



**US Army Corps  
Of Engineers**  
Wilmington District

# PUBLIC NOTICE

Issue Date: April 29, 2016  
Comment Deadline: May 31, 2016  
Corps Action ID #: SAW-2014-01728  
TIP Project No.W-5600

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 improving US 70 from US 70 Business (west of the SR 2565 (Sadisco Road) intersection) to east of the SR 1915 (Turnage Road) intersection near Clayton, Johnson 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: Philip S. Harris III, P.E., C.P.M.  
Natural Environment Section Head  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

## **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. 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 4.7 mile project is located on US 70 from US 70 Business (west of the SR 2565 (Sadisco Road) intersection) to east of the SR 1915 (Turnage Road) intersection near Clayton, Johnson County, North Carolina. The proposed project is included in the approved 2016-2025 State Transportation Improvement Program (STIP) as TIP Project W-5600. (Figure. 1)



Figure 1.

## Existing Site Conditions

The study area lies in the coastal plain physiographic region of North Carolina. Topography in the project vicinity is comprised of gently rolling hills with narrow, level floodplains and moderately steep slopes along streams. Elevations in the study area range from 140 to 165 feet above mean sea level. Land use in the project vicinity consists of primarily residential, commercial, and agricultural uses along roadways and in uplands and forested lands occupying stream corridors and other undeveloped areas.

Water resources in the study area are part of the Neuse River Basin (United States Geological Survey [USGS] Hydrologic Unit Code (HUC) 03020201). Twenty-one jurisdictional streams were identified with Reedy Branch, Little Poplar Creek and Poplar Creek as named streams. There are no impaired (303(d) list) waters located within one mile of the study area. No High Quality Waters (HQW), Outstanding Resource Waters (ORW), or WS-I or WS-II waters occur within one mile of the study area.

A wetland identification and preliminary assessment analysis for the study area was performed and wetlands were delineated based on the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual. Thirty-nine jurisdictional wetlands were identified within the project study area and are identified by type as Headwater Forest, Non-Tidal Freshwater Marsh or Hardwood Flat.

Five terrestrial communities were identified in the study area: maintained/disturbed areas, mesic mixed hardwood forest (coastal plain subtype), mesic pine flatwoods, coastal plain small stream swamp (blackwater subtype), and coastal plain bottomland hardwoods (blackwater subtype).

### **Applicant's Stated Purpose**

The purpose of the project is to improve the safety and mobility of vehicular travel along US 70 within the project limits. The proposed improvements are needed to safely accommodate future traffic volumes along this section of US 70. The proposed project would implement safe access management measures within the freeway concept consistent with the US 70 Access Management Study (NCDOT July 2005) and the US 70 Master Plan map for Johnston County (US 70 Corridor Commission July 2009). Secondary benefits from the proposed project include a reduction in the number of potential vehicular conflicts inherent with at-grade intersections.

### **Project Description**

The applicant proposes to upgrade US 70 within the project study corridor to a freeway. Interchanges are proposed to replace the existing signalized, at-grade intersections at SR 1501 (Swift Creek Road) and SR 1913 (Wilson's Mills Road). The non-signalized, at-grade intersections would also be eliminated. Full access control would be implemented along US 70 within the project limits. Access to adjacent properties would be maintained via service roads connected to the Swift Creek Road and Wilson's Mills Road interchanges.

### **Detailed Study Alternatives**

Multiple designs for each interchange location were considered. These interchange options include service road options. The individual interchange options are shown in attached Figures 3-7.

#### **Swift Creek Road Interchange Options**

Swift Creek Road Option 1 is a half-cloverleaf design with Swift Creek Road shifted west on new location. This option includes ramps/loops in the northwest and southwest quadrants. The realigned Swift Creek Road would be bridged over US 70.

Swift Creek Road Option 2 includes ramps/loops in the northeast and southwest quadrants. Swift Creek Road would remain on its existing alignment. Swift Creek Road would be bridged over US 70.

