



SANDY SPRINGS

GEORGIA

ROBERTS DRIVE SIDE PATH SCOPING REPORT

MARCH 2024

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EXECUTIVE SUMMARY

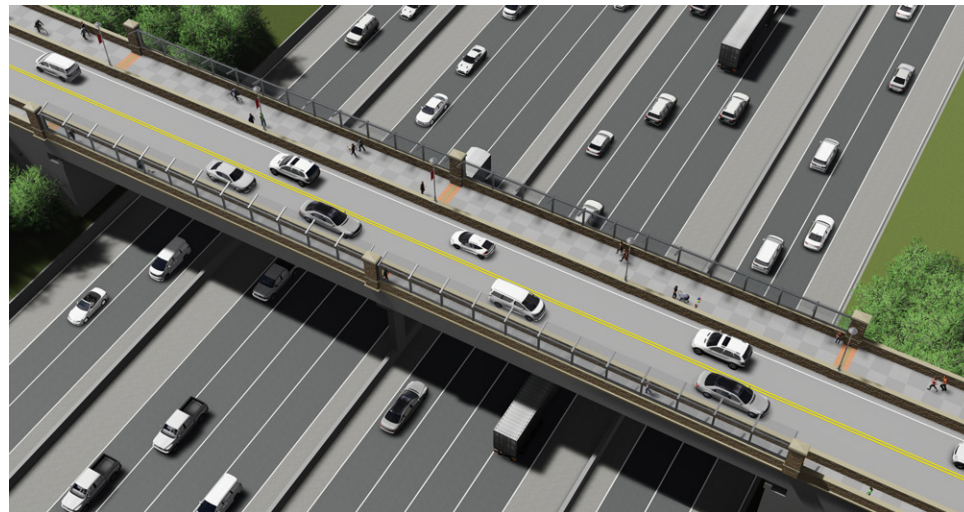
OVERVIEW

The proposed project would construct an approximate 2.2-mile shared use side path alongside Roberts Drive near Sandy Springs in Fulton County, Georgia. The project is planned for two phases between the intersection of Roswell Road and Dunwoody Place.

In addition to the side path project, the Georgia Department of Transportation (GDOT) SR 400 Express Lanes Project has slated two bridge replacements along Roberts Drive. These segments will be constructed by GDOT incorporating a multi-use side path with raised landscape buffer within the required right-of-way width on the new bridge construction.

The goal of this project is to create a safer and more comfortable walking and bicycling environment along Roberts Drive, and to increase connectivity to parks and greenspace within the City of Sandy Springs.

This scoping study was conducted to examine the possible ways of developing the Roberts Drive side path effectively and economically.



Georgia DOT SR 400
Express Lane Bridge
Typical Rendering
AtkinsRéalis



Morgan Falls Overlook Park
Visit Sandy Springs



Abernathy Greenway Park North
Visit Sandy Springs

METHOD

The design process involved in creating this scoping document included analysis of existing conditions, review of previous city planning documents, Georgia Department of Transportation (GDOT) SR 400 Express Lane project schedules and coordination with the City of Sandy Springs staff. AtkinsRéalis quickly proceeded with archeological and environmental research for the area impacted in the side path limits of work. Existing conditions on-site were examined to determine the alignment and design of the proposed shared use side path. Coordination with city staff and GDOT for the timeline was necessary for scheduling this project to coincide with the GDOT bridge replacement project. The project will be completed in two phases, the first phase located through industrial and commercial areas coincides with the first bridge replacement. The second phase will finish the side path and connect to Roswell Road.

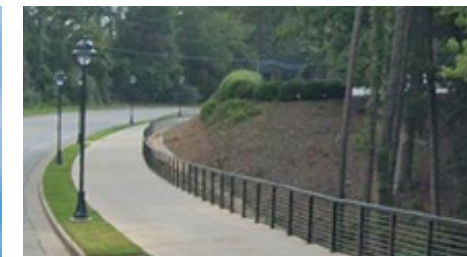
This project meets the goals set forth in the comprehensive plans adopted by the City of Sandy Springs from years 2014 to 2022 as identified in section 01.2 Background.



Island Ford
Chattahoochee River
National Recreation Area
Visit Sandy Springs



Sandy Springs Performing Arts Center
Visit Sandy Springs



Interstate N Pkwy Side Path
AtkinsRéalis



City Green at City Springs
Visit Sandy Springs

01 INTRODUCTION



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Chattahoochee River
Visit Sandy Springs

- 01.1 LOCATION
- 01.2 BACKGROUND
- 01.3 GOALS AND OBJECTIVES
- 01.4 WHAT IS A SIDE PATH?

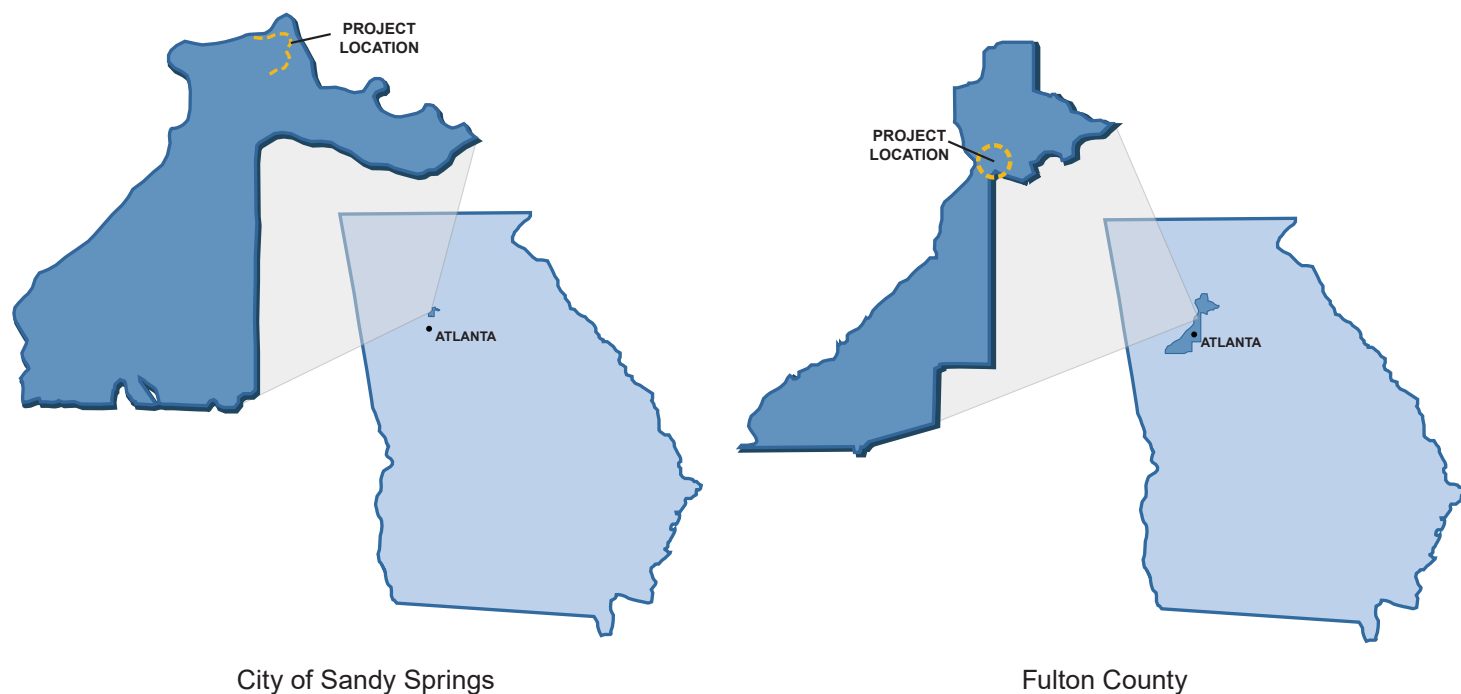
01.1 LOCATION



Map of proposed side path along Roberts Drive

The City of Sandy Springs is a 38.53 square mile city located about 12 miles north of Downtown Atlanta in northern Fulton County, Georgia, and is an inner ring suburb of Atlanta. The city's population was 108,080 at the 2020 census, making it Georgia's seventh-most populous city. It is the site of several corporate headquarters, including UPS, Newell Brands, Inspire Brands, Focus Brands, Cox Enterprises, and Mercedes-Benz USA's corporate offices.

The Roberts Drive side path project is in the northeastern part of Fulton County incorporating approximately 2.2 miles from Roswell Road to Dunwoody Place with the connection to Island Ford, the headquarters for the Chattahoochee National Recreation Area. This unit is located entirely within Sandy Springs.



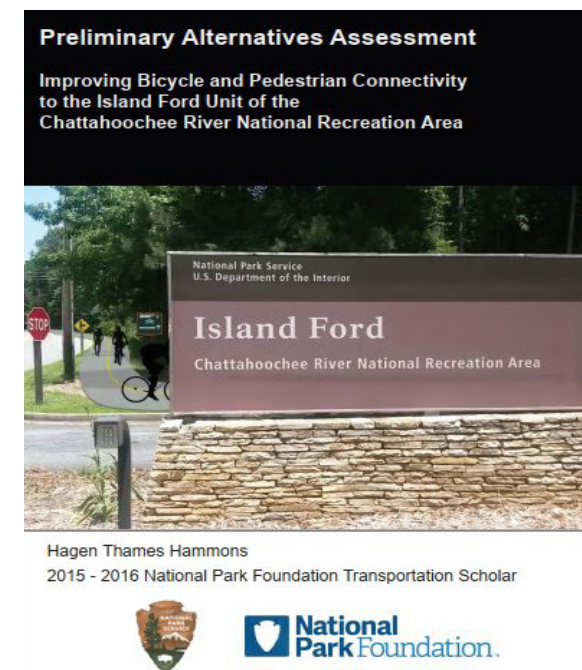
City of Sandy Springs

Fulton County

01.2 BACKGROUND

The following studies were reviewed to become familiar with previous work conducted in Sandy Springs that would align the Roberts Drive side path scoping report with citywide goals:

Preliminary Alternatives Assessment, Improving Bicycle and Pedestrian Connectivity to the Island Ford Unit of the Chattahoochee River National Recreation Area (Hagen Thames Hammons, 2015-16, NPF Transportation Scholar)



This report was completed to develop safer bicycle and pedestrian transportation alternatives to provide pedestrian links to the Chattahoochee National Recreational Area (CRNRA) at Island Ford Park. The goals are to decrease dependence on the automobile to access the unit, connect to the regional trail network and expand use of the CRNRA facilities to visitors and residents alike. The objective and outcome follow closely with an Environmental Assessment in accordance with the National Environmental Policy Act which evaluates the impacts of proposed project alternatives on the natural environment, historic resources, and public use and experience. Four action alternatives were developed and evaluated for discussion. This Scoping Report includes preliminary plans and technical data for approved **Alternative 1** as outlined in this report as selected as the best option for Roberts Drive.

- **Alternative 1:** A Multi-Use Side Path (MUSP) parallel to a major collector or road that directly connects the CRNRA to the future bridge.

Sandy Springs Transportation Master Plan, 2021



The Transportation Master Plan (TMP) completed by Kimley Horn (2021) for the City of Sandy Springs includes public input and connectivity data for improving roadways, trails, sidewalks, intersections, and transit facilities for the area. The TMP identifies Roberts Drive as priority for a bicycle, pedestrian, and trail connection.

01.2 BACKGROUND

City of Sandy Springs Next Ten Comprehensive Plan 5-yr Update, adopted 2017, updated 2022



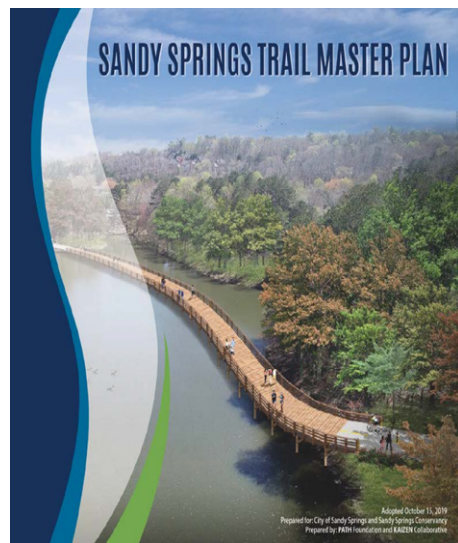
The comprehensive plan ranks developing an expanded trail network 9 out of the 10 action items. The plan denotes a priority of connecting green spaces, recreational facilities, destinations, and population centers within Sandy Springs with a network of interconnected on-road and off-road pedestrian and bicycle trails. Roberts Drive is identified in proposed on-road & road-adjacent bike and pedestrian connections.

Sandy Springs Recreation and Parks System Comprehensive Plan, February 2019



This report lists hiking trails and multi-use trails in the top five facility priorities needs for Sandy Springs Recreation and Parks System.

Sandy Springs Trail Master Plan, adopted 2019



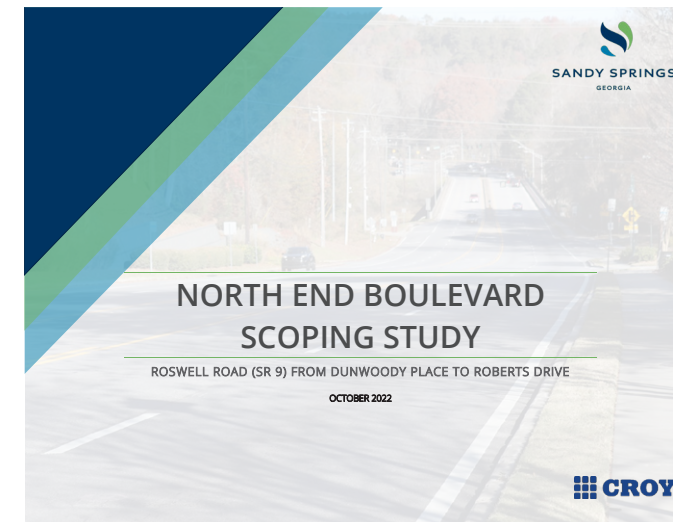
The top five priorities in this Master Plan lists multi-use trails as number two priority and identifies the Roberts Drive side path in the overall bicycle and pedestrian network plan. The plan recommends a 5-foot minimum landscaped buffer from the roadway should be required along with markings on the trail to heighten awareness that bicycles, and other users are present.

City of Sandy Springs TSPLOST, 2021

TIER TWO	
Roberts Drive Sidepath, Roswell Rd to Dunwoody Pl	Construction of a multi-use side path along Roberts Drive from Roswell Road/SR9 to Dunwoody Place.

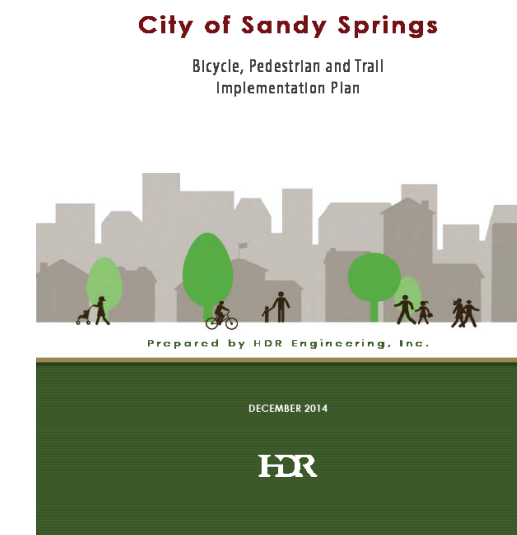
The 2021 Transportation Special Purpose Local-Option Sales Tax lists the Roberts Drive side path as a tier two project. TSPLOST tier 2 projects will only proceed if TSPLOST revenues exceed revenue projections.

North End Boulevard Scoping Study, October 2022



This study focuses on the Roswell Road corridor from Dunwoody Place to Roberts Drive, and lays out a recommendation for operational, safety, and multimodal improvements.

City of Sandy Springs Bicycle, Pedestrian, and Trail Implementation Plan, December 2014



This plan identifies the Roberts Drive side path in the overall bicycle and pedestrian network plan. Roberts Drive side path project aligns with Policy T-B2 (Bicycle and Pedestrian Improvements). Another key action in the comprehensive plan for connections from neighborhoods and multi-family apartment units to natural recreation areas to mitigate traffic congestion through a range of transportation options and linkages. This project meets the Green Space, Natural Systems, and Sustainability policies GS-C1 and C2 vision to enhance on-road links to local and regional parks and connect to green space network.

01.2 BACKGROUND

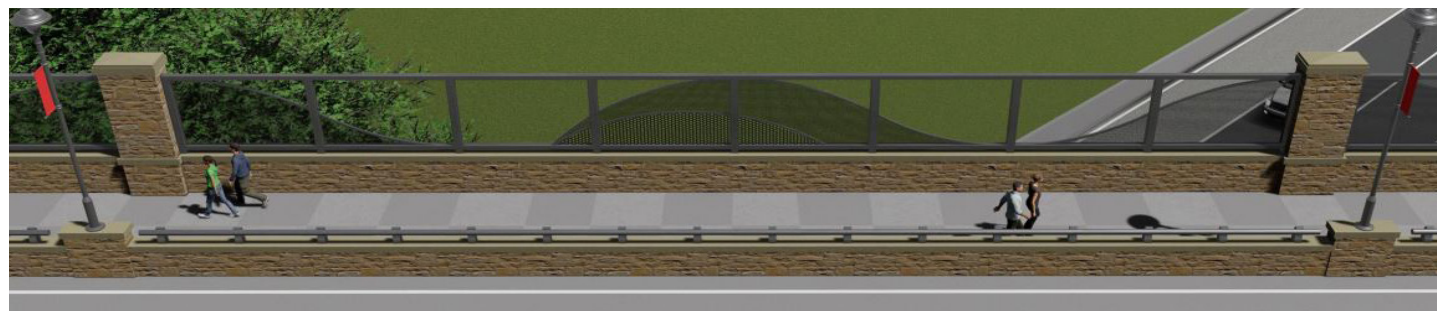
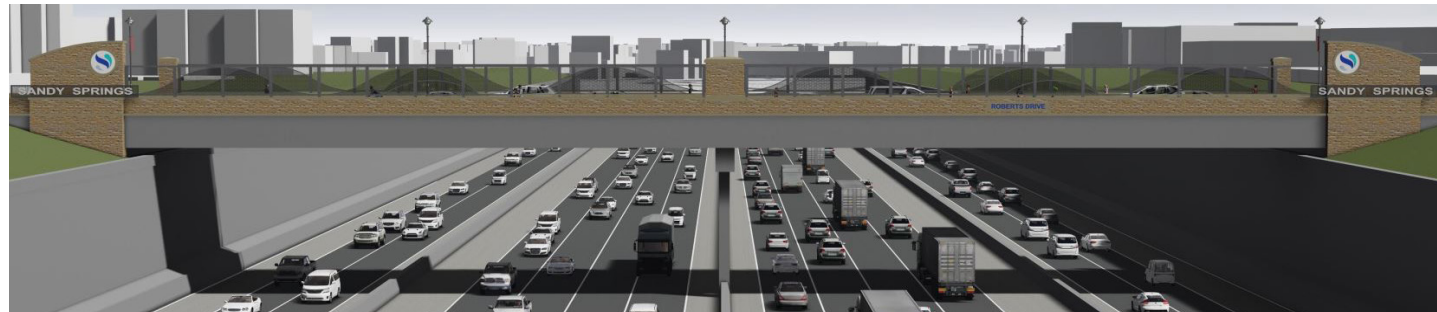
SR 400 Express Lanes Bridge Replacement Project, 2023-Ongoing

The City of Sandy Springs prepared the SR 400 Managed Lanes Bridge Enhancements Aesthetic Design Guide (Dec. 2020) for three bridge projects within the city: Spalding Drive, Pitts Road, and Roberts Drive.

The elements in the design recommendations include:

- Exterior barrier wall enhancements
- Traffic barrier wall enhancements between travel lanes and pedestrian areas
- Columns (above bridge deck)
- Railings / fencing
- Specialty paving
- Lighting (commercial) and conduit
- Colors and finishes

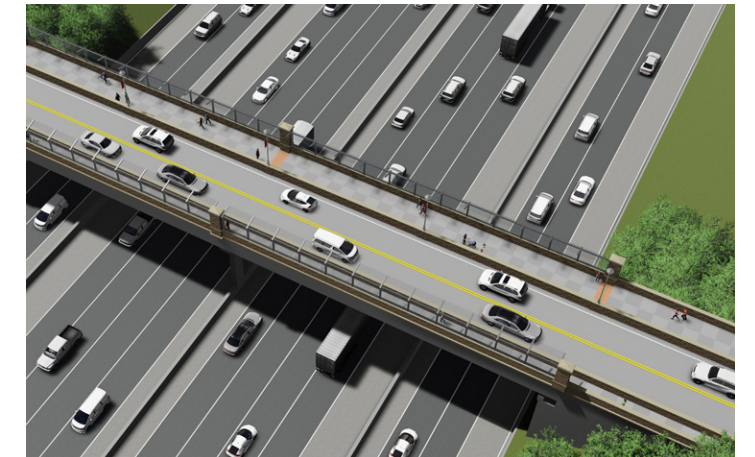
Typical Renderings of Bridge Aesthetics



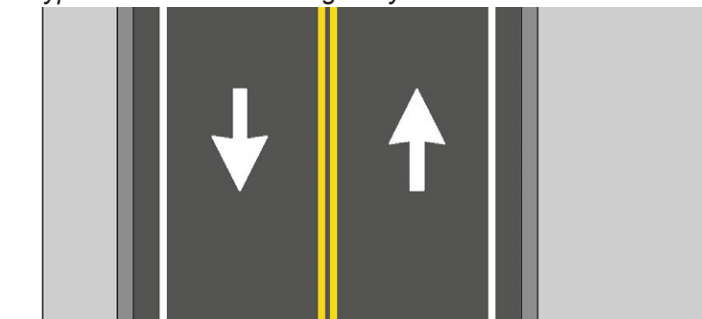
Roberts Drive requested betterments included:

- 12' multi-use path on south side
- Interior barrier wall separation on south side
- Pedestrian lights on interior barrier wall on south side
- Utility conduits
- Decorative fencing/railing

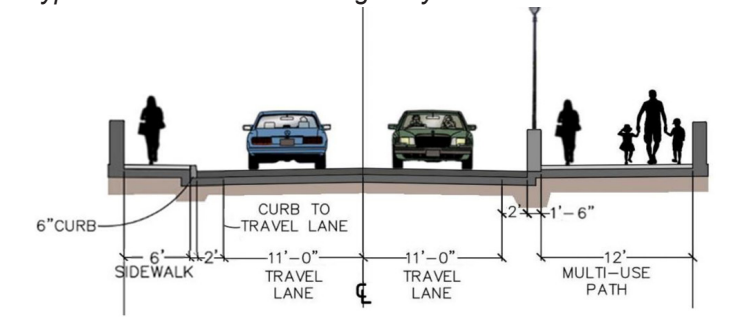
GDOT will follow the guidelines for the side path extension up to and over the SR 400 express lanes bridge replacement project. Power poles and utilities relocation in these segments will be part of GDOT construction.



Typical Plan View of Bridge Layout



Typical Section View of Bridge Layout



01.3 GOALS AND OBJECTIVES



INCREASE ACCESS TO CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA

Improve access to the national recreation area with direct trail connection to Roberts Drive and the City of Sandy Springs



FILL GAPS IN ACTIVE TRANSPORTATION NETWORK

Expand the City of Sandy Springs multi-modal transportation system (walking and biking) Provide non-automobile access to Chattahoochee River National Recreation Area and other destinations along Roberts Drive



IMPROVE MULTI-MODAL SAFETY

Provide safe walking and biking routes within the City of Sandy Springs Reduce crashes between automobiles, pedestrians, and cyclists Help eliminate conflicts between modes of travel



REDUCE VEHICLE MILES TRAVELED

Improve air quality Reduce car-dependence within the City of Sandy Springs



PROMOTE HEALTHY LIFESTYLES

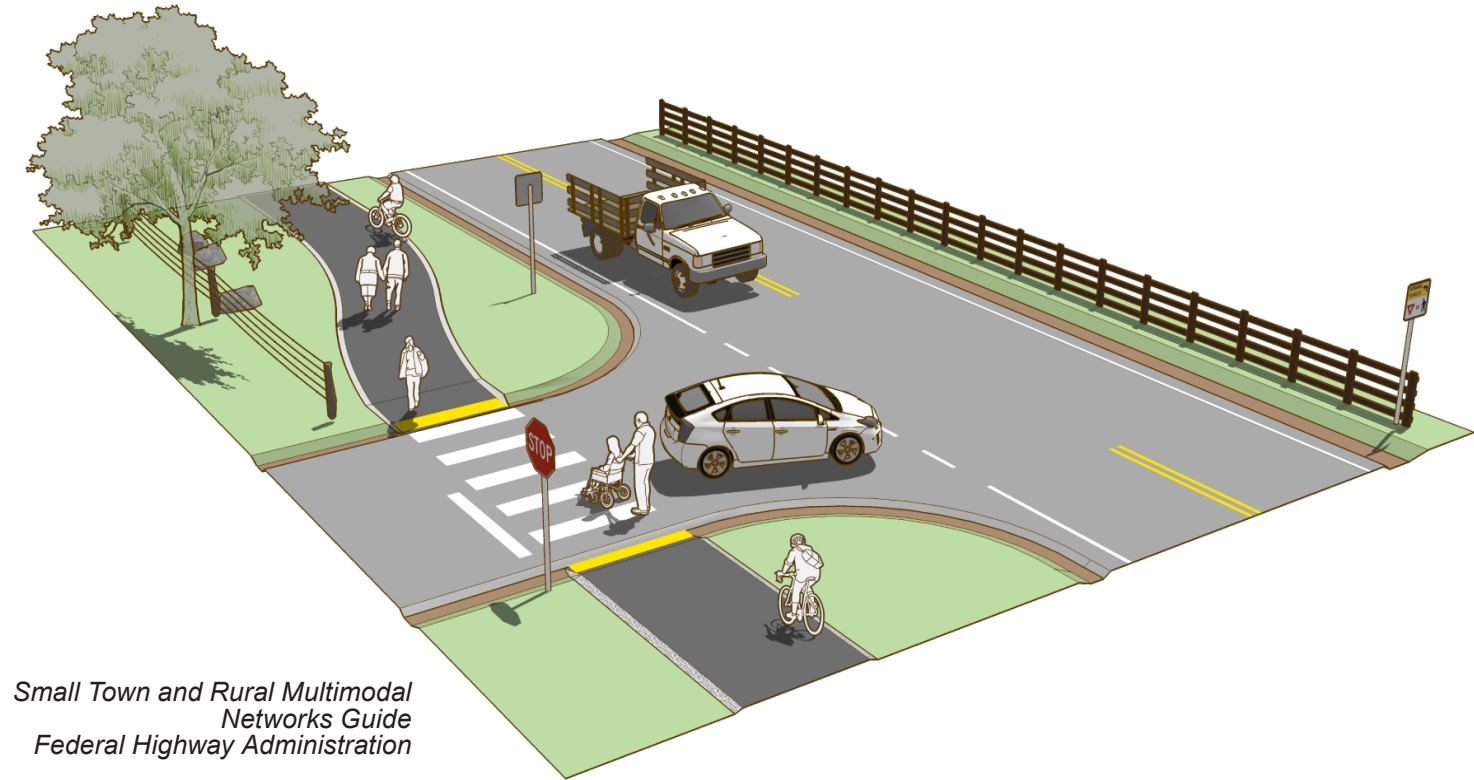
Promote physical and mental health benefits through exercise Promote social interaction Promote active commuting



PROTECT NATURE AND ENVIRONMENTAL RESOURCES

Improve access to nature Encourage environmental education

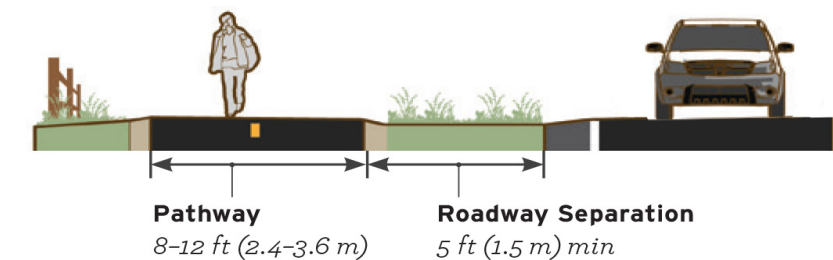
01.4 WHAT IS A SIDE PATH?



Small Town and Rural Multimodal Networks Guide
Federal Highway Administration

A side path is bi-directional shared use path located adjacent and parallel to a roadway. Side paths can offer a quality experience for users, including pedestrians and cyclists, while utilizing space within the right-of-way. Typical features that denote a side path include an 8-12 ft. path depending on available space, to allow for bi-directional traffic to pass by comfortably. The separation distance between traffic and the path should be no less than 5 ft. In areas where 5 ft. cannot be accomplished, a raised buffer such as shrubs or a guardrail should be provided for protection. This side path will increase the city of Sandy Springs' greater network of pedestrian and cyclist connectivity, while encouraging bicycling and walking within the Roberts Drive neighborhood.

Considerations for a side path are requirements for a wide shoulder or sufficient right-of-way to provide pedestrian separation from the roadway.



Typical Side Path Section
Small Town and Rural Multimodal Networks Guide
Federal Highway Administration

02

EXISTING CONDITIONS



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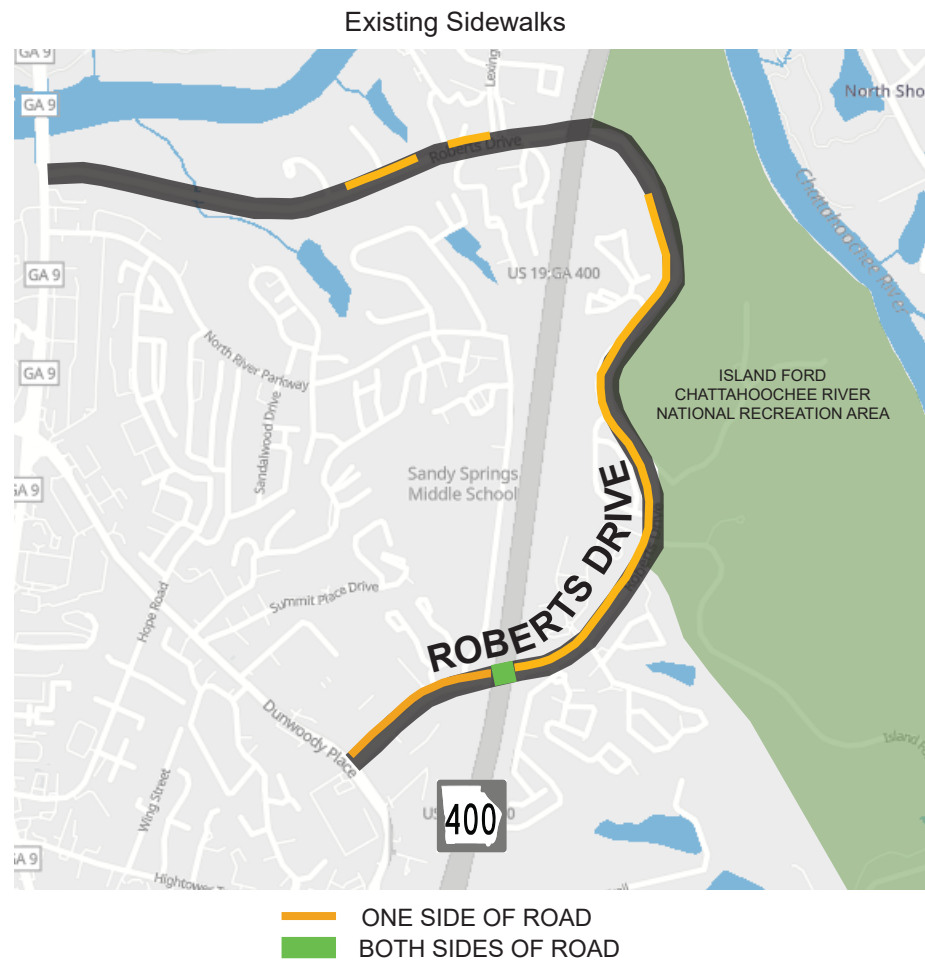
Island Ford, Chattahoochee River National Recreation Area
AtkinsRéalis

- 02.1 EXISTING INFRASTRUCTURE**
- 02.2 FUTURE CONNECTIVITY**
- 02.3 LAND USE AND ZONING**
- 02.4 ECOLOGICAL REPORT**
- 02.5 CULTURAL RESOURCES REPORT**

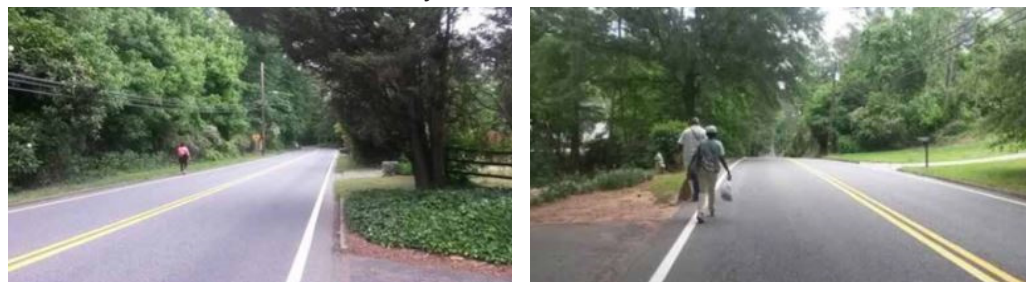
02.1 EXISTING INFRASTRUCTURE

SIDEWALKS

Existing pedestrian sidewalks are located predominately adjacent to developed residential and commercial areas along Roberts Drive. Many gaps exist in the sidewalk network leaving pedestrians to travel on the shoulders of the roadway in many locations. Safe passageways and crossings are critical for the safety of the pedestrian. Although speed limits are posted at 35 mph, many speeds exceed the posted limit and visibility around curves is reduced, shortening reaction times for both vehicles and pedestrians to avoid dangerous conditions.

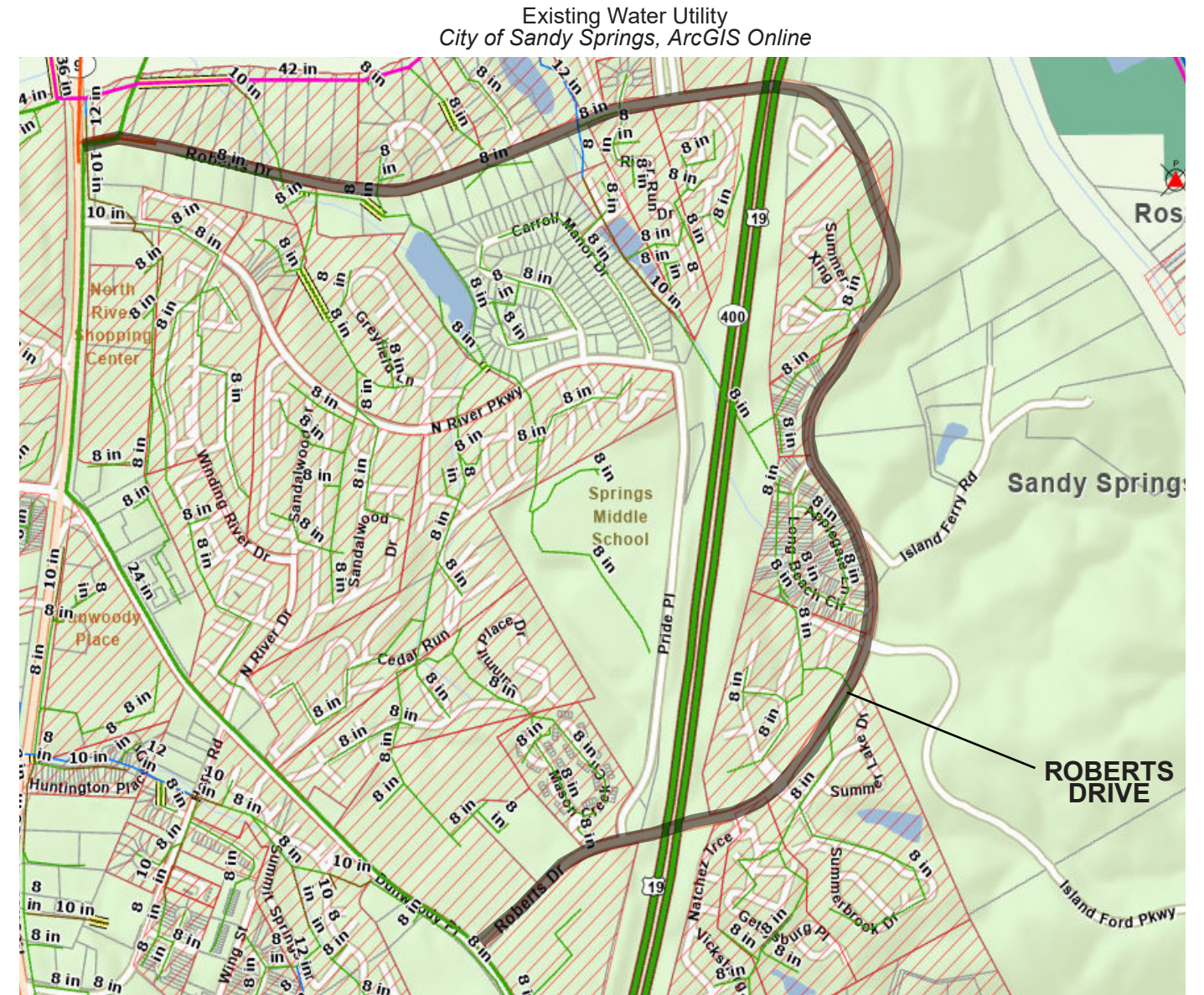


Gaps in Sidewalk Network
Preliminary Alternatives Assessment

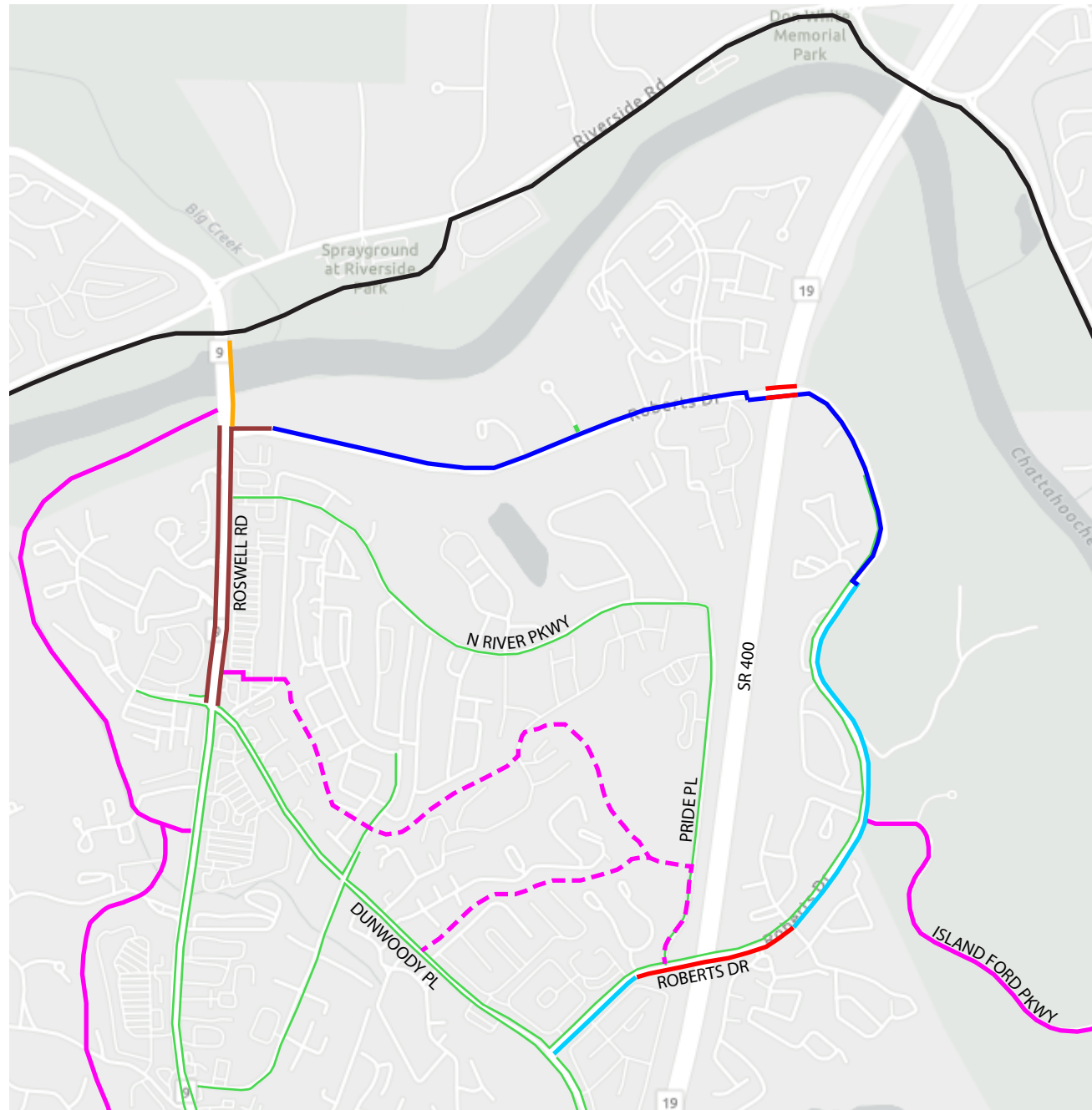


UTILITIES

Utility locations are considered in the design process. Fire hydrants may be relocated along with power poles and light poles adjusted, as needed, to accommodate the new side path and provide for pedestrian safety.



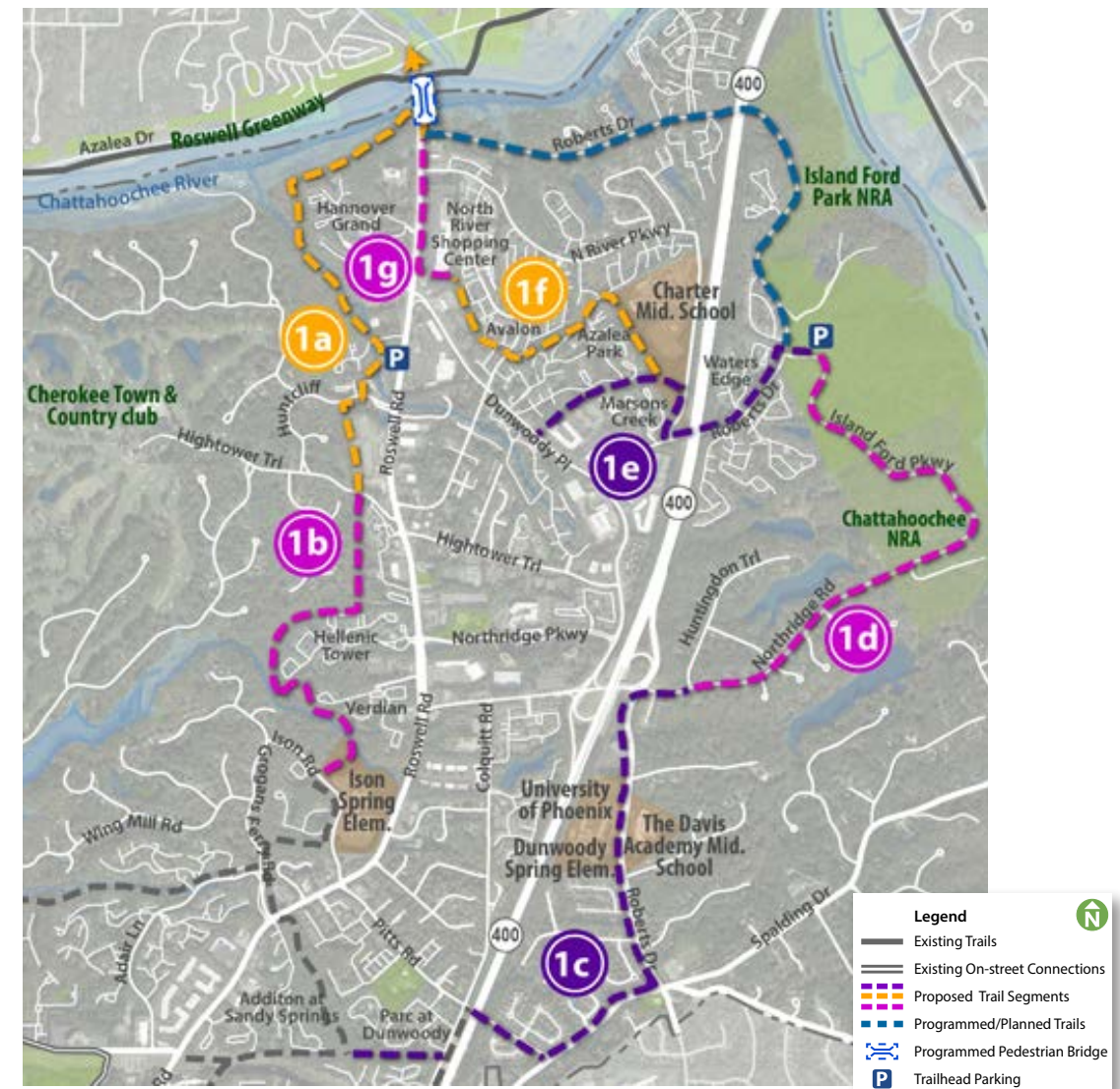
EXISTING AND FUTURE CONNECTIONS



- Existing Sidewalks
- Trails Master Plan
- - - Trails Master Plan - Planned
- Roswell North End Blvd
- Roswell Ped Bridge Project
- Roberts Drive Side Path - Phase 1
- Roberts Drive Side Path - Phase 2
- To Be Completed by GDOT
- Roswell Riverwalk (City of Roswell)

The Chattahoochee River National Recreation Area (CRNRA) has parks located within the city of Sandy Springs. The CRNRA is the largest urban green space environment and recreational jewel of the Atlanta Metropolitan region. The park is made up of 15 distinct and pristine land-based units surrounded by one of the fastest growing regions in the nation. Island Ford, located along Roberts Drive, is the most visited site among the CRNRA and is home to the park's headquarters. By creating safe and comfortable linkages, more residents within the city will have access to the public parks by foot or bike.

