Type I or II Categorical Exclusion Action Classification Form

STIP Project No.	W-5805E
WBS Element	48950.1.6
Federal Project No.	0098038

A. Project Description:

The proposed project involves constructing a roundabout at the intersection of NC 98 and SR 2057/SR 4465 (Moores Pond Road) at the Wake and Franklin County line. The proposed improvements include a roundabout with one 16-foot rotary lane. Twelve-foot lanes and four-foot paved shoulders will be provided on both NC 98 and Moores Pond Road within the project limits. The project location is shown on Figure 1. Proposed improvements are shown on Figure 2.

The project is included in the 2020-2029 North Carolina State Transportation Improvement Program (STIP). Right-of-way acquisition and construction are expected to begin in fiscal years 2023 and 2024, respectively.

The total estimated cost for the project is \$1,850,000, including \$150,000 for right of way acquisition, \$50,000 for utilities, and \$1,650,000 for construction.

B. <u>Description of Need and Purpose:</u>

The purpose of the proposed project is to improve safety at the intersection of NC 98 and Moores Pond Road.

For the five-year period between November 1, 2013 and October 31, 2018, a total of 42 crashes occurred at this intersection. Thirty-five of these crashes resulted in injuries. A total of 77 people were injured in these crashes. The majority of crashes occurring during the study period (64.29%) were angle-type crashes. Sixteen people were injured in angle-type crashes. The total crash rate for this intersection for the study period was 230.01 crashes per 100 million vehicles entering the intersection.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

- D. <u>Proposed Improvements:</u>
 - 23. Federally-funded projects:

a) That receive less than \$5,000,000 (as adjusted annually by the Secretary to reflect any increases in the Consumer Price Index prepared by the Department of Labor) of Federal funds;

27. Highway safety or traffic operations improvement projects, including the installation of ramp metering control devices and lighting, if the project meets the constraints in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

Potential Project Effects

The proposed project will require the acquisition of additional right of way. Temporary construction easements and permanent drainage and utility easements will also be required.

The proposed project is expected to impact less than 0.1 acre of wetlands and approximately 140 linear feet of stream (these impacts are based on an impact area 25 feet outside the proposed slope stakes). The project is not located within a 100-year floodplain. Figure 3 presents environmental features in the project area.

Complete Streets

Bicycle, pedestrian, and public transit accommodations were evaluated for the project. There are no bicycle, pedestrian, or transit facilities within or adjacent to the project study area. The four-foot paved shoulders proposed on both NC 98 and Moores Pond Road within the project limits will provide additional width for bicycles. NC 98 is proposed to be widened in the future, as indicated in the Capital Area Metropolitan Planning Organization (CAMPO) 2050 Metropolitan Transportation Plan (MTP). Bicycle and pedestrian accommodations will be provided as a part of this future widening.

Stage 2IM1 of the Integrated Project Delivery Process (IPD) has been completed and the NCDOT Integrated Mobility Division and Wake and Franklin County Planning staffs have concurred with the proposed four-foot paved shoulder on NC 98 and Moores Pond Road due to this future widening and the limited scope of this project.

Utilities

The proposed project will require relocation of telephone, cable, and overhead power lines within the study area.

Public Involvement

A public meeting was held for the proposed project on January 23, 2023 at New Life Church on NC 96 near Wake Forest. Property owners in the area were notified about the workshop by postcards distributed by mail. A project map showing the project design was displayed and informational handouts were available to meeting participants. No formal presentation was made; the public could attend at any time during the meeting hours.

Seven people attended this public meeting, not including project team staff. Two comment sheets were received from local citizens during the public meeting. Comments were also received via the public website.

In addition to the public meeting, a public input website was created to receive comments from residents and businesses in the study area. Postcards providing the website address were mailed to area property owners on January 4, 2023. Comments were accepted from the website starting January 4, 2023, until February 9, 2023.

In total, nine comments were received regarding the proposed project. Five comments expressed support for the project. Other comments suggested installing roadway lighting to improve visibility of the proposed roundabout at night and one comment suggested keeping the existing four-way stop.

Community Impacts

A Direct and Indirect Screening Tool (DIST) was completed by RKA in September 2022. The DIST identified that 720 people live within a one-mile radius of the project study area. It is reported that 20% of the population living within the one-mile radius are minority. It is reported that 4% of the households within the one-mile radius have a household income below \$15,000. It is reported that 2% of the population living within the one-mile radius speak English "less than very well."

