



PUBLIC NOTICE

**US Army Corps
Of Engineers**
Wilmington District

Issue Date: November 16, 2015
Comment Deadline: December 16, 2015
Corps Action ID #: SAW-2009-02240
STIP Project Numbers R-2721, R-2828, and R-2829

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 Complete 540, Triangle Expressway Southeast Extension (STIP Project Numbers R-2721, R-2828, and R-2829) in Wake and Johnston Counties, 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>

The Federal Highway Administration's (FHWA) Draft Environmental Impact Statement (DEIS) and related maps for this project are available on the NCDOT website at <http://www.ncdot.gov/projects/complete540/>.

Applicant North Carolina Department of Transportation (NCDOT)
Project Development and Environmental Analysis
Attn: Richard W. Hancock, P.E. 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 404 of the Clean Water Act (33 U.S.C. 1344).

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 evaluated in the November 2, 2015, FHWA DEIS (<http://www.ncdot.gov/projects/complete540/>). 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 is located in a corridor from the existing NC 540 toll facility at NC 55 in Apex to existing I-540 at the US 64/US 264 Bypass (I-495) in Knightdale, a distance of approximately 27 miles, in southern Wake and northwestern Johnston Counties, North Carolina, and is commonly referred

to as the Complete 540, Triangle Expressway Southeast Extension Project (see attached drawings). The proposed project is designated in the NCDOT 2016-2025 State Transportation Improvement Program (STIP) (June 2015) as project numbers R-2721, R-2828, and R-2829.

Existing Site Conditions

Wake and Johnston Counties are located within the piedmont and upper coastal plain regions of central North Carolina. The Raleigh-Durham-Chapel Hill metropolitan area is one of the fastest growing regions in the country, with the area immediately south of Raleigh being one of the places much of this growth is occurring. As recently as the early 1990s, much of the land in the study area was rural or undeveloped. The most common development in the study area was in the form of farms and other agricultural activities. Starting generally about 20 years ago, this pattern began to change, with suburban-style residential developments increasingly replacing agricultural or vacant land. Today, suburban development is the dominant land use throughout much of the study area. Commercial and office land uses tend to either be spread out along the major arterials, with access provided to each individual parcel, or are clustered in “plaza” style developments at the intersections of major roads. Major commercial arterials in the study area include NC 55 Bypass, US 401, US 70 Business, and NC 42 near I-40. Major commercial intersections include Holly Springs Road at Sunset Lake Road, Ten Ten Road at Kildare Farm Road and Holly Springs Road, US 70 Business at White Oak Road, Timber Drive at NC 50, and Rock Quarry Road at Battle Bridge Road. The attached Figure 1 shows the existing conditions in the study area.

The project study area is contained within the Neuse River Basin. Water resources in the study area are part of the U.S. Geological Survey (USGS) Hydrologic Unit 03020201). The alignment alternative include between 106 and 142 stream crossing within the study area, and between 111 and 161 wetland impacts. Named rivers and streams in the project area include the Neuse River, Rocky Branch, Camp Branch, Panther Branch, Guffy Branch, Swift Creek, Mahlers Creek, Little Creek, Middle Creek, White Oak Creek, and Terrible Creek, and unnamed tributaries to these waters.

The Swift Creek Water Supply Watershed Critical Area is located in the northern part of the project study area. In addition, there are several streams on the the North Carolina 2014 Final 303(d) list of impaired waters, including portions of the Neuse River, Middle Creek, Terrible Creek, Little Creek, Swift Creek, and Mahlers Creek, as shown in attached Figure 4.

Applicant’s Stated Purpose

The primary purposes of the proposed project are to:

- improve mobility within or through the study area during peak travel periods.
- reduce forecast congestion on the existing roadway network within the project study area.

A secondary purpose of the project is to improve system linkage in the regional roadway network by completing the 540 outer loop around the greater Raleigh area.

Project Description

NCDOT proposes to construct the Triangle Expressway Southeast Extension - Complete 540 project, a new controlled-access toll facility extending from NC 55 in Apex to US 64/US 264 Bypass (I-495) in Knightdale, a distance of approximately 27 miles. The proposed project would continue the design used in the existing segments of the Triangle Expressway, with six travel lanes, divided by a 70-foot wide median. The project study area includes portions of Wake and Johnston counties.

