

## Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	<u>U-5967</u>
WBS Element	<u>45981.1.1</u>
Federal Project No.	<u>BGANY-0517(014)</u>

A. Project Description:

The North Carolina Department of Transportation proposes to upgrade the traffic signal system in Morrisville, Wake County. The Morrisville Traffic Signal System project proposes replacing signal cabinets at five intersections: Development Drive and Davis Drive, Davis Drive and Kit Creek Road, NC 55 and Kit Creek Road, Kit Creek Road and Louis Stephens Drive, and Louis Stephens Drive and the Cisco Access. The installation of aerial fiber optic cable on existing utility lines is proposed along NC 55 and the installation of underground fiber optic cable in a conduit is proposed along Kit Creek Road and Davis Drive. One new CCTV camera is proposed on an existing pole at Kit Creek Road and NC 55. The existing base-mounted signal cabinet at Kit Creek Road and NC 55 is proposed to be replaced with a new base-mounted cabinet in the southwest quadrant of the intersection. At the remaining four intersections, the base-mounted cabinets are proposed to be replaced with new base-mounted cabinets in the same location. Figure 1 shows the project vicinity and Figures 2-2.5 show the proposed design details.

According to the 2020-2029 NCDOT Draft STIP (updated August 2019), the project is currently scheduled to begin construction in fiscal year 2023 and is estimated to have a total cost of \$1,000,000.

B. Description of Need and Purpose:

Due to recent and anticipated population growth in the Town of Morrisville, a fiber-optic network and modern Ethernet-based network to improve signal timing and coordination is required to meet the growing needs of the population. The Town of Morrisville currently does not have a centralized signal system.

C. Categorical Exclusion Action Classification: (Check one)

TYPE I A

D. Proposed Improvements

8. Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

E. Special Project Information:

**Jurisdictional Features**

Eight jurisdictional streams, two ponds, and one wetland were identified within the study area, as documented in the *Natural Resources Technical Report* (July 2019). There are no anticipated impacts to surface waters.

**Floodway**

The project proposes construction of underground and aerial fiber lines across three regulatory floodway areas. The final construction grade is proposed to match the existing grade; therefore, no impacts to floodways are anticipated.

**Tribal Coordination**

This project falls within a North Carolina County (Wake) in which a federally recognized Tribe, the Catawba Indian Nation, has expressed an interest in ground disturbing activities. The Catawba Indian Nation was notified about the project on April 12, 2019. In a letter dated May 21, 2019, the Catawba Indian Nation indicated there were no immediate concerns with regard to the project area and requested to be notified if Native American artifacts and/or human remains are located during construction of the project.

**Hazardous Materials**

An active underground storage tank (UST) is located adjacent to the project (Sheetz Inc 555), shown in Figure 2.2. While the proposed construction does encroach on the parcel, the construction activities are not anticipated to impact the active UST.

A former small quantity hazardous waste generator site (GSK) is shown in Figure 2.4. The site stopped generating hazardous waste in November 2016 and is no longer classified as a hazardous waste generator.

**Cultural Resources**

A "No Survey Required Form" was completed by the NCDOT Historic Architecture group on March 25, 2019. A "No Archaeological Survey Required Form" was completed by the NCDOT Archaeology group on March 18, 2019.

F. Project Impact Criteria Checklists:

<u>Type I &amp; II - Ground Disturbing Actions</u>			
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>			
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other Considerations (continued)		Yes	No
15	Does the project involve hazardous materials and/or landfills?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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), 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F

**Question 1**

The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (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. The programmatic determination for NLEB for the NCDOT program is May Affect, Likely to Adversely Affect. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake County, where TIP U-5967 is located. This level of incidental take is authorized from the effective date of a final listing determination through April 30, 2020.

**Question 8**

Given that the current project scope does not anticipate any stream impacts, the tentative biological conclusion for mussel species is No Effect. If the project scope changes to include aquatic impacts, this conclusion will need to be reevaluated.

**Question 10**

This project is within the Jordan Lake Watershed where a 50-foot riparian buffer applies to surface waters. Installing a non-electric utility line within a pre-established maintained corridor is exempt from new riparian buffer impacts. The proposed underground fiber conduit is within the pre-established maintained corridor and therefore impacts to riparian buffers are not anticipated.

**Question 15**

An active underground storage tank (UST) is located adjacent to the project (Sheetz Inc 555), shown in Figure 2.2. The proposed construction is directionally drilling from an existing utility pole on the edge of the parcel to a signal pole within NCDOT right-of-way. The construction activity is not anticipated to impact the active USTs located in the parcel.

H. Project Commitments

**Wake County  
Morrisville Traffic Signal System  
STIP No.: U-5967  
WBS No.: 45981.1.1  
FA No.: BGANY-0517(014)**

NCDOT Archaeology

The NCDOT Archaeology Group will notify the Catawba Indian Nation if Native American artifacts and/or human remains are located during construction of the project.

NCDOT Environmental Analysis Unit Biological Survey Group

The current plans do not include proposed impacts to jurisdictional streams. If the project scope changes to include aquatic impacts, species surveys would be required prior to construction to satisfy Section 7.

I. Categorical Exclusion Approval

STIP Project No.	<u>U-5967</u>
WBS Element	<u>45981.1.1</u>
Federal Project No.	<u>BGANY-0517(014)</u>

**Prepared By:**

9/4/2019

Date

DocuSigned by:  
*Teresa Gresham, P.E.*  
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 E67C81DDF5A44BC...  
 Teresa Gresham, PE  
 Kimley-Horn and Associates

**Prepared For:**

Division of Highways  
North Carolina Department of Transportation

**Reviewed By:**

9/4/2019

Date

DocuSigned by:  
*Eileen Fuchs*  
 \_\_\_\_\_  
 EE6204B13836401...  
 Eileen Fuchs  
 Project Management Unit  
 North Carolina Department of Transportation

**Approved**

If all of the threshold questions (1 through 7) of Section F are answered "no," NCDOT approves this Categorical Exclusion.

**Certified**

If any of the threshold questions (1 through 7) of Section F are answered "yes," NCDOT certifies this Categorical Exclusion.

