



**US Army Corps
Of Engineers**
Wilmington District

PUBLIC NOTICE

Issue Date: September 29, 2015
Comment Deadline: October 29, 2015
Corps Action ID Number: SAW-2012-00156

The Wilmington District, Corps of Engineers (Corps) received an application from North Carolina Department of Transportation, Mr. Richard W. Hancock, P.E., Manager, Project Development and Environmental Analysis Branch, 1548 Mail Service Center, Raleigh, North Carolina 27699-1548 seeking Department of the Army authorization for the permanent impact to 4,162 linear feet of stream channel (of which 225 linear feet is bank stabilization), temporary impact to 309 linear feet of stream channel and the temporary impact to 0.1 acres of wetland. The proposed impacts are associated with the I-77 High Occupancy Toll (HOT) lanes project (TIP #s I5405, I4750AA and I3311C) located along approximately 26 miles of I-77 starting north of NC 150 in Iredell County and continuing south along I-77, deviating from I77 at the I-277 interchange and following I-277 approximately 1.2 miles to terminate at North Brevard Street in Charlotte, Mecklenburg County, North Carolina.

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/PublicNotices.aspx>

Applicant: North Carolina Department of Transportation,
Project Development and Environmental Analysis Unit
Attn: Mr. Richard W. Hancock, P.E., Manager
1548 Mail Service Center
Raleigh, North Carolina 27699-1598

Authority

The Corps evaluates this application and decides whether to issue, conditionally issue, or deny the proposed work 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)

Location

Directions to Site: The proposed project is approximately 26 miles of I-77 starting north of NC 150 in Iredell County and continuing south along I-77, deviating from I-77 at the I-277 interchange and following I-277 approximately 1.2 miles to terminate at North Brevard Street in Charlotte, Mecklenburg County, North Carolina.

The project is further divided up into three sections, the North Section, the Central Section and the South Section. The location of these segments is as follows:

- I-5405 Central Section - begins at Cindy Lane (SR 2523) on I-77 and ends 14.7 miles north, just north of Catawba Avenue (SR 5544):
- I-4750AA North Section - begins north of Catawba Avenue and continues 8.3 miles north to just north of NC 150:
- I-3311C South Section – begins at North Brevard Street on I-277 (East Brookshire Freeway) and continues north on to I-77 and continues along I-77 to Cindy Lane, 3.8 miles.

Project Area: Approximately 27 miles

Nearest Town: Mooresville and Charlotte

Nearest Waterway: Irwin Creek, McIntyre Creek, Long Creek, Dixon Branch, Torrence Creek, McDowell Creek, Lake Norman (an impoundment of the Catawba River), and Byers Creek
River Basin: Catawba (HUC 03050101 and 03050103)

Latitude and Longitude:

Project start point: 35.594167 N -80.860362 W, end point: 35.230537 N, -80.831810 W

North Section start point: 35.594167, -80.860362 end point: 35.493246, -80.871622

Central Section start point: 35.493246, -80.871622 end point: 35.492743, -80.871142

South Section start point: 35.492743, -80.871142 end point: 35.230537, -80.831810

Existing Site Conditions

The study area lies in the piedmont physiographic region of North Carolina. Topography in the project vicinity is comprised of gently rolling hills with narrow, level floodplains along streams. Elevations in the project study area range from 680 to 820 feet above sea level. The Mecklenburg County Soil Survey (NRCS, 2011) and the Iredell County Soil Survey (USDA, 2011) identify 47 soil types within the project study area. The majority of these soils are non-hydric and well-drained.

General development trends along the I-77 project corridor consist of various densities of office, commercial, and industrial land uses surrounding interchanges, with various levels of single and multi-family residential developments located between interchanges and adjacent to the corridor. Municipalities traversed by the I-77 corridor include Charlotte, Huntersville, Cornelius, Davidson, and Mooresville. The subject project lies fully within the Catawba River Basin, USGS Hydrologic Units Codes 03050101 and 03050103. Named streams in the project area within the Catawba River Basin include Irwin Creek, McIntyre Creek, Long Creek, Dixon Branch, Torrence Creek, McDowell Creek, Lake Norman (an impoundment of the Catawba River), and Byers Creek. Aquatic communities in the project study area consist of both perennial and intermittent piedmont