Detailed Study Alternatives

As shown on the attached **Figure 2**, the project’s Detailed Study Alternatives (DSAs) are made up of ten color-coded corridors that can be combined in various ways to form 17 different end-to-end project alternatives. The attached **Figure 3** illustrates how the different color-coded corridors combine to form each of the 17 end-to-end DSAs. NCDOT prepared preliminary functional engineering designs for the DSAs within 1,000-foot wide study corridors. The study corridors were wider than 1,000 feet in areas where interchanges and/or service roads are under consideration. Potential interchange locations include:

- NC 55 Bypass
- Bells Lake Road
- Old Stage Road
- I-40
- Old Baucom Road
- Auburn Knightdale Road
- US 64/US 264 Bypass (I-495)
- Holly Springs Road
- US 401
- NC 50
- White Oak Road
- US 70 Business
- Poole Road

In addition to the 17 build DSAs on new location, a No-Build Alternative was also retained as a baseline against which the benefits, costs and impacts of the build DSAs could be compared, in accordance with NEPA regulations and FHWA guidelines. The No-Build Alternative assumed that the transportation network in the study area will continue to develop as called for in the 2035 LRTP, but without the Complete 540 project included.

Impacts to streams, wetlands, and ponds are shown in Table 1, below.

Table 1 Impacts to Water Resources by Detailed Study Alternative

DSA	Stream Impacts		Wetland Impacts		Pond Impacts		Neuse River Buffer Zone Impacts		100-Year Floodplain (acres)	Swift Creek Watershed Critical Area (acres)
	# of Crossings	Impacts (lf)	# of Wetlands	Impacts (acres)	# of Ponds	Impacts (acres)	Zone 1 (acres)	Zone 2 (acres)		
1	142	67,967	153	75.6	41	24.9	97.9	63.9	85.4	0
2	139	65,810	149	74.3	38	23.2	95.2	62.3	87.1	0
3	140	68,130	139	73.5	40	23.9	99.9	65.3	85.7	0
4	132	61,322	135	71.6	38	26.1	89.1	58.3	58.8	0
5	142	65,180	149	74.2	44	27.6	94.9	62.4	64.9	0
6	109	53,014	113	52.0	28	20.0	34.4	22.9	84.9	6.7
7	106	51,582	111	51.4	25	17.7	37.1	24.7	86.6	6.7
8	139	77,724	161	57.5	37	19.7	114.3	75.5	101.7	0
9	136	75,566	157	56.2	34	18.0	111.5	73.8	103.4	0
10	137	78,087	146	63.0	35	18.0	115.9	76.8	102.0	0
11	129	71,278	142	61.1	33	20.2	105.0	69.8	75.1	0
12	139	74,936	157	56.1	40	22.4	111.3	73.9	81.2	0
13	133	68,604	154	66.7	36	22.8	101.2	67.1	75.7	0
14	130	66,447	150	65.5	33	21.2	98.4	65.5	77.4	0
15	131	68,967	139	72.3	34	21.2	102.8	68.4	76.0	0
16	123	62,159	135	70.4	32	23.4	91.9	61.4	49.0	0
17	133	65,817	150	65.3	39	25.6	98.2	65.6	55.1	0

Notes: Impacts were calculated within the construction limits of the preliminary functional designs, with an additional 40 feet beyond the slope stake limits on each side.

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), will make determinations and request concurrence with these determinations from the North Carolina State Historic Preservation Office (NCSHPO). Additionally, if and when necessary, adverse effects to historic resources will be resolved through execution of a memorandum of agreement.

According to the FHWA:

Based on coordination with the North Carolina State Historic Preservation Office (SHPO), most of the DSAs were determined to have No Effect on most of the resources that are either listed or eligible for the National Register of Historic Places (NRHP). Impacts on the other properties were designated as either “Adverse Effect,” or “No Adverse Effect with Environmental Commitments” (meaning the finding of No Adverse Effect is contingent on various commitments being made to reduce or mitigate impacts to the property). Properties receiving these designations are listed in **Table 2 below**:

Table 2 – Historic Sites Affected by Detailed Study Alternative

Historic Site	NRHP Status	DSAs Causing the Effect	Effect Determination
Panther Branch School	Listed	1 through 5 (Orange Corridor)	No Adverse Effect, with Environmental Commitments
Dr. L. J. Faulhaber Farm	Eligible	6 and 7 (Red Corridor)	Adverse Effect
Bryan Farms Historic District	Eligible	6 and 7 (Red Corridor)	Adverse Effect
Britt’s Store	Eligible	8 through 12, 13 through 17 (Blue and Lilac Corridors)	No Adverse Effect, with Environmental Commitments
Mount Auburn School	Eligible	6 and 7 (Red Corridor)	No Adverse Effect, with Environmental Commitments
Baucom-Stallings House	Eligible	3, 10 and 15 (Tan Corridor)	Adverse Effect

Archaeological Resources

With respect to the Complete 540 project’s effect on archaeological resources, an agreement was reached between the HPO and NCDOT that detailed archaeological investigations will be conducted after a Preferred Alternative is selected. As described on page 77 of the Draft EIS, the investigations will identify and evaluate archaeological sites for their eligibility for the NRHP and will be completed in further consultation with the SHPO.