9/4/2019

Date

DocuSigned by:  
*Pamela R Williams*  
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 48D1AAF4334D463...  
 Pamela R. Williams  
 Project Management Unit – Team Lead  
 North Carolina Department of Transportation

FHWA Approved:

Date

N/A  
 \_\_\_\_\_  
 John F. Sullivan, III, PE Division Administrator  
 Federal Highway Administration

19-02-0034



## HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

### PROJECT INFORMATION

<b>Project No:</b>	U-5967	<b>County:</b>	Wake
<b>WBS No.:</b>	45981.1.1	<b>Document Type:</b>	CE
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	USACE
<b>Project Description:</b> Install town wide signal system in Morrisville			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<b><u>Description of review activities, results, and conclusions:</u></b> Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on March 25, 2019. Based on this review there are no NR, DE, LL, SL or SS in the Area of Potential Effects (APE). There are no structures over 50 years of age in the APE. No Survey is required at this time.
<b><u>Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:</u></b> Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities are considered valid for the purposes of determining the likelihood of historic resources being present.

### SUPPORT DOCUMENTATION

Map(s)     Previous Survey Info.     Photos     Correspondence     Design Plans

### FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

*Shelby Reap*

NCDOT Architectural Historian

*March 25, 2019*

Date

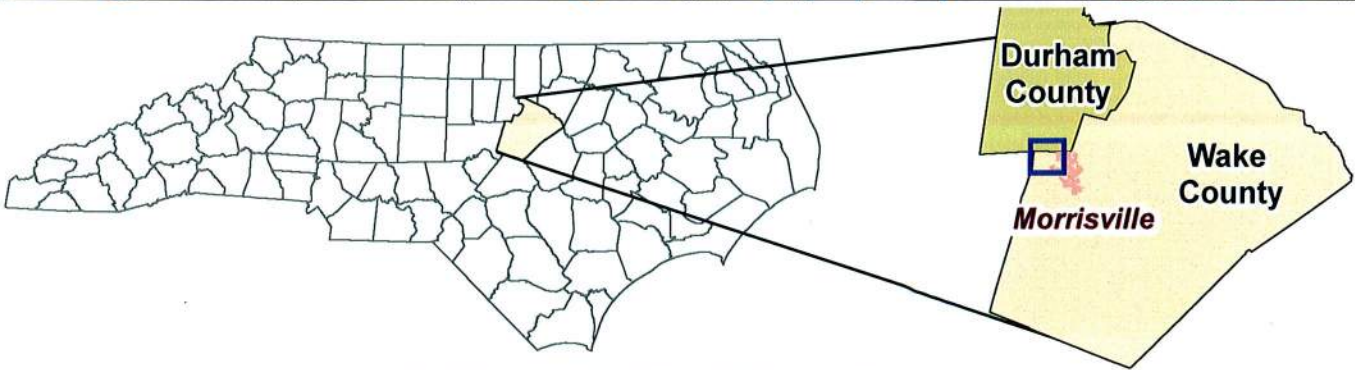
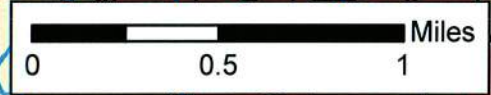
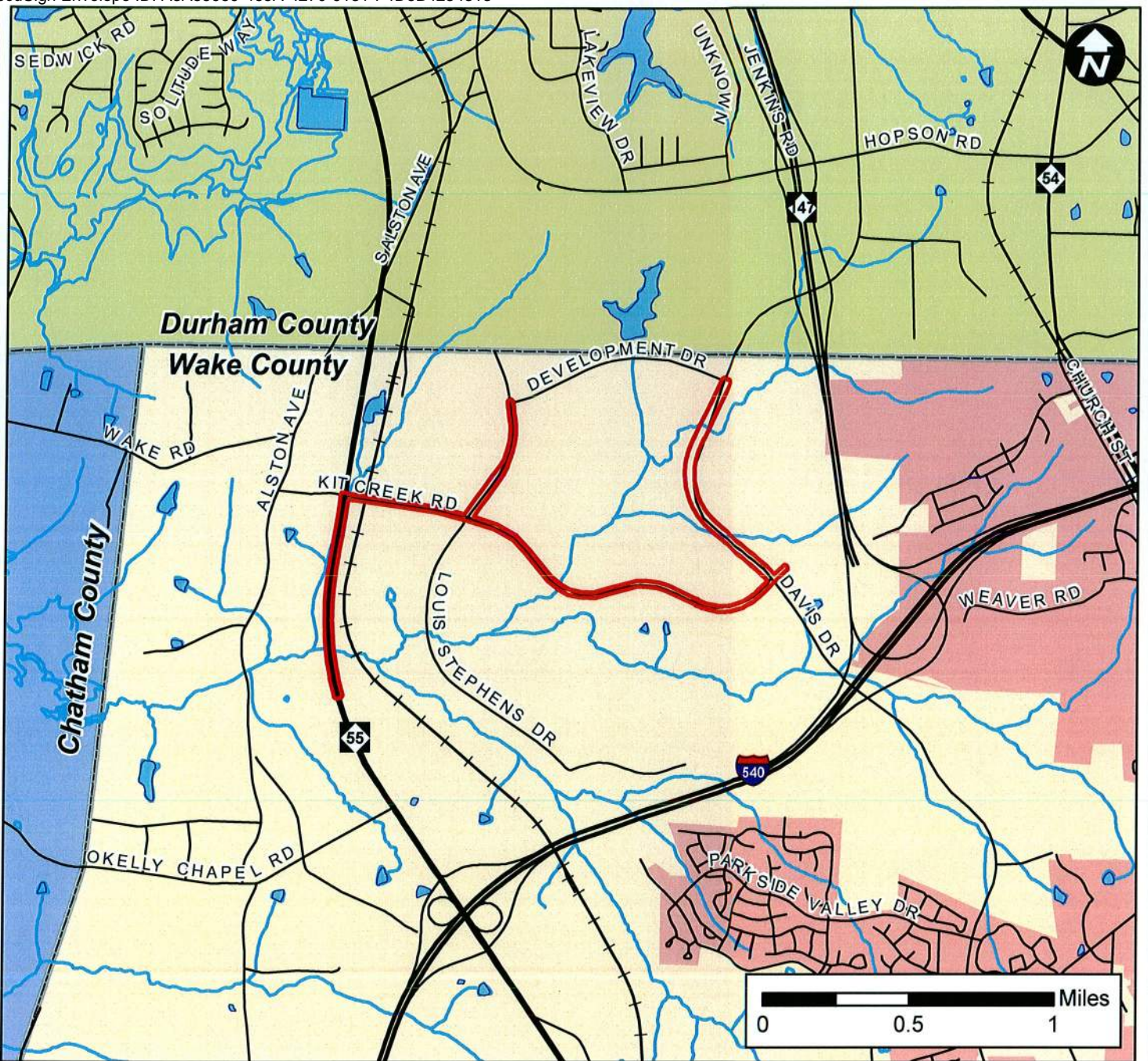






