

North Carolina Department of Transportation

NEPA/SEPA Consultation Form

STIP Project No.	<u>I-5111</u>
WBS Element	<u>42346.1.1</u>
Federal Aid Project No.	<u>IMNHF-040-4(139)301</u>

A. Project Description, Location, and Purpose:

The North Carolina Department of Transportation (NCDOT), in consultation with the Federal Highway Administration (FHWA), proposes to widen and improve approximately 11 miles of Interstate 40 (I-40) on the southeast side of the City of Raleigh, between Exits 301 and 312. The 11-mile segment of I-40 and surrounding area that is assessed in the Categorical Exclusion (CE) is referred to as the study corridor or project study area. The proposed project is located in Wake and Johnston Counties. It begins near Exit 301, where I-40 diverges from Interstate 440 (I-440) at the Raleigh Beltline, and extends southeast to near Exit 312, which is the interchange of I-40 and North Carolina Highway 42 (NC 42). Existing I-40 through the entire length of the study corridor is a median divided, controlled access freeway. The functional classification for I-40 is Interstate and it is designated as a Strategic Transportation Corridor by NCDOT.

The purpose of the proposed project is to better accommodate forecasted levels of congestion on I-40 from Exit 301 (Raleigh Beltline) to Exit 312 (NC 42) through 2040 in accordance with Capital Area Metropolitan Planning Organization's long term goals to impart a positive impact on mobility for the public using this transportation corridor.

B. Consultation Phase: (Check one)

- Right-of-Way
- Construction
- Other:

C. NEPA/SEPA Class of Action Initially Approved as: (Check one)

- FHWA Class II (CE Type III) 06/07/2018

D. Changes in Proposed Action & Environmental Consequences:

Changes in Proposed Action

The project design has been advanced since the Type III Categorical Exclusion was completed for the project in June 2018 with no proposed construction on Jones Sausage

Road (SR 5220) at I-40 interchange. The proposed design changes the Jones Sausage Road and I-40 existing diamond interchange to a Diverging Diamond Interchange with minor impact to the existing ramps. This change is due to increased traffic volume as a result of Amazon.com's warehouse that is under construction on Jones Sausage Road. The proposed changes will have minor temporary construction easement along north side and south side and minor permanent utility easements on the south side of Jones Sausage Road. Design changes will also include restriping existing pavement, adding a 5-foot sidewalk to the north side, and adding a concrete median barrier on the existing bridge (No. 910603) on Jones Sausage Road to accommodate the redesign of the interchange. In addition, on the north side of Jones Sausage Road, proposed design changes include adding 5-foot sidewalk on the approaches to the bridge. Converting from a diamond interchange to a diverging diamond interchange does not impact any of the Interchange Access Report warrants.

See Figure 1 at the end of this document for reference.

Environmental Consequences

The design modifications described above will occur within the study area identified in the 2018 environmental document for the project.

Water resources

Water resources classifications have not changed since the Categorical Exclusion Type III was completed on June 7, 2018.

Federal Protected species

The project was found to have No Effect on all species except for Atlantic pigtoe, Dwarf wedgemussel and Yellow lance, where the finding is May Affect – Likely to Adversely Affect. In a letter dated December 6, 2018 the FHWA determined the project meets the criteria pursuant to the programmatic biological opinion (PBO) issued on June 13, 2018 for Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, Divisions 1-8. This PBO was revised September 11, 2019. NCDOT will adhere to the requirements of the revised PBO and as such NCDOT/FHWA have fulfilled the requirements of the environmentally sensitive areas (ESA) for all currently listed species for this project.

Community Resources

The design modifications are not expected to result in additional impacts to community resources, including Environmental Justice and Limited English Proficiency communities.

Other Environmental Factors

The design changes for the project have no substantive changes on the project's previously documented effects on other environmental factors. This includes cultural resources, farmlands, hazardous materials, and indirect and cumulative effects.

Agency Coordination

The proposed design does not require additional environmental impacts. Permit drawings will be resubmitted to show new design but the impacts will remain the same.

