



NORTH CAROLINA
Environmental Quality

December 20, 2024

ROY COOPER
Governor

MARY PENNY KELLEY
Secretary

RICHARD E. ROGERS, JR.
Director

DWR #20240227 v2
Wake County

Town of Apex
Attn: Randal Vosburg
105-B Upchurch Street
Apex, NC 27502

Delivered via email to: randal.vosburg@apexnc.org

Subject: Approval of Individual 401 Water Quality Certification
Big Branch Force Main and Pump Station
USACE Action ID. No. SAW-2024-00257

Location: 35.677944, -78.911341

Dear Randal Vosburg,

Attached hereto is a copy of Certification No. WQC007233 issued to Randal Vosburg and Town of Apex, dated December 20, 2024. This approval is for the purpose and design described in your application.

This Water Quality Certification does not relieve the Permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

Upon the presentation of proper credentials, the Division of Water Resources (Division) may inspect the property.

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

Non-compliance with or violation of the conditions herein set forth may result in revocation of this Water Quality Certification for the project and may also result in criminal and/or civil penalties.



This approval and its conditions are final and binding unless contested [G.S. 143-215.5].

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) **within sixty (60) calendar days**. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the Permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S. 150B-23(a).

This letter completes the Division's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Samantha Wooten at (919) 707-3631 or samantha.wooten@deq.nc.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:

Paul Wojoski

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Paul Wojoski, Water Quality Permitting Section
Chief
Division of Water Quality

Electronic cc: Consultant – Keven Duerr, Hazen and Swayer (kduerr@hazenandsawyer.com)
Laura Meyer, PWS, USACE Raleigh Regulatory Field Office
(laura.i.meyer@usace.army.mil)
Gabriela Garrison, NCWRC (gabriela.garrison@ncwildlife.org)
DWR 401 & Buffer Permitting Branch Electronic file

Filename: 20240227 Big Branch 2 Force Main and Pump Station – Wake – 401.docx



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

CERTIFICATION #WQC007233 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina’s Regulations in 15 NCAC 02H .0500 and 15A NCAC 02B .0200, to Randal Vosburg and Town of Apex, who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on August 8, 2024, and subsequent information on October 16, 2024, and November 4, 2024, and by Public Notice issued by the U. S. Army Corps of Engineers on September 25, 2024, and within the *Reasonable Period of Time* pursuant to 40 CFR Part 121.6.

The State of North Carolina certifies that this activity will comply with water quality requirements and the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

The following impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

Type of Impact	Amount Approved Permanent	Amount Approved Temporary	Mitigation Amount Required
Perennial Streams			
S1 – Access Road to PS (Culvert)	155 linear feet	0 linear feet	0 credits
S2 – Access Road to PS (Culvert)	0 linear feet	48 linear feet	0 credits
S3 – Utility Easement (Access/riprap)	13 linear feet	0 linear feet	0 credits
S4 – Utility Installation (Excavation)	0 linear feet	38 linear feet	0 credits
S17 – Utility Easement (Access/riprap)	13 linear feet	0 linear feet	0 credits
S18 – Utility Installation (Excavation)	0 linear feet	53 linear feet	0 credits
S19 – Utility Easement (Access/riprap)	17 linear feet	0 linear feet	0 credits
S20 – Utility Installation (Excavation)	0 linear feet	63 linear feet	0 credits



S25 – Utility Easement (Access/riprap)	13 linear feet	0 linear feet	0 credits
S26 – Utility Installation (Excavation)	0 linear feet	38 linear feet	0 credits
Totals:	244 linear feet	240 linear feet	0 credits
Intermittent Streams			
S5 – Utility Easement (Access/riprap)	15 linear feet	0 linear feet	0 credits
S6 – Utility Installation (Excavation)	0 linear feet	47 linear feet	0 credits
S7 – Utility Easement (Access/riprap)	32 linear feet	0 linear feet	0 credits
S8 – Utility Installation (Excavation)	0 linear feet	42 linear feet	0 credits
S9 – Utility Easement (Access/riprap)	10 linear feet	0 linear feet	0 credits
S10 – Utility Installation (Excavation)	0 linear feet	21 linear feet	0 credits
S11 – Utility Easement (Access/riprap)	10 linear feet	0 linear feet	0 credits
S12 – Utility Installation (Excavation)	0 linear feet	40 linear feet	0 credits
S13 – Utility Easement (Access/riprap)	12 linear feet	0 linear feet	0 credits
S14 – Utility Installation (Excavation)	0 linear feet	18 linear feet	0 credits
S15 – Utility Easement (Access/riprap)	18 linear feet	0 linear feet	0 credits
S16 – Utility Installation (Excavation)	0 linear feet	44 linear feet	0 credits
S21 – Utility Easement (Access/riprap)	19 linear feet	0 linear feet	0 credits



