



Project Environmental Impact Report

**Poinciana Parkway Extension (SR 538)
Project Development and Environment Study
From Poinciana Parkway to CR 532
Osceola and Polk Counties, Florida**

CFX Project Number: 599-224

Prepared for:

**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

NOVEMBER 2019

Prepared by:

Kimley-Horn and Associates, Inc.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY PROJECT ENVIRONMENTAL IMPACT REPORT

1. PROJECT DESCRIPTION AND PURPOSE AND NEED

A. PROJECT INFORMATION

Project Name:	Poinciana Parkway Extension (SR 538)
Project Limits:	From Poinciana Parkway to CR 532
County:	Osceola and Polk Counties
ETDM Number (if applicable):	N/A
Financial Project Number:	N/A
CFX Project Number:	599-224
Project Manager:	S. Clifton Tate, P.E.

B. PROPOSED IMPROVEMENTS

Previous studies have been conducted by the former Osceola County Expressway Authority (OCX), Florida Department of Transportation (FDOT), and by the Central Florida Expressway Authority (CFX). Most recently, CFX conducted a Concept, Feasibility & Mobility Study for the Poinciana Parkway Extension/ I-4 Connector. From this study, the CFX Board determined that a phased implementation of an expressway from the Poinciana Parkway to CR 532 was preferred and authorized to move to the PD&E Study phase. Three corridors from the Concept, Feasibility & Mobility Study were advanced for further study.

The Poinciana Parkway Extension PD&E Study includes an evaluation of alternatives to extend the existing Poinciana Parkway (SR 538) from the existing bridge over the Reedy Creek Mitigation Bank to CR 532 (see **Figure 1: Regional Map** and **Figure 2: Study Area Map**). The project is a proposed tolled 4-lane expressway within approximately 330 feet of right-of-way (ROW). This ROW width provides for future expansion for additional lanes and/or other multimodal travel options if needed in the future. The project also includes interchanges with other county and state roads, bridges over wetlands in the Reedy Creek Mitigation Bank and South Florida Water Management District (SFWMD) owned/managed Upper Lakes Basin Watershed habitat, as well as bridges over local roads and railroads. Stormwater management facilities are also being considered.

Figure 1: Regional Map

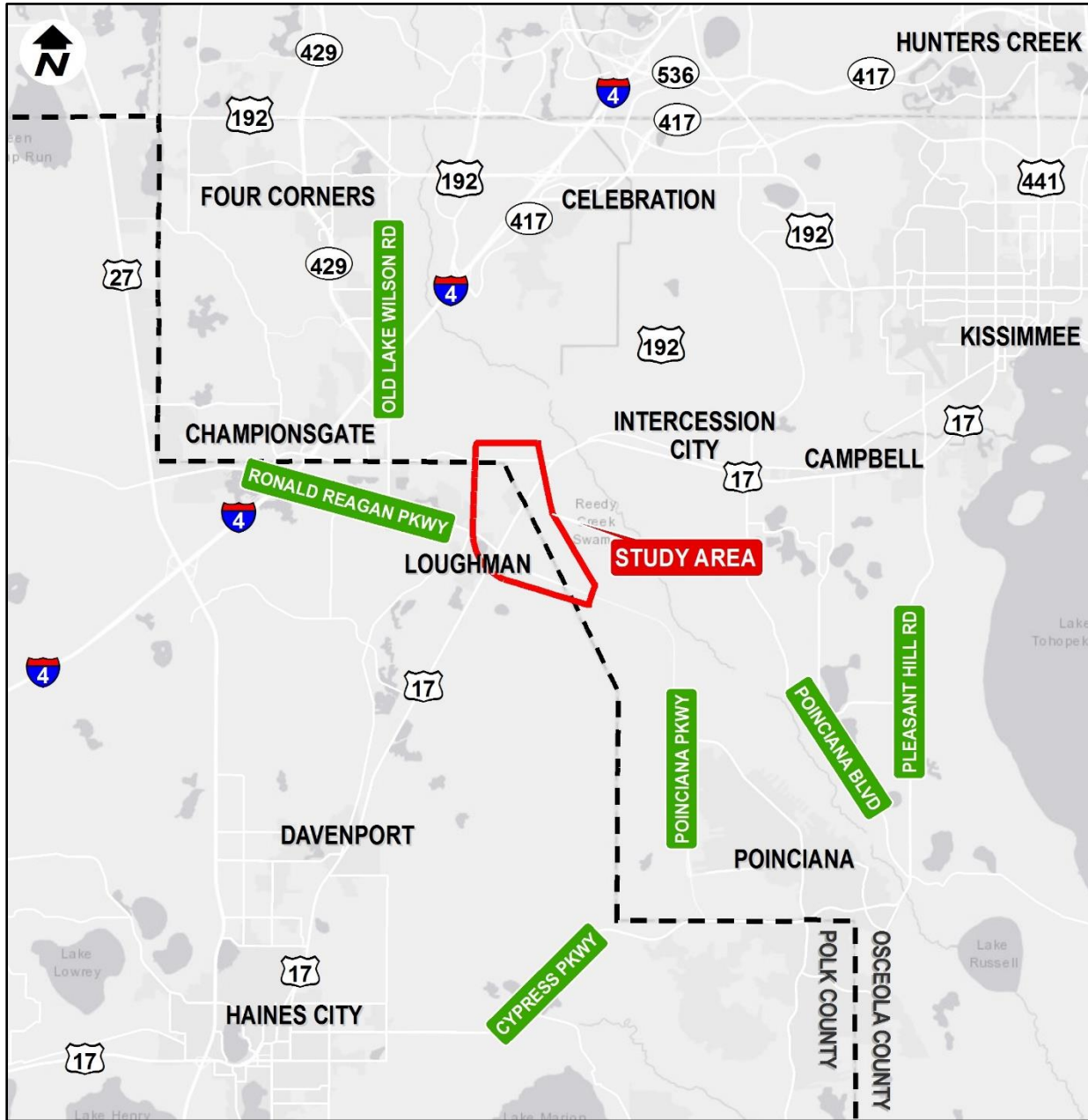
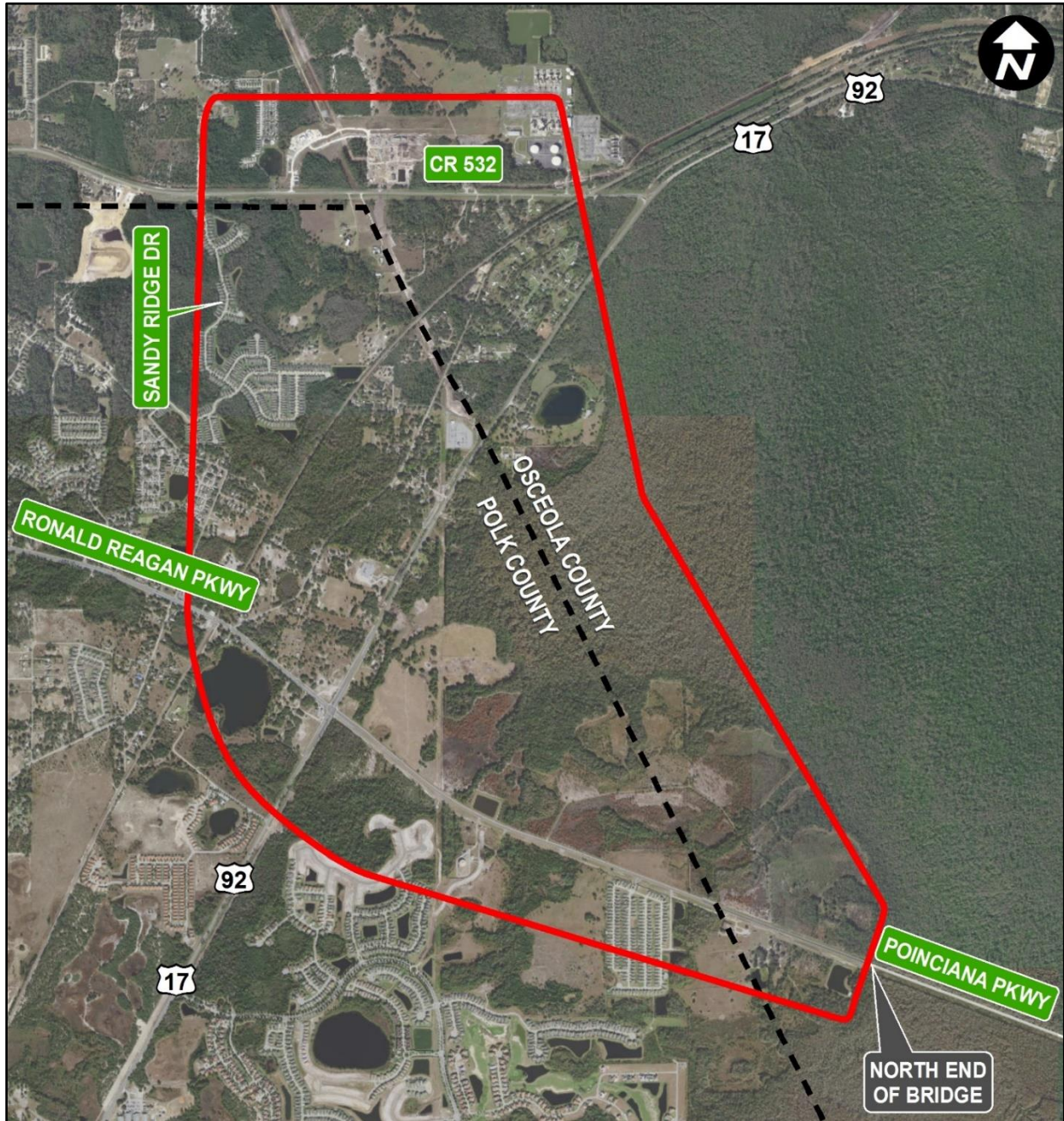


Figure 2: Study Area Map



C. PURPOSE AND NEED

As noted above, the CFX Board determined that a phased implementation of an expressway connection from the Poinciana Parkway to CR 532 was preferred and should be evaluated. As such, the purpose and need for this study retains the context of both a full expressway connection to I-4 as well as an initial phased expressway connection to CR 532.

PURPOSE

The primary purpose of the Poinciana Parkway Extension is to enhance mobility from I-4 to Cypress Parkway, improve overall traffic operations of the existing highway network within the project study area, and expand regional system linkage in Osceola and Polk Counties. The secondary objectives are to provide transportation infrastructure to support economic growth and provide consistency with local plans and policies.

NEED

The need for the project is to provide system linkage, provide regional connectivity and mobility, meet social and economic needs, provide increased transportation capacity, achieve consistency with transportation plans, and provide for multimodal opportunities.

SYSTEM LINKAGE

System linkage is defined as linking two or more existing transportation facilities, types of modal facilities, geographic areas, or regional traffic generators. Poinciana Parkway currently links Marigold Avenue, KOA Street, and Cypress Parkway in Poinciana to US 17/92 in Polk County, near the Osceola County line. No direct limited-access connection exists between Poinciana Parkway and I-4. Therefore, no direct connection exists between the Poinciana residential area in Osceola and Polk Counties to major employment centers in the Orlando metropolitan area, or from the limited-access Poinciana Parkway to the regional freeway/expressway system. The Poinciana Parkway Extension to CR 532 will improve system linkage.

REGIONAL CONNECTIVITY AND MOBILITY

Mobility is the movement of people and goods and the ability to meet transportation demands. One of the regional goals is to provide a direct, limited-access connection from Poinciana Parkway to I-4 to decrease travel time associated with delays at signalized and unsignalized intersections on the existing local roadway network. Currently, traffic traveling between Poinciana Parkway and I-4 can use Ronald Reagan Parkway and Lake Wilson Road (or Old Lake Wilson Road or Champions Gate Boulevard) to the CR 532 interchange. An alternate route is to use US 17/92 to CR 532 to the CR 532 interchange. However, all routes experience congestion. In addition, the CR 532 interchange with I-4 experiences significant congestion during the morning and afternoon peak periods. While the Poinciana Parkway Extension as part of this study will not connect to I-4, it will be compatible with a future expressway connection to I-4.

In addition, the Poinciana Parkway Extension will improve the connection to I-4 via CR 532, which is planned to be widened. The existing CR 532 interchange is also planned to be improved as part of the I-4 Beyond the Ultimate project (the improvement to the interchange could be implemented prior to the I-4 Beyond the Ultimate project).

SOCIAL AND ECONOMIC NEEDS

Osceola County has identified opportunities for growth but, without increased connectivity and sufficient capacity, congestion within the study area will increase and result in a lack of economic opportunities for areas such as Poinciana and Osceola County's South Lake Toho Master Plan. As part of Osceola County's growth strategy to discourage urban sprawl by focusing on higher intensity and density development within their Urban Growth Boundary, they identified a system of expressways which generally follow their urban growth boundary. These expressways, which include the Poinciana Parkway Extension and the I-4 Connector, will provide connectivity and capacity to support the County's economic and social needs.

CAPACITY CONSTRAINTS

The construction of Poinciana Parkway, from Cypress Parkway to US 17/92, provided a new alternative route for Poinciana residents traveling to and from the north. However, a direct connection to I-4 is not provided and traffic currently uses various routes (i.e., US 17/92, CR 532, Ronald Reagan Parkway, or Lake Wilson Road) to access I-4 at the CR 532/I-4 interchange. Currently, Lake Wilson Road, from Ronald Reagan Parkway to CR 532, operates over capacity. During the morning peak hour, there is severe congestion on eastbound I-4 (from US 27 to just beyond CR 532), westbound CR 532, eastbound Champions Gate Boulevard, and northbound Lake Wilson Road. There is also congestion on Ronald Reagan Parkway, US 17/92, and northbound Old Lake Wilson Road. During the afternoon peak hour, there is severe congestion on westbound I-4 (from SR 417 to just beyond CR 532), southbound Old Lake Wilson Road, and southbound Lake Wilson Road. There is also congestion on CR 532, Champions Gate Boulevard, Ronald Reagan Parkway, and US 17/92. It is anticipated that the Poinciana Parkway Extension will offer another option for drivers and, therefore, provide congestion relief to local roads.

CONSISTENCY WITH TRANSPORTATION PLANS

Osceola County's Comprehensive Plan includes a transportation system developed to respond to planned growth in the County. The Plan incorporates a vision for an integrated, multimodal transportation network that will meet the needs of the County's growing population. The Poinciana Parkway Extension is included in the County's Comprehensive Plan as well as the OCX Master Plan 2040 (OCX, 2013) as part of a planned limited-access, high-speed toll facility identified to serve Osceola County's urban growth area. The OCX Master Plan has been adopted into the CFX Master Plan. The MetroPlan Orlando 2040 Long Range Transportation Plan (LRTP) includes the Poinciana Parkway Extension as a new 4-lane facility to be constructed by 2030.

MULTIMODAL OPPORTUNITIES

CFX has established a multimodal policy to fund or partner on multimodal initiatives where revenue generated from the investment equals the project cost or where toll user benefits are equal to or exceed the project cost. In addition, Osceola County's Comprehensive Plan calls for an integrated, multimodal transportation network. Opportunities to provide for multimodal improvements were considered as part of the alternatives developed to address the need and purpose for this project.

2. ENVIRONMENTAL ANALYSIS

Issues/Resources	*Substantial Impacts?				**Supporting Information
	Yes	No	Enhance	No Inv	
A. SOCIAL & ECONOMIC					
1. Social	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.A.1.</u>
2. Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.A.2.</u>
3. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.A.3.</u>
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.A.4.</u>
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.A.5.</u>
6. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.A.6.</u>
B. CULTURAL					
1. Historic Sites/Districts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.B.1.</u>
2. Archaeological Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.B.2.</u>
3. Recreation Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.B.3.</u>
C. NATURAL					
1. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.C.1.</u>
2. Aquatic Preserves and Outstanding FL Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.C.2.</u>
3. Water Quality and Stormwater	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.C.3.</u>
4. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Not present</u>
5. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.C.5.</u>
6. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Not involvement</u>
7. Protected Species and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.C.7.</u>
8. Essential Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Not present</u>
D. PHYSICAL					
1. Highway Traffic Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.D.1.</u>
2. Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.D.2.</u>
3. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.D.3.</u>
4. Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.D.4.</u>
5. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.D.5.</u>
6. Bicycles and Pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>See Attachment 1, Section 1.D.6.</u>
7. Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>No Involvement</u>

* Substantial Impacts? Yes = Substantial Impact; No = No Substantial Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement

** Supporting information is documented in the referenced attachment

3. ANTICIPATED PERMITS

- Individual Dredge and Fill Permit – USACE
- Nationwide Permit – USACE
- Bridge Permit – USCG
- Individual Environmental Resource Permit – SFWMD or SWFWMD (FDEP or WMD)
- NPDES Generic Permit - FDEP

4. ENGINEERING ANALYSIS

As part of the Poinciana Parkway Extension PD&E Study, an engineering analysis was conducted to evaluate existing and future conditions, develop alternatives for the proposed improvements, and provide a comparison between Build Alternatives and the No Build Alternative. The following alternatives were analyzed during this PD&E study.

4.1 BUILD ALTERNATIVES

Several studies have been conducted to date to define corridors and potential build alternatives for this project. Following completion of the Poinciana Parkway Extension/I-4 Connector Concept, Feasibility & Mobility Study (May 2018), three build alternatives were carried forward into the PD&E Study. The other studies and results of the corridor and feasibility analyses are summarized in the Engineering Analysis Technical Memorandum. For this PD&E Study, the build alternatives have been refined based on input from the public, the Project Advisory Group (PAG), the Environmental Advisory Group (EAG), and other local stakeholders. The build alternatives evaluated are illustrated on **Figure 3** and are described below.

The proposed typical section, as illustrated on **Figure 4**, is 330 feet wide consisting of two 12-foot lanes in each direction with a 92-foot median (that can accommodate additional lanes and/or a potential multimodal corridor) and 95-foot borders on each side.

Figure 3: Build Alternatives

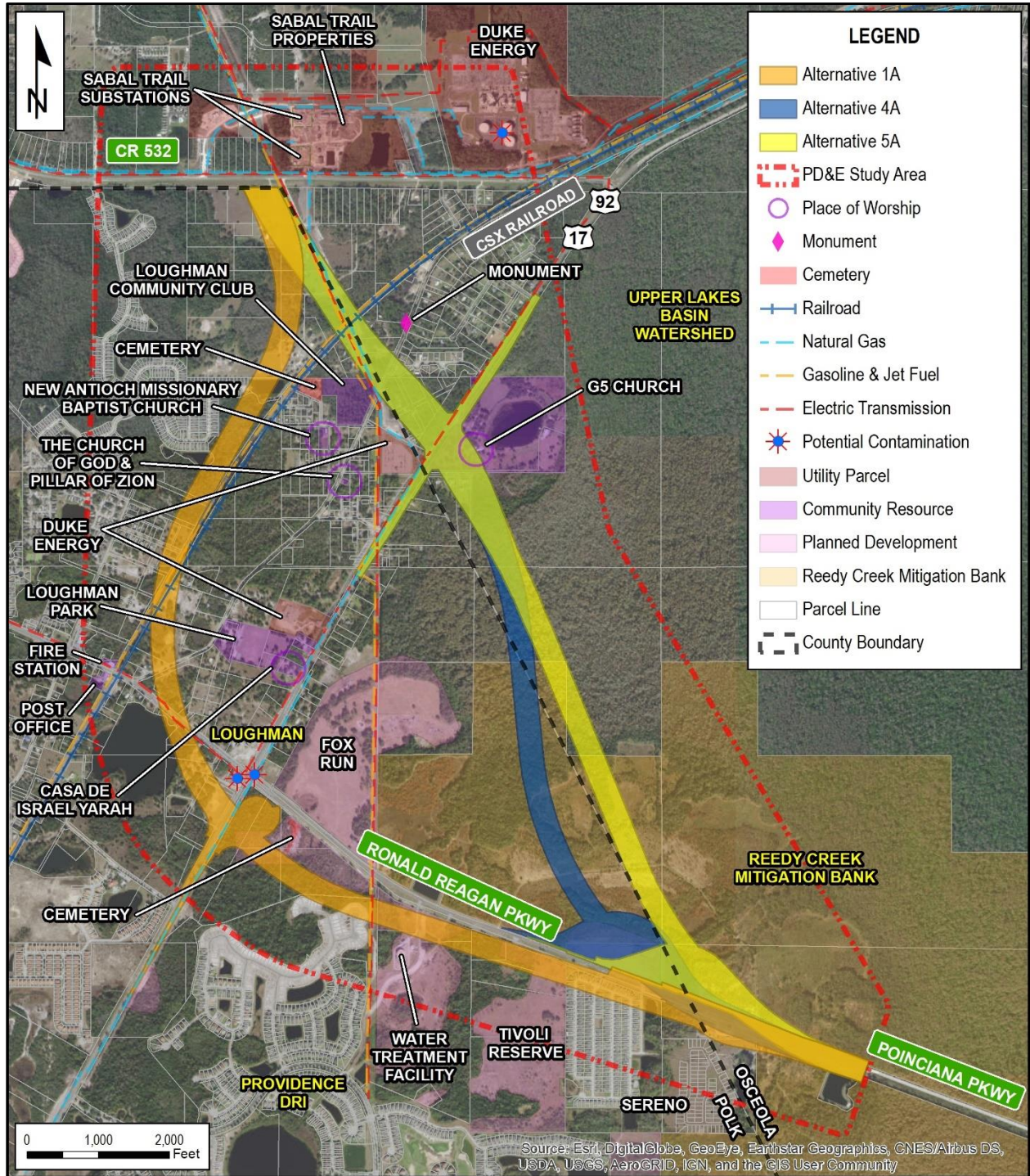
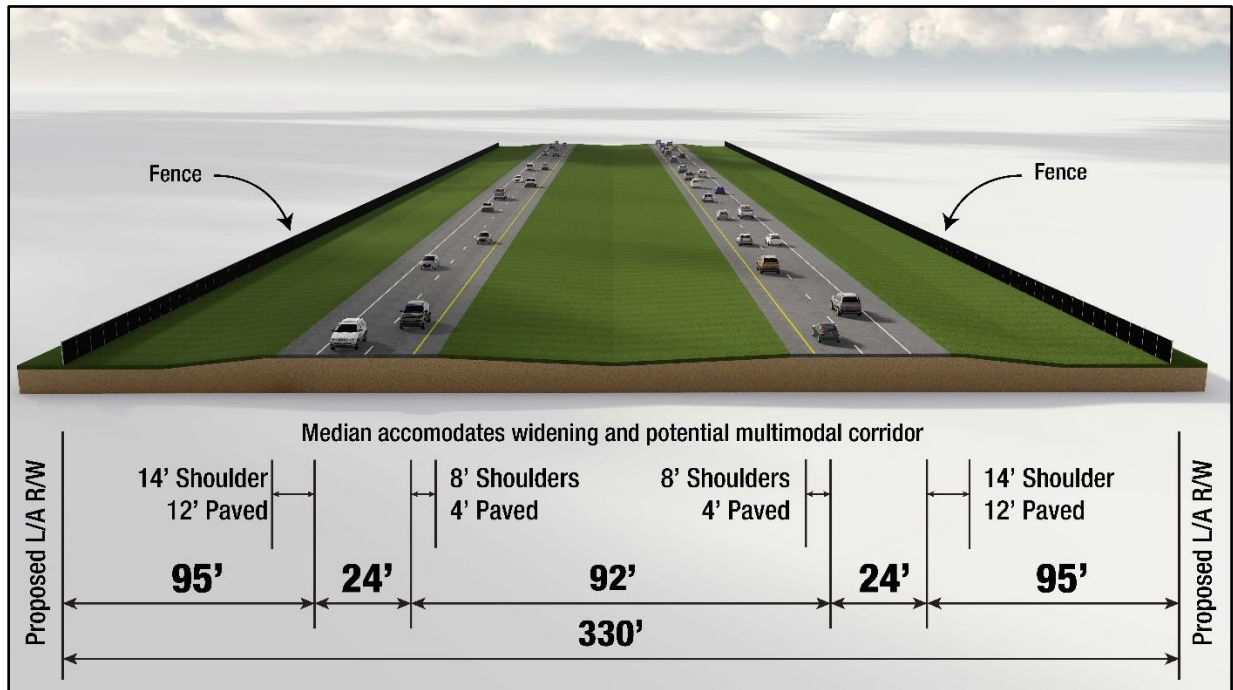


Figure 4: Typical Section



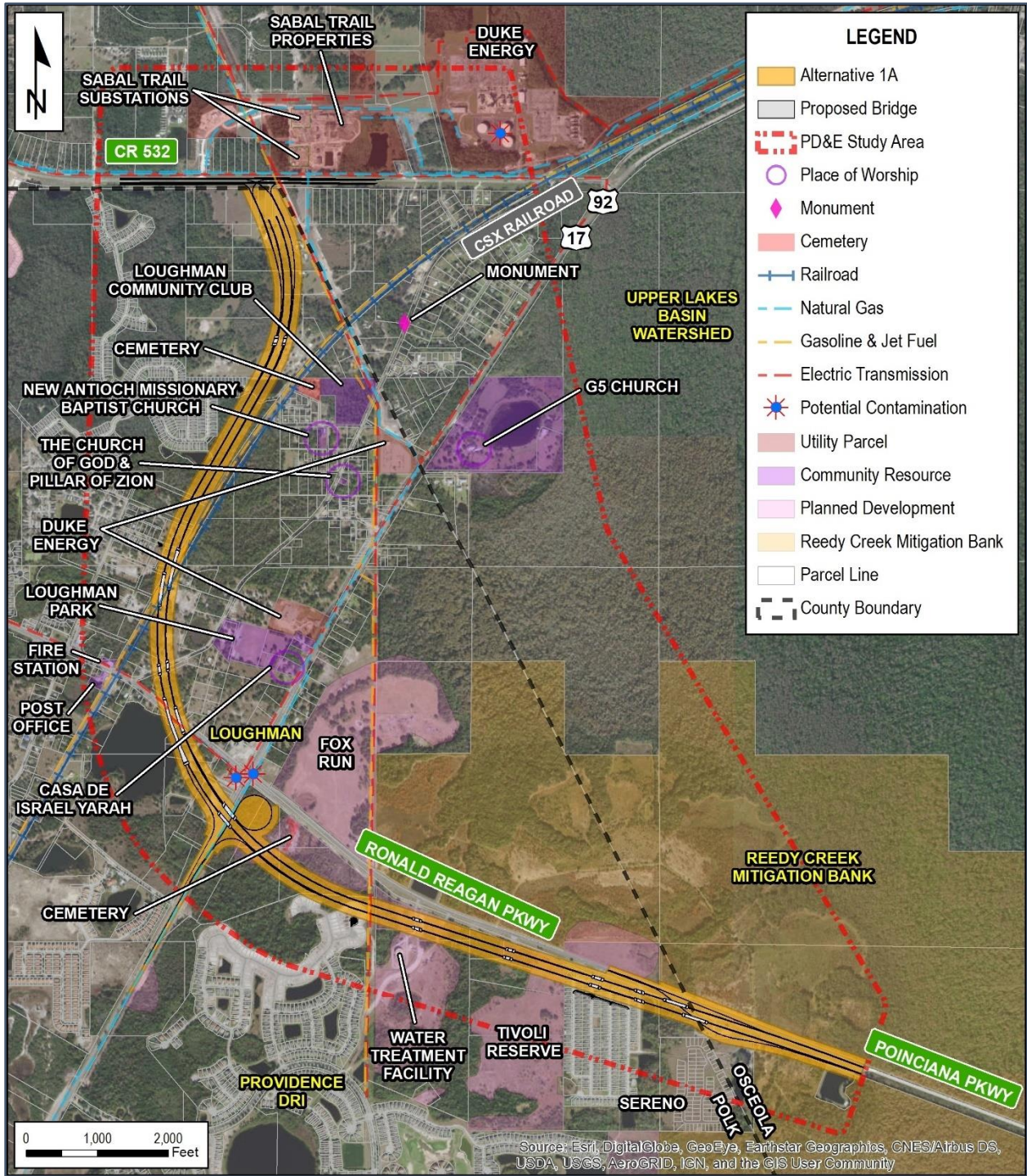
4.1.1 ALTERNATIVE 1A

Alternative 1A travels south of Ronald Reagan Parkway, and crosses over US 17/92 south of its intersection with Ronald Reagan Parkway. The alternative extends northward crossing over Old Kissimmee Road and the CSX railroad, traveling parallel to and west of the CSX railroad before heading north to CR 532 just west of the Polk County/Osceola County line.

A partial interchange is provided with US 17/92 and slip ramps are provided to and from Ronald Reagan Parkway just west of the existing bridge over the Reedy Creek Mitigation Bank (RCMB). An at-grade intersection is provided with CR 532.

Figure 5 illustrates Alternative 1A.

Figure 5: Alternative 1A



4.1.2 ALTERNATIVE 4A

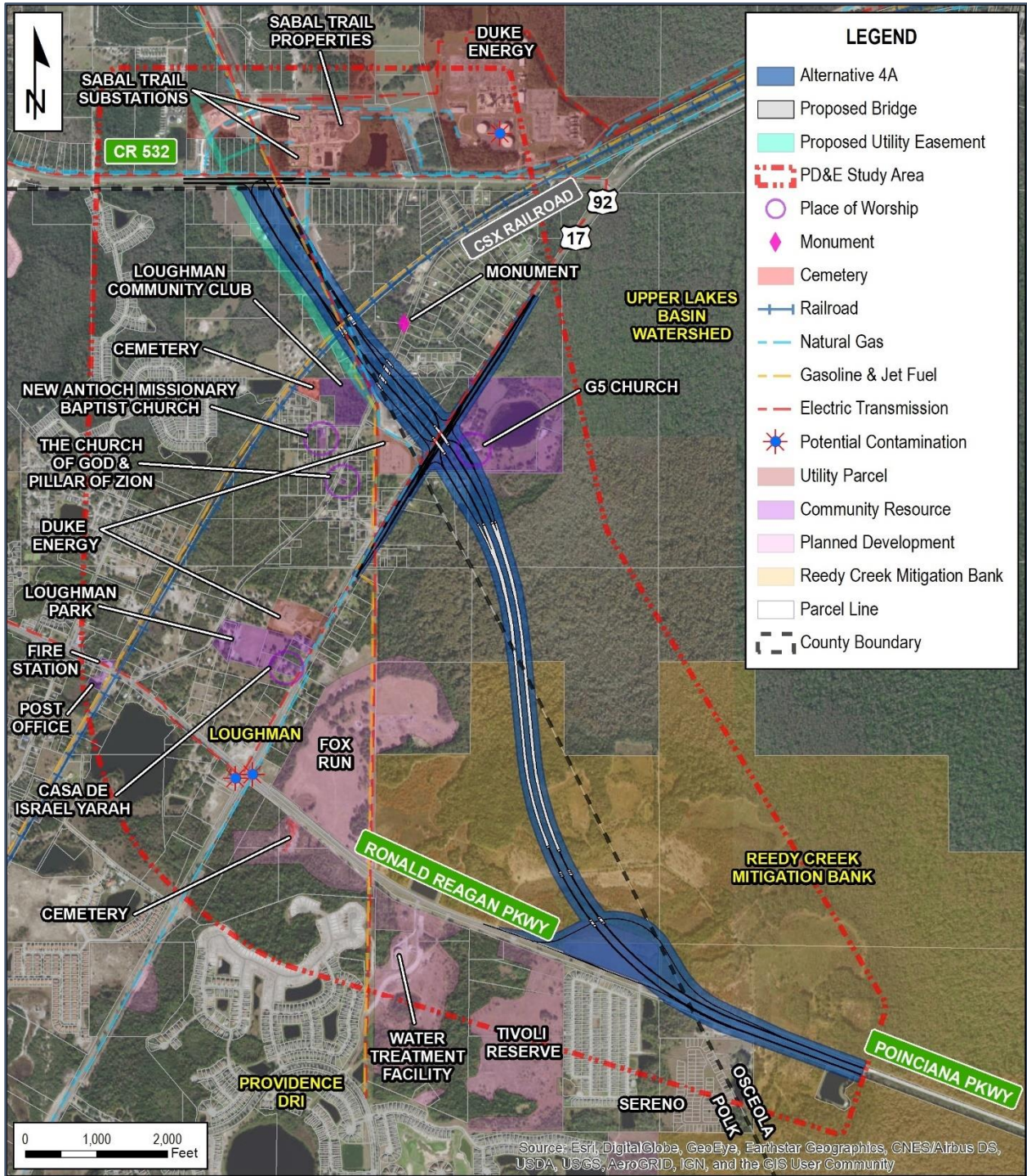
Alternative 4A travels northwesterly through the RCMB in Polk County, then enters Osceola County within the SFWMD's Upper Lakes Basin Watershed lands before crossing over US 17/92 approximately one mile north of its intersection with Ronald Reagan Parkway. The alternative continues northward and crosses over Old Tampa Highway and the CSX railroad before connecting with CR 532 just west of the Polk County/Osceola County line. This alternative requires utility relocations from along the Polk County/Osceola County line to just west of the expressway alternative.

This alternative includes bridging over the wetlands within the RCMB and the Upper Lakes Basin Watershed.

A single point urban interchange (SPUI) is provided with US 17/92 and slip ramps are provided to and from Ronald Reagan Parkway just west of the existing bridge over the RCMB. An at-grade intersection is provided with CR 532.

Figure 6 illustrates Alternative 4A.

Figure 6: Alternative 4A



4.1.3 ALTERNATIVE 5A WITHOUT SLIP RAMPS TO RONALD REAGAN PARKWAY

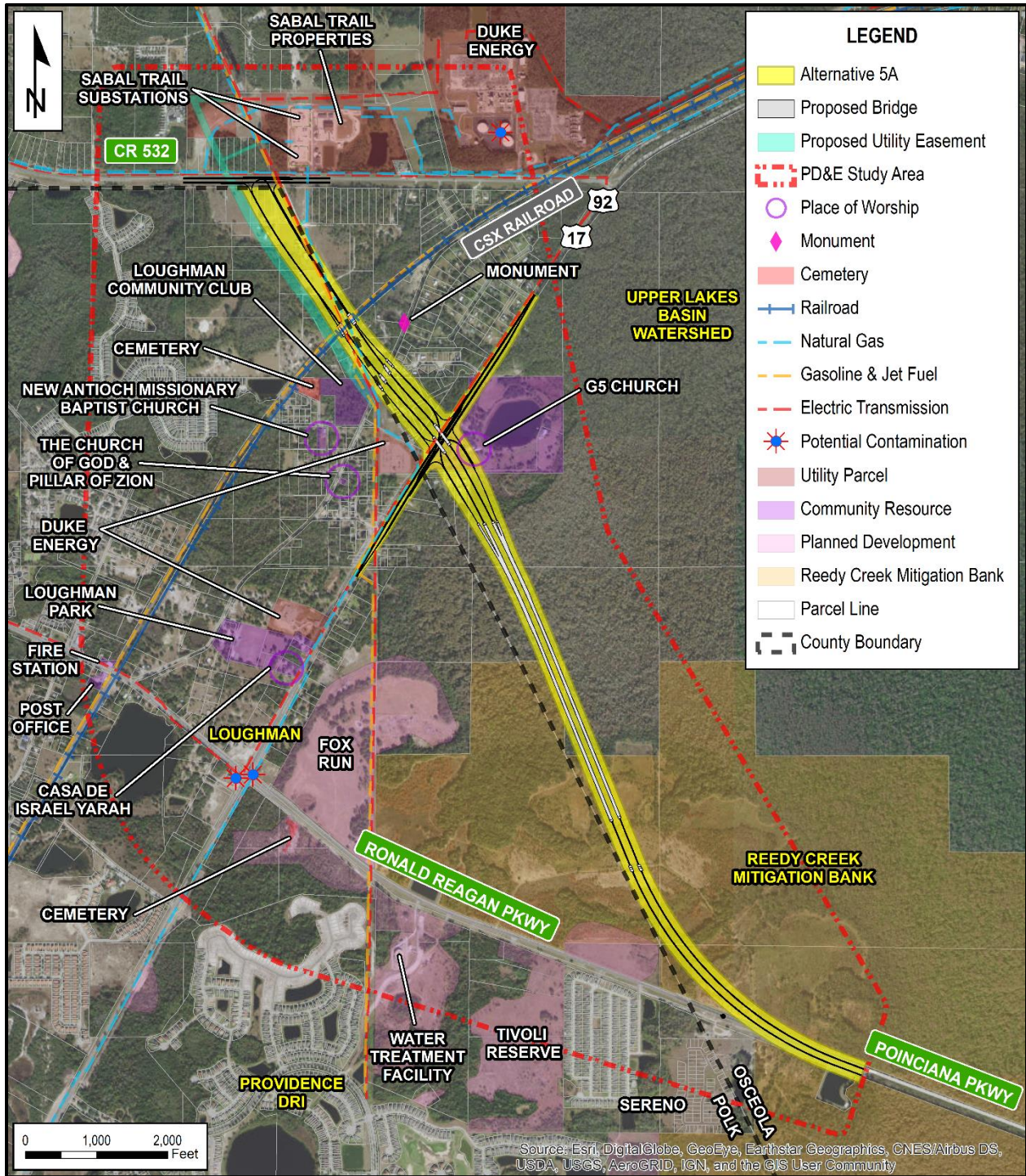
Alternative 5A travels northwesterly through the Reedy Creek Mitigation Bank in Osceola County and the SFWMD's Upper Lakes Basin Watershed before crossing over US 17/92 approximately one mile north of its intersection with Ronald Reagan Parkway. The alternative continues northward crossing over Old Tampa Highway and the CSX railroad before connecting with CR 532 just west of the Polk County/Osceola County line. This alternative requires utility relocations from along the Polk County/Osceola County line to just west of the expressway alignment.