E. Conclusion:

The above NEPA/SEPA documentation has been reevaluated (as required by either 23 CFR 771 or by NC General Statute Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted in Section D. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

F. Coordination

NCDOT personnel have discussed the current project parameters with qualified NCDOT representatives and FHWA (where applicable). The NCDOT Project Manager, Melanie Nguyen, hereby verifies the involvement of the following staff and the incorporation of their technical input:

Design-Build Engineer:	Malcolm Watson	9/1/2020
Environmental Specialist:	Chris Rivenbark	8/26/2020
FHWA:	Felix Davila	6/23/20
Biological Survey Group:	Jared Gray	8/17/20

G. Consultation Approval for NCDOT Project I-5111

Prepared By:

9/21/2020

Date

DocuSigned by:
Mel. L.C. Nguyen
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Melanie Nguyen, PE, Project Manager
Project Management Unit – Division 5 & 8
North Carolina Department of Transportation

Reviewed By:

9/21/2020

Date

DocuSigned by:
Pamela R Williams
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Pamela R. Williams, Team Lead
Project Management Unit – Division 5 & 8
North Carolina Department of Transportation

**Approved**

In adherence with 23 CFR 771 (NEPA) or NC General Statute Chapter 113A Article 1 (SEPA), NCDOT approves this Consultation.

or

**Certified**

NCDOT staff certifies if FHWA signature was previously required or where changes have resulted in FHWA signature being required.

9/21/2020

Date

DocuSigned by:

Virginia Mabry

ADE7033B1A78456...

Virginia Mabry, Manager
Project Management Unit
North Carolina Department of Transportation

FHWA Approved:

9/21/2020

Date

DocuSigned by:

For: Felix Davila

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

Wake and Johnston Counties

Widening of Interstate 40 between I-440/US 64 (Exit 301 in Southeast Raleigh) and NC 42 (Exit 312 near Clayton)

WBS Element No.

42346.1.1

STIP Project No.

I-5111

NCDOT Design-Build Section – Resident Engineer

- East of East Garner Road (SR 1004) to the I-5111 eastern terminus, no construction activity shall begin, excluding investigative borings covered under a Nationwide Permit No. 6, until the Section 7 Consultation is completed.
 - *This commitment has been met. Section 7 consultation was completed on December 11, 2018.*
- NCDOT will implement conservation measures as stated in Section 2.6 of the June 2018 Biological Assessment for I-5111. These commitments will be updated once the Biological Opinion is issued.
 - *Programmatic Biological Opinion was used.*
- Section 7 consultation measures at Swift Creek include:
 - Bridge bents will not be located in the channel of Swift Creek or within 10 feet (horizontally) of either top of bank.
 - *This commitment is still valid.*
 - No permanent or temporary structures required to build the bridge will be placed within Swift Creek. All permanent and temporary structures will be positioned such that they will not result in any bank instability or cause significant sediment to runoff into Swift Creek.
 - *This commitment is still valid.*
 - Construction of a filtration basin with media filter within the immediate vicinity/floodplain of the crossing of Swift Creek, with the ultimate location(s) to be determined during final design.
 - *This commitment is still valid.*
 - Retaining walls will be utilized along the eastbound and westbound slopes south of the Swift Creek bridge crossing to avoid/minimize adjacent wetland and stream impacts.
 - *This commitment no longer applies since a retaining wall was only used on the westbound side because of constructability and maintenance concerns on the eastbound side.*
- The areas within the Swift Creek watershed will be identified as “Environmentally Sensitive Areas” on the Sedimentation and Erosion Control Plans. By definition, the Environmentally Sensitive Areas will be identified as a 50-foot (15.2-meter) buffer zone on both sides of the stream, measured from top of streambank. Within the identified 50-foot (15.2-meter) Environmentally Sensitive Areas, the following shall apply:
 - The Contractor may perform clearing operations, but not grubbing operations until immediately prior to beginning grading operations.
 - *This commitment is still valid.*
 - Once grading operations begin in identified Environmentally Sensitive Areas, work shall progress in a continuous manner until complete.

- *This commitment is still valid.*
 - Erosion control devices shall be installed immediately following the clearing operation.
 - *This commitment is still valid.*
 - “Seeding and Mulching” shall be performed on the areas disturbed by construction immediately following final grade establishment.
 - *This commitment is still valid.*
 - Seeding and mulching shall be done in stages on cut and fill slopes that are greater than 20 feet (6.1 meters) in height measured along the slope, or greater than 2 acres (0.81 hectare) in area, whichever is less.
 - *This commitment is still valid.*
 - All sedimentation and erosion control measures, throughout the project limits, must be cleaned out when half-full of sediment, to ensure proper function of the measures.
 - *This commitment is still valid.*
- USFWS, FHWA, USACE, NCDWR and NCWRC will be invited to the preconstruction meeting and any preconstruction meetings associated with installation of structures within 0.25 mile of Swift Creek.
 - *The USACE, DWR and WRC have confirmed and concur with USFWS’s assessment that no meeting was required.*
- Borrow/waste site locations, staging areas, equipment storage areas, and refueling areas shall not be within 0.25 mile of Swift Creek without further coordination between NCDOT and the USFWS during the approval process.
 - *This commitment is still valid.*
- Design Standards in Sensitive Watersheds will be used throughout the project.
 - *This commitment is still valid.*

NCDOT Environmental Analysis Unit

Prior to commencing construction on the Swift Creek bridge, NCDOT, in collaboration with the USFWS and NCWRC, will develop and implement a Mussel Relocation Plan to remove mussels from a salvage area (to be determined in the Mussel Relocation Plan).

