



**US Army Corps  
Of Engineers**  
Wilmington District

# PUBLIC NOTICE

Issue Date: November 20, 2018  
Comment Deadline: December 20, 2018  
Corps Action ID #: SAW-2003-31021  
TIP Project No.: R-2822B

The Wilmington District, Corps of Engineers (Corps) has received an application from the North Carolina Department of Transportation (NCDOT) regarding a potential future requirement for Department of the Army (DA) authorization to discharge dredged or fill material into waters of the United States associated with the proposed NC 143 Improvement in Robbinsville, Graham County, North Carolina.

Specific alignment alternatives and location information are described below and shown on the attached maps. This Public Notice and attachments are also available on the Wilmington District Web Site at <http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx>

**Applicant:** North Carolina Department of Transportation (NCDOT)  
Project Development and Environmental Analysis  
Attn: Mr. Joshua Deyton.  
253 Webster Road  
Sylva, North Carolina 28779

## **Authority**

The Corps will evaluate this application to compare alternatives that have been carried forward for detailed study pursuant to applicable procedures of Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (33 U.S.C. 1344).

In order to more fully integrate Section 10 and Section 404 permit requirements with the National Environmental Policy Act of 1969, and to give careful consideration to our required public interest review and 404(b)(1) compliance determination, the Corps is soliciting public comment on the merits of this proposal and on the alternatives. At the close of this comment period, the District Commander will evaluate and consider the comments received, as well as the expected adverse and beneficial effects of the proposed road construction, to select the least environmentally damaging practicable alternative (LEDPA). The District Commander is not authorizing construction of the proposed project at this time. A final DA permit may be issued only after our review process is complete, impacts to the aquatic environment have been minimized to the maximum extent practicable, and a compensatory mitigation plan for unavoidable impacts has been approved.

## **Location**

The proposed project begins where NC 143 intersects with NC 129 (Tapoco Road)/NC 143 Business and extends along NC 143 4.5 miles west, northwest to just west of where NC 143 crosses West Buffalo Creek in Robbinsville, Graham County, North Carolina (Exhibit 1). The proposed project is designated as State Transportation Improvement Program (STIP) as project number R-2822B.

## **Existing Site Conditions**

The study area lies in the Blue Ridge Mountains physiographic region of North Carolina. Topography in the project vicinity is comprised of relatively rugged mountainous topography with elevations in the project study area range from approximately 2000-2200 feet above sea level. General trends along the NC 143 project corridor consist of mostly undeveloped land with residential properties located sparsely throughout. The project corridor lies fully within the Little Tennessee River Basin, USGS Hydrologic Units Codes 06010204. Named streams in the project area include the Cheoah River, Massey Branch, Snowbird Creek, and Cooloska Branch.

The need for the proposed roadway improvements to NC 143 is driven by the fact that the current roadway geometrics (pavement and shoulder width, horizontal and vertical curve design speeds) are not consistent with the roadway's functional classification and associated design standards. The numerous sharp curves, steep grades, narrow lane widths, and lack of paved shoulders contribute to the facility's high crash rate, and in particular the high percentage of lane departure crashes.

NC 143 serves as one of only two east-west oriented routes through the Nantahala National Forest. NC 143 connects Robbinsville (the Graham County Seat), US 129 and NC 28 to Tellico Plains, Tennessee via TN 165. In addition to serving regional traffic traveling between Robbinsville and Tellico Plains, NC 143 serves as the eastern gateway for tourist traffic to the Joyce Kilmer Memorial Forest and the Cherohala Skyway.

NC 143 is classified as a major collector. The purpose of the rural major collector is to link population and employment centers or to provide connectivity to higher classified roadways (arterials and freeways).

### Geometric Deficiencies

The various geometric deficiencies are a key contributor to the high crash rate along NC 143 within the project corridor. Between November 1, 2008 and October 31, 2013, 89 crashes occurred within the project study limits. The crash rate within the road corridor is higher than the critical crash rate and the statewide average crash rate. This section of NC 143 is a narrow two-lane facility with nine-foot wide lanes and grassed shoulders ranging in width from one to four feet. The average attainable speed in the project study area is restricted to approximately 25 to 30 mph due to the numerous low speed horizontal curves. Some of the curves have a recommended speed as low as 15 mph. The vertical curvature along NC 143 also contributes to the safety issues along the project corridor. Six of the 17 vertical curves do not meet the 35-mph design speed.

## **Applicant's Stated Purpose**

The purpose of the project is to improve safety by achieving the minimum geometric standards consistent with the facility's functional classification.

## **Project Description**

The North Carolina Department of Transportation (NCDOT) proposes to make safety improvements along a 4.5 corridor of NC 143 from West Buffalo Creek to NC 143 Business, near Robbinsville in Graham County. Improvements would include geometric/upgrade improvements using recommended design criteria stated in the AASHTO Green Book and NCDOT 3-R Design Guide for Rural Collectors. The project would result in an 80% reduction of identified roadway deficiencies and include the application of the Context Sensitive Solutions Design Controls and Criteria.

