

Type III Categorical Exclusion Action Classification Form

STIP Project No.	U-6243
WBS Element	49185.1.1
Federal Project No.	1152016

A. Project Description:

The Town of Holly Springs, in coordination with the N.C. Department of Transportation (NCDOT), proposes to improve Holly Springs Road (S.R. 1152) from Flint Point Lane to Sunset Lake Road (S.R. 1301) (approximately 1.5 miles). The vicinity of the project is shown in **Figure 1** and the proposed design and surrounding environmental features are shown in **Figure 2**. The proposed project will widen the existing roadway from two to four lanes with a median and curb and gutter. A two-lane roundabout is proposed on Holly Springs Road at the Cobblepoint Way/Holly Ridge Elementary School intersection. Wide outside lanes for shared-use with bicyclists and 8-foot sidewalks are proposed on both sides, as shown in **Exhibit 1**. The 8-foot sidewalks are anticipated to be used by pedestrians and bicyclists. A three-span bridge over Middle Creek is also proposed. This project is Phase II of improvements to Holly Springs Road and is planned to connect to the northern terminus of the Town of Holly Springs' Phase I project, NCDOT STIP Project U-6094, which proposes widening to four 12-foot lanes with a median and eight-foot sidewalks along Holly Springs Road from Main Street (N.C. 55) to Flint Point Lane.

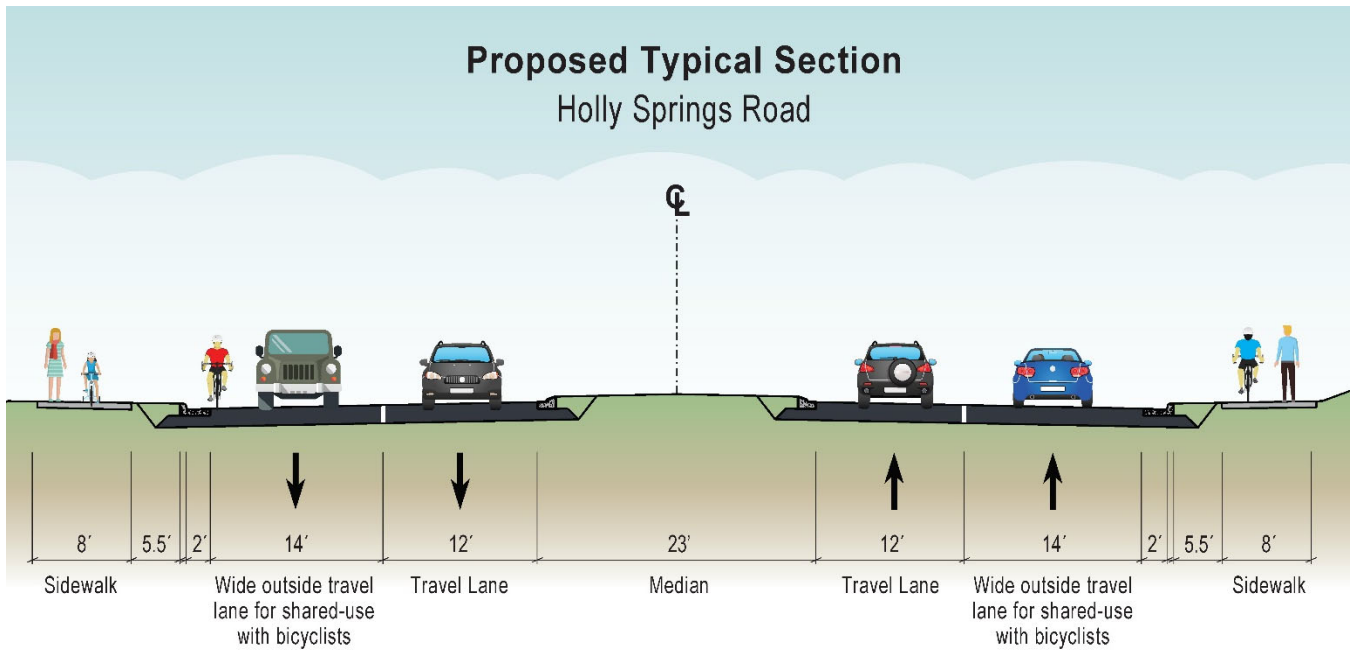


Exhibit 1: Proposed Typical Section

This project has been approved for \$3.6 million in construction funds through the Capital Area Metropolitan Planning Organization's (CAMPO) Locally Administered Projects Program (LAPP). The remainder of the funds for construction and right-of-way acquisition will be from the Town of Holly Springs 2018 Transportation Bond Referendum. The project is anticipated to cost approximately \$15 million to construct and \$3 million for right-of-way acquisition. The project is included in the 2020-2029 State Transportation Improvement Program (STIP) as Project U-6243 and is anticipated to begin construction in 2021.

B. Description of Need and Purpose:

The purpose of the project is to improve vehicular, pedestrian, and bicyclist mobility along the corridor. This segment of Holly Springs Road is congested and is anticipated to experience an increased growth

in traffic once N.C. 540 connects to Holly Springs Road with a new interchange (STIP Project R-2721 currently under construction). Holly Springs Road serves as a critical transportation corridor that connects northeastern Holly Springs to neighboring municipalities such as Cary and Raleigh as well as to downtown Holly Springs. Variation in the roadway typical section today leads to driver confusion and is inconsistent with local plans. Existing sidewalks on this segment of Holly Springs Road are intermittent and of varying widths and materials. Two other projects currently in progress adjacent to the U-6243 project propose to widen sections of Holly Springs Road to four lanes—N.C. 540 Extension (STIP Project R-2721) north of Sunset Lake Road (under construction) and Holly Spring Road Phase I (STIP Project U-6094) south of Flint Point Lane (in design).

C. Categorical Exclusion Action Classification:

Type III

D. Proposed Improvements:

N/A

E. Special Project Information:

Alternatives Analysis

Multiple alternatives for the project were evaluated, including a No Action (No Build) Alternative, an Off-Site Alternative, and four on-site alternatives. The No Action Alternative does not meet the purpose and need of the project but was carried forward for comparison. The Off-Site Alternative was not carried forward for consideration, as the options to improve other existing facilities were limited to N.C. 55 and U.S. 401 which would result in long detours for users and would not meet the purpose and need of the project. The four on-site alternatives evaluated are listed below and described in more detail in the *Individual Permit Application and Supporting Documentation* (August 2020) included in the U-6243 Project File.

All on-site alternatives include replacement of the existing undersize triple barrel box culvert (10' x 9' reinforced concrete box culvert) with a three-span bridge (40', 70', and 40') over Middle Creek. The proposed typical section was narrowed at the Middle Creek crossing in all four alternatives except Alternative 1 by reducing the median width, berm width, and by only proposing the sidewalk on the south (eastbound) side of Holly Springs Road. The four alternatives vary in their proposed horizontal alignment between Linksland Drive and Sunset Fairways Road.

- **Alternative 1** – North Alignment, Full Typical Section: The proposed alignment was shifted north at the Middle Creek crossing resulting in the proposed eastbound lanes being constructed generally within the footprint of the existing roadway. Maintenance of traffic during construction would be feasible by constructing the westbound lanes first, north of the existing traffic, and shifting the traffic to the new bridge once it is complete in order to construct the eastbound lanes.
- **Alternative 1A** – North Alignment, Reduced Typical Section: This alternative uses the same proposed alignment of Alternative 1, but proposes a narrower typical section as described above.
- **Alternative 2** – Central Alignment, Reduced Typical Section: The proposed alignment reduces the curvature of the roadway west of Middle Creek and shifts further south as it crosses Middle Creek. This alternative would utilize the entirety of the existing roadway and therefore require the long-term closure of Holly Springs Road. The narrower typical section was also applied in this alternative.
- **Alternative 3** – South Alignment, Reduced Typical Section: The proposed alignment crosses Middle Creek south of the existing roadway resulting in the proposed westbound lanes being constructed generally within the footprint of the existing roadway. This alternative would potentially impact two additional residential properties at the Sunset Fairways Drive intersection and result in impacts to the Devils Ridge Golf Club. Maintenance of traffic during construction may not be feasible as too much of the proposed roadway surface overlaps with the existing roadway which would prevent two lanes of traffic from being maintained throughout construction. The narrower typical section was also applied in this alternative.

In addition to narrowing the typical section and evaluating different alignments, as described above, the Town also included a 2:1 slope with a guardrail instead of a 3:1 slope without a guardrail on the bridge approaches near environmentally sensitive areas and moved the sidewalk closer to the back of curb approaching the bridge as further minimization measures. The anticipated impacts of each alternative are shown in **Table 1** and are outlined in the *Individual Permit Application and Supporting Documentation* (August 2020). Alternative 1A was selected by the Town as the preferred alternative based on the ability to maintain traffic, reduce impacts to properties, and minimize environmental impacts. Alternative 2 had slightly lower impacts but would require the closure of this critical roadway during construction and was therefore determined to be impractical.