## **Wilson's Mills Road Interchange Options**

Wilson's Mills Road Option A is a tight diamond design with ramps in four quadrants. US 70 would be realigned to the south and bridged over Wilson's Mills Road.

Wilson's Mills Road Option B is a half-cloverleaf design with ramps/loops in the northeast and southwest quadrants (similar to Swift Creek Road Option 2). Wilson's Mills Road would be bridged over US 70.

## **Service Roads**

The project proposes full control of access along US 70 within the project limits. Service roads would ensure access from adjacent properties to US 70. Proposed service roads, from west to east, are:

**Service Road 1**, located on the north side of US 70 near the western project terminus, acts as a western extension of Uzzle Road. Service Road 1 will provide a connection to the east via Uzzle Drive and Service Road 3. (Service Road 3 connects to the western end of Wilson's Mills Road). This service road would provide access to an agricultural property currently accessed directly from US 70 opposite Sadisco Road.

**Service Road 1A**, located on the south side of US 70 provides access to Uzzle Industrial Drive properties, via an extension of Sadisco Road.

**Service Road 2**, located on the south side of US 70 provides access to Uzzle Industrial Drive properties via a connection to Strickland Road to the east.

**Service Road 3** would extend Wilson's Mills Road to the west, providing access to agricultural properties and a nursery/landscape business on the north side of US 70.

**Service Road 4**, located south of US 70, connects Strickland Road to Swift Creek Road and enhances connectivity provided by Service Road 2. The length of Service Road 4 would vary, depending on the Swift Creek Road interchange option chosen.

**Service Road 5** would realign the Twin Creek Road intersection with Swift Creek Road, located on the south side of US 70. This service road would be required for Swift Creek Road Interchange Option 2, but is not needed for the Swift Creek Road Interchange Option 1.

**Service Road 6** provides access to properties on the south side of US 70. Service Road 6 would extend from an existing service road west to Wilson's Mills Road.

**Service Roads 7, 8, 9, 10, and 11** would connect the eastern-most segment of Bear Farm Road to Wilson's Mills Road on the north side of US 70. The combination of the service roads ensures access for businesses along Wilson's Mills Road Extension.

## **Detailed Study Alternatives**

Interchange Options Swift Creek Road 1 and 2 and Wilson's Mills Road A and B were carried forward for detailed analysis and combined into the detailed study alternatives described below in Figure 2. Each alternative is a combination of one of the two Swift Creek Road interchange

options, one of the two Wilson’s Mills Road interchange options, and the service roads. Figure 2A represents a comparison of the various impacts associated with the detailed study alternatives.

At this stage of the project, all four alternatives are still under consideration. Public and local official input will be considered prior to NCDOT selecting a preferred alternative.

**Figure 2. Detailed Study Alternatives with Interchange Options**

Alternative	Interchange Option	
	Swift Creek Road	Wilson’s Mills Road
1A	Half-cloverleaf ramps and loops in NW and SW quadrants – shifted west	Tight diamond
1B	Half-cloverleaf ramps and loops in NW and SW quadrants – shifted west	Ramps/loops in NE and SW quadrants
2A	Ramps/loops in NE and SW quadrants	Tight diamond
2B	Ramps/loops in NE and SW quadrants	Ramps/loops in NE and SW quadrants

**Figure 2A. Comparison of Detailed Study Alternatives**

Resource		Alternative 1A	Alternative 1B	Alternative 2A	Alternative 2B
Relocations	Residential	3	5	5	7
	Business	6	9	6	9
	Total	9	14	11	16
Minority / Low Income Populations (Disproportionate Impacts)		No	No	No	No
Historic Resources (Adverse Effects)		No	No	No	
Community Facilities Impacted <sup>1</sup>		0	0	1	1
Section 4(f) Impacts		N/A	N/A	N/A	N/A
Farmland (acres)		68.0	73.4	64.4	69.8
Wetlands (acres)		8.2	8.0	8.1	7.8
Streams (linear feet)		3,060	2,770	3,300	3,010
Riparian Buffers (acres)	Zone 1	1.7	1.5	1.2	1.0
	Zone 2	1.9	1.78	0.8	0.7
	Total	3.6	3.3	2.0	1.7
Floodplain (acres) <sup>2</sup>		0	0	0.1	0.1
Federally Protected Species		No Effect	No Effect	No Effect	No Effect

