

March 25, 2021

Regulatory Division

Action ID: SAW-2013-01833 (STIP Nos. I-4400/I-4700)

Philip S. Harris III, P.E., C.P.M. North Carolina Department of Transportation Environmental Analysis Unit 1598 Mail Service Center Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

I refer to your permit modification request of March 18, 2021, to change the type of catchment device/structure/system for the I-26 Bridge over the French Broad River from a "rigid, non-drooping" catchment system to a "netting containment system". This request pertains to the STIP I-4700 portion of the 22.2-mile-long project (i.e., I-4400/I-4700). This request did not propose modifications to impacts to waters of the U.S.

As background, STIP I-4400 and STIP I-4700 are considered to be one project for permitting purposes. STIP I-4400 is 13.6 miles in length and begins at US 25 (Exit 54) near Hendersonville and extends along I-26 west to NC 280 (Exit 40). STIP I-4700 is 8.6 miles in length and extends along I-26 from NC 280 west to the I-40/I-240 interchange. The entire project corridor is 22.2 miles in length and is located on I-26 in Henderson and Buncombe Counties, North Carolina.

The U.S. Army Corps of Engineers (USACE) issued a Department of the Army (DA) Individual Permit (IP) which authorized impacts to waters of the U.S. for Phase 1 of the project (Sections I-4700 A & B) to the North Carolina Department of Transportation (NCDOT) on June 21, 2019. On September 16, 2019, the USACE issued a modification to the DA IP for this project to authorize impacts to waters of the U.S. for Phase 2 of the project (Sections I-4400 BB and I-4400 C).

Your permit modification request of March 18, 2021, was coordinated with the U.S. Fish and Wildlife Service (Service), the U.S. Environmental Protection Agency (EPA), the N.C. Division of Water Resources (NCDWR), and the N.C. Wildlife Resources Commission (NCWRC). No objections were raised and NCDWR issued an In-field 401 Water Quality Certification Modification for this project on March 22, 2021 (enclosed).

The USACE has also reviewed NCDOT's modification request of March 18, 2021 and has no objections. As such, the permit special conditions, which apply to all approved phases of the I-4400/I-4700 project have been revised and are enclosed. The revised langue is crossed out and the new langue is highlighted to call attention to the modifications.

If you have any questions, please contact Lori Beckwith, Regulatory Project Manager, Asheville Regulatory Field Office, at Loretta.A.Beckwith@usace.army.mil or at 828-271-7980, ext. 4223.

FOR THE DISTRICT COMMANDER

Date: 2021.03.25 Monte Date: 2021.03.2. Matthews 14:26:46-04'00'

Monte Matthews Lead Project Manager Wilmington District

Enclosures

Copies furnished by email with enclosures:

USFWS, Ms. Holland Youngman USEPA, Ms. Amanetta Sommerville NCDWR, Mr. Kevin Mitchell NCWRC, Ms. Marla Chambers NCHPO, Ms. Renee Gledhill-Early NCDOT, Mr. William Barrett NCDOT, Mr. Michael Turchy NCDOT, Mr. Roger Bryan NCDOT, Mr. Luke Middleton NCDOT. Mr. Michael Patton NCDOT, Mr. Dave McHenry NCDOT, Mr. Kevin Barnett

ROY COOPER Governor DIONNE DELLI-GATTI Secretary S. DANIEL SMITH Director



North Carolina Division of Water Resources Transportation Permitting Unit In-Field Minor 401 Water Quality Certification, Buffer Certification and Isolated Water Permit Modification

Project Name/ TIP Project No.: I-26 Widening/ TIP No. I-4400/I-4700 Date: 03/22/21

DOT Division: 13 County: Buncombe DWR Project No. / Permit Type: 20181645 V2 / Individual Certification

DOT Staff: Michael Turchy DWR Staff: Kevin Mitchell

ACE Staff: Lori Beckwith DWR Regional Office: Asheville Regional Office

Modification Description:

During the analysis of potential catchment/containment systems for the French Broad River, several aspects of the rigid non-drooping system that pose a hazard to river users were discovered. The initial construction of a rigid system with plywood and structural lumber over the river has the high potential for materials to be accidently dropped onto river users. Demolition of a rigid system poses similar issues, especially after the bridge deck is complete and access is limited.

