

ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation

SR 45 (US 41) AT BONITA BEACH ROAD

District: FDOT District 1

County: Lee County

ETDM Number: 6291

Financial Management Number: 444321-1-22-01

Federal-Aid Project Number: D123-081-B

Project Manager: Patrick Bateman

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

For additional information, contact:

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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 11/22/2019 the State of Florida determined that this project is consistent with the Florida Coastal Zone Management Program.

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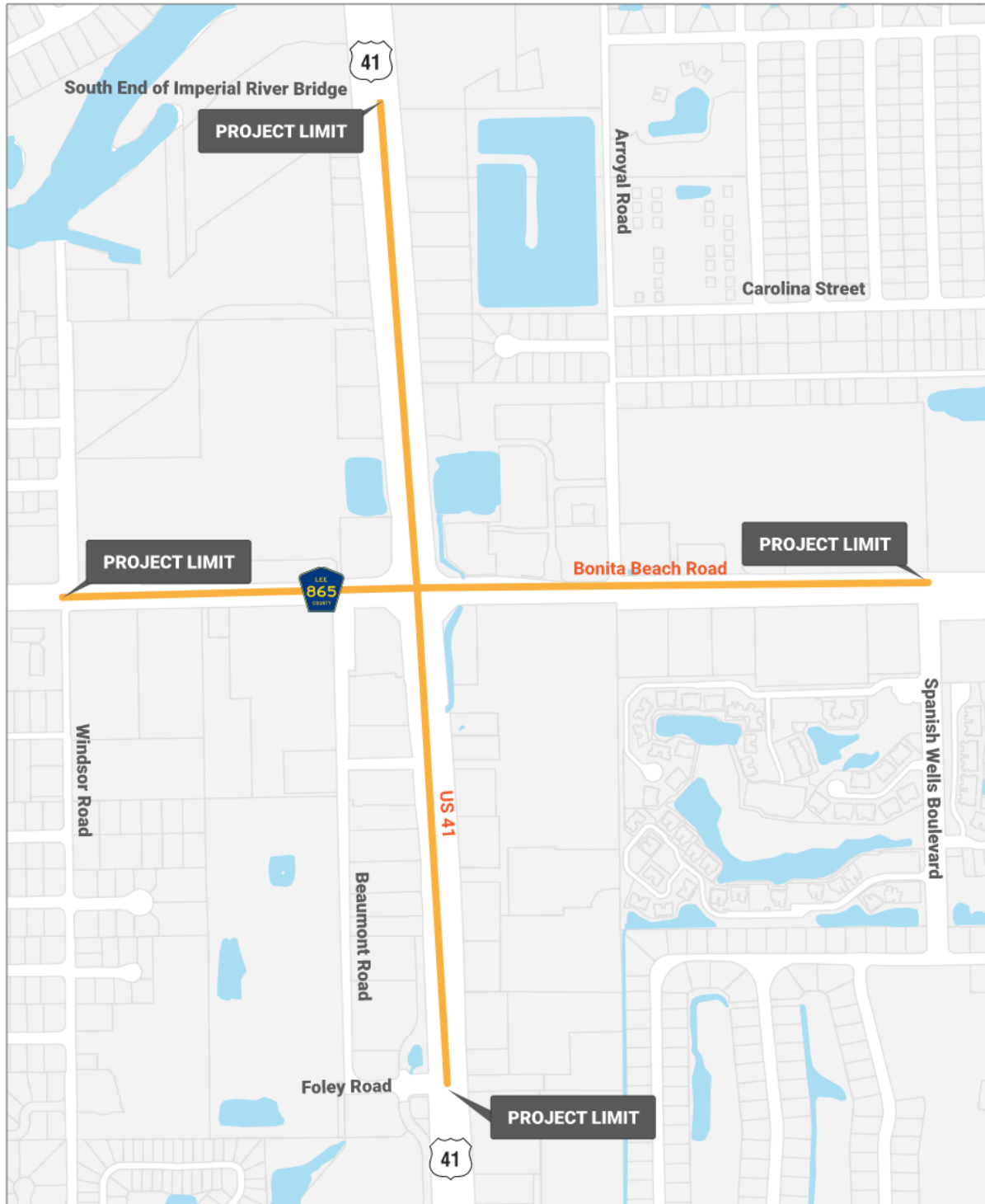
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1. Project Information

1.1 Project Description

Initiated in November 2019, this Project Development and Environment (PD&E) Study has been conducted to assess various intersection alternatives for SR 45 (US 41) at Bonita Beach Road. This Type 2 Categorical Exclusion documents the process and potential impacts identified during the PD&E Study. SR 45 will be referred to as US 41 throughout the remainder of this report. The study limits are shown on **Figure 1**.