<sup>1</sup>Wilson’s Mills Cemetery is impacted by Alternatives 2A and 2B only. (45 graves)

<sup>2</sup>Floodplain calculations based off of Johnston County 2004 Floodplain GIS mapping

## Summary of Anticipated Impacts to Waters of the U.S.

The impacts to waters of the U.S. for each of the four (4) alternatives that were studied in detail are listed below in Figures 2B-2C. These impact estimates were calculated on design slope stake limits plus a 25-foot buffer.

**Figure 2B. Stream Impacts by Alternative**

Stream Name	NRTR Map ID	Length of Impact (feet) by Alternative			
		1A	1B	2A	2B
Reedy Branch, including pond (PA) <sup>1</sup>	SA	0	0	0	0
Little Poplar Creek <sup>1</sup>	SB	182	182	182	182
UT to Little Poplar Creek	SC	91	91	91	91
UT to Little Poplar Creek <sup>1</sup>	SD	138	138	138	138
UT to Little Poplar Creek	SE	0	0		
UT to Little Poplar Creek	SF	248	248	248	248
UT to Poplar Creek, including ponds (PB and PZZ) <sup>1</sup>	SG	990	990	208	208
UT to Poplar Creek	SH	0		37	37
Poplar Creek	SI	20	20	875	875
UT to Poplar Creek <sup>1</sup>	SJ	0	0	0	0
UT to Poplar Creek, including pond (PD)	SL	0	0	0	0
UT to Poplar Creek including pond (PH) <sup>1</sup>	SM	0	0	500	500
UT to Poplar Creek <sup>1</sup>	SN	0			
UT to Neuse River	SO	97	285	97	285
UT to Poplar Creek (ephemeral) <sup>1</sup>	SP	0	0	0	0
UT to Neuse River <sup>1</sup>	SQ	0	0	0	00
UT to Poplar Creek <sup>1</sup>	SR	379	193	379	193
UT to Poplar Creek <sup>1</sup>	SS	297	0	0	0
UT to Neuse River	ST	246	192	297	192
UT to Neuse River	SU	0	57	246	57
UT to Poplar Creek	SZZ	50	50	0	0
Other UT		320	320	0	0
<b>Total</b>		<b>3,060</b>	<b>2,770</b>	<b>3,300</b>	<b>3,010</b>

<sup>1</sup>Stream is subject to Neuse River Buffer Rule protection.

**Figure 2C. Wetland Impacts by Alternative**

NRTR Map ID	NCWAM Classification	Hydrologic Classification	NCDWQ Wetland Rating	Area (ac.)	Impacts (ac.) by Alternative			
					1A	1B	2A	2B
WD	Headwater Forest	Riparian	47	4.53	0.42	0.42	0.42	0.42
WE	Headwater Forest	Riparian	35	0.29	0.17	0.17	0.17	0.17
WF	Non-Tidal Freshwater Marsh	Riparian	19	0.02	0.02	0.02	0.02	0.02
WG	Headwater Forest	Riparian	29	0.75	0.1	0.1	0.1	0.1
WJ	Headwater Forest	Riparian	35	1.26	0.5	0.5	0.5	0.5
WK	Hardwood Flat	Non-Riparian	50	5.08*	5.8	5.8	3.92	3.92
WL	Headwater Forest	Riparian	44	3.81	0	0	0.77	0.77

