



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: October 10, 2017
Comment Deadline: November 09, 2017
Corps Action ID Number: SAW-2016-00981

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 the replacement of Bridge No. 360 on US 29 and improvements to the existing interchange at SR 4771 (Reedy Fork Parkway) (STIP Project Number R-4707) in Guilford 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.aspx>

Applicant: North Carolina Department of Transportation (NCDOT)
Project Development Group
Attn: Derrick Weaver, P.E.
Senior Project Manager
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:

Project Area (acres): ~525

Nearest Town: Greensboro

Nearest Waterway: Unnamed Tributary at Camp Herman

River Basin: Cape Fear

Latitude and Longitude: 36.173055 N, -79.713599W

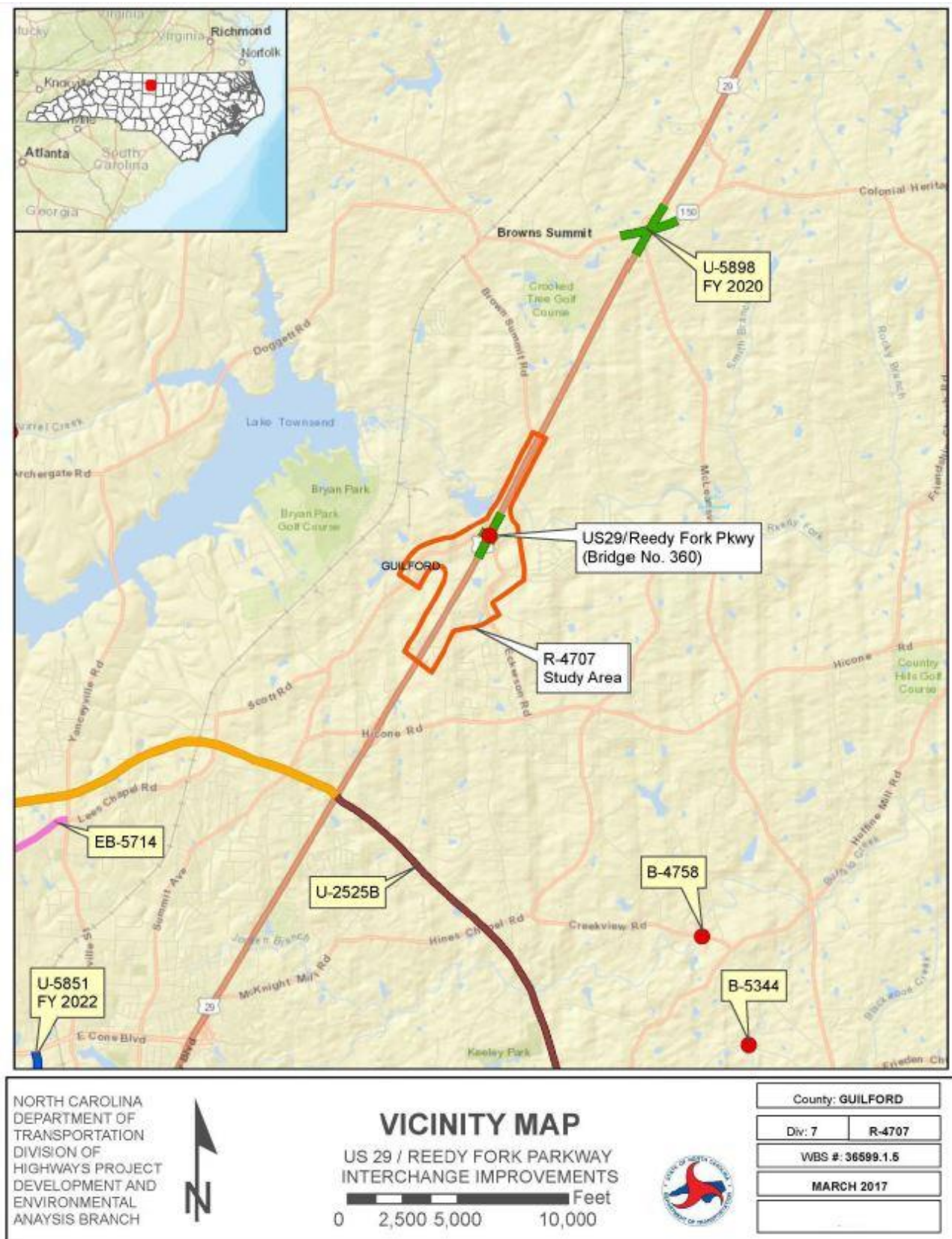
The proposed project is located in northeastern Guilford County, approximately 8 miles northeast of downtown Greensboro, North Carolina. The study area boundary for this project encompasses the proposed transportation improvements and consists of approximately 525 acres (Figure 1).

