



**US Army Corps  
Of Engineers**  
Wilmington District

# PUBLIC NOTICE

Issue Date: May 30, 2019  
Comment Deadline: June 13, 2019  
Corps Action ID Number: SAW-2010-00653  
STIP Project No. R-2566B and R-2566BA

The Wilmington District, Corps of Engineers (Corps) received an application from North Carolina Department of Transportation (NCDOT) seeking Department of the Army authorization to discharge dredged or fill material into waters of the United States, associated with proposed improvements to 5.5 miles of NC 105 from SR 1136 (Clark's Creek Road) to SR 1107 (NC 105 Bypass) in Boone, Watauga County (R-2566B). Additionally, NCDOT proposes to replace Bridge 5 over the Watauga River (R-2566BA) in Watauga County, North Carolina.

General plans and location information are described below and shown on the attached maps. This Public Notice and more detailed project plans are also available on the Wilmington District Web Site under this Corps Action ID#: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/>

**Applicant:** North Carolina Department of Transportation  
Project Development and Environmental Analysis Unit  
Philip S. Harris III, P.E., C.P.M., Natural Environment Section Head  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

**Authority:** The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures under Section 404 of the Clean Water Act (33 U.S.C. 1344).

## Location

**Location Description:** The proposed project is located along NC 105 from Clark's Creek Road (SR 1136) to NC 105 Bypass (SR 1107), near Boone, Watauga County, North Carolina.

**Project Area:** 5.5 miles  
**Nearest Town:** Foscoe and Boone  
**Nearest Waterway:** Watauga River, Laurel Creek  
**River Basin:** Watauga Watershed; French Broad-Holston River Basin (HUC 06010103)  
**Latitude and Longitude:** 36.194317N, 81.745241W

## Existing Site Conditions

R-2566 was originally proposed as a 16.4-mile project from US 221 in Linville to SR 1107 (NC 105 Bypass) in Boone. The project was shortened removing Section A between Linville and Foscoe leaving Section B, a 5.5-mile portion carried forward as the project. The study area lies in the northern mountain physiographic region of North Carolina. Topography in the project vicinity is comprised of mountain ranges, isolated peaks, large rolling valleys and stream floodplains. Elevations in the study area range from 2,800 to 4,080 feet above sea level. Land use in the project vicinity consists residential and commercial properties and large forested tracts. Five terrestrial communities were identified in the study area: acid cove forest, montane alluvial forest, rich cove forest, southern Appalachian bog and maintained/disturbed.

Water resources in the study area are a part of the Watauga River basin [U.S. Geological Survey (USGS) Hydrologic Units 06010103]. Forty-seven streams and twenty-seven jurisdictional wetlands were identified in the study area. The Watauga River is identified as High Quality Waters (HQW) from its source throughout the study area. In addition, the North Carolina Wildlife Resources Commission (NCWRC) has identified the Watauga River and Laurel Fork as a trout waters. Boone Fork (Price Lake) is identified as an Outstanding Resource Water (ORW) located within one mile of the study area and drains from the south toward the Watauga River. There are no anadromous fish waters or Primary Nursery Areas (PNA). The Watauga River from its source to Cove Creek is listed on the North Carolina 2014 Final 303(d) list of impaired waters for turbidity. All jurisdictional streams in the study area have been designated as cold water streams for the purposes of stream mitigation.

Wetland and stream determinations within R-2566B were conducted using the field delineation method outlined in the 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Eastern Mountains and Piedmont Supplement. The U.S. Army Corps of Engineers and the North Carolina Division of Water Resources (NCDWR) field verified the wetlands and surface waters on April 19, 2016.

NC 105 has a Federal Functional Classification of Other Principal Arterial throughout the project corridor. Currently, NC 105 is a 2-lane undivided facility from Clark's Creek Road for approximately 1.4 miles. A 0.4-mile long southbound passing lane is located between the two intersections of NC 105 with Old Shull's Mill Road. NC 105 then tapers back to 2 lanes undivided for the next 2.2 miles to Flintlock Campground. A northbound passing lane extends the final 1.5 miles from Flintlock Campground to NC 105 Bypass. Paved shoulders along the corridor are narrow (typically 1 to 2 feet wide), and clear zones do not meet current design standards in most areas. Existing right-of-way along NC 105 varies throughout the project corridor. Currently, there is no access control on NC 105 or within the project limits. In addition to intersecting roads and driveways, several businesses have pull-in parking areas directly on NC 105. The posted speed limit along NC 105 varies from 35-55 mph along the project corridor. No bicycle or pedestrian facilities are located within the project corridor. Aerial power lines are located throughout the project corridor. A major line is on one side of NC 105, switching between the north and south sides eight times. Smaller aerial power lines branch off to service adjacent properties.