This alternative includes bridging over the wetlands within the Reedy Creek Mitigation Bank and the Upper Lakes Basin Watershed.

A single point urban interchange is provided with US 17/92 and slip ramps are provided to and from Ronald Reagan Parkway just west of the existing bridge over the Reedy Creek Mitigation Bank. An at-grade intersection is provided with CR 532. For this alternative, slip ramps to and from Ronald Reagan Parkway were not included.

Figure 7 illustrates Alternative 5A Without Slip Ramps to Ronald Reagan Parkway.

Figure 7: Alternative 5A Without Slip Ramps to Ronald Reagan Parkway

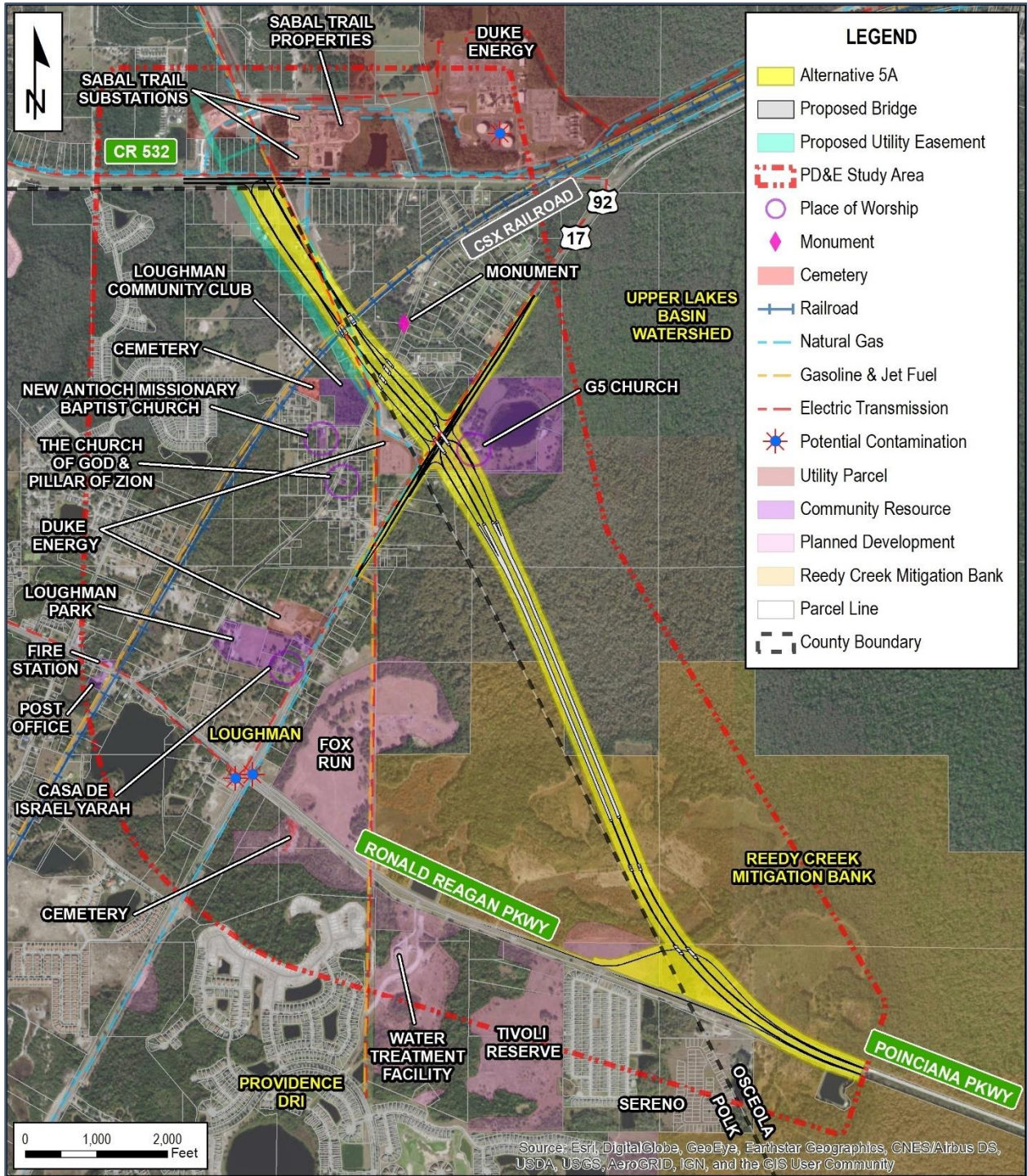


4.1.4 ALTERNATIVE 5A WITH SLIP RAMPS TO RONALD REAGAN PARKWAY

Alternative 5A was also evaluated with slip ramps to and from Ronald Reagan Parkway just west of the existing bridge in the Reedy Creek Mitigation Bank.

Figure 8 illustrates Alternative 5A With Slip Ramps to Ronald Reagan Parkway.

Figure 8: Alternative 5A With Slip Ramps to Ronald Reagan Parkway



5. COMMITMENTS

CFX commits to the following:

- Alternatives that impact RCMB and Upper Lakes Basin will include a bridge section.
- The *Standard Protection Measures for the Eastern Indigo Snake* will be implemented during project construction.
- Avoidance and minimization of wetland and listed species impacts will continue to be evaluated during the final design, permitting and construction phases of this project and all possible and practicable measures to avoid or minimize these impacts during design, construction and operation will be incorporated.
- Pre-construction surveys for the bald eagle, southeastern American kestrel, Florida sandhill crane, Florida burrowing owl, gopher tortoise, bald eagle, listed plants and any other listed species will be performed as required.
- BMPs to control erosion and sedimentation in accordance with Standard Specifications for Road and Bridge Construction will be implemented.
- To minimize water quality impacts, the stormwater management system design will include a site-specific pollutant loading analysis and an additional 50% water quality treatment volume.
- Surface water management system will be designed to maintain and support existing hydrologic flow patterns and regimes and avoid gradient drawdowns of the wetlands through a design that incorporates appropriate control elevations.
- Construction impacts will be minimized through implementation of Best Management Practices.

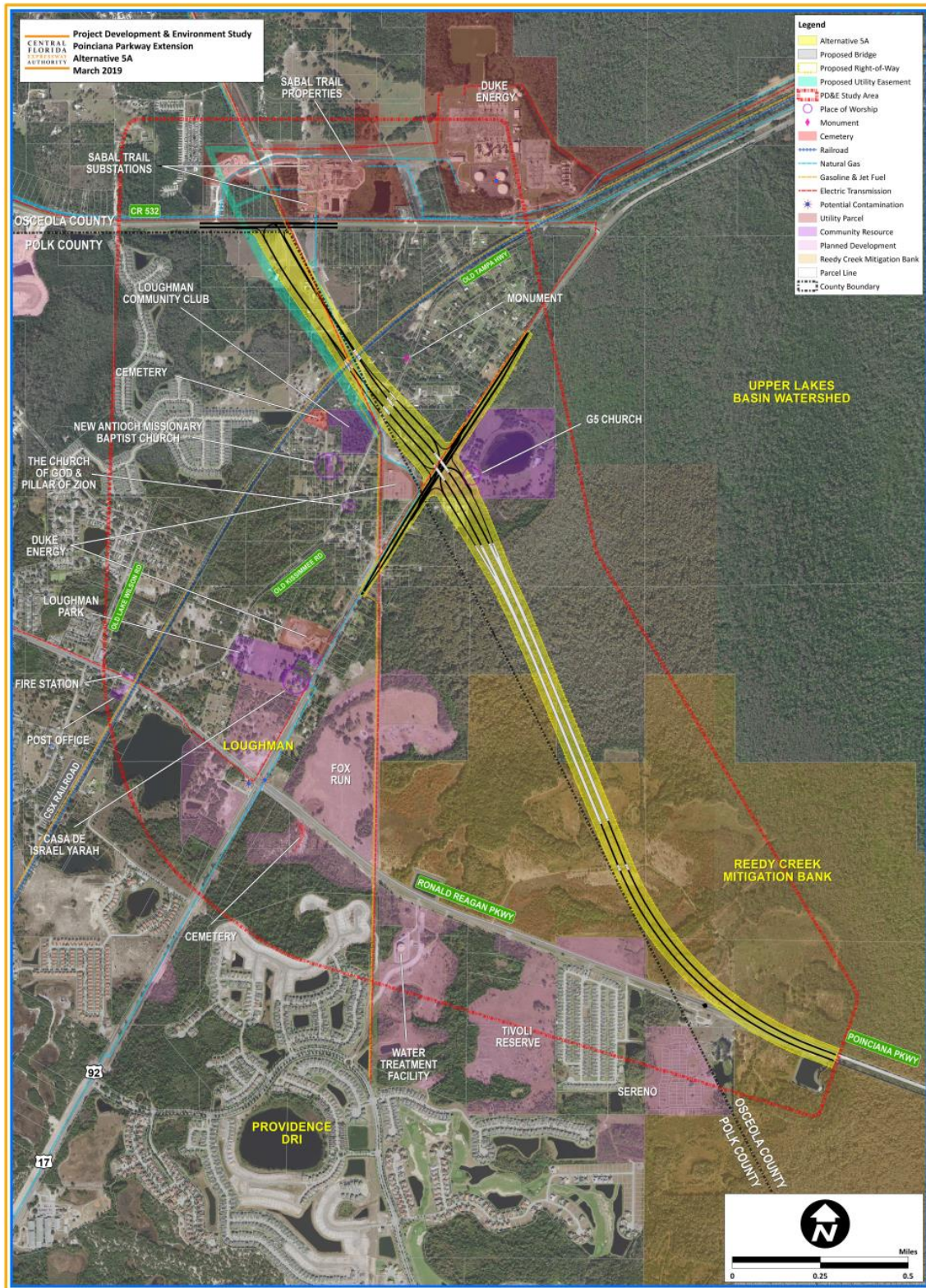
6. PREFERRED ALTERNATIVE

The preferred alternative is Alternative 5A without Slip Ramps to Ronald Reagan Parkway. This alternative travels northwest from the end of the existing Poinciana Parkway bridge, through the RCMB along the county line (in Osceola County) before crossing (and interchanging with) US 17/92 approximately one mile north of its intersection with Ronald Reagan Parkway. The alternative then crosses over Old Tampa Highway and the CSX railroad while shifting west into Polk County and intersecting with CR 532 just west of the Sabal Trail Reunion Compressor Station. This alignment requires utility relocations (a Duke Energy transmission line, a Kinder Morgan gas pipeline, and a Florida Southeast Connection gas pipeline) into a new easement which will extend along the west side of the expressway, from north of CR 532 to Old Kissimmee Road.

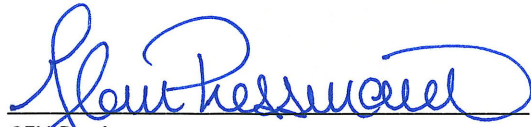
The interchange with US 17/92 is a single point urban interchange (SPUI) and the at-grade intersection with CR 532 will operate as a half SPUI (oriented to the east) and is set up to operate as a half SPUI interchange (oriented to the west) when the Poinciana Parkway Extension is connected to I-4. To minimize impacts, a bridge of approximately 0.9 mile in length is provided over wetlands in the Reedy Creek Mitigation Bank and the Upper Lakes Basin Watershed.

Figure 9 illustrates Alternative 5A Without Slip Ramps to Ronald Reagan Parkway and identifies a proposed utility easement for relocating utilities. Concept plans for the preferred alternative are included in **Appendix A**.

Figure 9: Alternative 5A Without Slip Ramps to Ronald Reagan Parkway



7. [X] APPROVED FOR PUBLIC AVAILABILITY (BEFORE PUBLIC HEARING WHEN A PUBLIC HEARING IS REQUIRED)


CFX Designee

8 / 8 / 2019
Date

8. PUBLIC INVOLVEMENT

1. A public hearing is not required.
2. A public hearing will be held on August 29, 2019. This draft document is publicly available, and comments can be submitted to CFX until September 9, 2019.

CFX Contact Information:

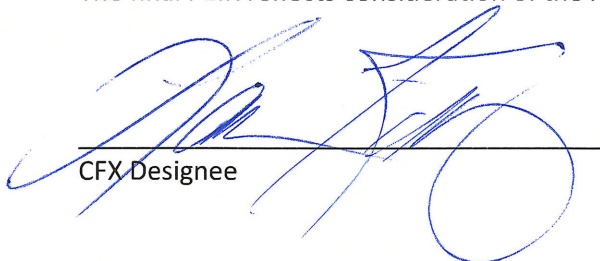
Glenn M. Pressimone, P.E.
Chief of Infrastructure
Central Florida Expressway Authority
4974 ORL Tower Road
Orlando, FL 32807
Phone: (407) 690-5321
Glenn.Pressimone@CFXWay.com

3. A public hearing was held on August 29, 2019, and the transcript is included.
4. An opportunity for a public hearing was afforded and was documented.

9. APPROVAL OF FINAL DOCUMENT

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

The final PEIR reflects consideration of the PD&E Study and the Public Hearing.


CFX Designee

11 / 1 / 19
Date

10. SUPPORTING INFORMATION

For supporting information for each issue/resource, please see **Attachment 1: Environmental Analysis** as well as the Preliminary Engineering Report (PER).

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APPENDICES

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Appendix F: Water Quality Impact Evaluation (WQIE)
Appendix G: Contamination Sites Information

ATTACHMENT 1: ENVIRONMENTAL ANALYSIS

The following sections summarize the results of the socio-economic, cultural, and natural environmental data collection and analysis conducted as part of this Project Development and Environment (PD&E) Study. A longer improvement which includes this project (as well as other alternatives which are no longer under study) was previously reviewed through the Environmental Screening Tool as part of the Efficient Transportation Decision Making (ETDM) Programming Screen. The project is listed as #13957 – Poinciana Parkway I-4 Segment. The Programming Screen Summary Report was published in 2016 (<http://etdmpub.fl-a-etat.org/>). An Advance Notification (AN) package, updated for this project’s study area, was distributed to the agencies on September 18, 2018. Degrees of Effect (DOE) were not assigned during the AN process. The following is a summary of comments received from the agencies:

- National Marine Fisheries Service (NMFS) indicated that Essential Fish Habitat (EFH) would not be impacted and an EFH assessment is not required. Further, NMFS is unaware of any threatened or endangered species or critical habitat under NMFS’ jurisdiction but indicated the project should be coordinated with the US Fish and Wildlife Service (USFWS). NMFS did provide comments regarding the benefits of freshwater wetlands and if wetlands are unavoidable, sequential minimization and mitigation should take place pursuant to the Fish and Wildlife Coordination Act. Because there are no EFH resources within the study area, the NRE did not include an EFH Assessment.
- The US Environmental Protection Agency (USEPA) commented that the “selected site should avoid and minimize, to the maximum extent practicable, placement of fill into jurisdictional waters of the U.S., which include wetlands and streams. Additionally, consider that the potential increase in impervious surface may increase storm water runoff and may increase pollutants into nearby water bodies and wetlands because of the project. Also, habitat loss due to the new construction would threaten the survival of fish and wildlife”. The USEPA recommended that the PD&E include a discussion of the direct and secondary impacts to wetlands and surface waters, best management practices during construction and compensatory mitigation for unavoidable wetland impacts. It was suggested to prevent further fragmentation, degradation, and loss of wildlife habitat, preservation of the remaining habitat in the project area be considered.
- The US Coast Guard (USCG) commented that there are no USCG-jurisdictional waterways within the study area.
- The Federal Aviation Administration (FAA) commented that the project would have no adverse effects on public airports.
- The Seminole Tribe of Florida (STOF) commented that the project does fall within the STOF Area of Interest and would like a copy of the CRAS once available.

The AN comments from all agencies are included in **Appendix B**.

A. SOCIAL & ECONOMIC

A.1 SOCIAL

COMMUNITY COHESION

Community cohesion is the degree to which residents have a sense of belonging to their community. This may also include the degree in which neighbors interact and cooperate with one another, the level

of attachment felt between residents and institutions in the community, and/or a sense of common belonging, cultural similarity or “togetherness” experienced by the population. Therefore, construction of roadways through existing communities has the potential to reduce the level of community cohesion by restricting access and creating divisions between already connected neighborhoods. Increased connections between communities and regions can be a positive effect on community cohesion particularly in areas that are heavily congested or divided by man-made or natural barriers such as wetland/stream systems.

The proposed project involves the extension of an existing roadway (Poinciana Parkway). The extension is a new, four-lane, limited-access freeway. In developing the alternatives, consideration was given to minimize effects to existing and planned neighborhoods and businesses. Based on the alternatives evaluated, existing neighborhoods will not be divided or isolated and regional connectivity between places such as Poinciana, Loughman, and ChampionsGate will be improved. The project is being designed and evaluated to increase capacity and improve mobility within burgeoning areas of Osceola and Polk Counties. It is anticipated that the project would enhance the movement of individuals, as well as goods and services, to community or neighborhood activity centers. Populations living in this area are known to utilize I-4 for their commute, thus the Poinciana Parkway Extension is one piece of the transportation infrastructure which will help provide better connectivity within the two counties.

Under the No-Build Alternative, a new four-lane freeway would not be constructed and communities along the proposed corridor would remain unchanged. Regional and local traffic movements within the existing communities would remain unchanged. Increased traffic volumes along the constrained roadway network would likely lead to a more congested network, thus hampering the flow of traffic.

The preferred alternative was selected partially due to the alternative avoiding impacts to existing neighborhoods, neighborhoods under construction, existing businesses, businesses under construction, and planned neighborhoods and businesses. As such, the preferred alternative does not divide existing neighborhoods or result in a significant division between the neighborhoods and places of interest that may be frequented by the residents (shopping centers, hospitals, schools, places of worship, parks/preserves).

DEMOGRAPHICS

This project has been developed in accordance with the *Civil Rights Act of 1964*, as amended by the *Civil Rights Act of 1968*. Additionally, the project has been developed in accordance with *Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994)*. This project has been developed without regard to race, color, national origin, age, sex, religion, disability or family status.

An analysis of minority and low-income populations (Environmental Justice or Potential EJ populations) was conducted through a review of census data and field reconnaissance. The study area for reviewing the demographics included those census tracts/blocks that overlap the study area and field review of those populations living immediately adjacent to the project improvements (see **Figure 10**). Most of the study area consists of residential, commercial, natural uplands and wetlands, and conservation lands. Per 2017 Census data (**Table 1**), the residential population in the study area is approximately 25,575.

Table 1: Demographic Data from the 2017 American Community Survey (Census Bureau)

GEOGRAPHY	CENSUS BLOCK GROUP	2017 POPULATION	PERCENT WHITE	PERCENT HISPANIC ¹	PERCENT BLACK	PERCENT OTHER ²
Poinciana Parkway Extension (PPE) Study Area		25,575	42.3	34.7	19.0	4.0
Census Tract 125.02	Block Group 2	5,596	54.9	26.6	13.3	5.2
Census Tract 125.06	Block Group 1	3,445	52.0	31.5	14.4	2.1
Census Tract 408.01	Block Group 1	925	46.4	27.8	19.5	6.3
Census Tract 411.00	Block Group 1	15,609	15.7	52.8	28.7	2.8

Source: US Census Bureau, 2013-2017 American Community Survey Five-Year Estimates.

¹Hispanic includes persons of any race with Hispanic or Latino family heritage.

²Other includes: American Indian/Alaskan Native, Asian, Native Hawaiian, other single race, and two or more races.

Table 2 illustrates the *Household Income Characteristics* summarized from the 2017 American Community Survey (ACS) five-year estimates. ACS estimates indicate that the median household income of the study area is approximately \$52,702 with approximately 16.7% of families having incomes below the federal poverty level.

Table 2: Project Area Household Income Characteristics, 2017

GEOGRAPHY	CENSUS BLOCK GROUP	MEDIAN HOUSEHOLD INCOME (DOLLARS)	PERCENTAGE OF HOUSEHOLDS WITH INCOMES BELOW POVERTY LEVEL
PPE Study Area		52,702	16.7%
Census Tract 125.02	Block Group 2	51,214	12.0%
Census Tract 125.06	Block Group 1	60,625	10.6%
Census Tract 408.01	Block Group 1	58,750	24.0%
Census Tract 411.00	Block Group 1	40,217	20.3%

Source: 2013-2017 American Community Survey Five-Year Estimates

In addition to ethnicity and household income, the ACS five-year estimates were reviewed to evaluate the percentage of households with one or more persons 65 years or older (**Table 3**) and the percentage of persons with limited English proficiency (**Table 4**). Limited English proficiency is defined as Census Tracts and Block Groups within the study area containing people that do not speak English “very well” or “well” aged five years or older.

Table 3: Project Area Elderly Population, 2017

GEOGRAPHY	CENSUS BLOCK GROUP	PERCENTAGE OF HOUSEHOLDS WITH ONE OR MORE PERSON 65 YEARS OR OLDER
PPE Study Area		19.2%
Census Tract 125.02	Block Group 2	20.4%
Census Tract 125.06	Block Group 1	20.2%
Census Tract 408.01	Block Group 1	12.9%
Census Tract 411.00	Block Group 1	23.4%
<i>Source: 2013-2017 American Community Survey Five-Year Estimates</i>		

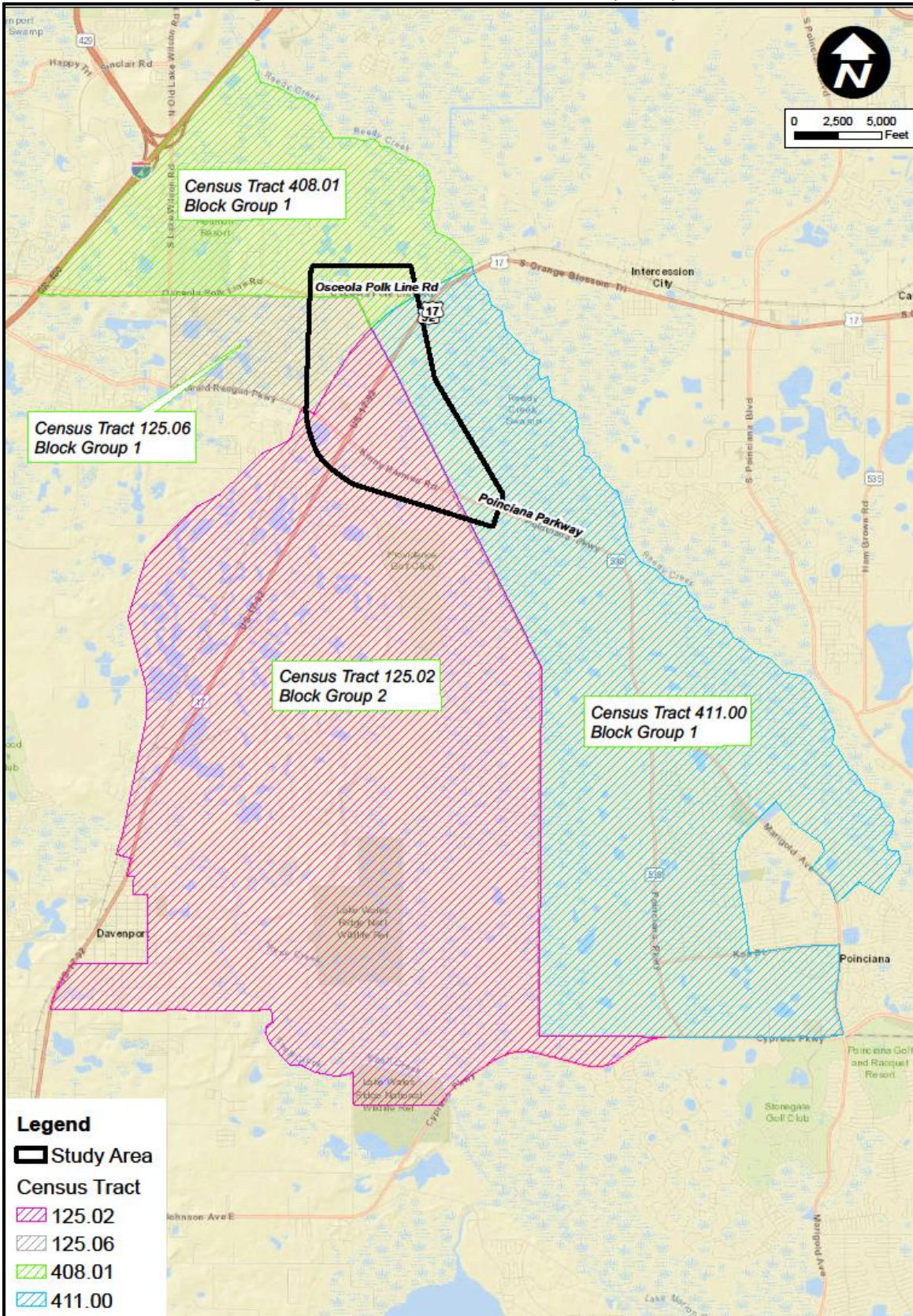
Table 4: Project Area Language Characteristics, 2017

GEOGRAPHY	CENSUS BLOCK GROUP	PERCENTAGE OF PEOPLE WHO SPEAK ENGLISH 'NOT WELL' OR 'NOT AT ALL'
PPE Study Area		8.8%
Census Tract 125.02	Block Group 2	6.6%
Census Tract 125.06	Block Group 1	8.0%
Census Tract 408.01	Block Group 1	11.4%
Census Tract 411.00	Block Group 1	9.2%
<i>Source: 2013-2017 American Community Survey Five-Year Estimates</i>		

The project is not anticipated to divide neighborhoods or adversely affect local access to community facilities. Temporary construction impacts would be the same for all populations within the study area. This proposed project will enhance mobility for all residents and the commuting public, including minority and low-income populations.

No minority or low-income populations have been identified that would be adversely impacted by the proposed project, as determined above. Therefore, in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a, no further Environmental Justice analysis is required. This project has been developed without regard to race, color, national origin, sex, age, religion, disability, or family status. No substantial impacts to the social environment are anticipated.

Figure 10: Census Tracts and Block Groups Map



A.2 ECONOMIC

The Poinciana Parkway Extension is one segment of the proposed Poinciana/I-4 Connector, which is listed in CFX's 2040 Master Plan. The original segments of the Poinciana Parkway, which were constructed in 2016, were a part of OCX's Master Plan, which was a key part of Osceola County's growth strategy. This strategy includes the concept of a limited-access expressway system serving the County's urban growth area. This expressway system reflected in the OCX Master Plan generally follows the County's Urban Growth Boundary. The four projects included in the OCX Master Plan were the Osceola Parkway Extension, Southport Connector Expressway, Northwest Connector Expressway, and the Poinciana Parkway. The extension of the Poinciana Parkway to CR 532, and eventually I-4, will help connect residents from Poinciana and the rest of Central Florida, as stated in the CFX Master Plan.

In addition to the economic impact on Osceola County, it is anticipated the Poinciana Parkway Extension will also enhance the economic growth in the greater Orlando area, particularly adjacent to the study area and south into Poinciana. These areas are already expanding with residential development. The proposed project is expected to provide economic enhancements through additional infrastructure linking employment centers and residential areas. Thus, the project is anticipated to enhance economic conditions.

A.3 LAND USE CHANGES

Future land use maps of were reviewed to determine if the proposed project will promote changes to land use within the study area in Osceola and Polk Counties (**Figures 11 and 12**, respectively). As this is a new alignment, ROW acquisition will be required resulting in changes to the existing and future land use. The most abundant future land uses within the preferred alternative include low-density residential and preservation. Therefore, there may be a decrease in the amount of open land within the study area. However, the study area is a high growth area with several Developments of Regional Impact (DRIs), Planned Developments (PDs) and other developments being proposed or permitted throughout the course of this study (e.g., Providence DRI and Tivoli Reserve). This limited-access facility will provide important transportation infrastructure to the immediate area and to the commuting public who utilize this area and the region. Extensive coordination was conducted throughout the study with stakeholders, including private and public landowners and Osceola and Polk Counties to ensure the project provides opportunities and minimizes impacts for future development. A Project Advisory Group was formed and met three times, providing input on the study alternatives. Though the recommended alternative impacts existing residential areas, this alternative avoids most of the proposed and future development areas and results in the least number of business and residential relocations. Thus, substantial impacts to future land use are not anticipated.

A.4 MOBILITY

The extension of the Poinciana Parkway to CR 532 will provide significant improvements to mobility by extending the parkway instead of depositing commuters on US 17/92 and Ronald Reagan Parkway. This extension is an additional piece of roadway, which will eventually connect to I-4. This limited-access freeway will provide improved regional connectivity between Poinciana and mixed-use developments such as ChampionsGate. Additionally, the Poinciana Parkway Extension will satisfy some travel demands on US 17/92, which will provide improved mobility within the local roadway network within the study area.

A.5 AESTHETIC EFFECTS

The topography of the project study area is relatively flat consisting primarily of single- and multi-family residential use, along with single-story commercial buildings. Views within the area are restricted by vegetation and/or other structures. For the residents currently living south and adjacent to the Poinciana Parkway, this roadway is already existing and therefore the viewshed will not change from the proposed improvements.

Most of the preferred alternative lies within the RCMB and the Upper Lakes Basin Watershed. These two properties are heavily forested and will provide a vegetative buffer for the residential communities and commercial businesses located within and around the recommended alternative. For the residential community located north of US 17/92 and south of CR 532, their viewshed will change due to a new road being constructed within this community. This community contains very large mature trees which will be preserved wherever possible during construction. This vegetation will help to block views of the proposed roadway.

There have been landscaping improvements at the interchange of I-4 and CR 532. Landscaping has also been installed along CR 532, from I-4 to Old Lake Wilson Road. Therefore, if warranted, landscaping will be included for the proposed extension of the Poinciana Parkway.

No substantial aesthetic effects are anticipated because of the proposed project.