The proposed project, in addition to replacing Bridge No. 360 over US 29, would also include the realignment and upgrade of the existing SR 4771 (Reedy Fork Parkway) and SR 2526 (Summit Avenue).

Existing Site Conditions

Guilford County is located within the piedmont region of central North Carolina. The project is located in the northern fringes of Greensboro, where historically rural agricultural land use is transitioning to residential and commercial developments. The Reedy Fork Ranches residential development is located on the east side of the existing interchange, whereas several commercial businesses, a municipal golf course, and Lake Townsend are on the west side of the interchange. The roadways to be improved as part of the proposed project include US 29 (Principle arterial freeway) running north/south, Summit Avenue (Minor arterial) on the west side of interchange, and Reedy Fork Parkway (Local road) which crosses from Summit Avenue over US 29 and continues east.

Figure 1.



US 29 is a four-lane, median-divided freeway that connects I-40 in Greensboro with US 58 in Danville, Virginia. US 29 has partial control of access with periodic median breaks and driveway cuts. The existing right-of-way is 250 feet wide along US 29. The SR 2565 (Hicone Road) Interchange is approximately 2 miles south of the Reedy Fork Parkway Interchange. To the north approximately 3 miles is the NC 150 Interchange. The current posted speed on US 29 is 55 miles per hour (MPH).

Summit Avenue is a minor arterial roadway that generally runs parallel to US 29 in the project vicinity. The facility runs from downtown Greensboro in the south to NC 150 in the north. Summit Avenue is a two-lane road with unpaved shoulders south of Bryan Park Road and has three lanes with shoulders from Bryan Park Road north to Reedy Fork Parkway. North of Reedy Fork Parkway it returns to a two-lane highway with unpaved shoulders. The existing right-of-way is 100 feet wide until just before Morrisette Paper and Packaging Company where it narrows to 60 feet as it continues north. The US 29 southbound ramps currently intersect with Summit Avenue. The posted speed limit is 45 MPH.

Reedy Fork Parkway is primarily a two-lane, median-divided local facility with curb-and-gutter through the Reedy Fork Ranch Development. It begins at its intersection with Summit Avenue to the west of US 29, then crosses over US 29, intersects with Eckerson Road, and continues to Turner Smith Road. The existing right-of-way along Reedy Fork Parkway is 68 feet wide. There are sidewalks along the south side of the roadway east from Eckerson Road to Reedy Fork Elementary School. The speed limit is 35 MPH.

The project study area is contained within the Cape Fear River Basin, part of the U.S. Geological Survey (USGS) Hydrologic Unit 03030002. Based on a delineation by NCDOT, there are 20 streams, 6 other surface waters (ponds), and 12 wetlands within the Study Area; all are potential waters of the U.S. All of the streams identified within the project area, which include Reedy Fork and Unnamed Tributary at Camp Herman, and several unnamed tributaries, have been assigned a primary water resources class classification of “WS-V; NSW.” “WS-V” refers to those waters protected as water supplies which are generally upstream and draining to Class WS-IV waters, waters used by industry to supply their employees with drinking water, or as waters formerly used as water supply; these waters are also protected for Class C uses. “NSW” is a supplemental classification intended for waters needing additional nutrient management due to being subject to excessive growth of microscopic or macroscopic vegetation. A field verification for NCDOT’s delineation is scheduled for October 2017; as such, the location and extent of potential waters of the US are subject to change.