- U-5967 Study Area
- Hazardous Waste Site
- Underground Storage Tank - Active
- Underground Storage Tank (Incident)
- + - Railroad
- Streams (NCDEQ)
- Body of Water
- Wetlands (NWI)
- Floodway
- 100-Yr Floodplain
- 500-Yr Floodplain

**Figure 2**  
**Environmental Features**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County



- ▭ U-5967 Study Area
- ▭ Body of Water (NWI)
- Streams (NCDEQ)
- + Railroad
- ▭ Chatham County
- ▭ Wake County
- ▭ Durham County
- ▭ Town of Morrisville

**Figure 1**  
**Vicinity Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County

19-02-0034



## NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



### PROJECT INFORMATION

*Project No:* **U-5967**                      *County:* **Wake**  
*WBS No:* **45981.1.1**                      *Document:* **C E**  
*F.A. No:* **BGANY-0517(014)**              *Funding:*     State     Federal

*Federal Permit Required?*                       Yes     No    *Permit Type:* **usace**

**Project Description:** NCDOT proposes to upgrade and expand a portion of the existing Morrisville signal system / ITS in Wake County. The work may include improvements to the existing traffic signals, communications upgrade and expansion, field equipment upgrades, and expansion of the video monitoring system. In addition to possible aerial or wireless connections, some underground earth disturbances may be expected in the form of trench excavation, bored directional drilling, pole installation and footings for other operations and control equipment. Total coverage of the project is listed as 7.90 miles though measuring provided mapping yields about 3.65 miles. Much of the work has a very minor width and will be done over already disturbed roadside environments, most often with the existing ROW. Therefore, the archaeological Area of Potential Effects amounts to a series of narrow, linear improvements above and below ground and small points where any new posts/poles for traffic signals, overhead wires or cameras, or utility/communications control boxes, are required. For purposes of this review, the focus is on the subsurface improvements. Under the Programmatic Agreement for Minor Transportation Projects (PA), all of these are generally exempt activities, however, the wide spread scale of this project resulted in further input from our office.

This is federally funded project, therefore Section 106 of the National Historic Preservation Act applies for the archaeological review. A USACE permit may be necessary, too. Please note that a separate review is required for Historic Architecture.

### SUMMARY OF CULTURAL RESOURCES REVIEW

#### ***Brief description of review activities, results of review, and conclusions:***

USGS and GIS mapping shows the project area is present northwest of Morrisville in Wake County. While there are undeveloped parcels, the area has undergone very recent modern development. Virtual streetside viewing was conducted at certain locations and showed conditions including utilities, driveways, wooded lots, etc. along the project streets. According to USGS mapping and GIS resources (data layer created by NCDOT archaeologist Paul J. Mohler), a small number of cemeteries are present nearby the APE though will be avoided. Should designs or fieldwork encounter cemeteries or suspected human remains, please contact this office immediately for further input.

The Office of State Archaeology was visited in the spring of 2019 to review archaeological mapping and to reference any known archaeological surveys and sites. This helps establish an archaeological context for comparison. There have been several archaeological reviews in the general project vicinity, mostly compliance-based research. Of these are notable transportation projects initiated by NCDOT including the Davis Drive Extension (TIP # R-2121) towards the east and I/NC 540 to the south. Site 31Wa555 was identified adjacent to the APE for TIP R-2121. This historic farmstead was not recommended as eligible for the National Register of Historic Places. The report for that survey also identified the Marcom Family Cemetery in the nearby vicinity. The cemetery had been captured in the GIS cemetery database maintained by NCDOT archaeologist Paul Mohler and is the only one documented near the APE, though it is a few

19-02-0034

hundred feet from the APE and will not be affected. Several other archaeological sites were identified for I/NC 540 though they are quite far from the project area. The scale of impacts of the signalization and IT project vs. construction of a new interstate is the reason the later project required survey and so many sites were found on that larger, new location project.

The ground disturbing footprint of this project is limited, having great length in certain areas but is otherwise extremely narrow. There will be no notable large or expanded impact areas and much of the project will overlap existing facilities and ROW. Due to the nature of the roadside improvements, much of the APE has already been impacted and is considered to have disturbed soils. Expectations are low that an intact, significant archaeological site would be affected during the signal system improvements based on the relative scale of the footprint. No new archaeological survey is recommended for this undertaking as currently proposed. For archaeological review, the proposed signal system upgrade should be considered compliant with Section 106.

***Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:***

The scale and nature of the project is limited to narrow subsurface impacts, generally within a disturbed archaeological context and within existing modified ROW. It is unlikely that any archaeological remains will be encountered that are present that would be intact and significant, or otherwise eligible for listing on the National Register of Historic Places for their subsurface remains. Cemeteries appear to be avoided. For archaeological review, this federally funded undertaking should be considered compliant with Section 106. A separate review from the NCDOT Architectural History team is required for their input. Should any cemeteries, human remains or unanticipated archaeological discoveries be encountered during the project, please contact our office immediately for any necessary further input.

This project falls within a North Carolina County in which a federally recognized Tribe, the Catawba Indian Nation, has expressed an interest. It is recommended that you contact each federal agency involved with your project to determine their Section 106 Tribal consultation requirements.

