

ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation
In cooperation with the US Coast Guard

SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)

District: FDOT District 1

County: Lee County

ETDM Number: 14359

Financial Management Number: 441942-1-22-01

Federal-Aid Project Number: N/A

Project Manager: Melody Matter

The Environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding (MOU) dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

This action has been determined to be a Categorical Exclusion, which meets the definition contained in 40 CFR 1508.4, and based on past experience with similar actions and supported by this analysis, does not involve significant environmental impacts.

Signature below constitutes Location and Design Concept Acceptance:

Director Office of Environmental Management
Florida Department of Transportation

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This document was prepared in accordance with the FDOT PD&E Manual.

This project has been developed without regard to race, color or national origin, age, sex, religion, disability or family status (Title VI of the Civil Rights Act of 1964, as amended).

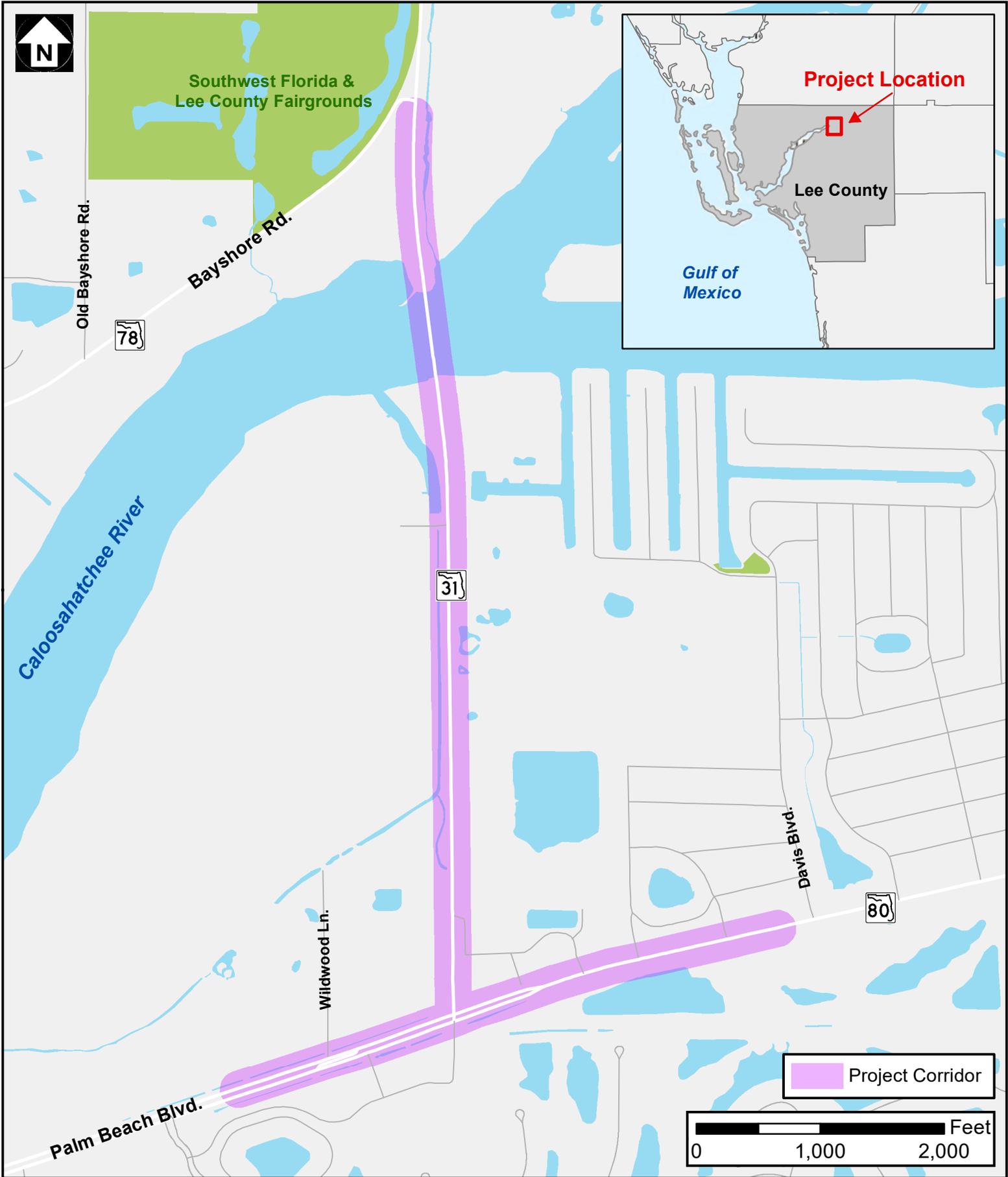
On 11/02/2018 the State of Florida determined that this project is consistent with the Florida Coastal Zone Management Program.

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**State Road 31 from
State Road 80 to State Road 78**
 FPID: 441942-1-22-01
 Lee County, FL

Project Location

DATA SOURCE:
Aerial Map - ESRI 2023

May 2023

**Figure
1**

1. Project Information

1.1 Project Description

The FDOT, District One (Department) is conducting a Project Development and Environment (PD&E) Study in accordance with the National Environmental Policy Act (NEPA) to evaluate capacity, operational, structural, and modal improvements to about 1.4 miles of State Road (SR) 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road) in northeastern Lee County (see **Figure 1**). The study includes the evaluation of capacity improvements to its current two-lane configuration, as well as pedestrian and bicycle accommodations. The study also includes evaluating repair/rehabilitation and replacement options for the Wilson Pigott Bridge over the Caloosahatchee River and improvement alternatives for the SR 31/SR 80 intersection.

The Department is coordinating with adjacent studies, including the SR 78 PD&E Study, the SR 31 North Design-Build project, and the pending Babcock Ranch development.

Existing Facility and Conditions

SR 31 in the project study area is classified by the Department as an Urban Minor Arterial. SR 31 is considered an Emerging Strategic Intermodal System (SIS) Corridor. The existing typical section is a two-lane, undivided rural roadway with two 12-foot travel lanes and 5-foot paved outside shoulders centered within a 100-foot right-of-way. The existing bridge is a 14-span low-level bascule structure with 10-foot lanes, 4-foot outside shoulders, and 3.5-foot raised sidewalks on both sides with no separation from motor vehicles. The existing vertical clearance over the channel is 26 feet.

The posted speed limit in this section of SR 31 is 40 mph. The surrounding land uses are a mixture of rural residential, commercial, and undeveloped land. The Lee County Future Land Use map (as of January 2022) reveals that most of the study area is zoned as "Future Urban Areas-Suburban". "Sub-Outlying Suburban", "Non-Urban Areas-Rural", and "Environmentally Critical Areas-Wetlands" designations are also in the project vicinity.

Stormwater runoff is collected in open drainage swales adjacent to the roadway with ultimate outfall to the Caloosahatchee River. SR 31 has no existing stormwater management facilities. The project is located within Waterbody ID (WBID) 3240C, which is impaired for Nutrients. There are four existing cross drains within the project limits.

Description of the Preferred Alternative

The Preferred Alternative consists of the following:

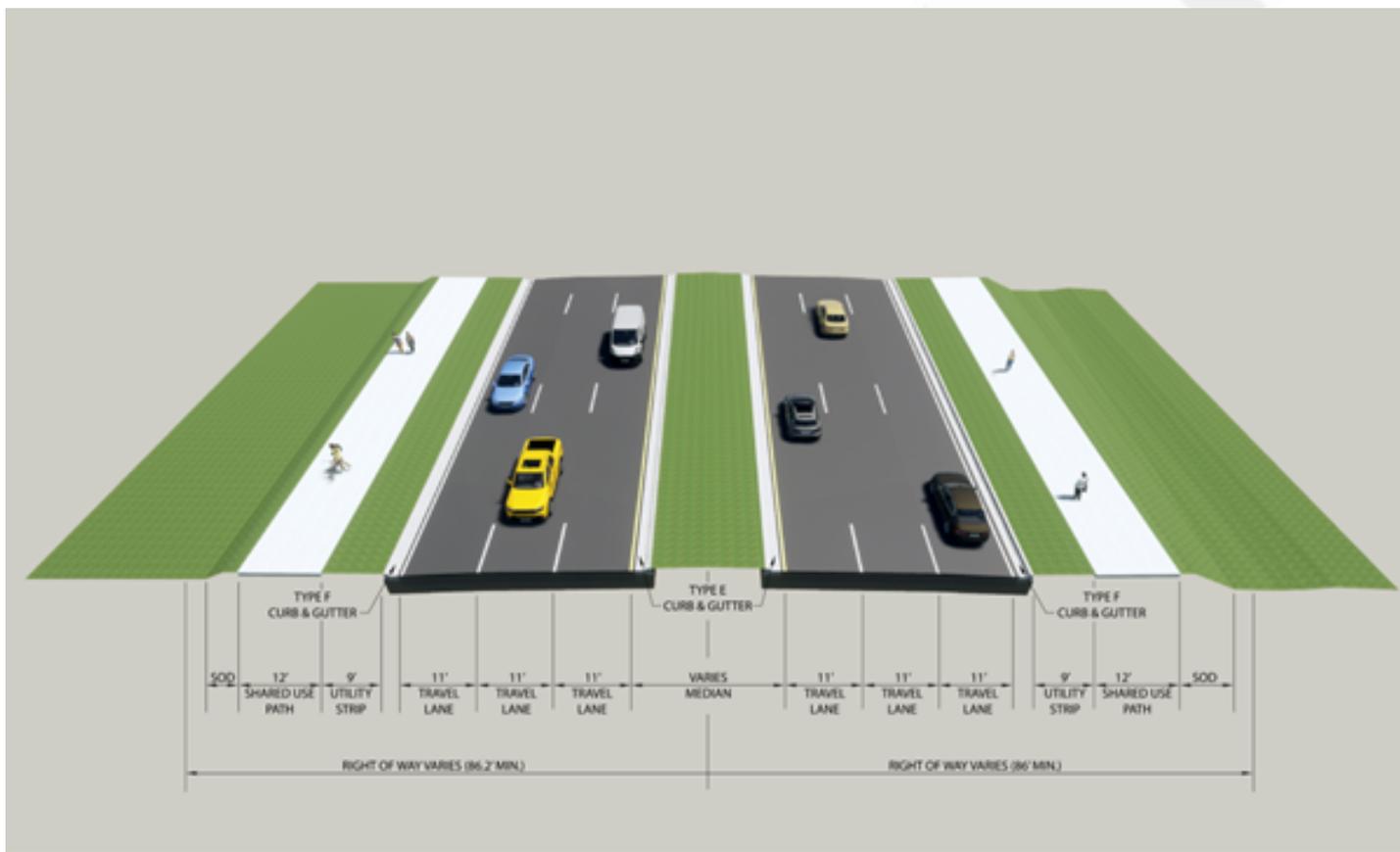
- Widening the existing two-lane undivided roadway to a six-lane divided roadway from SR 80 to SR 78
- Replacing the Wilson Pigott Bridge over the Caloosahatchee River
- Improvements to the SR 31/SR 80 intersection

As shown in **Figure 2**, the proposed SR 31 roadway typical section from SR 80 to SR 78 will include three, 11-foot travel lanes in each direction separated by a 22-foot raised median with Type E and F curb along the inside and outside lanes, respectively. A 12-foot wide shared-use path is proposed on each side of SR 31 (northbound and southbound) with a 9-foot utility strip between the back of curb and path. This typical section will require approximately 40 acres of new right-of-way.

The Preferred Alternative is a combination of widening existing SR 31 from SR 80 for about 0.7 miles, then shifting 300 feet east prior to the Wilson Pigott Bridge to minimize impacts to the existing Florida Gas Transmission (FGT) line. This portion of the alignment will be located east of the existing two-lane roadway and the 50-foot FGT easement. The project will tie into the current SR 31 North Design-Build project at the northern terminus.

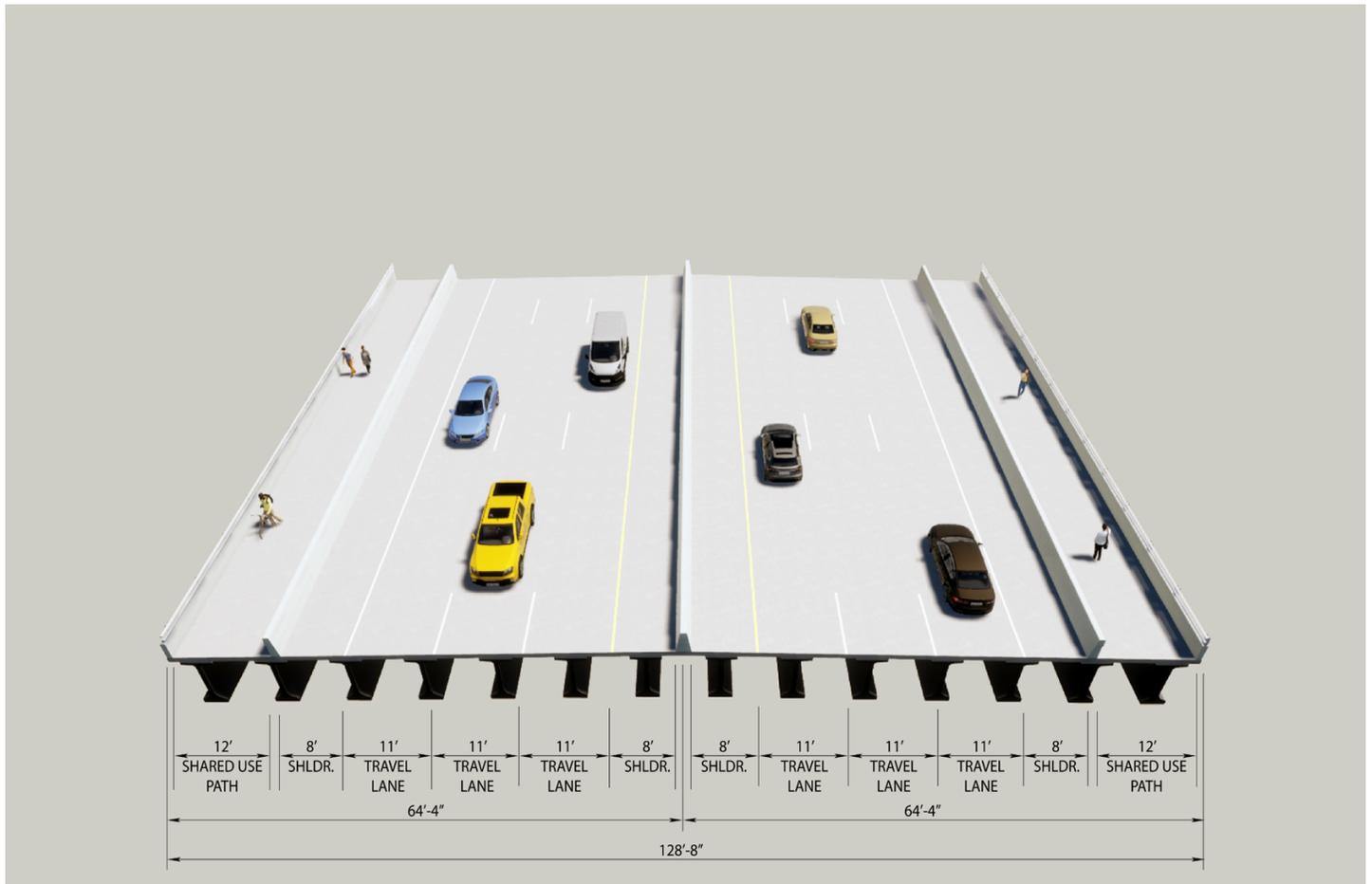
The proposed design speed for the project is 45 miles per hour. The Preferred Alternative raises the profile above the current 100-year floodplain. The profile will be raised approximately three feet above existing SR 31 due to the updated 100-year floodplain elevation (from seven feet to ten feet) in the project corridor.

Figure 2. Proposed SR 31 Roadway Typical Section



A new high-level fixed bridge will be constructed to replace the existing Wilson Pigott Bridge. The proposed bridge will meet USCG vertical clearance requirements of 55 feet for a high-level fixed bridge. As shown in **Figure 3**, the bridge will have three, 11-foot travel lanes in each direction, and 8-foot shoulders and 12-foot shared-use path on each side. Pedestrians and bicyclists will be protected via a raised barrier and railing. The minimum vertical clearance over the channel for this bridge is 55 feet, which is 29 feet higher than the existing bridge, and will not disrupt traffic from drawbridge openings.

Figure 3. Proposed Bridge Typical Section



The Preferred Alternative also includes reconfiguring the existing intersection of SR 31/SR 80 to a grade-separated intersection. The grade-separation will introduce two new flyover bridges for SR 31 and SR 80 movements and will also include a new signal at a crossover intersection on SR 31. **Figure 4** depicts how travelers will use the flyovers. Southbound SR 31 travelers such as those coming from Lee Civic Center or Babcock Ranch, who want to go eastbound on SR 80, will use the flyover bridge and cross over at a new signal on SR 31. Similarly, eastbound SR 80 travelers, including those coming from Fort Myers who want to go northbound on SR 31, will use the flyover bridge and cross over at a new signal on SR 31.

Figure 4. SR 31/SR 80 Proposed Flyover Traffic Movements



Figure 5 depicts the typical section for the SR 31 widening associated with the proposed flyovers.

Figure 6 and **Figure 7** depict the northbound and southbound typical sections for the flyover.

Figure 8 and **Figure 9** depict the proposed typical sections along SR 80 west and east of the intersection. **Figure 8** depicts the eastbound SR 80 to northbound SR 31 flyover ramp typical section, and **Figure 9** depicts the southbound SR 31 to eastbound SR 80 flyover ramp typical section.

Figure 5. Proposed SR 31 Typical Section (at Flyovers)

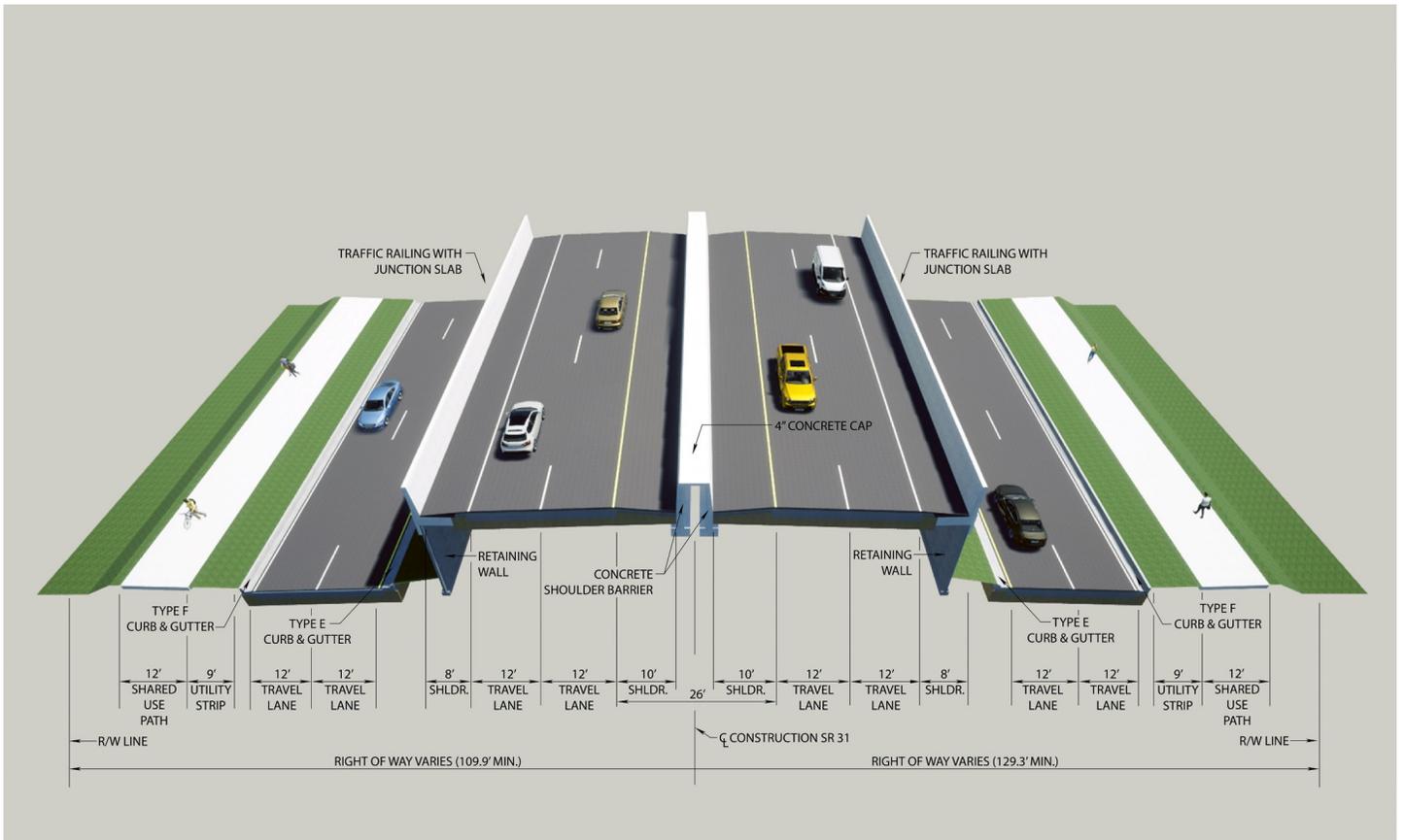


Figure 6. Proposed NB Flyover Typical Section

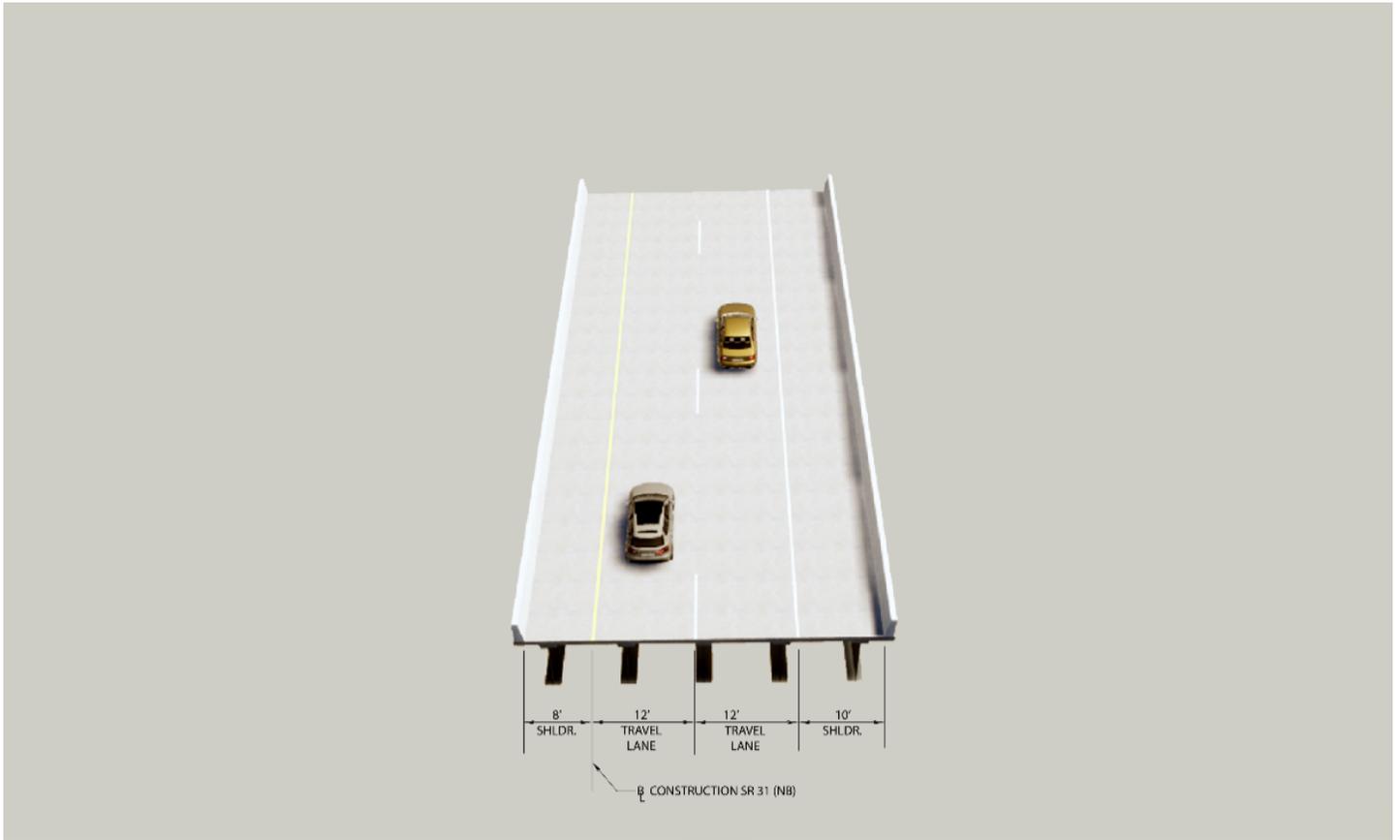
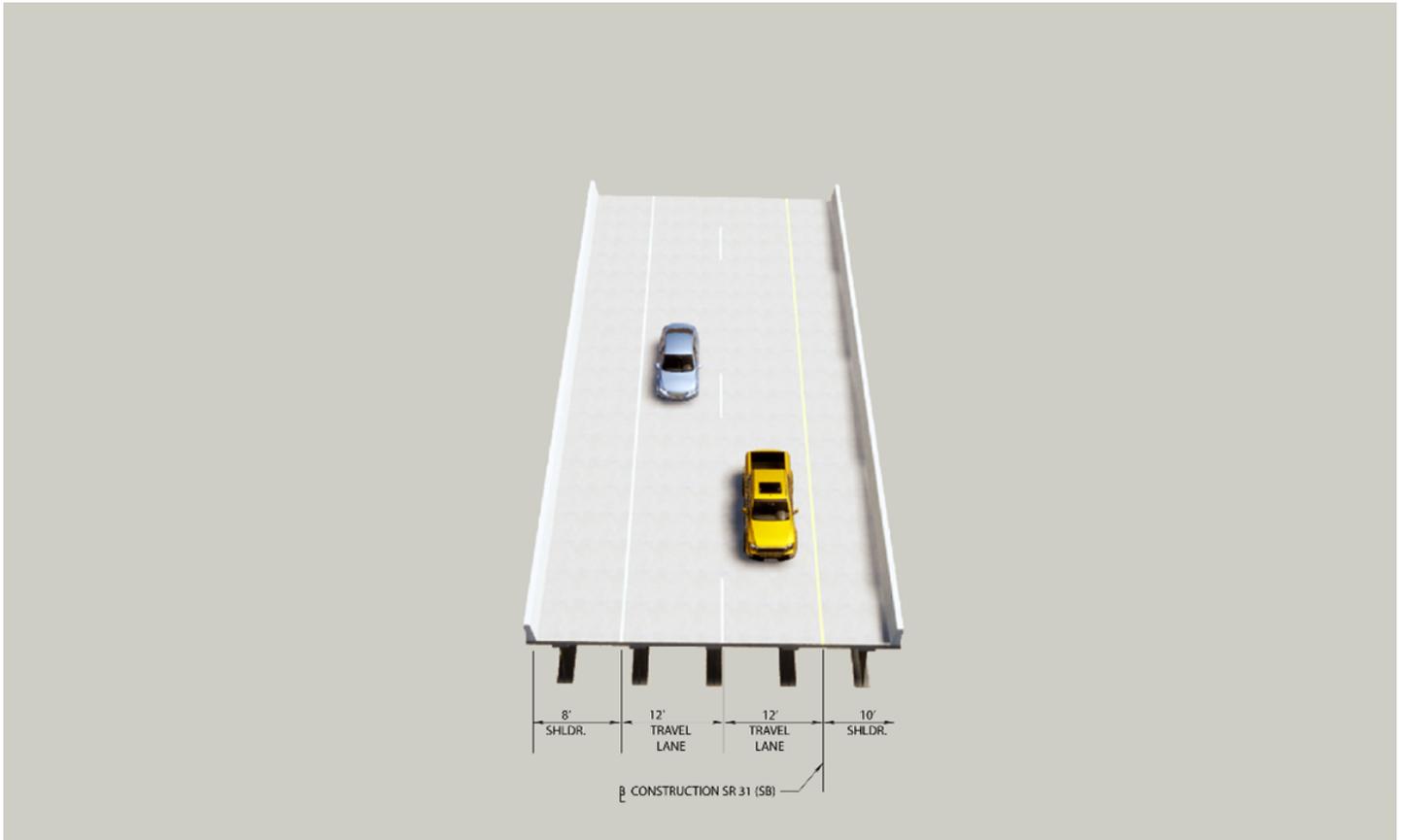
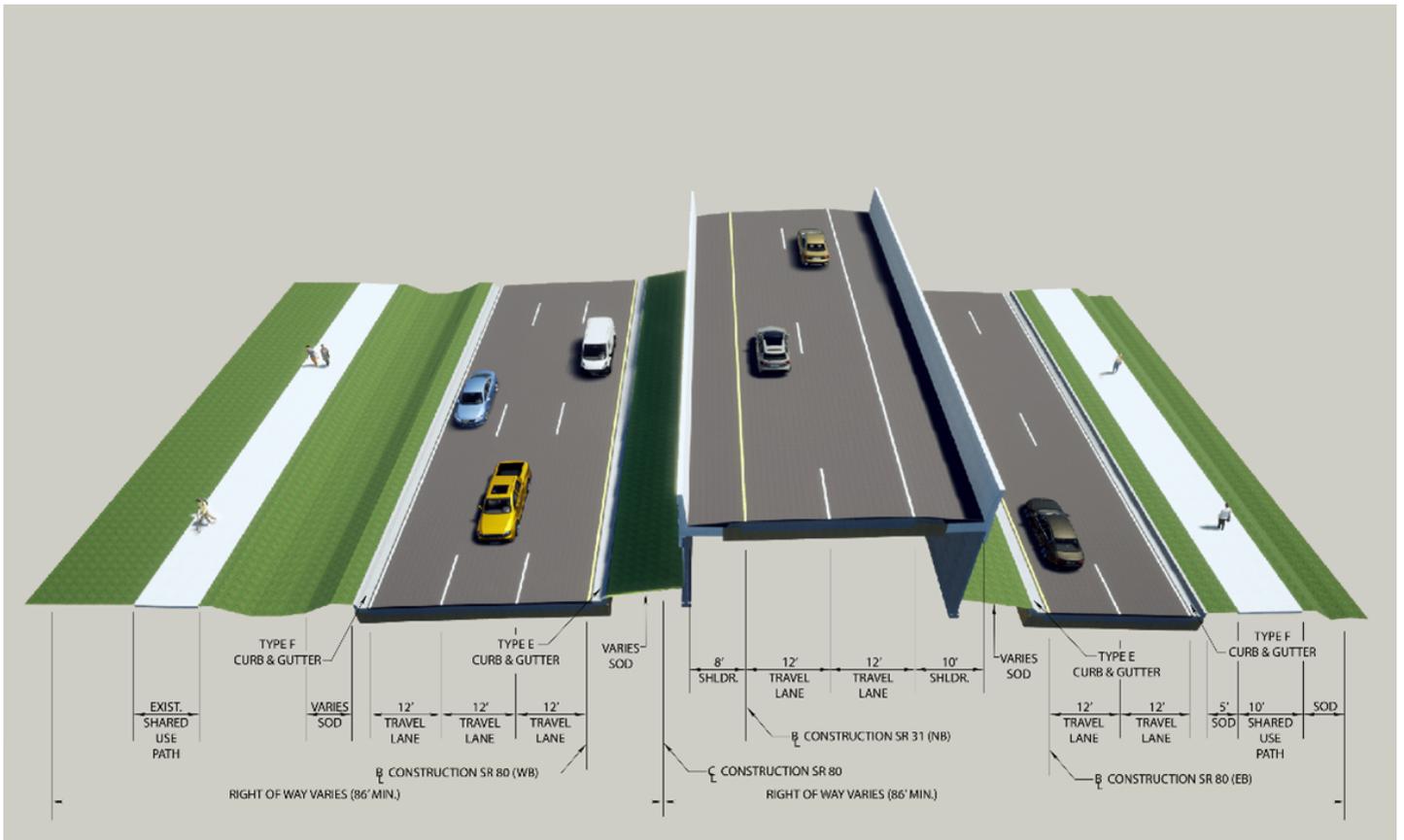


Figure 7. Proposed SB Flyover Typical Section



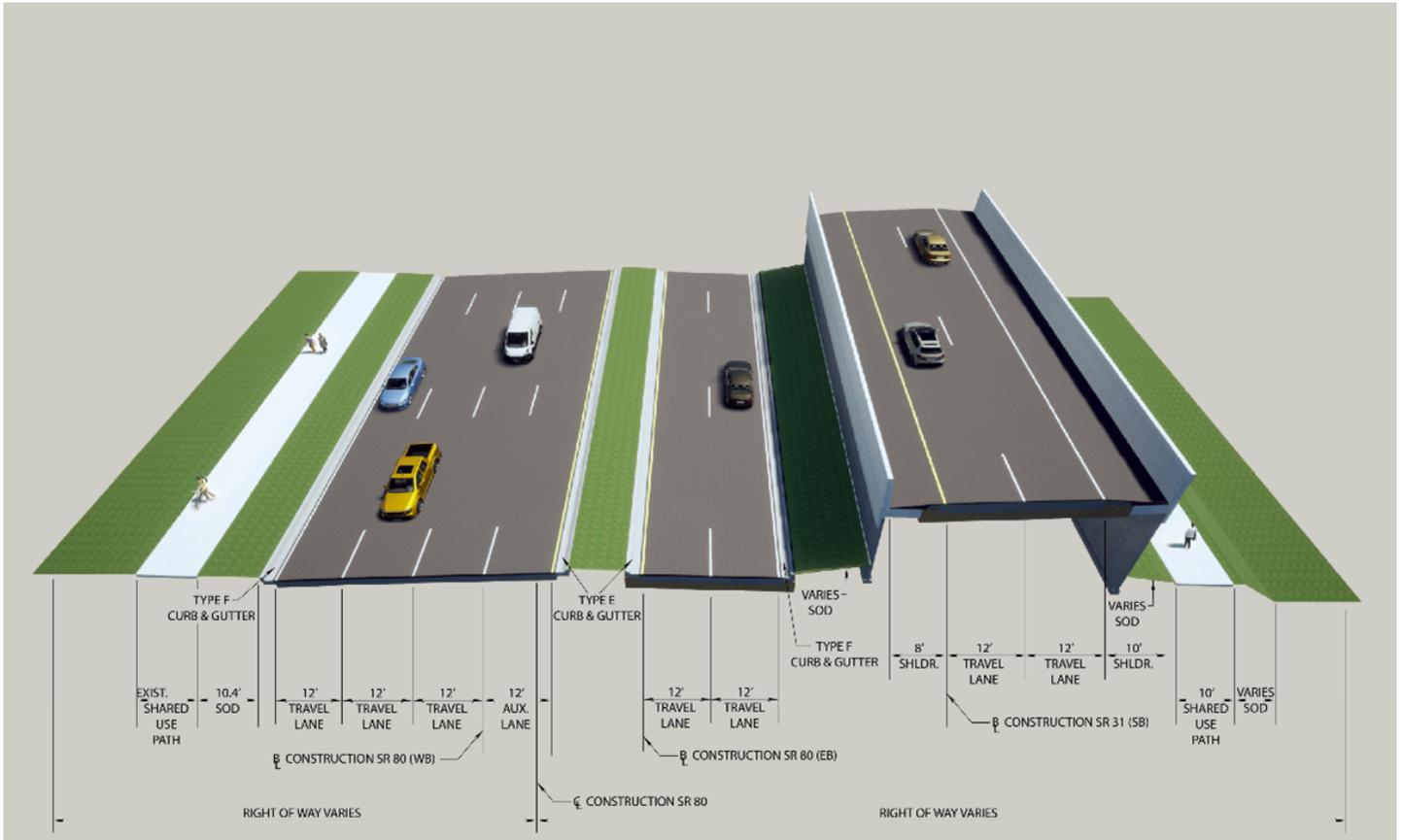
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Figure 8. Proposed SR 80 Roadway Typical Section (West of SR 31)



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Figure 9. Proposed SR 80 Roadway Typical Section (East of SR 31)



Stormwater runoff from the project will be collected and conveyed in closed drainage systems to one proposed offsite pond for water quality treatment and attenuation per state and federal requirements. The pond will discharge at or near the same outfall ditch that carries the roadway runoff in the existing condition. An additional 13.5 acres of right-of-way will be required for the proposed pond and associated access easements.

