



US Army Corps  
Of Engineers  
Wilmington District

# PUBLIC NOTICE

Issue Date: April 5, 2018  
Comment Deadline: May 5, 2018  
Corps Action ID Number: SAW-2004-21120

The Wilmington District, Corps of Engineers (Corps) received information from the North Carolina Department of Transportation (NCDOT) regarding a potential future requirement for Department of the Army authorization to discharge dredged or fill material into waters of the United States, associated with widening of US 158 (Reidsville Road) to a multi-lane facility, from the existing multi-lane section north of I-40 Business/US 421 in Forsyth County to US 220 in Guilford County. A new location bypass around Stokesdale, Guilford County, is also proposed as part of this project. (STIP Project Number R-2577)

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans 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)  
Central Project Delivery Team  
Attn: Karen Reynolds,  
Senior Project Planning Engineer  
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 the following Statutory Authorities:

- Section 404 of the Clean Water Act (33 U.S.C. 1344)
- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

In order to more fully integrate 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 considered. 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**

### Location Description:

Nearest Town: Winston Salem and Stokesdale

Nearest Waterway: Troublesome and Belews Creek

River Basin: Cape Fear, Roanoke, and Yadkin

Latitude and Longitude: 36.1908 N, -80.1035W

The proposed project begins in northeastern Forsyth County near the city of Winston-Salem, and extends north east approximately 18.8 miles into Guilford County along US 158 to Stokesdale, North Carolina. The study area boundary for this project encompasses the proposed transportation improvements as shown on attachment/Figure 1.

The proposed project, in addition to widening existing US 158, would also include a new location bypass around Stokesdale as shown on attachment/Figure 1.

## **Existing Site Conditions**

Forsyth and Guilford County is located within the piedmont region of central North Carolina. The project is located in the northern fringes of Winston-Salem, where historically rural agricultural land use is transitioning to residential and commercial developments. The roadways to be improved as part of the proposed project include US 158 (Principle arterial), NC 66 (Minor arterial), NC 65 (Minor arterial), NC 68 (Principle arterial), and US 220 (Principle arterial). Principal arterials provide a high degree of mobility by serving major centers of metropolitan areas, as well as providing mobility through rural areas. Minor arterials serve smaller geographic areas and offer connectivity to the higher Arterial system, such as principal arterials, freeways and expressways.

US 158 (Reidsville Road) is a primarily two-lane, undivided highway with grass shoulders within the project study area that connects I-40 Business/US 421 in Winston-Salem with US 220 (I-73) north of Greensboro. There is currently no control-of-access along US 158, which limits the level of mobility and travel speeds through the corridor due to numerous driveways for residences and businesses on both sides of the road. The existing right-of-way of US 158, within the project study area, varies between 60 and 300 feet, and the existing speed limit varies between 35 miles per hour (mph) and 55 mph.

NC 66 (Old Hollow Road) is mostly a two-lane, undivided highway with grass shoulders that crosses over US 158 in Walkertown in Forsyth County. The existing speed limit along NC 66 within the project study area is 45 mph. There is currently no control-of-access along NC 66 within the project study area. STIP Project U-5824 proposes to widen NC 66 north of US 158 and will also improve the intersection with US 158. STIP Project U-5824 is programmed in the 2018-2027 STIP and is scheduled for right-of-way acquisition in 2020 and construction in 2022.

NC 65 (Belews Creek Road) is a two-lane, undivided highway with grass shoulders that intersects with US 158 in Stokesdale in Guilford County. The existing speed limit along NC 65 within the project study area is 35 mph. There is currently no control-of-access along NC 65 within the project study area.

NC 68 is mostly a two-lane, undivided highway with grass shoulders that crosses over US 158 in Stokesdale in Guilford County. The existing speed limit along NC 68 within the project study varies between is 35 mph and 50 mph. There is currently no control-of-access along NC 68 within the project study area.

US 220 is the eastern terminus of the project, and is a four-lane, median divided facility. US 220 is part of the future I-73 corridor that starts at Myrtle Beach in South Carolina, runs through North Carolina and further north through Virginia, West Virginia, Ohio, and Michigan. An interchange has recently been constructed where US 158 connects with US 220. Full control-of-access exists along US 158 near the new interchange with US 220.

Water resources in the Study Area are part of the Cape Fear, Roanoke, and Yadkin river basins [U.S. Geological Survey (USGS) Hydrologic Units 03030002, 03010103, and 03040101, respectively]. There are 172 jurisdictional streams, 32 jurisdictional and non-jurisdictional other surface waters (ponds), and 244 jurisdictional wetlands within the project study area.