Table 1: Impacts to Jurisdictional Features by On-Site Alternative

Alternative	Wetland Impacts (acres)	Stream Impacts (linear feet)	Riparian Buffer Impacts (square feet)
1	0.75	614	49,890
1A	0.69	494	48,131
2	0.63	428	40,630
3	0.33	695	48,120

NOTE: Permanent Impacts to jurisdictional features were calculated based on the proposed slopestakes

Jurisdictional Features

Delineations of the environmental field survey area (survey area) conducted in October and November 2019 identified three streams, Middle Creek and two unnamed tributaries to Middle Creek, and five wetlands, as noted in the *Environmental Screening Report* (November 2020) and the *Individual Permit Application and Supporting Documentation* (August 2020). All three streams within the survey area are subject to the Neuse River Basin riparian buffer rules. Four of the five wetlands identified (WA, WB, WC, and WD) are anticipated to be considered part of the same wetland system, therefore impacts to these wetlands have been considered a single wetland impact. All three streams were determined by the US Army Corps of Engineers (USACE) to be a single crossing, therefore impacts to these streams would be considered as a single impact. Middle Creek is listed on the North Carolina 2018 Final 303(d) list of impaired waters for having a “Benthos (Nar, AL, FW)” rating of “Fair” (Category 5). No water supply watersheds, outstanding resource waters, or high-quality waters are located within the survey area or within one mile downstream of the survey area.

A total of 494 linear feet of permanent stream impacts with loss of waters, 165 linear feet of permanent stream impacts without loss of waters, 0.69 acres of permanent wetland impacts, and 48,131 square feet of permanent impacts to riparian buffer zones are anticipated with the preferred alternative, as detailed in **Table 2**, **Table 3**, and **Table 4**, and outlined in the *Response to USACE Incomplete Application Notification* (November 13, 2020). Due to the impacts to wetlands WA, WB, WC, and WD being above 0.5 acres, and the combined impacts to streams S1 and S2 being above 300 linear feet, an Individual Section 404 Permit, Individual Section 401 Water Quality Certification, and Riparian Buffer Permit were submitted to the USACE and NC Division of Water Resources on August 5, 2020. Additional information regarding the project, including revised permit drawings, was provided to USACE on November 13, 2020, in response to a request received on October 2, 2020, and December 21, 2020, in response to a request received on December 3, 2020.

Table 2: Anticipated Permanent Impacts of the Preferred Alternative by Jurisdictional Stream

Stream Feature	Permanent Impacts with Loss of Waters	Permanent Impacts without Loss of Waters
Middle Creek	0 linear feet	92 linear feet
S1 (UT to Middle Creek)	271 linear feet	0 linear feet
S2 (UT to Middle Creek)	223 linear feet	73 linear feet
Total Stream Impacts	494 linear feet	165 linear feet

UT = Unnamed tributary

Table 3: Anticipated Permanent Impacts of the Preferred Alternative by Jurisdictional Wetland

Wetland Feature	Permanent Impacts
WA, WB, WC, and WD	0.67 acres
WE	0.02 acres
Total Wetland Impacts	0.69 acres

Table 4: Anticipated Permanent Impacts of the Preferred Alternative by Riparian Buffer Zone

Stream	Buffer Zone 1 Impacts (square feet)	Buffer Zone 2 Impacts (square feet)	Total Buffer Zone Impacts (square feet)
Middle Creek	6,526	4,122	10,648
S1 (UT to Middle Creek)	13,027	5,770	18,797
S2 (UT to Middle Creek)	12,052	6,634	18,686
Total Buffer Zone Impacts	31,605	16,526	48,131

UT = Unnamed tributary

Federally Protected Species

The US Fish and Wildlife Service (USFWS) lists seven federally protected species known to occur in Wake County (updated July 17, 2020) including bald eagle, Cape Fear shiner, red-cockaded woodpecker (RCW), Michaux’s sumac, dwarf wedgemussel, Tar River spiny mussel, and yellow lance, as noted in the *Environmental Screening Report* (November 2020). Additionally, the USFWS Environmental Conservation Online system lists Atlantic pigtoe and Neuse River waterdog as proposed-threatened species and Carolina madtom as a proposed-endangered species known to occur in Wake County, as of August 10, 2020. While not listed currently, the Town has requested the inclusion of biological conclusions for these three species should they become listed prior to project construction. A review of the North Carolina Natural Heritage Program (NCNHP) database records (updated October 2020) indicates there are no known occurrences of any federally protected species, or species proposed for federal listing, in or within one mile of the survey area. The biological conclusions rendered for the project’s anticipated impacts to these species are summarized in **Table 5** and described in further detail below and in the *Environmental Screening Report* (November 2020).

Table 5: Federally Protected Species Listed in Wake County and Biological Conclusions

Species	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGPA	Yes	No Effect
<i>Notropis mekistocholes</i>	Cape Fear shiner	E	Yes	No Effect
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	Yes	No Effect
<i>Rhus michauxii</i>	Michaux’s sumac	E	Yes	No Effect
<i>Alasmidonta heterodon</i>	Dwarf wedgemussel	E	Yes	MA-NLAA*
<i>Parvaspina steinstansana</i>	Tar River spiny mussel	E	Yes	No Effect
<i>Elliptio lanceolata</i>	Yellow lance	T	Yes	MA-NLAA*
<i>Fusconaia masoni</i>	Atlantic pigtoe	PT	Yes	MA-NLAA*
<i>Necturus lewisi</i>	Neuse River waterdog	PT	Yes	MA-NLAA*
<i>Noturus furiosus</i>	Carolina madtom	PE	Yes	MA-NLAA*

BGPA = Bald and Golden Eagle Protection Act; E = Endangered; T = Threatened; PE = Proposed Endangered; PT = Proposed Threatened; MA-NLAA = May Affect-Not Likely to Adversely Affect

*MA-NLAA biological conclusion is subject to the Programmatic Biological Opinion and Programmatic Conference Opinion for these species between NCDOT and USFWS.

Bald Eagle:

A desktop-Geographic Information Systems assessment of the survey area, as well as the area within a 1.13-mile radius (1.0 mile plus 660 feet) of the survey area, for suitable bald eagle foraging habitat was performed in October 2019 using 2017 color aerials. Two water bodies (Sunset Lake and Bass Lake) large enough or sufficiently open to be considered potential feeding sources were identified,

therefore a survey of the survey area and the area within 660 feet of the survey area was conducted on January 30, 2020. No bald eagle nests or individuals were observed. Additionally, a review of the NCNHP database records (updated October 2020) indicates there are no known occurrences of the bald eagle within 1.0 mile of the Project. Due to the lack of habitat, the lack of known occurrences, and the minimal impact anticipated for this Project, it has been determined that this project would have “No Effect” on the bald eagle.

Cape Fear Shiner:

Potentially suitable habitat for Cape Fear shiner is present within Middle Creek. While Middle Creek could provide potential Cape Fear shiner habitat, the project is not within the Cape Fear River Basin, the Cape Fear shiner's only known range. Due to the disconnect from the known range and the lack of known occurrences, it has been determined that the proposed project will have “No Effect” on the Cape Fear shiner.

Red-cockaded Woodpecker

Suitable habitat for RCW is present in the mature pines located in and along the golf course adjacent to the project study area. Kimley-Horn biologists conducted pedestrian surveys in areas of suitable habitat on October 17, 2019, and no RCW individuals or nests were observed. Due to lack of known occurrences and lack of observed individuals, it has been determined that the proposed project will have “No Effect” on RCW.

Michaux's Sumac

Although the study area provides potentially suitable habitat for Michaux's sumac, the regular mowing maintenance schedule and herbicide application within these areas would likely inhibit the plant's success. Kimley-Horn biologists conducted pedestrian surveys for Michaux's sumac within areas of suitable habitat on October 17, 2019 and October 20, 2019, and no individuals were observed. Due to the lack of recorded occurrences and the lack of observed individuals, it has been determined that the proposed project will have “No Effect” on Michaux's sumac.

Aquatic Species

This project involves replacement of a three-barrel culvert with a three-span bridge over Middle Creek. The three-span bridge spans the open water of Middle Creek with two interior piers located on each side of Middle Creek on the adjacent floodplain. The original biological conclusions of “No Effect” as outlined in the *Environmental Screening Report* (December 2019), were provided to USFWS as part of the Conditional Letter of Map Revision (CLOMR) consultation in February 2020. In a letter response dated February 27, 2020, USFWS stated the project is not likely to have an adverse effect on federally listed endangered species, their formally designated critical habitat, or species currently proposed for listing under the Endangered Species Act.

