

Avoidance and Minimization for Sunset Avenue Improvements

NCDOT STIP Project # U-5026

PREPARED FOR



NCDOT Division 4
509 Ward Boulevard
P.O. Box 3165
Wilson, North Carolina

PREPARED BY



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Suite 500
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August 21, 2019

1. Meeting Purpose

The purpose of this meeting is to introduce NCDOT STIP Project # U-5026 to the Merger Team and to reach concurrence on Avoidance and Mitigation Measures (CP4A) for the subject project. A Merger Screening meeting was held on October 19, 2010. Due to the limited number of alternatives that could be considered for this type of project, it was suggested that the project enter the Merger Process at Concurrence Point 4A.

2. Project Description

STIP Project # U-5026 involves converting the existing Sunset Avenue (SR 1770) grade separation with I-95 to an interchange; widening Sunset Avenue between Old Carriage Road (SR 1603) and Halifax Road (SR 1544); and extending the existing collector-distributor along I-95 at US 64 to the south of the proposed interchange. The proposed project is in Rocky Mount, which is located in eastern Nash County. The project location is shown in Figure 1 and the Environmental Features are shown in Figure 2.

Proposed Improvements

Roadway

A half-cloverleaf interchange, with ramps and loops in the southwest and southeast quadrants, is proposed at the SR 1770 (Sunset Avenue) grade separation with I-95.

Roundabouts are proposed at the intersections of the I-95 ramps and loops with SR 1770 (Sunset Avenue). The existing bridge carrying SR 1770 (Sunset Avenue) over I-95 would be replaced with a new multi-lane bridge.

The existing collector-distributor on I-95 at US 64 would be extended southward in each direction to approximately 3,400 feet south of SR 1770. Access from I-95 to SR 1770 would be provided via the extended collector-distributor system.

SR 1770 would be widened to a four-lane median divided roadway, with two travel lanes in each direction from SR 1603 (Old Carriage Road) to SR 1544 (Halifax Road). Median breaks will be provided at the following locations:

- Full movement intersections
 - SR 1603 and SR 1770 (signalized)
 - Arrow Road and SR 1770 (roundabout)
 - Ramp terminals in southwest quadrant, Freight Drive, and SR 1770 (modified roundabout)
 - Ramp terminals in southeast quadrant and SR 1770 (roundabout)
 - SR 1544 and SR 1770 (signalized)

- Partial movement intersections
 - Westry Road
 - Sunshine Drive
 - Third Street / Pope Street

In addition, U-turn bulbs that could accommodate buses would be provided at several locations along SR 1770.

Structures

A new bridge would be built to carry SR 1770 over I-95 to accommodate the additional lanes added to SR 1770.

Design Speed

A 70 mile per hour (MPH) design speed is proposed for the mainline of I-95. A 60 MPH design speed is proposed for the I-95 collector-distributor. A 50 MPH design speed is proposed for SR 1770.

Speed Limit

The posted speed limit on I-95 would remain 70 MPH following project construction. The posted speed limit on SR 1770 would remain 45 MPH following project construction.

Right of Way and Access Control

Additional right of way would be required along both sides of I-95 in order to accommodate the proposed interchange and extended collector-distributor. Approximately 120 feet of right of way would be required along SR 1770 to accommodate for the typical section. Temporary easements may also be required for construction and/or utilities.

Full control of access would be maintained along I-95. Full control of access would be implemented along SR 1770 within approximately 400 feet of the proposed ramps, while partial control of access (one access per parcel) would be implemented in the vicinity of the proposed interchange. Partial control of access is proposed along SR 1770 on the west side of I-95 from approximately 400 feet west of Ben Layton Circle to 400 feet west of the proposed ramps and on the east side of I-95 from approximately 400 feet east of the proposed ramps to approximately 650 feet west of Pope Street/Third Street. No control of access is proposed for the remainder of SR 1770 within the project limits.

Bicycle Accommodations/Sidewalks

Pedestrians and bicyclists are prohibited from using I-95. As such, the project does not include pedestrian or bicycle accommodations along I-95.

Throughout the project development process, NCDOT coordinated with local stakeholders regarding bicycle and pedestrian accommodations. The City of Rocky Mount has approved the proposed design which includes a 10' multi-use path on the north side of Sunset Avenue from SR 1603 (Old Carriage Road) to SR 1544 (Hailfax Road). At the request of the City of Rocky Mount, NCDOT will enter into a municipal agreement with the City to fund five-foot sidewalks on the south side of SR 1770 within the project limits. Based on NCDOT's

Pedestrian Policy, the City of Rocky Mount will fund 40 percent of the cost of these improvements and accept maintenance and liability for the sidewalk and multi-use path. A municipal agreement between NCDOT and the City of Rocky Mount will be prepared prior to construction.

3. Project Status, Background, Impacts, and Schedule

Status

The project is included in the 2018-2027 NCDOT State Transportation Improvement Program (STIP) and will be funded through both Federal and State funds. Right of way acquisition and construction are scheduled to begin in Fiscal Year 2020. Proposed improvements to Sunset Avenue (SR 1770) were identified in the 2013 Rocky Mount Urban MPO Metropolitan Transportation Plan 2040. In this plan, Sunset Avenue is identified as a key area of growth in the city of Rocky Mount.

