

ROY COOPER

Governor

MARY PENNY KELLEY

Secretary

RICHARD E. ROGERS, JR.

Director



NORTH CAROLINA  
Environmental Quality

December 2, 2024

DWR # 20241176

Chatham County

NCDOT Division 8  
Attn: Mr. Art King  
121 DOT Drive  
Carthage, NC 28327

Delivered via email to: [acking@ncdot.gov](mailto:acking@ncdot.gov)

**Subject: Approval of Individual 401 Water Quality Certification**

NCDOT Chatham Park Way South (R-5963A) on New Location from US 15/501,  
NC 87 to US 64 Business and Chatham Park Way, Town of Pittsboro.  
USACE Action ID. No. SAW-2019-01870

Dear Sirs:

Attached hereto is a copy of Certification No. WQC007170 issued to Art King and NCDOT Division 8 dated December 2<sup>nd</sup>, 2024. This approval is for the purpose and design described in your application. 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 new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)].

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.

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.

Upon the presentation of proper credentials, the 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. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.



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

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.

If you are unable to comply with any of the conditions of this Water Quality Certification you 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 shall report to the 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.

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

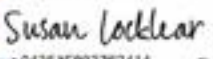
This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) **within sixty (60) calendar days**. Requirements for filing a Petition are 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.

One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:

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

This letter completes the Division's review under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Ryan Conchilla at 919-707-9111 or [ryan.conchilla@deq.nc.gov](mailto:ryan.conchilla@deq.nc.gov) if you have any questions or concerns.

Sincerely,  
Signed by:

  
Richard E. Rogers, Director  
Division of Water Resources

cc: Willie Sullivan, Kimley-Horn (via email)  
Stephen Brumagin, USACE Charlotte Regulatory Field Office (via email)  
Beth Harmon, Division of Mitigation Services (via email)  
DWR 401 & Buffer Permitting Branch Electronic file

### NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

**CERTIFICATION # WQC007170** 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 Mr. Art King and NCDOT Division 8, who has authorization for the impacts listed below, as described within your IP request received by the N.C. Division of Water Resources (Division) on September 6, 2024.

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)].

#### Stream Impacts in the Cape Fear River Basin

Site	Perm. Fill in Stream (linear ft)	Temp. Fill in Stream (linear ft)	Total Stream Impact (linear ft)
Site 1- Culvert Installation – 18' RCP-IV	5	12	17
Site 2- Culvert Installation- 1 @ 48' RCP-IV, HW Loss of Water	170		170
Site 2- Rip-Rap, No Loss of Water	57	59	116
<b>Totals</b>	<b>232</b>	<b>71</b>	<b>303</b>

**Total Stream Impacts: 303 linear feet.**

#### Wetland Impacts in the Cape Fear River Basin

Site	Perm. Fill in Wetlands (acres)	Mechanized Clearing in Wetlands (acres)	Total Wetland Impact (acres)
Site 3- 1 @ 48' RCP-IV, HW, Rip Rap	0.001	0.025	0.026
Site 4- Ditch		0.012	0.012
Site 5- Headwall and Bridge	0.105	0.084	0.189
<b>Totals</b>	<b>0.106</b>	<b>0.121</b>	<b>0.227</b>

**Total Wetland Impacts: 0.227 acres.**



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

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

1. The Division has received an acceptance letter from the NC Division of Mitigation Services (DMS) dated August 27, 2024 for impacts to 0.230 acres of jurisdictional wetlands located in the Cape Fear River Basin in Chatham County. Until the DMS receives and clears your payment, and proof of payment has been provided to this Office, no impacts specified in this Authorization Certificate for each phase outlined in the mitigation plan submitted with the application and updated (*Mitigation Plan, Revised August 2020*) shall occur. For accounting purposes, this Authorization Certificate authorizes payment to the DMS to meet the following compensatory mitigation requirement:

Mitigation:

	Compensatory Mitigation Required	River & Sub-basin Number
Wetlands	0.230 acres	Cape Fear (03030002)

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the project must provide for replacement of existing uses through compensatory mitigation.*