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US 41 at Bonita Beach Road PD&E Study

FPID 444321-1-22-01



Figure 1 | Study Area

Project Description

The SR 45 (US 41) at Bonita Beach Road Project Development and Environment (PD&E) Study evaluated capacity, safety, and multi-modal improvements at the US 41 and Bonita Beach Road intersection, in the City of Bonita Springs, Lee County, Florida. The study area limits extend along US 41 from Foley Road to just south of the Imperial River bridge, a distance of approximately 0.9 miles. Additionally, the study area extends along Bonita Beach Road from Windsor Road to Spanish Wells Boulevard, a distance of approximately 0.8 miles.

US 41 is a north-south principal arterial roadway running parallel to Interstate 75 (I-75) and facilitates movement of regional and local traffic (including truck traffic) along Florida's west coast. Bonita Beach Road is an east-west minor arterial roadway providing a connection to I-75 and is one of two east-west connections between the Lee County mainland and coastal communities and barrier island tourist destinations and beaches to the west. US 41 is a state roadway maintained by the Florida Department of Transportation (FDOT) District 1, while Bonita Beach Road is maintained by the Lee County. Both US 41 and Bonita Beach Road are designated as emergency evacuation routes.

US 41 within the project limits is a six-lane divided roadway with 5' wide on-street bicycle lanes and 5' wide sidewalks on both sides of the roadway. Bonita Beach Road is a four lane divided roadway with 5' wide sidewalks on both sides but no on-street bicycle facilities.

The US 41 at Bonita Beach Road intersection is currently a signalized intersection with two exclusive left turn lanes and an exclusive right turn lane on each approach. Aside from the main intersection, there is currently one other signalized intersection along US 41 at the Center of Bonita Springs (Tuffy Auto/Advanced Auto Parts). There are three additional signalized intersections along Bonita Beach Road at the Center of Bonita Springs, Arroyal Road, and Spanish Wells Boulevard.

The existing US 41 and Bonita Beach Road intersection has two high volume left turn movements, those being eastbound to northbound and southbound to eastbound. To partially address these heavy movements, the City of Bonita Springs conducted the "Network Enhancement Alignment Study - Quadrant Plan" in May 2017. From this, the City will be designing and building a two-lane quadrant roadway connecting Bonita Beach Road at Windsor Road to US 41 at the Center of Bonita Springs. This Northwest Quadrant Roadway is currently in design by the City and anticipated to be built ahead of the US 41 and Bonita Beach Road intersection improvements.

The proposed improvements will modify the signalized configuration of the US 41 and Bonita Beach Road intersection to be a partial displaced left turn (PDLT), with the northbound and southbound left turn movements to crossover and be located outside of the opposing traffic flow. This configuration will allow the northbound and southbound left turning movements to operate in the same signal phase or simultaneously as the northbound and southbound through movements. To accommodate the partial displaced left turn configuration and facilitate the relocation of northbound and southbound turning vehicles, two new signalized "crossover" intersections will be added along US 41 approximately 675' south and 460' north of Bonita Beach Road. The southbound and eastbound left turn movements are proposed to have three lanes each, and the eastbound and westbound right turn movements are proposed to have two lanes each.

As noted above, a Northwest Quadrant Roadway is being constructed by the City of Bonita Springs. As part of the PD&E study's proposed improvements, the US 41 and the Center of Bonita Springs intersection is proposed to be changed from a standard signalized intersection to a "thru-cut" intersection. A thru-cut intersection restricts through movements from the minor street typically due to operational and/or geometric conditions. In this case, the west leg is being widened from three lanes to five lanes (four eastbound approach lanes and one westbound receiving lane) and the east leg is being widened from two lanes to four lanes (two westbound approach lanes and two eastbound receiving lanes). This creates skew

issues for any east/west through movements and creates operational constraints that are alleviated by the thru-cut intersection configuration. Tying into the new east leg is a Northeast Quadrant Roadway proposed between US 41 and Arroyal Road, northeast of the US 41 and Bonita Beach Road intersection. This will be a new three-lane roadway with two lanes eastbound and one lane westbound.

