



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

June 8, 2021

MEMORANDUM TO: Mr. Brett Canipe, P.E.  
Division 10 Engineer

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

SUBJECT: **Renewed/Reissued Environmental Permits** for the Improvements to NC 24/27 from NC 740 in Albemarle to the Proposed Troy Bypass in Stanly and Montgomery Counties. Divisions 8 & 10, Federal Aid Project No STBG-0024(083), WBS 34446.1.7.  
**TIP: R-2530 B, B-4974, R-2527**

Please find enclosed the following renewed/reissued environmental permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Regional General Permit 31	December 25, 2025
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 4135	December 25, 2025

Environmental permitting is complete for the construction of this project.  
Please feel free to contact our Unit for any questions.

ec:  
NCDOT Permit Website (<https://xfer.services.ncdot.gov/pdea/PermIssued/>)  
Mr. Joel Howard, Division Environmental Officer

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

Action Id. SAW-2008-02315

Counties: Stanly and Montgomery U.S.G.S. Quad: NC-Morrow Mountain

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: Philip Harris III  
North Carolina Department of Transportation  
Address: 1598 Mail Service Center  
Raleigh NC, 27699  
Telephone Number: 919-707-6126 (J. Hemphill)

Size (Corridor Length) ~14.6 miles                      Nearest Town Mount Gilead  
Nearest Waterway Pee Dee River                      River Basin Upper Pee Dee  
USGS HUC 03040104                                      Coordinates Latitude: 35.310; Longitude: -80.077

Location description: The project area consists of an approximately 14.6-mile corridor that spans along NC 24-27 from NC 740 in Albemarle, Stanly County, to the Troy Bypass, west of Troy, Montgomery County, NC.

Description of projects area and activity: The project is a combination of three separate NCDOT projects: TIP projects R-2530B, B-4974 and R-2527. TIP projects R-2530B and B-4974 have final impact totals that are based off of final design plans; whereas, TIP project R-2527 is only in the preliminary design phase with 25 percent review plans.

TIP project R-2530B will widen the existing NC 24-27, from west of NC 740 to the Pee Dee River in Stanly County, from a two to three-lane facility to a four-lane divided facility. TIP project R-2530B will also involve a superstreet design in the areas where curb and gutter is proposed. TIP project B-4974 will rehabilitate the existing Bridge No. 51 over the Pee Dee River on the Stanly / Montgomery County line. In general, this verification would authorize the following:

- the permanent discharge of fill material into 1.01 acre wetlands;
- the permanent discharge of fill material into 0.75 acre of open waters;
- the permanent discharge of fill material into 4,980 linear feet of stream;
- the permanent discharge of fill material into 695 linear feet of streams for bank stabilization causing a permanent impact to the streams but not a permanent loss of waters; and
- the temporary discharge of fill material into 611 linear feet of streams.

TIP project R-2527 will widen the existing NC 24-27 from a two-lane facility to a four-lane divided facility from east of the Pee Dee River to the Troy Bypass. Note that TIP project R-2527 is only in preliminary design with 25 percent review plans. The preliminary impact totals to streams, wetlands and open waters are estimated by using the project's slope stakes plus an additional 25 feet. According to the 25 percent review plans for TIP project R-2527, the preliminary impacts are as follows:

- impacts to 1.04 acre of wetlands,
- impacts to 8068 linear feet of streams, and
- impacts to 0.45 acre of open water.

This verification authorizes the impacts to streams, wetlands and open waters that would result from TIP projects R-2530B, B-4974 and R-2527. However, please refer to the attached Special Condition e. with regards to construction timing. NOTE: This authorization replaces the previous authorization dated 5/2/2019. The special conditions and mitigation requirements have not changed, with the exception of Special Condition e.

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

Authorization: Regional General Permit Number GP 31 - NCDOT – Merger Widening Projects

*SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND/OR SPECIAL CONDITIONS*

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the enclosed Conditions, your application and plans dated 10/16/2018, and your 4/21/2021 request for re-verification. 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.

Action Id. SAW-2008-02315

This verification will remain valid until the expiration date identified below unless the regional general permit 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.

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 Eric Alsmeyer at 919-554-4884 ext. 23 or [eric.c.alsmeyer@usace.army.mil](mailto:eric.c.alsmeyer@usace.army.mil).

Corps Regulatory Official: *Monte Matthew* Date: 2021.05.20  
10:45:57 -04'00' Date: 5/20/2021  
Expiration Date of Verification: 12/25/2025

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 the Customer Satisfaction Survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

**SPECIAL CONDITIONS**

a. 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.

b. NCDOT shall abide by all stipulations identified in the Memorandum of Agreement between the Permittee, the North Carolina State Historic Preservation Officer, the Federal Highway Administration, the United States Forest Service, and the Catawba Indian Nation, signed by the North Carolina State Historic Preservation Officer on 12/19/2018, copy attached and identified as Attachment 1.

c. This Department of the Army permit does not authorize you to take an endangered species, in particular the Schweinitz's sunflower, *Helianthus schweinitzii*. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service Biological Opinion (BO) (Attachment 2) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

d. The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Biological Opinion (BO) titled "Northern Long-eared Bat (NLEB) Programmatic Biological Opinion for North Carolina Department of Transportation (NCDOT) Activities in Eastern North Carolina (Divisions 1-8)," dated March 25, 2015, and adopted on April 10, 2015, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that are specified in the BO. Your authorization under this Department of the Army permit is conditional upon your compliance with all the mandatory terms and conditions associated with incidental take of the BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Department of the Army permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

e. This permit only authorizes work on Sections TIP R-2530B and B-4974. Construction on Sections of TIP R-2527 shall not commence until: (a) final design has been completed for those sections and submitted to the U.S. Army Corps of Engineers (Corps); (b) the Permittee has minimized impacts to waters and wetlands to the maximum extent practicable and the Corps concurs with this assessment through standard Merger 4B and 4C meetings; (c) the Permittee has completed current plant surveys for the R-2527 sections for Schweinitz's sunflower, and provided the survey results to the Corps; (d) any modification to the plans have been approved by the Corps in writing; and (e) a final compensatory mitigation plan has been submitted by the Permittee and approved by the Corps.

f. **Work Limits:** All work authorized by this permit shall be performed in strict compliance with the attached permit plans, which are a part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any modification to the attached permit plans must be approved by the US Army Corps of Engineers prior to any active construction in waters or wetlands.

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**g. Permit Distribution:** The Permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, drawings and attachments shall be available at the project site during the construction and maintenance of this project.

**h. Pre-Construction Meeting:** The Permittee shall schedule and attend a preconstruction meeting between its Construction representatives, the contractors representatives, and the U.S. Army Corps of Engineers, Raleigh Regulatory 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 Corps, Raleigh Regulatory 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 Corps, NCDCM, and NCDWR Project Managers can attend. The Permittee shall invite the Corps, NCDCM, and NCDWR 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. The thirty (30) day requirement can be waived with the concurrence of the Corps.

**i. Notification of Construction Commencement and Completion:** The Permittee shall notify the U.S. Army Corps of Engineers in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

**j. Reporting Address:** All reports, documentation, and correspondence required by the conditions of this permit shall be submitted to the following: U.S. Army Corps of Engineers, Wilmington District Raleigh Regulatory Field Office, Attn: Eric Alsmeyer, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587, or [eric.c.alsmeyer@usace.army.mil](mailto:eric.c.alsmeyer@usace.army.mil). The Permittee shall reference the following permit number, SAW-2008-02315, on all submittals.

**k. Reporting Violations:** Violation of these permit conditions or violation of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act shall be reported to the Corps in writing and by telephone at: 919-554-4884 within 24 hours of the Permittee's discovery of the violation.

**l. Clean Fill:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, construction debris, metal and plastic products, and concrete block with exposed reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.

**m. Culverts:**

1) Unless otherwise requested in the application and depicted on the approved permit plans, culverts greater than 48 inches in diameter shall be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter and 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 existing channel slope. The bottom of the culvert shall be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Culverts shall be designed and constructed in a manner that minimizes destabilization and head cutting.

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2) Measures shall 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 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 opening shall 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.

3) The Permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The Permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the U.S. Army Corps of Engineers.

4) Culverts placed within wetlands must be installed in a manner that does not restrict the flows and circulation patterns of waters of the United States. Culverts placed across wetland fills purely for the purposes of equalizing surface water shall not be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

### **n. Sediment and Erosion Control:**

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

2) 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. This includes, but is not limited to, sediment control fences and other barriers intended to catch sediment losses.

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

4) 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 ensure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to ensure 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 shall 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 shall be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures shall be inspected and maintained regularly, especially following rainfall events. All fill material shall be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

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o. **Borrow and Waste:** 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 as borrow and/or waste sites associated with this project. The Permittee shall provide the U.S. Army Corps of Engineers with appropriate maps indicating the locations of proposed borrow and/or waste sites as soon as such information is available. The Permittee shall submit to the Corps site-specific information needed to ensure that borrow and/or waste sites comply with all applicable Federal requirements, to include compliance with the Endangered Species Act and the National Historic Preservation Act, such as surveys or correspondence with agencies (e.g., the USFWS, the NC-HPO, etc.). The required information shall also include the location of all aquatic features, if any, out to a distance of 400 feet beyond the nearest boundary of the site. The Permittee shall not approve any borrow and/or waste sites before receiving written confirmation from the Corps that the proposed site meets all Federal requirements, whether or not waters of the U.S., including wetlands, are located in the proposed borrow and/or waste site. All delineations of aquatic sites on borrow and/or waste sites shall be verified by the U.S. Army Corps of Engineers and shown on the approved reclamation plans. The Permittee shall ensure that all borrow and/or waste sites comply with Special Condition p. of this permit. Additionally, the Permittee shall produce and maintain documentation of all borrow and waste sites associated with this project. This documentation will include data regarding soils, vegetation, hydrology, any delineation(s) of aquatic sites, and any jurisdictional determinations made by the Corps to clearly demonstrate compliance with Special Condition p. All information will be available to the U.S. Army Corps of Engineers upon request. The Permittee shall require its contractors to complete and execute reclamation plans for each borrow and/or waste site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the U.S. Army Corps of Engineers within 30 days of the completion of the reclamation work.

p. Except as authorized by this permit or any U.S. Army Corps of Engineers 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 waste 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.