Background

U-5026 was originally proposed in support of a Rocky Mount Area Chamber of Commerce economic development initiative. The proposed project was intended to increase access to developable property near the convergence of I-95 and US 64. The Interstate Access Report (IAR) and Categorical Exclusion (CE) were approved and signed in 2017. A revised CE is currently under development and signature is anticipated in August 2019.

No developer has expressed interest in the property located near the convergence of I-95 and US 64 since completion of the IAR and CE. As a result, NCDOT revisited the potential need for, and subsequent benefits of, the proposed project in light of this new information. As demonstrated in the 2014 traffic analysis, the proposed project is warranted based on the potential traffic benefits of the new interchange and associated Sunset Avenue improvements. The proposed interchange would shift traffic off of US 64, resulting in the interchange improving the Level of Service (LOS). The new interchange itself would also operate at an acceptable LOS.

Therefore, based on NCDOT's review of project-related data and current information, the purpose of the proposed project is to improve regional mobility as a parallel route to US 64 and connector between Rocky Mount and Nashville. The proposed project is needed to reduce congestion and improve connectivity.

The following projects are located in the vicinity of STIP Project # U-5026:

- STIP Project # I-5761 is a pavement rehabilitation project along I-95 currently under construction from SR 1700 (Oak Level Road) to SR 1770 (Sunset Avenue).
- STIP Project # R-5720 proposes to widen Eastern Avenue from Red Oak Road to N. Old Carriage Road. The total project length for R-5720 is approximately 2.5 miles. The widened section would consist of a four-lane divided facility with a raised

median and paved shoulders, with some sections of curb and gutter. Right of way and construction are scheduled to begin 2020 and the project cost is estimated to be \$30,708,000.00.

- STIP Project # U-5996 proposes to widen N. Old Carriage Road from Eastern Avenue to Reges Store Road / Green Hills Road. The total project length for U-5996 is approximately 1.3 miles. The widened section would consist of a four-lane divided facility with a raised median and curb and gutter through the U.S. 64 interchange, and a three-lane facility with shoulders from the U.S. 64 interchange north to Reges Store Road / Green Hills Road. U-5996 also proposes to replace the existing bridge over U.S. 64, improve the interchange with N. Old Carriage Road, and construct roundabouts at eastbound U.S. 64, westbound U.S. 64, and Green Hills Road / Reges Store Road. Right of way and construction are both scheduled for 2020 and the project cost is estimated to be \$28,549,000.00.
- STIP Project # I-5725 is a pavement rehabilitation project along I-95 north of NC 58 to SR 1700 currently under construction.

Public Involvement

Citizen's Informational Workshop – February 12, 2008

A citizen's informational workshop was held on February 12, 2008, at the Hampton Inn in Rocky Mount. Property owners in the area were notified of the meeting via informational flyers distributed by mail and advertisements in the local paper. More than 70 people attended the workshop. Twelve comments were received. Concerns regarding the proposed project included increased commercialization in the project area and increased traffic volumes along SR 1770.

Public Meeting – February 6, 2017

Due to the amount of time which had passed since the 2008 workshop, an open house public meeting was held on Monday, February 6, 2017 at the Nash Community College Brown Auditorium to share the preliminary designs for the project. The meeting was advertised in the local English and Spanish language papers, on the radio, and on the project website (<https://www.ncdot.gov/projects/publicmeetings/>), and postcard announcements were mailed to approximately 1,800 nearby property owners.

During the open-house public meeting, NCDOT and consultant staff were on hand to answer questions and listen to input from citizens. Meeting attendees were invited to provide written comments at the meeting, through mail or email, or online via the NCDOT project website. The meeting was attended by 126 members of the public. A total of 24 comments were submitted to NCDOT at the meeting, or during the 14-day public comment period that followed.

A local officials meeting, held earlier in the day, was attended by 18 representatives of Nash County, Nash County Sheriff's Office, Nash County Emergency Management, City of Rocky Mount, Rocky Mount City Council, and the Nashville Town Council.

Small Group Meeting – March 20, 2017

A small group meeting was held on March 20, 2017 due to concerns that residents of the three mobile home parks located in the project study area (Stonegate Mobile Home Community, Sunset Mobile Estates, and Brook Valley Mobile Home Park) may not have received notice of the February 2017 meeting because the meeting notice was sent to the mobile home park owners and not individual residents. In addition, NCDOT learned that many of the mobile home parks residents speak Spanish as their primary, or only, language; therefore, NCDOT decided to conduct a second public outreach effort, targeted specifically at the residents of these mobile home parks. Approximately 550 door hangers were hand-delivered to each mobile home on March 7, 2017, announcing that a small group meeting would be held on March 20, 2017, at the Nash Community College Brown Auditorium. The door hangers were printed in both English and Spanish.

The meeting was attended by 17 members of the public. As meeting attendees arrived, they were given the opportunity to view the maps and speak with NCDOT and consultant staff, including a fluent Spanish speaker, about their specific questions or concerns. Following a formal presentation, NCDOT and consultant staff were on hand to answer questions and listen to input from citizens. Meeting attendees were invited to provide written comments at the meeting, through mail or email, or online via the NCDOT project website. A total of two comments were submitted to NCDOT at the meeting, or during the 14-day public comment period.