2. Mitigation for NCDOT Chatham Park Way South must be provided for the proposed impacts as specified in the table above. The Division has received an acceptance letter from the NC Division of Mitigation Services (DMS) to meet this mitigation requirement. Until the DMS receives and clears your payment, and proof of payment has been provided to this Office, no impacts specified in this Authorization Certificate shall occur. For accounting purposes, this Authorization Certificate authorizes payment to the DMS to meet the following compensatory mitigation requirement:

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the project must provide for replacement of existing uses through compensatory mitigation.*

3. Any final construction plans for development within the Chatham Park Way South portion of this project must include or reference the application and plans approved by the Division under this authorization letter and certification. NCDOT shall evaluate all final construction plans for all phases of the project, including any areas that are sold, leased, or otherwise constructed by others, to assure that they are consistent, and all relative impacts are accounted for and shown on the application documents.

*Citation: 15A NCAC 02H .0502 (a) and 15A NCAC 02H .0506 (b)(1)*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

4. NCDOT shall submit final construction plans for the Chatham Park Way South portion of this project for review and approval by DWR. The final design for the Project shall follow the NCDOT Post-Construction Stormwater Plan and Stormwater Best Management Practices Toolbox and that all stormwater measures shall be properly inspected and maintained in accordance with NCDOT's National Pollutant Discharge Elimination System (NPDES) stormwater permit NCS000250.

*Citation: 15A NCAC 02H .0502 (a) and 15A NCAC 02H .0506 (b)(1)*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

5. NCDOT shall ensure that all final construction plans for the development within Chatham Park Way South portion of this project comply with the approved Master Stormwater Manual Additional Element as approved by the Town. NCDOT shall evaluate all proposed SCM locations in detail to ensure that downstream hydrology is provided to all jurisdictional features within the project limits. NCDOT shall notify DWR if any future modifications occur to approved Master Stormwater Manual Additional Element which would result in less stringent stormwater requirements for the overall project.

*Citation: 15A NCAC 02H .0502 (a) and 15A NCAC 02H .0506 (b)(1)*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

6. NCDOT shall notify all future buyers, tenants, and/or leases of the conditions of this certification, particularly with attention to the requirements that may be above and beyond typical erosion control and/or stormwater measures. NCDOT shall retain documentation of these communications and provide them to DWR upon request.

*Citation: 15A NCAC 02H .0502 (a) and 15A NCAC 02H .0506 (b)(1)*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

7. NCDOT shall schedule and conduct a pre-construction meeting with the construction contractors, NCDOT staff, and Division staff to review the conditions and requirements of the respective certifications and permits for clarity and understanding before any impacts authorized in this Certification occur.

*Citation: 15A NCAC 02H .0507 (c) and 15A NCAC 02H .0502 (e) and 15A NCAC 02H .0506 (b)(3)*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

8. All sewer lines shall be designed, constructed and maintained in accordance with Title 15A NCAC Chapter 02T, applicable Minimum Design Criteria (MDC), and/or Alternative Design Criteria.

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

*Justification: The referenced Minimum Design criteria and 02T rules were adopted to ensure that conditions of waters be suitable for all best uses provided for in state rule (including, at minimum: aquatic life propagation, survival, and maintenance of biological integrity; wildlife: secondary contact recreation: agriculture); and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis.*

9. Any utility construction corridor that is parallel to a stream or open water shall not be closer than 10 feet to the top of bank or ordinary high-water mark.

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

10. Construction corridors in wetlands and/or across stream channels shall be minimized to the maximum extent practicable and shall not exceed 40 feet wide for utility lines.

For construction corridors in wetlands and across stream channels, stumps shall be grubbed only as needed to install the utility and remaining stumps shall be cut off at grade level. The general stripping of topsoil within wetlands along the construction corridor is prohibited.

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

11. Permanent maintained access corridors in wetlands and across stream channels shall be restricted to the minimum width practicable and shall not exceed 30 feet wide except at manhole locations.

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

12. For all utility lines constructed within wetlands, an anti-seep collar shall be placed at the downstream (utility line gradient) wetland boundary and every 150 feet up the gradient until the utility exits the wetland. 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 long do not require anti-seep collars. The compacted clay shall have a specific infiltration of  $1 \times 10^{-5}$  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:

- i. Minimum cement content, sacks per cubic yard with rounded coarse aggregate 5.0
- ii. Minimum cement content, sacks per cubic yard with angular coarse aggregate 5.5
- iii. Maximum water-cement ratio gallons per sack 6.8
- iv. Slump range 2" to 4"
- v. Minimum strength – 28-day psi 2,500

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*

13. The permittee shall have a specific plan for restoring wetland contours to pre-construction conditions. 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 piled separately from subsoils and will be backfilled into the trench only after the subsoils have been placed and compacted.

