

# North Carolina Department of Transportation

## NEPA/SEPA Consultation Form

STIP Project No.	<u>R-5709</u>
WBS Element	<u>50205.1.1</u>
Federal Aid Project No.	<u>N/A</u>

A. Project Description, Location, and Purpose:

STIP Project No. R-5709 proposes to widen approximately 15.4 miles of NC 211 in Moore and Hoke Counties, NCDOT Highway Division 8. (See Figure 1.) The existing two-lane roadway is proposed to be widened to a four-lane divided roadway with a grass median and reduced conflict intersections. A 30-foot-wide raised median is proposed in Moore County (50 mph design speed) and a 46-foot-wide depressed median is proposed in Hoke County (60 mph design speed). There will be curb and gutter with 5-foot sidewalks on both sides of NC 211 in Aberdeen (from US 15/501 to the corporate limits just east of the Aberdeen & Rockfish Railroad) and on the south side of NC 211 from Gable Drive to the project terminus in Raeford.

The purpose of the proposed project is to reduce traffic congestion and travel delays, and correct roadway deficiencies along NC 211 within the project limits.

B. Consultation Phase: (Check one)

Construction

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

SEPA MCDC July 29, 2020

D. Changes in Proposed Action & Environmental Consequences:

**Changes in Proposed Action**

There are no significant design changes in the final design since the completion of the Minimum Criteria Determination Checklist (MCDC).

Minor design changes occurred as design progressed, such as shifting several U-turn bulbs and adding wildlife crossings (pipes) within the right of way.

In response to public input expressing concern about frequent flood events in the Arthur Lane area, options to improve drainage conditions were analyzed. Options included:

- constructing a retention basin on the northwest side of N.C. 211,
- constructing a drainage ditch to safely convey water to its current outfall.

Several basin options were investigated; however, based upon existing high water, topography, and the lack of adequate storage potential, it was determined that a retention basin was not feasible. A drainage feature was incorporated along Arthur Lane to channel

water that currently flows behind homes on the southeast side of Arthur Lane during heavy rain events to minimize flooding. A roughly 2,400-foot-long, rock lined ditch would be constructed along the southeast side of Arthur Lane and a private drive at the end of the road and continue approximately 400 feet along an existing drainage feature to a wetland area and pond. The ditch is proposed on the southeast side of Arthur Lane and will be five-feet-wide at its base with a depth of three feet. Pipes will be installed or improved under driveways. Considering the proposed 3:1 slope for the ditch banks, the ditch will be a minimum of 23 feet wide at the top of bank.

## **Environmental Consequences**

### **Expansion of Study Area**

The progression and refinement of the design resulted in minor expansions of the study area in April 2021. (See Figures 2-A – 2-Z.) The study area was also expanded to capture drainage improvements along Arthur Lane (2022). (See Figure 3.) Additional field surveys and coordination were conducted to ensure design modifications in the expanded study areas would not result in substantial changes to impacts addressed in the MCDC.

### **Protected Species**

Following approval of the MCDC, protected species surveys were updated, as documented in a Natural Resources Technical Report (NRTR) memorandum dated June 2021. Protected species surveys were conducted for the Arthur Lane study area expansion and documented in a NRTR Addendum dated August 2022.

Based on review of the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) on February 6, 2024, one species, the Cape Fear shiner (*Notropis mekistocholas*), is no longer listed for the study area since completion of the NRTR as referenced in the MCDC and the updated NRTR. As of September 2022, an additional species, the tricolored bat (*Perimyotis subflavus*), is listed as “proposed endangered.”

**Table 1. ESA federally protected species listed for the R-5709 study area**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Federal Status</b>	<b>Habitat Present</b>	<b>Biological Conclusion</b>
<i>Alligator mississippiensis</i>	American alligator	T (S/A)	Yes	Not Required
<i>Picoides borealis</i>	red-cockaded woodpecker	E	Yes	MA-NLAA
<i>Neonympha mitchellii francisci</i>	Saint Francis’ satyr butterfly	E	Yes	MA-NLAA
<i>Schwalbea americana</i>	American chaffseed	E	Yes	No Effect
<i>Rhus michauxii</i>	Michaux’s sumac	E	Yes	No Effect
<i>Lysimachia asperulaefolia</i>	rough-leaved loosestrife	E	Yes	No Effect

T(S/A) - Threatened due to similarity of appearance; E – Endangered

MA-NLAA – May Affect-Not Likely to Adversely Affect

Informal concurrence from the USFWS for the red-cockaded woodpecker was received prior to approval of the MCDC. NC Natural Heritage Program data updated January 2, 2024 lists three red-cockaded woodpecker element occurrences [EO 23003 (2023), EO 17376 (2018), EO 23005 (2016)] within 1.0 mile of the study area. Habitat for this species is not present in the expanded study area.

A survey update for the Saint Francis' satyr butterfly was conducted in August 2023. The recommended biological conclusion was "May Affect – Not Likely to Adversely Affect." The final survey report was submitted to NCDOT on September 22, 2023. Informal consultation with the USFWS under Section 7 of the Endangered Species Act will be required. A biological conclusion of "No Effect" was listed in the MCDC.

### **Tricolored bat**

The US Fish and Wildlife Service has issued a programmatic conference opinion (PCO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the tricolored bat (TCB) (*Perimyotis subflavus*) in eastern North Carolina. The PCO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. NCDOT, FHWA, and USACE have agreed to three conservation measures (listed in the PCO) which will avoid/minimize take to TCBs. These conservation measures apply to all counties in Divisions 1-8. The programmatic determination for TCB for the NCDOT program is **May Affect, Likely to Adversely Affect**. Once the TCB is officially listed, the PCO will become the programmatic biological opinion (PBO) by formal request from FHWA and USACE. The PBO will ensure compliance with Section 7 of the Endangered Species Act for approximately five years (effective through December 31, 2028) for all NCDOT projects with a federal nexus in Divisions 1-8, which includes which includes Moore and Hoke counties, where R-5709 is located.

### **Northern long-eared bat**

The USFWS has issued a programmatic biological opinion (PBO) in conjunction with the FHWA, the USACE, and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. Although this PBO covers Divisions 1-8, The USFWS only considers NLEBs to be known or potentially found in 30 counties within Divisions 1-8. NCDOT, FHWA, and USACE have agreed to two conservation measures which will avoid/minimize mortality of NLEBs. These conservation measures only apply to the 30 current known/potential counties shown on Figure 2 of the PBO at this time. The programmatic determination for NLEB for the NCDOT program is **May Affect, Likely to Adversely Affect**. The PBO will ensure compliance with Section 7 of the Endangered Species Act for ten years (effective through December 31, 2030) for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Moore and Hoke counties, where R-5709 is located.

### Water Resources

No previously unidentified streams are in the expanded study areas. An additional 998 lf of stream SJ is in the Arthur Lane study area expansion, as documented in the NRTR Addendum dated August 2022.

One previously unidentified wetland (WG2) and two previously identified wetlands (WI and WN) are in the expanded study area (April 2021) (Table 2). These wetlands were documented in the NRTR memorandum dated June 2021. Four additional wetlands were also identified in the Arthur Lane study area expansion (Table 2). These wetlands were documented in the NRTR Addendum dated August 2022.

**Table 2. Characteristics of wetlands in the additional project study areas**

Map ID	NCWAM Classification	NCWAM Rating	Hydrologic Classification	Additional Area (ac.)
WG2	Headwater Forest	Medium	Riparian	0.05
WI	Bottomland Hardwood Forest	Low	Riparian	1.48
WN	Bottomland Hardwood Forest	High	Riparian	1.81
WAA	Headwater Forest	High	Riparian	0.15
WAB	Headwater Forest	High	Riparian	0.12
WAC	Non-Tidal Freshwater Marsh	Medium	Riparian	0.11
WAD	Non-Tidal Freshwater Marsh	High	Riparian	0.95
				<b>4.67</b>

Water resource classifications have not changed since the MCDC was completed. Permits were issued in July 2021; however, the Arthur Lane improvements will require modifications to the current permits.

### Cultural Resources

Historic Architecture: NCDOT Architectural Historians reviewed the study area expansions in April 2021 and October 2022 and determined no additional architectural survey is required. The finding that no historic properties will be affected by this project is still valid, as documented in the original review and four supplements dated: February 12, 2018, September 9, 2019, April 15, 2020, April 21, 2021 and October 27, 2022.

Archaeology: NCDOT Archaeologists reviewed the study area expansion in October 2022 and determined no additional archaeology survey is required. The documentation states, “This project is considered to be compliant with Section 106 of the National Historic Preservation Act and North Carolina General Statute 121-12(a) within the Area of Potential Effects as currently defined (jurisdictional areas with 100-foot buffer). It is clear that archaeological sites do exist within the vicinity of the proposed project but are not subject to Section 106 compliance.”

### GeoEnvironmental

No additional sites of concern were identified within the expanded study area.

### Traffic Noise

Per NCDOT policy, traffic noise analyses are not required for projects for which the SEPA document is a MCDC; and therefore was not completed for the R-5709 MCDC. However, following completion of the MCDC, NCDOT initiated a noise study because the project will include roadways on new location and introduce new traffic noise sources presently without traffic noise exposure, and in response to public comments expressing concern about traffic noise. Based on the R-5709 Design Noise Report (December 2021) and completion of the required public involvement process, one noise mitigation measure met NCDOT Policy feasibility and reasonableness criteria and is recommended for construction. The proposed noise wall is adjacent to NC 211 northbound, south of Devon Circle and Bree Court and will benefit 17 residences on Bree Court, Devon Circle, and Devonshire Trail.

### Public Involvement

Following approval of the MCDC, additional public involvement was completed for the Arthur Lane study area expansion. A project update in the form of a newsletter was provided to study area property owners in August 2022. The newsletter included a summary of the project

background, design revisions, potential impacts, and next steps; project contact information; and a map showing the proposed ditch alignment and section. The mailing list included 12 property owners along Arthur Lane and Strother Road. No comments were received as a result of the newsletter.

In addition, a small group meeting was held with Arthur Lane property owners on January 26, 2023. Property owners expressed concern about the location of the ditch along Arthur Lane (at the front of their properties). Following the meeting, an option to construct the ditch at the back of properties was investigated but was determined not feasible.

**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. The NCDOT Project Manager, Terry Farr, hereby verifies the involvement of the following staff and the incorporation of their technical input:

Design Engineer:	John Olinger, PE (RK&K)	1/29/2024
Environmental Specialist:	Chris Rivenbark (RK&K)	2/11/2024
Historic Architecture:	Vanessa Patrick (NCDOT)	2/15/2024
Archaeology:	Matt Wilkerson (NCDOT)	2/15/2024
GeoEnvironmental:	Ashley Cox, LG (NCDOT)	9/6/2023
Hydraulics:	Ray Lovinggood (NCDOT)	2/2/2023
Traffic Noise:	Jamie Lancaster (NCDOT)	1/12/2022
Public Involvement:	Jamille Robbins (NCDOT)	1/24/2023

**G. Consultation Approval for NCDOT Project R-5709**

**Prepared By:**

2/21/2024

Date

DocuSigned by:

*Robin Pugh*

Robin Pugh, AICP, Project Delivery Leader  
RK&K

**Prepared For:**

Terry Farr, PE, Senior Project Manager  
NCDOT Project Management Unit

**Reviewed By:**

2/23/2024

Date

DocuSigned by:

*Morgan Weatherford*

Morgan Weatherford, Eastern Regional Team Lead  
NCDOT Environmental Policy Unit



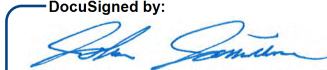
**Approved**

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

2/23/2024

Date

DocuSigned by:



John Jamison, Unit Head  
NCDOT Environmental Policy Unit

FHWA Approved: FHWA signature required for Type I or II CE with Substantial Changes, Type III CE, FONSI or ROD.

Date

N/A  
Yolonda K. Jordan, Division Administrator  
Federal Highway Administration

# PROJECT COMMITMENTS

US 15 / US 501 in Aberdeen to SR 1244 (West Palmer St) / SR 1311 (Mockingbird Hill Rd) in Raeford. Widen to multi-lanes.