Public Meeting – December 13, 2018

In November 2018, NCDOT mailed postcards informing the public of a public meeting scheduled for December 13, 2018. Invitations to the Local Officials Information Meeting (LOIM), also scheduled for December 13, 2018, were sent to local government representatives and stakeholders. Public meeting information was posted on the NCDOT Public Meetings webpage. A Public Meeting Notice was also shared with local newspapers, radio stations, and TV stations, and flyers announcing the meeting were posted at numerous locations in the vicinity of the proposed projects. Public comments were requested through January 14, 2019.

The public meeting was held on Thursday, December 13, 2018 from 4:00 PM to 7:00 PM in the Nash Community College Brown Auditorium located at 522 N. Old Carriage Road in Rocky Mount. 116 citizens signed in at the public meeting. A reporter from the Rocky Mount Telegram attended the meeting and asked questions of the project team and community members. The LOIM was held prior to the public meeting, in which seven local officials attended.

The purpose of the meetings was to inform the local community and gain input on existing conditions, concerns, and opinions. The public meeting provided information on NCDOT STIP Project # U-5026 and two adjacent projects in Nash County: U-5996 and R-5720. A narrated presentation, maps, informational boards, visualizations, simulations, and handouts were shared with the public. The project team and numerous NCDOT staff were available to discuss the projects with the community.

Small Group Meeting – January 22, 2019

A small group meeting for Westry Crossing residents was held on January 22, 2019, in the Nash Community College Brown Auditorium. Westry Crossing residents were notified of the meeting via informational flyers distributed by hand delivery. Concerns regarding the proposed project included noise, increased pedestrian traffic behind the neighborhood, and increased vehicular traffic through the neighborhood.

Impacts

The following information is included in the 2019 Draft CE.

Natural Resources

NCDOT completed a Natural Resources Technical Report (NRTR) for the project in July 2019. The NRTR includes an assessment of threatened and endangered species in the study area. According to the most recent list from the Information for Planning and Consultation (IPaC) website, there are potentially five federally protected species in the project area, as well as three species proposed for protection under the Endangered Species Act (ESA). These species are the Red-cockaded woodpecker, dwarf wedgemussel, yellow nance, Tar River spinymussel, Atlantic pigtoe, Neuse River waterdog, Carolina Madtom, and the Michaux's sumac. Of these species, only the Michaux's sumac was found to have a habitat found present in the region of the project. According to a North Carolina Natural Heritage Program (NCNHP) data report, the nearest known habitat for the Michaux's sumac is 20 miles away. Therefore, it was determined that this project would have no effect on any of the mentioned protected and endangered species.

Displacements/Right of Way Acquisition

Based on preliminary designs, 4 residences and 1 business will be displaced. Along with the business, multiple street-side advertisements would be displaced as well.

Sufficient right of way and easements would be acquired to accommodate the proposed improvements along SR 1770 and I-95. Additional right of way and easements are required along SR 1770 to accommodate the proposed widening, with the majority of the right of way being acquired at the location of the proposed interchange. Right of way will also be acquired along I-95, south of the proposed interchange to accommodate the proposed ramps in the southwest and southeast quadrants, and north of the proposed interchange to accommodate the extension of the northbound and southbound collector-distributor roads.

Direct, Indirect, and Cumulative Effects

An Indirect and Cumulative Effects & Land Use Scenario Assessment Report was prepared in June 2011 and is available from NCDOT.

Indirect Land Use Summary

This project is on the western edge of Rocky Mount, which is one of the areas identified for higher growth in the Rocky Mount "Together Tomorrow" Comprehensive Plan. Some future growth is expected to continue in this area regardless of this project, but will likely occur with greater intensity and sooner with the addition of an interchange on I-95 and Sunset Avenue. Based on land use assumptions in this analysis, there is expected to be approximately 25 percent more developed area in the probable development areas in the future no-build scenario compared with existing conditions, with an additional 15 percent more developed area in the build scenario. These predictions are calculated from parcel-level development assumptions based on future growth patterns noted by local planners.

Development in the no-build scenario would likely be primarily residential. In the build scenario, local planners anticipate new large retail in the northwest quadrant of the interchange and redevelopment of the Layton Mobile Home Park in the southwest quadrant to either residential or commercial, potentially with higher density. This project is not expected to have a long-term impact on water quality in the project area.

Cumulative Effects Summary

The project is expected to result in a minor decrease in travel time for most travelers, but would increase access and exposure to properties near the new interchange. Direct natural environmental impacts would be addressed by avoidance, minimization, or mitigation, during the project development process. Construction-related environmental effects in this area may include wetland or stream impacts. All developments would be required to follow local, state, and federal guidelines and permitting regulations.

The new interchange would encourage residential and commercial development in the area, and would contribute to cumulative effects to environmental resources in the study area, such as increased stormwater and water quality impacts. Impacts would be minimized through compliance with local and state regulations.

Impacted Waters

Streamside riparian zones within the project study area are protected under provisions of the Tar-Pamlico River Buffer Rules administered by North Carolina Division of Water Resources. The portions of Stony Creek and Maple Creek within the project area are subject to these provisions. However, only portions of Stony Creek are subject to Buffer Rules. The table below presents anticipated buffer impacts of the project.

Stony Creek is listed on the Draft 2016 Clean Water Act Section 303(d) list of impaired waters due to Impaired Biological Integrity; therefore, all unnamed tributaries to Stony Creek receive 303(d) status. It should be noted, however, that Stony Creek is not listed on the 303(d) list due to sedimentation or turbidity.