1.2 Purpose and Need

The purpose of the project is to address capacity, operational, and structural deficiencies of SR 31 from SR 80 to SR 78 in northeastern Lee County. To meet future travel demand, the project will evaluate the potential widening improvements to its current two-lane configuration, including paved shoulders, sidewalks, bike lanes, and/or multi-use pathway.

Repair/rehabilitation and replacement options for the Wilson Pigott Bridge will also be evaluated as part of the project, as design elements of the bridge are substandard.

The need for the project is based on the following primary and secondary criteria:

PRIMARY CRITERIA

CAPACITY/TRANSPORTATION DEMAND: Improve Operational Conditions

The existing year [2022] Annual Average Daily Traffic (AADT) volume for the SR 31 project corridor is 16,600 vehicles per day (vpd), operating at Level of Service (LOS) C. As SR 31 is a designated highway corridor of Florida's Emerging SIS and a Tier I Freight Corridor of Lee County, approximately 25% of existing traffic along the roadway is composed of trucks. The SIS network includes the state's most significant transportation facilities, as these facilities carry the highest volume of freight and commuter traffic. The projected demand along the corridor exceeds the maximum threshold of 20,000 AADT for a two-lane facility. As an Emerging SIS facility, LOS D is the minimum acceptable LOS for SR 31. Without capacity improvements, the corridor is projected to operate at LOS F.

Much of the growth contributing to the increase in traffic comes from the Babcock Ranch Development of Regional Impact (DRI) located to the north of the SR 31 project segment. Although the Babcock Ranch DRI is in Charlotte County, some development is expected to occur in Lee County, such as the Babcock Ranch Mixed-use Planned Development (MPD) and a marina to be sited northeast of the project corridor. The Babcock Ranch DRI and MPD is approved for 19,500 residential dwelling units, almost 5 million square feet of office and retail space, and 600 hotel rooms. In addition, the DRI is approved for 650,000 square feet of industrial space, which will further increase the volume of trucks moving freight along the corridor. Also, eight Planned Unit Developments exist or are proposed along the SR 31 project segment, including a mixed-use development southeast of SR 31 and SR 80. The Sweetwater Landing Marina, located along the corridor, has expanded operations.

Increased congestion along SR 31 between SR 80 and SR 78 is anticipated due to this noted growth. Conditions along the roadway are anticipated to be exacerbated if no improvements occur, as the roadway lacks the operational capacity to accommodate future travel demand. In addition, freight traffic and multimodal activity are expected to increase along the corridor due to projected growth in the area.

SUBSTANDARD BRIDGE ELEMENTS: Address Mechanical Malfunctions & Design Deficiencies

The Wilson Pigott Bridge was constructed in 1960 and has exceeded its fifty-year design life. Based on a FDOT bridge inspection report conducted in October 2021, the Wilson Pigott Bridge received a sufficiency rating of 52.0 (on a scale of 0-100). Sufficiency rating is essentially an overall rating of a bridge's fitness to remain in service. A sufficiency rating below 50.0 qualifies a bridge for replacement funds. The bridge inspection report also revealed a health index of 95.52 for the Wilson Pigott Bridge. The health index uses the condition rating of several important bridge components to develop a number from 1 to 100. The lower the number, the more work is required to improve the bridge's overall condition. Below 85 generally means repairs are needed. A low health index may also indicate that it would be more economical to replace the bridge than to repair it. Additionally, an interview conducted with Lee County Metropolitan Planning Organization (MPO) staff in February 2018 indicated that the Wilson Pigott Bridge frequently experiences mechanical malfunctions leaving the bascule span in the up position disrupting traffic flow and circulation in the area.

Although the current bridge inspection report indicates a health index over 90 due to the most recent bridge repairs, the bridge has substandard design elements, such as:

- Narrow roadway widths [ten-foot travel lanes and four-foot shoulders]
- Narrow pedestrian facilities [three-foot six-inch sidewalks on both sides with no guardrail separating pedestrians and motor vehicles]
- Substandard bridge rails

As the Caloosahatchee River is a navigable waterway, the United States Coast Guard (USCG) regulates the horizontal and vertical clearance requirements for bridges constructed over navigable waters. The following minimum movable bridge clearance guidelines for the Caloosahatchee River at the project location are: Horizontal Clearance = 90 feet;

Vertical Clearance (closed) = 21 feet. While the vertical clearance for the Wilson Pigott Bridge (closed) is 26 feet at the center and 23 feet at the fenders, the horizontal clearance is 86.6 feet. Based on this condition, the Wilson Pigott Bridge does not meet the current USCG guide for horizontal clearances.

SECONDARY CRITERIA

AREA WIDE NETWORK/SYSTEM LINKAGE: Enhance Regional Connectivity

Planned immediately north of the SR 31 project segment is the widening of SR 31 from SR 78 in Lee County to North of Cook Brown Road in Charlotte County. The proposed widening of SR 31 from SR 80 to SR 78 will provide a continuous connection from Lee County into Charlotte County and a viable north-south alternate route to I-75.

SAFETY: Improve Emergency Evacuation and Response Times

Serving as part of the emergency evacuation route network designated by the Florida Division of Emergency Management and Lee County, SR 31 [including the Wilson Pigott Bridge] plays a critical role in facilitating traffic during emergency evacuation periods as one of seven crossings over the Caloosahatchee River within Lee County. The project is in Lee County's Evacuation Zone "A", and all the neighborhoods in proximity to the project corridor are within the 100-year floodplain. Improving the operational capacity of the roadway and maintaining the functionality of the Wilson Pigott Bridge will further enhance emergency evacuation efficiency leading to improved evacuation and response times.

1.3 Planning Consistency

Currently Adopted LRTP-CFP	COMMENTS			
Yes	<p>The Lee Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP) was adopted in December 2020. This project is included in Chapter 5; Table 5-9: Cost Feasible Projects: State/Other Arterial/ Federal SU Funded Road Projects (\$1,000)</p> <p>The LRTP does not show PE funding, and so it is supplemented by inclusion of the SIS Plan to show PE funding in FY 24.</p> <p>The latest Lee MPO Transportation Improvement Program (TIP) for FY2022/23 - FY2026/27 was adopted June 17, 2022. This project is included in the TIP.</p> <p>Note: The Current and Approved STIP report differ. The Approved STIP Report was used because it meets planning consistency.</p>			
	Currently Approved	\$	FY	COMMENTS
PE (Final Design)				
TIP	Y	\$9,050,000	2024	Cost estimates between the TIP and Approved STIP are consistent.
STIP		\$9,050,000	All years	Cost estimates between the TIP and Approved STIP are consistent.
R/W				
TIP	N		All years	
STIP	N		All years	
Construction				
TIP	N		All years	
STIP	N		All years	

2. Environmental Analysis Summary

Issues/Resources	Significant Impacts?*			
	Yes	No	Enhance	NoInv
3. Social and Economic				
1. Social	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Economic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Relocation Potential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Farmland Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Cultural Resources				
1. Section 106 of the National Historic Preservation Act	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Section 4(f) of the USDOT Act of 1966, as amended	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Section 6(f) of the Land and Water Conservation Fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Recreational Areas and Protected Lands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Natural Resources				
1. Protected Species and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Essential Fish Habitat (EFH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Sole Source Aquifer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Water Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Aquatic Preserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Outstanding Florida Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Physical Resources				
1. Highway Traffic Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

USCG Permit

- A USCG Permit IS NOT required.
- A USCG Permit IS required.

* **Impact Determination:** Yes = Significant; No = No Significant Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement. Basis of decision is documented in the following sections.

3. Social and Economic

The project will not have significant social and economic impacts. Below is a summary of the evaluation performed.

3.1 Social

Community Demographics

Demographic data within 500-feet of the project corridor were analyzed and compared to the demographic profile of Lee County. The census block groups include 120710301002, 120710301003, 120710302011, 120710302012, 120710302021, and 12070302024. Data sets not available at the block group level from the 2019 American Community Survey (ACS) were evaluated at the census tract level.

Lee County has a total population of 737,468. The total population of the six census block groups within 500-feet of the project corridor is 6,817, or less than 1 percent of the County. About 12.7 percent of the block group population is a minority, which is lower than the Lee County average (32.8%). The block group population contains about 5.9 percent Hispanic or Latino descent, which is about a quarter of the County Hispanic or Latino population (21.4%).

The population age 65 and older for census tracts 301, 302.01, and 302.02 is about 34.6 percent, which is slightly higher than Lee County (28.1%). Similar to the County, (9.9%), about 9.3 percentage of the census tracts population have a disability.

The median household income for the census tracts is \$76,035 and about 7.4 percent of the households are below the poverty level. For comparison, Lee County has a lower median household income of \$57,832 and about 11.4 percent of households are below the poverty level. The average for the census tracts and the County average are shown in **Table 1** below.

Table 1. Project Study Area and County Comparison

	Census Tracts (Avg.)	County Average
Median Age	55	48.5
Over 65	34.60%	28.10%
Disability 18-64	9.30%	9.90%
Median Household Income	\$76,035	\$57,832

Lastly, 2019 ACS data indicates that for individuals aged 5 and over, about 3.7 percent speak English Less than "very well". This includes people who speak Spanish, Indo-European languages, Asian and Pacific Island languages, and "Other" languages. This is lower than the County average of 9.3 percent. Based on an evaluation of the four Limited English Proficiency (LEP) factors outlined in the PD&E Manual, it was determined that bilingual translation and distribution of materials was not required.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations, signed on February 11, 1994, directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and

adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Implementing the Preferred Alternative does not result in any disproportionate adverse impacts to any distinct minority, ethnic, elderly, or handicapped groups and/or low-income households. No environmental justice populations will be affected by construction of the project. Therefore, impacts to minority and low-income populations will not be disproportionately high and adverse. Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community.

Community Cohesion

Permanent negative impacts to community cohesion are not anticipated from the Preferred Alternative. Although right-of-way (ROW) will be required for the proposed widening, no neighborhoods or communities in the project study area will be bisected. Minor direct impacts will be limited to parcels immediately adjacent to the corridor and will include minor to moderate ROW acquisition and access modifications to/from existing businesses.

The Preferred Alternative will not impact any important resources (i.e., churches or other gathering places) that contribute to community cohesion. The Preferred Alternative will have beneficial impacts on community cohesion by providing improved mobility and connectivity for pedestrians and bicyclists. Sidewalk and/or shared-use path are proposed along the project corridor.

Community Facilities and Services

Community facilities within the project study area include the Fort Myers Shores Fire Department Station 811. The Lee Civic Center is in the project vicinity. Although it is an entertainment destination, it is also a critical community resource due to its function as a post hurricane response staging center. Access will be maintained to these facilities during and after construction, as required by FDOT's *Standard Specifications for Road and Bridge Construction*.

The proposed improvements, including eliminating the frequent mechanical malfunctions on the Wilson Pigott Bridge, are anticipated to improve overall travel reliability to community resources and services within and outside of the project study area. With the added capacity, emergency response and evacuation times will improve for SR 31 and SR 80, which are designated hurricane evacuation routes.

The proposed grade-separated flyovers will improve accessibility to area destinations such as community facilities and commercial centers along SR 31 and SR 80. The proposed reconfiguration of the SR 31/SR 80 intersection from at-grade to an urban grade-separated intersection will modify the driver experience by introducing a new travel pattern and new signals on SR 31.

3.2 Economic

SR 31 provides north-south travel between Palm Beach Blvd and Bayshore Ave serving as a commuter route and also serves regional truck traffic as an Emerging SIS highway corridor. Access to these businesses will be maintained throughout and after construction of the proposed capacity improvements. There will be no adverse impacts to businesses, or the tax base within the project area; therefore, the Preferred Alternative is expected to have minimal economic impacts along the project corridor.

3.3 Land Use Changes

Due to its proximity to I-75 and other major highways, the overall SR 31 corridor has continued to transition from more rural uses to suburban areas, including Babcock Ranch. While there are prime farmland soils present along the southern portion of the project corridor, soils associated with agricultural activities do not exist within the study area. Additional information regarding farmland is in **Section 3.7**.

Retail and commercial market activity has followed the area's growth, and the corridor is used to access services and activity centers within and surrounding the project corridor such as nearby commercial and shopping areas, the Sweetwater Landing Marina, the Lee Civic Center, and the Southwest Florida Lee County Fairgrounds. Growing activity centers have become notable traffic generators for commuters living in the area. As described in **Section 1.2**, development trends in the surrounding area include conversion of adjacent vacant or underutilized properties, with several projects in the early stages of planning or under construction. The most notable growth pressure within the project limits is generally east of SR 31 and at the intersection with SR 80.

Development pressure in the area and associated changes in land use for parcels along the corridor are not necessarily dependent upon construction of the Preferred Alternative; development in the area is more dependent upon market conditions. The project will change the character of the existing facility, but it will not solely contribute to changes in land use. Land use will continue to be guided by adopted zoning and land use plans, such as the *Lee Plan* (as amended through January 2023).

The project will require additional ROW from immediately adjacent parcels, converting land from its existing use to a transportation use. The direct conversion of some land to roadway ROW will be compatible with the remaining lands, which will benefit from having access to a more efficient roadway. The proposed project is within an area that is mostly identified as "Future Urban Areas-Suburban" in the Lee County Future Land Use Map (*The Lee Plan*, as amended January 2023).

3.4 Mobility

The Preferred Alternative includes a 12-foot-wide shared-use path on both sides of SR 31 from SR 80 to SR 78 and along both sides of SR 80. The Wilson Pigott Bridge will include a 12-foot shared-use path on each side, with a raised barrier and railing along the edges of the deck. Overall, the proposed project is expected to enhance mobility for all modes along the corridor by:

- Providing additional capacity to meet the future travel demand
- Addressing operational deficiencies in the study area
- Better facilitating the movement of freight to local activity centers
- Providing separated bicycle/pedestrian facilities along developed portions of the study area

Proposed improvements within the project study area will enhance mobility and connectivity locally and for the surrounding area, allowing SR 31 to function as a regional corridor and providing a viable north-south alternative to I-75. Also, the added capacity will enhance mobility along the overall corridor due to its connection with the SR 31 North Design-Build project (428917-1). As previously mentioned, SR 31 is designated as a "Rural Minor Arterial" within the study limits and provides north-south travel through predominantly suburban and rural areas of Lee and Charlotte Counties.

Since SR 31 also plays a critical role as a designated evacuation route, improving the capacity and operations of the corridor and replacing the bridge will enhance emergency evacuation efforts and lead to improved evacuation and response times.

Sidewalk is present within the project study area, including in a limited area of SR 31 near the improved Racetrac entrance north of the SR 80 intersection on the eastern side. This 435-foot section of sidewalk does not provide connectivity to SR 80 shared-use path or sidewalk. A new 10-foot shared-use path is present on the northern side of SR 80.

There are no continuous bike lanes on SR 31 or SR 80 within the project study area. Cyclists currently have use of the shoulder on SR 31 and markings are provided both north and south of the Wilson Pigott Bridge. There is a bicycle keyhole lane provided north of the SR 78 intersection that was added during construction of turn lanes.

There are no bus services along SR 31 within the study area. However, Route 100 (Rosa Parks/Riverdale) of Lee County Transit (LeeTran) runs along SR 80 within the study area. Bus stops are present along SR 80 on either side of the intersection with SR 31.

3.5 Aesthetic Effects

The visual landscape for most of the project corridor consists of rural views with vacant fields and wooded areas. There are short sections of suburban transition areas with commercial and retail nodes at major intersections. The view of the Caloosahatchee River can be considered a unique visual resource in the project corridor.

The proposed project will widen an existing roadway, so the properties along the corridor that currently have views of the roadway will continue to have views of the roadway following construction of the Preferred Alternative. Similarly, travelers that currently have views to adjacent uses will continue to experience these uses. Notable community features that may be sensitive to aesthetic effects of the project include the Sweetwater Landing Marina and recreational users (i.e., boaters).

The proposed bridge replacement will alter the viewshed of the area due to the increased height of the high-level fixed bridge. However, visual resources and the overall character are not anticipated to be substantially altered as a result of the proposed project. The proposed typical section is similar to existing roadways in the area.

3.6 Relocation Potential

The study area primarily consists of suburban residential and commercial properties with some agricultural land uses. Existing ROW along the project corridor is 100-feet along SR 31 and varies from 200-feet to 225-feet along SR 80. Proposed ROW is only required for intersection improvements at SR 80 and SR 31, the SR 31 alignment shift to the east to avoid FGT impacts, and for offsite drainage facilities sited on undeveloped lands. No residential or business relocations are anticipated for the proposed project.

The proposed project, as presently conceived, will not displace any residences or businesses within the community. Should this change over the course of the project, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

3.7 Farmland Resources

Lands within the project vicinity do not meet the definition of farmland as defined in 7 CFR § 658 and the provisions of the Farmland Protection Policy Act of 1981 do not apply because the entire project area is located in the urbanized area of Fort Myers with no designated farmlands adjacent to the project corridor.

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4. Cultural Resources

The project will not have significant impacts to cultural resources. Below is a summary of the evaluation performed.

4.1 Section 106 of the National Historic Preservation Act

A Cultural Resource Assessment Survey (CRAS), conducted in accordance with 36 CFR Part 800, was performed for the project, and the resources listed below were identified within the project Area of Potential Effect (APE). FDOT found that some of these resources meet the eligibility criteria for inclusion in the National Register of Historic Places (NRHP), and State Historic Preservation Officer (SHPO) has concurred with this determination. After application of the Criteria of Adverse Effect, and in consultation with SHPO, FDOT has determined that the proposed project will have No Adverse Effect on these resources.

A CRAS (September 2023) was prepared for the project and is included with technical materials in the project file. The concurrence from the SHPO was received for the CRAS Report on July 24, 2023. The concurrence letter and a map of the cultural resources is included in the Cultural Resource Appendix.

Much of the APE is within areas of existing and proposed ROW that have been previously surveyed for archaeological resources during the following surveys, each of which previously received concurrence from the FDR/SHPO:

- *Cultural Resource Assessment Survey of State Road 31 from State Road 80 (Palm Beach Boulevard) to North of County Road 78 (North River Road) Lee County, Florida* (Southeastern Archaeological Research, Inc. [SEARCH] 2012; Florida Master Site File [FMSF] Manuscript No. 20161)
- *Technical Memorandum: Cultural Resource Assessment Survey Update for the Project Development and Environment Study of State Road 31 from State Road 78 to County Road 78, Lee County, Florida* (SEARCH 2020; FMSF Manuscript No. 27269)
- *Cultural Resource Assessment of the Caloosa Landing Project Area in Lee County, Florida* (Panamerican Consultants, Inc. 2005; FMSF Manuscript No. 12279)
- *Cultural Resource Reassessment Survey of a Segment of SR 80 in Lee County, Florida* (Ballo 1989; FMSF Manuscript No. 2165)

The archaeological APE was defined as the footprint of the existing and proposed ROW containing the proposed improvements. It also included Pond 1E and its two associated outfalls, as well as several small areas where the proposed roadway improvements extend outside of the existing/proposed ROW.

Where the improvements were minor or limited (i.e., improvements like milling and resurfacing, pavement marking, etc. within existing ROW), the historic resources APE consisted of the existing ROW containing the proposed improvements and the small areas where the improvements extended outside of the existing/proposed ROW. The historic resources APE expanded to include the areas of the proposed roadway widening, encompassing the footprint of proposed improvements and ROW, and extending to adjacent parcels/resources within a distance up to 150 feet from the edge of the proposed ROW/roadway widening footprint. The historic resources APE expanded to encompass the newly proposed roadway alignment, including the footprint of the existing and proposed ROW and a 25-foot buffer from the proposed ROW. In addition, the historic resources APE expanded out 250 feet from the footprint of the proposed flyovers and 500 feet from the footprint of the proposed high-level bridge. The APE for Pond 1E included the footprint of the pond and a

buffer of 150 feet. The APE for the outfalls was limited to their footprints. The archaeological and historic resources APEs are shown on aerial mapping in the CRAS.

No archaeological sites were recorded within or adjacent to the current APE during prior survey efforts. No archaeological sites or archaeological occurrences were identified during the current survey. Subsurface testing was conducted within the APE where feasible and focused on areas of proposed ROW not included in previous surveys. Based on the results of the current and previous survey efforts, the archaeological APE exhibits a low potential for encountering intact archaeological deposits or significant archaeological sites.

Six historic resources were identified within the APE. Four of these were previously recorded (8LL2586, 8LL1898, 8LL2615, and 8LL2845) and two were newly recorded (8LL2948 and 8LL2949). The Caloosahatchee River Canal (8LL2586) was determined eligible for the National Register by the SHPO in 2012 under Criterion A for its association with late-19th-Century efforts to drain the Everglades and the agricultural development of South Florida. It was recorded within the current APE as part of the Cultural Resource Assessment Survey of State Road 31 from State Road 80 (Palm Beach Boulevard) to North of County Road 78 (North River Road), Lee County, Florida. As part of the current survey, the canal still conveys its significance and is considered eligible.

The Seaboard Air Line Railroad Grade (8LL1898) and Wilson Pigott Bridge (8LL2615) have been determined ineligible by the SHPO. SR 31 (8LL2845) was previously determined ineligible outside of the APE and the section within the current APE exhibits modern improvements and lacks historic associations, making it ineligible for the National Register. The FMSF form for SR 31 (8LL2845) was updated since the roadway had not been previously recorded within the current APE. FMSF forms were not updated for the other previously recorded resources as they did not exhibit alterations or changes in their National Register eligibility since they were last recorded. The two newly recorded structures exhibit common architectural styles in South Florida and lack historical associations. Therefore, they are considered ineligible for the National Register. FMSF forms were completed for the two newly identified resources. All FMSF forms are included as part of the CRAS located in the project file.

Based on the background research and results of the field investigations, the Preferred Alternative is not expected to result in significant impacts to sites protected under Section 106 National Historic Preservation Act. In a letter signed on July 24, 2023, SHPO determined that there will be no adverse effects on the Caloosahatchee River Canal, and that the linear resource will remain eligible for inclusion in the National Register due to its importance to drainage of the Everglades. The letter also stated the improvements will not involve changes that would compromise the integrity of the canal such as rerouting, cutting of or filling in, widening, severing from other waterways, change of function, or removal of ancillary structures or features that contribute to its significance.

4.2 Section 4(f) of the USDOT Act of 1966, as amended

The following evaluation was conducted pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, and 23 CFR Part 774.

Section 4(f) resources were analyzed within a 500-foot buffer around the project study area. Based upon review of existing field conditions within the project study area, review of the ETDM Final Programming Screen Summary Report published on May 17, 2023, Florida Department of Environmental Protection Greenways and Trails map, and local planning documents, there are two potential Section 4(f) resources located within the project study area.

The first resource identified is the Great Calusa Blueway, a paddling trail that passes through the coastal waters of Lee County, spanning from the Pine Island Sound to Estero Bay, up the Caloosahatchee River and through its tributaries. This 190-mile trail supports outdoor recreation, guiding canoeists and kayakers through clearly marked brown-and-white signs located along the course of the trail. The trail is accessible to the general public at no cost. The Caloosahatchee segment of the blueway can be accessed in Lee County through a series of 20 launch sites, located on both public and private properties.

The proposed improvement of SR 31 includes replacement of the existing Bridge #120064 over the Caloosahatchee River. No physical improvement made as part of the blueway is present within the bounds of the project. The project will maintain vessel traffic on the Caloosahatchee in the future condition and during construction. No effects to the attributes, features, or activities that qualify the Great Calusa Blueway for protection under Section 4(f) are anticipated. No use of the blueway will occur.

The second resource identified is a single 10-foot multi-use trail that exists on the north side of SR 80. The trail is designated as part of the Florida Shared-Use Nonmotorized Trail Network (Florida SUN Trail Network). This section of Florida SUN Trail is identified as the Caloosahatchee Trail and extends 22 miles in Lee County from US 41 to the Hendry County Line. The same trail alignment is listed as part of the Pine Island - Hendry Trail and is included in the Lee County Greenways Master Plan. The trail consists of a combination of existing and planned trail segments along portions of SR 78, SR 31, and SR 80. Within the project limits, the Caloosahatchee Trail/Pine Island - Hendry Trail is listed as an unfunded need on SR 31. The FDOT recently completed a 10-foot multi-use path on the north side of SR 80 (as part of project 429823-1). The proposed improvement of SR 31 (as part of this project) includes a 12-foot multi-use trail to support the planned/existing trail system.

The Florida SUN Trail Network consists of multi-use trails and shared-use paths physically separated from motor vehicle traffic which, by virtue of design, location, and extent of connectivity, provide nonmotorized transportation opportunities for bicyclists and pedestrians statewide. The Florida SUN Trail Network is intended to support a range of use by the public ranging from transportation-based use to recreational activities such as walking, biking, or jogging.

Due to its eligibility for the National Register of Historic Places, the Caloosahatchee River Canal (8LL1898) qualifies for protection under Section 4(f). As part of the project improvements, the construction of the new bridge includes new supports/concrete piers within the Caloosahatchee River Canal and rip rap will be installed immediately adjacent to the bridge ends at the shoreline. On July 24, 2023, the SHPO concurred with the Section 106 finding that there will be no adverse effects on the Caloosahatchee River Canal and the linear resource will remain eligible for inclusion in the National Register due to its importance to drainage of the Everglades. The improvements will not involve changes that would compromise the integrity of the canal, such as rerouting, cutting off or filling in, widening, severing from other waterways, change of function, or removal of ancillary structures or features that contribute to its significance.

The improvements do not require the direct use or conversion of the Caloosahatchee River Canal to permanent ROW and there is no change in ownership or impairments to the Section 4(f) linear resource. Under Section 4(f) it appears that the improvements within the Caloosahatchee River Canal would meet the requirements for a temporary occupancy exception: they are temporary, they are minor, there are no permanent adverse physical impacts and no adverse effects under Section 106; and any changes that occur during construction of the new bridge in the Caloosahatchee River Canal will be restored back to their pre-construction condition following construction.

The Section 4(f) findings from OEM are pending. No use of the blueway is anticipated. A portion of the Caloosahatchee Trail may experience temporary impacts during construction, but the affected multi-use trail is part of the local transportation system, designated as a segment of Florida SUN Trail that functions primarily for transportation. No use of the Section 106 Caloosahatchee River Canal is anticipated. Draft documents submitted to OEM identify these no use recommendations of the blueway and Caloosahatchee River Canal, and an exemption from Section 4(f) for the multi-use trail based on criteria listed in 23 CFR 774.13(f)(1-4).

4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965

There are no properties in the project area that are protected pursuant to Section 6(f) of the Land and Water Conservation Fund of 1965.

4.4 Recreational Areas and Protected Lands

Please refer to **Section 4.2** for discussion on the recreational areas within and adjacent to the project. There are no other protected public lands or protected state lands in the project area.

5. Natural Resources

The project will not have significant impacts to natural resources. Below is a summary of the evaluation performed:

5.1 Protected Species and Habitat

The following evaluation was conducted pursuant to Section 7 of the Endangered Species Act of 1973 as amended as well as other applicable federal and state laws protecting wildlife and habitat.

A Natural Resources Evaluation (NRE) (DATE of FINAL) was completed for the project to document and summarize the potential impacts to natural resources including federal and state protected species. The NRE also documented commitments and implementation measures considered to avoid, minimize, and mitigate for potential impacts. The NRE is included in the project file and concurrence letters are attached to this document.