**SUPPORT DOCUMENTATION**

See attached:  Map(s)  Previous Survey Info  Photos  Correspondence  
 Photocopy of County Survey Notes Other:

**FINDING BY NCDOT ARCHAEOLOGIST**

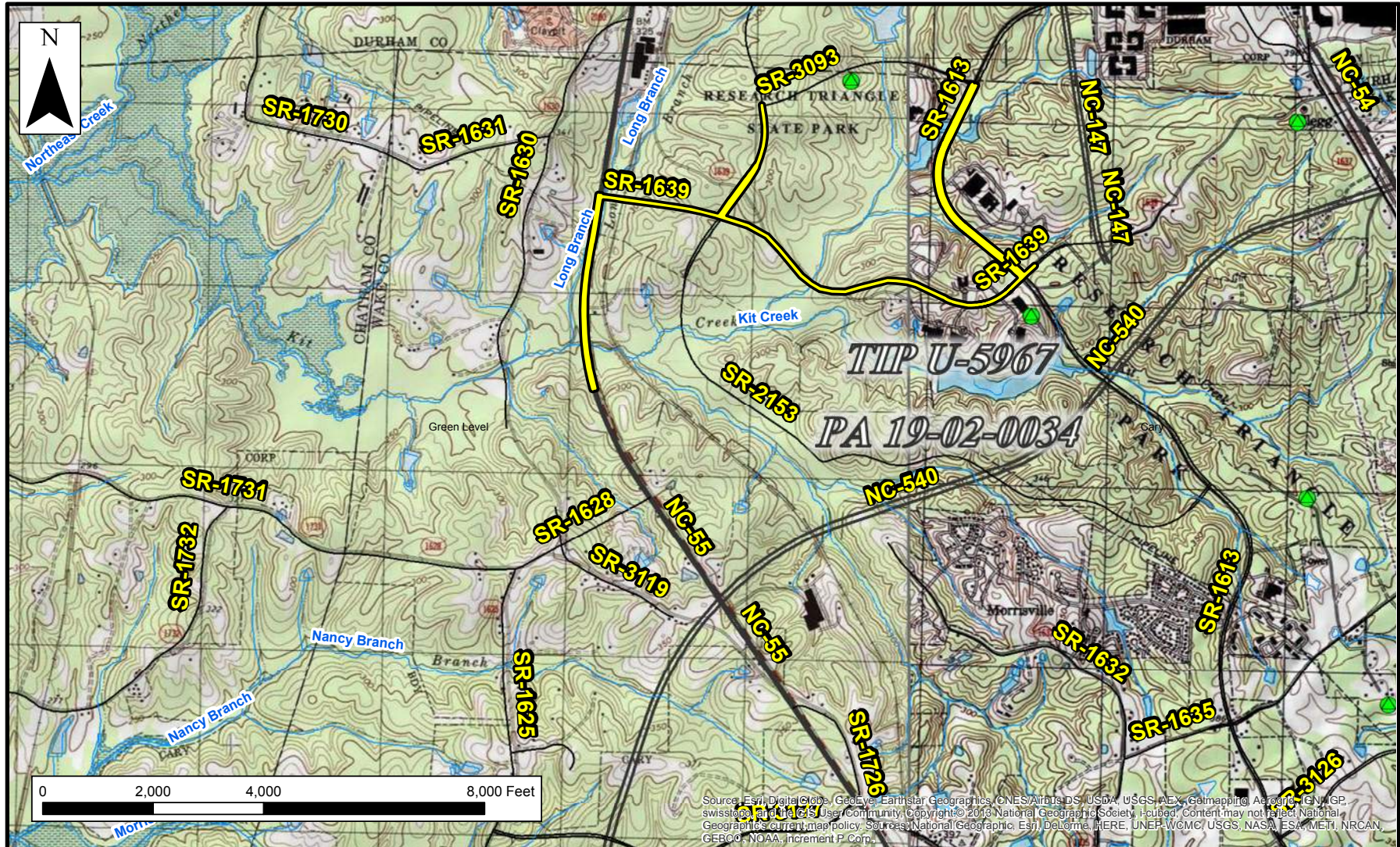
NO ARCHAEOLOGY SURVEY REQUIRED



NCDOT ARCHAEOLOGIST

3/18/2019

Date



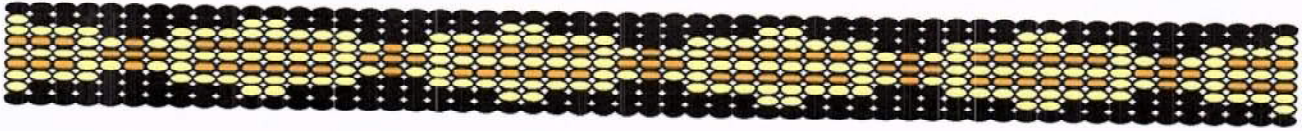
**Figure 1. Vicinity of TIP # U-5967 / PA 19-02-0034, the proposed upgrade and installation of a computerized traffic signal system for a portion of Morrisville in Wake County. The project area shown here on USGS mapping (Green Level and Cary) as the APE is larger than the expected actual impacts of the upgrade. The actual footprint may be very narrow and will usually be adjacent to the existing road and facilities.**



Figure 2. Aerial map of TIP # U-5967 / PA 19-02-0034, the proposed upgrade and installation of a computerized traffic signal system for a portion of Morrisville in Wake County. Circumscribed triangles, in green, show known cemetery locations, all of which appear avoided by the subsurface work.