streams, as well as Lake Norman. Terrestrial communities in the study area are mainly comprised of highly disturbed habitats, with small pockets (from a few acres to 50 acres) of forested habitat adjoining the corridor. Habitat for small or disturbance-adapted species exists in grassy or wooded areas. There are no Outstanding Resource Waters, High Quality Waters, nor are there any waters designated as WS-I or WS-II Water Supply waters within 1.0 mile of any portion of the project study area. More than 100 stream channels cross through portions of the project's study area, but only a very small fraction of these stream channels occur within the proposed footprint of the project, as designed. Two streams within the study area are listed as 303(d) impaired streams; Irwin Creek and Long Creek. Irwin Creek ranges through the South Section.

Applicant's Stated Purpose

The purpose of the proposed action is to provide travel time reliability to and from the major employment center (downtown Charlotte) to the rapidly growing residential communities of northern Mecklenburg and southern Iredell counties, particularly the Lake Norman area.

Not only does this route serve the rapidly expanding base of daily commuters, it is also a major route for commerce. Currently, heavy traffic occurs during peak periods within the project limits, resulting in frequent congestion and delays. The study area has grown faster than the financial resources have been available to complete long-term transportation improvements. The traffic congestion results in predictable delays, as well as excessive travel times for commuters and through-travelers. Predicted growth in the study area will only exacerbate travel in what is a part of the Interstate Highway System.

Project Description

The I-77 Hot Lanes Project proposes to improve approximately 26 miles of I-77 and approximately 1.2 miles of I-277 by widening the highway and introducing High Occupancy Toll (HOT) lanes. The Project is proposed to address travel delays by providing a travel option that results in more reliable local trip times and improves overall network efficiency.

The project has been divided into three phases: the Central Section, North Section and South Section. The current permit application includes plans and proposed impacts for the entire project, but final design and final impact numbers are only provided for the Central Section. Plans for submitted for the South Section and North Section include preliminary designs and the applicant would seek approval for final design plans for these sections through permit modification requests. The majority of the road widening is proposed to occur predominately in existing right-of-way, with the majority to occur in the median.

The referenced project sections are described as:

- I-5405 Central Section - begins at Cindy Lane (SR 2523) on I-77 and ends 14.7 miles north, just north of Catawba Avenue (SR 5544): convert existing HOV lanes on I-77 to HOT lanes and extend northward to Exit 28. Add additional HOT lane in each direction from I-85 to Exit 28.

- I-4750AA North Section - begins north of Catawba Avenue and continues 8.3 miles north to just north of NC 150: construct one HOT lane in each direction along I-77 from Exit 28 (connecting to I-5405 HOT lane project) to Brawley School Road (Exit 35). North and southbound HOT designations begin/end at Brawley School Road (Exit 35).
- I-3311C South Section – begins at North Brevard Street on I-277 (East Brookshire Freeway) and continues north on I-77 to Cindy Lane, 3.8 miles:
 - Southbound I-77: Construct one HOT lane from the southern terminus of the existing southbound HOV lane (south of I-85) to I-277.
 - Southbound I-77: Construct an additional HOT lane southbound from the southern terminus of I-5405 (north of I-85/I-77 interchange) to I-277.
 - Northbound I-77: Construct two HOT lanes northbound from I-277 to the southern terminus of I-5405 (north of I-85)
 - Both directions of I-277: Construct one HOT lane in each direction from I-77 to North Brevard Street (with HOT lane designation beginning and ending at North Tryon St.)

Impacts that would result from the proposed project are shown in the table below:

Summary of Wetland and Stream Impacts for I-77 HOT Lanes Project

Section	Design Stage	Wetland Impact Type	Wetland Impact Area (ac)	Stream Impact Type	Stream Impact linear foot
Central	Final	Temp Impact	0.06	Permanent Impact	185
		Permanent Impact	<0.01	Bank Stabilization	225
				Temporary Impact	309
North	Preliminary	NA	0	Permanent Impact	90
South	Preliminary	Temp Impact	0.04	Permanent Impact	3,662
Total Permanent Impacts			<0.1		4,162
Total Temporary Impacts			0.10		309

Avoidance and Minimization

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

Efforts have been taken, and will continue throughout construction, to first avoid and then minimize any impacts to Section 404 waters and wetlands. The following is a partial list of avoidance and minimization initiatives that have been undertaken on this project, and specifically for the Central Section:

- The majority of this project is widening toward the median. This avoids impacts to not only adjacent jurisdictional resources, but also other concerns such as forested fringes, 4(f) properties, FEMA Buyout Parcels, neighborhoods and private residences.
- Retaining walls will be implemented where practicable to avoid and minimize expanding the roadway footprint into jurisdictional areas. This is primarily anticipated for the North and South Section designs which are currently preliminary.
- Side slopes have been steepened beyond typical in several areas to avoid jurisdictional impacts. Opportunities for this type of avoidance will also be evaluated and considered in the North and South Sections which are currently preliminary.
- NCDOT's Design Standards in Sensitive Watersheds will be used during the implementation of erosion and sedimentation control BMP's around Lake Norman and Byers Creek.
- Existing storm drainage systems and cross culverts have been utilized and retained when possible to collect and convey storm water. Using the existing systems will maintain existing drainage patterns and minimize additional discharge points that will require stabilization along the corridor.
- When allowed by slope and velocities, grassed swales will be used to convey storm water and in areas where grassed swales are not feasible due to velocities, ditches will be stabilized by rip rap or permanent soil reinforcement matting.
- Preformed scour holes will be utilized where possible throughout the project. Specifically at Sta. 680+10 (RT) for the Central Section, a preformed scour hole is provided to diffuse the concentrated flow from storm drain outlet pipes into non-erosive sheet flow to surrounding water resources.
- Rip rap aprons/pads will be utilized where necessary to reduce velocity and erosion at pipe outlets.
- Rip rap aprons/pads will be utilized where necessary to reduce velocity and erosion at pipe outlets.
- Designers avoided or minimized temporary impacts where equipment access was needed in the vicinity of streams and wetlands for the purpose of installing drainage structures, conducting bank stabilization or other activities.

Compensatory Mitigation

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

The project has been designed to avoid and minimize impacts to jurisdictional areas throughout the National Environmental Policy Act (NEPA) and design processes. However, project impacts will necessitate compensatory mitigation for the unavoidable impacts. Mitigation will be provided by NC Division of Mitigation Services (DMW).

The applicant has requested mitigation credit via DMS to off-set the impacts to 3,237 lf of warm water stream channel and 0.5 acre riparian wetlands in the Catawba River Basin.

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

Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that:

- Should historic properties, or properties eligible for inclusion in the National Register, be present within the Corps' permit area; the proposed activity requiring the DA permit (the undertaking) is a type of activity that will have no potential to cause an effect to an historic properties.
- No historic properties, nor properties eligible for inclusion in the National Register, are present within the Corps' permit area; therefore, there will be no historic properties affected. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Properties ineligible for inclusion in the National Register are present within the Corps' permit area; there will be no historic properties affected by the proposed work. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; however, the undertaking will have no adverse effect on these historic properties. The Corps subsequently requests concurrence from the SHPO (or THPO).
- Historic properties, or properties eligible for inclusion in the National Register, are present within the Corps' permit area; moreover, the undertaking may have an adverse effect on these historic properties. The Corps subsequently initiates consultation with the SHPO (or THPO).
- The proposed work takes place in an area known to have the potential for the presence of prehistoric and historic cultural resources; however, the area has not been formally surveyed for the presence of cultural resources. No sites eligible for inclusion in the National Register of Historic Places are known to be present in the vicinity of the proposed work. Additional work may be necessary to identify and assess any historic or prehistoric resources that may be present.

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

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 determines that the proposed project would not affect federally listed endangered or threatened species or their formally designated critical habitat.
- The Corps determines that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat. The Corps initiates consultation under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- The Corps is not aware of the presence of species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. The Corps will make a final determination on the effects of the proposed project upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

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 October 29, 2015 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):

- The application did not include a certification that the proposed work complies with and would be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2(b)(2) the Corps cannot issue a Department of Army (DA) permit for the proposed work until the applicant submits such a certification to the Corps and the NCDCM, and the NCDCM notifies the Corps that it concurs with the applicant's consistency certification. As the application did not include the consistency certification, the Corps will request, upon receipt, concurrence or objection from the 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 shall 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.

The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, October 29, 2015. Comments should be submitted to Crystal Amschler, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, North Carolina 28801-5006, at (828) 271-7980, ext 231.