Figure 11: Osceola County Future Land Use Map

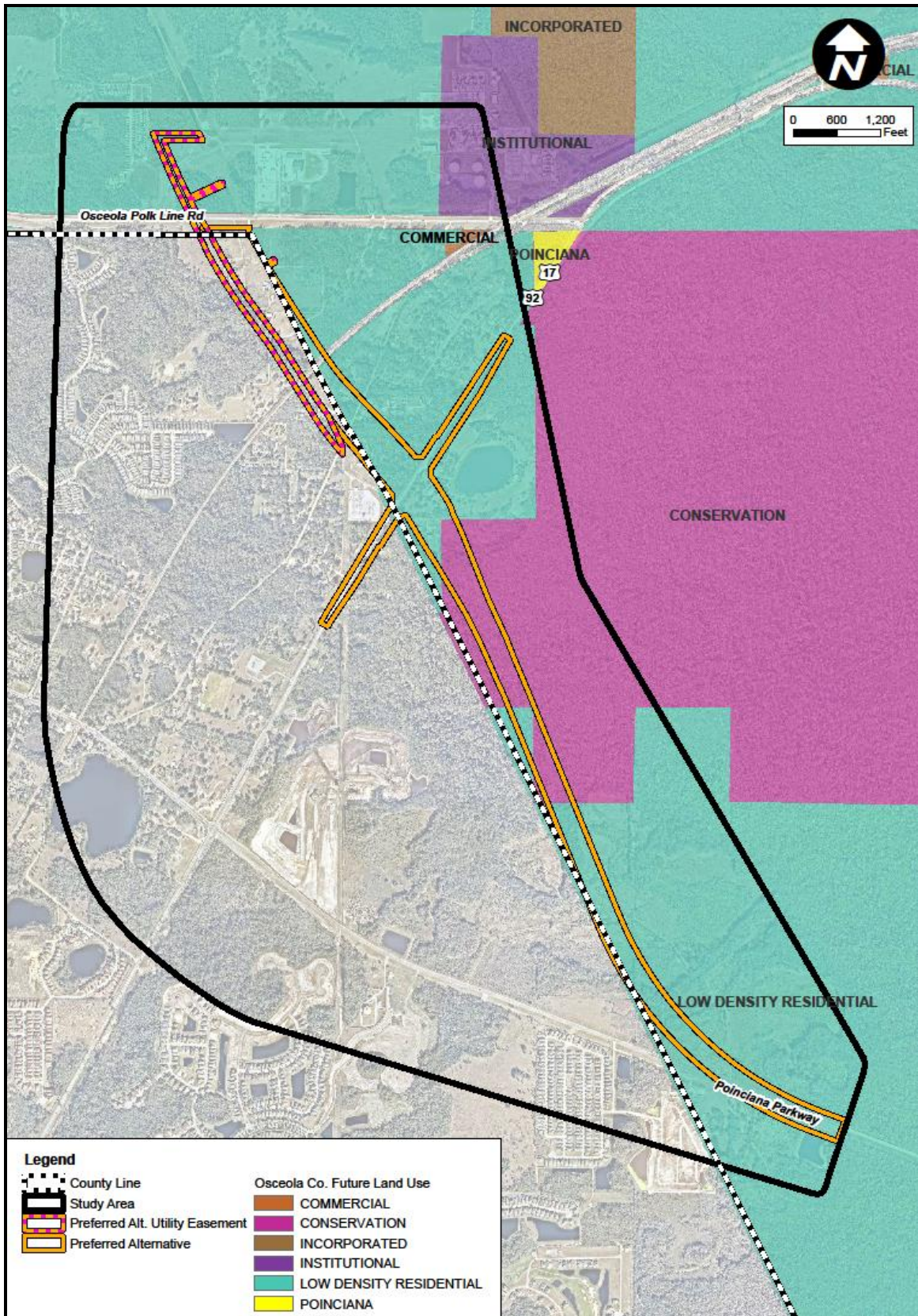
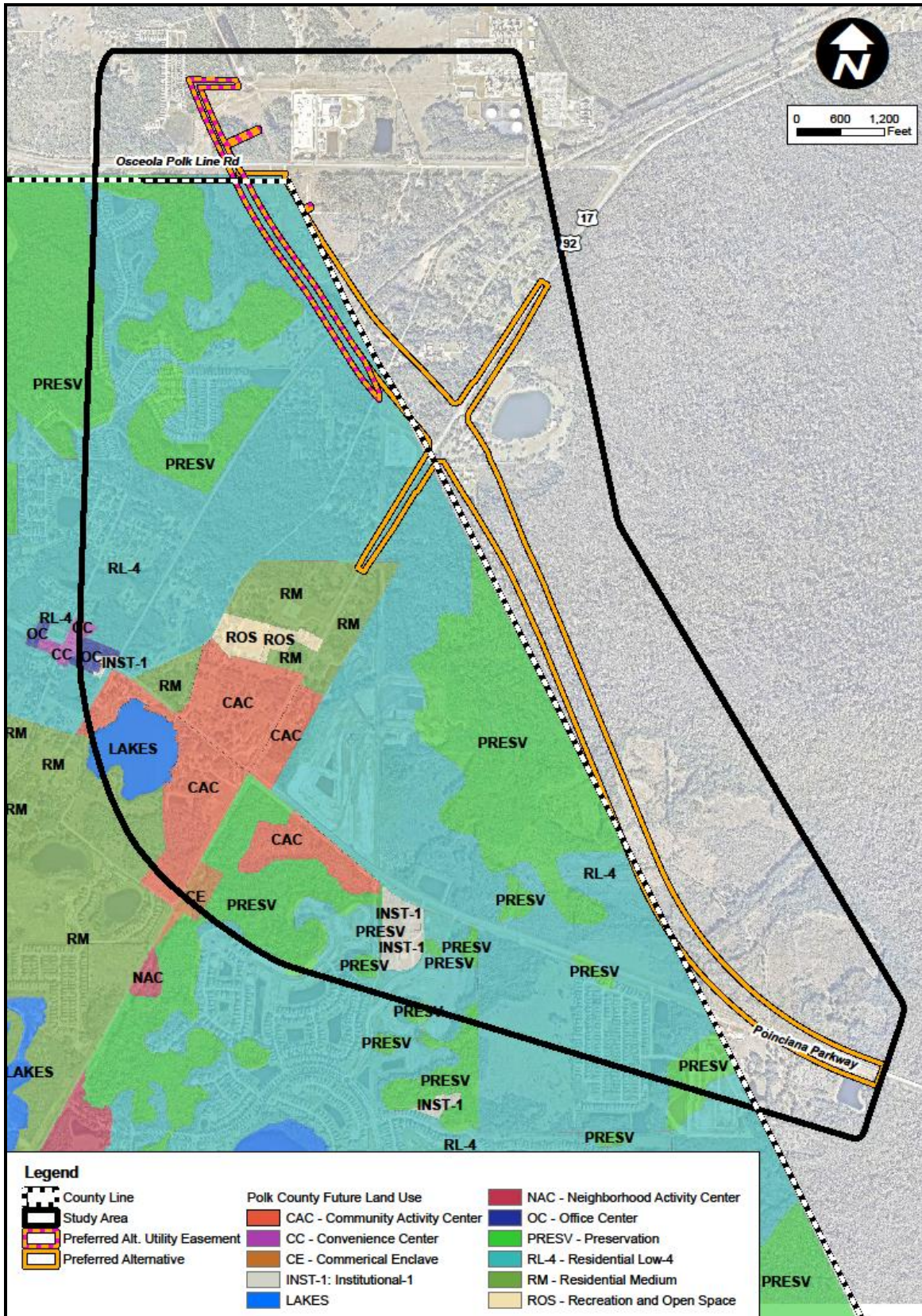


Figure 12: Polk County Future Land Use Map



A.6 RELOCATION POTENTIAL

The preferred alternative will require acquisition of approximately 131 acres for the roadway which will impact (including partially impacted parcels) 52 residential parcels and eight non-residential parcels. Another 27 acres will be needed for ponds, which will impact no additional residential parcels and no additional non-residential parcels. Approximately seventeen acres will be needed for utility easements, which will impact an additional 13 residential parcels (three with existing development on them) and no additional non-residential parcels.

To minimize the unavoidable effects of ROW acquisition and displacement of people, the CFX will carry out a Right of Way and Relocation Assistance Program in accordance with Florida Statute 421.55, Relocation of displaced persons. Although ROW acquisition will be required, no substantial impacts are anticipated because of the proposed project.

B. CULTURAL

B.1 HISTORIC SITES/DISTRICTS

In accordance with the procedures contained in 36 CFR, Part 800A, a Cultural Resource Assessment Survey (CRAS) dated June 2019, was performed for the project. In addition, this survey was prepared in conformity with standards set forth in Part 2, Chapter 8 (*Archaeological and Historic Resources*) of the FDOT PD&E Manual (revised, January 2019).

The purpose of this CRAS was to locate and evaluate archaeological and historic resources within the Area of Potential Effect (APE) and to assess their eligibility for inclusion in the *National Register of Historic Places* (NRHP) according to the criteria set forth in 36 CFR Section 60.4.

The architectural survey resulted in the identification and evaluation of 10 historic resources in the APE, including four previously recorded resources and six newly recorded resources. The previously recorded resources include two linear resources (8PO07154/8OS02567 (Old Kissimmee Road) and 8PO07219/8OS02540 (South Florida Railroad)) and two structures (8PO07156 and 8PO07157). The newly recorded historic resources include six structures (8OS02937, 8PO08109, and 8PO08197-8PO08200). In addition, during the field review, one previously recorded resource (8PO07155) was confirmed to have been previously demolished.

The State Historic Preservation Office (SHPO) stated that there was insufficient information to determine eligibility for either 8PO07154/8OS02567 or 8PO07219/8OS02540 within Section 6 of Township 26 South, Range 28 East. Both 8PO07156 and 8PO07157 were determined ineligible by SHPO on January 30, 2009.

Based on the results of the current survey, SEARCH recommends that the South Florida Railroad (8PO07219/8OS02540) is eligible for the NRHP under Criteria A and C. The remaining nine historic resources are recommended ineligible for the NRHP due to a lack of historic associations, architectural significance, and/or historic integrity. The Poinciana Parkway Extension project, as it relates to the South Florida Railroad (8PO07219/8OS02540), proposes to intersect the railroad by bridging the resource rather than an at-grade crossing. No historic fabric associated with the resource will be compromised by the project. Furthermore, railroad traffic will not be impeded by the project. Although the introduction of the Poinciana Parkway Extension and associated bridging will alter the

setting to a degree, the character-defining features of the railroad bed and its continued use as a transportation corridor are more significant for its ability to convey its historic associations than its viewshed. Therefore, it is the opinion of SEARCH that the proposed project will pose no adverse effect to the South Florida Railroad (8PO07219/8OS02540). No additional architectural survey is recommended.

The CRAS was forwarded to SHPO for review on June 13, 2019. SHPO supplied comments indicating non-concurrence with the findings of the CRAS and requested additional information (see **Appendix C – SHPO RAI**). Specifically, SHPO did not concur with the determinations of eligibility for the Old Kissimmee Road (PO7154 and OS2567). SHPO also stated that the CRAS was not complete as the CRAS indicated that several parcels were unable to be accessed and tested. Lastly, SHPO asked if the Reedy Creek Mitigation Bank would be tested in the future. A revised CRAS, addressing SHPO's concerns, was submitted on August 6, 2019. SHPO concurred with the findings of the revised CRAS on September 6, 2019 with the following condition: the concurrence of effects and eligibility apply only to the surveyed portions and resources of the project area. Effect determinations for the project as a whole will need to be re-assessed once survey is completed for the remainder of the project area (see **Appendix D – SHPO Concurrence**).

The revised CRAS was sent to the Seminole Tribe of Florida (STOF) on September 6, 2019. The STOF concurred with the findings of the CRAS in a letter dated September 26, 2019 (see **Appendix E – STOF Concurrence**).

Based on the results of the CRAS, the proposed project will pose no adverse effect to cultural resources listed or eligible for listing on the NRHP and thus no substantial impacts to cultural resources are anticipated.

B.2 ARCHAEOLOGICAL SITES

The archaeological field survey involved the excavation of 94 subsurface shovel tests within the APE. The archaeological field survey yielded two newly documented prehistoric archaeological sites (8OS02940 and 8OS02941), however both are ineligible for listing with the NRHP, in the opinion of SEARCH. Six previously recorded archeological sites are within or intersect the APE (8OS00150, 8OS00151, 8OS01722, 8OS02765, 8PO03968, and 8PO07756). However, the SHPO has determined all six sites are ineligible for listing with the NRHP. There were several areas that were inaccessible due to access issues. These areas will be addressed with supplemental testing following land acquisition of the parcels if the project moves forward to the design and ROW acquisition phases.

B.3 RECREATION AREAS

The study area contains recreation areas that are available to the public. Loughman Park is in the Loughman community; however, the preferred alternative will have no direct impacts to this park nor will access to this park be impacted. There is another unnamed community park within Loughman along Old Kissimmee Road. This park will also have no direct impacts nor will access to this park be impacted by the proposed project. The Bill Johnston Memorial Pathway to Ronald Reagan Parkway Connector recreational trail is located along Old Kissimmee Road. The preferred alternative will be bridging Old Kissimmee Road and therefore will not impact the recreational trail. The preferred alternative will be impacting the publicly-owned Upper Lakes Basin Watershed. This resource is owned and maintained by the SFWMD. Although parts of this resource are open to the public, the section within the study area,

which will be impacted by the preferred alternative, is not open to the public. Therefore, the preferred alternative will have no impacts to recreation areas within the Upper Lakes Basin Watershed.

C. NATURAL

C.1 WETLANDS AND OTHER SURFACE WATERS

A wetland evaluation was conducted, and the results were summarized in the *Natural Resource Evaluation (NRE)* (July 2019). Two Florida Land Use, Cover, and Forms Classification System (FLUCFCS) codes of surface waters and seven FLUCFCS codes of wetlands were identified within the study area (see **Figures 13A-13C**). The total direct impacts to surface waters and wetlands for the preferred alternative is approximately 52 acres, as shown in **Table 5**. Secondary impacts were evaluated based on a 50-foot buffer from the wetlands. Wetland impact areas that are located adjacent to wetlands or uplands that are part of RCMB may require additional secondary impacts buffers, but this will be determined during permitting and design. The total secondary impacts to wetlands are 17 acres, as shown in **Table 6**. A functional assessment using the Uniform Mitigation Assessment Methodology (UMAM) was completed for the impacted wetlands to determine the functional loss that would need to be mitigated. The total functional loss due to direct impacts is 36.1 units for the recommended alternative. Details of the wetland impacts, including functional values and UMAM credits needed, are included in **Table 7**.

Table 5: Estimated Direct Wetland and Surface Water Impacts for the Preferred Alternative

SW/WL Number	Alt 5A Without Slip Ramps (acres)
SW 3	<0.5
Total Surface Water Impacts	<0.5
WL 2, 6, 8, 9, 30	8
WL 3, 7	2
WL 4	0.7
WL 18, 21, 21A, 22	12
WL 23	26
WL 24	2
WL 29	1
Total Wetland Impacts	51.7
Grand Total Surface Water and Wetland Impacts	51.7

Table 6: Estimated Secondary Wetland Impacts by Alternative

SW/WL Number	Alt 5A Without Slip Ramps (acres)
WL 2	<0.5
WL 4	2
WL 9	1
WL 18	
In RCMB	1
WL 21	
In RCMB	-
Portion not in Easement or RCMB	<0.5
WL 21A	
In RCMB	<0.5
WL 22	
In RCMB	1
In ULBW	1
WL 23	
In RCMB	1
In ULBW	6
Portion not in RCMB or ULBW	1
WL 29	1
WL 30	2
Total Secondary Wetland Impacts	17

RCMB-Reedy Creek Mitigation Bank; ULBW-Upper Lakes Basin Watershed.

Table 7: Potential Wetland Functional Loss

Alternative	Wetland Number/FLUCFCS	Direct Impacts (Acres)	UMAM Composite Score	Potential Functional Loss ¹
Alt 5A Without Slip Ramps	WL 2, 6, 8, 9, 30/610	8	0.33	-3
	WL 3, WL 7/643	2	0.17	-0.3
	WL 4/630	0.7	0.3	-0.2
	WL 18, 21A, 22/610	12	0.67	-8
	WL 23/630	26	0.87	-22
	WL 24/611	2	0.8	-2
	WL 29/621	1	0.63	-0.6

¹ Functional loss rounded to the nearest whole integer.

The proposed improvements consist of the extension of Poinciana Parkway on a new alignment. As described in the *NRE* (June 2019), the study area is in a rapidly developing area and an area with several large wetland systems associated with Reedy Creek and the Reedy Creek Watershed. Thus, complete avoidance of wetlands, habitat, and wildlife is not feasible with any build alternative. Furthermore, the impact evaluation must consider impacts to existing homes, businesses, communities, cultural resources and utilities and balance the impacts with the natural resource impacts.

To further reduce wetland impacts, it was determined that the preferred alternative would include a bridge through the Upper Lakes Basin Watershed property and most of the RCMB. This reduces the direct fill impacts to the RCMB, allows for continued continuity for management of the RCMB, reduces habitat fragmentation, provides for greater wildlife connectivity, and reduces floodplain impacts to both the RCMB and Upper Lakes Basin property.

Almost all impacts for any of the alternatives will be to forested systems, therefore, primarily forested credits will be required. The most likely feasible source for forested credits will be RCMB due to its proximity and availability of both state and federal credits. Other mitigation banks within the same basin as the study area include Florida Mitigation Bank and Southport Ranch Mitigation Bank. CFX will coordinate with all state and federal agencies during design and permitting to develop a mitigation plan for the wetland impacts associated with this project.

The CFX has undertaken all actions to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. Nonetheless, the CFX has determined that there is no practicable alternative to construction impacts occurring in wetlands. Any unavoidable impacts to wetlands will be mitigated to achieve no net loss of wetland function.

Figure 13A: Wetlands and Surface Waters Map

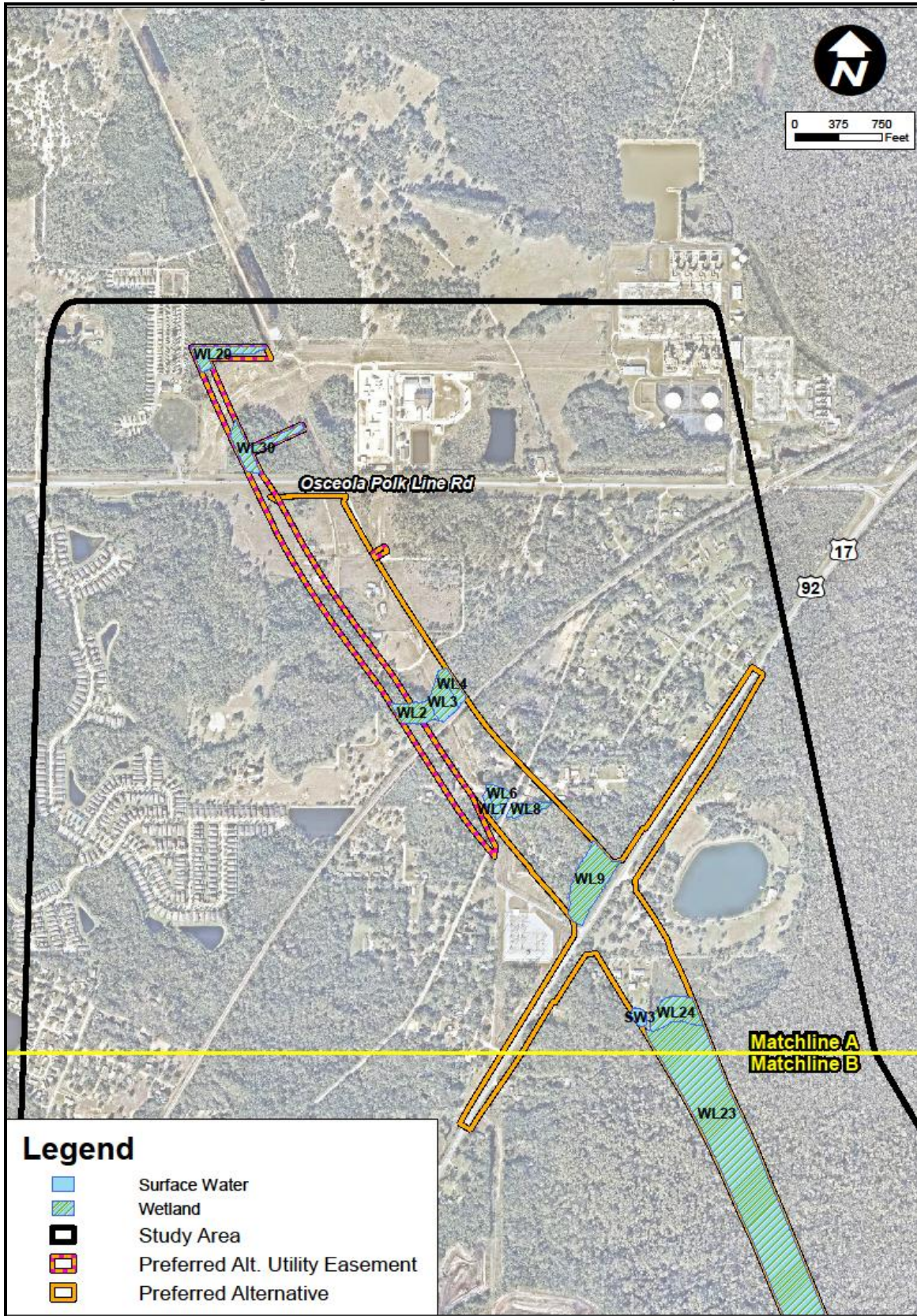
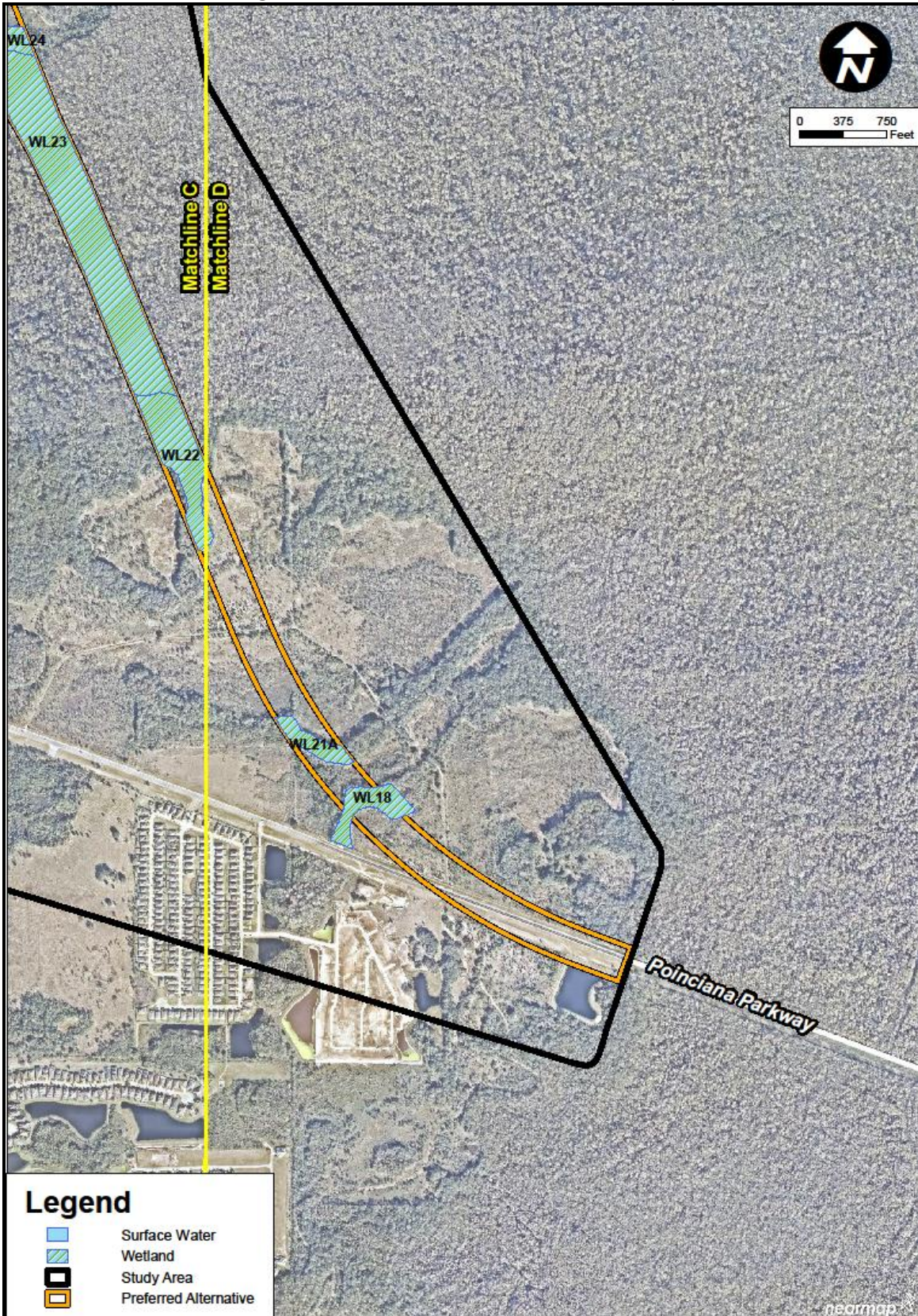


Figure 13B: Wetlands and Surface Waters Map



Figure 13C: Wetlands and Surface Waters Map



C.2 AQUATIC PRESERVES AND OUTSTANDING FLORIDA WATERS

There are no aquatic preserves or Outstanding Florida Waters within the study area and therefore the preferred alternative will not impact either of these resources.

C.3 WATER QUALITY AND STORMWATER

A Water Quality Impact Evaluation (WQIE) was conducted for the project to comply with the Clean Water Act. A copy of the WQIE is included in **Appendix F**. The results of the WQIE indicate that the project will not result in significant effects to water quality. A review of USEPA Sole Source Aquifer Protection Program maps of sole source aquifers in the southeastern United States indicated that the study area is located within the Biscayne Sole Source Aquifer and Recharge Zone. The project will meet all applicable SFWMD/SFWMD¹ criteria related to Water Quality. The project is currently a non-federal action receiving no federal monies; therefore, concurrence from the USEPA is not required according to the Safe Drinking Water Act. Best Management Practices (BMPs) that would control erosion, sediment release, and storm water runoff to minimize adverse impacts on surface water resources will be implemented during design, permitting and construction.

A stormwater management system will be designed for the preferred alternative and will include wet detention stormwater management facilities, as described in the *Pond Siting Report* (June 2019). Six stormwater ponds were evaluated for the preferred alternative (**Figure 14**). The design of the stormwater facilities will comply with the standards set forth by CFX, SFWMD, SWFWMD, Polk County, and Osceola County. As discussed in the *Pond Siting Report*, the study area is within the WBID 3170C – Reedy Creek Above Lake Russel which is not an Outstanding Florida Water or an impaired water, but it is part of the Lake Kissimmee Total Maximum Daily Load (TMDL) Basin and the Lake Okeechobee Basin Management Action Plan (BMAP) which are impaired for nutrients. Thus, to minimize water quality impacts, the stormwater management system design will include a site-specific pollutant loading analysis and an additional 50% water quality treatment volume.

Surface water management system will be designed to maintain and support existing hydrologic flow patterns and regimes and avoid gradient drawdowns of the wetlands through a design that incorporates appropriate control elevations.

Construction impacts will be minimized through implementation of BMPs.

¹ The project is in both SFWMD and SWFWMD jurisdictions, but primarily within SFWMD jurisdiction. Based on coordination with SFWMD, the decision on which agency will permit the project will be made following final selection of the preferred alternative. Thus, both agencies are included in this document.

Figure 14: Stormwater Pond Map



C.4 WILD AND SCENIC RIVERS

There are no wild and/or scenic rivers within the study area, thus the proposed project would have no involvement with wild and scenic rivers.

C.5 FLOODPLAINS

The study area is located within Federal Emergency Management Agency (FEMA) flood zones AE, A, X and X500 as shown on **Figure 15**. Zones A and AE include areas within the 100-year floodplain. Zone X and Zone X500 represent areas outside the 100-year floodplain. There is one small area that is a regulated floodway within the study area; however, it is outside of the preferred alternative limits and will not be impacted. The preferred alternative will impact 6 acres of flood zone AE and 15 acres of flood zone A. These acreages include existing roadways, therefore actual floodplain impacts may be lower than reported here.

A conceptual analysis was conducted to evaluate the floodplain impacts and the drainage patterns and the results were summarized in the Location Hydraulic Report (May 2019). The hydraulic structures proposed along the new alignment will be designed to cause no adverse increase in flood stages and flood limits. These changes will not result in any adverse impacts in the natural and beneficial floodplain values or any changes in flood risk or damage.

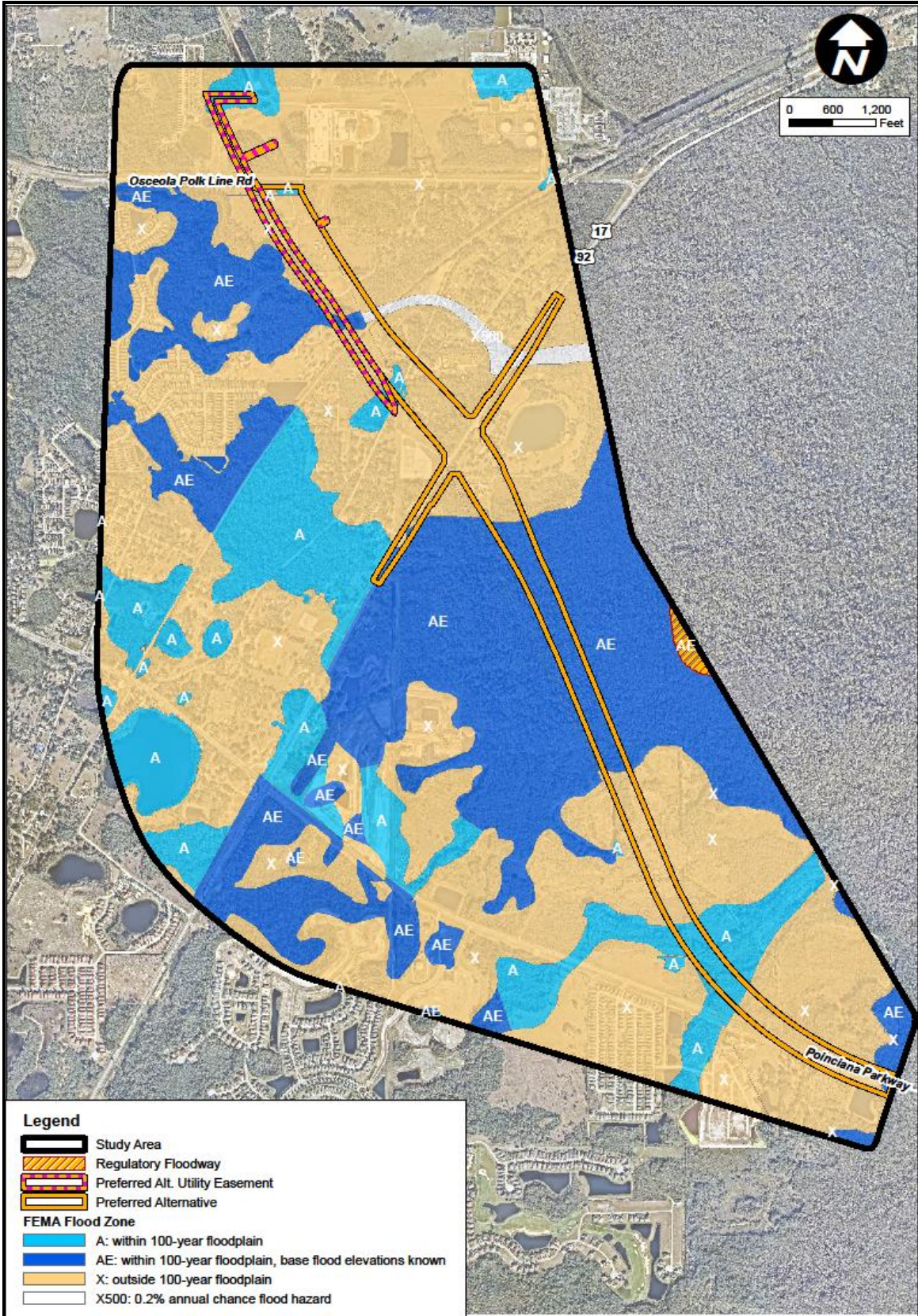
Additional right-of-way is anticipated for offsite floodplain compensation sites to mitigate for impacts to the floodplain on a cup-for-cup basis and a determination to the best location for compensation should be performed during the design phase. Therefore, it has been determined that the encroachment type for this study is classified as “minimal.”

The cross drain analysis shows that no adverse impacts due to the extension or incorporation of cross drains along the Poinciana Parkway Extension improvements will occur.

C.6 COASTAL BARRIER RESOURCES

The proposed project would have no involvement with coastal barrier resources.

Figure 15: FEMA Flood Insurance Rate Map



C.7 PROTECTED SPECIES AND HABITAT

A *Protected Species and Habitat Assessment* was conducted, and the results are summarized in the *NRE* (July 2019). **Table 8** summarizes the federally listed species evaluated during the protected species evaluation:

Table 8: Federally Protected Species Potentially Occurring in the Study Area

Common Name	Scientific Name	Federal Status	State Status ¹	Likelihood of Occurrence
Mammals				
Florida black bear	<i>Ursus americanus floridanus</i>	NL*	NL*	Medium
Birds				
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	FE	None
Everglade snail kite	<i>Rostrhamus sociabilis</i>	E	FE	None
Florida grasshopper sparrow	<i>Ammodramus savannarum floridanus</i>	E	FE	None
Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	T	FT	None
Florida scrub-jay	<i>Aphelocoma coerulescens</i>	T	FT	None
Wood stork	<i>Mycteria americana</i>	T	FT	High
Florida burrowing owl	<i>Athene cunicularia floridana</i>	NL	ST	Medium
Florida sandhill crane	<i>Grus canadensis pratensis</i>	NL	ST	High
Southeastern American kestrel	<i>Falco sparverius paulus</i>	NL	ST	Medium
Bald eagle	<i>Haliaeetus leucocephalus</i>	NL**	NL**	High
Reptiles				
Eastern indigo snake	<i>Drymarchon couperi</i>	T	FT	Medium
Florida sand skink	<i>Plestiodon reynoldsi</i>	T	FT	High
Blue-tailed mole skink	<i>Plestiodon egregius lividus</i>	T	FT	High
Gopher tortoise	<i>Gopherus polyphemus</i>	C	ST	High
Plants				
Short-leaved rosemary	<i>Conradina brevifolia</i>	E	FE	Medium
Lewton's polygala	<i>Polygala lewtonii</i>	E	FE	Medium
Small's jointweed/Sandlace	<i>Polygonella myriophylla</i>	E	FE	Medium
Pygmy fringe-tree	<i>Chionanthus pygmaeus</i>	E	FE	Medium
Perforate reindeer lichen	<i>Cladonia perforata</i>	E	FE	Medium
Avon park rabbit-bells	<i>Crotalaria avonensis</i>	E	FE	Low
Garrett's scrub balm	<i>Dicerandra christmanii</i>	E	FE	Medium
Highlands scrub hypericum	<i>Hypericum cumulicola</i>	E	FE	Medium
Florida blazing star	<i>Liatris ohlingerae</i>	E	FE	Medium
Scrub lupine	<i>Lupinus aridorum</i>	E	FE	Medium
Britton's beargrass	<i>Nolina brittoniana</i>	E	FE	Medium
Florida jointweed	<i>Polygonella basiramia</i>	E	FE	Medium
Scrub plum	<i>Prunus geniculata</i>	E	FE	Medium

Common Name	Scientific Name	Federal Status	State Status ¹	Likelihood of Occurrence
Clasping warea	<i>Warea amplexifolia</i>	E	FE	Low
Carter's mustard	<i>Warea carteri</i>	E	FE	Medium
Scrub buckwheat	<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	T	FT	Medium
Florida bonamia	<i>Bonamia grandiflora</i>	T	FT	Medium
Scrub pigeon-wing	<i>Clitoria fragrans</i>	T	FT	Low
Paper-like whitlow-wort	<i>Paronychia chartacea</i> ssp. <i>chartacea</i>	T	FT	Low
Nodding pinweed	<i>Lechea cernua</i>	NL	ST	Medium
Pine-woods bluestem	<i>Andropogon arctatus</i>	NL	ST	Medium
Ashe's savory	<i>Calamintha ashei</i>	NL	ST	Low
Many-flowered grass-pink	<i>Calopogon multiflorus</i>	NL	ST	Low
Chapman's sedge	<i>Carex chapmanii</i>	NL	ST	Medium
Sand butterfly pea	<i>Centrosema arenicola</i>	NL	SE	Low
Piedmont jointgrass	<i>Coelorachis tuberculosa</i>	NL	ST	Low
Chapman's skeletongrass	<i>Gymnopogon chapmanianus</i>	NL	ST	Medium
Hartwrightia	<i>Hartwrightia floridana</i>	NL	ST	Low
Star anise	<i>Illicium parviflorum</i>	NL	SE	Medium
Pine pinweed	<i>Lechea divaricata</i>	NL	SE	Medium
Florida spiny-pod	<i>Matelea floridana</i>	NL	SSE	Medium
Celestial lily	<i>Nemastylis floridana</i>	NL	SE	Medium
Florida beargrass	<i>Nolina atopocarpa</i>	NL	ST	Medium
Cutthroat grass	<i>Panicum abscissum</i>	NL	SE	Medium
Giant orchid	<i>Pteroglossaspis ecristata</i>	NL	ST	Medium
Florida willow	<i>Salix floridana</i>	NL	SE	Low
Scrub bluestem	<i>Schizachyrium niveum</i>	NL	SE	Low

Based on Florida's Endangered and Threatened Species updated December 2018 available on <http://myfwc.com/wildlifehabitats/imperiled/> and the 5B-40.0055 Florida Administrative Code (FAC) Regulated Plant Index.

Federal Status: E = Endangered; T = Threatened; T(S/A) = Threatened due to Similarity of Appearance; C = Candidate Species; NL = Not Listed
State Status: FE = Federally Endangered; FT = Federally Threatened; FT(S/A) = Federally Threatened due to Similarity of Appearance. ST= State Threatened; SE = State Endangered; SSC = Species of Special Concern. Note: Coordination is not required with FWC for federally listed species.
Bold = observed during field reconnaissance

*The Florida Black Bear is still protected under Florida Black Bear Conservation Rule 68A-4.009 (F.A.C.) and the FWC Florida Black Bear Management Plan.

**The Bald eagle is still protected under the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act and FWC Management Plan regulations.

Twenty-five federally-listed species and twenty-five state-listed species may occur within the study area. Pedestrian surveys for gopher tortoise burrows, listed plant species and sand and blue-tailed mole skink were conducted on September 13, and October 2, 2018. Sand and/or blue-tailed mole skink tracts were observed within the study area but not within the proposed ROW for the preferred alternative. As some areas of the project area were not accessible during this study, a survey will be initiated during design and permitting within the preferred alternative to determine the presence of skinks. Audubon's crested caracara surveys were conducted January through April 2019, documenting that crested caracaras are

not nesting within the alignments of any of the alternatives. Florida scrub-jay surveys were conducted March 11-15, 2019, documenting that there is no occupied scrub-jay habitat within the alignments of any of the alternatives. Effects determinations made for the federally listed species evaluated are shown in **Table 9**.