Along US 41 in the northbound direction, a 6' wide sidewalk is proposed from Foley Road to Springs Plaza and a 12' shared-use path is proposed from Springs Plaza to just north of the Imperial River Boat Ramp intersection. In the southbound direction, a 12' wide shared-use path is proposed from just north of the Imperial River Boat Ramp intersection to Bonita Funeral Home and a 6' wide sidewalk is proposed from Bonita Funeral Home to Foley Road. Along both sides of Bonita Beach Road, the sidewalks will be widened to 12' wide shared-use paths from the Center of Bonita Springs to Arroyal Road. Signalized marked crosswalks will be maintained on every leg of the PDLT, including the channelized right turn lanes. Signalized marked crosswalks will also be provided on every leg of each signalized intersection along US 41 and Bonita Beach Road within the study area.

1.2 Purpose and Need

The purpose of this project is to address the deficient operational capacity of the US 41 and Bonita Beach Road intersection to relieve existing congestion and accommodate projected future traffic demand. The project's secondary goals are to 1) Enhance regional and local mobility; 2) Enhance safety conditions; and 3) Improve multi-modal access. The need for these improvements is described in this section.

Transportation Demand/Capacity

The US 41 at Bonita Beach Road intersection experiences chronic congestion. As population and employment growth are expected to continue within this area of Lee County, the intersection's congestion is anticipated to increase. Based on 2019 traffic counts taken, the existing Annual Average Daily Traffic (AADT) ranges from 39,000 to 53,000 along US 41 and was 30,000 along Bonita Beach Road. New traffic counts were taken at the study intersections in 2022 to inform the opening and design year Turning Movement Counts (TMCs) Based on future growth projections to a 2050 design year, the AADTs are forecast to range from 60,000 to 78,000 along US 41. The future 2050 AADT forecast along Bonita Beach Road is 39,000.

The US 41 at Bonita Beach Road intersection's existing (2019) mid-day traffic analysis shows that six of the 12 movements operate at Level of Service (LOS) of F, with one of those being overcapacity (volume-to-capacity >1.0). The intersection's existing (2019) PM traffic analysis shows that seven of the 12 movements operate at Level of Service (LOS) of F, with two of those being overcapacity. In the future 2050 condition, the no-build intersection operates at LOS F with an overall average vehicle delay between 85 and 92 seconds. While there are a similar number of LOS F movements between the existing and future no-build, latent demand is expected to increase by nearly 30 percent. The future no-build intersection is serving approximately the same amount of traffic volume as the existing condition but with the increased volumes, there are more vehicles in the overall network not being served.

Safety

Crash records were obtained for both US 41 and Bonita Beach Road within the study area, as described below:

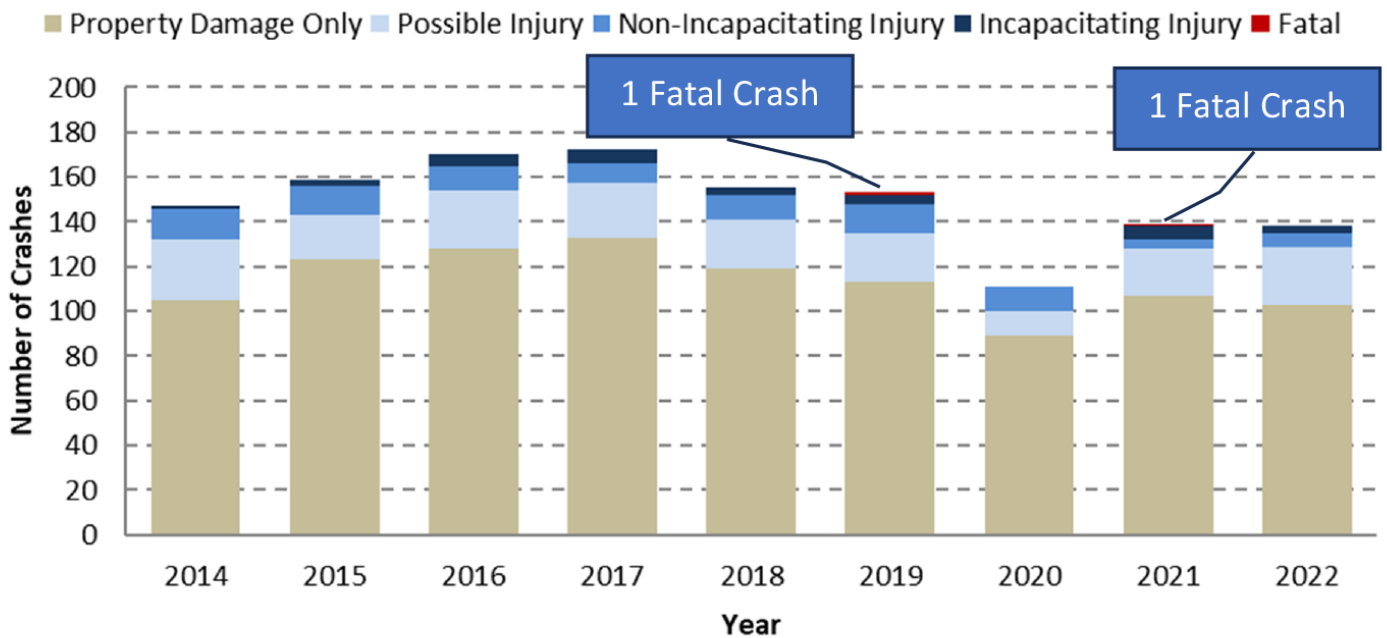
- US 41 from Foley Road (MP 0.540) to the Imperial River bridge (MP 1.482); and
- Bonita Beach Road from 400' west of Windsor Road to 450' east of Spanish Wells Boulevard.