Tribal Historic Preservation Office  
1536 Tom Steven Road  
Rock Hill, South Carolina 29730

Office 803-328-2427  
Fax 803-328-5791



May 21, 2019

Attention: Eileen Fuchs  
NC Dept. of Transportation  
1582 Mail Service Center  
Raleigh, NC 27699-1582

Re. THPO #	TCNS #	Project Description
2019-193-5		SYIP Project U-5967 – upgrade 5 traffic signals & install 4 miles of fiber optic cable & 1 new CCTV camera at an existing signal on the Morrisville Traffic Signal System in Wake County

Dear Ms. Fuchs,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

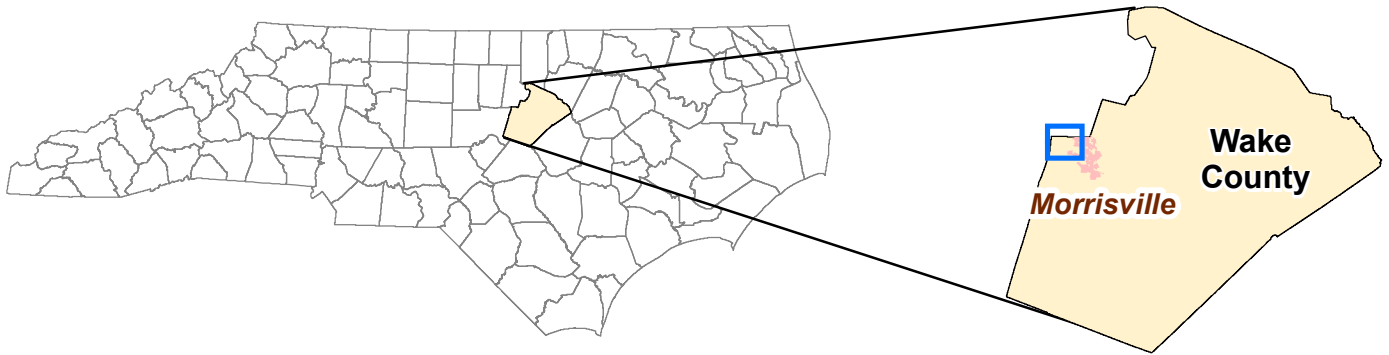
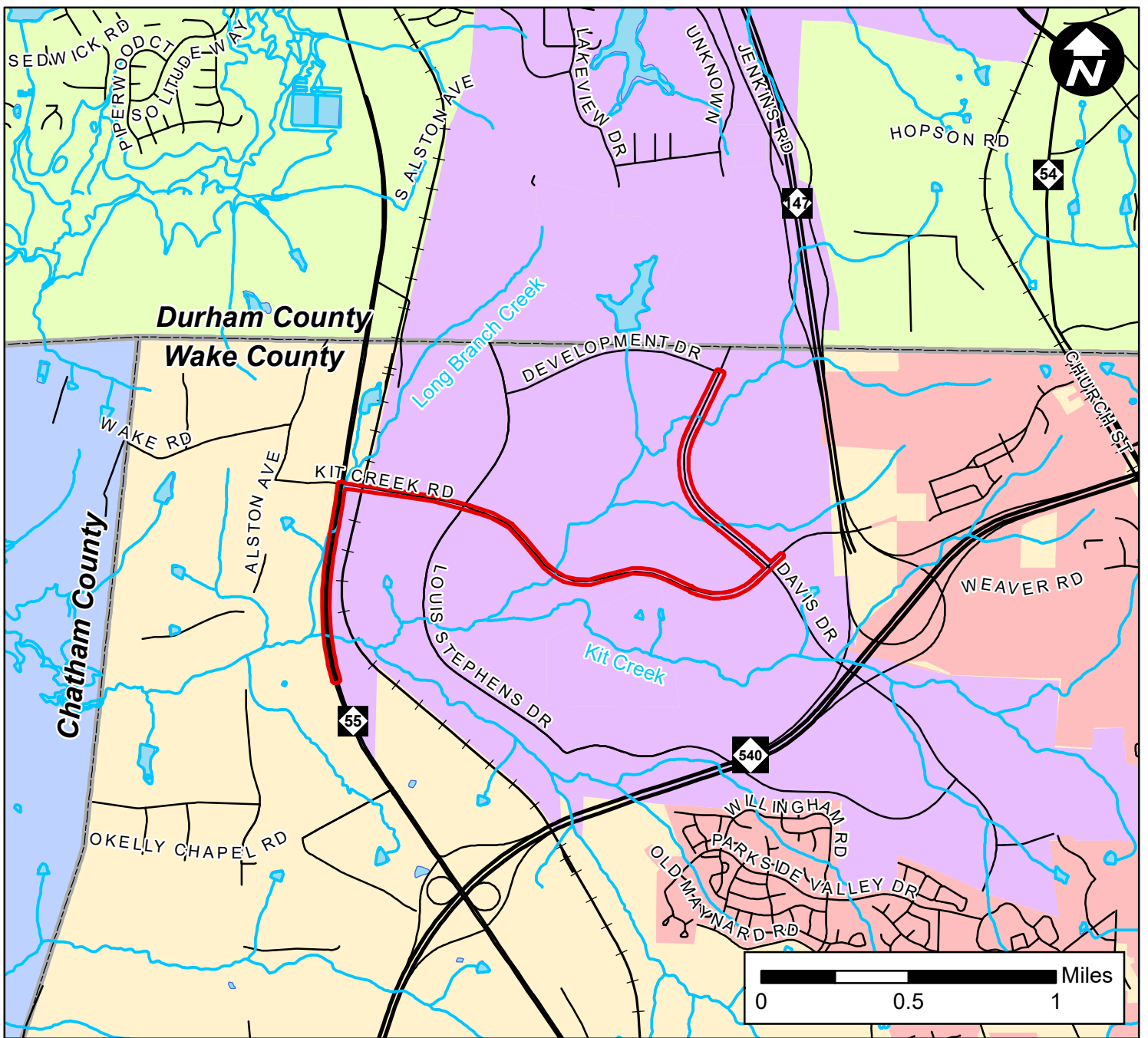
If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail [caitlinh@ccppcrafts.com](mailto:caitlinh@ccppcrafts.com).

Sincerely,

A handwritten signature in cursive script that reads "Caitlin Rogers for".