Table 9: Federally Listed Species Effects Determinations

Federally Listed Species	Effect Determination
Red-cockaded woodpecker	No effect
Everglade snail kite	No effect
Florida grasshopper sparrow	No effect
Audubon's crested caracara	No effect
Florida scrub-jay	No effect
Wood stork	May affect, not likely to adversely affect
Eastern indigo snake	May affect
Florida sand skink	May affect, not likely to adversely affect
Blue-tailed mole skink	May affect, not likely to adversely affect
Short-leaved rosemary	May affect, not likely to adversely affect
Lewton's polygala	May affect, not likely to adversely affect
Small's jointweed/Sandlace	May affect, not likely to adversely affect
Pygmy fringe-tree	May affect, not likely to adversely affect
Perforate reindeer lichen	May affect, not likely to adversely affect
Avon park rabbit-bells	May affect, not likely to adversely affect
Garrett's scrub balm	May affect, not likely to adversely affect
Highlands scrub hypericum	May affect, not likely to adversely affect
Florida blazing star	May affect, not likely to adversely affect
Scrub lupine	May affect, not likely to adversely affect
Britton's beargrass	May affect, not likely to adversely affect
Florida jointweed	May affect, not likely to adversely affect
Scrub plum	May affect, not likely to adversely affect
Clasping warea	May affect, not likely to adversely affect
Carter's mustard	May affect, not likely to adversely affect
Scrub buckwheat	May affect, not likely to adversely affect
Florida bonamia	May affect, not likely to adversely affect
Scrub pigeon-wing	May affect, not likely to adversely affect
Paper-like whitlow-wort	May affect, not likely to adversely affect

Twenty-two Florida Fish and Wildlife Conservation Commission (FWC) state-listed species were evaluated in this study. Six potentially occupied gopher tortoise burrows were observed within the study area. A 100% gopher tortoise survey will be conducted during design and permitting, and any gopher tortoises observed within 25 feet from construction will be relocated pursuant to FWC guidelines and regulations. The following additional surveys will be conducted during design and permitting for state listed species: southeastern American kestrel, Florida sandhill crane, and Florida burrowing owl. No adverse effects are anticipated to state listed species.

Upland land cover was classified according to FLUCFCS. A summary of the proposed impacts to native, upland habitats are shown in **Table 10**.

Table 10: Habitat Impacts for the Preferred Alternative

FLUCFCS Code	Description	Alt 5A Without Slip Ramps
211	Improved Pastures	19
213	Woodland Pastures	8
310	Herbaceous (Dry Prairies)	0.7
320	Shrub and Brushland	2
410	Upland Coniferous Forests	4
421	Xeric Oak	7
434	Hardwood-Conifer Mixed	4
441	Pine Plantations	29

C.8 ESSENTIAL FISH HABITAT

There is no essential fish habitat (EFH) within the study area, thus the proposed project would have no involvement with EFH.

D. PHYSICAL

D.1 HIGHWAY TRAFFIC NOISE

A noise analysis was conducted in accordance with Part 2, Chapter 18 of the PD&E Manual and Title 23, Code of Federal Regulations (CFR), Part 772 (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. Noise-sensitive areas, including residences and community facilities (religious facilities, cemeteries) are located within the study area. As discussed in the *Noise Study Report* dated July 2019, noise levels were predicted at 57 receptor points representing 74 noise sensitive sites, however because this is a new alignment, several existing receptors that fall within the expected future ROW will need to be relocated. Forty-five receptor points, representing 62 noise sensitive sites will remain.

The results of the analysis indicate that existing (2019) exterior traffic noise levels are predicted to range from 46.2 dB(A) to 67.3 dB(A) at the 74 evaluated noise sensitive sites adjacent to Poinciana Parkway Extension. Future year (2045) no-build alternative exterior traffic noise levels are predicted to range from 46.2 dB(A) to 67.3 dB(A). With the proposed extension of Poinciana Parkway, the exterior traffic noise levels at the remaining noise sensitive sites for the future year (2045) build alternative are predicted to range from 51.1 dB(A) to 66.4 dB(A). Noise levels are predicted to approach or exceed the NAC (i.e., 66 dB(A) for Activity Category B) established by the Federal Highway Administration (FHWA) for the Build condition at one location (RWB01-004) that will remain after the completion of construction. No receptors, that are to remain after the completion of the project, are projected to experience a substantial increase of 15 dB(A) or greater of traffic noise from the proposed extension of Poinciana Parkway.

In addition to residences, NAC Activity Category B, Title 23 Code of Federal Regulations Part 772 specifies other Activity Categories addressing non-residential noise sensitive sites. Within the project limits no impacts are predicted at any non-residential noise sensitive sites that will remain after the completion of construction.

Based on the noise analyses performed to date, there are no feasible solutions available to mitigate the noise impacts at the location identified in WB01, as there is only one isolated impacted receptor. Further barrier analysis in this location would require two impacted receptors to warrant further consideration of noise impact mitigation.

During the construction phase of the proposed project, short-term noise and vibration may be generated by stationary and mobile construction equipment. The construction noise and vibration will be temporary at any location and will be controlled by adherence to the most recent edition of the *FDOT Standard Specifications for Road and Bridge Construction*. Should any noise or vibration issue arise during construction, the Project Engineer, in concert with the CFX Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts. The preferred alternative is not expected to result in substantial effects from highway traffic noise.

D.2 AIR QUALITY

An air quality review of the subject project was conducted, and the results can be found in the *Air Quality Screening Analysis Technical Memorandum* (July 2019). The operations of the proposed facility are anticipated to result in maximum one-hour CO concentrations of 5.6 ppm and maximum eight-hour CO concentrations of 3.4 ppm. Since these values do not exceed the National Ambient Air Quality Standards (NAAQS) established by the USEPA of 35 ppm for a one-hour concentration and 9 ppm for an eight-hour concentration, no adverse air quality impact will result from the operation of this project. Construction activities may cause minor short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts can be minimized by adherence to the BMP within the *FDOT Standard Specifications for Road and Bridge Construction*. The preferred alternative is not expected to result in substantial effects on air quality.

D.3 CONTAMINATION

A Level 1 *Contamination Screening Evaluation Report* (CSER) (May 2019) was prepared using historical research, review of environmental record databases, site reconnaissance, and detailed file reviews. A total of nine sites/facilities and/or properties were identified, located in and around the project corridor, which may present the potential for finding petroleum contamination or hazardous materials and therefore may impact the proposed improvements for this project. A summary of potentially contaminated sites from the CSER is included in **Appendix G**.

The preferred alternative will not directly impact any of the potential contamination sites documented in the CSER as Medium or High Risk (See **Appendix G** for Contamination Sites Map and Table).

D.4 UTILITIES AND RAILROADS

Twenty-nine Utility Agency/Owners (UAO) have been identified within the project study area through a Sunshine 811 Design Ticket and initial utility coordination efforts. These utilities are described in the following sections.

ELECTRICAL

Three electrical UAOs have been identified within the project study area, including transmission and distribution facilities. **Table 11** identifies these UAOs and provides a general description of their facilities located on the project.

Table 11: Existing Electrical Utilities in the Study Area

Utility Company	Facility	Description
Duke Energy-Transmission	Transmission Electric	<ul style="list-style-type: none"> • Intercession City Power Plant on the north side of CR 532 just west of US 17/92. • Transmission substation located along the south side of Osceola Polk Line Road just west of Reunion Boulevard. • Transmission substation located along the west side of US 17/92 approximately 0.9 mile south of CR 532. • Transmission substation located along the west side of US 17/92 approximately 1.4 miles south of CR 532. • Transmission lines along the south side of I-4 in dedicated easements from SR 429 heading east. • Transmission lines in dedicated easements connecting Intercession City Power Plant and substations, heading north and south.
Duke Energy-Distribution	Distribution Electric	<ul style="list-style-type: none"> • Electric distribution service throughout the project.
Tampa Electric Company	Electric	<ul style="list-style-type: none"> • Distribution electric facilities for local businesses and residents in Polk County.

GASOLINE AND JET FUEL

Kinder Morgan maintains gasoline and jet fuel facilities within the project study area. The two pipelines are a part of Kinder Morgan's Tampa to Taft pipeline system and are the sole petroleum pipeline supplying jet fuel to the Orlando International Airport. **Table 12** identifies these pipelines and provides a general description of their facilities located within the project study area.

Table 12: Existing Gasoline and Jet Fuel Utilities in the Study Area

Utility Company	Facility	Description
Kinder Morgan / CFP	Gasoline / Jet Fuel Pipeline	<ul style="list-style-type: none"> 16-inch gasoline with batch ethanol pipeline along the south side of I-4 to SR 429, where the pipeline turns southeast along Reedy Creek Improvement District parcels and then an easement running adjacent to Duke Energy’s transmission easement exiting the project study area to the south. 10-inch jet fuel pipeline along the north side of CSX’s railroad for the limits of the project. The pipeline (Tampa to Taft) runs from Tampa to Orlando International Airport for aviation fueling.

NATURAL GAS

Six natural gas UAOs have been identified within the project study area, including transmission and distribution facilities. **Table 13** identifies these UAOs and provides a general description of their facilities located within the project study area.

Table 13: Existing Natural Gas Utilities in the Study Area

Utility Company	Facility	Description
Florida Southeast Connection	Gas	<ul style="list-style-type: none"> 36-inch natural gas pipeline starting from the north side of Osceola Polk Line Road heading south in an easement adjacent to Duke Energy’s transmission lines to Orange Blossom Trail. 36-inch natural gas pipeline continues south on Orange Blossom Trail, transitioning from the east and west side of the road, and exits the project study area in Polk County.
Spectra Energy-Sabal Trail	Natural Gas Pipeline	<ul style="list-style-type: none"> 36-inch natural gas pipeline along the north side of Osceola Polk Line Road, from just west of Duke Energy’s power plant to Orange Blossom Trail, where the pipeline continues east along the north side of CSX’s ROW.
Gulfstream Natural Gas	Gas Pipeline	<ul style="list-style-type: none"> 24-inch pipeline runs along the north side of Osceola Polk Line Road to serve Duke Energy Intercession City Power Plant.
Florida Public Utilities	Gas	<ul style="list-style-type: none"> Distribution gas services for Polk and Osceola Counties within the project study area.
Kissimmee Utility Authority (KUA)	Gas Pipeline	<ul style="list-style-type: none"> Natural gas pipeline along Osceola Polk Line Road to KUA Cane Island Power Plant.
TECO Peoples Gas	Gas	<ul style="list-style-type: none"> Gas distribution services for local business and residential areas throughout the project study area.

OTHER UTILITIES

Nineteen other UAOs have been identified within the project study area, including cable television (CATV), phone, fiber, water and sewer utilities. **Table 14** identifies these UAOs and provides a general description of their facilities located within the project study area.

Table 14: Existing Other Utilities in the Study Area

Utility Company	Facility	Description
Charter Communications	CATV/Phone/Fiber	<ul style="list-style-type: none"> Aerial cable and phone attached to existing power company pole lines with buried service drops to customers.
Spectrum	CATV/Phone/Fiber	<ul style="list-style-type: none"> Cable/phone within the study corridor. Facilities are primarily aerial and attached to existing power company pole lines with buried service drops to customers.
Duke Energy-Fiber	Fiber	<ul style="list-style-type: none"> Aerial fiber attached to Duke distribution power poles.
TOHO Water Authority	Water/Sewer	<ul style="list-style-type: none"> Water and sewer facilities throughout the project study area for all of Osceola County and northern portions of Polk County.
Frontier Communications	Cable/Fiber/Phone	<ul style="list-style-type: none"> Cable, fiber, and phone facilities within the study corridor. Phone facilities are primarily aerial and attached to existing power company pole lines with buried cable/fiber throughout the study area.
Wiltel Communications	Fiber	<ul style="list-style-type: none"> Buried fiber throughout the study area.
Level 3 Communications	Fiber	<ul style="list-style-type: none"> Buried fiber throughout the study area.
MCI	Fiber	<ul style="list-style-type: none"> Buried fiber throughout the study area.
Osceola Traffic	Fiber	<ul style="list-style-type: none"> Traffic fiber at signalized County Roadways and County maintains signalized intersections.
Orlando Telephone Company	Phone	<ul style="list-style-type: none"> Phone facilities within the study area. Phone facilities are primarily aerial and attached to existing power company pole lines.
Polk County Utilities	Water/Sewer	<ul style="list-style-type: none"> Water and wastewater facilities throughout project study area in Polk County. WTP and storage tank located along the south side of Ronald Reagan Parkway just east of US 17/92.
AT&T Distribution	Phone	<ul style="list-style-type: none"> Phone facilities within the study area. Phone facilities are primarily aerial and attached to existing power company pole lines.
Smart City Telecom	Phone/Fiber	<ul style="list-style-type: none"> Phone facilities within the study area. Phone facilities are primarily aerial and attached to existing power company pole lines.
Embarq	Fiber	<ul style="list-style-type: none"> Buried fiber throughout the study area.
Tower Cloud	Fiber	<ul style="list-style-type: none"> Buried fiber throughout the study area.
TECO Fiber	Fiber	<ul style="list-style-type: none"> Fiber throughout the study area. Fiber facilities are primarily aerial and attached to existing TECO power pole lines.
Comcast Communications	CATV	<ul style="list-style-type: none"> Cable within the study corridor. Facilities are primarily aerial and attached to existing power company pole lines with buried service drops to customers.
Sprint	Fiber	<ul style="list-style-type: none"> Buried fiber throughout the study area.
Century Link	Phone/Fiber	<ul style="list-style-type: none"> Fiber and phone facilities within the study area. Phone facilities are primarily aerial and attached to existing power company pole lines with buried fiber throughout the study area.

The project's extents, anticipated ROW acquisition, and related improvements are shown on the recommended alternative conceptual plans included **Appendix A**. Relocations into new easements have been identified for a section of Duke Energy transmission lines, a section of Kinder Morgan pipeline and a section of Florida Southeast Connection pipeline.

Mitigation measures will be implemented during the design phase of the project to minimize impacts to the existing utilities. If impacts are unavoidable, design alternatives will be reviewed to allow for relocation of impacted facilities in a manner that minimizes cost to the Utility Agency/Owners and disruption to their customers.

Because relocations of facilities located in easements and on private property would likely be eligible for reimbursement, all measures will be taken to avoid impacting the existing utility facilities identified in easements or privately-owned parcels. Though relocation of other facilities within the existing ROW are anticipated, all efforts will be made during the design phase to minimize impacts to existing pipelines, power plants, substations, and transmission facilities, to the greatest extent possible.

D.5 CONSTRUCTION

Construction activities for the proposed improvements will have temporary air, noise, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the project. The air quality impact will be temporary and will primarily be in the form of emissions from diesel powered construction equipment and dust from embankment and haul road areas. Air pollution associated with the creation of airborne particles will be effectively controlled using watering or the application of calcium chloride in accordance with *Standard Specifications for Road and Bridge Construction*.

The contractor will adhere to the most current version of the *Standard Specifications for Road and Bridge Construction* to minimize or eliminate potential construction noise and vibration impacts.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with the *Standard Specifications for Road and Bridge Construction* and using BMPs.

MOT and Sequence of Construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used as appropriate to provide notice of lane closures and other pertinent information to the traveling public.

By following *Standard Specifications for Road and Bridge Construction*, no substantial impacts from construction are anticipated because of the proposed project.

D.6 BICYCLES AND PEDESTRIANS

The Poinciana Parkway Extension is proposed as a limited-access facility; therefore, no bicycle or pedestrian facilities will be provided along the expressway. Buffered bicycle lanes and sidewalks have been included along the improved sections of CR 532 and US 17/92.

The proposed project will have no impacts on any existing bicycle or pedestrian facility; therefore, no substantial impacts to bicycles and pedestrians are anticipated because of this project.

D.7 NAVIGATION

There are no navigable waterways affected by the proposed project and thus, the project will have no involvement with navigation.

APPENDIX A

Concept Plans for the Preferred Alternative

CONTRACT PLANS COMPONENTS

ROADWAY PLANS

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

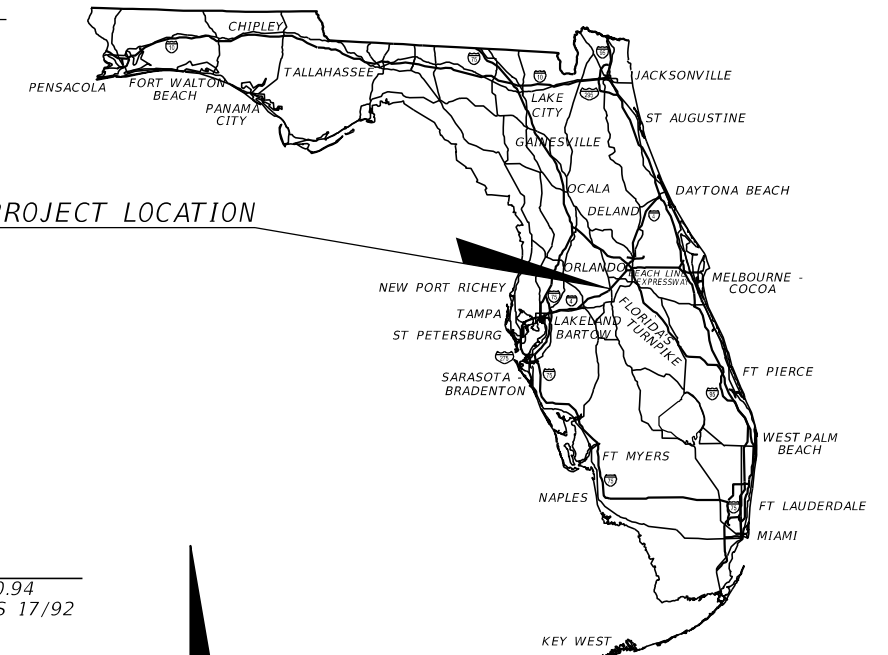
CONCEPT PLANS

SR 538 POINCIANA PARKWAY EXTENSION

OSCEOLA AND POLK COUNTIES

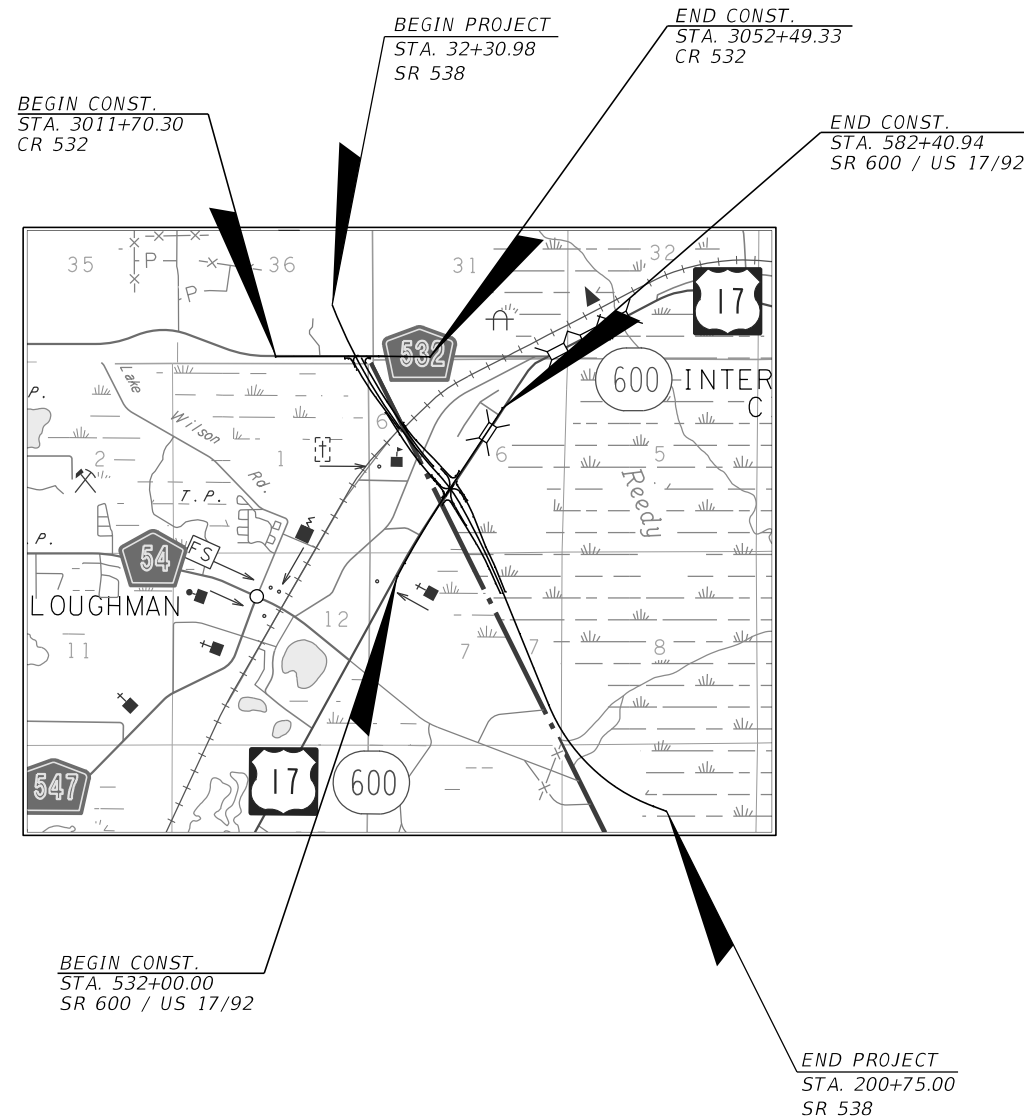
STATE ROAD NO. 538
CFX PROJECT NO. 599-224A

PROJECT LOCATION



INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2-11	TYPICAL SECTIONS
12-13	PROJECT LAYOUT
14	CURVE DATA
15-35	PLAN SHEETS



GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2019-20 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, July 2019 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

ROADWAY PLANS

ENGINEER OF RECORD:

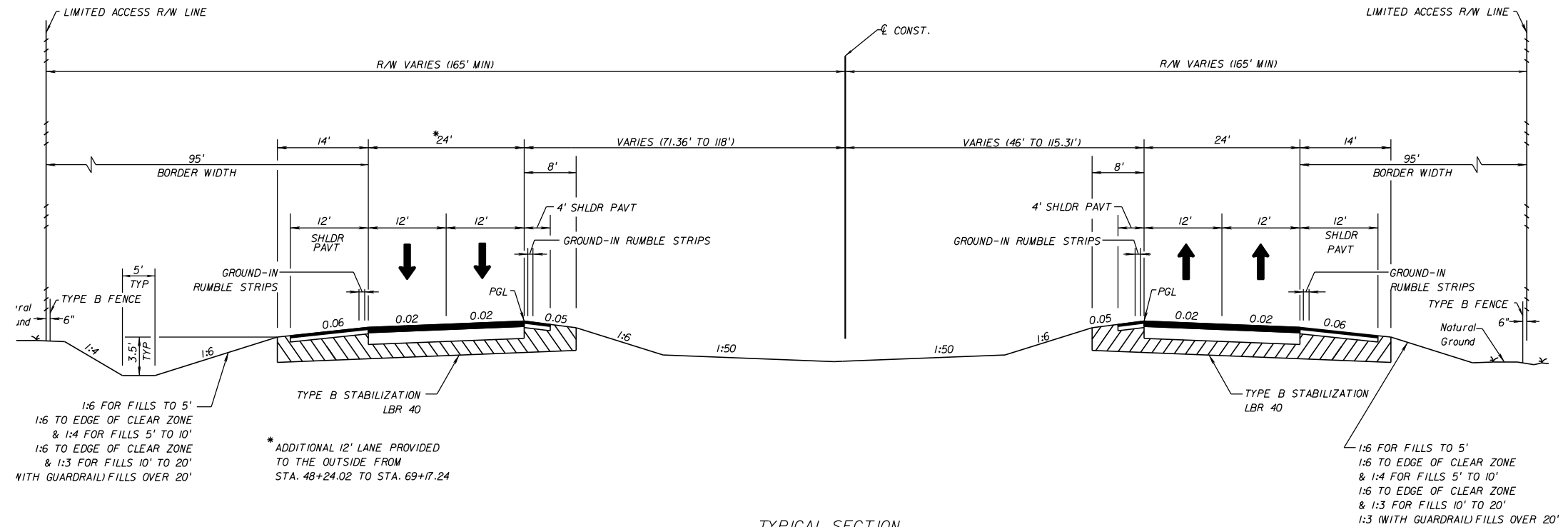
L. FREDERICK BURKETT, P.E. 45825
KIMLEY-HORN AND ASSOCIATES, INC.
189 SOUTH ORANGE AVENUE, SUITE 1000
ORLANDO, FLORIDA 32801
TEL. (407) 427-1615

VENDOR NO. F560885615-001
CERTIFICATE OF AUTHORIZATION NO. 696

CFX PROJECT MANAGER:

JONATHAN WILLIAMSON, AICP

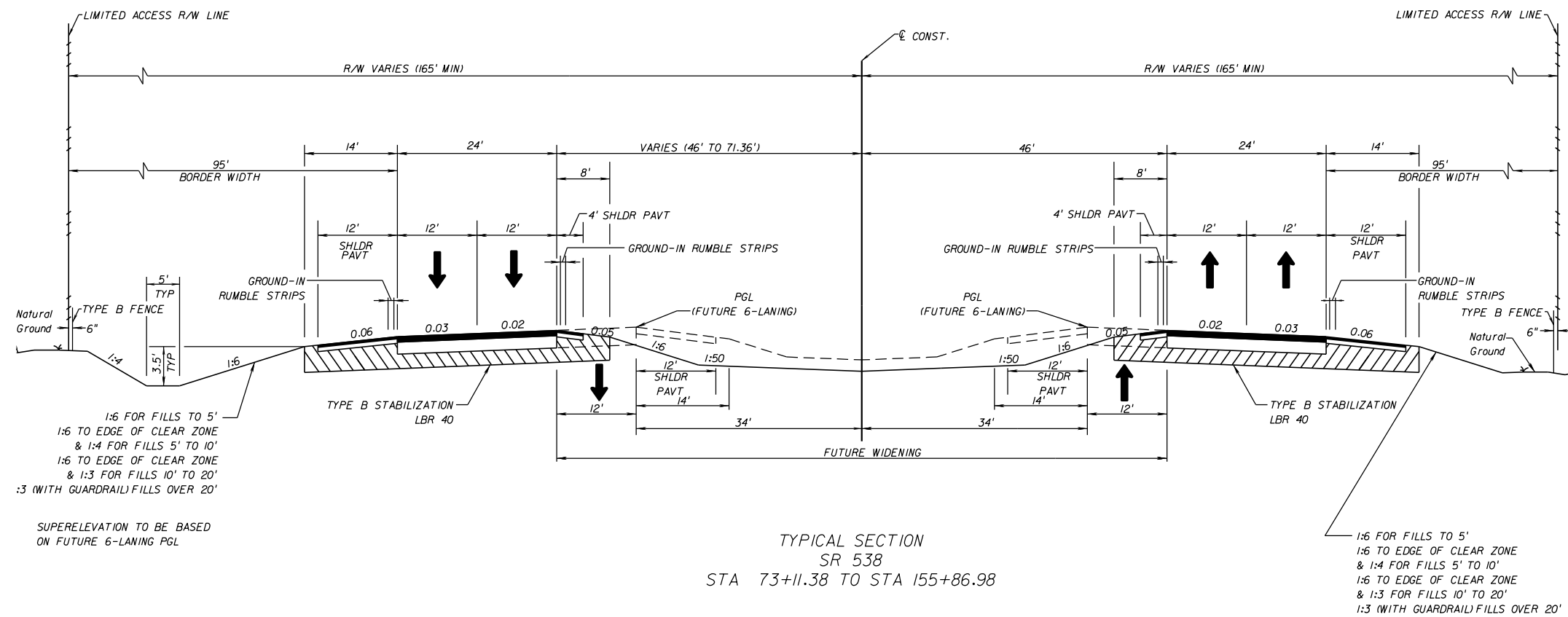
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19	1



TYPICAL SECTION
 SR 538
 STA 46+65.53 TO STA 73+11.38

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 ESTIMATED OPENING YEAR = 2025 AADT = 22,600
 ESTIMATED DESIGN YEAR = 2045 AADT = 28,000
 K = 11% D = 60% T (24 HOUR) = 6%
 DESIGN SPEED = 70 MPH
 POSTED SPEED = 65 MPH

REVISIONS				Kimley»Horn Certificate Of Authorization No. 696 L. Frederick Burkett, P.E. P.E. License No. 45825 189 South Orange Avenue, Suite 1000 Orlando, Florida 32801	CENTRAL FLORIDA EXPRESSWAY AUTHORITY			TYPICAL SECTION	SHEET NO. 2
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 538	OSCEOLA POLK	599-224A		



TYPICAL SECTION
 SR 538
 STA 73+11.38 TO STA 155+86.98

TRAFFIC DATA

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 ESTIMATED DESIGN YEAR = 2045 AADT = 28,000
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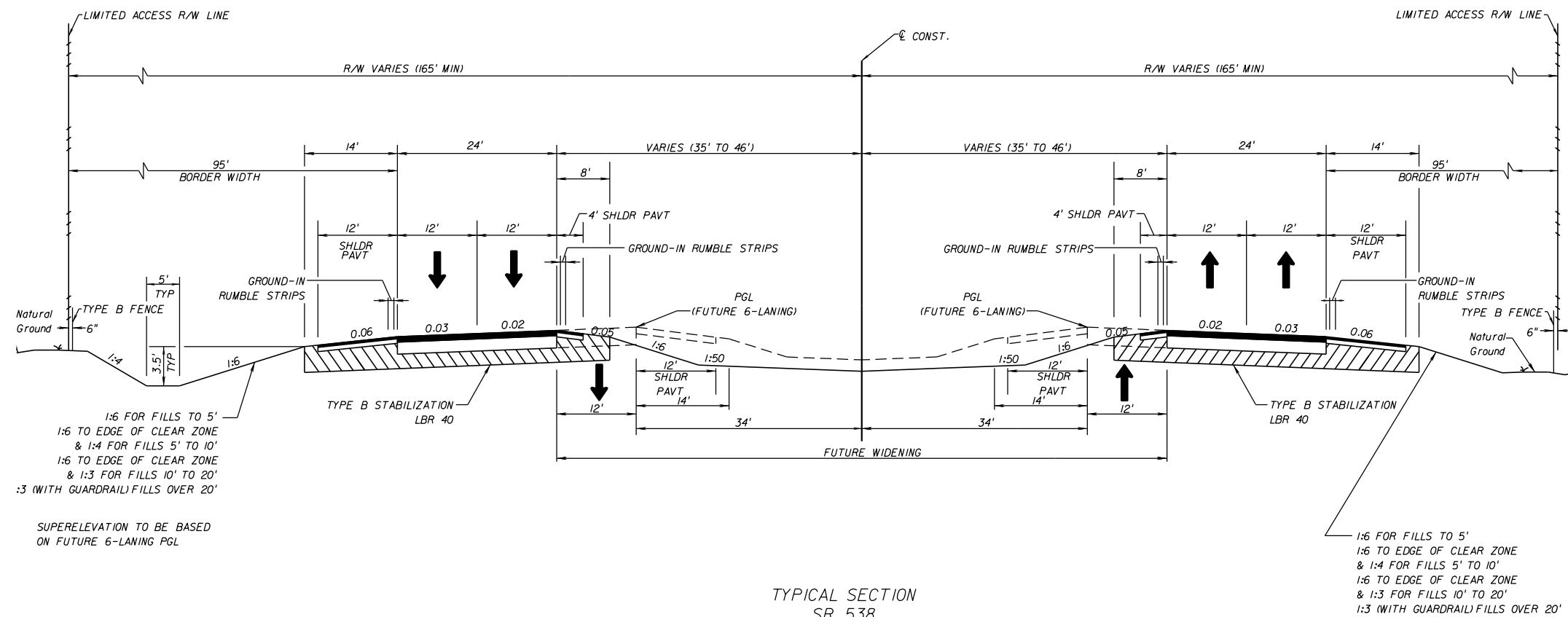
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

TYPICAL SECTION

SHEET NO. 3

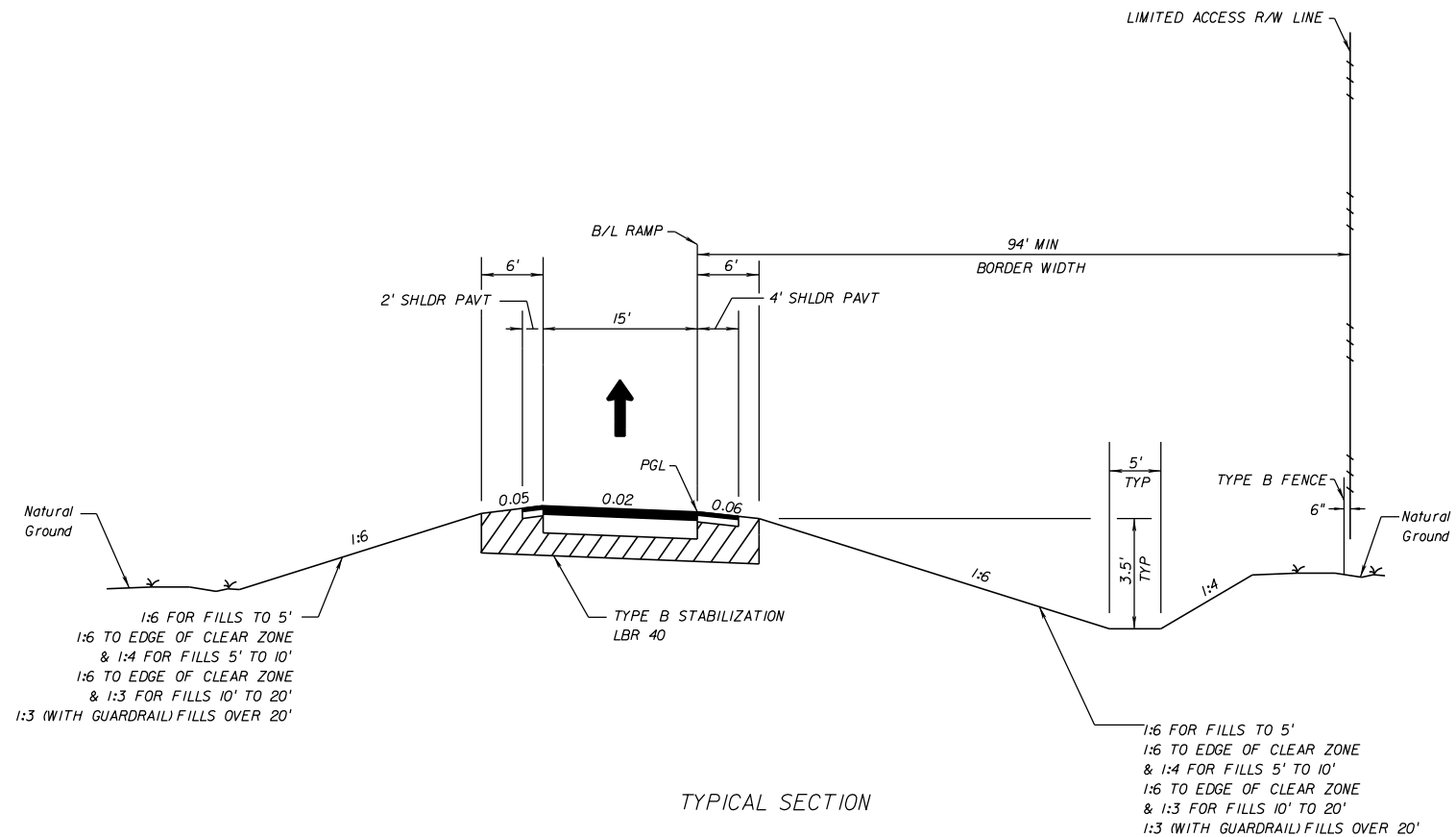


TYPICAL SECTION
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 STA 155+86.98 TO STA 200+75.00