Crash data was obtained for the most recent five-year period on record (2018 through 2022). The crash data was obtained from the University of Florida's Signal Four (S4) Analytics crash database for US 41 and Bonita Beach Road. The safety analysis was performed for the most recent five years of crash data (January 1, 2018 - December 31, 2022). Supplemental crash data from previous years (2014 to 2017) and January 1, 2023 to June 30, 2023 were also analyzed to verify crash trends and patterns.

Figure 2 displays a summary of crash frequency by year along with the respective severities from 2014 to 2022. There was an increase in crashes between 2014 and 2017, but there has been a decrease in crashes between 2017 and 2019 before an approximate 30 percent drop in crashes due to the COVID-19 pandemic in 2020. The number of crashes have stayed relatively constant in 2021 and 2022. There were 163 crashes per year on average between 2014 to 2017. However, there were 146 crashes per year on average in the study area between 2018 to 2022, not including 2020 (a 10 percent decrease). The fatal crash in 2019 involved a vehicle striking a pedestrian on US 41 just south of Bonita Beach Road, and the fatal crash in 2021 involved an angle crash at the intersection of US 41 at Foley Road/Shanna Lane.

Figure 2:

Crashes by Year and Severity



Forty three percent of the total study area crashes were located within the US 41 and Bonita Beach Road's intersection influence area. Figure 4 displays a summary of crash frequency by year along with the respective severities from 2018 to 2022. There was a total of 298 reported crashes during this period, 65 injury crashes (22 percent), and one fatal crash (in 2019). As displayed in Figure 3, there were an average of 60 crashes per year at the intersection.

Figure 4 displays the crashes at the intersection by type and severity for the five-year study period. The highest crash type observed was rear end, comprising 59 percent of the total crashes. Sideswipe crashes (13 percent) and left turn (8 percent) were the second and third highest crash types. These trends are consistent with the overall study area. The fatal crash in 2019 occurred when a vehicle struck a pedestrian crossing US 41.

Figure 3:

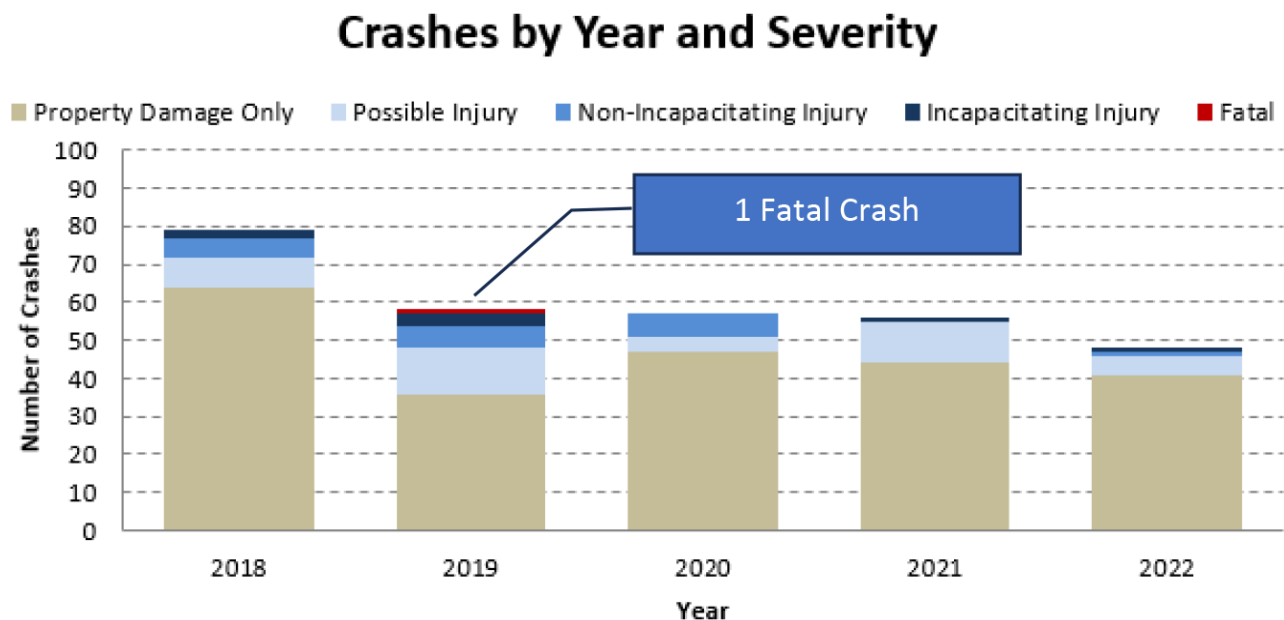
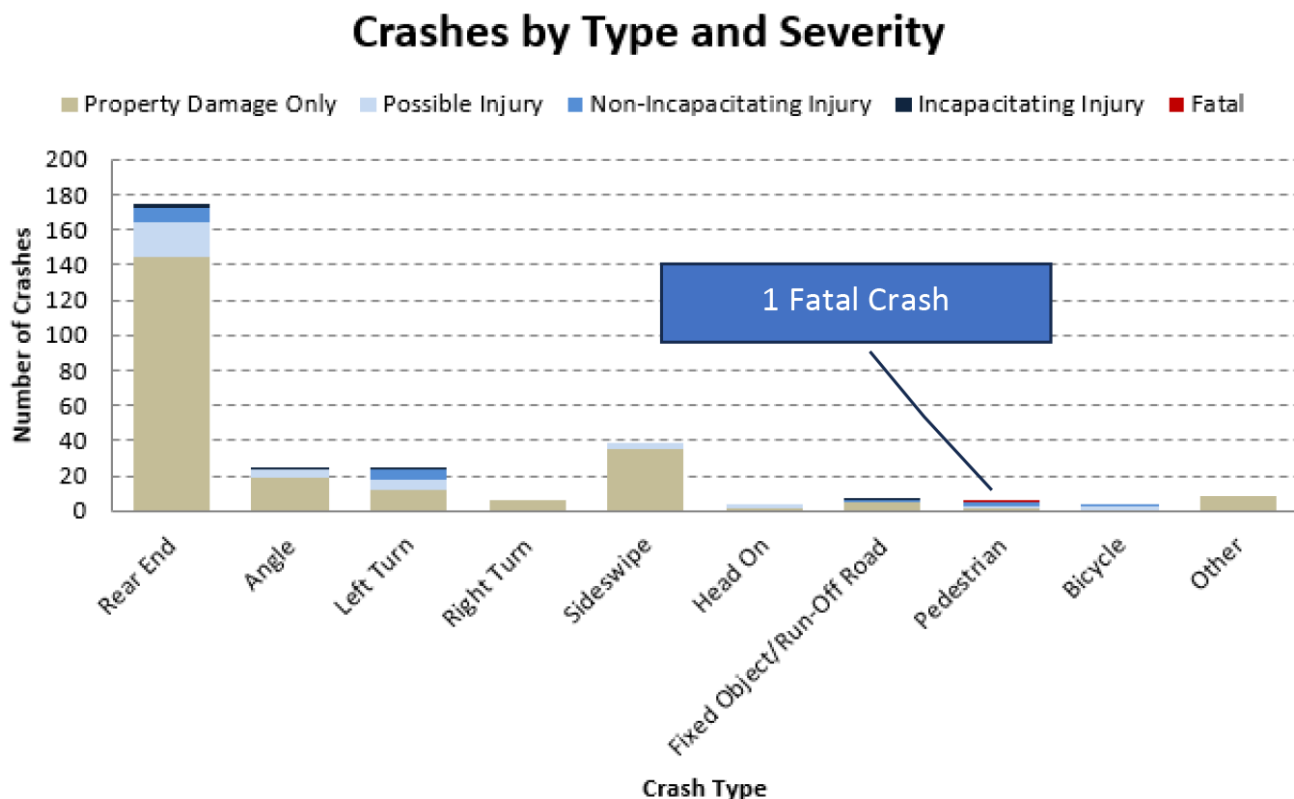