To ensure the project will not adversely affect protected species or contribute to water quality degradation, the Department will perform or adhere to the following measures. Analysis for the presence of federal and state protected species and their suitable habitat was performed to comply with the above listed federal regulation and in accordance with 68A-27 Florida Administrative Code (FAC) Rules Relating to Endangered or Threatened Species and the PD&E Manual. The United States Fish and Wildlife Service (USFWS) South Florida Ecological Field Office and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Southeast Regional Office will be consulted for potential impacts to federally protected species per Section 7 of the Endangered Species Act (ESA). For state protected species, the Florida Fish and Wildlife Conservation Commission (FWC) oversees protection of listed wildlife, and the Florida Department of Agriculture and Consumer Services (FDACS) oversees the protection of native plants.

Literature reviews, agency database searches, and field reviews (between June 2020 and April 2023) for protected species and their suitable habitat were conducted within and adjacent to the project corridor. Based on this evaluation, a total of 71 listed species were identified as potentially occurring within the project study area. The Bald Eagle (*Haliaeetus leucocephalus*), Florida Black Bear (*Ursus americanus floridanus*), and non-listed bats were included in the analysis due to the regulatory protections associated with the species. Table 2 and Table 3 provide the ten federally listed and eight state listed species identified to have a "moderate" or "high" potential of occurrence within the study area, their listing status, and their corresponding effect determinations. All federally listed species are also considered state listed species. It is anticipated the project will have no effect on federally listed plant species and state listed plant species.

Table 2. Federally Listed Species and Anticipated Effect Determinations

Federally Listed Species			
Common Name	Scientific Name	Federal Status	Proposed Determination
FISH			
Smalltooth sawfish	<i>Pristis pectinata</i>	E	May affect, not likely to adversely affect
REPTILES			
Eastern indigo snake	<i>Drymarchon couperi</i>	T	May affect, not likely to adversely affect

Green sea turtle	<i>Chelonia mydas</i>	E	May affect, not likely to adversely affect
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	E	May affect, not likely to adversely affect
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	E	May affect, not likely to adversely affect
Leatherback sea turtle	<i>Demorchelys coriacea</i>	E	May affect, not likely to adversely affect
Loggerhead sea turtle	<i>Caretta caretta</i>	T	May affect, not likely to adversely affect
BIRDS			
Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	E	May affect, not likely to adversely affect
Florida grasshopper sparrow	<i>Ammodramus savannarum floridanus</i>	E	No effect
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	No effect
Wood stork	<i>Mycteria americana</i>	T	May affect, not likely to adversely affect
MAMMALS			
Florida bonneted bat	<i>Eumops floridanus</i>	E	May affect + further coordination
Florida panther	<i>Puma concolor coryi</i>	E	No effect
West Indian manatee	<i>Trichechus manatus</i>	T	May affect, not likely to adversely affect

E = Endangered, T = Threatened

A summary of the findings for the federally listed species is provided below:

- **Smalltooth sawfish:** The study area occurs within designated critical habitat for the smalltooth sawfish and provides suitable habitat for juveniles with the Caloosahatchee River mangrove habitats. The species has been documented west of the study area within the Charlotte Harbor Estuary Unit. No smalltooth sawfish were observed within or adjacent to the study area during wetland delineation or seagrass and mangrove surveys. The Protected Species Construction Conditions will be adhered to during construction of the project.
- **Eastern indigo snake:** The Department is committed to implementing the USFWS's *Standard Protection Measures for Eastern Indigo Snake*. Additionally, no gopher tortoise borrows were observed within the study area during field surveys. The USFWS *Programmatic Effect Determination Key for the Eastern Indigo Snake* was used to support the effect determination for this species and is included in Appendix B in the NRE.
- **Sea turtles:** There is no suitable nesting habitat within the study area, but foraging habitat is available within the Caloosahatchee River. No sea turtles were observed during the field reviews and no seagrasses were observed within the study area. Additionally, the review of the FWC Sea Turtle Stranding Data (2021) indicated that the nearest sea turtle stranding is approximately 8.50 miles southwest of the study area. Due to their potential of occurrence within the study area, the NOAA *Protected Species Construction Conditions* will be implemented during construction.
- **Audubon's crested caracara:** The study area is located within the USFWS consultation area for the caracara. A formal survey was conducted in 2020 and 2023. The study area for the 2023 caracara survey was modified to encompass a pond outfall near the southwest portion of the project. The survey results indicate that caracaras do not appear to be actively using the habitat within the study area for nesting or foraging. However, based on the existing

habitat and land use, no additional suitable caracara habitat occurs within the updated study area and no updated species surveys were required.

- **Wood stork:** The Preferred Alternative is within two designated wood stork Core Foraging Areas (CFAs): Caloosahatchee River East and West. The nearest wood stork colony, Caloosahatchee River East, is located approximately 2.1 miles west of the study area. The study area contains wood stork suitable foraging habitat (SFH) within other surface waters (OSW), herbaceous wetlands, and riparian areas along the Caloosahatchee River. During field assessments, wood storks were observed foraging in a roadside swale near the intersection of SR 31 and SR 80 and in a small agricultural pond just north of the study area. The USFWS *Wood Stork Effect Determination Key* was used to support the effect determination for this species and is included as Appendix E in the NRE. FDOT will provide mitigation for impacts to wood stork SFH within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank.
- **Florida bonneted bat:** The The study area is not within the proposed critical habitat for the Florida bonneted bat, but is located within the USFWS consultation area, and suitable foraging habitat is present throughout the study area. According to the PD&E Study conducted to the north of the proposed project, *SR 31 from SR 78 to Cook Brown Road*, acoustic surveys performed in Spring 2020 confirmed the Florida bonneted bats were present and foraging in the project area. Following the acoustic survey, a roosting survey was conducted, and no potential roosting locations were observed. During a meeting held with USFWS and Department staff on August 18, 2021, USFWS determined that the proposed project (SR 31 from SR 80 to SR 78) could assume presence of the species, the study area contains foraging habitat for the Florida bonneted bat, and that a roosting survey would be required. A roost survey conducted on January 26, 2023, in accordance with the USFWS *Florida Bonneted Bat Consultation Guidelines* (2019) found no suitable roosting features for the bats. Results of the survey are included in the project file. The USFWS *South Ecological Services Field Office Consultation Key for the Florida Bonneted Bat* was used to support the effect determination for this species and is included as Appendix G in the NRE. Further consultation with USFWS is required to determine the effect on the Florida bonneted bat, and the Department is requesting formal Section 7 consultation with the USFWS through the review of the NRE to determine the DOE on the Florida bonneted bat and to provide concurrence on the proposed BMPs.
- **West Indian manatee:** Manatee observation are documented within and adjacent to the study area in the Caloosahatchee River and associated canals. The study area occurs within the USFWS designated critical habitat for the manatee and State Manatee Protection Zone. A nearby manatee aggregation area exists approximately two miles downstream of the Wilson Pigott Bridge; the Florida Power and Light (FPL) Orange River Power Plant generates warm water discharges that attract manatees to the southern shore of the Caloosahatchee River. A manatee was observed in the Caloosahatchee River during wetland and mangrove surveys. The USACE *Effect Determination Key for the Manatee in Florida* was used to support the effect determination for this species and is included as Appendix H in the NRE. Due to their potential of occurrence within the project, the Department is committed to implementing USFWS's *Standard Manatee Conditions for In-Water Work* during construction.

One federally protected plant (Aboriginal Pricklyapple) has a "moderate" potential of occurrence within the study area due to suitable habitat for the species. No federally protected plant species were observed within the Preferred Alternative during the species-specific plant surveys conducted in June 2020 and April 2023. Therefore, it is anticipated that the proposed project will have no effect on federally protected plant species.

The tricolored bat is a candidate for listing under the jurisdiction of the USFWS. As of September 14, 2022, the USFWS proposed to list the tricolored bat as an endangered species under the ESA. Designated critical habitat is not proposed for the tricolored bat at this time. The study area contains suitable roosting and foraging habitat for the tricolored bat. The Department will continue coordination with USFWS to determine the potential effect to the tricolored bat once a final listing decision has been made.

The study area occurs within areas of critical habitat for the west Indian manatee and smalltooth sawfish. The proposed project will include the replacement of an existing overwater structure and minor impacts to EFH. Impacts to critical habitat will be minor given the small size of impact to EFH relative to the available habitat in the region. Additionally, compensatory mitigation to offset loss of similar habitat will be provided pursuant to Section 373.4137, FS, to satisfy all mitigation requirements. It is anticipated that the Preferred Alternative will result in no destruction or adverse modification of critical habitat of the west Indian manatee and smalltooth sawfish.

It is anticipated the Preferred Alternative will have no effect on the Florida grasshopper sparrow, Red-cockaded woodpecker, and Florida panther.

Table 3. State Listed Species and Anticipated Effect Determinations

State Listed Species			
Common Name	Scientific Name	State Status	Proposed Determination
REPTILES			
Gopher tortoise	<i>Gopherus polyphemus</i>	T	No adverse effect anticipated
BIRDS			
Florida sandhill crane	<i>Antigone canadensis pratensis</i>	T	No adverse effect anticipated
Least tern	<i>Sternula antillarum</i>	T	No adverse effect anticipated
Little blue heron	<i>Egretta caerulea</i>	T	No adverse effect anticipated
Reddish egret	<i>Egretta rufescens</i>	T	No adverse effect anticipated
Roseate spoonbill	<i>Platalea ajaja</i>	T	No adverse effect anticipated
Tri-colored heron	<i>Egretta tricolor</i>	T	No adverse effect anticipated
Southeastern American kestrel	<i>Falco sparverius paulus</i>	T	No adverse effect anticipated

T = Threatened

A summary of the findings for the state listed species is provided below:

- **Gopher tortoise:** There are portions of the study area that contain suitable xeric habitat. However, no gopher tortoises or their burrows were observed within the study area during the gopher tortoise survey conducted in April 2023. The Department will conduct a gopher tortoise survey for all suitable habitat within the project footprint prior to construction, in accordance with FWC's Gopher Tortoise Permitting Guidelines. If gopher tortoise burrows are identified within the project footprint, a gopher tortoise relocation permit will be obtained from the FWC.
- **Florida sandhill crane:** It is anticipated that the Florida sandhill crane may utilize habitat within the study area for foraging, particularly the freshwater wetlands, however, no suitable nesting habitat was observed.
- **Least tern:** Suitable foraging habitat for the least tern occurs within the study area, and suitable nesting habitat exists in areas along the Caloosahatchee River, however, it is anticipated that there will be minimal loss of suitable habitat.
- **Wading birds:** Wetlands and surface waters within the study area contain foraging habitat for four state listed wading bird species: little blue heron, reddish egret, roseate spoonbill, and tri-colored heron. During the field review, no nesting activity for wading birds was observed within or adjacent to the study area. Additionally, the Preferred Alternative will not cause a significant loss of foraging or nesting habitat in the region or impact nest sites.
- **Southeastern American kestrel:** During the preliminary field surveys, southeastern American kestrel habitat was observed throughout the study area in open lands and woodland edges. Due to the presence of suitable habitat, a

species-specific survey was conducted in March and April 2023 in accordance with the FWC's *Species Conservation Measures and Permitting Guidelines for the Southeastern American Kestrel*. Based on the results of the 2023 species-specific survey, southeastern American kestrels do not appear to be actively using the habitat within the study area for nesting or foraging and no active or inactive nest cavities were observed during the survey. Survey results are included in the project file.

Eight state protected plants (American Bird's Nest Fern, Banded Wild-Pine, Hand Fern, Florida Beargrass, Redmargin Zephyrlily, Giant Leather Fern, Giant Orchid, and Sanibel Lovegrass) have a "moderate" or "observed" potential of occurrence within the study area due to the presence of potentially suitable habitat or were observed within the study area. No state protected plant species were observed within the Preferred Alternative during the species-specific plant surveys conducted in June 2020 and April 2023. Therefore, it is anticipated that the proposed project will have no effect on state protected plant species.

Other Protected Species

Bald Eagle

The bald eagle is protected under the U.S. Migratory Bird Act, the Bald and Golden Eagle Protection Act, and under the state bald eagle rule 68A-16.002, FAC. According the FWC and EagleWatch data, the closest documented bald eagle nest is located approximately 1.34 miles east of the Preferred Alternative, well beyond the 660-ft protection zone. The study area contains suitable foraging and nesting habitat for the bald eagle; however, no individual or nests were observed during field investigations.

Florida Black Bear

The Florida Black Bear is not listed by the USFWS and was removed from FWC's list of threatened species in 2012; however, is still protected under the Bear Conservation Rule (68A-4.009, FAC) and the FWC Florida Black Bear Management Plan. There is one documented bear related call within the study area near the Sweetwater Landing Marina and several surrounding the study area, near the SR 80 intersection and Fort Myers Shores residential neighborhood. Additionally, one bear mortality occurred in 2009 east of the study area near proposed Pond Site 1-E. The study area falls within the FWC South Bear Management Unit. To avoid potential conflicts with bears during construction, the Department will require contractors to remove garbage daily from the project work area to prevent these items from becoming an attractant for the Florida black bear. Any interaction with nuisance bears will be reported to the FWC Wildlife Alert hotline.

Non-Listed Bats

In Florida, there are 13 resident bat species that reside in the state year-round or are seasonal visitors. All Florida non-listed bats are protected in accordance with FAC rule 68A-4.001 General Prohibitions and FAC rule 68A-9.010 Taking Nuisance Wildlife. During field investigations, evidence of roosting bats were observed in the Wilson Pigott Bridge. The Department will follow the FDOT Guidance on Bat Exclusion Practices (July 2023) prior to construction to ensure adverse impacts to bats are avoided. Bat exclusion measures can only be conducted outside of the maternity season which lasts from April 15th through August 15th, and the exclusion should take place when the low temperature is forecasted by the US National Weather Service to remain above 50 degrees F for four consecutive nights.

Potential Impacts and Mitigation

Potential impacts to listed species and their habitats are described in more detail in the NRE. The NRE will be submitted to the USFWS, NMFS, and FWC for review and to initiate consultation for the project. In addition, the NRE will be shared with the South Florida Water Management District (SFWMD) and the USACE for informational purposes. The resulting coordination and/or concurrence will be documented in the final NRE.

To ensure the project will not adversely affect protected species or contribute to water quality degradation, the Department will perform or adhere to the following implementation measures.

- Conduct surveys for listed plants in suitable habitat prior to construction. If listed plant species are observed in the project footprint, the Department will coordinate with the appropriate agency to receive the necessary authorizations prior to construction.
- Conduct a pre-construction survey for gopher tortoises. If gopher tortoise burrows are located within 25 feet of the project footprint, a relocation permit will be obtained from the FWC prior to construction for burrows that cannot be avoided or excluded from project construction.
- Apply best management practices (BMPs) (e.g., erosion and sediment controls) prior to and throughout construction to avoid adverse impacts to wetland and aquatic resources adjacent to the project area.
- Provide compensatory mitigation for wetland impacts resulting from the Preferred Alternative, per 373.4137, FS, and 33 USC 1344.

To ensure the project will not adversely affect protected species or their habitats, the Department will perform or adhere to the following commitments.

- The NMFS Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office will be utilized during construction.
- The most recent version of the USFWS Standard Protection Measures for the Eastern Indigo Snake will be utilized during construction.
- The USFWS and FWC Standard Manatee Conditions for In-Water Work will be utilized during construction.
- FDOT will require contractors to remove garbage daily from the construction site or use bear proof containers for securing food and other debris from the project work area to prevent these items from becoming an attractant for the Florida black bear. Any interaction with nuisance bears will be reported to the FWC Wildlife Alert hotline.
- FDOT will provide mitigation for impacts to wood stork Suitable Foraging Habitat within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank.
- Prior to demolition of Wilson Pigott Bridge, bat exclusion must be completed to comply with FAC rule 88A-4.001 General Prohibitions; and rule 68A-9.010 Taking Nuisance Wildlife. Per regulations, exclusion is not permitted during bat maternity season of April 15 through August 15. Exclusion devices must be left up for a minimum of four nights and the low temperature must be forecasted to remain above 50 degrees Fahrenheit during that time period.
- Should the listing status of the tricolored bat be elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area during design and permitting phase of the proposed project, FDOT commits to re-initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tricolored bat.
- The NFMS Vessel Strike Avoidance Measures, NOAA Fisheries Southeast Regional Office will be utilized during construction.
- A survey for giant leather fern will be performed during the design phase and coordination with FDACS will occur if impacts to the species are anticipated.

5.2 Wetlands and Other Surface Waters

The following evaluation was conducted pursuant to Presidential Executive Order 11990 of 1977 as amended, Protection of Wetlands and the USDOT Order 5660.1A, Preservation of the Nation's Wetlands.

A NRE (**Date of Final**) was prepared under separate cover to document and summarize the potential impacts to natural resources, including wetlands and other surface waters. The NRE also documents commitments and implementation measures considered to avoid, minimize, and mitigate potential impacts.

The presence of wetlands and surface waters associated with the Preferred Alternative fall under the jurisdiction of the USACE which regulates the discharge of dredged or fill material into water of the United States under the CWA and SFWMD which regulates activities in surface waters and wetlands in this region. A variety of resources including the National Wetlands Inventory (NWI) maps, Soil Surveys for Lee County, SFWMD Florida Land Use, Cover, and Forms Classifications System (FLUCFCS) land cover and land use data, and current and historical aerial photographs were utilized to identify any wetlands and surface waters that occur within the study area.

Professional wetland scientists delineated the extent of wetlands and surface waters within the study area on various field visits between August 2019 and April 2021, in accordance with federal and state guidelines. A seagrass survey was conducted, but no seagrass was observed. The study area for this assessment includes all areas within the existing and proposed FDOT ROW as well as areas located directly adjacent.

Direct Impacts

The Preferred Alternative will result in direct wetland and surface water impacts. Wetland and surface water impacts for the Preferred Alternative were calculated based on the estimated project footprint, accounting for the proposed typical section, new bridge, and intersection improvements. Accounting for the proposed typical section, drainage improvements, and floodplain compensation areas, the estimated project footprint will result in about 15.32 acres of direct wetland impacts and 7.28 acres of surface water (i.e., ditches and reservoirs) impacts. The Department will provide compensation for direct wetland impacts.

Indirect Impacts

Potential indirect (i.e., secondary) wetland impacts for the Preferred Alternative were calculated 25-feet beyond the limits of the direct wetland impacts. Indirect impacts were not calculated for OSW impacts because these areas are routinely maintained to prevent flooding and edge effects will be negligible. It is anticipated that the Preferred Alternative will result in 5.16 acres of indirect wetland impacts. The Department will provide compensation for indirect wetland impacts.

Cumulative Impacts

Compensatory mitigation for direct and indirect wetland and surface water impacts resulting from the Preferred Alternative will be mitigated through the purchase of credits from Little Pine Island Mitigation Bank (LPIMB). The purchase of credits from LPIMB will require a Cumulative Impact Assessment be completed during the permitting phase that provides reasonable assurance the proposed impacts will not have unacceptable cumulative impact on similar wetland types within the same basin.

Impacts to federally and state jurisdictional wetlands and other surface water resulting from the Preferred Alternative are summarized in **Table 4**.

A wetland assessment was conducted for wetlands and surface waters within the footprint of the Preferred Alternative using the Uniform Mitigation Assessment Method (UMAM). Based on the UMAM, the 20.48 acres of direct and indirect wetland impacts may require 1.23 estuarine mangrove credits and 7.86 freshwater forested credits from an approved wetland mitigation bank or equivalent regional mitigation area. These values may be refined through coordination and review by the regulatory agencies during project design and permitting. The anticipated mitigation credits required to offset impacts to wetlands are summarized below in **Table 4**.

Table 4. Anticipated Wetland and Surface Water Impacts for the Preferred Alternative

Impact Type	Direct Impacts		Indirect Impacts	
	Acre(s)	Functional Loss	Acre(s)	Functional Loss
Wetland Impacts and Functional Loss	15.32	8.49	5.16	0.60
OSW Impacts*	7.28	-	-	-
Total Wetland and OSW Impacts	22.60	-	5.16	-

*Shading impacts. No functional loss or mitigation anticipated.

Avoidance and minimization of potential wetland and surface water impacts were incorporated throughout the development of the Preferred Alternative and as the project advances through subsequent phases, avoidance and minimization of wetland impacts will continue to be considered to the maximum extent practicable. Unavoidable direct and indirect impacts to wetlands will be mitigated through the purchase of credits from LPIMB to satisfy all mitigation requirements of Part IV, Chapter 373 FS and 33 USC 1344.

LPIMB currently has type-for-type state and federal credits available, including mangrove swamp habitat. LPIMB is located within the Charlotte Harbor Aquatic Preserve and Matlacha Pass Aquatic Preserve and has a direct hydrologic connection to the Caloosahatchee River. LPIMB is a 4,670-acre island that provides habitat for many of the same protected species that may utilize habitat within the study area. The purchase of 9.09 credits (1.23 estuarine mangrove credits and 7.86 freshwater forested credits) is estimated for wetland impacts resulting from the Preferred Alternative. The purchase of credits from LPIMB will require a Cumulative Impact Assessment be completed during the permitting phase that provides reasonable assurance the proposed impacts will not have unacceptable cumulative impact on similar wetland types within the same basin. It is anticipated that no mitigation will be required for the direct and shading impacts anticipated to surface waters. Final credit amounts will be determined through coordination with the SFWMD and USACE during project design and permitting. Mitigation credits will also offset the loss of wood stork SFH because LPIMB is within the wood stork CFA impacted by the preferred alternative.

The Preferred Alternative has been evaluated in accordance with Federal Executive Order 11990 - "Protection of Wetlands." Given the location of the existing infrastructure, location and landscape of the existing alignment, the purpose and need for the project, these factors preclude any practical alternatives that avoid wetland impacts. Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. Therefore, the proposed project is expected to result in no significant short-term or long-term adverse impacts to wetlands.

Potential impacts to wetlands and other surface waters are described in more detail in the NRE, included in the project file.

5.3 Essential Fish Habitat (EFH)

An Essential Fish Habitat (EFH) Assessment has been prepared and consultation has been completed in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). It has been determined that this project will have adverse effects to EFH.

Estuarine habitats within the project area have been identified as EFH for coastal migratory pelagics, stone crab (*Menippe mercenaria*), reef fish, shrimp (*Penaeus spp.*), red drum (*Sciaenops ocellatus*), black tip shark (*Carcharhinus limbatus*), bonnethead shark (*Sphyrna tiburo*), bull shark (*Carcharhinus leucas*), and tiger shark (*Galeocerdo cuvier*). The project may indirectly affect mangroves, seagrasses, and salt marshes located downstream at the mouth of the Caloosahatchee River and in San Carlos Bay.

The Preferred Alternative will directly impact 1.54 acres of mangrove wetlands considered EFH. The Preferred Alternative will indirectly impact 0.34 acres of mangrove wetlands considered EFH. Indirect impacts were calculated in EFH areas 25-feet beyond the limits of the direct wetland impacts.

Erosion control measures and the use of BMPs during construction will be implemented to provide reasonable assurance the Preferred Alternative will not contribute to violations of water quality standards. Compensatory mitigation for direct and indirect EFH impacts resulting from the Preferred Alternative will be provided from an approved mitigation bank.

In accordance with state and federal regulations, avoidance and minimization of wetland impacts were considered in developing the preferred alternative. These measures include using the existing right-of-way when practical; proposing a typical section to meet needs of the project and the minimum requirements of the FDOT standard design criteria; collecting stormwater runoff efficiently; evaluating best fit options; reducing the footprint as much as possible, particularly near sensitive habitats along the Caloosahatchee River; and implementing FDOT's *Standard Specifications for Road and Bridge Construction*.

Based on the UMAM, the 1.54 acres of direct and indirect wetland impacts to wetlands considered EFH may require 1.23 estuarine mangrove credits. The Department will purchase functional credits from the LPIMB to compensate for unavoidable wetland impacts pursuant to Section 373.4137, FS to satisfy all mitigation requirements of Part IV of Ch. 373, FS and 33 USC 1344. The LPIMB provides estuarine habitat and long-term protection for many of the same managed fisheries within the study area.

Given the minor impact to EFH compared to the available habitat in the region and the provision of agency-approved mitigation for unavoidable impacts, it is anticipated the Preferred Alternative has "more than minimal but less than substantial" potential for adverse effect to EFH. Any changes to mitigation credit availability will be coordinated with the NMFS during project design and permitting.

5.4 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management.

In compliance with the PD&E Manual for Floodplains, a Location Hydraulics Report (LHR) (June 2022) was prepared for the project. Following completion, the report will be included in the project file. The purpose of the LHR is to address base floodplain encroachments resulting from the roadway improvements evaluated in the PD&E study. The intent is to avoid or minimize highway encroachments within the 100-year (base) floodplains and to avoid supporting land use development incompatible with floodplain values.

A Bridge Hydraulic Report (BHR) (March 2023) was also prepared for this project to evaluate the existing and proposed hydraulic conditions at Wilson Pigott Bridge (Bridge No. 120064). The BHR is included in the project file.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the project study area include panel numbers 12071C0282F and 12071C0284F, for Lee County, Florida dated August 28, 2008, with a revision dated June 28, 2019. Most of the project is designated Zone AE with the 100-year flood stage at elevation 10 NAVD 88.

Per coordination with the SFWMD on September 13, 2019, floodplain compensation (FPC) sites will not be required for the project because the floodplain is in the Tidal Caloosahatchee River Basin and the Franklin Lock further east is considered the tidal limits. Existing SFWMD permits were researched within the project vicinity and no floodplain compensation has been required for adjacent development. Meeting minutes are appended in the Water Quality Impact Evaluation (WQIE) Checklist (April 2023) in the project file.

There are four existing cross drains and one bridge within the study limits. Two cross drains along SR 31 will be upsized due to the widening. One new cross drain will be required to maintain conveyance under the proposed alignment. The bridge is not within a FEMA floodway and a FEMA no-rise study associated with the new bridge is not required.

The project will impact the 100-year floodplain in three different ways:

- Impacts from filling the floodplain areas associated with the proposed roadway widening, isolated wetlands, wetlands systems, and depressional areas
- Transverse impacts resulting from the extension and replacement of the existing cross drain culverts
- Transverse impacts resulting from widening the bridge.

While impacts are unavoidable since the floodplains associated with the water bodies extend both north and south of the proposed alignment, impacts are anticipated to be minimal. During the final design phase of the project, every necessary action will be taken to minimize upstream impacts. To minimize upstream impacts, FDOT design criteria for conveyance system (e.g., culvert) allow no significant increase in flood stages at the upstream end of the structures. During the design phase, each cross drain will be analyzed for existing and proposed conditions with more defined data and designed to ensure no conflicts with the proposed roadway and no significant increase in headwater elevations. Also, a more detailed inspection of the cross drains will be necessary to verify their structural integrity and assess the need for complete reconstruction.

Impacts resulting from the widening and construction of the bridge at the Caloosahatchee River are considered minimal. As a minimum, the designer will maintain the horizontal and vertical openings at the bridges similar to the existing condition.

Floodplain Finding: Modifications to existing drainage structures included in this project will result in an insignificant change in their capacity to carry floodwater. This change will not increase flood heights or flood limits. The proposed structures will perform hydraulically in a manner equal to or greater than the existing condition, and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There will not be a significant change in the potential for interruption or termination of emergency service or in emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

5.5 Sole Source Aquifer

There is no Sole Source Aquifer associated with this project.

5.6 Water Resources

A Pond Siting Report (PSR) (May 2023), PSR Addendum (August 2023), and a WQIE checklist (April 2023) were each prepared under separate cover and are included in the project file. As documented in the PSR, stormwater management for water quality treatment and runoff attenuation will be provided using a combination of dry retention/ wet detention systems to meet the SFWMD Resource Permit (ERP) requirements.

The project is located within the Tidal Caloosahatchee sub-basin of the Caloosahatchee River Watershed. The tidal portion of the Caloosahatchee River extends upstream (33.2 miles) from the Gulf of Mexico to the Franklin Lock. The Caloosahatchee River traverses the project limits and serves as the primary outfall for the project area. This segment of SR 31 is located within Waterbody ID (WBID) 3240C - Caloosahatchee Estuary (Tidal Segment 3 - per the current 303(d) list) and is listed as impaired for Nutrients and Dissolved Oxygen. Therefore, a pre versus post pollutant loading analysis is required as part of the ERP permitting process. The pre versus post pollutant loading analysis will need to comply with the guidelines set forth by FDOT's Memorandum, "Nutrient Loading Calculations for FDOT Projects" dated July 7, 2011, and Florida Department of Environmental Protection's (EDEP) March 2010 draft Stormwater Quality Applicant's Handbook (SQAH), or any subsequent updates or revisions. A Total Maximum Daily Load (TMDL) has been adopted for this WBID and a water quality nutrient loading analysis has been performed for ERP purposes. In accordance with the SFWMD coordination meeting on September 2019, pre vs. post discharge rate attenuation will not be required for those basins which discharge directly to the Caloosahatchee River. FDOT will not require critical duration analysis (Rule 14-86) for the Basin 1 stormwater management facility (SMF) preferred site for this project.

There are four existing cross drains and one existing bridge (movable) within the project limits. The cross drains provide conveyance of offsite and onsite runoff through the roadway corridor with eventual discharge into the Caloosahatchee River. In the proposed conditions, the cross drains have been designed to accommodate offsite flows and maintain current drainage patterns.

Roadway runoff sheet flows to the adjacent natural wetlands and undeveloped properties which then outfall to the Caloosahatchee River without providing formal water quality treatment or attenuation. The roadway project corridor is divided into two roadway basins: Basin 1 south of the river (between SR 80 and the profile high point over the Caloosahatchee River), and Basin 2 north of the river (between the profile high point over the Caloosahatchee River and SR 78). Although the project corridor is comprised of two roadway drainage basins, only Basin 1 was evaluated for pond siting. The Basin 2 (from the proposed bridge high point to north of the Caloosahatchee River to the End Project at SR 78)

SMF (named Pond 2) recommended alternative was determined under the adjacent SR 31 North Design-Build project to the north.

The proposed stormwater management system will consist of an off-site SMF designed to treat and attenuate the stormwater runoff from the improved project corridor. The analysis estimates pond ROW needs using a volumetric analysis approach that accounts for water quality treatment (presumptive and net improvement) and water quantity for peak discharge attenuation where required. Potential SMF alternatives were identified along the project limits and were designed as a combination dry retention/wet detention system to meet ERP permit requirements. For SMF discharges directly to the Caloosahatchee River (tidally influenced), peak discharge attenuation is not required, otherwise post development peak discharge attenuation is based on the 25-year/72-hour design storm event. FDOT Critical Duration analysis is not required per FDOT District One. The PSR evaluated five SMF site alternatives for Basin 1 and recommended Alternative 1-E based on the parameters identified in the SMF Site Evaluation Matrix and on the Pond Alternatives Map.

Since the original PSR, flyovers were introduced along SR 80 impacting the existing permitted linear treatment systems. A PSR Addendum was completed to address additional stormwater requirements by the impacted system along SR 80. Three pond alternatives were evaluated, and Alternative 1-G (Gordon Center SMF) was selected as the recommended preferred alternative. The site was selected because it has one property owner, is already permitted by SWFWMD, and FDOT is in contact with the owner of the property regarding acquiring the property.

One major design constraint on this project is the existing FGT gas transmission line. The location of this line (in the vicinity of the river) is a major constraint impacting the ability to locate an efficient and economically suited stormwater pond site. It is anticipated that a National Pollutant Discharge Elimination System (NPDES) construction permit will be acquired, and a Stormwater Runoff Control Concept (SRCC) will be developed during design.

The SMF recommendations are based on sizes and locations determined from preliminary data calculations, best available data, reasonable engineering judgement, and assumptions. SMF sizes and configurations may change during final design as specific site information (seasonal high ground water table (SHGWT), actual topographic elevation data, wetland hydrologic information, and final roadway geometry) is obtained.

5.7 Aquatic Preserves

There are no aquatic preserves in the project area.

5.8 Outstanding Florida Waters

There are no Outstanding Florida Waters (OFW) in the project area.

5.9 Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers or other protected rivers in the project area.