T.I.P Number: R-5709

Moore and Hoke Counties

Federal Aid Number: N/A

WBS:50205.1.1

## COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

### Construction Office - Bethesda Cemetery Association Property Superfund Site

A GeoEnvironmental Phase II Investigation (February 17, 2020) was completed for the potentially impacted Superfund site (Bethesda Cemetery Association). No special handling of soils on this site are recommended; however, if groundwater is encountered during construction activities on this site, refer to special provisions for handling potentially impacted saturated soil. All excavated soil will remain onsite.

### Right of Way, EAU – Cultural Resources - Cemeteries / Graves

Where final project design includes intrusion into cemetery boundaries, additional consultation between NCDOT's Right of Way (ROW) and Environmental Analysis Units (EAU) and the Office of State Archaeology (OSA) will be required to identify graves, both marked and unmarked, in the impact area and arrange for their relocation per North Carolina General Statutes 14-148, 65 and 70. The ROW agent will notify archaeologist Shane Petersen of the EAU (scpetersen@ncdot.gov, 919.707.6083) at least two months in advance of the ROW acquisition of any cemetery parcels in order to determine if the OSA will require archaeological investigations to identify and remove unmarked burials. Should OSA require investigations in relation to the likelihood of unmarked burials being impacted within the cemetery, three months will be required to complete the investigations after ROW has acquired all necessary cemetery parcels. The final disposition of any interments recovered during the archaeological investigations will be determined by NCDOT's ROW Unit and the EAU in consultation with OSA.

### Geotech/Geoenvironmental - GeoEnvironmental Review of Final Right of Way Plans

Twenty-four (24) sites of concern were identified within the study area. NCDOT GeoEnvironmental Section will re-evaluate potentially hazardous waste sites once the Final Right of Way plans are complete to determine whether soil and groundwater assessments are necessary prior to right of way acquisition.

### Construction Office - Local EMS/fire Coordination

The NCDOT Resident Engineer will continue coordination with local EMS/fire officials through project construction to minimize potential impacts to response time and access during peak times and special events.

### Construction Office - Pedestrian Access to the All-American Trail at Plank Road

Pedestrian access to the All-American Trail at Plank Road will be maintained during construction while the trail is open (February through late September).

### Division Office - Posted Speed Limit Reduction

The NCDOT Division Traffic Engineer will request a revision of the ordinance to reduce the NC 211 posted speed from 55 mph to 45 mph prior to Gable Drive in Raeford.

### Construction Office - Roundabout Conduit in Raeford

The City of Raeford requested landscaping for the roundabout and installation of conduit for lighting and irrigation. The cost of installation for the conduit will be included in a municipal agreement with the City of Raeford.

### Construction Office - School Transportation Officials Coordination

The NCDOT Resident Engineer will coordinate with school transportation officials at least one month prior to and throughout construction.

### Construction Office - Sidewalks in Aberdeen

Sidewalks are included on both sides of NC 211 from US 15-501 to the Aberdeen corporate limits just east of the dual bridges over the Aberdeen & Rockfish Railroad. The maintenance of the sidewalks and cost share (Pee Dee Road to east of dual bridges) will be included in the municipal agreement(s) with the Town of Aberdeen.

### Construction Office - Sidewalks in Raeford

Sidewalks will be included on the south side of NC 211 from Gable Drive to the eastern project terminus and on the west side of Palmer Street from NC 211 to the first entrance at West Hoke Middle School. The maintenance of the sidewalks will be included in a municipal agreement with the City of Raeford.

### Construction Office - Special Landscaping in Aberdeen

The Town of Aberdeen expressed interest in special landscaping and requested to participate in review of the landscaping plan during the construction phase. The maintenance of any proposed landscape will be included in a municipal agreement with the Town of Aberdeen.

## COMMITMENTS FROM PERMITTING

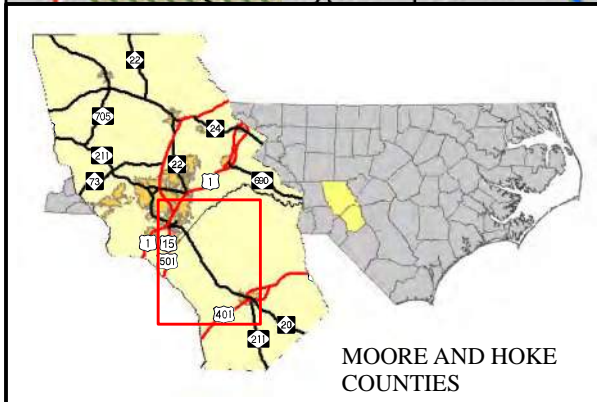
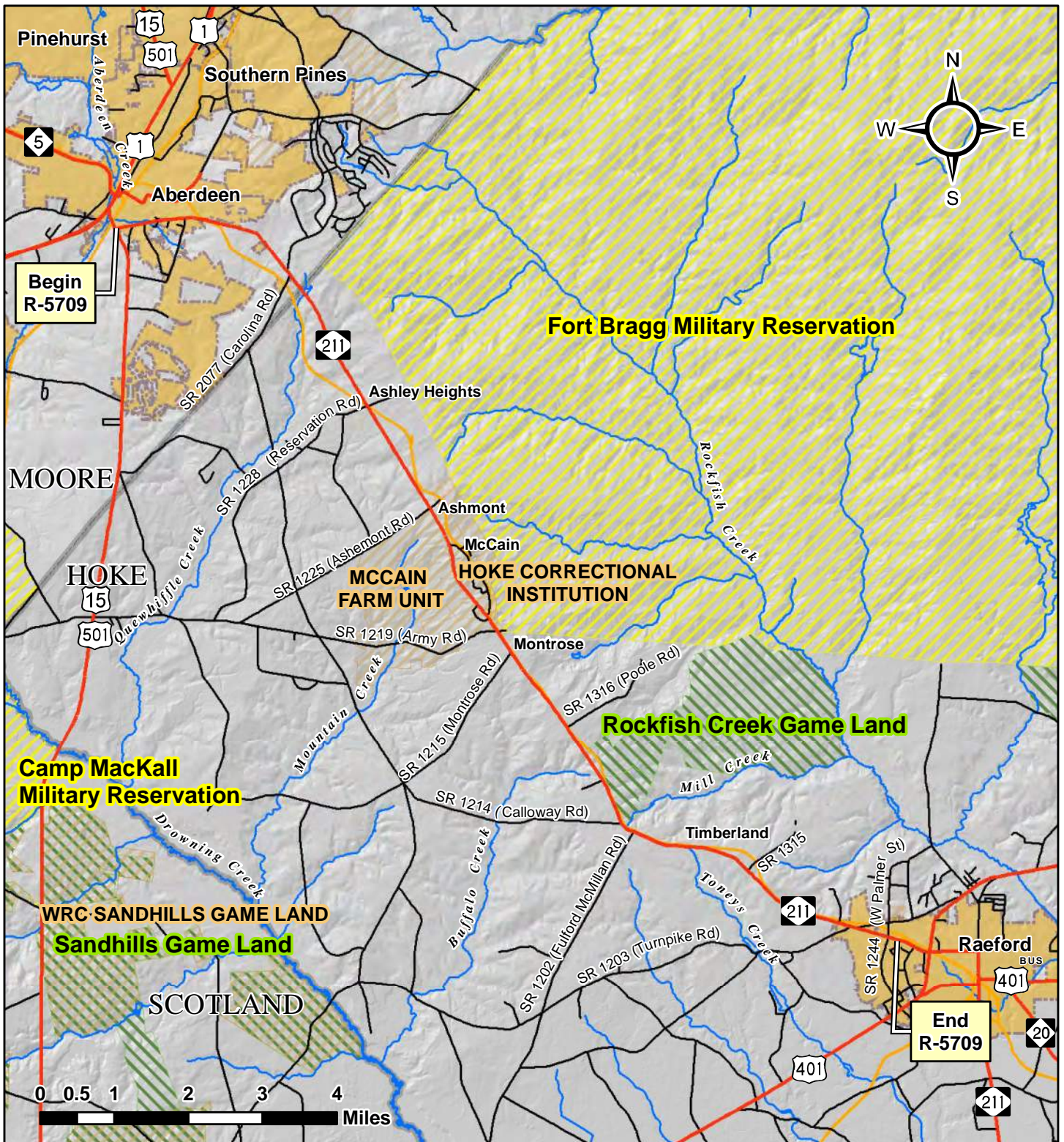
No commitments developed during project permitting.

**\*\*\*\*\*END OF PROJECT COMMITMENTS\*\*\*\*\***

US 15 / US 501 in Aberdeen to SR 1244 (West Palmer St) / SR 1311 (Mockingbird Hill Rd) in Raeford. Widen to multi-lanes.

50205.1.1



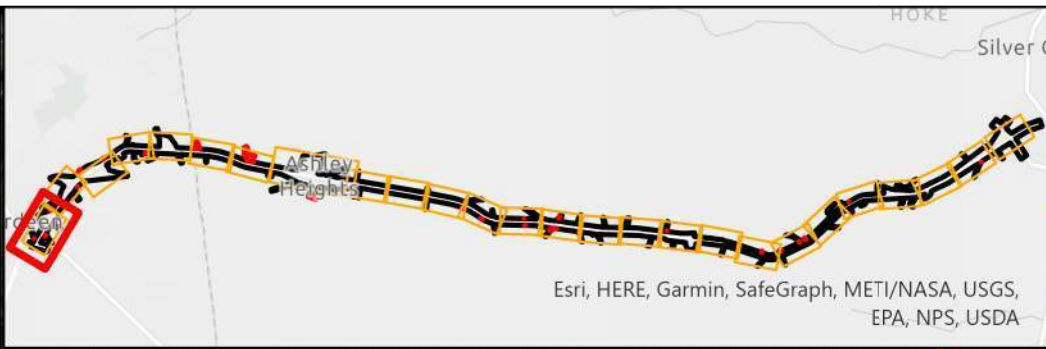


North Carolina Department of Transportation



**VICINITY**  
**NC 211**  
 FROM US 15 - 501 IN ABERDEEN  
 TO SR 1244 - SR 1311 IN RAEFORD,  
 MOORE, AND HOKE COUNTIES  
 STIP PROJECT R-5709