Figure 4:



A crash rate analysis was performed for the US 41 at Bonita Beach Road intersection. Note that as 2020-2022 average crash rates are not yet available, crash rate analyses were limited to 2018 and 2019 data. Based on the analysis, the study intersection experienced higher than average crash rates in both 2018 and 2019 when compared to both Statewide and Districtwide average crash rates.

US 41 and Bonita Beach Road are designated emergency evacuation routes for both the Florida Division of Emergency Management and Lee County. Providing parallel service to I-75, US 41 plays an important role in facilitating north-south traffic during incidences and emergency evacuation periods (particularly within southwest Florida). Bonita Beach Road also serves a critical role during emergency evacuation periods as it connects US 41 and I-75 (facilities of the state evacuation route network) and provides one of two connections for residents and tourists between the barrier islands/tourist destinations to the west and mainland of Lee County.

Modal Interrelationships

While sidewalks are present on both sides of US 41 and Bonita Beach Road, the only bicycle facilities present in the study area are 5' wide marked bicycle lanes along both sides of US 41. Two LeeTran bus routes (Route 600) operate along US 41 and Bonita Beach Road. In addition to the two bus routes, LeeTran has partnered with Uber to provide ULTRA On-Demand Transit service in the Bonita Springs area. With LeeTran's ULTRA On-Demand Transit service is a deluxe mini-bus available seven days a week from 7:00 AM to 6:00 PM. ULTRA On-Demand Transit allows riders to request a ride as needed, with curb to curb service.

Due to the presence of these facilities/services and the surrounding urban environment, heavy pedestrian and bicycle traffic exists in the area (as observed during field reviews conducted for the project).

The Office of Greenways and Trails (OGT) and the Lee County Metropolitan Planning Organization (MPO) have identified trail opportunities in the vicinity of the US 41 and Bonita Beach Road study intersection. The Coastal Loop Trail is a spur loop from the Southwest Coastal Regional Trail, which is part of the larger FDOT Shared-Use Nonmotorized (SUN) Trail Program. This is a planned loop trail that begins at the Southwest Coastal Regional Trail in Bonita Springs, travels along Bonita Beach Road to the barrier islands, then travels through Fort Myers Beach and southern Fort Myers before connecting back to the Southwest Coastal Regional Trail east of US 41 in Fort Myers. Through discussions with Lee County MPO, no future funding has been dedicated for Coastal Loop Trail improvements in the vicinity of the US 41 and Bonita Beach Road intersection as per the date of this report.

System Linkage

US 41 serves as a critical arterial in facilitating the north-south movement of regional and local traffic (including truck traffic) as it runs parallel to I-75 along Florida's west coast. Similarly, Bonita Beach Road serves as a major east-west local roadway within Lee County, linking US 41 and I-75 and providing access (as one of two connections) between the mainland of Lee County and coastal communities/tourist destinations to the west (i.e., barrier islands and beaches).

The City of Bonita Springs performed the Network Enhancement Alignment Study, also known as the "Quadrant Plan", in May 2017. The purpose of the Quadrant Plan is to develop an expanded roadway network between Bonita Beach Road with US 41 that improves the area's mobility, maintains a high-quality environment for the community, and minimizes impacts to the natural environment. The City is moving forward with design and construction for a northwest quadrant roadway.

Project Status

This section will be updated following the Public Hearing.