Action ID Number: SAW-2008-02315

County: Stanly and Montgomery

Permittee: North Carolina Department of Transportation, Carla Dagnino

Project Name: R-2530B, B-4974, R-2527: NC 24/27 Widening from Albemarle to the Troy Bypass

Date Verification Issued: 5/20/2021

Project Manager: Eric Alsmeyer

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: Eric Alsmeyer  
Raleigh Regulatory Office  
U.S Army Corps of Engineers  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, North Carolina 27587  
or  
eric.c.alsmeyer@usace.army.mil

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:** North Carolina Department of Transportation, Carla Dagnino  
02315

**Action ID:** SAW-2008-

**Project Name:** R-2530B, B-4974, R-2527: NC 24/27 Widening from Albemarle to the Troy Bypass **County:** Montgomery

**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:** 03040104, Yadkin River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
4,980			1.01			

\*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:** 03040104, Yadkin River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
9,960			2.02			

**Mitigation Site Debited:** NCDMS

(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:** \_\_\_\_\_

NCDMS DMS

**Name of Sponsor's Authorized Representative:** \_\_\_\_\_

Beth Harmon

**Signature of Sponsor's Authorized Representative**

Beth Harmon

**Date of Signature**

05/16/2019

**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:** A letter from NCDMS, confirming their willing and able to accept the applicants compensatory mitigation responsibility, dated 10/16/2018 was included with the preconstruction notification. This mitigation is from impacts associated with TIP Nos. R-2530B and B-4974. Mitigation associated with TIP No. R-2527 will be assessed once NCDOT submits final plans.

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:** Roscoe L. Sullivan, III  
**USACE Field Office:** Raleigh Regulatory Office  
US Army Corps of Engineers  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, North Carolina 27587  
**Email:** roscoe.l.sullivan@usace.army.mil



\_\_\_\_\_  
**USACE Project Manager Signature**

\_\_\_\_\_  
5/2/2019

**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>

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

Regional General Permit No. SAW-198200031 (RGP 31)  
Name of Permittee: North Carolina Department of Transportation  
Effective Date: May 26, 2020  
Expiration Date: May 25, 2025

**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 BEST-FIT WIDENING PROJECTS, OR PHASES OF “PHASED” BEST-FIT WIDENING PROJECTS, THAT (1) HAVE UNDERGONE INTERAGENCY REVIEW AND COMPLETED THE INTERAGENCY MERGER PROCESS, AND (2) WOULD CAUSE ONLY MINIMAL INDIVIDUAL AND CUMULATIVE ADVERSE ENVIRONMENTAL EFFECTS. THESE PROJECTS ARE CONDUCTED BY THE VARIOUS DIVISIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT), INCLUDING THE NCDOT DIVISION OF HIGHWAYS, RAIL, BICYCLE/PEDESTRIAN, ETC.**

Detailed Description/Terms

The Merger Process merges the requirements of the National Environmental Policy Act (NEPA) with those of Section 404 of the Clean Water Act (CWA).

A best-fit widening project, or a phase of a “phased” best-fit widening project, must complete the interagency Merger Process in order to qualify for authorization under RGP 31.

Projects that require an Environmental Impact Statement (EIS) cannot be authorized by RGP 31.

Best-fit widening projects, or phases of “phased” best-fit widening projects, may include a small amount of new location roadway for components such as interchanges, intersections, road segments, etc., provided that (1) the Merger Team concurs on the new location portion, and (2) the Corps determines that the amount of new location roadway is acceptable for authorization under RGP 31. Note that “new location roadway” is not limited to the examples provided above.

If the Merger Process for a specific best-fit widening project, or a phase of a “phased” best-fit widening project, is modified to exclude Concurrence Points (CPs), or changed in any way that prevents the interagency Merger Team from concurring, non-concurring, or abstaining (for those agencies that are allowed to abstain under the Merger Memorandum of Understanding) on all CPs, RGP 31 cannot be used to authorize the best-fit widening project or phase. Note that combining CPs is acceptable in some circumstances and will not prevent a best-fit widening project or phase from being authorized under RGP 31.

The Corps will determine if RGP 31 can be used to authorize a particular best-fit widening project, as follows:

- **Best-fit widening projects that are not phased** - this decision will not be made by the Corps until (1) the best-fit widening project completes the full Merger Process (i.e., all CPs have been completed) for road widening projects; (2) the prospective permittee completes final design for the project; (3) the prospective permittee submits a pre-construction notification (PCN) for the project to the Corps, and; (4) the Corps completes the evaluation of the PCN. If the Corps determines that the project qualifies for use of RGP 31, and once all other requirements are satisfied, the Corps will issue a verification letter for the use of RGP 31 for impacts to waters of the U.S. for the best-fit widening project.
- **Best-fit widening projects that are phased** - this decision will not be made by the Corps until (1) the entire best-fit widening project completes the Merger Process, up to and including completion of CP 4A (Avoidance/Minimization); (2) the initial phase to be constructed (Phase 1) completes CPs 4B and 4C; (3) the prospective permittee completes final design for Phase 1; (4) the prospective permittee submits a PCN for the entire project to the Corps, and; (5) the Corps completes the evaluation of the PCN. If the Corps determines that the project qualifies for use of RGP 31, and once all other requirements are satisfied, the Corps will issue a verification letter for the use of RGP 31 for impacts to waters of the U.S. for the project, but the verification letter will authorize construction of Phase 1 only.

Authorization of impacts for Phase 2 - with the exception of (1) noted above, Phase 2 will be processed as Phase 1 was, i.e., Phase 2 completes CPs 4B and 4C, the prospective permittee completes final design for Phase 2, the prospective permittee submits a PCN to the Corps for evaluation, and the Corps completes the re-evaluation of the PCN. If the

Corps determines that the project still qualifies for use of RGP 31, and once all other requirements are satisfied, the Corps will issue a re-verification letter for the use of RGP 31 authorizing Phase 2 construction. If there are additional phases of a project, the same process will apply.

Phased Projects - if, after the entire project completes CP 4A, project impacts to waters of the U.S. for a particular phase increase or change to such a degree that the Corps determines that the proposed impacts of that phase would cause more than minimal individual and cumulative adverse environmental effects, RGP 31 will no longer be available for use and an Individual Permit will be required for the remainder of the project. This will apply even if impacts to waters of the U.S. for previous phases of that specific project were authorized by RGP 31.

If the Programmatic Merger Process changes while a best-fit widening project, or phase of a “phased” best-fit widening project, is in the Merger Process (e.g., if the Merger Process is updated or revised on a programmatic scale), the Merger Process for widening projects that was in place when the project review by the interagency Merger Team began (i.e., at CP 1), will remain in effect, unless the Merger Team concurs that the new programmatic process may be used. If the Merger Teams concurs that the new programmatic process may be used for a phase of a “phased” best-fit widening project, that process will be used for the remainder of the project/all phases.

While there is no impact limit under RGP 31, the Corps will require an Individual Permit if the proposed impacts (permanent and/or temporary) of a best-fit widening project, or phases of a “phased” best-fit widening project, would have more than minimal individual and cumulative adverse environmental effects. Additionally, if the Corps determines, on a case-by-case basis, that the concerns for the aquatic environment so indicate, he/she may exercise discretionary authority to override this RGP and require an Individual Permit.

#### 1. Special Conditions.

a. The prospective permittee must submit a pre-construction notification (PCN) and applicable supporting information 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) (“CAMA counties”), a consistency submission is not required. If the project will impact a designated AEC and meets the definition of “development”, the prospective permittee must obtain the required CAMA permit. Development activities shall not commence until a copy of the approved CAMA permit is furnished to the appropriate Corps Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889).

**\*The 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. No work shall be authorized by this RGP within the 20\* CAMA counties without prior consultation with the National Oceanic and Atmospheric Administration's (NOAA) Habitat Conservation Division. 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 prospective permittee and forwarded to the Corps and NOAA Fisheries for review and comment prior to authorization of work.

d. Culverts and pipes. The following conditions [(1)-(8)] apply to the construction of culverts/pipes, and work on existing culverts/pipes.

Additionally, if the proposed work would affect an existing culvert/pipe (e.g., culvert/pipe extensions), the prospective permittee must include actions (in the PCN) to correct any existing deficiencies that are located:

- At the inlet and/or outlet of the existing culvert/pipe, IF these deficiencies are/were caused by the existing culvert/pipe, or
- Near the inlet or outlet of the existing culvert/pipe, IF these deficiencies are/were caused by the existing culvert/pipe.

These deficiencies may include, but are not limited to, stream over-widening, bank erosion, streambed scour, perched culvert/pipes, and inadequate water depth in culvert(s). Also note if the proposed work would address the existing deficiency or eliminate it – e.g., bank erosion on left bank, but the culvert extension will be placed in this eroded area. If the prospective permittee is unable to correct the deficiencies caused by the existing culvert/pipe, they must document the reasons in the PCN for Corps consideration.

(1) 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. Measures will be included that will promote the safe passage of fish and other aquatic organisms.