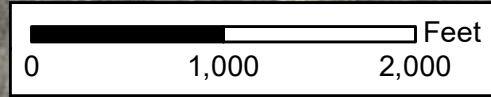
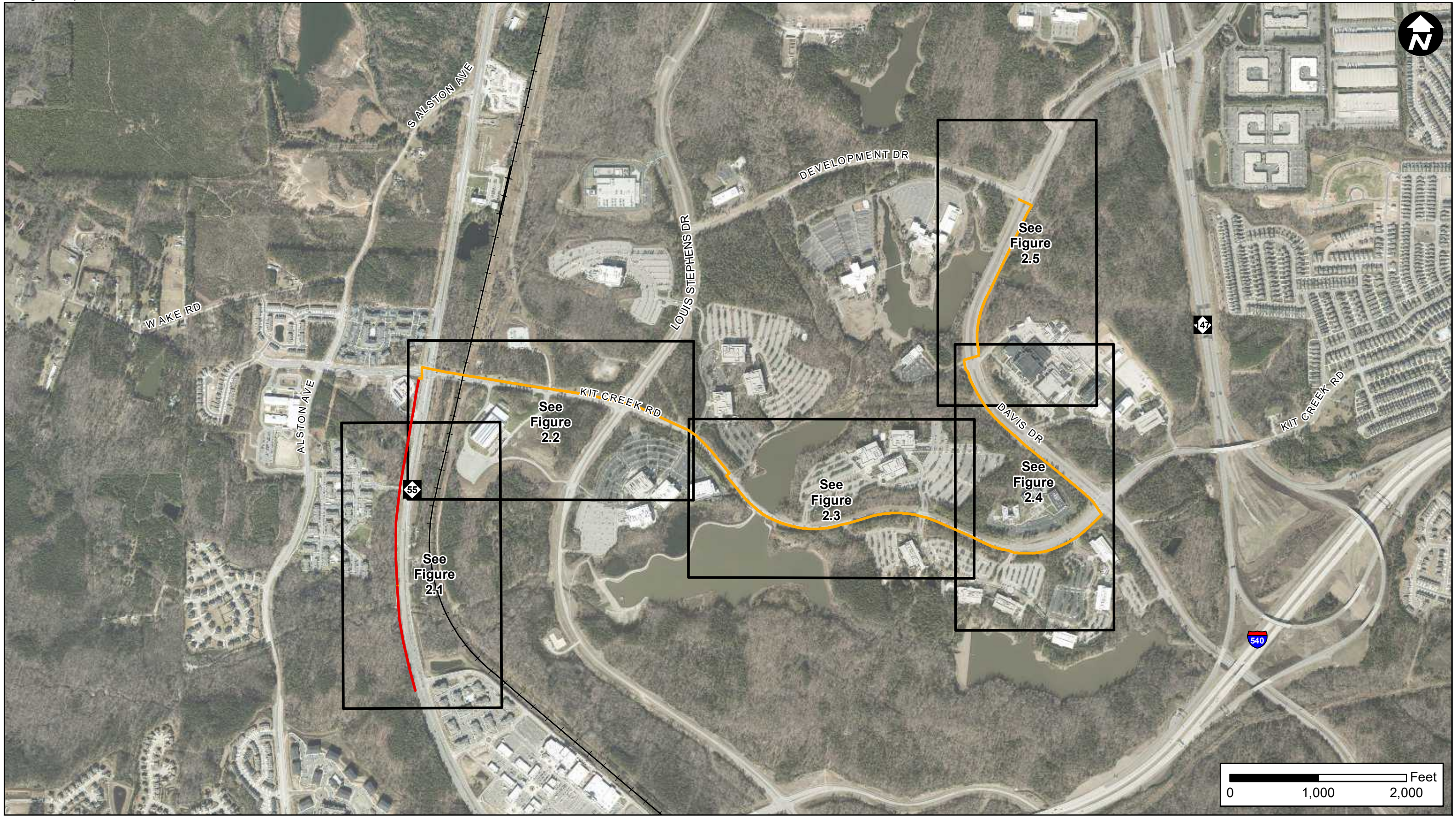
Wenonah G. Haire  
Tribal Historic Preservation Officer





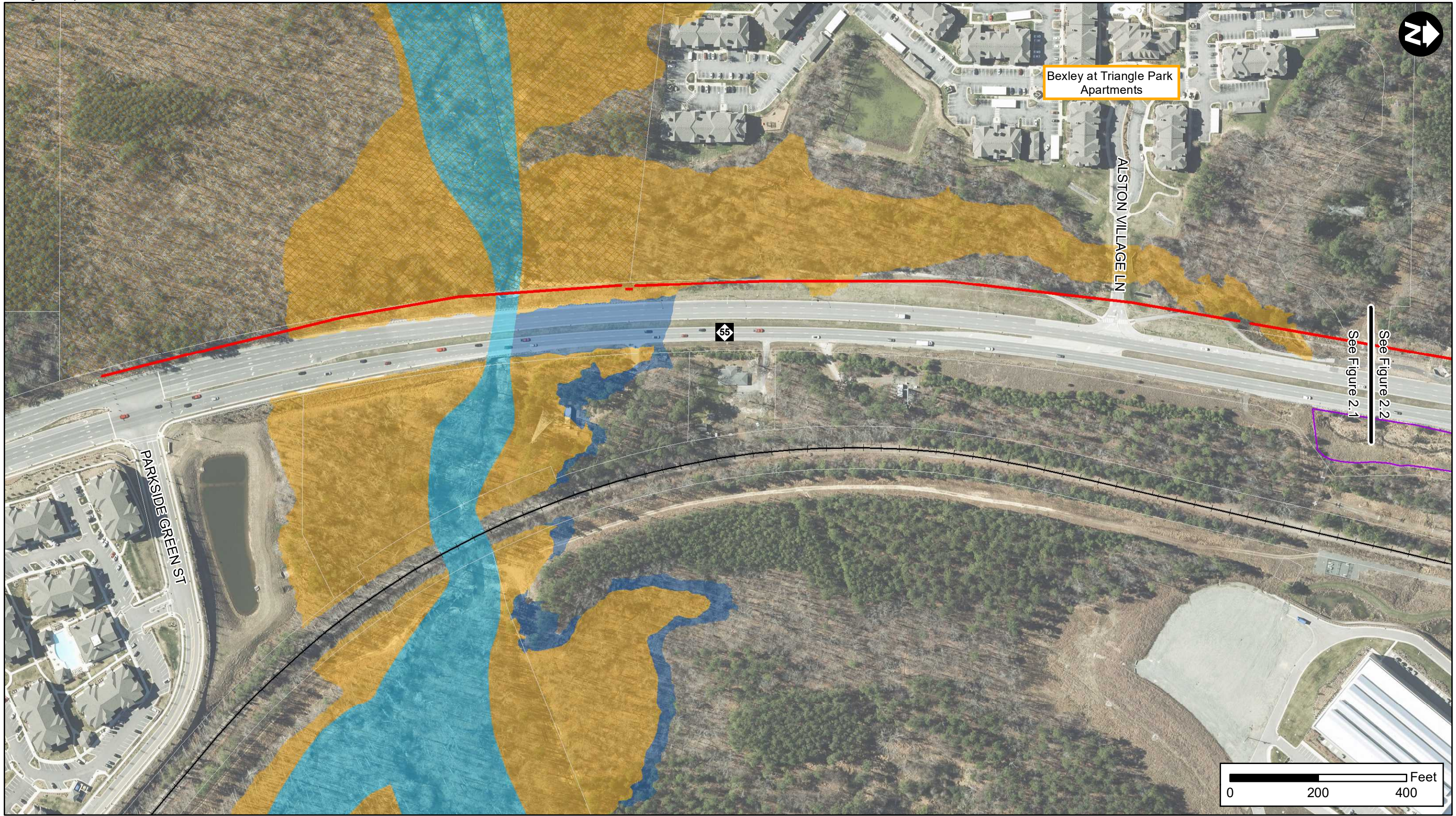
- U-5967 Study Area
- Streams (NCDEQ)
- Railroad
- Body of Water (NWI)
- Town of Morrisville
- Research Triangle Park
- Chatham County
- Wake County
- Durham County