1.3 Planning Consistency

The design phase was created under 444321-2, with \$2.8 M SU funds and \$700K in local funds. The project's design funding is shown as tentatively programmed for Fiscal Year 2026. Once the design funding is adopted next work program cycle, then the Transportation Improvement Plan (TIP) / Statewide Transportation Improvement Plan (STIP) can be updated. The Long Range Transportation Plan (LRTP) will not need updating at this time, unless project information changes. Therefore, **Table 1**, Planning Consistency, has been left blank.

Currently Adopted LRTP-CFP	COMMENTS			
Yes				
	Currently Approved	\$	FY	COMMENTS
PE (Final Design)				
TIP				
STIP				
R/W				
TIP	N			ROW for project is currently unfunded.
STIP	N			ROW for project is currently unfunded.
Construction				
TIP	N			Construction for project is currently unfunded.
STIP	N			Construction for project is currently unfunded.

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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

Based on the U.S. Census Bureau 2018-2022 American Community Survey 5-Year Estimates, there are approximately 2,500 households with a population of 4,800 residents identified within the study area. Approximately 64 percent of households are single family dwelling units while approximately 36 percent are multifamily units. The median income is approximately \$71,500 with just under 6 percent of the households below poverty level. Minority population comprises approximately 9 percent of the total population in the study area.

The Bonita Springs City Hall is adjacent to the US Post Office on Bonita Beach Road in the study area's southeast quadrant. In the intersection's southwest quadrant is the St. Leo Catholic Church on Beaumont Road which is also where the Knights of Columbus meet. The Lee County Sheriff's Office South District office is located in the Bonita Springs shopping center. These community features are shown in **Figure 5**.



US 41 at Bonita Beach Road PD&E Study

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Figure 5 | Community Map

At the study area's northern terminus are two public recreational areas along the southern shore of the Imperial River. West of US 41 is the Bonita Springs River Park with hiking trails and picnic areas. East of US 41 is Lee County's Imperial River Boat Ramp.

No changes to the population or demographic characteristics are anticipated to result from the from the Preferred Alternative. Based on the PD&E Study's analysis, the Preferred Alternative will not cause disproportionately high or adverse effects on any minority or low-income population in accordance with the provisions of the President's Executive Order on Environmental Justice (Executive Order 12898).

Community cohesion is the degree to which residents have a sense of belonging to their community. Community cohesion may also include the degree in which neighbors interact and cooperate with one another or the level of attachment felt between residents and institutions in the community. This project proposes to modify an existing intersection and will not bisect any neighborhoods or other portions of the community. The project will also improve pedestrian access and vehicular mobility. In turn, the project will maintain or improve the quality of life of the residents in the area, improve emergency response times, and will not impact community cohesion.

Access to proximate businesses and residences may temporarily be affected or modified as a result of the project. Encroachment into surrounding parcels, if necessary, will be coordinated with the appropriate property owners. The proposed project improvements will be designed to minimize right-of-way acquisition.

In accordance with the Civil Rights Act of 1964, the Civil Rights Act of 1968, and Title VI of the Civil Rights Act, Executive Order 12898 (Environmental Justice), appropriate steps are required to identify and address disproportionately high and adverse effects of Federal programs, policies, and activities on minority and low-income populations. While there is limited potential for the adverse effects, proactive measures for affected communities will be taken related to alternative selection, impact analysis, and mitigation.

3.2 Economic

The project has the potential to support the added businesses proposed in the study area. There are several new developments within the study area, including Angler's Paradise (located in the northwestern section of the study area) which will contain up to 260 residential units, 30,000 square feet of retail and office and 160 hotel rooms.

In the long term, the proposed project is anticipated to enhance the economic conditions by addressing the deficient capacity of the intersection, better facilitating the movement of local and regional freight, and accommodating multimodal activity through bicycle and pedestrian facilities and reliable transit.

3.3 Land Use Changes

The US 41 and Bonita Beach Road intersection improvements are compatible with community development goals and the City and County comprehensive plans.