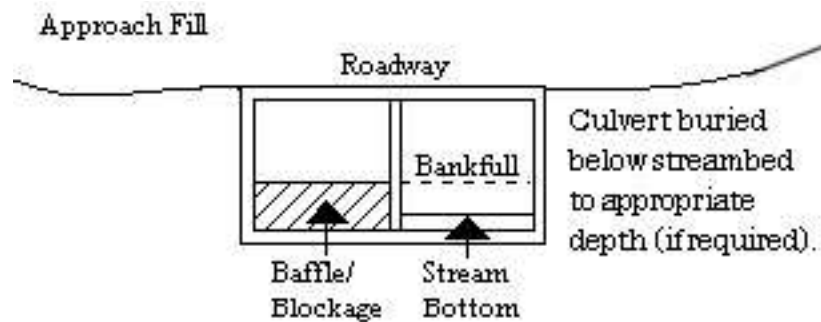
(2) The dimension, pattern, and profile of the stream above and below a culvert/pipe shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. It is acceptable to use rock vanes at culvert/pipe outlets to ensure, enhance, or maintain aquatic passage. Pre-formed scour holes are acceptable when designed for velocity reduction. The width, height, and gradient of a proposed opening shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow will be determined from gauge data, if available. In the absence of such data, bankfull flow will be used as a comparable level.

(3) Burial/depth specifications: If the project is located within any of the 20\* CAMA counties, culvert/pipe 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 located outside of the 20\* CAMA counties, culvert/pipe inverts will be buried at least one foot below the bed of the stream for culverts/pipes that are greater than 48 inches in diameter. Culverts/pipes that are 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, to include passage during drought or low flow conditions. Every effort shall be made to maintain the existing channel slope. A waiver from the burial/depth specifications in this condition may be requested in writing. The prospective permittee is encouraged to request agency input about waiver requests as early as possible, and prior to submitting the PCN for a specific project; this will allow the agencies time to conduct a site visit, if necessary, and will prevent time delays and potential project revisions for the prospective permittee. The waiver will only be issued by the Corps if it can be demonstrated that the impacts of complying with burial requirements would result in more adverse impacts to the aquatic environment.

(4) Appropriate actions to prevent destabilization of the channel and head cutting upstream shall be incorporated in the design and placement of culverts/pipes.

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

(6) Bankfull flows (or less) shall be accommodated through maintenance of the existing bankfull channel cross sectional area in no more than one culvert/pipe or culvert/pipe barrel. Additional culverts/pipes or barrels at such crossings shall be allowed only to receive flows exceeding the bankfull flow. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable to comply with this condition.



(7) Where adjacent floodplain is available, flows exceeding bankfull will be accommodated by installing culverts/pipes at the floodplain elevation. When multiple culverts/pipes are used, baseflow must be maintained at the appropriate width and depth by the construction of floodplain benches, sills, and/or construction methods to ensure that the overflow culvert(s)/pipe(s) is elevated above the baseflow culvert(s)/pipe(s).

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

See the remaining special conditions for additional information about culverts/pipes in specific areas.

e. 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 15th and June 30th, without prior written approval from the Corps and the appropriate wildlife agencies (NCDMF, NCWRC, and/or the National Marine Fisheries Service (NMFS)). Discharges into waters of the U.S. designated by NCWRC as primary nursery areas in inland waters are prohibited during the period between February 15th and September 30th, without prior written approval from the Corps and the appropriate wildlife agencies. Discharges into waters of the U.S. designated by NCDMF as primary nursery areas shall be coordinated with NCDMF prior to being authorized by this RGP. Coordination with NCDMF may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

The prospective permittee 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 Division**  
**1721 Mail Service Center**  
**Raleigh, NC 27699-1721**  
**Telephone (919) 707-0220**

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

g. No in-water work shall be conducted in waters of the U.S. designated as Atlantic sturgeon critical habitat during the periods between February 1st and June 30th. No in-water work shall be conducted in waters of the U.S. in the Roanoke River designated as Atlantic sturgeon critical habitat during the periods between February 1st and June 30th, and between August 1st to October 31st, without prior written approval from NMFS.



h. Before discharging dredged or fill material into waters of the U.S. in designated trout watersheds in North Carolina, the PCN will be sent to the NCWRC and the Corps concurrently. See <https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx> for the designated trout watersheds. The PCN shall summarize alternatives to conducting work in waters of the U.S. in trout watersheds that were considered during the planning process and detail why alternatives were or were not selected. For proposals where (1) a bridge in a trout stream will be replaced with a culvert, or (2) a culvert will be placed in a trout stream, the PCN must also include a compensatory mitigation plan for all loss of stream bed, and 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. The evaluation 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 shall 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, the prospective permittee will describe bedforms that will be impacted by the proposed culvert – e.g., pools, glides, riffles, etc. The NCWRC will respond to both the prospective permittee and the Corps.

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

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

(2) Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters; however, the prospective permittee may request a waiver from this requirement. The waiver request must be in writing. The Corps will only issue a waiver if the prospective permittee demonstrates that the impacts of complying with this requirement would result in greater adverse impacts to the aquatic environment. Note that filter fabric is not required if the riprap will be pushed or “keyed” into the bank of the waterbody.

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

(4) Riprap shall not be placed in a manner that prevents or impedes fish passage.

(5) Riprap shall be clean and free from loose dirt or any pollutant except in trace quantities that will not have an adverse environmental effect.

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

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

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

k. 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 authorized by this RGP. Impacts from the detour may be considered temporary and may not require compensatory mitigation if the impacted area is restored to pre-construction elevations and contours after construction is complete. The permittee shall also restore natural hydrology and stream corridors (if applicable) and reestablish native vegetation/riparian corridors. 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. See special condition "s" for additional information.

l. All activities authorized by this RGP shall, to the maximum 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 set and cured. 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).

m. 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 pre-construction elevations and contours. The permittee shall also restore natural hydrology and stream corridors (if applicable), and reestablish 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" in this document. Any proposed on-site wetland restoration area must be void of utility conflicts and/or utility maintenance areas. A restoration plan detailing this activity will be required with the submittal of the PCN.

n. 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).

o. 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, scour, 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.

p. All PCNs will describe sedimentation and erosion control structures and measures proposed for placement in waters of the U.S. To the maximum extent practicable, structures and measures will 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.

q. Compensatory mitigation will be required for permanent impacts resulting in a loss of waters of the U.S. due to culvert/pipe installation and other similar activities. Mitigation may be required for stream relocation projects (see Special Condition "r" below). When compensatory mitigation is required, the prospective permittee will attach a proposed mitigation plan to the PCN. Compensatory mitigation proposals will be written in accordance with currently approved Wilmington District guidance and Corps mitigation regulations, unless the purchase of mitigation credits from an approved mitigation bank or the North Carolina Division of Mitigation Services (NCDMS) is proposed to address all compensatory mitigation requirements. The Corps Project Manager will make the final determination concerning the appropriate amount and type of mitigation.

r. Stream Relocations (non-tidal only) - for the purposes of permitting, stream relocations are considered a loss of waters of the U.S. Depending on the condition and location of (1) the existing stream, and (2) the relocated channel, stream relocation(s) may provide a functional uplift. The Corps will determine if an uplift is possible based on the information submitted with the PCN. If the anticipated uplift(s) occurs, it may offset, either partially or fully, the loss associated with a stream relocation(s) - (i.e., due to the uplift, either no compensatory mitigation would be required for the stream relocation itself, or compensatory mitigation would be required at a reduced ratio).

Because the amount of potential uplift is dependent upon the condition (or quality) of the channel to be relocated, there is no pre-determined amount of uplift needed to satisfy the requirements for a successful relocation project. After performing the evaluation(s) noted in this

document, the prospective permittee will propose a certain amount of uplift potential and the Corps project manager will make the final determination. Baseline conditions and subsequent monitoring must show that the relocated channel is providing/will provide aquatic function at, or above, the level provided by the baseline (pre-project) condition. If the required uplift is not achieved, the work will not be in compliance with this special condition of RGP 31 and remediation will be required through repair (and continued monitoring), or by the permittee providing compensatory mitigation (e.g., mitigation credit through an approved bank, mitigation credit through NCDMS, etc.).

Compensatory mitigation, in addition to the stream relocation activity, may be required if the Corps determines that (a) no uplift in stream function is achievable, (b) the proposed uplift in stream function is not sufficient, by itself, (c) the risks associated with achieving potential uplifts in stream function are excessive, and/or (d) the time period for achieving the potential uplifts/functional success is too great.

On-site compensatory mitigation is not the same as stream relocation. While stream relocation simply moves a stream to a nearby, geographically similar area, it does not generate mitigation credits. If NCDOT proposes to generate compensatory mitigation on a project site, NCDOT must submit a mitigation plan that complies with 33 CFR 332.4.

**The prospective permittee is required to submit the following information for any proposed project that involves stream relocation, regardless of the size/length of the stream relocation** (note that 1-5 below only apply to stream relocations and not to compensatory mitigation):

- (1) A statement detailing why relocating the stream is unavoidable. In order to ensure that this action is separate from a compensatory mitigation project, the need for the fill must be related to road/interchange/intersection construction or improvement, and the project must meet the requirements set forth in the full description/terms on pages 1-3 of this permit.
- (2) An evaluation of effects on the relocated stream and buffer from utilities, or potential for impact from utility placement in the future.
- (3) An evaluation of the baseline condition of the stream to be relocated. In order to demonstrate a potential uplift, the prospective permittee must provide the baseline (pre-impact) condition of the stream that is proposed for relocation. The prospective permittee will document the baseline condition of the stream by using the Corps' (Wilmington District's) current functional assessment method - e.g., the North Carolina Stream Assessment Method (NCSAM). The functional assessment must be used to identify specific areas where an uplift would reasonably be expected to occur, and also show important baseline functions that will remain after the relocation.