Buffer Impacts of Project (square feet)

| Zone 1 | Zone 2 |
|--------|--------|
| 77,961 | 47,561 |

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Jurisdictional Resources

The proposed project is expected to affect 4.68 acres of wetlands (3.31 acres of riparian wetlands; 1.37 acres of non-riparian wetlands) and 2,713 linear feet of streams.

| Wetland Map ID | Impact (ac) |
|------------------|--------------|
| Wetland B (WB) | 1.39 |
| Wetland J (WJ) | 0.007 |
| Wetland L (WL) | 0.92 |
| Wetland O (WO) | 0.39 |
| Wetland T (WT) | 1.41 |
| Wetland BA (WBA) | 0.03 |
| Wetland BB (WBB) | 0.007 |
| Wetland BD (WBD) | 0.37 |
| Wetland BE (WBE) | 0.004 |
| Wetland BF (WBF) | 0.01 |
| Wetland BJ (WBJ) | 0.007 |
| Wetland BK (WBK) | 0.05 |
| Wetland BM (WBM) | 0.05 |
| Wetland BN (WBN) | 0.03 |
| Total | 4.675 |

| Stream Map ID | Impact (lf) |
|---------------|--------------|
| Stream B (SB) | 68 |
| Stream C (SC) | 226 |
| Stream D (SD) | 49 |
| Stream E (SE) | 1,156 |
| Stream F (SF) | 1,214 |
| Total | 2,713 |

Under the current Section 404 permitting requirements, it is expected the project will require an Individual Permit (IP). In general, the US Army Corps of Engineers Wilmington District issues an IP for projects that result in 0.5 acre or more of fill to Waters of the US or 300 linear feet or more of stream impacts or if the project is considered by the agency to be a major action. This permit requires a full public interest review, including public notices and coordination with involved agencies, interested parties, and the general public.

Hazardous Materials

Thirteen potential underground storage tank facilities, one hazardous waste site, and one potential site of geo-environmental concern (automotive repair facility) were identified within the project study area. No landfills were identified within the project study area.

Floodplains

Nash County and the City of Rocky Mount are participants in the National Flood Insurance Program, administered by the Federal Emergency Management Agency. Portions of the project would cross Stony Creek. Based on the most current information available from the NC Floodplain Mapping Program, this stream crossing is in a designated flood hazard zone which is within a detailed flood study reach, having a regulated floodway.

Noise

A preliminary noise evaluation was performed that identified six noise barriers that preliminarily meet feasibility and reasonableness criteria found in the NCDOT Traffic Noise Policy. A more detailed traffic noise analysis will be completed during project final design. Noise barriers found to be feasible and reasonable during the preliminary noise analysis may not be found to be feasible and reasonable during the final design noise analysis due to changes in proposed project alignment and other design considerations, surrounding land use development, or utility conflicts, among other factors. Conversely, noise barriers that were not considered feasible and reasonable may meet the established criteria and be recommended for construction. This evaluation completes the highway traffic noise requirements of Title 23 CFR Part 772.

Farmland

A preliminary screening of farmland conversion impacts in the project area has been completed (NRCS Form CPA-106 for corridor projects, Part VI only) and a total score of 84 out of 160 points was calculated for the U-5026 project site. Since the total site assessment score does not exceed the 160-point threshold established by NRCS, farmland conversion impacts may be anticipated, but not considered notable.

Schedule

The tentative project schedule is shown below. Please note that the dates are preliminary and subject to change.

| Milestone | Timeframe |
|---------------------------------------|------------------|
| Public Meeting | December 2018 |
| Environmental Documentation Completed | Summer 2019 |
| Design-Build Bid Awarded | October 2019 |
| Right of way Acquisition | Late Winter 2020 |
| Construction Begins | Fall 2020 |

4. Concurrence Point 4A – Avoidance and Minimization

Measures to avoid and minimize impacts to potential jurisdictional waters of the US were incorporated into the best fit design of the project. The presence of residential and commercial buildings, existing structures, and utility transmission lines were also taken into consideration. As designs are refined, reductions to stream and wetland impacts are anticipated.

Opportunities for avoidance and minimization were limited due to the nature of the project and the location of the potentially jurisdictional resources located in the vicinity of the project. The preliminary design includes a 17'6" median instead of a 23' median where possible, east of the roundabout at Nash Community College along Eastern Avenue/Sunset Avenue, to reduce the project footprint.