5.10 Coastal Barrier Resources

There are no Coastal Barrier Resources in the project area.

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6. Physical Resources

The project will not have significant impacts to physical resources. Below is a summary of the evaluation performed for these resources.

6.1 Highway Traffic Noise

The following evaluation was conducted pursuant to 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, and Section 335.17, F.S., State highway construction; means of noise abatement.

A Noise Study Report (NSR) (September 2023) was completed for the project and is included in the project file. This project qualifies as a Type I project pursuant to 23 CFR 772 and Section 335.17, F.S. The evaluation uses methodology established by the FDOT and documented in the PD&E Manual, Highway Traffic Noise Chapter.

A total of 33 receptors (discrete/representative locations of a noise sensitive area) were evaluated. The receptors represented 45 residences, three outdoor dining areas, an active sports area (a golf course), a medical facility (dental office), and a fire station for a total of 51 properties. A map and description of the locations of the noise sensitive receptors are appended in the NSR. The residences were evaluated as an Activity Category B land use (an exterior Noise Abatement Criteria (NAC) of 66 decibels on the "A"-weighted scale (dB(A))). The outdoor dining areas were evaluated as Activity Category E (an exterior NAC of 71 dB(A)). The golf course was evaluated as an Activity Category C land use (an exterior NAC of 66 dB(A)). Because there are no exterior areas of frequent human use, the medical facility and the fire station were evaluated as Activity Category D (an interior NAC of 51 dB(A)).

The results of the analysis indicate that the existing (year 2019) exterior traffic noise levels range from 44.6 to 66.1 dB(A), and the interior traffic noise levels at the medical facility and the fire station are predicted to be 34.6 and 43.5 dB(A), respectively. In the future (year 2045) without the proposed project improvements (the No-Build Alternative), exterior traffic noise levels are predicted to range from 46.9 to 66.1 dB(A), and the interior levels at the medical facility and the fire station are predicted to be 35.5 and 43.5 dB(A), respectively. With the proposed Preferred Alternative, future conditions for exterior traffic noise levels are predicted to range from 53.3 to 65.8 dB(A), and the interior levels at the medical facility and the fire station are predicted to be 36.4 and 42.6 dB(A), respectively.

Based on these results, highway traffic noise levels do not approach, meet, or exceed the NAC in the future with the proposed project improvements at any of the evaluated receptors. The results of the analysis also indicate that when compared to existing conditions, traffic noise levels with the proposed improvements will not increase more than 9.5 dB(A) at any receptor. As such, the project will not substantially increase highway traffic noise (i.e., an increase of 15 dB(A) or more).

Based on the results, there are no highway traffic noise impacted land uses within the project area that require abatement consideration. Should the proposed improvements change during the project's final design phase such that a re-analysis of highway traffic noise is warranted, and impacts are identified in the analysis, an evaluation of noise abatement measures would be performed at that time. The FDOT is committed to the construction of feasible and reasonable noise abatement measures at noise-impacted locations contingent on the following:

- Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to the District Office
- Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved

The residences and the medical facility within the project limits are considered construction noise and vibration sensitive sites. Implementing the proposed project is not expected to have a significant noise or vibration impact on these sites because it is anticipated that application of the FDOT *Standard Specifications for Road and Bridge Construction* will minimize or eliminate the potential for such impacts. Should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

Land uses such as residences, motels, medical facilities, schools, churches, recreation areas, and parks are considered incompatible with highway traffic noise levels that approach, meet, or exceed the NAC. To reduce the possibility of noise-related impacts on land uses that may be approved for construction in the future, noise level contours were developed for the future improved roadway facility. Local officials will be provided a copy of the NSR that delineates/illustrates the contours to promote compatibility between land development and the proposed improvements.

6.2 Air Quality

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to improve the Level of Service (LOS) and reduce delay and congestion on all facilities within the study area.

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

6.3 Contamination

A Contamination Screening Evaluation Report (CSER) (September 2023) was prepared for the project and is included in the project file. As seen in **Table 5**, 21 sites were considered to have potential for contamination. Two sites were rated as "High" risk, four sites were rated as "Medium" risk, 12 sites were rated as "Low" risk, and three sites were rated as "No" risk for contamination. Additionally, one SMF site (Pond 1-E) was evaluated and assigned a "Medium" risk rating for the project (**Table 6**). Following the Final CSER, further assessments were conducted, and Pond 1-E was removed as the selected SMF.

Table 5. Potential Contamination Site Risk Ratings

Site No.	Name/Address	ROW (ft.)	Database/ Facility ID/ or Other Source	Contaminants of Concern	Site Rating
3	First Bank 11741 Palm Beach Blvd.	Adjacent south of SR 80	Site reconnaissance, Aerials photos	Petroleum	No
5	Tire Recycling Services of Florida, LLC 11821 Palm Beach Blvd.	380 ft. south of SR 80	SLDWST_NLF	Waste Tires	No
1	Tire Services of Florida 11480 Palm Beach Blvd.	1,000 ft. west of SR 80 project limit	WACS 96352 (formerly SLDWST_LF 99249)	Waste Tires, Petroleum, Solvents	Low
2	Pole Barn/ Green House/ Tree Farm 2950-2990 Wildwood Lane	100 ft. north of SR 80	Site reconnaissance, Aerial photos	Petroleum, Herbicides, Pesticides	Low
4	Verandah Cleaners 11821 Palm Beach Blvd.	480 ft. south of SR 80	Site reconnaissance, Aerial photos	Dry Cleaning solvents	Low
10	Superior Auto Care 12238 Palm Beach Blvd.	Adjoining north of SR 80 ROW	N/A	Petroleum, solvents	Low
12	Veranda Club Golf Course 12355 Palm Beach Blvd.	Adjoining south SR 80 ROW	9805918	Petroleum, solvents, pesticides, herbicides, arsenic	Low
13	Fort Myers Shores Fire Department Station 81 12345 Palm Beach Blvd.	Adjoining south of SR 80 ROW	8627451	Petroleum	Low
14	Fox Plumbing and Pool Supplies 12338 Palm Beach Blvd.	Adjacent north of SR 80 ROW	Site reconnaissance, Aerial photos	Hazardous Substances	Low
15	Carrillo's Tires/ Former Turn Key Tire and Auto 12370 Palm Beach Blvd.	350 ft. east of the SR 80 east project limit	SWNLF 101004	Petroleum, solvents	Low
16	7-Eleven/ Mobil 12516 Palm Beach Blvd.	490 ft. east of SR 80 project limit	9804195	Petroleum	Low
6	7-Eleven 11891 Palm Beach Blvd.	Adjacent south of a SR 80 ROW	9807804	Petroleum	Medium

8	RaceTrac #2571 12050 Palm Beach Blvd.	Adjoining north of SR 80 ROW	9817743	Petroleum	Medium
9	Accident SR 31 & Palm Beach Blvd 11741 Palm Beach Blvd.	Adjacent north of SR 80 ROW	FDEP OHMIT #2019-3I-63060 ERIC 11334	Petroleum	Medium
11	Former Circle K #2707335 / Redbone Spirits 12255 Palm Beach Blvd. (Formerly 7033)	Adjoining north of SR 80 ROW	8518912	Petroleum	Medium
7	Former Gas Station 12002-12010 Palm Beach Blvd.	Within proposed and adjoining SR 31 ROW	Aerial photographs	Petroleum	High
SR 31 (Babcock Ranch Road)					
20	David C. Brown Farms Hwy 31	Adjacent east	TANKS 9401433	Petroleum	No
17	Johns Farm 16361 SR 31	Adjoining west of SR 31	Site reconnaissance, Aerial photos	Petroleum	Low
18	LJ's Lounge 16500 SR 31	Within ROW	Site reconnaissance, Aerial photos	Asbestos, LBP	Low
19	Sweetwater Landing 16691 Hwy 31 Former Marina 31 17281 Hwy 31	Adjoining west	9804415 9102602 ERIC_11236	Petroleum	Low
21	Wilson Pigott Bridge / FDOT Bridge No. 120064	Within existing SR 31 ROW	Site reconnaissance, Aerial photographs	Asbestos, Metals-Based Coatings	High

Table 6. Drainage Sites

Site Name & Address	Databases/ Facility ID/ or Other Source	Contaminants of Concern	Risk Rating
Pond 1-E 2600 Wildwood Lane (N 1/2) and Folio 10239222 (S 1/2)	N/A	Petroleum, Herbicides, Pesticides	Medium

A total of six sites were assigned a risk rating of "Medium" or "High". For four of these six sites, if deemed appropriate by the District Contamination Impact Coordinator (DCIC), will require further evaluation and Level II testing. Although Sites 9 and 21 were rated "Medium" and "High," no testing is recommended. For Site 9 - Accident SR 31 & Palm Beach Boulevard, additional file review is recommended to determine if testing is warranted in consideration of NPDES permitting. No further testing is warranted for Site 21 - Wilson Pigott Bridge (FDOT No. 120064) since an asbestos survey and screening for Metals-Based Coatings was already performed.

Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the *National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharges from Large and Small Construction Activities*. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area. For areas where a structure is located within proposed ROW, an asbestos survey is recommended, in accordance with the PD&E Manual.

6.4 Utilities and Railroads

A Utility Assessment Package (UAP) was prepared in DATE for this project and is included in the project file. This effort was completed with assistance from the District's local Area Utility Manager. A design ticket was obtained from the Sunshine One Call of Florida. Based on the information received and coordination with the Area Utility Manager, a utility contact list was created of participating members in the study area. The responding Utility Agency Owners (UAOs) are summarized below. **(NOTE: TO BE UPDATED)**

Utility owners were contacted and asked to verify ownership or operation of any facilities, existing or proposed, within the project study area. The UAOs were also provided a copy of the preliminary project concept plans and were asked to reply with a narrative of major utilities that may require relocation.

AT&T Transmission

This utility has underground fiber optic cable facilities, which provides communications and data services within the project limits.

- One 4" HDPE duct along the north side of SR 80 (Palm Beach Boulevard), beginning from the west limits of this project to the east side of SR 31. Then proceeds north along the east side of SR 31 to a handhole located south of the Caloosahatchee River.
- One 6" steel pipe along the east side of SR 31 from a handhole located south of the Caloosahatchee River. Then proceeds north along the east side of SR 31 becoming a subaqueous crossing under the Caloosahatchee River. Then the subaqueous crossing continues north along the east side of SR 31 to a handhole located on the north side of the Caloosahatchee River.
- One 4" HDPE duct long the east side of SR 31 from a handhole located on the north side of the Caloosahatchee River and continuing to the south side of SR 78 (Bayshore Road). Then crosses SR 31 from the east side to the west side. Then proceeds north along the west side of SR 31 to the north limits of this project.

CenturyLink - Local

This utility has underground facilities providing telephone, data and internet services within the project limits.

- Underground fiber optic cable (count unknown) in multi-duct manhole system along the median of SR 80, from west of project limits and proceeds east to east of project limits.
- Buried 100 pair copper cable beginning from a manhole located in the median of SR 80, being east of SR 31. Then proceeds north to the north side of SR 80. Then proceeds west to the east side of SR 31. Then proceeds north along the east side of SR 31 to West Marina Drive.

- Two buried 50 pair copper cables crosses from the east to the west side of SR 31 at West Marina Drive. Then one buried 50 pair copper cable proceeds west along the north side of West Marina Drive. Then one buried 50 pair copper cable proceeds north along the west side of SR 31 from the SR 31 road crossing to the Boathouse Grill.

CenturyLink - National

This utility has underground facilities providing telephone, data and internet services within the project limits.

Comcast

This utility has underground and aerial facilities within the project limits.

Florida Gas Transmission (FGT)

This utility has aerial and underground facilities within the project limits.

- 26" O.D. x 0.446" W.T., Grade X - 70 Natural gas transmission pipeline runs east along the south side of W Marina Drive and then crosses to the east side of SR 31.
- The gas pipeline runs north along the east side of SR 31 and goes sub-aqueous to cross the Caloosahatchee River to continue north on the east side of SR 31 until exiting the project limits.

Florida Governmental Utility Authority

This utility has no facilities within the project limits.

Florida Power and Light - Distribution

This utility has aerial facilities within the project limits.

- Overhead electric distribution line goes west and east crossing SR 31 on the north side of Palm Beach Blvd. and continues in both directions until exiting the project limits.
- Overhead electric distribution line starting on the north side of Palm Beach Blvd. runs north along the east side of SR 31 until crossing SR 31 350' south of W Marina Dr. and continues west exiting the project limits.
- Overhead electric distribution line 350' south of W Marina Blvd. continues north along the east side of SR 31 and then crosses to the northeast side of the driveway 800' south of the Caloosahatchee River. This line continues north along the east side of the Boat House parking lot and ends just before the river.
- Overhead electric distribution line 800' south of the Caloosahatchee River continues north along the east side of SR 31 until just south of the Caloosahatchee River.

Lee County Electric

This utility has aerial facilities within the project limits.

- Secondary overhead electric line starting 300' south of SR 78 running north along the west side of SR 31 and crosses SR 78 to continue north along SR 31 until exiting the project limits.

- Primary overhead electric lines running east along the south side of SR 78 crosses SR 78 at the SR 31 intersection.
- Primary overhead electric lines on the north side of SR 78 crosses SR 31 and continues north along the west side of SR 31 until exiting the project limits.

TECO Peoples Gas

This utility has underground facilities within the project limits.

- 8" St High Pressure Gas Main starting at Palm Beach Blvd. running north along the east side of SR 31 goes sub-aqueous crossing the Caloosahatchee River and continues to run north along SR 31 until crossing to the west side of SR 31 just north of SR 78.
- The line continues north along the west side of SR 31 and exits project limits as well as continuing west along SR 78 exiting the project limits.

It is unknown whether utility relocations within the limits of the project would be at the expense of the utility owner or if they would be eligible for reimbursement. There are no plans by any UAO for betterments of their facilities at this time.

There are no active or inactive railroad facilities or crossings within or adjacent to the project limits.

6.5 Construction

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. Construction activities for the proposed project will have temporary air, noise, water quality, traffic flow, and visual effects for residents and travelers within the immediate vicinity of the project. These effects will be minimized through the application of the FDOT Standard Specifications for Road and Bridge Construction.

During construction, the contractor will utilize BMPs to minimize any sedimentation and erosion impacts to areas outside of the limits of construction. This project may require a NPDES permit that will be developed during design. The contractor is responsible for their methods of controlling pollution on haul roads, borrow pits, other material pits, and areas used for disposal of materials from the project. Temporary erosion (water quality) control features as specified in Section 104 of FDOT *Standard Specifications for Road and Bridge Construction* will consist of measures such as temporary grassing, sodding, mulching, sandbagging, slope drains, sediment basins, sediment checks, artificial coverings, and berms.

It is FDOT policy to follow the requirements of local ordinances to the extent practicable. The residences and the medical facility within the project limits are construction noise and vibration sensitive sites. Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impacts on these properties. If sensitive land uses develop adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the FDOT Standard Specifications for Road and Bridge Construction will minimize or eliminate potential construction noise and vibration impacts. The FDOT Standard Specifications contain the following requirements for construction noise and vibration control:

- The contractor shall operate only factory recommended exhaust muffles on internal combustion engines
- Back up alarm noise from heavy equipment and trucks shall be minimized by requiring the contractor to operate forward passes or in a figure eight pattern when dumping, spreading, or compacting material

- Adequate equipment maintenance procedures shall be used to ensure the elimination of unnecessary noise caused by loose body parts on all construction equipment
- Excessive tailgate banging by haul trucks shall be prohibited
- All stationary equipment shall be screened from noise-sensitive receptor sites if the equipment is to operate beyond normal working hours. If feasible, the equipment shall be screened during normal working hours to reduce noise impacts
- When feasible, the contractor shall establish haul routes to direct vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

Should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

Temporary impacts to travelers along SR 31 and SR 80 are anticipated during construction of the flyover. A Maintenance of Traffic (MOT) plan will be developed during final design for the implementation of the Preferred Alternative.

7. Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the Preliminary Engineering Report.

DRAFT

8. Permits

The following environmental permits are anticipated for this project:

Federal Permit(s)

USACE Section 10 or Section 404 Permit
USCG Bridge Permit

Status

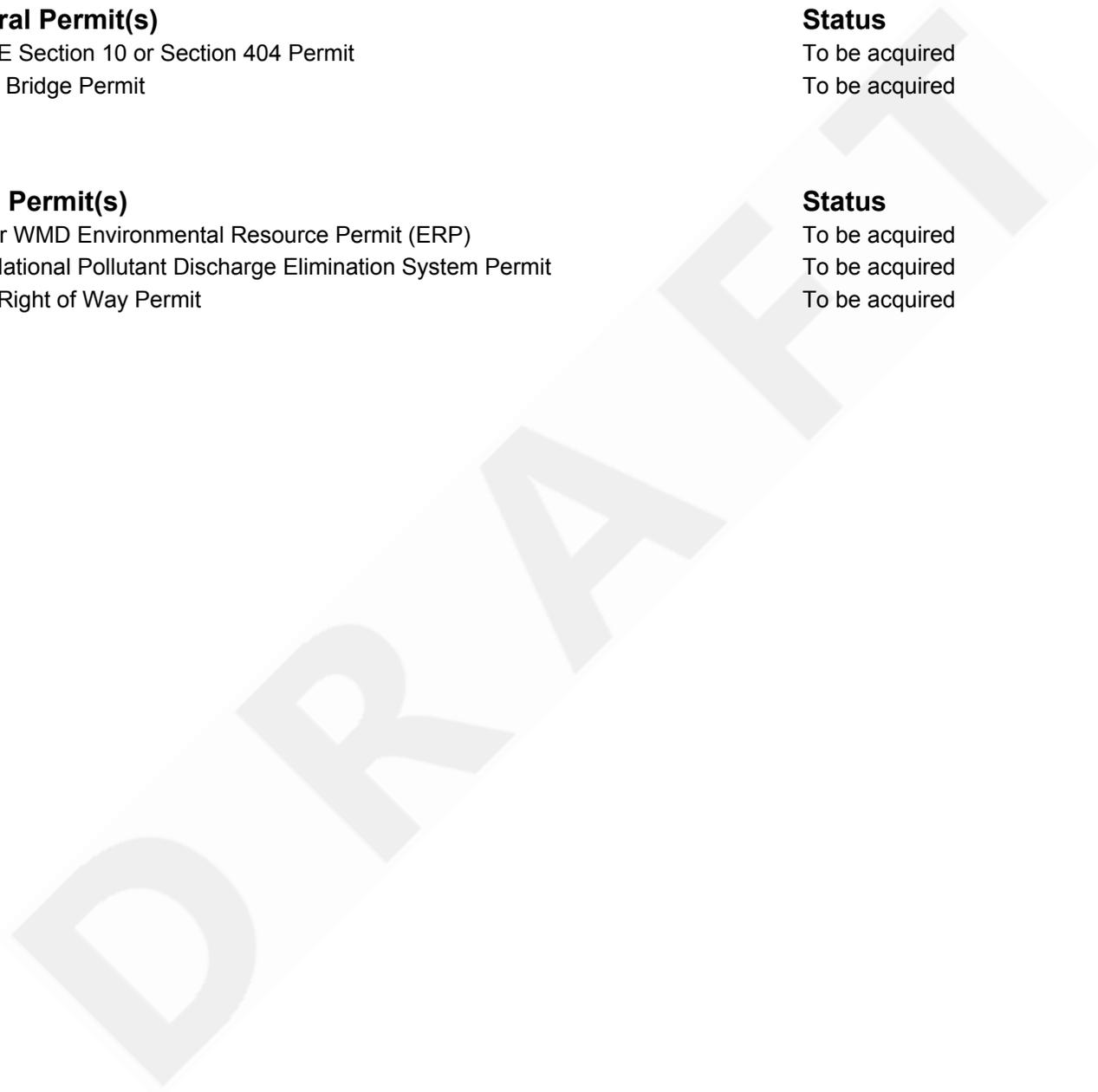
To be acquired
To be acquired

State Permit(s)

DEP or WMD Environmental Resource Permit (ERP)
DEP National Pollutant Discharge Elimination System Permit
WMD Right of Way Permit

Status

To be acquired
To be acquired
To be acquired



9. Public Involvement

The following is a summary of public involvement activities conducted for this project:

Summary of Activities Other than the Public Hearing

A Public Involvement Plan (PIP) was approved in February 2019 and is included in the project file, and implemented for this project in accordance with the Florida Statutes (F.S.) 286.105, and 339.115; Executive Orders 11990 and 11988; Council on Environmental Quality regulations for implementing the procedural provisions of the NEPA; U.S. Department of Transportation Order 5610.1C; and the CFR Parts 23 and 40. The purpose of this plan is to outline the public involvement approach for the project and identify stakeholders and communities informed throughout the project's lifetime.

Advance Notification and Program Screen Summary Report

An Advance Notification (AN) package was completed for this project and mailed to the Florida State Clearinghouse and local and federal agencies on June 22, 2018, in accordance with Governor's Executive Order 95-359 - Florida State Clearing House and President's Executive Order 12372 - Intergovernmental Review of Federal Programs.

Project Kick-Off Newsletter

Project kickoff emails were sent to elected officials by the FDOT District One Secretary and sent to appointed officials by FDOT, District One, District Environmental Administrator, on April 25, 2019, and is included in the project file. These emails provided an overview of the project and public involvement program and included the first project newsletter.

The project kickoff newsletter, published in English, was mailed on April 20, 2019, informing the public of the start of the project and included a discussion of the study process and schedule. The newsletter also encouraged the need for public input and provided information on points of contact within the Department regarding citizen comments and concerns.

This newsletter was mailed to the property owner mailing list which was developed from information in the Lee County Property Appraiser's website. It was also distributed to interested parties who had contacted the Department and requested to be added to the project mailing list.

Alternatives Public Meeting

The FDOT conducted an in-person Alternatives Public Meeting on Tuesday, January 31, 2023, at the Field House at Babcock Ranch. Subsequently, a live virtual Alternatives Public Meeting was held on Tuesday, February 7, 2023, at 6 p.m. FDOT held the public meetings to present the Build Alternatives and the No-Build Alternative for the project.

A joint in-person Alternatives Public Meeting was initially planned for both this SR 31 PD&E and the SR 78 (I-75 to SR 31) PD&E studies for Tuesday, December 6, 2022, as the studies are in proximity to each other. The meeting was advertised, and notifications were sent the week of November 8, 2022, to elected and appointed officials, ETAT members, and stakeholders for both studies. FDOT also prepared and mailed a newsletter announcing the public meetings to property owners along the corridor, advertised the public meetings in the Florida Administrative Register and the News-Press, prepared and disseminated a press release to local media partners, and announced the in-person and online meetings on the project webpage and on the FDOT public meeting notice site. However, on November 22, 2022, the Lee County Civic Center, the intended venue for the meeting, informed the project team that their venue was no longer available because

their facility was needed for Hurricane Ian relief efforts. FDOT distributed cancellation notices/advertisements shortly thereafter and the public meeting was able to be rescheduled for just the SR 31 PD&E Study. Due to uncertainty surrounding hurricane relief efforts at the civic center, FDOT made the decision to host the public at The Field House at Babcock Ranch in January 2023.

Approximately 108 citizens and one elected official signed in at the in-person public meeting and approximately 35 citizens attended the live online public meeting. Public comments were encouraged, and FDOT provided various outlets to share their comments on the four Build Alternatives and No-Build Alternative at the meeting with FDOT/consultant staff, or through other methods. A continuous project video presentation as well as mapping and displays provided project information. Representatives and project information from the adjacent SR 31 North and SR 78 projects were also available to allow individuals to engage with those project teams.

Attendees were provided a project handout that included an overview of the PD&E study process, project purpose, alternatives evaluation results, project schedule and a comment form. Approximately 37 comments were received during the comment period. The comments were generally in favor of the project, in favor of the flyover, and in favor of the fixed bridge. Multiple comments were concerned with the impacts to businesses, noise, and others had questions about the duration of construction. All comments received were considered prior to advancing the Preferred Alternative to final design. Comments and responses are documented in the Comments and Coordination Report, located in the project file.

Stakeholder and Agency Coordination

FDOT coordinated with and presented project updates to the Lee County Department of Transportation (DOT) on November 3, 2022, and May 5, 2023. Attendees for the November presentation included representatives from Lee County DOT, FDOT, and consultants for both the SR 31 and SR 78 PD&E studies.

Two additional presentations were made to the Lee County MPO Bike and Pedestrian Advisory Committee (BPAC) and Traffic Management and Operations Committee (TMOC) in June and July 2023. These presentations included a project overview such as the project limits, adjacent projects, and the proposed schedule.

The public involvement process, including meeting summaries, comments/responses, and materials, are documented in the Comments and Coordination Report, located in the project file.

Date of Public Hearing: 11/02/2023

Summary of Public Hearing

10. Commitments Summary

1. To ensure the project will not adversely affect protected species or their habitats, the Department and/or contractor will commit to perform or adhere to the following measures.
 - The NMFS Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office will be utilized during construction.
 - The most recent version of the USFWS Standard Protection Measures for the Eastern Indigo Snake will be utilized during construction.
 - The USFWS and FWC Standard Manatee Conditions for In-Water Work will be utilized during construction.
 - FDOT will require contractors to remove garbage daily from the construction site or use bear proof containers for securing food and other debris from the project work area to prevent these items from becoming an attractant for the Florida black bear. Any interaction with nuisance bears will be reported to the FWC Wildlife Alert hotline.
 - FDOT will provide mitigation for impacts to wood stork Suitable Foraging Habitat within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank.
 - Prior to demolition of Wilson Pigott Bridge, bat exclusion must be completed to comply with FAC rule 88A-4.001 General Prohibitions; and rule 68A-9.010 Taking Nuisance Wildlife. Per regulations, exclusion is not permitted during bat maternity season of April 15 through August 15. Exclusion devices must be left up for a minimum of four nights and the low temperature must be forecasted to remain above 50 degrees Fahrenheit during that time period.
 - Should the listing status of the tricolored bat be elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area during design and permitting phase of the proposed project, FDOT commits to re-initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tricolored bat.
 - The NFMS Vessel Strike Avoidance Measures, NOAA Fisheries Southeast Regional Office will be utilized during construction.
 - A survey for giant leather fern will be performed during the design phase and coordination with FDACS will occur if impacts to the species are anticipated.

11. Technical Materials

The following technical materials have been prepared to support this environmental document and are included in the Project File.

Cultural Resources Assessment Survey
Pond Siting Report Addendum
Bridge Hydraulic Report
WQIE Checklist
Pond Siting Report
Noise Study Report
Contamination Screening Evaluation Report
Bridge Development Report
Project Traffic Analysis Report
Project Traffic Analysis Report Addendum
Preliminary Engineering Report
Public Involvement Plan

DRAFT

Attachments

Planning Consistency

Planning Consistency Documentation

Social and Economic

Land Use Map

Supporting Documentation Specific to Land Use Changes

Cultural Resources

Concurrence Letter

Section 106 Resource Map

Section 4(f) Report

Natural Resources

Wetlands Map

Species and Habitat Map

Floodplains Map

Physical Resources

Potential Contamination Site Map

Noise Map

Planning Consistency Appendix

Contents:

Planning Consistency Documentation

DRAFT



Lee County Metropolitan Planning Organization
Long Range Transportation Plan

Adoption December 18, 2020

Table 5-9: Cost Feasible Projects: State/Other Arterial/ Federal SU Funded Road Projects (\$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2035	2036-2045	Total Cost (YOE)	Total Cost (PDC)	Funding Sources
Countywide Signal System Updates, Final Phase			ITS	PE		\$1,500	\$0	\$0	\$1,500	\$1,200	SU, SA, DDR
Countywide Signal System Updates, Final Phase			ITS	CST		\$10,730	\$0	\$0	\$10,730	\$8,000	SU, SA, DDR
Metro Parkway	South of Daniels Parkway	Winkler Avenue	Widen 4L to 6L/CFI	ROW	\$18,070	\$0	\$0	\$0	\$18,070	\$18,070	DDR, DS,DIH
Metro Parkway	South of Colonial Blvd	Winkler Avenue	Widen 4L to 6L/CFI	CST		\$49,620	0	\$0	\$49,620	\$37,700	OA
Metro Parkway	South of Daniels Parkway	North of Daniels Parkway	CFI	CST		\$27,620	0	\$0	\$27,620	\$20,900	OA
Metro Parkway	North of Daniels Parkway	South of Colonial Blvd.	Widen 4L to 6L	CST		\$37,820	0	\$0	\$37,820	\$28,650	OA
Big Carlos Bridge Replacement Repayment			Reconstruct Bridge	CST	\$8,500	\$16,500	\$0	\$0	\$25,000	\$21,000	SU/SA
San Carlos Boulevard	Estero Blvd	Summerlin Road	Intersection Improvements	CST	\$5,990	\$0	\$0	\$0	\$5,990	\$5,990	SU/TALU
Old US 41	Collier County Line	Bonita Beach Road	Add Lanes & Reconstruct	PE		\$2,640	\$0	\$0	\$2,640	\$2,110	SU
Old US 41	Collier County Line	Bonita Beach Road	Add Lanes & Reconstruct	ROW		\$5,800	\$0	\$0	\$5,800	\$4,880	SU
Old US 41	Collier County Line	Bonita Beach Road	Add Lanes & Reconstruct	CST		\$0	\$22,170	\$0	\$22,170	\$14,300	SU
US 41 at Six Mile Cypress			Intersection Improvements	PE		\$4,690	\$0	\$0	\$4,690	\$3,553	OA
US 41 at Six Mile Cypress			Intersection Improvements	ROW		\$0	\$7,560	\$0	\$7,560	\$4,880	OA
US 41 at Six Mile Cypress			Intersection Improvements	CST		\$0	\$39,430	\$0	\$39,430	\$29,870	OA
SR78	W. of Santa Barbara	24th Avenue	Widen 4L to 6L	PD&E		\$0	\$3,090	\$0	\$3,090	\$2,190	OA
SR 78	W. of Santa Barbara	24th Avenue	Widen 4L to 6L	PE		\$0	\$9,270	\$0	\$9,270	\$6,000	OA
SR 78	W. of Santa Barbara	24th Avenue	Widen 4L to 6L	CST		\$0	\$0	\$81,080	\$81,080	\$43,710	OA
SR 78	I-75	SR 31	Widen 2L to 4L	PE		\$3,080	\$0	\$0	\$3,080	\$2,330	OA
SR 78	I-75	SR 31	Widen 2L to 4L	ROW		\$0	\$6,770	\$0	\$6,770	\$4,370	OA
SR 78	I-75	SR 31	Widen 2L to 4L	CST		\$0	\$25,860	\$0	\$25,860	\$16,700	OA
SR 78	Old US 41	Slater Road	Widen 4L to 6L	PD&E		\$0	\$1,920	\$0	\$1,920	\$1,360	OA
SR 78	Old US 41	Slater Road	Widen 4L to 6L	PE		\$0	\$0	\$8,360	\$8,360	\$4,080	OA
SR 78	Old US 41	Slater Road	Widen 4L to 6L	CST		\$0	\$0	\$50,400	\$50,400	\$27,200	OA

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2035	2036-2045	Total Cost (YOE)	Total Cost (PDC)	Funding Sources
Fowler Street	Metro/Fowler Cross over	Dr Martin Luther King Jr Blvd	Reconstruction	PD&E/PE/ROW/CST		\$5,500	\$28,700	\$0	\$34,200	\$22,670	OA
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widen 2L to 4L	PE		\$8,090	\$0	\$0	\$8,090	\$6,130	SU
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widen 2L to 4L	ROW		\$15,680	\$0	\$0	\$15,680	\$13,514	SU
Burnt Store Road	Van Buren Parkway	Janis Road	Widen 2L to 4L	CST		\$0	\$12,535	\$0	\$12,535	\$7,950	SU, LF
Burnt Store Road	Janis Road	Durden Parkway	Widen 2L to 4L	CST		\$0	\$14,700	\$0	\$14,700	\$9,300	SU, LF
Burnt Store Road	Durden Parkway	Charlotte Co/Line	Widen 2L to 4L	CST		\$0	\$15,900	\$0	\$15,900	\$10,100	SU, LF
SR 31	SR 80	SR 78	Widen 2L to 6L	ROW		\$0	\$23,780	\$0	\$23,780	\$16,400	OA
SR 31	SR 80	SR 78	Widen 2L to 6L	CST		\$0	\$0	\$164,000	\$164,000	\$80,000	OA
Cape Coral Evacuation Study			Access	Planning	\$300	\$0	\$0	\$0	\$300	\$300	SU, LF
US 41/Bonita Beach Road	Intersection		Intersection	PE		\$3,190	\$0	\$0	3,190	2,400	OA
US 41/Bonita Beach Road	Intersection		Intersection	ROW		\$5,940	\$0	\$0	5,940	4,500	OA, LF, SU
US 41/Bonita Beach Road	Intersection		Intersection	CST		\$0	\$26,800	\$0	26800	17,300	OA, LF, SU
US 41/SR 78	Intersection		Intersection	PE		\$750	\$0	\$0	750	570	OA
US 41/SR 78	Intersection		Intersection	CST		\$8,050	\$0	\$0	8050	6,100	OA
ACES Technology Support				Capital		\$5,000	\$9,000	\$50,000	\$64,000	\$33,900	OA, SU
Transit Operations Congestion Management				OPS							OA
Major Intersections/Interchanges			Operational & Safety Improvements	P/R/CST		\$10,000	\$10,000	\$150,000	\$170,000	\$88,300	OA, SU
Total Cost:					\$32,860	\$222,200	\$257,485	\$503,840	\$1,016,385	\$628,477	
Revenues:					\$32,860	\$226,600	\$258,020	\$538,910	\$1,056,390		

Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-Way; CST: Construction

Funding Sources - SU: Federal Surface Transportation Program Urban Area funds >200,00; SA: Federal Surface Transportation Program any area; OA: State Other Arterial funding; DDR: State District Dedicated Revenue; LF: Local Funding; DIH: State District In-house

Other - ACES: Automated, Connected, Electric & Shared Vehicle Technology



TRANSPORTATION IMPROVEMENT PROGRAM
FISCAL YEAR 2022/23 THROUGH FISCAL YEAR 2026/27

Adopted: June 17, 2022

P.O. Box 150045
Cape Coral, Florida 33915
239-244-2220
www.leempo.com

"The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation."