**FIGURE**  
**1**

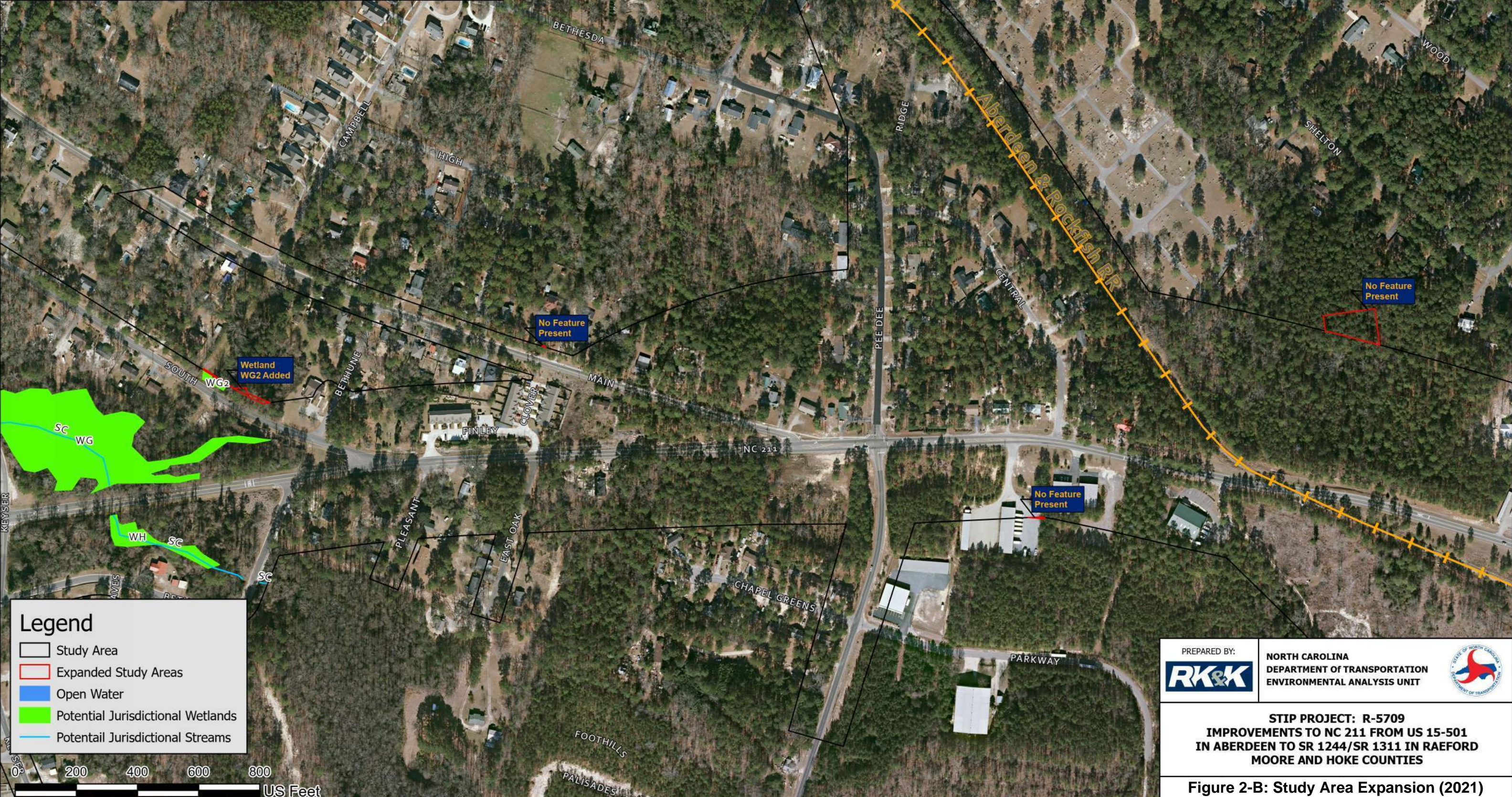
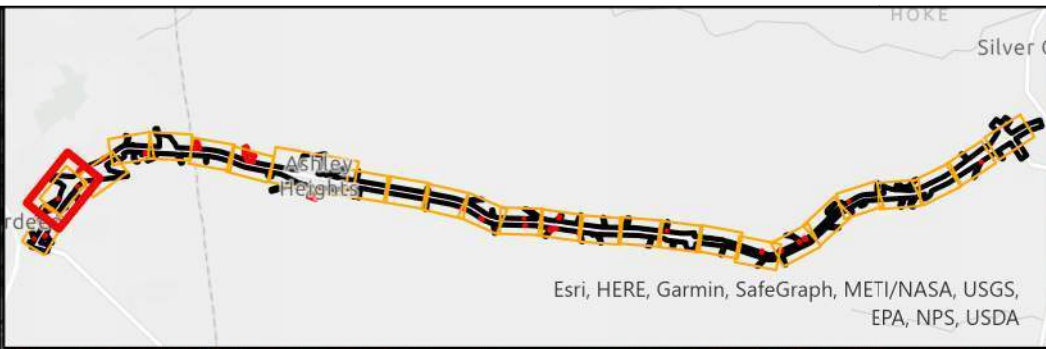


**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



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<b>STIP PROJECT: R-5709</b> <b>IMPROVEMENTS TO NC 211 FROM US 15-501</b> <b>IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD</b> <b>MOORE AND HOKE COUNTIES</b>	
<b>Figure 2-A: Study Area Expansion (2021)</b>	



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

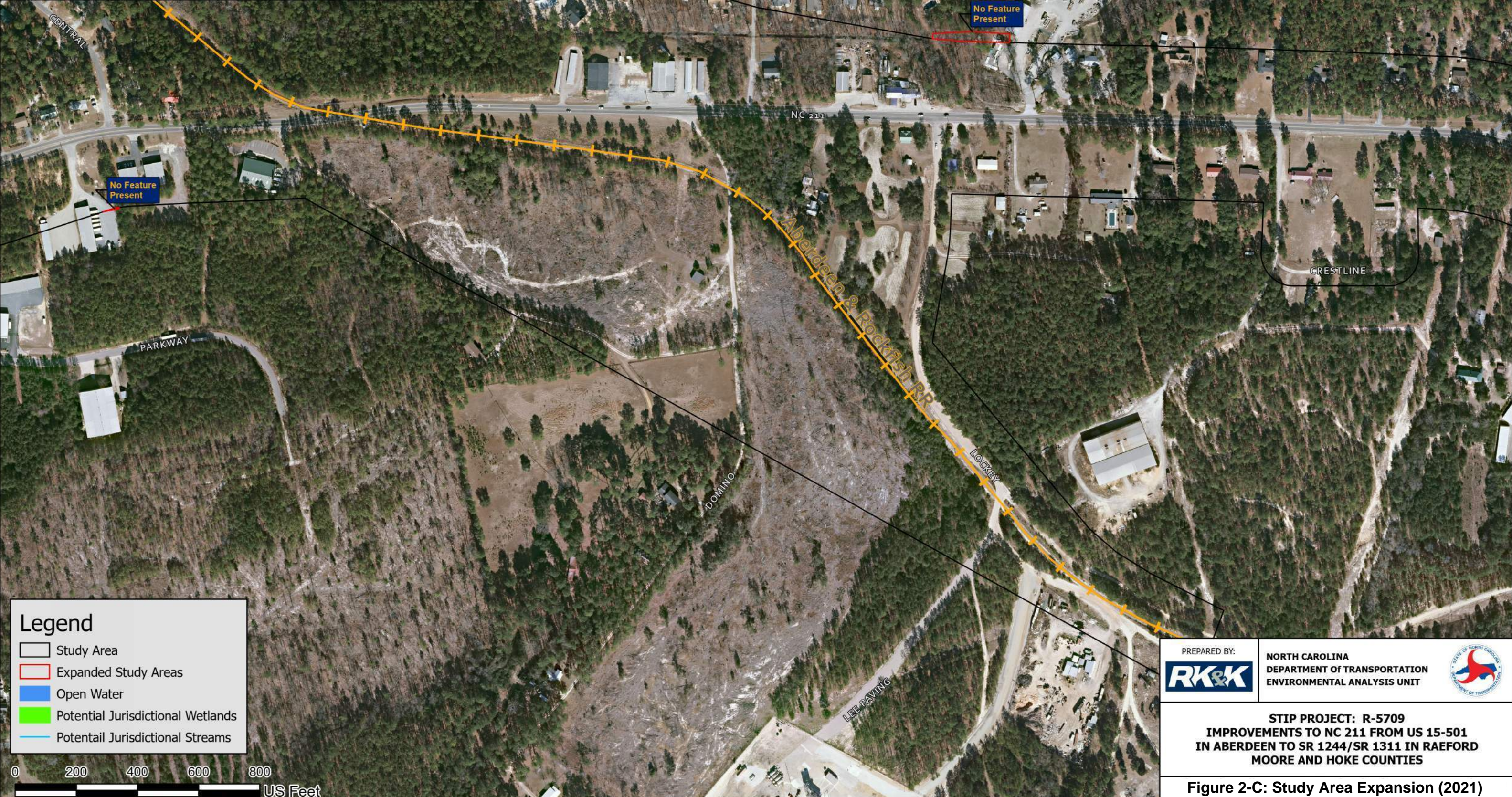
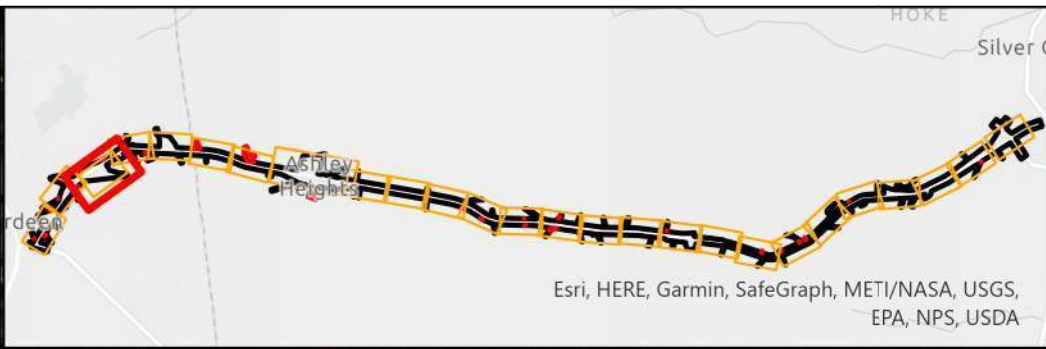


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**STIP PROJECT: R-5709**  
**IMPROVEMENTS TO NC 211 FROM US 15-501**  
**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

**Figure 2-B: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

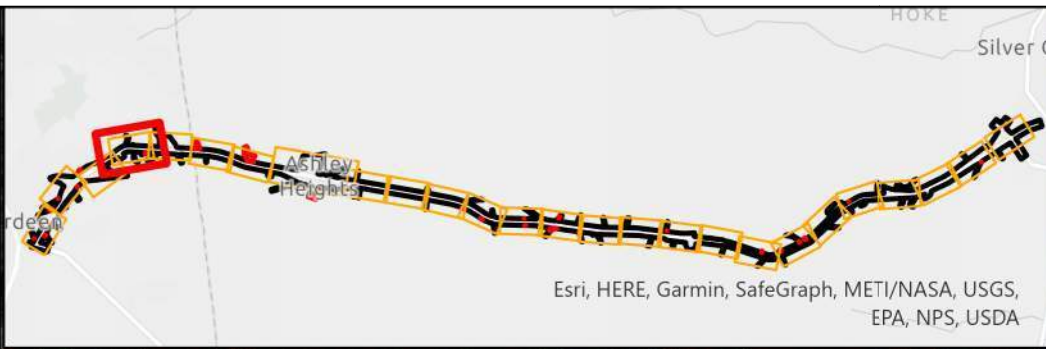


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**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