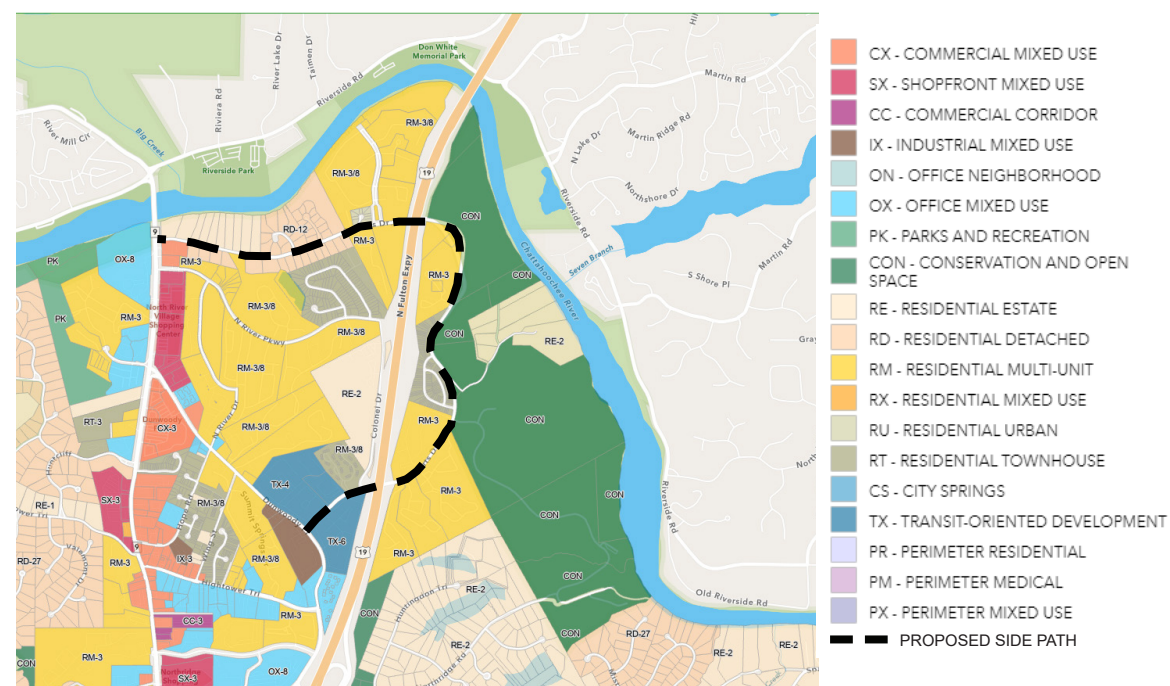
The Roberts Drive side path project intersects with the North End Connector trail project described in the Trails Master Plan beginning at Spalding Drive and ending at the Chattahoochee River, connecting North End residents to commercial hubs, schools, recreation areas and the existing Roswell Greenway over the Chattahoochee River. The planned pedestrian bridge over the Chattahoochee River will provide connections to the Roswell Riverwalk.



North End Connector Trails
Sandy Springs Trail Master Plan and Implementation Strategy

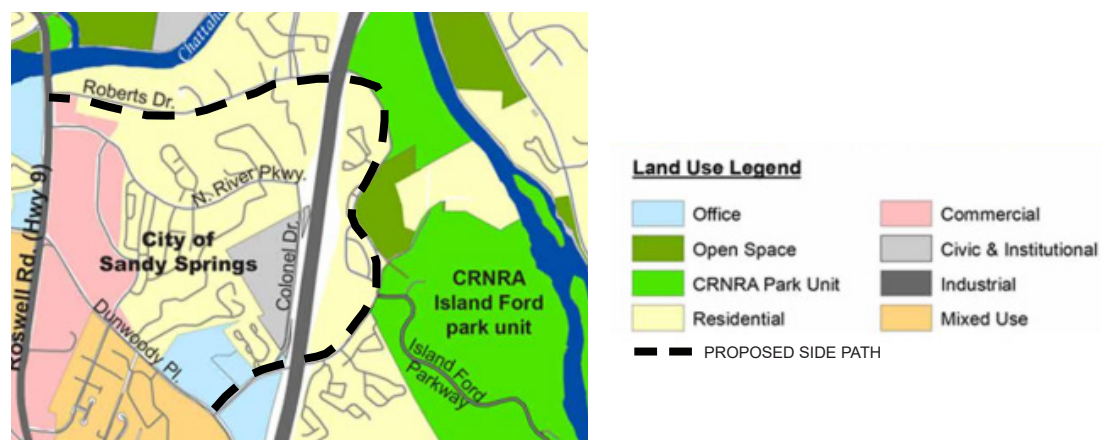
02.3 LAND USE AND ZONING

COMMUNITY DEVELOPMENT MAP



The City of Sandy Springs adopted a new development code and zoning map in August 2017. The above map shows the zoning around the proposed side path. The corridor is primarily residential townhouses (RT-3), residential multi-unit (RM-3), conservation and open space (CON), residential detached (RD-18, RD-27), and residential estate (RE-1). The northern end of Roberts Drive has a commercial mixed-use property (CX-3) on the opposite side of the street as the proposed trail. The southern end of Roberts Drive has transit-oriented development (TX-4) on either side of the roadway.

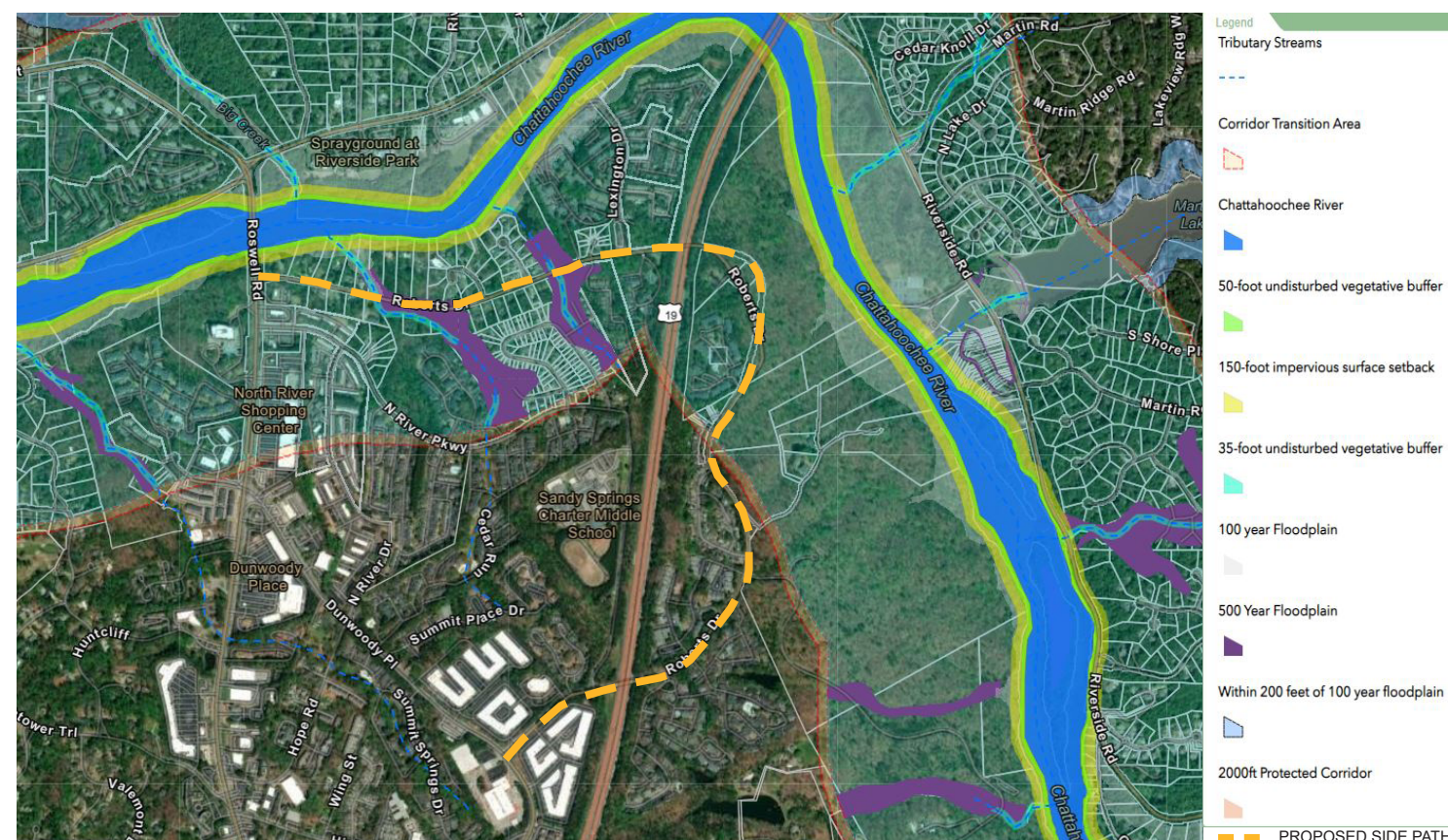
LAND USE MAP



The Roberts Drive corridor is primarily residential, scattered with some single-family homes, and multi-family townhomes and apartment complexes. The corridor also has some areas of commercial on the northern end of the project, fronting Roswell Road. The southern end of Roberts Drive where it meets Dunwoody Place is primarily single-story office buildings.

02.4 METROPOLITAN RIVER PROTECTION ACT

The Atlanta Regional Commission (ARC) Metropolitan River Protection Act (MRPA) was adopted by the Georgia General Assembly in 1973 to protect a 48-mile stretch of the Chattahoochee River between Buford Dam and Peachtree Creek by creating a 2,000 ft. buffer along both banks of the river and its impoundments. The Act was amended in 1998 to extend the Corridor an additional 36 miles to the downstream limits of Fulton and Douglas counties. A 2023 amendment to the Corridor Plan was added to describe planting restoration and other clarifications. MRPA is designed to protect the water quality and environs of the Chattahoochee River. Phase 2 of the Roberts Drive side path falls within the limits of the 2,000 ft. protected corridor of the MRPA and will require further study to determine how potential impacts to the river will be addressed to comply with land-disturbing limits of the policy standards.



Map showing the NRPA buffers.
Atlanta Regional Commission

All land-disturbing activity in the corridor must be reviewed, approved, and certified for consistency with Corridor Plan standards. Consult the MRPA Rules and Regulations for procedures and requirements for corridor reviews. The local government will determine if a review is needed.

02.5 ECOLOGICAL REPORT

As part of the project planning process, a desktop review was conducted to identify potential State and Federal Waters within the proposed project limits. To conduct this desktop review, the following resources were utilized: USGS topographic maps, aerial imagery, National Wetland Inventory (NWI) maps, Federal Emergency Management Agency (FEMA) Floodplain Maps, and soil maps. Additionally, Google Earth Streetview was utilized to visualize approximate conditions on the ground. No field visits have been conducted as part of this desktop review. Based on the data available, there are two streams, one open water, and one additional buffer anticipated to be present within the project limits. Refer to the full Ecological report located in the appendix.

Although the Chattahoochee River is not located within the project limits, it is considered a trout stream and would be subject to a 50' state-mandated stream buffer. All other channels with perennial or intermittent flow and open waters within Fulton County are not considered trout waters and are subject to a 25' state-mandated stream buffer. Channels with ephemeral flow are also not considered trout waters and are not subject to state-mandated buffers in Fulton County. The City of Sandy Springs requires a minimum of 75' buffer along designated streams and bodies of water. Of the 75', 50' must remain undisturbed, while the other 25' property owners can remove vegetation and grading.

Location 1: Stream near 9679 Roberts Dr.
A 75 ft. city mandated stream buffer would apply.

Location 2: Stream near 9500 Roberts Dr
A 75 ft. city mandated stream buffer would apply.



The map above shows the approximate location of the open waters and streams within the project limits.

The proposed alignment for the side path will traverse two state-mandated stream buffers on Phase 2 of the project with proposed boardwalks to stay within the Federal guidelines for minimal disturbance.

02.6 CULTURAL RESOURCES REPORT

As part of the project planning process, a cultural resources desktop screening was conducted. The review included the National Register of Historic Places (NRHP), National Historic Landmarks, and historic and archaeological properties included in Georgia's Natural, Archaeological and Historic Resources Geographic Information System (GNAHRGIS) database.

One NRHP (National Register of Historic Places) listed resource is located within the proposed projects area of potential effects. This resource, the Isaac Roberts House, is located at 9725 Roberts Drive. The house was built in 1894 and listed on the NRHP in 2008.

Isaac Roberts was a chief engineer for the Roswell Railroad and later founder of Roswell Bank. The railroad was a three-foot narrow-gauge railroad that ran south of Roswell GA to Chamblee from 1881 to 1921 as a passenger and freight carrier. The Roswell terminus was located south of the Chattahoochee River near Roberts Drive. Ike (Isaac) Roberts was an employee of Southern Railway at the time the company decided to create the Roswell Railroad. Roberts participated in the grading and track laying for this new line. He also purchased 650 acres of land at the northern terminus, built a train station, and leased it to Southern Railway. After completion of the line, he stayed on as the engineer and was the only person that worked in that capacity until the closing of the line. His home remains on Roberts Drive (his namesake in the Sandy Springs community) (Wikipedia).

Some features that potentially contribute to the eligibility of the Isaac Roberts House are located within and outside the existing right-of-way of Roberts Drive. These features include trees, vegetation, fence, brick pavers, and stone pillars.

Items in the right of way could be impacted. Trail narrowing will occur along this property to minimize potential impacts.



Isaac Roberts Property Signage and Columns
Preliminary Alternatives Assessment



Isaac Roberts House
Preliminary Alternatives Assessment

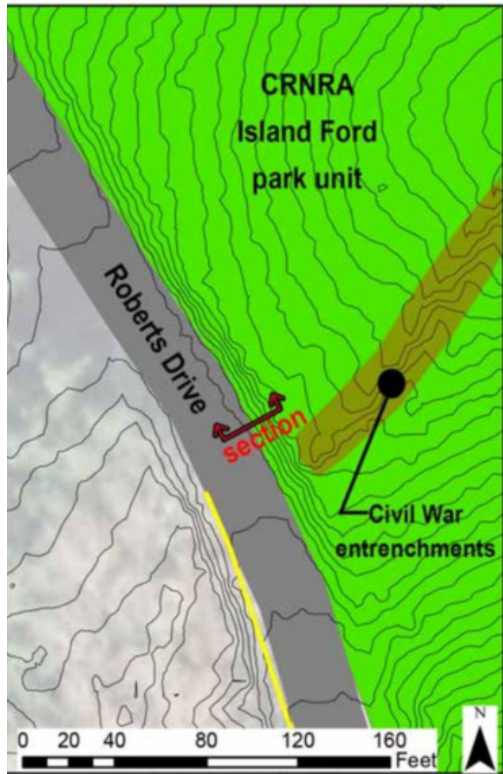
02.6 CULTURAL RESOURCES REPORT

An archaeological resource, Civil War military entrenchment line (site number 9FU753), is located on top of a slope and was identified within the projects area of potential effects. "This line, entrenched by Federal troops during the Atlanta campaign (5-7-1864 to 9-2-1864) immensely strengthened General W. T. Sherman's hold on the Chattahoochee River's south bank. This causing the Confederate Army to abandon its river line and withdraw south of the river."(Hitt 1991)

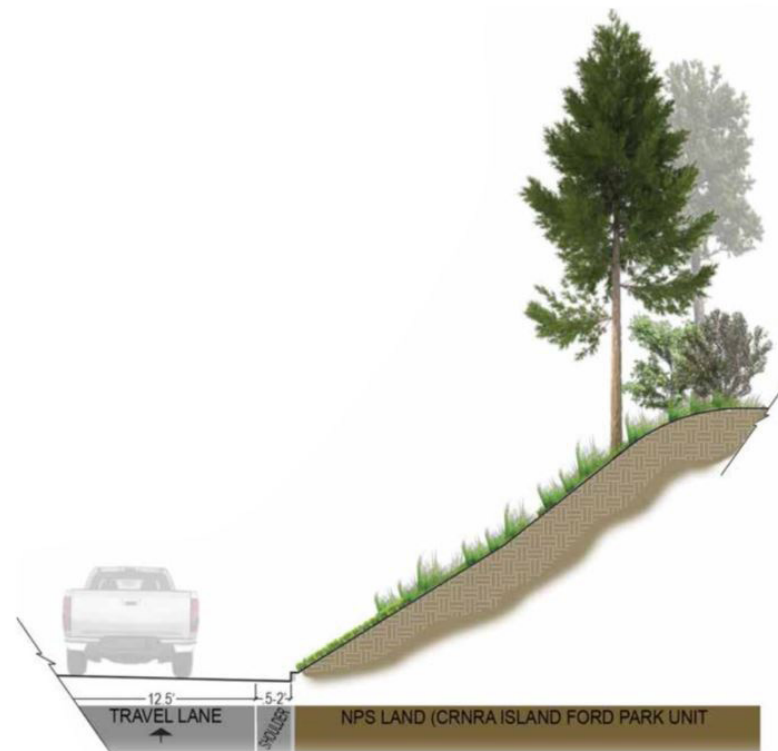
This site is located on NPS property and does not extend into the existing right-of-way.

Three other archaeological resources were identified in the report and determined to not be affected by the project limits. Fourteen additional resources 50 years of age or older are located within the project's area of potential effects. The resources were identified via the Fulton County tax assessor's records.

Refer to the appendix for the full cultural resources report for more information on these sites.



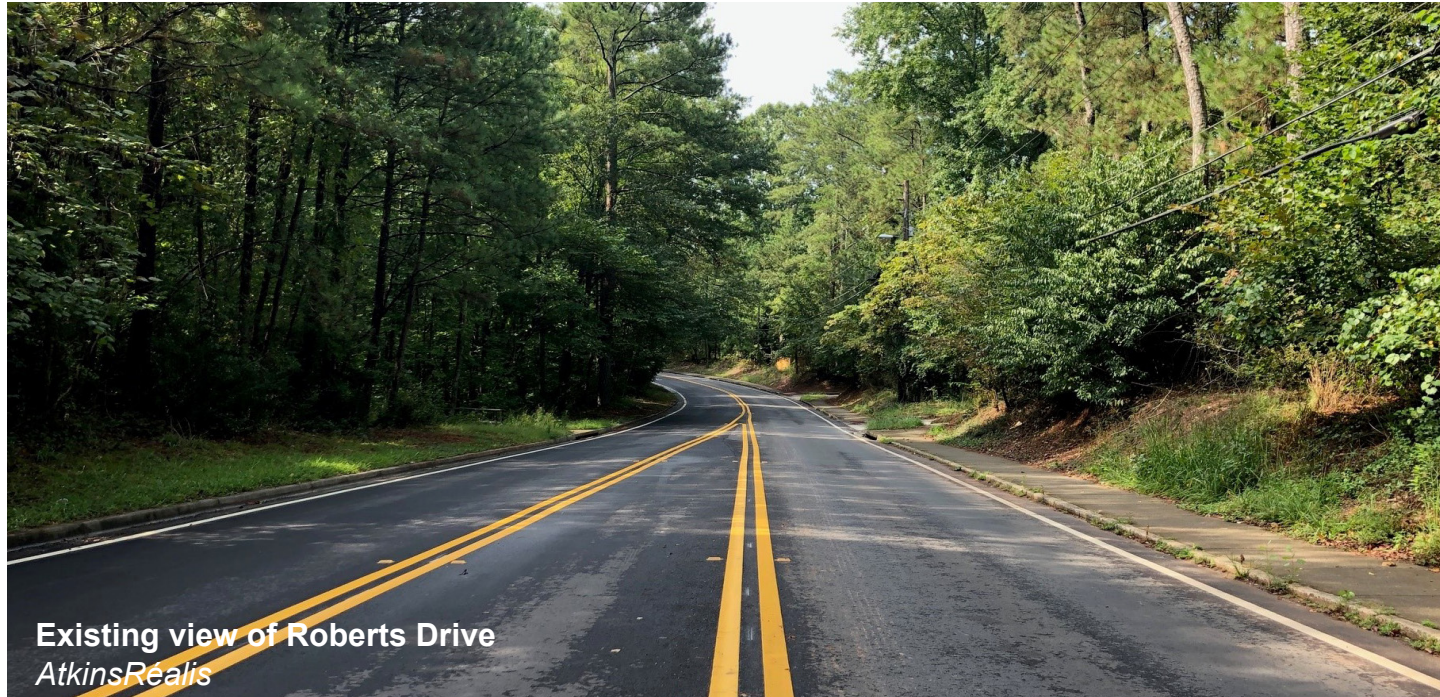
Plan view of Civil War Trench Location
Preliminary Alternatives Assessment



Section view of Civil War Trench Location
Preliminary Alternatives Assessment

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03 TECHNICAL ANALYSIS



- 03.1 ELEVATION MAP
- 03.2 SLOPE ANALYSIS MAP

03.1 ELEVATION MAP



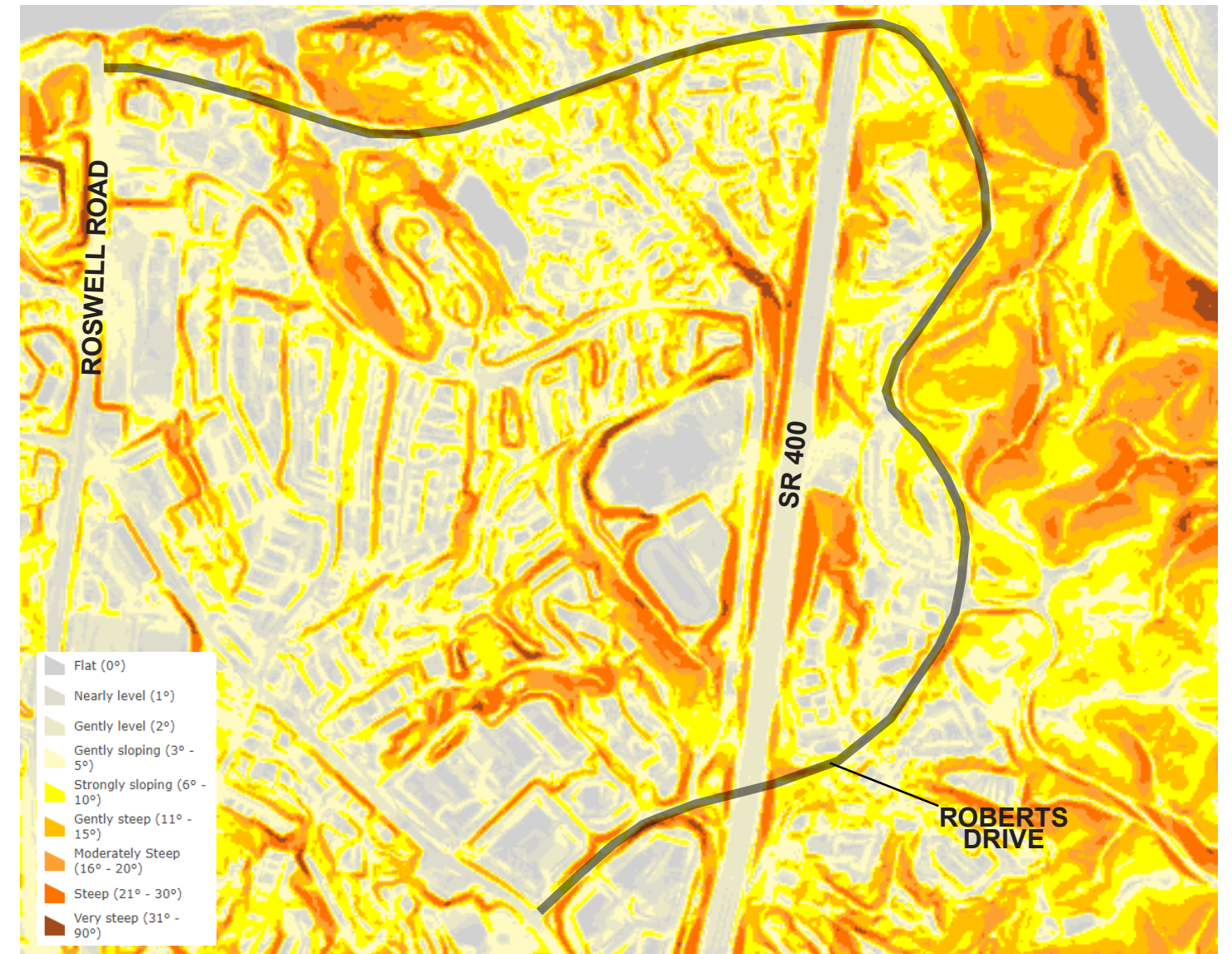
ArcGIS Online

The elevation of Sandy Springs, Georgia is 323m / 1060feet. The primary coordinate point for Sandy Springs is located at latitude 33.9243 and longitude -84.3785 in Fulton County. The formal boundaries for the City of Sandy Springs encompass a land area of 37.66 sq. miles and a water area of 0.87 sq. miles.

Fulton County's elevation is 1,093 feet. The elevation of the area encompassing Roberts Drive spans between 900 ft. elevation at the northern end (Phase 2) and 1050 ft. elevation at the southern end (Phase 1).

Certain areas adjacent to the roadway within the right of way have steep grades and will require walls for the side path to traverse the adjacent terrain.

03.2 SLOPE ANALYSIS MAP



ArcGIS Online

Slopes in the right-of-way along Roberts Drive side path construction zones are moderate with steeper grades along portions of the commercial areas (Phase 1) and adjacent to some residential areas along phase 2. These areas will require walls for the side path to traverse the terrain.

04

DESIGN RECOMMENDATIONS



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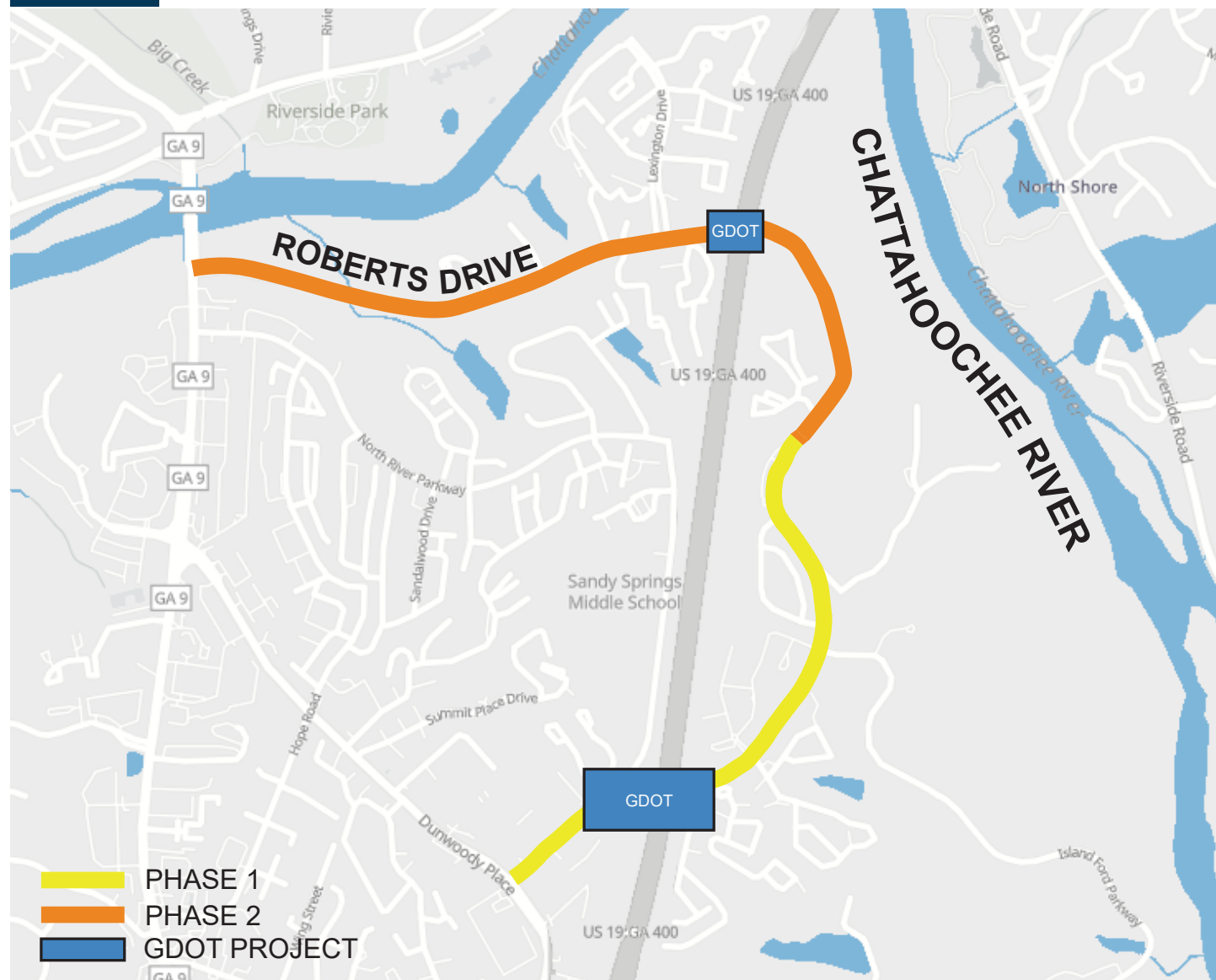
Interstate North Side Path
AtkinsRéalis



Interstate North Side Path
AtkinsRéalis

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- 04.8 MID-BLOCK CROSSINGS SIGHT DISTANCE STUDY

04.1 PHASING PLAN



The side path is divided into a two-phase construction project.

Phase 1 (highlighted in yellow) will begin at Dunwoody Place (STA 0+00) and travel north to the start of the GDOT bridge replacement project over SR 400 (STA 8+12). The first phase will pick back up on the other end of the GDOT project (STA 22+17) and continue to a midblock crossing near Summer Crossing (STA 53+10). The phase 1 end point was chosen at the mid-block crossing near Summer Crossing to provide a connection point to the existing sidewalk locations and to provide residents along the opposite side of Roberts Drive access to the first phase of trail. Phase 2 (highlighted in orange) will begin at the midblock crossing (53+10) and travel north on the west side of the roadway to the limits of the GDOT SR 400 underpass bridge replacement project (STA 71+95). This phase will pick back up on the other end of the GDOT project (STA 75+38) and cross to the north side of Roberts Drive. The path will continue to Roswell Rd, where the side path ends (STA 119+50).

04.2 SITE AMENITIES



Pedestrian Light



Intersection Light



Metal Bollards



Rectangular Rapid Flashing Beacons (RRFB)

04.2 SITE AMENITIES



GDOT Standard Gravity Wall, Stone



GDOT Standard 42" Cabled Handrail, Steel



GDOT Standard Turned-Up Curb, Concrete



GDOT Standard Poured-in-Place Wall, Stone

04.3 EASEMENTS

Temporary Construction Easement:

5 ft. will be provided during construction off the back of the side path. In areas where this space is not available within the right-of-way, up to 5 ft. temporary construction easement will be provided. In areas with a gravity wall, a minimum of 10 ft. will be provided from the back of the wall during construction. In areas where this space is not available within the right-of-way, up to 10' temporary construction easement will be provided. These easements are shown in **Blue** on the plans.

Permanent Easement:

A permanent easement will be provided at the proposed culvert extension required near station 51+00. These easements are shown in **Green** on the plans.

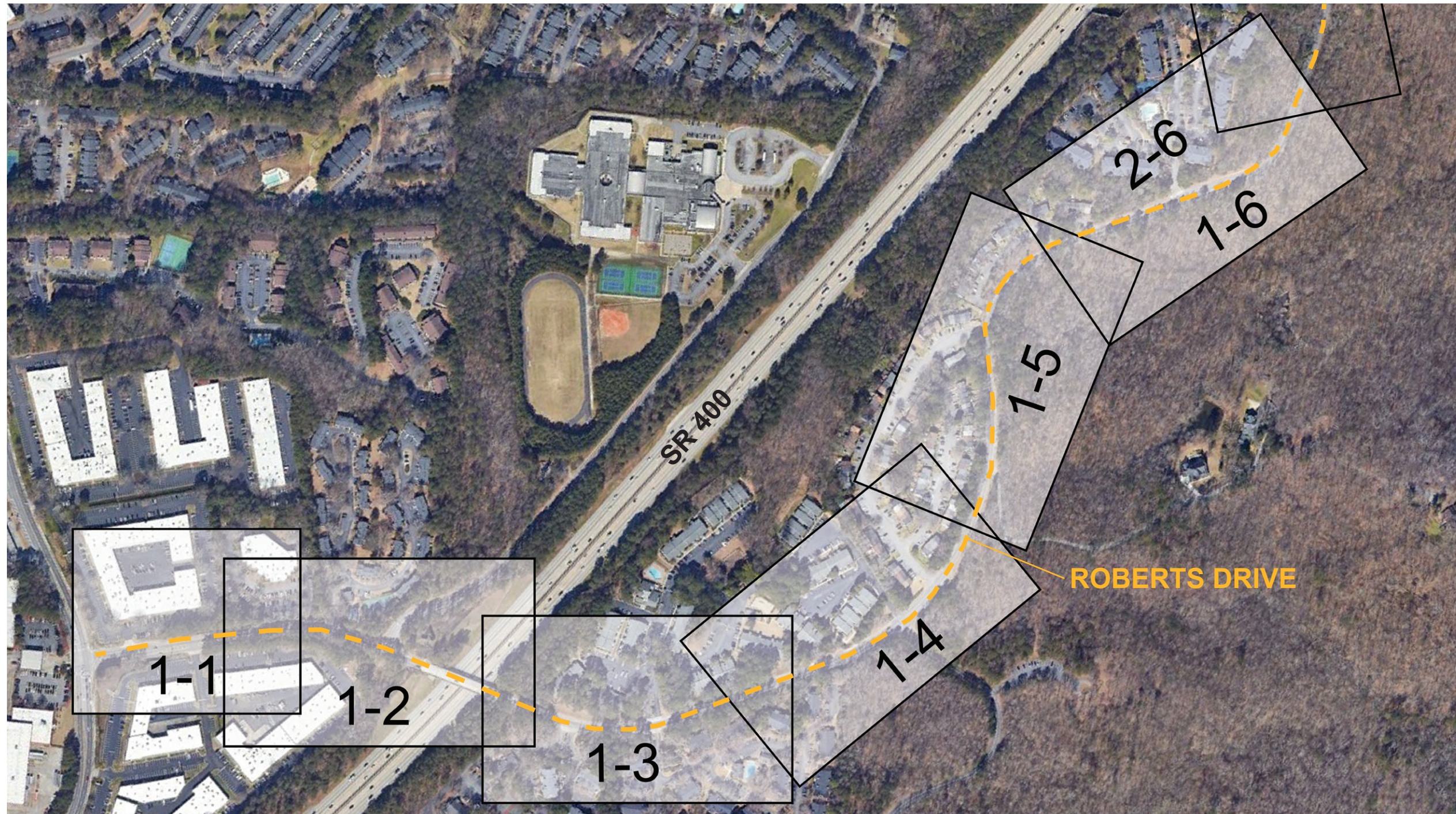
Temporary Driveway Easement:

In areas where driveway reconstruction is required, a temporary driveway easement will be provided. The size of each easement varies based on requirements to rebuild each drive. These easements are shown in **Orange** on the plans.

Required Right of Way:

Additional ROW will need to be acquired in areas to meet the minimum space required for the side path. Required ROW is shown in **Red** on the plans.

04.4 PHASE 1 OVERVIEW



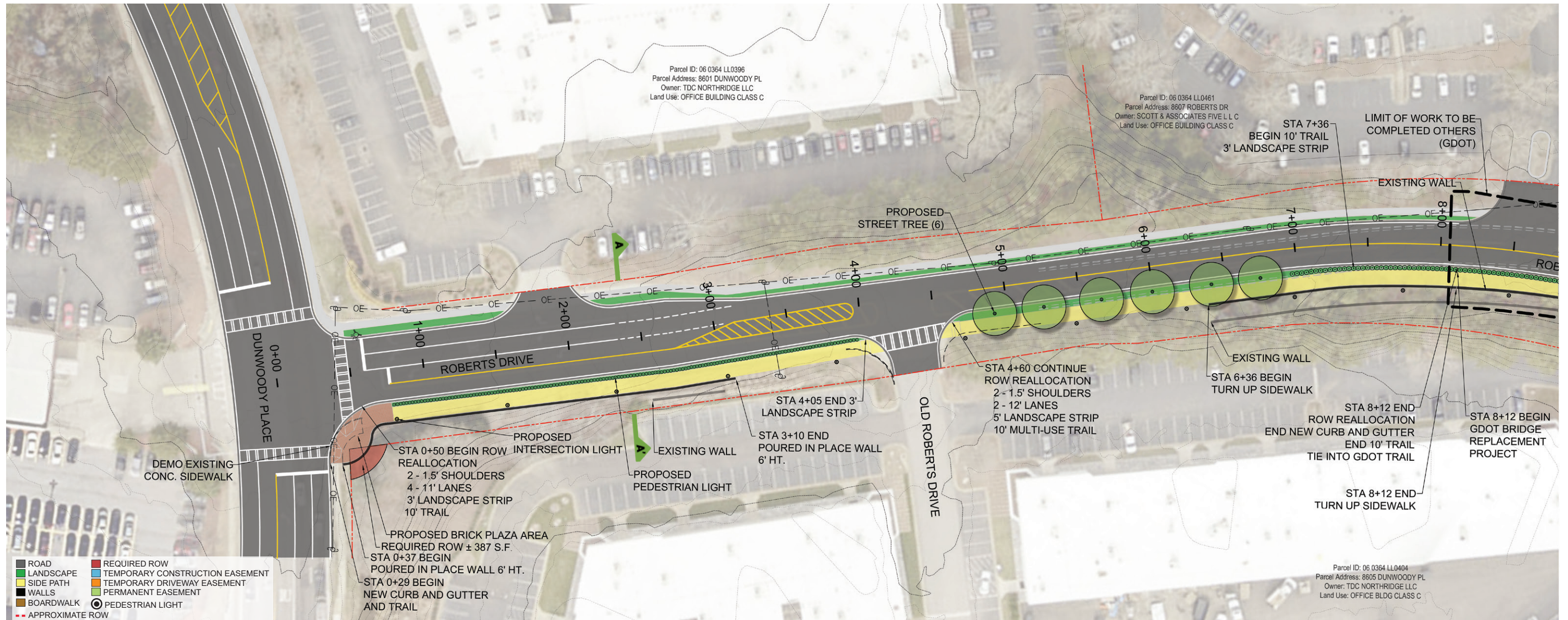
SHEET LAYOUT

NOT TO SCALE

Phase 1 begins at Dunwoody Place and continues approximately 5,200' before ending near Summer Crossing. This phase includes a GDOT bridge replacement project and is first to be reconstructed, of the two along Roberts Drive. Before the SR 400 express lane bridge, there are office complexes and apartment communities. After the bridge, adjacent properties are multi-family residential and the Chattahoochee River National Recreation Area (CRNRA). There are cultural and historical areas noted in this phase.

Adjacent steep grades along this corridor will require reallocation of right of way and wall construction which will determine the variations in the landscape strip and side path widths. Three new mid-block pedestrian crosswalks are proposed in this phase to provide a safe crossing to the side path. Temporary and permanent easements, along with power pole relocations are included in this phase.

04.4 PHASE 1 (STA 0+00 TO 8+00)



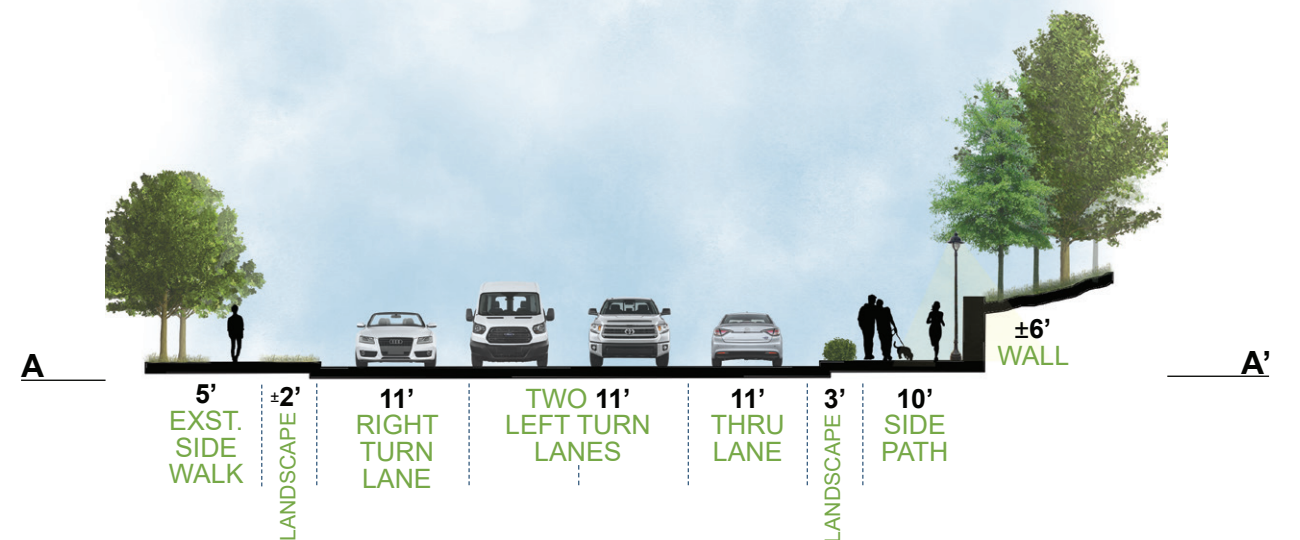
SHEET 1-2

SHEET 1-1

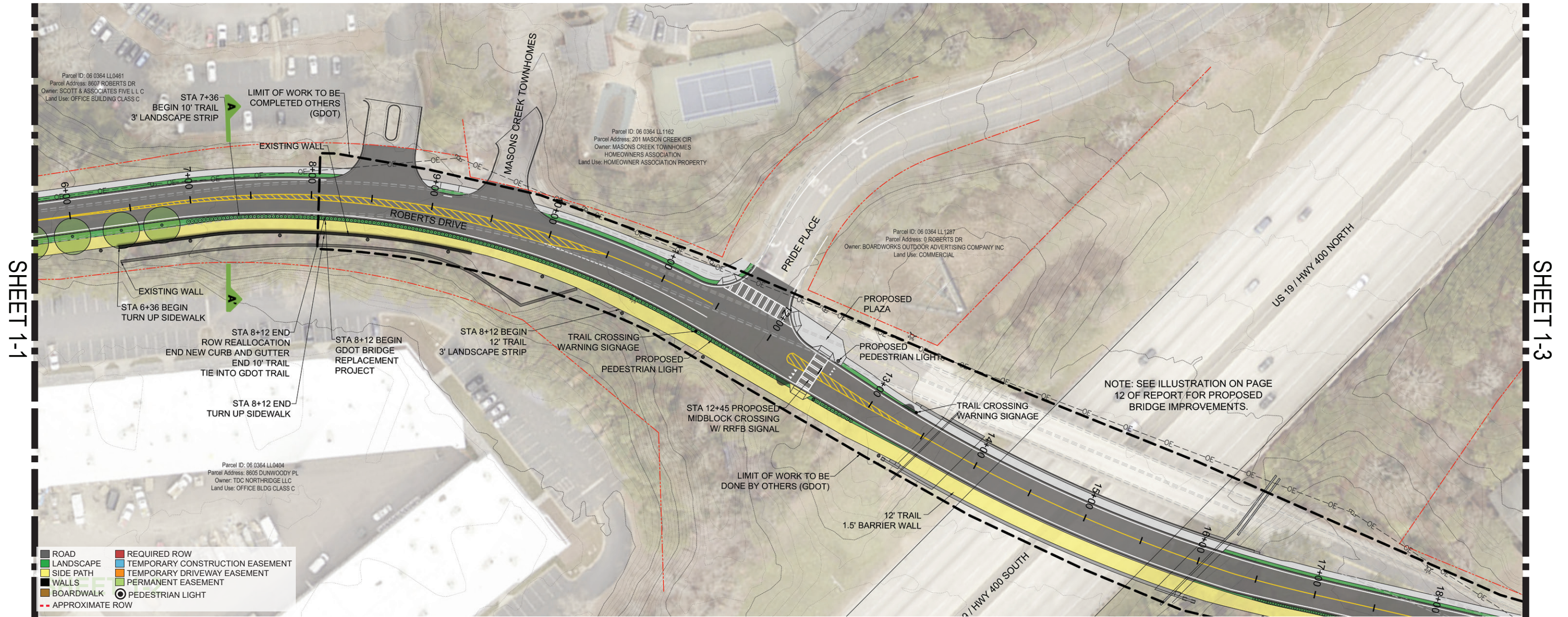
NOT TO SCALE

Phase 1 of the Roberts Drive side path begins at Dunwoody Place. A small plaza space will be constructed at the southeast corner of the intersection. This plaza will welcome users to the start of the path and allow extra room for pedestrians waiting to cross the street. Additional right-of-way (ROW) will be required to construct the plaza space.

This section includes a reallocation of right of way to allow for extra room for the side path. The path begins 10 ft. wide with a 3 ft. landscape strip and travels northeast along Roberts Drive. Due to steep grades along the shoulder, a retaining wall will travel the first 250' of the path. As the path passes the first drive, Old Roberts Drive, the landscape strip widens to 5 ft. with a 10 ft. path. The Georgia Department of Transportation (GDOT) SR 400 bridge replacement project begins at STA 08+12. Phase 1 will tie into the improvements completed in the GDOT project.



04.4 PHASE 1 (STA 8+00 TO 18+00)

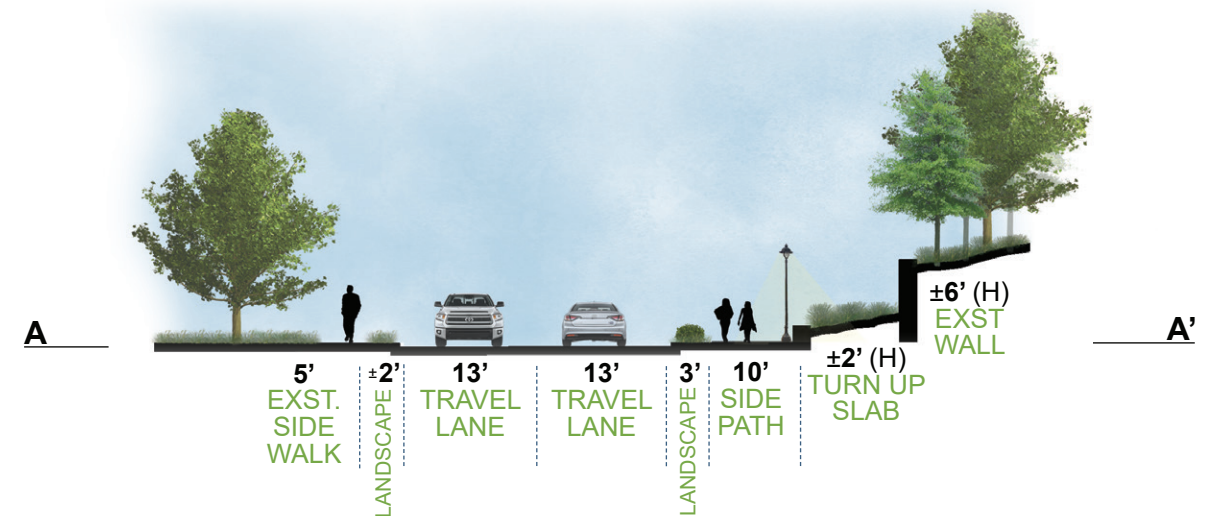


SHEET 1-1

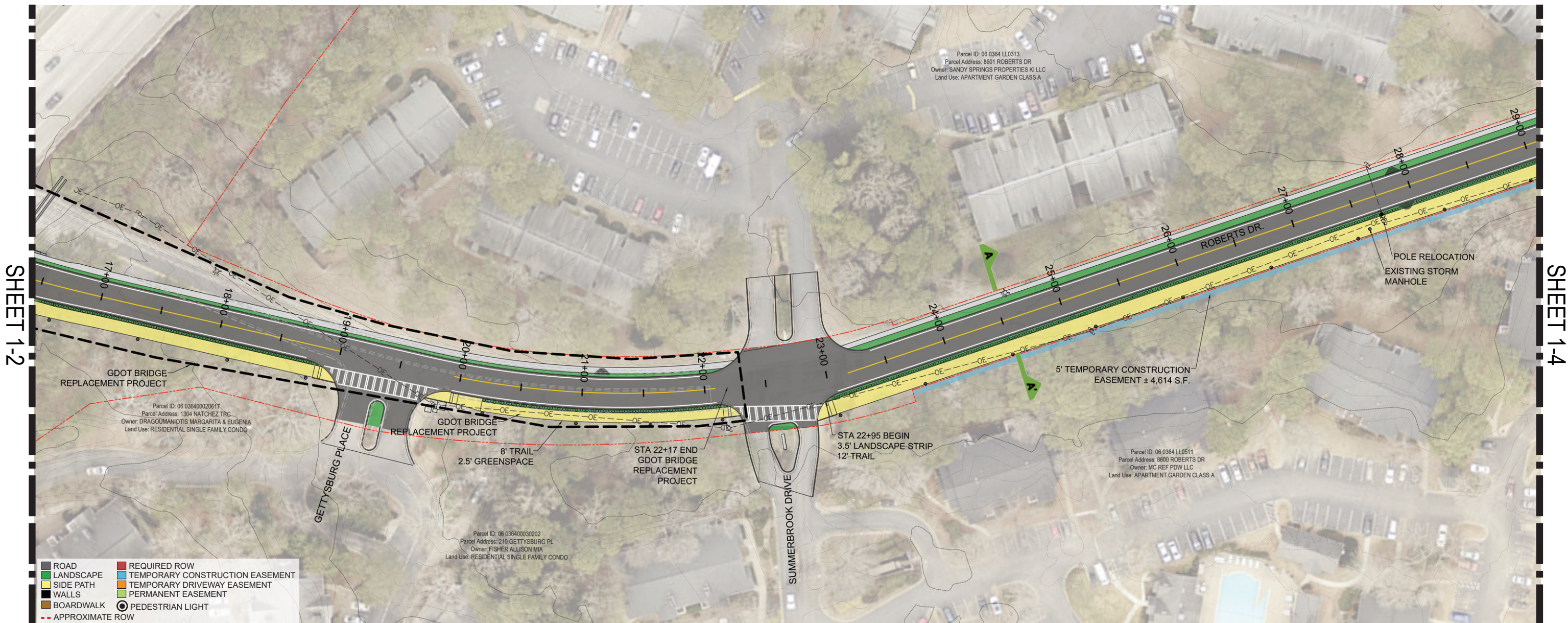
SHEET 1-3

SHEET 1-2 NOT TO SCALE

This segment of the Roberts Drive side path will be constructed within the GDOT bridge replacement project. Once bridge construction has been completed, these plans call for adding in a mid-block crossing where Pride Place meets Roberts Drive. Along with this, new ADA ramps will need to be built, signage, and striping will occur. Adequate warning signage for the trail crossing will be necessary, as well as the rapid rectangular flashing beacons at the crosswalk. Refer to section 04.8, mid-block crossings sight distance study, for input on where the mid-block crossing should be located. Phase 1 of construction will also include adding pedestrian lighting and street trees in this section of the side path, where it was not included in the GDOT project.