There are no designated anadromous fish waters, Primary Nursery Areas (PNA), or trout waters present in the Study Area. There are no designated High Quality Waters (HQW), Outstanding Resource Waters (ORW), or water supply watersheds (WS-I or WS-II) within 1.0-mile downstream of the Study Area. No streams located within a 1.0-mile radius of the Study Area were found on the North Carolina 2014 Final 303(d) List of Impaired Waters. No waters within the 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 Study Area as an Essential Fish Habitat. There are no streams within the Study Area determined by the USACE as Navigable Waters under Section 10 of the Rivers and Harbors Act.

Applicant's Stated Purpose

The primary purposes of the proposed project are to:

- replace a structurally deficient bridge over US 29;
- improve the existing US 29 / Reedy Fork Parkway Interchange to meet interstate standards;
- accommodate the future traffic volumes generated from the Reedy Fork Ranches mixed use development.

Project Description

NCDOT proposes a bridge replacement and an improvement to the existing interchange on US 29 at SR 4771 (Reedy Fork Parkway) in Guilford County. The proposed project would also include the realignment, part on new location, and upgrade of the existing SR 4771 (Reedy Fork Parkway) and SR 2526 (Summit Avenue).

The Build Alternatives under consideration for R-4707 consist of three interchange configurations. Each interchange configuration would meet the project's purpose and need by providing a new bridge and improved interchange.

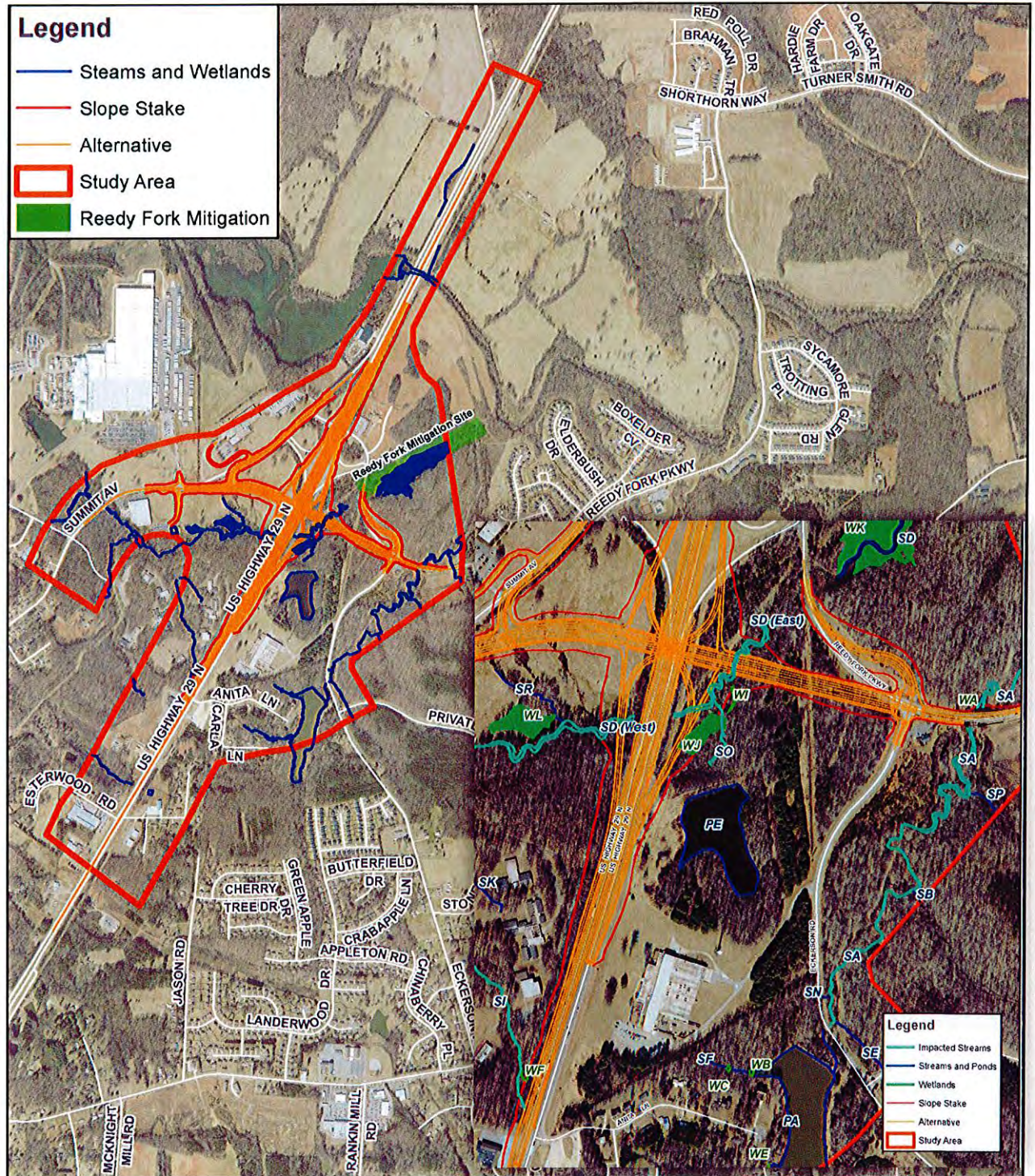
Detailed Study Alternatives (DSA)