**Figure 2-C: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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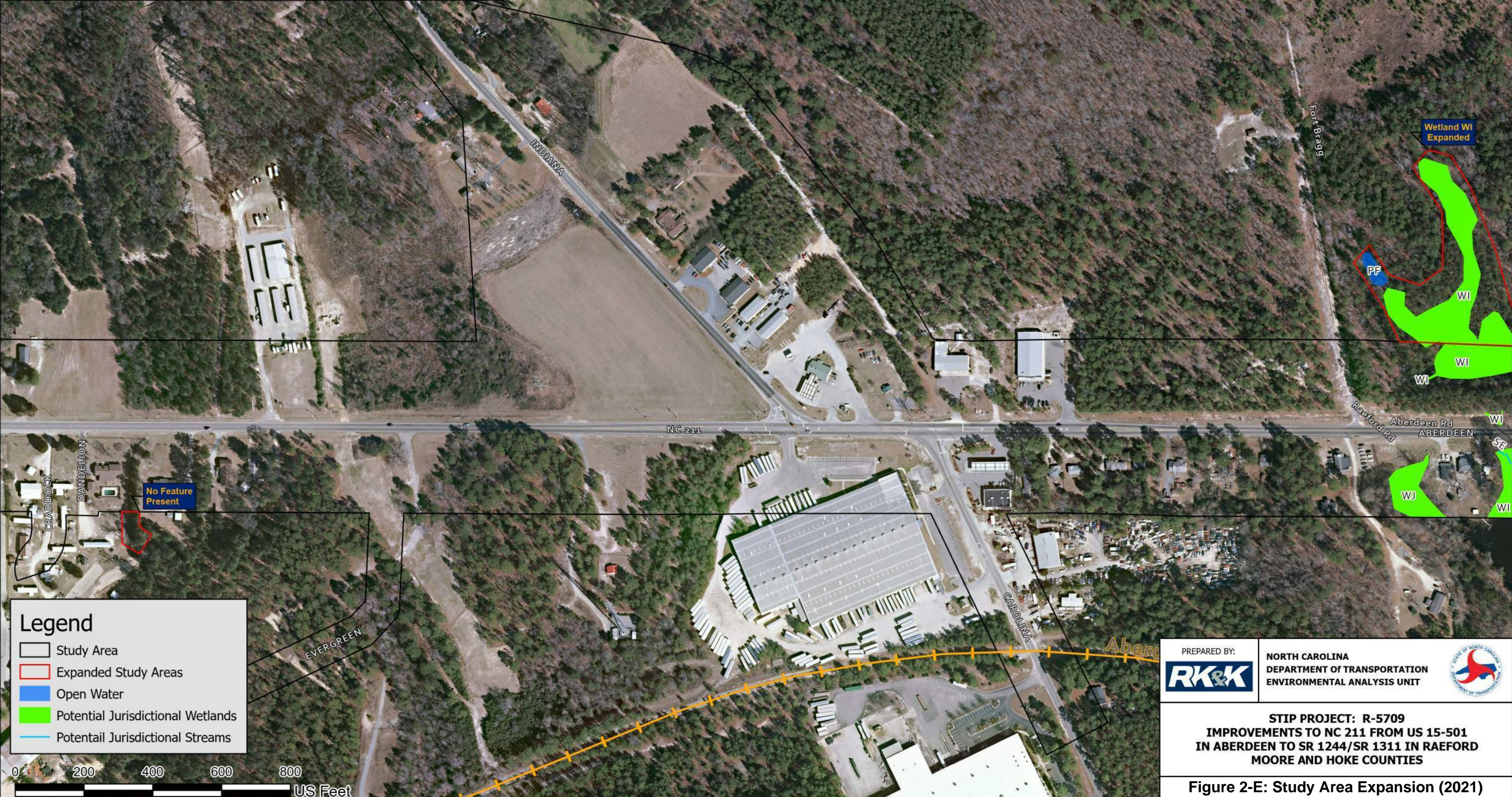
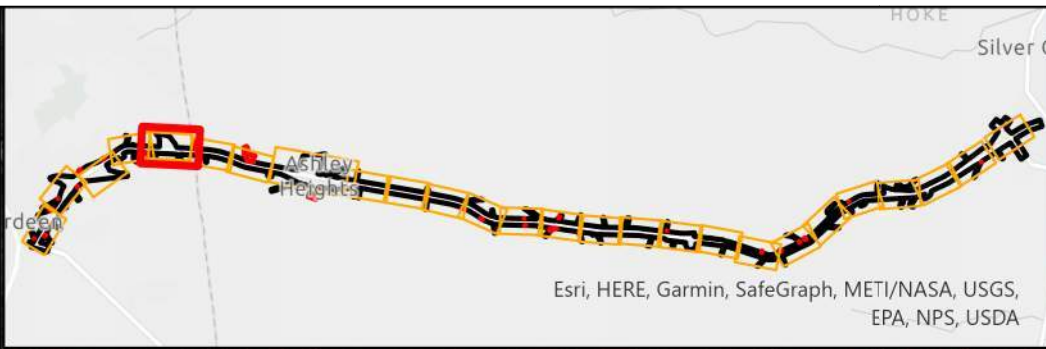


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**STIP PROJECT: R-5709**  
**IMPROVEMENTS TO NC 211 FROM US 15-501**  
**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

**Figure 2-D: Study Area Expansion (2021)**



No Feature Present

Wetland WI Expanded

**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



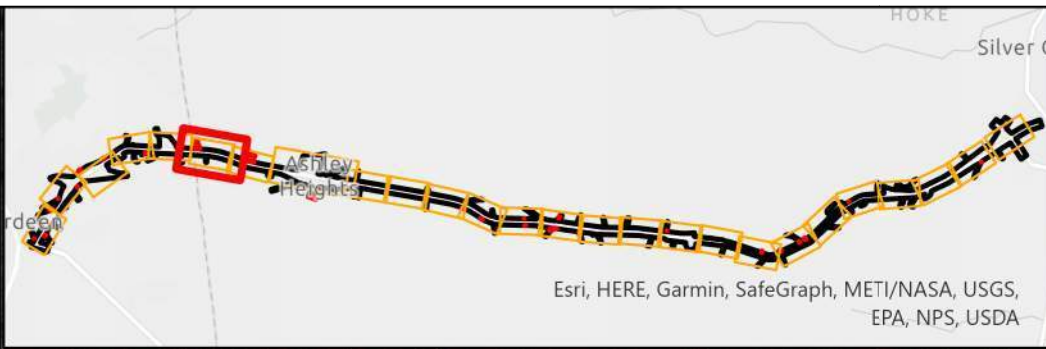
PREPARED BY:

**RK&K**

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**IMPROVEMENTS TO NC 211 FROM US 15-501**  
**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

**Figure 2-E: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

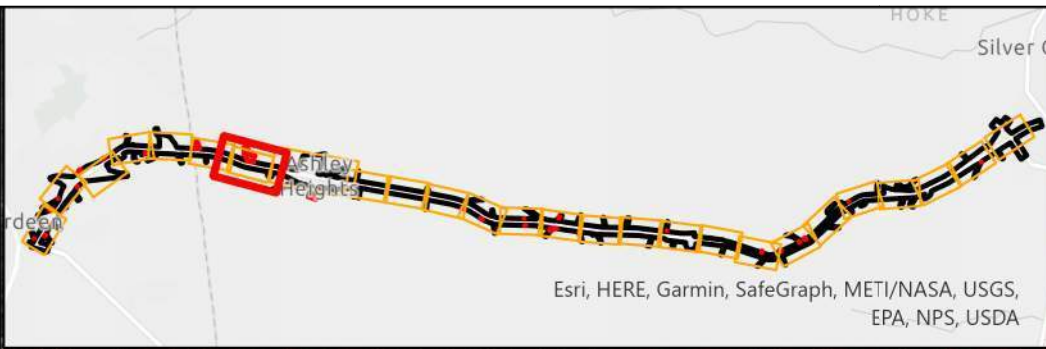


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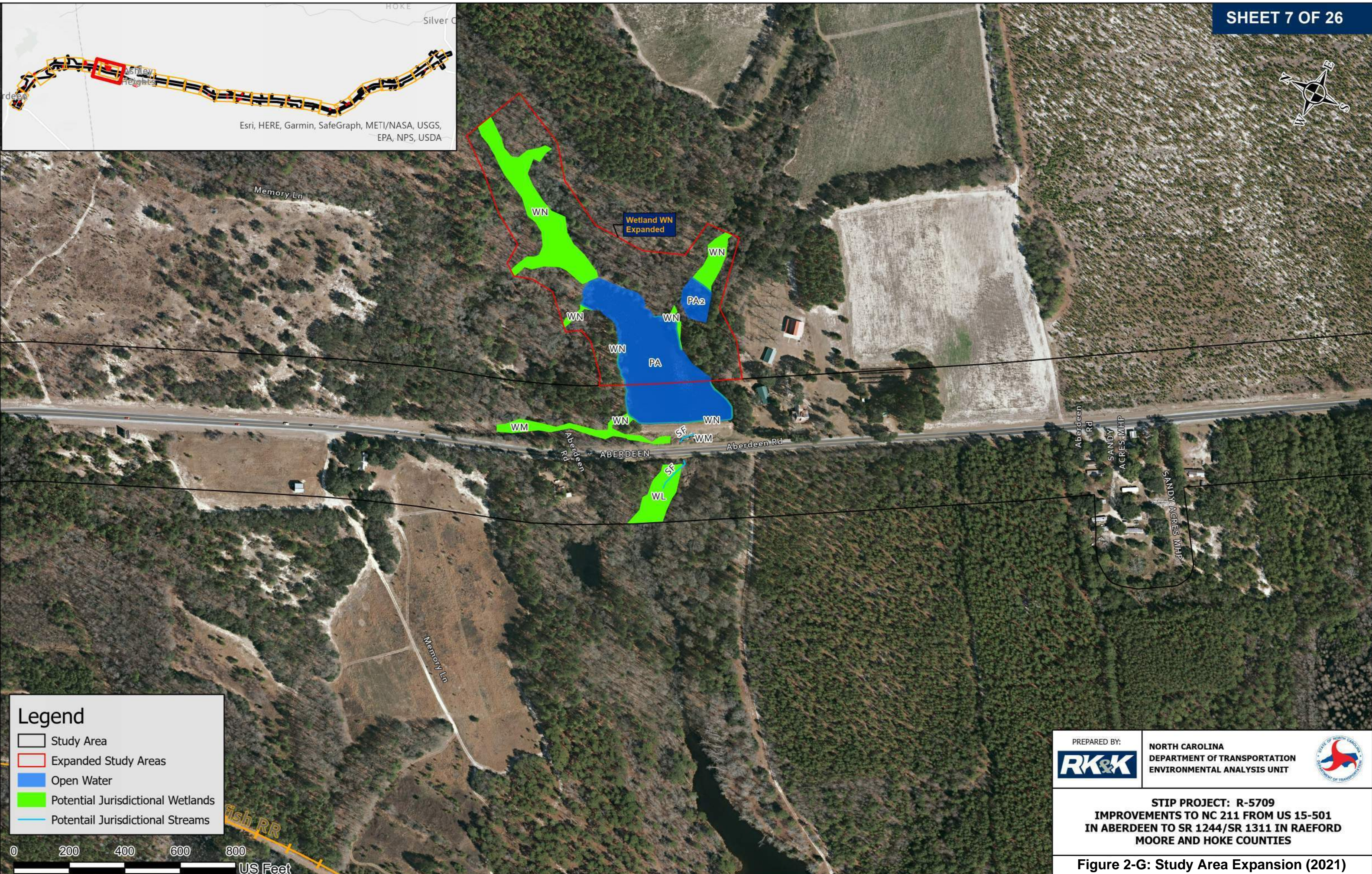
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**MOORE AND HOKE COUNTIES**