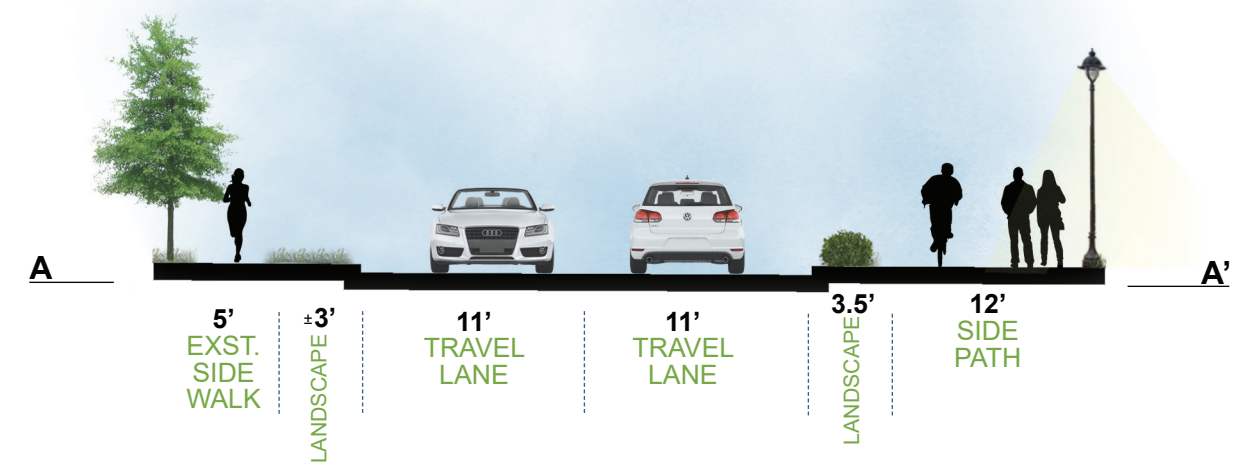


04.4 PHASE 1 (STA 18+00 TO 29+00)



SHEET 1-3 NOT TO SCALE

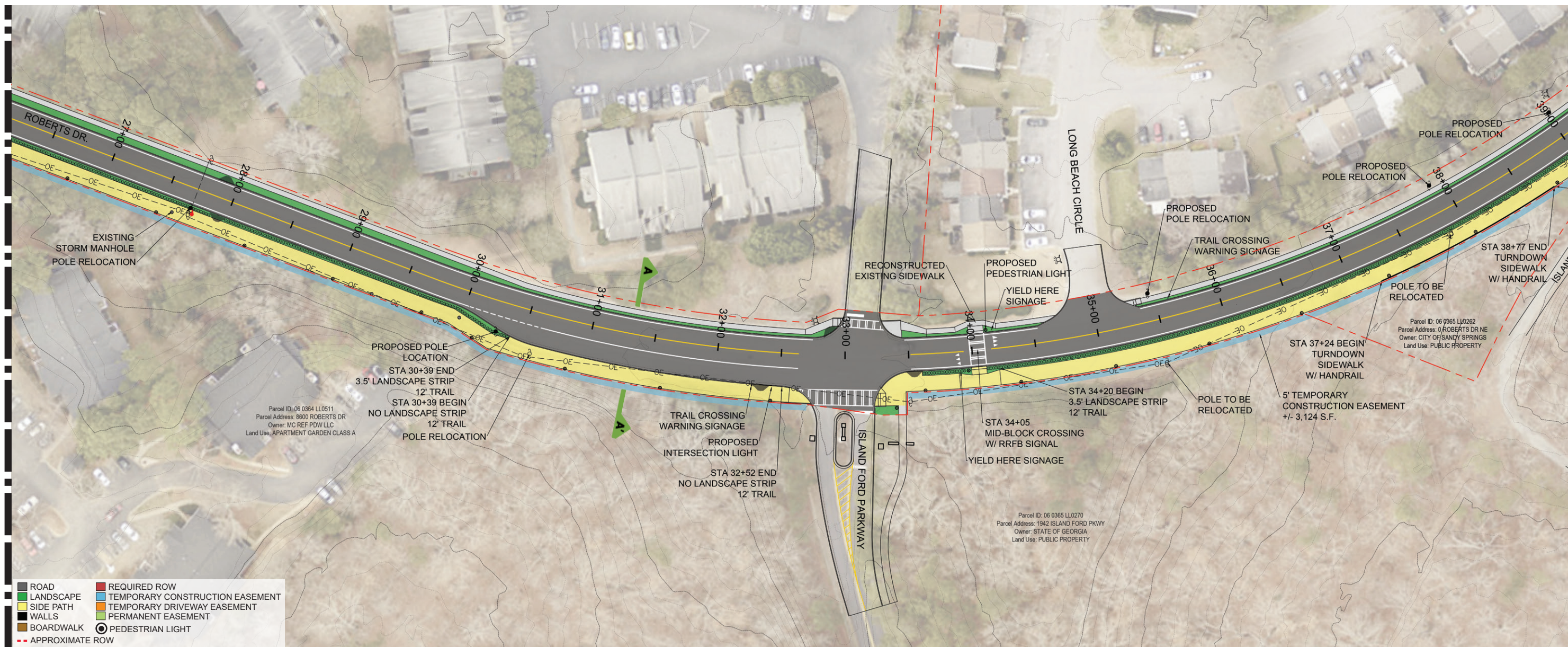
This segment continues at STA 18+12, within the GDOT SR 400 bridge replacement project, which ends at STA 22+17, adjacent to Summerbrook Drive. The side path will be constructed with the bridge in the area within the GDOT project limits. The city will resume side path construction beginning at STA 22+17. Section A-A' shows path width of 12 ft., with a 3.5 ft. landscape strip. One power pole at station 27+72 will be relocated from the proposed path alignment to the opposite side of Roberts Drive. A 5 ft. temporary construction easement (TCE) will be required in this segment for construction access.



04.4 PHASE 1 (STA 29+00 TO 38+00)

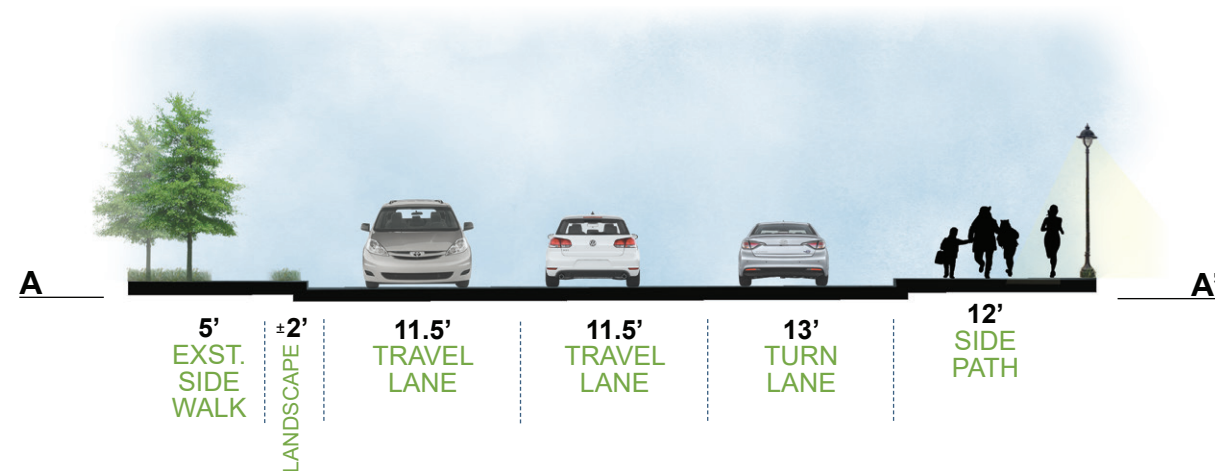
SHEET 1-3

SHEET 1-5

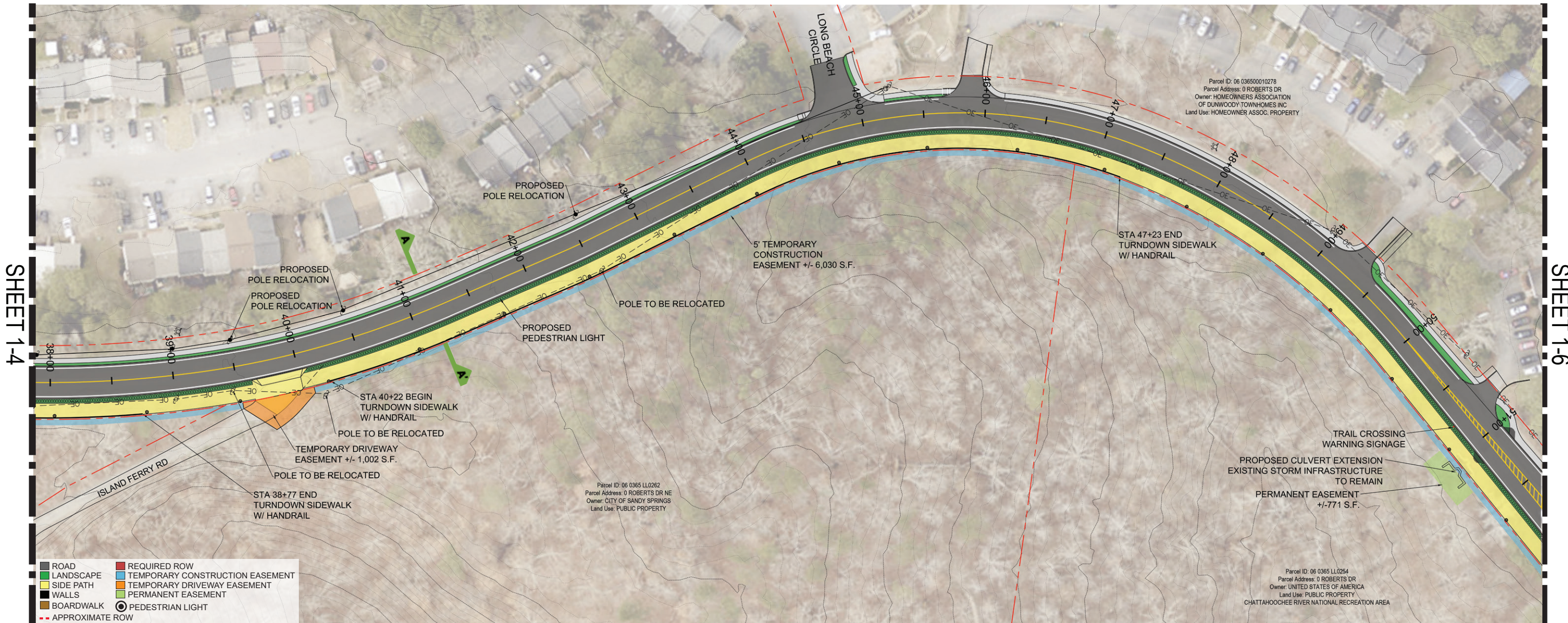


SHEET 1-4 NOT TO SCALE

This segment continues at STA 29+00 and ends at STA 38+00. The Chattahoochee River National Recreation Area (CRNRA) is a popular destination, and it is important to provide safe pedestrian access to the entrance drive, at Island Ford Parkway. A second mid-block crossing provides pedestrian crossing from the residential areas to the park. Refer to section 04.8, mid-block crossings sight distance study, for input on where the mid-block crossing should be located. Section A-A' shows the 12 ft. path with no landscape strip, as the deceleration lane provides a buffer from the moving traffic. The current deceleration lane is approximately 200 ft long, which can be reduced to minimize construction easements required. Past Island Ford Parkway, the path will transition back to a 12 ft wide with a 3.5 ft. greenspace. An adjacent slope on CRNRA property requires a turn-down curb with handrail. Four power poles will be relocated from the trail side of the roadway. A 5 ft. temporary construction easement will be required in this segment for construction access.

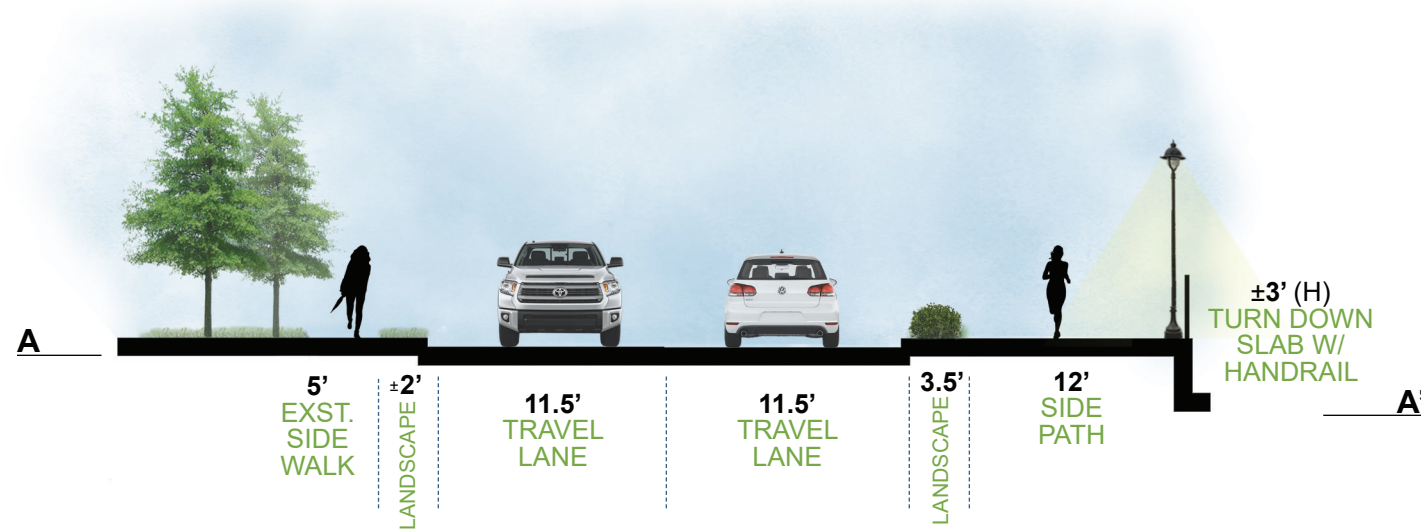


04.4 PHASE 1 (STA 38+00 TO 51+00)

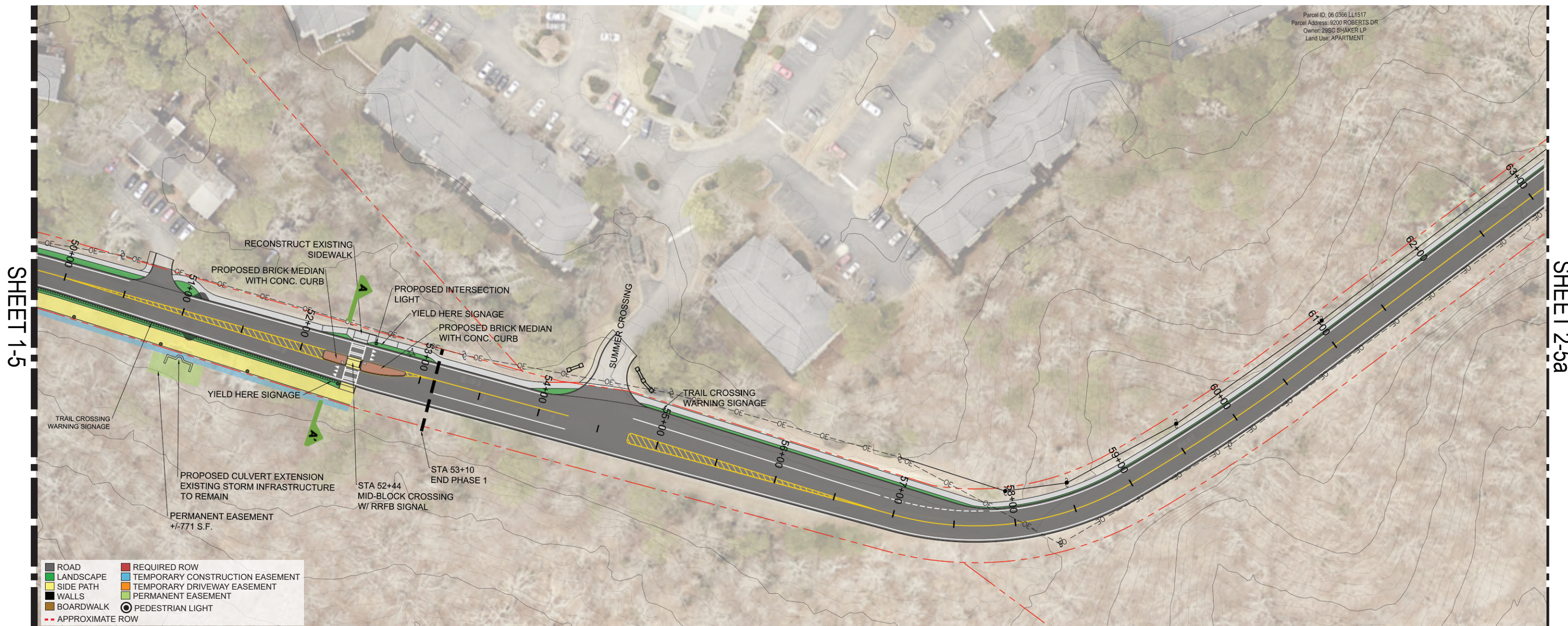


SHEET 1-5 NOT TO SCALE

This segment continues at STA 38+00 and ends at STA 51+00. The path is adjacent to the CRN-RA property at 12 ft wide with a 3.5 ft. greenspace. Section A-A' shows a turn-down curb with handrail along an area where the shoulder within the ROW has steep grades going downhill. Two power poles will be relocated from proposed path alignment to the opposite side of Roberts Drive. A 5 ft. temporary construction easement will be required in this segment for construction access. One temporary driveway easement will be needed to reconstruct Island Ferry Road. A permanent easement will be required for a stormwater culvert extension to accommodate the path width.

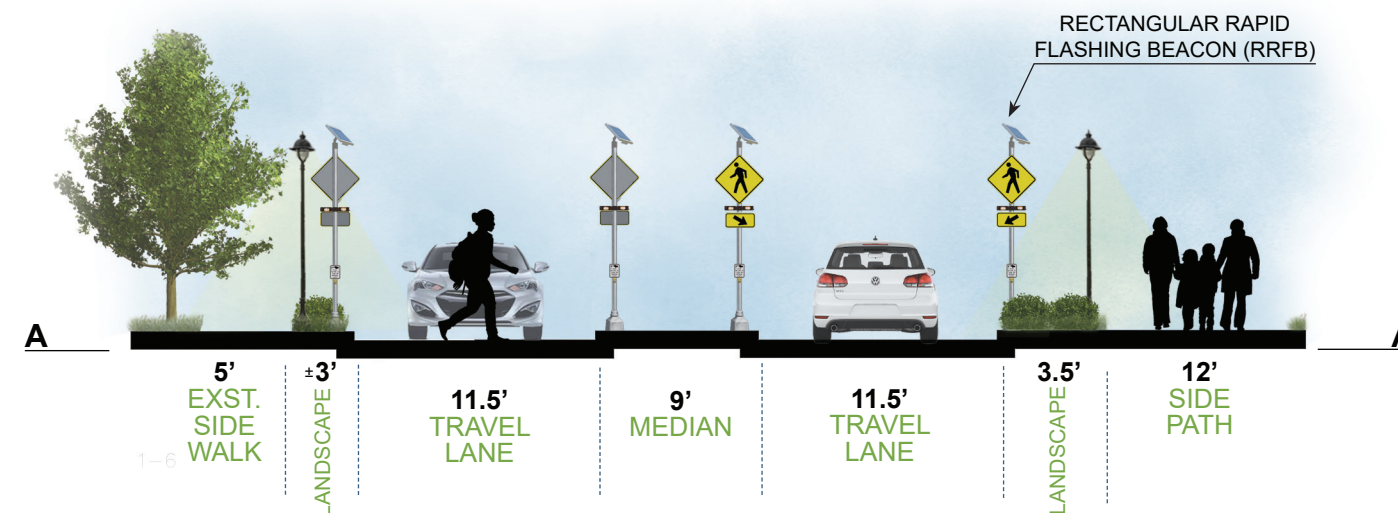


04.4 PHASE 1 (STA 51+00 TO 52+45)

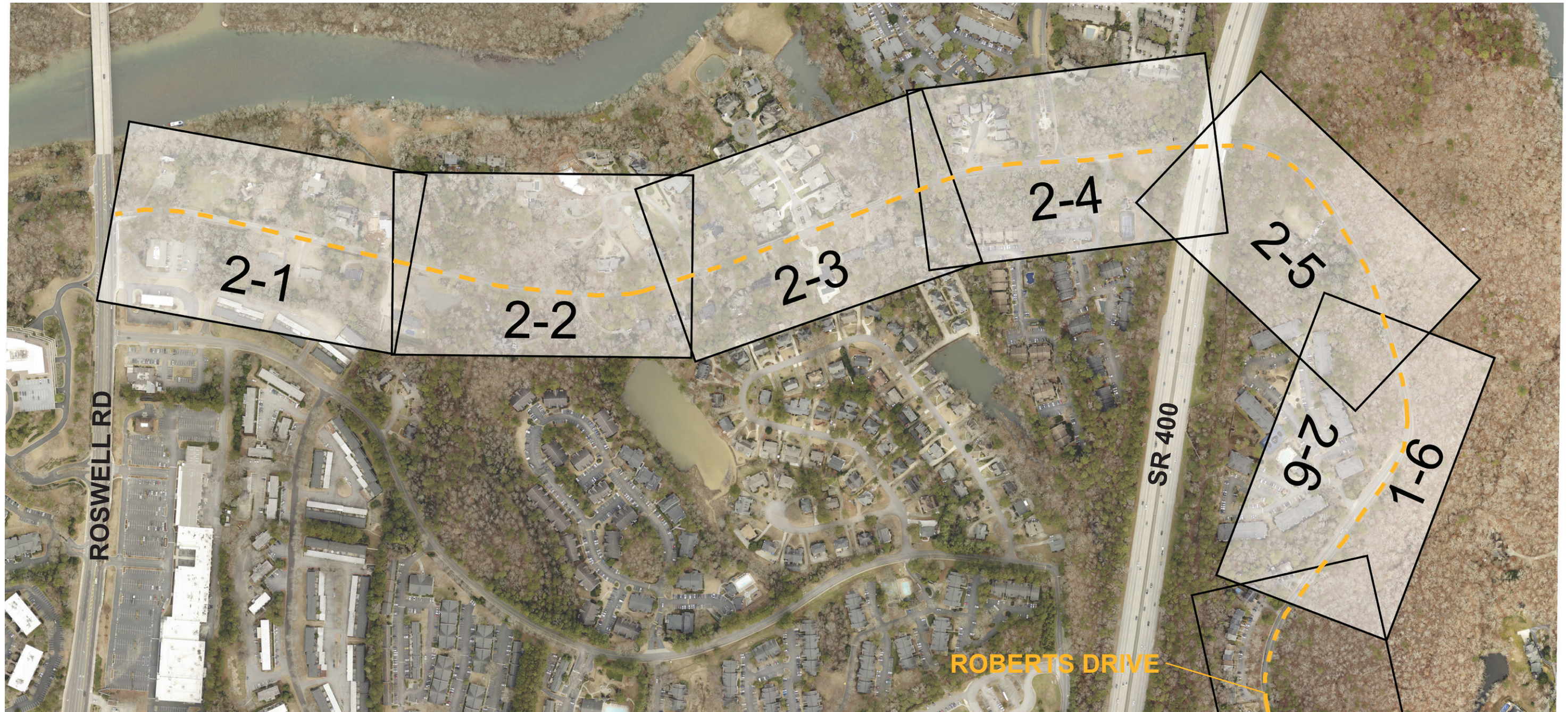


SHEET 1-6 NOT TO SCALE

This segment continues at STA 51+00 and Phase 1 ends at STA 53+10. The path is adjacent to the CNRA property at 12 ft wide with a 3.5 ft. landscape strip. The third mid-block crossing in Phase 1 is located at STA 52+44 with a pedestrian refuge island, to be constructed with a concrete curb and brick. Refer to section 04.8, mid-block crossings sight distance study, for input on where the mid-block crossing should be located. Section A-A' shows the mid-block crossing, with rectangular rapid flashing beacon signage, and the median island in the center of the roadway. This crossing will provide safe access to the path from the residential areas across Roberts Drive. A 5 ft. temporary construction easement is shown for construction access. Phase 2 of the side path will conclude at the mid-block crossing constructed in phase 1.



04.5 PHASE 2 OVERVIEW

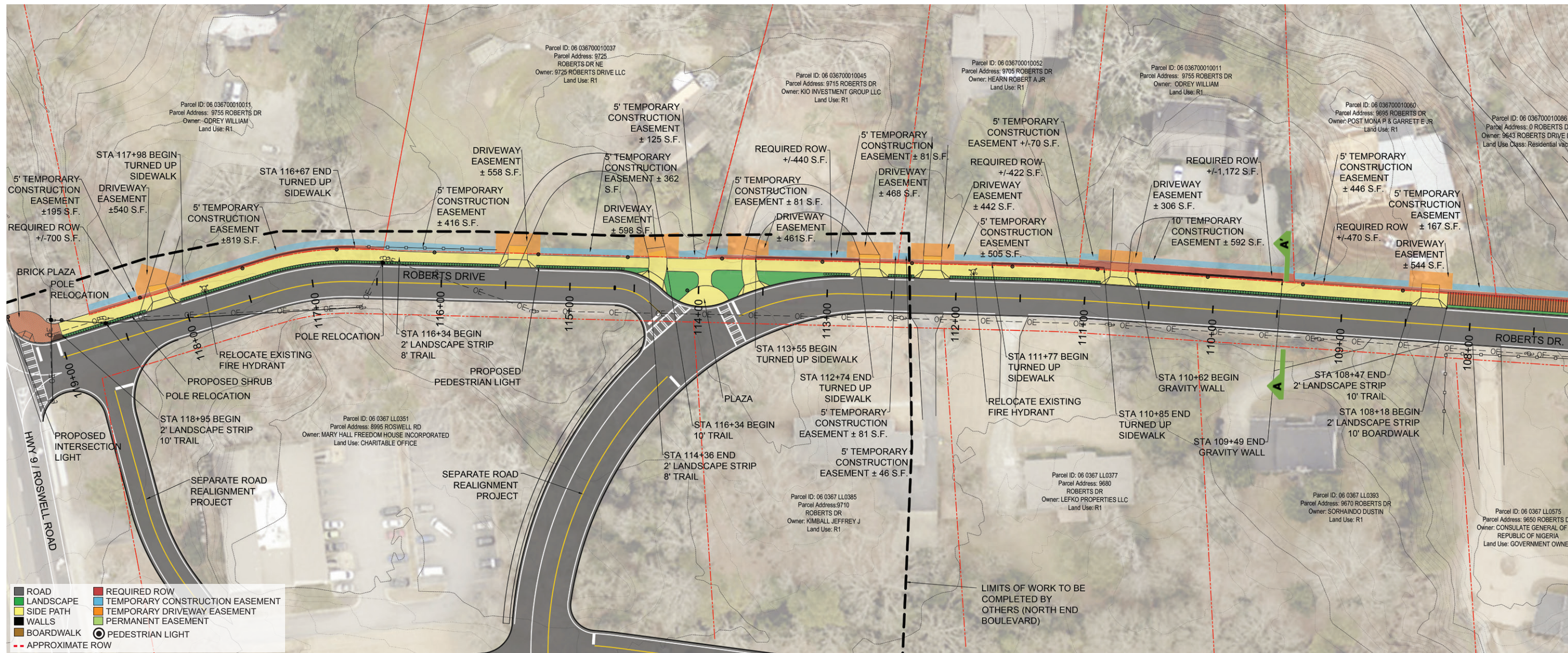


SHEET LAYOUT 
NOT TO SCALE

Phase 2 begins at Roswell Road (STA 119+50) and continues approximately 6,700' before ending at STA 53+10, where the side path will tie into the terminus of phase 1. This phase includes the second GDOT bridge replacement project, which will be reconstructed following the completion of the first bridge replacement along Roberts Drive. From Roswell Road, Roberts Drive travels through a residential area, mainly with single-family residential and multi-family complexes. There are cultural and historical areas noted in this phase, as well as streams the path will cross.

Path and landscape strip widths through this phase will vary depending on roadway alignment, ROW space, and existing conditions. One mid-block crossing is proposed in Phase 2 near Lexington Drive, where the side path will crossover Roberts Drive. This phase calls for two pedestrian bridges/boardwalks, as well as utility relocations.

04.5 PHASE 2 (STA 119+50 TO 107+50)



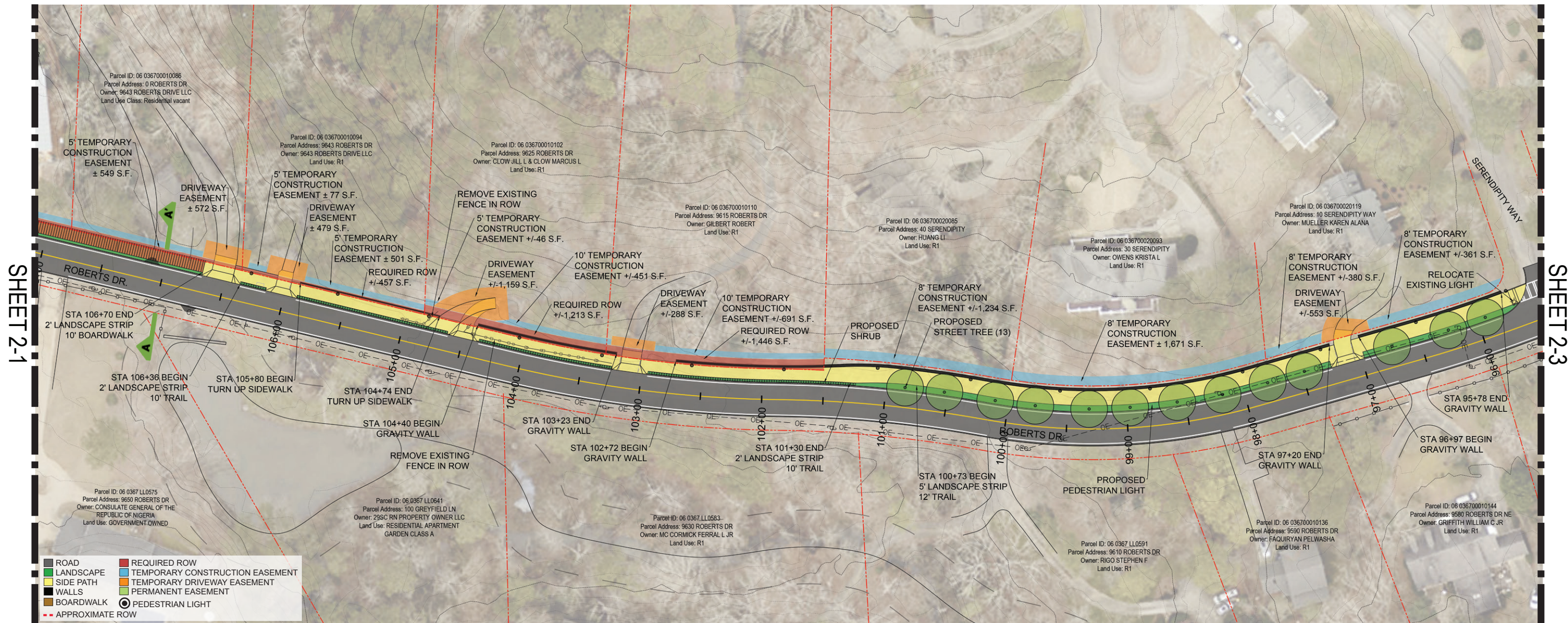
SHEET 2-2

SHEET 2-1 NOT TO SCALE

Phase 2 begins at Roswell Road, STA 119+50 to STA 107+50. The width begins as a 10 ft. wide path and a 2 ft. planted greenspace. After traveling approximately 300', the path narrows to 8 ft. wide, and the 2 ft. planted landscape strip continues. The 8 ft. path travels the length of the property located at 9725 Roberts Drive, the Isaac Roberts House, which is listed on the National Register of Historic Places. The path then transitions back to the 10 ft. wide path with a 2 ft. planted landscape strip. The North End Boulevard Scoping Study re-aligns Roberts Drive and focuses on improving the Roswell Road to Dunwoody Place Corridor. These improvements are outside of the Roberts Drive side path scoping study and are shown to inform the design. As the North End project advances, changes to this section of the side path may be necessary. Topography changes will require walls within this segment. Additional right of way, temporary construction, and driveway easements will be required within this segment. A boardwalk is proposed to cross existing drainageway beginning at STA 108+18, and utility relocations will be required.

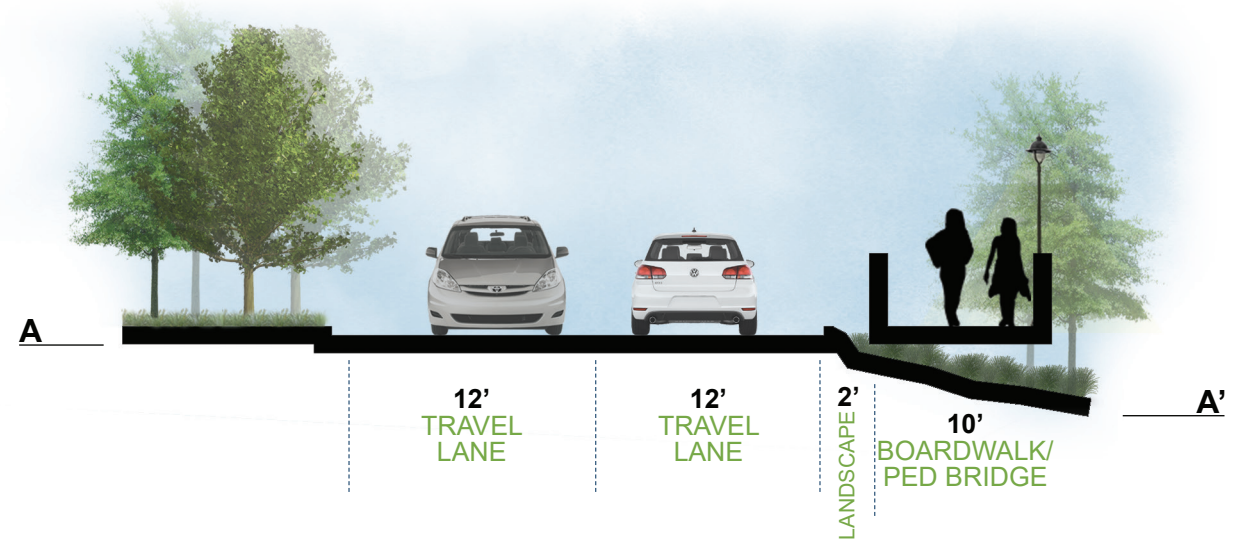


04.5 PHASE 2 (STA 107+50 TO 96+50)

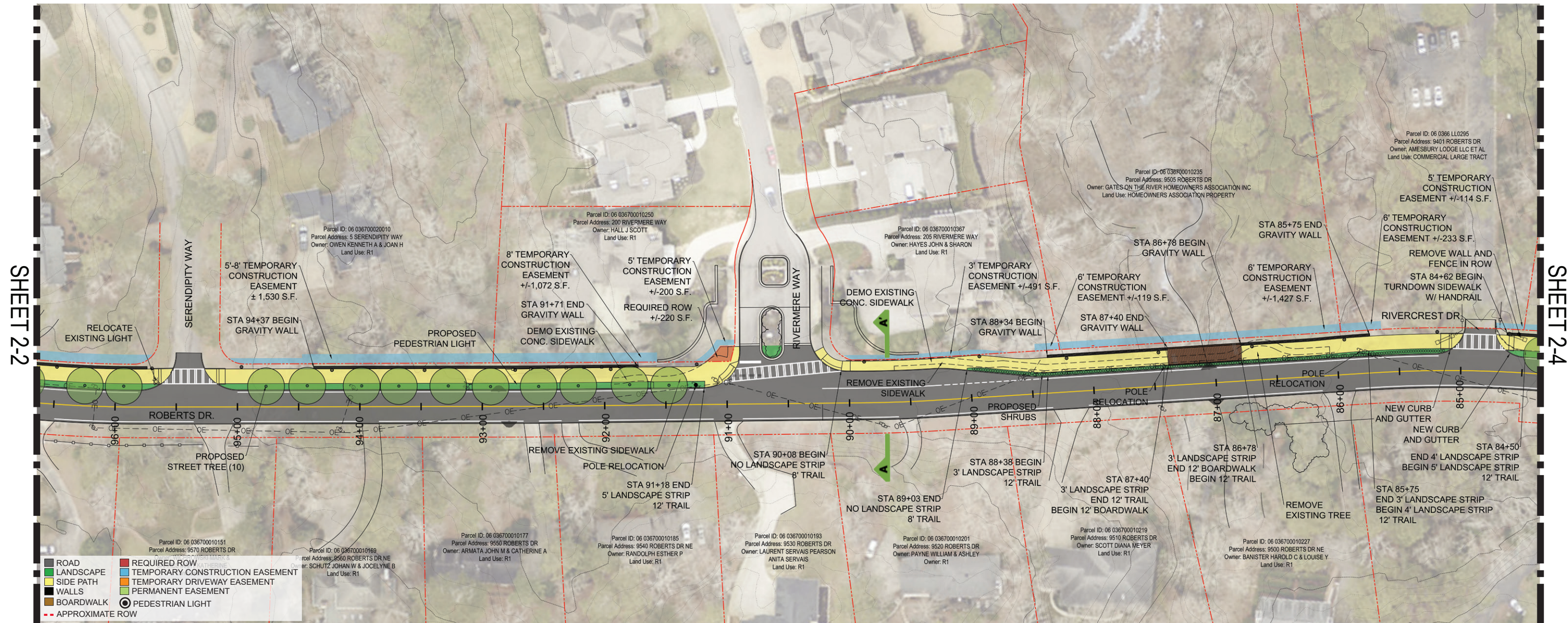


SHEET 2-2 NOT TO SCALE

This segment continues at STA 107+50 and ends at STA 96+50. The boardwalk continues to station 106+70. A 75 ft. city-mandated stream buffer would apply, see section 02.4 ecological report for more information. Section A-A' shows the 10 ft. wide boardwalk/pedestrian bridge with a 2 ft. landscape strip buffer between the road. Refer to section 04.7, alternatives comparison, for water body crossing options. At station 101+73, the path transitions to 12 ft. wide with a 5 ft. greenspace, which will include street trees. Topography changes will require a turned-up curb and a gravity wall. Additional right of way, temporary construction, and driveway easements will be required within this segment. Utility relocations will be required.

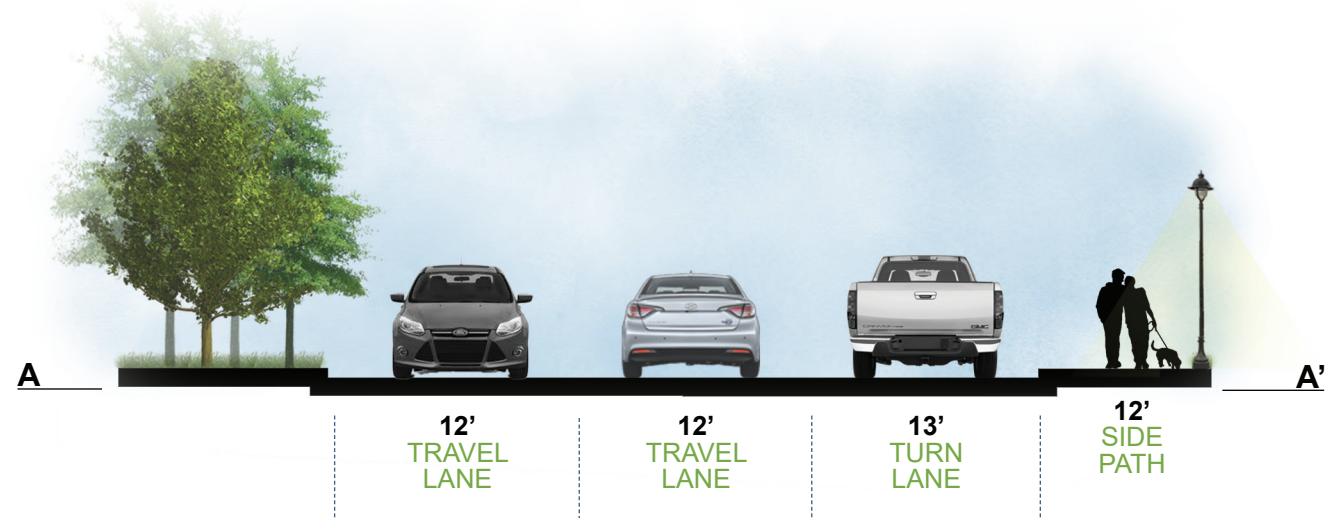


04.5 PHASE 2 (STA 96+50 TO 84+50)

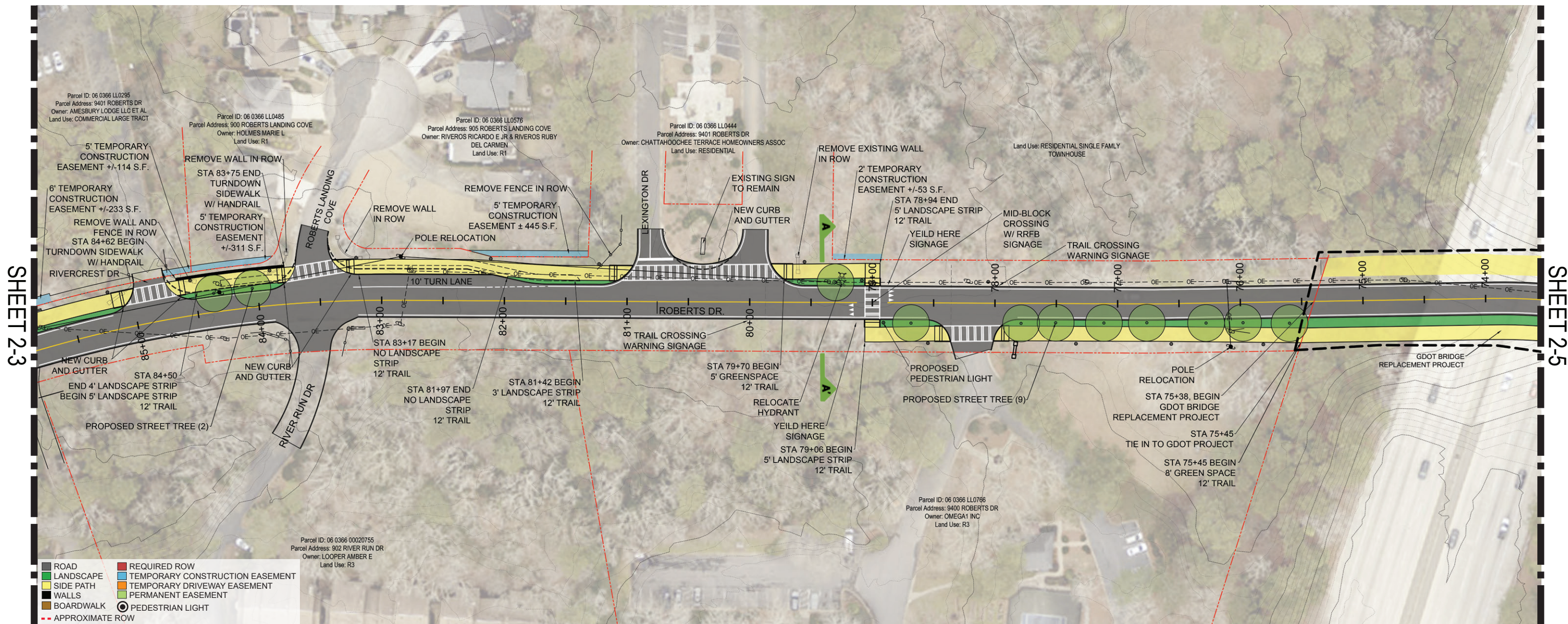


SHEET 2-3 NOT TO SCALE

This segment continues at STA 96+50 and ends at STA 84+50. The path remains 12 ft. wide with a 5 ft. landscape strip. A second boardwalk/pedestrian bridge begins at station 87+40 and traverses the natural stream to STA 86+78. A 75 ft. city mandated stream buffer would apply, see section 02.4 ecological report for more information. Refer to section 04.7, alternatives comparison, for water body crossing options. Section A-A shows the 12 ft. path with no landscape strip, as the deceleration lane provides a buffer from the moving traffic. The path remains 12 ft. wide, and a 3 ft. landscape strip begins at STA 88+3. Topography changes will require two gravity walls. Additional right of way, temporary construction, and driveway easements will be required within this segment. Utility relocations will be required.