S22 – Utility Installation (Excavation)	0 linear feet	112 linear feet	0 credits
S23 – Utility Easement (Access/riprap)	14 linear feet	0 linear feet	0 credits
S24 – Utility Installation (Excavation)	0 linear feet	27 linear feet	0 credits
S27 – Utility Easement (Access/riprap)	14 linear feet	0 linear feet	0 credits
S28 – Utility Installation (Excavation)	0 linear feet	38 linear feet	0 credits
Totals:	144 linear feet	389 linear feet	0 credits
Riparian Wetlands			
W1 – Utility Easement (Conversion)	0.010 acres	0 acres	0 credits
W2 – Utility Installation (Excavation)	0 acres	0.014 acres	0 credits
Totals:	0.010 acres	0.014 acres	0 credits
Non-Riparian Wetlands			
W3 – Utility Easement (Access/riprap)	0.009 acres	0 acres	0 credits
W4 – Utility Installation (Excavation)	0 acres	0.035 acres	0 credits
Totals:	0.009 acres	0.035 acres	0 credits

This approval requires you to follow the conditions listed in the Certification below.

CONDITIONS OF CERTIFICATION [15A NCAC 02H .0507(c)]:

1. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division, and you may be required to submit a new application package with the appropriate fee.

If the property is sold, the Permittee shall provide the new owner must with a copy of this Water Quality Certification and all plans and specifications incorporated by reference. The Permittee may transfer this Water Quality Certification to the new owner by submitting a letter to the Division with the following statement: *“At the time the property is transferred, the terms and conditions of this 401 Individual Water Quality Certification, including the responsibility to*



ensure compliance, are binding on the new owner(s) of the property.” The letter shall be signed and dated by both the transferee and the new owner.

Citation: 15A NCAC 02H .0507(d)(2)

2. Any final construction plans for this project must include or reference the application and plans approved by the Division under this authorization letter and certification. The applicant will also be required to evaluate all acquired permits to assure that they are consistent, and all relative impacts are accounted for and shown on the construction plans. Any additional impacts to streams and/or wetlands within the project may be considered cumulative to impacts approved in this Certification and may require a modification of this 401 Water Quality Certification approval.

Citation: 15A NCAC 02H .0506; 15A NCAC 02H .0507(c)

3. All wetlands, streams, and surface waters located within 50 feet of the construction area on the project site shall be clearly marked (example- orange fabric fencing) prior to any land disturbing activities and must be maintained on the property until the project phase is completed.

Citation: 15A NCAC 02H .0506(b)(2); 15A NCAC 02H .0507(c)

4. Appropriate measures should be installed prior to any land clearing activities to protect wetlands, streams, and/or buffers from turbidity and/ or sedimentation. These measures should be routinely inspected and properly maintained, and excavated materials should be contained outside wetland, stream, and/or buffer boundaries. Excessive silt and sediment loads can have numerous detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs, and clogging of gills of aquatic species.

Citation: 15A NCAC 02H .0506(b)(2); 15A NCAC 02H .0507(c)

5. All wetlands impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species including woody species.

Citation: 15A NCAC 02H .0506(b)

6. Any additional impacts to streams and/or wetlands as a result of future roads, buildings, driveways, utility lines or other development related activities within the Big Branch 2 Force Main and Pump Station may be considered cumulative to impacts approved in this Certification and may require a modification of this 401 Water Quality Certification approval.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

7. The permittee shall comply with any moratoriums per the National Marine Fisheries Service and/or the US Fish and Wildlife Service.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 04B .0125

8. The permittee shall provide on-site supervision of stability work including, but not limited to bank re-sloping, culvert installation, in-stream structure placement, and riparian zone re-establishment,



by an appropriately trained individual.

Citation: 15A NCAC 02H .0506(b)(1) and (2)

9. Disturbed areas shall be stabilized at the end of each working day to ensure downstream water quality standards are maintained throughout construction.

