATERAL 'V' DITCH
(Not to Scale)

Min. D = 1.0 Ft.

FROM -L1- STA. 13+00 RT TO STA. 13+75 RT

SPECIAL LATERAL "V" DITCH
SEE DETAIL B
GRASSED SWALE DITCH

-L- STA. 13+00 TO 13+75 R
DA=0.5 ACRES C=0.75
Q10=CIA=(0.75)(2.4)(.5)=0.96
SLOPE:FRONT=3:1 BACK=3:1
LONGITUDINAL=0.30%
REQUIRED LENGTH=50 FT.
ACTUAL LENGTH=51 FT.
V10=1.8FPS D10=0.41FT.

SITE 2

(SEE ENLARGEMENT 1 ON PERMIT DRAWING
SHEET 7 OF 21)

A horizontal scale bar representing 50 feet. The bar is divided into two main sections. The left section, labeled '50'', is filled with a black and white checkerboard pattern. The right section, labeled '5'', is solid black. A vertical line marks the '0'' point at the boundary between the two sections.

2/4/16

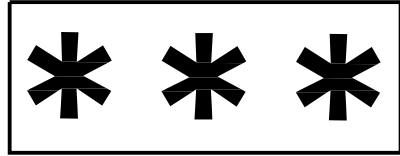
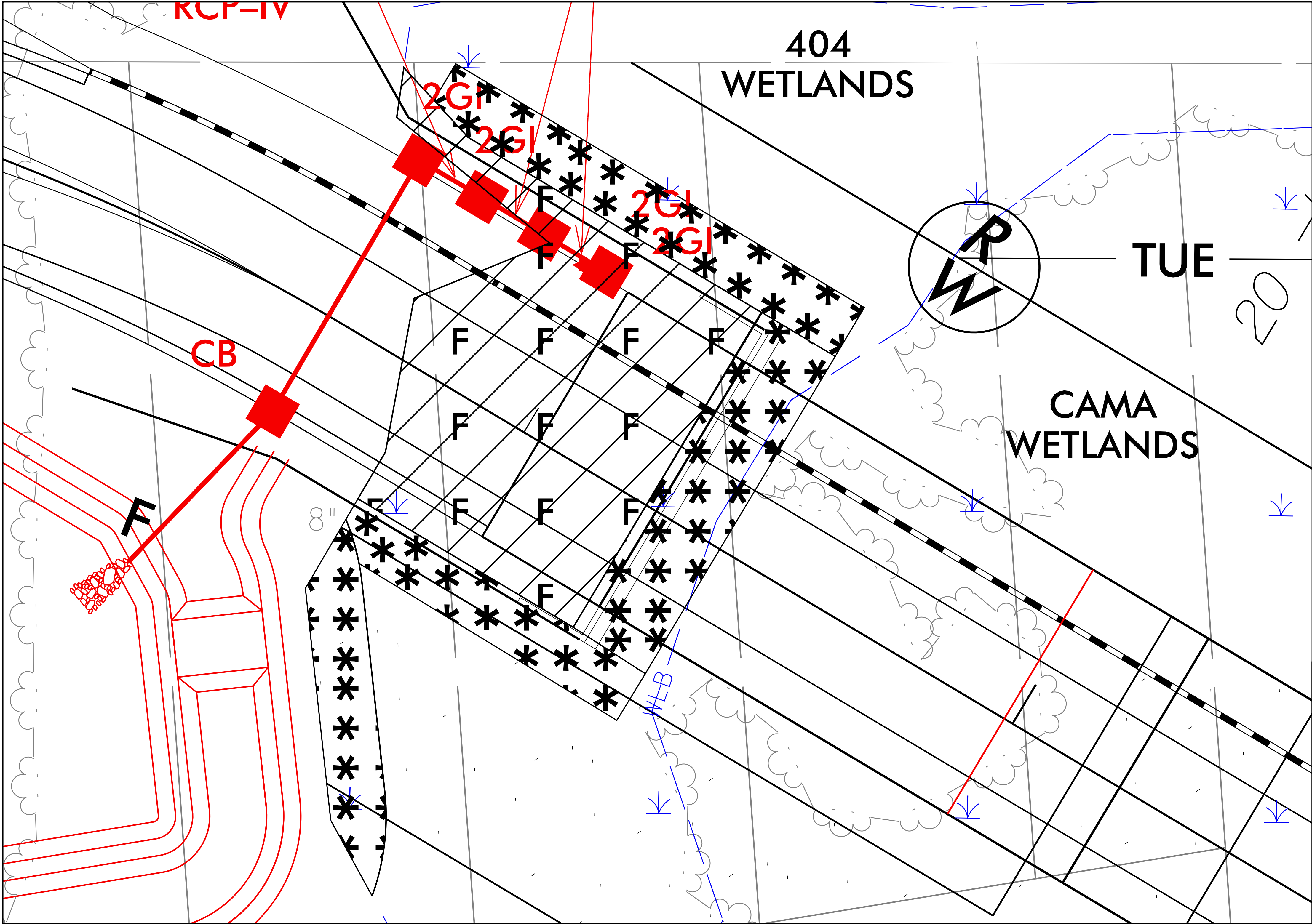
8/17/99

REVISIONS

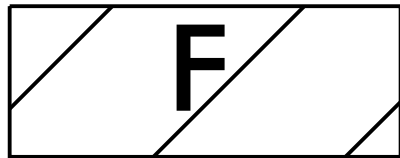
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ENLARGEMENT 1

NAD 83/NA 2011



DENOTES MECHANIZED
CLEARING

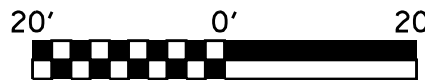


DENOTES FILL IN
WETLAND

PROJECT REFERENCE NO.	SHEET NO.
B-4929	
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

RS&H

PERMIT DRAWING
SHEET 7 OF 21



WETLANDS
BOUNDARY
230.2 FT.
(RIGHT OF CL)

SITE 1

-L1- 13 + 00

SITE 2

**WETLANDS
BOUNDARY**

-L2- 19 + 00

SITE 3



WETLANDS
BOUNDARY

-Y1-	13 + 00
------	---------

**PERMIT DRAWING
SHEET 8 OF 21**

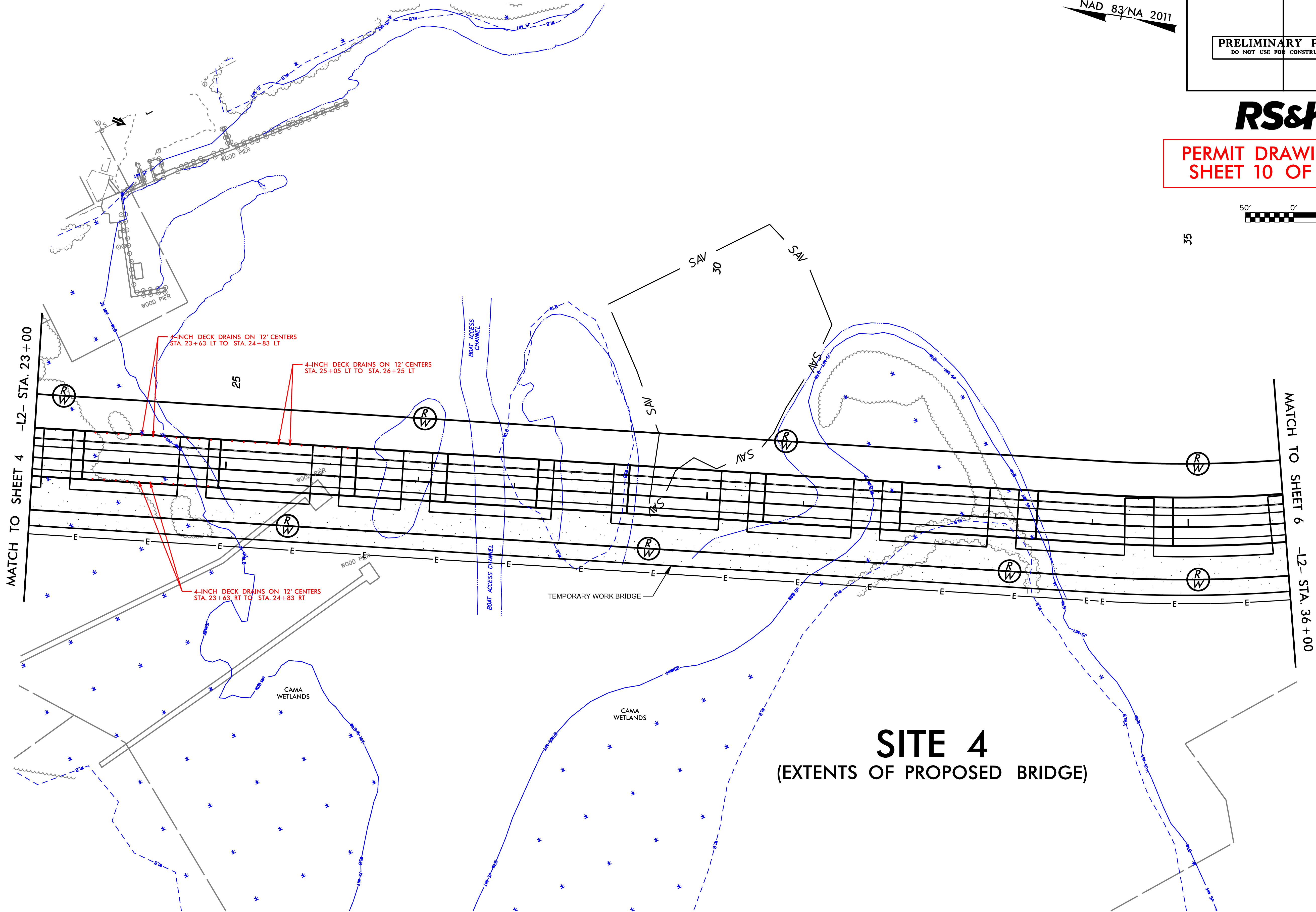


2/4/16

8/17/99

REVISIONS

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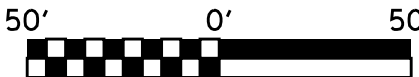


NAD 83/NA 2011

PROJECT REFERENCE NO.		SHEET NO.	
B-4929		5	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

RS&H

PERMIT DRAWING
SHEET 10 OF 21



35

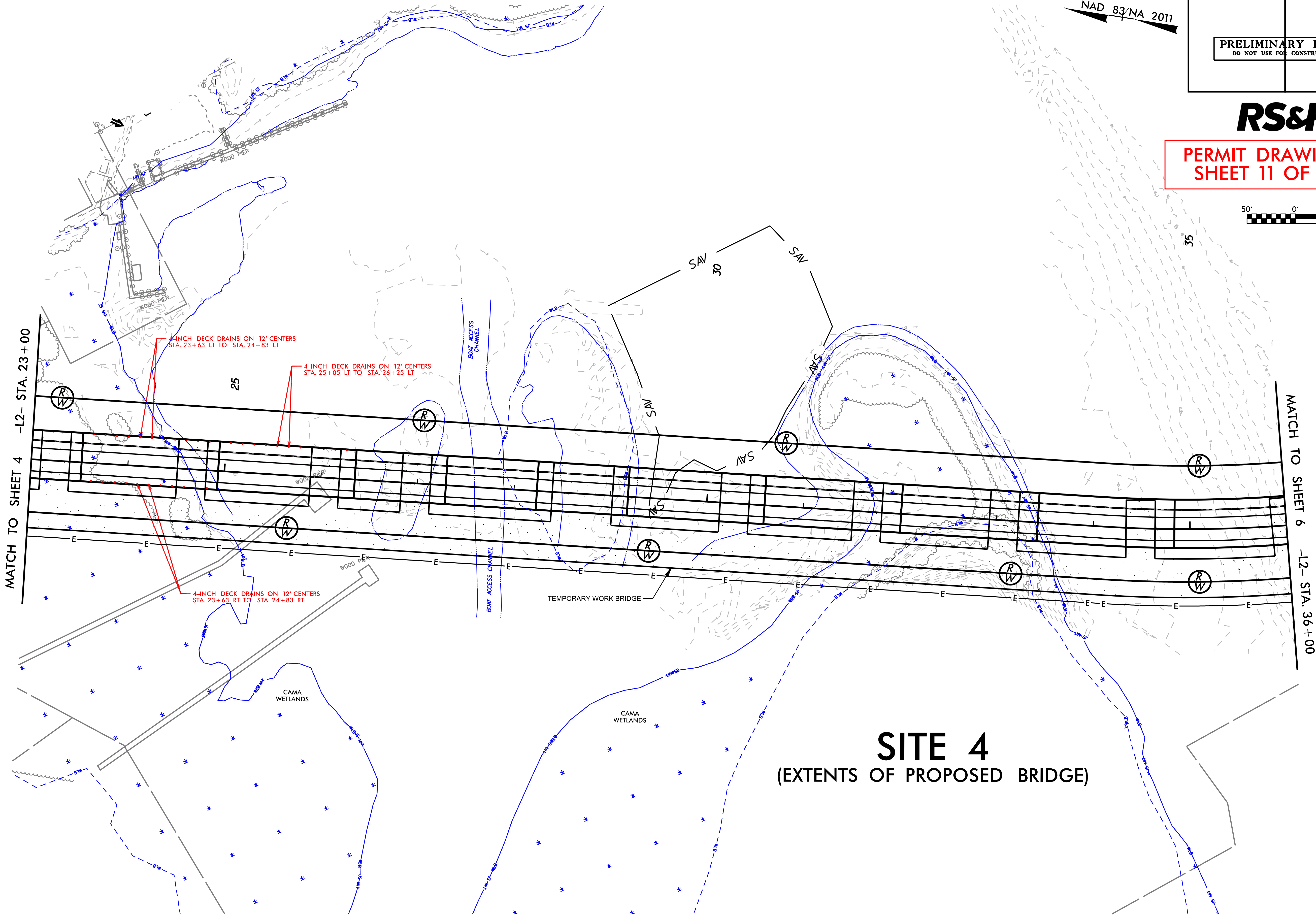
SITE 4
(EXTENTS OF PROPOSED BRIDGE)