- (4) An evaluation of the potential uplifts to stream function for the relocated channel. The amount of detail required in the plan will be commensurate with the functional capacity of the original stream and proposed uplift(s). Low functional capacity will warrant less monitoring and less detail in the plan in order to ensure that the relocated channel provides the same, or better/increased, suite of aquatic functions as the existing channel.
- (5) A proposed monitoring plan for the relocated channel (and buffer, if applicable), will be prepared in accordance with current District guidance. The level of detail needed in the plan will be directly related to the quality of baseline functions and the anticipated uplift, therefore it is recommended that a pre-application discussion occur with the Corps Project Manager as early as possible. For example, if the risk for achieving the anticipated functional uplift is moderate or low, or if there is a low amount of proposed uplift, less information and monitoring will be required in the proposed relocation plan; similar to the requirements found in the "2003 Stream Mitigation Guidelines". If the risk for uplift is higher, or if there is a high amount of proposed uplift, additional monitoring and information will be required, trending toward the prescriptions found in the most recent Wilmington District Compensatory Mitigation Guidance – e.g., the 2016 Wilmington District Stream and Wetland Compensatory Mitigation Update. All monitoring will be for at least 5 years unless the Corps project manager determines that (a) a specific project requires less than 5 years due to site conditions or limited risk/uplift potential, and/or complexity (or simplicity) of the existing channel and/or the relocation work, or (b) the Corps project manager determines (during the monitoring period) that the 5 years of monitoring may be reduced (or that no further monitoring is required) based on monitoring information received once the stream relocation has been completed.

s. Upon completion of any work authorized by this RGP, all temporary fills (to include culverts, pipes, causeways, etc.) will be completely removed from waters of the U.S. and the areas will be restored to pre-construction elevations and contours. The permittee shall also restore natural hydrology and stream corridors (if applicable), and reestablish 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 during the next appropriate time frame. 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 elevations and contours.

t. Once the authorized work in waters of the U.S. is complete, the permittee shall sign and return the compliance certificate that is attached to the RGP verification letter.

u. The District Engineer will consider any comments from Federal and/or State agencies concerning the proposed activity's compliance with the terms and conditions of this RGP.

v. 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 during construction or maintenance of the 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 the 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 North Carolina Division of Water Resources (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 of 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, 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 RGP for the verified individual activity, may apply for an individual permit, or will, without expense to the U.S. and in such time and manner as the Secretary of the Army or his/her authorized representative may direct, restore the affected water of the U.S. to its former conditions.

h. This RGP does not authorize any activity that would conflict with a federal project's congressionally authorized purposes, established limitations or restrictions, or limit an agency's ability to conduct necessary operation and maintenance functions. Per Section 14 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. 408), no project that has the potential to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, or obstruct a federally constructed work or project, including, but not limited to, levees, dams, jetties, navigation channels, borrow areas, dredged material disposal sites, flood control projects, etc., shall be permitted unless the project has been reviewed and approved by the appropriate Corps approval authority. Permittees shall not begin the activity authorized by this RGP until notified by the Corps that the activity may proceed.

i. The permittee shall obtain a Consent to Cross Government Easement from the appropriate Corps District's Land Use Coordinator prior to any crossing of a Corps easement and/or prior to commencing construction of any structures, authorized dredging, or other work within the right-of-way of, or in proximity to, a federally designated disposal area.

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

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

l. This RGP does not authorize any injury to the property or rights of others.

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

n. 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.

o. 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 would be 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.

p. No activity may occur in a component of the National Wild and Scenic Rivers 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 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, etc.).

q. 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 prospective 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 prospective permittees - 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. In cases where the non-federal prospective permittee 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 prospective permittee 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.

(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 verification letter for a project.

(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 in North Carolina at the addresses provided below, or from the USFWS and NMFS via their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

USFWS offices in North Carolina:

The Asheville USFWS Office covers all NC counties west of, and including, Anson, Stanly, Davidson, Forsyth and Stokes Counties.

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

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

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

r. The Wilmington District, USFWS, NCDOT, and the FHWA have conducted programmatic Section 7(a)(2) consultation for a number of federally listed species and habitat, and programmatic consultation concerning other federally listed species and/or habitat may occur in the future. The result of completed programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS. These PBOs contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” of whichever species or critical habitat is covered by a specific PBO. Authorization under RGP 31 is conditional upon the permittee’s compliance with all the mandatory terms and conditions associated with incidental take of the applicable PBO (or PBOs), which are incorporated by reference in RGP 31. Failure to comply with the terms and conditions associated with incidental take of an applicable PBO, where a take of the federally listed species occurs, would constitute an unauthorized take by the permittee, and would also constitute permittee non-compliance with the authorization under RGP 31. If the terms and conditions of a specific PBO (or PBOs) apply to a project, the Corps will include this/these requirements in any RGP 31 verification that may be issued for a project. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO, and with the ESA.

s. Northern long-eared bat (NLEB) (*Myotis septentrionalis*). Standard Local Operating Procedures for Endangered Species (SLOPES) for the NLEB have been approved by the Corps and the U.S. Fish and Wildlife Service. See <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/>. This SLOPES details how the Corps will make determinations of effect to the NLEB when the Corps is the lead federal agency for an NCDOT project that is located in the western 41 counties of North Carolina. This SLOPES does not address NCDOT projects (either federal or state funded) in the eastern 59 counties of North Carolina. Note that if another federal agency is the lead federal agency for a project in the western 41 counties, procedures for satisfying the requirements of Section 7(a)(2) of the ESA will be dictated by that agency and will not be applicable for consideration under the SLOPES; however, information that demonstrates the lead federal agency’s (if other than the Corps) compliance with Section 7(a)(2) / 4(d) Rule for the NLEB, will be required in the PCN. Note that at the time of issuance of RGP 31, the federal listing status of the NLEB as “Threatened” is being litigated at the National level. If, as a result of litigation, the NLEB is federally listed as “Endangered”, this general condition (“s”) will no longer be applicable because the 4(d) Rule, and this NLEB SLOPES, will no longer apply/be valid.

t. For proposed activities the sixteen (16) counties listed below, prospective permittees 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.

The 16 counties with tributaries that drain to designated critical habitat that require notification to the Asheville USFWS are: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

u. If the permittee discovers or observes any live, damaged, injured or dead individual of an endangered or threatened species during construction, the permittee shall immediately notify the Wilmington District Engineer so that required coordination can be initiated with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

v. Historic Properties.

(1) In cases where the District Engineer determines that the activity may have the potential to cause effects to 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 prospective 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 prospective permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements; this includes copies of correspondence sent to all interested, federally recognized tribes and a summary statement about tribal consultation efforts or, if the Corps enters into a Programmatic Agreement (PA) with the FHWA/NCDOT, documentation that the FHWA/NCDOT has complied with PA 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 prospective permittees - 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) and/or Tribal Historic Preservation Officer (THPO), as appropriate, and the NRHP (see 33 CFR 330.4(g)). When reviewing PCNs, the District Engineer 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.

(4) 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)).

(5) Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to a prospective permittee 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 prospective permittee. 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 prospective permittee, 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.

w. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this general 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 National Register of Historic Places.

x. 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 general permit does not authorize any activity prohibited by the National Flood Insurance Program.

y. The permittee must install and maintain, at his/her 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 Coast Guard Sector North Carolina at (910) 772-2191 or email Coast Guard Fifth District at [cgd5waterways@uscg.mil](mailto:cgd5waterways@uscg.mil).

z. The permittee must maintain any structure or work authorized by this general permit in good condition and in conformance with the terms and conditions of this general 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 general permit will automatically transfer this general 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 general permit and provide the subsequent owner with a copy of the terms and conditions of this general permit.

aa. At his or her sole discretion, any time during the processing cycle, the Wilmington District Engineer may determine that this general permit 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.

bb. Except as authorized by this general permit or any Corps approved modification to this general 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.

cc. Except as authorized by this general permit or any Corps approved modification to this general permit, all excavated material will be disposed of in approved upland disposal areas.

dd. 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 that were in effect at the time the activity was completed continue to be authorized by the general permit.

ee. 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.

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

gg. 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.

hh. Unless authorization to fill those specific wetlands or mudflats has been issued by the Corps, heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

ii. 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.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

**CLARK.ROBERT.J** Digitally signed by  
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Robert J. Clark  
Colonel, U. S. Army  
District Commander

## Biological Opinion

### NC 24/27 Widening from NC 740 to East of Pee Dee River in Stanly and Montgomery Counties, North Carolina (STIP No. R-2530B)

FWS Log #: 42420-2008-F-0240



Prepared by:

U.S. Fish and Wildlife Service  
Raleigh Field Office  
P.O. Box 33726  
Raleigh, NC 27636-3726

Tom Auger / Deputy Field Supervisor      12-12-2016  
[NAME, TITLE]      Date

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## **CONSULTATION HISTORY**

This section lists key events and correspondence during the course of this consultation. A complete administrative record of this consultation is on file in the Service's Raleigh Field Office.

**2012-06-12** – The Service met with NCDOT staff on-site to discuss the need for Section 7 consultation.

**2018-03-06** – The Service received a draft biological assessment (BA) for review.

**2018-03-07** – The Service provided comments on the draft BA to NCDOT.

**2018-08-15 to 2018-10-04** – The Service provided technical assistance in development of conservation measures to minimize adverse effects.

**2018-10-11** – The Service received the final BA (dated 2018-09-00) and a letter from the Federal Highway Administration (FHWA) requesting initiation of formal Section 7 consultation.

**2018-10-31** – The Service sent a letter to the FHWA stating that all information required for initiation of consultation was either included with their 2018-10-31 letter or was otherwise available.