Citation: 15A NCAC 02H .0506(b)(1) and (2)

10. The Permittee shall secure an *approved* stormwater management plan (SMP) from NCDEMLR **before any** impacts authorized in this Certification occur. The applicable portion of the approved SMP shall be constructed and operational before any permanent building or other permanent structure is occupied at the site. If any of the SCMs are used as an Erosion and Sediment Control device, it must be restored to the approved stormwater design condition within 30 days of close-out of the Erosion and Sediment Control Plan.

Citation: 15A NCAC 02H .0506(b)(2) and (3); 15A NCAC 02H .0507(c)

11. If the Permittee becomes aware of any inability to comply with any of the conditions of this Water Quality Certification, they must notify the Raleigh Regional Office within 24 hours (or the next business day if a weekend or holiday) from the time the Permittee becomes aware of the circumstances. The Permittee may be required to submit a new application package with appropriate fee to initiate modification of this authorization, and/or to conduct corrective actions as determined by the Division.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

12. The Permittee shall report to the DWR Raleigh Regional Office any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200], including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the Permittee became aware of the non-compliance circumstances.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

13. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the approved impacts (including temporary impacts).

Citation: 15A NCAC 02H .0506; 15A NCAC 02H .0507(c)

14. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2B of Title 15A in the North Carolina Administrative Code.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

15. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall



incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur.

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

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

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

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

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231

16. Sediment and erosion control measures shall not be installed in wetland or waters except within the footprint of temporary or permanent impacts otherwise authorized by this Certification. If placed within authorized impact areas, then placement of such measures shall not be conducted in a manner that results in dis-equilibrium of any wetlands, streambeds, or streambanks. Any silt fence installed within wetlands shall be removed from wetlands and the natural grade restored within two (2) months of the date that DEMLR or the locally delegated program has released the specific area within the project to ensure wetland standards are maintained upon completion of the project.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231

17. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

18. If the project is covered by NPDES Construction Stormwater Permit Number NCG010000 or NPDES Construction Stormwater Permit Number NCG250000, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping, and reporting requirements is required.



Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231

19. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the NC Sediment and Erosion Control Manual, or the NC Department of Transportation Construction and Maintenance Activities Manual, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200

20. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. If the width of the culvert is wider than the stream channel, the culvert shall include multiple boxes/pipes, baffles, benches and/or sills to maintain the natural width of the stream channel. If multiple culverts/pipes/barrels are used, low flows shall be accommodated in one culvert/pipe and additional culverts/pipes shall be installed such that they receive only flows above bankfull.

Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life. If the culvert outlet is submerged within a pool or scour hole and designed to provide for aquatic passage, then culvert burial into the streambed is not required.

For structures less than 72" in diameter/width, and topographic constraints indicate culvert slopes of greater than 2.5% culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g., rock ladders, cross-vanes, sills, baffles etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR thirty (30) calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required, provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of thirty (30) calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or



other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

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

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

21. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State, and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters.

Citation: 15A 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231

22. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231

23. All proposed and approved temporary fill and culverts shall be removed, and the impacted area shall be returned to natural conditions within sixty (60) calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross-sectional dimensions, planform pattern, and longitudinal bed profile. All temporarily impacted sites shall be restored and stabilized with native vegetation.

Citation: 15A NCAC 02H.0506(b); 15A NCAC 02H .0507(c)

24. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams or wetlands shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

25. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original streambed elevation and streambank contours are restored and maintained and shall consist of clean rock or masonry material free of debris or toxic pollutants. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or be installed in a manner that precludes aquatic life passage.



Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

26. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows, and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0201

27. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication, and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231

28. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance and compaction.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0231

29. In accordance with 143-215.85(b), the Permittee shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.

Citation: 15A NCAC 02H .0507(c); N.C.G.S 143-215.85(b)

30. The 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.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)

31. The Permittee shall require its contractors and/or agents to comply with the terms and conditions of this Certification 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 Water Quality Certification. A copy of this Water Quality Certification shall be available at the project site during the construction and maintenance of this project.

Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)



32. This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user.

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

This, the 20th day of December 2024

DocuSigned by:

Paul Wojoski

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Paul Wojoski, Water Quality Permitting Section
Chief

Division of Water Quality