2/4/16

8/17/99

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REVISIONS



PROJECT REFERENCE NO.		SHEET NO.	
B-4929		5	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

RS&H

PERMIT DRAWING
SHEET 11 OF 21

NAD 83/NA 2011



SITE 4
(EXTENTS OF PROPOSED BRIDGE)

2/4/16

8/17/99

REVISIONS

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MATCH TO SHEET 8 -ICW- STA. 19+25

MATCH TO SHEET 5 -L2- STA. 36+00

NAD 83/NA 2011

PROJECT REFERENCE NO.		SHEET NO.
B-4929		6
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION		

RS&H

PERMIT DRAWING
SHEET 12 OF 21



MATCH TO SHEET 7 -L2- STA. 50+00

SITE 4
(EXTENTS OF PROPOSED BRIDGE)

TEMPORARY WORK BRIDGE

FOR -L2- PROFILE, SEE SHEET 11

2/4/16

8/17/99

REVISIONS

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MATCH TO SHEET 8 -ICW- STA. 19+25

MATCH TO SHEET 5 -L2- STA. 36+00

MATCH TO SHEET 7 -L2- STA. 50+00

SITE 4
(EXTENTS OF PROPOSED BRIDGE)

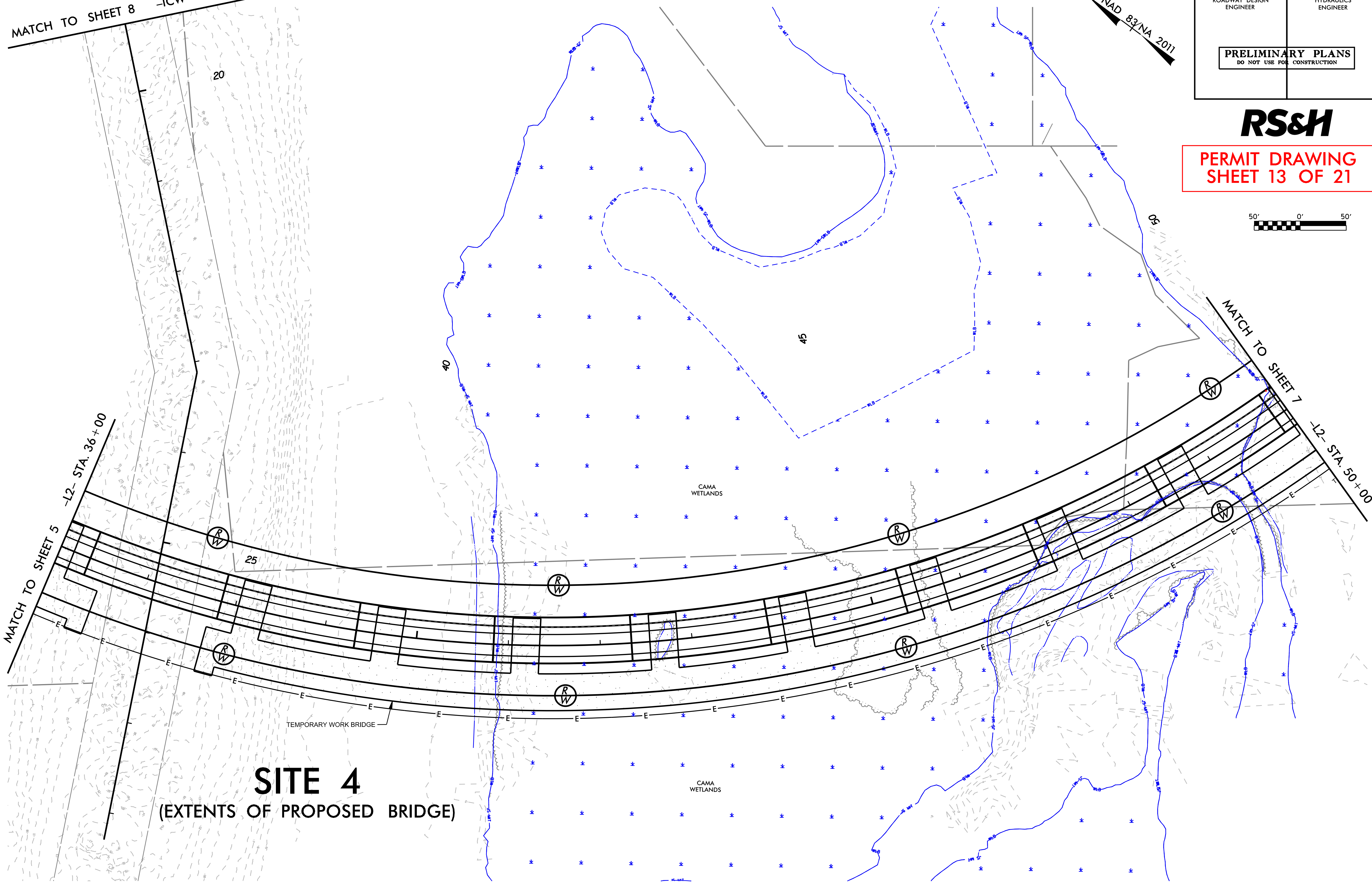
TEMPORARY WORK BRIDGE

PROJECT REFERENCE NO.		SHEET NO.	
B-4929		6	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

RS&H

PERMIT DRAWING
SHEET 13 OF 21

NAD 83/NA 2011

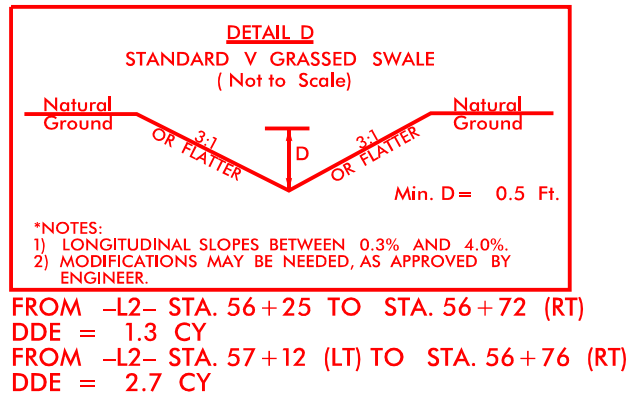
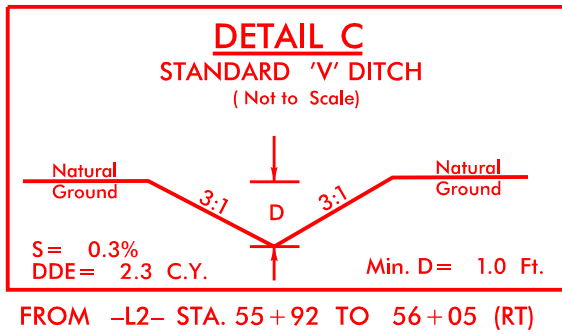


FOR -L2- PROFILE, SEE SHEET 11

2/4/16

8/17/99

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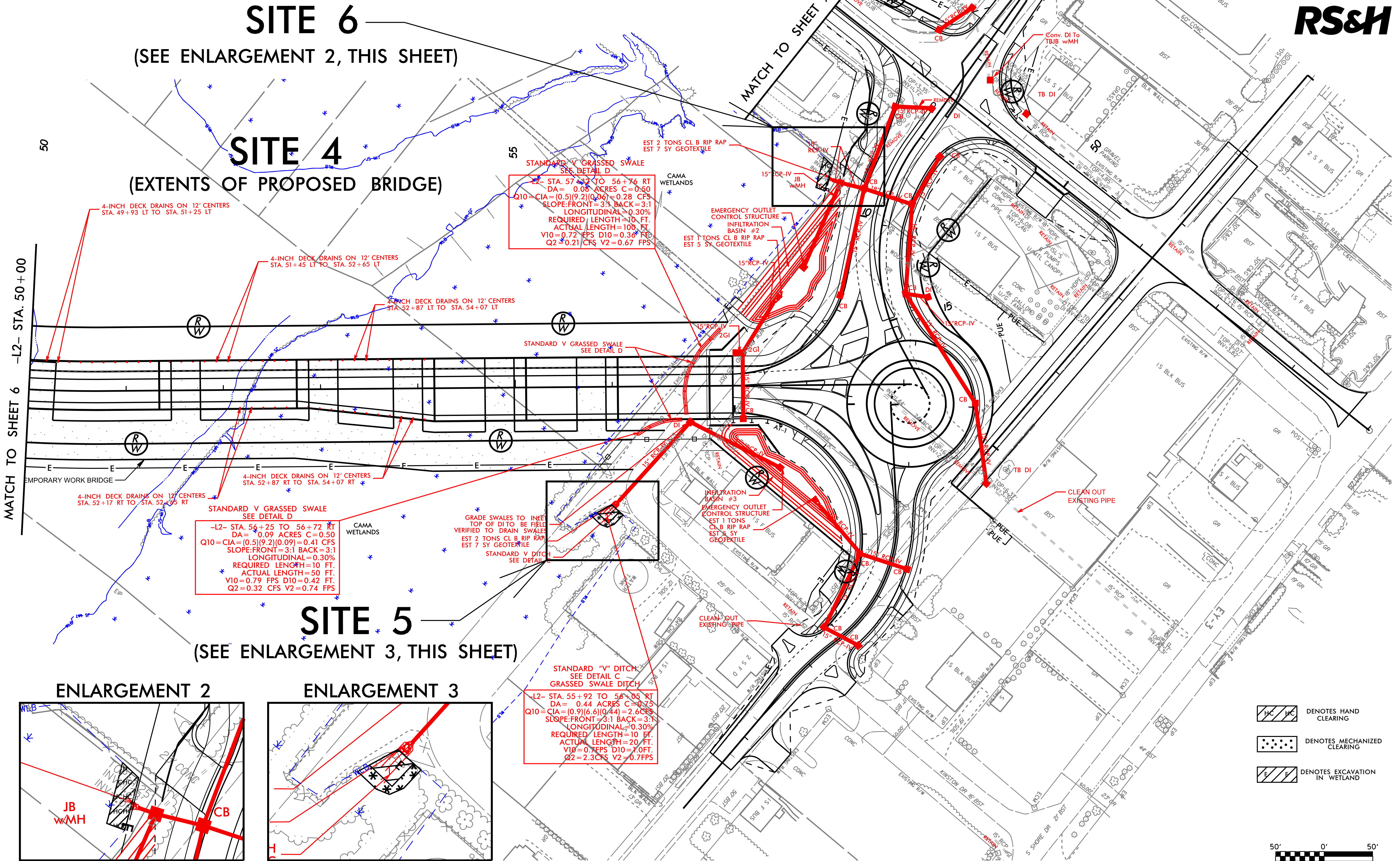


**PERMIT DRAWING
SHEET 14 OF 21**

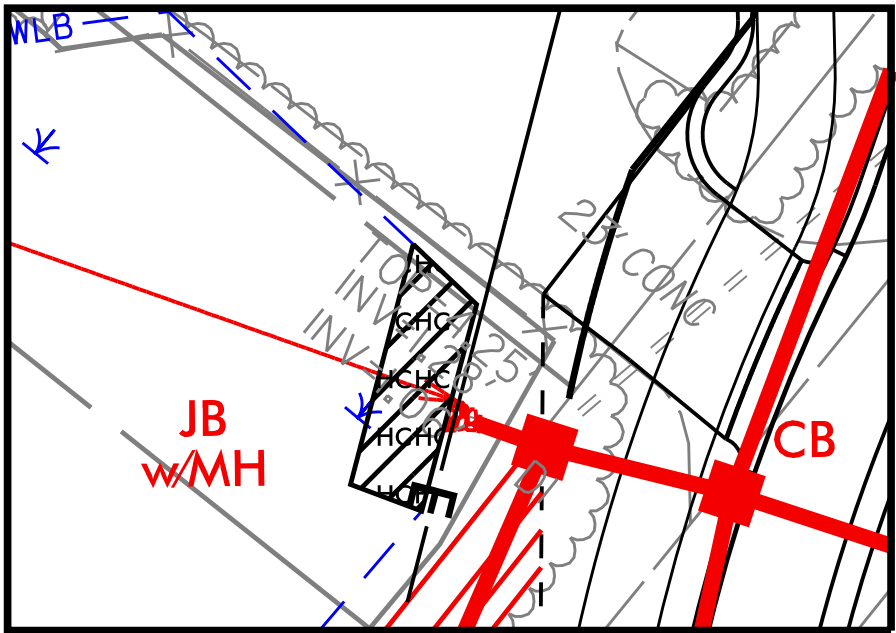
NAD 83/NA 2011

PROJECT REFERENCE NO.	SHEET NO.
B-4929	7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

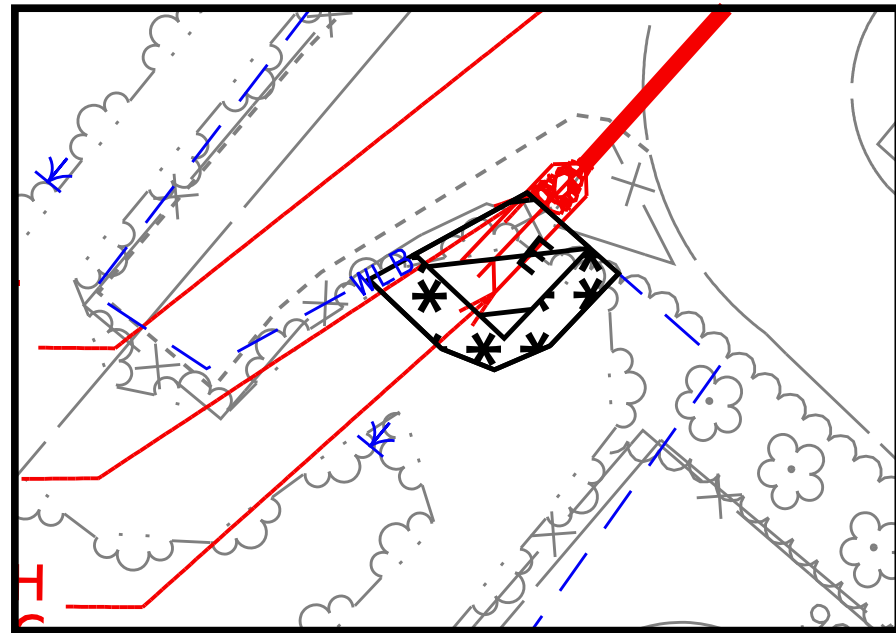
RS&H



ENLARGEMENT 2



ENLARGEMENT 3



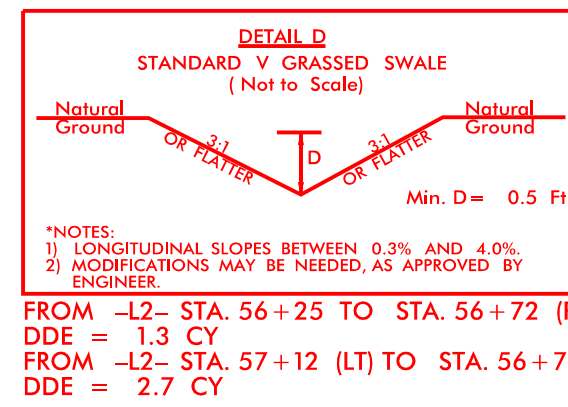
STANDARD 'V' DITCH
SEE DETAIL C
GRASSED SWALE DITCH