- *This commitment no longer applies since this project implemented the use of Eastern Mussel Programmatic Biological Opinion (PBO). There are certain conditions and constraints in the PBO that will be followed.*

NCDOT Design Build Section and Environmental Analysis Unit

Five of the noise walls were found to meet NCDOT's criteria for feasibility and reasonableness, and a more detailed analysis will be completed once final design plans are available.

A final design noise analysis has been completed, and a Design Noise Report (DNR) was approved 9/16/2019. The TNR found noise abatement to be likely (preliminarily feasible and reasonable) in Noise Study Areas (NSA) 2, 5, 6, 11, and 12. An update for each of these NSAs is provided below in italics based on the findings of the DNR and the subsequent noise wall balloting process. In addition to these 5 noise walls, the DNR found noise abatement to also be feasible and reasonable in NSAs 1, 3, and 4. Since the completion of the DNR, design changes required a new

noise analysis of NSA 7. This analysis has been completed, and a DNR Addendum was approved 9/14/2020. This DNR Addendum finds noise abatement to be feasible and reasonable in NSA 7. An update for each of these noise walls is also found below in italics.

- NSA 2: Abatement in the form of a noise wall, approximately 1,293 feet long, was found to be feasible and reasonable, and therefore, is qualified for further consideration and possible inclusion in the project.
 - *A noise wall approximately 900 feet long was recommended in the DNR, has passed the balloting process, and will be constructed.*
- NSA 5: Abatement in the form of a noise wall, approximately 2,500 feet long, was found to be feasible and reasonable, and therefore, is qualified for further consideration and possible inclusion in the project.
 - *A noise wall approximately 3,120 feet long was recommended in the DNR, has passed the balloting process, and will be constructed.*
- NSA 6: Abatement in the form of a noise wall, approximately 3,900 feet long, was found to be feasible and reasonable, and therefore, is qualified for further consideration and possible inclusion in the project.
 - *A noise wall approximately 3,840 feet long was recommended in the DNR, has passed the balloting process, and will be constructed.*
- NSA 11: Abatement in the form of a noise wall, approximately 3,550 feet long, was found to be feasible and reasonable, and therefore, is qualified for further consideration and possible inclusion in the project.
 - *A noise wall approximately 2,490 feet long was recommended in the DNR, has passed the balloting process, and will be constructed.*
- NSA 12: Abatement in the form of a noise wall, approximately 2,454 feet long, was found to be feasible and reasonable, and therefore, is qualified for further consideration and possible inclusion in the project.
 - *A noise wall approximately 2,640 feet long was recommended in the DNR, has passed the balloting process, and will be constructed.*
- *NSA 1: A noise wall approximately 1,140 feet long was recommended in the DNR, has passed the balloting process, and will be constructed. The location of the noise wall is adjacent to I-40 westbound, west of the I-40/I-440/US 64 interchange, near Belafonte Drive, Rose lane, and Maplewood Lane.*
- *NSA 3: A noise wall approximately 1,140 feet long was recommended in the DNR, has passed the balloting process, and will be constructed. The location of the noise wall is adjacent to I-40 eastbound, west of the I-40/I-440/US 64 interchange, near Southgate Drive and Golden Arbor Court.*
- *NSA 4: A noise wall approximately 3,780 feet long was recommended in the DNR, has passed the balloting process, and will be constructed. The location of the noise wall is adjacent to the ramp from I-40 westbound to I-440 westbound, north of Rock Quarry Road and west of Sunnybook Road, near Sunbright Lane and Eastern Branch Road.*
- *NSA 7: A noise wall approximately 480 feet long was recommended in*

the DNR Addendum. The balloting process has not yet been conducted. Only if the wall passes the balloting process will it be constructed. The location of the noise wall would be adjacent to the ramp from I-40 eastbound to Jones Sausage Road.