TRAFFIC DATA

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 DESIGN SPEED = 70 MPH
 POSTED SPEED = 65 MPH

REVISIONS				 Certificate of Authorization No. 696 L. Frederick Burkett, P.E. P.E. License No. 45825 189 South Orange Avenue, Suite 1000 Orlando, Florida 32801	CENTRAL FLORIDA EXPRESSWAY AUTHORITY			TYPICAL SECTION SHEET NO. 4
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					SR 538	OSCEOLA POLK	599-224A	



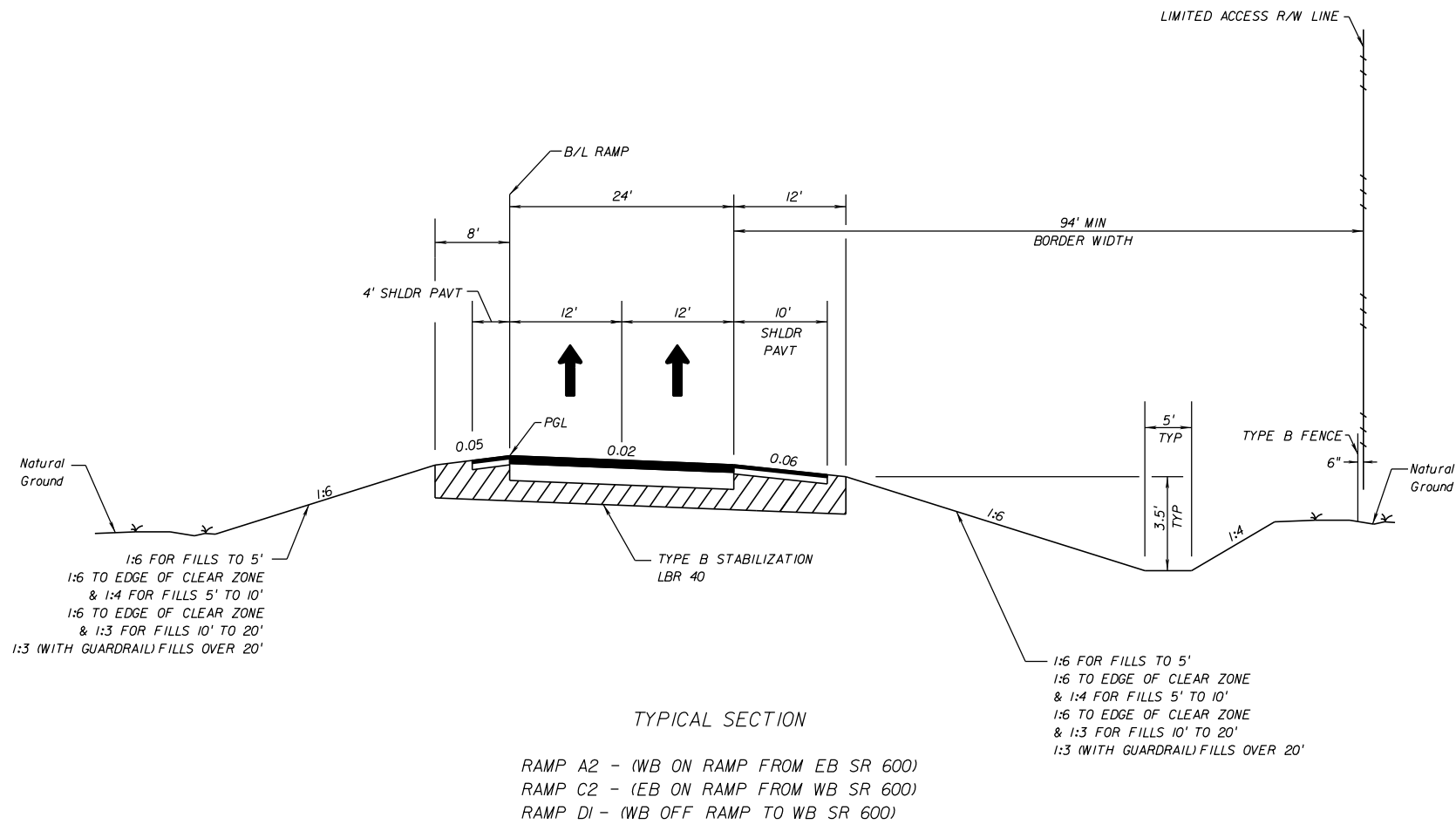
TYPICAL SECTION

- RAMP A1 - (WB OFF RAMP TO EB CR 432)
- RAMP A2A - (WB ON RAMP FROM WB SR 600)
- RAMP B1 - (EB OFF RAMP TO SR 600)
- RAMP C1 - (EB ON RAMP FROM EB SR 600)
- RAMP DIA - (WB OFF RAMP TO EB SR 600)
- RAMP D2 - (WB OFF RAMP TO SR 600)
- RAMP E1 - (EB ON RAMP FROM EB CR 532)
- RAMP E2 - (EB ON RAMP FROM WB CR 532)

TRAFFIC DATA

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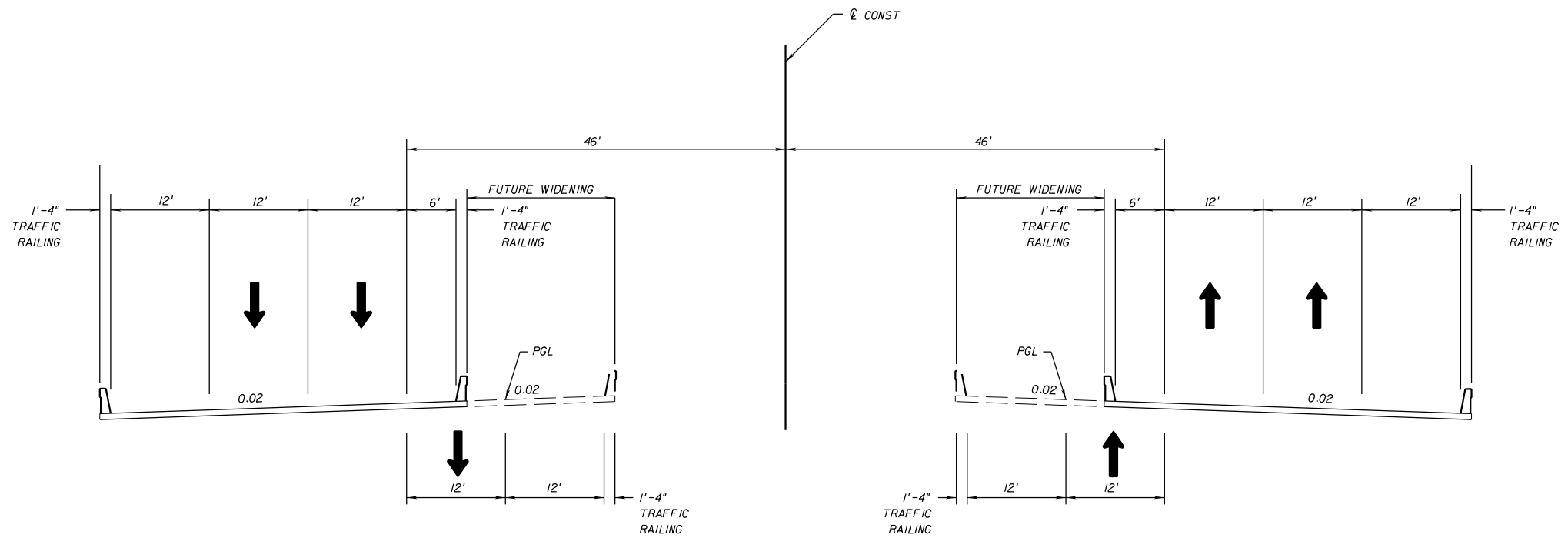
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					SR 538	OSCEOLA POLK	599-224A	



TRAFFIC DATA

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 POSTED SPEED = 50 MPH

REVISIONS				 Certificate Of Authorization No. 696 L. Frederick Burkett, P.E. P.E. License No. 45825 189 South Orange Avenue, Suite 1000 Orlando, Florida 32801	CENTRAL FLORIDA EXPRESSWAY AUTHORITY			TYPICAL SECTION 6
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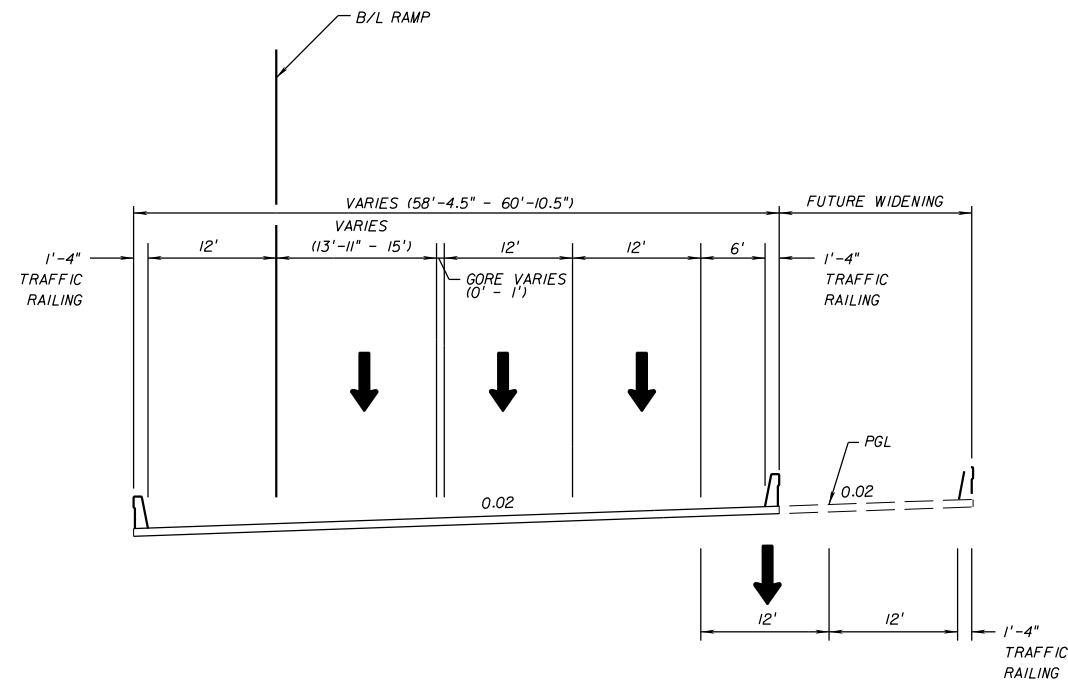
BRIDGE TYPICAL SECTION
 BRIDGE NO. 6 - (WB OVER OLD TAMPA HWY)
 BRIDGE NO. 9 - (WB OVER SR 600)
 BRIDGE NO. 11 - (WB OVER MITIGATION BANK)

BRIDGE TYPICAL SECTION
 BRIDGE NO. 2 - (EB OVER CSX RR)
 BRIDGE NO. 5 - (EB OVER OLD TAMPA HWY)
 BRIDGE NO. 8 - (EB OVER SR 600)
 BRIDGE NO. 10 - (EB OVER MITIGATION BANK)

TRAFFIC DATA

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 ESTIMATED OPENING YEAR = 2025 AADT = 22,600
 ESTIMATED DESIGN YEAR = 2045 AADT = 28,000
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 DESIGN SPEED = 70 MPH
 POSTED SPEED = 65 MPH

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					SR 538	OSCEOLA POLK	599-224A	

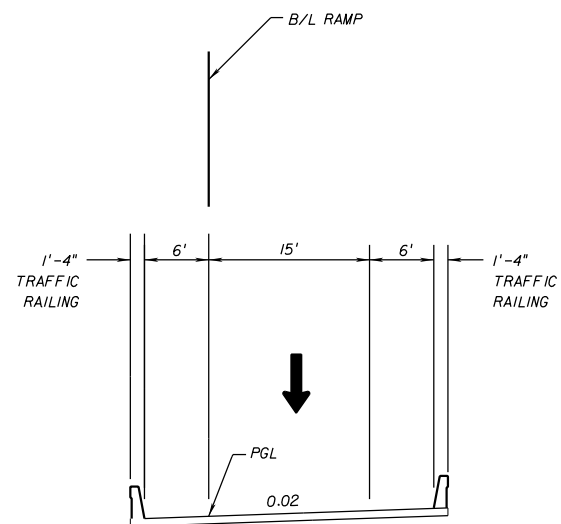


BRIDGE TYPICAL SECTION
 BRIDGE NO. 3 - (WB OVER CSX RR)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = N/A
 ESTIMATED OPENING YEAR = 2025 AADT = 22,600
 ESTIMATED DESIGN YEAR = 2045 AADT = 28,000
 K = 11% D = 60% T (24 HOUR) = 6%
 DESIGN SPEED = 70 MPH
 POSTED SPEED = 65 MPH

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 538	OSCEOLA POLK	599-224A		



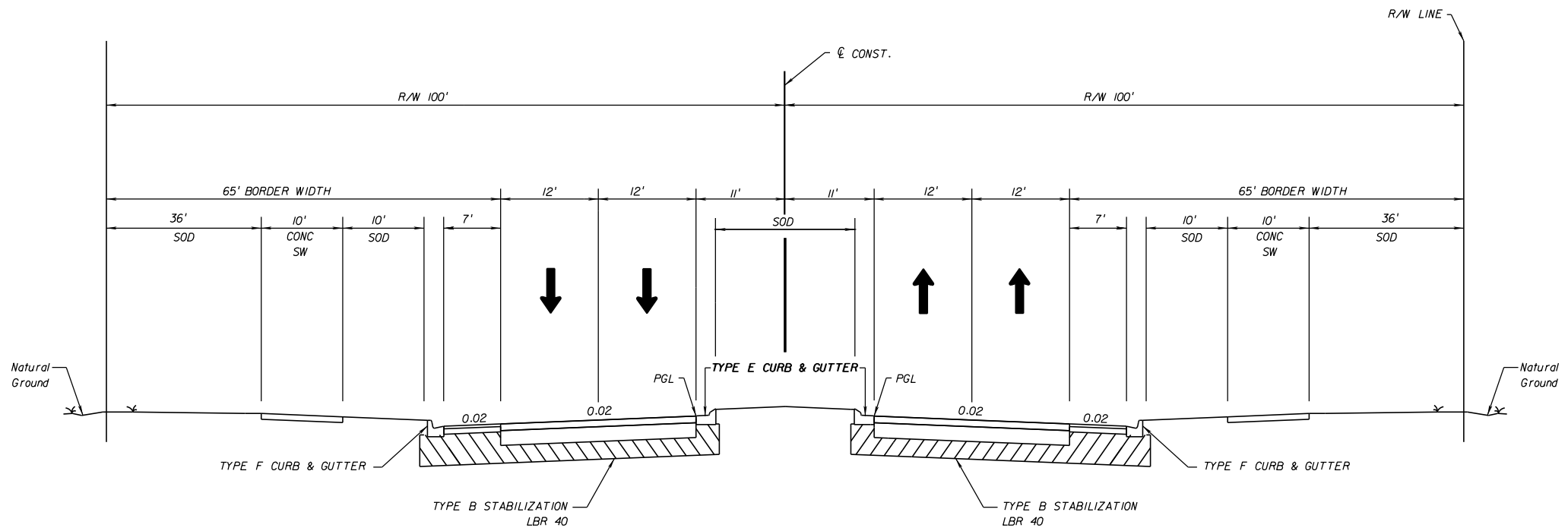
BRIDGE TYPICAL SECTION

BRIDGE NO. 1 - (EB ON RAMP OVER CSX RR)
 BRIDGE NO. 4 - (EB ON RAMP OVER OLD TAMPA HWY)
 BRIDGE NO. 7 - (WB ON RAMP OVER OLD TAMPA HWY)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = N/A
 ESTIMATED OPENING YEAR = 2025 AADT = TBD
 ESTIMATED DESIGN YEAR = 2045 AADT = TBD
 K = TBD D = TBD T (24 HOUR) = TBD
 DESIGN SPEED = 50 MPH
 POSTED SPEED = 50 MPH

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		9
					SR 538	OSCEOLA POLK	599-224A		

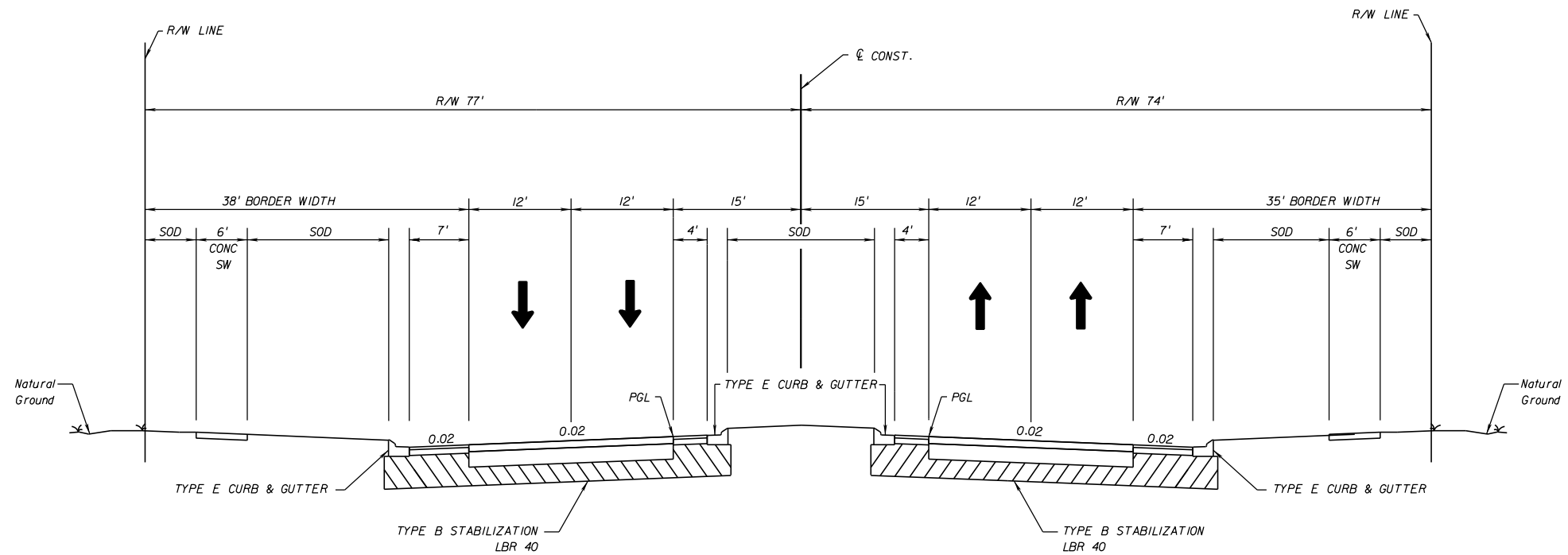


TYPICAL SECTION
CR 532

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = N/A
 ESTIMATED OPENING YEAR = 2025 AADT = TBD
 ESTIMATED DESIGN YEAR = 2045 AADT = TBD
 K = TBD D = TBD T (24 HOUR) = TBD
 DESIGN SPEED = 45 MPH
 POSTED SPEED = 45 MPH

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					SR 538	OSCEOLA POLK	599-224A	

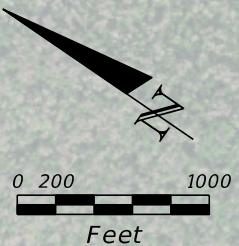
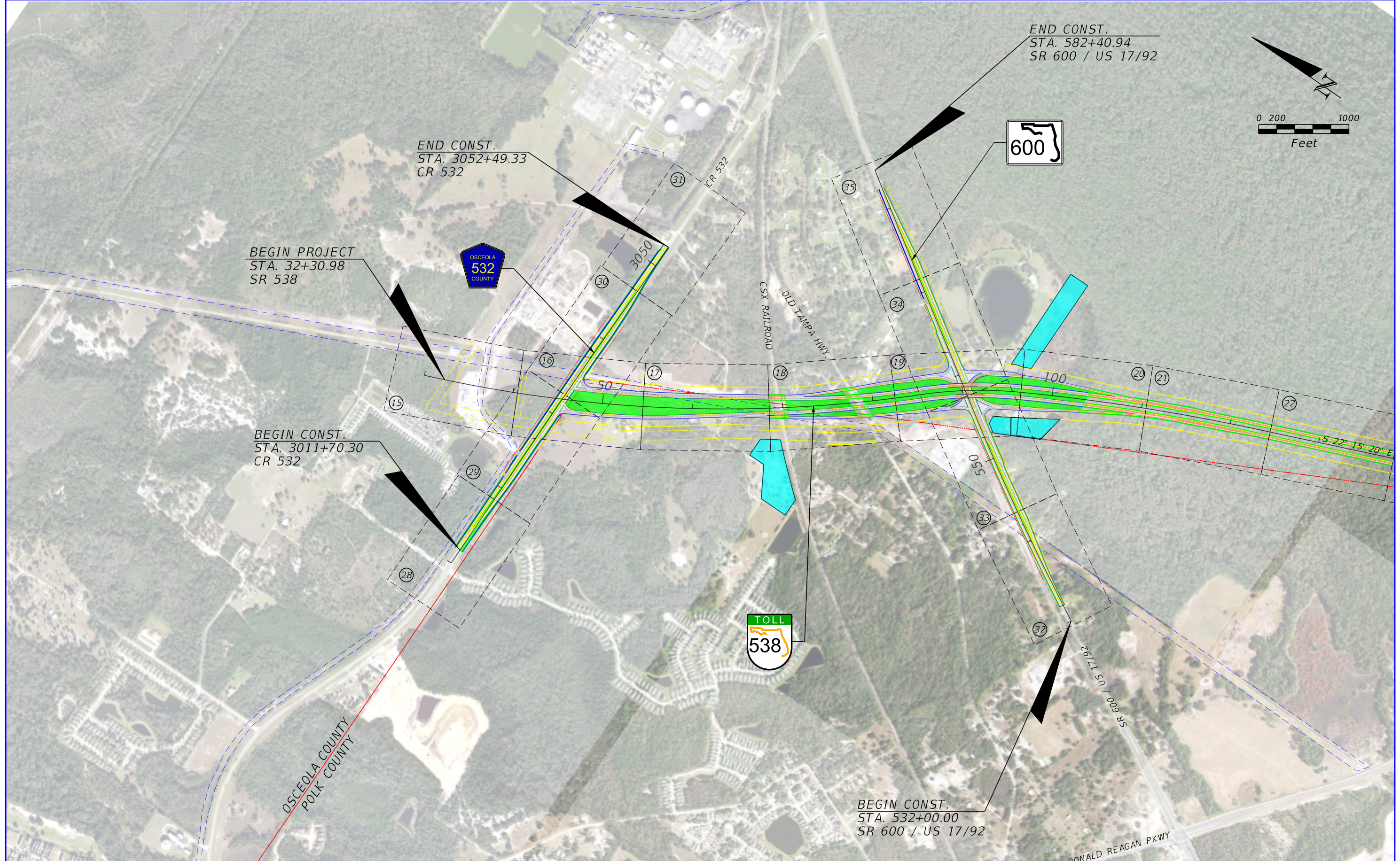


TYPICAL SECTION
SR 600 (US 17/92)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = N/A
 ESTIMATED OPENING YEAR = 2025 AADT = TBD
 ESTIMATED DESIGN YEAR = 2045 AADT = TBD
 K = TBD D = TBD T (24 HOUR) = TBD
 DESIGN SPEED = 55 MPH
 POSTED SPEED = 55 MPH

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					SR 538	OSCEOLA POLK	599-224A	



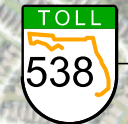
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STA. 32+30.98
SR 538

END CONST.
STA. 3052+49.33
CR 532

BEGIN CONST.
STA. 3011+70.30
CR 532

END CONST.
STA. 582+40.94
SR 600 / US 17/92

BEGIN CONST.
STA. 532+00.00
SR 600 / US 17/92



OSCEOLA COUNTY
POLK COUNTY

REVISIONS			
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CENTRAL FLORIDA
EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

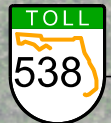
PROJECT LAYOUT

SHEET
NO.

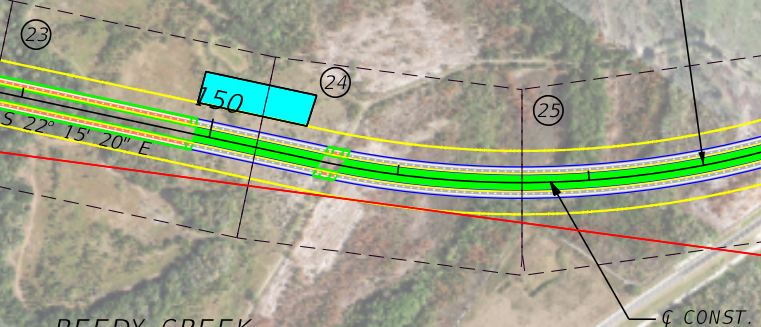
12

UPPER LAKES
BASIN WATERSHED

END PROJECT
END CONST.
STA. 200+75.00
SR 538



REEDY CREEK
MITIGATION BANK



REEDY CREEK
MITIGATION BANK

OSCEOLA COUNTY
POLK COUNTY

RONALD REAGAN PKWY

REVISIONS			
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

PROJECT LAYOUT

SHEET
NO.
13

CURVE DATA									
CURVE NAME	P.C. STATION	P.I. STATION	P.T. STATION	Δ	D	T	L	R	DESIGN SPEED
538 1	30+00.00	57+96.44	85+29.41	21° 7' 15"	0° 22' 55"	2796.44	5529.41	15000.00	70
538 2	85+29.41	90+86.73	96+38.61	13° 51' 50"	1° 15' 00"	557.32	1109.20	4584.00	70
538 3	96+38.61	109+53.03	122+64.57	6° 33' 54"	0° 15' 00"	1314.42	2625.96	22918.00	70
538 4	155+92.10	177+77.97	197+13.47	47° 13' 38"	1° 08' 45"	2185.87	4121.36	5000.00	70
538 WB 1	481+52.27	488+57.13	495+60.94	5° 25' 24"	0° 23' 06"	704.86	1408.67	14882.00	70
538 WB 2	505+41.58	511+46.56	517+49.37	8° 23' 54"	0° 41' 43"	604.98	1207.78	8239.79	70
538 EB 1	354+99.25	359+56.35	364+12.16	7° 28' 20"	0° 49' 07"	457.10	912.91	7000.00	70
532 1	3031+91.35	3035+15.58	3038+39.81	0° 56' 43"	0° 08' 45"	324.24	648.46	39300.00	45
600 1	534+07.31	544+97.75	555+87.08	4° 27' 08"	0° 12' 15"	1090.44	2179.78	28052.00	55
A1 1	427+39.39	429+09.00	429+47.01	118° 57' 10"	57° 17' 45"	169.61	207.61	100.00	35
A1A 1	480+00.00	480+87.83	481+57.76	62° 42' 30"	39° 44' 57"	87.83	157.76	144.14	35
A1A 2	481+57.76	482+50.14	483+42.51	0° 42' 45"	0° 23' 08"	92.38	184.75	14858.00	50
A2 1	551+70.67	555+12.23	557+49.78	76° 16' 41"	13° 10' 17"	341.56	579.12	435.00	35
A2A 1	521+00.04	523+50.97	526+00.71	9° 36' 37"	1° 55' 10"	250.92	500.67	2984.93	50
A2A 2	539+70.73	540+98.08	541+51.75	103° 43' 19"	57° 17' 45"	127.36	181.03	100.00	35
B1 1	670+19.37	677+32.94	684+43.54	9° 03' 05"	0° 38' 08"	713.57	1424.17	9015.00	50
B2 1	684+43.54	685+12.97	685+82.41	0° 52' 54"	0° 38' 06"	69.43	138.87	9024.00	35
B2 2	685+82.41	686+03.01	686+23.61	0° 32' 16"	1° 18' 19"	20.60	41.20	4390.00	35
B2 3	687+23.61	688+57.16	689+90.64	3° 29' 15"	1° 18' 22"	133.55	267.03	4387.00	35
B2 4	689+90.64	690+78.19	691+42.54	71° 17' 53"	46° 56' 12"	87.55	151.90	122.07	35
B2A 1	710+00.00	710+69.25	711+38.50	0° 52' 54"	0° 38' 12"	69.25	138.50	9000.00	35
B2A 2	711+38.50	711+59.76	711+81.02	0° 33' 07"	1° 17' 53"	21.26	42.52	4414.00	35
B2A 3	712+81.22	713+24.74	713+68.26	1° 07' 45"	0° 17' 50"	43.52	87.04	4417.00	35
B2A 4	713+68.26	716+81.26	717+99.32	107° 22' 49"	24° 54' 40"	312.99	431.05	230.00	35
C1 1	754+22.92	755+82.82	756+25.30	115° 57' 27"	57° 17' 45"	159.90	202.38	100.00	35
C1 2	769+72.23	773+20.56	776+68.12	6° 39' 43"	0° 57' 26"	348.34	695.89	5985.00	50
C1 3	777+68.54	779+82.43	781+96.31	1° 04' 24"	0° 15' 03"	213.89	427.78	22836.00	50
C2 1	710+00.00	713+14.73	715+61.80	64° 22' 39"	11° 27' 33"	314.73	561.80	500.00	35
D1 1	860+92.76	864+20.11	865+18.32	113° 24' 23"	26° 38' 57"	327.35	425.55	215.00	35
D1 2	865+18.32	866+22.70	867+27.05	2° 30' 56"	1° 12' 19"	104.38	208.73	4754.00	35
D1 3	867+27.05	867+66.47	868+05.89	1° 17' 27"	1° 38' 13"	39.42	78.84	3500.00	35
D1A 1	810+00.00	810+68.91	811+20.68	69° 08' 33"	57° 17' 45"	68.91	120.68	100.00	35
D1A 2	811+20.68	812+81.38	814+41.97	3° 50' 27"	0° 11' 43"	160.71	321.29	4793.00	35
D2 1	816+23.71	818+61.16	820+97.90	7° 43' 46"	1° 37' 48"	237.45	474.19	3515.00	50
D2 2	829+99.37	832+99.71	836+00.02	1° 29' 47"	0° 14' 57"	300.34	600.65	23000.00	50
E1 1	320+98.63	321+58.60	322+06.68	61° 54' 28"	57° 17' 45"	59.98	108.05	100.00	35
E2 1	350+00.00	352+42.61	352+99.25	118° 17' 08"	39° 31' 39"	242.61	299.25	144.95	35

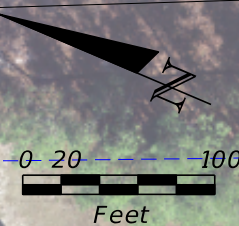
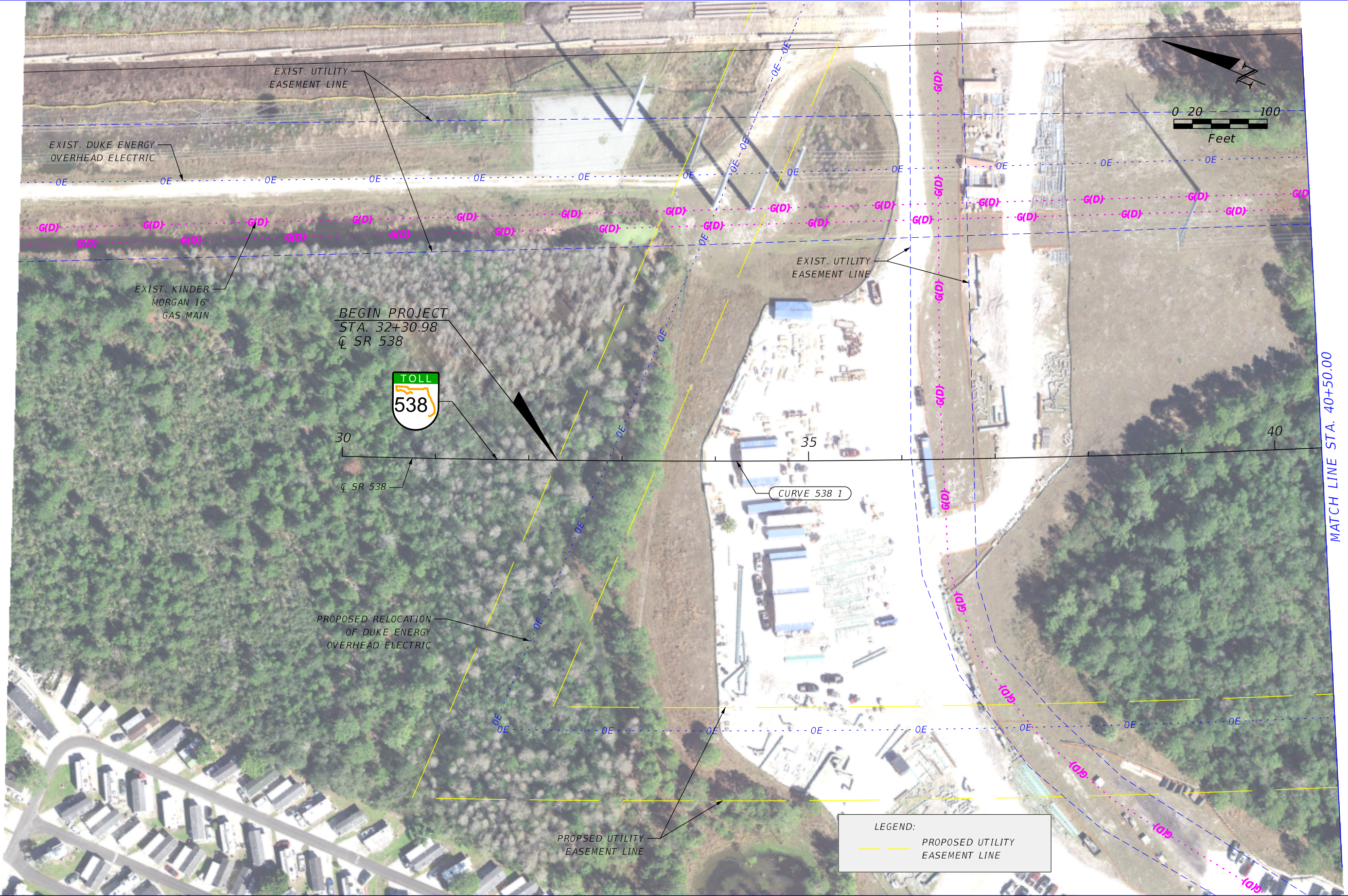
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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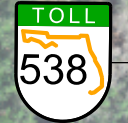
CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