Once federal funding for the project was secured, scoping packets were distributed to agencies, including USFWS, in April 2020. In an email dated April 30, 2020, the USFWS replied with concerns regarding federally protected aquatic species in the area as well as proposed threatened and proposed endangered aquatic species that may be affected by the replacement of the existing culvert on Middle Creek with a bridge. The USFWS indicated that the *Revised Programmatic Biological/Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8* (USFWS, September 11, 2019) and the *Programmatic Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitation Effects on Carolina Madtom and Neuse River Waterdog in NCDOT Divisions 2, 4, 5 and 7* (USFWS, May 7, 2020) (further referred to as the PBO/PCO Agreements) can be used for this project to determine biological conclusions for aquatic species, following the flowchart in Appendix B2 (Culvert Replacement or Extension) of the PBO/PCO Agreements. Use of the USFWS Information for Planning and Consultation (IPaC) website and Identified Stream Reaches for the aquatic species indicates that the appropriate Biological Conclusion is “May Affect, Not Likely to Adversely Affect” (MA-NLAA) for dwarf wedgemussel, yellow lance, Atlantic pigtoe, Neuse River waterdog and Carolina madtom. The biological conclusion for Tar River spiny mussel is “No Effect” as it does not occur in the sub-watershed of this project. The revised biological conclusions for

these aquatic species are reflected in the *Environment Screening Report* (November 2020) and were provided to USACE during their review of the IP Application via email on November 23, 2020.

PBO/PCO Agreement Conservation Measures

With use of the PBO/PCO Agreements for aquatic species outlined above, the design and construction of the project must follow conservation measures as outlined in the PBO/PCO Agreements. These measures have been modified as necessary as the project involves demolition of the existing culvert, construction of a new bridge, and the project is locally administered by the Town of Holly Springs. The Town of Holly Springs is required to adhere to all conservation measures and ensure compliance through use of its staff and contract staff. The NCDOT provides technical and administrative oversight. The conservation measures are identified below:

Erosion control measures

Design Standards in Sensitive Watersheds” [15A NCAC 04B.0124 (b) – (e)] are incorporated into the plans. Within the Environmentally Sensitive Areas (ESA), the following shall apply:

- The contractor may perform clearing operations but not grubbing operations until immediately prior to beginning grading operations.
- Once grading operations begin in the ESA, work shall progress in a continuous manner until complete.
- Erosion control devices shall be installed immediately following the clearing operation.
- Seeding mulching shall be performed on the areas disturbed by construction immediately following final grade establishment.
- Seeding mulching shall be done in stages on cut and fill slopes that are greater than 20 feet in height measure along the slope or greater than two acres in area, whichever is less.

Other measures

Offsite detours will be used to the maximum extent practicable.

No heavy equipment will be placed in the live flow of Middle Creek. All heavy equipment used in demolition of the existing culvert that are in Middle Creek must be isolated from live flow and contained within an impervious dike.

Best Management Practices for erosion and sedimentation control, structure demolition, managing of the watercourse, bridge construction, ground stabilization, etc. will be implemented (NCDOT Best Management Practices for Construction and Maintenance Activities, 2003)

All components of the existing culvert will be removed.

Deck drains will not be allowed to discharge directly into the stream.

Special sediment control fence (NCDOT Standard No. 1606.01) or a combination of special sediment control fence and standard silt fence will be installed between the top of the stream bank and bridge embankment. Once the disturbed areas of the project draining to these areas have been stabilized, the special sediment control fence and/or standard silt fence and all built up sediment adjacent to these devices will be removed to natural ground and stabilized with a native grass mix.

All appropriate sedimentation and erosion control measures, throughout the project limits, will be maintained to ensure proper function following NCDOT Erosion and Sediment Control Design and Construction Manual and NCDOT Best Management Practices (BMP) for Construction and Maintenance Activities.

Coir fiber matting or clean rip rap (underlain with geotextile) will be installed on the footprint of unclassified structure excavation near the streambanks.

Embankment construction and grading shall be managed in such a manner as to prevent surface runoff/drainage from discharging untreated into the riparian buffer. Instead all interim surfaces will be

graded to drain to temporary erosion control devices. Temporary berms, ditches, etc. will be incorporated, as necessary, to treat runoff before discharging into the riparian buffer (as specified in the NCDOT BMP manuals).

Any utility relocations across Middle Creek will be conducted by boring instead of open trenching.

Utility relocations along or near Middle Creek must minimize sedimentation effects in the stream.

All sedimentation and erosion control measures will be appropriately maintained following NCDOT standards to ensure proper function of the measures. This project must adhere to conditions of General Permit NCG01000 to Discharge Stormwater under the National Pollutant Discharge Elimination System for Construction Activities. The project design and construction activities are required to “select, install, implement and maintain BMPs and control measures that minimize pollutants in the discharge to meet the requirements of the permit.” Among these conditions, the permit requires: 1) all erosion and sedimentation control measures must be inspected at least once every seven calendar days and 2) within 24 hours after any storm event of greater than 1.0 inch of rain per 24-hour period. It is understood that these requirements and implementation of other appropriate BMPs are monitored through multiple layers of oversight. At a minimum, the following personnel monitor erosion control measures:

- Town of Holly Springs Project Manager
- Town of Holly Springs Project Inspection staff

The Town of Holly Springs Project Manager will coordinate with the Division 5 Project Engineer for Planning and Environmental Studies to submit project information to comply with Monitoring and Reporting Requirement #2 (Report Number of Automatic Concurrences) for Biological Conclusions for aquatic species that have May Affect-Not Likely to Adversely Affect conclusions.

In the event of any visible sediment loss from the project is observed from any individual project site, a review of turbidity levels will be made upstream and downstream 400 meters (0.25 mile) to determine if sedimentation effects are occurring beyond 400 meters downstream. If visual observation of turbidity levels downstream appear to be elevated beyond upstream observations, the project inspector will contact the Town of Holly Springs Project Manager. If determined that project-related sedimentation is occurring beyond 400 meters, the USFWS must be contacted immediately to discuss potential remediation.

Northern Long-Eared Bat

The USFWS has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the USACE, and NCDOT for the northern long-eared bat (NLEB) 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 ESA for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake County, where U-6243 is located. This level of incidental take is authorized from the effective date of a final listing determination through December 31, 2020. A new PBO takes effect on January 1, 2021 (valid for ten years) that will replace the existing PBO. There are no commitments for projects located in Division 5.

Access Control

The addition of a median will convert most commercial and residential driveways and minor side streets to right-in/right-out access, including the entrance to Holly Ridge Middle School and the bus loop associated with Holly Ridge Elementary School and Holly Ridge Middle School. The restriction of access to the aforementioned bus loop will be mitigated by constructing a new driveway access between the bus loop and Holly Ridge Elementary School driveway so that busses can access the roundabout at Cobblepoint Way directly to travel westbound on Holly Springs Road. Access for the remaining side streets will either be full movement or right-in/right-out with left-in access. U-turns for passenger vehicles will be allowed at the full movement intersections, which were designed to accommodate this movement for those types of vehicles. Left turns were designed to meet the requirements for an SU-40 (single unit 40-foot long) vehicle, which is comparable to a school bus. No U-turn bulbs or other accommodations

for tractor trailers are proposed along the project corridor, though the proposed roundabout could be used to make this movement. This change in access is anticipated to improve the overall safety and reduce congestion of the corridor but may require school bus routes in the area to be re-routed.

Cultural Resources

No sites listed on, or determined eligible for listing on, the National Register of Historic Places or Local Landmark sites were identified in the study area. The State Historic Preservation Office submitted a response of “No Comment” on June 8, 2020, in response to the distributed scoping packet for historic architecture and archaeology review. A tribal coordination letter was sent to the Catawba Indian Nation on September 21, 2020. The Catawba Indian Nation provided a response dated October 20, 2020 indicating that the Catawba Indian Nation has no immediate concerns with regard to traditional cultural properties, sacred sites, or Native American archaeological sites within the boundaries of the proposed study area.

Section 4(f)

The Holly Ridge Elementary School and Holly Ridge Middle School athletic fields and playgrounds are accessed from the corridor. The Town of Holly Springs has a Joint Use Agreement in place with the Wake County Public School System to utilize the Holly Ridge Elementary and Holly Ridge Middle School facilities and they are therefore potential Section 4(f) resources. Not all on-site facilities are covered by this agreement. Holly Ridge Elementary School playground equipment and outdoor facilities are open to the public after 6:00 pm. Holly Ridge Middle School athletic facilities are not open to the public but are used by Town of Holly Springs parks and recreation department for athletic games and events as well as local club teams such as Wake FC youth soccer. No use of these potential Section 4(f) resources is anticipated with the project, as confirmed by the Town of Holly Springs Recreation Department on October 9, 2020 and FHWA on October 13, 2020. Therefore, no additional coordination is necessary regarding Section 4(f).

Relocations

Two residential relocations are currently anticipated (one across from Holly Ridge Middle School and one across from Lassiter Road). No impacts to community cohesion are anticipated with this project.