There are no designated anadromous fish waters, Primary Nursery Areas (PNA), or trout waters present in the project study area. There are no designated High Quality Waters (HQW) or water supply watersheds (WS-I or WS-II) within 1.0 mile downstream of the project study area. There are no waters listed on the North Carolina 2010 Final 303(d) list of impaired waters due to excessive sedimentation and turbidity within 1.0 mile downstream of the project study area. No waters within the project study area have been identified by the North Carolina Wildlife Resource Commission (NCWRC) as trout waters; therefore, no moratoria are anticipated for the proposed project. The National

Marine Fisheries Service (NMFS) has not identified any streams within the project study area as an Essential Fish Habitat. There are no streams within the project study area determined by the USACE as Navigable Waters under Section 10 of the Rivers and Harbors Act.

A field verification for NCDOT's delineation was performed on January 10, 2012 and February 1, 2012. A subsequent approved jurisdictional determination was issued on April 3, 2012, and has expired. As such, the location and extent of potential waters of the US are subject to change.

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

#### Need for the Project:

- Transportation deficiencies exist along US 158 in the project study area and are projected to decline by the Design Year 2040.

The current (2017) No-Build traffic volumes on existing US 158 range from 21,000 vehicles per day (vpd), at the project beginning, to 7,000 vpd just east of the US 220 interchange, the project ending terminus. By the Design Year 2040, the No-Build traffic volumes along US 158 are expected to range from 24,400 vpd, at the beginning of the project, to 8,100 vpd just east of the US 220 (I-73) interchange. The truck forecast in 2040 is anticipated to range between 4% - 6% for Duals (dual axle trucks) and 4% - 12% for TTSTs (tractor trailer trucks).

In 2040, twenty (20) out of thirty (30) intersections analyzed within the project study area would function at a level of service (LOS) E or F during at least one peak hour (AM Peak or PM Peak). These projected deficiencies would cause substantial travel delay, increase the potential for accidents and contribute to the inefficient operation of motor vehicles.

- Protection of the mobility and connectivity functions of the US 158 corridor

The proposed project was part of 55 highway corridors across the state defined in the North Carolina Strategic Highway Corridors (SHC) Policy that was adopted by the NC Board of Transportation in 2004. The SHC Policy represented a timely initiative to protect the mobility and connectivity functions of critical highway facilities, while promoting environmental stewardship through maximizing the use of existing facilities to the extent possible.

The SHC Policy has since been replaced by the North Carolina Strategic Transportation Corridors (STC) Network that represents NCDOT's highest priority for long-term preservation and improvement of 25 corridors across the State. US 158, between Winston Salem and US 220, is not identified as one of the 25 STC corridors, but it is shown as a "low volume US Route" on the Strategic Corridor Element 2: Freight and Passenger Mobility Map which objective is to serve "major inter-regional travel with higher levels of service, moving high volumes of passenger or freight traffic, and providing multiple transportation opportunity in travel or shipping in the corridor."

US 158 between Winston-Salem and US 220 north of Greensboro is also listed on the National Highway System (NHS) which includes roadways that are important to the nation's economy, defense, and mobility. It is identified as a Moving Ahead for Progress (MAP)-21 Principal Arterial on the NHS map for Winston Salem, North Carolina.

#### Purpose of the Project:

The project purpose is to improve traffic flow and LOS along US 158, within the project limits. Additionally, this project would also improve the mobility and connectivity functions of the US 158 corridor.

#### **Project Description**

The NCDOT proposes to widen and upgrade approximately 18.8 miles of US 158 (Reidsville Road) to a multi-lane facility, from the existing multi-lane section north of I-40 Business/US 421 in Forsyth County to US 220 in Guilford County. The project is divided into three sections, Sections A, B, and C, for scheduling and funding purposes:

- Section A starts north of US 421/I-40 Business and ends just east of the SR 1965 (Belews Creek Road)/SR 2011 (Vance Road) intersection in Forsyth County.
- Section B starts just east of the SR 1965 (Belews Creek Road)/SR 2011 (Vance Road) intersection in Forsyth County and ends just east of the SR 2034 (Anthony Road) intersection in Guilford County.
- Section C starts just east of the SR 2034 (Anthony Road) intersection with US 158 in Guilford County and ends just east of the US 220 interchange.

The Build Alternatives under consideration for R-2577 consist of widening alternatives along Sections A and B, and two new-location alternatives for Section C, R-2577C Alternative 2 and R-2577C Alternative 3.

#### **Detailed Study Alternatives (DSA)**

Several widening options were considered along existing US 158 for Sections A and B of the project. Widening options were eliminated during the NEPA/Section 404 Merger Process. The following widening options currently under consideration for the seven (7) widening option segments that comprise Sections A and B are shown in Table 1. The seven widening segments of Sections A and B serve to constitute an overall best-fit roadway design for R-2577A and R-2577B.