CURVE DATA

SHEET NO.
14



BEGIN PROJECT
STA. 32+30.98
CL SR 538



CURVE 538 1

PROPOSED RELOCATION
OF DUKE ENERGY
OVERHEAD ELECTRIC

PROPOSED UTILITY
EASEMENT LINE

LEGEND:
 PROPOSED UTILITY EASEMENT LINE

MATCH LINE STA. 40+50.00

REVISIONS			
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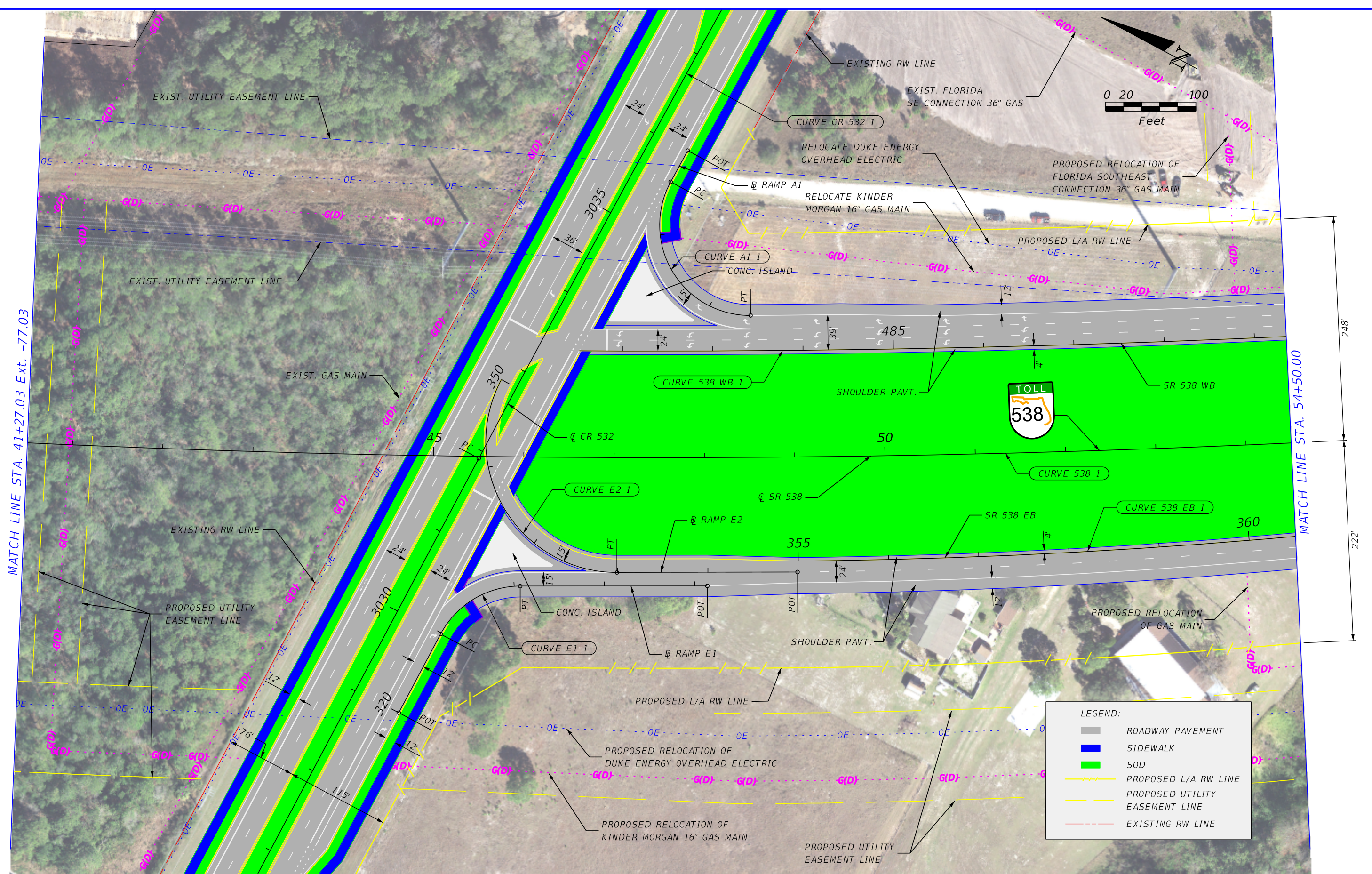
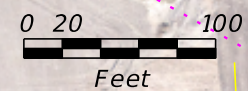
CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
15

MATCH LINE STA. 41+27.03 Ext. -77.03

MATCH LINE STA. 54+50.00



LEGEND:

- ROADWAY PAVEMENT
- SIDEWALK
- SOD
- PROPOSED L/A RW LINE
- PROPOSED UTILITY EASEMENT LINE
- EXISTING RW LINE

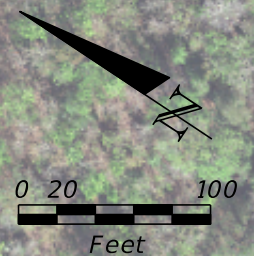
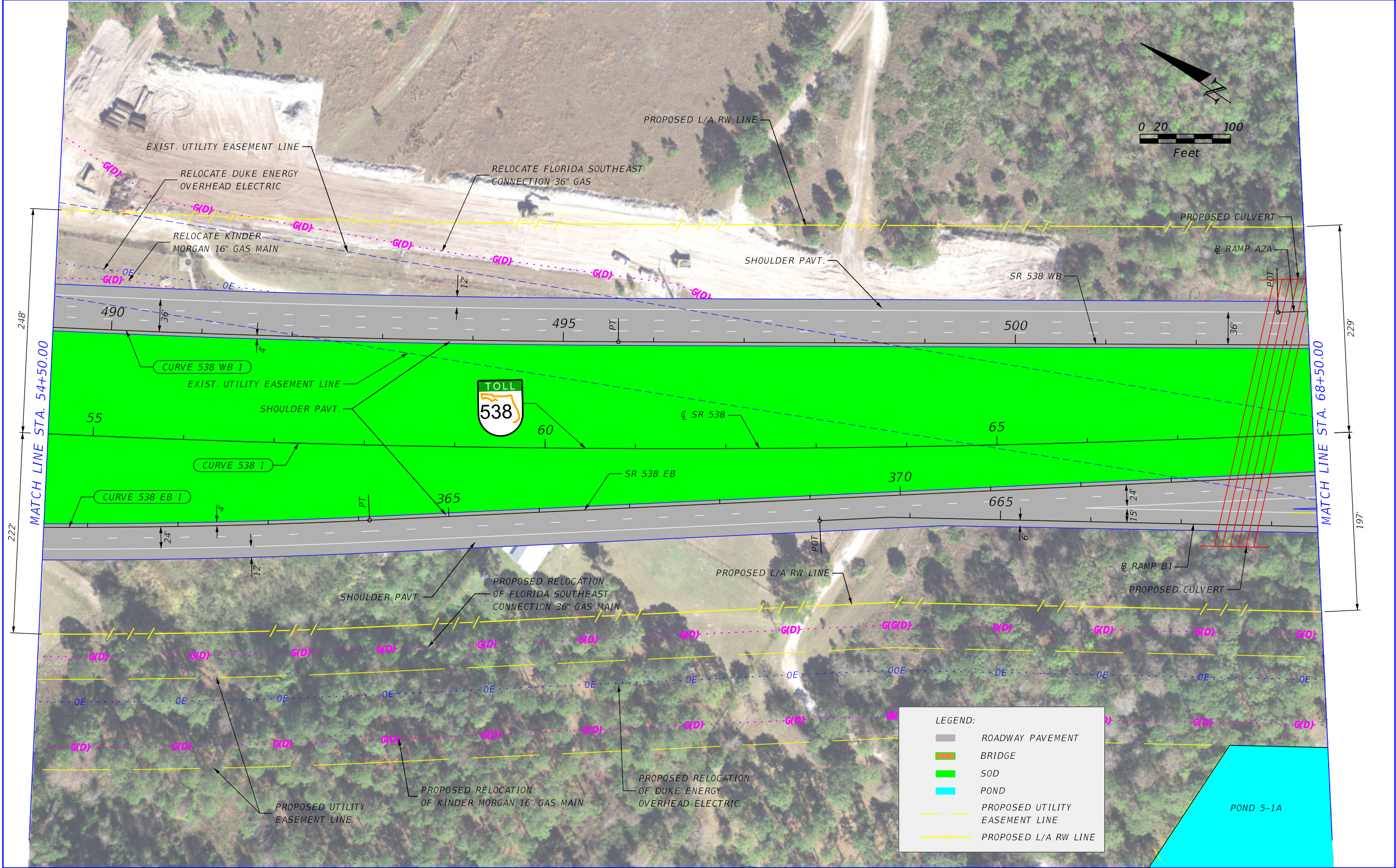
REVISIONS			
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ROADWAY PLAN

SHEET NO.
16



LEGEND:

- ROADWAY PAVEMENT
- BRIDGE
- SOD
- POND
- PROPOSED UTILITY EASEMENT LINE
- PROPOSED L/A RW LINE

REVISIONS			
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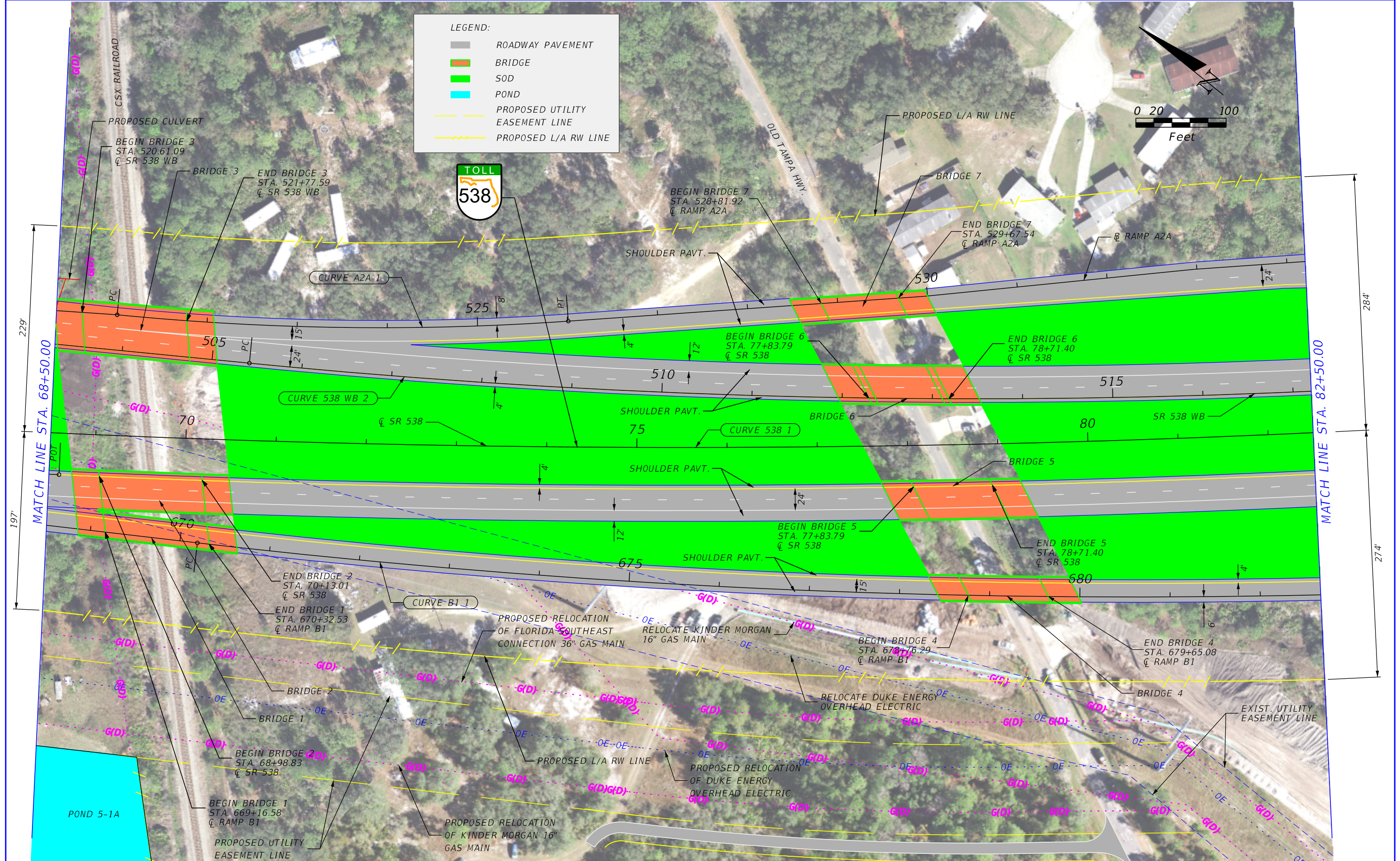
CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
17

LEGEND:

- ROADWAY PAVEMENT
- BRIDGE
- SOD
- POND
- PROPOSED UTILITY EASEMENT LINE
- PROPOSED L/A RW LINE



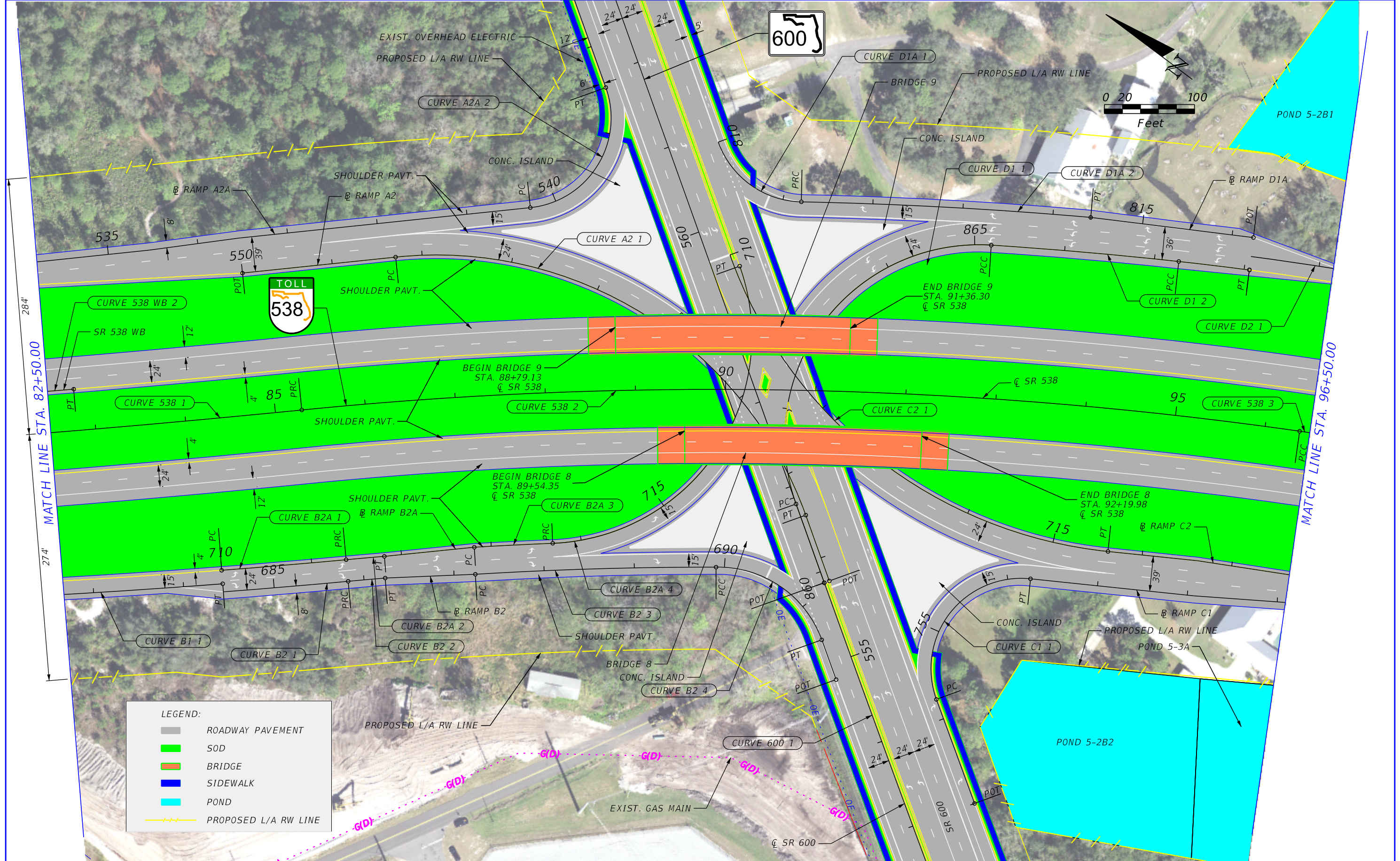
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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ROADWAY PLAN

SHEET NO.
18



LEGEND:

- ROADWAY PAVEMENT
- SOD
- BRIDGE
- SIDEWALK
- POND
- PROPOSED L/A RW LINE

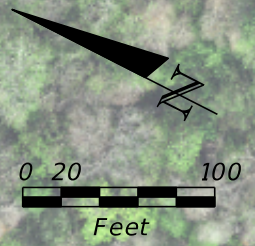
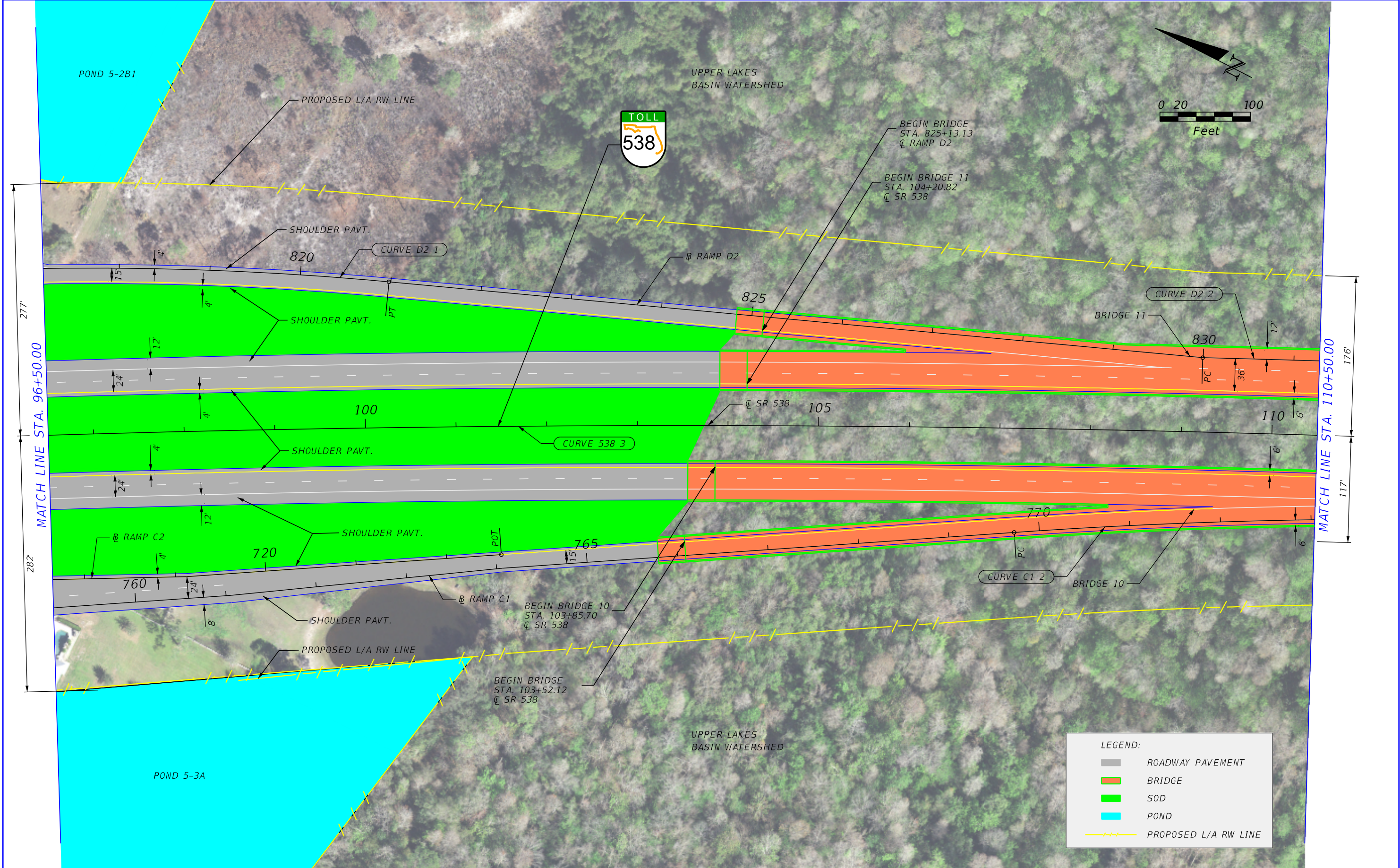
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
19



LEGEND:

	ROADWAY PAVEMENT
	BRIDGE
	SOD
	POND
	PROPOSED L/A RW LINE

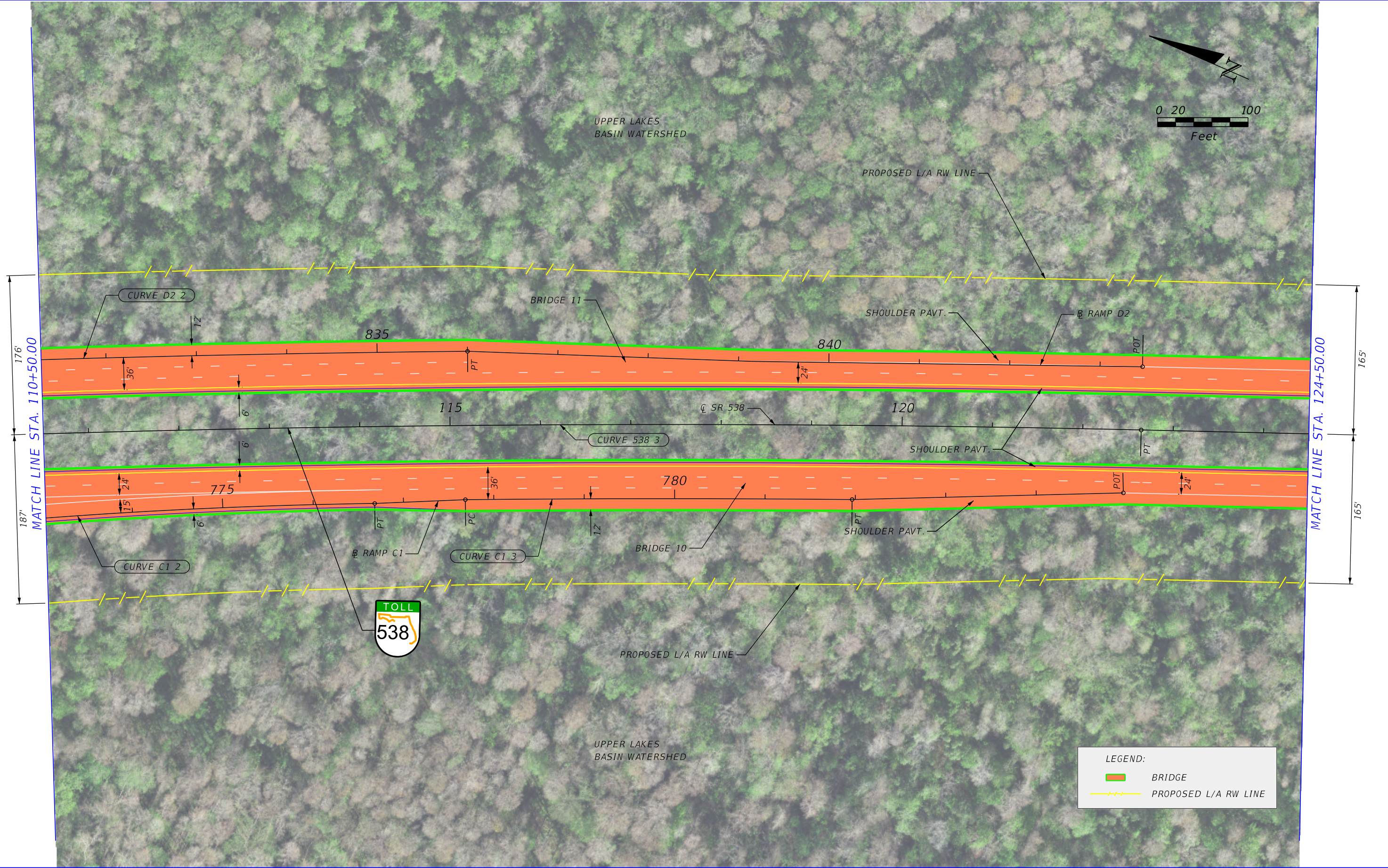
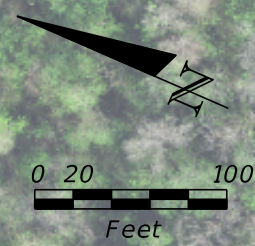
REVISIONS			
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SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
20



LEGEND:

	BRIDGE
	PROPOSED L/A RW LINE

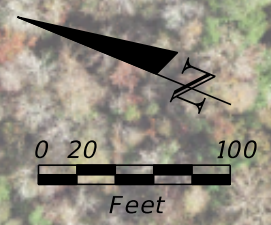
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
21



UPPER LAKES
BASIN WATERSHED

REEDY CREEK
MITIGATION BANK

PROPOSED L/A RW LINE

SHOULDER PAVT.

BRIDGE 11

125

130

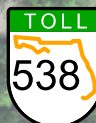
135

SR 538

SHOULDER PAVT.

SHOULDER PAVT.

BRIDGE 10



PROPOSED L/A RW LINE

LEGEND:

	BRIDGE
	PROPOSED L/A RW LINE

165'
MATCH LINE STA. 124+50.00

MATCH LINE STA. 138+50.00

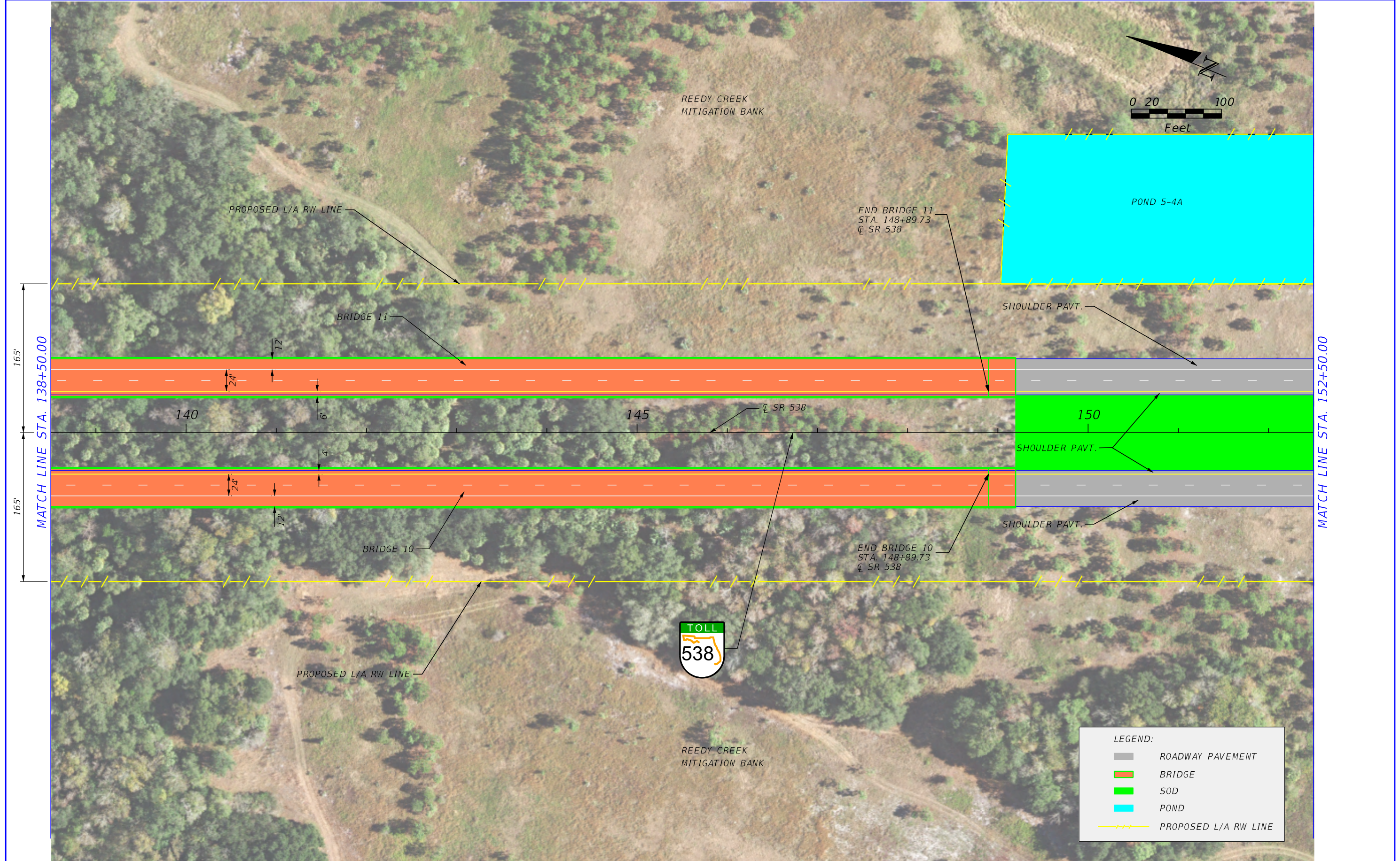
REVISIONS			
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET
NO.
22

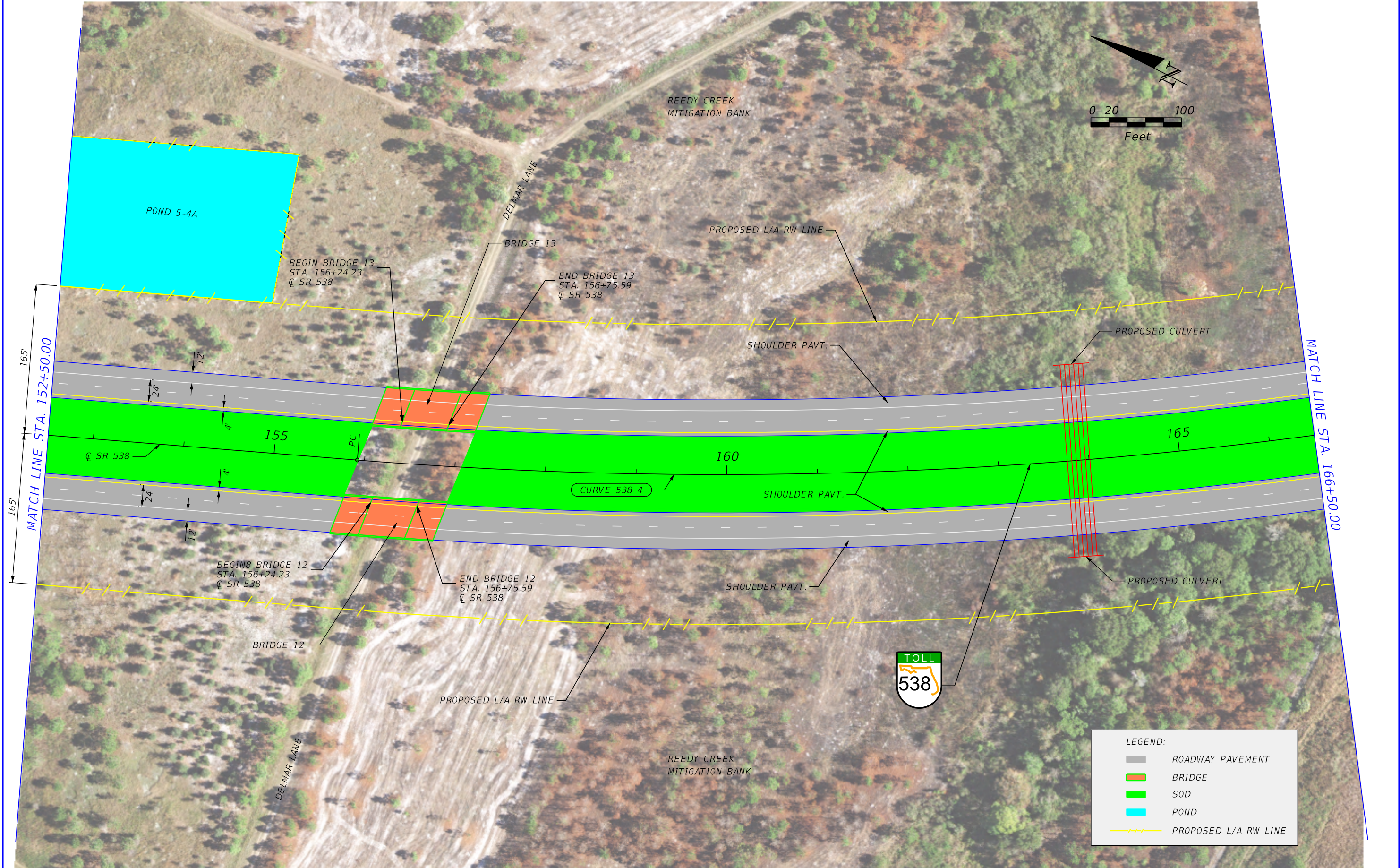


REVISIONS			
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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ROADWAY PLAN		SHEET NO.
		23



REVISIONS			
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO. 24



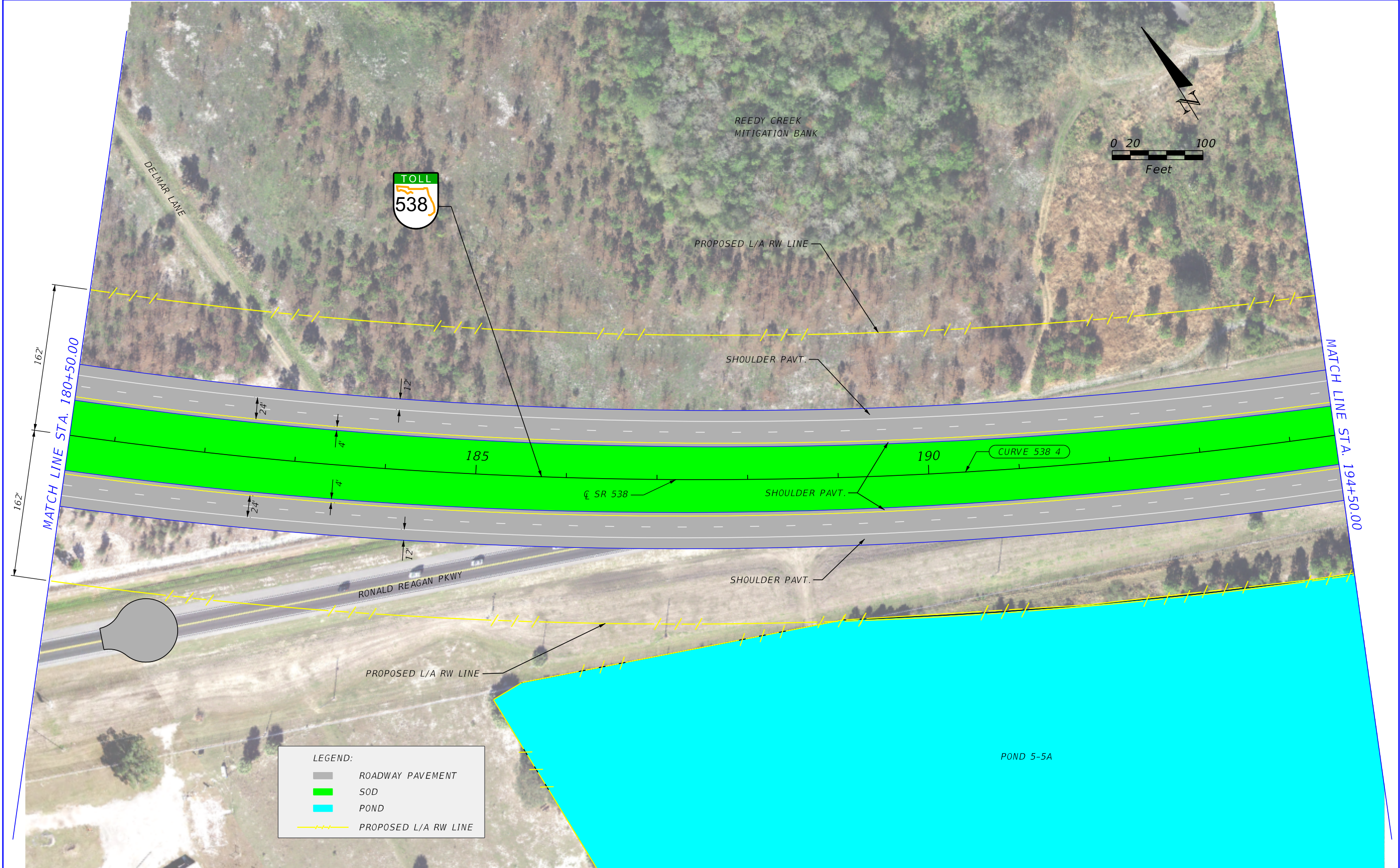
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
25