**Figure 1**  
**Vicinity Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County

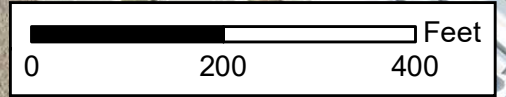


- Proposed Aerial Fiber
- Proposed Underground Fiber
- +— Railroad
- ▭ Figures 2.1-2.5 Extents

**Figure 2**  
**Environmental Features: Cover Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County

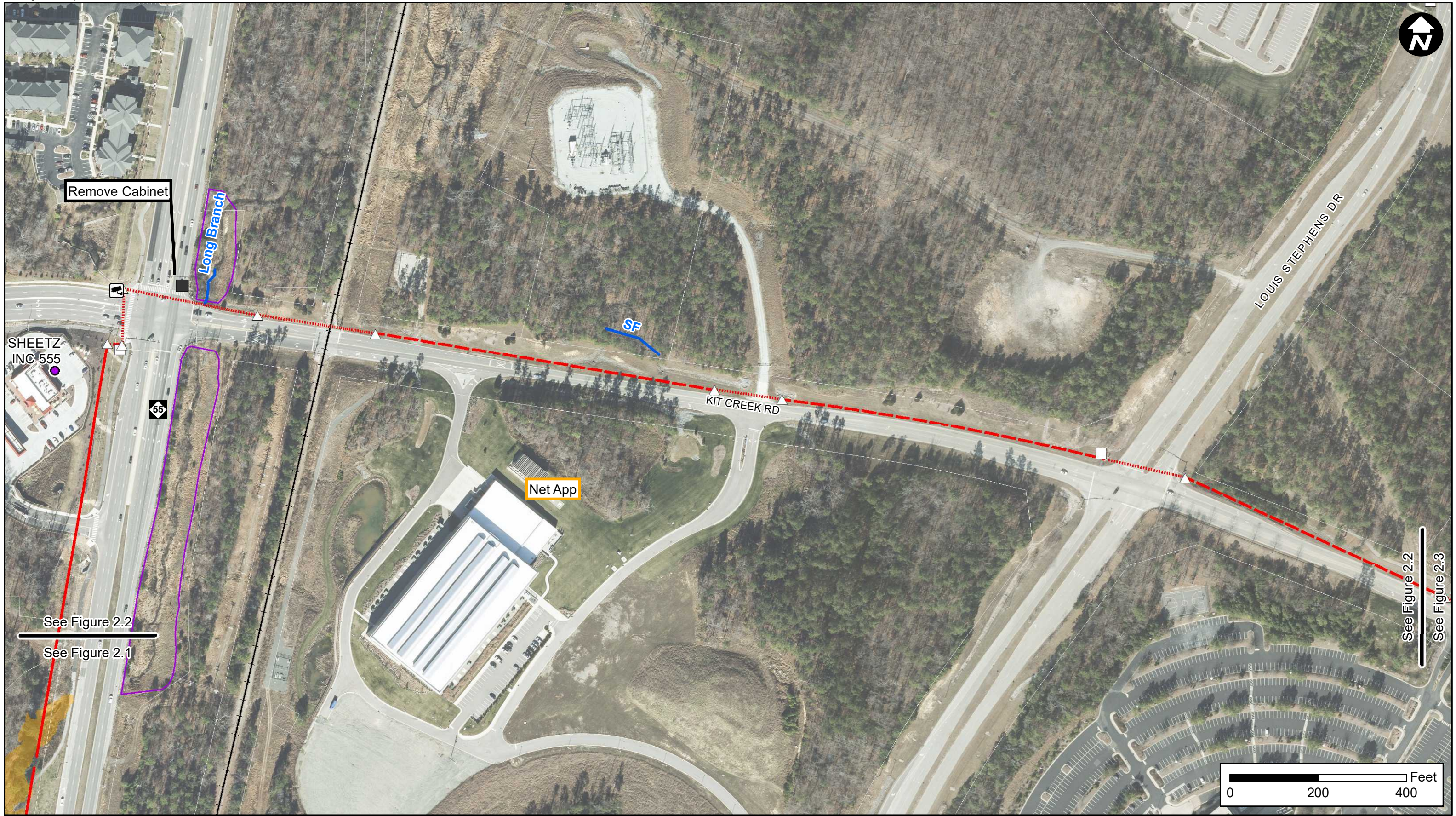


- Proposed Aerial Fiber
- - - Proposed Conduit
- Railroad
- Property Lines
- NCDOT Mitigation Site
- Local Government Ownership
- Floodway
- 100-Yr Floodplain
- 500-Yr Floodplain