-L2- STA. 55+92 TO 56+05 RT
DA = 0.44 ACRES C=0.50
Q10=CIA=(0.9)(6.6)(0.44)=2.6 CFS
SLOPE: FRONT=3:1 BACK=3:1
LONGITUDINAL=0.30%
REQUIRED LENGTH=10 FT.
ACTUAL LENGTH=20 FT.
V10=0.79 FPS D10=0.42 FT.
Q2=2.3 CFS V2=0.7 FPS

- DENOTES HAND CLEARING
- DENOTES MECHANIZED CLEARING
- DENOTES EXCAVATION IN WETLAND

50' 0' 50'

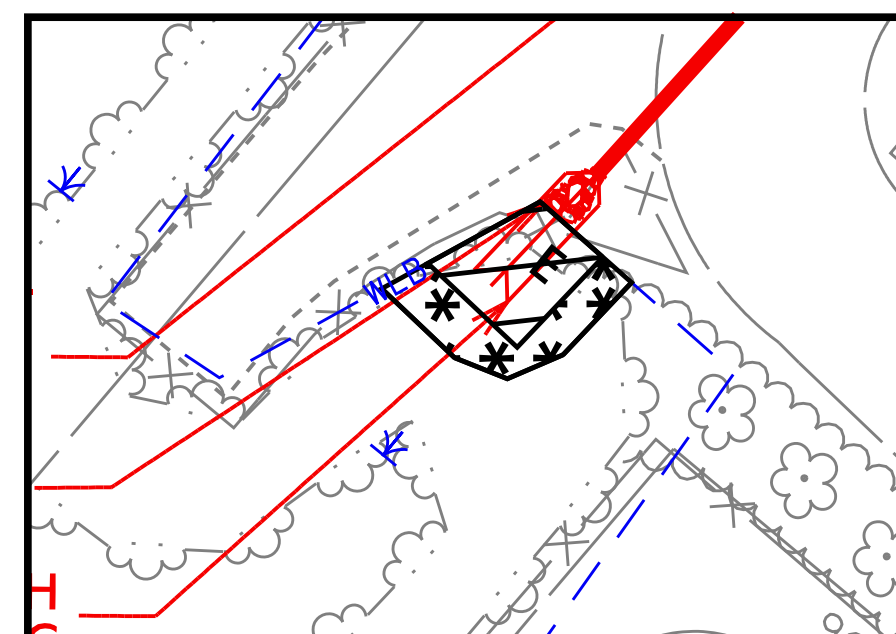
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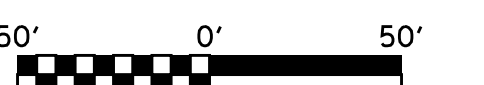
SITE 4
(EXTENTS OF PROPOSED BRIDGE)

ENLARGEMENT 2

ENLARGEMENT 3



	DENOTES HAND CLEARING
	DENOTES MECHANIZED CLEARING
	DENOTES EXCAVATION IN WETLAND



2/4/16

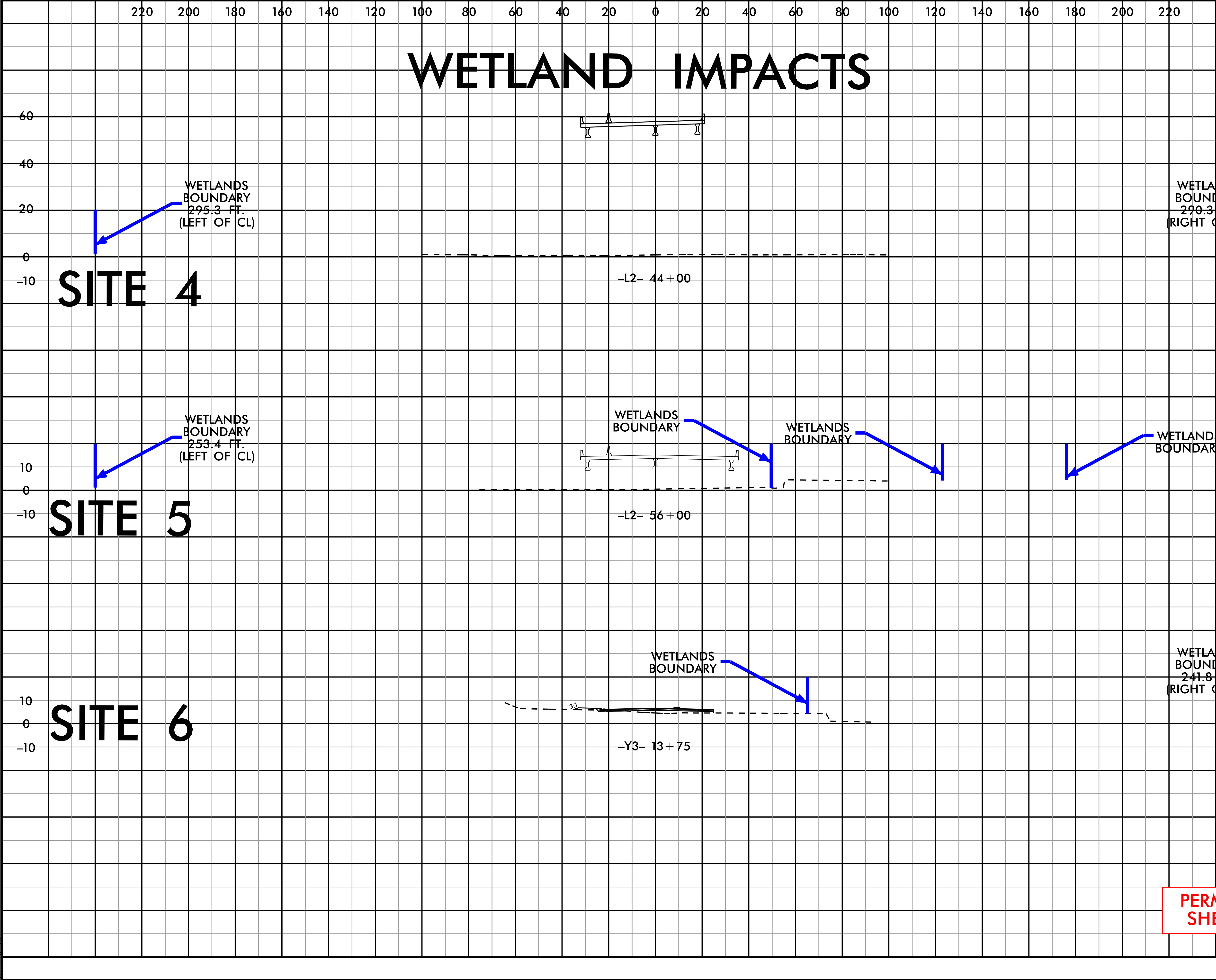
REVISIONS

8/17/99

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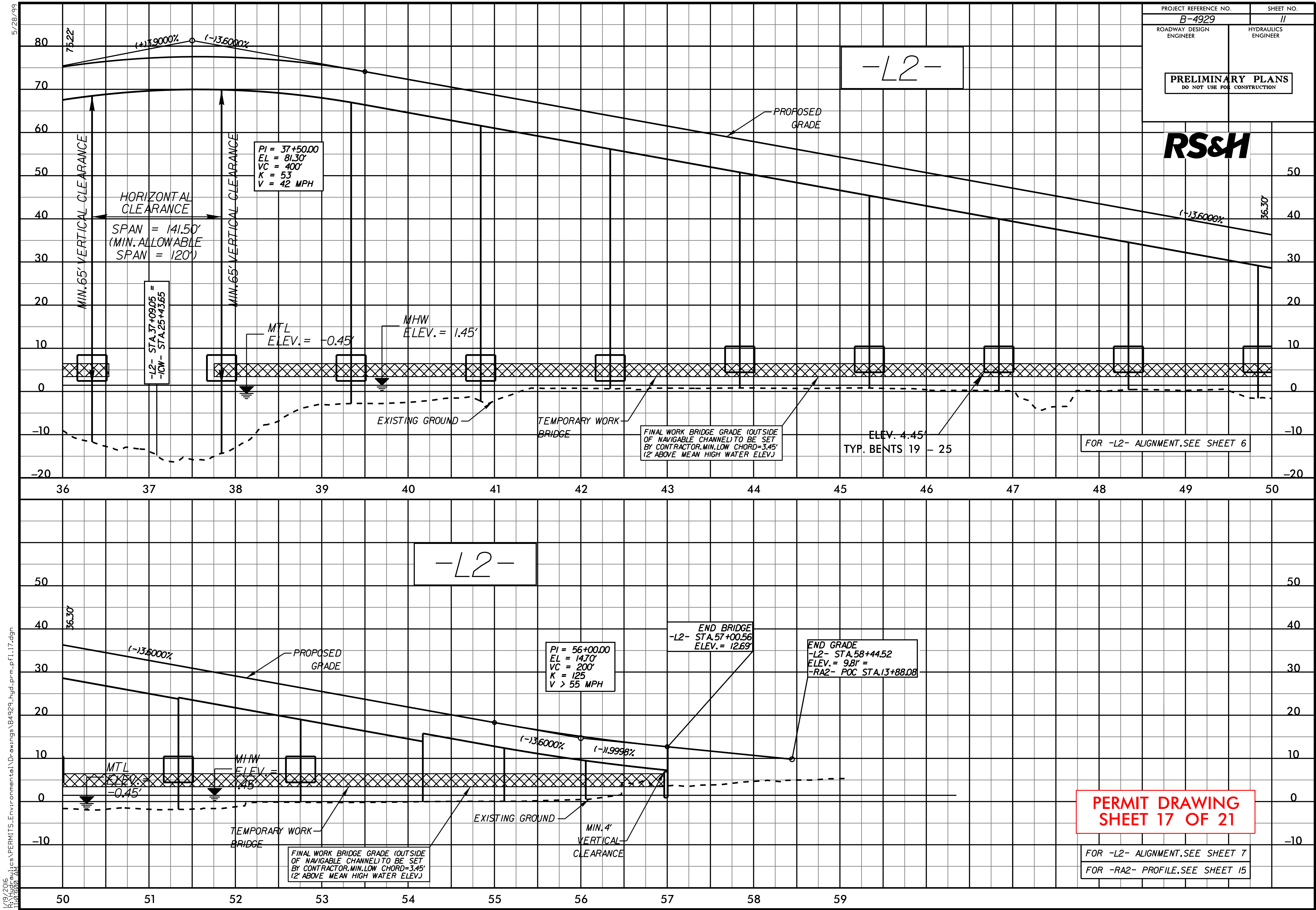


PROJECT REFERENCE NO.		SHEET NO.	
B-4929			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

RS&H

PERMIT DRAWING
SHEET 16 OF 21

2/4/16

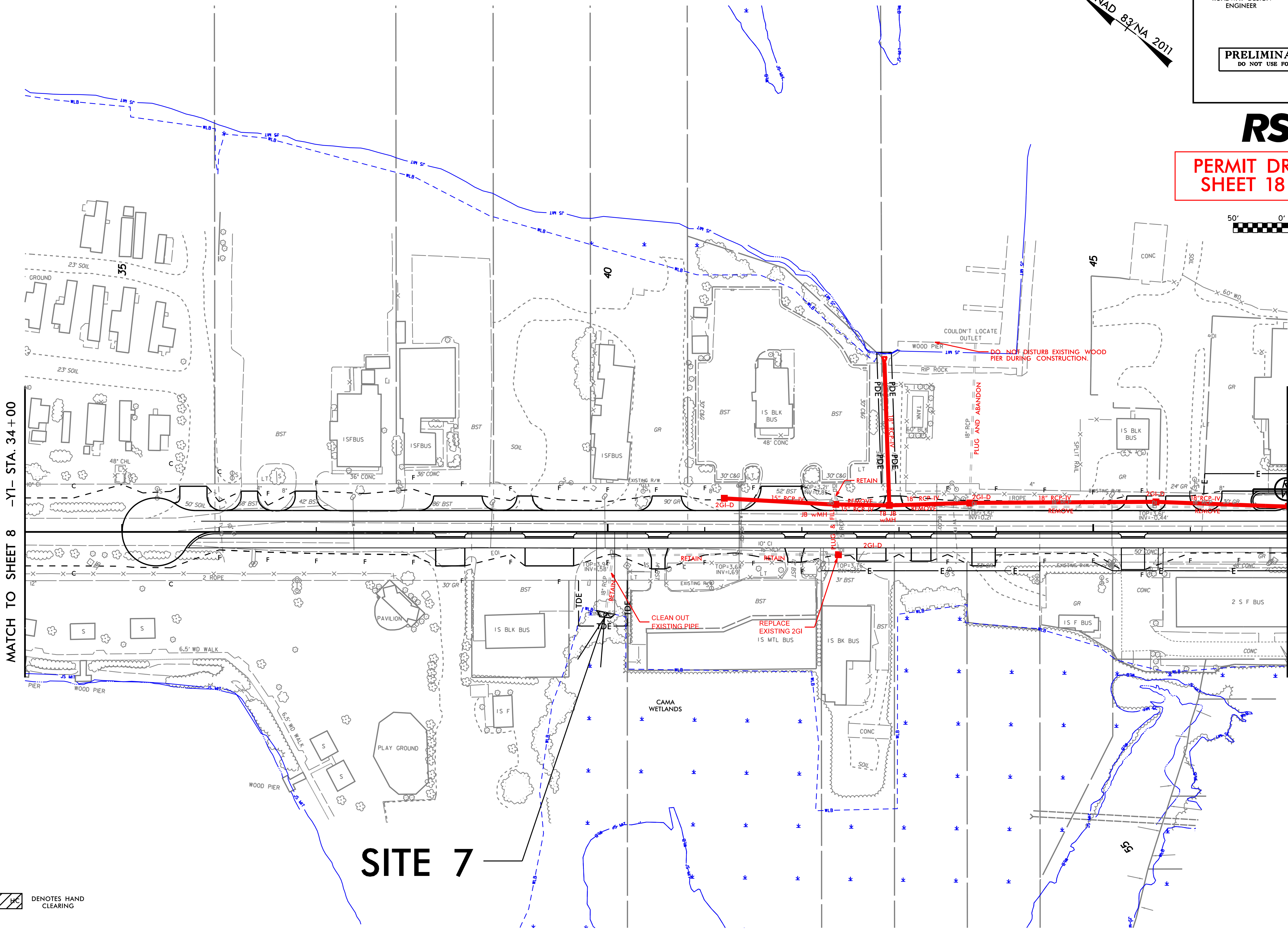


2/4/16

8/17/99

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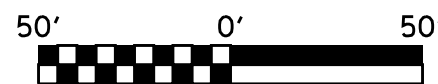
REVISIONS