The proposed modification changes the type of catchment device for the I-26 Bridge over the French Broad River from a "rigid, non-drooping" catchment system to a "netting containment system". Details of the netting containment system are included in the modification attachments.

This modification contains no changes to impacts to jurisdictional resources.

Modification Attachment: See attached letter.



This in-field modification is required for the following reason(s):

 The information contained in the application or presented in support thereof has changed in the following manner:

The type of catchment device for the I-26 Bridge over the French Broad River has changed from a "rigid, non-drooping" catchment system to a "netting containment system".

This in-field modification is valid only if issued by an authorized agent of the Division of Water Resources, Transportation Permitting Unit ^{1.}

This in-field modification authorizes the NCDOT to use a debris containment system with netting in place of the non-drooping catchment system originally described in the River Safety Plan for the Construction of the I-26 Bridge over the French Broad River. The project shall be constructed as described in the Modification Description of this document dated March 22, 2021 for river safety during bridge construction on the I-26 bridge over the French Broad. Any further changes to the original Water Quality Certification dated June 9, 2019 may require a formal written modification request.

The description of the proposed action provides adequate assurance that the proposed action in the French Broad River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Section 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth. Should your project change, you are required to notify the DWR 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 conditions. For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state, or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Modification Approval shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Conditions(s) of Modification Approval:

 All the authorized action activities and conditions of the certification associated with the original Water Quality Certification dated June 19, 2019 and all other corresponding modification still apply except where superseded by this certification.

Failure to construct the proposed action as described in the Modification Description and attachments of this document and/or violations of any condition herein set forth may result in revocation of this modification approval and may result in criminal and/or civil penalties. This modification approval shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. If additional (wetland, stream, buffer) impacts for this project (now or in the future) exceed (one tenth of an acre, 300 linear feet, or one-third of an acre/150 linear feet, respectively), or if mitigation is required above and beyond the current mitigation requirement for this project, this in-field modification is invalid and a formal written modification is required. This in-field modification is effective upon the date the last party signs this document. This in-field modification is made upon mutual agreement between DOT and DWR as indicated by the signatures below and is, therefore, not subject to appeal by either party. Appeals by third parties must be made within sixty (60) days of notification pursuant to the contested case provisions of the Administrative Procedure Act, NC Gen. Stat. §150B-23 et seq.



DocuSigned by:
Kevin Mitchell
DWR Staff Signature:
3/22/2021
Date:
Date:
Staff Signature:
Date:

¹ – An authorized agent of the Transportation Permitting Unit is defined as DWR staff that are DOT-funded and review and issue 401 Water Quality Certification for DOT projects. These staff include Central Office and Regional Office personnel.





STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J. ERIC BOYETTE Secretary

March 18, 2021

U.S. Army Corps of Engineers Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, NC 28801-5006

ATTN: Ms. Loretta Beckwith, NCDOT Regulatory Coordinator

Subject: Amended Request for Modification to the Section 404 Individual Permit for the permitted I-4700A&B sections of the proposed I-26 Widening project in Buncombe County; Division 13; WBS No. 34232.1.6

Reference: USACE Individual Permit Action ID: SAW-2013-01833, dated June 21, 2019 USACE Individual Permit Modification Request, dated March 20, 2021, NCDWR Project No. 20181645 (Mod. 2), 401 WQC, dated June 19, 2019

Dear Ms. Beckwith:

The purpose of this letter is to request a modification to the United States Corps of Engineers (USACE) Section 404 Individual Permit, and the North Carolina Division of Water Resources (NCDWR) Water Quality Certification, for the above-referenced project.

This Request for Modification replaces the previous March 10, 2021 Request for Modification as it has since been revised and provides additional information to address agency concerns.

The proposed modification changes the type of catchment device for the I-26 Bridge over the French Broad River from a "rigid, non-drooping" catchment system to a "netting containment system".