**Figure 2.1**  
**Environmental Features Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County





- |                       |                                       |                       |
|-----------------------|---------------------------------------|-----------------------|
| Proposed Cabinet      | Proposed Conduit                      | Property Lines        |
| Proposed CCTV Camera  | Proposed Directional Drilling Conduit | NCDOT Mitigation Site |
| Proposed Junction Box | Delineated Streams                    | 100-Yr Floodplain     |
| Proposed Aerial Fiber | Railroad                              |                       |

**Figure 2.2**  
**Environmental Features Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County



See Figure 2.2

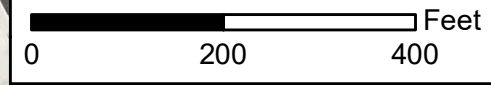
See Figure 2.3

See Figure 2.3

See Figure 2.4



- △ Proposed Junction Box
- Proposed Conduit
- ..... Proposed Directional Drilling Conduit
- Delineated Streams
- Delineated Pond
- Property Lines
- Floodway
- 100-Yr Floodplain
- 500-Yr Floodplain



**Figure 2.3**  
**Environmental Features Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County

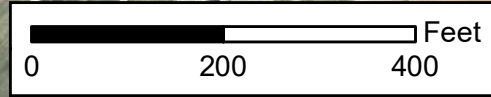


See Figure 2.3

See Figure 2.4

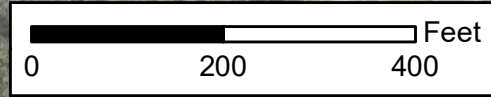
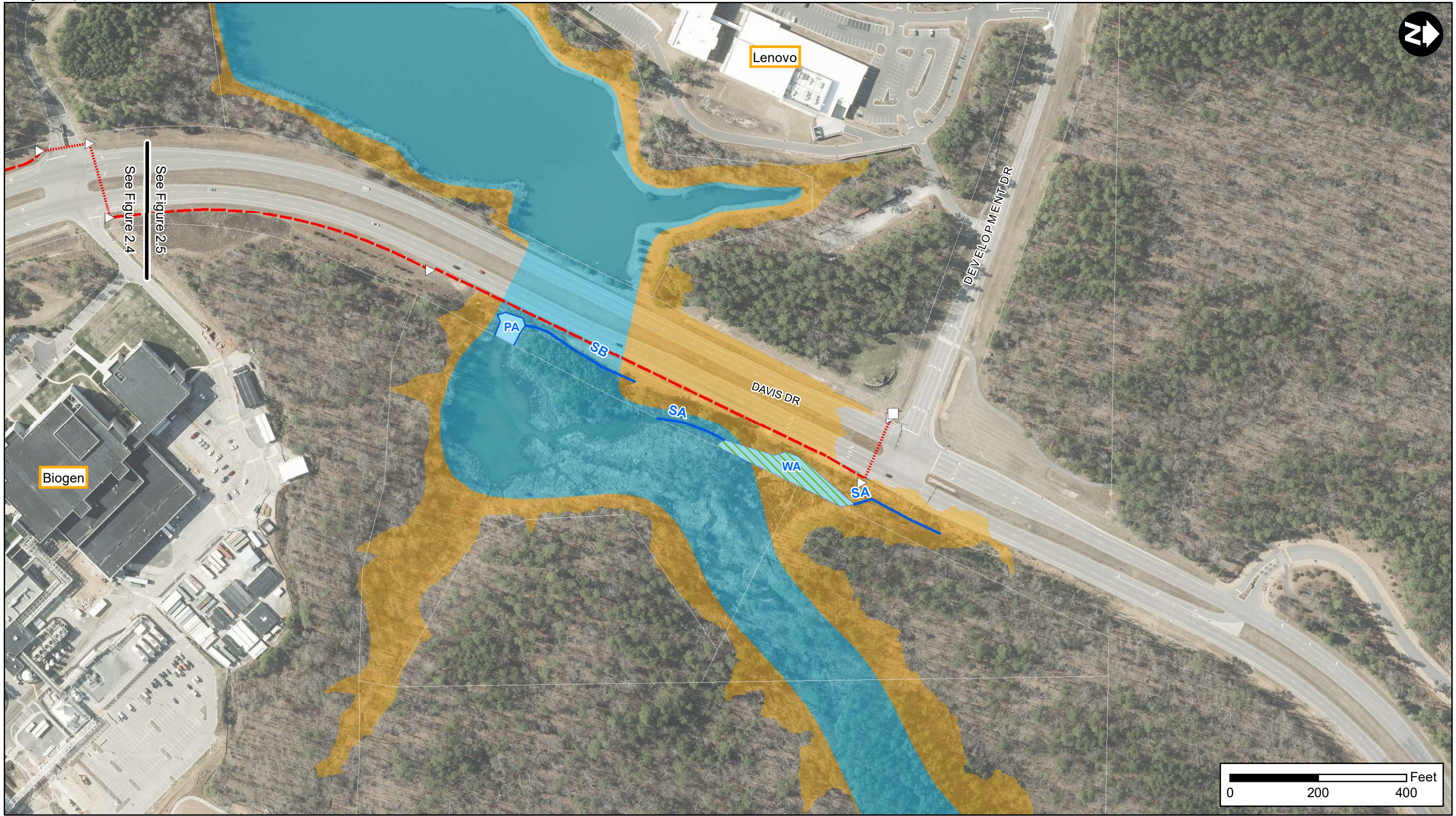
See Figure 2.4

See Figure 2.5



- Proposed Cabinet
- △ Proposed Junction Box
- Proposed Conduit
- ⋯ Proposed Directional Drilling Conduit
- Delineated Streams
- Property Lines
- Floodway
- 100-Yr Floodplain

**Figure 2.4**  
**Environmental Features Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County



- Proposed Cabinet
- △ Proposed Junction Box
- Proposed Conduit
- ⋯ Proposed Directional Drilling Conduit
- Delineated Streams
- Delineated Pond
- ▨ Delineated Wetland
- Property Lines
- Floodway
- 100-Yr Floodplain



**Figure 2.5**  
**Environmental Features Map**  
 NCDOT Project No. U-5967  
 Morrisville Signal System  
 Morrisville, Wake County