Direct, negative impacts to farmland soils, agricultural operations or voluntary agriculture districts were noted as being possible. Within the project study area, there are farmlands of statewide importance and prime farmland soils, according to the Natural Resources Conservation Service. Additionally, one of the properties within the study area, in the southeast quadrant of the intersection of NC 98 and Moores Pond Road, is actively farmed. A preliminary screening of farmland impacts in the project area has been completed. An AD-1006 form was submitted to NRCS in July 2022 and it was found that the project has a total site assessment score below the Farmland Protection Policy Act threshold of 160 points. As such, these farmland conversion impacts are not considered notable.

Although not identified as a possible negative impact, an off-site detour will be utilized during construction. The intersection is expected to be closed for approximately a year, with a 3.2-mile detour for drivers on NC 98 and a 3.4-mile detour for drivers on Moores Pond Road. Low impacts were noted by the school systems and emergency service agencies for both Wake and Franklin Counties. Additional information regarding the proposed detours and their effects are provided below.

Detour

The intersection of NC 98 and Moores Pond Road will be closed during construction. The proposed detour route for drivers on NC 98 is approximately 3.2 miles. From the west, the detour follows NC 96 (Zebulon Road) to US 401 to NC 98. The proposed detour route for drivers on Moores Pond Road is approximately 3.4 miles. From the north, the detour follows SR 1104 (Satterwhite Road)/SR 1946 (Jack Jones Road) to NC 96 to US 401 to Moores Pond Road. The proposed detour routes are shown on Figure 1.

Wake County Schools was contacted to provide input on the impact of a possible intersection closure. Wake County Schools indicated there will be a low impact to school bus transportation if the intersection was closed. One Wake County school bus travels through the intersection of NC 98 and Moores Pond Road twice a day.

Franklin County Schools was contacted to provide input on the impact of a possible intersection closure. Franklin County Schools indicated there will be a low impact to school bus transportation if the intersection was closed. No Franklin County school buses travel through the intersection of NC 98 and Moores Pond Road.

Wake County Emergency Medical Services (EMS) was contacted to provide input on the impact of a possible intersection closure. Wake County EMS noted the intersection closure would cause low impact to emergency response and noted the detours are acceptable.

Youngsville Fire Department was contacted to provide input on the impact of a possible intersection closure. Youngsville Fire Department noted the intersection closure would cause low impact to fire response within their coverage area but did note a potential moderate impact on mutual aid response from both the Bunn and Rolesville Fire Departments. Mutual aid is when another fire department responds to assist with structure fires in neighboring districts. The Youngsville Fire Department did note the project intersection is not inside their coverage area, although it is possible they could be dispatched into areas in Wake County, including the project area.

Impact forms were also sent to Wake County Fire Services and Emergency Management Department and Franklin County EMS, with no response received after six weeks.

Cultural Resources

NCDOT architectural historians reviewed State Historic Preservation Office data on May 18, 2022 and found no existing National Register of Historic Places-listed or eligible properties in the project's area of potential effects (APE). There are no structures over 50 years of age in the APE. No historic architectural survey is required. The "Historic Architecture and Landscapes No Survey Required Form" was signed on May 18, 2022.

NCDOT archaeologists conducted an on-line map review and site file search of data provided by the Office of State Archaeology on May 24, 2022. As explained in the May 25, 2022 "Archaeological Survey Required" form prepared by the NCDOT Archaeology Team, there are numerous archaeological sites in the project vicinity and positive environmental factors for past settlement. An archaeological survey was conducted in September 2022. The survey identified two newly recorded archaeological sites, both of which were recommended Not Eligible for the National Register of Historic Places. All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project. In the event that the Project APE is expanded, further work is recommended to determine the full extent of multiple archaeological sites. The "No National Register of Historic Places Eligible or Listed Archaeological Sites Present Form" was signed on November 29, 2022.