**2018-11-26** – The Service provided the FHWA and NCDOT with a draft Biological Opinion.



# BIOLOGICAL OPINION

## 1. INTRODUCTION

A biological opinion (BO) is the document that states the opinion of the U.S. Fish and Wildlife Service (Service) under the Endangered Species Act of 1973, as amended (ESA), as to whether a Federal action is likely to:

- jeopardize the continued existence of species listed as endangered or threatened; or
- result in the destruction or adverse modification of designated critical habitat.

The Federal action addressed in this BO is the Federal Highway Administration (FHWA) proposed NC 24/27 widening from NC 740 to east of Pee Dee River in Stanly and Montgomery Counties, North Carolina (the Action). This BO considers the effects of the Action on Schweinitz's sunflower. The Action does not affect designated critical habitat; therefore, this BO does not further address critical habitat.

A BO evaluates the effects of a Federal action along with those resulting from interrelated and interdependent actions, and from non-Federal actions unrelated to the proposed Action (cumulative effects), relative to the status of listed species and the status of designated critical habitat. A Service opinion that concludes a proposed Federal action is *not* likely to jeopardize species and is *not* likely to destroy or adversely modify critical habitat fulfills the Federal agency's responsibilities under §7(a)(2) of the ESA. In this BO, only the jeopardy definition is relevant, because the Action does not affect designated critical habitat. "*Jeopardize the continued existence*" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR §402.02). The basis of our opinion for Schweinitz's sunflower is developed by considering the status of the species, its environmental baseline, the effects of the Action, and cumulative effects.

This BO uses hierarchical numeric section headings. Primary (level-1) sections are labeled sequentially with a single digit (e.g., 2. PROPOSED ACTION). Secondary (level-2) sections within each primary section are labeled with two digits (e.g., 2.1. Action Area), and so on for level-3 sections.

## 2. PROPOSED ACTION

The North Carolina Department of Transportation (NCDOT), in cooperation with the FHWA, proposes to widen the existing two-lane NC 24/27 from NC 740 in Stanly County to a point approximately 800 feet west of River Road (SR 1150) in Montgomery County (STIP No. R-2530B). The Action also includes the rehabilitation of the existing bridge over the Pee Dee River. The Action will be deconstructed into two components: 1) road widening and bridge rehabilitation and 2) conservation measures.

### 2.1. Action Area

For purposes of consultation under ESA §7, the action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the

action” (50 CFR §402.02). The “Action Area” for this consultation includes the NC 24/27 corridor from NC 740 in the City of Albemarle, Stanly County, to a point approximately 800 feet west of River Road (SR 1150) in Montgomery County – a distance of approximately 7.1 miles (Figure 2.1).

## **2.2. Road Widening and Bridge Rehabilitation**

The Stanly County portion of NC 24/27 will be widened to a four-lane divided facility with a 23-foot raised median from NC 740 in the City of Albemarle east to SR 1731 (Sweet Home Church Road). Between SR 1731 and the eastern terminus, NC 24/27 will be widened to a four-lane divided facility with a 46-foot depressed median. The existing Bridge No. 51 over the Pee Dee River will also be rehabilitated.

## **2.3. Conservation Measures**

To minimize effects to the species, a plan is being developed, in coordination with the Service, to relocate all affected Schweinitz’s sunflowers to a more protected site with appropriate habitat within Stanly County (a tentative relocation site has been selected but not yet finalized). All affected Schweinitz’s sunflowers will be dug up and relocated prior to project let. Seeds from the plants will also be collected and transferred to a Service approved facility for storage and future restoration efforts. A NC Plant Conservation Program permit will be obtained prior to any transplant activities. A monitoring plan will be developed and reports detailing results and management activities will be supplied to the Service.

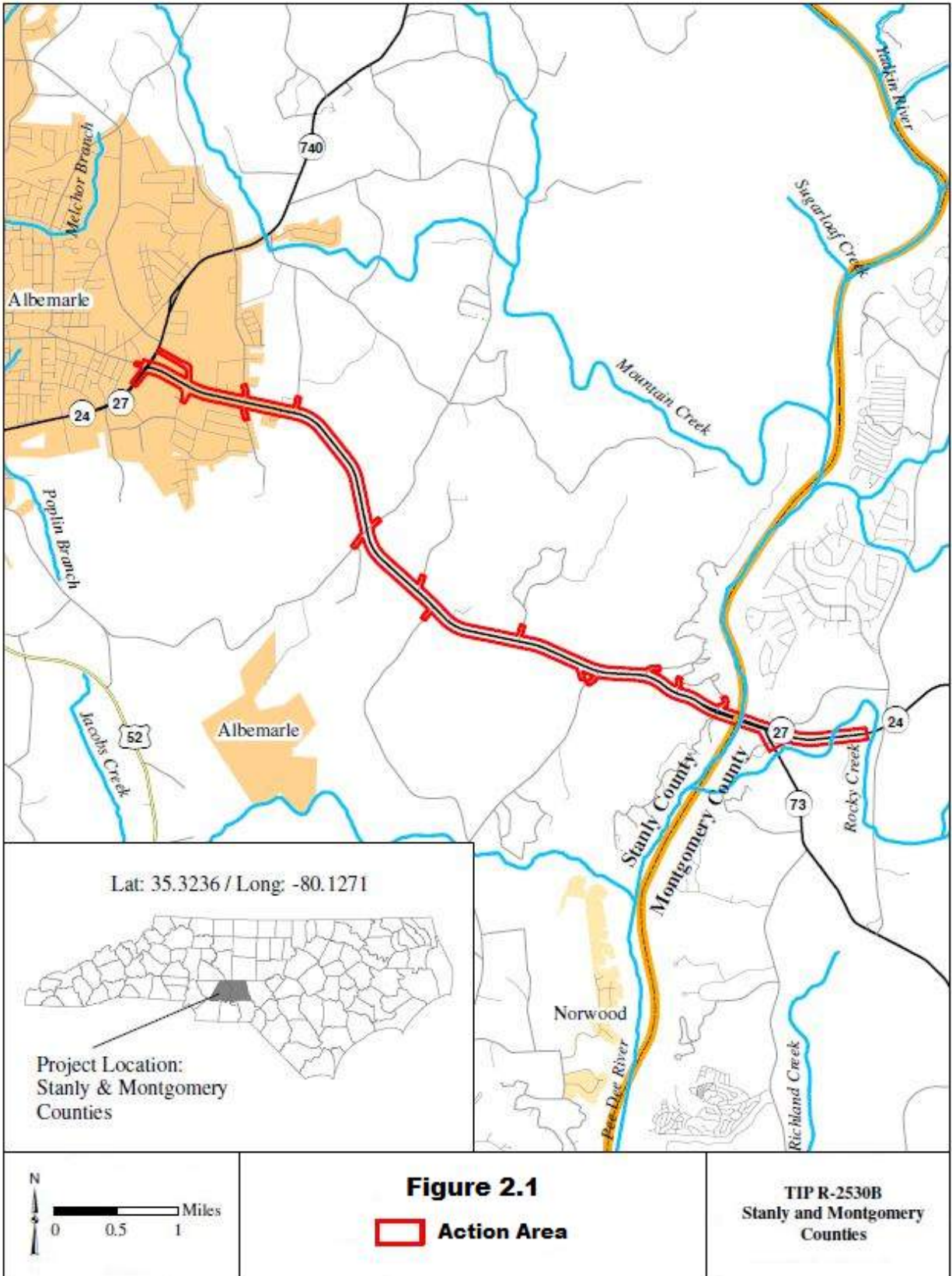
## **2.4. Interrelated and Interdependent Actions**

A BO evaluates the effects of a proposed Federal action. For purposes of consultation under ESA §7, the effects of a Federal action on listed species or critical habitat include the direct and indirect effects of the action, plus the effects of interrelated or interdependent actions. “Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration” (50 CFR §402.02).

Utilities along NC 24/27 include telephone, power, gas, cable television, water, and sewer lines. Power, telephone, and cable television lines are suspended from utility poles, while other utility lines are buried along the road shoulder. Utilities within the construction footprint will likely be relocated prior to road construction.

## **3. STATUS OF SPECIES**

This section summarizes best available data about the biology and current condition of Schweinitz’s sunflower (*Helianthus schweinitzii*) throughout its range that are relevant to formulating an opinion about the Action. The Service published its decision to list Schweinitz’s sunflower as endangered on May 7, 1991 (56 FR 21087-21091).



**Figure 2.1**  
 **Action Area**

TIP R-2530B  
 Stanly and Montgomery  
 Counties

### **3.1. Species Description**

Schweinitz's sunflower is a perennial plant that generally grows to approximately 6.5 feet tall. It has thickened roots that are used by the plant to store starch. The stem is purplish in color, and the upper third bears secondary branches at 45-degree angles. The leaves are arranged in pairs on the lower part of the stem but usually occur singly (or alternate) on the upper parts. Leaves are attached to the stem at right angles, and the tips of the leaves tend to droop. The leaves are thick and stiff with a rough upper surface. The upper leaf surfaces have broad spiny hairs that are directed toward the tip, and soft white hairs cover the underside. The plant produces small yellow flowers from late August until frost (USFWS 2017).

### **3.2. Life History**

Schweinitz's sunflower is able to colonize through the dispersal of seeds that readily germinate without a dormant period. Presently, this species occurs in relatively open habitats such as roadsides, power line clearings, early successional fields, forest ecotone margins or forest clearings. It thrives in full sun but also grows in the light shade of open stands of oak-pine-hickory. The species is known from a variety of soil types but is generally found growing on shallow, poor, clayey and/or rocky soils, especially those derived from mafic rocks (USFWS 1994). The species also benefits from routine soil disturbance, most notably along roadsides which receive regular right-of-way (ROW) maintenance (Smith 2008).