PROJECT REFERENCE NO.		SHEET NO.	
B-4929		9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

RS&H

PERMIT DRAWING
SHEET 18 OF 21



NAD 83/NA 2011

MATCH TO SHEET 8 -Y1- STA. 34+00

MATCH TO SHEET 7 -Y1- STA. 47+00

SITE 7

HC HC DENOTES HAND CLEARING

2/4/16

8/17/99

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REVISIONS

MATCH TO SHEET 8 -Y1- STA. 34+00

MATCH TO SHEET 7 -Y1- STA. 47+00

HC HC
DENOTES HAND
CLEARING

SITE 7

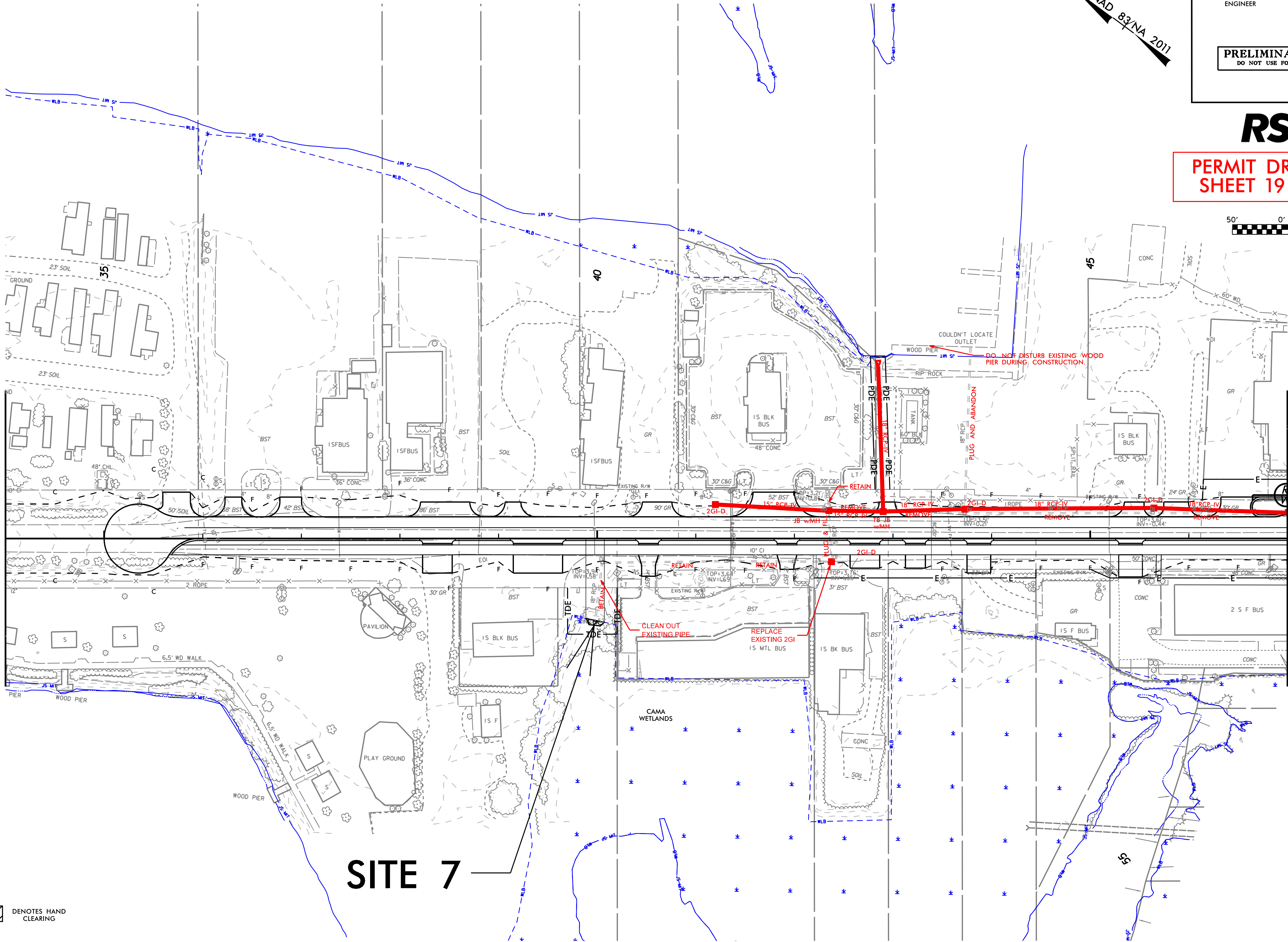
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B-4929		9	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

RS&H

PERMIT DRAWING
SHEET 19 OF 21

50' 0' 50'

NAD 83/NA 2011



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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2/4/16

WETLAND PERMIT IMPACT SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	12+93 TO 13+23 -L1-	ROADWAY			< 0.01	< 0.01						
2	18+81 TO 19+19 -L2- RT	INFILTRATION BASIN				0.01						
2	18+57 TO 19+10 -L2- LT/RT	ROADWAY				0.03						
2	18+71 TO 19+40 -L2-	BRIDGE APPROACH	0.07			0.04						
3	12+32 TO 12+45 -Y1- RT	ROADWAY	< 0.01									
3	12+62 TO 15+98 -Y1-	ROADWAY	0.45									
3	13+02 TO 16+03 -Y1- LT	ROADWAY				0.04						
3	12+28 TO 15+28 -Y1- RT	ROADWAY				0.05						
4	19+26 TO 57+00 -L2-	BRIDGE	0.04	0.03				0.02				
5	55+76 TO 56+10 -L2- RT	PIPE OUTLET			< 0.01	< 0.01						
6	13+57 TO 13+81 -Y3- RT	PIPE OUTLET					< 0.01					
7	39+88 TO 40+07 -Y2- RT	PIPE OUTLET					< 0.01					
TOTALS*:			0.57	0.03	0.01	0.19	< 0.01	0.02				

*Rounded totals are sum of actual impacts

NOTES:

- Site 2: Permanent impacts due to bridge approach in CAMA wetlands: 0.002 acres (mech. clearing) -- These impacts are included in the total impacts above.
- Site 4: Temporary impacts due to temporary work bridge bents in CAMA wetlands: 0.03 acres -- These impacts are included in the total impacts above.
- Site 4: Permanent impacts due to bents in CAMA wetlands: 0.04 acres -- These impacts are included in the total impacts above.
- Site 4: Permanent impacts due to bents in surface water: 0.02 acres -- These impacts are included in the total impacts above.
- Site 5: Permanent impacts due to grassed swale construction at pipe outlet (V ditch) in CAMA wetlands: <0.01 acres - These impacts are included in the total impacts above.
- Site 6: Temporary impacts due to pipe cleanout in CAMA wetlands: <0.01 acres-- These impacts are included in the total impacts above.
- Site 7: Temporary impacts due to pipe cleanout in CAMA wetlands: <0.01 acres-- These impacts are included in the total impacts above.
- Total permanent impacts in CAMA wetlands is 0.05 acres.

PERMIT DRAWING
SHEET 21 OF 21

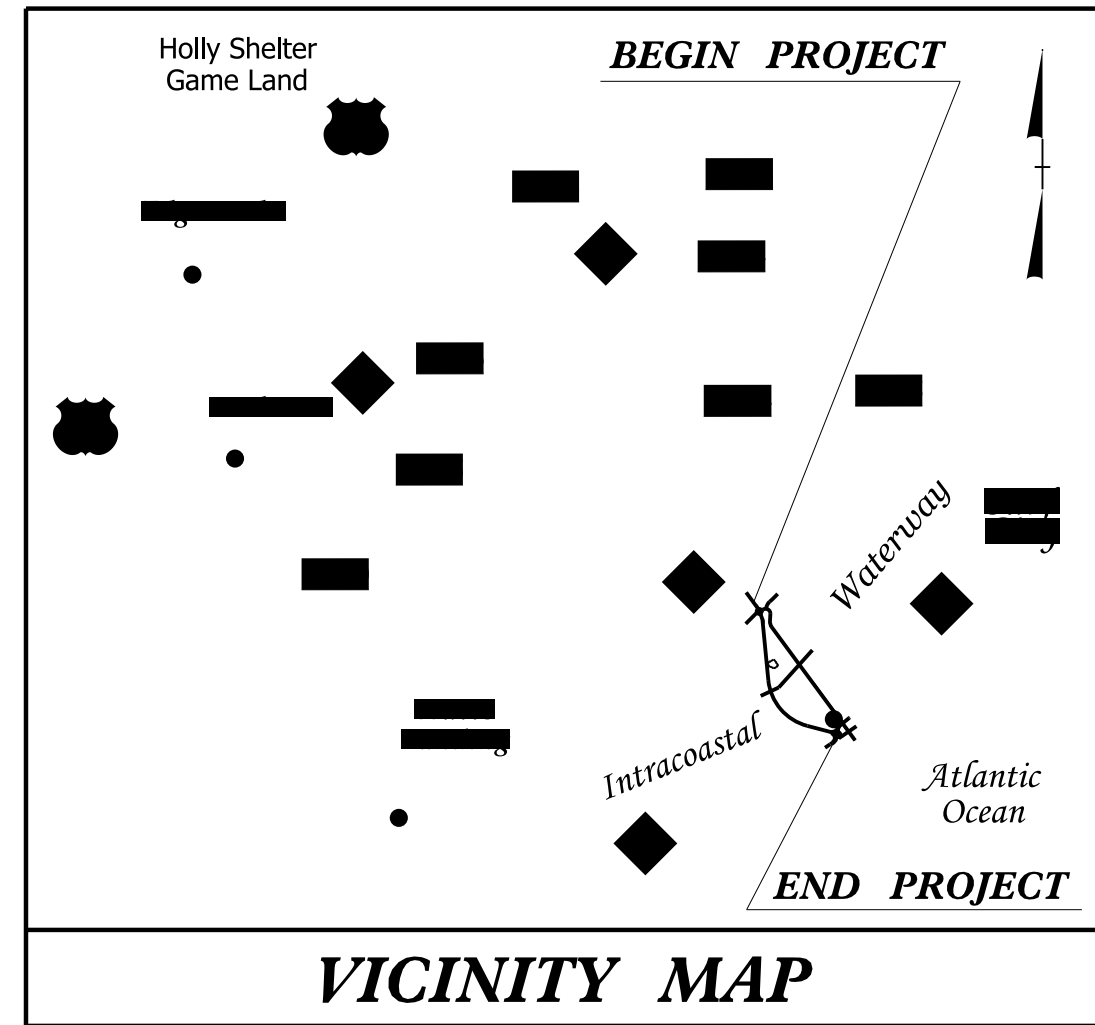
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
12/15/2015
PENDER COUNTY
B-4929

2/3/2016

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09/08/99

TIP PROJECT:



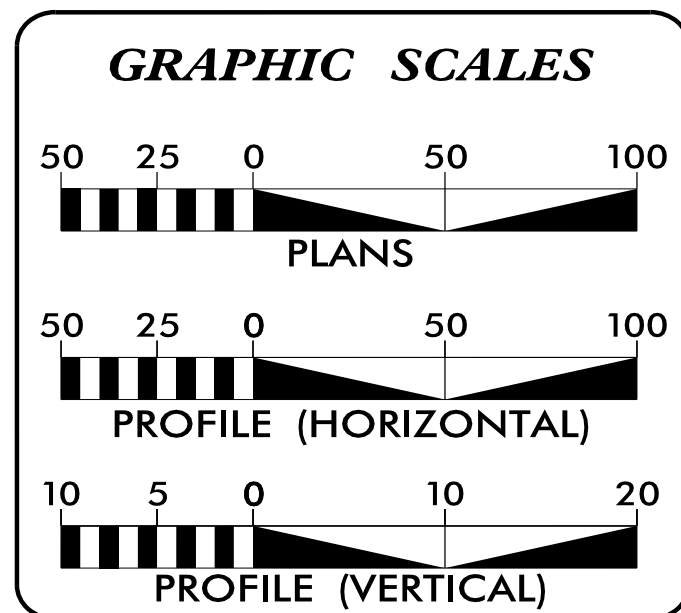
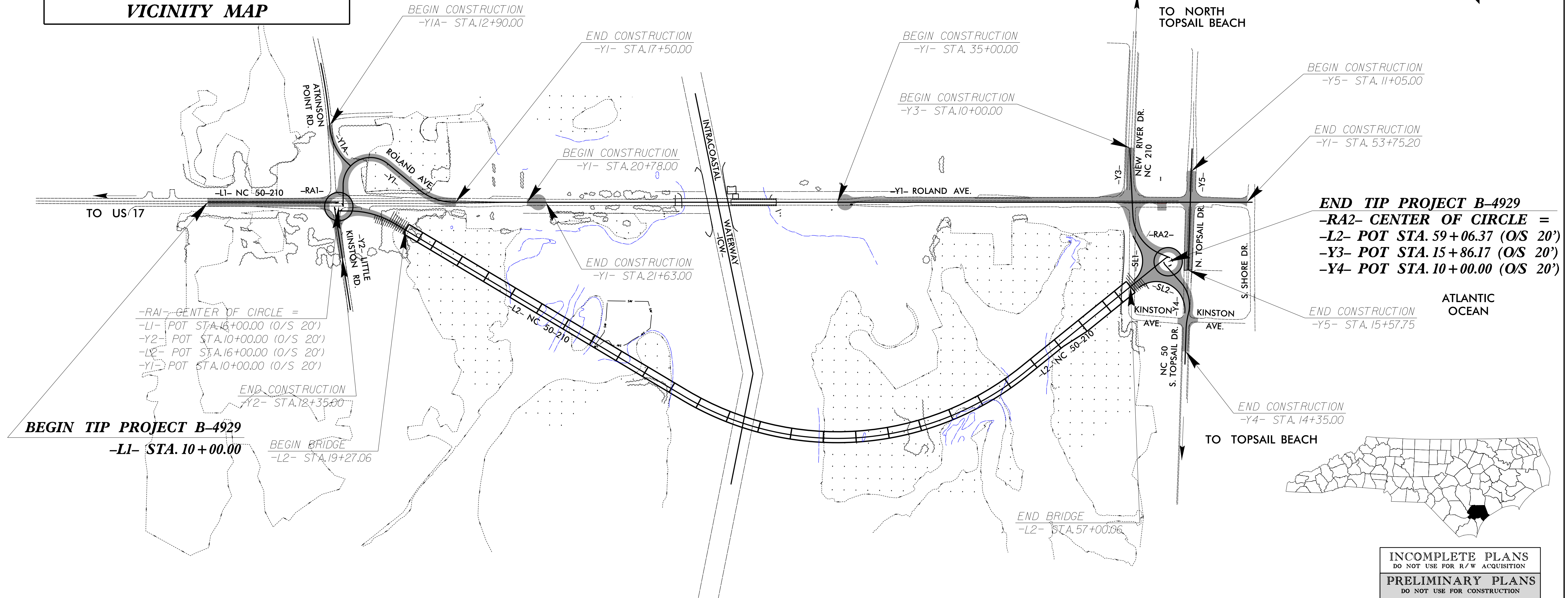
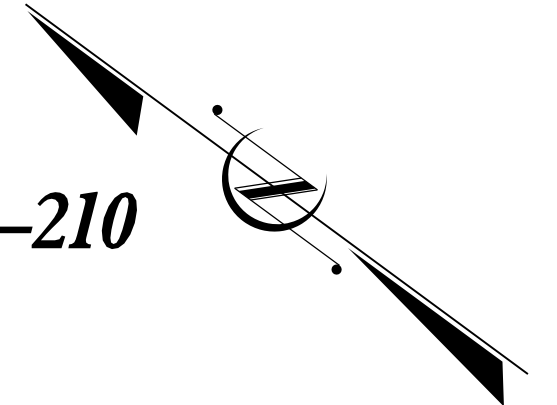
ROW PLANS

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITY ENVIRONMENTAL PLANS PENDER COUNTY

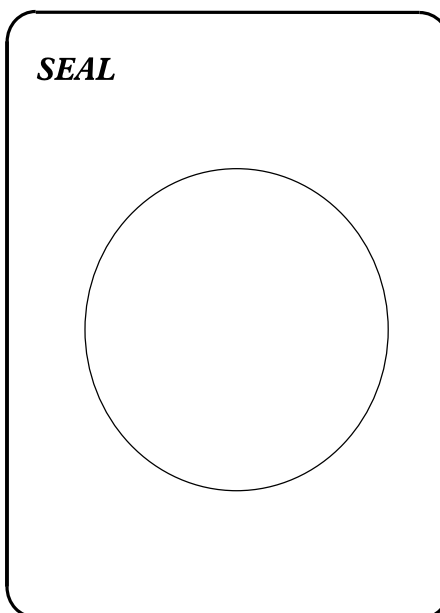
LOCATION: BRIDGE 16 OVER THE INTERCOSTAL WATERWAY ON NC-50-210
TYPE OF WORK: RELOCATE POWER, TELEPHONE, WATER AND SEWER

Utility Permit Drawing
Sheet 1 of 18



SHEET NO.	DESCRIPTION
UE-1	TITLE SHEET
UE-2 THRU UE-3	NEU PLAN SHEETS
UE-4	PROFILE SHEET

WATER AND SEWER OWNERS ON PROJECT
(1) TOWN OF SURF CITY (WATER AND SEWER)
(2) JONES ONSLOW EMC INC. (POWER)
(3) CENTURYLINK (TELEPHONE)
(4) CABLEVISION (CABLE TV)
(5) PNC (GAS)



DEPARTMENT OF TRANSPORTATION

PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING

1555 MAIL SERVICES CENTER
RALEIGH NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

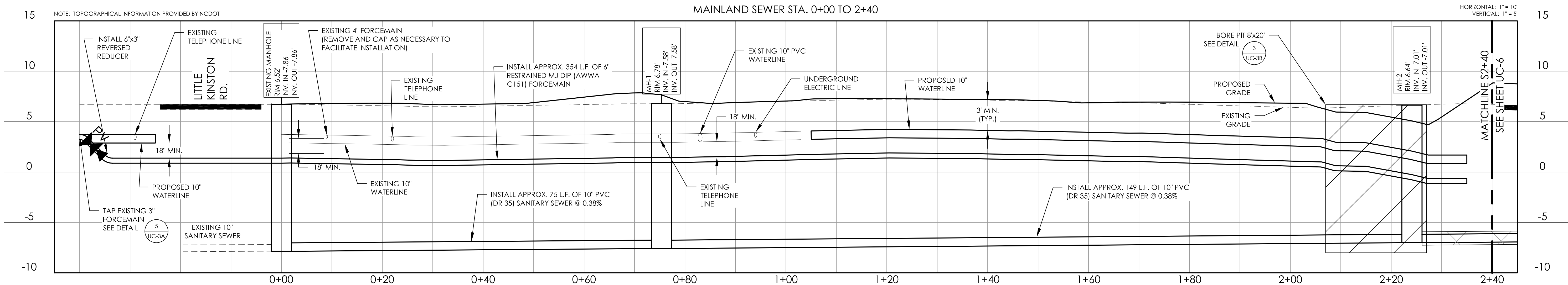
Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Bo Hemphill, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Kelvin Martin UTILITIES PROJECT DESIGNER

2/2/2016

UTILITY CONSTRUCTION

Utility Permit Drawing

Sheet 4 of 18



GENERAL NOTES:

- (1) TOPOGRAPHICAL INFORMATION PROVIDED BY NCDOT. INFORMATION PROVIDED FOR ENGINEERING DESIGN PURPOSES ONLY – NOT FOR RECORDATION.
- (2) THE UNDERGROUND UTILITIES INDICATED ON THE PLANS HAVE BEEN TAKEN FROM INFORMATION MADE AVAILABLE FROM THE VARIOUS UTILITY OWNERS. THIS INFORMATION IS NOT INCLUSIVE OF ALL EXISTING UNDERGROUND UTILITIES AND CABLES. THE CONTRACTOR SHALL WORK WITH THE OWNER TO MINIMIZE CONFLICTS.
- (3) CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- (4) CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST 48 HOURS PRIOR TO PERFORMING WORK THAT MAY AFFECT EXISTING UTILITIES.
- (5) CONTRACTOR TO COORDINATE RELOCATION AND/OR ADJUSTMENT OF ALL EXISTING UTILITIES WITH UTILITY OWNER.
- (6) ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL NCDOT, LOCAL, STATE, AND FEDERAL STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY AND ALL PERCEIVED CONFLICTS THAT MAY ARISE FROM THE PERFORMANCE OF THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS.
- (7) SEWER PIPES TO BE INSTALLED IN TRENCHES ACCORDING TO STANDARD SPECIFICATIONS AND DETAILS.
- (8) SEWER AND STORMWATER PIPES TO HAVE A MINIMUM OF 24" SEPARATION, UNLESS OTHERWISE SHOWN, FROM BOTTOM OF STORMWATER PIPE AND TOP OF SEWER PIPE.

- (8) LATERAL SEPARATION OF SEWERS OR WATER MAINS. WATER MAINS SHALL BE LAID AT LEAST TEN (10) FEET Laterally FROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A TEN (10) FOOT LATERAL SEPARATION -- IN WHICH CASE:
- (A) THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION ON THE BOTTOM OF THE WATER MAIN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF SEWER; OR
 - (B) THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF SEWER.
- (10) CROSSING A WATER MAIN OVER A SEWER. WHENEVER NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN EIGHTEEN (18) INCH SEPARATION -- IN WHICH CASE, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE CROSSING.
- (11) CROSSING A WATER MAIN UNDER A SEWER. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE POINT(S) OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

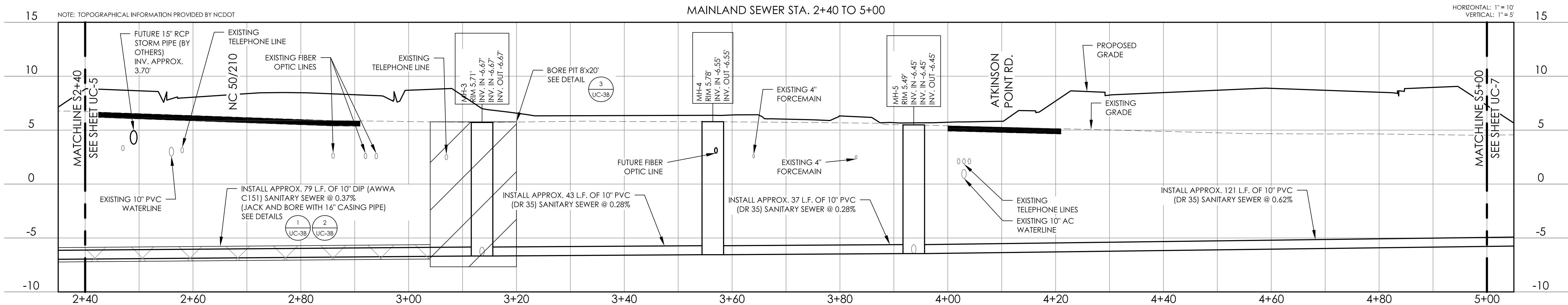
- (13) UNLESS OTHERWISE SPECIFIED IN THE PLANS, MAXIMUM SLOPES OF EARTHEN AREAS SHALL BE 3:1 OR FLATTER.
- (14) CONTRACTOR SHALL COORDINATE WITH NCDOT REGARDING LIMITS OF DISTURBANCE AND REQUIRED CONTROL MEASURES.
- (15) CONTRACTOR SHALL COORDINATE ALL WORK AT INTERSECTIONS WITH NCDOT STAFF TO INSURE CONTINUOUS OPERATION OF ALL SIGNAL WIRES AND TRAFFIC CONTROL DEVICES.
- (16) TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AMENDMENTS OR SUPPLEMENTS THERETO. PROPER TRAFFIC CONTROL DEVICES, SIGNS, ETC., SHALL BE INSTALLED TO ENSURE PUBLIC SAFETY.
- (17) CONTRACTOR SHALL CONFIRM PUE LOCATIONS WITH NCDOT.
- (18) PROPOSED MANHOLE RIMS SHALL BE FLUSH WITH GRADE.
- (19) UNLESS NOTED OTHERWISE ON PLANS, ALL PROPOSED WATERLINES AND FORCEMAINS SHALL BE DIP (AWWA C151) WITH MECHANICALLY RESTRAINED JOINTS.
- (20) ALL BENDS SHALL BE SUPPORTED BY THRUST BLOCKING IN ACCORDANCE WITH THE THRUST BLOCKING DETAIL.
- (21) CONTRACTOR SHALL RECONNECT ALL UTILITY SERVICES AFFECT BY PERMANENT LINE TERMINATION TO NEAREST ACTIVE SUPPLY LINE.
- (22) UNLESS NOTED OTHERWISE ON PLANS, ALL ABANDONED UTILITY LINES SHALL EITHER BE REMOVED OR FILLED AND CAPPED TO ABANDON IN PLACE.