Build Alternative 1: Single Point Urban Interchange (SPUI) - The SPUI Alternative involves the signalization of three intersections on Reedy Fork Parkway between Summit Avenue and Eckerson Road (Figure 2). Summit Avenue would be realigned to tie into the realigned and extended Reedy Fork Parkway forming a signalized four-leg intersection. For this alternative, three intersections would be signalized along Reedy Fork Parkway between Summit Avenue and the proposed Service Road connecting Reedy Fork Parkway to existing land uses along US 29.

Build Alternative 1 Revised: Diverging Diamond Interchange (DDI) – A diverging diamond interchange (DDI) is a type of diamond interchange in which the two directions of traffic from US 29 cross to the opposite side on both sides of the bridge at the interchange (Figure 3).

Build Alternative 2: Partial Cloverleaf Interchange – The partial cloverleaf interchange includes a loop and a ramp in the southeast and southwest quadrants of the proposed Reedy Fork Road Interchange (Figure 4). The ramp terminals connect with planned roadways on the north side of Reedy Fork Parkway.

FIGURE 2



NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION
DIVISION OF
HIGHWAYS PROJECT
DEVELOPMENT AND
ENVIRONMENTAL
ANALYSIS BRANCH



SINGLE POINT URBAN INTERCHANGE (SPUI) ALTERNATIVE 1

US 29 / REEDY FORK PARKWAY
INTERCHANGE IMPROVEMENTS

0 500 1,000 2,000 3,000 Feet



County: GUILFORD

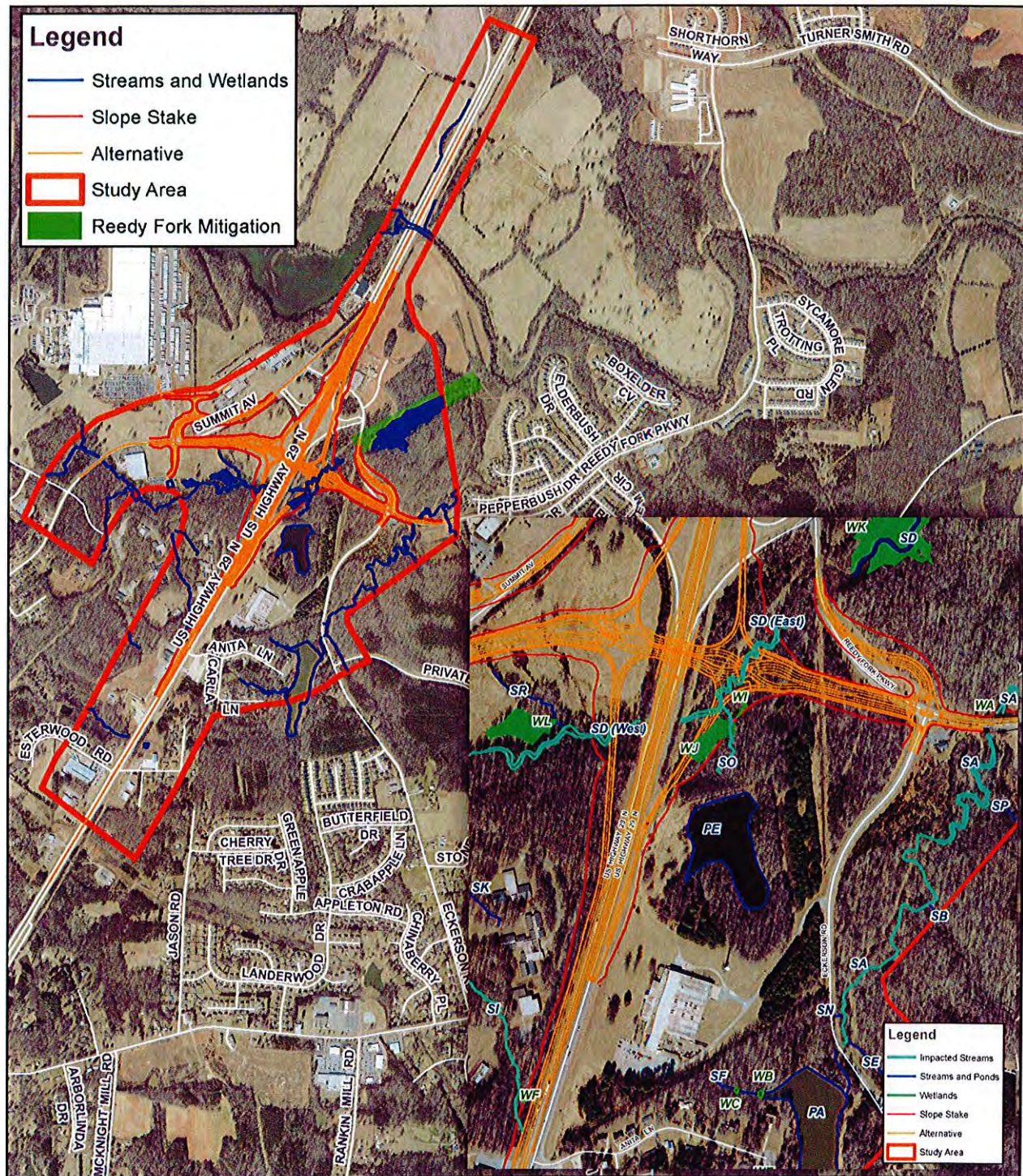
Div: 7 R-4707

WBS #: 36599.1.5

MARCH 2017

Figure #2

FIGURE 3



NORTH CAROLINA
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TRANSPORTATION
DIVISION OF
HIGHWAYS PROJECT
DEVELOPMENT AND
ENVIRONMENTAL
ANALYSIS BRANCH



DIVERGING DIAMOND INTERCHANGE (DDI)