## **Applicant's Stated Purpose**

This project has two primary purposes and one secondary purpose. A primary purpose of the project is to reduce congestion on NC 105 in order to achieve level of service (LOS) D or better in the design year (2040) during the average highest week day, and to achieve LOS E or better in the design year during the average highest weekend day. One segment on NC 105 between Foscoe and Boone currently operates at LOS E, and several segments and intersections are anticipated to operate at LOS E and F in the design year. Another primary purpose is to reduce rear-end and run-off-road crashes on NC 105. Crash types and rates on NC 105 have indicated a pattern of crashes related to terrain, geometry, congestion, and development. A secondary purpose is to improve bicycle facilities on NC 105 in areas where capacity or safety improvements are proposed.

## **Project Description**

NCDOT proposes to improve NC 105 from Clark's Creek Road (SR 1136) to NC 105 Bypass (SR 1107) in Boone, Watauga County. The project corridor is 5.5 miles long. No improvements are recommended on the approximate 1-mile section between Clark's Creek Road and the southern intersection of NC 105 and Old Shull's Mill Road. The merger team agreed not to make improvements in the southernmost 1-mile section where no additional congestion or safety needs were identified. This section was retained in the environmental documents because it was within the agreed-upon logical termini. Although the project is being reviewed as one cumulative project, it will be permitted in phases due to project size, funding and TIP schedule. Replacement of the bridge that carries NC 105 over the Watauga River north of the Broadstone Road intersection is funded separately in the STIP as R-2566BA. The following improvements were proposed:

### Section BA

- Replacement of Bridge 5 over the Watauga River along with the realignment of SR1112 (Broadstone Road) and Old Tweetsie Road.

### Section B

- The section between Old Shull's Mill Road and Broadstone Road will consist of two 12-foot lanes (one in each direction) with 6-foot wide paved shoulders on both sides. The current design proposes to extend the existing climbing lane (located near Old Shull's Mill Road) to Broadstone Road.
- The section between Broadstone Road and NC 105 Bypass will consist of four 12-foot lanes, a 23-foot wide raised median and 6-foot wide paved shoulders.
- The intersection of NC 105/Old Shull's Mill Road (south) will be realigned and the NC 105/Old Shull's Mill Road (north) will be closed.

The preliminary projected impacts for the overall project (R-2566B/BA) will be approximately 0.57 acre of permanent wetland impacts and 4,302 linear feet of permanent stream impacts. Table's 1-3 contain a summary of the proposed jurisdictional wetland and stream impacts. Impacts are based upon final design for R-2566BA and preliminary impacts for R-2566B. There are no impacts to jurisdictional wetlands proposed with Section BA.

**Table 1. R-2566B Wetland Impacts (Preliminary)**

Permit Drawing Site Number	JD Map Label	Type	Permanent Impacts (ac.)
1A	WBW	Riparian	0.09
1B	WBX	Riparian	<0.01
2	WBZ	Riparian	0.02
3	WBZ	Riparian	0.04
7	WCC	Riparian	0.02
10	WCD	Riparian	0.01
11	WCF	Riparian	0.02
13	WCG	Riparian	0.03
17	WCI	Riparian	0.08
20	WCK	Riparian	0.06
27	WCQ	Riparian	0.03
32	WCU	Riparian	0.03
33	WCV	Non-riparian	<0.01
35	WCX	Riparian	0.02
40	WDA	Riparian	<0.01
<b>Additional Impact*</b>			<b><u>0.10</u></b>
<b>Total:</b>			<b><u>0.57</u></b>

\*Preliminary impacts were calculated as the slope stake +25 feet. However, it has been determined that in some areas of severe slopes, the true impact may exceed +25 feet.

**Table 2. R-2566BA Stream Impacts (Final)**

Permit Drawing Site Number	Impact Type	Permanent Stream Impacts (ft)	Temporary Stream Impacts (ft)
1	24" CSP/Fill	100	10
2	Workpad/Biofiltration conveyance	0	274
3	60" SSP/Dewatering	0	70
4	60" SSP/Fill	73	22
5	60" SSP/Fill	30	21
<b>Total</b>		<b>203</b>	<b>397</b>