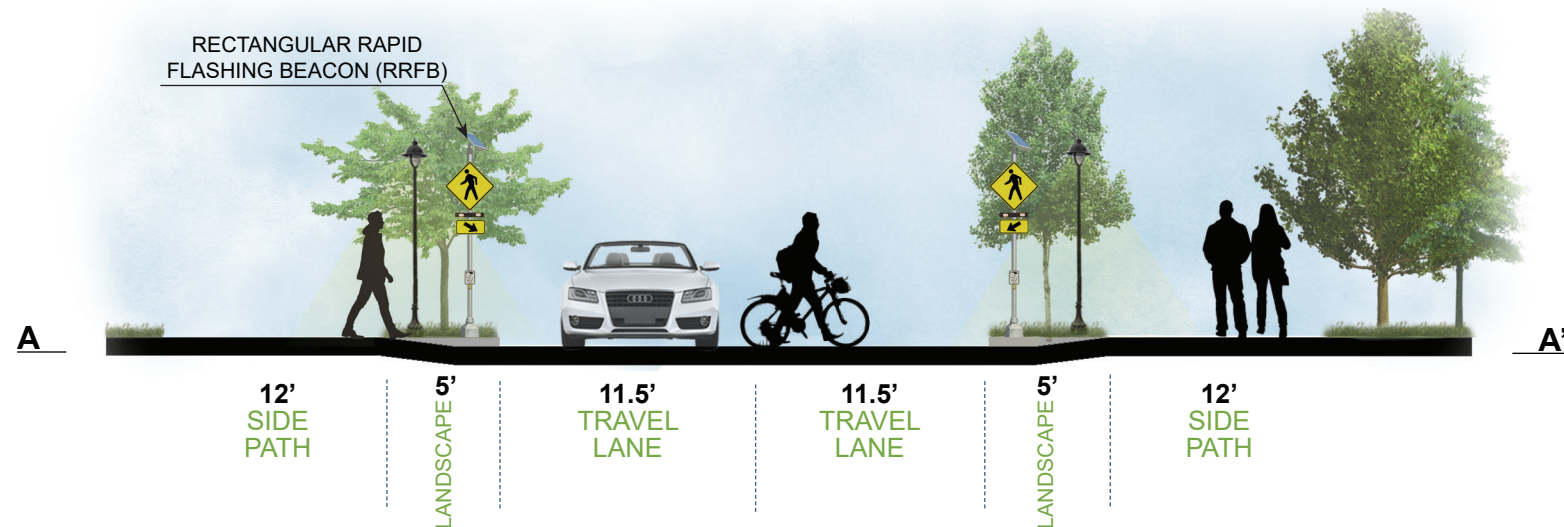


04.5 PHASE 2 (STA 84+50 TO 74+50)



SHEET 2-4 NOT TO SCALE

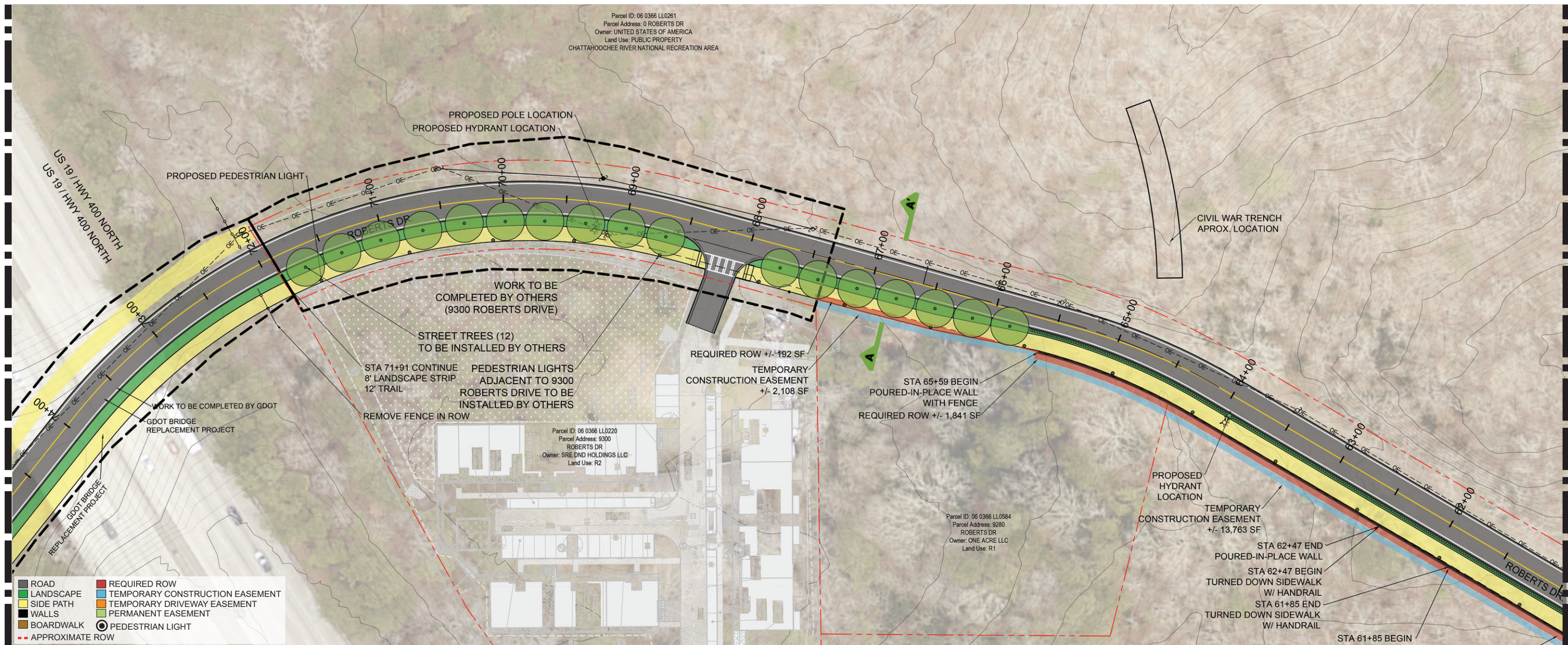
This segment continues at STA 79+06 through STA 73+50. A mid-block crossing will be located at STA 79+00, where the path will cross Roberts Drive and continue on the southside of the road. After crossing the road, the path continues at 12 ft. wide with a 5 ft. landscape strip, with street trees. This sheet ends at STA 75+36, where the GDOT bridge replacement project will begin. The bridge replacement project will provide a 12 ft. wide side path with a 8' landscape strip on both side of Roberts Drive. Temporary construction easements will be required on the north side of Roberts Drive. Utility relocations will be required. Section A-A' shows the mid-block crossing with rectangular rapid flashing beacons. There is no median at this crossing location.



04.5 PHASE 2 (STA 74+50 TO 61+00)

SHEET 2-4

SHEET 2-6

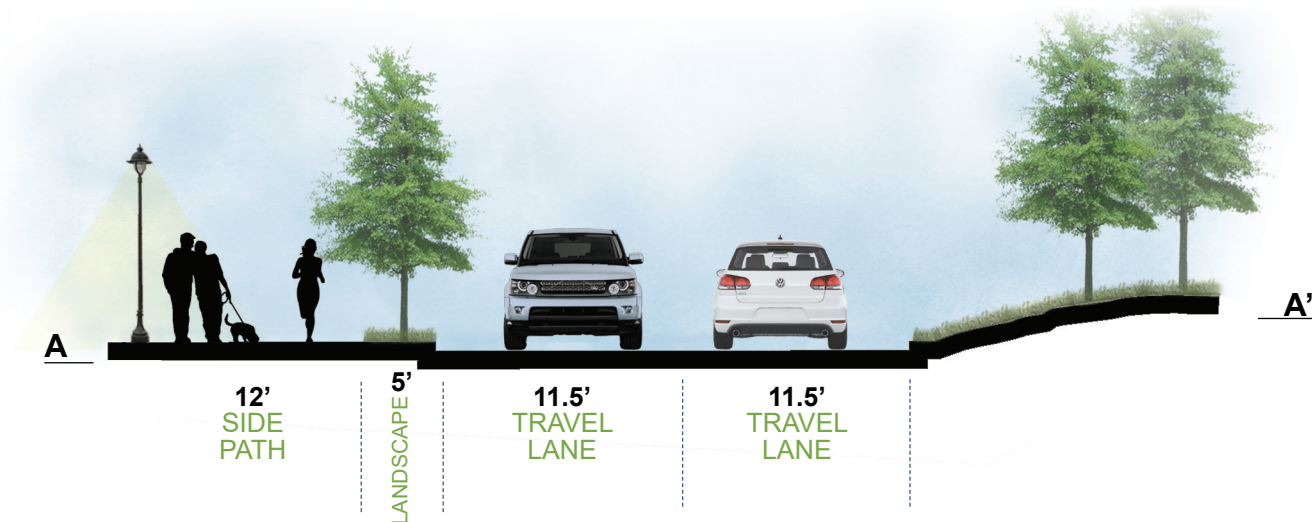


SHEET 2-5 NOT TO SCALE



This segment begins at STA 71+91, where the GDOT bridge replacement project ends, and continues to STA 61+00. The path picks up at 12 ft. wide with a 8 ft. landscape strip and continues along the parcel 3900 Roberts Drive. A current site plan for this parcel is shown. The developer of this site would complete the side path section along the frontage of the parcel. This area is delineated on the plan with a black dashed line and labeled "To be completed by others". Following this parcel, the landscape strip will narrow down to 3.5 ft. with a 12 ft. path.

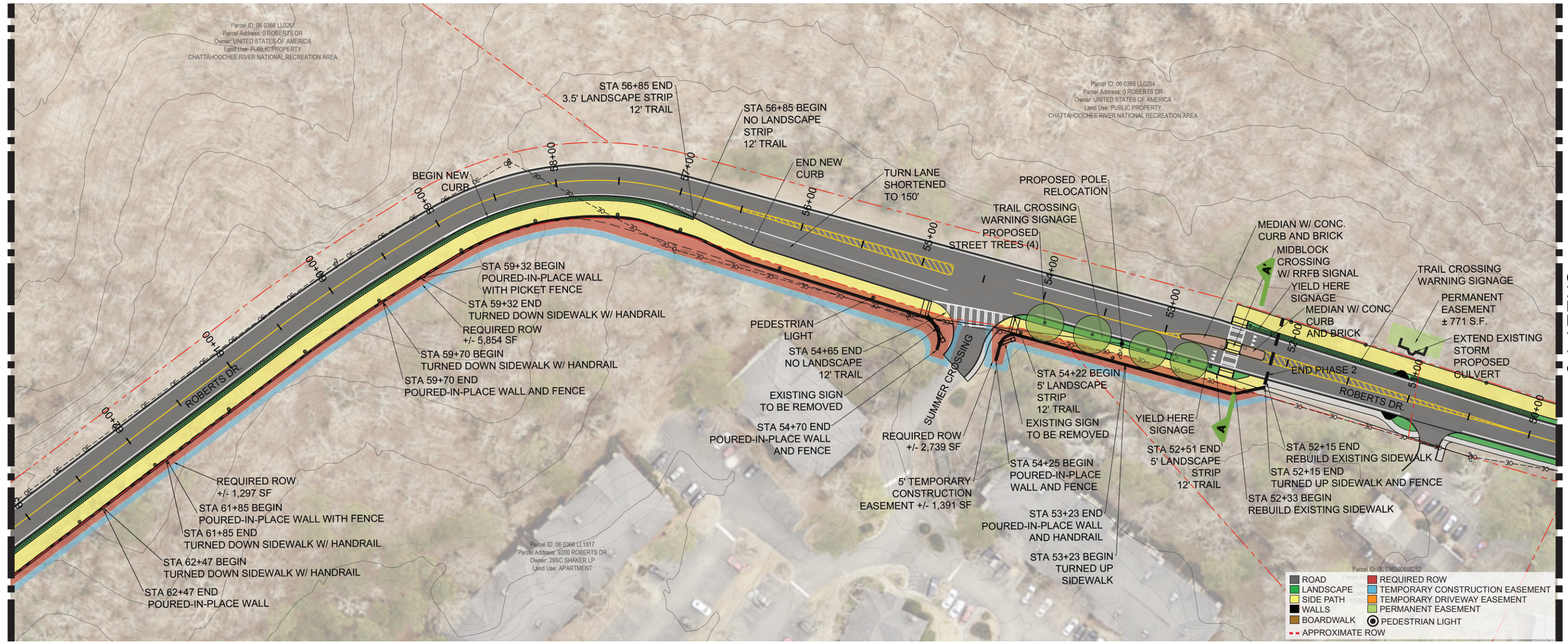
Topography changes will require a turned down sidewalk and a poured in place wall. Additional right of way and temporary construction easements will be required within this segment. Utility relocations will be required. In the appendix, a version of this section of side path is available that does not show the site development at 6300 Roberts Drive.



04.5 PHASE 2 (STA 61+00 TO 53+10)

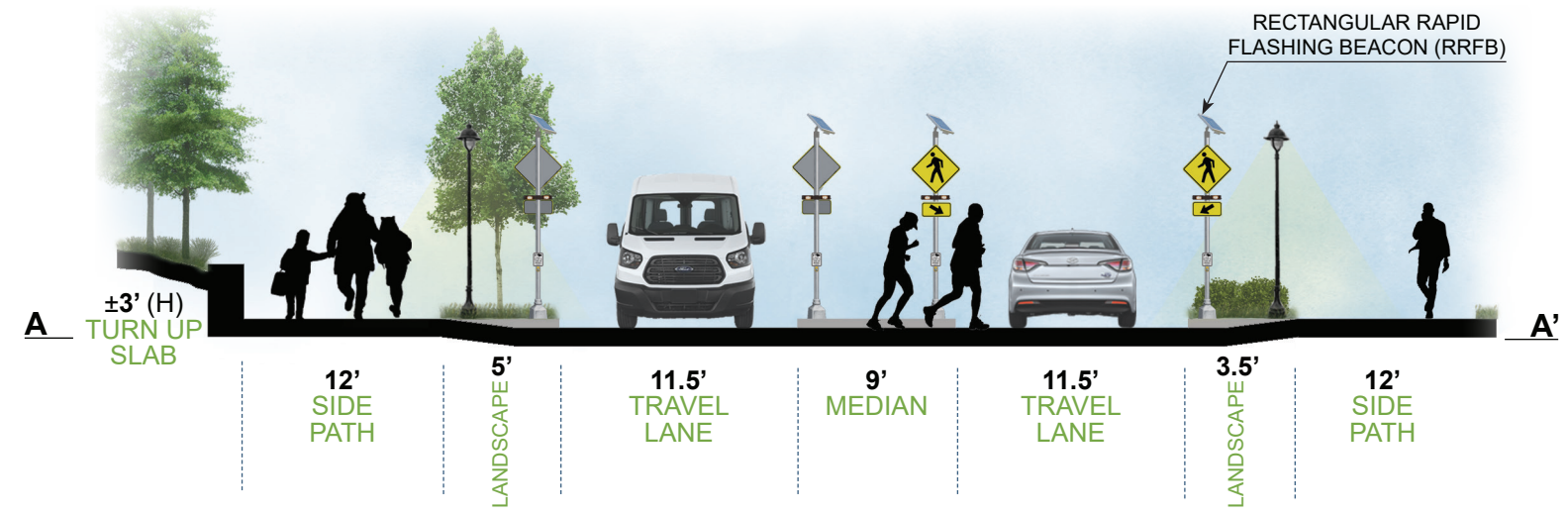
SHEET 2-5

SHEET 1-5



SHEET 2-6 NOT TO SCALE

This segment continues at STA 61+00 and ends at 53+10, the terminus of Phase 2. The path maintains a 12 ft. width and a 3.5 ft. landscape strip along the segment to station 57+10. A deceleration lane into Summer Crossing removes the landscape strip. The deceleration lane is shown as shortened from the existing length to 150 ft. with a 75 ft. taper. The trail crosses Summer Crossing, where the existing sidewalk will be removed, and the path will continue to the mid-block crossing constructed in phase 1 (Section A-A'). Topography changes will require a turned down sidewalk and poured in place walls. Additional right of way and temporary construction easements will be required within this segment. Utility relocations will be required.



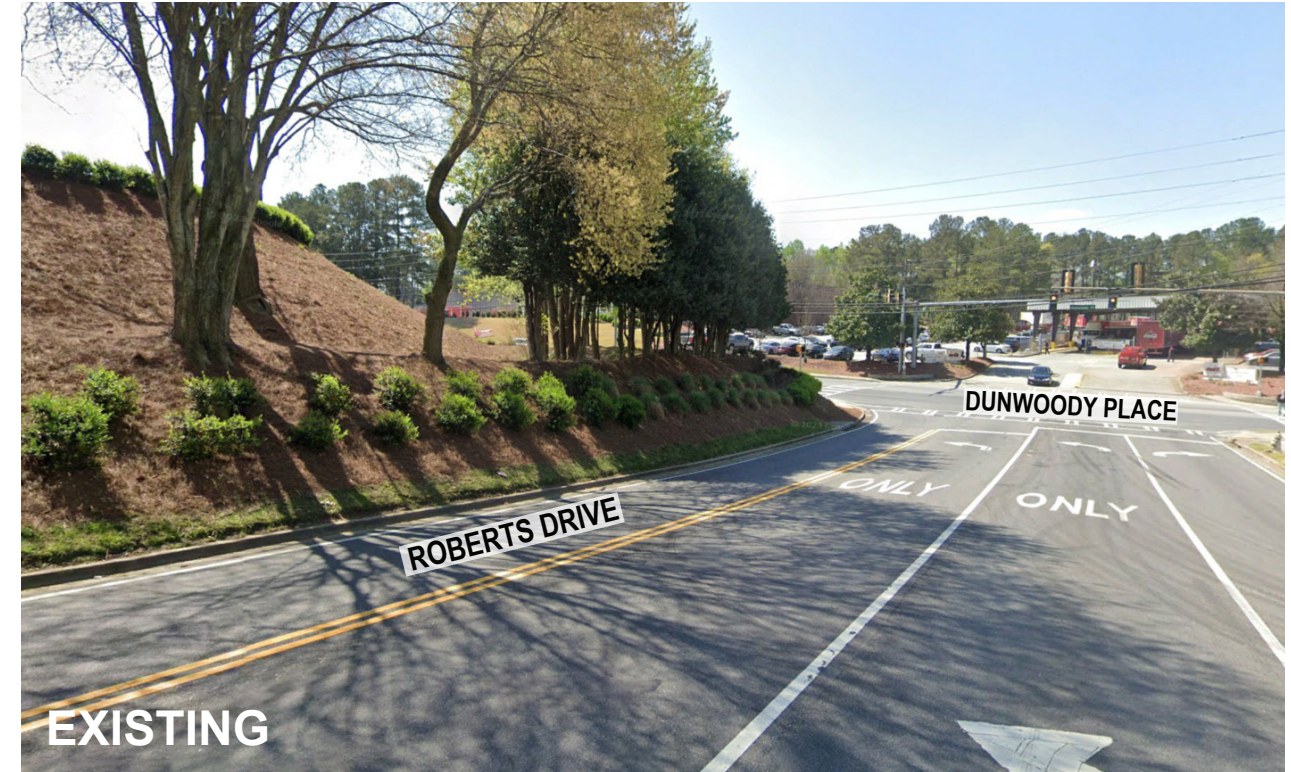
04.6 PERSPECTIVES

ROBERTS DRIVE AT DUNWOODY PLACE (PHASE 1)

VIEW AT STA 0+00, LOOKING NORTHEAST TOWARDS ROBERTS DRIVE 



VIEW AT STA 2+25, LOOKING SOUTHWEST TOWARDS DUNWOODY PLACE 



04.6 PERSPECTIVES

ROBERTS DRIVE AT ISLAND FORD PARKWAY (PHASE 1)

VIEW AT STA 33+00, LOOKING NORTHEAST TOWARDS ISLAND FORD PKWY



VIEW AT STA 34+00, LOOKING SOUTH TOWARDS ISLAND FORD PKWY



04.6 PERSPECTIVES

MID-BLOCK CROSSING (PHASE 1)

VIEW AT STA 51+50, LOOKING NORTHEAST TOWARDS SUMMER CROSSING 



EXISTING



PROPOSED

VIEW AT STA 52+75
LOOKING SOUTHWEST TOWARDS THE PEDESTRIAN CROSSING 



EXISTING



PROPOSED

04.6 PERSPECTIVES

TYPICAL VIEW (PHASE 2)

VIEW AT STA 66+00



VIEW AT STA 61+00



04.6 PERSPECTIVES

PEDESTRIAN BRIDGE/BOARDWALK (PHASE 2)

VIEW AT STA 86+50, LOOKING EAST



EXISTING



PROPOSED

VIEW AT STA 87+40, LOOKING NORTH



EXISTING



PROPOSED

04.6 PERSPECTIVES

ROBERTS DRIVE AT ROSWELL ROAD (PHASE 2)

VIEW AT STA118+00, LOOKING EAST TOWARDS ROSWELL ROAD



EXISTING



PROPOSED

VIEW AT STA120+00, LOOKING WEST TOWARDS ROBERTS DRIVE



EXISTING



PROPOSED

04.7 STREAM CROSSING ALTERNATIVES

BOARDWALK / PEDESTRIAN BRIDGE

- More expensive option
- May add to the aesthetics of the side path
- Least disruptive to stream bed



PermaTrak Concrete Boardwalk
PermaTrak



Pedestrian Bridge
TrueNorth Steel

CULVERT EXTENSION AND GRADING

- Least expensive option
- More disruptive to stream bed
- Would allow for continuous concrete path
- May take longer to obtain permits



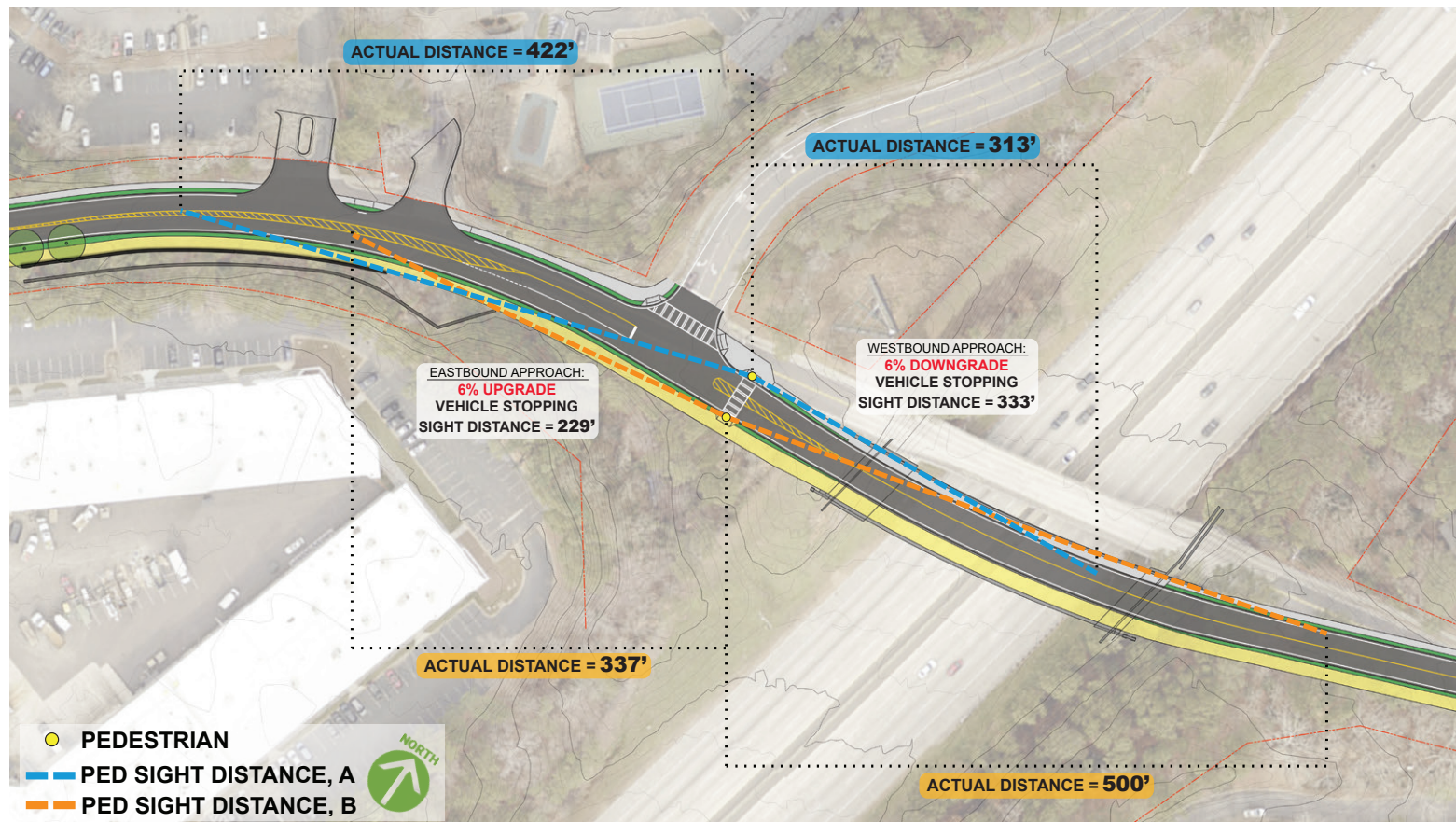
CULVERT OVER WATER BODY

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Images are shown as examples only and do not represent final design.

04.8 MID-BLOCK CROSSING SIGHT DISTANCES

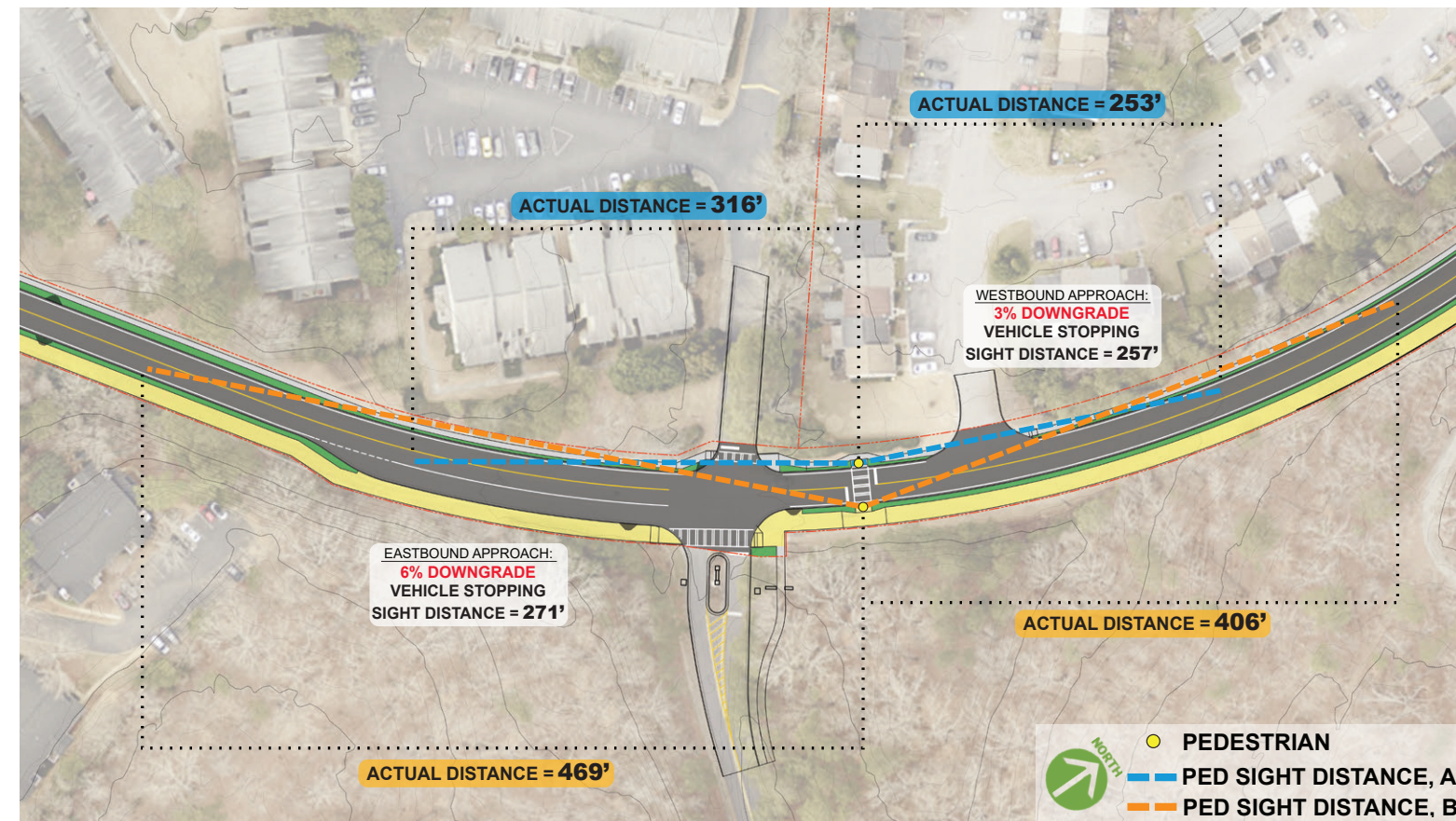
CROSSING A (NEAR PRIDE PLACE) (PHASE 1)



Location: STA 12+50
 Roadway Speed Limit: 35 MPH
 Design Speed: 40 MPH
 Pedestrian Sight Distance Requirement: 694 FT

The sight distance study was limited to the ROW limits. The minimum pedestrian sight distance required by GDOT is 694 ft. Each of the pedestrian site limits do not meet this required amount. The vehicle stopping distance meets the requirements for vehicles traveling eastbound on Roberts Drive. However, due to the bridge wall, the vehicle stopping distance is not met for westbound traffic. A potential solution would be to move the mid-block crossing to the east side of Pride Place. Further study will need to be required to determine the solutions for the vehicle stopping distance and pedestrian sight distances required for this crossing.

CROSSING B (NEAR ISLAND FORD PARKWAY) (PHASE 1)

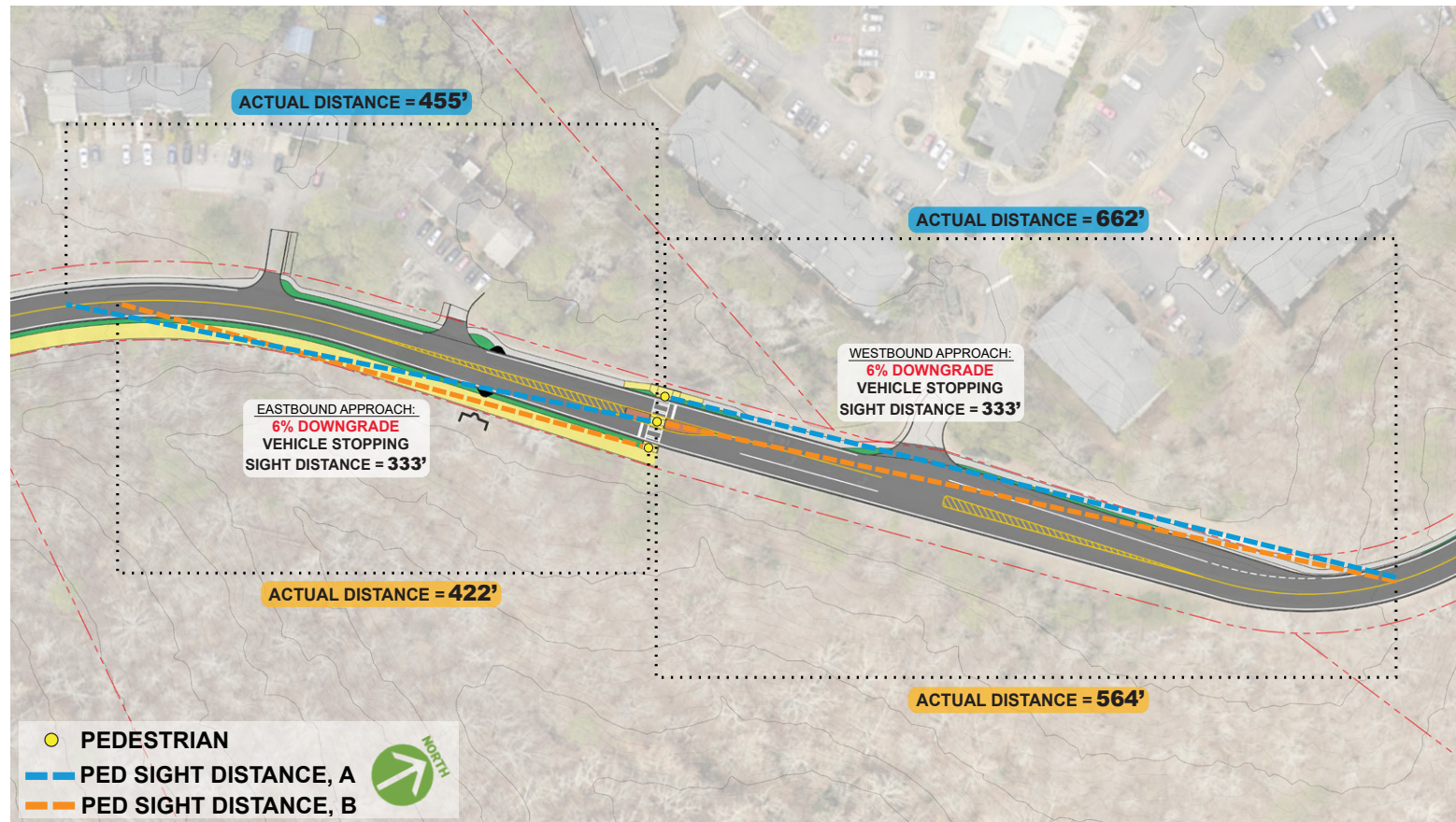


Location: STA 34+05
 Roadway Speed Limit: 35 MPH
 Design Speed: 40 MPH
 Pedestrian Sight Distance Requirement: 563 FT

The sight distance study was limited to the ROW limits. The minimum pedestrian sight distance required by GDOT is 563 ft. Each of the pedestrian site limits do not meet this required amount. The vehicle stopping distance meets the requirements for vehicles traveling eastbound on Roberts Drive. However, the vehicle stopping distance is not met for westbound traffic. The required distance is only short by 4 ft., therefore if the crosswalk is shifted to the left, the required vehicle stopping distance can be met. Further study will need to be required to determine the solutions for the vehicle stopping distance and pedestrian sight distances required for this crossing.

04.8 MID-BLOCK CROSSING SIGHT DISTANCES

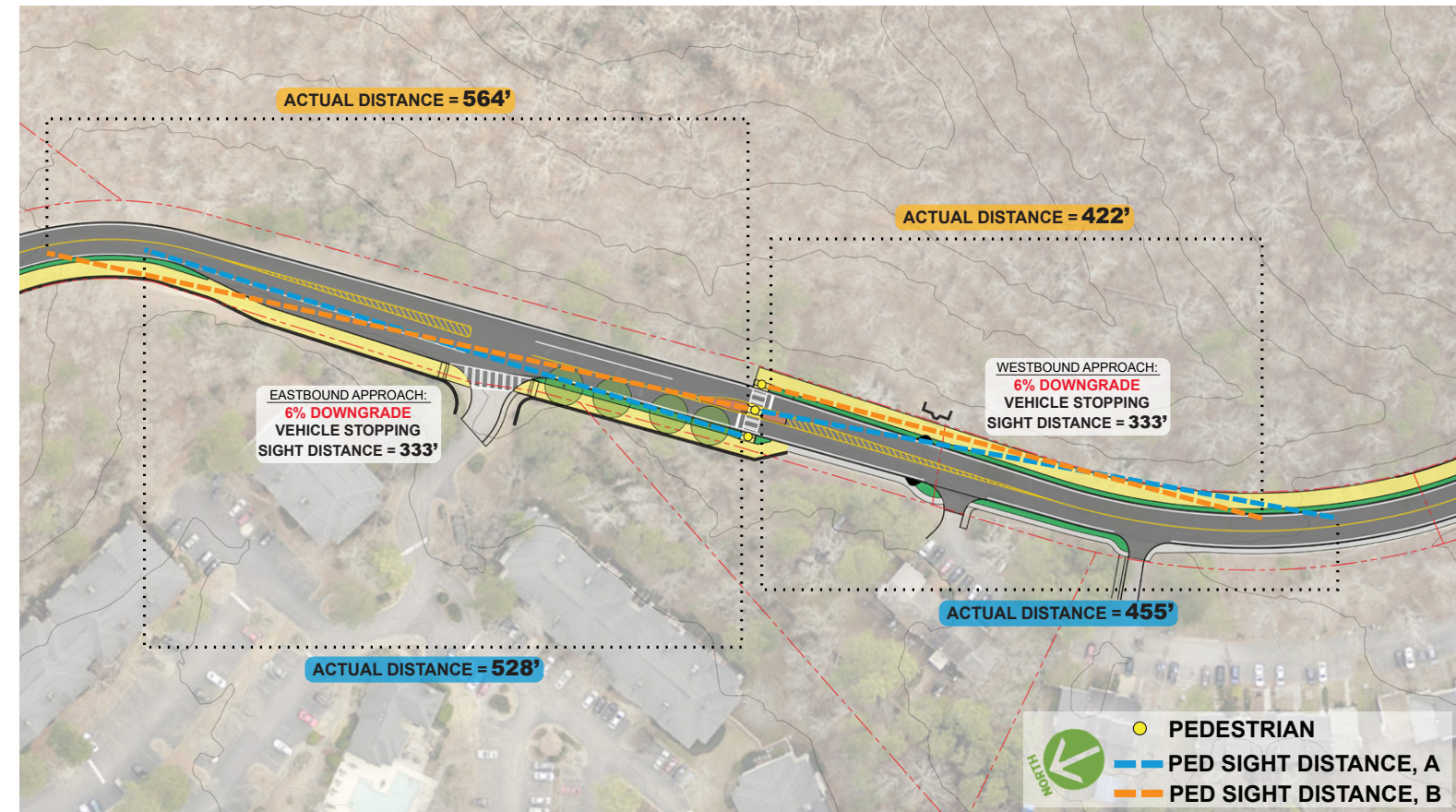
CROSSING C (NEAR SUMMER CROSSING) (PHASE 1)



Location: STA 52+44
 Roadway Speed Limit: 35 MPH
 Design Speed: 40 MPH
 Pedestrian Sight Distance Requirement: 402 FT

The sight distance study was limited to the ROW limits. The minimum pedestrian sight distance required by GDOT is 402 ft. Each of the pedestrian site limits meet this required amount. The vehicle stopping distance meets the requirements for vehicles traveling both eastbound and westbound along Roberts Drive. Further study is recommended to verify the vehicle stopping distances and pedestrian sight distances required for this crossing.

CROSSING C (NEAR SUMMER CROSSING) (PHASE 2)

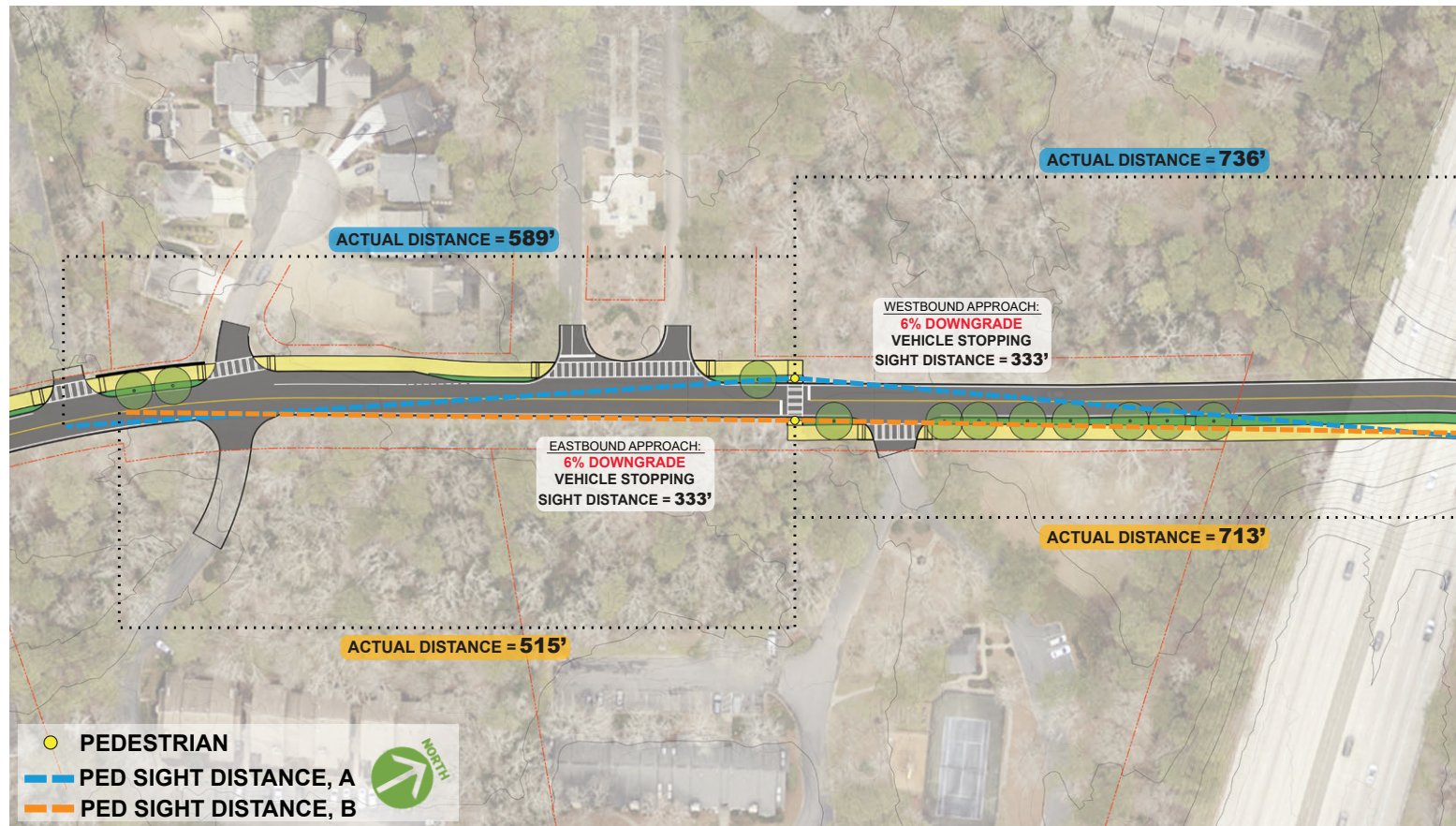


Location: STA 52+44
 Roadway Speed Limit: 35 MPH
 Design Speed: 40 MPH
 Pedestrian Sight Distance Requirement: 402 FT

The sight distance study was limited to the ROW limits. The minimum pedestrian sight distance required by GDOT is 402 ft. Each of the pedestrian site limits meet this required amount. The vehicle stopping distance meets the requirements for vehicles traveling both eastbound and westbound along Roberts Drive. Further study is recommended to verify the vehicle stopping distances and pedestrian sight distances required for this crossing.

04.8 MID-BLOCK CROSSING SIGHT DISTANCE

CROSSING D (NEAR LEXINGTON DRIVE) (PHASE 2)

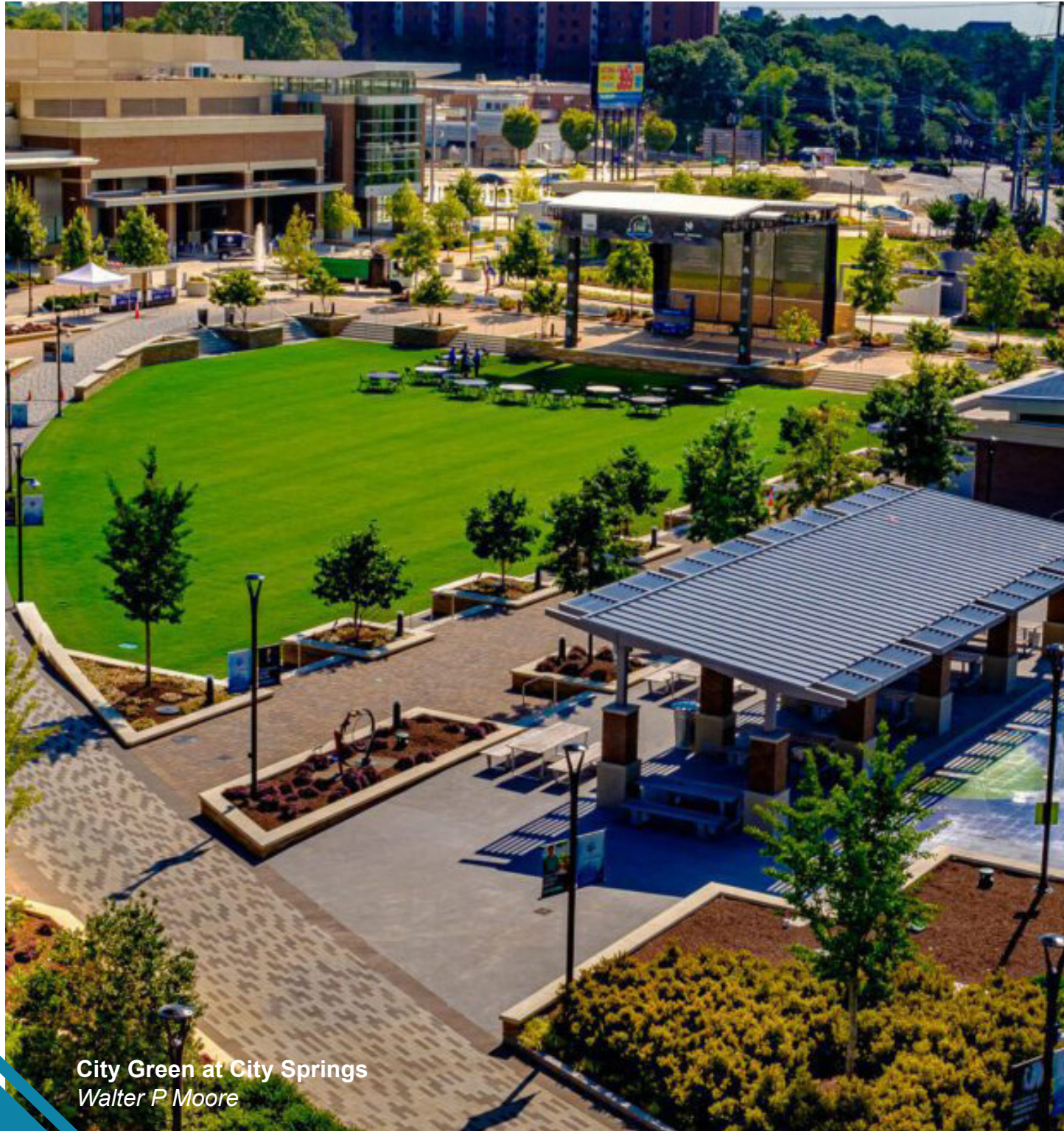


Location: STA 52+44
Roadway Speed Limit: 35 MPH
Design Speed: 40 MPH
Pedestrian Sight Distance Requirement: 402 FT

The sight distance study was limited to the ROW limits. The minimum pedestrian sight distance required by GDOT is 402 ft. Each of the pedestrian site limits meet this required amount. The vehicle stopping distance meets the requirements for vehicles traveling both eastbound and westbound along Roberts Drive. Further study is recommended to verify the vehicle stopping distances and pedestrian sight distances required for this crossing.