LEGEND:

	ROADWAY PAVEMENT
	SOD
	POND
	PROPOSED L/A RW LINE

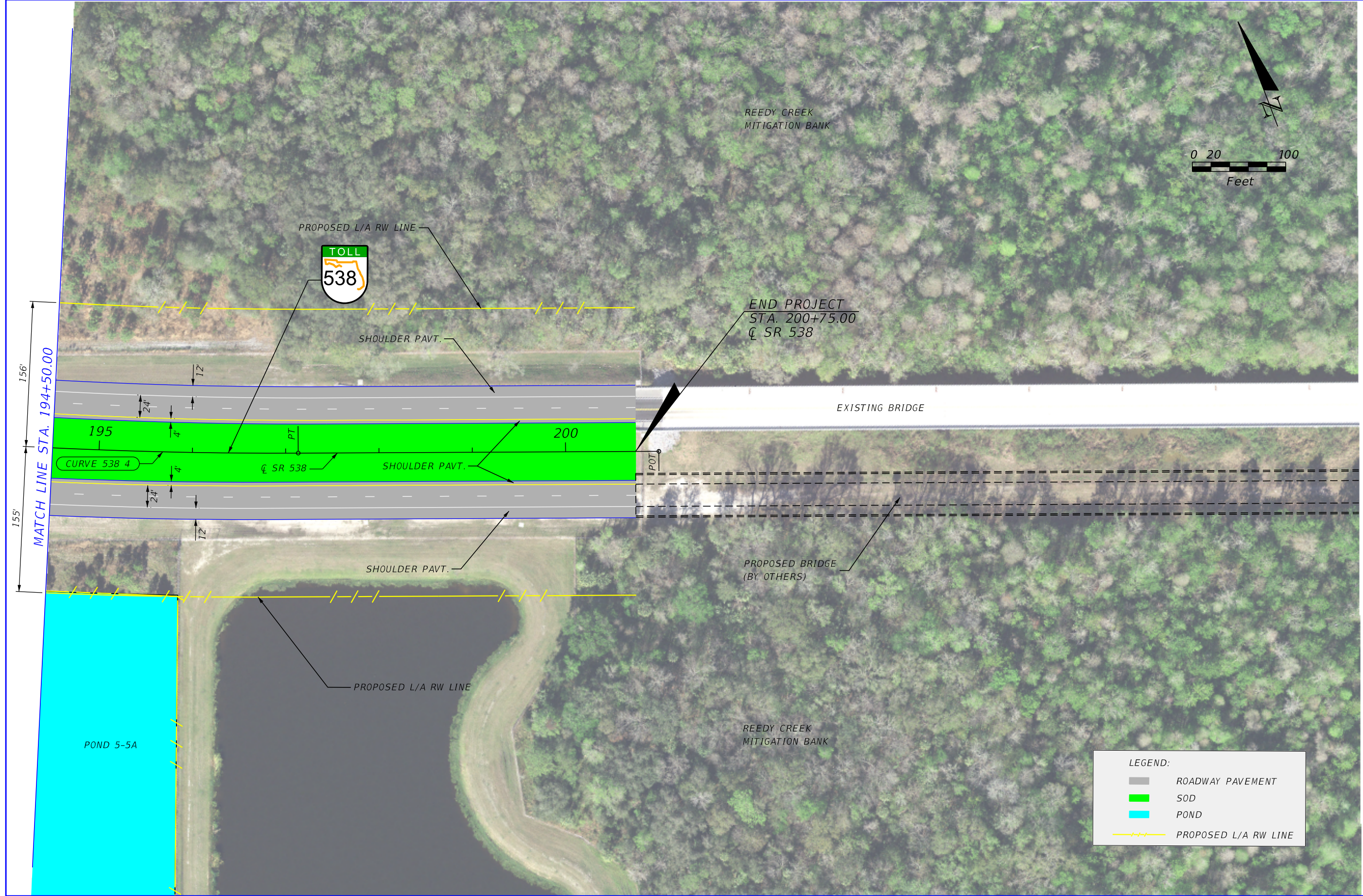
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO. 26



LEGEND:

	ROADWAY PAVEMENT
	SOD
	POND
	PROPOSED L/A RW LINE

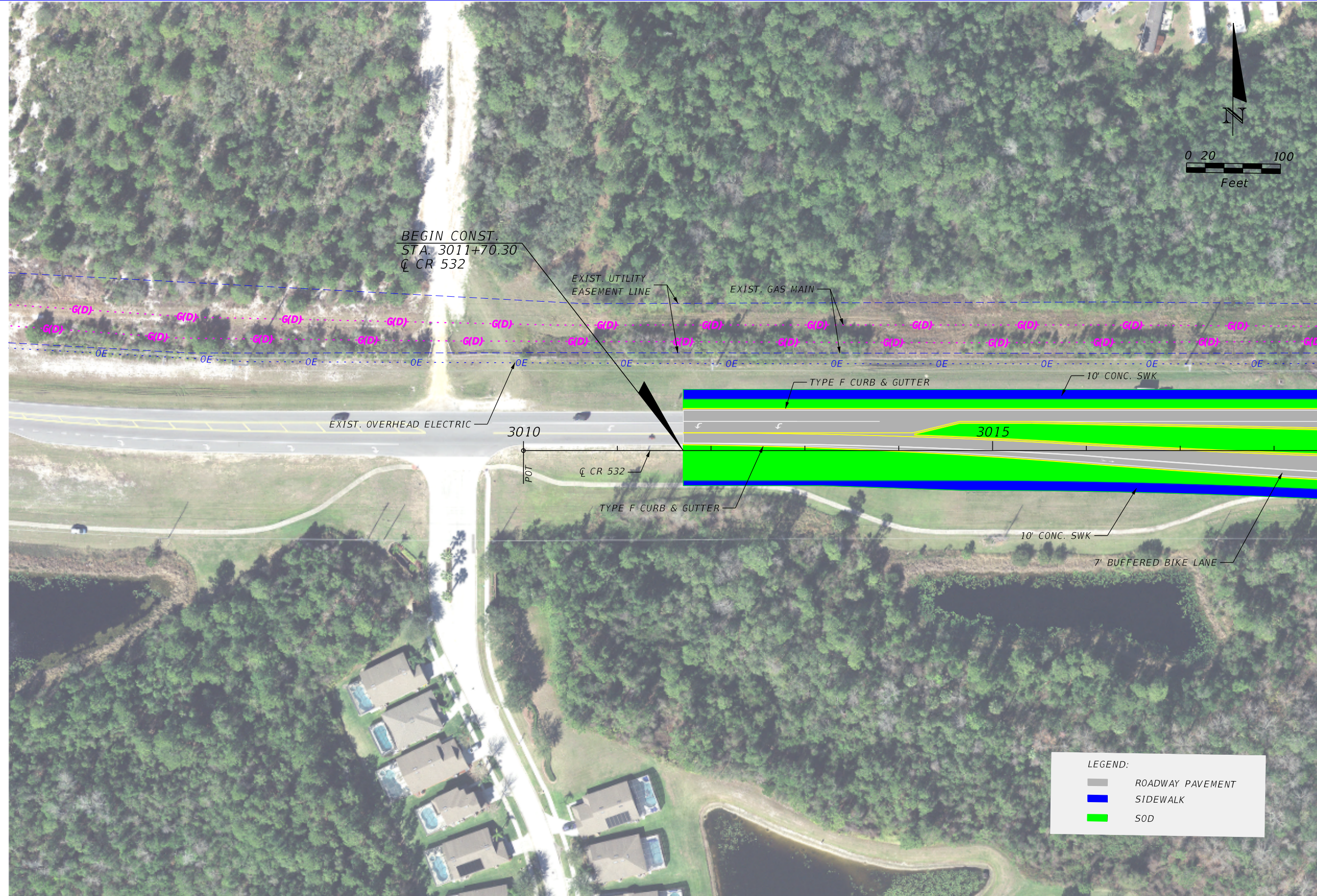
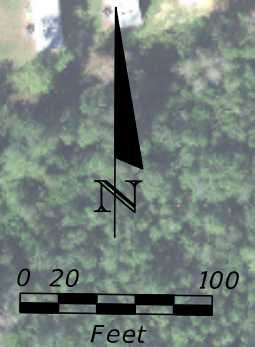
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
27



MATCH LINE STA. 3018+51.00

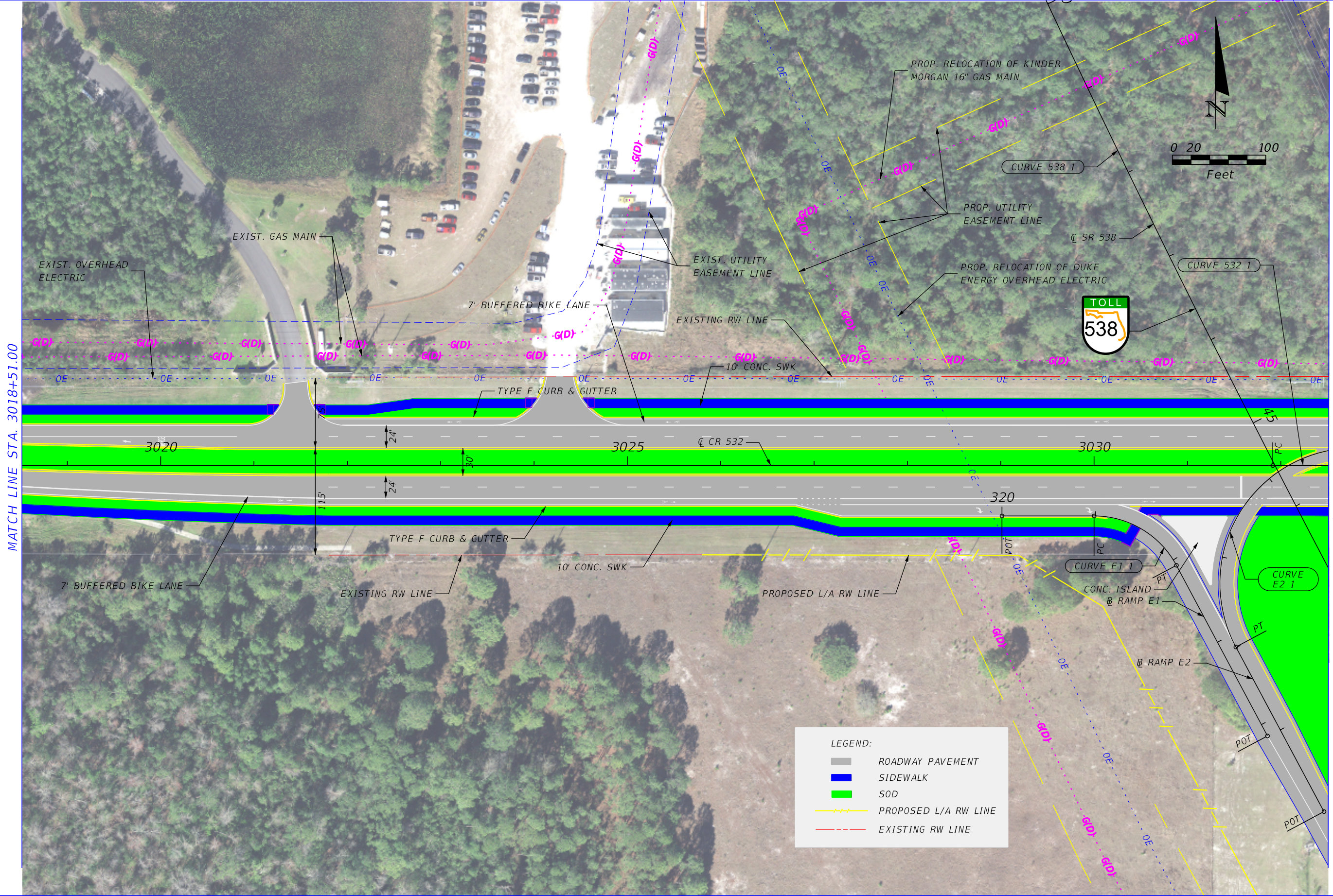
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
28



MATCH LINE STA. 3018+51.00

MATCH LINE STA. 3032+51.32

LEGEND:

	ROADWAY PAVEMENT
	SIDEWALK
	SOD
	PROPOSED L/A RW LINE
	EXISTING RW LINE

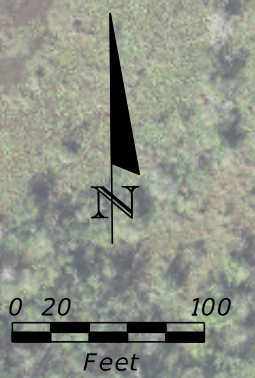
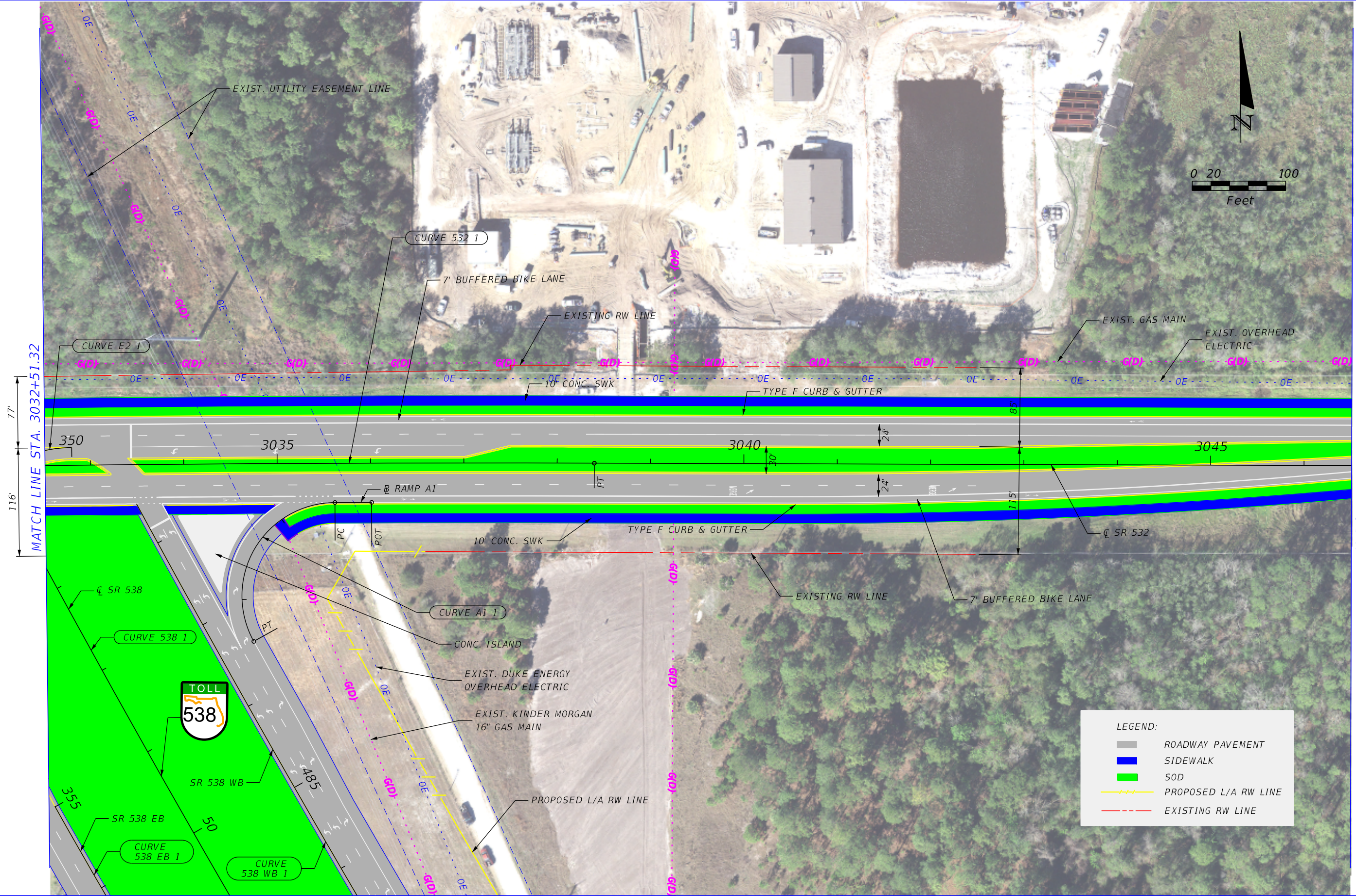
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
29



LEGEND:

	ROADWAY PAVEMENT
	SIDEWALK
	SOD
	PROPOSED L/A RW LINE
	EXISTING RW LINE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

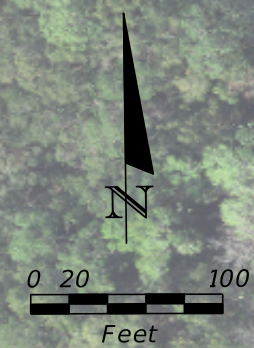
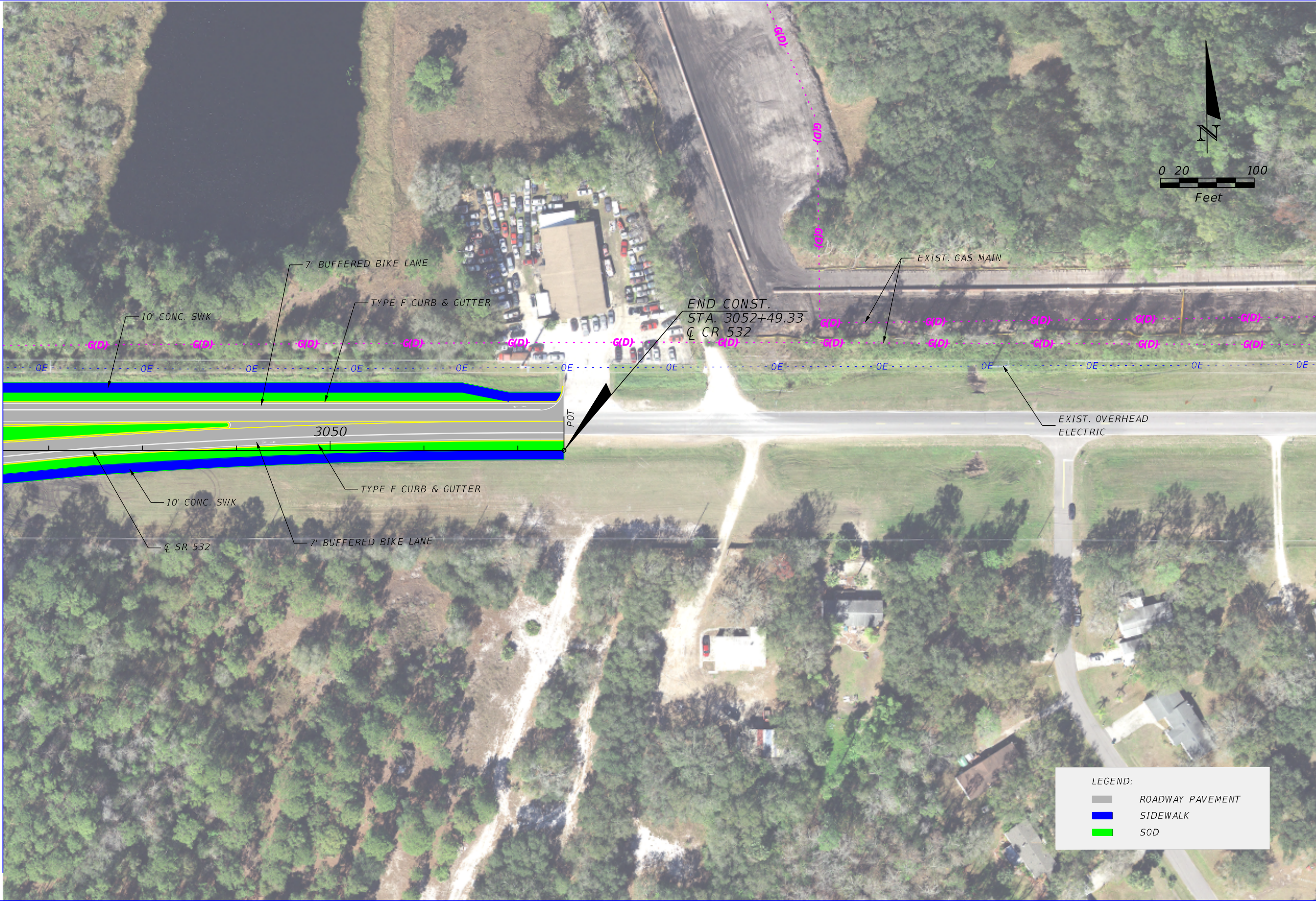
Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
30

MATCH LINE STA. 3046+51.03



LEGEND:

- ROADWAY PAVEMENT
- SIDEWALK
- SOD

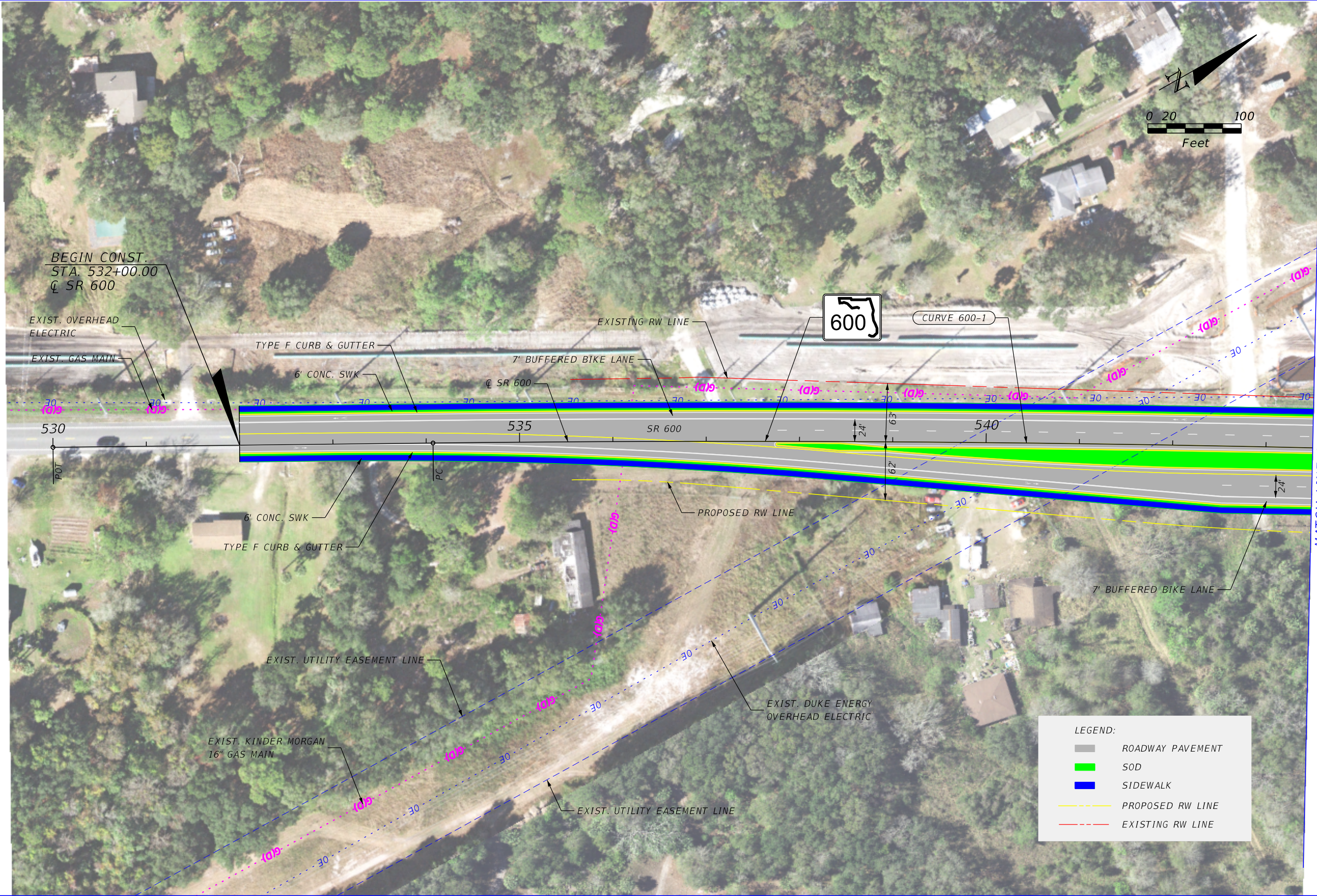
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
31



LEGEND:

	ROADWAY PAVEMENT
	SOD
	SIDEWALK
	PROPOSED RW LINE
	EXISTING RW LINE

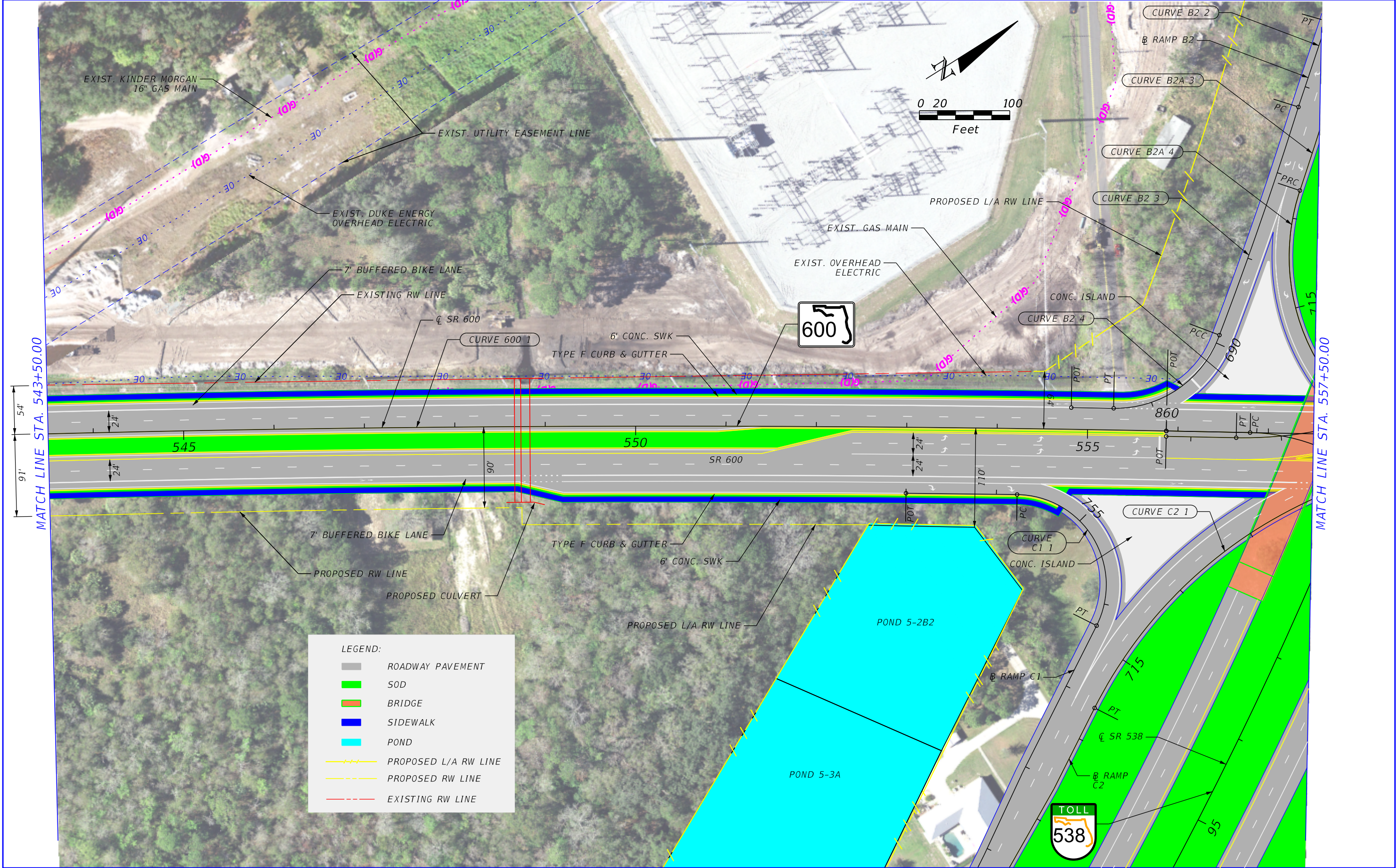
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
32



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

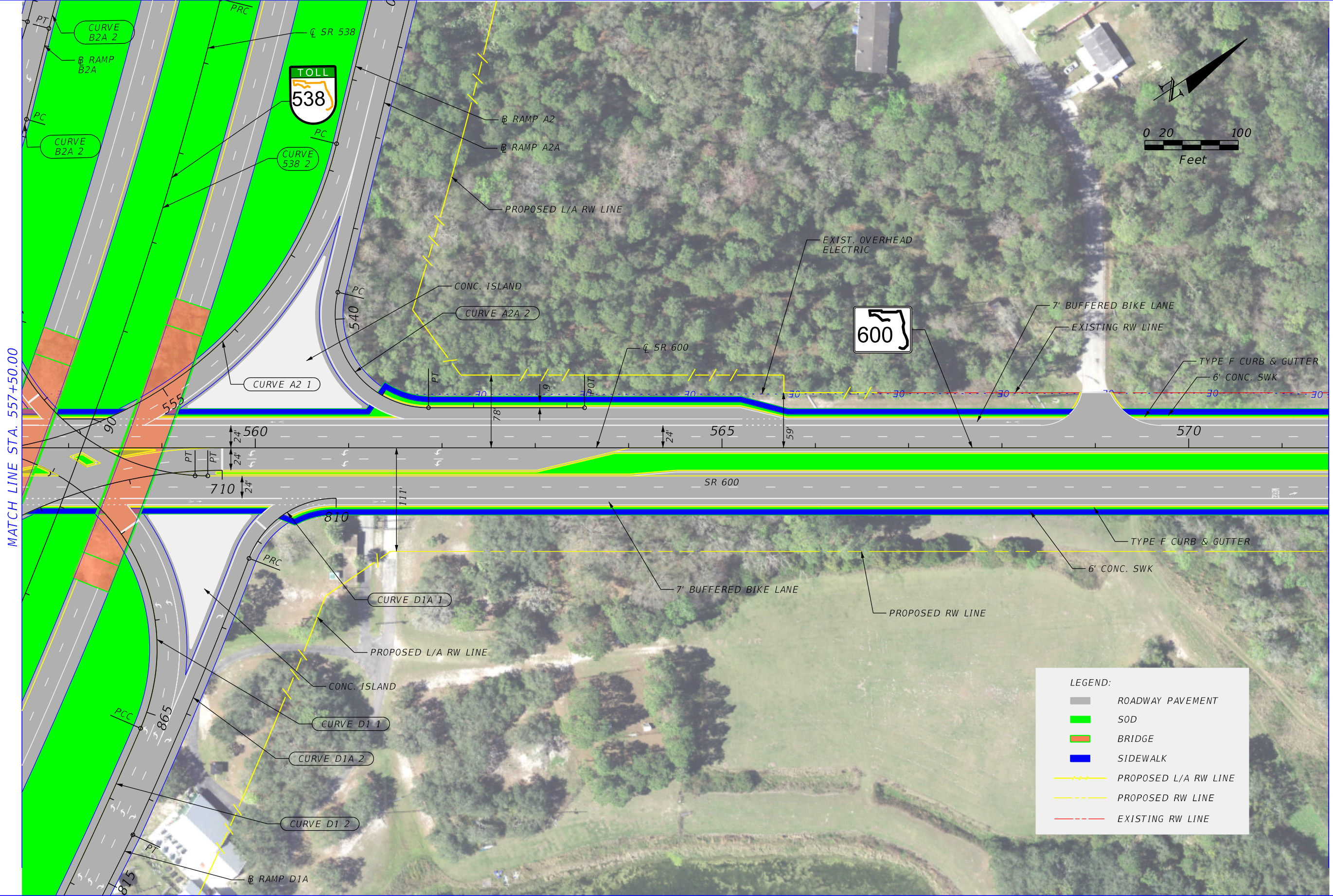
Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

TOLL 538

SHEET NO.
33



MATCH LINE STA. 557+50.00

MATCH LINE STA. 571+50.00

LEGEND:

- ROADWAY PAVEMENT
- SOD
- BRIDGE
- SIDEWALK
- PROPOSED L/A RW LINE
- PROPOSED RW LINE
- EXISTING RW LINE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

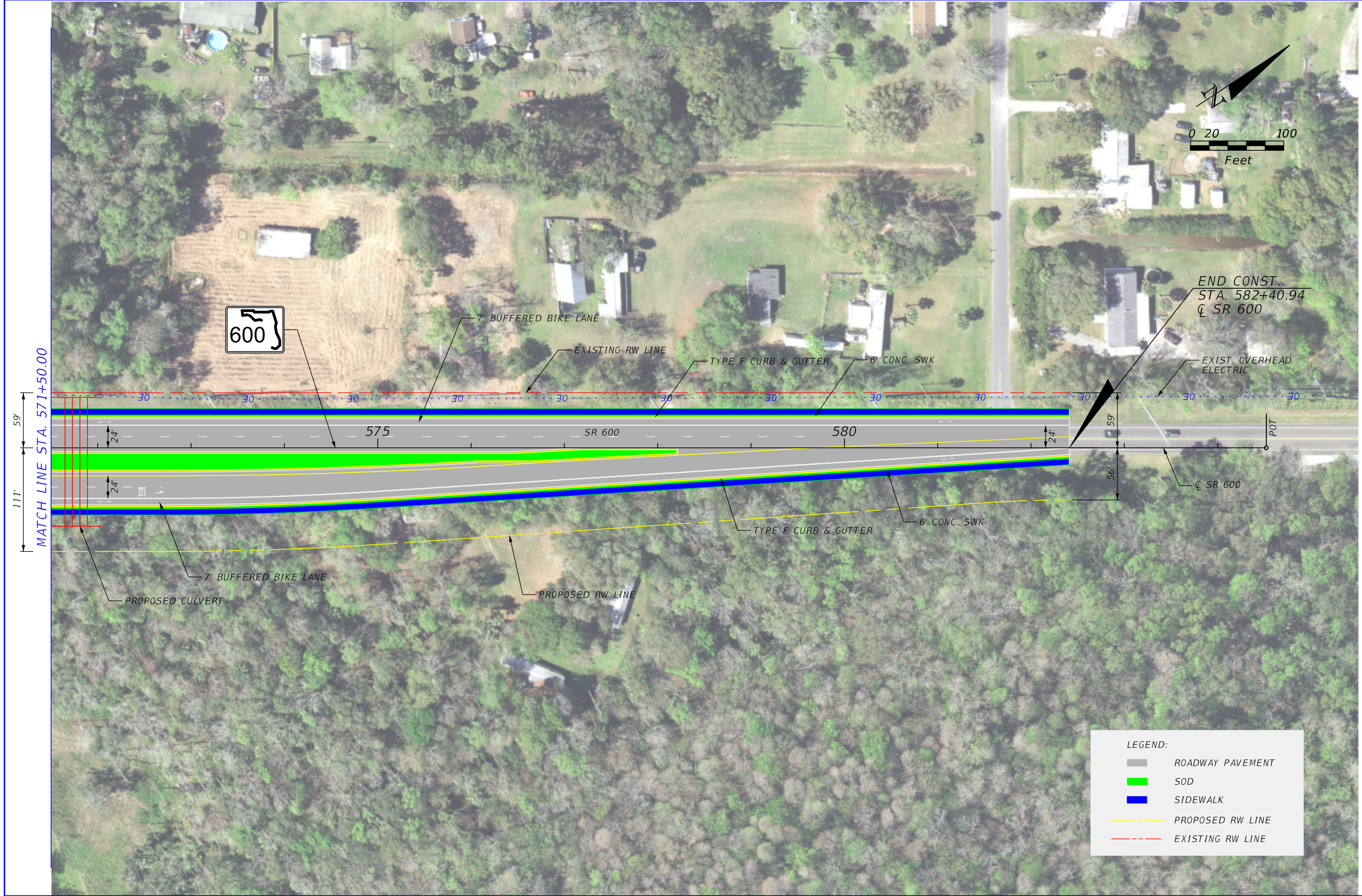
Kimley»Horn

Certificate Of Authorization No. 696
L. Frederick Burkett, P.E.
P.E. License No. 45825
189 South Orange Avenue, Suite 1000
Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
34



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley»Horn
 Certificate Of Authorization No. 696
 L. Frederick Burkett, P.E.
 P.E. License No. 45825
 189 South Orange Avenue, Suite 1000
 Orlando, Florida 32801

CENTRAL FLORIDA EXPRESSWAY AUTHORITY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 538	OSCEOLA POLK	599-224A

ROADWAY PLAN

SHEET NO.
35

APPENDIX B

Advance Notification Comments

From: White, Roshanna <White.Roshanna@epa.gov>
Sent: Friday, November 2, 2018 9:07 AM
To: Black, Amanda <Amanda.Black@kimley-horn.com>
Cc: Militischer, Chris <Militischer.Chris@epa.gov>; Buskey, Traci P. <Buskey.Traci@epa.gov>
Subject: Re: UPDATED - Advance Notification Package - Poinciana Parkway Extension PD&E - Osceola and Polk Counties, FL

Dear Ms. Black,

The U.S. Environmental Protection Agency reviewed an Advance Notification (AN) Package for the extension of Poinciana Parkway (SR-538). According to the AN, the proposed project would extend from SR-538, the northern end of the existing bridge over Reedy Creek Mitigation Bank, to CR-532 (Osceola Polk Line Road). The EPA understands that the extension of Poinciana Parkway is a new construction.