During the analysis of potential catchment/containment systems for the French Broad River, several aspects of the rigid non-drooping system that pose a hazard to river users were discovered. The initial construction of a rigid system with plywood and structural lumber over the river has the high potential for materials to be accidently dropped onto river users. Demolition of a rigid system poses similar issues, especially after the bridge deck is complete and access is limited.

Telephone: (919) 707-6000 Customer Service: 1-877-368-4968 Website: www.ncdot.gov Location: 1000 Birch Ridge Drive Raleigh NC 27610 Another aspect of the rigid system is the likelihood that objects or materials dropped onto a rigid system would bounce and potentially exit the containment on either side of the platform thereby falling into the river below. The proposed netting containment system poses no debris loss potential during installation or removal. The system is continuous and attached by cables, then tensioned in position. In addition, since there is some flexibility of the net, any materials dropped will be cushioned and retained by the catchment.

In addition to being safer to install and remove from the bridge structure, the system has been tested to capture a 350-pound weight dropped from a distance of 50 feet (17,500 ft-lbs). This capacity exceeds any items that will be used during bridge deck construction over the French Broad River. The net debris catchment system also has a 3/16-inch fine mesh liner reinforced with 4-inch corded rope that will prevent any small debris from falling on river users. The mesh size will capture all potential construction items and tools that will be used on the project, including hammers, drills, deck pans, reinforcing steel bars, and screws/nails. Nets are treated with Envirocoat for resistance to ultra-violet light and abrasion.

The netting containment system meets the requirements of ANSI A10.11, ASTM F2375, and OSHA 1926.105d, 1926.502. The system has been sealed by an engineer and based on their data, NCDOT has concluded that the net debris containment system will protect river users from falling debris and meets or exceeds the protection that would have been provided by a rigid platform system.

The netting containment system will be inspected immediately after installation by a competent person, and at least once a week thereafter. At a minimum, inspections will also occur after any impacted load, repairs, or alterations to the system. Inspection procedures and frequency/schedule are contained within the document entitled *Horizontal Perimeter Netting Installation Guide (Guide)*, pages 19-20 (pdf pages 20-21). Along with the Design drawings, this *Guide* is included within Attachment 1, entitled *I-4400 I-4700 Attachment 1 - Bridge Safety Netting*, which was provided by Division 13.

The netting containment system will not trap any bats or birds. As depicted on the Design drawings (pdf pages 2 and 3 of Attachment 1), the catchment system is attached by cables that run the length of the overhang on both sides of the bridge. Therefore, no gaps will be present on the edges of the system. However, the catchment system will be open to the construction area between the girders above the netting and the pier caps on each side of the span over the river. Any bats/birds entering the catchment system from the ends or from above will have the same means of egress.

As found referenced in the 404 Permit (Special Condition No. 3), NCDOT prepared a report encompassing the various aspects and impacts related to the proposed construction and demolition of the I-26 bridges over the French Broad River. This report, *I-26 Bridge Over the French Broad River*, *Proposed Construction and Demolition (revised March 2021)*, along with the *River Safety Plan for the Construction of the I-26 Bridge over the French Broad River* (RSP) (*revised March 2021*), and the *I-26 Widening*, *STIP Project Nos. I-4400 & I-4700 Consolidated Project Commitments version March 17*, *2021*, have been updated to include this new netting containment system language and are included as part of this modification request. Additionally, Attachment 1, *I-4700 Buncombe Co. NC Bridge Safety Netting* documents contain supporting information for the new netting containment system that was requested by the Corps. All updated documents can be accessed on the NCDOT permit application website: <u>https://xfer.services.ncdot.gov/pdea/PermApps/I-4400%20and%20I-4700%20Additional%20Elements/</u>

NCDOT requests that 404 Permit Special Condition No. 3 be revised to address the modification to the new netting containment system.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Bill Barrett at wabarrett@ncdot.gov or (919) 707-6103. A copy of this application and distribution list will also be posted on the NCDOT website at: https://xfer.services.ncdot.gov/pdea/PermApps/.