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05 COST ESTIMATE



City Green at City Springs
Walter P Moore

- 05.1 OVERALL COST ESTIMATE
- 05.2 FUNDING OPPORTUNITIES

05.1 OVERALL COST ESTIMATE

PHASE ONE

DEMOLITION AND GRADING	645,004.50
EROSION AND SEDIMENT CONTROL	86,095.00
SIDE PATH AND WALLS	963,765.00
ROADWAY IMPROVEMENTS	186,916.00
UTILITY: WATER AND STORMWATER IMPROVEMENTS	7,125.00
AMENITIES	247,500.00
LANDSCAPE	106,205.00
SUBTOTAL:	2,242,610.50
PROJECT MGMT / MOBILIZATION / BONDING & INSURANCE (25%)	560,652.63
CONTINGENCY (20%)	448,522.10
DESIGN AND ENGINEERING (12%)	269,113.26
UTILITY: POWER RELOCATION AND PEDESTRIAN LIGHTING	1,276,000.00
RIGHT OF WAY ACQUISITION AND EASEMENTS	51,395.00
TOTAL COST:	\$ 4,848,293.49

PHASE TWO

DEMOLITION AND GRADING	1,521,882.50
EROSION AND SEDIMENT CONTROL	98,900.00
SIDE PATH AND WALLS	3,732,105.00
ROADWAY IMPROVEMENTS	194,721.00
UTILITY: WATER AND STORMWATER IMPROVEMENTS	14,000.00
AMENITIES	303,875.00
LANDSCAPE	123,590.00
SUBTOTAL:	5,989,073.50
PROJECT MGMT / MOBILIZATION / BONDING & INSURANCE (25%)	1,497,268.38
CONTINGENCY (20%)	1,197,814.70
DESIGN AND ENGINEERING (12%)	718,688.82
UTILITY: POWER RELOCATION AND PEDESTRIAN LIGHTING	1,371,500.00
RIGHT OF WAY ACQUISITION AND EASEMENTS	886,901.00
TOTAL COST:	\$ 11,661,246.40

PROJECT TOTAL

PHASE ONE	4,848,293.49
PHASE TWO	11,661,246.40
TOTAL COST:	\$ 16,509,539.89

The cost estimate is based on the conceptual plan and is approximate cost only. The detailed cost estimate can be found in section 07.4 of the appendix.



Abernathy Greenway Park
City of Sandy Springs

05.2 FUNDING OPPORTUNITIES

FEDERAL

- Transportation Alternatives Program (TAP)
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants
- Federal Recreational Trails Program (RTP) Grants
- Congestion Mitigation and Air Quality Program (CMAQ)
- Federal Lands and Tribal Transportation Program (FLTTP)
- National Recreation Trails (NRT)
- Community Development Block Grant CDBG)
- Transit-Oriented Development (TOD) Pilot Program
- Highway Safety Improvement Program (HSIP)
- Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)
- Federal Lands Access Program (FLAP)
- Carbon Reduction Program (CRP)

STATE

- Georgia Department of Natural Resources (DNR) Grants
- GDOT Maintenance and Improvement Grant (LMIG)
- GDOT Transportation Enhancement (TE) Program
- Georgia Transportation Infrastructure Bank (GTIB)
- Quick Response projects
- GDOT Local Bridge Program (LBP) and Low-Impact Bridge Replacement Program (LIBRP)
- Safe Routes to School (SRTS)

REGIONAL

- Livable Centers Initiative (LCI)
- Community Development Assistance Program
- Transportation Improvement Program (TIP) (TIP is used to distribute some federal funding sources like CMAQ, TAP, and STBG, CRP)

SALES TAX

- Fulton County TSPLOST

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06 PROJECT DURATION



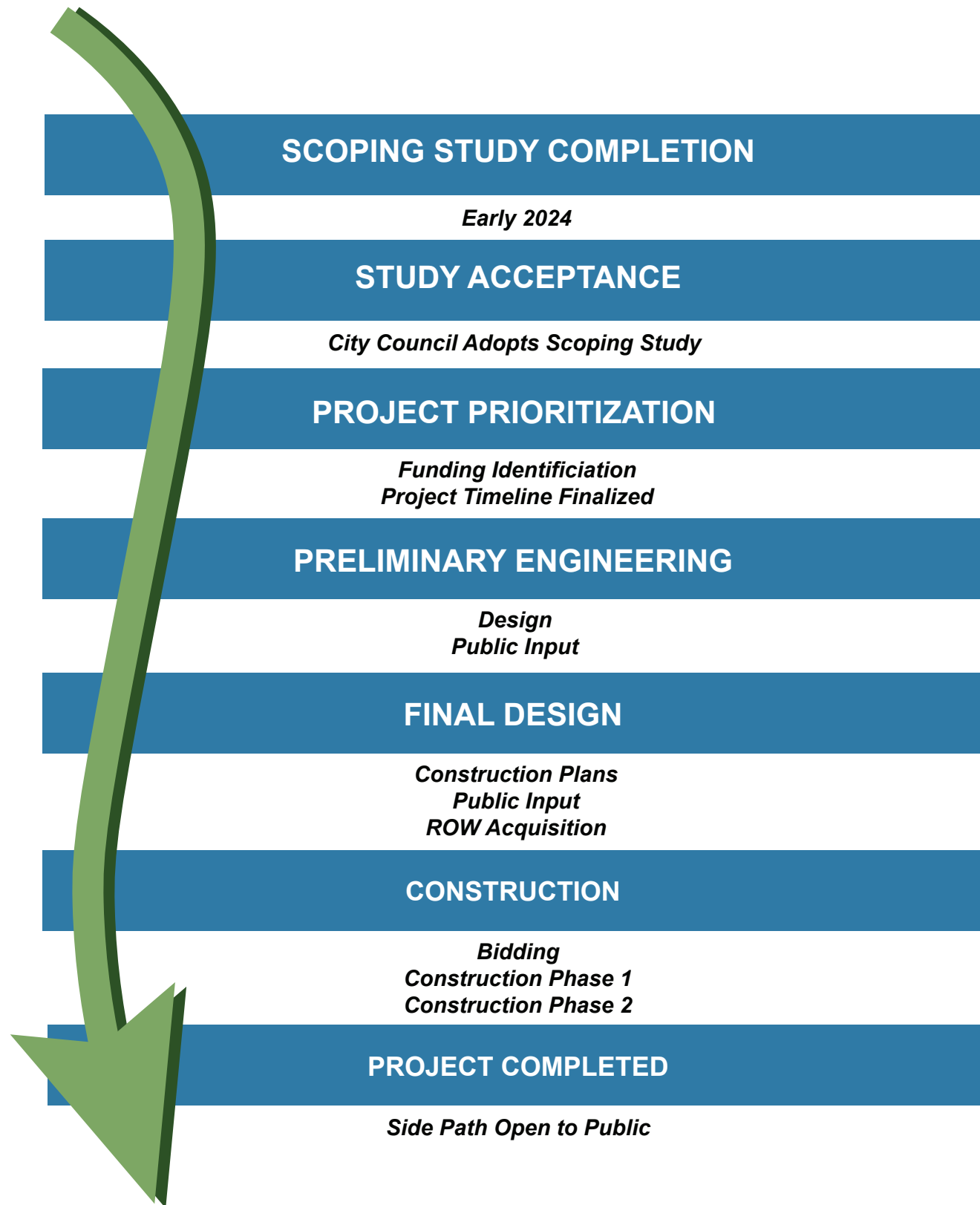
SANDY SPRINGS
GEORGIA



Island Ford
Chattahoochee National Recreation Area
Atlanta Trails

06.1 TIMELINE

06.1 TIMELINE



This graphic shows a general timeline for the Roberts Drive side path.

With the scoping study for the Roberts Drive side path complete, the next steps to be taken include project acceptance by city council, and funding source identification and allocation. As funding is obtained the project can enter final design and cost estimating. The project will be constructed in two phases as funding is available. The timeline for this project is expected to take 3 years from project acceptance to phase one open for public use, with phase two to follow. The project timeline can lengthen depending on funding availability. The chart to the right shows a general timeline for the project from study completion to project completed.

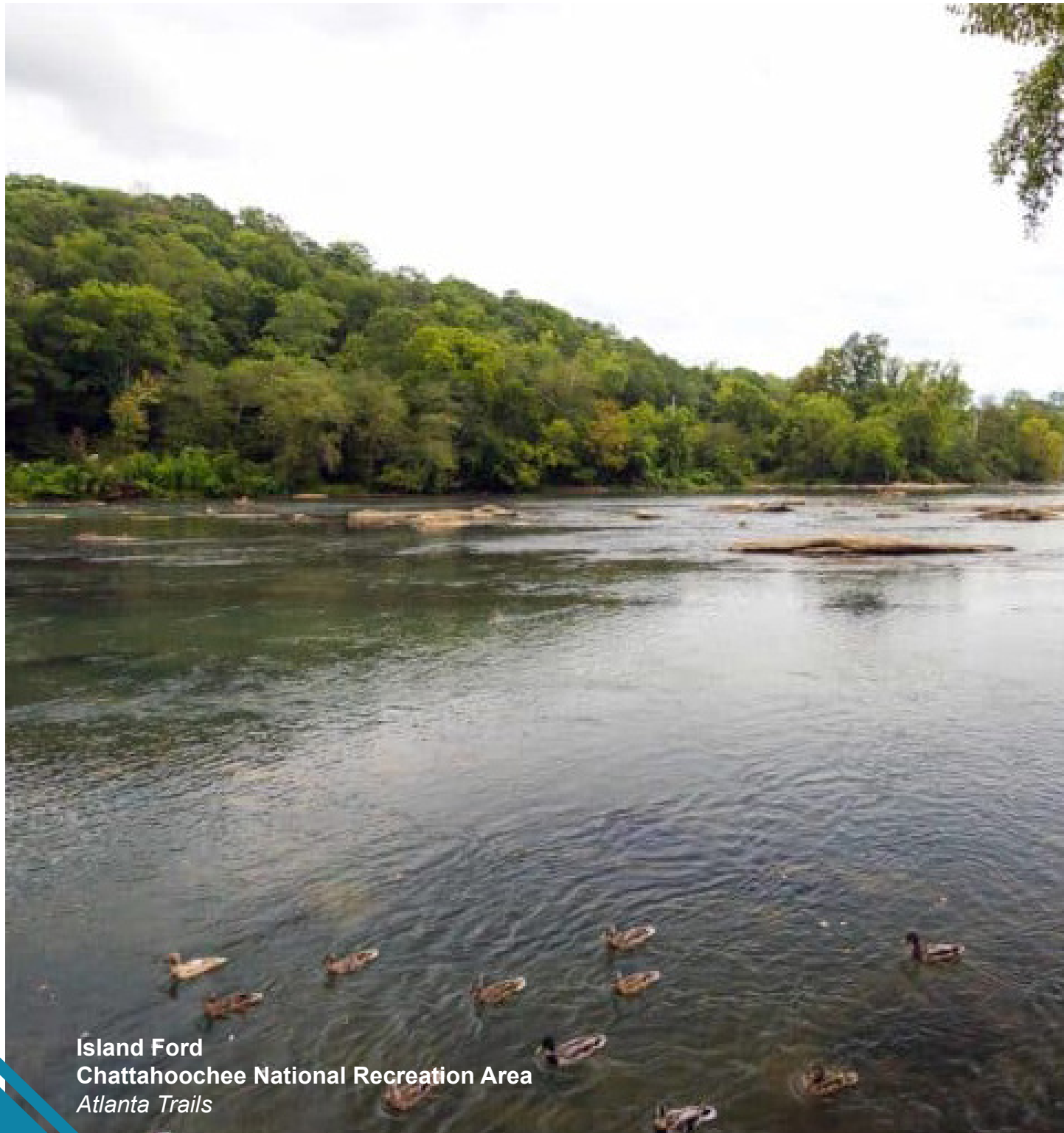


Island Ford, Chattahoochee National Recreation Area
Visit Sandy Springs

07 APPENDIX



SANDY SPRINGS
GEORGIA

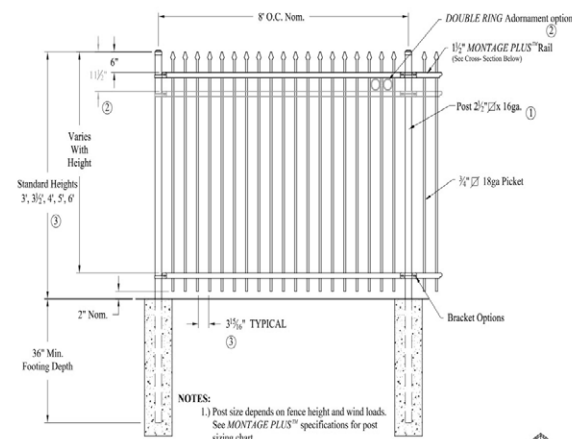


Island Ford
Chattahoochee National Recreation Area
Atlanta Trails

- 07.1 CONSTRUCTION DETAILS
- 07.2 REPORTS (ECOLOGICAL AND CULTURAL RESOURCES)
- 07.3 COORDINATION MEETINGS
- 07.4 COST ESTIMATE
- 07.5 PHASE TWO ALTERNATIVES COMPARISON
- 07.6 PHASE TWO ALTERNATIVE ALIGNMENT
- 07.7 PHASE 2, SHEET 2-5
- 07.8 RESOURCES

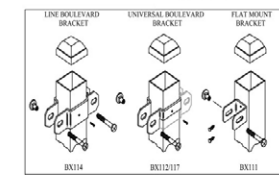
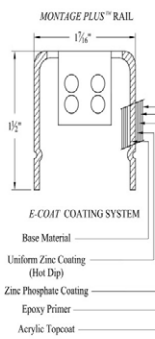
07.1 CONSTRUCTION DETAILS

FENCING



- NOTES:**
- 1) Post size depends on fence height and wind load. See MONTAGE PLUS[®] specifications for post sizing chart.
 - 2) Third rail required for Double Rings.
 - 3) Available in 3\"/>

RAKING DIRECTIONAL ARROW
Welded panel can be raked 30° over 4\"/>

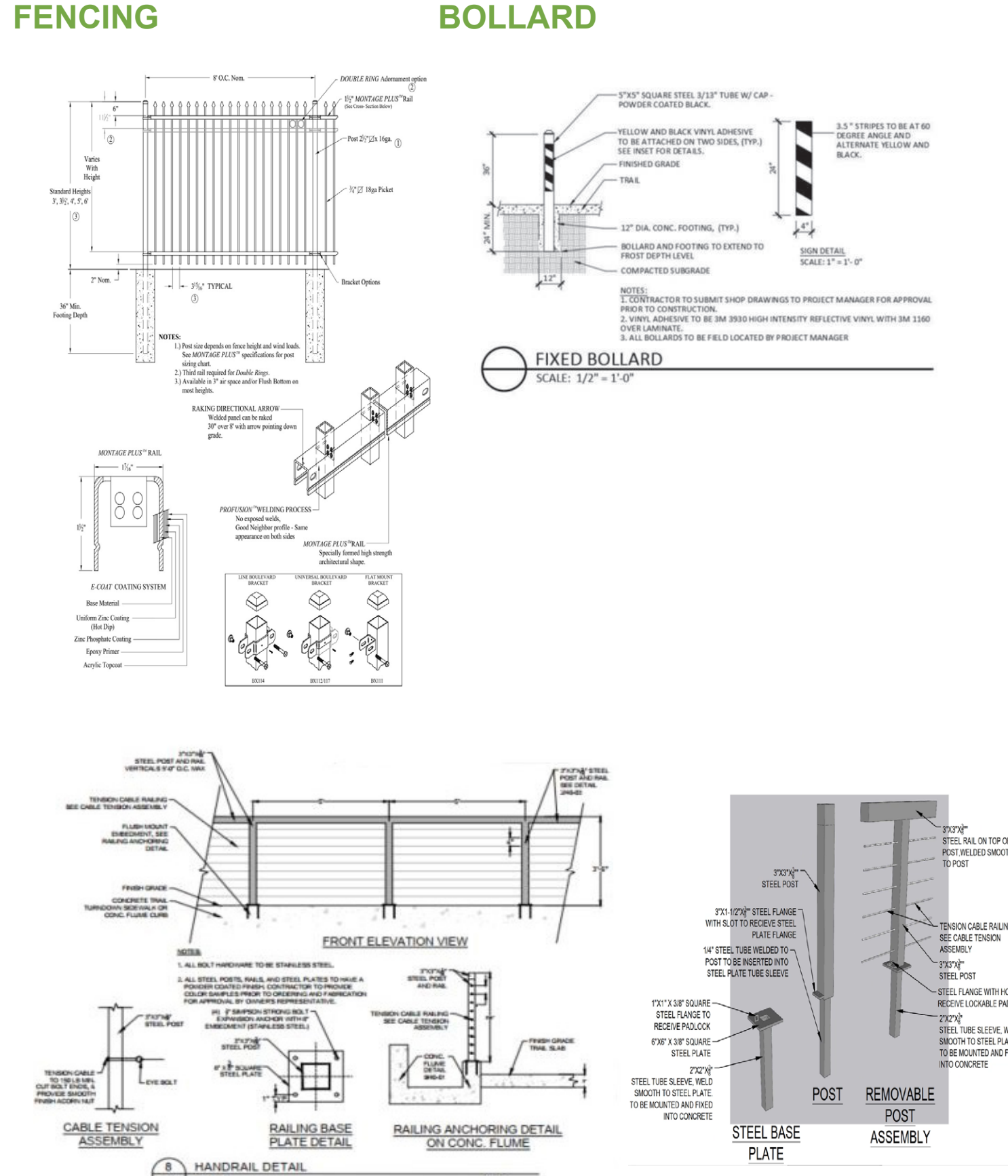


BOLLARD



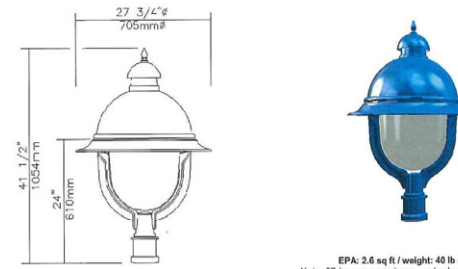
FIXED BOLLARD
SCALE: 1/2\"/>

- NOTES:**
1. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO PROJECT MANAGER FOR APPROVAL PRIOR TO CONSTRUCTION.
 2. VINYL ADHESIVE TO BE 3M 3930 HIGH INTENSITY REFLECTIVE VINYL WITH 3M 1160 OVER LAMINATE.
 3. ALL BOLLARDS TO BE FIELD LOCATED BY PROJECT MANAGER



8 HANDRAIL DETAIL
N.T.S.

LIGHTING



EPA: 2.6 sq ft / weight: 48 lb (18.2 kg)
Note: 3D image may not represent color or option selected. Logos above include link, click to access.

Qty	1	Luminaire	DMS64-SW48LED4K-R-ACDR-LE3A-VOLT-GN8TX
-----	---	-----------	--

Description of Components:

Finial: Decorative cast 356 aluminum, mechanically assembled.

Cupola: Decorative spun aluminum 1100-0, mechanically mounted on hood.

Hood: Spun aluminum 1100-0 dome, mechanically assembled on the luminaire.

Guard: With 2 cast aluminum 356 arms, this guard is welded to the finial and to the access-mechanism.

Skirt: Spun 1100-0 aluminum, mechanically assembled on the luminaire.

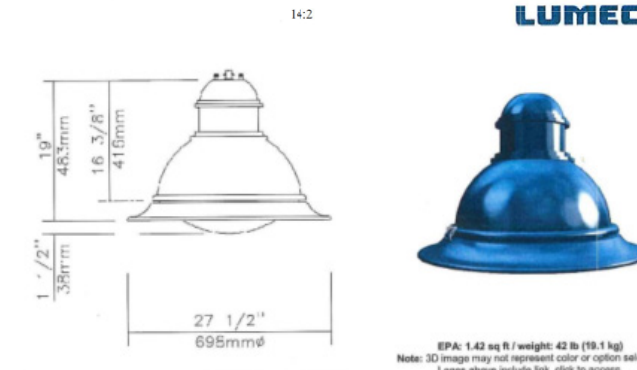
Access-Mechanism: A die cast A360 aluminum technical ring with latch and hinge. The mechanism shall offer toolfree access to the inside of the luminaire. An embedded memory-retentive gasket shall ensure weatherproofing.

Light Engine: LEDgine composed of 5 main components: **Globe / LED lamp / Optical System / Heat Sink / Driver**
Electrical components are RoHS compliant.

Globe: (ACDR), Made of one-piece seamless injection-molded impact-resistant (DR) acrylic having an inner prismatic surface. The globe is mechanically assembled and sealed onto the lower part of the heat sink.

Lamp: (Included), Lamp type Philips Lumileds Luxeon R. Composed of 48 high-performance white LEDs, 55w lamp wattage. Color temperature of 4000 Kelvin nominal, 70 CRI. Operating lifespan based on TM21 extrapolation to get results after which 50% of LEDs still emits over 70% (L70) of its original lumen output. Use of metal core board insures greater heat transfer and longer lifespan of the light engine. The LED circuit board is included with a connector, (no connection wire

A - MID BLOCK LED Standard w/ Finial
05-14-2014 Page 1/5



EPA: 1.43 sq ft / weight: 42 lb (19.1 kg)
Note: 3D image may not represent color or option selected. Logos above include link, click to access.

Qty	1	Luminaire	DMS50-70W64LED4K-R-LE3S-VOLT-GN8TX
-----	---	-----------	------------------------------------

Description of Components:

Hood: A die cast A360.1 aluminum dome complete with a cast-in technical ring with latch and hinge. The mechanism shall offer toolfree access to the inside of the luminaire. An embedded memory-retentive gasket shall ensure weatherproofing.

Housing: In a round shape, this housing is made of cast 356 aluminum, c/w a watertight grommet, mechanically assembled to the bracket with four bolts 3/8-16 UNC. This suspension system permits for a full rotation of the luminaire in 90 degree increments.

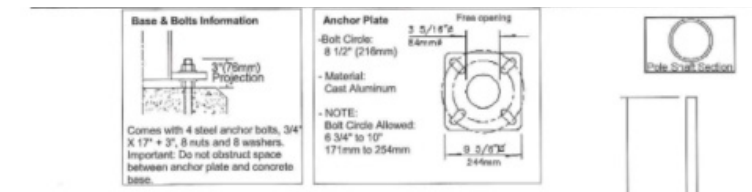
Light Engine: LEDgine composed of 5 main components: **Lens / LED lamp / Optical System / Heat Sink / Driver**
Electrical components are RoHS compliant.

Lens: Made of soda-lime clear tempered glass curved lens, mechanically assembled and sealed onto the lower part of the heat sink.

Lamp: (Included), Lamp type Philips Lumileds Luxeon R. Composed of 64 high-performance white LEDs, 70w lamp wattage. Color temperature of 4000 Kelvin nominal, 70 CRI. Operating lifespan based on TM21 extrapolation to get results after which 50% of LEDs still emits over 70% (L70) of its original lumen output. Use of metal core board insures greater heat transfer and longer lifespan of the light engine. The LED circuit board is included with a connector, (no connection wire required for ease of replacement).

Optical System: (LE3S), IES type III (asymmetrical). Composed of high-performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumen and a perfect lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM63 and LM79 and TM15 (IESNA) certifying its photometric performance. Street side indicated.

C - INTERSECTION Complete_ALT Pole
02-11-2014 Page 1/6



Qty	1	Pole	APR4U-13-LBC1-GN8TX
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Description of Components:

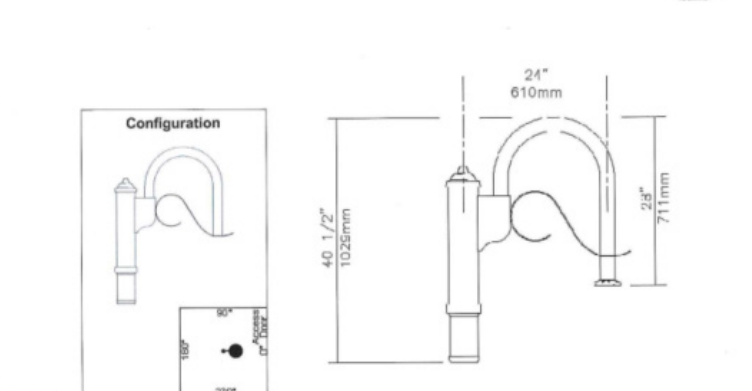
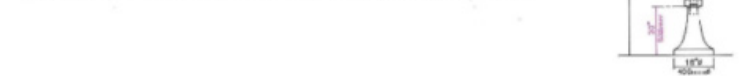
Pole Shaft: Shall be made from a 4" (102mm) round extruded 6061-T6 aluminum tubing, having a 0.226" (5.7mm) wall thickness, welded to both the bottom and top of the anchor plate.

Maintenance Opening: The pole shall have a 2" x 4 1/2" (51mm x 114mm) maintenance opening centered 20" (508mm) from the bottom of the anchor plate, complete with a weatherproof aluminum cover and a copper ground lug.

Base Cover: Two piece round base cover made from cast 356 aluminum, mechanically fastened with stainless steel screws.

Note: A tenon will be provided when the luminaire or bracket does not fit directly on pole shaft. Tenon not shown on the drawing.

IMPORTANT: Philips Lumec strongly recommends the installation of the complete lighting assembly with all of its accessories upon the anchoring of the pole. This will ensure that the structural integrity of the product is maintained throughout its lifetime.



Qty	1	Bracket	LM-1A-GN8TX
-----	---	---------	-------------

Description of Components:

Arm: Shall be made from bent 6061-T6 aluminum tubing, 2 3/8" (60mm) outside diameter, welded.

Decorative Element: Scroll made of bent aluminum, welded to the arm.

Central Adaptor: Made of aluminum 6061-T6, 5" (127mm) outside diameter. Complete with a cast 356 aluminum finial that slip-fits 9" (229mm) over a 4" (102mm) outside diameter pole tenon. Mechanically assembled using two sets of four set screws at 90 degrees around the bracket.

Bracket Weight: 17 lbs (7.7 kg)

07.1 CONSTRUCTION DETAILS

CURBS

RAISED EDGE WITH CONCRETE GUTTER
SCALE: 1/2" = 1'-0"

CONCRETE MEDIANS (Integral)
SCALE: 1/2" = 1'-0"

CONCRETE HEADER CURBS
SCALE: 1/2" = 1'-0"

CONCRETE CURB & GUTTER
SCALE: 1/2" = 1'-0"

CONCRETE INTEGRAL CURB
SCALE: 1/2" = 1'-0"

DETAILS OF RECESSED CURB FOR DRIVEWAYS
NO SCALE

CURB FACE DESIGN
SCALE: 1/2" = 1'-0"

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
STANDARD
CONCRETE CURB & GUTTER
CONCRETE CURBS, CONCRETE MEDIANS
REVISED AND REDRAWN OCT. 2018
9032B

RAMPS

TYPICAL LOCATIONS FOR CURB CUT RAMPS - PLAN VIEW

CONCRETE SIDEWALK DETAILS
SCALE: PROJECT NUMBER SHEET NO. 07.1.003

Notes for Concrete Sidewalks:

- CONCRETE TO BE PLACED 4" THICK AND FINISHED WITH TAMPS, WOOD CURBS AND CURB BRICKS.
- TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED AT 20 FT. INTERVALS. ALL SIDES TO BE FINISHED TO FINISH.
- EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALKS MEET A STRUCTURE OR TERMINATE AT CURBS, RAMPS OR DRIVEWAYS AND AT 40' INTERVALS.

Notes for Curb Cut Ramps:

- CURB CUT RAMPS SHALL BE CONSTRUCTED AS FOLLOWS UNLESS OTHERWISE SPECIFIED OTHERWISE:
 - AT ALL INTERSECTIONS (SIDEWALKS) WHERE CURBS IS CONSTRUCTED OR NOTICED.
 - WHERE THE SIDEWALK, CONCRETE OR DRIVEWAY IS INTERRUPTED BY THE CURB AT TURNINGS OR AT INTERSECTIONS.
 - AT OTHER LOCATIONS SUCH AS SIDEWALK NARROWINGS, BEST PRACTICE SHALL BE USED TO PROVIDE A SAFE AND ACCESSIBLE TRANSITION TO THE SIDEWALK.
- RAMPS SHALL BE CONSTRUCTED FROM CONCRETE. SPECIFICATIONS FOR RAMP SHALL BE THE SAME AS FOR CONCRETE SIDEWALKS. RAMPS SHALL HAVE EITHER A RAMP OR A CURB ON EITHER SIDE.
- RAMPS SHALL BE LOCATED DIRECTLY IN FRONT OF RAMPS. CURB RAMPS SHALL BE LOCATED AT LEAST 10 FT. FROM RAMPS WITH FEASIBLE.
- WHERE RAMPS ARE LOCATED IN FRONT OF THE SIDEWALK, RAMPS SHALL BE LOCATED PERPENDICULAR TO THE SIDEWALK AND THE CURB.
- WHERE SIDEWALKS INTERSECT CURBS, WHERE SIDEWALKS INTERSECT AT AN ANGLE, INTERSECTIONS OR IN OTHER SPECIAL CASES, THE RAMP DESIGN WILL BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CONTRACTOR. THE RAMP SHALL BE LOCATED AS CLOSE TO THE CURB AS POSSIBLE AND SHALL BE FINISHED TO THE SAME FINISH AS THE SIDEWALK.
- 1/2" OF CURB AND GUTTER WILL INCLUDE THE TRANSITION CURB IN FRONT OF RAMPS. ALL CURBS OF CONCRETE SIDEWALKS AND CONCRETE MEDIANS SHALL BE FINISHED TO THE SAME FINISH AS THE SIDEWALKS. NO ADDITIONAL FINISH WILL BE MADE FOR EXISTING SIDEWALKS OR CURBS WHEN NECESSARY FOR RAMP CONSTRUCTION.
- WHERE A CURB RAMP IS PLACED ON EXISTING SIDEWALK, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A MINIMUM FINISH OF 1/2" OF CONCRETE AT ALL INTERSECTIONS. NO SEPARATE FINISH WILL BE MADE FOR THE SIDEWALK OR CURB.

Notes for Skewed Ramp Details:

APPLIES TO TYPE A & TYPE D RAMPS ONLY

IN AREAS WHERE THE GUTTER HAS A SLOPE, THE RAMP DESIGN WILL BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CONTRACTOR. THE RAMP SHALL BE LOCATED AS CLOSE TO THE CURB AS POSSIBLE AND SHALL BE FINISHED TO THE SAME FINISH AS THE SIDEWALK.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL DETAIL
CONCRETE SIDEWALK DETAILS
CURB CUT (WHEELCHAIR) RAMPS
NO SCALE
MARCH 12, 2002
A3

DETECTABLE SURFACE

SIZE: DETECTABLE WARNINGS SHALL BE 24 INCHES (610 mm) IN THE DIRECTION OF PEDESTRIAN TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.

LOCATION: THE DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE OR OTHER POTENTIAL HAZARD IS 6 TO 8 INCHES (150 mm TO 180mm) FROM THE CURB LINE OR OTHER POTENTIAL HAZARD, SUCH AS A REFLECTIVE POOL EDGE OR THE DYNAMIC ENVELOPE OF RAIL OPERATIONS.

DOME SIZE AND SPACING: TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9 INCH TO 1.4 INCH (23mm-36mm) AT THE BOTTOM, A DIAMETER OF 0.45 INCH TO 0.91 INCH (11mm-23mm) AT THE TOP, THE TOP DIAMETER SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER, A HEIGHT OF 0.2 INCH (5.1mm) AND A CENTER-TO-CENTER SPACING OF 2.40 INCHES (61mm) DESIRABLE 1.60 INCHES (41mm) MINIMUM MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT. DOMES SHALL HAVE A SQUARE ARRANGEMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.

VISUAL CONTRAST: DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH THE ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE.

MATERIALS:
NEW CONSTRUCTION
THE DETECTABLE WARNINGS SHALL BE MADE OF MATERIALS SPECIFIED ON QPL #7.
RETROFIT OF EXISTING RAMPS
SURFACE APPLIED MATERIALS WILL ONLY BE APPROVED TO BE USED ON EXISTING WHEELCHAIR RAMPS.

INSTALLATION:
BRICK PAVERS SHALL BE SET IN A WET MORTAR BED, THE BED SHALL BE PLACED ON CONCRETE. THE CONCRETE SHALL BE A MINIMUM OF 4" THICK.
CERAMIC TILE SHALL BE EPOXYED IN PLACE OR SET IN A WET MORTAR BED. MANUFACTURER RECOMMEND ADHESIVE OR FASTENER SHALL BE USED IN THE INSTALLATION.
ALL OTHER MATERIALS SHALL BE INSTALLED ACCORDING TO MANUFACTURERS DETAILS OR INSTRUCTION.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL DETAIL
DETECTABLE WARNING SURFACE
TRUNCATED DOME SIZE, SPACING
AND ALIGNMENT REQUIREMENTS
NO SCALE
A4

DRIVEWAY APRON

PICTORIAL SECTION
NO CONCRETE SIDEWALK

PICTORIAL SECTION
DRIVE & CONCRETE SIDEWALK

DRIVE MODIFIED FOR HEADER OR INTEGRAL CURB ALONG ROADWAY

DRIVE WITH CURB ISLAND

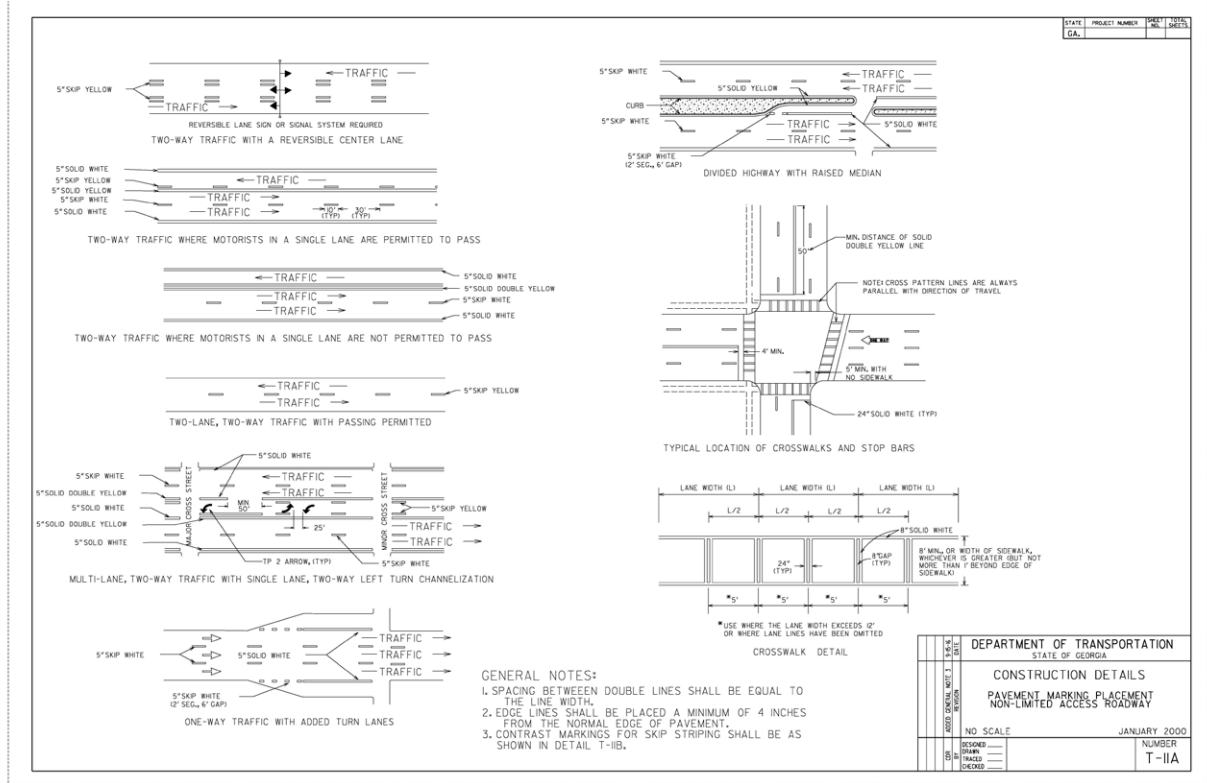
Notes:

- DETAILS NOT SHOWN FOR MODIFIED DRIVES WILL BE AS SHOWN AT BOTTOM.
- DRIVES WILL NOT BE SKEWED EXCEPT WHERE PERPENDICULAR ALIGNMENT IS NOT FEASIBLE.
- DRIVES RECONSTRUCTED SHALL BE REPLACED IN AN EQUAL APPOINT FOR ASPHALT FOR CONCRETE FOR CONCRETE AND NECESSARY SURFACE CURBS FOR DRIVE.
- SEE STANDARD SPECIFICATIONS FOR DETAILS OF CONCRETE CURB & GUTTER, HEADER CURBS AND SKEWED INTERIOR CURBS.
- WIDTH OF CONCRETE DRIVEWAYS WILL COMPLY WITH CURRENT RULES AND REGULATIONS FOR DRIVEWAY AND ENCLOSURE CONTROL WIDTHS OF RESIDENTIAL. NON-COMMERCIAL DRIVEWAYS SHALL BE AS SPECIFIED IN THE PLANS.
- WARNING DRIVEWAY GRADES SHALL BE AS SPECIFIED FOR RESIDENTIAL DRIVEWAYS. WHEN FLATTER GRADES ARE NOT FEASIBLE, GRADES FOR COMMERCIAL DRIVEWAYS OR FOR PROXIES SHALL NOT BE GREATER THAN 1% UNLESS SPECIFIED OTHERWISE.

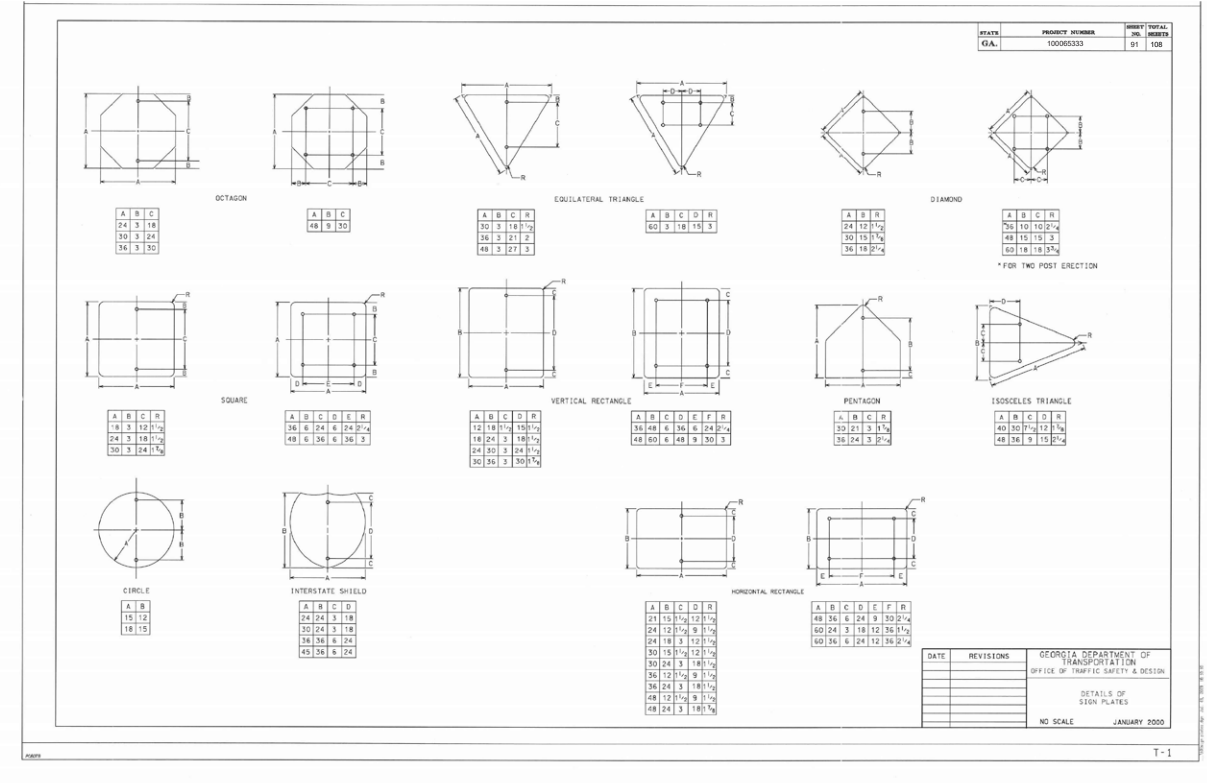
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL DETAIL
DRIVEWAYS WITH TAPERED
CONCRETE VALLEY GUTTERS
NO SCALE
MARCH 12, 2002
A1

07.1 CONSTRUCTION DETAILS

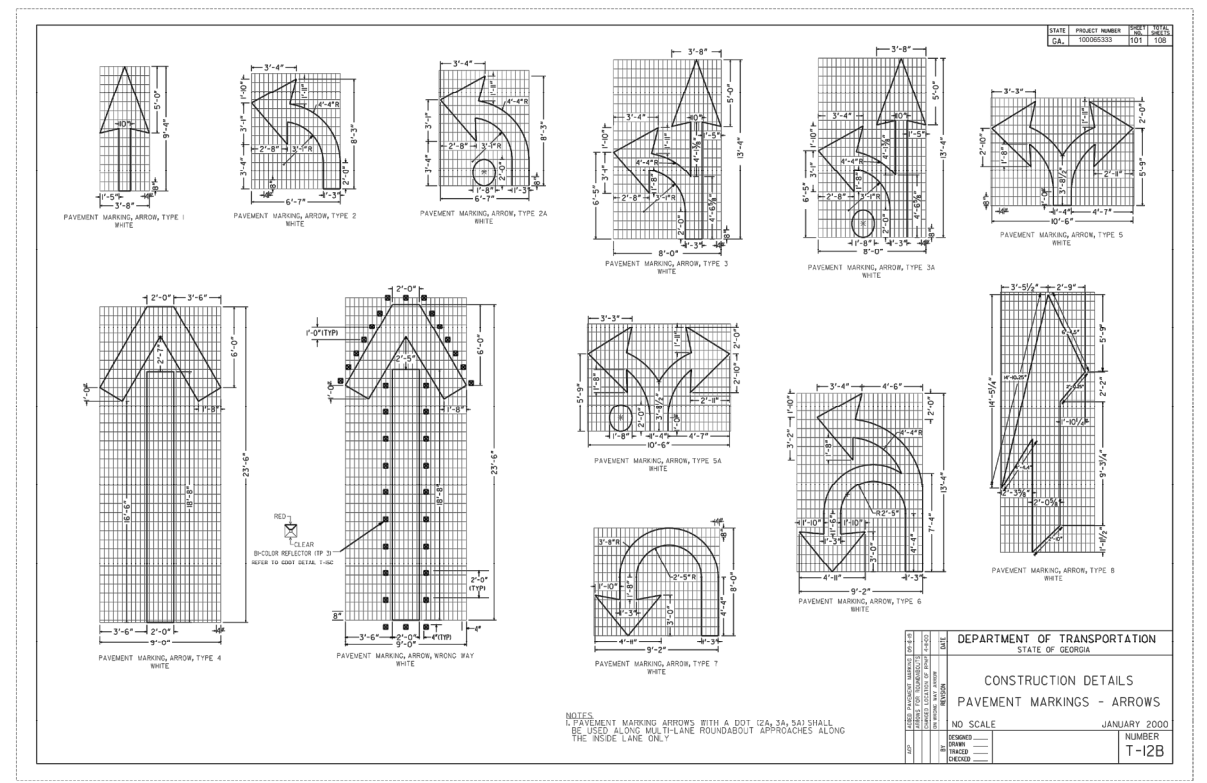
PAVEMENT MARKING



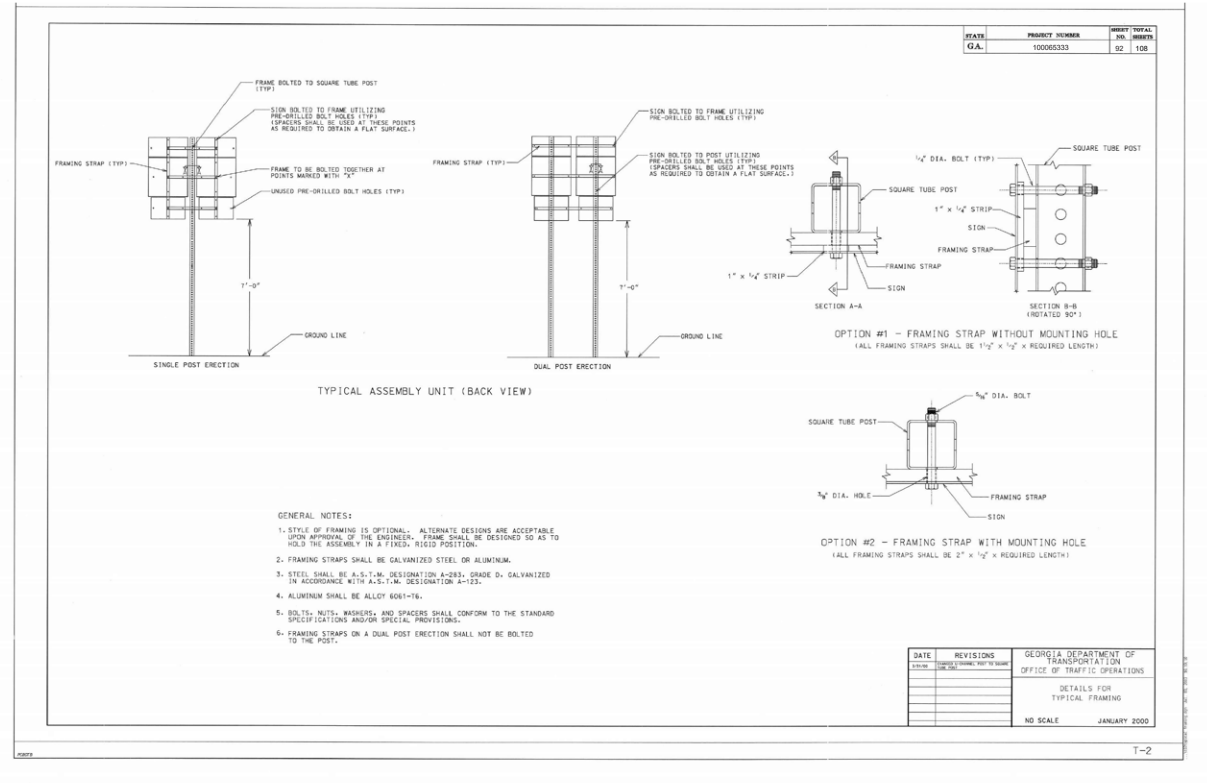
SIGNAGE



PAVEMENT MARKINGS



SIGNAGE



07.1 CONSTRUCTION DETAILS

PAVEMENT MARKINGS

DETAIL "A" (YELLOW)
TRAFFIC → 8" SOLID YELLOW STRIPING → 4" SOLID YELLOW STRIPING → 8" SOLID YELLOW STRIPING → TRAFFIC →

DETAIL "B" (YELLOW)
TRAFFIC → 8" SOLID YELLOW STRIPING → 4" SOLID YELLOW STRIPING → 8" SOLID YELLOW STRIPING → TRAFFIC →

DETAIL "C" (YELLOW)
TRAFFIC → 8" SOLID YELLOW STRIPING → 4" SOLID YELLOW STRIPING → 8" SOLID YELLOW STRIPING → TRAFFIC →

DETAIL "D" (YELLOW)
TRAFFIC → 8" SOLID YELLOW STRIPING → 4" SOLID YELLOW STRIPING → 8" SOLID YELLOW STRIPING → TRAFFIC →

DETAIL "A" (WHITE)
TRAFFIC → 8" SOLID WHITE STRIPING → 4" SOLID WHITE STRIPING → 8" SOLID WHITE STRIPING → TRAFFIC →

DETAIL "B" (WHITE)
TRAFFIC → 8" SOLID WHITE STRIPING → 4" SOLID WHITE STRIPING → 8" SOLID WHITE STRIPING → TRAFFIC →

DETAIL "C" (WHITE)
TRAFFIC → 8" SOLID WHITE STRIPING → 4" SOLID WHITE STRIPING → 8" SOLID WHITE STRIPING → TRAFFIC →

DETAIL "D" (WHITE)
TRAFFIC → 8" SOLID WHITE STRIPING → 4" SOLID WHITE STRIPING → 8" SOLID WHITE STRIPING → TRAFFIC →

GENERAL NOTES:
1. FOR YELLOW STRIPING, THE SQUARE YARDS SHOWN ON PLAN, SUMMARY AND DETAILED ESTIMATE SHEETS INCLUDE THE AREA WITHIN THE BORDERS AND THE 8" SOLID YELLOW BORDER.
2. FOR WHITE STRIPING, THE SQUARE YARDS SHOWN ON PLAN, SUMMARY AND DETAILED ESTIMATE SHEETS INCLUDE THE AREA WITHIN THE BORDERS AS WELL AS THE 8" SOLID WHITE BORDER.