2/2/2016

UTILITY CONSTRUCTION

Utility Permit Drawing

Sheet 5 of 18



GENERAL NOTES:

- | | | |
|--|--|--|
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2/3/2016

2/2/2016

PROJECT REFERENCE NO.		SHEET NO.	
B-4929		UC-7	
DESIGNED BY: JPC	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	UTILITY CONSTRUCTION PLANS ONLY	
DRAWN BY: JPC			
CHECKED BY: WGS			
APPROVED BY: JPC			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION

Utility Permit Drawing
Sheet 6 of 18

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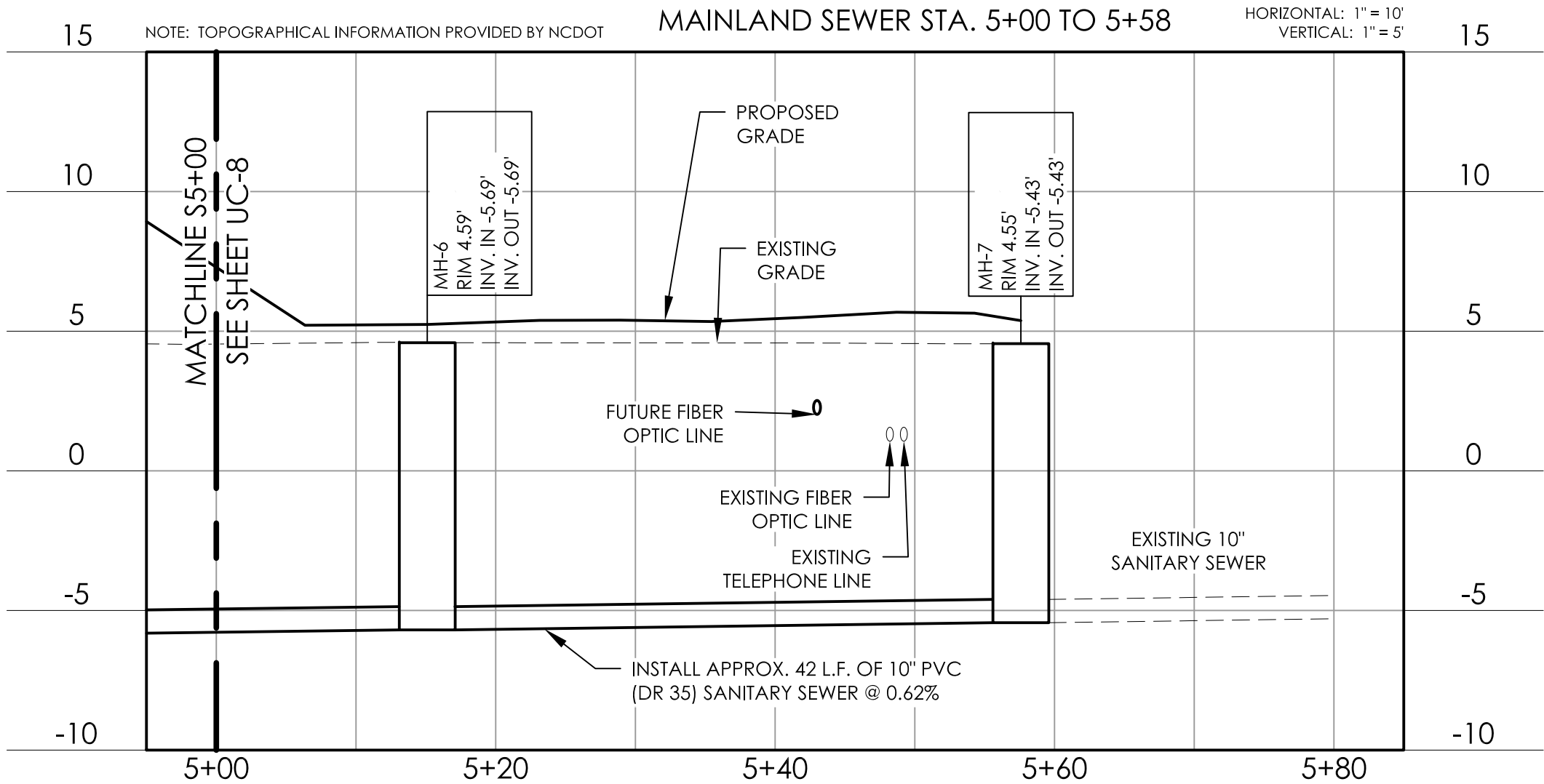
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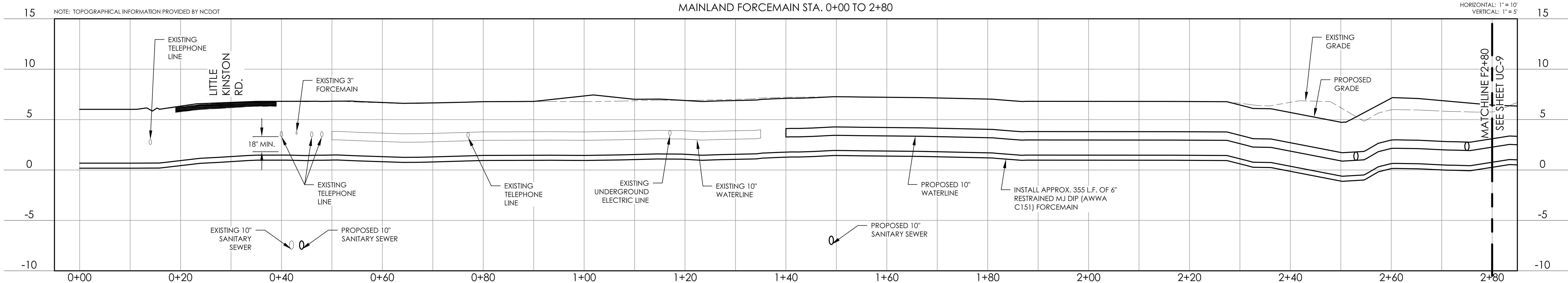


2/3/2016

PROJECT REFERENCE NO.		SHEET NO.
B-4929		UC-8
DESIGNED BY: JPC	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY: JPC		
CHECKED BY: WGS		
APPROVED BY: JPC		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

UTILITY CONSTRUCTION

Utility Permit Drawing
Sheet 7 of 18



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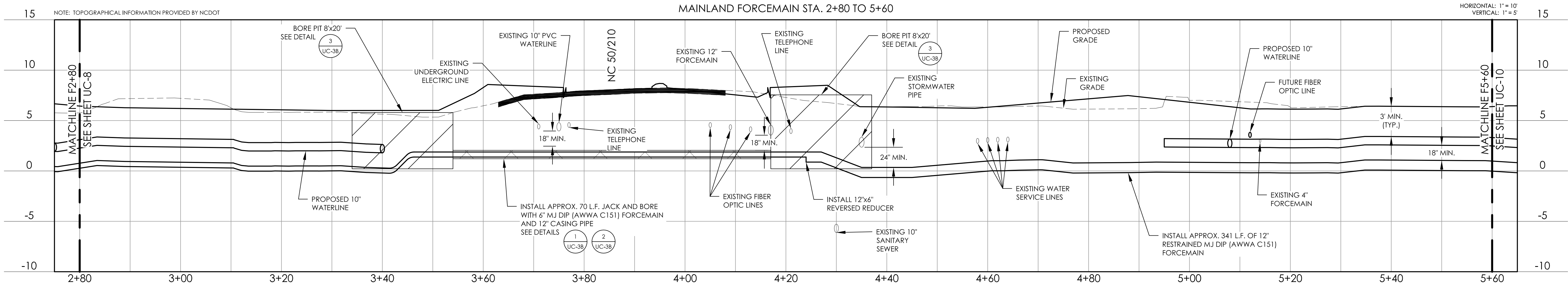
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PROJECT REFERENCE NO.		SHEET NO.
B-4929		UC-9
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REVISED:		
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UTILITY CONSTRUCTION

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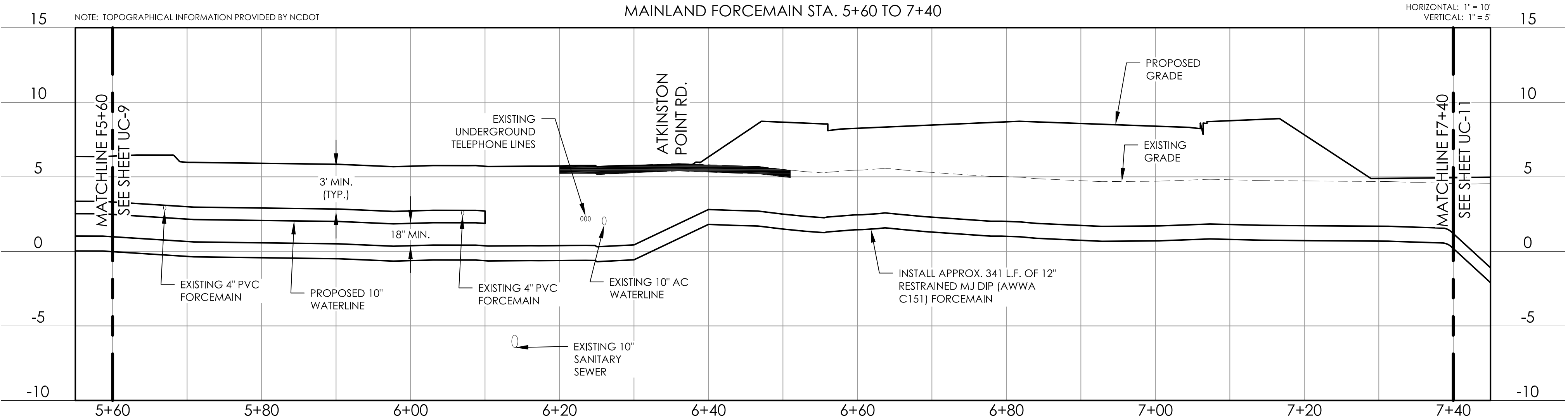
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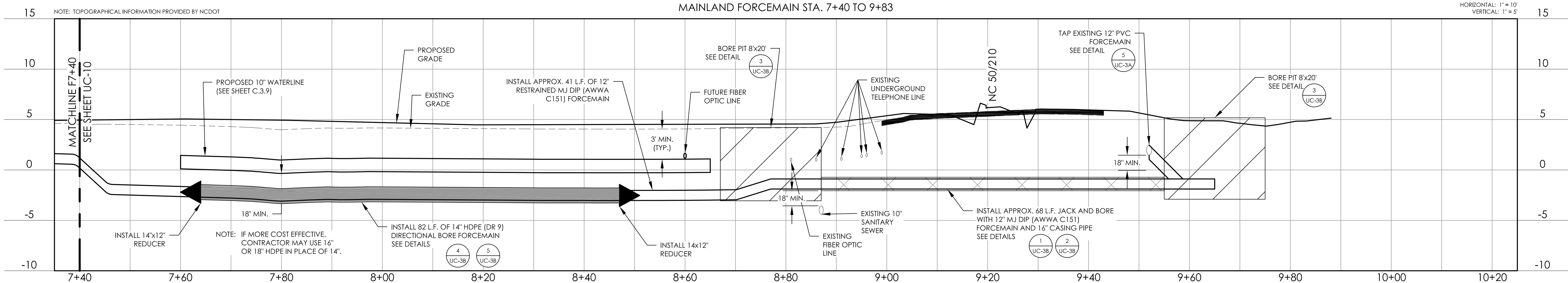
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CHECKED BY: WGS	
APPROVED BY: JPC	
REVISED:	UTILITY CONSTRUCTION PLANS ONLY
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

UTILITY CONSTRUCTION

Utility Permit Drawing
Sheet 10 of 18



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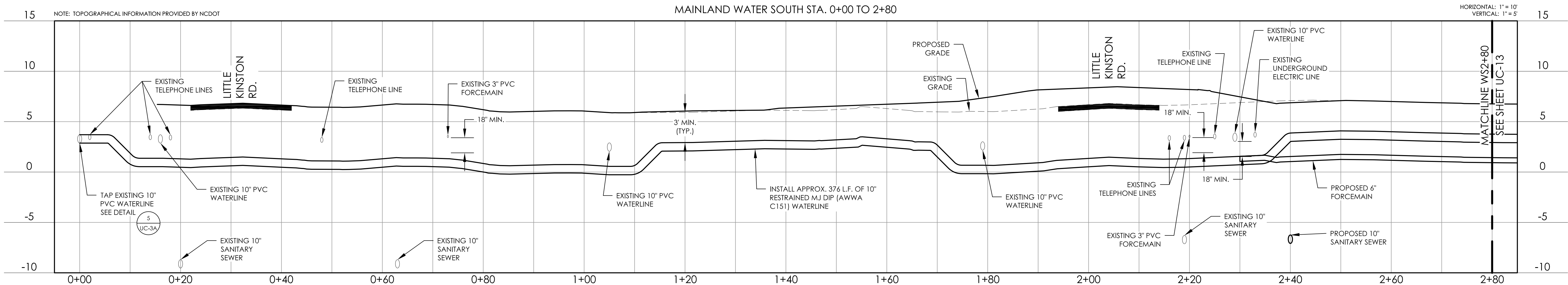
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UTILITY CONSTRUCTION

Utility Permit Drawing

Sheet 11 of 18



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2/3/2016

2/2/2016

PROJECT REFERENCE NO.		SHEET NO.
B-4929		UC-13
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APPROVED BY: JPC		
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UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