**Figure 2-F: Study Area Expansion (2021)**



Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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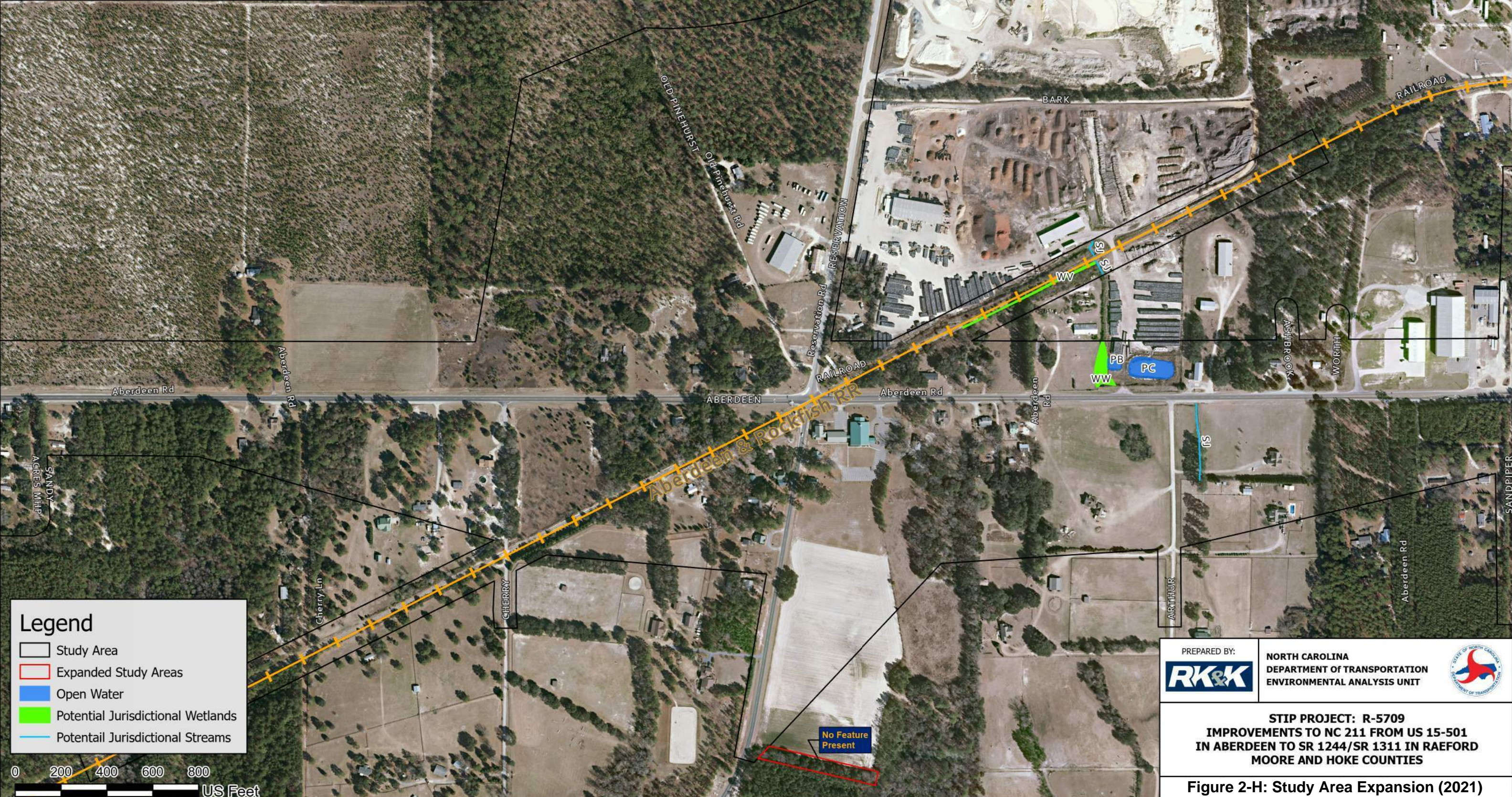
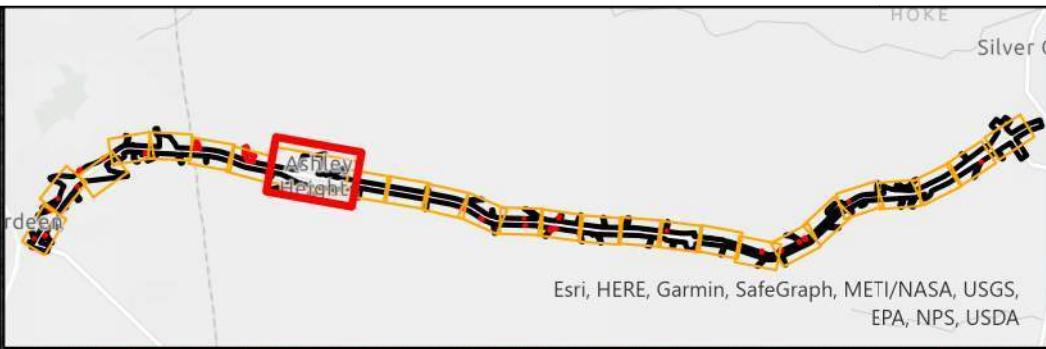
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**STIP PROJECT: R-5709**  
**IMPROVEMENTS TO NC 211 FROM US 15-501**  
**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

Figure 2-G: Study Area Expansion (2021)





**Legend**

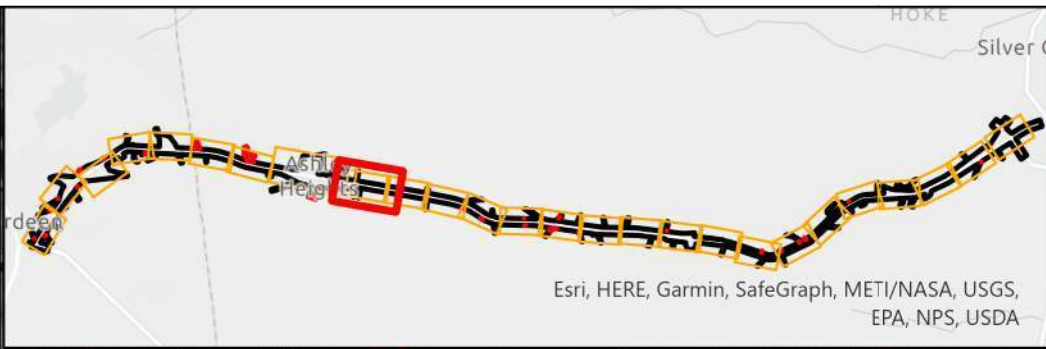
- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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**STIP PROJECT: R-5709**  
**IMPROVEMENTS TO NC 211 FROM US 15-501**  
**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

**Figure 2-H: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

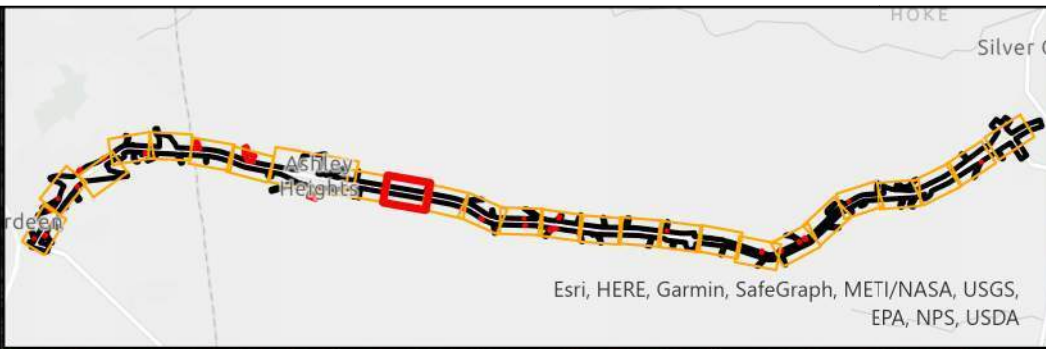


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**IMPROVEMENTS TO NC 211 FROM US 15-501**  
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**MOORE AND HOKE COUNTIES**

**Figure 2-I: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



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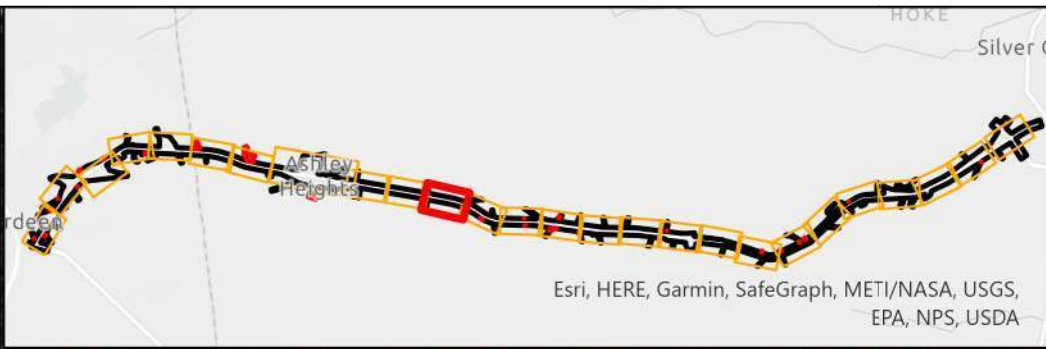


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**IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD**  
**MOORE AND HOKE COUNTIES**

**Figure 2-J: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

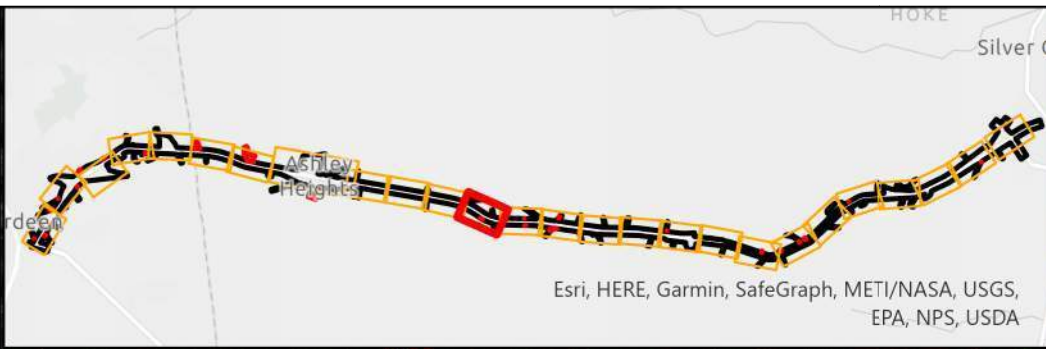


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**MOORE AND HOKE COUNTIES**

**Figure 2-K: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

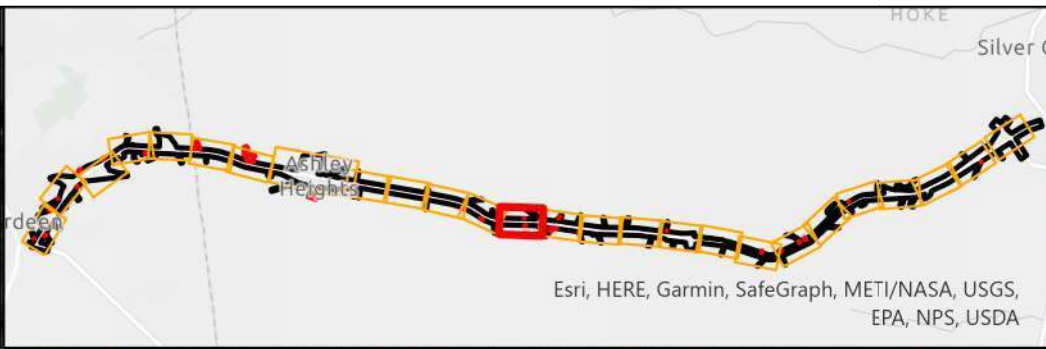


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**Figure 2-L: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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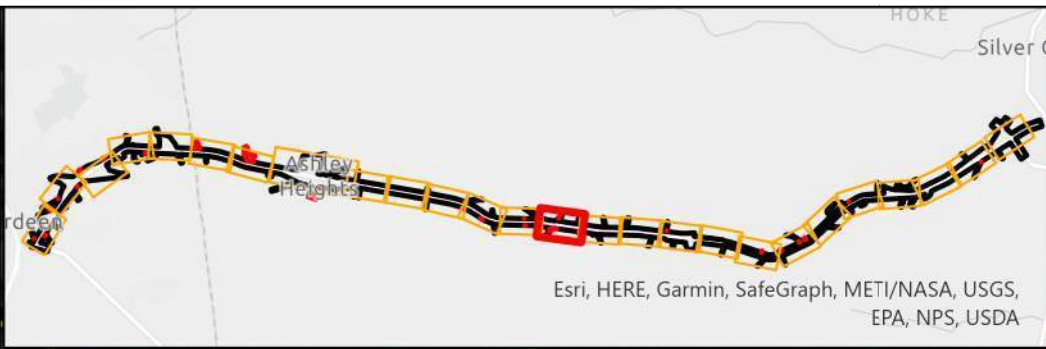


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**Figure 2-M: Study Area Expansion (2021)**



**Legend**

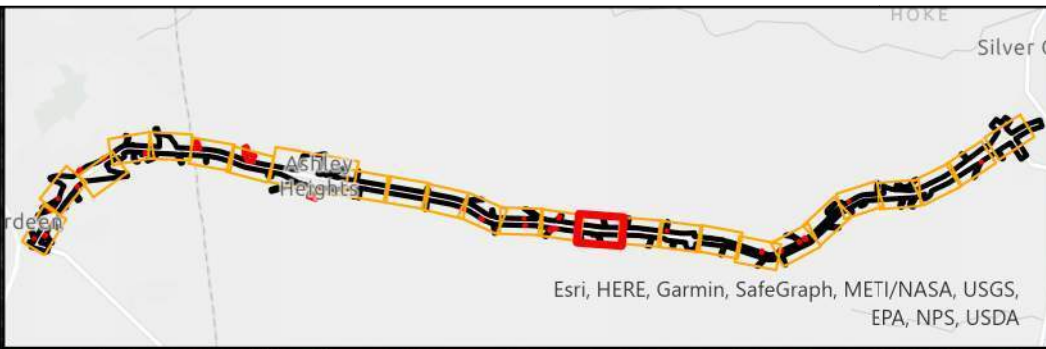
- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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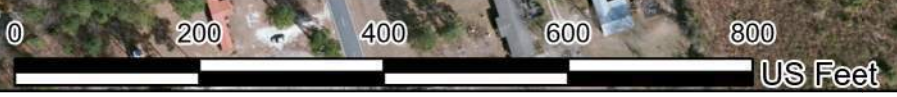
**STIP PROJECT: R-5709**  
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**MOORE AND HOKE COUNTIES**