### **3.3. Numbers, Reproduction, and Distribution**

Schweinitz's sunflower is endemic to the Piedmont physiographic province of North Carolina and South Carolina. It is believed that the species historically occupied prairie areas and open woodlands. However, with fire suppression and increasing development, these habitats have either succeeded into oak-pine-hickory forests or have been severely degraded and fragmented (USFWS 1994).

When the species was listed in 1991, there were a total of 13 extant populations (eight in NC and five in SC) distributed across five NC counties (Cabarrus, Mecklenburg, Rowan, Stanly and Union) and one county (York) in SC (USFWS 1991). In recent years, several additional populations have been found in both NC and SC. As of 2010, there were approximately 78 geographically distinct populations of the species in NC distributed across 13 counties (the original five plus Anson, Davidson, Gaston, Montgomery, Randolph, Richmond, Stokes and Surry) (USFWS 2006, USFWS 2010). A new population in Guilford County, NC was discovered in 2018 (Dale Suiter, USFWS, personal communication). In SC, there are eight geographically distinct areas which appear to approximate populations in two counties (Lancaster and York) (Houk 2003). Therefore, the total known range consists of approximately 86 populations (USFWS 2010).

The 1991 listing rule did not state the number of plants contained within the 13 known populations extant at that time. However, supporting information from the Service's files on this species suggest that these sites were collectively and conservatively estimated to contain some 2,805 stems. Data suggests that, as of 2010, those sites with some potential to provide a role in

the species' recovery in NC contain over 40,000 stems (USFWS 2010). According to Houk (2003), all of the SC sites (regardless of their protection or recovery potential) contained some 27,740 stems in 2002. However, due to annual variability in stem counts, it is important to note that stem counts derived from single observations may provide limited value in assessing the actual abundance of the species in a given location or across its range.

### **3.4. Conservation Needs and Threats**

Schweinitz's sunflower is endangered by the loss of historic levels of natural disturbance from fire and grazing by native herbivores, residential and industrial development, encroachment by exotic species, highway construction and improvement, and roadside and utility ROW maintenance (USFWS 1994).

While seemingly more secure due to the increase in known populations, most populations remain extremely vulnerable. A large majority of the known sites containing the species (over 90%) occur within road or utility ROW. Many of these ROW occurrences are along existing roads which are subject to widening and improvement projects which disturb the existing adjacent ROW. The NCDOT has a program designed to sign roadside rare plant populations and manage these areas with mowing and/or herbicides applied during the dormant season. Despite these efforts, some of the roadside populations have been impacted through herbicide applications or mowing during the wrong time of year. Current recovery efforts are focused upon relocating plants from vulnerable ROW habitats to more protected areas with the potential for adequate management (USFWS 2010).

Portions of 24 extant populations (distributed across eight NC counties and two SC counties) have been identified as having a potential to meet some of the recovery criteria for the species. Of the 24 extant populations with some protection potential, 22 (distributed across seven NC counties and one SC county) are in some form of ownership and management that could provide permanent protection to the species. Portions of ten of these 22 populations have written management plans with components explicit to Schweinitz's sunflower. However, implementation of these plans is a challenge at all locations due to lack of resources (i.e. funding and staff). Management plans are in draft for portions of the remaining 12 other populations whose current ownership may provide (or has indicated willingness to provide) permanent protective ownership (USFWS 2006, USFWS 2010).

As of the last 5-Year Review (USFWS 2010), the status of this species was listed as uncertain. The majority of sites are not monitored annually, or in a way that allows one to assess year-to-year fluctuations in status and trends.

## **4. ENVIRONMENTAL BASELINE**

This section is an analysis of the effects of past and ongoing human and natural factors leading to the current status of the Schweinitz's sunflower, its habitat, and ecosystem within the Action Area. The environmental baseline is a "snapshot" of the species' health in the Action Area at the time of the consultation, and does not include the effects of the Action under review.

#### **4.1. Action Area Numbers, Reproduction, and Distribution**

The Action Area contains two NC Natural Heritage Program element occurrences (EO) for Schweinitz's sunflower – EO 14 and EO 243. No Schweinitz's sunflowers have been observed at EO 14 since 1991, with the most recent survey occurring on October 3, 2017. At EO 243, an October 3, 2017 survey revealed 212 stems with 51 being in flower. This is an increase in number from previous surveys in 2011 (55 stems) and 2012 (110 stems). The 212 Schweinitz's sunflower stems from the 2017 survey comprise 0.021 acre separated into four subpopulations stretching over approximately 0.11 mile of road right-of-way (Figure 4.1). Subpopulations A and B represent a recent increase in the boundaries of EO 243.

#### **4.2. Action Area Conservation Needs and Threats**

Like all roadside populations of Schweinitz's sunflowers, the population within the Action Area is vulnerable to future road improvements and maintenance activities. Although NCDOT has posted *Do Not Mow* signs and maintains a policy of only mowing such sites during the winter, the site is still vulnerable to mowing during the growing season by contractors who disregard the signs (as has happened at other roadside populations).

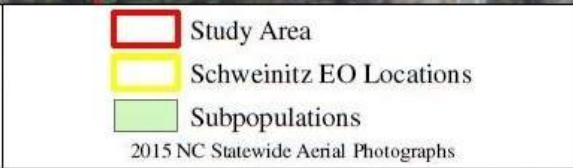
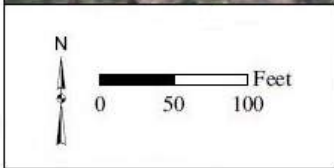
### **5. EFFECTS OF THE ACTION**

This section analyzes the direct and indirect effects of the Action on the Schweinitz's sunflower, which includes the direct and indirect effects of interrelated and interdependent actions. Direct effects are caused by the Action and occur at the same time and place. Indirect effects are caused by the Action, but are later in time and reasonably certain to occur. Our analyses are organized according to the description of the Action in section 2 of this BO.

#### **5.1. Effects of Road Widening and Bridge Rehabilitation**

The entire Schweinitz's sunflower EO 243 lies within the construction footprint of the Action. The construction area will incur excavation, grading, and fill placement. Therefore, it is assumed that all of the current Schweinitz's sunflower habitat within this EO will either be lost or permanently modified. This will directly affect all 212 stems and their habitat, but the sunflowers will be salvaged (see Section 5.2 below). Although the current roadside habitat will be either lost or permanently modified, the clearing and soil disturbance associated with the Action will likely create new habitat within the Action Area adjacent to the affected area. Due to the persistence of seeds in the soil and the species' generally positive response to tree removal and soil disturbance, the species may recolonize the disturbed area after clearing occurs for newly established right-of-way boundaries.





TIP R-2530B  
 Stanly and Montgomery  
 Counties

**Figure 4.1: EO 243**

## **5.2. Effects of Conservation Measures**

All of the known Schweinitz's sunflowers within EO 243 (212 stems as of October 2017) will be relocated to a more protected location within Stanly County (a tentative relocation site has been selected but not yet finalized). Although past efforts of transplanting the species have had mixed success, there is good potential that many of the relocated sunflowers will survive to establish a new population that will have more protection and greater opportunities for management.

## **5.3. Effects of Interrelated and Interdependent Actions**

The existing utilities located within the construction footprint of the Action will likely be relocated prior to road construction. Although the Schweinitz's sunflowers will have been previously moved, the utility relocations will disturb the species habitat within EO 243 through excavation and clearing. The soil disturbance associated with these activities may create conditions for recolonization of the species from seeds persisting in the soil. Furthermore, the newly cleared and maintained utility rights-of-way may provide new habitat.

## **6. CUMULATIVE EFFECTS**

For purposes of consultation under ESA §7, cumulative effects are those caused by future state, tribal, local, or private actions that are reasonably certain to occur in the Action Area. Future Federal actions that are unrelated to the proposed action are not considered, because they require separate consultation under §7 of the ESA.

There are no known cumulative effects related to this Action.

## **7. CONCLUSION**

In this section, we summarize and interpret the findings of the previous sections (status, baseline, effects, and cumulative effects) relative to the purpose of a BO under §7(a)(2) of the ESA, which is to determine whether a Federal action is likely to:

- a) jeopardize the continued existence of species listed as endangered or threatened; or
- b) result in the destruction or adverse modification of designated critical habitat.

“Jeopardize the continued existence” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR §402.02).

Schweinitz's sunflower is endemic to the Piedmont physiographic province of North Carolina and South Carolina. As of 2010, there were approximately 86 populations of the species in the two states – up from 13 populations known when the species was listed in 1991. The species is endangered by the loss of historic levels of natural disturbance from fire and grazing by native herbivores, residential and industrial development, encroachment by exotic species, highway construction and improvement, and roadside and utility ROW maintenance. At least 22 populations are in some form of ownership and management that could provide permanent protection to the species.



As of October 3, 2017, approximately 212 Schweinitz's sunflower stems occupying approximately 0.021 acre were located within the Action Area. It is assumed that road construction will directly affect all 212 stems and their habitat. However, these sunflowers will be relocated to a more protected area with greater management opportunities. Assuming a significant level of survival, the relocated sunflowers will establish a new population which will compensate for the loss of habitat through the Action. Although the current roadside habitat will be either lost or permanently modified, the clearing and soil disturbance associated with the Action will likely create new habitat within the Action Area adjacent to the affected area. After the completion of the Action, it is possible that seeds persisting in the soil may recolonize the disturbed area within the new right-of-way.

After reviewing the current status of the species, the environmental baseline for the Action Area, the effects of the Action and the cumulative effects, it is the Service's biological opinion that the Action is not likely to jeopardize the continued existence of the Schweinitz's sunflower.