GEORGIA DEPARTMENT OF TRANSPORTATION
NO SCALE

DATE	REVISIONS	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC OPERATIONS SIGNING AND MARKING PLANS
6/25/04	Initial general note 1	
11/27/08	CHANGED BORDERS	
11/27/08	Initial general note 1	
11/27/08	Initial general note 1	

DETAIL OF PAVEMENT MARKING HATCHING
NO SCALE
JANUARY 2002

SIGNAGE

FRONT VIEW
7'-0" MINIMUM
TYPE 7, TYPE 8, OR TYPE 9 POST
4" MAXIMUM STUB HEIGHT ALLOWED (2" STUB HEIGHT RECOMMENDED 7' MINIMUM STUB HEIGHT)
STUB POST (COST FOR STUB IS INCLUDED IN LN FT PRICE FOR POST) (4'-0" IN VALLEY & ROCE AND PIEDMONT REGIONS) (4'-0" IN COASTAL PLAIN REGION)
POST SHALL EXTEND 6" MINIMUM BELOW GROUND LEVEL

SECTION A-A
MEDIUM CORNER BOLT 5/8"-18
SEPARATED FLANGE NUT 5/8"-18

POST STUB SIZE
TYPE 7 2 1/2" x 2 1/2"
TYPE 8 2 1/2" x 2 1/2"
TYPE 9 2 1/2" x 2 1/2"

SOIL POST SELECTION CHART
Soil Pressure (lb/ft²) vs. Post Height (ft) vs. Post Diameter (in) vs. Post Weight (lb)

Soil Pressure (lb/ft²)	TYPE 7 2 1/2" x 2 1/2"		TYPE 8 2 1/2" x 2 1/2"		TYPE 9 2 1/2" x 2 1/2"	
	1 Post	2 Post	1 Post	2 Post	1 Post	2 Post
0	13.50	27.00	19.50	39.00	80.00	160.00
1	11.80	23.60	16.80	33.60	67.50	135.00
2	10.10	20.20	14.40	28.80	57.00	114.00
3	8.40	16.80	12.00	24.00	46.50	93.00
4	6.70	13.40	9.60	19.20	36.00	72.00
5	5.00	10.00	7.20	14.40	25.50	51.00
6	3.30	6.60	4.80	9.60	15.00	30.00
7	1.60	3.20	2.40	4.80	7.50	15.00
8	0.00	0.00	0.00	0.00	0.00	0.00

DATE REVISIONS
NO SCALE
JULY 2002

GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
TYPE 7, 8, AND 9 SQUARE TUBE POST INSTALLATION DETAIL
NO SCALE

RAPID RECTANGULAR FLASHING BEACON

SINGLE LANE DETAIL
SIDEWALK → DOUBLE SIDED RRFB → STREET → DOUBLE SIDED RRFB → SIDEWALK

MULTILANE LANE DETAIL
SIDEWALK → SINGLE SIDED RRFB → 20 TO 50 FT → TRAFFIC FLOW → 20 TO 50 FT → TRAFFIC FLOW → SINGLE SIDED RRFB → SIDEWALK

ANCHOR BOLT/CONDUIT ORIENTATION
CONDUIT FOR GROUND WIRE AND PED. WIRING
HANDHOLE SIDE
ANCHOR BOLTS
34" DIA
7 FT MIN
4"

PED POLE BASE (TOP VIEW)
R10-25
PUSH BUTTON TO TURN ON WARNING LIGHTS

TYPICAL DETAIL FOR RRFB SIGNAL POLES
SOLAR PANEL
SIGNAL
PEDESTRIAN INDICATOR
SIGNAL
RRFB CABINET
PUSHBUTTON AND SIGN
ALUMINUM POLE ON BREAKAWAY BASE
HANDHOLE
PULL BOX
ANCHOR BOLTS
CLASS A CONCRETE PER SPECIFICATION
2" ROD TYPE 2 CONDUIT PER SPECIFICATION

DATE REVISIONS
NO SCALE
NOVEMBER 2012

GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
DETAILS OF RECTANGULAR RAPID FLASHING BEACON
NO SCALE

BRICK PAVER

PAVER SECTION N.T.S.

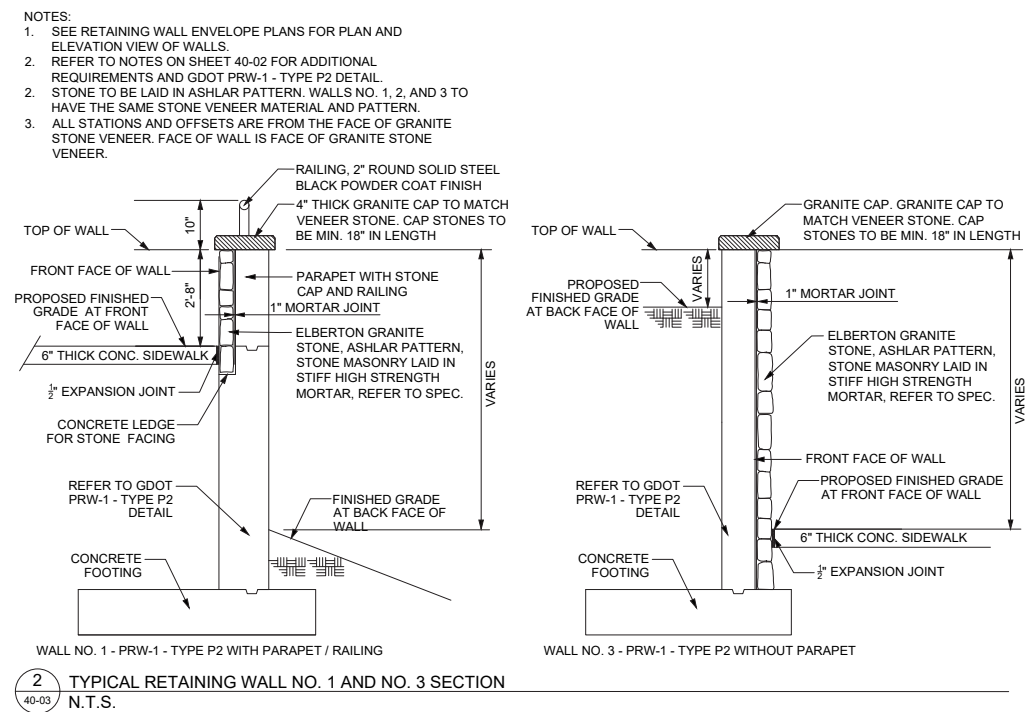
- SWEEP JOINTS WITH POLYMERIC SAND - SANDLOCK OR SAKRETE OR APPROVED EQUAL
- EXPANSION JOINT EVERY 20' O.C. TYP.
- PAVERS
- CONTROL JOINT SPACING TO BE EQUAL TO OR LESS THAN OVER ALL PAVEMENT WIDTH.
- 1" SAND SETTING BED
- 4" CONCRETE BASE SLAB WITH WIRE MESH
- 1" DIAMETER SCHEDULE 40 PVC PIPE, FILL WITH GRAVEL, COVER WITH FILTER FABRIC, PLACE 10' O.C.
- COMPACTED SUBGRADE

NOTE: 4" CONCRETE BASE SLAB TO BE PAID FOR AS CONCRETE SIDEWALK, 4 IN.

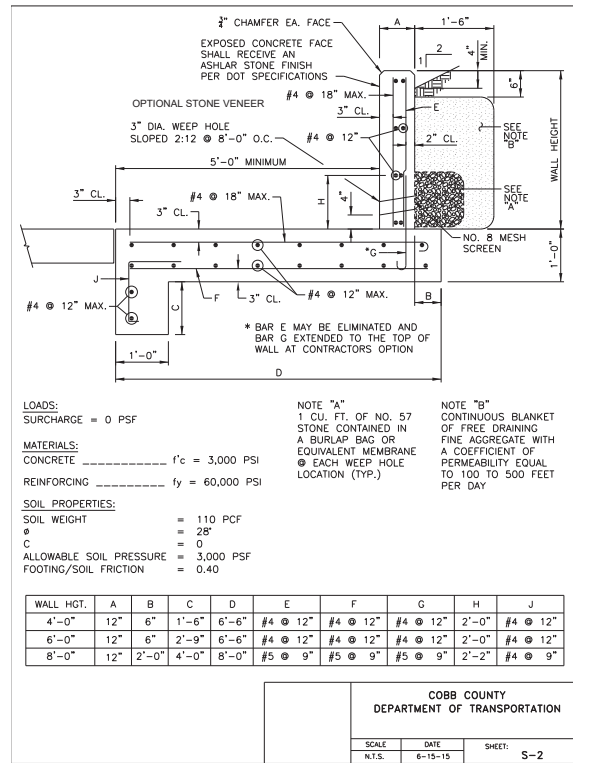
DATE REVISIONS
NO SCALE

07.1 CONSTRUCTION DETAILS

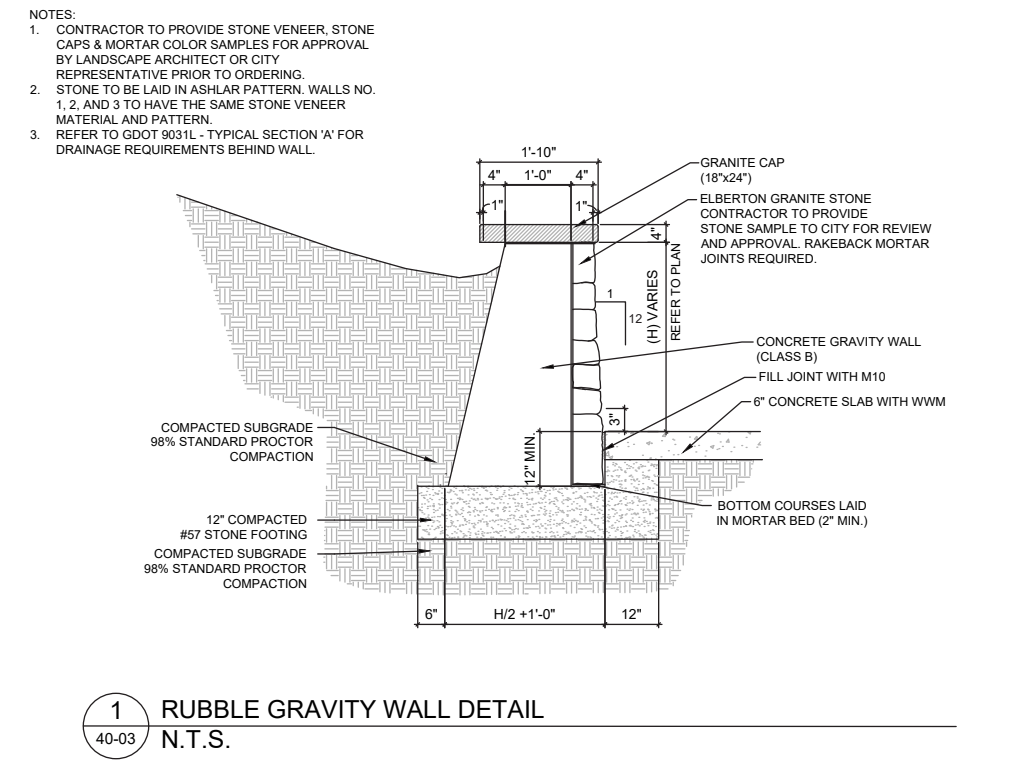
POURED IN PLACE WALL



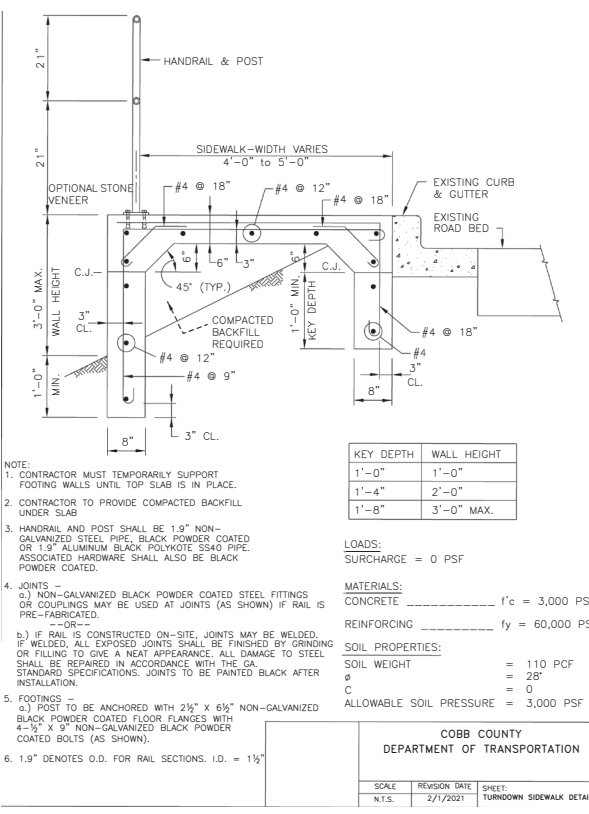
TURN UP SIDEWALK



GRAVITY WALL

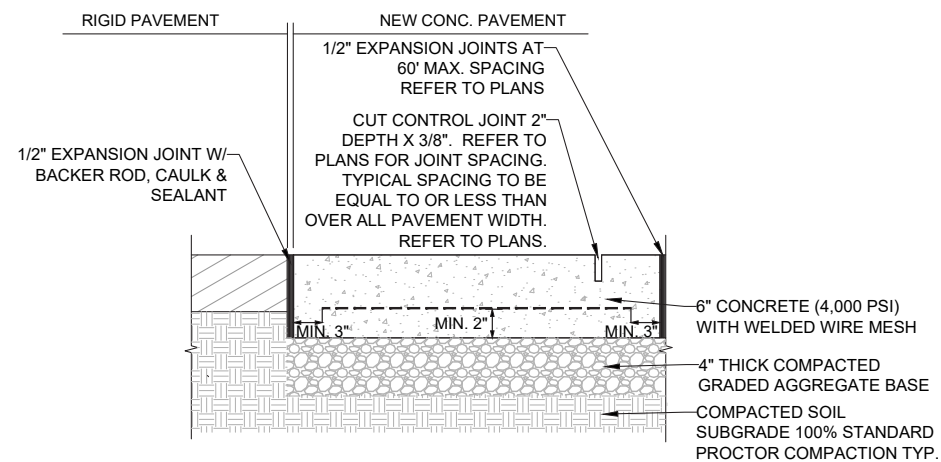


TURN DOWN SIDEWALK



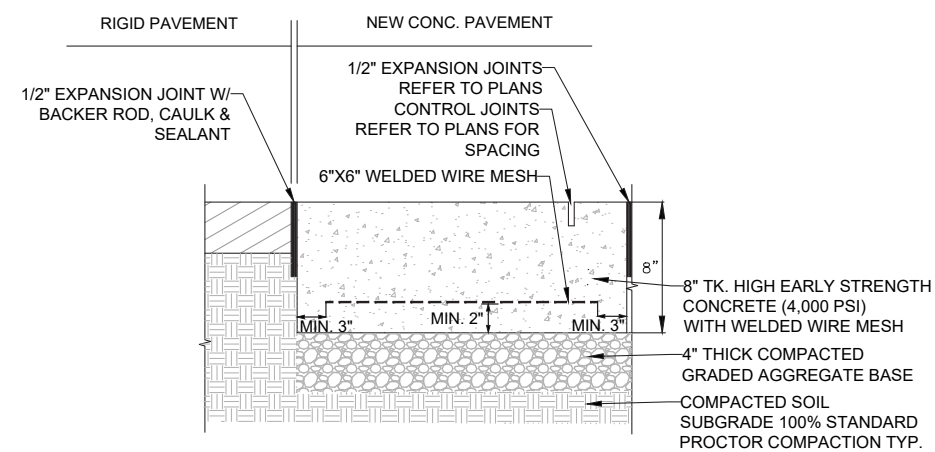
07.1 CONSTRUCTION DETAILS

CONCRETE WALK, 4IN



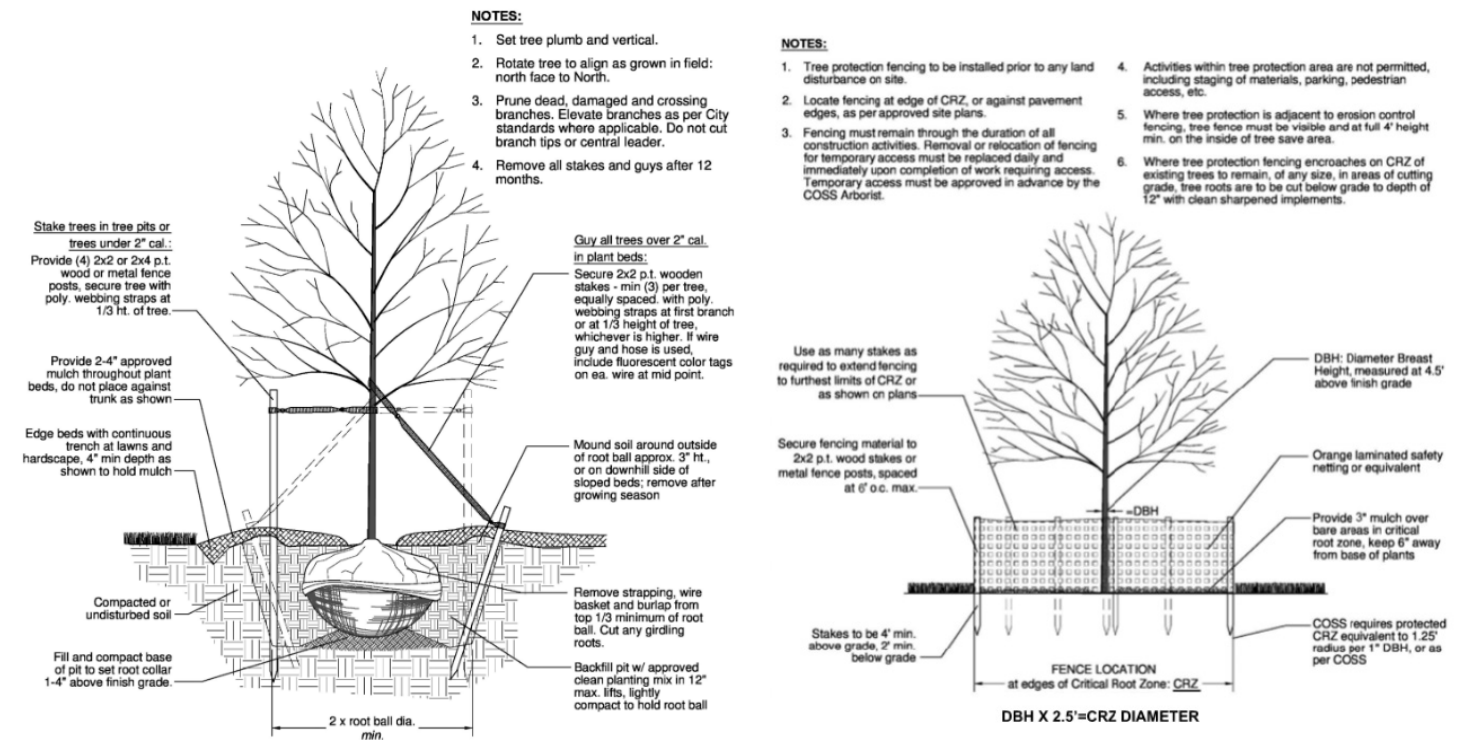
1 CONCRETE WALK SECTION
40-01 N.T.S.

CONCRETE WALK, 6IN

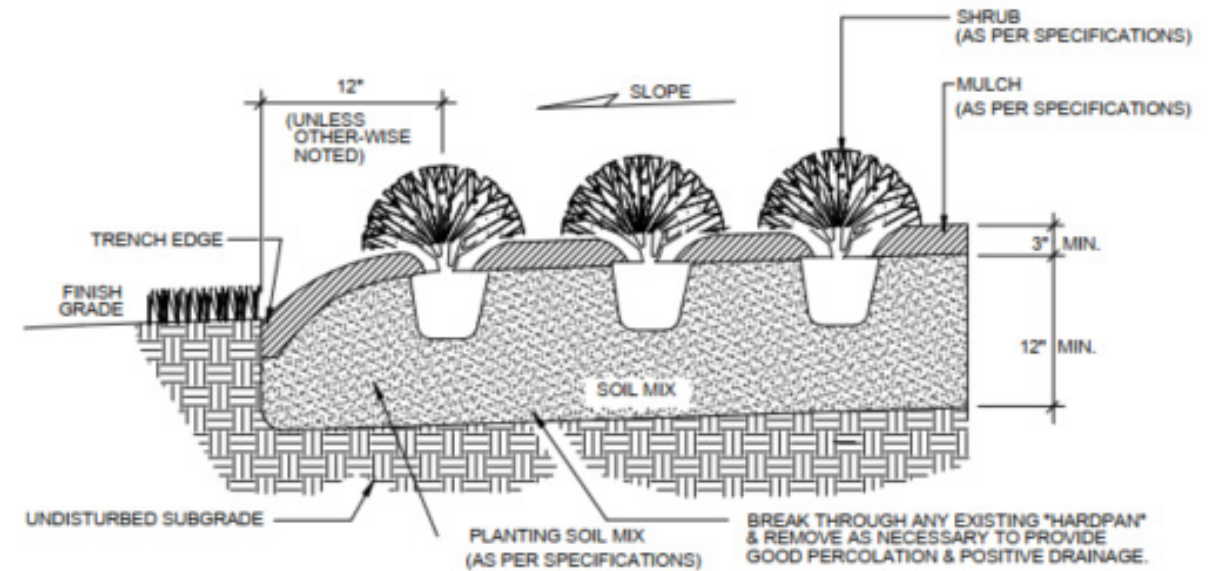


2 8" CONCRETE DRIVEWAY PAVING SECTION
40-01 N.T.S.

TREE PLANTING & TREE PROTECTION FENCING



SHRUB PLANTING



10 SHRUB PLANTING DETAIL (TYPICAL)
N.T.S.



Memo

To: The City of Sandy Springs

From: Rebecca Ricks

Email: rebecca.ricks@atkinsglobal.com

Date: 26 April 2023

Ref: Roberts Drive Sidepath; Atkins
Job Number: 100084225

Subject: Ecology Desktop Review

The proposed project would construct a pedestrian path alongside Roberts Road near Sandy Springs in Fulton County, Georgia. The project would begin near the intersection of Roberts Drive and Roswell Road and ends near the intersection of Roberts Drive and Pride Place (Figure 1). As part of the project planning process, a desktop review was conducted to identify potential State and Federal Waters within the proposed project limits. To conduct this desktop review, the following resources were utilized: USGS topographic maps, aerial imagery, National Wetland Inventory (NWI) maps, Federal Emergency Management Agency (FEMA) Floodplain Maps, and soil maps. Additionally, Google Earth Streetview was utilized to visualize approximate conditions on the ground. No field visits have been conducted as part of this desktop review. Based on the available data, there are two streams, one open water, and one additional buffer anticipated to be present within the project limits.

Although the Chattahoochee River is not located within the project limits, it is considered a trout stream and would be subject to a 50' state-mandated stream buffer. All other channels with perennial or intermittent flow and open waters within Fulton County are not considered trout waters and are subject to a 25' state-mandated stream buffer. Channels with ephemeral flow are also not considered trout waters and are not subject to state-mandated buffers in Fulton County.

The attached figures depict the approximate location of waters within the project limits based on the desktop review. These depictions should be used for planning purposes only. Please note that there may be additional resources present on the site that can only be detected with a field review. A field survey is required to determine the boundary and classification of any waters that may be present within the project limits.

- Location 1: Buffer of Chattahoochee River
 - Based on the available mapping information, the Chattahoochee River is not located within the project limits, but the 50' state mandated stream buffer is within the project limits.
- Location 2: Stream near 9679 Roberts Drive
 - One stream crossing under Roberts Drive and one open water. Based on Google Streetview, it appears that the stream has been dammed on the south side of Roberts Drive to create an in-line pond.
 - A 25' state-mandated stream buffer would apply
 - Resource is a tributary of the Chattahoochee River



- Location 3: Stream near 9500 Roberts Drive
 - One stream crossing under Roberts Drive
 - A 25' state-mandated stream buffer would apply
 - Resource is a tributary of the Chattahoochee River

List of Attachments

- Streetview Images
- Figure 1 – Project Vicinity Map
- Figure 2 – Topographic Map
- Figure 3 – Aerial Map
- Figure 4 – NWI Map
- Figure 5 – FEMA Map
- Figure 6 – Soils Map



Location 2: View of south side of Roberts Drive near 9679 Roberts Drive. Based on this image, a stream has been dammed to create an in-line pond. Screenshot from Google Earth Streetview, image dated 3/2022.



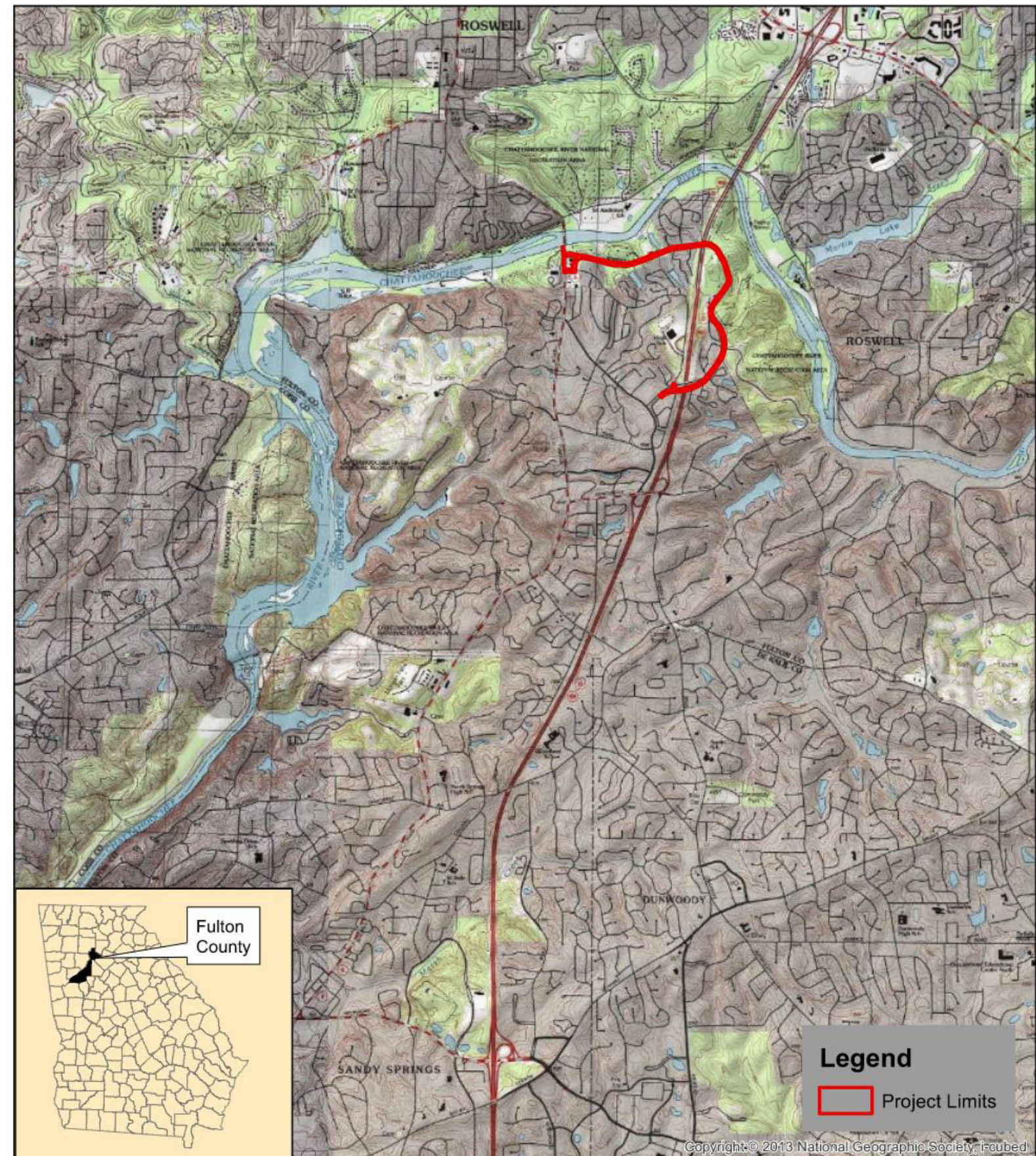
Location 2: View of north side of Roberts Drive near 9679 Roberts Drive. Screenshot from Google Earth Streetview, image dated 3/2022.



Location 3: View of south side of Roberts Drive near 9500 Roberts Drive. Screenshot from Google Earth Streetview, image dated 3/2022.



Location 3: View of north side of Roberts Drive near 9500 Roberts Drive. Screenshot from Google Earth Streetview, image dated 3/2022.



**Figure 1: Vicinity Map
 Roberts Drive Sidepath
 Fulton County, GA**



Document Path: \\wsatkins.com\Project\USATC\Data\TP\ite-corridor\Corridor_Planning\Georgia\Fulton County\Roberts Drive Trail\GIS\Figure 2 TopoMap.mxd Author: RGR Date Saved: 5/1/2023

Figure 2-A: Topographic Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

0 200 400 800 Feet

1 in = 400 feet

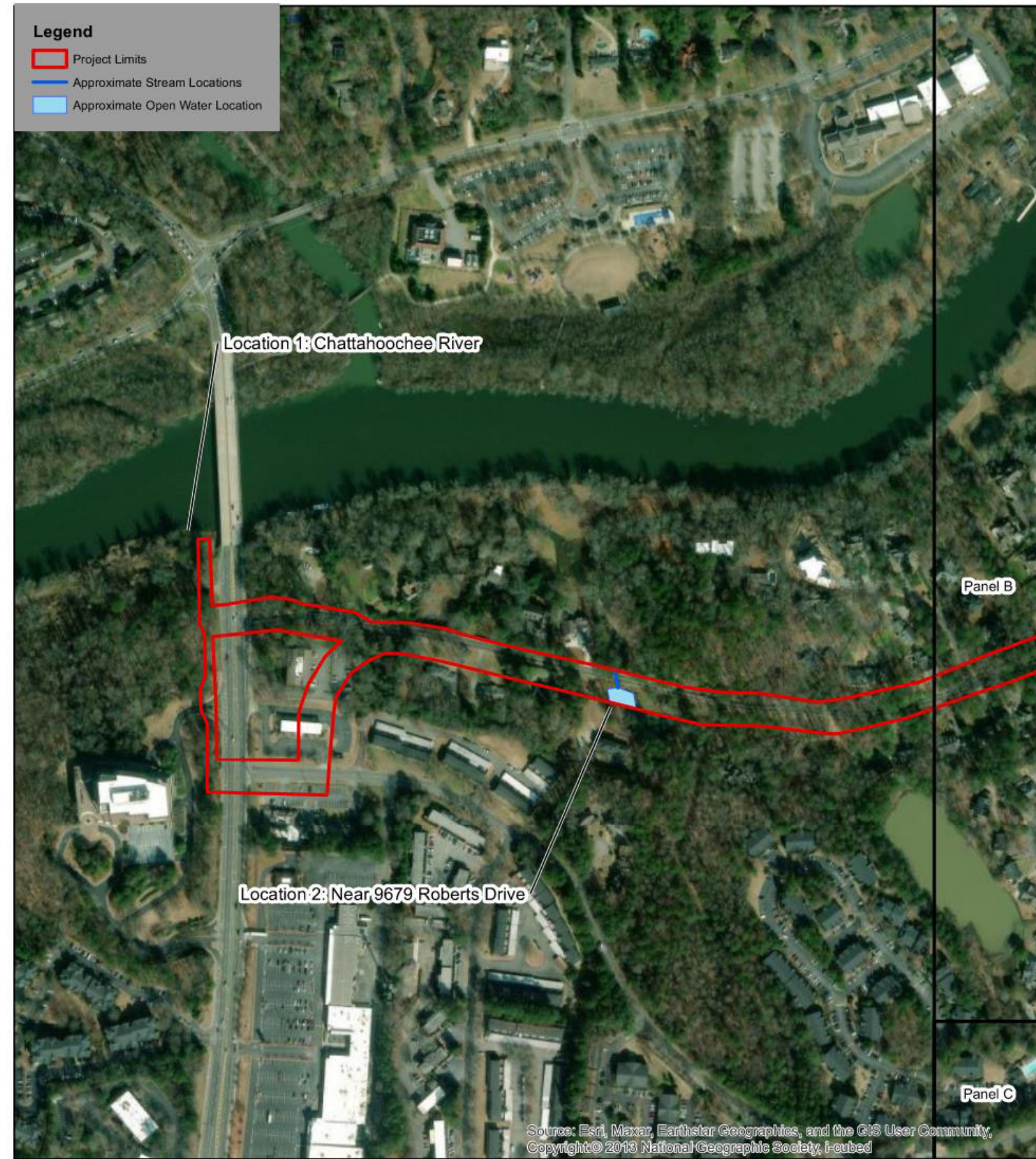
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Figure 2-B: Topographic Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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Figure 2-C: Topographic Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

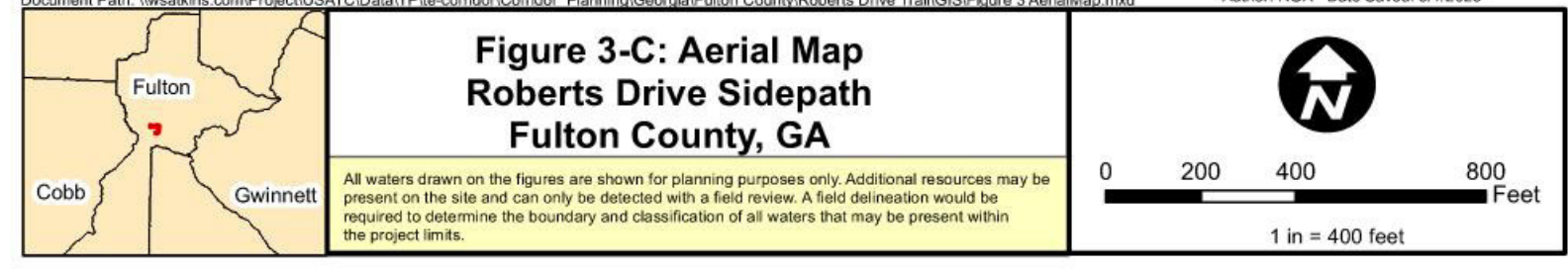
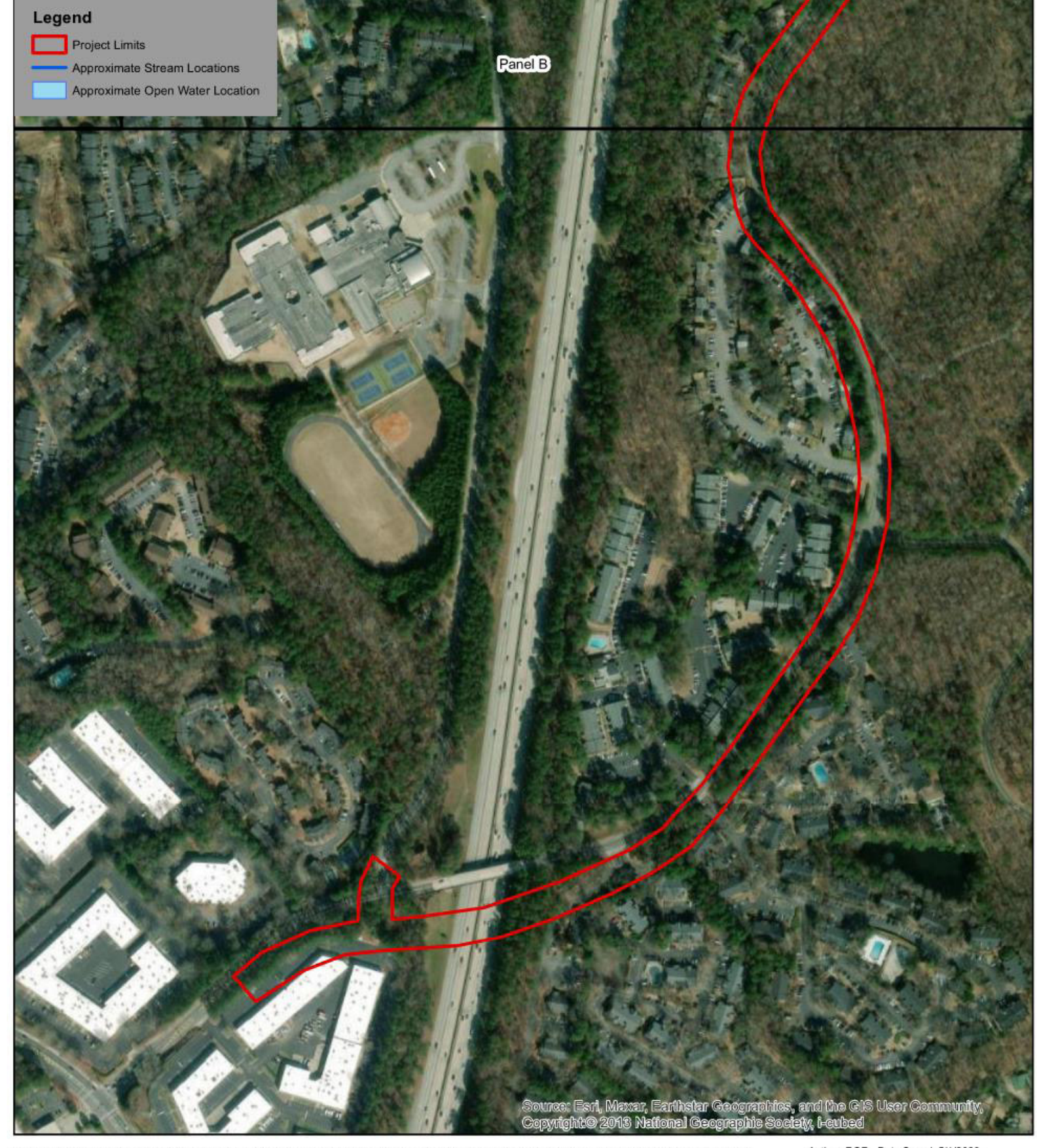
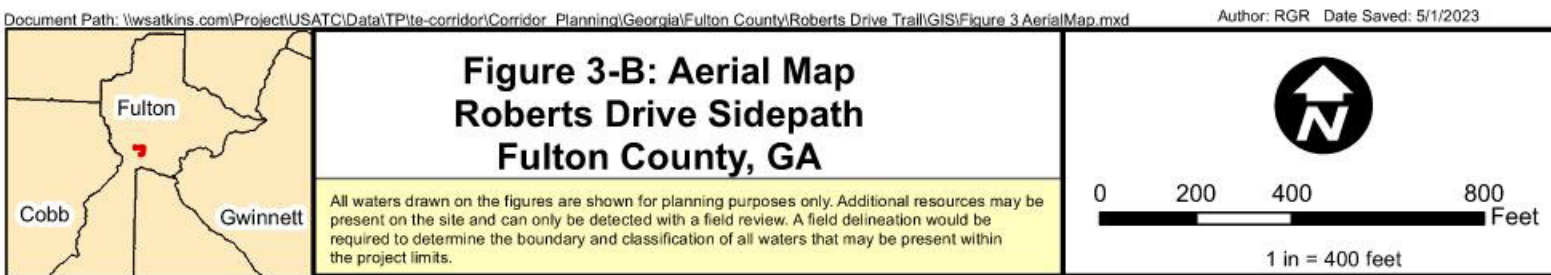
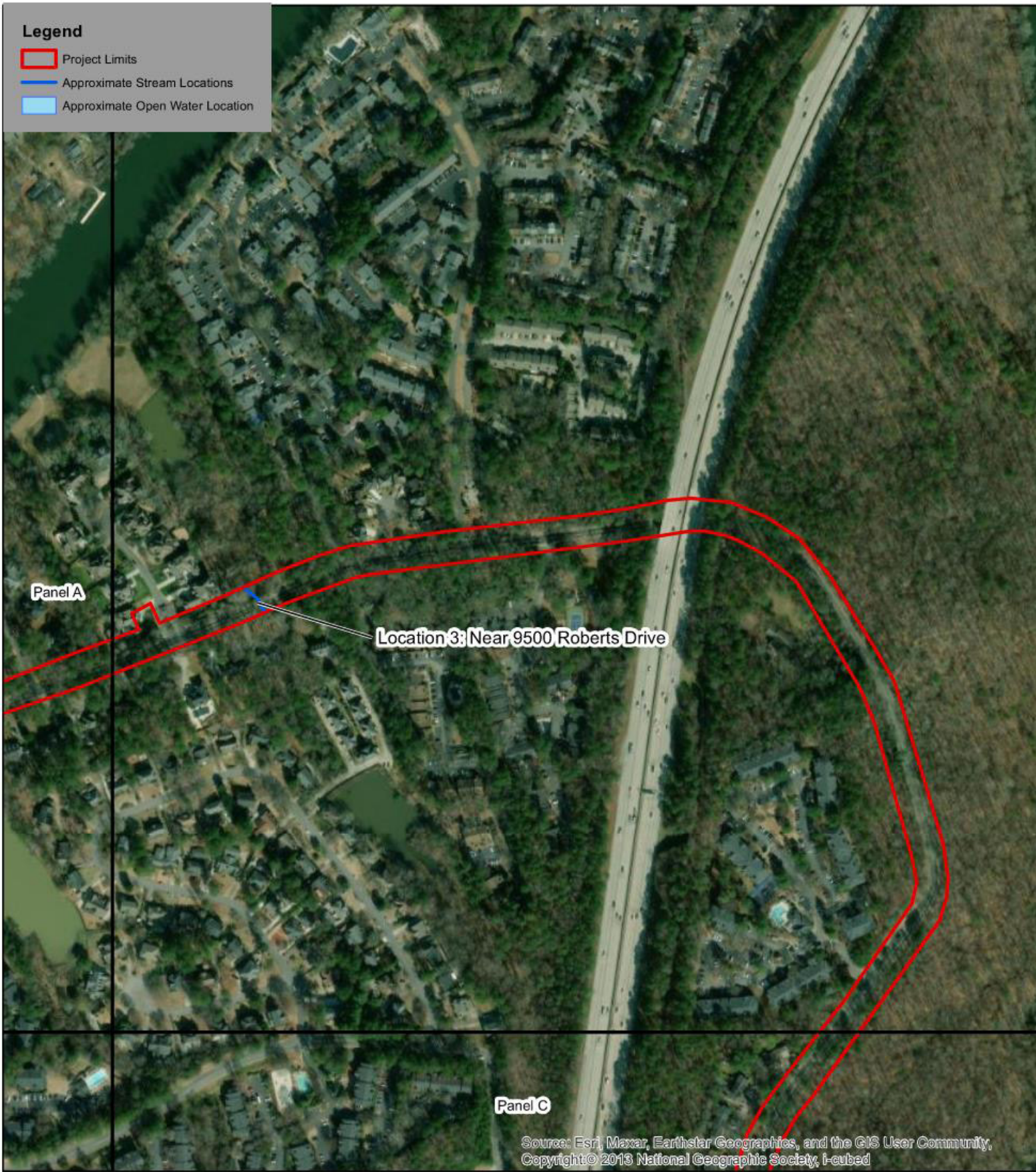
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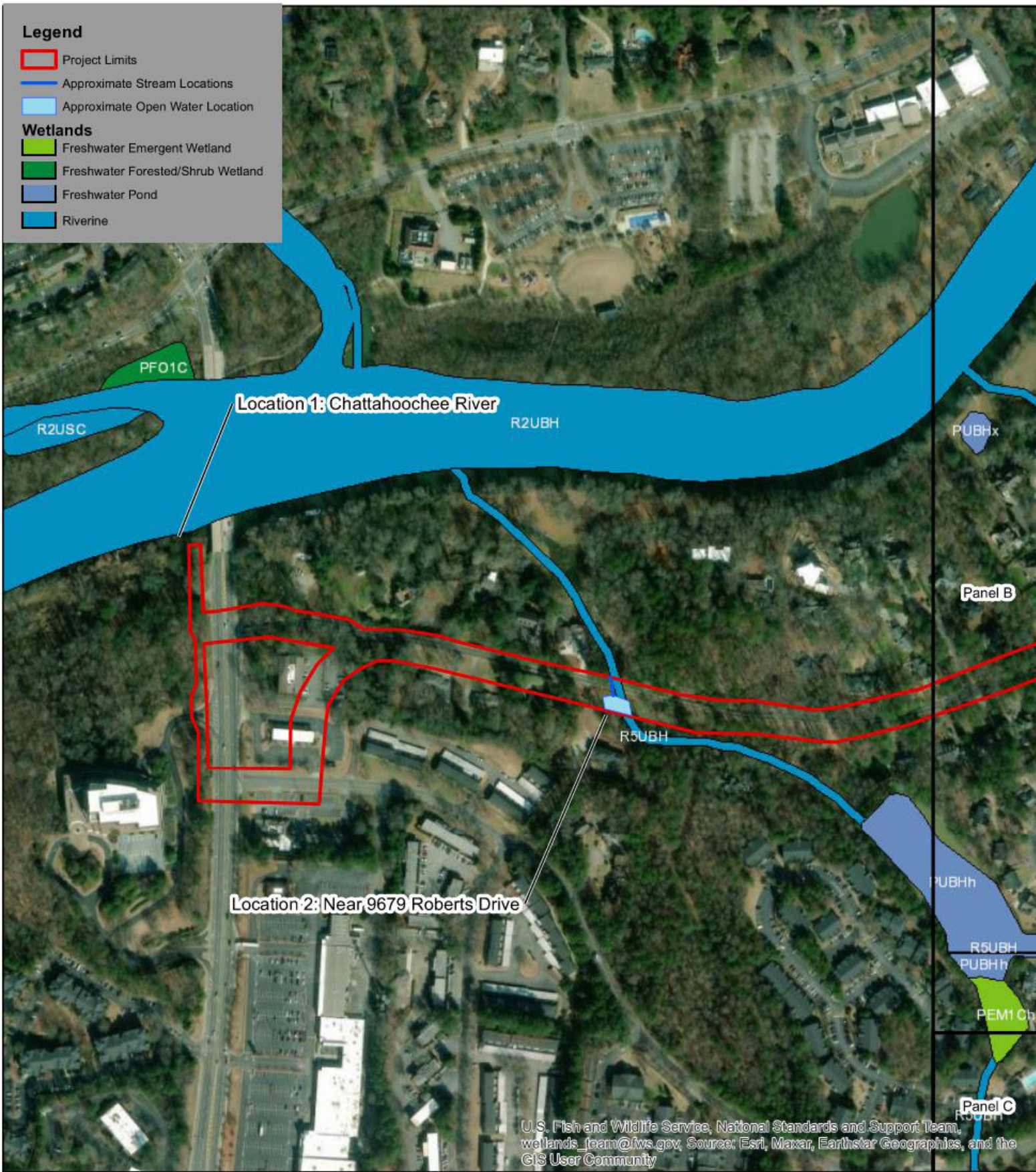
Document Path: \\wsatkins.com\Project\USATC\Data\TP\te-corridor\Corridor_Planning\Georgia\Fulton County\Roberts Drive Trail\GIS\Figure 3 AerialMap.mxd Author: RGR Date Saved: 5/1/2023