Figures

Figure 1. Project Vicinity

Figure 2. Environmental Features

Figure 3. Jurisdictional Features Overview

Figure 1. Project Vicinity

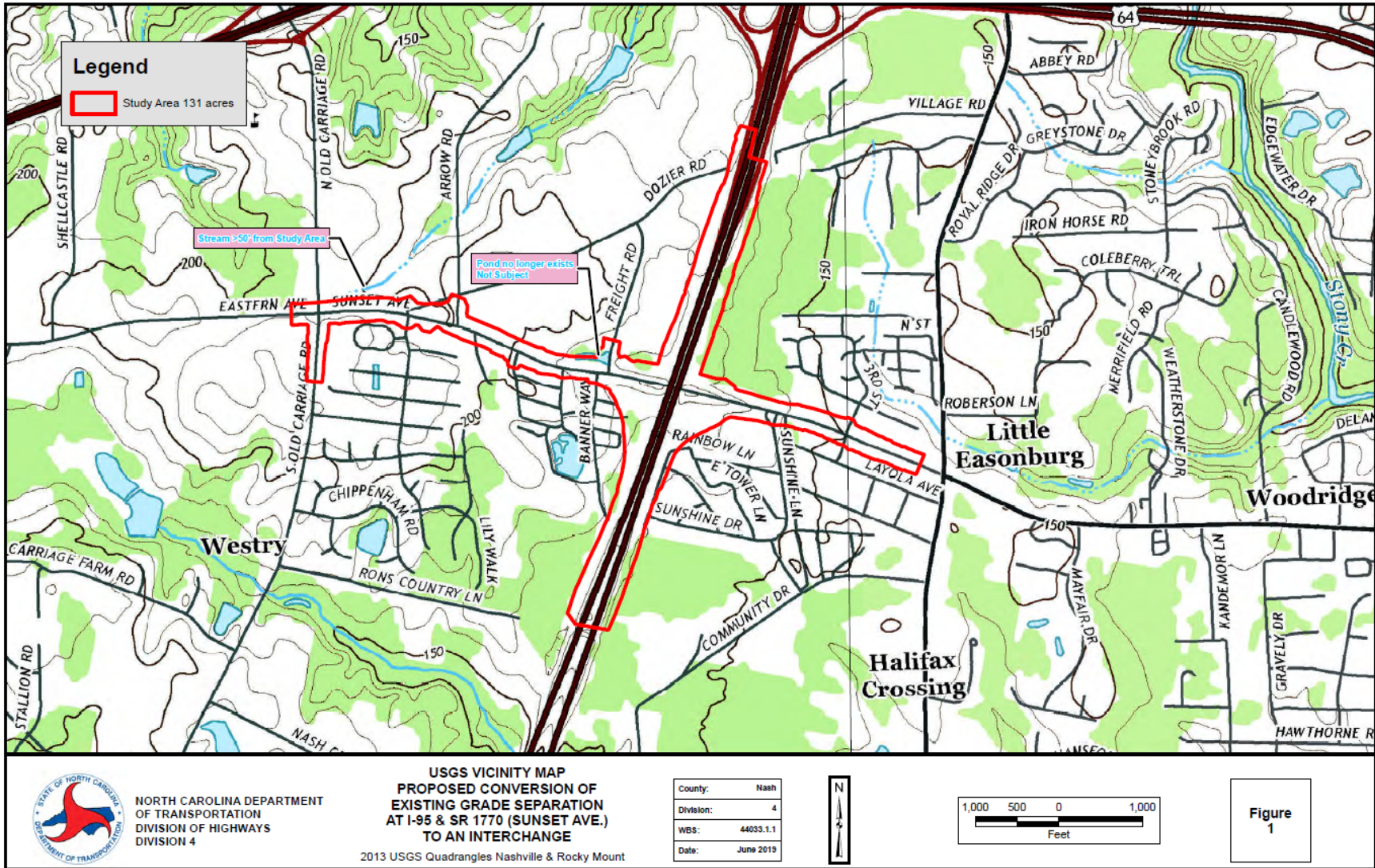
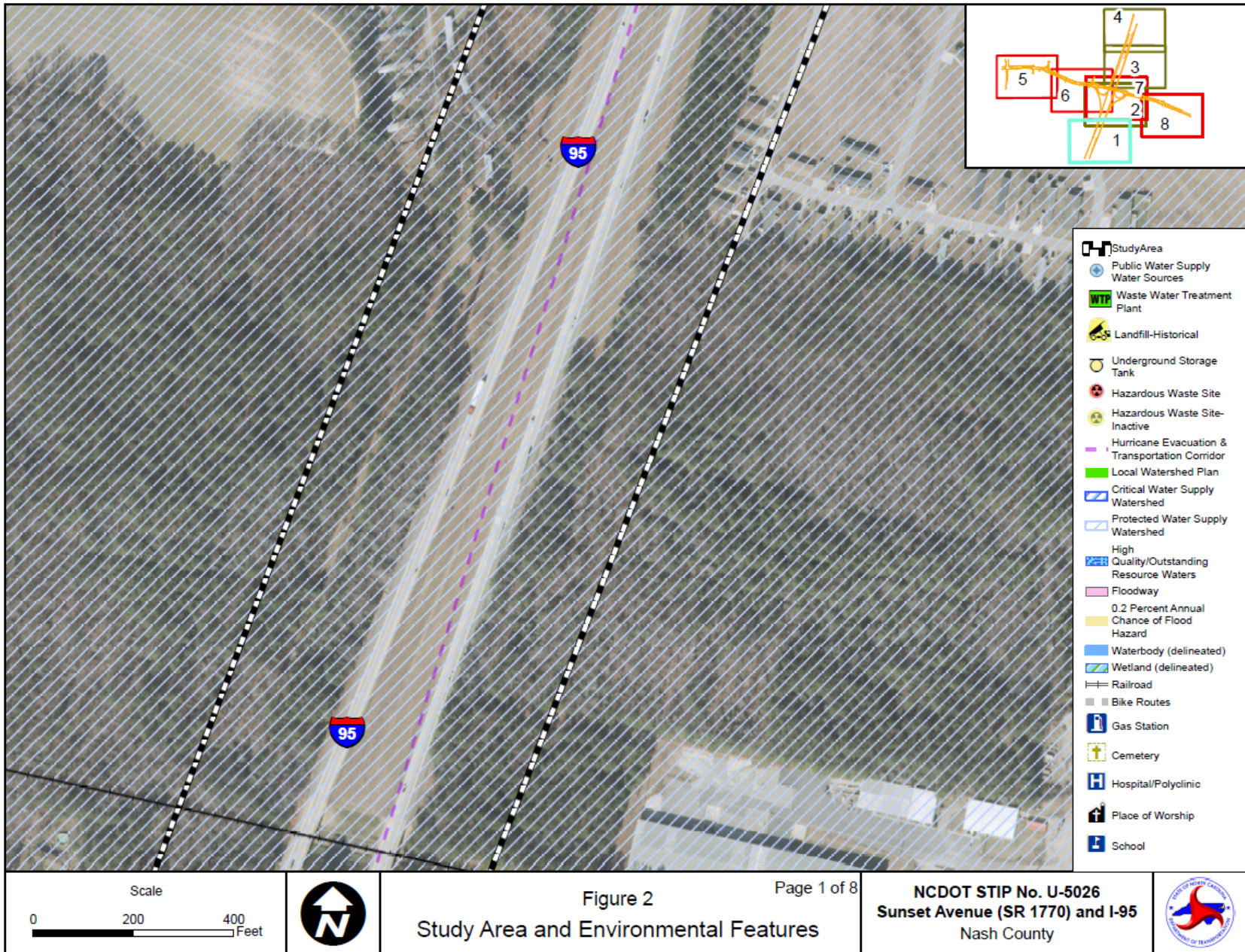