Community Resources

The *U-6243 Community Impact Assessment* (October 2020) identified multiple community resources within or immediately adjacent to the study area: Holly Ridge Elementary School, Holly Ridge Middle School, The Learning Experience, Holly Springs Learning Center, Devil’s Ridge Golf Club, and the Holly Springs Fire Station #1 (see **Figures 2.A** through **2.C**). The project proposes to construct a median-divided roadway which would permanently alter access for some resources as described above. The widened typical section is anticipated to result in permanent right-of-way impacts to many of these properties, but these impacts are not expected to affect operations of the facilities. Temporary adverse impacts to bicyclists and pedestrians may occur during construction but once construction is complete, the project is anticipated to positively impact these users by providing additional and improved facilities. The *U-6243 Community Impact Assessment Update Technical Memorandum* (January 2021) outlines the changes to community impacts assessed in the October 2020 document due to the addition of the proposed roundabout at the Cobblepoint Way/Holly Ridge Elementary School intersection. The addition of the roundabout is anticipated to have a net positive impact on the community and address the concerns presented by the public.

Traffic Noise

A traffic noise assessment was completed in October 2020. Findings are summarized below. Following addition of the roundabout at the Cobblepoint Way/Holly Ridge Elementary School intersection, a *U-6243 Traffic Noise Addendum Memorandum* (January 2021) was prepared by NCDOT, which concluded that no additional noise impacts are anticipated due to the revised design, and analysis of noise abatement measures in the vicinity of the proposed roundabout is not warranted.

Traffic Noise Impacts

The maximum number of receptors in each project alternative predicted to be impacted by future traffic noise is shown in **Table 6** below. The table includes those receptors expected to experience traffic noise impacts by either approaching or exceeding the FHWA Noise Abatement Criteria or by a substantial increase in exterior noise levels as defined in the NCDOT Traffic Noise Policy.

Table 6: Prediction Traffic Noise Impacts by Alternative

Traffic Noise Impacts				
Alternative	Residential (NAC B)	Places of Worship/Schools, Parks, etc. (NAC C & D)	Businesses (NAC E)	Total
Future Build (2040)	11	0	0	11

*Per TNM[®]2.5 and in accordance with 23 CFR Part 772

Traffic Noise Abatement Measures

Measures for reducing or eliminating the traffic noise impacts, including noise barriers, were considered for all impacted receptors in each alternative. Noise barriers include two basic types: earthen berms and noise walls. These structures act to diffract, absorb, and reflect highway traffic noise.

This project will maintain uncontrolled right of way access, meaning that most noise-sensitive land uses will have direct access connections to the proposed project, and most intersections will adjoin the project at grade. The traffic noise analysis for this project confirmed that the physical breaks in potential noise barriers that would occur due to the uncontrolled right of way access would prohibit any noise barrier from providing the minimum required traffic noise level reductions at predicted traffic noise impacts, as defined by the noise abatement measure feasibility criteria of the NCDOT Traffic Noise Policy. Therefore, noise abatement would not be feasible.

Based on this preliminary study, traffic noise abatement is not recommended, and no noise abatement measures are proposed. This evaluation completes the highway traffic noise requirements of Title 23 CFR Part 772. No additional noise analysis will be performed for this project unless warranted by a substantial change in the project's design concept or scope.

In accordance with NCDOT Traffic Noise Policy, the Federal/State governments are not responsible for providing noise abatement measures for new development for which building permits are issued after the Date of Public Knowledge. The Date of Public Knowledge of the proposed highway project will be the approval date of the Categorical Exclusion. NCDOT strongly advocates the planning, design and construction of noise-compatible development and encourages its practice among planners, building officials, developers and others.

Floodplain Management

The project crosses the floodway, 100-year floodplain, and 500-year floodplain associated with Middle Creek as designated by FEMA. A CLOMR and subsequent Letter of Map Revision (LOMR) from the FEMA Floodplain Manager/NC Floodplain Mapping Program (FMP) is being pursued as part of the project and will be obtained prior to construction. The Conditional Letter of Map Revision was submitted on August 25, 2020 and is currently in review by FEMA.

Air Quality

The project is in Wake County, which is within the Raleigh-Durham-Chapel Hill prior 1997 8-hour ozone area as defined by the Environmental Protection Agency (EPA). This area was designated nonattainment for the 1997 8-hour ozone standard effective June 15, 2004. However, due to improved

monitoring data, this area was redesignated maintenance on December 26, 2007. EPA approved a state air quality implementation plan (SIP) revision for the removal of Federal low-reid vapor pressure requirement effective on February 3, 2014. Section 176(c) of the Clean Air Act (CAA) requires that transportation plans, programs, and projects conform to the intent of the SIP. The current SIP does not contain any transportation control measures for Wake County. The CAMPO (2045) Metropolitan Transportation Plan (MTP) and the (2020-2024) Transportation Improvement Program (TIP) conform to the intent of the SIP. The CAMPO (2045) MTP and the (2020-2024) TIP were determined by the US Department of Transportation to be in conformity in a letter dated February 6, 2020. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. There are no significant changes in the project's design concept or scope, as used in the conformity analyses.

Wake County is within an attainment area for all other National Ambient Air Quality Standards (NAAQS). In accordance with 40 CFR Part 93, transportation conformity requirements are not applicable to this project since the project is not located in a nonattainment or maintenance area for any transportation-related criteria pollutant (i.e., ozone, particulate matter, nitrogen dioxide, and carbon monoxide). In addition, the project is located in a volatile organic compounds (VOC) and nitrogen oxides (NOx) Emissions Control Area. As such, all reasonable precautions should be taken to limit the emissions of VOC and NOx. All burning will be done in accordance with applicable local laws and ordinances and regulations of the North Carolina SIP for air quality in compliance with 15 NCAC 2D.1900. Measures will be taken to reduce the dust generated by construction when the control of dust is necessary for the protection and comfort of motorists or area residents.

Environmental Justice

While Census data does not indicate a notable presence of populations meeting the criteria for Environmental Justice or protected by Title VI and related statutes within the census block groups intersecting the study area, minority and low-income communities were observed within the study area during a field visit conducted on June 30, 2020 and were noted by Town staff. While minority and low-income populations are present in the study area, no notably adverse community impacts are anticipated with this project; thus, impacts to minority and low-income populations are not disproportionately high and adverse. Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community. No disparate impacts are anticipated under Title VI and related statutes.

Limited English Proficiency

Census data does not indicate Limited English Proficiency (LEP) populations meeting the US Department of Justice LEP Safe Harbor threshold, but does indicate Spanish, Other Indo-European, and Other language speaking populations exceeding 50 persons within the Census Block Groups adjacent to the study area that may require language assistance.

Indirect and Cumulative Effects

The project will not alter travel patterns, reduce travel time, affect access to properties in the area, or open areas for development or redevelopment. Due to its minimal transportation impact-causing activities, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect and cumulative effects study will not be necessary.

Hazardous Materials

A database review was conducted by Environmental Data Resources (EDR) in September 2019 along with a review of the NC Department of Environmental Quality's (NCDEQ) online database. Five potential hazardous material sites were identified within or immediately adjacent to the study area. **Table 7** lists the individual sites and types of potential hazardous materials.

Table 7: Potential Hazardous Material Sites

Site #	Site Address	Site Description	Hazardous Material	Anticipated Impact
1	5201 Sunset Lake Road	Food Mart/Harris Teeter Fuel	Active UST with leak incident. Petroleum present in soil with no further corrective action necessary	None – outside of construction limits
2	Holly Springs Road and Sunset Lake Road	Harris Teeter Tanker Truck Spill	Petroleum transport truck accident	None – outside of construction limits
3	4999 Sunset Fairways Drive	Old Holly Springs Dump	Pre-regulatory landfill operated by Town of Cary from 1955 to 1975	Low risk – see detailed description below
4	9800 Holly Springs Road	Sunset Mart	Active UST	None – outside of construction limits
5	5153 Sunset Lake Road	CVS Pharmacy	Large quantity hazardous waste generator	None – outside of construction limits

UST = underground storage tank

Site 3 (see **Figure 2.B**), the Old Holly Springs Dump operated by the Town of Cary from 1955 to 1975, is considered a pre-regulatory landfill and is the only site with an anticipated impact. The project proposes approximately 1.6 acres of ground disturbance within the portion of the Town of Cary property where the landfill was operated. The proposed earthwork in this location mostly consists of fill due to the proposed higher alignment of the roadway surface. Some cut sections are anticipated to construct the proposed drainage ditches and in areas where the existing topography contains a steep incline immediately west of the existing alignment. The project also proposes to incorporate approximately 1.5 acres of this portion of the property as permanent right-of-way, less than 0.1 acres for permanent drainage easement, and approximately 0.5 acres for temporary construction easements. Three geotechnical borings were conducted in this area of the property and found mostly sand, silt, clay, and alluvial materials with some rock fragments, gravel, and weathered rock. Based on aerial imagery of the site from 1973, shown in **Exhibit 2**, the operating area of the landfill appears to be outside the limits of the proposed project. A copy of the right-of-way design plans was provided to the NCDEQ Pre-Regulatory Landfill Unit on August 27, 2020. The Town will provide an electronic copy of the final design plans to, and continue to coordinate with, the NCDEQ Pre-Regulatory Landfill Unit as necessary.