## **Detailed Study Alternatives**

Three build alternatives and the no-build alternative were selected as detailed study alternatives. Exhibits 2A-2C show the three build alternatives. The following is a brief description of each alternative:

### Alternative 1

Alternative 1 proposes to widen existing NC 143 from West Buffalo Creek to just north of NC 143 Business. This alternative proposes to upgrade NC 143 by improving all vertical and horizontal curves to meet a minimum design speed of 45-mph. These improvements are consistent with the minimum recommendations for a rural collector as described in the AASHTO Green Book. The proposed widening includes 11-foot travel lanes and 6-foot wide shoulders (4-foot paved) in each direction (Exhibit 4). The 11-foot travel lanes do not meet the minimum-width recommendations in the AASHTO Green Book for a Rural Collector, but they are consistent with the minimum lane and shoulder widths recommended by the NCDOT 3-R Guide. The proposed design also reconfigures the NC 143/NC 143 Business intersection by rerouting NC 143 on new location to make it the primary through movement.

This alternative also proposes to replace Bridge #370013 over Snowbird Creek. Bridge #370013 is a 180-foot long pre-stressed concrete cored slab bridge that consists of four, 45-foot long spans. The bridge has a sufficiency rating of 63.83 out of 100 and is considered functionally obsolete due to substandard deck geometry. Staged construction is the preferred method for reconstructing the bridge. This would consist of reducing the bridge to a one-way operation along half of the structure and dismantling the out of service portion of the bridge. The dismantled portion of the bridge will be reconstructed to current design standards and traffic would then be shifted. The remaining older portion of the bridge will then be dismantled, reconstructed to current standards, and then opened to vehicular traffic.

Exhibit 2A shows the proposed alignment of Alternative 1.

### Alternative 2 Revised

Alternative 2-Revised proposes to widen NC 143 from West Buffalo Creek to near the Carver Cemetery. A new alignment segment is proposed to carry NC 143 to the north and east of the existing NC 143 from near the Chickalelee Cemetery to near the Graham County Waste Convenience Site. This alignment includes a new crossing of Santeetlah Lake and will include horizontal and vertical alignment improvements along existing NC 143 from near the Graham County Waste Convenience Site to the NC 143 Business intersection. The alternative will upgrade NC 143, ensuring that all the vertical and horizontal curves have a minimal design speed of 35-mph, and widening NC 143 to consist of 11-foot travel lanes and 6-foot wide shoulders (4-foot paved) in each direction (see typical section 1, Exhibit 4). These improvements meet the minimum recommendations provided in the NCDOT 3-R Guide for a rural collector. The alternative will also reconfigure the NC 143/NC 143 Business intersection by rerouting NC 143 on new location to make it the primary through movement. Alternative 2-Revised was developed as a means to minimize impacts to the Forest Service's Snowbird Picnic area.

The functional classification of the portion of existing NC 143 that will be bypassed between the Chickalelee Cemetery and the Graham County Waste Convenience Site will be downgraded from a "rural collector" to "local road" and no longer be signed as NC 143. This means that this "vacated" section of NC 143 will be improved to meeting the NCDOT 3-R Guide standards for a local road. The roadway will be widened to consist of 11-foot wide lanes and 4-foot wide shoulders grassed shoulders in each direction (see typical section 2, Exhibit 4). This section of the "vacated" NC 143 will not include any improvements to the horizontal or vertical alignment. Exhibit 2B shows the proposed alignment for Alternate 2-Revised.

### Alternative 4A

Alternative 4A proposes to widen existing NC 143 with horizontal and vertical alignment improvements from West Buffalo Creek to just north of NC 143 Business. The alternative proposes to upgrade NC 143, ensuring that all vertical and horizontal curves have a minimal design speed of 35-mph, and widening the roadway to consist of two 11-foot lanes and 6-foot wide shoulders (4-foot paved), which is consistent with the minimal recommendations for a Rural Collector in the NCDOT 3-R guidance (see typical section 1, Exhibit 4). The alternative will also reconfigure the NC 143/NC 143 Business intersection by rerouting NC 143 on new location to make it the primary through movement.

This alternative also proposes to replace Bridge #370013 over Snowbird Creek using staged construction, which is identical to the methodology for replacing the bridge in Alternative 1. Exhibit 3C shows the proposed alignment of Alternative 4A.

### Alternative Impact Table

Resource	Alternative 1	Alternative 2 Revised	Alternative 4A
Streams (linear feet)	4,080	2,710	3,200
Wetlands (acres)	0.14	0.08	0.08
Ponds (acres)	0.4	-	0.4
Trout Buffers (square feet)	88,720	55,930	82,930
<b>Cultural Resources</b>			
Eastern Band of Cherokee Indian Tracts			
Towayallah Tract (acres)	1.5	3.0	3.0
Ootalkahah Tract (acres)	1.8	2.1	2.6
Elowah Tract (acres)	4.9	5.4	5.3
Collooska Tract (acres)	0.2	0.9	0.5
<b>Total</b>	<b>8.4</b>	<b>11.4</b>	<b>11.8</b>
Tribal lands	3.6	2.6	2.8
NR - Archaeological Sites Impacts	Y	Y	Y
Other Cemeteries	N	N	N
NRHP- Eligible Historic Structures	0	0	0
<b>Community Resources</b>			
Residential Relocations (Estimated)	0	3	1
Business Relocations (Estimated)	2	1	3
Churches	0	0	0
Hazardous Material Sites	1	0	1
<b>US Forest Service Resources</b>			
Property Impacts (acres)	39.8	41.8	37.4
Santeetlah Bike Trail (linear feet)	1,230	630	480
Long Hungry Road Camping Area	N	N	N
Snowbird Picnic Area	Y	N	Y

## Cultural Resources

### Historic Architectural Resources

Field surveys of the project's area of potential effect were conducted in February 2013. No properties listed on or eligible for the National Register of Historic Places were found.