Sincerely,

Philip S. Harris III, P.E., C.P.M. Environmental Analysis Unit Head

cc: NCDOT Permit Application Standard Distribution List.

This document has been replaced by the March 18, 2021 request.



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J. ERIC BOYETTE Secretary

March 10, 2021

U.S. Army Corps of Engineers Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, NC 28801-5006

ATTN: Ms. Loretta Beckwith, NCDOT Regulatory Coordinator

- Subject: Request for Modification to the Section 404 Individual Permit for the permitted I-4700A&B sections of the proposed I-26 Widening project in Buncombe County; Division 13; WBS No. 34232.1.6
- Reference: USACE Individual Permit Action ID: SAW-2013-01833, dated June 21, 2019 NCDWR Project No. 20181645 (Mod. 2), 401 WQC, dated June 19, 2019

Dear Ms. Beckwith:

The purpose of this letter is to request a modification to the United States Corps of Engineers (USACE) Section 404 Individual Permit, and to provide a courtesy copy to the North Carolina Division of Water Resources (NCDWR), for the above-referenced project.

The proposed modification changes the type of catchment device for the I-26 Bridge over the French Broad River from a "rigid, non-drooping" catchment system to a debris containment system with netting.

This change accomplishes the same intent as the previous catchment system, with the additional benefit of reduced risk of dropping components (e.g., plywood and structural lumber) that may be used in the assembly and removal of a rigid, non-drooping catchment system, as well as the ability to re-use the catchment system.

As found referenced in the 404 Permit (Special Condition No. 3), NCDOT prepared a report encompassing the various aspects and impacts related to the proposed construction and demolition of the I-26 bridges over the French Broad River. This report, *I-26 Bridge Over the French Broad River, Proposed Construction and Demolition (revised March 2021)*, as well as the *River Safety Plan for the Construction of the I-26 Bridge over the French Broad River* (RSP) (*revised March 2021*), have been updated to include this new catchment system and are included as part of this modification request. A *Net Example System* document has also been included. Additionally, the *I-26 Widening, STIP Project Nos. I-4400 & I-4700 Project Commitments* (Version 6, March 5, 2021) has been updated to include this modification to the catchment system. All updated documents can be accessed on the NCDOT permit application website: https://xfer.services.ncdot.gov/pdea/PermApps/I-4400%20and%20I-4700%20Additional%20Elements/

Telephone: (919) 707-6000 Customer Service: 1-877-368-4968 Website: www.ncdot.gov NCDOT requests that 404 Permit Special Condition No. 3 be revised to address the modification to the catchment system.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Bill Barrett at wabarrett@ncdot.gov or (919) 707-6103. A copy of this application and distribution list will also be posted on the NCDOT website at: https://xfer.services.ncdot.gov/pdea/PermApps/.

Sincerely,

Michael Chy OPhilip S. Harris III, P.E., C.P.M. Environmental Analysis Unit Head

cc: NCDOT Permit Application Standard Distribution List

WORK LIMITS/NOTIFCATION

1) The entire 22.2 mile project is identified as STIP I-4400/I-4700. This permit only authorizes work on Sections I-4700 A, I-4700 B, I-4400 C, and I-4400 BB of STIP I-4400/I-4700; also known as "Phase 1" and "Phase 2" for permitting purposes. Construction on the remaining sections (i.e., I-4400 BA, and I-4400 A) of the I-4400/I-4700 project shall not commence until: (a) final design for those sections/phases has been completed 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 for those sections/phases and the Corps concurs with this assessment through standard Merger 4B and 4C meetings; (c) any modification(s) to the plans for those sections/phases have been approved by the Corps in writing; and (d) a final compensatory mitigation plan for those sections/phases has been submitted by the Permittee and approved by the Corps.

2) All work authorized by this permit shall be performed in strict compliance with the attached permit plans titled:

- "Wetland and Surface Water Impacts Permit, I-4700", permit drawing sheets 1-97 (Phase 1)
- "Wetland and Surface Water Impacts Permit, I-4400 C", sheets 1-43 (Phase 2)
- "Wetland and Surface Water Impacts Permit, I-4400 BB," permit drawing sheets 1-83, dated August 6, 2019 (Phase 2).