Protected Species

As of March 1, 2023, the US Fish and Wildlife Services (USFWS) Information and Planning and Consultation (IPaC) website (ecos.fws.gov/ipac/) shows the following species are potentially affected by activities in this location:

rederany-rotected Species rotentially Occurring in roject Study Area				
Common Name	Scientific Name	Status	Potential Habitat?	Biological Conclusion
Tricolored bat	Perimyotis subflavus	Proposed Endangered	Unknown	Unresolved
Neuse River Waterdog	Necturus Iewisi	Threatened	Yes	May Affect, Not Likely to Adversely Affect
Carolina Madtom	Noturus furiosus	Endangered	Yes	May Affect, Not Likely to Adversely Affect
Atlantic Pigtoe	Fusconaia masoni	Threatened	Yes	May Affect, Not Likely to Adversely Affect
Dwarf Wedgemussel	Alasmidonta heterodon	Endangered	Yes	May Affect, Not Likely to Adversely Affect
Tar River Spinymussel	Parvaspina steinstansana	Endangered	Yes	May Affect, Not Likely to Adversely Affect
Yellow Lance	Elliptio lanceolata	Treatened	Yes	May Affect, Not Likely to Adversely Affect
Michaux's Sumac	Rhus michauxii	Endangered	Yes	No Effect

Federally-Protected Species Potentially Occurring in Project Study Area

NCDOT biologists conducted a site review on February 1 and February 17, 2022 and found suitable habitat for Michaux's sumac in the study area. A follow up survey conducted June 6, 2022 found no specimens within the study area. It is therefore expected the proposed project will have "no effect" on Michaux's sumac.

IPaC identifies potential for Neuse River waterdog and Carolina madtom in the study area, but the streams within the study area are greater than 0.25 mile from an identified stream reach for these species. In accordance with the Programmatic Biological Opinion-Bridge and Culvert Replacements/Repair/Rehabilitation Effects on Carolina madtom and Neuse River waterdog in NCDOT Divisions 2, 4, 5, and 7 (August 3, 2021), a biological conclusion of May Affect, Not Likely to Adversely Affect is expected for Neuse River waterdog and Carolina madtom.

IPaC identifies potential for Atlantic pigtoe, Dwarf wedgemussel, Tar River spinymussel, and yellow lance in the study area, but the streams within the study area are well beyond any identified stream reach for these species. Following the Programmatic Biological Opinion-Bridge and Culvert Replacements/Repair/Rehabilitations in Eastern North Carolina NCDOT Divisions 1-8 (September 11, 2019) with addendum to Revised Programmatic Biological/Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8 (June 1, 2021), a biological conclusion of May Affect, Not Likely to Adversely Affect is expected for Atlantic pigtoe, Dwarf wedgemussel, Tar River spinymussel, and Yellow lance.

The bald eagle is protected under the Bald and Golden Eagle Protection Act enforced by the USFWS. No known Natural Heritage Program occurrences exist for this area. There are no large trees sufficient for eagle's nests, nor were any nests or birds observed during the site visit. Therefore, based on lack of habitat, it is expected the proposed project will have "No Effect" on bald eagle.

On September 14, 2022, the U.S. Fish and Wildlife Service announced a proposal to list the tricolored bat (Perimyotis subflavus - PESU) as endangered under the Endangered Species Act. Given the proposal to list PESU as Federally Endangered, NCDOT and its federal partners, FHWA and USACE are initiating a conference programmatic consultation to address impacts to this species. USFWS has not provided an official effective listing date, but it is anticipated to occur in the second half of 2023. Upon listing, USFWS is expected to provide habitat descriptions and an area of influence/distribution range for PESU. When this information is provided, it will help to inform NCDOT's determinations on habitat that could be impacted by NCDOT actions. If listed, NCDOT will resolve Section 7 prior to project construction as appropriate.

Streams, Buffers, and Wetlands

Biologists with NCDOT conducted a site review on February 1 and February 17, 2022. This review is documented in the natural resources and protected species memo, which is a part of the project files. The project study area is located within the Neuse River Basin and the Neuse River Basin Buffer Rules apply. There are two streams within the study area. One stream is on NC 98 just west of the project intersection and is an intermittent stream. The other stream is on Moores Pond Road south of the project intersection and is a perennial stream. The proposed project will affect approximately 140 linear feet of stream, based on the area 25 feet outside the proposed slope stakes.

The proposed project will affect approximately 8,807 square feet of Zone 1 and approximately 6,307 square feet of Zone 2 of the riparian buffer for both streams, based on the area 25 feet outside the proposed slope stakes.

According to data from the North Carolina Department of Environmental Quality (NC DEQ), the entire study area is within a Class II Water Supply Watershed for the Little River. NCDOT will strictly adhere to "Design Standards in Sensitive Watersheds" (15A NCAC 04B .0024) (HQW standards) throughout design and construction of the project.

Two wetlands were identified within the study area. The wetlands are located within the Neuse River Basin. The project may impact less than 0.1 acre of wetlands, based on the area 25 feet outside the proposed slope stakes.