Lee County MPO Transportation Improvement Program - FY 2022/23- 2026/27

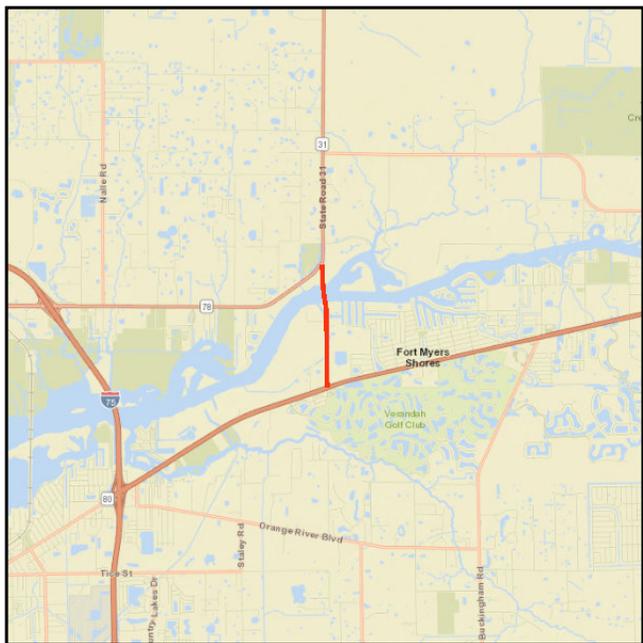
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SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)

Project Number: 4419422

SIS



From: SR 80/Palm Beach Blvd **Work Summary:** ADD LANES & RECONSTRUCT
To: SR 78/Bayshore Rd
Lead Agency: MANAGED BY FDOT **Length:** 1.407

Phase	Fund Source	2022/23	2023/24	2024/25	2025/26	2026/27	Total
PE	DIH	0	50,000	0	0	0	50,000
RRU	LF	0	300,000	0	0	0	300,000
RRU	DI	0	600,000	0	0	0	600,000
PE	DI	0	9,000,000	0	0	0	9,000,000
Total		0	9,950,000	0	0	0	9,950,000

Prior Cost < 2022/23: 0
Future Cost > 2026/27: 0
Total Project Cost: 9,950,000
Project Description:



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Web Application

Federal Aid Management Sean McAuliffe - Manager

STIP Project Detail and Summaries Online Report

**** Repayment Phases are not included in the Totals ****

Selection Criteria	
Approved STIP Financial Project: 441942_ As Of: 7/1/2022	Detail Related Items Shown

HIGHWAYS							
Item Number: 441942 1	Project Description: SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)					*SIS*	
District: 01	County: LEE	Type of Work: PD&E/EMO STUDY			Project Length: 1.407MI		
	Fiscal Year						
Phase / Responsible Agency	<2023	2023	2024	2025	2026	>2026	All Years
P D & E / MANAGED BY FDOT							
Fund Code: DDR-DISTRICT DEDICATED REVENUE	2,345,965						2,345,965
DIH-STATE IN-HOUSE PRODUCT SUPPORT	41,001	21,150					62,151
DS-STATE PRIMARY HIGHWAYS & PTO	5,629						5,629
Phase: P D & E Totals	2,392,595	21,150					2,413,745
Item: 441942 1 Totals	2,392,595	21,150					2,413,745
<hr/>							
Item Number: 441942 2	Project Description: SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)					*SIS*	
District: 01	County: LEE	Type of Work: ADD LANES & RECONSTRUCT			Project Length: 1.407MI		
	Fiscal Year						
Phase / Responsible Agency	<2023	2023	2024	2025	2026	>2026	All Years
PRELIMINARY ENGINEERING / MANAGED BY FDOT							

Fund Code:	DI-ST. - S/W INTER/INTRASTATE HWY			9,000,000				9,000,000
	DIH-STATE IN-HOUSE PRODUCT SUPPORT			50,000				50,000
Phase: PRELIMINARY ENGINEERING Totals				9,050,000				9,050,000
RAILROAD & UTILITIES / MANAGED BY FDOT								
Fund Code:	DI-ST. - S/W INTER/INTRASTATE HWY			600,000				600,000
	LF-LOCAL FUNDS			300,000				300,000
Phase: RAILROAD & UTILITIES Totals				900,000				900,000
Item: 441942 2 Totals				9,950,000				9,950,000
Item Number: 441942 3 Project Description: SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD) *SIS*								
District: 01 County: LEE Type of Work: ADD LANES & RECONSTRUCT			Project Length: 0.148MI					
		Fiscal Year						
Phase / Responsible Agency		<2023	2023	2024	2025	2026	>2026	All Years
CONSTRUCTION / RESPONSIBLE AGENCY NOT AVAILABLE								
Fund Code:	GR23-GAA EARMARKS FY2023		30,000,000					30,000,000
Item: 441942 3 Totals			30,000,000					30,000,000
Project Totals		2,392,595	30,021,150	9,950,000				42,363,745
Grand Total		2,392,595	30,021,150	9,950,000				42,363,745

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.

For additional information please e-mail questions or comments to:
Federal Aid Management
Sean McAuliffe: Sean.McAuliffe@dot.state.fl.us Or call 850-414-4564

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Office Home: [Office of Work Program](#)

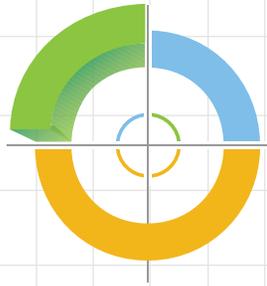
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Florida Department of Transportation

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FIRST FIVE YEAR PLAN



Multi-Modal

FY 2022/2023 through FY 2026/2027

Capacity Projects on the Strategic Intermodal System
State of Florida Department of Transportation

2022/2023

2026/2027



SIS Adopted 1st 5 Year Program District 1 Non-Interstate Plan



MAP ID	FACILITY	DESCRIPTION	2023	2024	2025	2026	2027	TOTAL STATE MANAGED	TOTAL DISTRICT MANAGED	TOTAL LOCAL FUNDS	PD&E	PE	ENV	ROW	CON
2012105	I-4 AT US 27 (SR 25)	M-INCH: Modify Interchange	\$35	\$0	\$1,652	\$3,474	\$152,662	\$157,822	\$0	\$0	●	●	●	●	●
4495041	REGIONAL PLANNING STUDY	PDE: Project Dev. & Env.	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	●				
4449581	SR 15 (US 441) AT CR 68 (NW 160TH ST)	TURN: Add Turn Lane	\$0	\$41	\$0	\$0	\$0	\$0	\$41	\$0	●				
4448861	SR 15 (US 441) AT POTTER RD (NE 144TH ST)	TURN: Add Turn Lane	\$0	\$55	\$0	\$0	\$0	\$0	\$55	\$0	●				
4192433	SR 25 (US 27) FROM CR 630A TO PRESIDENTS DRIVE	A2-6: Add 2 To Build 6 Lanes	\$6,700	\$20	\$50	\$0	\$0	\$6,596	\$74	\$100	●	●	●		
4192432	SR 25 (US 27) FROM HIGHLANDS COUNTY LINE TO CR 630A	A2-6: Add 2 To Build 6 Lanes	\$4,860	\$50	\$100	\$0	\$0	\$3,784	\$926	\$300	●	●	●		
4424031	SR 25 (US 27) FROM SOUTH OF SUN 'N LAKE TO NORTH OF SUN 'N LAKE	TURN: Add Turn Lane	\$200	\$0	\$0	\$0	\$0	\$0	\$200	\$0	●				
4178788	SR 29 FROM CR 80A (COWBOY WAY) TO CR 731 (WHIDDEN RD)	A2-4: Add 2 To Build 4 Lanes	\$216	\$3,314	\$6,165	\$0	\$0	\$9,566	\$4	\$125	●	●	●		
4175405	SR 29 FROM CR 846 E TO N OF NEW MARKET ROAD W	NR: New Road	\$2	\$1,106	\$5,768	\$0	\$0	\$6,564	\$312	\$0	●	●	●		
4344901	SR 29 FROM I-75 TO OIL WELL RD	PDE: Project Dev. & Env.	\$17	\$0	\$0	\$0	\$0	\$0	\$17	\$0	●				
4175406	SR 29 FROM N OF NEW MARKET RD TO SR 82	A2-4: Add 2 To Build 4 Lanes	\$576	\$0	\$0	\$300	\$33,752	\$33,910	\$718	\$0	●	●	●	●	
4175401	SR 29 FROM OIL WELL ROAD TO SR 82	PDE: Project Dev. & Env.	\$156	\$0	\$0	\$0	\$0	\$0	\$156	\$0	●				
4175402	SR 29 FROM OIL WELL ROAD TO SUNNILAND NURSERY ROAD	A2-4: Add 2 To Build 4 Lanes	\$0	\$7,440	\$0	\$0	\$0	\$7,440	\$0	\$0	●				
4178784	SR 29 FROM SR 82 TO HENDRY C/L	A2-4: Add 2 To Build 4 Lanes	\$51	\$0	\$0	\$0	\$0	\$50	\$1	\$0	●	●			
4419501	SR 31 FROM CR 74 TO CR 74	M-INT: Modify Intersection	\$1,012	\$0	\$7,034	\$0	\$0	\$7,033	\$1,013	\$0	●	●	●	●	●
4289171	SR 31 FROM SR 78 TO CR 78	PDE: Project Dev. & Env.	\$23	\$0	\$0	\$0	\$0	\$0	\$23	\$0	●				
4419421	SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)	PDE: Project Dev. & Env.	\$21	\$0	\$0	\$0	\$0	\$0	\$21	\$0	●				
4419422	SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)	A4-6: Add 4 To Build 6 Lanes	\$0	\$9,950	\$0	\$0	\$0	\$9,600	\$50	\$300	●				
4338562	SR 60 FROM CR 630 TO GRAPE HAMMOCK RD	A2-4: Add 2 To Build 4 Lanes	\$110	\$0	\$0	\$0	\$0	\$110	\$0	\$0	●				
4145065	SR 70 FROM CR 29 TO LONESOME ISLAND ROAD	PDE: Project Dev. & Env.	\$29	\$0	\$0	\$0	\$0	\$0	\$29	\$0	●				
4503341	SR 70 FROM CR 721 S TO CR 559/128 AVE	PDE: Project Dev. & Env.	\$4,000	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	●	●			
4498511	SR 70 FROM LONESOME ISLAND RD TO SOUTHERN LEG OF CR 721	PDE: Project Dev. & Env.	\$2,000	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	●				
4145062	SR 70 FROM LORRAINE RD TO CR 675/WATERBURY ROAD	PDE: Project Dev. & Env.	\$16,264	\$0	\$0	\$0	\$0	\$0	\$16,164	\$100	●	●	●		
4145067	SR 70 FROM LORRAINE ROAD TO BOURNSIDE BLVD	A2-4: Add 2 To Build 4 Lanes	\$79,849	\$0	\$0	\$0	\$0	\$77,564	\$958	\$1,327					●
4193445	SR 710 FROM SHERMAN WOOD RANCHES TO CR 714 (MARTIN C/L)	A2-4: Add 2 To Build 4 Lanes	\$84	\$0	\$0	\$0	\$0	\$84	\$0	\$0	●				
4193443	SR 710 FROM US 441 TO L-63 CANAL	NR: New Road	\$51	\$0	\$5,966	\$0	\$0	\$5,957	\$60	\$0	●		●		
4308481	SR 82 FROM HENDRY COUNTY LINE TO GATOR SLOUGH LANE	A2-4: Add 2 To Build 4 Lanes	\$51,212	\$0	\$0	\$0	\$0	\$49,308	\$1,905	\$0	●	●	●	●	●
4420273	STATE SIB LOAN FOR SR 31 (BABCOCK RANCH)	A4-6: Add 4 To Build 6 Lanes	\$4,482	\$0	\$0	\$0	\$0	\$0	\$0	\$4,482					●
4420274	STATE SIB LOAN FOR SR 31 (BABCOCK RANCH) FROM SR 78 (BAYSHORE RD)	A4-6: Add 4 To Build 6 Lanes	\$4,543	\$0	\$0	\$0	\$0	\$4,541	\$2	\$0	●			●	●
4349861	US 27 AT SR 64	M-INT: Modify Intersection	\$93	\$0	\$0	\$0	\$0	\$92	\$1	\$0					●
4495031	US 27 CORRIDOR ALTERNATIVE STUDY	PDE: Project Dev. & Env.	\$6,500	\$0	\$0	\$0	\$0	\$0	\$6,500	\$0	●				
ANNUAL TOTALS			\$188,086	\$21,976	\$26,735	\$3,774	\$186,414	\$386,021	\$34,230	\$6,734					

All Values in Thousands of "As Programmed" Dollars

PD&E Project Development & Environmental;
PE Preliminary Engineering;
ENV Environmental Mitigation;
Type 2 Categorical Exclusion

Project highlighted with gray background is no longer designated as SIS.

ROW Right-of-Way;
CON Construction & Support (may Include Grants);
TOTAL LOCAL FUNDS include all funds that start with LF fund code;

Social and Economic Appendix

Contents:

Land Use Map

Supporting Documentation Specific to Land Use Changes

DRAFT



Southwest Florida
& Lee County Fairgrounds

Old Bayshore Rd.

Bayshore Rd.

78

Caloosahatchee River

31

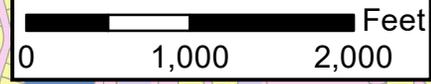
Wildwood Ln.

Davis Blvd.

80

Palm Beach Blvd.

- Project Study Area
- Agricultural
- Commercial
- Industrial
- Mixed
- Public
- Residential
- Submerged Land
- Vacant
- Wetlands



**State Road 31 from
State Road 80 to State Road 78**
FPID: 441942-1-22-01
Lee County, FL

**Existing
Land Use**

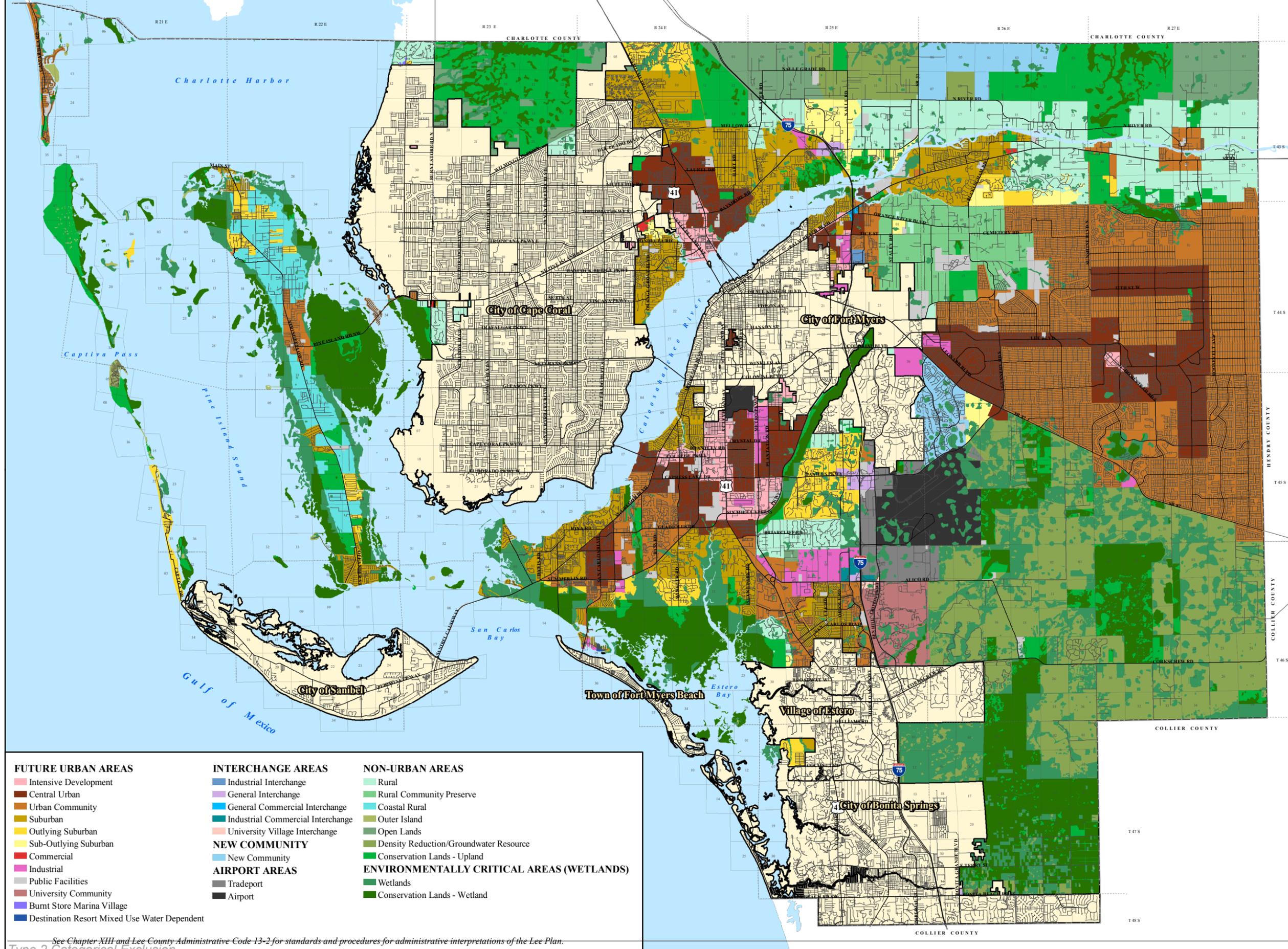
**Figure
1**

DATA SOURCE:
Aerial Map - ESRI 2023
Lee County Florida GIS

August 2023

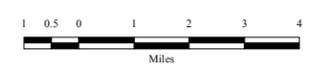
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FUTURE LAND USE MAP



Ordinance Number	Date of Adoption	Effective Date
89-02	1/31/1989	3/1/1989
90-09	3/7/1990	3/4/1990
90-43	9/6/1990	9/17/1990
91-10	4/3/1991	4/10/1991
91-19	7/9/1991	7/18/1991
92-35	8/7/1992	8/18/1992
92-41	9/15/1992	9/21/1992
92-47	10/27/1992	11/9/1992
92-48	10/27/1992	11/9/1992
92-51	12/9/1992	12/21/1992
93-05	2/22/1993	2/26/1993
93-25	9/20/1993	1/24/1994
94-23	8/29/1994	11/14/1994
94-29	10/26/1994	1/9/1995
94-30	11/1/1994	7/25/1996
95-27	12/20/1995	1/20/1996
96-19	10/2/1996	11/2/1996
97-05	3/5/1997	4/23/1997
97-17	8/26/1997	9/30/1997
97-13	6/24/1997	7/25/1997
97-22	11/25/1997	12/26/1997
98-02	1/13/1998	2/13/1998
98-09	6/3/1998	7/30/1998
99-02	4/13/1999	2/4/2000
98-26	11/24/1998	12/25/1998
99-15	11/22/1999	1/19/2000
99-16	11/22/1999	1/19/2000
99-17	11/22/1999	1/19/2000
99-18	11/22/1999	1/19/2000
99-19	11/22/1999	12/23/1999
00-08	5/4/2000	6/26/2000
00-16	8/8/2000	9/8/2000
00-22	11/1/2000	12/26/2000
01-24	1/13/2001	1/13/2002
02-02, 03, 04, 05, 06	1/10/2002	3/27/2002
02-29	10/21/2002	1/9/2003
03-01, 02, 03, 04, 05, 06, 07	1/9/2003	4/1/2003
03-12	5/6/2003	6/6/2003
03-19, 03-20, 03-21	10/23/2003	1/12/2004
03-26	12/15/2003	3/6/2004
04-14	9/20/2004	12/7/2004
04-15	9/22/2004	10/23/2004
05-19, 05-21	10/12/2005	1/9/2006
05-20	10/12/2005	11/15/2006
07-07	4/24/2007	5/24/2007
07-06	4/24/2007	5/24/2007
07-09 thru 07-18	5/16/2007	8/13/2007
08-04	3/11/2008	4/11/2008
08-05	3/11/2008	4/11/2008
09-06 thru 09-17	2/25/2009	5/15/2009
10-10, 11, 12, 16	3/3/2010	6/2/2010
10-19	3/3/2010	10/19/2011 partial
10-27	6/16/2010	7/19/2010
10-34 thru 10-39	10/20/2010	1/5/2011
10-33	10/18/2010	1/11/2011
10-40	10/20/2010	3/4/2011
11-15, 11-17	9/28/2011	11/11/2011
14-14	6/18/2014	7/19/2014
15-10	6/3/2015	11/17/2017
16-08	3/16/2016	4/16/2016
16-14	10/5/2016	11/7/2016
16-17	10/5/2016	11/18/2016
17-12	9/6/2017	10/20/2017
17-23	12/20/2017	1/28/2018
18-06	2/7/2018	4/5/2018
18-17	6/20/2018	7/29/2018
18-18	6/20/2018	7/29/2018
18-23	10/17/2018	11/28/2018
18-25	11/7/2018	12/24/2018
19-01	2/6/2019	3/9/2019
19-14	8/7/2019	9/13/2019
19-17	8/21/2019	9/29/2019
20-04	5/6/2020	6/11/2020
20-05	5/6/2020	6/11/2020

- FUTURE URBAN AREAS**
- Intensive Development
- Central Urban
- Urban Community
- Suburban
- Outlying Suburban
- Sub-Outlying Suburban
- Commercial
- Industrial
- Public Facilities
- University Community
- Burnt Store Marina Village
- Destination Resort Mixed Use Water Dependent
- INTERCHANGE AREAS**
- Industrial Interchange
- General Interchange
- General Commercial Interchange
- Industrial Commercial Interchange
- University Village Interchange
- NEW COMMUNITY**
- New Community
- AIRPORT AREAS**
- Tradeport
- Airport
- NON-URBAN AREAS**
- Rural
- Rural Community Preserve
- Coastal Rural
- Outer Island
- Open Lands
- Density Reduction/Groundwater Resource
- Conservation Lands - Upland
- ENVIRONMENTALLY CRITICAL AREAS (WETLANDS)**
- Wetlands
- Conservation Lands - Wetland



Map Generated: June 2020
City limits current to date of map generation

See Chapter XIII and Lee County Administrative Code 13-2 for standards and procedures for administrative interpretations of the Lee Plan.
Type 2 Categorical Exclusion

Cultural Resources Appendix

Contents:

Concurrence Letter

Section 106 Resource Map

Section 4(f) Report

DRAFT



Florida Department of Transportation

RON DESANTIS
GOVERNOR

801 N Broadway Ave
Bartow, FL 33830

JARED W. PERDUE, P.E.
SECRETARY

June 26, 2023

Ms. Alissa S. Lotane, Director
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

Attn: Transportation Compliance Review Program

**RE: Cultural Resources Assessment Survey for the State Road (SR) 31 Project Development and Environment (PD&E) Study from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road) Lee County, Florida
Financial Project ID No. 441942-1-22-01
Federal Aid Project No. TBD**

Dear Ms. Lotane:

The Florida Department of Transportation, District One conducted a Cultural Resources Assessment Survey (CRAS) for the State Road (SR) 31 Project Development and Environment (PD&E) Study from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road) in Lee County, Florida. The objective of the survey was to identify cultural resources within the project area of potential effects (APE) and assess the resources in terms of their eligibility for listing in the *National Register of Historic Places* (National Register) according to the criteria set forth in 36 CFR Section 60.4.

This assessment complies with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Public Law 89-665, as amended), as implemented by 36 CFR 800 -- Protection of Historic Properties (incorporating amendments effective August 5, 2004); Stipulation VII of the *Programmatic Agreement among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida* (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017); Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.), as implemented by the regulations of the Council on Environmental Quality (CEQ) (40 CFR Parts 1500–1508); Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303 and 23 USC 138); the revised Chapter 267, *Florida Statutes (F.S.)*; and the standards embodied in the FDHR's *Cultural Resource Management Standards and Operational Manual* (February 2003), and Chapter 1A-46 (*Archaeological and Historical Report Standards and Guidelines*), *Florida Administrative Code*. In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (*Archaeological and Historical Resources*) of the *FDOT Project Development and Environment Manual* (effective July 1, 2020).

Ms. Alissa S. Lotane, Director
SR 31 PD&E from SR 78 to SR 80
Lee County, Florida
Financial Project ID: 441942-1-22-01
June 26, 2023
Page 2 of 4

The Preferred Alternative includes a combination of widening existing SR 31 from SR 80 for about 0.7 miles, then shifting 300 feet east prior to the Wilson Pigott Bridge to minimize impacts to the existing Florida Gas Transmission (FGT) line. The project would tie into the proposed SR 31 project at the northern terminus. The Preferred Alternative raises the profile above the current 100-year floodplain. The profile will be raised approximately three feet above existing SR 31 due to the updated 100-year floodplain elevation (from seven feet to ten feet) in the project corridor. A new high-level fixed bridge would be constructed to replace the existing Wilson Pigott Bridge. The proposed bridge will meet United States Coast Guard (USCG) vertical clearance requirements for a high-level fixed bridge. The Preferred Alternative also includes reconfiguring the existing intersection of SR 31/SR 80 to a grade-separated intersection. The grade-separation would introduce two new flyover bridges for SR 31 and SR 80 movements and would also include a new signal on SR 31.

Stormwater runoff from the project would be collected and conveyed in closed drainage systems to one proposed offsite pond for water quality treatment and attenuation per state and federal requirements. The pond would discharge at or near the same outfall ditch that conveys the roadway runoff in the existing condition. An additional 13.5 acres of right-of-way (ROW) would be required for the proposed pond and associated access easements.

The project APE was established in accordance with 36 CFR 800.16(d). The archaeological APE included the footprint of the existing and proposed ROW containing the proposed improvements. It also included a stormwater management facility (Pond 1E) and its two associated outfalls, as well as several small areas where the proposed roadway improvements extend outside of the existing/proposed ROW.

The historic resources APE varied depending on the nature of the improvements. Where the improvements were minor or limited (i.e., improvements like milling and resurfacing, pavement marking, etc. within existing ROW), the historic resources APE consisted of the existing ROW containing the proposed improvements and the small areas where the improvements extended outside of the existing/proposed ROW. The historic resources APE expanded in areas of proposed ROW and roadway widening to the footprint of the existing and proposed ROW containing the proposed improvements, as well as adjacent parcels/resources for a distance of up to 150 feet from the edge of the existing/proposed ROW. The historic resources APE also expanded in the area of the newly proposed roadway alignment to the footprint of the existing and proposed ROW containing the proposed improvements, as well as a buffer of 250 feet from the edge of the associated existing/proposed ROW. In addition, the historic resources APE expanded out 250 feet from the footprint of the proposed flyovers and 500 feet from the footprint of the proposed high-level bridge. The historic resources APE for Pond 1E included the footprint of the pond and a buffer of 150 feet. The APE for the outfalls was limited to their footprints.

Much of the archaeological APE is within areas of existing and proposed ROW that have been previously surveyed for archaeological resources (Florida Master Site File [FMSF] Manuscript Nos. 20161, 27269, 12279, and 2165). No archaeological sites were recorded within or adjacent to the current APE during the prior survey efforts and the SHPO concurred with these findings. The current survey also identified no archaeological sites or archaeological occurrences within the APE.

The CRAS identified six historic resources within the APE. Four of these were previously recorded (8LL1898, 8LL2586, 8LL2615, and 8LL2845) and two were newly recorded (8LL2948 and 8LL2949). The Caloosahatchee River Canal (8LL1898) was determined eligible for the National Register by the SHPO in 2012 under Criterion A for its association with late-19th-Century efforts to drain the Everglades and the

Ms. Alissa S. Lotane, Director
SR 31 PD&E from SR 78 to SR 80
Lee County, Florida
Financial Project ID: 441942-1-22-01
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Page 3 of 4

agricultural development of South Florida. The Seaboard Air Line Railroad Grade (8LL2586) and Wilson Pigott Bridge (8LL2615) have been determined ineligible by the SHPO. SR 31 (8LL2845) was previously determined ineligible outside of the APE. The section within the current APE exhibits modern improvements and lacks historic associations. It is considered ineligible for the National Register. The two newly recorded structures include 16400 SR 31 (8LL2948) and the Sweetwater Landing Marina (8LL2949). The structures exhibit common architectural styles in South Florida and lack historical associations. Therefore, they are considered ineligible for the National Register.

As noted, a new bridge will be constructed east of the current bridge, which will be removed. The new bridge will cross over the National Register-eligible Caloosahatchee River Canal (8LL1898). As part of these improvements, the new bridge construction will include new supports/concrete piers within the Caloosahatchee River Canal and rip rap will be installed immediately adjacent to the bridge ends at the shoreline. Based on these improvements, there will be no adverse effects on the Caloosahatchee River Canal and the linear resource will remain eligible for inclusion in the National Register due to its importance to drainage of the Everglades. The improvements will not involve changes that would compromise the integrity of the canal, such as rerouting, cutting off or filling in, widening, severing from other waterways, change of function, or removal of ancillary structures or features that contribute to its significance.

This information is being provided in accordance with the provisions of the National Historic Preservation Act of 1966 (as amended), which are implemented by the procedures contained in 36 CFR, Part 800, as well as the provisions contained in the revised Chapter 267, *F.S.*

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the FHWA and FDOT.

The CRAS report is provided for your review and comment. If you have any questions or if I may be of assistance, please contact me at (954) 336-3625 or matthew.marino@dot.state.fl.us.

Sincerely,



Matt Marino, M.A., RPA
Cultural Resource Coordinator

CC: Jeffrey James, FDOT District 1
Patrick Bateman, FDOT District 1
Lindsay Rothrock, FDOT OEM

Ms. Alissa S. Lotane, Director
SR 31 PD&E from SR 78 to SR 80
Lee County, Florida
Financial Project ID: 441942-1-22-01
June 26, 2023
Page 4 of 4

The Florida State Historic Preservation Officer (SHPO) finds the attached Cultural Resources Assessment Survey Report complete and sufficient and concurs/ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 202304024. Or, the SHPO finds the attached document contains insufficient information.