Exhibit 2: Aerial Imagery of Holly Springs Road and Old Holly Springs Dump in 1973

Public Involvement

Three public outreach events have been held for the subject project. An initial public meeting was held on March 19, 2019 to discuss the study area, purpose of the project, and gather input from the public. The meeting was attended by 59 members of the public and 38 comments were received following this meeting. A second public meeting was held virtually on March 17, 2020 via the Town's Facebook page, which was attended by 171 people, following the completion of preliminary designs. Additional resources were posted on the Town's project website. A total of 25 written comments were received following this meeting (one via email and 24 via the public meeting website located at www.publicinput.com/d771). Comments received following these two meetings are summarized in the *Public Meetings Comment Summary* (August 2020). A third public meeting was held virtually on December 3, 2020 via the Zoom Webinar platform to present the proposed addition of the roundabout at the Cobblepoint Way/Holly Ridge Elementary School intersection and was attended by 98 individuals. A total of eight written comments were received following this meeting (four via email and four via the public meeting website located at <https://www.publicinput.com/16473/>) and are summarized in the *Public Meeting Comment Summary* (January 2021).

Many of the comments received during the first two public meetings for this project were from residents of the Cobble Ridge neighborhood, located on the north side of Holly Springs Road on Cobblepoint Way, across from the Holly Ridge Elementary School. The main concerns presented were regarding the change in access which will convert the neighborhood's access to right-in/right-out and left-in. Residents noted this may affect travel times, emergency response times, property values, and safety. Many residents also expressed concern for pedestrian crossings of Holly Springs Road at this location and were in support of a full-movement signalized intersection. Based on these comments and coordination with the Wake County Public School System, the Town decided to revise the design and propose a two-lane roundabout at the Cobblepoint Way/Holly Ridge Elementary School intersection with mid-block crosswalks located west and east of the roundabout with push button activated rapid flashing beacons and median refuges for pedestrians and bicyclists crossing Holly Springs Road. This design addresses the concerns presented and was received positively by the public during the December 3, 2020 public meeting.

Other comments received, not related to the Cobblepoint Way intersection or Cobble Ridge neighborhood, requested additional consideration by the project team of specific elements in the design such as the access restrictions due to the addition of a median, installation of a traffic signal at Sunset Fairways Drive, pedestrian crossing facilities, and maintaining the 35-mile per hour speed limit.

F. Project Impact Criteria Checklists:

F3. Type III Actions			
		Yes	No
1	Does the project involve potential effects to Threatened or Endangered species listed by the US Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<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 substantial residential or commercial displacements or right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project include a determination under Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Is a project-level analysis for direct, indirect, or cumulative effects required based on the NCDOT community studies screening tool?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Does the project impact anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Does the project impact waters classified as Outstanding Resource Waters (ORW), High Quality Waters (HQW), Water Supply Watershed Critical Areas, 303(d)-listed impaired water bodies, buffer rules, or submerged aquatic vegetation (SAV)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project require a US Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Does the project include Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15	Does the project require work encroaching and adversely effecting 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 checked="" type="checkbox"/>	<input type="checkbox"/>
16	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Areas of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Type III Actions (continued)</u>		Yes	No
17	Does the project require a US Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	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"/>
19	Does the project involve Coastal Barrier Resource Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project impact federal lands (e.g. US Forest Service (USFS), US Fish and Wildlife Service (USFWS), etc.) or Tribal (Trust) Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	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, TVA, Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project involve Federal Emergency Management Act (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Is the project considered a Type I under the NCDOT's Noise Policy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
28	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"/>
29	Is the project in an Air Quality non-attainment or maintenance area for a National Ambient Air Quality Standard (NAAQS)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30	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

Section 7 compliance for the Dwarf Wedgemussel, Yellow Lance, and Atlantic Pigtoe will be met through the PBO/PCO Agreements issued by the USFWS. The use of the PBO/PCO Agreement indicates the biological conclusion of "May Affect-Not Likely to Adversely Affect" for all three species. Additionally, while not listed currently, the Town has requested the inclusion of biological conclusions for the Neuse River waterdog and Carolina madtom under the PBO/PCO Agreement should they become listed prior to project construction. The PBO/PCO Agreement for these two species indicates the biological conclusion of "May Affect-Not Likely to Adversely Affect". The Town will adhere to all PBO and PCO project-specific requirements as well as all monitoring and reporting requirements.

The USFWS has developed a PBO in conjunction with the 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 ESA for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake County, where STIP Project No. U-6243 is located. This level of incidental take is authorized from the effective date of a final listing determination through December 31, 2020. A new PBO takes effect on January 1, 2021 (valid for ten years) that will replace the existing PBO. There are no commitments for projects located in Division 5.

Question 7

Multiple community resources are within or immediately adjacent to the study area. The project proposes to construct a median-divided roadway which would permanently alter access for some resources and the widened typical section is anticipated to result in permanent right-of-way impacts but no impacts to operations of the facilities. Temporary adverse impacts to bicyclists and pedestrians may occur during construction but the project is anticipated to provide a long-term positive benefit for these users. The project will not alter travel patterns, reduce travel time, affect access to properties in the area, or open areas for development or redevelopment. Due to its minimal transportation impact-causing activities, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect and cumulative effects study will not be necessary.

Question 9

The project proposes to replace the existing undersized triple barrel box culvert with a three-span bridge over Middle Creek which is listed on the North Carolina 2018 Final 303(d) list of impaired waters for having a "Benthos (Nar, AL, FW)" rating of "Fair" (Category 5). No permanent impacts with loss of waters are anticipated to Middle Creek. Middle Creek and the two unnamed tributaries to Middle Creek within the study area are also subject to the Neuse River Basin riparian buffer rules.

Question 11

Due to the anticipated stream and wetland impacts, an Individual Section 404 Permit was submitted to the USACE on August 5, 2020.

Question 14

The project proposes approximately 1.6 acres of ground disturbance within an area where a pre-regulatory landfill was operated from 1955 to 1975. The proposed earthwork in this location mostly consists of fill with some cut sections. The project also proposes to incorporate approximately 1.5 acres of this portion of the property as permanent right-of-way, less than 0.1 acres for permanent drainage easement, and approximately 0.5 acres for temporary construction easements. Based on aerial imagery of the site from 1973, the operating area of the landfill appears to be outside the limits of the proposed project. Three geotechnical borings were conducted in this area of the property and found mostly sand, silt, clay, and alluvial materials with some rock fragments, gravel, and weathered rock. A copy of the right-of-way design plans was provided to the NCDEQ Pre-Regulatory Landfill Unit on August 27, 2020. The Town will provide an electronic copy of the final design plans to, and continue to coordinate with, the NCDEQ Pre-Regulatory Landfill Unit as necessary.

Question 15

The project crosses the floodway, 100-year floodplain, and 500-year floodplain associated with Middle Creek as designated by FEMA. A CLOMR and subsequent LOMR from the FEMA Floodplain Manager/NC FMP is being pursued prior to construction.

Question 21

The addition of a median will convert most commercial and residential driveways and minor side streets to right-in/right-out access, including the entrance to Holly Ridge Middle School and the bus

loop associated with Holly Ridge Elementary School and Holly Ridge Middle School. The restriction of access to the aforementioned bus loop will be mitigated by constructing a new driveway access between the bus loop and Holly Ridge Elementary School driveway so that busses can access the roundabout at Cobblepoint Way directly to travel westbound on Holly Springs Road. Access for the remaining side streets will either be full movement or right-in/right-out with left-in access. U-turns for passenger vehicles will be accommodated at the full movement intersections. School bus routes in the area may need to be re-routed.

Question 27

This project will maintain uncontrolled right of way access, meaning that most noise-sensitive land uses will have direct access connections to the proposed project, and most intersections will adjoin the project at grade. The traffic noise analysis for this project confirmed that the physical breaks in potential noise barriers that would occur due to the uncontrolled right of way access would prohibit any noise barrier from providing the minimum required traffic noise level reductions at predicted traffic noise impacts, as defined by the noise abatement measure feasibility criteria of the NCDOT Traffic Noise Policy. Therefore, noise abatement would not be feasible.

Question 29

The project is in Wake County, which is within the Raleigh-Durham-Chapel Hill prior 1997 8-hour ozone area as defined by the EPA. This area was designated nonattainment for the 1997 8-hour ozone standard effective June 15, 2004. However, due to improved monitoring data, this area was redesignated maintenance on December 26, 2007. EPA approved a SIP revision for the removal of Federal low-reid vapor pressure requirement effective on February 3, 2014. Section 176(c) of the CAA requires that transportation plans, programs, and projects conform to the intent of the SIP. The current SIP does not contain any transportation control measures for Wake County. The CAMPO 2045 MTP and the 2020-2029 TIP conform to the intent of the SIP.