The project study area is not within a 100-year floodplain.

Permits Required

Given that the project may affect streams and wetlands, it is anticipated a Section 404 permit will be required for the project. A Nationwide Permit 14 or a Regional General Permit 50 may be pursued for this project due to the wetland and stream impacts. A buffer authorization and a Section 401 Water Quality Certificate will be required from the NC Division of Water Resources.

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F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)

Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.

- If any question 1-7 is checked "Yes" then NCDOT certification for FHWA approval is required.
 - If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.

PROJECT IMPACT THRESHOLDS (FHWA signature required if any of the questions 1-7 are marked "Yes".)		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?		V
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?		\mathbf{N}
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?		\checkmark
4	Does the project cause disproportionately high and adverse impacts relative to low- income and/or minority populations?		\checkmark
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?		A
6	Does the project require an Individual Section 4(f) approval?		\mathbf{N}
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?		L
	y question 8-31 is checked "Yes" then additional information will be required for those ion G.	questio	ns in
Othe	er Considerations	Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	A	
9	Is the project located in anadromous fish spawning waters?		V
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	\checkmark	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?		\mathbf{N}
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?		V
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?		V

Othe	er Considerations for Type I and II Ground Disturbing Actions (continued)	Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?		V
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?		\checkmark
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?		V
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?		\checkmark
18	Does the project require a U.S. Coast Guard (USCG) permit?		\checkmark
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?		\checkmark
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?		\checkmark
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?		\checkmark
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?		\checkmark
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?		\checkmark
24	Will maintenance of traffic cause substantial disruption?		\checkmark
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?		\checkmark
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?		Ŋ
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?		\checkmark
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?		\checkmark
29	Is the project considered a Type I under the NCDOT Noise Policy?		\checkmark
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	\checkmark	
31	Are there other issues that arose during the project development process that affected the project decision?		\checkmark

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):

Response to Question 8:

Tricolored bat is proposed for listing as endangered. It currently has an unresolved Biological Conclusion. If listed, NCDOT will resolve Section 7 prior to project construction as appropriate.

IPaC identifies potential for Neuse River waterdog and Carolina madtom in the study area, but the streams within the study area are greater than 0.25 mile from an identified stream reach for these species. In accordance with the Programmatic Biological Opinion-Bridge and Culvert Replacements/Repair/Rehabilitation Effects on Carolina madtom and Neuse River waterdog in NCDOT Divisions 2, 4, 5, and 7 (August 3, 2021), a biological conclusion of May Affect, Not Likely to Adversely Affect is expected for Neuse River waterdog and Carolina madtom.

IPaC identifies potential for Atlantic pigtoe, Dwarf wedgemussel, Tar River spinymussel, and yellow lance in the study area, but the streams within the study area are well beyond any identified stream reach for these species. Following the Programmatic Biological Opinion-Bridge and Culvert Replacements/Repair/Rehabilitations in Eastern North Carolina NCDOT Divisions 1-8 (September 11, 2019) with addendum to Revised Programmatic Biological/Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8 (June 1, 2021), a biological conclusion of May Affect, Not Likely to Adversely Affect is expected for Atlantic pigtoe, Dwarf wedgemussel, Tar River spinymussel, and Yellow lance.

Response to Question 10:

According to data from the North Carolina Department of Environmental Quality (NC DEQ), the entire study area is within a Class II Water Supply Watershed for the Little River. All WS-II waters are High Quality Waters by supplemental classification. NCDOT will strictly adhere to "Design Standards in Sensitive Watersheds" (15A NCAC 04B .0024) (HQW standards) throughout design and construction of the project.

The two unnamed streams in the project area are subject to the Neuse River riparian buffer rules. The proposed project will affect 8,807 square feet of Zone 1 and 6,307 square feet of Zone 2 of the riparian buffers for these streams, based on the area 25 feet outside the proposed slope stakes.

Response to Question 30:

Within the project study area, there are farmlands of statewide importance and prime farmland soils. Additionally, one of the properties within the study area, in the southeast quadrant of the intersection of NC 98 and Moores Pond Road, is actively used as farmland. The project will affect approximately one acre of prime or important farmland soils. A preliminary screening of farmland conversation impacts in the project area has been completed. An AD-1006 form was submitted to NRCS in July 2022 and it was found that the project has a total site assessment score which does not exceed the Farmland Protection Policy Act threshold of 160 points. As such, these farmland conversion impacts are not considered notable.