Figure 3-A: Aerial Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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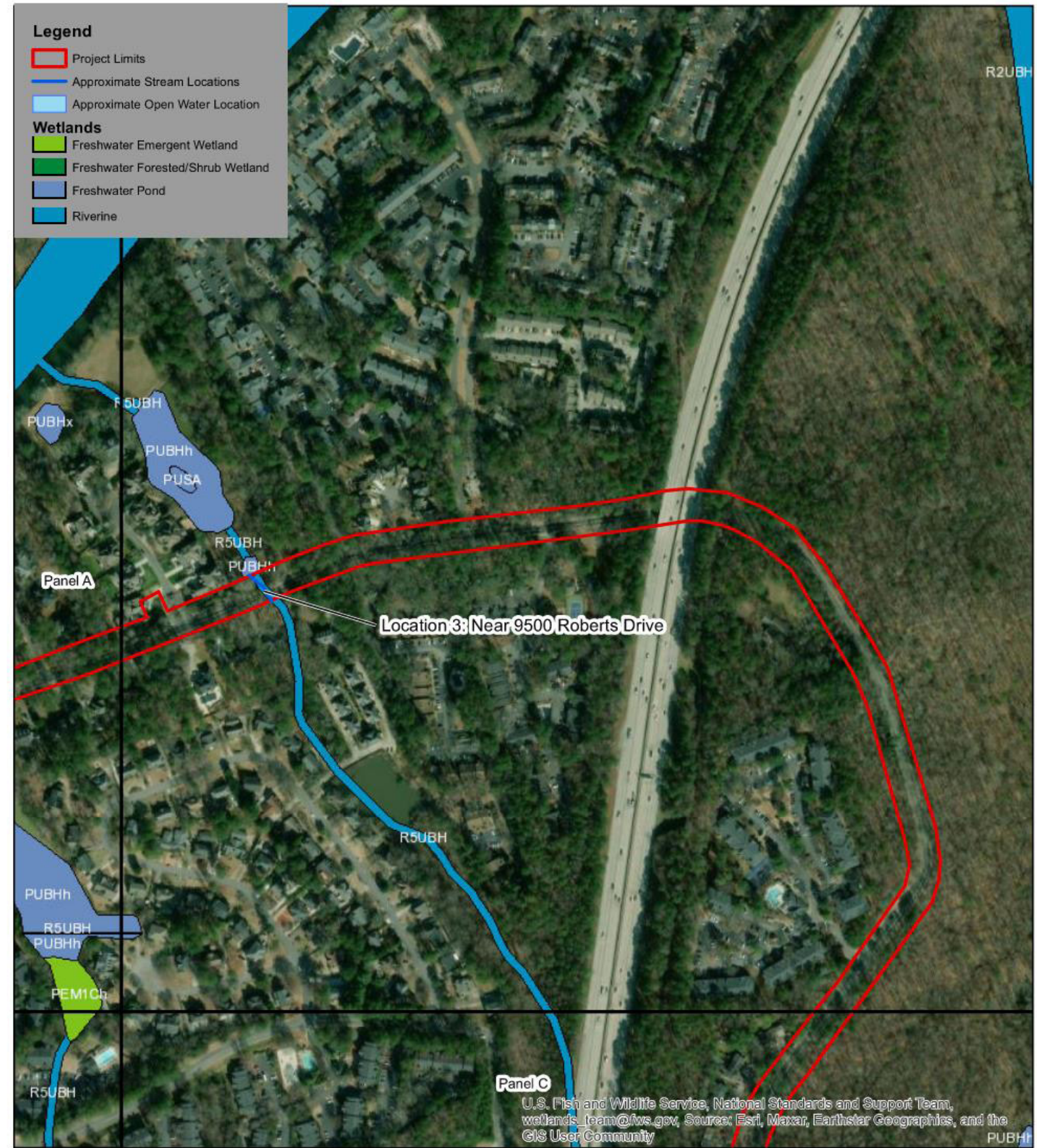


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Figure 4-A: NWI Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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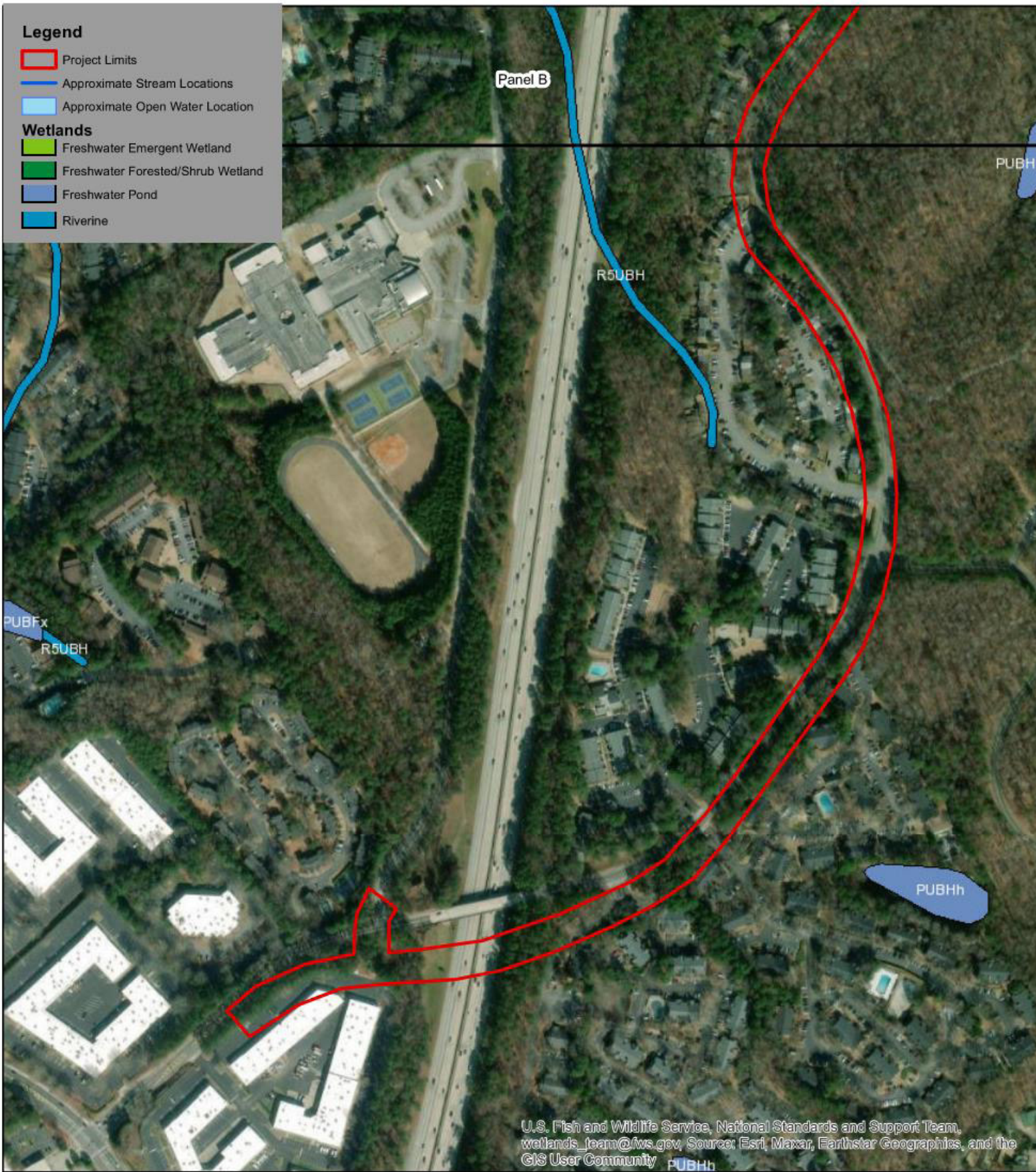


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Figure 4-B: NWI Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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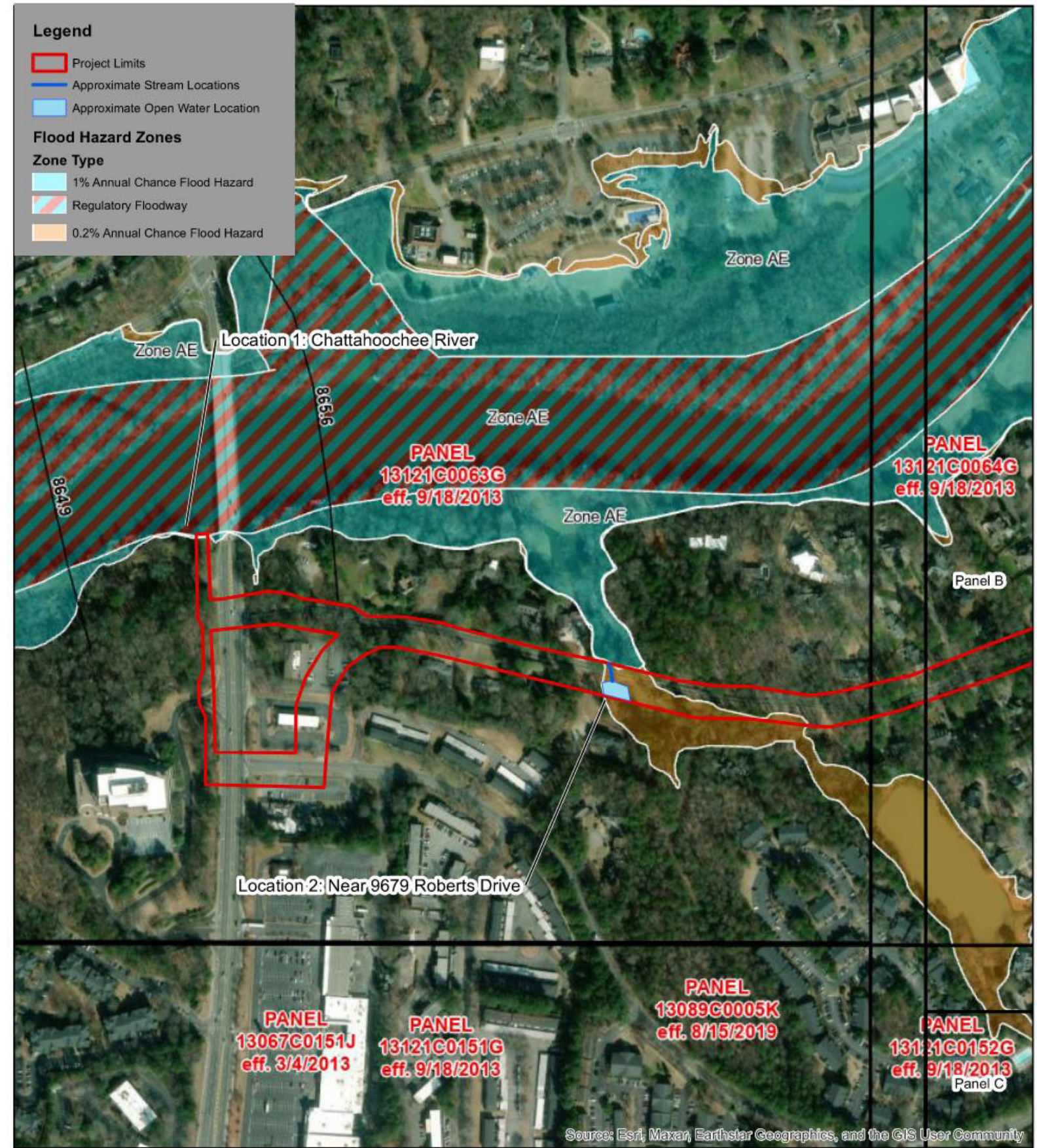


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**Figure 4-C: NWI Map
Roberts Drive Sidepath
Fulton County, GA**

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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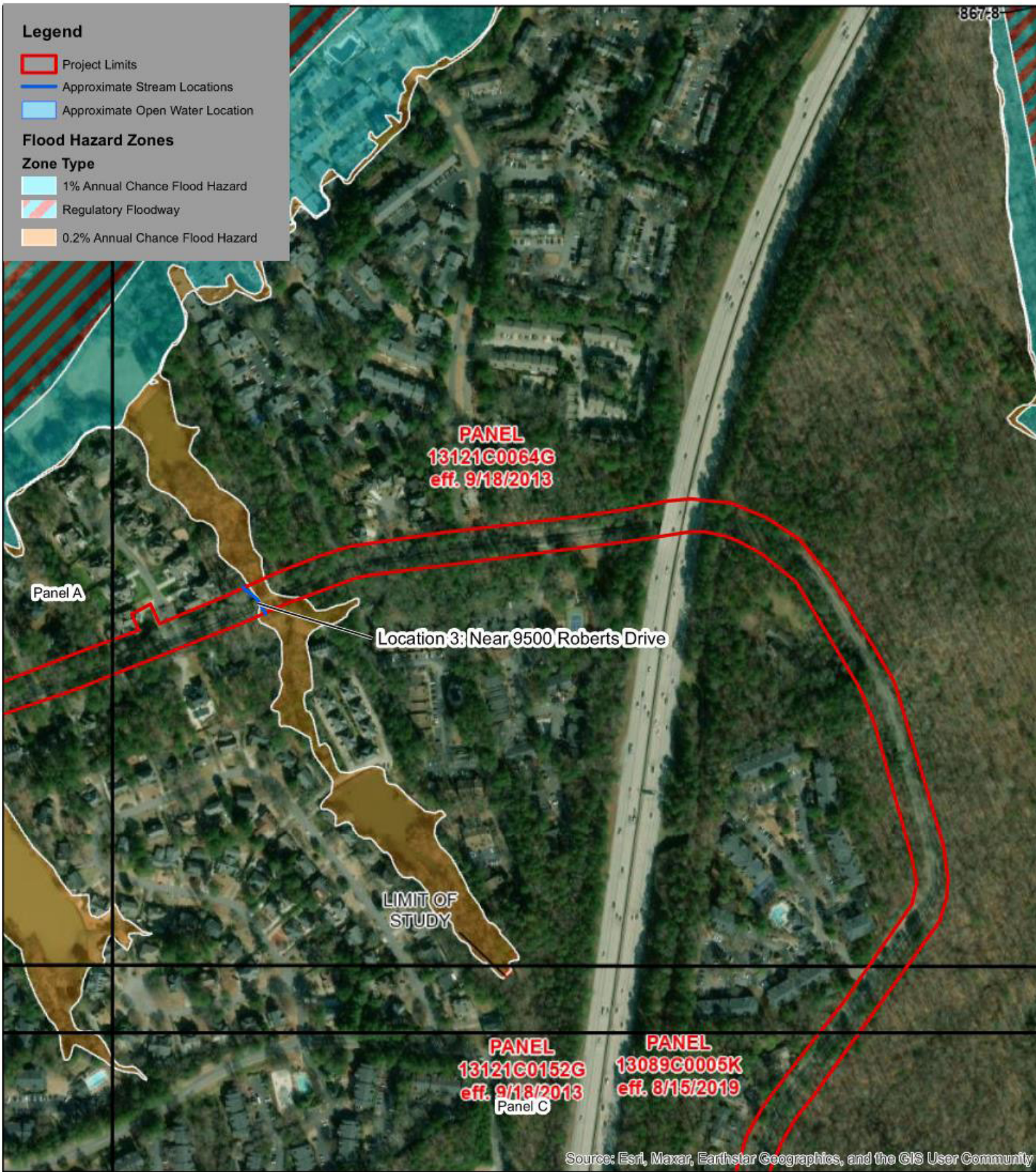


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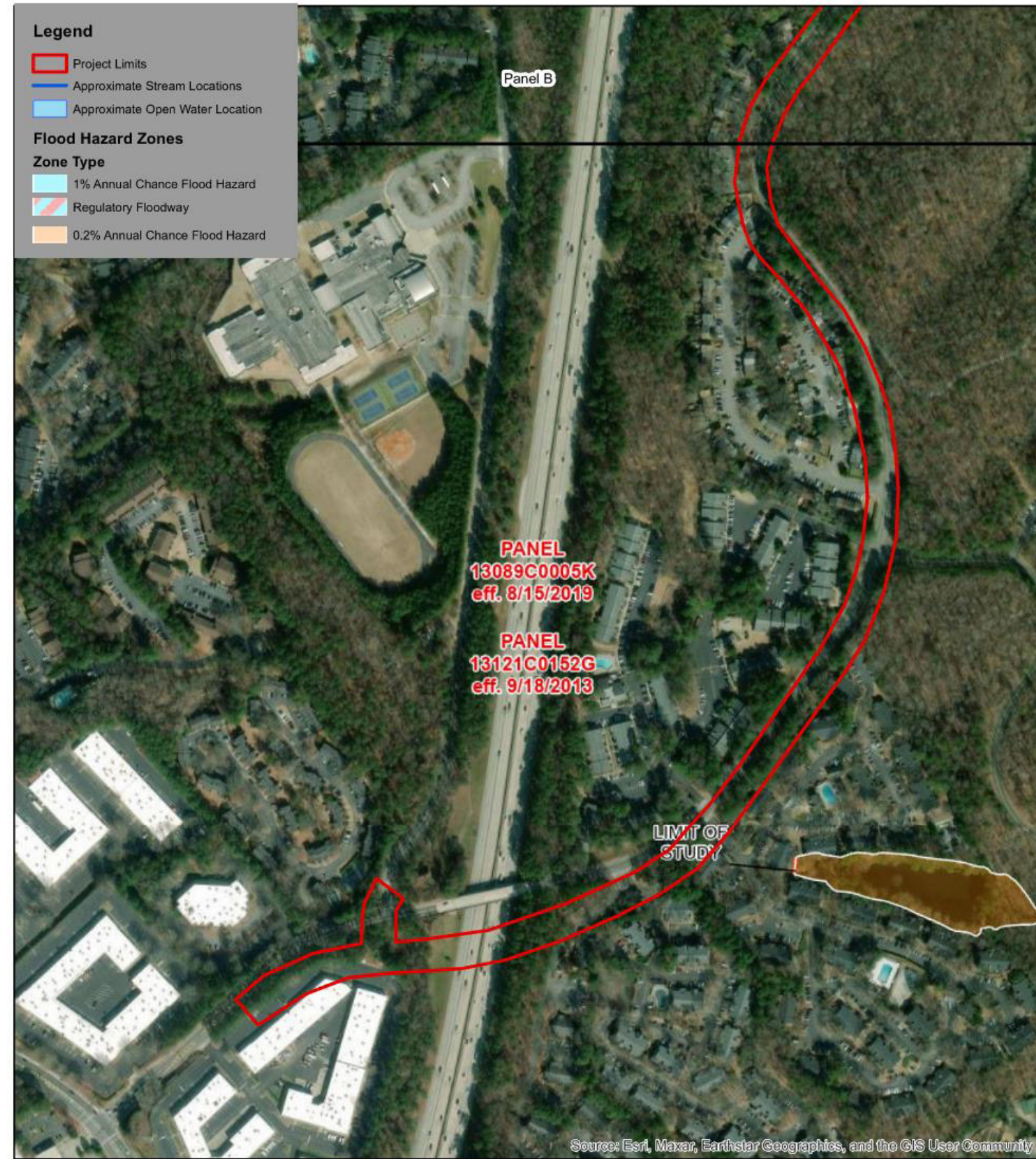
**Figure 5-A: Federal Emergency Management Agency (FEMA) Floodplain Map
Roberts Drive Sidepath
Fulton County, GA**

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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Figure 5-B: Federal Emergency Management Agency (FEMA) Floodplain Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

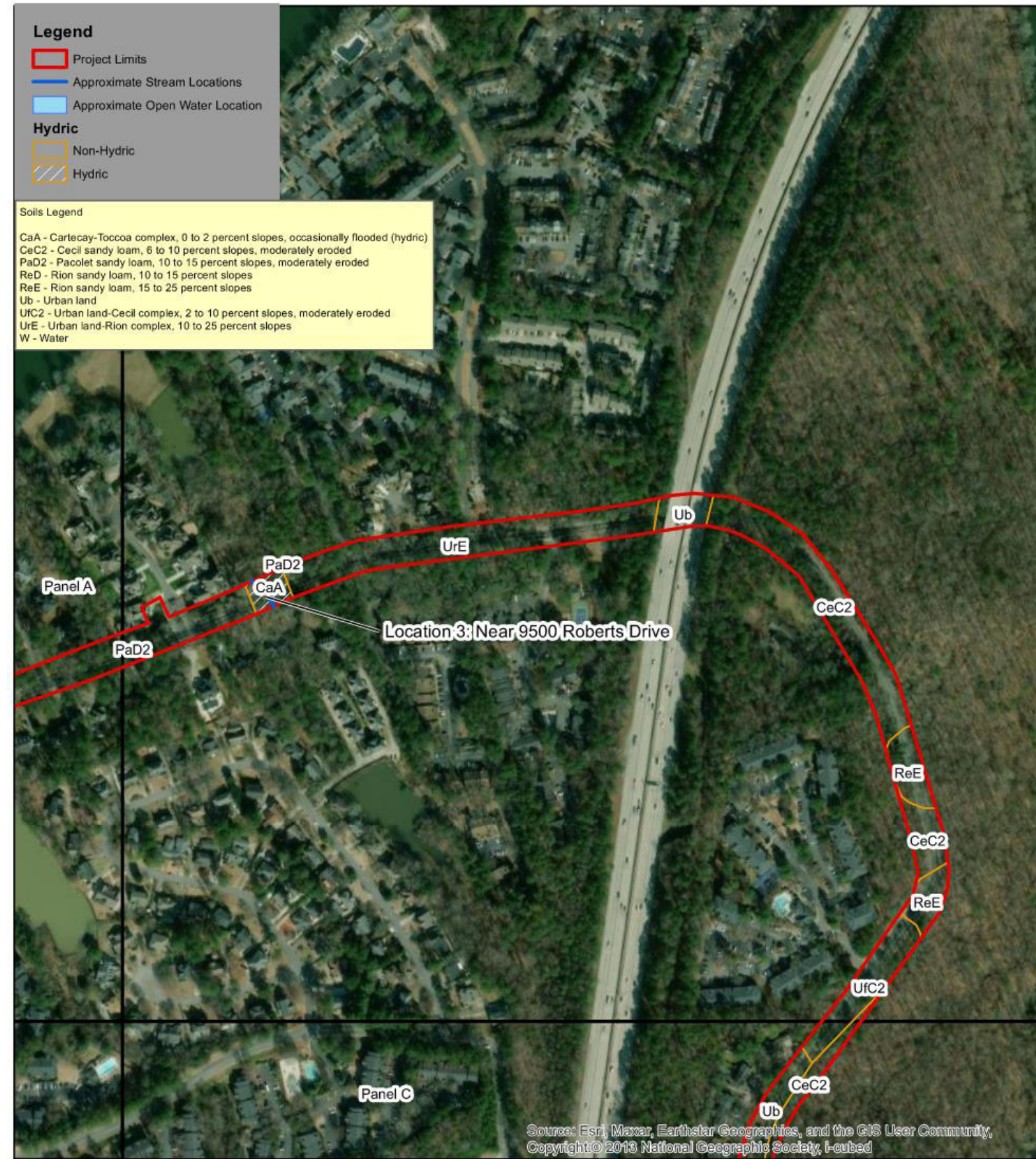
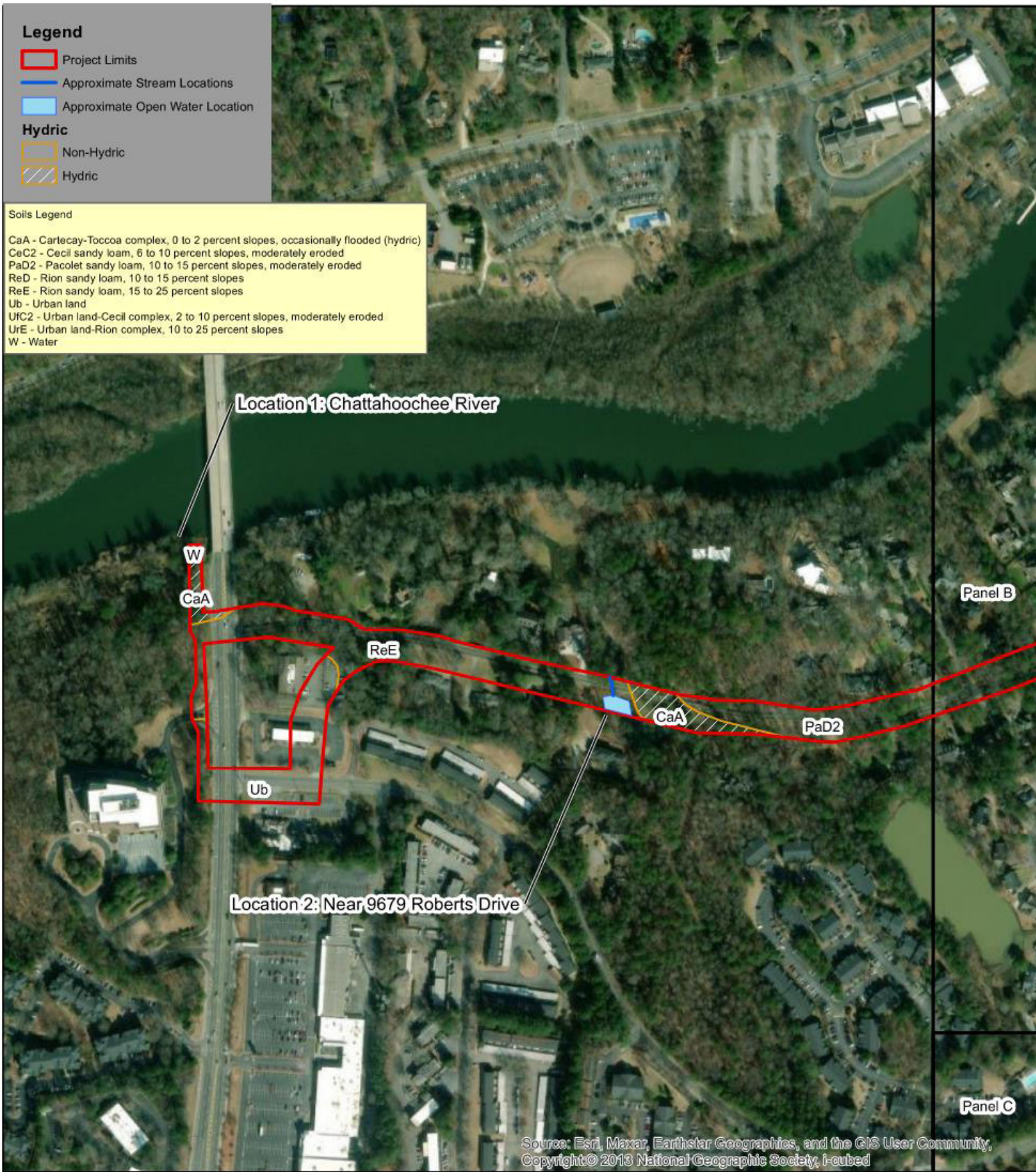
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Figure 5-C: Federal Emergency Management Agency (FEMA) Floodplain Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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Figure 6-A: Soils Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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Figure 6-B: Soils Map Roberts Drive Sidepath Fulton County, GA

All waters drawn on the figures are shown for planning purposes only. Additional resources may be present on the site and can only be detected with a field review. A field delineation would be required to determine the boundary and classification of all waters that may be present within the project limits.

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1 in = 400 feet

Memo

To: Files

From: Julia Templeton, Historian **Email:** Julia.templeton@atkinsglobal.com
 Brandy Norton, Archaeologist Brandy.norton@atkinsglobal.com

Phone: 678-247-2693 **Date:** May 15, 2023

Subject: S2123-1 Roberts Drive Sidepath T0071 North End Blvd Safety Study-Cultural Resources Desktop Screening

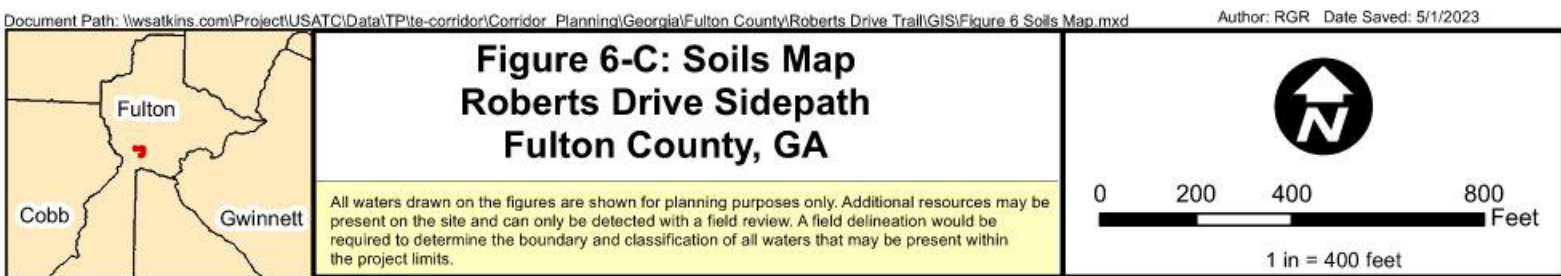
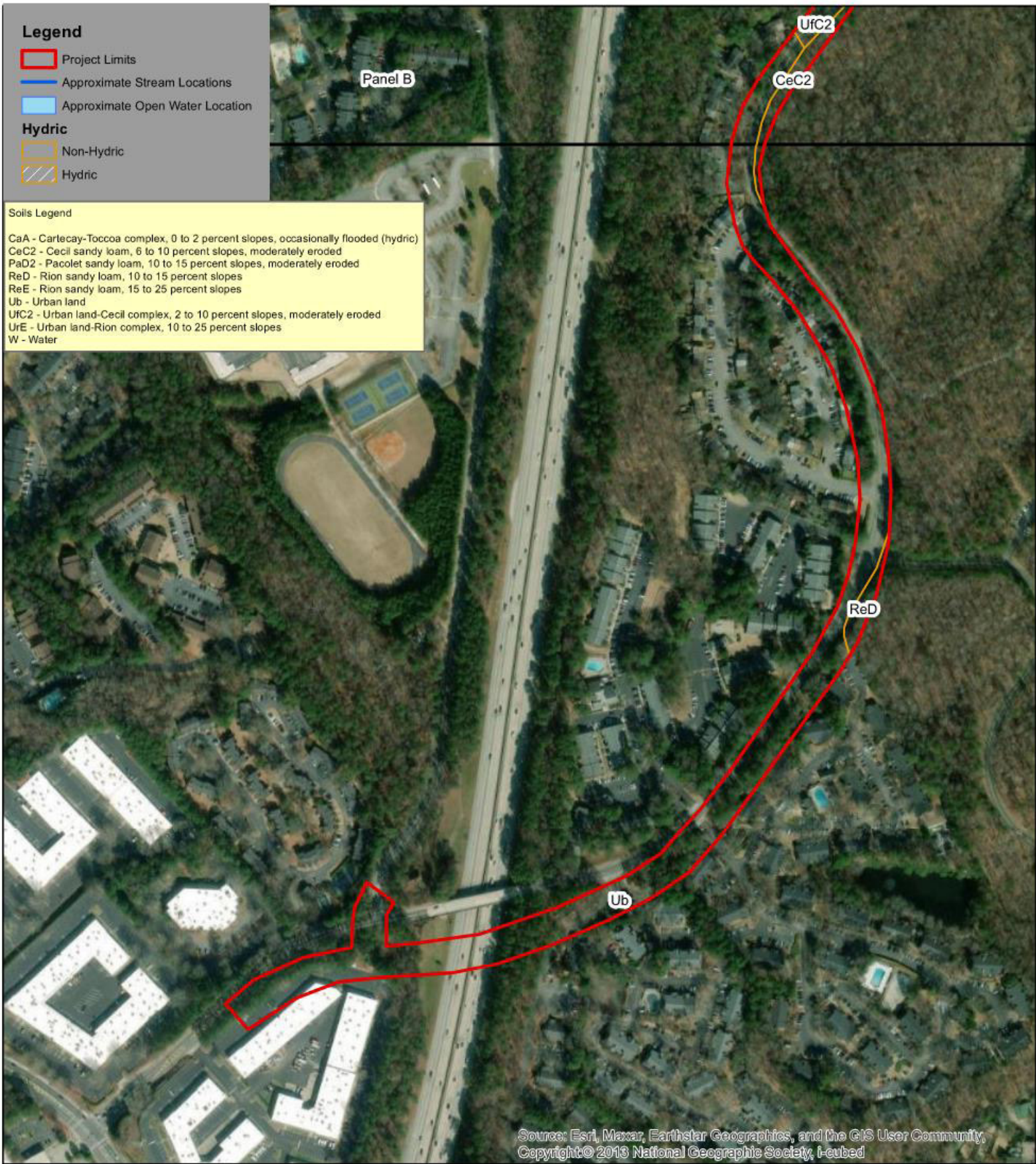
Project Description:
 The goal of this project is to create a safer and more comfortable walking and bicycling environment along Roberts Drive as outlined in the city of Sandy Springs *Next Ten Comprehensive Plan*. The main project component would include a 12-foot wide sidepath with a 5-foot landscape buffer along Roberts Drive from Roswell Road to Dunwoody Place. Multiple alignments may be considered with up to 3 mid-block crossings anticipated to be used with location of the sidepath. Proposed locations of the mid-block crossings would include a stopping sight-distance check to ensure safe pedestrian/bicycle crossings on Roberts Drive.

Survey Purpose and Methodology:
 The purpose of this memo is to conduct a desktop screening of the project area to identify cultural resources along the project corridor that could potentially be impacted by this proposed project. The area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of cultural resources if any exist. The APE for this environmental screening consists of the properties fronting Roberts Drive from Roswell Road to Dunwoody Place and a segment of North River Parkway from Roswell Road to Winding River Drive.

Existing information on previously identified cultural resources was consulted to determine if any are located within the APE of this proposed streetscape improvement project. The review of existing information included the National Register of Historic Places (NRHP), National Historic Landmarks, and historic and archaeological properties included in Georgia's Natural, Archaeological, and Historic Resources Geographic Information System (GNAHRGIS) database. Desktop review of previously unidentified cultural resources was conducted using the Fulton County tax assessor's records, aerial photography and Google Streetview. Previous cultural resource surveys conducted of the project area were consulted as well.

Survey Results:
 Based on the review of the above referenced sources, one NRHP listed resource is located within the proposed project's APE. This resource, the Isaac Roberts House, is also identified with GNAHRGIS ID numbers 33119 and 249569. This resource, located at 9725 Roberts Drive, was built in 1894 and listed on the NRHP in 2008 (Figure 1).

Fourteen additional resources 50 years of age or older are located within the proposed project's APE. These resources were identified via the Fulton County tax assessor's records. The following table provides the date of construction and location for each of these resources.



Date of Construction	Location	Resource Type
1963	9755 Roberts Drive	Ranch House
1972	9710 Roberts Drive	Ranch House
1970	320 Winding River Road	Condominium
1972	8975 Roswell Road	Commercial
1965	9705 Roberts Drive	Ranch House
1972	9680 Roberts Drive	Ranch House
1972	9695 Roberts Drive	Gabled Ell House
1972	9670 Roberts Drive	I-House
1963	9673 Roberts Drive	Split Level House
1968	9643 Roberts Drive	Ranch House
1972	9625 Roberts Drive	Ranch House
1963	9615 Roberts Drive	Ranch House
1973	9401 Roberts Drive	Apartment
1972	8601 Roberts Drive	Apartment

Features that potentially contribute to the eligibility of the Isaac Roberts House are located within and outside the existing right-of-way (ROW) of Roberts Drive. These features include trees, vegetation, fence, brick pavers, and stone pillars (see attached photographs). Once it has been determined which of these contribute to the significance of the historic property, the project design may need to take these features into consideration.

No NRHP eligibility recommendations have been made at this time. A field survey for cultural resources and subsequent report preparation would be necessary to evaluate the NRHP eligibility of any resources 50 years of age or older not already listed in the NRHP.

Three previous archaeological surveys intersect with the APE (Figure 1). A Phase I Archaeological Resources survey was conducted by the National Park Service (NPS) in 1979 which included the area surrounding the majority of Roberts Drive within the APE. No archaeological resources were recorded within the APE. A Phase I Archaeological Resources Survey was conducted by the Georgia Department of Transportation (GDOT) in 1997. This survey included a small area where Roberts Drive intersects with Roswell Road. Site 9FU284 was recorded during this survey (see description below). In 2018, GDOT conducted a Phase I Archaeological Survey that included the area where Roberts Drive intersects with State Route (SR) 400. This survey revisited Sites 9FU753 and 9FU754 which were initially recorded by the Southeast Archaeological Center (SEAC) in 2009. The SEAC survey boundaries were not able to be located.

Four archaeological resources were identified within the proposed project's APE (see Figure 1 and table below). The Georgia Archaeological Site File (GASF) form for Site 9FU64 contained little information and the site's eligibility for the NRHP is unknown. No survey is associated with this site. It appears to have been recorded by an amateur archaeologist. The site should be avoided by design if possible. If not, further archaeological testing would be needed to determine site eligibility within the APE. Site 9FU284 is an historic artifact scatter that was determined to be ineligible for the NRHP. No considerations for this site need to be taken into account for design. No further archaeological work is recommended for this site. Site 9FU753 is a site with Civil War defense features which was determined to be eligible for the NRHP. This site is located on NPS property and does not extend into the existing ROW. This site should be avoided in the project design. Finally, Site 9FU754 is a mining site with unknown eligibility for the NRHP. The site should be avoided by design if possible. If not, further archaeological testing would be needed to determine site eligibility within the APE.

Site Number	Site Type	NRHP Eligibility
9FU64	Unknown	Unknown
9FU284	Historic Artifact Scatter	Ineligible
9FU753	Civil War Site	Eligible
9FU754	Mining Site	Unknown

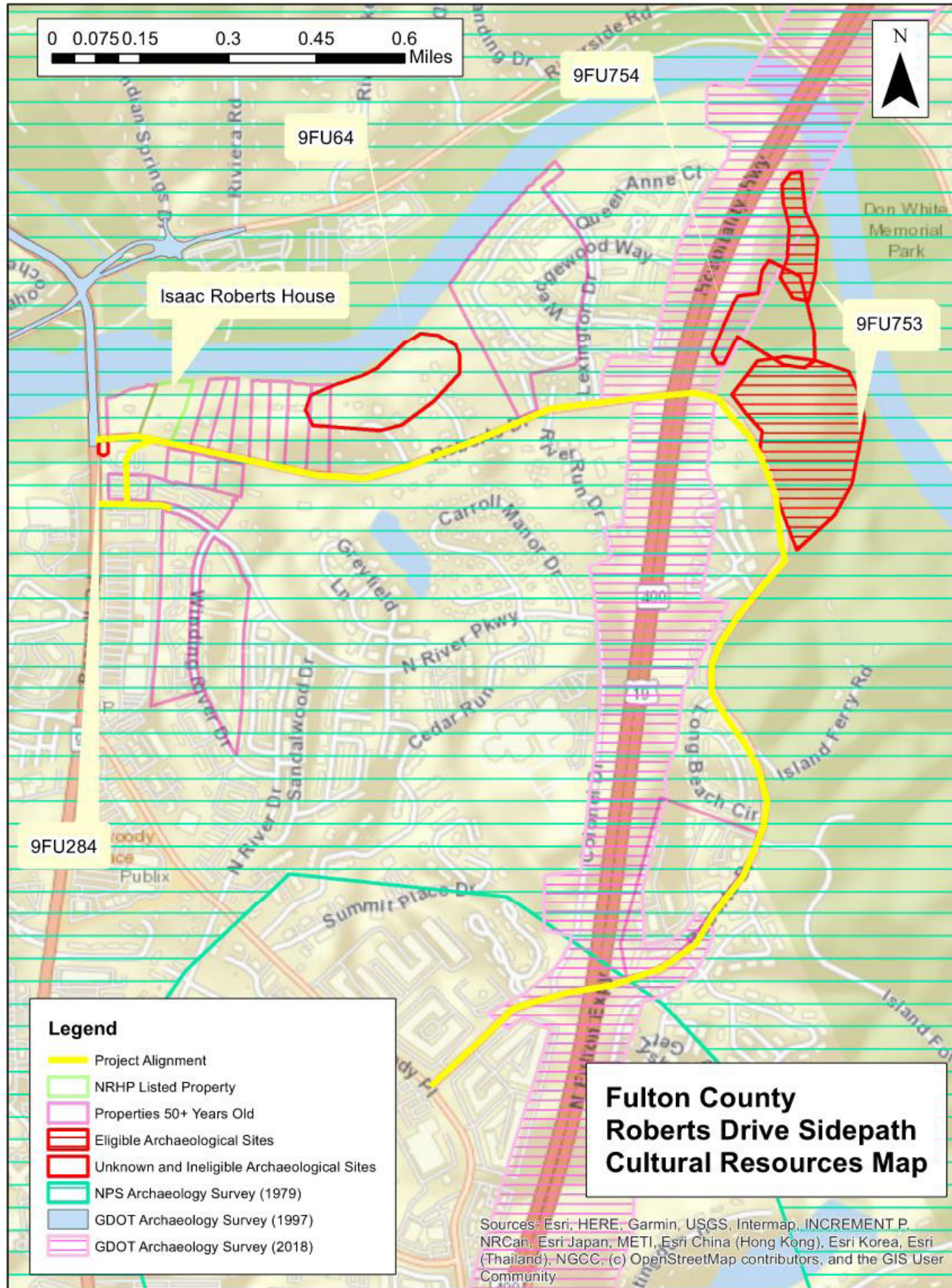
Potential Contributing Features of the NRHP-Listed Isaac Roberts House



Photo 1: Stone pillar, brick pavers, and wood fence. View looking east from Roberts Drive. (Source: Google Streetview)



Photo 2: Stone pillar, brick pavers, and vegetation. View looking west from Roberts Drive. (Source: Google Streetview)



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07.3 COORDINATION MEETINGS



Atkins North America, Inc.
1600 RiverEdge Parkway, NW, Suite 700
Atlanta, Georgia 30328
Telephone: +1.770.933.0280
www.atkinsglobal.com/northamerica



Atkins North America, Inc.
1600 RiverEdge Parkway, NW, Suite 700
Atlanta, Georgia 30328
Telephone: +1.770.933.0280
www.atkinsglobal.com/northamerica

Roberts Drive, Sidepath Scoping Study
Project # S2123-1
City of Sandy Springs
Public Works Department
Project Status Report #1
Date 4-7-23

I. Coordination/Meetings:

- Project Kick-off meeting held on- 3/21/23
- Atkins to provide project update to CoSS PM on -4/7/23 (mid-month)
- Atkins and CoSS to hold monthly coordination meetings- next conference call/coordination meeting to be held on 4/21/23

II. Project Progress:

- CoSS has provided the following reports
 - North End Blvd Study Final Report
 - North End Blvd Scoping Study
 - AECOM- Roberts Drive Under SR 400 Streetscape Section
 - Preliminary Alternatives Assessment Study for NPS
- Review of current reports and study findings provided by CoSS
- Atkins requested GIS data base information- Pending GIS deliverables from the city.
- Atkins is working on preparing base information for side path study
- Initial site review of Roberts Drive corridor and potential side path alignment, date: 4-3-23
- Atkins internal coordination with Environmental Group, to begin "Desktop" review of the Corridor.

III. Deliverables:

- Revised Schedule: see attached
- Initial Conceptual Plan side-path alignment alternative-TBD, Pending -GIS deliverables



Atkins North America, Inc.
1600 RiverEdge Parkway, NW, Suite 700
Atlanta, Georgia 30328
Telephone: +1.770.933.0280
www.atkinsglobal.com/northamerica

Roberts Drive, Side Path Scoping Study
Project # S2123-1
City of Sandy Springs
Public Works Department
Project Status Report #4
Meeting Minutes
Date 6-22-23

Attendees

- Mr. Allen Johnson, TSPLOST Manager
- Mr. David Sustaita, CIP Project Manager
- Mr. Wesley Waters, CIP Unit Manager
- Ms. Ko Seo, CIP Project Manager
- Mr. Richard Rohrer, Atkins, Landscape Architect
- Mr. John Boudreau, Atkins, Project Manager

Atkins review the status of current project activities:

- Coss suggested Atkins reach out to GIS Dept to obtain more accurate GIS topographic information.
- Atkins reviewed side path alignment starting on the north end of the project. A summary of the current alignment includes:
 - Atkins reviewed the side path alignment on the relocated and improved Roberts Drive.
 - Atkins reviewed the potential utility relocations, including overhead pole and fire hydrant relocation's locations.
 - Atkins reviewed the potential stream crossing locations, including where potential boardwalk and culvert improvements are proposed.
 - Atkins reviewed the cost comparison between the concrete boardwalk and the pedestrian bridge
 - Atkins reviewed wall locations
 - Atkins reviewed shifting of Roberts Drive to avoid the National Park Services historical civil war trench. Atkins indicated that the roadway centerline may have to be shifted towards the west, approximately 4'+.
 - Atkins reviewed Roberts Drive roadway diet locations proposed at the larger neighborhood entrance to minimize impacts to neighborhood entrance walls and signage features.
 - Atkins indicated that they would begin reviewing and identifying the proposed retaining wall lengths and heights to determine future potential cost implications.
 - Atkins reviewed that there is a potential temporary/permanent construction easement required from the NPS to construct the culvert and side path.
 - Atkins mid-block pedestrian crossing locations along Roberts Drive.

Roberts Drive, Side Path Scoping Study
Project # S2123-1
City of Sandy Springs
Public Works Department
Project Status Report #2
Meeting Minutes
Date 5-8-23

Attendees

- Mr. Allen Johnson, TSPLOST Manager
- Mr. David Sustaita, CIP Project Manager
- Mr. Wesley Waters, CIP Unit Manager
- Ms. Ko Seo, CIP Project Manager
- Mr. Richard Rohrer, Atkins, Landscape Architect
- Mr. John Boudreau, Atkins, Project Manager

Atkins review the status of current project activities:

- "Desk Top Review" -underway anticipated competition of Desk Top review by 5/12/23
- Atkins reviewed preferred and current side path alignment. A summary of the current alignment includes:
 - The side-path is proposed to remain on the outside of Roberts Drive from the southern to the northern end of the project limits. This is to minimize mid-block crossings and future safety concerns.
 - Atkins expressed that locating the side path on the outside of Roberts Drive appears to be less overall impact to existing neighborhoods and its future location appears to make for a more pleasant pedestrian and bicycle experience.
 - To minimize impacts to the neighborhoods and National Park property, Atkins proposing to minimize Roberts Drive roadway and, travel lane width. The proposed lane width is to be a min of 11'-0". The City agreed with Roberts Drive lane width reduction and roadway diet in difficult areas. The goal would be to hold the inside curb line alignment as much as possible and reduce the outside roadway to minimize the impact to adjacent properties.
 - Currently the Roberts Drive width varies and is +/- 26' from face of curb to face of curb.
 - The typical side path section is to include a 5' grass strip from the back of curb to the face of the 12' wide side path
 - The 12' wide side path is proposed to be concrete
 - The minimum side path section would include a 2' grass strip and 8' wide side path.
 - When the width of the grass strip has been reduced to 2' offset from the back of curb, the 2' offset is to include either a guardrail or shrub planting.
 - Atkins reviewed the potential shifting of Roberts Drive towards the east to avoid the National Park Services historical civil war trenches. Atkins indicated that the roadway would have to be shifted towards the east, approximately 4'-5'. The shift would



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Roberts Drive, Side Path Scoping Study
Project # S2123-1
City of Sandy Springs
Public Works Department
Project Status Report #4
Meeting Minutes
Date 6-16-23

Attendees

- Mr. Allen Johnson, TSPLOST Manager
- Mr. David Sustaita, CIP Project Manager
- Mr. Wesley Waters, CIP Unit Manager
- Ms. Ko Seo, CIP Project Manager
- Mr. Richard Rohrer, Atkins, Landscape Architect
- Mr. John Boudreau, Atkins, Project Manager

Atkins review the status of current project activities:

- CoSS suggested Atkins reach out to GIS Dept to obtain more accurate GIS topographic information.
- Atkins reviewed the further development of the side path alignment. A summary of the current alignment includes:
 - Atkins reviewed road diet at historic property location.
 - Atkins reviewed the potential utility relocations, including overhead pole and fire hydrant relocation's locations.
 - Atkins reviewed the potential stream crossing locations, including where potential boardwalk and culvert improvements are proposed.
 - Atkins reviewed the cost comparison between the concrete boardwalk and the pedestrian bridge
 - Atkins reviewed proposed wall locations
 - Atkins reviewed shifting of Roberts Drive to avoid the National Park Services historical civil war trench. Atkins indicated that the roadway centerline may have to be shifted towards the west, approximately 4'+.
 - Atkins reviewed Roberts Drive roadway diet locations proposed at the larger neighborhood entrance to minimize impacts to neighborhood entrance walls and signage features.
 - Atkins indicated that they would begin reviewing and identifying the proposed retaining wall lengths and heights to determine future potential cost implications.
 - Atkins reviewed that there is a potential temporary/permanent construction easement required from the NPS to construct the culvert and side path.
 - Atkins reviewed the mid-block pedestrian crossing locations along Roberts Drive.