H. Project Commitments:

NCDOT PROJECT COMMITMENTS

STIP Project No. **U-6243**
Widening of Holly Springs Road (S.R. 1152)
from Flint Point Lane to Sunset Lake Road (S.R. 1301)
Wake County
Federal Aid Project No. 1152016
WBS Element 49185.1.1

Floodplain Management

A Conditional Letter of Map Revision and subsequent Letter of Map Revision from the FEMA Floodplain Manager/NC Floodplain Mapping Program will be obtained prior to construction.

Hazardous Materials

If solid waste, contaminated soils, or other hazardous materials are encountered, the Town will notify the NCDEQ Pre-Regulatory Landfill Unit and identified materials will be characterized and transported to a permitted facility. The Town will provide an electronic copy of the final design plans to, and continue to coordinate with, the NCDEQ Pre-Regulatory Landfill Unit as necessary.

Environmental Permits

The Town will obtain environmental permits as necessary from the USACE and NCDEQ DWR prior to construction. Construction of the project will adhere to all appropriate Section 404 (USACE) and Section 401 (NCDEQ DWR) permit conditions.

Aquatic Species Programmatic Biological/Conference Opinion Conservation Measures

The design and construction of the project must follow Conservation Measures as outlined in the *Revised Programmatic Biological/Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitations in Eastern North Carolina, NCDOT Divisions 1-8* (USFWS, September 11, 2019) and the *Programmatic Conference Opinion-Bridge and Culvert Replacements/Repairs/Rehabilitation Effects on Carolina Madtom and Neuse River Waterdog in NCDOT Divisions 2, 4, 5 and 7* (USFWS, May 7, 2020). The Town will complete these conservation measures presented in the Aquatic Species description section of the CE beginning on page 5.

I. Categorical Exclusion Approval:

STIP Project No.	<u>U-6243</u>
WBS Element	<u>49185.1.1</u>
Federal Project No.	<u>1152016</u>

Prepared By:

1/19/2021

Date

DocuSigned by:

Colin Frosch, P.E.
Kimley-Horn

Prepared For:

1/19/2021

DocuSigned by:

Tim Athy, P.E.
Transportation Engineer
Town of Holly Springs Department of Engineering

Reviewed By:

1/27/2021

Date

DocuSigned by:

Chris Murray, SPWS
Project Engineer for Planning and Environmental Studies
NCDOT Highway Division 5

Approved

Certified

• If classified as Type III Categorical Exclusion.

1/27/2021

Date

DocuSigned by:

Tracy Parrott, P.E.
Project Delivery Engineer
NCDOT Highway Division 5

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

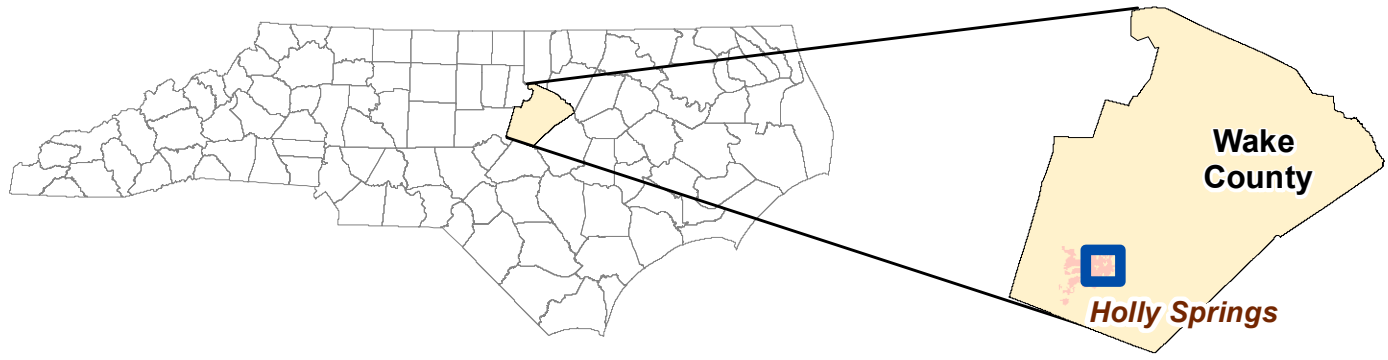
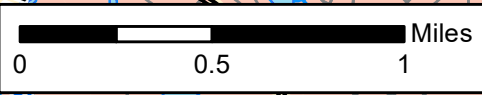
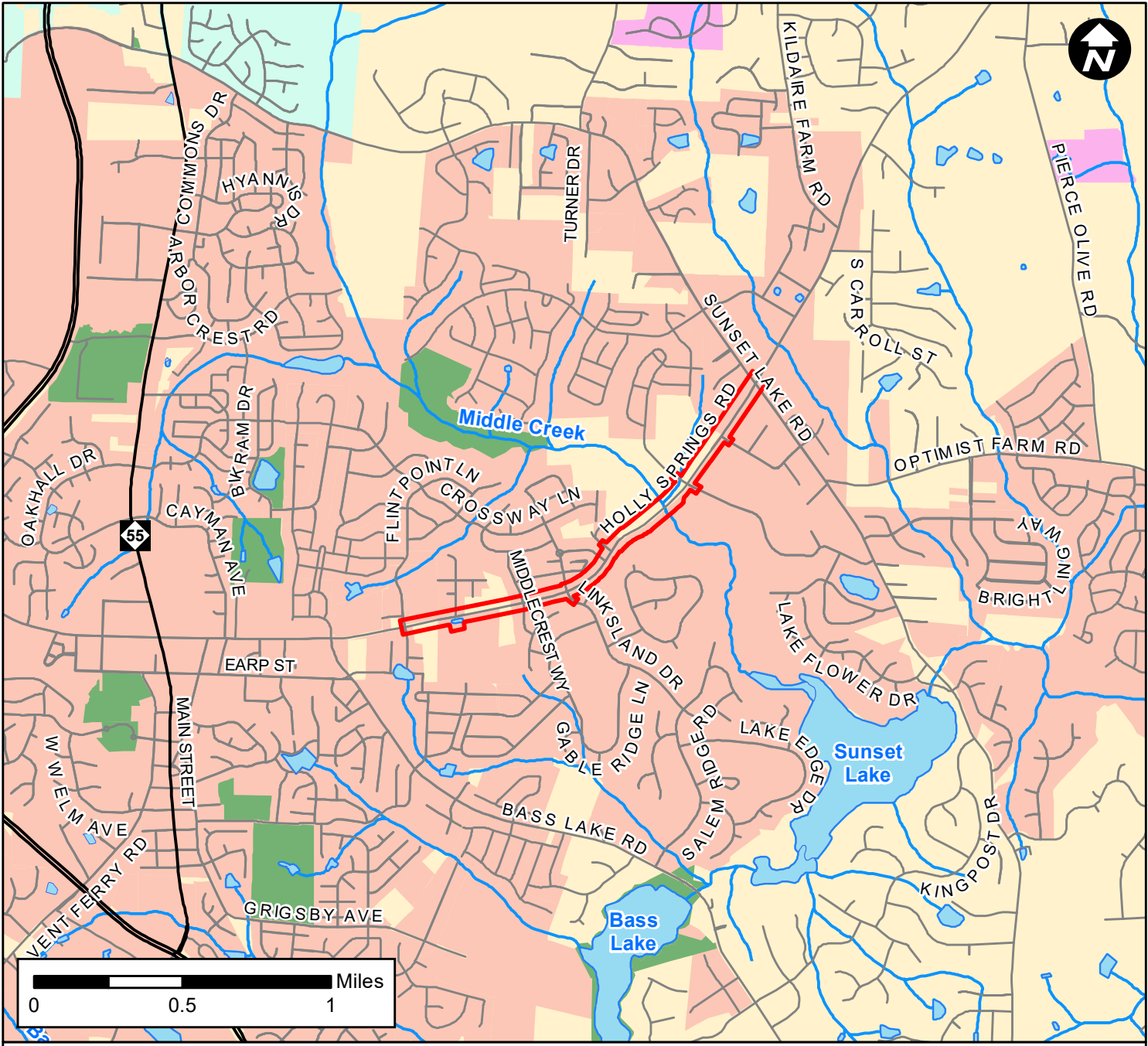
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Date