UTILITY CONSTRUCTION

Utility Permit Drawing
Sheet 12 of 18

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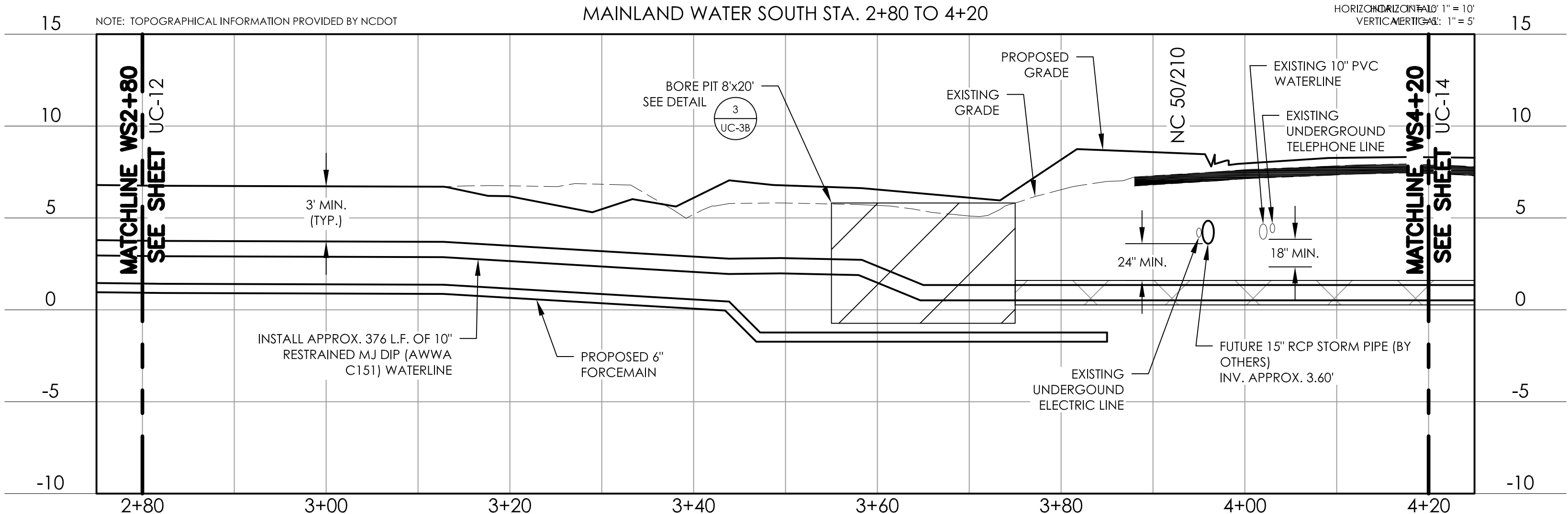
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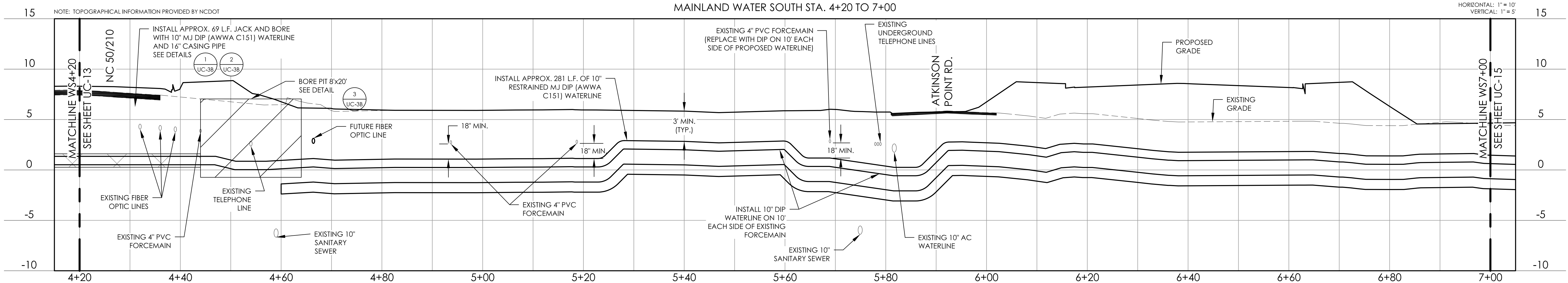


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UTILITY CONSTRUCTION

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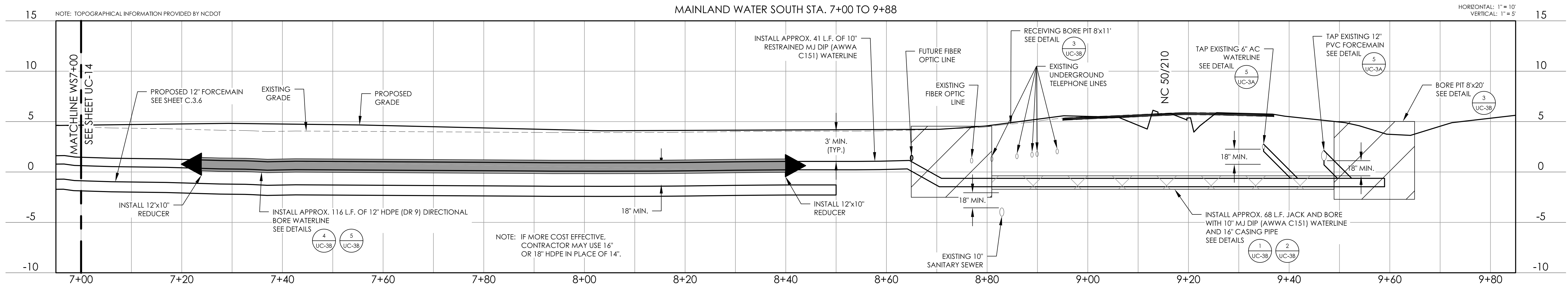
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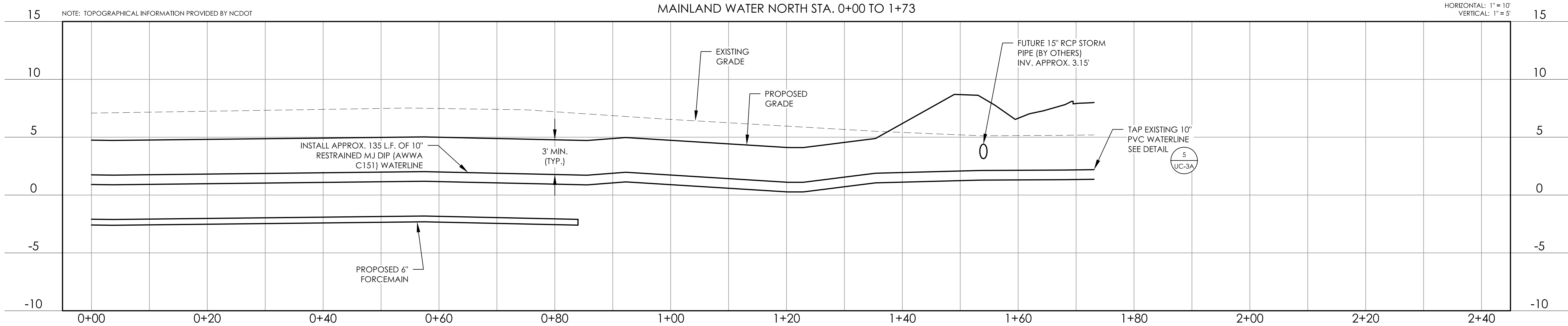
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Utility Permit Drawing
Sheet 15 of 18



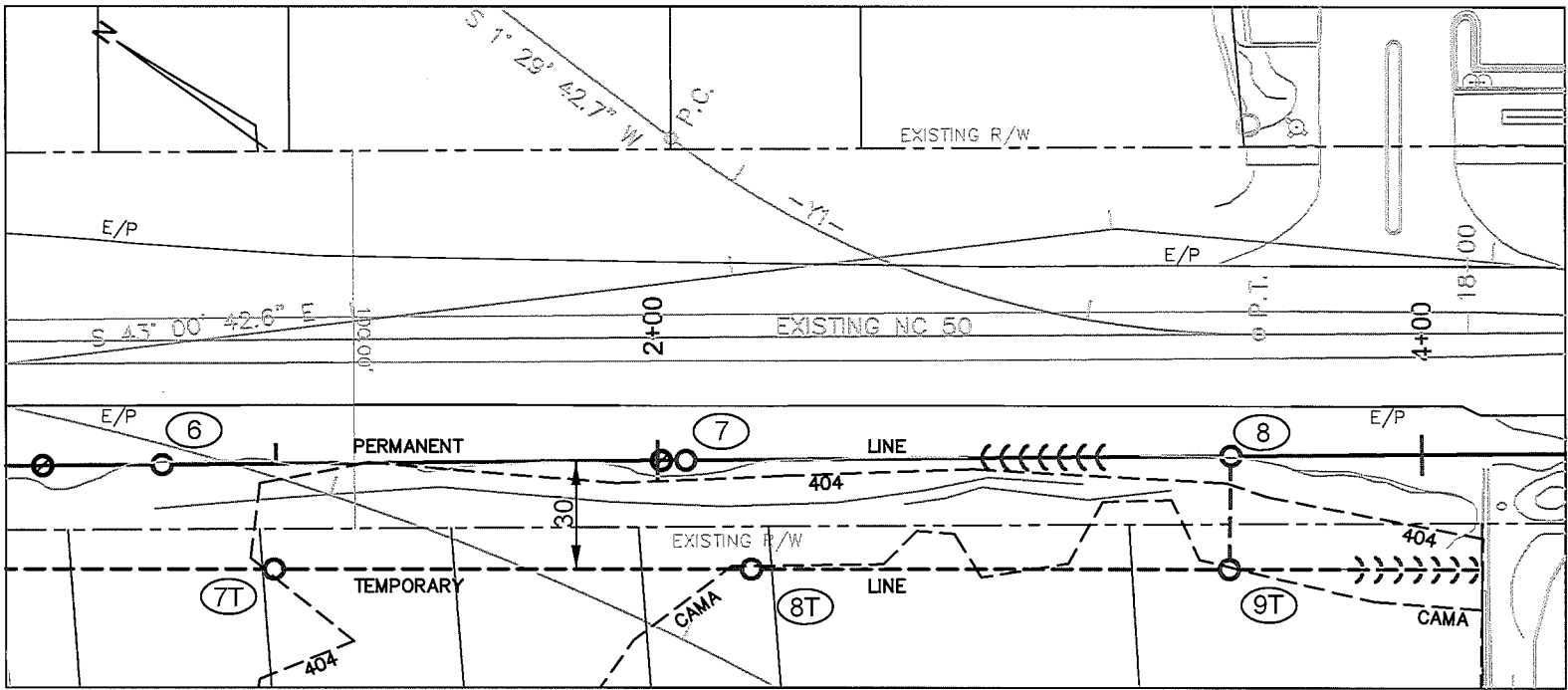
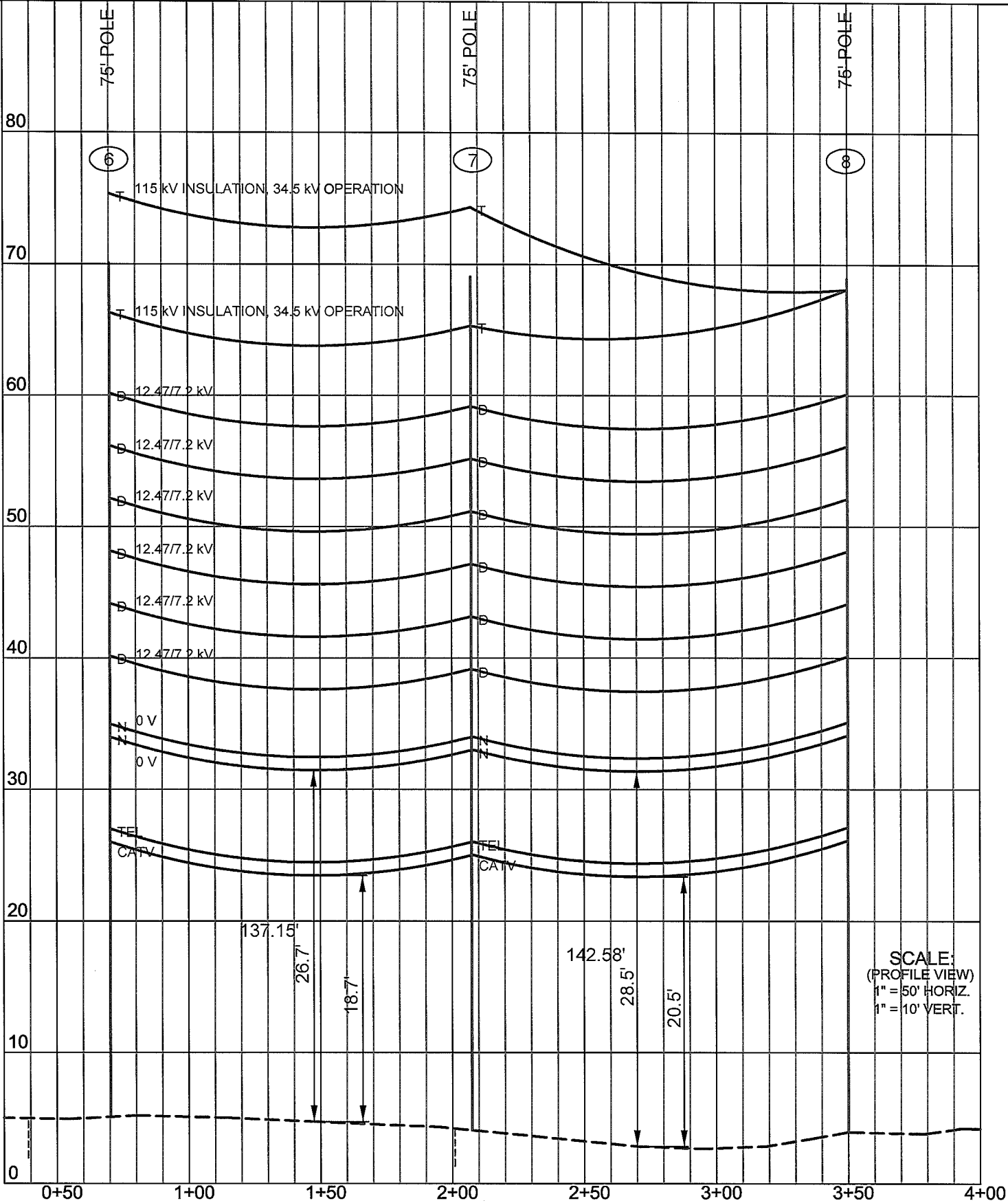
GENERAL NOTES:

- TOPOGRAPHICAL INFORMATION PROVIDED BY NCDOT. INFORMATION PROVIDED FOR ENGINEERING DESIGN PURPOSES ONLY -- NOT FOR RECORDATION.
- THE UNDERGROUND UTILITIES INDICATED ON THE PLANS HAVE BEEN TAKEN FROM INFORMATION MADE AVAILABLE FROM THE VARIOUS UTILITY OWNERS. THIS INFORMATION IS NOT INCLUSIVE OF ALL EXISTING UNDERGROUND UTILITIES AND CABLES. THE CONTRACTOR SHALL WORK WITH THE OWNER TO MINIMIZE CONFLICTS.
- CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST 48 HOURS PRIOR TO PERFORMING WORK THAT MAY AFFECT EXISTING UTILITIES.
- CONTRACTOR TO COORDINATE RELOCATION AND/OR ADJUSTMENT OF ALL EXISTING UTILITIES WITH UTILITY OWNER.
- ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL NCDOT, LOCAL, STATE, AND FEDERAL STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY AND ALL PERCEIVED CONFLICTS THAT MAY ARISE FROM THE PERFORMANCE OF THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS.
- SEWER PIPES TO BE INSTALLED IN TRENCHES ACCORDING TO STANDARD SPECIFICATIONS AND DETAILS.
- SEWER AND STORMWATER PIPES TO HAVE A MINIMUM OF 24" SEPARATION, UNLESS OTHERWISE SHOWN, FROM BOTTOM OF STORMWATER PIPE AND TOP OF SEWER PIPE.