**Figure 2-N: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



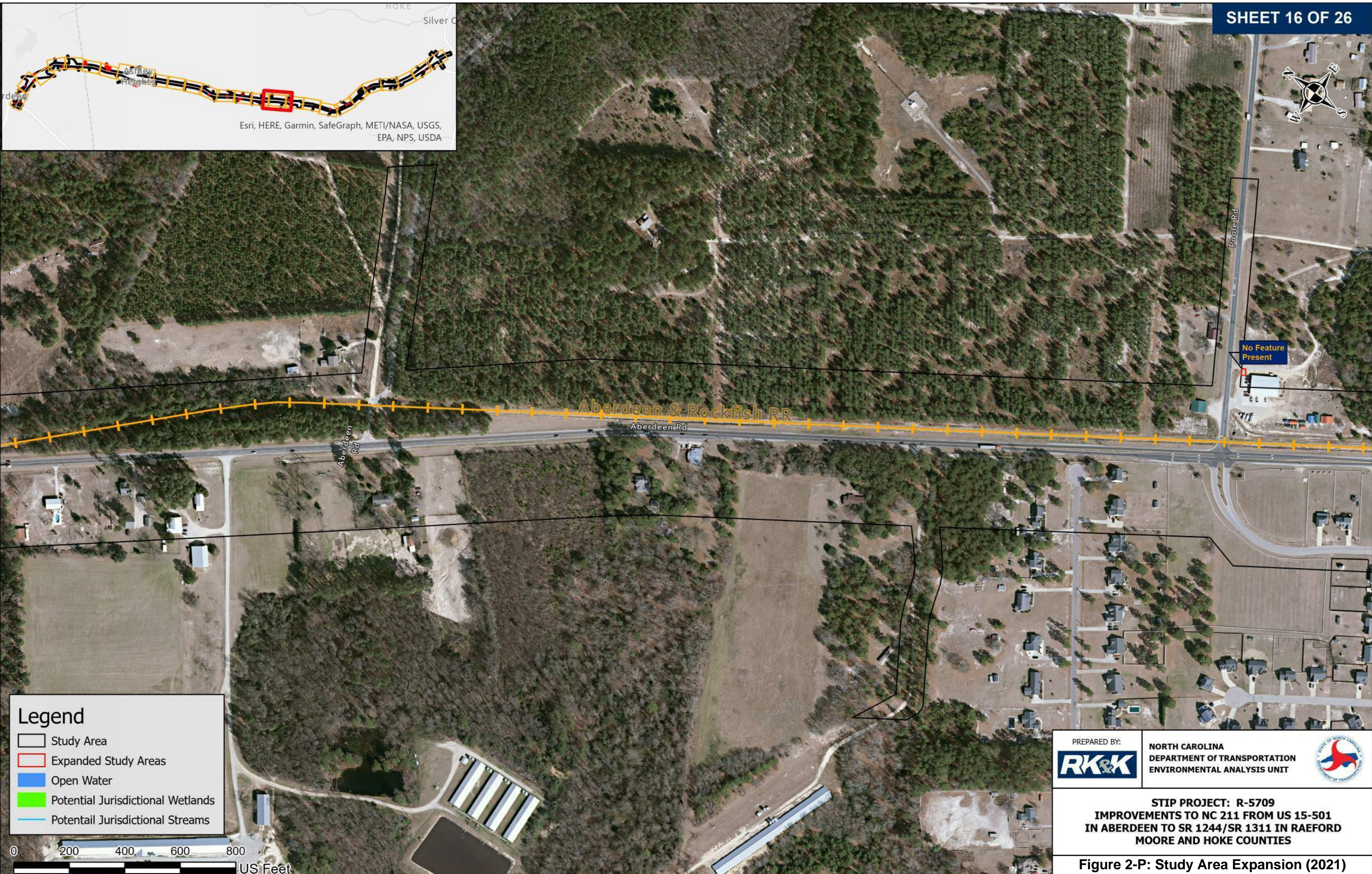
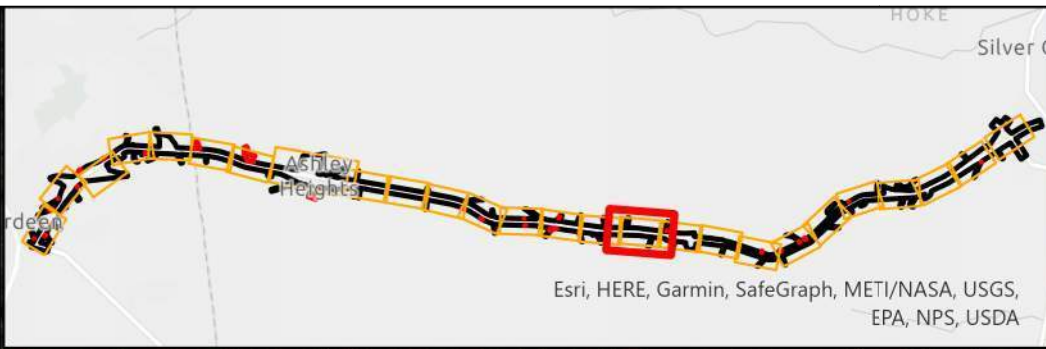
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**MOORE AND HOKE COUNTIES**

**Figure 2-O: Study Area Expansion (2021)**





**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



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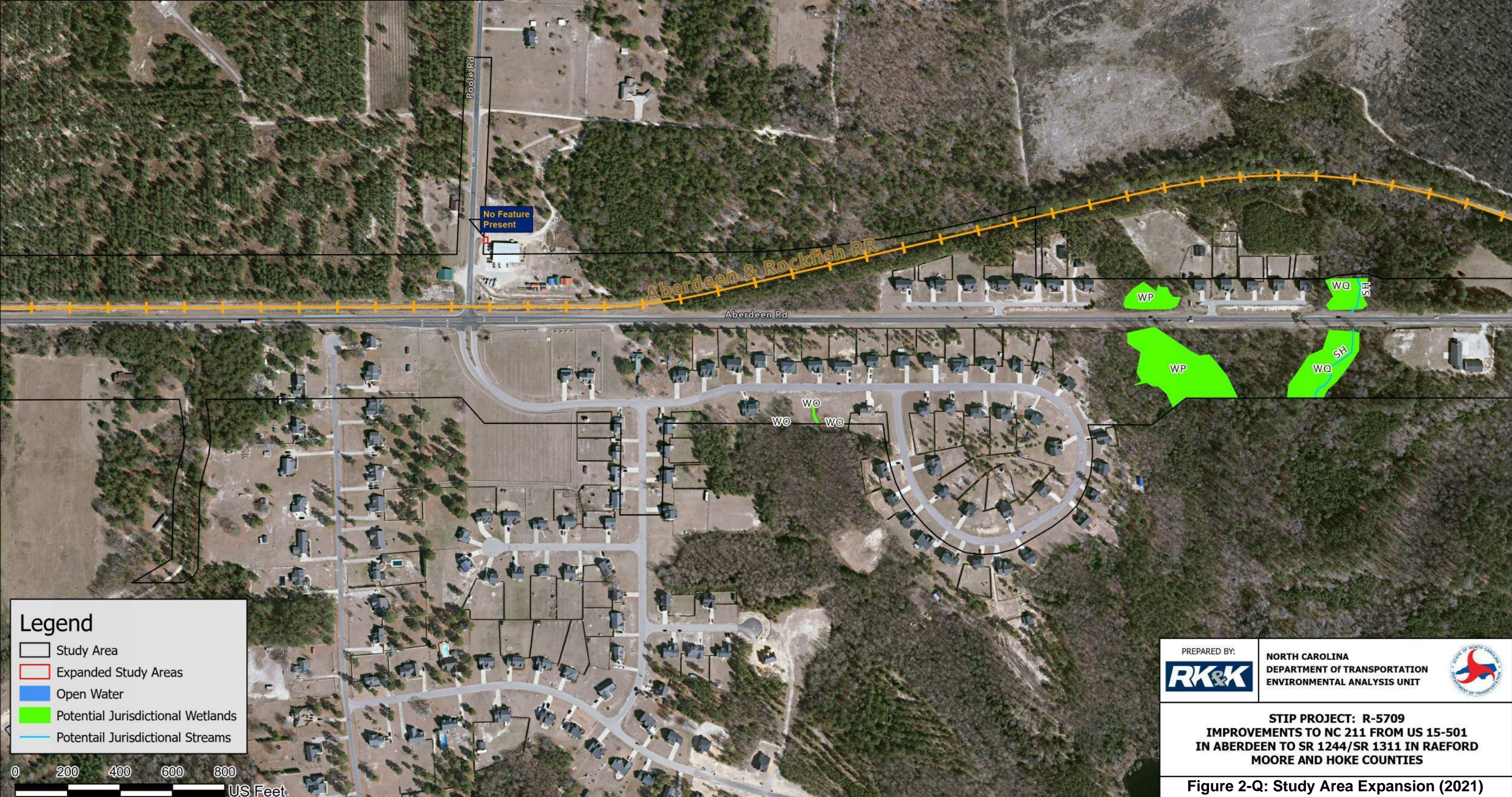
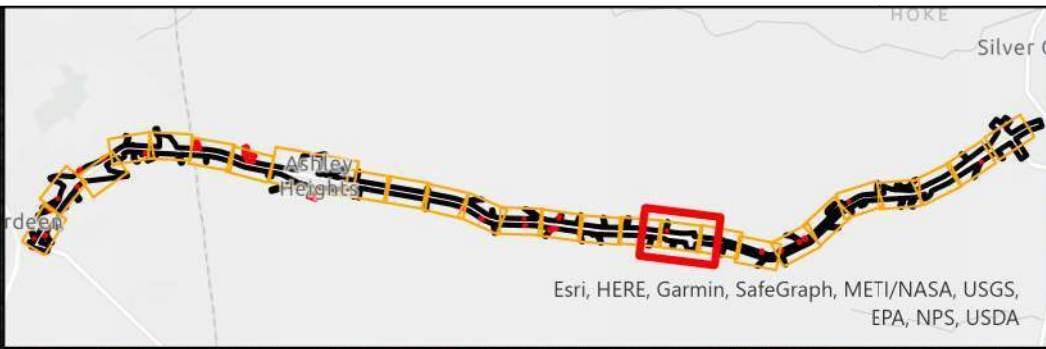


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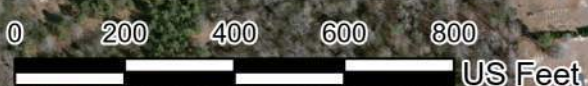
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**Figure 2-P: Study Area Expansion (2021)**