The plans referenced above are now 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.

- Combined Final Environmental Impact Statement (EIS), Final Section 4(f) Evaluation, and Record of Decision (ROD) (March 2019)
- Biological Assessment (September 2018)
- Biological Opinion (BO) (February 2019)
- I-26 Bridge Over the French Broad River Construction and Demolition (Nevember 2018 March 17, 2021)
- River Safety Plan (September 2018 March 17, 2021)
- Strategic Communication Plan for the Construction of the I-26 Bridge over the French Broad River (September 2018)
- Section 106 Memorandum of Agreement (July 2018)

4) Unauthorized Dredge or Fill: 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.

5) Maintain Flows and Circulation Patterns of Waters: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters and/or wetlands.

6) 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.

7) Pre-Construction Meeting: The Permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors representatives, and the U.S. Army Corps of Engineers, Asheville 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, Asheville 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 and NCDWR Project Managers can attend. The Permittee shall invite the Corps 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.

8) 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.

9) 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 Asheville Regulatory Field Office, Attn: Lori Beckwith, 151 Patton Ave., Room 208, Asheville, NC 28801-5006, or <u>loretta.a.beckwith@usace.army.mil</u>. The Permittee shall reference the following permit number, SAW-2013-01883, on all submittals.

10) 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: 828-271-7980, ext. 4223, within 24 hours of the Permittee's discovery of the violation.

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

RELATED LAWS

12) 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.

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

14) Federally Listed Species/Biological Opinion: This Department of the Army permit does not authorize you to take a federally listed species, in particular the Appalachian elktoe (Alasmidonta raveneliana) or the gray bat (Myotis grisescens). In order to legally take a federally listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply). The U.S. Fish and Wildlife Service issued a BO for this project titled, "I-26 Widening from US 25 Near Hendersonville to I-40/I-240 South of Asheville, Henderson and Buncombe Counties, North Carolina", on February 22, 2019. This BO 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; the terms and conditions of the BO are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of this BO, where a take of the federally 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.

15) Endangered Species Act: The Permittee shall implement all necessary measures to ensure the authorized activity does not kill, injure, capture, harass, or otherwise harm any federally listed threatened or endangered species. While accomplishing the authorized work, if the Permittee discovers or observes an injured or dead threatened or endangered species, the U.S. Army Corps of Engineers, Wilmington District, Asheville Regulatory Field Office, Attn: Lori Beckwith at 828-271-7980, ext. 4223, or loretta.a.beckwith@usace.army.mil will be immediately notified.

16) NCDOT shall abide by all stipulations identified in the attached Memorandum of Agreement titled, "MEMORANDUM OF AGREEMENT AMONG THE FEDERAL HIGHWAY ADMINISTRATION, the NATIONAL PARK SERVICE, the NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, and the NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICE PURSUANT TO 36 CFR 800.6 regarding the REPLACEMENT OF BRIDGE 205 CARRYING THE BLUE RIDGE PARKWAY OVER INTERSTATE 26 BUNCOMBE COUNTY, NORTH CAROLINA NCDOT TIP ID I-4700b", dated May 30, 2018 (last signature). This MOA is incorporated herein by reference.

AQUATIC LIFE/CULVERTS

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

18) 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.

19) Measures shall be included in the construction/installation of culverts 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.

20) Aquatic Life Movement: Unless otherwise requested in the application and depicted on the approved permit plans, no activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. All discharges of dredged or fill material within waters of the United States shall be designed and constructed to maintain low flows to sustain the movement of aquatic species.

21) 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.

22) 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.