H. Project Commitments (attach as Green Sheet to CE Form):

NCDOT PROJECT COMMITMENTS

STIP Project No. **W-5805E** Intersection Improvements at the intersection of NC 98 and SR 2057/SR 4465 (Moores Pond Road) Wake and Franklin Counties Federal Aid Project No. 0098038 WBS Element 48950.1.6

Roadside Environmental Unit/Hydraulics Unit

NCDOT will strictly adhere to "Design Standards in Sensitive Watersheds" (15A NCAC 04B .0024) (HQW standards) throughout design and construction of the project.

NCDOT Division Five/NCDOT Biological Services Group

Tricolored bat is proposed for listing as endangered. If listed, NCDOT will resolve Section 7 prior to project construction as appropriate.

All environmental commitments included in The Programmatic Biological/Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8 (September 11, 2019) with addendum to Revised Programmatic Biological/Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8 (June 1, 2021) and Programmatic Biological Opinion-Bridge and Culvert Replacements/ Repairs/Rehabilitation Effects on Carolina madtom and Neuse River waterdog in NCDOT Divisions 2,4,5 and 7 (August 3, 2021), will be adhered to during final design and construction of the project.

I. <u>Categorical Exclusion Approval:</u>

STIP Project No.	W-5805E
WBS Element	48950.1.6
Federal Project No.	0098038

Prepared By	y :
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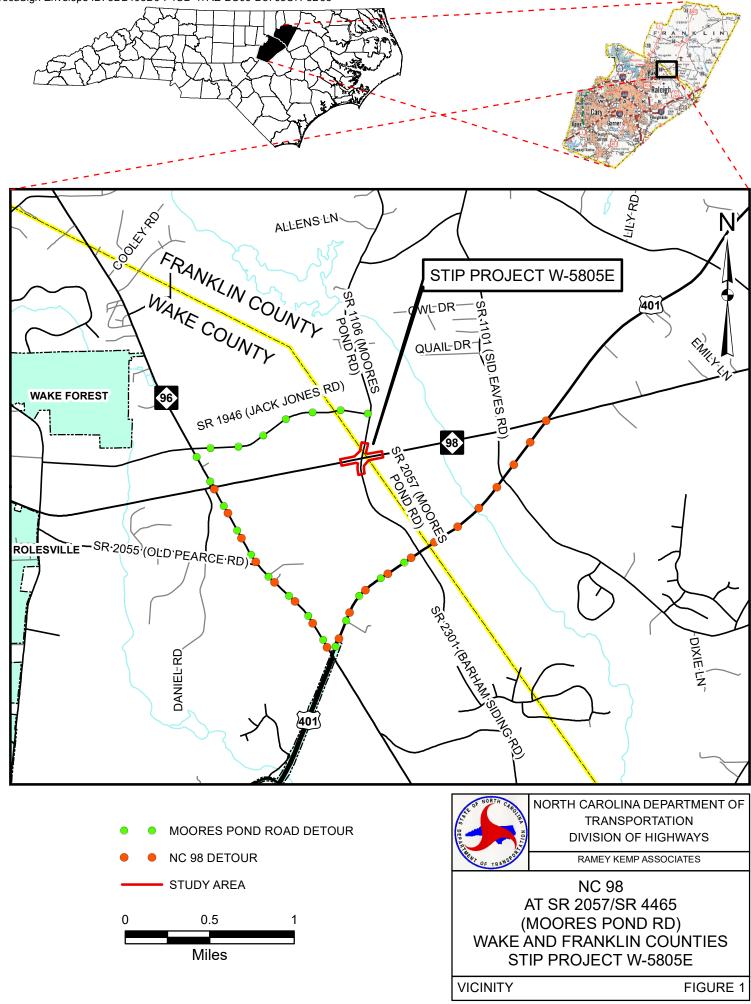
Frepared by.	Correction DocuSigned by:
3/17/2023	Deryn B. Teates 4E25F5AEDC96451
Date	Devyn Teates, PE
	Ramey Kemp Associates
Prepared For:	S. Reid Davidson, PE, NCDOT Division Five
Reviewed By:	CocuSigned by:
•	Cliris Murray
3/17/2023	
Date	Chris Murray, SPWS
Date	NCDOT Project Engineer for Planning and Environmental Studies
Approv	 Categorical Exclusion. If ANY grey boxes are checked in Section F (pages 2 and 3). NCDOT certifies the Type Lor Type II.
3/21/2023	Ber Jpshaw CDBEB110DBE54E5
Date	Ben Upshaw, PE, Division Five Project Development Engineer
	For Brandon Jones, PE, Division Five Engineer
	North Carolina Department of Transportation