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards or would result in secondary or cumulative impacts.*



14. 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)*

*Justification: Timely reporting of non-compliance is important in identifying and minimizing detrimental impacts to water quality and avoiding impacts due to water pollution that precludes any best use on a short-term or long-term basis.*

15. 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)*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule (including, at minimum: aquatic life propagation, survival, and maintenance of biological integrity; wildlife; secondary contact recreation; agriculture); and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis.*

16. 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)*

*Justification: The referenced Riparian Buffer rules were adopted to address water quality impairments and further protect existing uses.*

17. 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), the Chatham County Soil Erosion and Sedimentation Control Ordinance, as well as 15A NCAC 04B .0124: Design Standards for Sensitive Watersheds items (b), (c) and (e).

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC02B .0200; 15A NCAC 02B .0231*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*



18. 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 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*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

19. 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)*

*Justification: A project that affects waters shall not be permitted unless the existing uses (including aquatic life propagation and biological integrity), and the water quality to protect such uses, are protected. Protections are necessary to ensure any remaining surface waters or wetlands, and any surface waters or wetlands downstream, continue to support existing uses during and after project completion. The Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards, or would result in secondary or cumulative impacts.*

20. 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*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity*

*in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

21. 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*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.*

22. In-stream structures installed to mimic natural channel geomorphology such as cross-vanes, sills, step-pool structures, etc. shall be designed and installed in such a manner that allow for continued aquatic life movement.

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

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. Ensuring that in-stream structures are installed properly will ensure that surface water quality standards are met and conditions of waters are suitable for all best uses.*

23. 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 bank full.

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 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 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)*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. Ensuring that structures are installed properly in waters will ensure that surface water quality standards are met and conditions of waters are suitable for all best uses.*

24. Bridge deck drains shall not discharge directly into streams or wetlands. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering streams or wetlands.

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

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. Ensuring that in-stream structures are installed properly will ensure that surface water quality standards are met and conditions of waters are suitable for all best uses.*



25. 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*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

26. 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 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

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

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

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Protections are necessary to ensure any remaining surface waters or wetlands, and any surface waters or wetlands downstream, continue to support existing uses after project completion.*

28. 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)*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. Ensuring that structures are installed properly in waters will ensure that surface water quality standards are met and conditions of waters are suitable for all best uses.*

29. 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)*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. The Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards, or would result in secondary or cumulative impacts.*

30. Any rip-rap used for stream 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*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. The Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards, or would result in secondary or cumulative impacts.*

31. 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*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. As cited in Wetland*

*Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

32. 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*

*Justification: Wetland standards require maintenance or enhancement of existing uses of wetlands such that hydrologic conditions necessary to support natural biological and physical characteristics are protected; populations of wetland flora and fauna are maintained to protect biological integrity of the wetland; and materials or substances are not present in amounts that may cause adverse impact on existing wetland uses.*

33. 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)*

*Justification: Person(s) owning or having control over oil or other substances upon notice of discharge must immediately notify the Department, or any of its agents or employees, of the nature, location, and time of the discharge and of the measures which are being taken or are proposed to be taken to contain and remove the discharge. This action is required in order to contain or divert the substances to prevent entry into the surface waters. Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule (including, at minimum: aquatic life propagation, survival, and maintenance of biological integrity; wildlife; secondary contact recreation; agriculture); and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis.*

34. 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)*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. The Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards, or would result in secondary or cumulative impacts.*

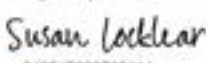
35. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this General Certification. A copy of this General 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)*

*Justification: Those actually performing the work should be aware of the requirements of this 401 Water Quality General Certification to minimize water quality impacts.*

This approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit. The conditions in effect on the date of issuance shall remain in effect for the life of the project, regardless of the expiration date of this Certification. [15A NCAC 02H .0507(c)]

This, the 2<sup>nd</sup> day of December 2024

Signed by:  
  
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Richard E. Rogers, Director  
Division of Water Resources

WQC 007170