07.4 COST ESTIMATE

PHASE 1, SHEET 1 OF 2

ROBERTS DRIVE - Phase 1
Dunwoody Place past Island Ford Parkway (Entrance
J) Station 00+29 to Station 53+10 (5,281 LF = 1 mile)
Date: 1/02/2024

ITEM CODE	ITEM	Notes	NUMBER	UNIT	COST/UNIT	TOTAL	
*Cost estimate includes GDOT segment decorative light poles from sta. 7+28 to 22+17(+/-)							
Demolition and Grading Items							
150-1000	Traffic Control		1	LS	\$75,000.00	\$75,000.00	
210-0100	Grading Complete		1	LS	\$450,000.00	\$450,000.00	
201-1500	Clearing and Grubbing		1.5	AC	\$1,500.00	\$2,250.00	
610-0355	Remove Concrete Curb & gutter	road diet sta. 0+00 to 8+12 + intersections	1000	LF	\$6.50	\$6,500.00	
610-2815	Remove Concrete sidewalk		180	SY	\$6.50	\$1,170.00	
UNDEF	Remove ex. Ramp		13	SY	\$6.50	\$84.50	
609-1000	REMOVE ROADWAY SLAB	road diet sta. 0+00 to 8+12 (760 LF)x 11 ft wide = 8360 sf (930 SY)	1000	SY	\$100.00	\$100,000.00	
611-8050	ADJUST MANHOLE TO GRADE		5	EA	\$2,000.00	\$10,000.00	
						Subtotal	\$645,004.50
Erosion and Sediment Control							
163-0232	Temporary grassing	length of project x 10 ft width	1.2	AC	\$600.00	\$720.00	
163-0300	Construction exit		2	EA	\$2,000.00	\$4,000.00	
163-0529	Construct and Remove temporary sediment barrier or baled straw check dam		1000	LF	\$7.00	\$7,000.00	
163-0550	Maintain Inlet Sediment Trap	ex. Storm inlets	9	EA	\$225.00	\$2,025.00	
165-0010	Maintenance of Temp Silt Fence -		5000	LF	\$3.00	\$15,000.00	
165-0101	Maintenance of Construction Entrance -		2	EA	\$750.00	\$1,500.00	
165-0105	Inlet Sediment Trap maintenance		9	EA	\$150.00	\$1,350.00	
171-0030	Temporary Silt Fence, Type C	length of project = 5, 281 LF	5000	LF	\$5.00	\$25,000.00	
455-1000	Filter Fabric for Embankment Stabilization	EST.	1000	SY	\$6.00	\$6,000.00	
603-2182	Stn Dumped Rip Rap, TP, 3, 24"		100	SY	\$70.00	\$7,000.00	
643-8200	Barrier Fence (Orange), 4ft		5000	LF	\$3.00	\$15,000.00	
700-6910	Permanent grassing	length of project x 10 ft width	1.2	AC	\$1,250.00	\$1,500.00	
						Subtotal	\$86,095.00
Side Path and Walls							
441-0104	Conc. Sidewalk 4 IN		105	SY	\$65.00	\$6,825.00	
UNDEF	Brick pavers	Dunwoody Place entry plaza	950	SF	\$15.00	\$14,250.00	
441-0106	Conc. Sidewalk 6 IN	sht 1=(833 SY) + sht 2=(992 SY) + sht 3=(1276 SY) + sht 4=(70 SY) + sht 5=(146 SY) + sht 6 = (62 SY) = 3379 sy for project	3500	SY	\$95.00	\$332,500.00	
310-5040	GR AGGR BASE CRS, 4 INCH, INCL MATL	sidewalks + under pavers (plaza)	3500	SY	\$35.00	\$122,500.00	
						Subtotal	\$476,075.00
Walls							
500-3110	Wall #1 Poured in Place Wall w/ picket fencing (separate line item)	sta. 0+40 to 3+10 (270 lf, avg. ht.6 ft, 12" width)	70	CY	\$1,500.00	\$105,000.00	
607-3001	Wall #1 Stone Cap	12" x 24" cap	300	LF	\$35.00	\$10,500.00	
607-3000	Wall #1 Stone Veneer	granite rubble, ashlar pattern	1620	SF	\$35.00	\$56,700.00	
500-3110	Wall #2 Turnup Concrete Slab with Reinforcement	sta. 6+36 to 8+12(176 lf, 2.5'avg ht x 8" width)	17	CY	\$1,650.00	\$28,050.00	
607-3001	Wall #2 Stone Cap	12" x 24" cap	200	LF	\$35.00	\$7,000.00	
607-3000	Wall #2 Stone Veneer	granite rubble, ashlar pattern	440	SF	\$35.00	\$15,400.00	
500-3110	Wall #3 Turn-down slab w/cable rail (separate line item)	sta.37+24 to 38+77(153 LF x 4-6ft avg.ht.x 8" width)	23	CY	\$1,650.00	\$37,950.00	
500-3110	Wall #4 Turn-down slab w/cable rail (separate line item)	sta.40+22 to 47+33(711 lf, 4-5ft avg. ht. x 8" width)	105	CY	\$1,650.00	\$173,250.00	
						Subtotal	\$433,850.00
441-7011	Curb Cut Wheelchair Ramp, Type A		11	EA	\$2,800.00	\$30,800.00	
441-7012	Curb Cut Wheelchair Ramp, Type B		0	EA	\$3,700.00	\$0.00	
441-7013	Curb Cut Wheelchair Ramp, Type C		0	EA	\$2,400.00	\$0.00	
441-7014	Curb Cut Wheelchair Ramp, Type D		7	EA	\$2,000.00	\$14,000.00	
999-5200	DETECTABLE WARNING SURFACE		144	SF	\$35.00	\$5,040.00	
						Subtotal	\$49,840.00
Signage on Side path							
636-6025	Bicycles Only	ESTIMATED	4	EA	\$1,000.00	\$4,000.00	
636-6026	Wayfinding Signage		0	EA	\$1,000.00	\$0.00	
636-6027	Mile Markers		0	EA	\$1,000.00	\$0.00	
652-9002	Yellow Centerline		0	LF	\$3.00	\$0.00	
						Subtotal	\$4,000.00
Roadway							
441-0018	Concrete Driveway Apron (8" Thick)	Island Ferry Road	30	SY	\$125.00	\$3,750.00	
441-5222	Concrete Curb and Gutter 8" x 30" Tp 2	includes sta. 1+00 to 7+00 and radius at intersections	1000	LF	\$30.00	\$30,000.00	
402-3103	Recycled Asph Conc 9.5 MM Superpave, Type II, GP 2 Only, Incl Bituminous Matl & H Lime (2 inch)		110	TN	\$205.00	\$22,550.00	
402-3130	Recycled Asph Conc 12.5 MM Superpave, GP 2 Only, Incl Matl & H Lime (1.5 inch)		83	TN	\$200.00	\$16,600.00	
432-5010	MILL ASPH CONC PVTM, VARIABLE DEPTH		0	SY	\$20.00	\$0.00	
Signing and Marking							
UNDEF	Pedestrian crossing signal pole	relocate from plaza at Dunwoody Pl.	1	EA	\$500.00	\$500.00	
UNDEF	Stop Sign		3	EA	\$1,200.00	\$3,600.00	
UNDEF	Multiple traffic signs	roadway	5	EA	\$1,200.00	\$6,000.00	
652-5701	Stop Bar	125 LF drive/road stop bars	125	LF	\$6.00	\$750.00	
652-9002	Yellow Centerline	road diet sta. 0+00 to 8+12 + intersections	922	LF	\$3.00	\$2,766.00	
MISC	Rectangular Rapid Flashing Beacon	Pride Place (sta.12+50) & Island Ford Parkway Entrance (sta.34+05)and sta. 52+44	3	EA	\$25,000.00	\$75,000.00	
441-0748	Concrete Median 6"	sta 52+44 (Sheet 6)	1	EST.	\$20,000.00	\$20,000.00	
UNDEF	Brick pavers	mid-block crossing median (on conc. Base; qty added to conc. Item 40 sy)	360	SF	\$15.00	\$5,400.00	
Utilities							
668-4300	Proposed Storm Manhole		1	EA	\$2,500.00	\$2,500.00	
668-2100	Drop Inlet GP1 GDOT 1019A		1	EA	\$3,500.00	\$3,500.00	
550-1181	Storm Pipe 18" RCP		15	LF	\$75.00	\$1,125.00	
550-1240	Storm Pipe 24" RCP		0	LF	\$100.00	\$0.00	
UNDEF	Concrete End Section		0	EA	\$5,000.00	\$0.00	
603-1024	STN PLAIN RIP RAP 24		0	TN	\$85.00	\$0.00	
670-9710	Firehydrant Relocation		0	EA	\$3,500.00	\$0.00	
						Subtotal	\$194,041.00

07.4 COST ESTIMATE

PHASE 2 PREFERRED, SHEET 2 OF 2

CONCEPTUAL COST ESTIMATE
ROBERTS DRIVE - Phase 2 - PREFERRED
Roswell Road to end of Phase 1
Station 118+95 to Station 53+10 = (6,585 LF = 1.2 miles)

ITEM	DESCRIPTION	NUMBER	UNIT	COST/UNIT	TOTAL
Curb Cut Wheelchair Ramp, Type A		3	EA	\$2,800.00	\$8,400.00
Curb Cut Wheelchair Ramp, Type B		0	EA	\$3,700.00	\$0.00
Curb Cut Wheelchair Ramp, Type C		0	EA	\$2,400.00	\$0.00
Curb Cut Wheelchair Ramp, Type D		18	EA	\$2,000.00	\$36,000.00
DETECTABLE WARNING SURFACE	sewing surface 8" Dia (24"x48" typ.)	144	SF	\$35.00	\$5,040.00
Boardwalk with railing	Two boardwalk sections #1 sta 108+18 (148 LF) and #2 sta. 87+40 (62 LF)	210	LF	\$3,250.00	\$672,500.00
	Subtotal				\$521,940.00
Signage on side path					
Bicycles only		4	EA	\$1,000.00	\$4,000.00
Wayfinding Signage		0	EA	\$1,000.00	\$0.00
White Markers		0	EA	\$1,000.00	\$0.00
Yellow Centerline		0	LF	\$3.00	\$0.00
	Subtotal				\$4,000.00
Roadway					
Concrete Driveway Apron (8" Thick)	14 driveways 20' x 25' typ. +500 of typ. X 14 + 7000 sf/9 = 778 sy	778	SY	\$125.00	\$97,250.00
Concrete Curb and Gutter 8" x 30" Tp 2	20 radius at 35' lf each typ. + road diet (sta 58+55 to 56+40)	665	LF	\$30.00	\$19,950.00
Recycled Asphalt Conc 9.5 MM Superpave, Type II, GP 2 Only, Inc'l Bituminous Mat & H Lime(2")	24" x 15' x 15' = 690 (l) 770 (sta. 58+55 - 56+40) (*Includes 200' of transition)	80	TN	\$205.00	\$16,400.00
Recycled Asphalt Conc 12.5 MM Superpave, GP 2 Only, Inc'l Mat & H Lime (1.5")	24" x 15' x 15' = 690 (l) 770 (sta. 58+55 - 56+40)	60	TN	\$200.00	\$12,000.00
MILL ASPH CONC PVM7, VARIABLE DEPTH		0	SY	\$20.00	\$0.00
Signing and Marking					
Stop Sign	locations at drive exits	8	EA	\$1,200.00	\$9,600.00
Multiple traffic signs	Roadway	10	EA	\$1,200.00	\$12,000.00
Stop Bar	8 x 12 lf (drives)	96	LF	\$6.00	\$576.00
Yellow Centerline	21/8" road diet (sta. 58+55 - 56+40) = 215 lf + transition	315	LF	\$3.00	\$945.00
Rectangular Rapid Flashing Beacon	Mid Block Crossing	1	EA	\$25,000.00	\$25,000.00
Concrete Median 6"	Phase 1 only	0	EST	\$20,000.00	\$0.00
Traffic Control Signage	Midblock crossing	2	EA	\$500.00	\$1,000.00
	Subtotal				\$194,721.00
Utilities					
Relocate Fire Hydrant		4	EA	\$3,500.00	\$14,000.00
Proposed Storm Manhole		0	EA	\$3,500.00	\$0.00
Prop. inlet (6" C907 1819A)		0	EA	\$3,500.00	\$0.00
Storm Pipe 18" RCP		0	LF	\$75.00	\$0.00
Storm Pipe 24" RCP		0	LF	\$100.00	\$0.00
Concrete End Section		0	EA	\$5,000.00	\$0.00
Rip Rap		0	TN	\$85.00	\$0.00
	Subtotal				\$14,000.00
Site Amenities					
Furnishings					
Bollard	1 at each intersection corner at trail entries	19	EA	\$1,500.00	\$28,500.00
Bench	2 at intersection with Roswell Road	2	EA	\$4,000.00	\$8,000.00
Trash Receptacle	1 at intersection with Roswell Road	1	EA	\$2,500.00	\$2,500.00
Cable Handrailing (burndown slabs only)	42" Cable Handrailing	160	LF	\$200.00	\$32,000.00
Picket Fencing (walls > 6' ht)	48" ht top of walls > 6' ht	1863	LF	\$125.00	\$232,875.00
	Subtotal				\$303,875.00
Landscape					
Plant Topsoil	4" for sod areas + plants	185	CY	\$50.00	\$9,250.00
Landscape Mulch	4" depth	440	SY	\$20.00	\$8,800.00
Sod	Bermuda	868	SY	\$15.00	\$13,020.00
Planting					
Street Tree	45 gal, 3" cal., variety TBD	36	EA	\$1,500.00	\$54,000.00
shrubs (2' o.c.)	3 gal, variety TBD	963	EA	\$40.00	\$38,520.00
	Subtotal				\$123,520.00
	Project Subtotal				\$5,989,073.50
	O&P/Proj Mgmt/Mobilization/Bonding & Insurance (12%)				\$1,497,688.82
	20% Contingency				\$1,197,814.70
	Design & Engineering Services (12%)				\$718,688.82
	Total				\$9,402,845.40
Items Outside Construction Contract					
Utility Pole Relocations and Pedestrian Lighting					
Relocate Utility Pole	12 relocated	10	EA	\$25,000.00	\$250,000.00
Relocate light pole, add utility pole	1 relocate light	1	EA	\$10,000.00	\$10,000.00
Add Pedestrian Light Pole	11' DECORATIVE	76	EA	\$12,000.00	\$912,000.00
Directional Bore	18' DECORATIVE GATEWAY	1	EA	\$15,000.00	\$15,000.00
Conduit NONMETL, TP 2, 1/2 IN and Elect. Wire		1000	LF	\$20.00	\$20,000.00
Electrical Service Point		6500	LF	\$15.00	\$97,500.00
Cable, TP THW AIWG NO TBO		2	EA	\$10,000.00	\$20,000.00
Relocate Electrical Box	To be determined	6500	LF	\$10.00	\$65,000.00
	Subtotal				\$1,371,500.00
Right-Of-Way and Easement Cost					
Industrial					
Industrial		0	SF	\$35.00	\$0.00
Single Family Residential	PA# 060366110251 (2,782sf), 06036700010251 (4,445sf), 06036700010252 (2,242sf), 06036700010251 (2,724sf), 06036700010252 (4,741sf), 06036700010253 (4,176sf), 06036700010254 (4,176sf), 06036700010255 (3,171sf), 06036700010256 (4,445sf), 06036700010257 (2,724sf), 06036700010258 (4,176sf)	8381	SF	\$20.00	\$167,620.00
Multi-Family Residential -Apartments	PA 06036611617 (5,854sf) + (1,297sf) + (2,739) = 9,890sf	9890	SF	\$50.00	\$494,500.00
Multi-Family Residential -Condominiums		0	SF	\$80.00	\$0.00
Multi-Family Residential -Townhomes		0	SF	\$20.00	\$0.00
Permanent Easement (50% of ROW)					
Industrial		0	SF	\$17.50	\$0.00
Single Family Residential		0	SF	\$10.00	\$0.00
Multi-Family Residential -Apartments		0	SF	\$25.00	\$0.00
Multi-Family Residential -Condominiums		0	SF	\$15.00	\$0.00
Multi-Family Residential -Townhomes		0	SF	\$10.00	\$0.00
Temp Construction Easement (20% of ROW)					
Industrial	06 0366 110255 - COMMERCIAL USE	347	SF	\$7.00	\$2,429.00
Single Family Residential	5' wide & 10' wide	17650	SF	\$4.00	\$70,600.00
Multi-Family Residential -Apartments	PA 06036611617 (13,763sf) + (1,391sf)	15154	SF	\$10.00	\$151,540.00
Multi-Family Residential -Condominiums		0	SF	\$6.00	\$0.00
Multi-Family Residential -Townhomes	parcel number unknown	53	SF	\$4.00	\$212.00
Public Property		0	SF	\$0.00	\$0.00
Driveway Easement					
13 driveways	no cost	7,000	SF	\$0.00	\$0.00
	Subtotal				\$886,901.00
Note: The Conceptual Cost Estimate is based on Conceptual Plan and is approximate cost only.					

07.5 PHASE 2 ALTERNATIVES COMPARISON

PHASE 2: PREFERRED vs ALTERNATIVE STA 53+10 TO 78+00

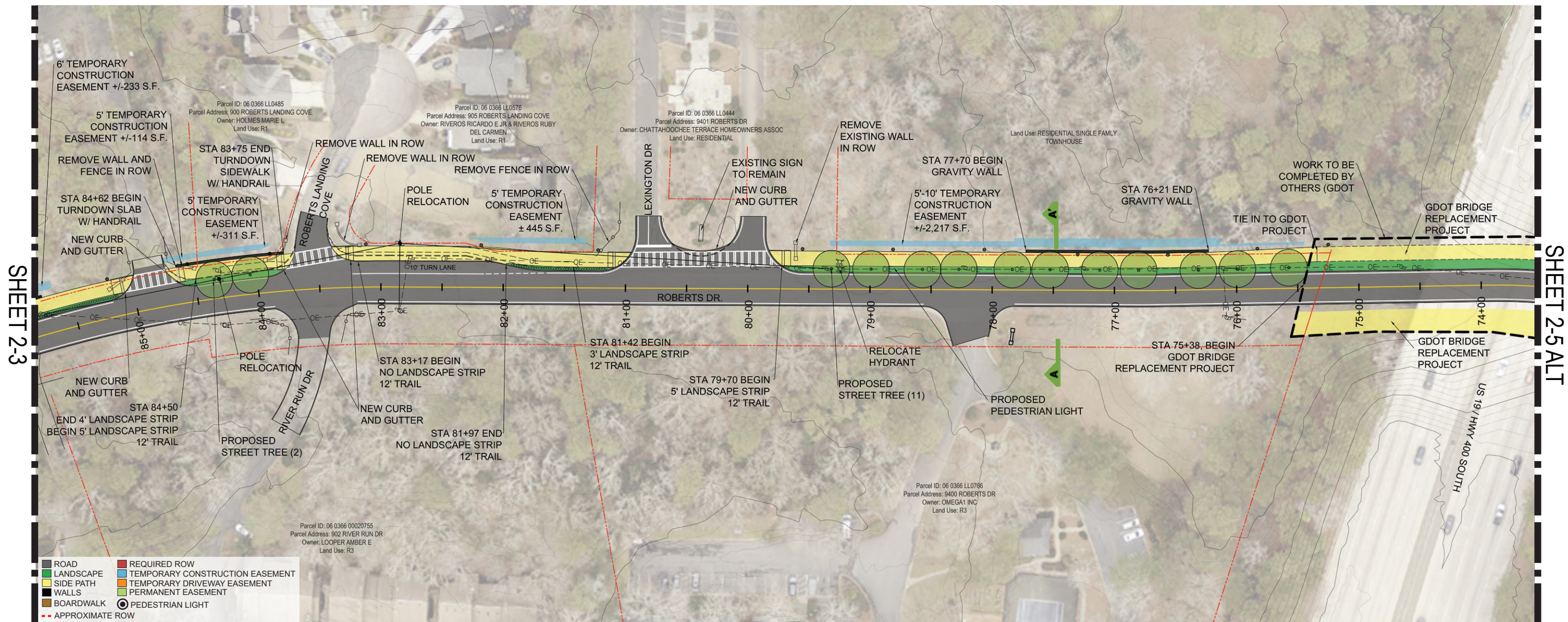
PREFERRED

- Path is adjacent to multi-family apartment complex, single residential housing, and wooded areas
- Path will be located on the side of Roberts Drive with neighborhoods, offering access for users who live along this segment of the path
- Users will cross the Roberts Drive two additional times when traversing the path
- 1 additional mid-block crossing (4 total mid-block crossings within entire project)
- This section of path impacts 4 parcels
- Additional right-of-way and temporary construction easements are required
- Path will cross 3 drives, 1 residential property and two apartment complex entrances
- Existing sidewalk will need to be removed
- There are 7 walls in this section of path: 4 poured-in-place walls (312' +/-, 215' +/-, 362' +/-, and 102' +/-), and 3 turn down curbs (62' +/-, 38' +/-, and 108' +/-)
- There are 3 power pole and 2 fire hydrant relocations in this section of path
- There will be approximately 566 shrubs and 17 trees planted along this route

ALTERNATIVE

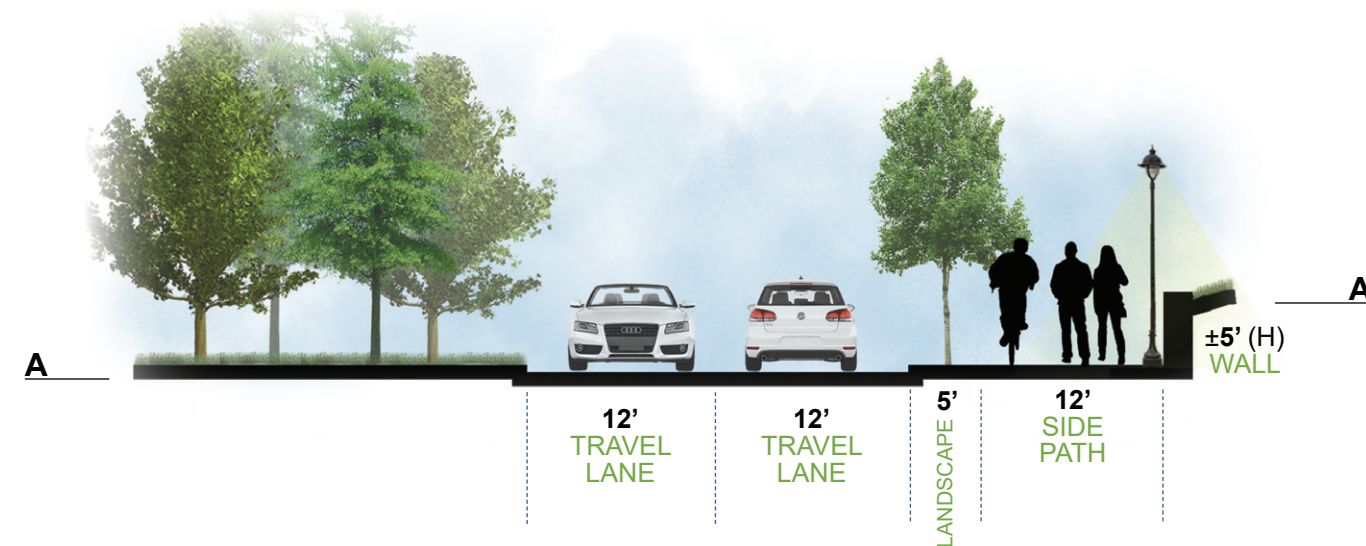
- Path is adjacent to National Park property, offering views of forest and nature
- On this section of the path, users from residential areas on the west side, would be required to cross Roberts Drive to access the side path on the east side at the one midblock crossing.
- No additional mid-block crossings (3 total mid-block crossings within entire project)
- This section of path impacts 3 parcels (2 are owned by the National Park Service)
- Only temporary construction easements are required for this section
- Path does not cross any drives
- No existing sidewalk to remove
- There are 4 walls in this section of path: 1 gravity wall (150' +/-), 1 turn up curbs (285' +/-), and 2 turn down curbs (101' +/- and 100' +/-)
- There are 5 power pole relocations in this section of path
- There will be approximately 794 shrubs and 10 trees planted along this route

07.6 PHASE 2 ALTERNATIVE DESIGN (STA 85+50 TO 75+38)

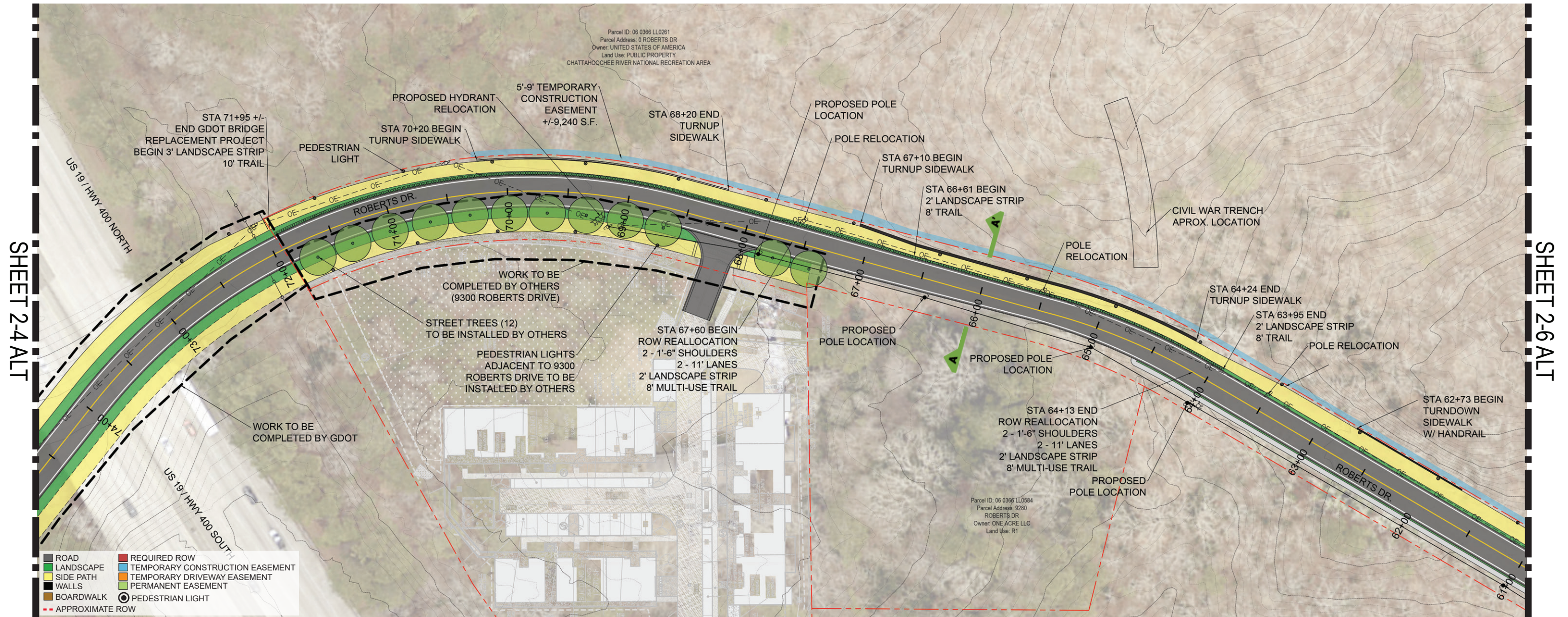


SHEET 2-4 (ALT) NOT TO SCALE

This sheet shows path alignment for Phase 2 Alternative, where the side path remains continuous on the north side of Roberts Drive. This segment continues at STA 85+50 and ends at STA 75+38. The path continues at 12 ft. wide with a 5 ft. landscape strip, with street trees. As the path travels along the deceleration lane, the landscape strip is removed to minimize required space. A 3 ft. landscape strip begins at STA 81+97 and continues to STA 81+42. After crossing Lexington Drive, the path continues at 12 ft. wide with a 5 ft. landscape strip, with street trees (section A-A'). This sheet ends at the start to the GDOT bridge replacement project, which will provide a 12 ft. wide side path with a 8' landscape strip on both sides of Roberts Drive. Topography changes will require a turn-down slab and a gravity wall. Temporary construction easements are required within this segment, as well as utility relocations.



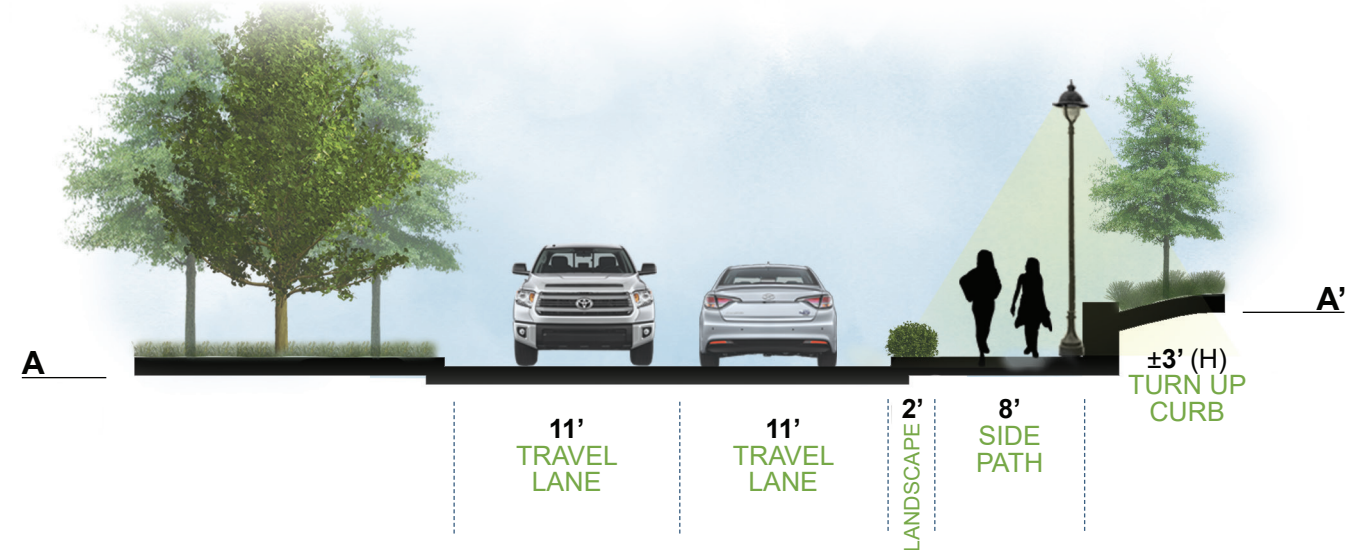
07.6 PHASE 2 ALTERNATIVE DESIGN (STA 71+95 TO 61+00)



SHEET 2-5 (ALT)

NOT TO SCALE

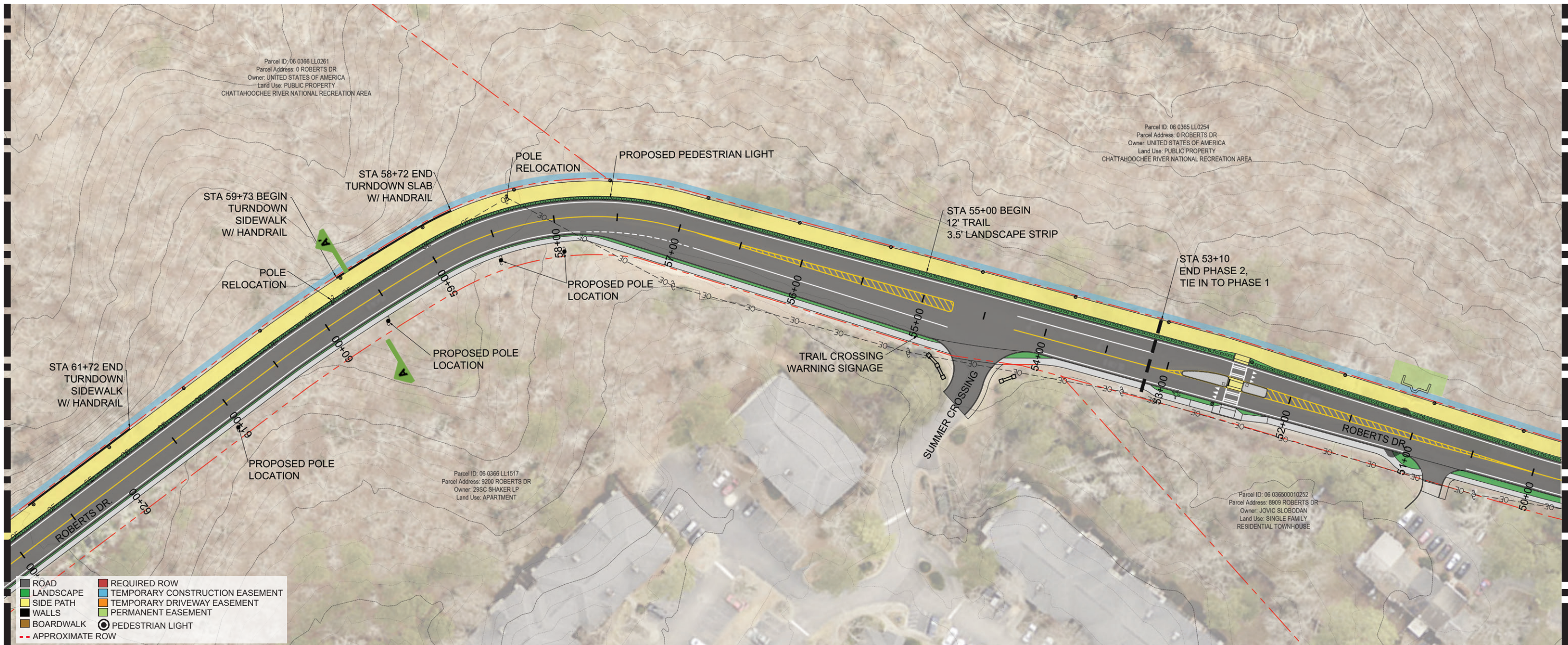
This sheet shows path alignment Phase 2 Alternative, where the side path remains continuous on the north side of Roberts Drive. This segment continues at STA 71+95, where the GDOT bridge replacement project ends, and continues to STA 61+00. The path begins at 10 ft. wide with a 3 ft. greenspace. To avoid sensitive areas within the CRNRA property, a reallocation of right of way is proposed to gain extra space for the path between STA 68+00 and STA 63+50. The narrowed roadway will include two 11 ft. travel lanes, and two 1.5 ft. shoulders. The path will narrow to 8 ft. wide with a 2 ft. planted landscape strip (Section A-A'). Following the right of way reallocation, the path will widen to 12 ft. with a 2.5 ft landscape strip. Two turn-up curbs and one turn-down curb are required within this segment. Temporary construction easements are required within this segment, as well as utility relocations.



07.6 PHASE 2 ALTERNATIVE DESIGN (STA 61+00 TO 53+10)

SHEET 2-5 ALT

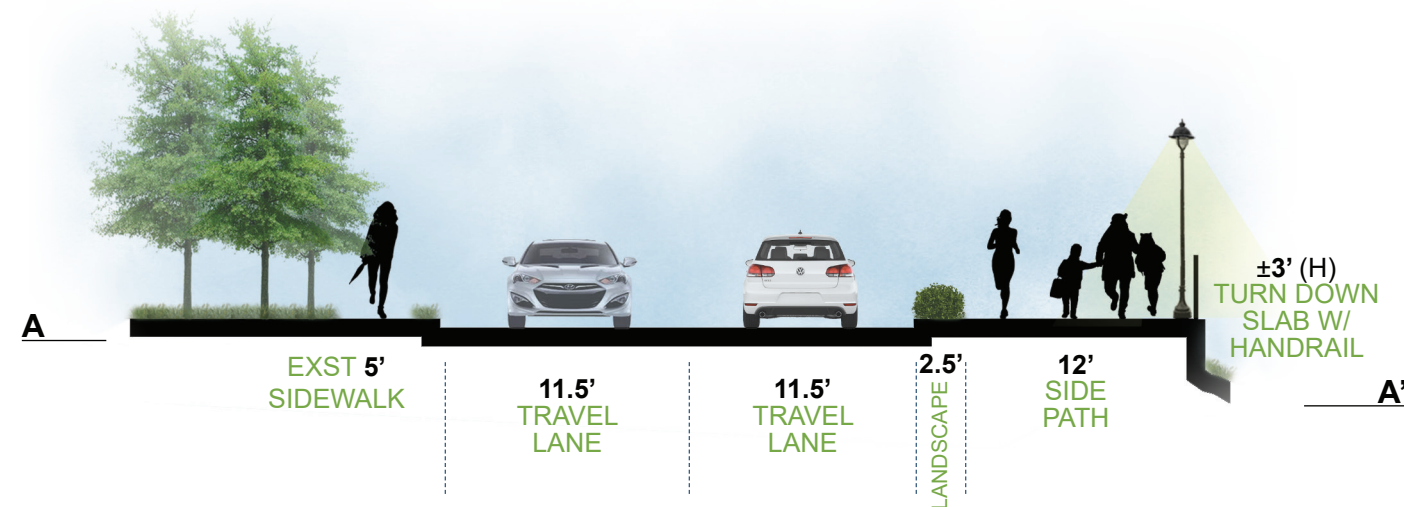
SHEET 1-5

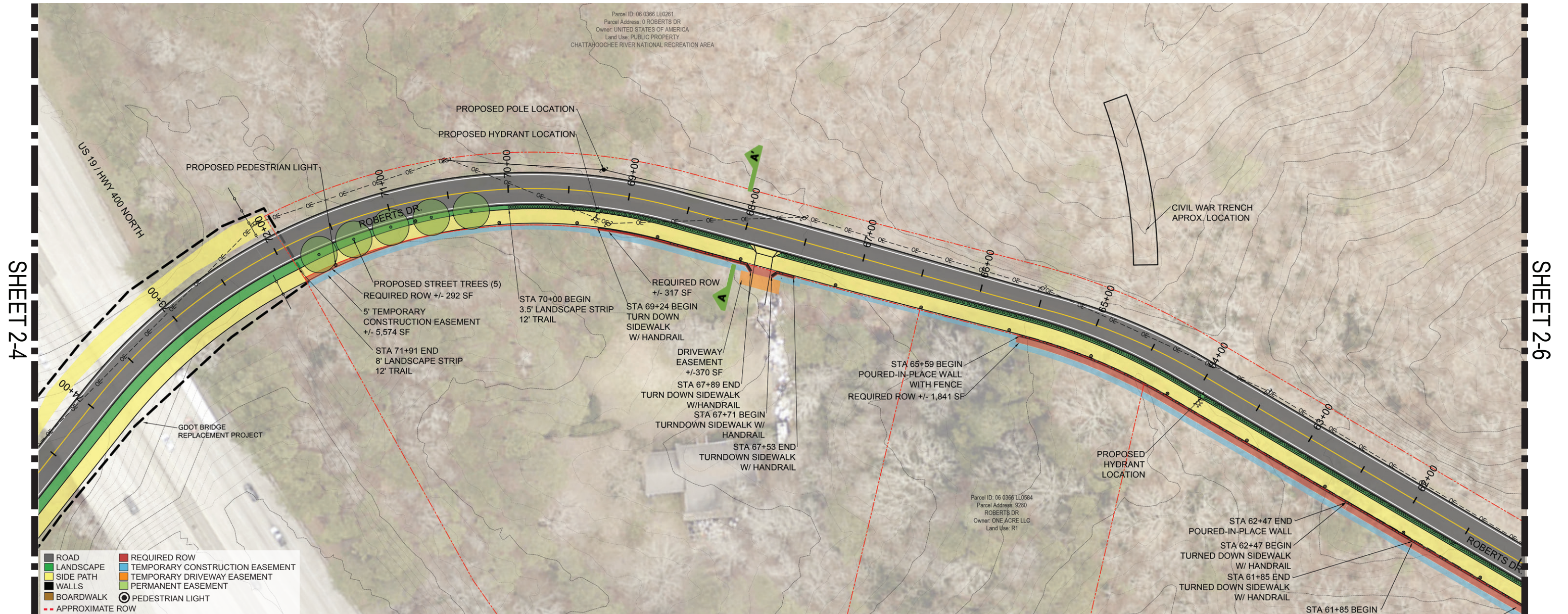


SHEET 2-6 (ALT)

NOT TO SCALE

This sheet shows path alignment Phase 2 Alternative, where the side path remains continuous on the north side of Roberts Drive. This segment continues at STA 61+00 and ends at station 53+10, the end of Phase 2 where it will tie into Phase 1. The path continues at 12 ft. wide with a 2.5 ft. landscape strip. At STA 55+00, the landscape strip widens to 3.5 ft. One turn-down curb is required. Temporary construction easements are required within this segment, as well as utility relocations. Section A-A' shows the side path along the turn-down slab, with handrail.



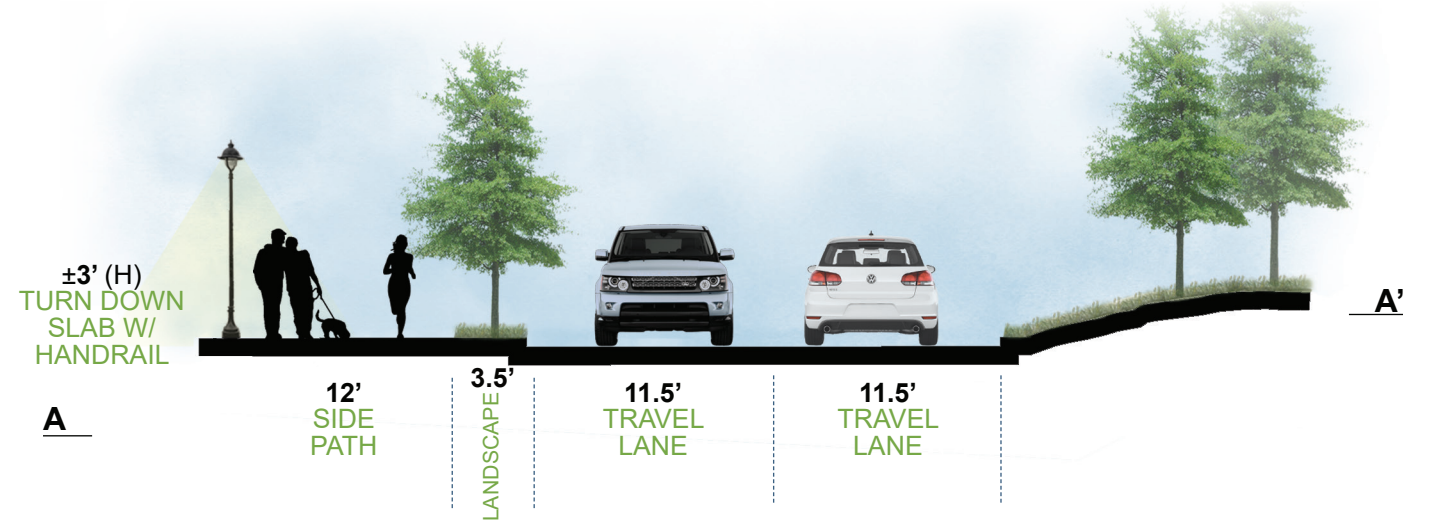


SHEET 2-5
NOT TO SCALE

This segment of the Phase 2 exhibits the sidepath design without the proposed development on parcel address 9300 Roberts Drive. The side path design along this property shown on sheet 2-5 (page 62-63), will be constructed by the property owner. In the event that the parcel is not developed, the side path will be designed as shown on this sheet. Below is a cost summary of the side path as shown here along the parcel 9300 Roberts Drive. If the property is not developed as planned, then the following cost will be added to the Phase 2 cost shown in the report (page 88).

Estimated Cost of side path along 9300 Roberts Drive, as shown on this sheet:

Required ROW (391 sf), 5 ft TCE (3026 sf)	95,200.00
Trees (5) + Sod (107 sy) + Shrubs (140) + Mulch (172 sy) + Topsoil (15 cy)	18,895.00
Side path(12' wide, 520 sy) + Agg. Base (520 sy)	67,600.00
Decorative Light Poles (6)	72,000.00
Turn-down curb with railing (9 cy)	40,950.00
O&P, Project management, contingency, design/eng. service	72,643.00
Total	\$ 367,288.00



ARC GIS mapping, ESRI

City of Sandy Springs' Transportation Master Plan 2021, Kimley Horn 2021

City of Sandy Springs' Next Ten Comprehensive Plan 5-yr Update, adopted 2017, updated 2022, RHI (Rhodeside Harwell), Nelson / Nygaard, Code Studio, Gensler, RCLCO, Lowe Engineers, Ross & Associates

City of Sandy Spring' Recreation and Parks System Comprehensive Plan, February 2019, Barge Design Solutions, PROS Consulting and ETC Institute

City of Sandy Springs' Trail Master Plan, adopted Oct. 2019, PATH Foundation.org and KAI-ZEN Collaborative

City of Sandy Springs' TSPLOST 2021, Fulton County, GA

City of Sandy Springs' Bicycle, Pedestrian, and Trail Implementation Plan, December 2014, HDR Engineering, Inc.

City of Sandy Springs Zoning Ordinance Streetscape Manual Urban Design Standards, 2013, ORD NO. 2005-12-19

Construction Standards and Details, 2023 Georgia Department of Transportation (GDOT)

Preliminary Alternatives Assessment, Improving Bicycle and Pedestrian Connectivity to the Island Ford Unit of the Chattahoochee River National Recreation Area (Hagen Thames Hammons, 2015-16, NPF Transportation Scholar)

Small Town and Rural Multimodal Networks Guide, Dec. 2016, Alta Planning + Design (Alta), Small Urban and Rural Livability Center – Western Transportation Institute, and National Association of Counties, 711 SE Grand Avenue, Portland, OR 97214, U.S. Department of Transportation, Office of Planning, Environment, and Realty, Federal Highway Administration, 1200 New Jersey Avenue SE Washington DC 20590 FHWA-HEP-17-024

Atlanta Regional Commission (ARC) Metropolitan River Protection Act (MRPA) website: <https://atlantaregional.org/what-we-do/natural-resources/metropolitan-river-protection-act/>

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