## **8. INCIDENTAL TAKE STATEMENT**

ESA §9(a)(1) and regulations issued under §4(d) prohibit the take of endangered and threatened fish and wildlife species without special exemption. The term "take" in the ESA means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (ESA §3). In regulations at 50 CFR §17.3, the Service further defines:

- "harass" as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering;"
- "harm" as "an act which actually kills or injures wildlife. Such 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;" and
- "incidental take" as "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

Under the terms of ESA §7(b)(4) and §7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered prohibited, provided that such taking is in compliance with the terms and conditions of an incidental take statement (ITS).

This BO evaluated effects of the Action on the endangered Schweinitz's sunflower. ESA §7(b)(4) and §7(o)(2), which provide the authority for issuing an ITS, do not apply to listed plant species. However, ESA §9(a)(2) prohibits certain acts with respect to endangered plant species, including:

- (a) remove and reduce to possession from areas under Federal jurisdiction;
- (b) maliciously damage or destroy on areas under Federal jurisdiction; and
- (c) remove, cut, dig up, or damage or destroy on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law.

Regulations issued under ESA §4(d) extend the prohibition under (a) above to threatened plant species (50 CFR §17.71). The damage or destruction of endangered and threatened plants that is incidental to (not the purpose of) an otherwise lawful activity is not prohibited.

## **9. CONSERVATION RECOMMENDATIONS**

§7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by conducting conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary activities that an action agency may undertake to avoid or minimize the adverse effects of a proposed action, implement recovery plans, or develop information that is useful for the conservation of listed species. The Service offers the following recommendations that are relevant to the listed species addressed in this BO and that we believe are consistent with the authorities of the FHWA.

1. NCDOT should endeavor to keep protected roadside populations of Schweinitz's sunflower free of invasive species.
2. NCDOT should improve its roadside plant management program with more emphasis and attention to prevent roadside populations of Federally listed plant species from being treated with herbicides or mowed during the wrong time of the year.
3. NCDOT should provide the Service with a copy of any NCDOT databases used for tracking and monitoring roadside populations of Federally listed plant species. These data should be provided on an annual basis.
4. NCDOT should survey the construction site at EO 243 1-2 years after the site is stabilized to see if Schweinitz's sunflowers have recolonized the new right-of-way.

## **10. REINITIATION NOTICE**

Formal consultation for the Action considered in this BO is concluded. Reinitiating consultation is required if the FHWA retains discretionary involvement or control over the Action (or is authorized by law) when:

- a. the amount or extent of incidental take is exceeded;
- b. new information reveals that the Action may affect listed species or designated critical habitat in a manner or to an extent not considered in this BO;
- c. the Action is modified in a manner that causes effects to listed species or designated critical habitat not considered in this BO; or
- d. a new species is listed or critical habitat designated that the Action may affect.

## **11. LITERATURE CITED**

Houk, R. 2003. Status survey and prioritization protection of Schweinitz's sunflower (*Helianthus schweinitzii*) in York and Lancaster Counties, South Carolina. Unpublished report prepared for the U.S. Fish and Wildlife Service, Cooperative Agreement No. 1448-40181-02-J-032. 30 pp.

- Smith, T.C. 2008. Spatial analysis of *Helianthus schweinitzii* (Schweinitz's sunflower), an endangered species endemic to the Piedmont of North Carolina. Master of Arts Thesis, University of North Carolina at Greensboro, Greensboro, NC. 65 pp.
- U.S. Fish and Wildlife Service (USFWS). 1991. Endangered and threatened wildlife and plants; *Helianthus schweinitzii* (Schweinitz's sunflower) determined to be endangered. Federal Register 56:21087-21091.
- U.S. Fish and Wildlife Service (USFWS). 1994. Recovery plan for Schweinitz's sunflower. U.S. Fish and Wildlife Service. Atlanta, GA. 28 pp.
- U.S. Fish and Wildlife Service (USFWS). 2006. Schweinitz's sunflower (*Helianthus schweinitzii*). 5-year review: Summary and Evaluation. Asheville, NC.
- U.S. Fish and Wildlife Service (USFWS). 2010. Schweinitz's sunflower (*Helianthus schweinitzii*). 5-year review: Summary and evaluation. Asheville, NC. 27 pp.
- U.S. Fish and Wildlife Service (USFWS). 2017. Schweinitz's sunflower (*Helianthus schweinitzii*). Available online at [https://www.fws.gov/raleigh/species/es\\_schweinitz\\_sunflower.html](https://www.fws.gov/raleigh/species/es_schweinitz_sunflower.html). Accessed on August 30, 2018.

**MEMORANDUM OF AGREEMENT  
AMONG THE  
FEDERAL HIGHWAY ADMINISTRATION,  
THE UNITED STATES FOREST SERVICE,  
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,  
THE CATAWBA INDIAN NATION,  
AND  
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER  
FOR THE  
IMPROVEMENTS TO NC 24/NC 27 FROM NC 740 IN ALBEMARLE TO THE  
PROPOSED TROY BYPASS,  
STANLY & MONTGOMERY COUNTIES, NORTH CAROLINA,  
TIP NOS. R-2530B, B-4974, & R-2527,  
FEDERAL AID NO. STBG-0024(083) R-2530B**

**WHEREAS**, the Federal Highway Administration (FHWA) has determined that the proposed improvements to NC 24/27 from NC 740 in Albemarle to the proposed Troy Bypass (the Undertaking) will have an adverse effect upon archaeological sites 31MG1806, 31MG1629, 31MG321, and the archaeological district composed of sites 31ST195, 31ST196, and 31ST204/204\*\* which have been determined eligible for the National Register of Historic Places (NRHP) under Criterion D; and

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

**WHEREAS**, the FHWA has notified the Advisory Council on Historic Preservation (Council) of the adverse effect to archaeological sites 31MG1806, 31MG1629, 31MG321, and the archaeological district composed of sites 31ST195, 31ST196, and 31ST204/204\*\* and it has declined to comment or participate in the consultation; and

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

Whereas the Catawba Indian Nation and the United States Forest Service (USFS) have been notified of the adverse effects and invited to participate in the consultation and concur in this MOA; and

**WHEREAS**, the consulting parties agree that the recovery of significant information from archaeological sites 31MG1806, 31MG1629, 31MG321, and the archaeological district composed of sites 31ST195, 31ST196, and 31ST204/204\*\* may be done in accordance with the published guidance; and

**WHEREAS**, the consulting parties agree that it is in the public interest to expend funds for the recovery of significant information from archaeological sites 31MG1806, 31MG1629, 31MG321, and the archaeological district composed of sites 31ST195, 31ST196, and 31ST204/204\*\* to mitigate the adverse effects of the project; and



**WHEREAS**, to the best of our knowledge and belief, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001), are expected to be encountered in the archaeological work;

**NOW, THEREFORE**, the FHWA, NCDOT, and the SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in compliance with the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470).

### **I. Stipulations**

1. The NCDOT, in consultation with the SHPO, USFS, and the Catawba Indian Nation, will develop Data Recovery Plans (DRPs) for archaeological sites 31MG1806, 31MG1629, 31MG321, and the archaeological district composed of sites 31ST195, 31ST196, and 31ST204/204\*\* which will be affected by the subject project.
2. The NCDOT will ensure that the DRPs will be implemented after Right-of-Way is acquired and prior to construction activities within the site location as shown in the DRPs.
3. Upon completion of the Data Recovery efforts, the NCDOT will prepare and forward a Management Summary to the SHPO, USFS, and the Catawba Indian Nation detailing the results of the Data Recovery field investigations. The Management Summary will contain sufficient information to demonstrate that the field investigation portion of the DRPs has been implemented.
4. Upon receipt of the Management Summary, the SHPO, USFS, and the Catawba Indian Nation will respond within ten (10) days to the recommendations contained within the document.
5. Upon acceptance of the recommendations contained in the Management Summary, the SHPO, USFS, and the Catawba Indian Nation will issue the NCDOT documentation that the Data Recovery field investigations have been completed.
6. The analysis and report preparation, detailing archaeological work conducted at sites 31MG1806, 31MG1629, 31MG321, and the archaeological district composed of sites 31ST195, 31ST196, and 31ST204/204\*\*, will be completed by the NCDOT, or their consultants, within eighteen (18) months after completion of the fieldwork.

### **II. Unanticipated Discovery**

In accordance with 36 CFR 800.11(a), 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 and Concurring Party additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory and Concurring Party, 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.

### **III. Dispute Resolution**

Should any Signatory object within (30) days to any plans or documentation provided for review pursuant to this Agreement, 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 Advisory Council on Historic Preservation (Council). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding the dispute, or
- B. 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; the FHWA's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

#### **IV. 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 agreed upon, the dispute resolution process set forth in Section III will be followed.

#### **V. Termination**

Any Signatory to this MOA may terminate the agreement by providing notice to the other party(ies), provided that the party(ies) 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.

#### **VI. Duration**

Unless terminated as detailed above, this MOA will be in effect until FHWA, in consultation with the other Signatories, determines that all terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to construct the Undertaking.

Execution of this Memorandum of Agreement by the FHWA 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, and that the FHWA, has taken into account the effects of the Undertaking on the aforementioned archaeological sites.