### Archeological Resources

Archaeological surveys were performed for the project in June and July of 2012. The surveys identified four new archaeological sites and three previously identified sites. All three build alternatives would impact one of these sites, which was recommended eligible for listing on the National Register of Historic Places.

### Cemeteries

Although there are three known cemeteries within the project study area, these cemeteries are not considered eligible for listing on the National Register and none would be impact by the proposed improvements.

## Endangered Species

As of September 2018, the United States Fish and Wildlife Service (USFWS) lists 10 federally listed species protected under the ESA and the Bald Eagle protected under the BGEA for Graham County. Biological conclusions for federally protected species are shown in the below table. The US Fish and Wild Service will be consulted on all determinations other than “no effect” to ensure their concurrence with determinations.

Federally Listed Species for Graham County

Scientific Name	Common Name	Habitat Present	Federal Status	Biological Conclusion
<i>Alasmidonta raveneliana</i>	Appalachian Elktoe	No	E	No Effect
<i>Clemmys muhlenbergii</i>	Bog turtle	No	T(S/A)	Not Required
<i>Glaucomys sabrinus coloratus</i>	Carolina northern flying	No	E	No Effect
<i>Myotis grisescens</i>	Gray Bat	Unknown	E	Unresolved
<i>Myotis spetentrionalis</i>	Northern long-eared bat	Yes	T	MA-NLAA
<i>Myotis sodalist</i>	Indiana bat	Yes	E	Unresolved
<i>Gymnoderma lineare</i>	Rock gnome lichen	No	E	No Effect
<i>Bombus affinis</i>	Rusty-patched bumble bee	No	E	Not required
<i>Erimonax monachus</i>	Spotfin chub (turquoise)	No	T	Unresolved
<i>Spiraea virginiana</i>	Virginia spiraea	Yes	T	No Effect
<i>Eurycea junaluska</i>	Junaluska salamander	Unknown	FSC	Unresolved
<i>Cryptobranchus alleganiensis</i>	Hellbender	Unknown	ARS	Unresolved
<i>Desmognathus aeneus</i>	Seepage salamander	Unknown	ARS	Unresolved
<i>Erimonax monachus</i>	Spotfin chub	Unknown	T	Unresolved
<i>Nothoceros aenigmaticus</i>	A Hornwort	Unknown	FSC	Unresolved
<i>Plagiochila cuduciloba</i>	A Liverwort	Unknown	FSC	Unresolved
<i>Plagiochila virginica var. caroliniana</i>	A Liverwort	Unknown	FSC	Unresolved
<i>Plagiochila sharpii</i>	A Liverwort	Unknown	ARS	Unresolved
<i>Plagiochila sullivantii var. sullivantii</i>	A Liverwort	Unknown	FSC	Unresolved
<i>Porella wataugensis</i>	A Liverwort	Unknown	FSC	Unresolved

ARS = At Risk Species; FSC = Federal Species of Concern; E = Endangered; T = Threatened; T(S/A) = Threatened, similarity of appearance; MA-NLAA = May affect, not likely to adversely affect

## 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.

### **Compensatory Mitigation**

The purpose of compensatory mitigation is to offset unavoidable functional losses to the aquatic environment resulting from project impacts to waters of the United States. NCDOT will investigate potential on-site stream and wetland mitigation opportunities once a preferred alternative has been chosen. If on-site mitigation is not feasible, or a sufficient amount of mitigation is not available on-site, mitigation will be provided by the NC Division of Mitigation Services (NCDMS).

### **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 select the least environmentally damaging practicable alternative (LEDPA) 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 a Corps of Engineers 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.

NCDOT is holding a public meeting for this project on December 11, 2018. Details for the meeting will be posted at this link up to two weeks before the meeting <https://www.ncdot.gov/news/public-meetings/Pages/default.aspx>. Additionally, Mr. Joshua Deyton of NCDOT can be contacted at [jbdeyton@ncdot.gov](mailto:jbdeyton@ncdot.gov), or 828-586-2141 for the location and other details for the meeting.

The opportunity to submit written comments or questions will also be provided. The Corps will receive a copy of the public comments.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, December 20, 2018. Written comments should be submitted to Ms. Crystal Amschler, US Army Corps of Engineers, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, NC 28801-5006, telephone 828-271-7980, ext. 4231. Written comments can also be submitted by email to [crystal.c.amschler@usace.army.mil](mailto:crystal.c.amschler@usace.army.mil).