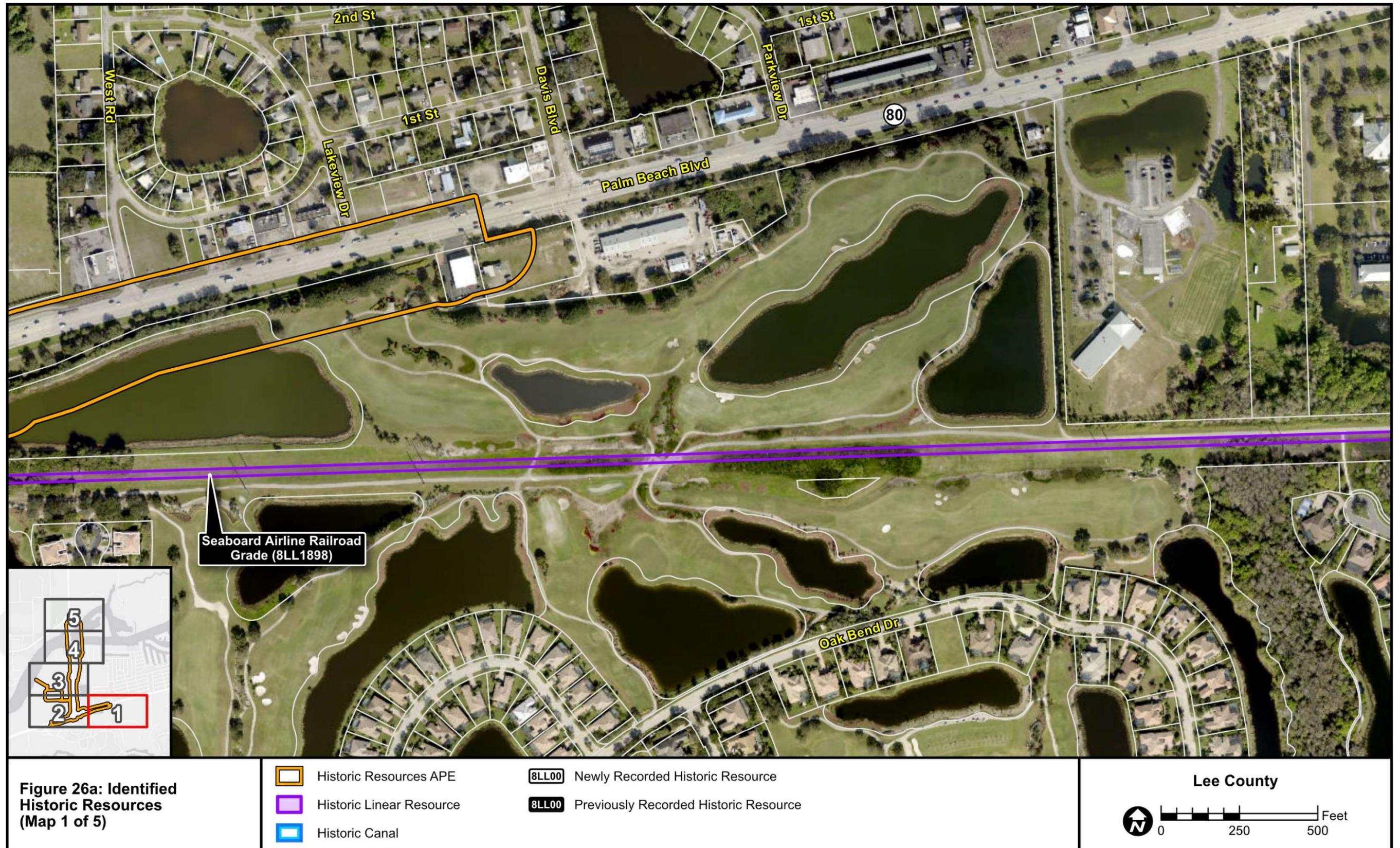
In accordance with the Programmatic Agreement among the FHWA, ACHP, FDHR, SHPO, and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FHWA will proceed with a de minimis Section 4(f) finding at its discretion for the use of land from the historic property.

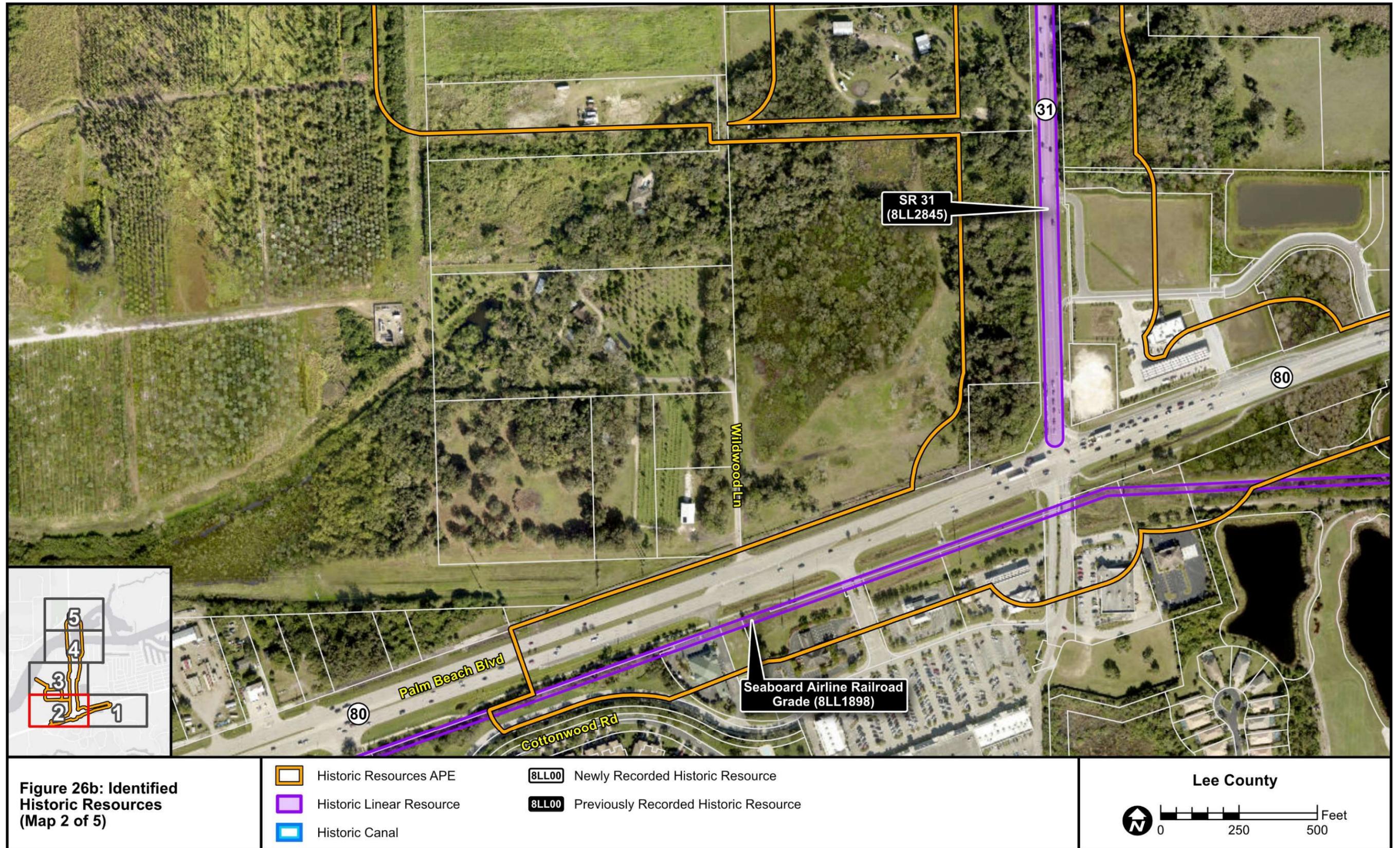
SHPO Comments:

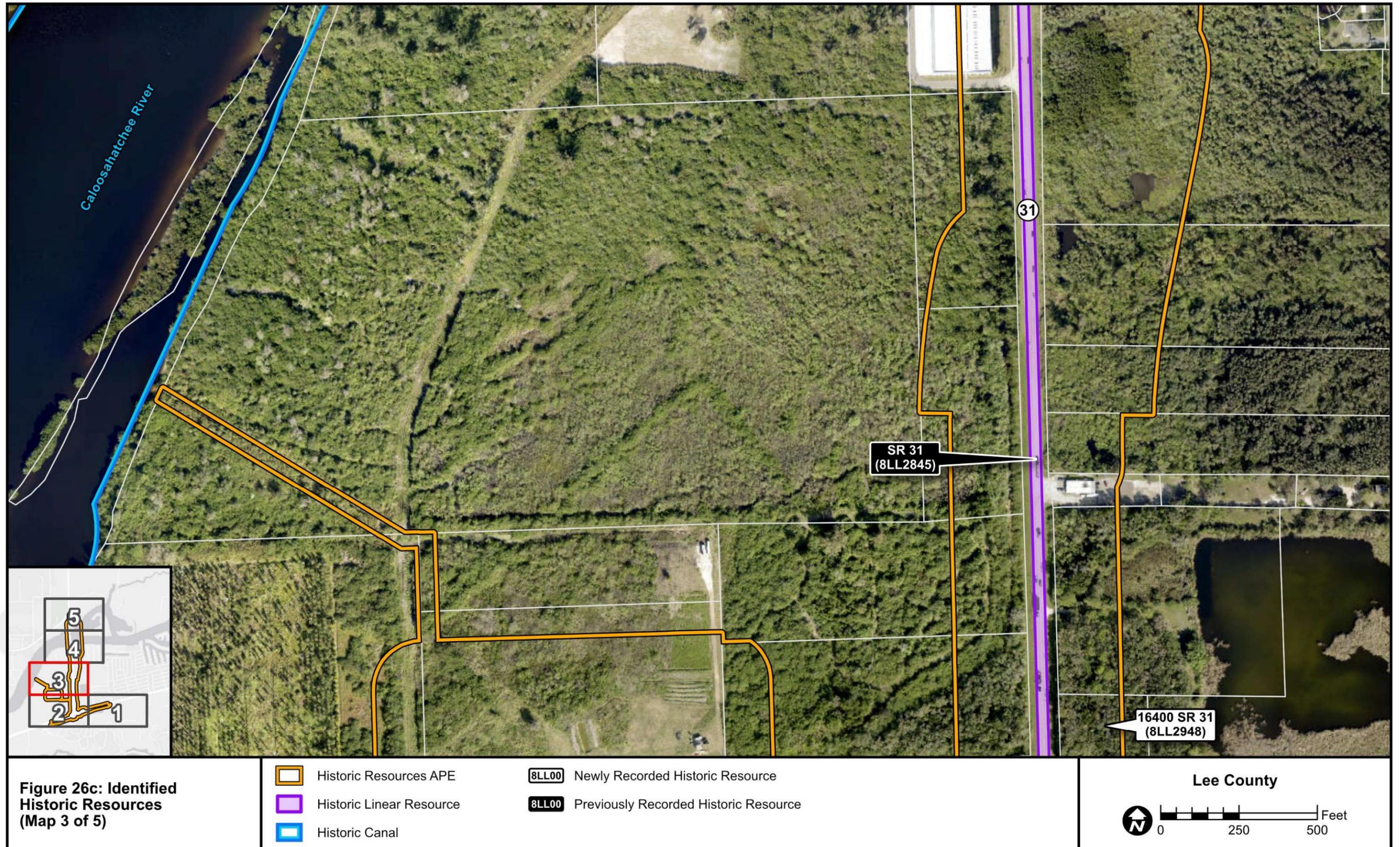
Kelly L Chase
for

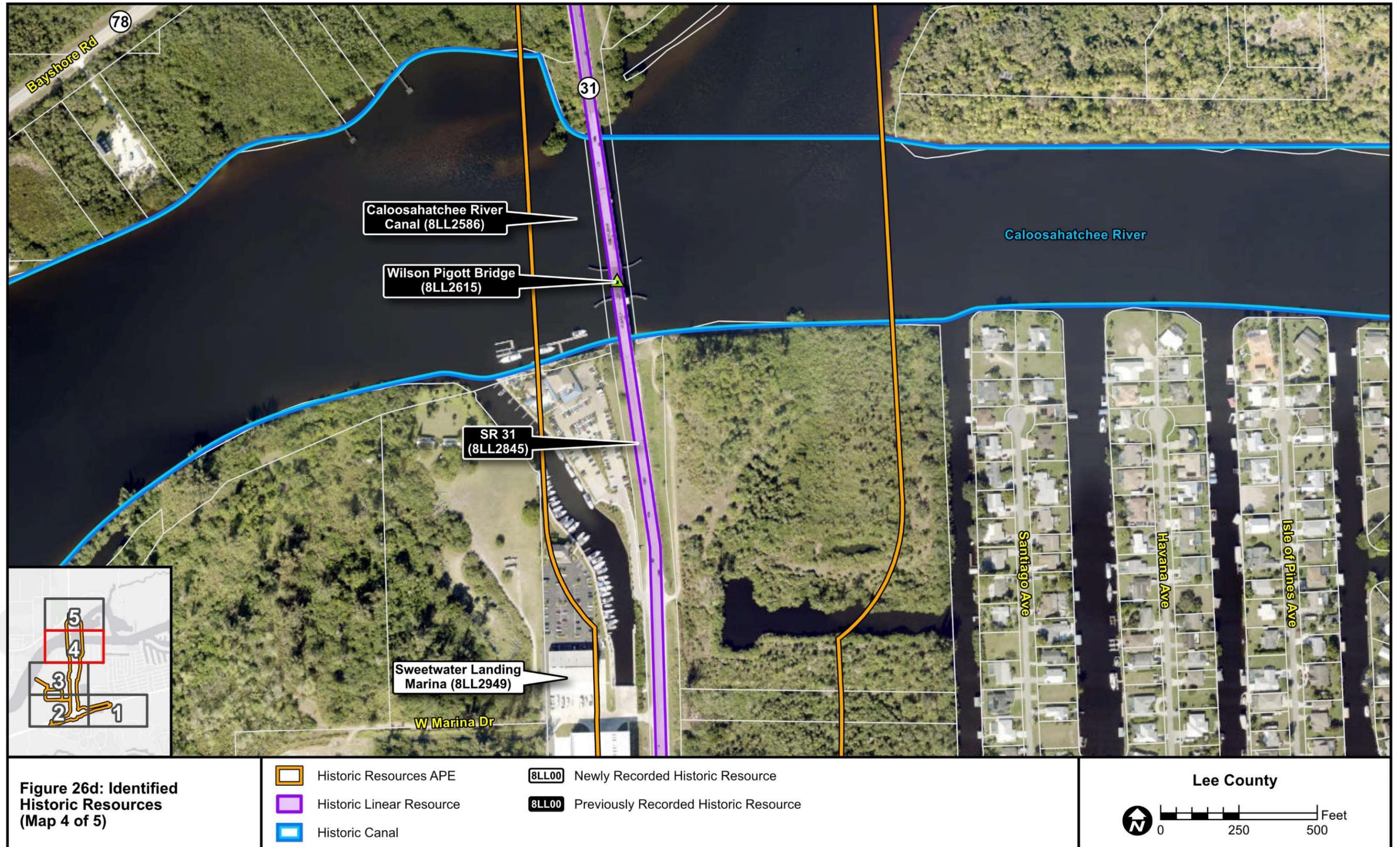
Alissa S. Lotane, Director
State Historic Preservation Officer
Florida Division of Historical Resources

7.24.2023
Date









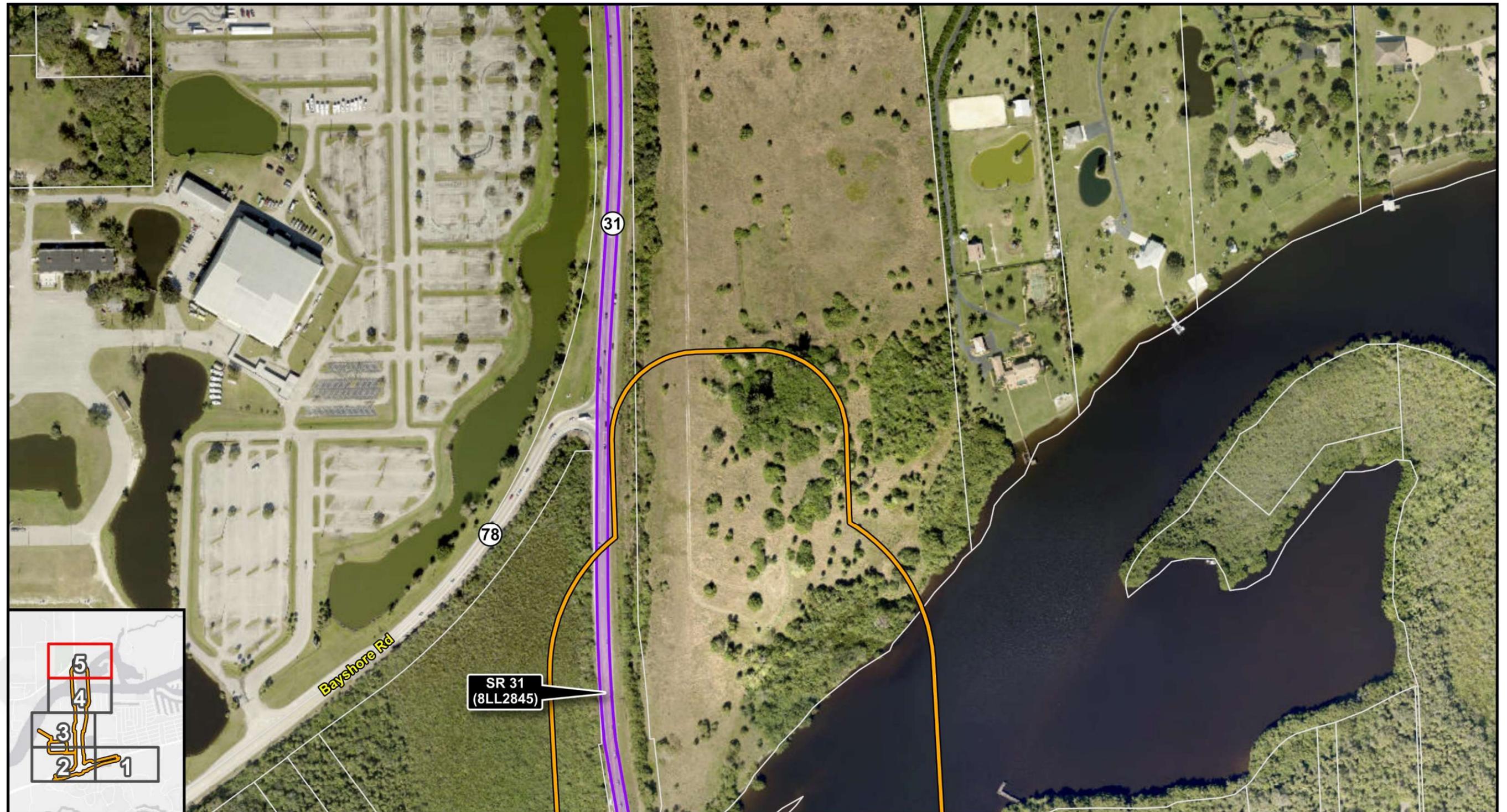


Figure 26e: Identified Historic Resources (Map 5 of 5)

- Historic Resources APE
- Historic Linear Resource
- Historic Canal
- 8LL00 Newly Recorded Historic Resource
- 8LL00 Previously Recorded Historic Resource

Lee County

N

0
250
500
Feet

Section 4(f) Resources

Florida Department of Transportation

SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD)

District: FDOT District 1

County: Lee County

ETDM Number: 14359

Financial Management Number: 441942-1-22-01

Federal-Aid Project Number: N/A

Project Manager: Melody Matter

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT. Submitted pursuant 49 U.S.C. § 303.

Table of Contents

Summary and Approval	1
Caloosahatchee Trail	2
Great Calusa Blueway	4
Caloosahatchee River Canal Resource Group (8LL02586)	5
Project-Level Attachments	7
Resource Attachments	9

DRAFT

Summary and Approval

Resource Name	Facility Type	Property Classification	Owner/Official with Jurisdiction	Recommended Outcome	OEM SME Action
Caloosahatchee Trail	Multi-Use Trail	Park/Rec Area	FDOT / Lee County	Exception/Exemption	Determination Pending
Great Calusa Blueway	Blueway / Paddling Trail	Park/Rec Area	Lee County	No Use	Determination Pending
Caloosahatchee River Canal Resource Group (8LL02586)	Canal	Historic Site	SHPO	Exception/Exemption	Determination Pending

DRAFT

Caloosahatchee Trail

Facility Type: Multi-Use Trail

Property Classification: Park/Rec Area

Address and Coordinates:

Address:

Latitude: 264206.37N Longitude: 814534.10W

Description of Property:

The Caloosahatchee Trail, designated as part of the Florida Shared-Use Nonmotorized Trail Network (Florida SUN Trail Network), extends 22 miles in Lee County from US 41 to the Hendry County Line. The same corridor is listed as part of the Pine Island - Hendry Trail and is included in the Lee County Greenways Master Plan. The trail consists of a combination of existing and planned trail segments along portions of SR 78, SR 31, and SR 80.

The Florida SUN Trail Network consists of multiuse trails or shared-use paths physically separated from motor vehicle traffic which, by virtue of design, location, and extent of connectivity, provide nonmotorized transportation opportunities for bicyclists and pedestrians statewide. The Florida SUN Trail Network is intended to support a range of use by the general public ranging from transportation-based use to recreational activities such as walking, biking, or jogging.

Owner/Official with Jurisdiction: FDOT / Lee County

Recommended Outcome: Exception/Exemption

Exception/Exemption Type: Certain trails, paths, bikeways, and sidewalks that meet one of the circumstances in 23 CFR 774.13(f)(1-4).

Exception/Exemption Justification:

The Caloosahatchee Trail is designated as one segment of the Florida SUN Trail Network. The Florida SUN Trail Network is one part the statewide multi-modal transportation system. The primary purpose of these networks and systems is to support transportation. Within the project limits, the Caloosahatchee Trail is listed as an unfunded need on SR 31. The FDOT is currently constructing a 10-foot multi-use path on the north side of SR 80 (as part of project 429823-1). The proposed improvement of SR 31 (as part of project 441942-1) includes a 12-foot multi-use trail to support the planned/existing trail system.

Enabling State Statues (Fla. Stat. 339.81) note the SUN Trail System is intended to meet growing transportation system demands by advancing alternative travel modes to meet the needs of residents and visitors. The same State Statues direct the Florida Department of Transportation to develop the SUN Trail Network as a system of trails which allows nonmotorized vehicles and pedestrians to use the system to access a variety of destinations for a variety of trip purposes, including accessing work, school, shopping, and other personal business, as well as social, recreational, and personal fitness purposes.

As such, the Caloosahatchee Trail meets the qualifications for 23 CFR 774.13(f)(4) Trails, paths, bikeways, and sidewalks that are part of the local transportation system and which function primarily for transportation.

OEM SME Determination Date: Pending

DRAFT

Great Calusa Blueway

Facility Type: Blueway / Paddling Trail

Property Classification: Park/Rec Area

Address and Coordinates:

Address: Caloosahatchee River, FL, USA

Latitude: 2642'58.35 N Longitude: 8145'38.45 W

Description of Property:

The Great Calusa Blueway is a paddling trail that passes through the coastal waters of Lee County from the Pine Island Sound to Estero Bay, up the Caloosahatchee River and through its tributaries. The trail supports outdoor recreation guiding canoeists and kayakers via easy-to-identify brown-and-white signs located along the course of the trail. The 190-mile trail is accessible to the general public at no cost. The Caloosahatchee segment of the blueway can be accessed in Lee County through a series of 20 launch sites located on both public and private properties.

Owner/Official with Jurisdiction: Lee County

Relationship Between the Property and the Project

The Great Calusa Blueway follows the Caloosahatchee River within the project area. The proposed improvement of SR 31 would include replacement of the existing bridge (Bridge#120064) over the Caloosahatchee River. No physical improvement made as part of the blueway is present within the bounds of the project. The project will maintain vessel traffic on the Caloosahatchee in the future condition and during construction. No effects to the attributes, features, or activities that qualify the Great Calusa Blueway for protection under Section 4(f) are anticipated. No use of the blueway will occur.

Yes No

Will the property be "used" within the meaning of Section 4(f)?

Recommended Outcome: No Use

OEM SME Determination Date: Pending

Caloosahatchee River Canal Resource Group (8LL02586)

Facility Type: Canal

Property Classification: Historic Site

Address and Coordinates:

Address:

Latitude: 26.716559 Longitude: -81.760757

Description of Property:

The Caloosahatchee River Canal Resource Group (8LL02586) runs approximately 65 miles from Lake Okeechobee in southeastern Glades County to the Gulf of Mexico, crossing through Glades, Hendry, and Lee Counties. It is a straight, upland flow-through canal that maintains flow between two open boundaries, with Lake Okeechobee as the eastern boundary and the Gulf of Mexico as the western boundary. It is utilized to facilitate drainage and flood control, navigation, salinity control, irrigation, municipal water supplies, and maintenance of the Lake Okeechobee regulation schedule.

The Caloosahatchee River Canal was originally constructed in the 1880s and 1890s as part of the Disston Drainage Contract-Hamilton Disston's initial attempt to drain the Everglades. The canal has been altered since it was originally constructed, primarily through the deepening and straightening of the canal in the 1930s in response to hurricanes in the 1920s. In the mid-1950s, the canal was enlarged to a width of 250 feet and a depth of 8 feet. The historic route of the canal through the project area has not been disrupted or changed since its original construction.

In 2012, the Caloosahatchee River Canal Resource Group (8LL02586) was evaluated as eligible for listing in the National Register of Historic Places (NRHP) under Criterion A for its direct association with late nineteenth-century efforts to drain the Everglades and develop agricultural pursuits in south Florida. The portion of 8LL02586 within the current APE still conveys its significance and is considered NRHP-eligible. The SHPO concurred with this determination on July 24, 2023.

The Preferred Alternative includes a combination of widening existing SR 31 from SR 80 for about 0.7 miles, then shifting 300 feet east prior to the Wilson Pigott Bridge to minimize impacts to the existing Florida Gas Transmission (FGT) line. The project would tie into the proposed SR 31 project at the northern terminus. A new high-level fixed bridge would be constructed to replace the existing Wilson Pigott Bridge over the Caloosahatchee River Canal Resource Group (8LL02586), and the proposed bridge will meet United States Coast Guard (USCG) vertical clearance requirements for a high-level fixed bridge.

As part of these improvements, the new bridge construction will include new supports/concrete piers within the Caloosahatchee River Canal and rip rap will be installed immediately adjacent to the bridge ends at the shoreline. These improvements will not involve changes that would compromise the integrity of the canal, such as rerouting, cutting off or filling in, widening, severing from other waterways, change of function, or removal of ancillary structures or features that contribute to its significance. FDOT has determined that the project will have no adverse effects on the Caloosahatchee River Canal Resource Group (8LL02586) and the SHPO concurred with this determination on July 24, 2023.

Owner/Official with Jurisdiction: SHPO

Recommended Outcome: Exception/Exemption

Exception/Exemption Type: Temporary occupancies of land that are so minimal as to not constitute a use within the meaning of Section 4(f) and that meet all of the conditions in (23 CFR 774.13(d)(1-5).

Exception/Exemption Justification:

The work proposed within the boundary of 8LL02586 work meets the conditions of a temporary occupancy (23 CFR 774.13 (d)). As the overall project proposes to widen and reconstruct SR 31, the duration of the work within 8LL02586 is temporary and will be less than the time needed for construction of the project. There will be no change in ownership of the land, and the scope of work is limited to bridge replacement. No alterations to the canal are proposed, there will be no changes to the Section 4(f) property, no anticipated permanent adverse physical impacts, and no interference with the protected activities, features, or attributes of the property on either a temporary or permanent basis. Similarly, as no work to the canal itself is proposed, the resource will remain in a condition which is at least as good as that which existed prior to the project. Per coordination with OEM, SHPO concurrence with FDOTs determination of no adverse effect serves as the OWJs agreement with the temporary occupancy conditions.

OEM SME Determination Date: Pending

Project-Level Attachments

44194212201-CE2-D1-SR_31_Design_Concept-2023-0417 (r)

DRAFT



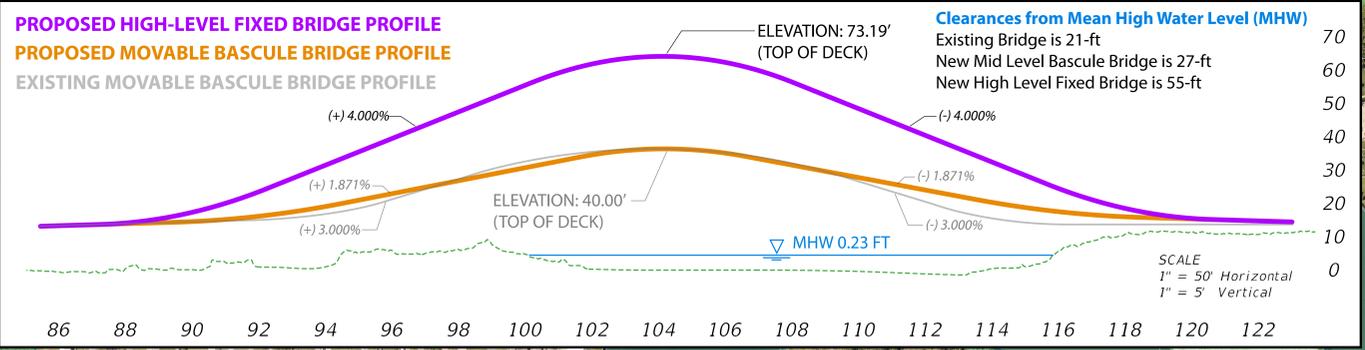
SOUTHWEST FLORIDA & LEE COUNTY FAIR

LEE CIVIC CENTER

CALOOSAHATCHEE RIVER

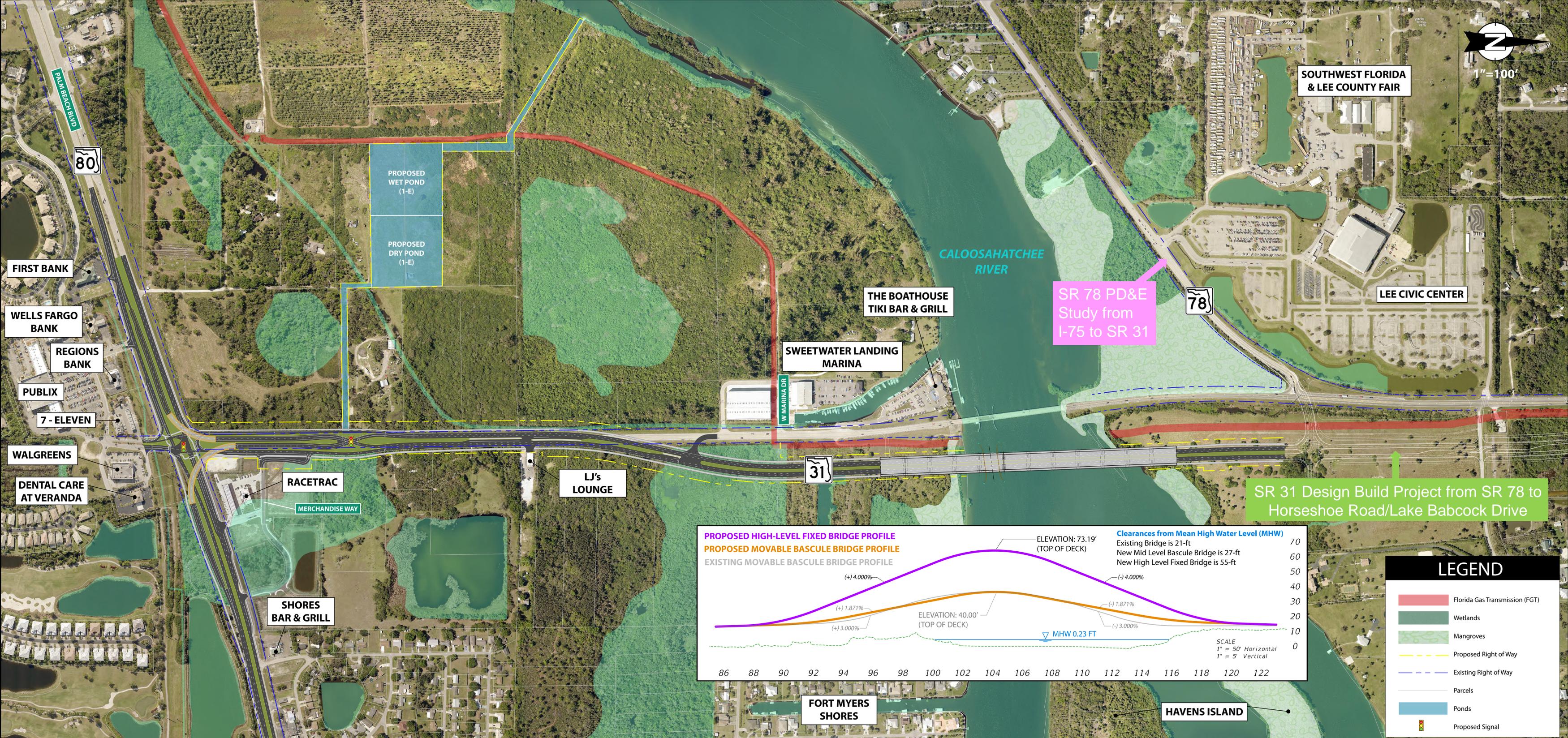
SR 78 PD&E Study from I-75 to SR 31

SR 31 Design Build Project from SR 78 to Horseshoe Road/Lake Babcock Drive



LEGEND

- Florida Gas Transmission (FGT)
- Wetlands
- Mangroves
- Proposed Right of Way
- Existing Right of Way
- Parcels
- Ponds
- Proposed Signal



SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Project Development and Environment (PD&E) Study
Lee County, FL
Financial Project Number: 441942-1-22-01

SR 31 ALTERNATIVE 1B/2B (Flyover at SR 80)



Resource Attachments

Caloosahatchee Trail
SR31 Trail Overview Map
SR 31 Project and Section of Resource Location
SR 31 4/ Reference OS Abbviate Table

Great Calusa Blueway
SR31 Project and Section of Resource Location - Calusa Blueway 2023.0027
Great Calusa Blueway System Map

Caloosahatchee River Canal Resource Group (SL02586)
Section 40 Resource Map - Canal
Concurrent Letter_4/1/2011 SRPO Transmittal_MKOR_ML_KLC

DRAFT

Caloosahatchee Trail

Contents:

SUN Trail Statewide Map

SR 31 Project and Section 4f Resource Location

SR 31 4f Reference GIS Attribute Table

DRAFT



Shared-Use Nonmotorized (SUN) Trail Network Statewide Map



LEGEND

-  SUN Trail Network
-  Existing Trail
-  Strategic Intermodal System (SIS) Facilities
-  Water

NOTES

No Warranties: This map and its content is made available by the Florida Department of Transportation (FDOT) on an "as is", "as available" basis without warranties of any kind, expressed or implied. This product is for reference purposes only and is not to be construed as a legal document or survey instrument. Information is subject to change.