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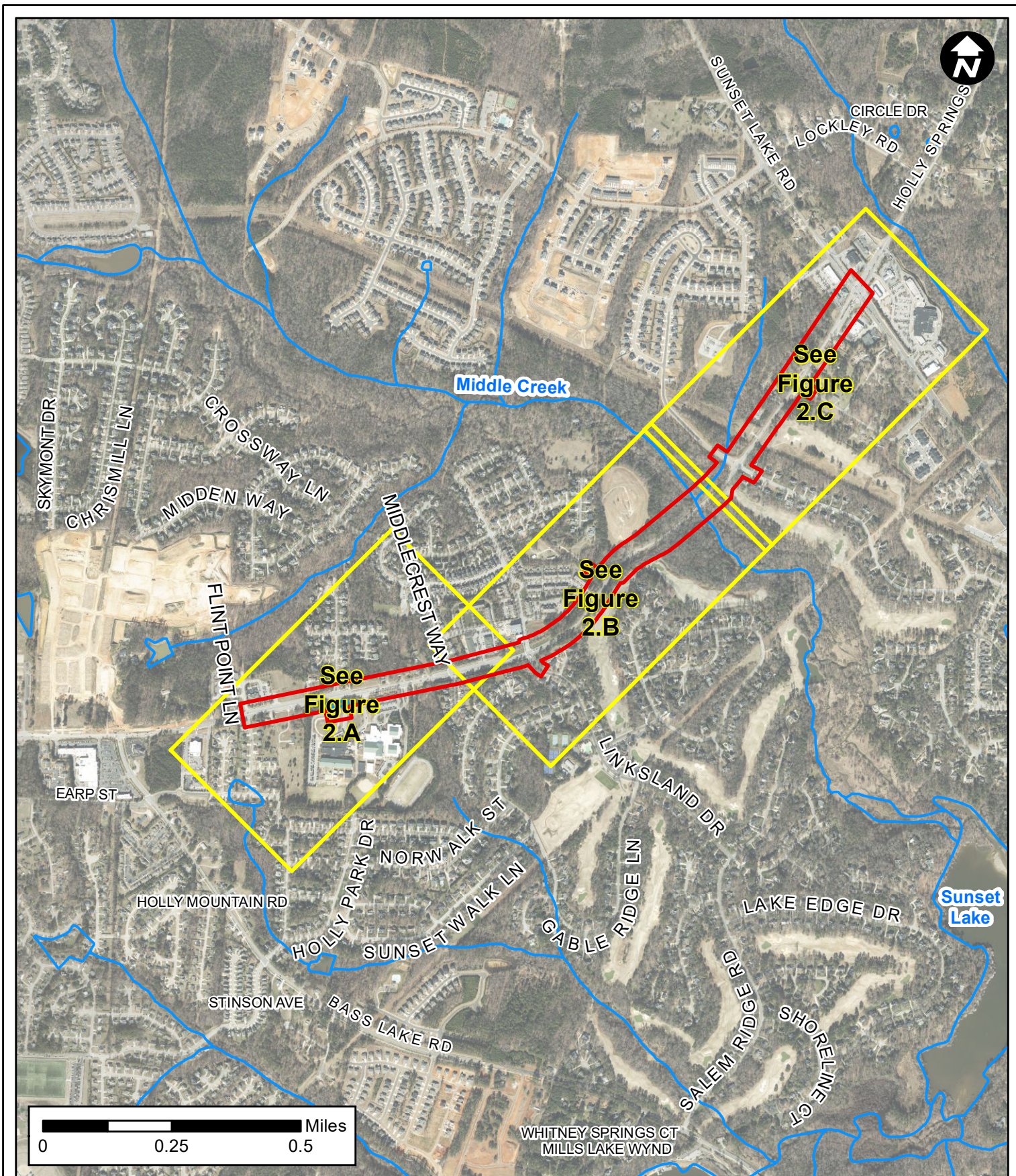
for John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).



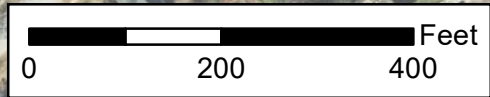
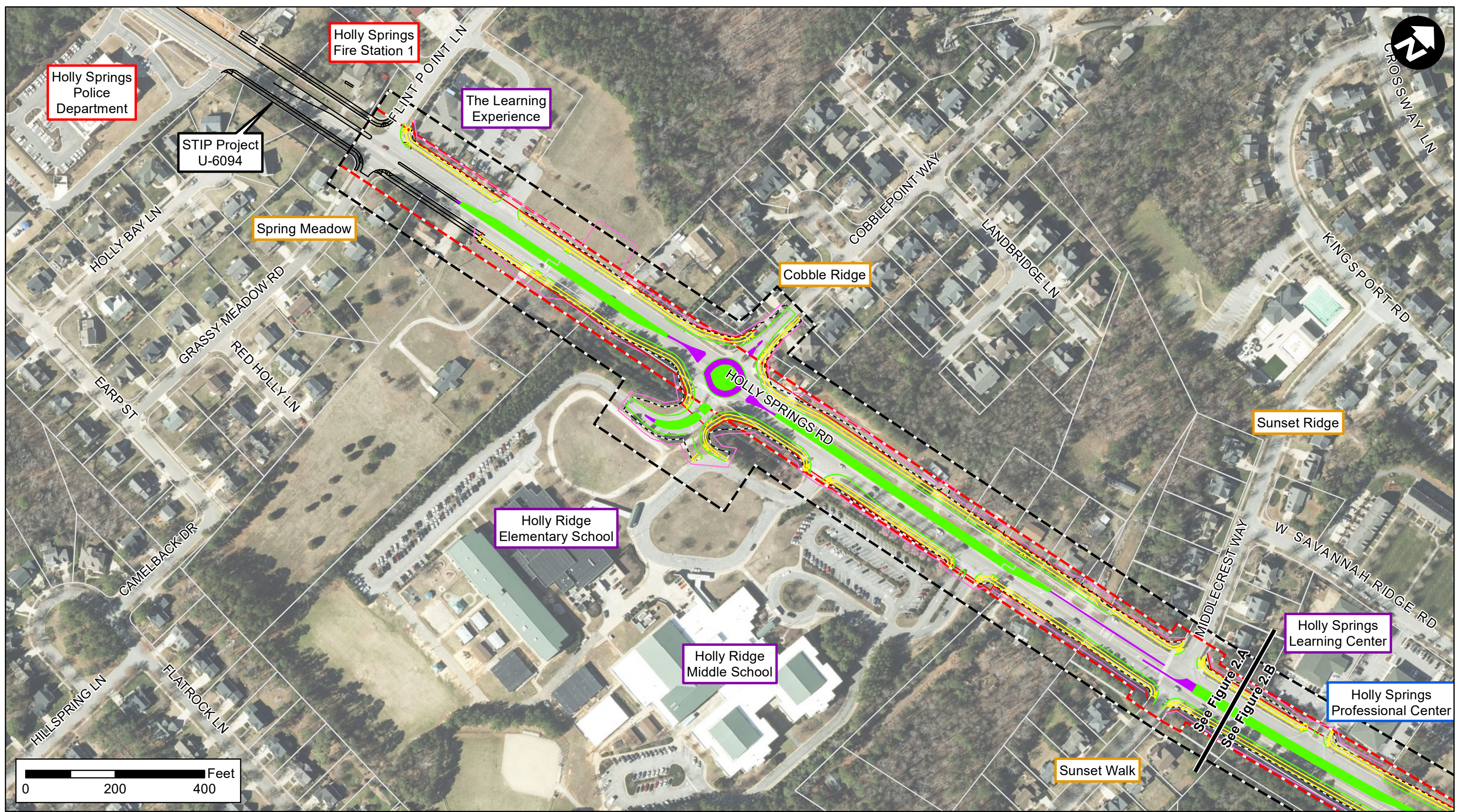
- Project Study Area
- Wake County
- Town of Holly Springs
- Town of Apex
- Town of Cary
- Park
- Surface Water (NCDEQ)
- Streams (NCDEQ)

Figure 1: U-6243 Vicinity Map
 Holly Springs Road (S.R.1152)
 Improvements Phase 2
 Holly Springs, Wake County



- ▭ Figures 2.A-2.E Extents
- ▭ Project Study Area
- Streams (NCDEQ)

Figure 2: U-6243 Environmental Features
Holly Springs Road (S.R. 1152)
Improvements Phase 2
 Holly Springs, Wake County



- Neighborhood
- School/Childcare
- Business/Shopping Center
- Emergency Services