ALTERNATIVE 1 REVISED

US 29 / REEDY FORK PARKWAY
INTERCHANGE IMPROVEMENTS

0 500 1,000 2,000 3,000 Feet



County: GUILFORD

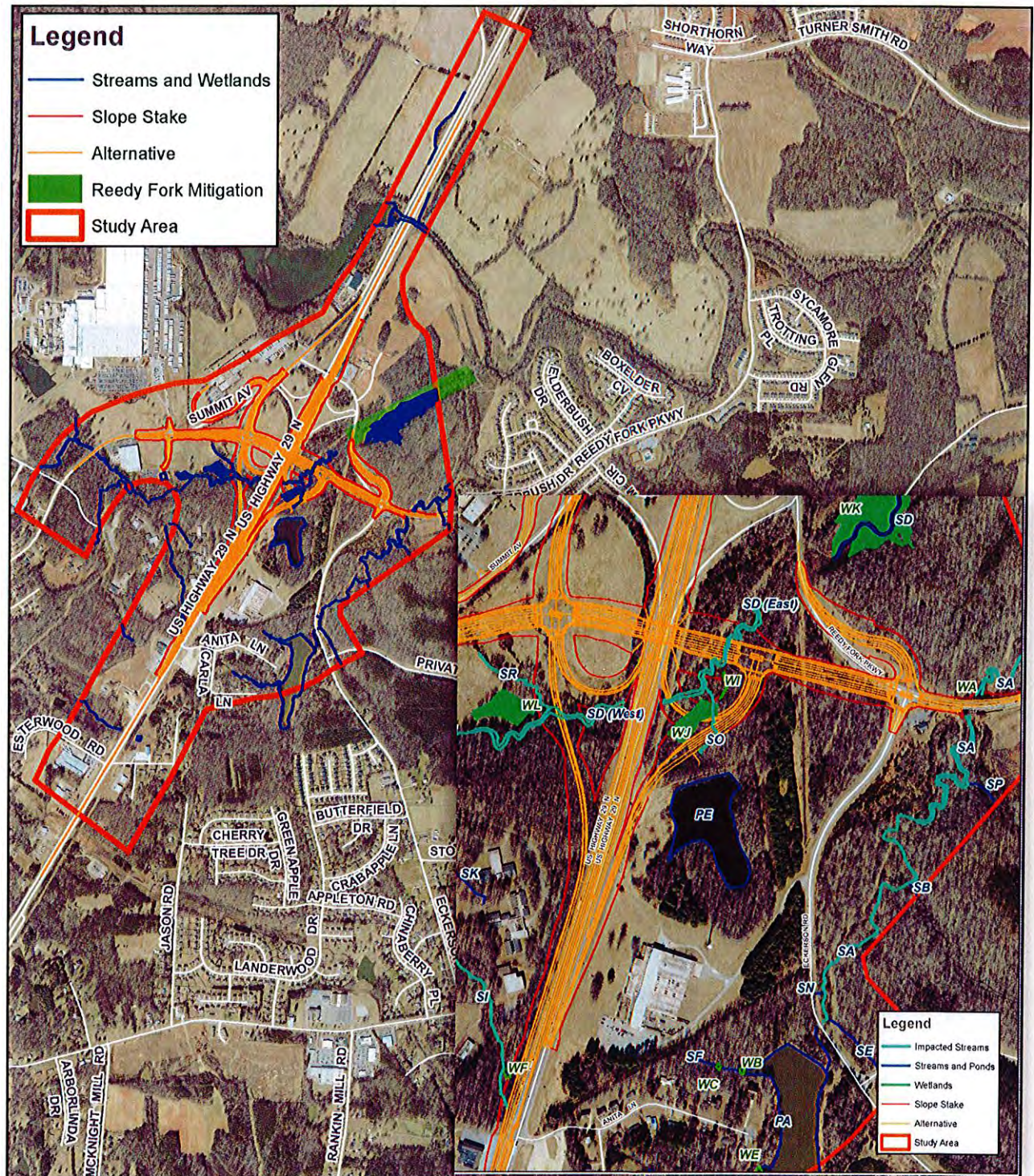
Div: 7 R-4707

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Figure #3

FIGURE 4



NORTH CAROLINA
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DEVELOPMENT AND
ENVIRONMENTAL
ANALYSIS BRANCH



PARTIAL CLOVERLEAF ALTERNATIVE 2

US 29 / REEDY FORK PARKWAY
INTERCHANGE IMPROVEMENTS

0 500 1,000 2,000 3,000 Feet



County: GUILFORD

Div: 7 R-4707

WBS #: 36599.1.5

MARCH 2017

Figure #4

In addition to the three 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. The No-Build Alternative assumed that the transportation network in the PSA will continue to develop as called for in the 2040 Long Range Transportation Plan (LRTP), but without R-4707 included.