**Table 3. R-2566B Streams Impacted and Description (Preliminary)**

<b>Permit Drawing Site Number</b>	<b>JD Map Label</b>	<b>Stream Name</b>	<b>Perennial/Intermittent</b>	<b>Permanent Impact (Preliminary)</b>
1A/1B	SFS	UT to Watauga River	Perennial	300
1	SFU	UT to Watauga River	Perennial	163
4/6/8	SFV	UT to Watauga River	Perennial	479
5/7	SFW	UT to Watauga River	Perennial	169
9	Big Branch	Big Branch	Perennial	163
10	SGB	UT to Watauga River	Perennial	77
11	SGD	UT to Watauga River	Perennial	132
12	SGE	UT to Watauga River	Perennial	93
14/15	SGF	UT to Watauga River	Perennial	66
16	SGH	UT to Watauga River	Perennial	135
18	SGG	UT to Watauga River	Perennial	42
19	SGJ	UT to Watauga River	Perennial	90
20	SGO	UT to Watauga River	Perennial	42
21	SGO/SGP	UTs to Watauga River	Perennial	242
25	SGZ	UT to Laurel Fork	Perennial	217
26	SHB	UT to Laurel Fork	Perennial	152
28	SHD	UT to Laurel Fork	Perennial	50
29	SHE	UT to Laurel Fork	Perennial	54
30	SHF*	UT to Laurel Fork	Perennial	73
31	SHH	UT to Laurel Fork	Perennial	52
32	SHK	UT to Laurel Fork	Perennial	130
34	SHO	UT to Laurel Fork	Perennial	115
35	SHW	UT to Laurel Fork	Perennial	268
36/37	SHZ	UT to Laurel Fork	Perennial	150
38	SIC	UT to Laurel Fork	Perennial	59
39	SID	UT to Laurel Fork	Perennial	40
42	Laurel Fork	Laurel Fork	Perennial	98
<b>Additional Impact**</b>				<b>200</b>
<b>Total</b>				<b><u>4,099</u></b>

\*Stream was not included in the JD package but was covered under the NRTR.

\*\* Preliminary impacts were calculated as the slope stake +25 feet. However, it has been determined that in some areas of severe slopes, the true impact may exceed +25 feet.

### **Avoidance and Minimization**

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment: All jurisdictional features were delineated, field verified and surveyed within the corridor for R-2566B/BA. Using these features, preliminary designs were adjusted to avoid and/or minimize impacts to jurisdictional areas. NCDOT employs many strategies to avoid and minimize impacts to jurisdictional areas in all of its designs. Many of

these strategies have been incorporated into BMP documents that have been reviewed and approved by the resource agencies and which will be followed throughout construction. All wetland areas not affected by the project will be protected from unnecessary encroachment. Individual avoidance and minimization items are as follows:

- The Best-Fit Alternative uses the fewest improvements that would result in meeting the purpose of the project. This alternative also allows to avoid or minimize impacts to the Watauga River and Laurel Fork.
- NCDOT Design Standards in Sensitive Watersheds will be employed throughout the project.
- Minimizing roadway side slopes to the maximum extent possible, including the use of retaining walls in the vicinity of the Watauga River.
- Roadway was shifted away from the Watauga River to minimize impacts.
- Roadway adjacent to the Watauga River will be a three-lane road, as opposed to a 4-lane divided to reduce impacts.
- Roadway and bridge runoff in the vicinity of the Watauga River will be routed to a biofiltration conveyance.
- The Corps will authorize construction for each section only after the approval of finalized plans.

### **Compensatory Mitigation**

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment: The unavoidable permanent stream impacts of 307 linear feet and wetland impacts of 0.02 acre will be offset by compensatory mitigation provided by the North Carolina Department of Environmental Quality (NCDEQ)-Division of Mitigation Services (DMS). Compensatory mitigation for the preliminary impacts of 4,099 linear feet of streams and 0.57 acre of wetland to the Section B segment of this project are also proposed to be provided by DMS and acceptance letters from DMS were submitted with the permit application.

### **Essential Fish Habitat**

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act, this Public Notice initiates the Essential Fish Habitat (EFH) consultation requirements. The Corps' initial determination is that the proposed project would not effect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

### **Cultural Resources**

The FHWA is the lead federal agency for this project and, in accordance with Section 106 of the National Historic Preservation Act (NHPA), is the federal agency responsible for making determinations and when required, requesting concurrence with these determinations from the North Carolina State Historic Preservation Office (SHPO).

The NCDOT and SHPO, working under the programmatic agreement, found two properties recommended eligible for listing with the National Register of Historic Places (NRHP); the Prout-Atkins House and Ed & Falah Hollars House. However, the Best-Fit Alternative will not require any right-of-way from these properties or work within the property boundaries and therefore a determination of No Effect was signed by the NCDOT, SHPO and FHWA in 2016.