**Table 1. Segment Widening Options for Sections A and B**

<b>Project Segment</b>	<b>Segment Termini</b>	<b>Design Options for Further Study</b>
Segment 1	West of Old Greensboro Road to Darrow Road	Northern widening
Segment 2	Darrow Road to N.C. 66	Transitional widening
Segment 3	NC 66 to Flat Rock Road	Southern widening
		Transitional widening
Segment 4	Flat Rock Road to Goodwill Church Road	Transitional widening
Segment 5	Goodwill Church Road to Peaceful Valley Drive	Transitional widening
Segment 6	Peaceful Valley Drive to Coldwater Road	Transitional widening
Segment 7	Coldwater Road to Anthony Road	Northern widening

Several new location alternatives were considered and evaluated and some have been eliminated during the NEPA/Section 404 Merger Process. The new-location alternatives currently under consideration for Section C include R-2577C Alternative 2, south of Stokesdale, and R-2577C Alternative 3, north of Stokesdale.

- R-2577C Alternative 2 takes off on new location just east of the SR 2014 (Anthony Road)/US 158 intersection, loops around the south side of Stokesdale, crosses NC 68 just south of Prince Edward Road, ties back into existing US 158 just east of the existing Ellison Road intersection, and ends at the project's eastern terminus just east of the US 220 interchange.
- R-2577C Alternative 3 follows existing US 158 from just east of the SR 2014 (Anthony Road)/US 158 intersection and takes off on new location at the Branson Road intersection with US 158, loops around the north side of Stokesdale, has a proposed interchange at the existing NC 65 and NC 68 intersection, and ties back into existing US 220 at the Athens Road intersection with US 158, and ends at the project's eastern terminus just east of US 220.

In addition to the Build Alternatives (i.e., Detailed Study Alternatives), a No-Build Alternative was also retained as a baseline against which the benefits, costs, and impacts of the Build Alternatives could be compared. NCDOT has preliminarily determined that the No-Build Alternative would not meet the project's purposes.

Impacts to waters of the United States for the Detailed Study Alternatives are listed in Table 2. These impact estimates were calculated based on preliminary roadway design slope stake limits plus 25 feet.

**Table 2. Stream and Wetland Impacts**

<b>Build Alternatives</b>	<b>Stream Impacts* (linear feet)</b>	<b>Wetland Impacts* (Acres)</b>	<b>Lake/Pond Impacts* (Acres)</b>
<b>Sections A&amp;B – Widening (Segment 3 was the only segment with multiple alternatives)</b>			
<b>With Segment 3 Southern Widening</b>	3,026	0.3	4.7
<b>With Segment 3 Transitional Widening</b>	3,202	0.3	4.4
<b>Section C – New Location and Widening</b>			
<b>R-2577C Alternative 2 (South of Stokesdale)</b>	3,335	1.5	0.6
<b>R-2577C Alternative 3 (North of Stokesdale)</b>	2,842	0.6	0.0

\*Based on preliminary roadway design slope stakes plus 25 feet.

### **Avoidance, Minimization and Compensatory Mitigation**

Through development of the preliminary functional designs within the DSAs, NCDOT has attempted to avoid impacts to streams and wetlands to the greatest practicable extent. This included developing alignments and interchange configurations for the DSAs that avoided these resources as much as possible, while also minimizing impacts to other resources. NCDOT will continue to seek ways to avoid and minimize impacts in further design efforts for the selected Alternative.

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 compensatory mitigation opportunities for the selected alternative. 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).

### **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 proposed project is subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and implemented by the Advisory Council on Historic Preservations' Regulations for Compliance with Section 106, codified as 36 CFR Part 800. Section 106 requires federal agencies to take into account of their undertakings (federally-funded, licenses, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council a reasonable opportunity to comments on such undertakings.

### Architectural Resources

Pursuant to the requirements of Section 106 of the NHPA, an initial, project field survey conducted in 2011, identified 390 resources that were greater than fifty years of age within the project study area. These findings were presented to the Historic Preservation Office (HPO) on January 24, 2012, where 30 resources were identified as meriting further investigation. Additionally, the potential bypass routes around the town of Stokesdale were surveyed in March 2012, and an additional 90 resources were identified. These resources were reviewed by the HPO in May 2012, and it was determined that no further investigation was merited for these resources.

Of the 30 resources investigated, six were determined eligible for NRHP listing by the HPO. The Stokesdale Commercial Historic District was also determined edible for listing. An assessment form of effects was completed by the HPO and NCDOT on July 9, 2013 and amended on September 22, 2015. It was determined that the only NRHP-eligible property that would be adversely affected by the project is Edgewood Baptist Church (FY 2392). NCDOT held another meeting with the HPO on January 8, 2018, after refinement of the preliminary designs, and re-affirming the historic property boundary for Edgewood Baptist Church. NCDOT is currently investigating further minimization measures to the church and will continue coordinating with the HPO and the church to develop a Memorandum of Agreement (MOA) to address impacts to the church.