**Legend**

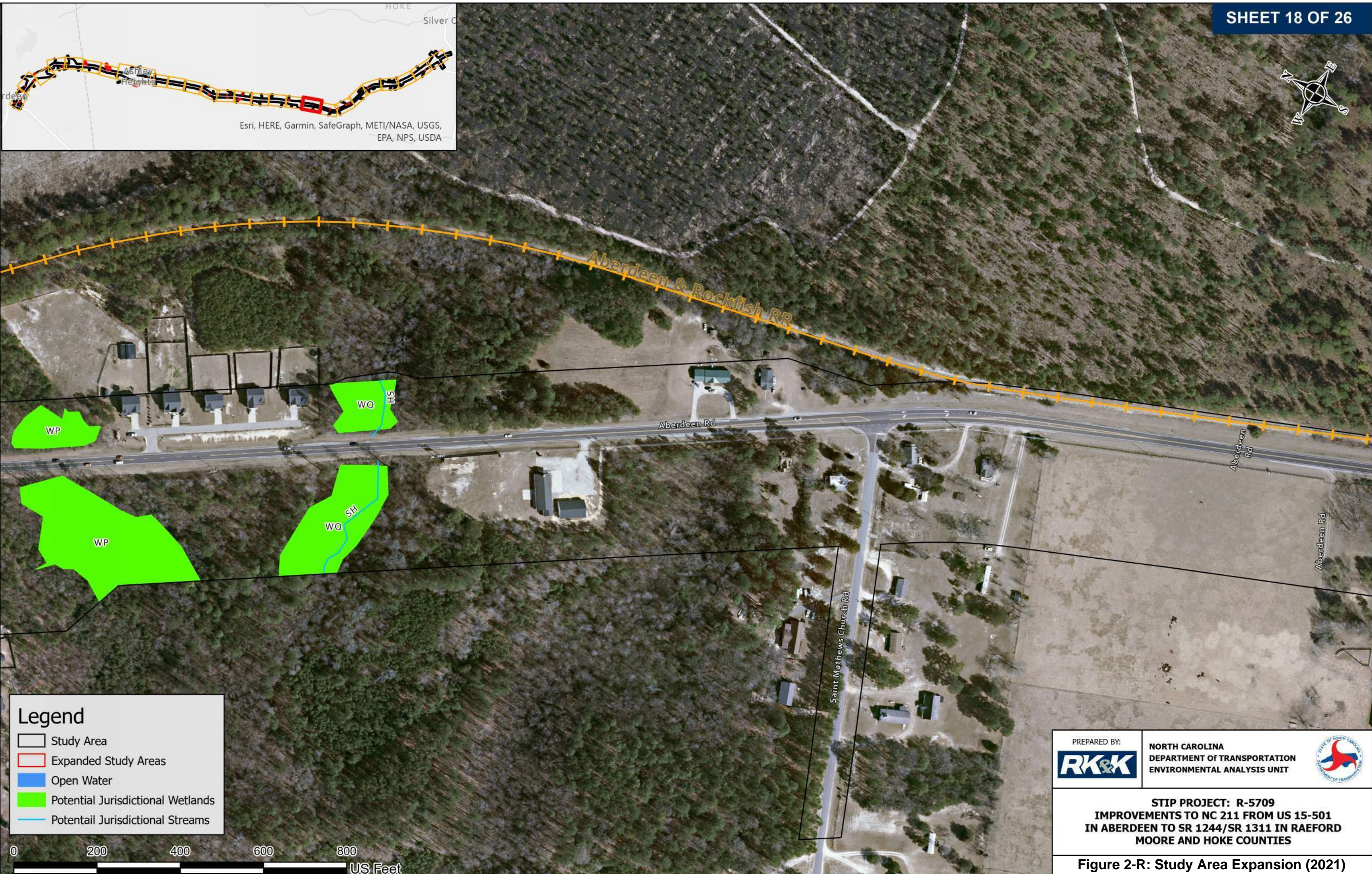
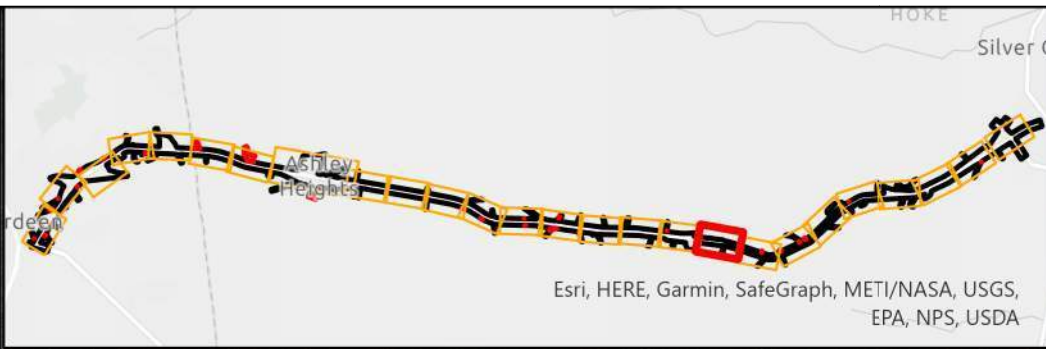
- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



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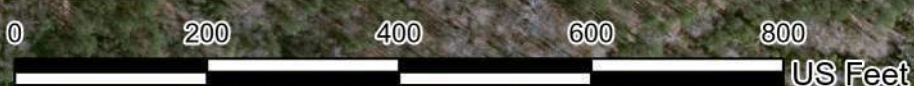
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**Figure 2-Q: Study Area Expansion (2021)**

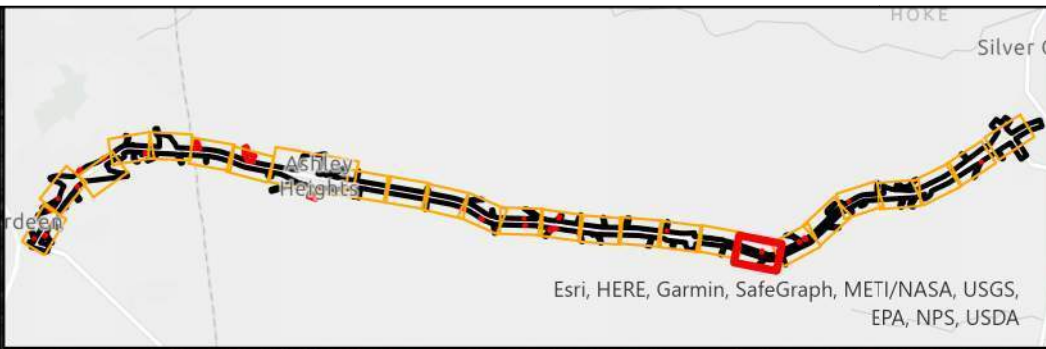


**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

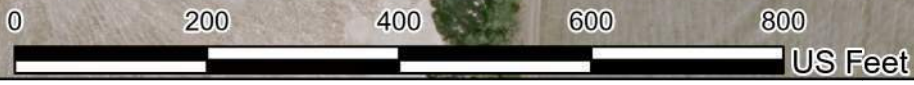


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<p align="center"><b>STIP PROJECT: R-5709</b>  <b>IMPROVEMENTS TO NC 211 FROM US 15-501</b>  <b>IN ABERDEEN TO SR 1244/SR 1311 IN RAEFORD</b>  <b>MOORE AND HOKE COUNTIES</b></p>	
<p align="center"><b>Figure 2-R: Study Area Expansion (2021)</b></p>	



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

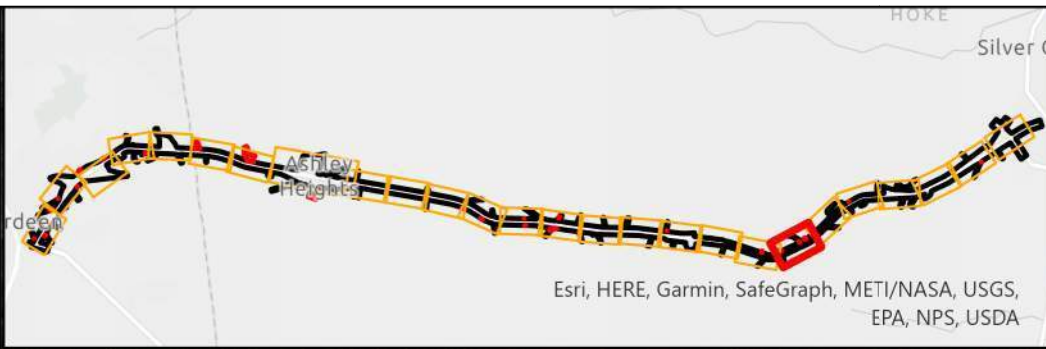


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**Figure 2-S: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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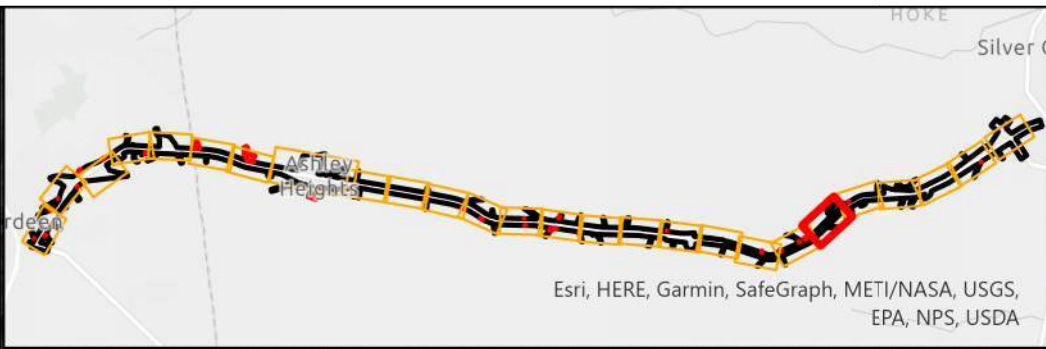