Figure 2. Environmental Features



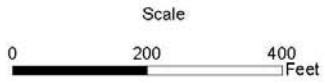
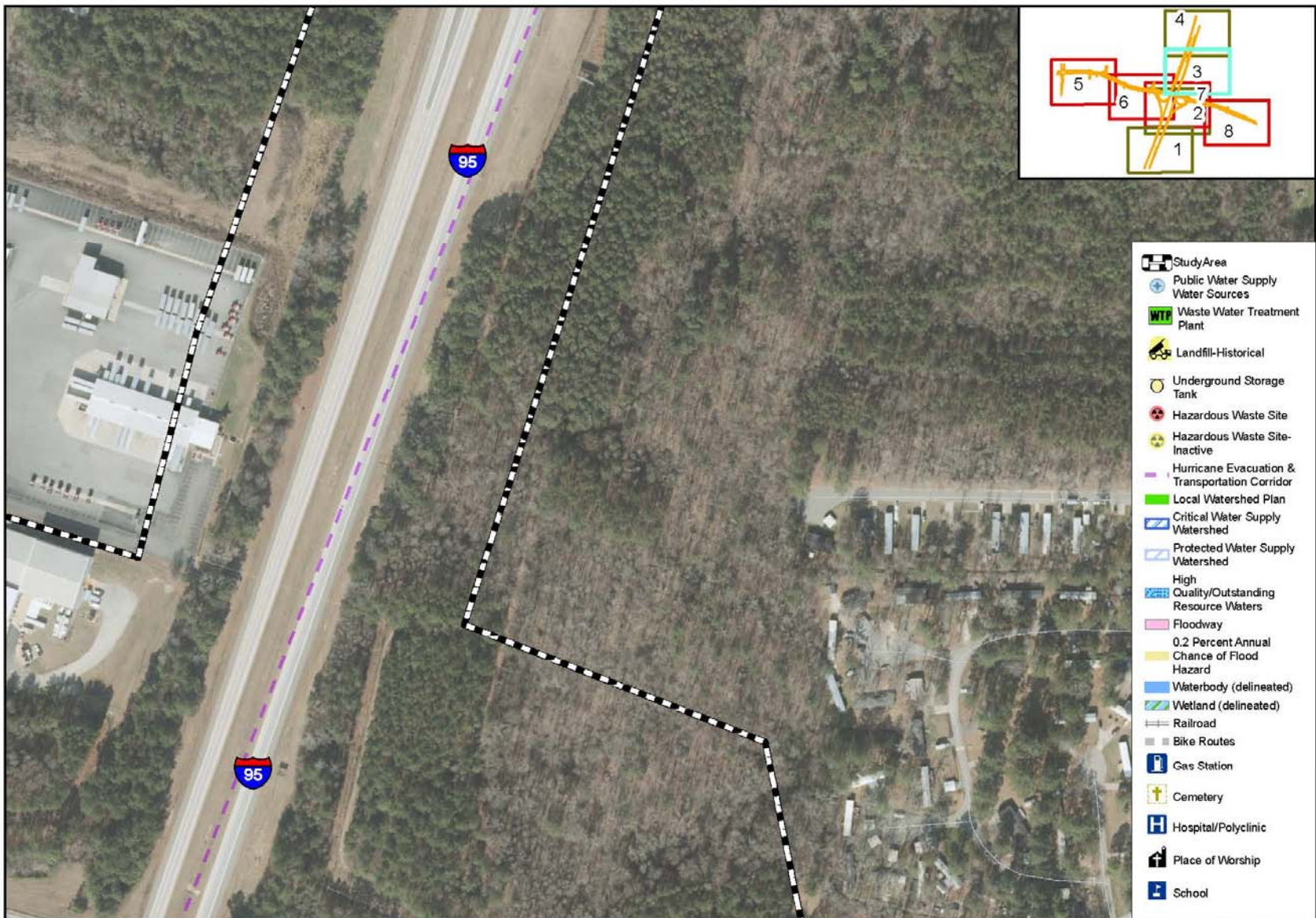