Disclaimer of Liability: The user of this map and data assumes all responsibility and risk for the use of both. Under no circumstances, including negligence, shall the FDOT or its employees be liable for any direct, indirect, incidental, special, exemplary or consequential damages, or lost profits that result from the use, misuse or inability to use the map and data.

Additional trail information may be obtained by contacting your local government.

Document Path: S:\ProjRecurring\SunTrails\GIS\Mapping\Statewide\2022\SUNTrail_StatewideMap_2022-02-01.pdf

SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD) 441942-1-22-01



SR 31 - Section 4(f) Reference

FPID: 441942-1

SUN Trail / Caloosahatchee Trail

Section 4(f) Resource Location

Existing SUN Trail / Caloosahatchee Trail

Planned SUN Trail / Caloosahatchee Trail

Project Limits

Data Source: EDOT
Sun Trail New Status
March 17, 2023

Attribute Table

SUN Trail Statewide Network Mapping Tools

Updated: March 17, 2023

Caloosahatchee Trail

FID	658
ROADWAY	12931005
SEG_NAME	Caloosahatchee Trail
STATUS	PROGRAMMED/FUNDED
COUNTY	LEE
CST_TO_CST	NO
CAP_TO_SEA	NO
H_OF_FL	NO
SJ_RV_SEA	NO
SW_CST_CON	NO
ECG	NO
FKOHT	NO
MODIFIEDON	7/26/2018
BEGIN_POST	9.988094
END_POST	12.480363
Length	2.49227
MapID	CALT
DOTDIST	1
CORRIDOR	Caloosahatchee Trail
SUNTRTYP	2
CLASS	
ECO_REGION	Southwest

<http://floridasuntrail.com/> (Accessed April 17, 2023)

Great Calusa Blueway

Contents:

SR31 Project and Section 4f Resource Location - Calusa Blueway 2023-0927

Great_Calusa_Blueway_System_Map

DRAFT



SR 31 - Section 4(f) Reference

FPID: 441942-1

Great Calusa Blueway

Resource Location

Section 4(f) Resource Location

- Great Calusa Blueway
- Project Limits

THE GREAT CALUSA BLUEWAY



3



Tributary Trails



Major Boating Channels



Hiking Trails

Accessible Public Lands

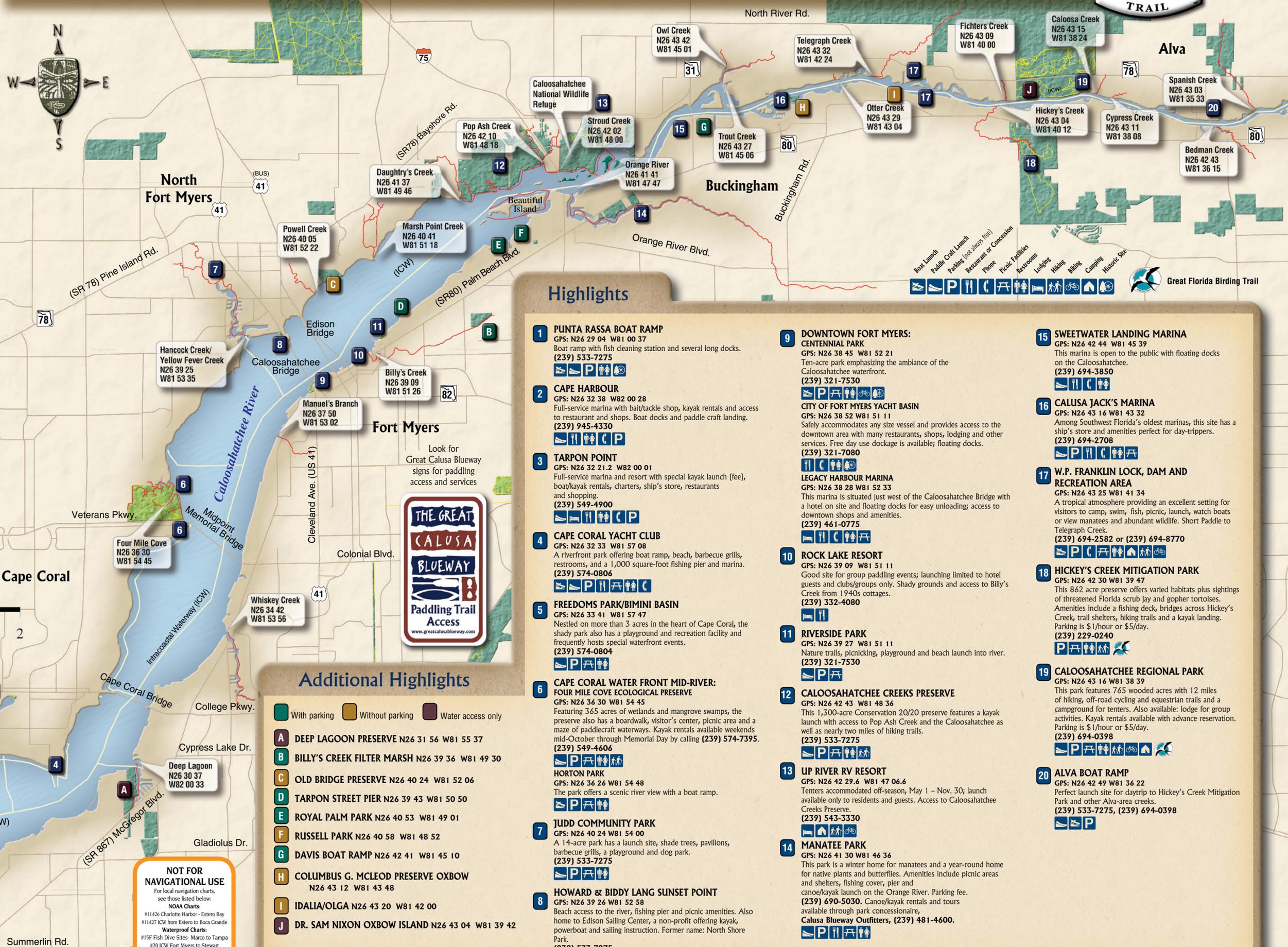


County Sites



Municipal Park Sites

The Great Calusa Blueway - Caloosahatchee River & tributaries



Highlights

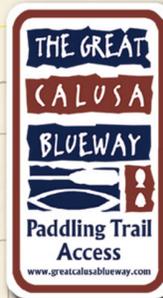
- 1 PUNTA RASSA BOAT RAMP**
GPS: N26 29 04 W81 00 37
Boat ramp with fish cleaning station and several long docks.
(239) 533-7275
- 2 CAPE HARBOUR**
GPS: N26 32 38 W82 00 28
Full-service marina with bait/tackle shop, kayak rentals and access to restaurant and shops. Boat docks and paddle craft landing.
(239) 945-4330
- 3 TARPON POINT**
GPS: N26 32 21.2 W82 00 01
Full-service marina and resort with special kayak launch (fee), boat/kayak rentals, charters, ship's store, restaurants and shopping.
(239) 549-4900
- 4 CAPE CORAL YACHT CLUB**
GPS: N26 32 33 W81 57 08
A riverfront park offering boat ramp, beach, barbecue grills, restrooms, and a 1,000 square-foot fishing pier and marina.
(239) 574-0806
- 5 FREEDOMS PARK/BIMINI BASIN**
GPS: N26 33 41 W81 57 47
Nestled on more than 3 acres in the heart of Cape Coral, the shady park also has a playground and recreation facility and frequently hosts special waterfront events.
(239) 574-0804
- 6 CAPE CORAL WATER FRONT MID-RIVER: FOUR MILE COVE ECOLOGICAL PRESERVE**
GPS: N26 36 30 W81 54 45
Featuring 365 acres of wetlands and mangrove swamps, the preserve also has a boardwalk, visitor's center, picnic area and a maze of paddlecraft waterways. Kayak rentals available weekends mid-October through Memorial Day by calling (239) 574-7395.
(239) 549-4606
- 7 JUDD COMMUNITY PARK**
GPS: N26 40 24 W81 54 00
A 14-acre park has a launch site, shade trees, pavilions, barbecue grills, a playground and dog park.
(239) 533-7275
- 8 HOWARD & BIDDY LANG SUNSET POINT**
GPS: N26 39 26 W81 52 58
Beach access to the river, fishing pier and picnic amenities. Also home to Edison Sailing Center, a non-profit offering kayak, powerboat and sailing instruction. Former name: North Shore Park.
(239) 533-7275
- 9 DOWNTOWN FORT MYERS: CENTENNIAL PARK**
GPS: N26 38 45 W81 52 21
Ten-acre park emphasizing the ambiance of the Caloosahatchee waterfront.
(239) 321-7530
- 10 ROCK LAKE RESORT**
GPS: N26 39 09 W81 51 11
Good site for group paddling events; launching limited to hotel guests and clubs/groups only. Shady grounds and access to Billy's Creek from 1940s cottages.
(239) 332-4080
- 11 RIVERSIDE PARK**
GPS: N26 39 27 W81 51 11
Nature trails, picnicking, playground and beach launch into river.
(239) 321-7530
- 12 CALOOSAHATCHEE CREEKS PRESERVE**
GPS: N26 42 43 W81 48 36
This 1,300-acre Conservation 20/20 preserve features a kayak launch with access to Pop Ash Creek and the Caloosahatchee as well as nearly two miles of hiking trails.
(239) 533-7275
- 13 UP RIVER RV RESORT**
GPS: N26 42 29.6 W81 47 06.6
Tenters accommodated off-season, May 1 - Nov. 30; launch available only to residents and guests. Access to Caloosahatchee Creeks Preserve.
(239) 543-3330
- 14 MANATEE PARK**
GPS: N26 41 30 W81 46 36
This park is a winter home for manatees and a year-round home for native plants and butterflies. Amenities include picnic areas and shelters, fishing cover, pier and canoe/kayak launch on the Orange River. Parking fee.
(239) 690-5030. Canoe/kayak rentals and tours available through park concessionaire, Calusa Blueway Outfitters, (239) 481-4600.
- 15 SWEETWATER LANDING MARINA**
GPS: N26 42 44 W81 45 39
This marina is open to the public with floating docks on the Caloosahatchee.
(239) 694-3850
- 16 CALUSA JACK'S MARINA**
GPS: N26 43 16 W81 43 32
Among Southwest Florida's oldest marinas, this site has a ship's store and amenities perfect for day-trippers.
(239) 694-2708
- 17 W.P. FRANKLIN LOCK, DAM AND RECREATION AREA**
GPS: N26 43 25 W81 41 34
A tropical atmosphere providing an excellent setting for visitors to camp, swim, fish, picnic, launch, watch boats or view manatees and abundant wildlife. Short Paddle to Telegraph Creek.
(239) 694-2582 or (239) 694-8770
- 18 HICKEY'S CREEK MITIGATION PARK**
GPS: N26 42 30 W81 39 47
This 862 acre preserve offers varied habitats plus sightings of threatened Florida scrub jay and gopher tortoises. Amenities include a fishing deck, bridges across Hickey's Creek, trail shelters, hiking trails and a kayak landing. Parking is \$1/hour or \$5/day.
(239) 229-0240
- 19 CALOOSAHATCHEE REGIONAL PARK**
GPS: N26 43 16 W81 38 39
This park features 765 wooded acres with 12 miles of hiking, off-road cycling and equestrian trails and a campground for tenters. Also available: lodge for group activities. Kayak rentals available with advance reservation. Parking is \$1/hour or \$5/day.
(239) 694-0398
- 20 ALVA BOAT RAMP**
GPS: N26 42 49 W81 36 22
Perfect launch site for daytrip to Hickey's Creek Mitigation Park and other Alva-area creeks.
(239) 533-7275, (239) 694-0398

Additional Highlights

- With parking
- Without parking
- Water access only
- A DEEP LAGOON PRESERVE** N26 31 56 W81 55 37
- B BILLY'S CREEK FILTER MARSH** N26 39 36 W81 49 30
- C OLD BRIDGE PRESERVE** N26 40 24 W81 52 06
- D TARPON STREET PIER** N26 39 43 W81 50 50
- E ROYAL PALM PARK** N26 40 53 W81 49 01
- F RUSSELL PARK** N26 40 58 W81 48 52
- G DAVIS BOAT RAMP** N26 42 41 W81 45 10
- H COLUMBUS G. MCLEOD PRESERVE OXBOW** N26 43 12 W81 43 48
- I IDALIA/OLGA** N26 43 20 W81 42 00
- J DR. SAM NIXON OXBOW ISLAND** N26 43 04 W81 39 42

NOT FOR NAVIGATIONAL USE
For local navigation charts, see those listed below:
NOAA Charts:
#11426 Charlotte Harbor - Estero Bay
#11427 ICW from Estero to Boca Grande
Waterproof Charts:
#15F Fish Dive Sites- Marco to Tampa
#20 ICW Fort Myers to Stewart
#21 ICW Fort Myers to Tampa
#25 Cape Romano to Boca Grande
#121F Sanibel To Venice

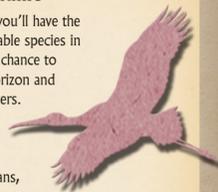
Look for Great Calusa Blueway signs for paddling access and services





Observing Wildlife

Along the Great Calusa Blueway, you'll have the opportunity to observe many remarkable species in their natural habitats. You'll have the chance to witness dolphins racing across the horizon and manatees gliding through the backwaters. Bird watching is big here, and best of all, birds can be spotted just about anytime and anywhere. Bald eagles, herons, egrets, ospreys, pelicans, roseate spoonbills and wood storks are just a few of the more than 300 species you can find here.



Unspoiled, Undisturbed, Uninterrupted

During your visit, we hope you will find time to enjoy many of the wonderful experiences there are to be found in our diverse ecosystem. It is an environment that is as beautiful as it is fragile. It is up to all of us – residents and guests alike – to protect it, and leave the same wonders we enjoy today preserved for generations to come.

Help Our Wildlife

- Please dispose of trash and food items properly.
- Observe all wildlife from a safe distance. When on board a vessel, stay at a distance of at least 50 yards (150 feet or 45 meters) and use binoculars or a telephoto lens to get a good view.
- Feeding wildlife is illegal and causes animals to lose their natural fear of humans, and increases their vulnerability to injuries and death.
- Seagrasses are a valuable part of Florida's marine environment. Please use caution at low tide, so as not to impact the fragile sea grass beds and marine life nurseries.
- Pick up fishing line and debris – leave the scene cleaner than you found it.

Recommended Safety Gear

- Flotation gear - Florida law requires a Coast Guard approved, readily accessible and wearable personal flotation device (PFD) for each occupant. PFDs must be worn by all occupants under age 6.
- Potable water – Be careful of dehydration
- Extra paddle
- Bow and stern line
- First aid kit
- Flashlight and whistle
- Insect repellent
- Sunglasses, sunscreen, covering and hats
- Binoculars, GPS system & compass
- Cell phone
- Water shoes, dry bag
- Map or chart

Play It Safe

- Use caution at passes; strong currents exist.
- Watch for motorboats; stay to the right and turn your bow into the wake.
- Secure your car and take keys with you.
- Paddle in a group or with a buddy.
- Let someone know your plans – where you are going and when you plan to be back.
- Be careful with campfires; use cook stoves whenever possible.
- Access to private land should be by invitation only.
- Make mental notes as you pass trail markers – knowing the number of the closest marker will help emergency personnel should you need assistance.

Navigation

The enlarged map of the Caloosahatchee River shows tributaries that are suggested routes and destinations for canoeists and kayakers. There is no marked trail on the river itself, so explore as you please. But it's advisable for paddlers to avoid the powerboat channel. Also provided here are Global Positioning System (GPS) coordinates for the mouth of each tributary as well as put-in spots and other land-accessible locations of interest to paddlers. For a complete list of GPS coordinates, you can also go online to www.calusablueway.com

Unlike the Estero Bay (Phase 1) and Pine Island Sound (Phase 2) legs of the blueway, on-water markers are not used on the Caloosahatchee (Phase 3). However, you will see Great Calusa Blueway Paddling Trail Access signs at various shore-access points. These signs serve to let paddlers know they are at a location that is also listed on the map and Web site.

Please note that creeks along the trail may be inaccessible during periods of low rainfall and/or extreme low tide. Note that as you traverse the river, you may have to cross the powerboat channel, which is busy and used by recreational and commercial vessels. Please paddle safely.

For a Boater's Guide with additional navigation information follow the online link at <http://LeeWaterways.com>.

As you explore the Great Calusa Blueway, we remind you to preserve this paddling paradise by leaving nothing behind and taking only photos.

THE GREAT CALUSA BLUEWAY



Lee County Paddling Trails

Estero Bay - Pine Island Sound - Matlacha Pass

For paddling opportunities in Charlotte County visit: www.charlottecountyfl.com/communityservices/blueway.asp

Hendry & Glades counties / Okeechobee Waterway ▶



Eco Parks Guide

Parks with an emphasis on the ecology of Southwest Florida are identified by the numbers below. For detailed information on each of them, and a complete list of parks, visit www.FortMyers-Sanibel.com.

- 1 Audubon Corkscrew Swamp Sanctuary
- 2 Bowditch Point Regional Park
- 3 Caloosahatchee Regional Park
- 4 Cayo Costa State Park
- 5 Four Mile Cove Ecological Preserve
- 6 Hickey's Creek Mitigation Park
- 7 J.N. "Ding" Darling National Wildlife Refuge
- 8 Kreshan State Historic Site
- 9 Lakes Regional Park
- 10 Lovers Key State Park
- 11 Manatee Park
- 12 Matanzas Pass Preserve
- 13 Rotary Park
- 14 Six Mile Cypress Slough Preserve
- 15 Mound House
- 16 Randell Research Center
- 17 Sanibel-Captiva Conservation Foundation
- 18 Jaycee Park
- 19 Prarie Pines
- 20 Bob Janes Preserve



The Great Calusa Blueway

Phases 1 & 2:	
Miles of marked trail.....	97
Phase 3:	
Miles of tributaries.....	52
Miles of river.....	38

For more information, visit www.CalusaBlueway.com

For paddling opportunities in Collier County visit: www.paradisecoastblueway.com



Lee County Paddling Trail
Caloosahatchee River & Tributaries



Lee County invites paddlers from around the world to explore the fabled bays, rivers, backwaters and shorelines of Southwest Florida. The Great Calusa Blueway paddling trail has been developed by Lee County Parks & Recreation and funded with tourist development tax dollars specifically dedicated to beach and shoreline enhancement projects.

Inspired by the indigenous Calusas, the Great Calusa Blueway encompasses three distinct regions of the Gulf of Mexico coast. The first portion of the trail meanders through Estero Bay, while the second segment centers on Pine Island Sound and Matlacha (pronounced Mat-lashay) Pass. A third leg of the trail takes paddlers inland to the Caloosahatchee and its tributaries.

This map shows all three regions, but covers only the Caloosahatchee River and its tributaries in detail. We hope it will serve as your guide to the natural and historic highlights of these protected waterways while also helping you locate amenities along the trail.



3410 Palm Beach Blvd., Fort Myers, FL 33916
239-533-7275

For More Information:
Paddling Trail - www.CalusaBlueway.com
Area Information - www.FortMyers-Sanibel.com
Lee County Parks & Recreation - www.leeparks.org
Statewide Trails - <http://www.dep.state.fl.us/gwt/paddling/saltwater.htm>



Caloosahatchee River Canal Resource Group (8LL02586)

Contents:

Section 4(f) Resource Map - Canal

Concurrence Letter_441942-1 SHPO Transmittal_MKW_AM_KLC

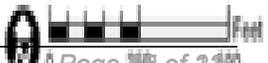
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Figure 26d: Identified Historic Resources (Map 4 of 5)

 Historic Resources APE	 Newly Recorded Historic Resource
 Historic Linear Resource	 Previously Recorded Historic Resource
 Historic Canal	

Lee County



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Florida Department of Transportation

RON DESANTIS
GOVERNOR

801 N Broadway Ave
Bartow, FL 33830

JARED W. PERDUE, P.E.
SECRETARY

June 26, 2023

Ms. Alissa S. Lotane, Director
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

Attn: Transportation Compliance Review Program

**RE: Cultural Resources Assessment Survey for the State Road (SR) 31 Project Development and Environment (PD&E) Study from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road) Lee County, Florida
Financial Project ID No. 441942-1-22-01
Federal Aid Project No. TBD**

Dear Ms. Lotane:

The Florida Department of Transportation, District One conducted a Cultural Resources Assessment Survey (CRAS) for the State Road (SR) 31 Project Development and Environment (PD&E) Study from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road) in Lee County, Florida. The objective of the survey was to identify cultural resources within the project area of potential effects (APE) and assess the resources in terms of their eligibility for listing in the *National Register of Historic Places* (National Register) according to the criteria set forth in 36 CFR Section 60.4.

This assessment complies with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Public Law 89-665, as amended), as implemented by 36 CFR 800 -- Protection of Historic Properties (incorporating amendments effective August 5, 2004); Stipulation VII of the *Programmatic Agreement among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida* (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017); Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.), as implemented by the regulations of the Council on Environmental Quality (CEQ) (40 CFR Parts 1500–1508); Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC 303 and 23 USC 138); the revised Chapter 267, *Florida Statutes (F.S.)*; and the standards embodied in the FDHR's *Cultural Resource Management Standards and Operational Manual* (February 2003), and Chapter 1A-46 (*Archaeological and Historical Report Standards and Guidelines*), *Florida Administrative Code*. In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (*Archaeological and Historical Resources*) of the *FDOT Project Development and Environment Manual* (effective July 1, 2020).

Ms. Alissa S. Lotane, Director
SR 31 PD&E from SR 78 to SR 80
Lee County, Florida
Financial Project ID: 441942-1-22-01
June 26, 2023
Page 2 of 4

The Preferred Alternative includes a combination of widening existing SR 31 from SR 80 for about 0.7 miles, then shifting 300 feet east prior to the Wilson Pigott Bridge to minimize impacts to the existing Florida Gas Transmission (FGT) line. The project would tie into the proposed SR 31 project at the northern terminus. The Preferred Alternative raises the profile above the current 100-year floodplain. The profile will be raised approximately three feet above existing SR 31 due to the updated 100-year floodplain elevation (from seven feet to ten feet) in the project corridor. A new high-level fixed bridge would be constructed to replace the existing Wilson Pigott Bridge. The proposed bridge will meet United States Coast Guard (USCG) vertical clearance requirements for a high-level fixed bridge. The Preferred Alternative also includes reconfiguring the existing intersection of SR 31/SR 80 to a grade-separated intersection. The grade-separation would introduce two new flyover bridges for SR 31 and SR 80 movements and would also include a new signal on SR 31.

Stormwater runoff from the project would be collected and conveyed in closed drainage systems to one proposed offsite pond for water quality treatment and attenuation per state and federal requirements. The pond would discharge at or near the same outfall ditch that conveys the roadway runoff in the existing condition. An additional 13.5 acres of right-of-way (ROW) would be required for the proposed pond and associated access easements.

The project APE was established in accordance with 36 CFR 800.16(d). The archaeological APE included the footprint of the existing and proposed ROW containing the proposed improvements. It also included a stormwater management facility (Pond 1E) and its two associated outfalls, as well as several small areas where the proposed roadway improvements extend outside of the existing/proposed ROW.

The historic resources APE varied depending on the nature of the improvements. Where the improvements were minor or limited (i.e., improvements like milling and resurfacing, pavement marking, etc. within existing ROW), the historic resources APE consisted of the existing ROW containing the proposed improvements and the small areas where the improvements extended outside of the existing/proposed ROW. The historic resources APE expanded in areas of proposed ROW and roadway widening to the footprint of the existing and proposed ROW containing the proposed improvements, as well as adjacent parcels/resources for a distance of up to 150 feet from the edge of the existing/proposed ROW. The historic resources APE also expanded in the area of the newly proposed roadway alignment to the footprint of the existing and proposed ROW containing the proposed improvements, as well as a buffer of 250 feet from the edge of the associated existing/proposed ROW. In addition, the historic resources APE expanded out 250 feet from the footprint of the proposed flyovers and 500 feet from the footprint of the proposed high-level bridge. The historic resources APE for Pond 1E included the footprint of the pond and a buffer of 150 feet. The APE for the outfalls was limited to their footprints.

Much of the archaeological APE is within areas of existing and proposed ROW that have been previously surveyed for archaeological resources (Florida Master Site File [FMSF] Manuscript Nos. 20161, 27269, 12279, and 2165). No archaeological sites were recorded within or adjacent to the current APE during the prior survey efforts and the SHPO concurred with these findings. The current survey also identified no archaeological sites or archaeological occurrences within the APE.

The CRAS identified six historic resources within the APE. Four of these were previously recorded (8LL1898, 8LL2586, 8LL2615, and 8LL2845) and two were newly recorded (8LL2948 and 8LL2949). The Caloosahatchee River Canal (8LL1898) was determined eligible for the National Register by the SHPO in 2012 under Criterion A for its association with late-19th-Century efforts to drain the Everglades and the

Ms. Alissa S. Lotane, Director
SR 31 PD&E from SR 78 to SR 80
Lee County, Florida
Financial Project ID: 441942-1-22-01
June 26, 2023
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agricultural development of South Florida. The Seaboard Air Line Railroad Grade (8LL2586) and Wilson Pigott Bridge (8LL2615) have been determined ineligible by the SHPO. SR 31 (8LL2845) was previously determined ineligible outside of the APE. The section within the current APE exhibits modern improvements and lacks historic associations. It is considered ineligible for the National Register. The two newly recorded structures include 16400 SR 31 (8LL2948) and the Sweetwater Landing Marina (8LL2949). The structures exhibit common architectural styles in South Florida and lack historical associations. Therefore, they are considered ineligible for the National Register.

As noted, a new bridge will be constructed east of the current bridge, which will be removed. The new bridge will cross over the National Register-eligible Caloosahatchee River Canal (8LL1898). As part of these improvements, the new bridge construction will include new supports/concrete piers within the Caloosahatchee River Canal and rip rap will be installed immediately adjacent to the bridge ends at the shoreline. Based on these improvements, there will be no adverse effects on the Caloosahatchee River Canal and the linear resource will remain eligible for inclusion in the National Register due to its importance to drainage of the Everglades. The improvements will not involve changes that would compromise the integrity of the canal, such as rerouting, cutting off or filling in, widening, severing from other waterways, change of function, or removal of ancillary structures or features that contribute to its significance.

This information is being provided in accordance with the provisions of the National Historic Preservation Act of 1966 (as amended), which are implemented by the procedures contained in 36 CFR, Part 800, as well as the provisions contained in the revised Chapter 267, *F.S.*

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the FHWA and FDOT.

The CRAS report is provided for your review and comment. If you have any questions or if I may be of assistance, please contact me at (954) 336-3625 or matthew.marino@dot.state.fl.us.

Sincerely,



Matt Marino, M.A., RPA
Cultural Resource Coordinator

CC: Jeffrey James, FDOT District 1
Patrick Bateman, FDOT District 1
Lindsay Rothrock, FDOT OEM

Ms. Alissa S. Lotane, Director
SR 31 PD&E from SR 78 to SR 80
Lee County, Florida
Financial Project ID: 441942-1-22-01
June 26, 2023
Page 4 of 4

The Florida State Historic Preservation Officer (SHPO) finds the attached Cultural Resources Assessment Survey Report complete and sufficient and concurs/ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 202304024. Or, the SHPO finds the attached document contains insufficient information.

In accordance with the Programmatic Agreement among the FHWA, ACHP, FDHR, SHPO, and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FHWA will proceed with a de minimis Section 4(f) finding at its discretion for the use of land from the historic property.