Based on our preliminary review of the proposed project's three alternatives (Alt. 1, Alt. 4, and Alt. 5), the EPA offers the following environmental comments for your consideration in preparation of the draft Project Development and Environmental Study (PD&E):

Wetlands and Other Surface Waters: The AN states that within a 500-ft. study buffer Alternative 1 GIS analysis indicates 192.42 acres palustrine wetlands and 12.78 acres of lacustrine wetlands, Alternative 4 GIS analysis indicates 198.37 acres palustrine wetlands, and Alternative 5 GIS analysis indicates 219.35 acres palustrine wetlands. Consistent with Section 404 of the Clean Water Act, the selected site should avoid and minimize, to the maximum extent practicable, placement of fill into jurisdictional waters of the U.S., which include wetlands and streams. Additionally, consider that the potential increase in impervious surface may increase storm water runoff and may increase pollutants into nearby water bodies and wetlands as a result of the project. Also, habitat loss due to the new construction would threaten the survival of fish and wildlife. The EPA recommends that the PD&E discuss the actual wetland acreage impact for the proposed project, storm water collection and treatment mechanisms that would be designed to protect the function of surrounding wetlands that will and have already experienced secondary impacts from roadway runoff, and avoidance and minimization measures that would be included in the project design. Compensatory mitigation, best management practices during project construction activities, and an evaluation of low-impact development storm water management practices should be considered during the development of the PD&E. Additionally, it is important to prevent further fragmentation, degradation, and loss of wildlife habitat through preservation of the remaining habitat in the project area.

The EPA acknowledges that the AN indicates that a Wetlands Evaluation and Conceptual Mitigation Plan will be included in the Natural Resources Evaluation (NRE). We request a copy of the NRE document for review and a further understanding of the significance of the impacts to wetlands.

Water Quality and Quantity: The AN states that the proposed project is within the Reedy Creek Drainage Basin. A healthy watershed provides clean drinking water, productive fisheries, and outdoor recreation which support a healthy environment and quality of life. Water movement to and from ground water, and storm water runoff patterns are factors that influence the health of the watershed. Moreover, the proposed project area is within the Florida Surficial Aquifer System and the Biscayne Sole Source Aquifer streamflow and recharge zone. Human activities have the potential to degrade ground water, and it is important to maintain and protect the quality of water because it provides much of the drinking water in Florida. An increase in impervious or semi-impervious surfaces may contribute to surface drainage and non-point sources that may impact surface and groundwater quality. The EPA recommends that the PD&E discuss adequate sediment and erosion control measures that would be used to prevent the discharge of pollutants into water bodies; project measures that would reduce pollution runoff from construction activities; best management practices that would control erosion, sediment release and storm water runoff to minimize adverse impacts on water resources; and ensure drainage design is major part of planning for the project.

Environmental Justice: The AN identified four census block groups within a 1,320-ft buffer. Within that buffer Alternative 1 total population is 1,240 people (1990 population of 700 increased to 1,240 people in 2016) and minority population of 55.40%, Alternative 4 total population is 974 people (1990 population of 375 increased to 974 people in 2016) and minority population of 75.26%, and Alternative 5 Alternative 1 total population is 1,175 people (1990 of population 389 increased to 1,175 people in 2016) and minority population of 76.60%. The potential residential impacts (relocations or partially impacted parcels) for each Alternative is as follows: Alternative 1 would potentially impact 90 parcels, Alternative 4 would potentially impact 75 parcels, and Alternative 5 would potentially impact 65 parcels. Environmental features and community elements help individuals maintain health and well-being. The EPA recommends that the PD&E identify and address the environmental health impacts and safety risks that may have a disproportionate impact on vulnerable populations; develop the project in accordance with Executive Order 12989 on Environmental Justice.

We acknowledge that the AN states that public outreach will be conducted to solicit input and ensure that both social and transportation needs of the community are addressed. We recommend that social impacts are continually evaluated as the project continues into future phases and request to review the Sociocultural Effects Evaluation and Noise Study.

The EPA appreciates the opportunity to provide comments on the proposed project. Please provide updates of future project revisions or submissions of the environmental documents for the proposed project. If you have any questions regarding these comments, please contact me at the information below.

Sincerely,

Roshanna White | Life Scientist | NEPA Program Office
U.S. Environmental Protection Agency | Region IV
61 Forsyth Street SW | Atlanta, GA 30303
Voice: 404-562-9035 | Email: white.roshanna@epa.gov

From: Stephen.Wilson@faa.gov [mailto:Stephen.Wilson@faa.gov]

Sent: Wednesday, October 3, 2018 7:56 AM

To: Tate, Clif <Clif.Tate@kimley-horn.com>

Subject: Advance Notification Package - Poinciana Parkway Extension SR 538, Project No. 599-224

Mr. Tate,

Based on the information provided in the Advance Notification Package dated September 17, 2018, we find no impacts to surrounding public airports.

Thank you

Stephen Wilson
Community Planner
FAA, Orlando Airports District Office
8427 SouthPark Circle, Suite 524
Orlando, FL 32819
407.487.7229
Stephen.wilson@faa.gov

From: Jennifer Schull - NOAA Federal <jennifer.schull@noaa.gov>
Sent: Thursday, October 4, 2018 2:54 PM
To: Tate, Clif <Clif.Tate@kimley-horn.com>
Cc: Black, Amanda <Amanda.Black@kimley-horn.com>; Pace Wilber - NOAA Federal <pace.wilber@noaa.gov>; Jennifer Schull <Jennifer.Schull@noaa.gov>
Subject: NMFS Response: Poinciana Parkway Extension from Poinciana Parkway to CR 532

Dear Mr. Tate,

NOAA's National Marine Fisheries Service (NMFS) reviewed the Advanced Notification Package for the road improvement project along Poinciana Parkway Extension (State Road 538) from Poinciana Parkway to County Road 532 in Osceola County, Florida (CFX project number 599-224).

Based on the project location, information provided in the advanced notification package and GIS-based analysis of impacts, NMFS concludes that essential fish habitat (EFH) would not be impacted by the proposed project; accordingly, we offer no comments pursuant to the EFH provisions of the Magnuson-Stevens Act (P.L. 104-297); and this project will not require an EFH Assessment. However, the freshwater wetlands within the project corridor provide water quality functions, such as removal of sediments, excess nutrients, and contaminants, which benefit and support aquatic ecosystems. Through hydrological connections, these wetlands also contribute plant material and other usable nutrients (both dissolved and particulate organic matter) into aquatic food webs that include recreationally, commercially, and ecologically important species downstream. If wetland impacts are unavoidable, sequential minimization and mitigation should take place. In addition to the direct impacts from filling wetlands, construction activities may impact adjacent wetlands through sedimentation and runoff.

The NMFS is not aware of any threatened or endangered species or critical habitat under NMFS' jurisdiction within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

We appreciate the opportunity to provide these comments. The comments regarding sequential mitigation are in accordance with the Fish and Wildlife Coordination Act. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH. Please direct any future correspondence on this project to Ms. Jennifer Schull at our West Palm Beach field office ((561) 249-1652, jennifer.schull@noaa.gov, 400 N Congress Avenue, Suite 110, West Palm Beach, Florida 33401.)

--

Jennifer Schull
NOAA Fisheries Southeast Regional Office
Habitat Conservation Division
400 N. Congress Avenue STE 110
West Palm Beach, FL 33401
561 249-1652

From: Victoria Menchaca [<mailto:VictoriaMenchaca@semtribe.com>]

Sent: Tuesday, October 16, 2018 9:59 AM

To: Tate, Clif <Clif.Tate@kimley-horn.com>

Cc: Watts, Jason <Jason.Watts@dot.state.fl.us>; Marino, Matthew <Matthew.Marino@dot.state.fl.us>; Jackson, Roy <Roy.Jackson@dot.state.fl.us>

Subject: FDOT CFX Poinciana Parkway Extension SR538/Poinciana Pkwy to CR 532, Osceola and Polk Counties FL

SEMINOLE TRIBE OF FLORIDA
TRIBAL HISTORIC PRESERVATION OFFICE
AH-TAH-THI-KI MUSEUM

TRIBAL HISTORIC
PRESERVATION OFFICE
SEMINOLE TRIBE OF FLORIDA
AH-TAH-THI-KI MUSEUM
30290 JOSIE BILLIE HIGHWAY
PMB 1004
CLEWISTON, FL 33440
THPO PHONE: (863) 983-6549
MUSEUM PHONE: (863) 902-1113
FAX: (863) 902-1117
THPO WEBSITE: WWW.STOFTHPO.COM
MUSEUM WEBSITE: WWW.AHTAHTHIKI.COM



TRIBAL OFFICERS

MARCELLUS W. OSCEOLA JR.
CHAIRMAN

MITCHELL CYPRESS
VICE CHAIRMAN

LAVONNE ROSE
SECRETARY

PETER A. HAHN
TREASURER

October 16, 2018

Clif Tate, P.E.
Project Manager
Kimley-Horn and Associates IN
189 South Orange Ave Ste 100
Orlando FL
Email: Clif.Tate@Kimley-Horn.com

Subject: FDOT CFX Poinciana Parkway Extension SR538/Poinciana Pkwy to CR 532, Osceola and Polk Counties FL
THPO #: 0031266

Dear Mr. Tate,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the FDOT CFX Poinciana Parkway Extension SR538/Poinciana Pkwy to CR 532, Osceola and Polk Counties FL. The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the documents provided and would respectfully like to request a copy of the Cultural Resources Assessment Survey, when it is available, so that we may complete our assessment pursuant to Section 106 of the National Historic Preservation Act and its implementing authority, 36 CFR 800.

Thank you and feel free to contact us with any further questions.

Respectfully,

A handwritten signature in black ink on a light gray background. The signature reads "Victoria Menchaca" in a cursive, flowing script.

Victoria L. Menchaca, MA, Compliance Review Specialist
STOF-THPO, Compliance Review Section
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Office: 863-983-6549 ext 12216
Email: victoriamentchaca@semtribe.com
Web: www.stofhpo.com

From: Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Wednesday, September 19, 2018 8:17 AM
To: Black, Amanda <Amanda.Black@kimley-horn.com>
Subject: RE: UPDATED - Advance Notification Package - Poinciana Parkway Extension PD&E - Osceola and Polk Counties, FL

Thank you for the Advance Notification package regarding the Poinciana Parkway Extension in Osceola and Polk Counties, FL.

There are no Coast Guard jurisdictional waterways within the scope of the project; we have no additional comments regarding the project as currently scoped.

Thank you,

Randall Overton, M.P.A.
Chief, Permits Division
Coast Guard Seventh District Bridge Administration
909 SE 1st Ave Suite 432
Miami, FL 33131
(305) 205-0795 Cell
(305) 415-6736 Office

APPENDIX C

SHPO RAI

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

June 13, 2019

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Dr. Adrienne Daggett, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Poinciana Parkway Extension (SR 538)
Project Development and Environment (PD&E) Study
From Poinciana Parkway to County Line Road 532
Polk and Osceola Counties, Florida
CFX No. 599-224

RECEIVED
BUREAU OF
HISTORIC PRESERVATION
2019 JUN 17 P 12:05

Dear Dr. Parsons,

Enclosed please find one copy of the report titled *Cultural Resource Assessment Survey for the Poinciana Parkway Extension (State Road 538) Project Development and Environment (PD&E) Study from Poinciana Parkway to County Road 532, Polk and Osceola Counties, Florida*. The Central Florida Expressway Authority (CFX) is assessing the feasibility and viability of extending Poinciana Parkway for a distance of approximately 3 miles (4.8 kilometers) in Polk and Osceola Counties, Florida. This report presents the findings of a Phase I CRAS conducted in support of the proposed project.

To encompass all potential improvements, the Area of Potential Effects (APE) was defined to include the existing and proposed Poinciana Parkway right-of-way. For the new roadway, the APE was extended 328 feet (100 meters) from the construction footprint. For the portions of the project located along existing roadway, the APE was extended to the back or side property lines of parcels adjacent to proposed new right-of-way, or a distance of no more than 328 feet (100 meters) from the maximum right-of-way line. For the utility easement, the APE was defined as the construction footprint, as these improvements will be at-grade and cause no new viewshed concerns. The archaeological survey was conducted within the existing and proposed rights-of-way, as well as the utility easement. The historic structure survey was conducted within the entire Poinciana Parkway Extension APE.

This CRAS was conducted in accordance with the requirements set forth in the National Historic Preservation Act of 1966, as amended, and Chapter 267, Florida Statutes (F.S.). The investigations were carried out in conformity with Part 2, Chapter 8 (Archaeological and Historical Resources) of FDOT's Project Development and Environment (PD&E) Manual, FDOT's Cultural Resources Manual, and the standards contained in the Florida Division of Historical Resources (FDHR) Cultural Resource Management Standards and Operations Manual (FDHR 2003). In addition, this survey meets the specifications set forth in Chapter 1A-46, Florida Administrative Code.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Given the results of the CRAS, it is the opinion of CFX that the proposed Poinciana Parkway Extension will pose no adverse effect to cultural resources listed or eligible for listing in the NRHP within the areas surveyed by the present CRAS. In consultation with Kimley-Horn, Inc. and CFX, the areas left to be tested due to access issues will be addressed with supplemental testing following land acquisition of the parcels if the project moves forward to the design and right-of-way acquisition phases.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Clif Tate, P.E., Kimley-Horn and Associates, Inc., by email at clif.tate@kimley-horn.com or by phone: 407-427-1628.

Sincerely,



Mr. Joseph A. Berenis, P.E.
Chief of Infrastructure
Central Florida Expressway Authority

Enclosure

The Florida State Historic Preservation Officer:

___ finds the attached report complete and sufficient and ___ concurs/ ___ does not concur with the findings and recommendations contained in this cover letter and the enclosed report.

X does not find the attached report complete and sufficient and requires additional information in order to provide an opinion on the potential effects of the proposed project on historic resources.

Is/ J. Aldrich Deputy SHPO
For: Timothy A. Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

7/11/2019
Date

2019-3452
DHR No.

Please see attached comments.

SHPO comments on Poinciana Parkway Extension (SR 538)

At this time, SHPO cannot concur with either eligibility or effects determinations for this project, for the following reasons:

- We do not concur with the determinations of eligibility for the Old Kissimmee Road (PO7154 and OS2567). The segment within the area of potential effects is not enough to make a determination of eligibility for the entire resource. The fact that the road is no longer a brick road does not compromise the resource's integrity. The road maintains alignment, setting, character and has not been expanded to multiple lanes. Additionally, it is a former segment of the Old Dixie Hwy system. If the road were to be evaluated in its entirety, it is very likely that the road would be eligible. Therefore, at this time, our office cannot concur with the determinations or findings of this report.
- SHPO cannot concur with effects until the survey is completed. Both the letter and the report intro discuss the lack of access to certain parcels and the intent to complete testing once the project moves forward, though the report conclusion recommends no additional work without discussion of the inaccessible parcels.
- Please clarify whether Reedy Creek Mitigation Bank isn't going to be tested at all, or just hasn't been yet.

APPENDIX D

SHPO Concurrence

COPY

2019-3452c

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

August 6, 2019

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Dr. Adrienne Daggett, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Poinciana Parkway Extension (SR 538)
Project Development and Environment (PD&E) Study
From Poinciana Parkway to County Line Road 532
Polk and Osceola Counties, Florida
CFX No. 599-224
DHR No. 2019-3452

2019

A 9 14 9

Dear Dr. Parsons,

In June 2019, our office submitted the report titled *Cultural Resource Assessment Survey for the Poinciana Parkway Extension (State Road 538) Project Development and Environment (PD&E) Study from Poinciana Parkway to County Road 532, Polk and Osceola Counties, Florida* to your office for review and concurrence. The Central Florida Expressway Authority (CFX) is assessing the feasibility and viability of extending Poinciana Parkway for a distance of approximately 3 miles (4.8 kilometers) in Polk and Osceola Counties, Florida. This report presented the findings of a Phase I CRAS conducted in support of the proposed project.

On July 11, 2019, we received comments from your office regarding the report, indicating non-concurrence with the findings of the document and requesting additional information. Subsequently, we submitted to you a technical memorandum providing additional information and proposing revisions to the report to clarify the findings and recommendations. Please find the revised CRAS report here enclosed.

The archaeological survey identified two prehistoric archaeological sites, PPLS#1 (8OS02940) and PPLS#2 (8OS02941), both of which are recommended ineligible for the National Register of Historic Places (NRHP). However, archaeological testing for the current survey effort was restricted in three areas due to landowner objections. The untested portions of the proposed right-of-way will be tested in the future, should the project move forward into the Design phase. Once access has been arranged, archaeological and architectural history survey will be conducted in these areas and the survey results will be submitted to your office as an addendum to the present report.

The architectural survey resulted in the identification and evaluation of 10 historic resources in the Poinciana Parkway Extension APE, including four previously recorded resources and six newly recorded resources. The previously recorded resources include two linear resources (8PO07154/8OS02567 and 8PO07219/8OS02540) and two structures (8PO07156 and 8PO07157). The newly recorded historic

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

resources include six structures (8OS02937, 8PO08109, and 8PO08197-8PO08200). In addition, during the field review, one previously recorded resource (8PO07155) was confirmed to have been previously demolished.

Based on the results of the current survey, SEARCH recommends that the South Florida Railroad (8PO07219/8OS02540) is eligible for the NRHP under Criteria A and C. Furthermore, there is insufficient information available to make an eligibility recommendation regarding Old Kissimmee Road/Old Tampa Highway (8PO07154/8OS02567). The remaining eight historic resources are recommended ineligible for the NRHP due to a lack of historic associations, architectural significance, and/or historic integrity.

No further work is recommended for the portions of the project APE addressed by the current survey effort. Should the project move forward to the design and right-of-way acquisition phases, the unsurveyed portions of the APE will be subjected to archaeological and architectural history survey once access is secured. The results of the additional survey will be submitted as a CRAS addendum and, at that time, project-related effects will be evaluated in consultation with your office.

At this time, I respectfully request your concurrence with the eligibility recommendations provided in the revised CRAS report.

If you have any questions or need further assistance, please contact Clif Tate, P.E., Kimley-Horn and Associates, Inc., by email at clif.tate@kimley-horn.com or by phone: 407-427-1628.

Sincerely,



Mr. Glenn Pressimone, P.E.
Chief of Infrastructure
Central Florida Expressway Authority

Enclosure

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

The Florida State Historic Preservation Officer:

finds the attached report complete and sufficient and ^{with the conditions stated below} concurs / does not concur with the findings and recommendations contained in this cover letter and the enclosed report.

does not find the attached report complete and sufficient.

1/s/ Timothy A. Parsons Deputy SHPO
For Timothy A. Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

9/6/2019
Date

2019-3452-C
DHR No.

DHR's concurrence of effects and eligibility apply only to the surveyed portions and resources of the project area. Effects determinations for the project as a whole will need to be re-assessed once survey is completed for the remainder of the project area.

APPENDIX E

STOF Concurrence

SEMINOLE TRIBE OF FLORIDA
TRIBAL HISTORIC PRESERVATION OFFICE
AH-TAH-THI-KI MUSEUM

TRIBAL HISTORIC
PRESERVATION OFFICE
SEMINOLE TRIBE OF FLORIDA
AH-TAH-THI-KI MUSEUM
30290 JOSIE BILLIE HIGHWAY
PMB 1004
CLEWISTON, FL 33440
THPO PHONE: (863) 983-6549
MUSEUM PHONE: (863) 902-1113
FAX: (863) 902-1117
THPO WEBSITE: WWW.STOFTHPO.COM
MUSEUM WEBSITE: WWW.AHTAHTHIKI.COM



TRIBAL OFFICERS

MARCELLUS W. OSCEOLA JR.
CHAIRMAN

MITCHELL CYPRESS
VICE CHAIRMAN

LAVONNE ROSE
SECRETARY

PETER A. HAHN
TREASURER

September 26, 2019

Clif Tate, P.E.
Project Manager
Kimley-Horn and Associates IN
189 South Orange Ave Ste 100
Orlando FL
Email: Clif.Tate@Kimley-Horn.com

Subject: FDOT CFX Poinciana Parkway Extension SR538/Poinciana Pkwy to CR 532, Osceola and Polk Counties FL
THPO #: 0031266

Dear Mr. Tate,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the FDOT CFX Poinciana Parkway Extension SR538/Poinciana Pkwy to CR 532, Osceola and Polk Counties FL. The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the documents provided and completed our assessment pursuant to Section 106 of the National Historic Preservation Act and its implementing authority, 36 CFR 800. We have no objections to the project at this time. However, please notify us if any archaeological, historical, or burial resources are inadvertently discovered.

Respectfully,

Victoria L. Menchaca, MA, Compliance Review Specialist
STOF-THPO, Compliance Review Section
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Office: 863-983-6549 ext 12216
Email: victoriamenchaca@semtribe.com
Web: www.stofthpo.com

APPENDIX F

Water Quality Impact Evaluation (WQIE)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
WATER QUALITY IMPACT EVALUATION CHECKLIST

650-050-37
 ENVIRONMENTAL
 MANAGEMENT
 10/17

PART 1: PROJECT INFORMATION

Project Name:	Poinciana Parkway Extension
County:	Polk and Osceola
FM Number:	NA
Federal Aid Project No:	NA
Brief Project Description:	The Poinciana Parkway Extension PD&E Study includes an evaluation of alternatives to extend the existing Poinciana Parkway (SR 538) from the existing bridge over the Reedy Creek Mitigation Bank to CR 532. The project is a proposed tolled 4-lane expressway within approximately 330 feet of right-of-way (ROW). This ROW width provides for expansion for additional lanes and/or other multi-modal travel options if needed in the future. The project also includes interchanges with other county and state roads, bridges over wetlands in the Reedy Creek Mitigation Bank and South Florida Water Management District (SFWMD) owned/managed Upper Lakes Basin Watershed habitat, as well as bridges over local roads and railroads. Stormwater management facilities are also being evaluated.

PART 2: DETERMINATION OF WQIE SCOPE

Does project discharge to surface or ground water? Yes No

Does project alter the drainage system? Yes No

Is the project located within a permitted MS4? Yes No

Name: _____

If the answers to the questions above are no, complete the applicable sections of Part 3 and 4, and then check Box A in Part 5.

PART 3: PROJECT BASIN AND RECEIVING WATER CHARACTERISTICS

Surface Water

Receiving water(s) names: Reedy Creek above Lake Russell (WBID 3170C)

Water Management District: South Florida and Southwest Florida Water Management Districts

Environmental Look Around meeting date: [Click here to enter a date.](#)

Attach meeting minutes/notes to the checklist.

Water Control District Name (list all that apply): Reedy Creek Improvement District

Groundwater

Sole Source Aquifer (SSA)? Yes No

Name Biscayne Sole Source Aquifer and Recharge Zone

If yes, complete Part 5, D and complete SSA Checklist shown in Part 2, Chapter 11 of the PD&E Manual

Other Aquifer? Yes No

Name Floridan

Springs vents? Yes No

Name _____

Well head protection area? Yes No

Name _____

Groundwater recharge? Yes No

Name _____

Notify District Drainage Engineer if karst conditions are expected or if a higher level of treatment may be needed due to a project being located within a WBID verified as Impaired in accordance with Chapter 62-303, F.A.C.

Date of notification: [Click here to enter a date.](#)

PART 4: WATER QUALITY CRITERIA

List all WBIDs and all parameters for which a WBID has been verified impaired, or has a TMDL in **Table 1**. This information should be updated during each re-evaluation as required.

Note: If BMAP or RAP has been identified in **Table 1**, **Table 2** must also be completed. Attach notes or minutes from all coordination meetings identified in **Table 2**.

EST recommendations confirmed with agencies? Yes No

BMAP Stakeholders contacted: Yes No

TMDL program contacted: _____ Yes No

RAP Stakeholders contacted: Yes No

Regional water quality projects identified in the ELA Yes No

If yes, describe:

Potential direct effects associated with project construction and/or operation identified? Yes No

If yes, describe:

The project consists of a new limited access toll facility that will introduce new pollutant discharges into the watershed. Alternatives 4A and 5A (with and without slip ramps to Ronald Reagan Parkway cross the Reedy Creek Mitigation Bank and portions of the Reedy Creek Upper Lakes Basin - SFWMD lands. The proposed improvements include bridges over the wetland areas and existing access roads within the bank. Stormwater management facilities will be constructed in accordance with State criteria to minimize impacts from this new road facility.

Discuss any other relevant information related to water quality including Regulatory Agency Water Quality Requirements.

Project will meet all applicable SFWMD criteria related to Water Quality. The project is currently a non-federal action receiving no federal monies; therefore, concurrence from the EPA is not required according to the Safe Drinking Water Act. The PD&E Study will discuss the use of best management practices that would control erosion, sediment release, and storm water runoff to minimize adverse impacts on surface water resources, as well as ensure drainage design is part of the planning for the project.

PART 5: WQIE DOCUMENTATION

- A. No involvement with water quality
- B. No water quality regulatory requirements apply.
- C. Water quality regulatory requirements apply to this project (provide Evaluator's information below). Water quality and stormwater issues will be mitigated through compliance with the design requirements of authorized regulatory agencies.
- D. EPA Ground/Drinking Water Branch review required. Yes No
Concurrence received? Yes No
If Yes, Date of EPA Concurrence: [Click here to enter a date..](#)
Attach the concurrence letter

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by CFX.

Evaluator Name (print): Lynn Kiefer

Title: Senior Environmental Scientist

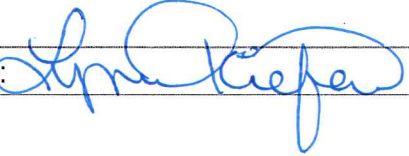
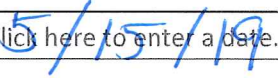
Signature: 	Date:  Click here to enter a date.
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Table 1: Water Quality Criteria

Receiving Waterbody Name (list all that apply)	FDEP Group Number / Name	WBID(s) Numbers	Classification (I,II,III,IIIL,IV,V)	Special Designations*	NNC limits**	Verified Impaired (Y/N)	TMDL (Y/N)	Pollutants of concern	BMAP, RA Plan or SSAC
Reedy Creek Above Lake Russell	4/ Kissimmee River	3170C	III	NA	NA	No	No	Biology but causative pollutant not identified	NA
Lake Okeechobee	1	3212A -I	I	NA	140 metric tons/yr	Yes	Yes	TP	Yes
Lake Kissimee	4/Kissimmee River	3183B	III	NA	NA	Yes	Yes	TN	NA

* ONRW, OFW, Aquatic Preserve, Wild and Scenic River, Special Water, SWIM Area, Local Comp Plan, MS4 Area, Other
 ** Lakes, Spring vents, Streams, Estuaries
 Note: If BMAP or RAP has been identified in Table 1, Table 2 must also be completed.

Table 2: REGULATORY Agencies/Stakeholders Contacted

Receiving Water Name (list all that apply)	Contact and Title	Date Contacted	Follow-up Required (Y/N)	Comments
N Reedy Creek	SFWMD	11/27/18	No	See attached Pre-application Meeting Minutes
	Reedy Creek Improvement District	NA	No	Representatives from the RCID are included on the Environmental Advisory Group and have attended 2 EAG meetings (8/15/18 and 2/19/19)

APPENDIX G

Contamination Sites Information

Table 3: Potential Contamination Sites Summary

Site No.	Site ID. per GeoSearch Radius Report	Facility Name	Location/ Address	County	Facility ID	Distance from ROW	Potential Concern(s)	Site History and Potential Contamination Parameters	Risk Evaluation Rating
01A	05	EZ Food Store #1	5945 US 17/92, Davenport, FL 33857	Polk	8736165	~200-250 feet NE of Alt 1A	Operational Gas Station, Previous Petroleum Discharge – SRCO	This facility is an active retail gas station that contains one (1) 20,000-gallon underground storage tank (UST). The UST was reportedly installed in 2009 and remains in service. Historically, this facility contained two (2) 8,000-gallon unleaded gas USTs, one (1) 4,000-gallon unleaded gas UST, and one (1) 4,000-gallon diesel fuel UST, all installed in 1987 and removed from the site. The facility reported a petroleum discharge in April 1988. Cleanup activities were performed for this discharge and the facility was issued a Site Rehabilitation Completion Order (SRCO) in August 2012. The facility remains an active gas station.	Medium
01B	05	Oak Hills Estates	CR 54 & 17-92, Loughman, FL 33837	Polk	9046109	~400-450 feet NE of Alt 1A	Former UST Site, Previous Petroleum Discharge – NFA	This facility previously contained one (1) 10,000-gallon leaded gas UST, one (1) 1,000-gallon leaded gas UST, three (3) 550-gallon leaded gas USTs, and one (1) 280-gallon leaded gas UST, all of which have been removed from the site. The facility reported a petroleum discharge in November 1989. Cleanup activities were completed and the facility was issued a No Further Action (NFA) status from the FDEP in October 1998. Since that time, the site has remained vacant and undeveloped. Based on the regulatory status and lack of tanks remaining onsite, this facility is assigned a Low risk.	Low
02	06	Polk County – Providence Water Production Facility	601 Kinney-Harmon Road, Loughman, FL 33896	Polk	9811362	Within Alt 1A	AST Site	This facility contains one (1) 3,000-gallon emergency generator aboveground storage tank (AST) with no reported discharges.	Low
03	11	Sabal Trail Transmission Reunion	6781 Osceola Polk Line Road, Davenport, FL 33896	Osceola	FLR000225318	~300-400 feet north of Alts 4A & 5A	RCRA Generator	This facility is listed as a small quantity generator of hazardous waste with no reported RCRA violations.	Low
04	13	Rambo & Sons Trucking, Inc. 04-41-0600	US 17/92 & Labor Camp Road, Davenport, FL 33896	Osceola	9807327	Within Alts 4A & 5A	Previous Petroleum Discharge – NFA	This facility reported a petroleum discharge associated with a dump truck in December 2004. There are no tanks associated with this facility. Cleanup activities were completed, and the facility was issued a NFA in February 2006.	Low
05	14	Reedy Creek Land Bank – 3500 Acre Tract	CR 54, Loughman, FL 34758	Osceola	9807014	Within all Alts	Previous Petroleum Discharge – NFA	This facility reported a petroleum discharge in response to an emergency spill along SR 54 in November 1999. There are no tanks associated with this facility. Cleanup activities were completed and the facility was issued a NFA in September 2005.	Low
06A	16	Loughman Service Center	6004 US 17/92 North, Loughman, FL 33858	Polk	8624326	~350-400 feet north of Alt 1A	UST Site, Petroleum Discharge – Cleanup Ongoing	This facility is a closed retail fuel station that historically contained three (3) 4,000-gallon USTs, two (2) 2,000-gallon USTs, one (1) 1,000-gallon UST that were removed from the site. There were also one (1) 2,000-gallon UST and three (3) 12,000-gallon USTs that were closed-in-place at the site. This facility reported two (2) petroleum discharges in 1992 and 1993. The 1993 discharge was issued a No Cleanup Required by the FDEP. The 1992 discharge has ongoing cleanup activities and has a cleanup priority score of 46, indicating that the State cleanup funding is being expended to remediate this facility. Based on the ongoing cleanup activities, closed-in-place tanks existing on the site, and the close proximity to the project study area, it is assigned a Medium risk.	Medium
06B	16	Hart Storage Facility – Loughman	6004 US 17/92, Loughman, FL 33858	Polk	9300807	~300-350 feet north of Alt 1A	Former AST site	This facility historically contained one (1) 12,000-gallon AST that was installed in June 1993 and removed from the site in February 1995. There are no reported discharges associated with this facility. Lacking any reported discharges and tanks onsite, this facility is assigned a Low risk.	Low
07	20	Polk County Utilities – Oak Hills Master Lift Station	1650 Kinney Harmon Road, Davenport, FL 33836	Polk	9807691	Within all Alts except the Alts 4A/5A Utility Easement	AST Site	This facility contains one (1) 1,800-gallon emergency generator diesel fuel AST with no reported discharges and is associated with a Low risk.	Low

*GeoSearch Radius Report Sites 1, 2, 4, 7, 8, 9, 17, 21, 22, and 23 are NPDES permit facilities not associated with a potential contaminant release and are not included in this table.

*GeoSearch Radius Report Sites 18 and 19 are Facility Registry System Sites and are waste water sites not associated with a contaminant release and are not included in this table.

*GeoSearch Radius Report Sites 3, 10, 12, 15, and 24 are over 500 feet away from the project alternatives and are not included in this table.