Figure 2
Study Area and Environmental Features





- Study Area
- Public Water Supply Water Sources
- Waste Water Treatment Plant
- Landfill-Historical
- Underground Storage Tank
- Hazardous Waste Site
- Hazardous Waste Site-Inactive
- Hurricane Evacuation & Transportation Corridor
- Local Watershed Plan
- Critical Water Supply Watershed
- Protected Water Supply Watershed
- High Quality/Outstanding Resource Waters
- Floodway
- 0.2 Percent Annual Chance of Flood Hazard
- Waterbody (delineated)
- Wetland (delineated)
- Railroad
- Bike Routes
- Gas Station
- Cemetery
- Hospital/Polyclinic
- Place of Worship
- School

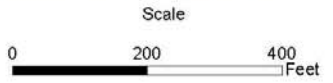


Figure 2
Study Area and Environmental Features

NCDOT STIP No. U-5026
Sunset Avenue (SR 1770) and I-95
Nash County



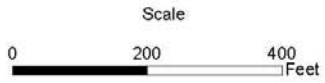


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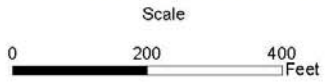


Figure 2
Study Area and Environmental Features

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Sunset Avenue (SR 1770) and I-95
Nash County



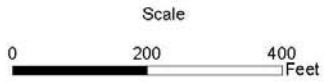


Figure 2