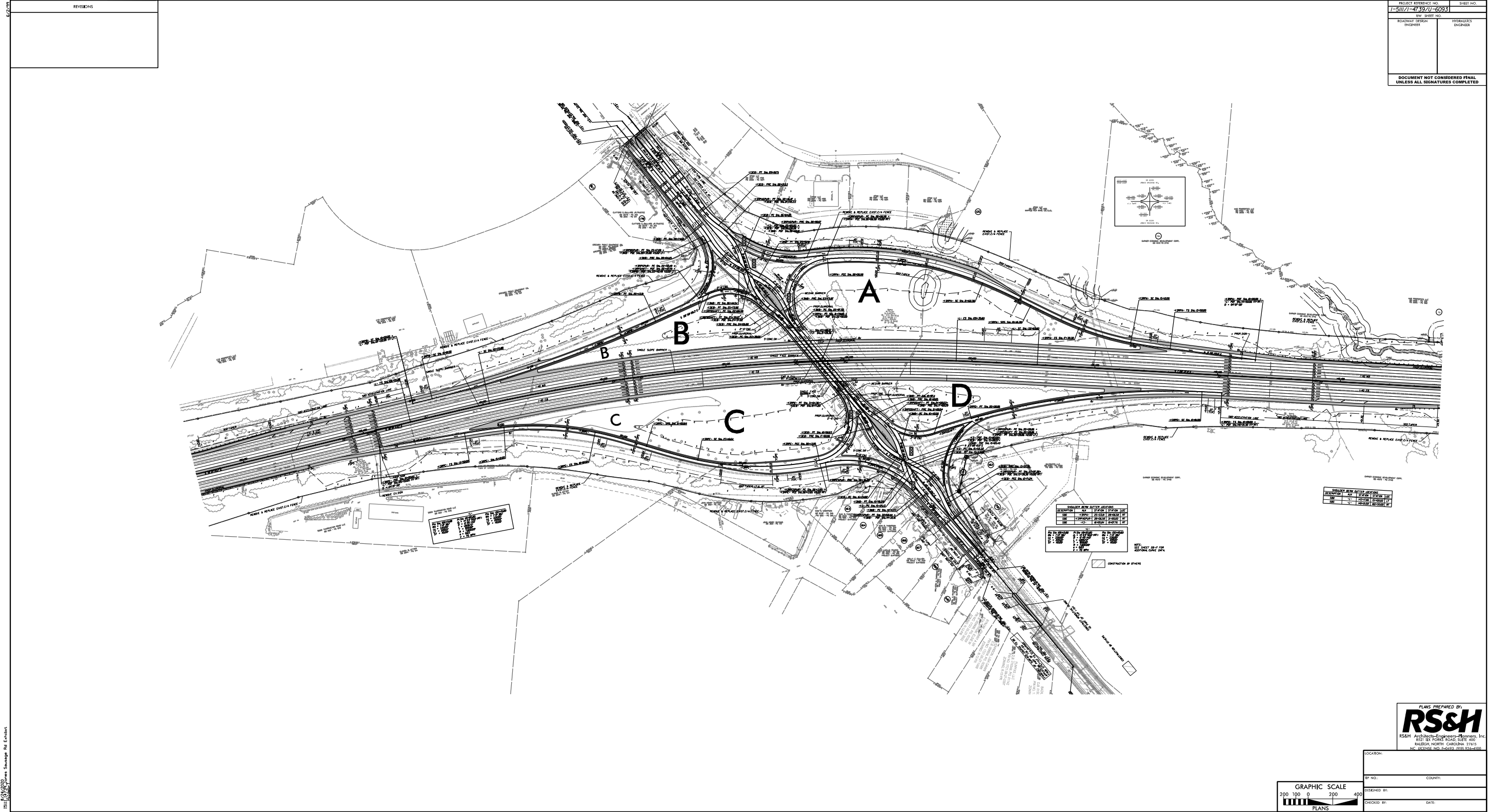
- *In summary, there are 9 total recommended noise walls, 8 of which have passed the balloting process. NWS 1, 2, 3, 4, 5, 6, 11, and 12 have passed the balloting process and are to be constructed. The balloting process for the last noise wall (NW7) still needs to be completed.*

NCDOT Environmental Analysis Unit

Prior to commencing construction on the Swift Creek bridge, NCDOT will conduct a survey for the Neuse River waterdog (*Necturus lewisi*) in collaboration with the USFWS and NCWRC.

- *A survey for Carolina Madtom and Neuse River waterdog was conducted on August 7, 2019, and USFWS concurred on October 16, 2019.*

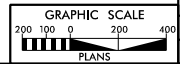
Figure 1



NO.	DESCRIPTION	DATE

PROJECT NUMBER 1-51171-473971-6093	SHEET NO.
DESIGNED BY	CHECKED BY
DATE	COUNTY
LOCATION	

PLANS PREPARED BY	
RS&H	
ARCHITECTS-ENGINEERS-PLANNERS, INC.	
857 5th FLOOR ROAD SUITE 600	
RALEIGH, NORTH CAROLINA 27615	
NC LICENSE NO. E04603 03/02/04/05	
DESIGNED BY	CHECKED BY
DATE	COUNTY
LOCATION	



DATE PLOTTED: 03/03/05 10:58 AM