WM	Headwater Forest	Riparian	44	0.03	0	0	0.026	0.026
WU	Headwater Forest	Riparian	40	0.72	0	0	0.43	0.43
WZ	Non-Tidal Freshwater Marsh	Riparian	31	0.49	0	0	0.65	0.65
WBB	Hardwood Flat	Non-Riparian	19	1.53	0	0.1	0	.1
WCC	Hardwood Flat	Non-Riparian	23	0.64	0	0	0	0
WDD	Headwater Forest	Riparian	38	0.37	0.14	0.37	0.14	0.37
WGG	Headwater Forest/ Non-Tidal Freshwater Marsh	Riparian	50	1.54	0.65	0.19	0.65	0.19
WII	Headwater Forest	Riparian	31	0.73	0.27	0.27	0.27	0.27
WXX	Headwater Forest	Riparian	34	0.12	0.12	0.12	0	0
<b>Total</b>					<b>8.2</b>	<b>8.0</b>	<b>8.1</b>	<b>7.8</b>

## Cultural Resources

The proposed project is subject to North Carolina General Statute 121-12(a), and Section 106 of the National Historic Preservation Act of 1966, as amended.

### 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 2014. Eight archaeological sites were encountered. None of these sites are considered eligible for the National Register of Historic Places.

## Endangered Species

As of December 13, 2013, the United States Fish and Wildlife (USFWS) lists 4 federally protected species for Johnston County. Biological conclusions for federally protected species are shown in Figure 4.

**Figure 4. Federally Protected Species in Johnston County**

Scientific Name	Common Name	Habitat Present	Federal* Status	Biological Conclusion
<i>Picoides borealis</i>	Red cockaded woodpecker	No	E	No Effect
<i>Alasmidonta heterodon</i>	Dwarf wedgemussel	Yes	E	No Effect
<i>Elliptio steinstansana</i>	Tar River spiny mussel	Yes	E	No Effect
<i>Rhus michauxii</i>	Michaux's sumac	Yes	E	No Effect

\*E = Endangered; a taxon "in danger of extinction throughout all or a significant portion of its range"

Suitable habitat for red-cockaded woodpecker does not exist within the study area. There are no stands of pine within the project area having trees of the size and age required by the red-cockaded woodpecker for nesting, nor is there appropriate foraging habitat.

Mussel surveys were conducted in July 2014 within Little Poplar Creek, Poplar Creek and tributaries within 100 meters upstream and 400 meters downstream from the project study area. No specimens of either mussel species were observed. The surveyed stream reaches were too small to provide habitat for the Tar River Spiny mussel. These streams were also relatively poor quality dwarf wedgemussel habitat. Also, there were few other types of mussels in the areas surveyed. In general, both listed species are usually found in areas with substantial diversity and abundances of mussels. Given relatively poor habitat conditions, low diversity and abundances of other mussel species and the distance to any NC Natural Heritage Program element occurrences for both species, it is anticipated the project will have "No effect" on either species.

Suitable habitat for Michaux's sumac is present in the study area along roadside shoulders and utility easements. Surveys were conducted throughout areas of suitable habitat during June and July 2013 and October 2013. No individuals of Michaux's sumac were observed.

A review of North Carolina Natural Heritage Program (NCNHP) records, updated March 2016, indicates no known occurrence of any of these species within one mile of the study area.

The bald eagle was declared recovered, and removed (de-listed) from the USFWS Federal List of Threatened and Endangered Species effective August 8, 2007. The bald eagle remains federally protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Species Act. Mature forests and large dominant trees do not occur within the study area or within a 1.13 mile radius (one mile plus 660 feet). A review of the NCNHP database in March 2016 showed no occurrences of bald eagle within two miles of the study area. Due to the results of the survey and lack of known occurrences, it has been determined this project will not affect this species.

The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect." The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with federal nexus in Divisions 1-8, which includes Johnston County, where TIP W-5600 is located.

## **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.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, May 31, 2016. Written comments should be submitted to Mr. Thomas Steffens, US Army Corps of Engineers, Washington Regulatory Field Office, 2407 West 5<sup>th</sup> Street, Washington, NC 27889 or by email to [thomas.a.steffens@usace.army.mil](mailto:thomas.a.steffens@usace.army.mil).