Study Area and Environmental Features

NCDOT STIP No. U-5026
Sunset Avenue (SR 1770) and I-95
Nash County



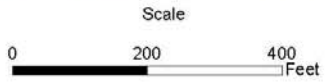
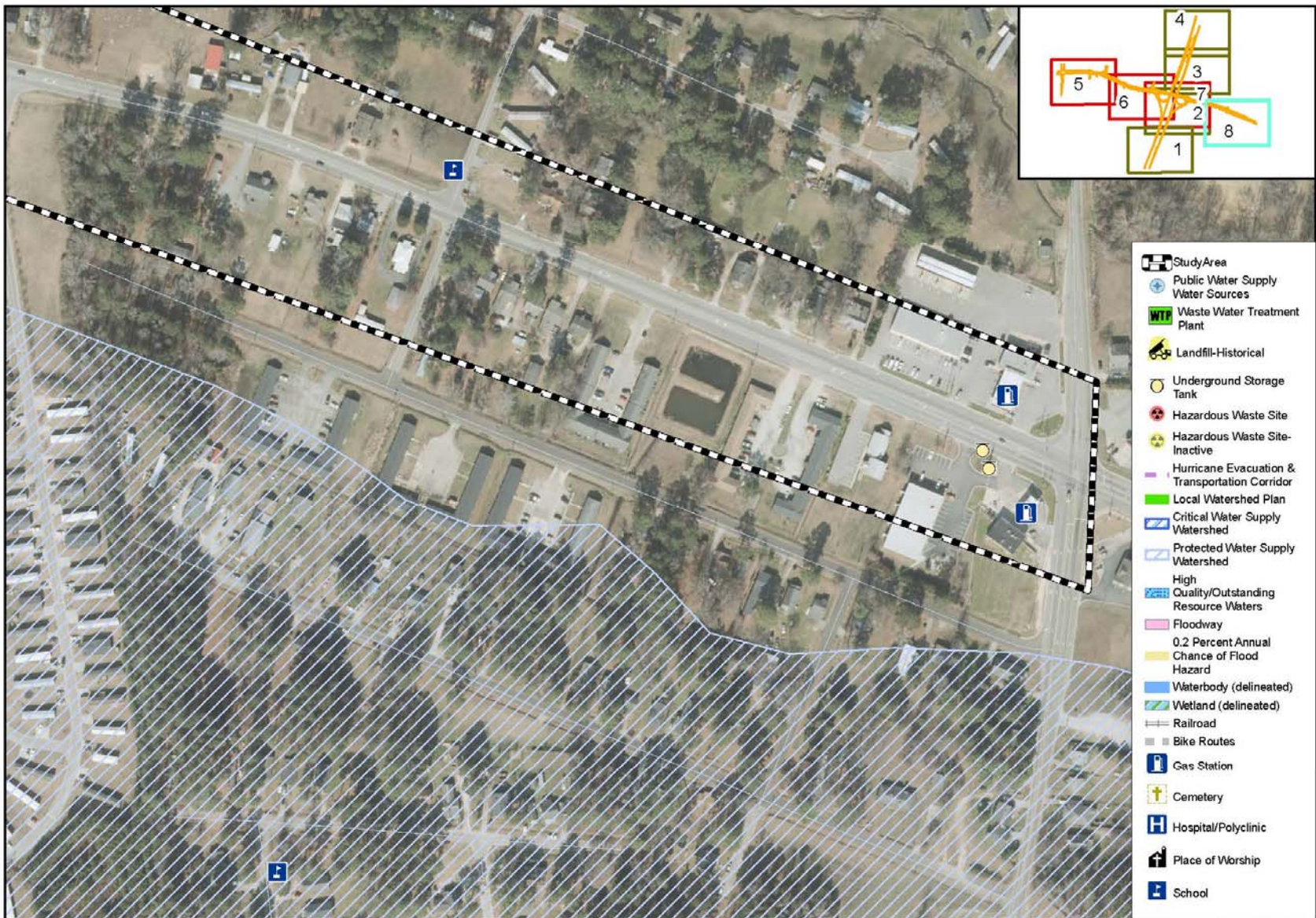
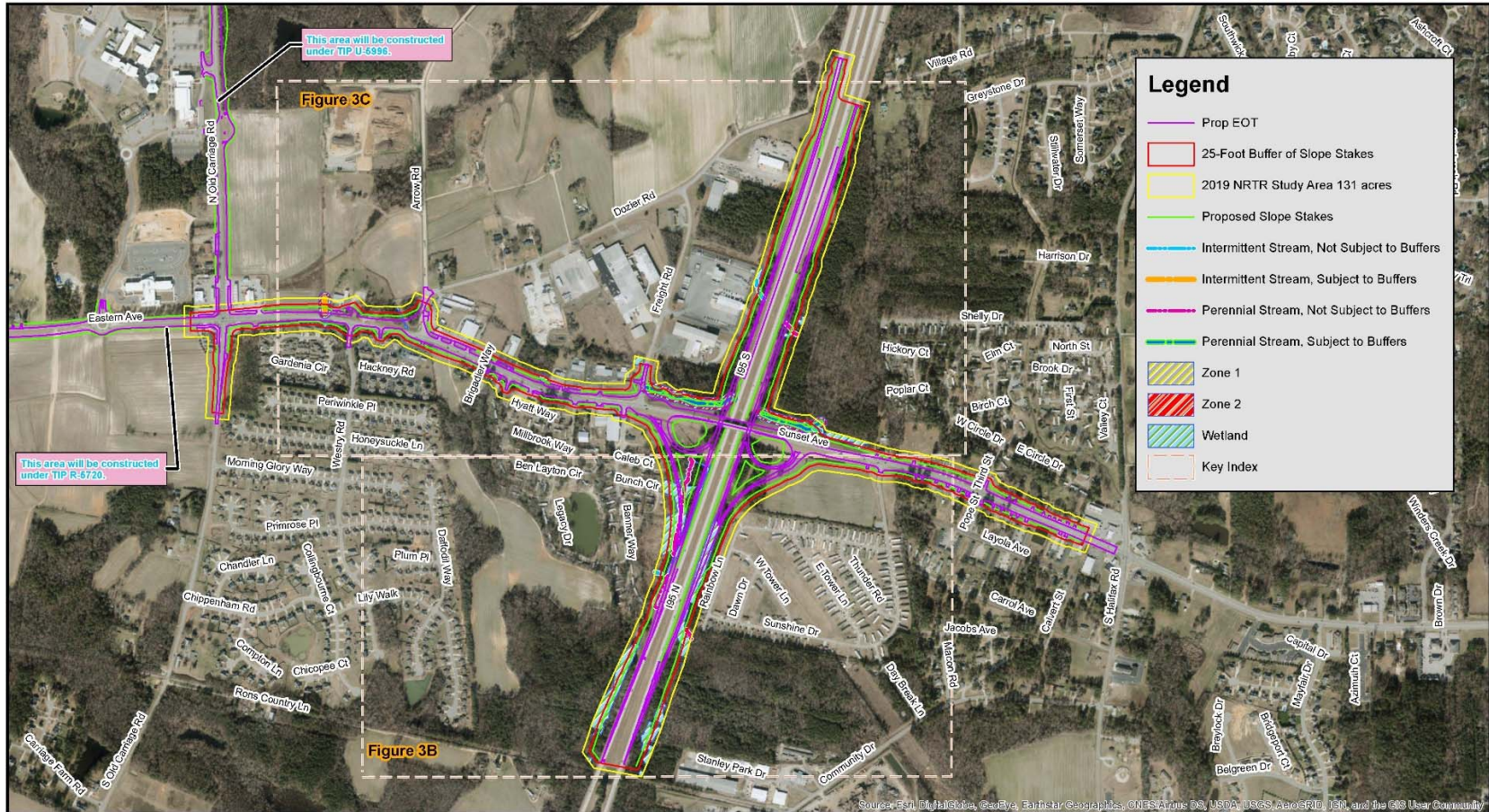


Figure 2
Study Area and Environmental Features



Figure 3. Jurisdictional Features



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DIVISION 4

PROPOSED IMPACTS TO JURISDICTIONAL FEATURES OVERVIEW
PROPOSED CONVERSION OF EXISTING GRADE SEPARATION AT I-95 & SR 1770 (SUNSET AVE.) TO AN INTERCHANGE
2017 NC Onemap Aerial

| | |
|-----------|-------------|
| County: | Nash |
| Division: | 4 |
| WBS: | 44023.1.1 |
| Date: | August 2019 |

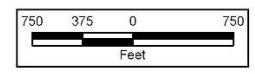


Figure 3A



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
DIVISION 4

PROPOSED IMPACTS TO JURISDICTIONAL FEATURES
PROPOSED CONVERSION OF
EXISTING GRADE SEPARATION
AT I-95 & SR 1770 (SUNSET AVE.)
TO AN INTERCHANGE
2017 NC Onemap Aerial

| | |
|-----------|-------------|
| County: | Nash |
| Division: | 4 |
| WBS: | 44033.1.1 |
| Date: | August 2019 |

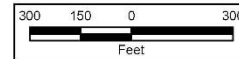


Figure
3B