SHPO Comments:

Kelly L Chase
for

Alissa S. Lotane, Director
State Historic Preservation Officer
Florida Division of Historical Resources

7.24.2023
Date

Natural Resources Appendix

Contents:

Wetlands Map

Species and Habitat Map

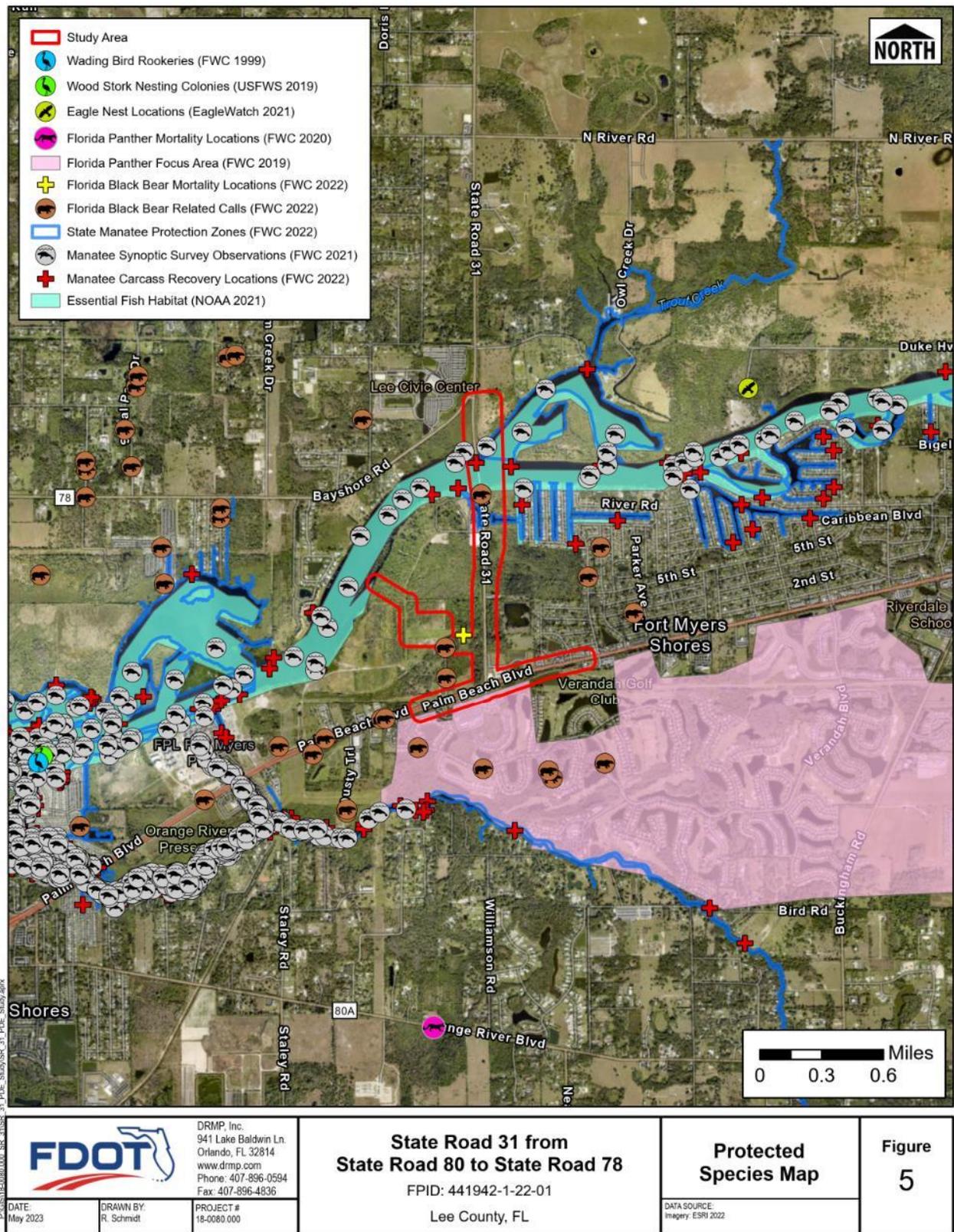
Floodplains Map

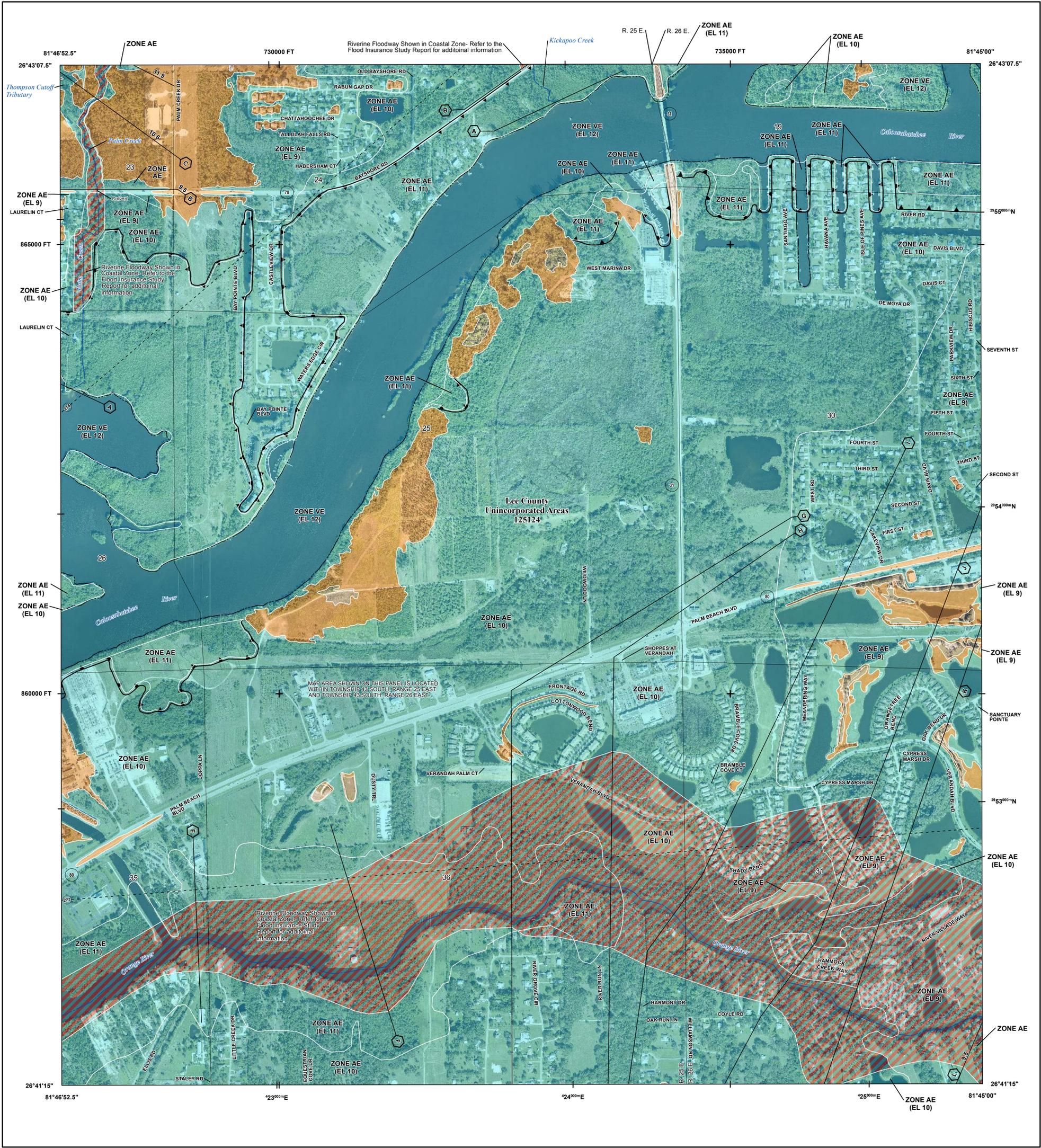
DRAFT

Figure 6: Wetland and Other Surface Waters Map



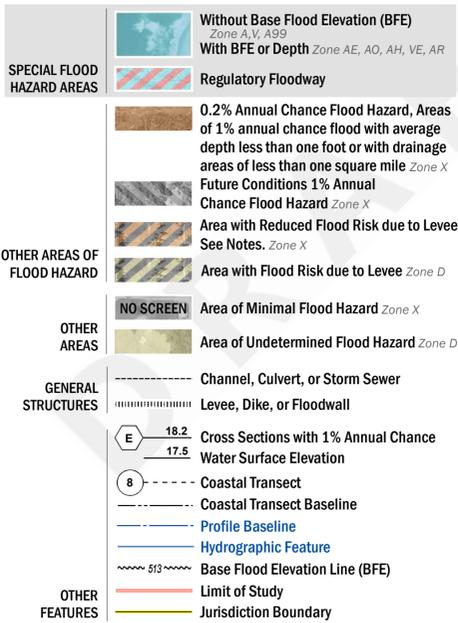
Figure 5: Protected Species Map





FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)



NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information Exchange at 1-877-FEMA-MAP (1-877-338-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

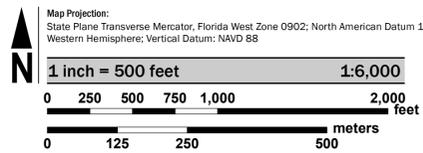
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided by Lee County, dated 2008 and 2018; the Florida Department of Transportation, dated 2017 and 2018; the U.S. Department of Agriculture, dated 2018; and the U.S. Department of Transportation, dated 2017.

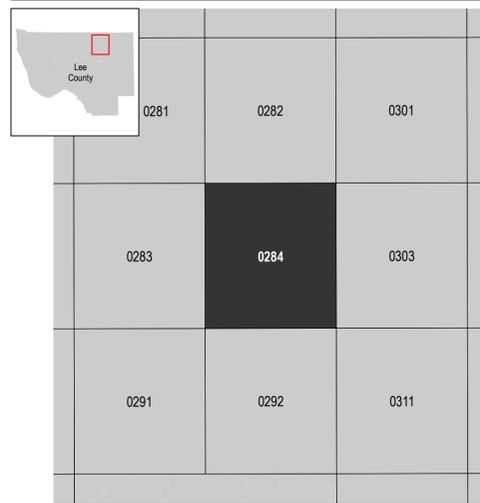
LIMIT OF MODERATE WAVE ACTION: Zone AE has been divided by a Limit of Moderate Wave Action (LMWA). The LMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between Zone VE and the LMWA (or between the shoreline and the LMWA for areas where Zone VE is not identified) will be similar to, but less severe than, those in the Zone VE.

▲ Limit of Moderate Wave Action (LMWA)

SCALE



PANEL LOCATOR



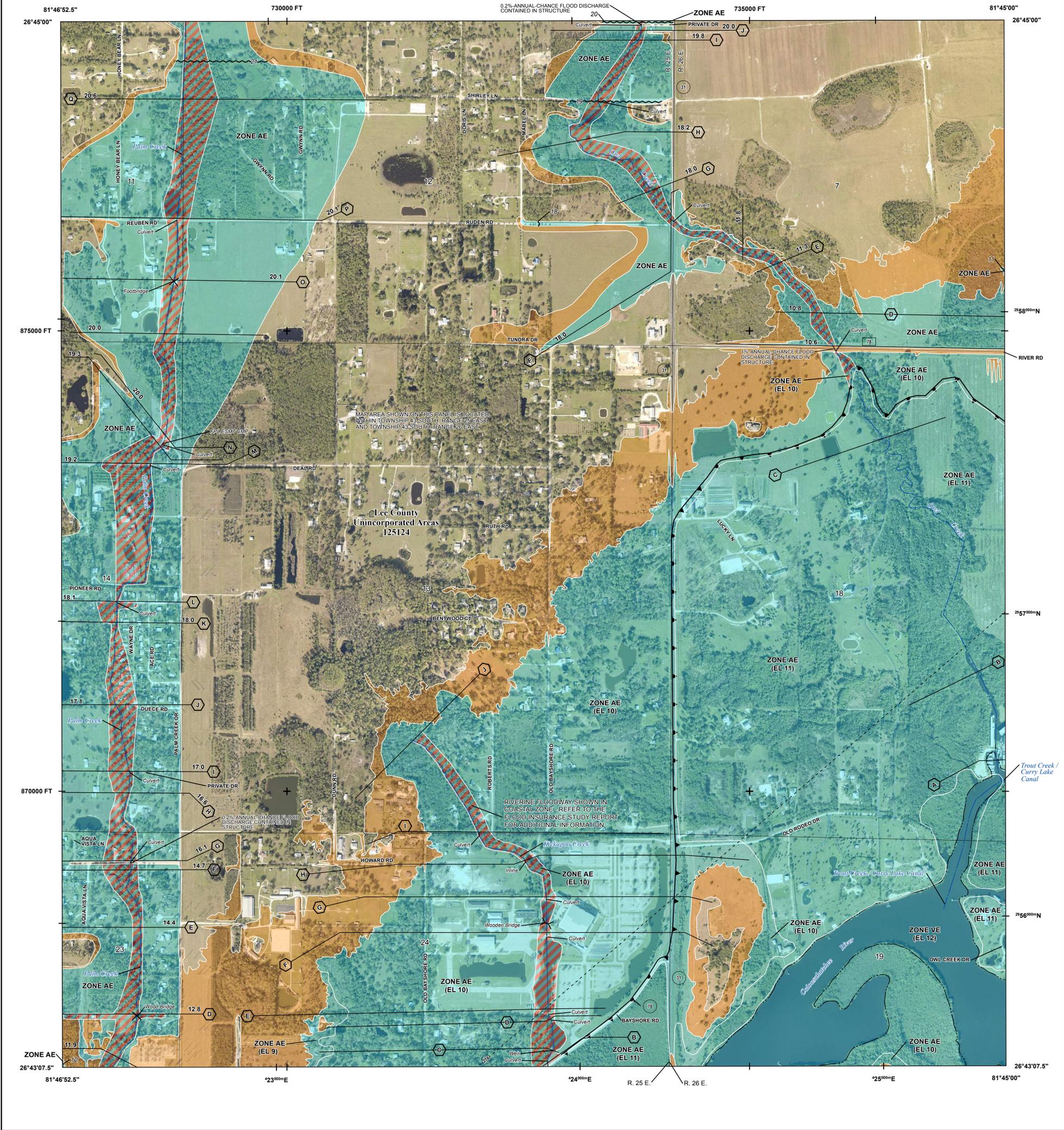
FEMA
 National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP
 LEE COUNTY, FLORIDA
 and Incorporated Areas
 PANEL 284 OF 685

COMMUNITY: LEE COUNTY
 NUMBER: 125124
 PANEL: 0284
 SUFFIX: G

PRELIMINARY
 6/28/2019

VERSION NUMBER: 2.4.3.5
 MAP NUMBER: 12071C0284G
 MAP REVISED



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
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	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
	Area of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation
	Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

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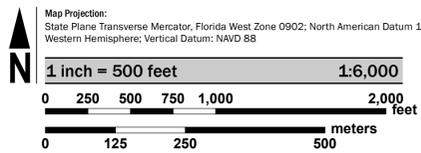
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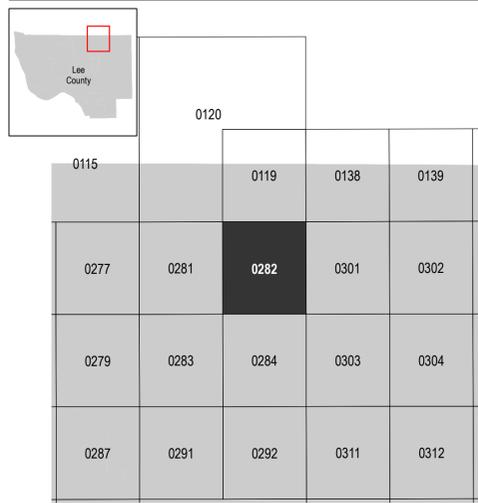
LIMIT OF MODERATE WAVE ACTION: Zone AE has been divided by a Limit of Moderate Wave Action (LiMWA). The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between Zone VE and the LiMWA (or between the shoreline and the LiMWA for areas where Zone VE is not identified) will be similar to, but less severe than, those in the Zone VE.

Limit of Moderate Wave Action (LiMWA)

SCALE



PANEL LOCATOR



**NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP**

LEE COUNTY, FLORIDA
 and Incorporated Areas

PANEL 282 of 685

Panel Contains:
 COMMUNITY NUMBER PANEL SUFFIX
 LEE COUNTY 125124 0282 G

**PRELIMINARY
 6/28/2019**

VERSION NUMBER
 2.4.3.5
 MAP NUMBER
 12071C0282G
 MAP REVISED

Physical Resources Appendix

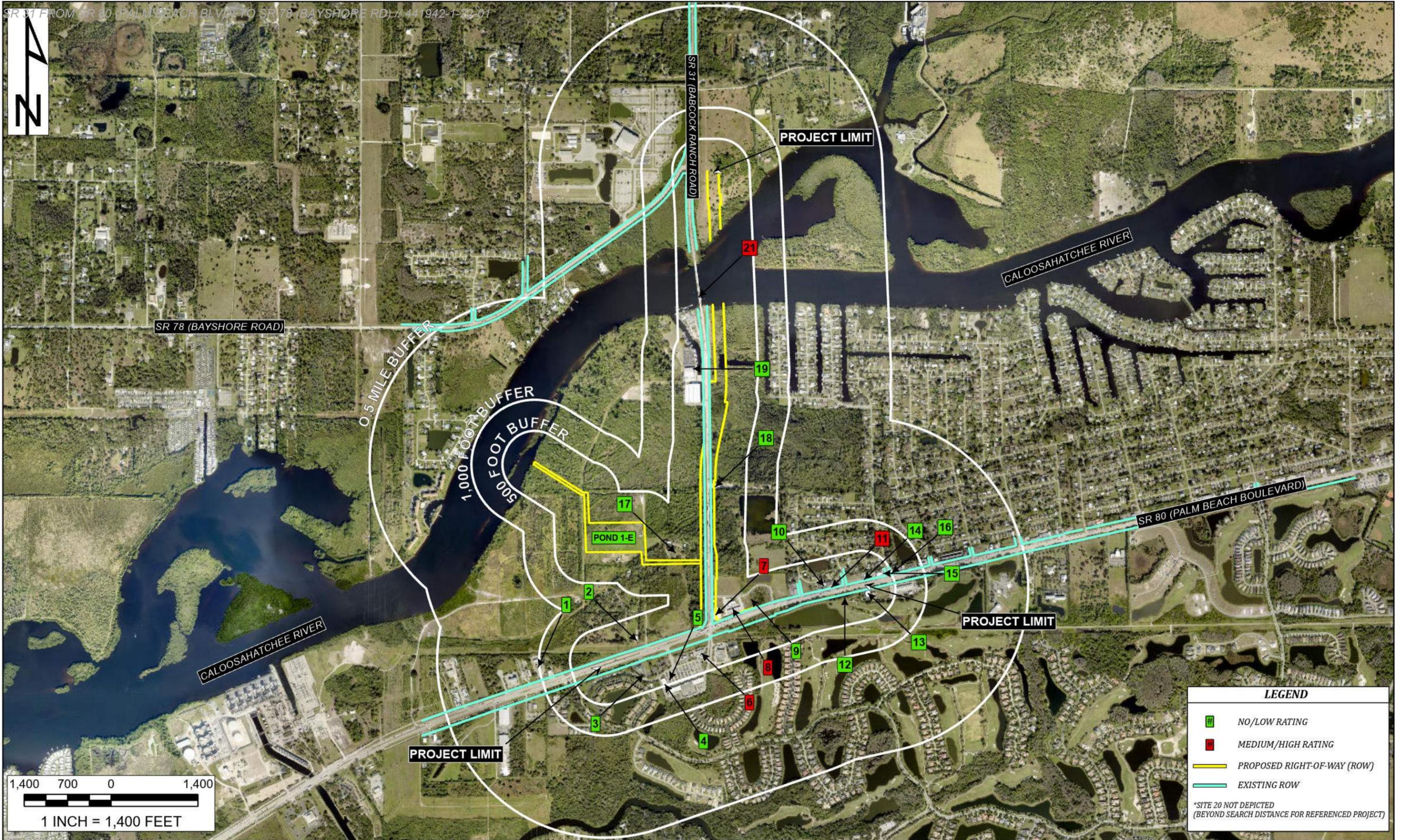
Contents:

Potential Contamination Site Map

Noise Map

DRAFT

SR 31 FROM SR 80 (PALM BEACH BLVD) TO SR 78 (BAYSHORE RD) // 441942-1-22-01



LEGEND

- # NO/LOW RATING
- # MEDIUM/HIGH RATING
- PROPOSED RIGHT-OF-WAY (ROW)
- EXISTING ROW

*SITE 20 NOT DEPICTED
(BEYOND SEARCH DISTANCE FOR REFERENCED PROJECT)

OWNER: FDOT-DISTRICT 1		
COUNTY	TIERRA PROJECT NO.	FINANCIAL PROJECT ID
LEE	6511-18-173E	441942-1-22-01

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
 SR 31 (BABCOCK RANCH ROAD)
 FROM SR 80 (PALM BEACH BOULEVARD) TO SR 78 (BAYSHORE ROAD)

POTENTIAL CONTAMINATION SITES AND DRAINAGE ALTERNATIVES MAP

SHEET NO.
1
Page 106 of 114



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



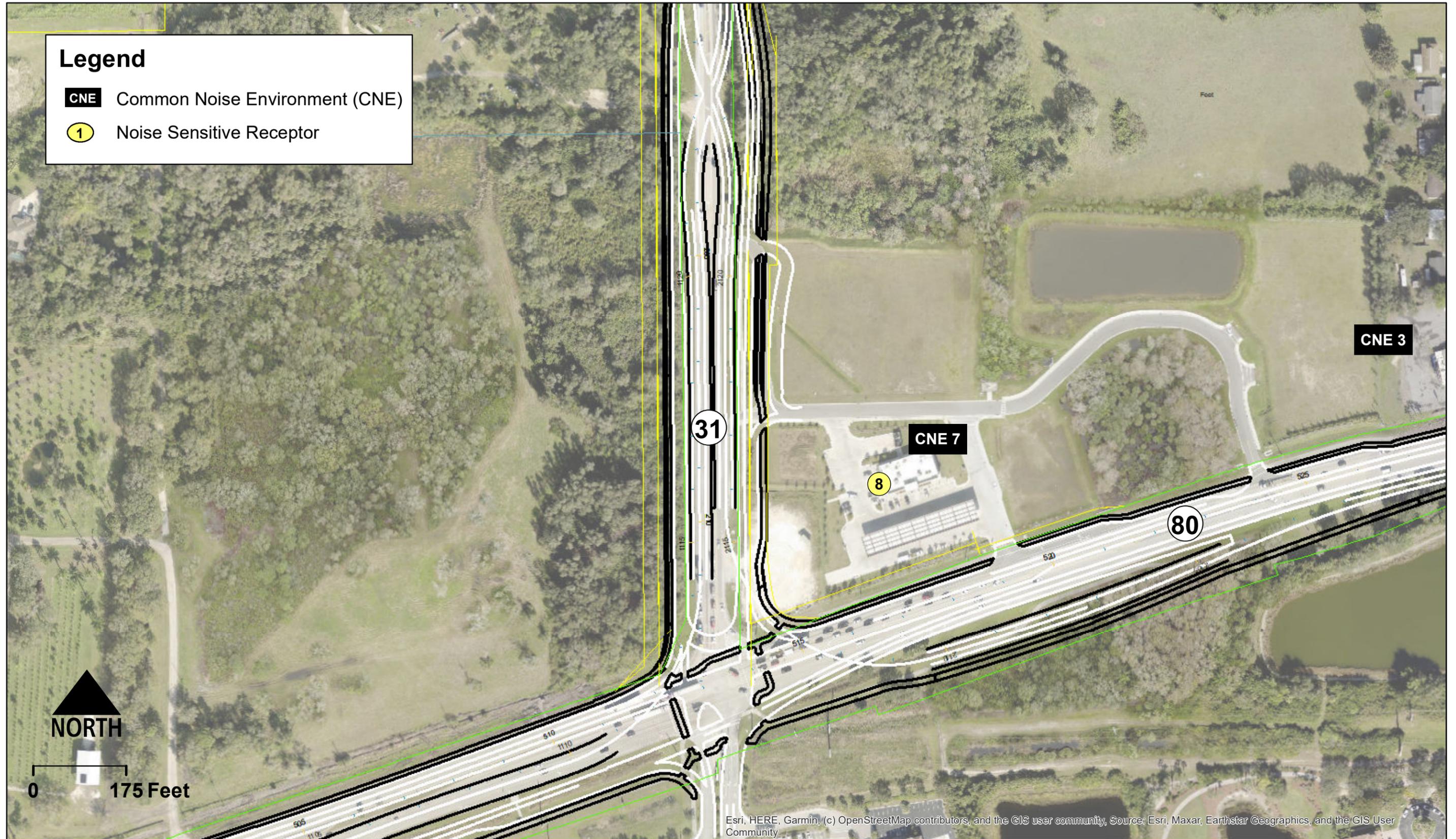
SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 1 of 8



SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 2 of 8



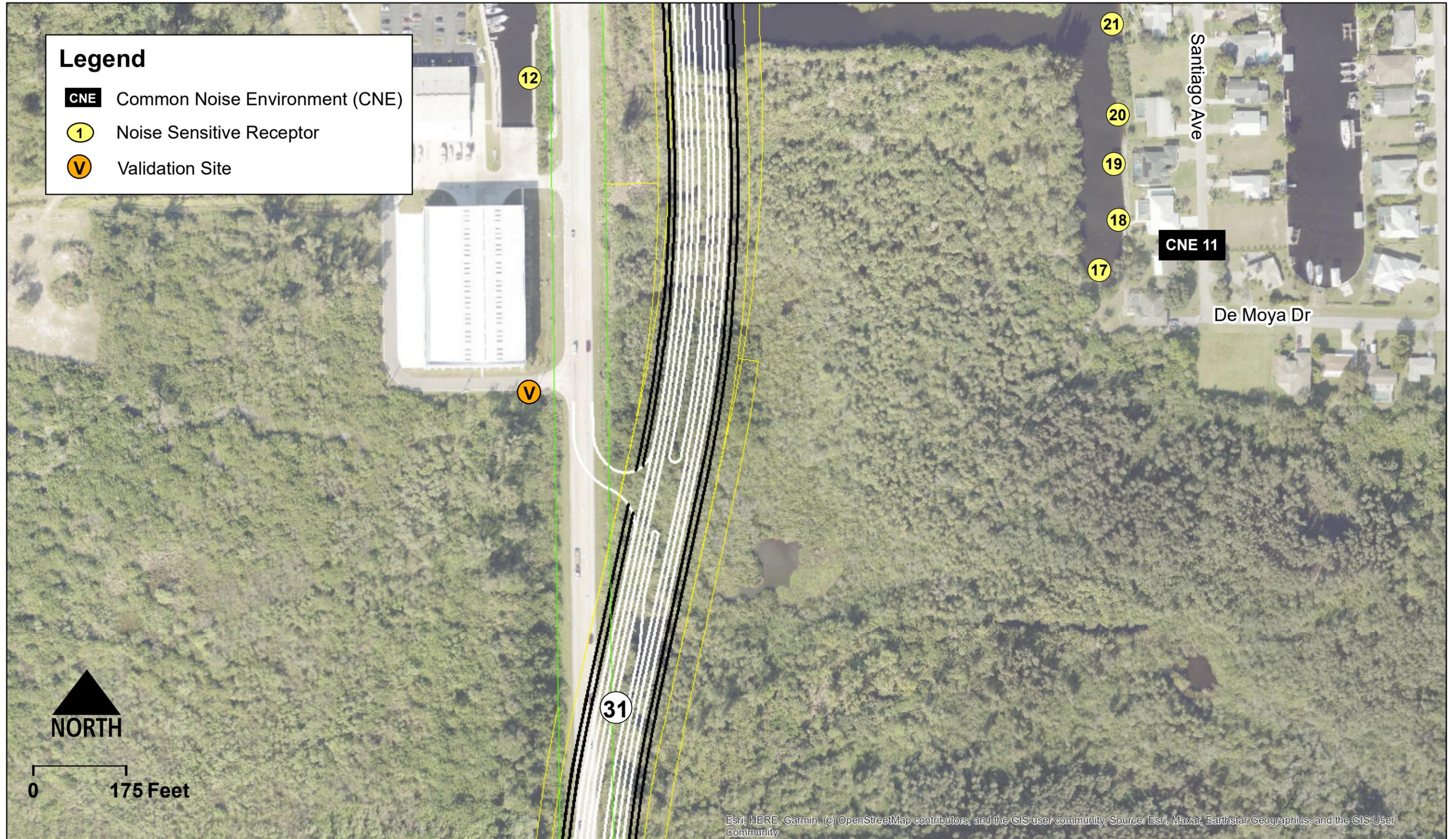
SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 3 of 8



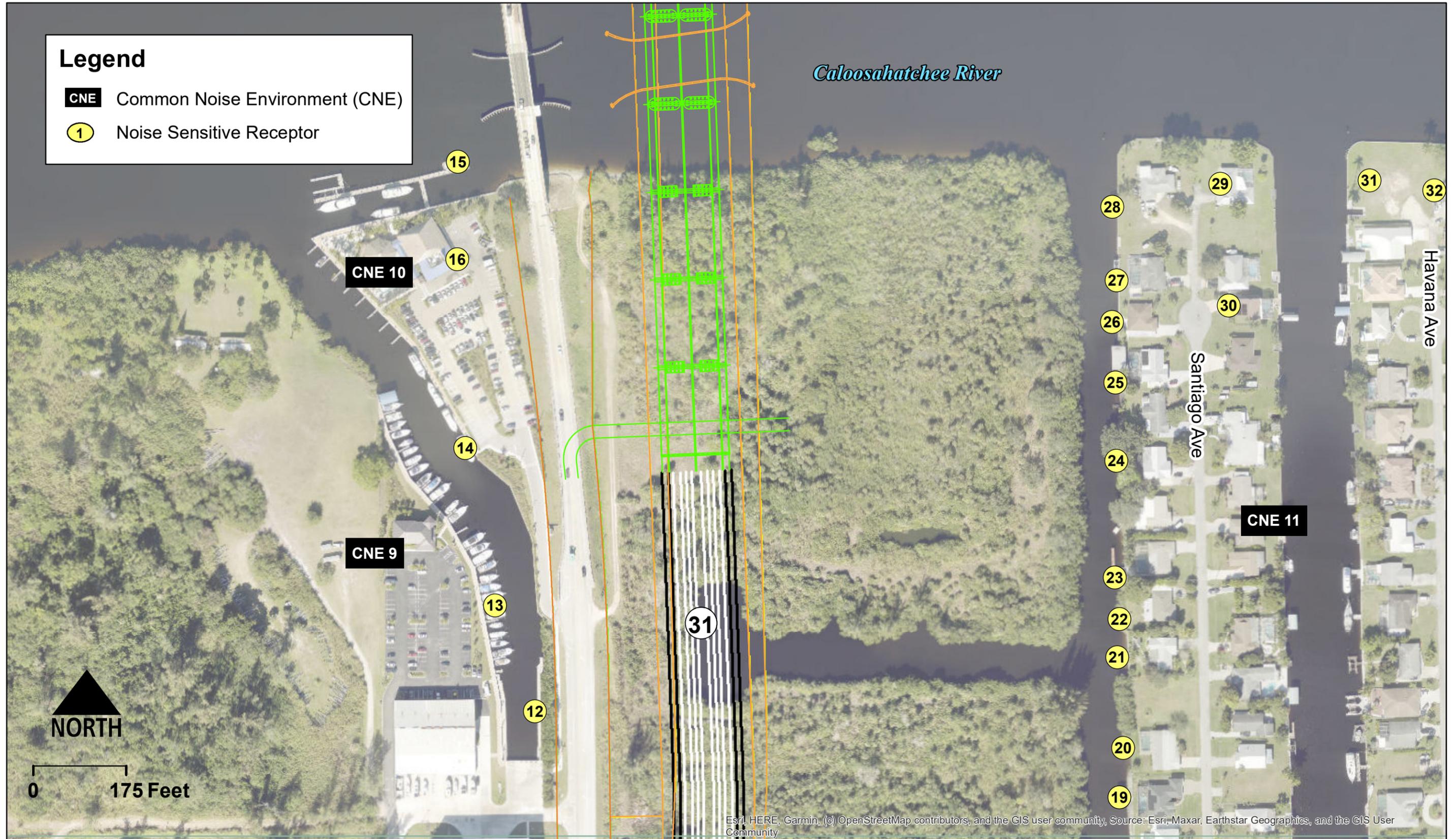
SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 4 of 8



SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 5 of 8



SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 6 of 8



SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 7 of 8



SR 31 from SR 80 (Palm Beach Boulevard) to SR 78 (Bayshore Road)
Lee County, FL
FPID: 441942-1-22-01

Noise Sensitive Receptors
Sheet 8 of 8