**AGREE:**

By: Felix O'Neil Date: 12/13/18  
Federal Highway Administration

By: Ken Cherry Date: 12/19/18  
North Carolina State Historic Preservation Officer

By: Mandice Pan Date: 12/13/2018  
North Carolina Department of Transportation

**CONCUR:**

By: [Signature] Date: 1/30/19  
United States Forest Service

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Catawba Indian Nation



**MEMORANDUM OF AGREEMENT  
AMONG THE  
FEDERAL HIGHWAY ADMINISTRATION,  
THE UNITED STATES FOREST SERVICE,  
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,  
THE CATAWBA INDIAN NATION,  
AND  
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER  
FOR THE  
IMPROVEMENTS TO NC 24/NC 27 FROM NC 740 IN ALBEMARLE TO THE  
PROPOSED TROY BYPASS,  
STANLY & MONTGOMERY COUNTIES, NORTH CAROLINA,  
TIP NOS. R-2530B, B-4974, & R-2527,  
FEDERAL AID NO. STBG-0024(083) R-2530B**

Execution of this Memorandum of Agreement by the FHWA 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, and that the FHWA, has taken into account the effects of the Undertaking upon archaeological site 31WA1997/1997.

**FILED:**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Advisory Council on Historic Preservation



**ROY COOPER**

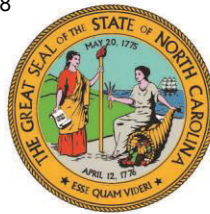
*Governor*

**DIONNE DELLI-GATTI**

*Secretary*

**S. DANIEL SMITH**

*Director*



**NORTH CAROLINA  
Environmental Quality**

June 8, 2021

Stanly/Montgomery Counties

NCDWR Project No. 20181416v.2

State Project No. R-2530B, B-4974,

R-2527

## **REISSUANCE of APPROVAL of 401 WATER QUALITY CERTIFICATION**

Mr. Philip S. Harris, III, P.E., CPM  
Environmental Analysis Unit Head  
1598 Mail Service Center  
Raleigh, NC 27699-1598

Dear Mr. Harris:

NC DWR is in receipt of your renewal request for the NCDOT - NC 24/27 Widening (R-2530B, B-4974, R-2527). The expired 401 was issued under Regional General Permit (RGP) 31 and corresponding Water Quality General Certification (GC) 4135. Since the original issuance for this project, the RGP31 has changed conditions and this project is now being requested to be covered under the new RGP50 with corresponding GC4135.

After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4135. This certification corresponds to the General Permit 50 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.

There are no additional impacts of any kind approved for this issuance and only the impacts with the original submittal and subsequent additional information on October 15, 2018 are approved. All conditions of the original 401 (version 1) issuance on April 3, 2019 remain in effect in addition to any conditions in this issuance (version 2). 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 perennial streams (now or in the future) exceed 300 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s).

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:



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

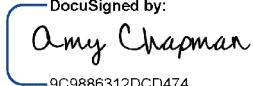
Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

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

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

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Donna Hood at (704) 235-2193 or [donna.hood@ncdenr.gov](mailto:donna.hood@ncdenr.gov).

Sincerely,

DocuSigned by:  
  
9C9886312DCD474...  
S. Daniel Smith, Director  
Division of Water Resources

Electronic copy only distribution:

James Lastinger, US Army Corps of Engineers, Raleigh Field Office  
Joel Howard, Division 10 Environmental Officer  
Michael Turchy, NC Department of Transportation  
Amanetta Somerville, US Environmental Protection Agency  
Byron Hamstead, US Fish and Wildlife Service  
Marla Chambers, NC Wildlife Resources Commission  
Donna Hood, NC Division of Water Resources Mooresville Regional Office  
File Copy

ROY COOPER  
Governor

DIONNE DELLI-GATTI  
Secretary

S. DANIEL SMITH  
Director



NCDWR Project No.: \_\_\_\_\_ County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: \_\_\_\_\_

**Certificate of Completion**

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

***Applicant’s Certification***

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

***Agent’s Certification***

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

***Engineer’s Certification***

\_\_\_\_\_ Partial \_\_\_\_\_ Final

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

Signature \_\_\_\_\_ Registration No. \_\_\_\_\_  
Date \_\_\_\_\_



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

**WATER QUALITY GENERAL CERTIFICATION NO. 4135**

**GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS**

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

Water Quality Certification Number 4135 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (14) of the US Army Corps of Engineers regulations and Regional General Permit 198200031.

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

Effective date: December 1, 2017

Signed this day: December 1, 2017

By

A handwritten signature in black ink, appearing to read 'Linda Culpepper', is written over a solid horizontal line.

*for* Linda Culpepper  
Interim Director

## GC4135

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

- a) If any of the conditions of this Certification (listed below) cannot be met; or
- b) Any temporary or permanent impacts to wetlands, open waters and/or streams, except for construction of a driveway to a single family residential lot that is determined to not be part of a larger common plan of development, as long as the driveway involves a travel lane of less than 25 feet and total stream impacts of less than 60 feet, including any topographic/slope stabilization or in-stream stabilization needed for the crossing; or
- c) Any stream relocation or stream restoration; or
- d) Any high-density project, as defined in 15A NCAC 02H .1003(2)(a) and by the density thresholds specified in 15A NCAC 02H .1017, which:
  - i. Disturbs one acre or more of land (including a project that disturbs less than one acre of land that is part of a larger common plan of development or sale); and
  - ii. Has permanent wetland, stream or open water impacts; and
  - iii. Is proposing new built-upon area; and
  - iv. Does not have a stormwater management plan reviewed and approved under a state stormwater program<sup>1</sup> or a state-approved local government stormwater program<sup>2</sup>.

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

- e) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-1, WS-11, or North Carolina or National Wild and Scenic River.
- f) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as Trout except for driveway projects that are below threshold (b) above provided that:
  - i. The impacts are not adjacent to any existing structures
  - ii. All conditions of this General Certification can be met, including adherence to any moratoriums as stated in Condition #10; and
  - iii. A *Notification of Work in Trout Watersheds Form* is submitted to the Division at least 60 days prior to commencement of work; or
- g) Any permanent impacts to coastal wetlands [15A NCAC 07H .0205], or Unique Wetlands (UWL); or
- h) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or

---

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

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

## GC4135

- j) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless*:
- i. The activities are listed as "EXEMPT" from these rules; or
  - ii. A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or
  - iii. A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23

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

### **I. ACTIVITY SPECIFIC CONDITIONS:**

1. If this Water Quality Certification is used to access residential, commercial or industrial building sites, then all parcels owned by the applicant that are part of the single and complete project authorized by this Certification must be buildable without additional impacts to streams or wetlands. If required in writing by DWR, the applicant shall provide evidence that the parcels are buildable without requiring additional impacts to wetlands, waters, or state regulated riparian buffers. [15A NCAC 02H .0506(b)(4) and (c)(4)]
2. For road and driveway construction purposes, this Certification shall only be utilized from natural high ground to natural high ground. [15A NCAC 02H .0506(b)(2) and (c)(2)]
3. Deed notifications or similar mechanisms shall be placed on all lots with retained jurisdictional wetlands, waters, and state regulated riparian buffers within the project boundaries in order to assure compliance with NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules {15A NCAC 02H .1300}, and/or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200). These mechanisms shall be put in place at the time of recording of the property or individual parcels, whichever is appropriate. [15A NCAC 02H .0506(b)(4) and (c)(4)]
4. For the North Carolina Department of Transportation, compliance with the NCDOT's individual NPDES permit NCS000250 shall serve to satisfy this condition. All other high-density projects that trigger threshold item (d) above shall comply with one of the following requirements: [15A NCAC 02H .0506(b)(5) and (c)(5)]

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- a. Provide a completed Stormwater Management Plan (SMP) for review and approval, including all appropriate stormwater control measure (SCM) supplemental forms and associated items, that complies with the high-density development requirements of 15A NCAC 02H .1003. Stormwater management shall be provided throughout the entire project area in accordance with 15A NCAC 02H .1003. For the purposes of 15A NCAC 02H .1003(2)(a), density thresholds shall be determined in accordance with 15A NCAC 02H .1017.
- b. Provide documentation (including calculations, photos, etc.) that the project will not cause degradation of downstream surface waters. Documentation shall include a detailed analysis of the hydrological impacts from stormwater runoff when considering the volume and velocity of stormwater runoff from the project built upon area and the size and existing condition of the receiving stream(s).

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

### II. GENERAL CONDITIONS:

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

No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 028 .0200]

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

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

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

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

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

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

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

6. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]



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8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

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

9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]

10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506 (b)(2) and 15A NCAC 04B .0125]

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

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

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

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

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

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

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

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

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

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

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Exceptions to this condition require application to and written approval from DWR. [ISA NCAC 02H .0506(b)(S)]

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13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross-sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]
16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]
17. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original stream elevation and streambank contours are restored and maintained. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
18. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]
19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H.1405.

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20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils. [15A NCAC 02H .0506{b}(3) and {c}(3) and 15A NCAC 02B .0211 {12}]
21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506{b}(3) and {c}(3)]
22. In accordance with 143-215.85{b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
23. If an environmental document is required under the State Environmental Policy Act {SEPA), then this General Certification is not valid until a Finding of No Significant Impact {FONSI) or Record of Decision {ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act {NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency. [15A NCAC 01C .0107{a}]
24. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
25. The applicant and their authorized agents shall conduct all activities in a manner consistent with State water quality standards {including any requirements resulting from compliance with §303{d) of the Clean Water Act), and any other appropriate requirements of State and Federal Law. If DWR determines that such standards or laws are not being met, including failure to sustain a designated or achieved use, or that State or Federal law is being violated, or that further conditions are necessary to assure compliance, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507{d}]
26. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this Certification. A copy of this Certification, including all conditions shall be available at the project site during the construction and maintenance of this project. [15A NCAC 02H .0507 {c) and 15A NCAC 02H .0506 {b)(2) and {c)(2)]

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27. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
28. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
29. If the property or project is sold or transferred, the new permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

### 111. GENERAL CERTIFICATION ADMINISTRATION:

1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).
2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [ISA NCAC 02H .0502(e)]
4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.

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5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is deemed in the public's best interest or determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.

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