- LATERAL SEPARATION OF SEWERS OR WATER MAINS. WATER MAINS SHALL BE LAID AT LEAST TEN (10) FEET Laterally FROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A TEN (10) FOOT LATERAL SEPARATION -- IN WHICH CASE:
 - THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION ON THE BOTTOM OF THE WATER MAIN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF SEWER; OR
 - THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF SEWER.
- CROSSING A WATER MAIN OVER A SEWER. WHENEVER NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN EIGHTEEN (18) INCH SEPARATION -- IN WHICH CASE, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE CROSSING.
- CROSSING A WATER MAIN UNDER A SEWER. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE POINT(S) OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

- UNLESS OTHERWISE SPECIFIED IN THE PLANS, MAXIMUM SLOPES OF EARTHEN AREAS SHALL BE 3:1 OR FLATTER.
- CONTRACTOR SHALL COORDINATE WITH NCDOT REGARDING LIMITS OF DISTURBANCE AND REQUIRED CONTROL MEASURES.
- CONTRACTOR SHALL COORDINATE ALL WORK AT INTERSECTIONS WITH NCDOT STAFF TO INSURE CONTINUOUS OPERATION OF ALL SIGNAL WIRES AND TRAFFIC CONTROL DEVICES.
- TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AMENDMENTS OR SUPPLEMENTS THERETO. PROPER TRAFFIC CONTROL DEVICES, SIGNS, ETC., SHALL BE INSTALLED TO ENSURE PUBLIC SAFETY.
- CONTRACTOR SHALL CONFIRM PUE LOCATIONS WITH NCDOT.
- PROPOSED MANHOLE RIMS SHALL BE FLUSH WITH GRADE.
- UNLESS NOTED OTHERWISE ON PLANS, ALL PROPOSED WATERLINES AND FORCEMAINS SHALL BE DIP (AWWA C151) WITH MECHANICALLY RESTRAINED JOINTS.
- ALL BENDS SHALL BE SUPPORTED BY THRUST BLOCKING IN ACCORDANCE WITH THE THRUST BLOCKING DETAIL.
- CONTRACTOR SHALL RECONNECT ALL UTILITY SERVICES AFFECT BY PERMANENT LINE TERMINATION TO NEAREST ACTIVE SUPPLY LINE.
- UNLESS NOTED OTHERWISE ON PLANS, ALL ABANDONED UTILITY LINES SHALL EITHER BE REMOVED OR FILLED AND CAPPED TO ABANDON IN PLACE.

2/2/2016

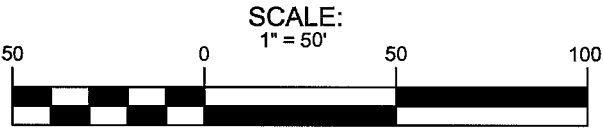


NOTES:

- ELECTRICAL CONDUCTORS SHOWN ARE 559.5 kCMIL AAAC DARIEN. SAG IS 167° F. FINAL WITH 220 FT. RULING SPAN.
- TELEPHONE AND CATV (BY OTHERS) ARE SHOWN FOR REFERENCE ONLY. SAG IS ESTIMATED TO MATCH ELECTRICAL.
- TOPOGRAPHIC DATA PROVIDED BY NCDOT. NOT SURVEYED BY ENGINEER OF RECORD.
- MAXIMUM POLE DIAMETER AT GROUND LINE TO BE 5 FEET BASED ON INSTALLATION IN STEEL CASINGS.

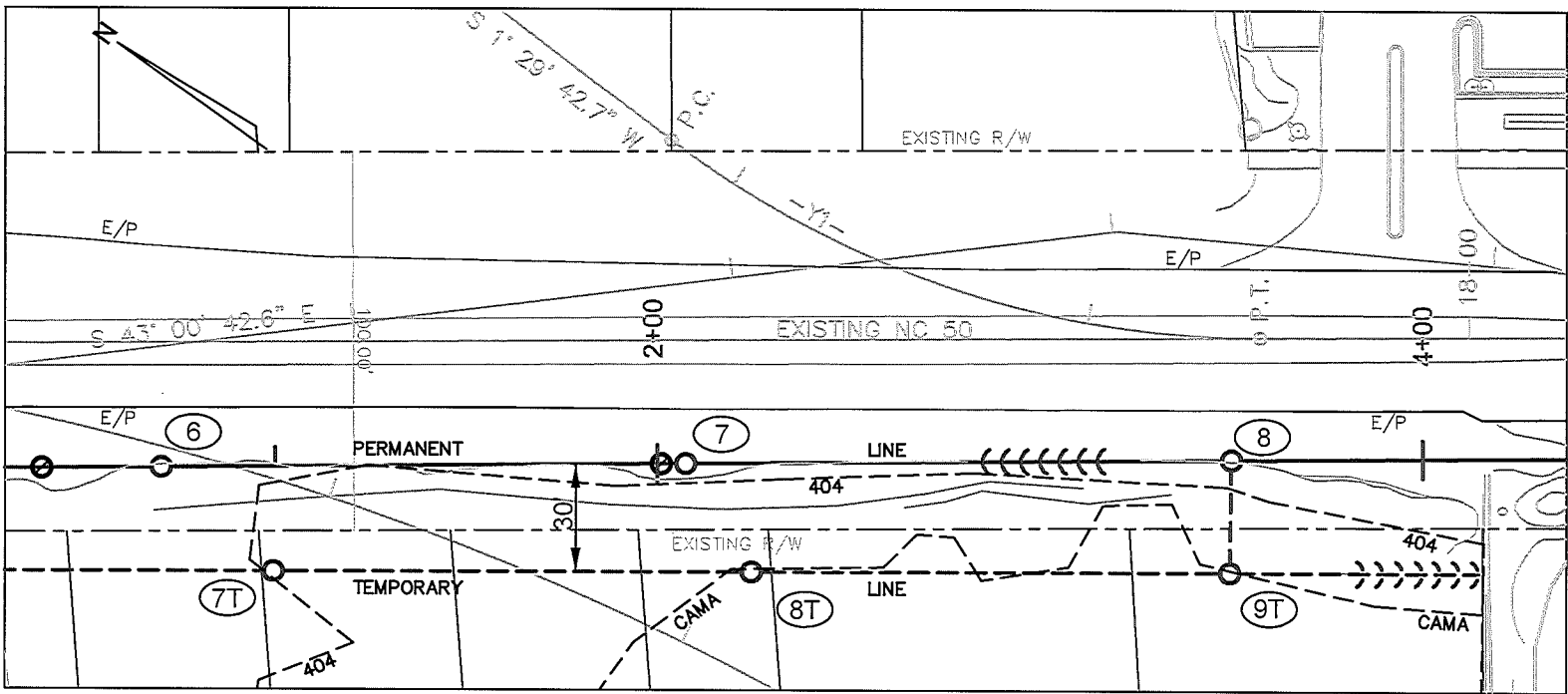
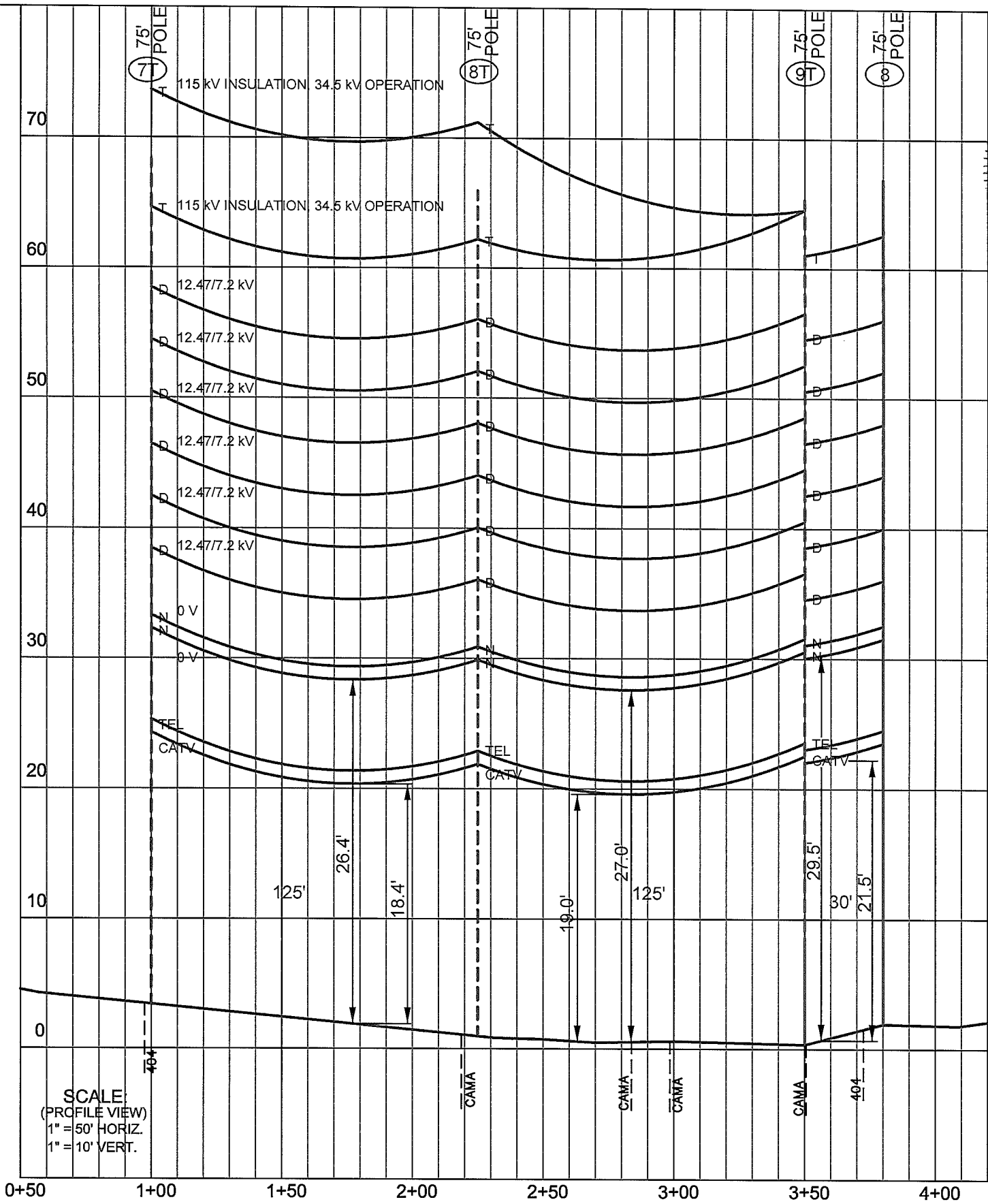
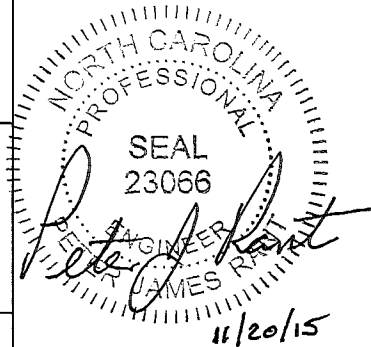
LEGEND:

- PERMANENT ELECTRIC FACILITIES
- TEMPORARY ELECTRIC FACILITIES



Utility Permit Drawing
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Power Services Engineering and Management Services LICENSE # F-1131 1616 E. Millbrook Rd. Suite 210 Raleigh, NC 27609 TEL: 919-256-5900 FAX: 919-256-5939		REV	DATE	DESCRIPTION
CLIENT PROJ. REF. NO.: POWER SERVICES PROJ. NO.: DATE: 11/20/2015 SCALE: 1" = 50' DWN BY: JWP CKD BY: HGB APPVD BY: PJR		JONES ONSLOW EMC Jacksonville, N.C.		
Surf City Bridge Project B-4929 WETLANDS IMPACT PERMIT PERMANENT POWER LINE		DWG. NO. 1A		

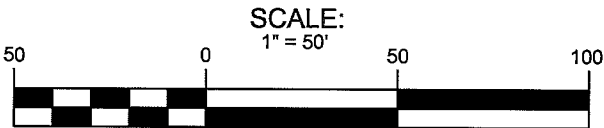


NOTES:

- ELECTRICAL CONDUCTORS SHOWN ARE 559.5 kCMIL AAAC DARIEN. SAG IS 167° F. FINAL WITH 130 FT. RULING SPAN.
- TELEPHONE AND CATV (BY OTHERS) ARE SHOWN FOR REFERENCE ONLY. SAG IS ESTIMATED TO MATCH ELECTRICAL.
- TOPOGRAPHIC DATA PROVIDED BY NCDOT. NOT SURVEYED BY ENGINEER OF RECORD.
- MAXIMUM POLE DIAMETER AT GROUND LINE TO BE 5 FEET BASED ON INSTALLATION IN STEEL CASINGS.

LEGEND:

- PERMANENT ELECTRIC FACILITIES
- TEMPORARY ELECTRIC FACILITIES



Utility Permit Drawing
Sheet 17 of 18

Power Services Engineering and Management Services LICENSE # F-1131 1616 E. Millbrook Rd. Suite 210 Raleigh, NC 27609 TEL: 919-256-5900 FAX: 919-256-5939		REV	DATE	DESCRIPTION
CLIENT PROJ. REF. NO.: POWER SERVICES PROJ. NO.: DATE: 11/20/2015 SCALE: 1" = 50' DWN BY: JWP CKD BY: HGB APPVD BY: PJR		JONES ONSLOW EMC Jacksonville, N.C.		
Surf City Bridge Project B-4929 WETLANDS IMPACT PERMIT TEMPORARY POWER LINE		DWG. NO. 1B		