SEDIMENT AND EROSION CONTROL

23) As noted on pages 34-38 of the attached document titled, "I-26 Widening, STIP Project Nos. I-4400 & I-4700 Project Commitments", June 19, 2019 March 17, 2021 (Version = 6), the permittee shall ensure that (1) the site specific sediment and erosion control measures, and (2) sediment and control measures for all other portions of the 22.2 mile corridor, are strictly implemented and maintained. This document is 38 pages long and was created to compile project commitments that NCDOT has agreed to in a number of other documents, to include commitments from the following:

- Combined Final Environmental Impact Statement (EIS), Final Section 4(f) Evaluation, and Record of Decision (ROD) (March 2019)
- Biological Assessment (September 2018)
- Biological Opinion (BO) (February 2019)
- I-26 Bridge Over the French Broad River Construction and Demolition (Nevember 2018 March 17, 2021)
- River Safety Plan (September 2018 March 17, 2021)
- Strategic Communication Plan for the Construction of the I-26 Bridge over the French Broad River (September 2018)
- Section 106 Memorandum of Agreement (July 2018)

24) 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.

25) 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.

26) 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.

BORROW AND WASTE

27) 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 a borrow and/or waste site(s) associated with this project and provide this information to the U.S. Army Corps of Engineers, along with the following:

- a) Borrow Sites: When any portion of an aquatic resource(s) (i.e., a stream, river, wetland, pond, seep, and/or spring) is located within the boundaries of the proposed borrow site(s), or within a distance of 400 feet from the nearest boundary of the proposed borrow site(s), the Permittee shall provide the U.S. Army Corps of Engineers with appropriate maps indicating: the locations of the proposed borrow site(s); boundaries of the proposed borrow site(s), and; delineation(s) of all aquatic resources (as described above) within the site, and out to 400 feet from the boundary of the site, as soon as such information is available.
- b) Waste Sites: When any portion of an aquatic resource(s) (i.e., a stream, river, wetland, pond, seep, and/or spring) is located within the boundaries of the proposed waste site(s), the Permittee shall provide the U.S. Army Corps of Engineers with appropriate maps indicating: the locations of the proposed waste site(s); boundaries of the proposed waste site(s), and; delineation(s) of all aquatic resources (as described above) within the site, as soon as such information is available.

For those areas proposed as waste sites that have any aquatic resources within the boundaries, or borrow sites that have any aquatic resources within the boundary or out to 400 feet beyond the boundaries, the Permittee shall not approve those borrow and/or waste sites until the U.S. Army Corps of Engineers issues written confirmation that an area does or does not contain potentially jurisdictional resources. 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 #4 of this permit. Additionally, the Permittee shall produce and maintain documentation of all borrow and waste sites associated with this project. When aquatic resources are located within

these designated areas, this documentation will include data regarding soils, vegetation, hydrology, delineation(s) of aquatic sites, and any jurisdictional determinations made by the Corps to clearly demonstrate compliance with Special Condition #4. 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 to the Permittee. For areas with aquatic resources that the Corps has determined are potentially jurisdictional (or jurisdictional), this documentation will be provided to the U.S. Army Corps of Engineers within 30 days of the completion of the reclamation work. The permittee shall ensure that (1) waste material placed in a project-related waste site(s) does not migrate into an aquatic resource, even if that resource is located outside the boundaries of the waste site, and (2) that any project-related activities in borrow sites does not adversely impact any off-site waters, to include dewatering (due to project-related excavation/borrow activities in the borrow site) of those off-site waters.

NAVIGATION/SECTION 10 WATERS (FRENCH BROAD RIVER)

28) This permit does not authorize the interference with any proposed Federal project, and the Permittee will not be entitled to compensation for damage or injury to the authorized structure or work which may be caused from future operations undertaken by the United States in the public interest. Except as authorized by this permit, or any approved modification to this permit, 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. Except as authorized by this permit, or any approved modification to this permit authorized by this permit, or any approved to the authorized work. Except as authorized by this permit, or any approved modification to this permit, the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

29) The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration.

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

COMPENSATORY MITIGATION

31) 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.

32) The permittee shall ensure that the Division Environmental Officer (DEO), or a representative delegated by the DEO, observes all in-water work (i.e., work at or below the ordinary high water mark) on Allen Branch at Sites 5 and 7 on the I-4400 BB Section of this project.