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**MOORE AND HOKE COUNTIES**

**Figure 2-T: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

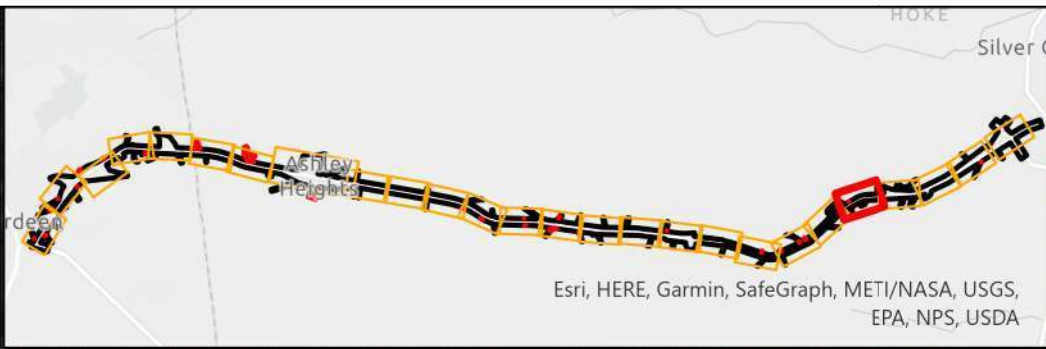


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**MOORE AND HOKE COUNTIES**

**Figure 2-U: Study Area Expansion (2021)**



**Legend**

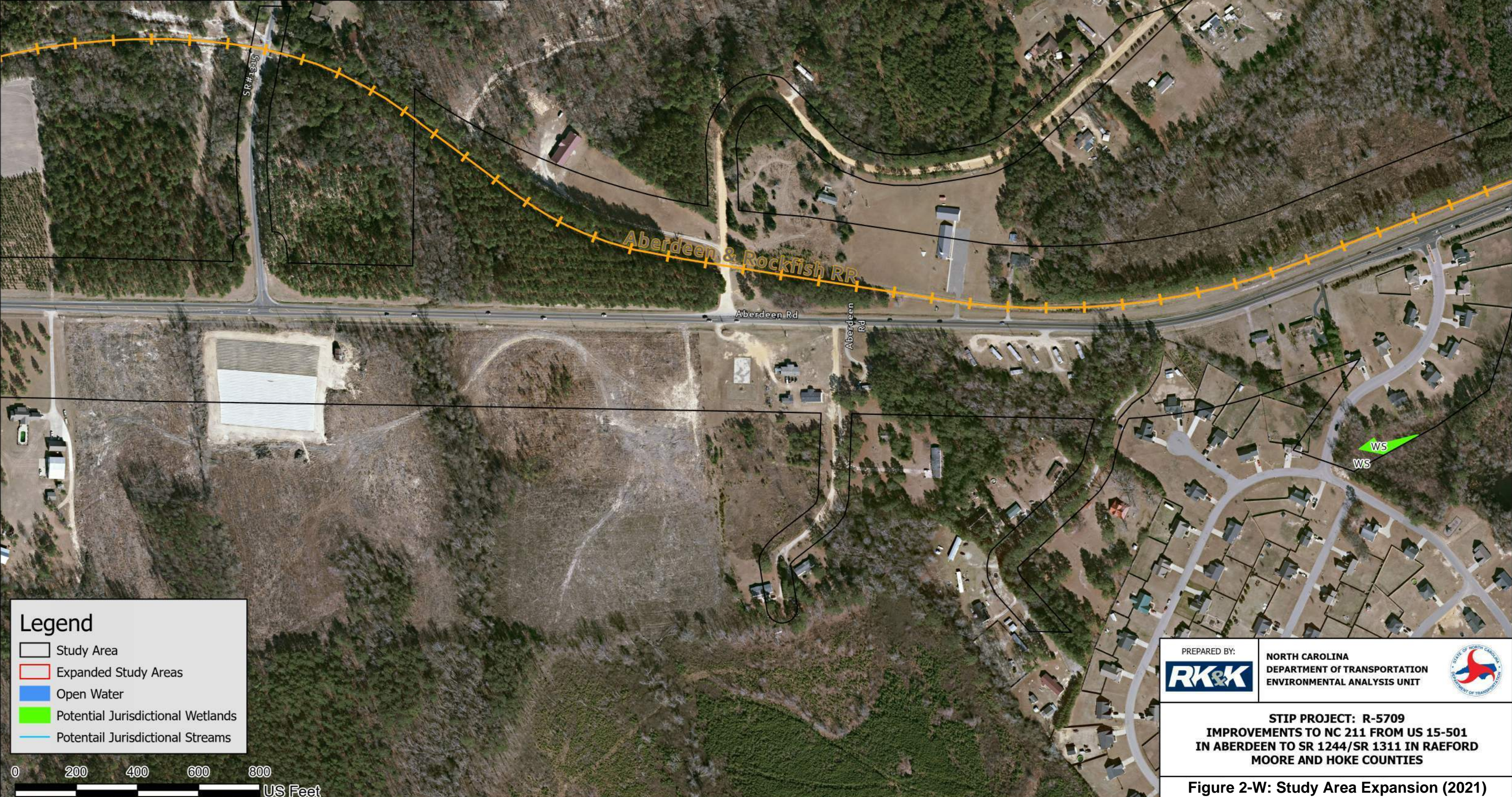
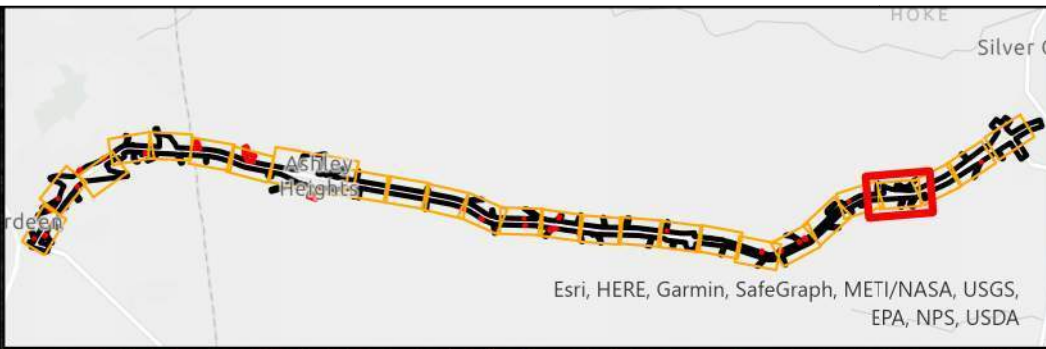
- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

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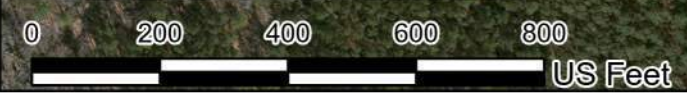
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**MOORE AND HOKE COUNTIES**

**Figure 2-V: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



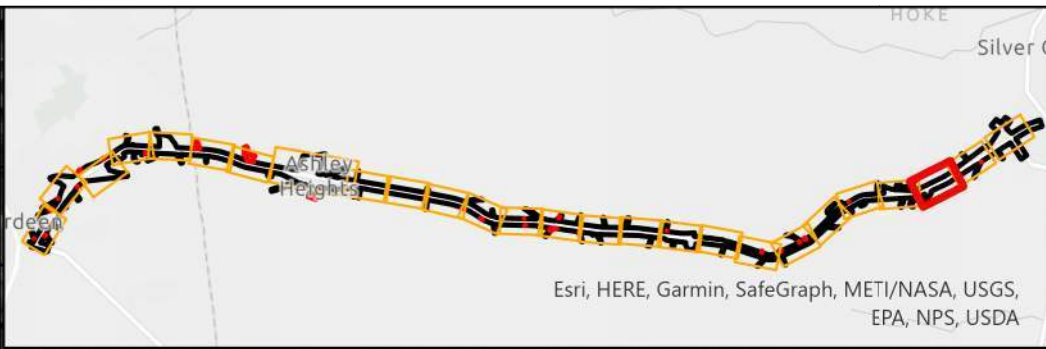
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**MOORE AND HOKE COUNTIES**

**Figure 2-W: Study Area Expansion (2021)**





**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

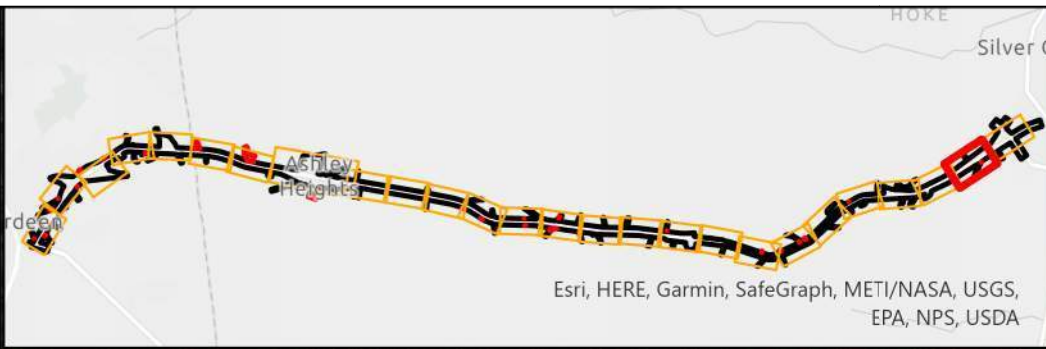


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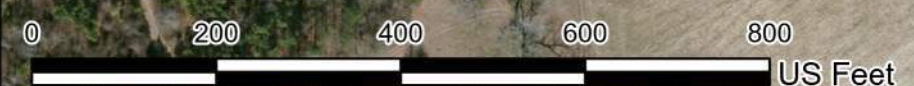
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**MOORE AND HOKE COUNTIES**

**Figure 2-X: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams

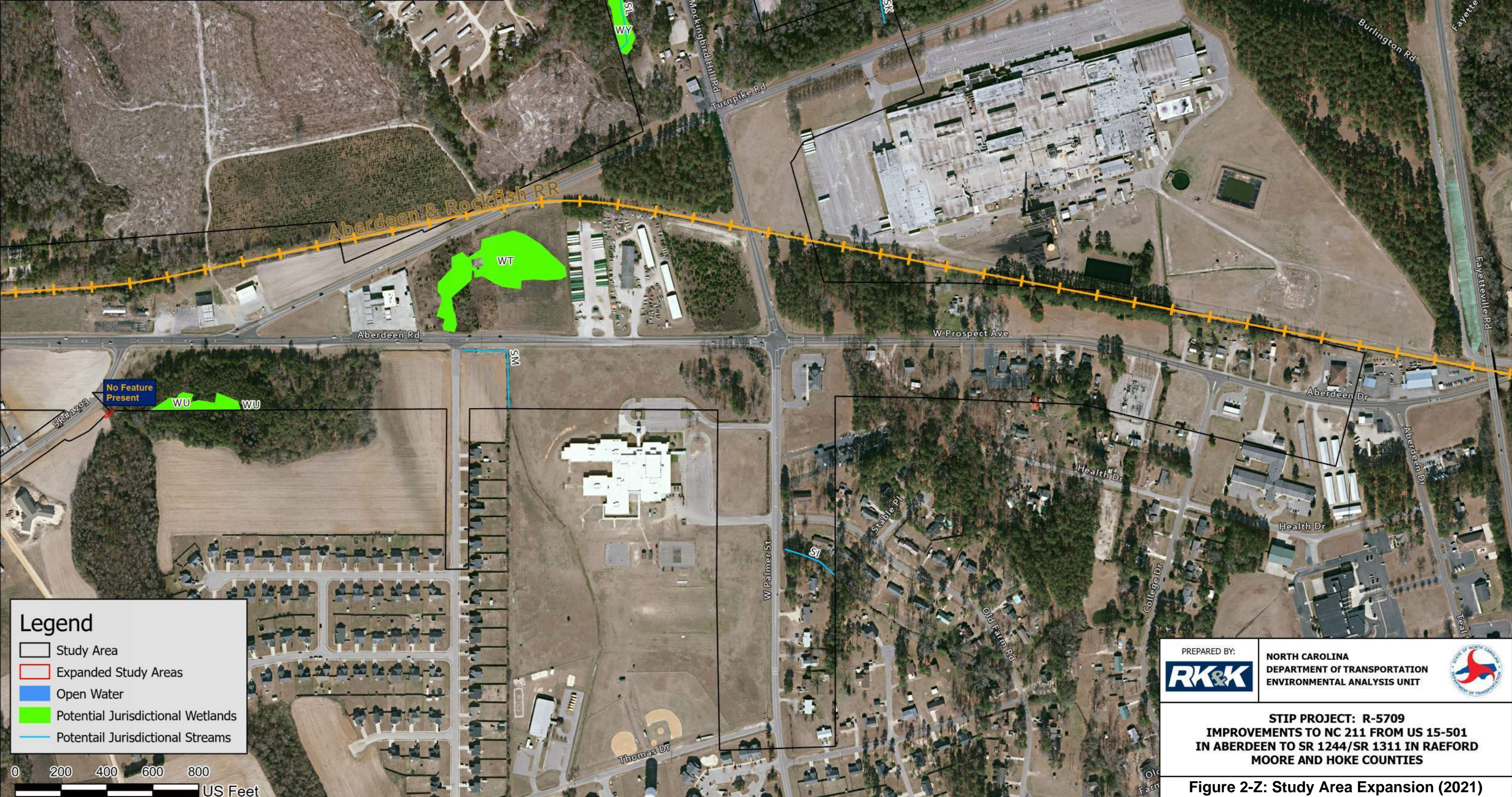
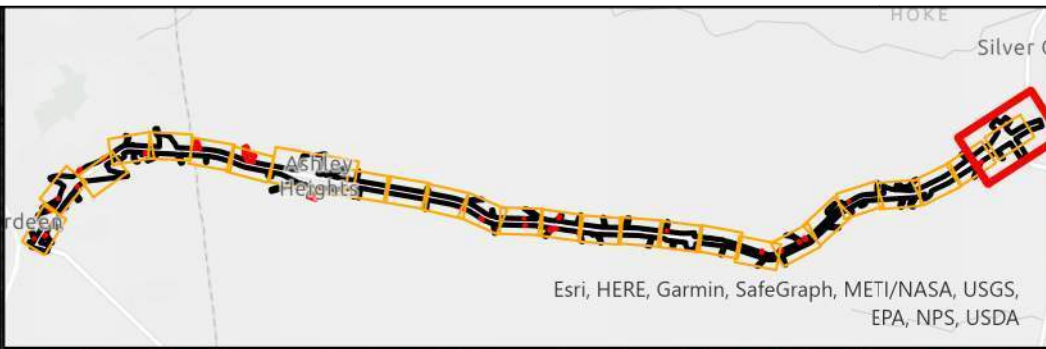


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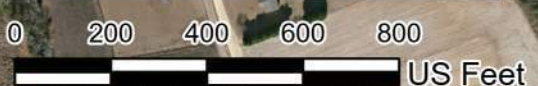
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**MOORE AND HOKE COUNTIES**

**Figure 2-Y: Study Area Expansion (2021)**



**Legend**

- Study Area
- Expanded Study Areas
- Open Water
- Potential Jurisdictional Wetlands
- Potential Jurisdictional Streams



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**Figure 2-Z: Study Area Expansion (2021)**



**Legend**

- Additional Project Study Area
- Project Study Area

**Water Resources**

- Potential Wetlands
- Potential Intermittent Stream
- Open Water

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<b>Arthur Lane Study Area Expansion</b>	