An archaeological reconnaissance was conducted in 2012 describing the archaeological potential of the entire Area of Potential Effects (APE). The archaeological survey within the APE was conducted in April 2017. The survey identified two historic archaeological sites, 31WT371\*\* and 31WT396\*\*. These sites are believed to be the former locations of the Robbins Hotel and an unidentified business supporting the Boone Fork Lumber Company located a short distance to the east. Both sites were recommended ineligible for the National Register of Historic Places, (NRHP), and no further archaeological work was recommended for this project.

The District Engineer’s final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required, and with full consideration given to the proposed undertaking’s potential direct and indirect effects on historic properties within the Corps-identified permit area.

### Endangered Species

The FHWA is the lead federal agency for this project and is the federal agency responsible for making determinations and requesting concurrence, when required, with these determinations from the US Fish and Wildlife Service (USFWS), in accordance with Section 7(a)(2) of the Endangered Species Act of 1973 (ESA). As of June 27, 2018, the USFWS lists eleven (11) federally protected species for Watauga County. Table 4 contains the federally listed threatened and endangered species listed for Watauga County and includes the FHWA’s determinations of effect to these species that would result from implementation of the project.

**Table 4. Federally protected species listed for Watauga County**

Common Name	Scientific Name	Status	Habitat Presence	Biological Conclusion
Bog turtle	<i>Glyptemys muhlenbergii</i>	T(S/A)	No	Not Required
Carolina northern flying squirrel	<i>Glaucomys sabrinus coloratus</i>	E	No	No Effect
Gray bat	<i>Myotis grisescens</i>	E	Yes	MANLAA
Northern long-eared bat	<i>Myotis septentrionalis</i>	T	Yes	*
Virginia big-eared bat	<i>Corynorhinus townsendii virginianus</i>	E	Yes	MANLAA
Rusty-patched bumble bee	<i>Bombus affinis</i>	E	NA	**
Spruce-fir moss spider	<i>Microhexura montivaga</i>	E	No	No Effect
BlueRidge goldenrod	<i>Solidago spithamaea</i>	T	No	No Effect

Heller's blazing star	<i>Liatrix helleri</i>	T	No	No Effect
Roan mountain bluet	<i>Hedyotis purpurea var. montana</i>	E	No	No Effect
Spreading avens	<i>Geum radiatum</i>	E	No	No Effect

MANLAA- May Affect, Not Likely to Adversely Affect

\*May Affect – NLEB is compliant with the 4(d) rule.

\*\*The Service does not require surveys for rusty-patched bumble bee in North Carolina because FWS assumes the state is unoccupied by the species.

Informal concurrence for biological conclusions of May Affect, Not Likely to Adversely Affect was requested by the NCDOT for gray bat and Virginia big-eared bat from the USFWS on June 22, 2018. Concurrence was received on June 28, 2018 agreeing with NCDOT's biological conclusion. The Northern long-eared bat is considered to be compliant with the 4(d) rule. All other species listed for Watauga County received biological conclusions of No Effect and did not require concurrence.

Pursuant to the Endangered Species Act of 1973, the Corps reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps agrees with the FHWA's determinations of effect to these species that would result from implementation of the project.

### Other Required Authorizations

The Corps forwards this notice and all applicable application materials to the appropriate State agencies for review.

**North Carolina Division of Water Resources (NCDWR):** The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. A waiver will be deemed to occur if the NCDWR fails to act on this request for certification within sixty days of receipt of a complete application. Additional information regarding the 401 Certification may be reviewed at the NCDWR Central Office, Transportation Permitting Unit, 512 North Salisbury Street, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for a 401 Certification should do so, in writing, by June 13, 2019 to:

NCDWR Central Office  
 Attention: Ms. Amy Chapman, Transportation Permitting Unit  
 (USPS mailing address): 1617 Mail Service Center, Raleigh, NC 27699-1617

Or,

(Physical address): 512 North Salisbury Street, Raleigh, North Carolina 27604



### **North Carolina Division of Coastal Management (NCDCM):**

Based upon all available information, the Corps determines that this application for a Department of Army (DA) permit does not involve an activity which would affect the coastal zone, which is defined by the Coastal Zone Management (CZM) Act (16 U.S.C. § 1453).

### **Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

### **Commenting Information**

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, June 13, 2019. Written comments should be submitted to Mr. Steve Kichefski, US Army Corps of Engineers, Asheville Regulatory Field

Office, 151 Patton Avenue, Room 208, Asheville, NC 28801-5006, telephone (828) 271-7980, ext. 4234. Written comments can also be submitted by email to:  
[steven.l.kichefski@usace.army.mil](mailto:steven.l.kichefski@usace.army.mil)