For construction, right of way, and utilities, the project is estimated to cost a total of \$52.3 million to \$57.7 million (2017 dollars). Depending on the DSA, construction costs range from \$35.6 million to \$38.6 million, right-of-way costs range from \$15.8 million to \$18.4 million, and utility relocation costs range from \$0.6 million to \$1.0 million.

Impacts to streams are shown in Table 1, below.

Table 1. Summary of Permanent and Temporary Stream Impacts

Build Alternative	Stream Impacts* (linear feet)	Wetland Impacts (Acres)
Single Point Urban Interchange (SPUI)	1,477	0.51
Diverging Diamond Interchange (DDI)	1,669	0.55
Partial Cloverleaf Interchange (PARCLO)	2,187	0.57

*Based on functional 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, NCDOT intends to coordinate with the NCDEQ Division of Mitigation Services to provide the required compensatory mitigation.

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 (NHPA), 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 applicant states that coordination with the North Carolina State Historic Preservation Office (SHPO) was initiated through a letter dated August 10, 2004. This coordination was initiated pursuant to the requirements of Section 106 of the NHPA. In a response letter dated August 31, 2004, the SHPO identified Hardy's Mill and recommended an archaeological evaluation to determine its eligibility for listing in the National Register of Historic Places (National Register) under Criterion D. The letter also mentioned that two structures of historical or architectural importance are located within the general area of the proposed project: Reedy Fork Acres (GF 1666) and Hardy's Mill Pond and Store Millpond (GF 2056). A field study was completed in 2006 by an NCDOT architectural

historian of the two structures noted in the 2004 letter. Photographs and evaluations of the properties were reviewed in a SHPO staff meeting held February 2, 2007 where it was determined that neither site is eligible for inclusion in the National Register of Historic Places.

The applicant states that an archaeological field investigation was carried out between October 17, 2016, November 3, 2016, and June 2017 to identify and evaluate archaeological sites within the defined APE for inclusion in the NRHP. The investigations identified one small site which was recommended as not eligible for the NRHP. As such, the applicant states that the project would not impact significant archaeological resources.

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO, 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, not likely to adversely 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. As of March 25, 2015, the U.S. Fish and Wildlife Service (USFWS) lists one federally protected species for Guilford County, the small whorled pogonia (*Isotria medeoloides*). The applicant has indicated that habitat does exist for this species in the project area, although no information on surveys for the species were submitted.
- ☐ The Corps will consult under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- ☐ The Corps has initiated consultation under Section 7 of the ESA and will not make a permit decision until the consultation process is complete.
- ☐ The Corps determines that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat. Consultation has been completed for this type of activity and the effects of the

proposed activity have been evaluated and/or authorized by the National Marine Fisheries Service (NMFS) in the South Atlantic Regional Biological Opinion or its associated documents, including 7(a)(2) & 7(d) analyses and Critical Habitat assessments. A copy of this public notice will be sent to the NMFS.

- ☐ 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.

Northern Long-Eared Bat. The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with FHWA, USACE, and NCDOT for the northern long-eared bat in eastern North Carolina (which includes Wake County). The PBO went into effect in 2016 and covers all NCDOT projects and activities in NCDOT Divisions 1 to 8. The programmatic determination for the bat is "May Affect, Likely to Adversely Affect". The PBO involves a research and tracking program to establish conclusive information concerning the existence of the northern long-eared bat in the eastern part of North Carolina. The PBO also requires that upon completion of clearing activities for each project with federal funds, NCDOT will report on the estimated acres of clearing to the US Fish and Wildlife Service.

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 a Public Meeting on April 21, 2016 at the Bryan Park Golf and Conference Center in Browns Summit to update the public on the project studies, present the design alternatives, and request public comments on design alternatives and the project in general. A total of 77 citizens signed in at the meeting, with 6 citizens providing written comments by the end of the advertised 15-day comment period. Previously, NCDOT held a Citizens Informational Workshop on November 13, 2006 at the Reedy Fork Community Center in Greensboro.

The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, November 9, 2017. Comments should be submitted to David E. Bailey, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, North Carolina 27587, at (919) 554-4884 extension 30, or by email to David.E.Bailey2@usace.army.mil.