Section 4(f) of the Department of Transportation Act of 1966

Section 4(f) provides protection to historic properties, public parks, and recreation areas. The proposed project would result in a “use” of historic properties and park/recreation areas, depending on the selected alternative. Use of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility; or when there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose; or when there is a constructive use (a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired). The direct effects on the following resources would likely constitute use of a Section 4(f) property:

- Dr. L. J. Faulhaber Farm (Red Corridor segment; Alternatives 6 and 7)
- Bryan Farms Historic District (Red Corridor segment; Alternatives 6 and 7)
- Baucom-Stallings House (Tan Corridor segment; Alternatives 3, 10, and 15)
- Middle Creek School Park (Orange Corridor segment; Alternatives 1-5 and 13-17)
- Planned Sunset Oaks Park (Purple Corridor segment; Alternatives 8-12)

Endangered Species

The following table contains the federally listed threatened and endangered species for Wake and Johnston Counties and determinations made by the FHWA, the lead federal agency for this project.

Table 3 – Federally Protected Species Listed for Wake and Johnston Counties

Common Name	Scientific Name	County	Federal Status	Biological Conclusion
Red-cockaded woodpecker	<i>Picoides borealis</i>	Wake/Johnston	Endangered	No Effect
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	Wake/Johnston	Endangered	Unresolved
Tar River spiny mussel	<i>Elliptio steinstansama</i>	Johnston	Endangered	Unresolved
Michaux's sumac	<i>Rhus michauxii</i>	Wake/Johnson	Endangered	No Effect
Northern long-eared bat	<i>Myotis septentrionalis</i>	Wake	Endangered	May Affect, Likely to Adversely Effect
Bald eagle	<i>Haliaeetus leucocephalus</i>	Wake/Johnston	Delisted	No Effect

Notes: While the bald eagle is no longer listed as endangered, it is still protected by the Bald Eagle and Golden Eagle Protection

Consultation with the US Fish and Wildlife Service (USFWS) for the the Tar River spiny mussel, and the Dwarf wedgemussel is ongoing. All determinations, other than no effect determinations, will require concurrence from the USFWS.

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.

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 has also tried to minimize the total impacts to these resources by considering bridges instead of culverts over some of the larger streams and bridges over some of the larger and higher quality wetlands. NCDOT will continue to seek ways to avoid and minimize impacts in further design efforts for the Preferred 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 stream and wetland mitigation opportunities after a Preferred Alternative is selected. 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 Department of Environmental Quality, Division of Mitigation Services.

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 three public meetings and one public hearing for this project, as follows:

Monday, December 7, 2015
Barwell Road Elementary School
3925 Barwell Road, Raleigh 27610
Public Meeting: 6 to 8 p.m.

Tuesday, December 8, 2015
Holly Springs High School Cafeteria
5329 Cass Holt Road, Holly Springs 27540
Public Meeting: 6 to 8 p.m.

Wednesday, December 9, 2015
Wake Tech Community College – Student Services Building, Room 213/214
9101 Fayetteville Road, Raleigh 27603
Public Meeting: 4 to 6:30 p.m., Formal Hearing: 7 p.m.

NCDOT representatives will be available between 6 p.m. and 8 p.m. to answer questions and receive comments concerning the proposed project. The opportunity to submit written comments or questions will also be provided. The public may attend at any time during the above mentioned hours.

A formal presentation and hearing will begin at 7 p.m. on December 9, 2015, at Wake Tech Community College. The presentation will consist of an explanation of the proposed corridor location, design, right-of-way, relocation requirements/procedures, and the state-federal relationship. The hearing will be open to those present for statements, questions, and comments. The presentation and comments will be recorded and a transcript will be prepared. A Corps representative will attend the formal hearing, and 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 16, 2015. Written comments should be submitted to Mr. Eric Alsmeyer, US Army Corps of Engineers, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587, telephone (919) 554-4884, extension 23. Written comments can also be submitted by email to eric.c.alsmeyer@usace.army.mil.