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

Date for John F

for John F. Sullivan, III, PE, Division Administrator Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details). DocuSign Envelope ID: 8DB198D9-F4CD-47AE-BC03-D8765C7F8D58



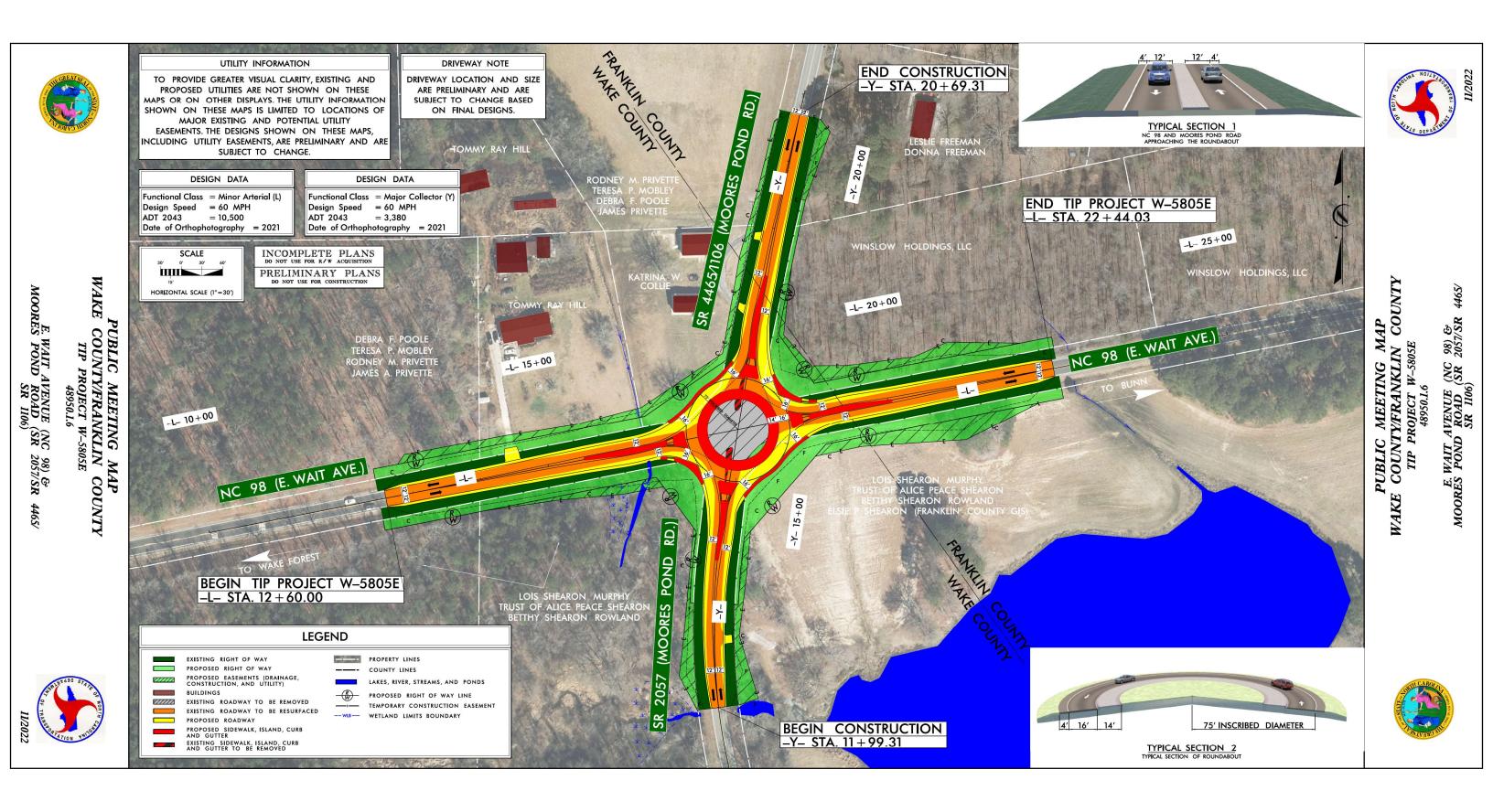


FIGURE 2