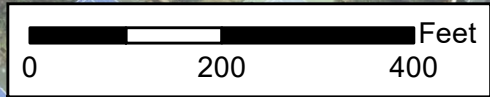
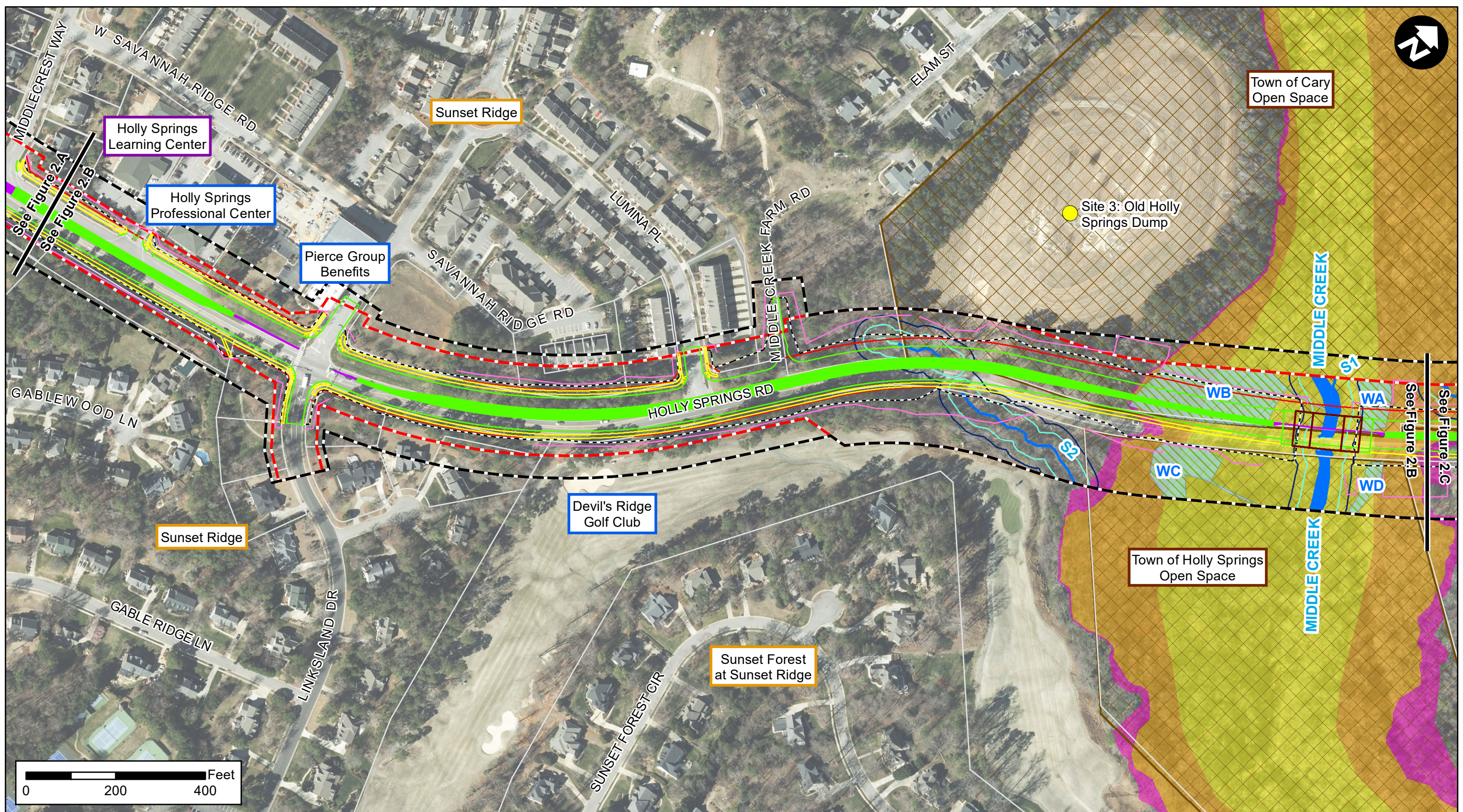
- NEPA Study
- Env. Field Survey
- Wetlands
- Local Government Ownership

- Proposed Concrete Island/Median
- Proposed Landscaped Median

- Proposed Temporary Easement
- Proposed Right-of-Way
- STIP Project U-6094
- Property Line

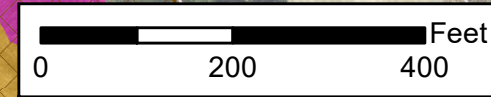
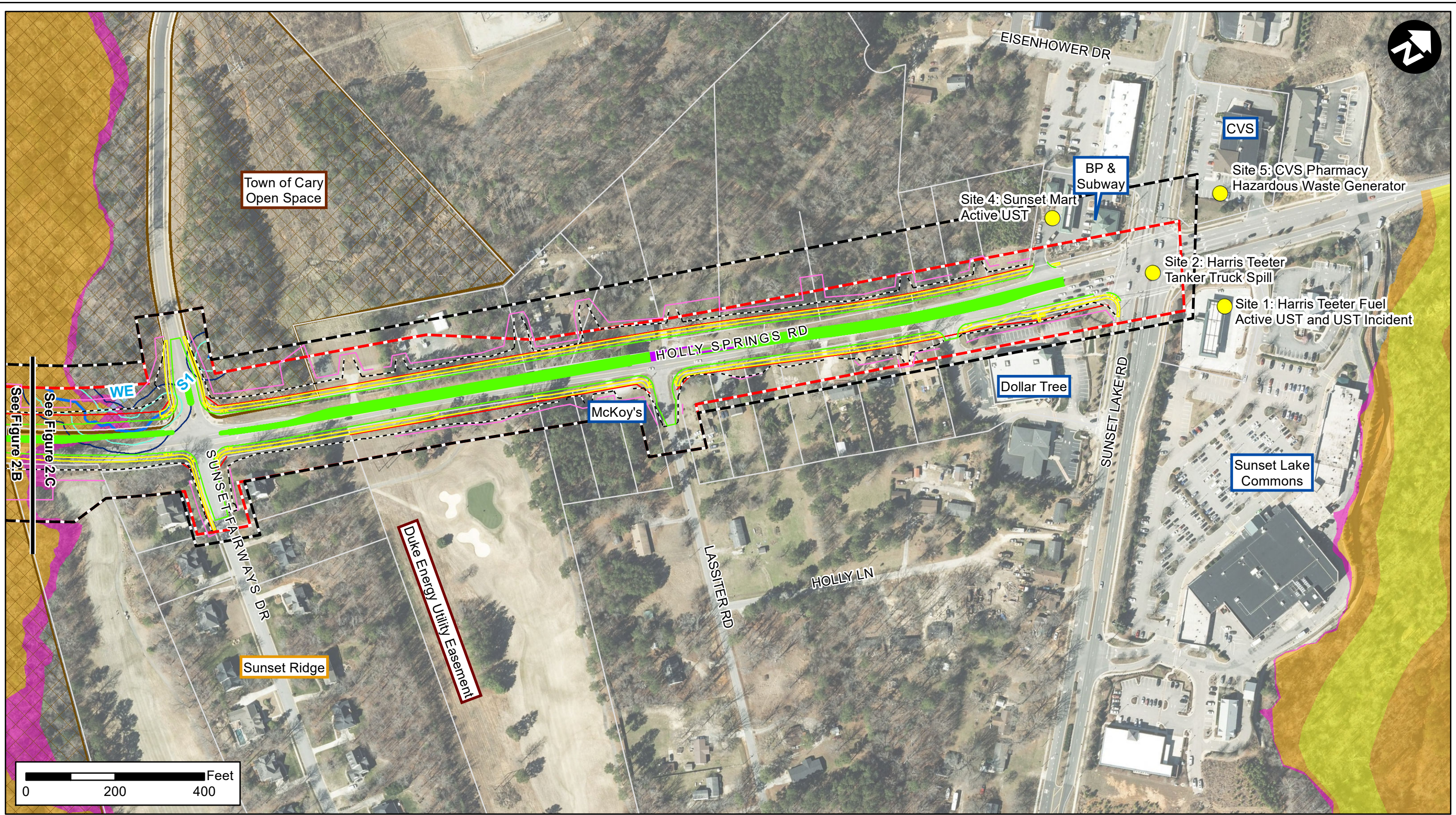
- Proposed Sidewalk
- Proposed Edge of Travel
- Proposed Slopestakes

Figure 2.A:
U-6243 Environmental Features
 Holly Springs Road (S.R. 1152)
 Improvements Phase 2
 Holly Springs, Wake County



- | | | | | |
|---|---|--|---|--|
| Neighborhood | NEPA Study | Floodway | Proposed Concrete Island/Median | — Streams |
| School/Childcare | Env. Field Survey | 100-Yr Floodplain | Proposed Landscaped Median | — Proposed Sidewalk |
| Business/Shopping Center | Wetlands | 500-Yr Floodplain | Proposed Temporary Easement | — Proposed Bridge |
| Emergency Services | Riparian Buffer Zone 1 | Local Government Ownership | — Proposed Right-of-Way | — Proposed Edge of Travel |
| | Riparian Buffer Zone 2 | Hazardous Materials Site | — Property Line | - - - Proposed Slopestakes |

Figure 2.B:
U-6243 Environmental Features
 Holly Springs Road (S.R. 1152)
 Improvements Phase 2
 Holly Springs, Wake County



- Neighborhood
- School/Childcare
- Business/Shopping Center
- Emergency Services

- NEPA Study
- Env. Field Survey
- Wetlands
- Riparian Buffer Zone 1
- Riparian Buffer Zone 2

- Floodway
- 100-Yr Floodplain
- 500-Yr Floodplain
- Local Government Ownership
- Hazardous Materials Site

- Proposed Concrete Island/Median
- Proposed Landscaped Median
- Proposed Temporary Easement
- Proposed Right-of-Way
- Proposed Slopestakes
- Property Line

- Streams
- Proposed Sidewalk
- Proposed Edge of Travel
- Proposed Slopestakes

Figure 2.C:
U-6243 Environmental Features
 Holly Springs Road (S.R. 1152)
 Improvements Phase 2
 Holly Springs, Wake County