### Archaeological Resources

Phase I and Phase II surveys were conducted for archaeological resources within the project Area of Potential Effects (APE). However, during the Phase I archaeological survey, 33 archaeological sites and 33 isolated finds were identified. Sites were comprised of 21 historic sites, one historic burial site, four prehistoric sites, and seven sites with both prehistoric and historic components. In total there were 9 historic isolated finds and 24 prehistoric isolated finds. Of the 33 sites identified, 32 were recommended as ineligible for NRHP listing. Phase II testing was conducted on 10 of the 33 sites in order to definitely determine their NRHP eligibility. The only site that was determined to have the potential for NRHP eligibility is site LS-15, which contains two historic graves covered with rock slabs. Because of the unusual burial treatment and presence of artifacts, this site's eligibility is unknown pending further research. Archival research may provide more information about the interred, the time period, and ethnicity. If so, the site may meet NRHP eligibility criteria.

Site LS-15 is located within the project study area of R-2577C Alternative 3, the proposed new location alternative north of Stokesdale, but is not located within or near the construction limits of this alternative.

**Endangered Species**

Species with the federal classification of Endangered (E), Threatened (T), or officially Proposed (P) for such listing, are protected under the Endangered Species Act (ESA) of 1973 (16 USC 1531 *et seq.*) as amended.

In lists updated on March 25, 2015 and July 24, 2015, respectively, the U.S. Fish and Wildlife Service (USFWS) lists one federally protected species for Guilford County, and three federally protected species for Forsyth County, as shown in Table 3. A brief description of the species’ habitat requirements follows, along with the Biological Conclusion rendered based on survey results in the Study Area. Habitat requirements for the species are based on the current best available information from referenced literature and/or USFWS.

**Table 3. Federally Protected Species Listed for Forsyth and Guilford Counties**

Scientific Name	Common Name	County	Federal Status	Habitat Present	Biological Conclusion
<i>Glyptemys muhlenbergii</i>	Bog turtle	Forsyth	T(S/A)	Yes	Not Required
<i>Picoides borealis</i>	Red-cockaded woodpecker*	Forsyth	E	No	No Effect
<i>Cardamine micranthera</i>	Small-anthered bittercress*	Forsyth	E	Yes	Unresolved
<i>Isotria medeoloides</i>	Small whorled pogonia	Guilford	T	Yes	No Effect

T – Threatened; E – Endangered; T(S/A) - Threatened due to similarity of appearance  
 \* Historic record (the species was last observed in the county more than 50 years ago)

Natural Heritage Program (NHP) Database Review:

- Per a review of the NHP database on 2/28/2018, there are no occurrences of small whorled pogonia within 1 mile of the Guilford County portion of the project.
- Per a review of the NHP database on 2/28/2018, there is one occurrence of small-anthered bittercress within 1 mile of the Forsyth County portion of the project. The occurrence (EO number 1) is approximately 2,000 feet outside of the project study area and is listed as extirpated in the database.

Northern Long-eared Bat (NLEB):

Since this project is state-funded, the U.S. Army Corps of Engineers (USACE) will act as the lead agency for issues related to the northern long-eared bat (NLEB).

**For the Division 7 Section (Guilford County):** The USFWS has developed a programmatic biological opinion (PBO) in conjunction with the FHWA, the USACE, and NCDOT for the NLEB 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 a federal nexus in Divisions 1-8, which includes Guilford County, where a portion of R-2577ABC is located. This level of incidental take is authorized from the effective date of a final listing determination through April 30, 2020.

**For the Division 9 Section (Forsyth County):** The USACE has developed a Standard Local Operating Procedure for Endangered Species (SLOPES) to address NLEB when they are the lead agency, which NCDOT will follow for the portions of the project within Forsyth County. The requirements of the SLOPES for NLEB will be completed prior to Let and will be submitted to the USACE.

### **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 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 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.

NCDOT held two Design Public Meetings in October 2017 to update the public on the project studies, to present the design alternatives, and to request public comments on the design alternatives and the project in general. The meetings were held on two separate evenings at the Gospel Light Baptist Church in Walkertown on October 24, 2017, and at the Stokesdale Town Hall on October 26, 2017. A total of 687 citizens signed in at the meetings, with 168 citizens providing comments by the end of the advertised comment period.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, May 5, 2018. Comments should be submitted to James C. Lastinger, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105 , Wake Forest, North Carolina 27587, at (919) 554-4884 extension 32, or by email to [James.C.Lastinger@usace.army.mil](mailto:James.C.Lastinger@usace.army.mil).