The existing and future land uses abutting the US 41 and Bonita Beach Road intersection are primarily commercial/retail/office with shopping centers in the northwest and southeast quadrants. The larger vacant parcels in the study area's northwest quadrant are being developed into a mixed-use development called Angler's Paradise which will

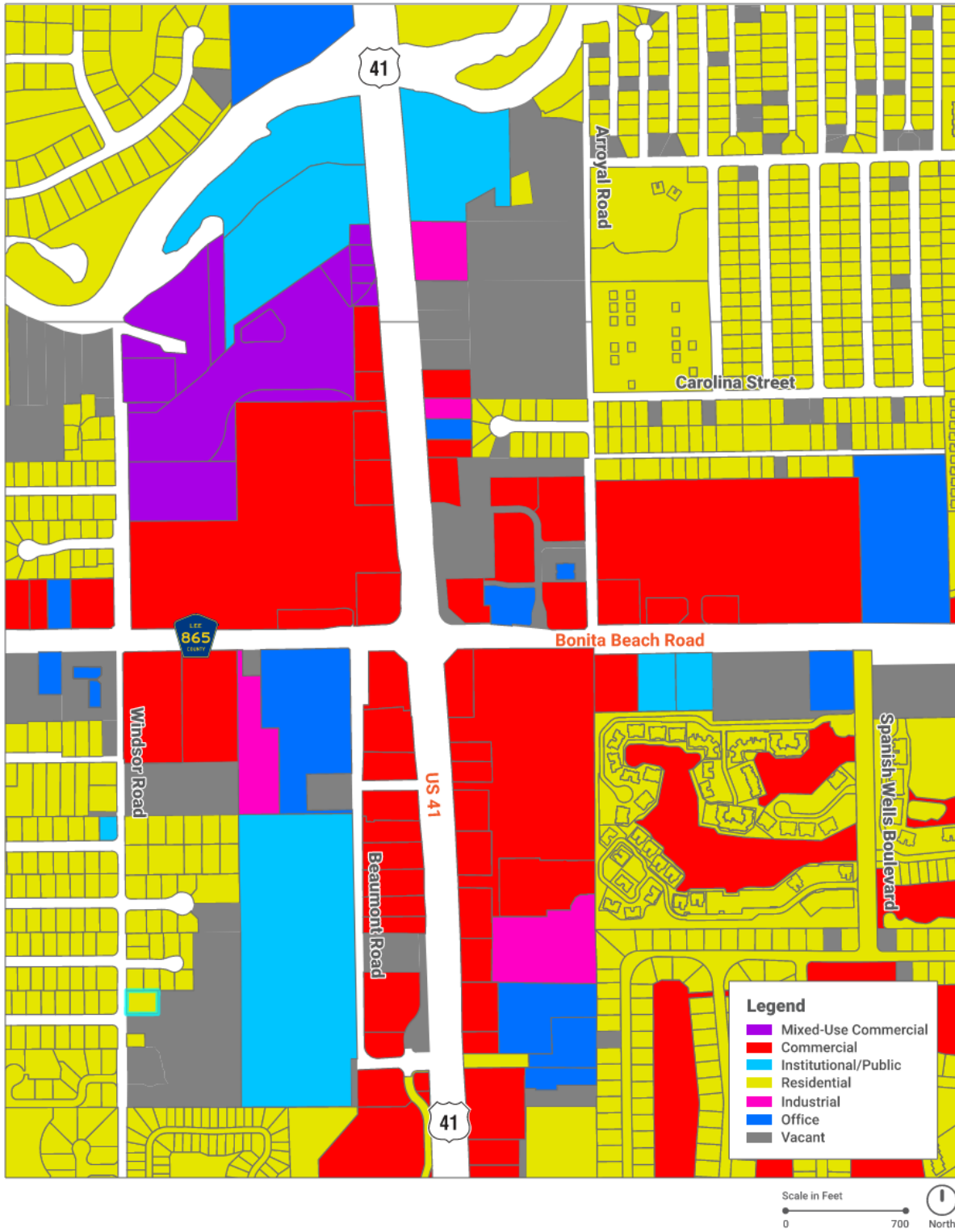
contain up to 260 residential units, 30,000 square feet of retail and office and 160 hotel rooms. Residential uses are located behind the commercial/retail/office uses.

Other land use types in the study area include office and industrial land uses. There are also several vacant properties within the study area. Institutional land use is also identified in the southwest quadrant of the US 41 and Bonita Beach Road intersection, along Bonita Beach Road, and adjacent to the Imperial River.

The future land uses are generally consistent with the existing land uses. The study area's future land use categories include commercial, residential, industrial, mixed-use/planned development, public, and recreational land uses.

Figure 6 shows the existing land use while **Figure 7** shows the future land use.

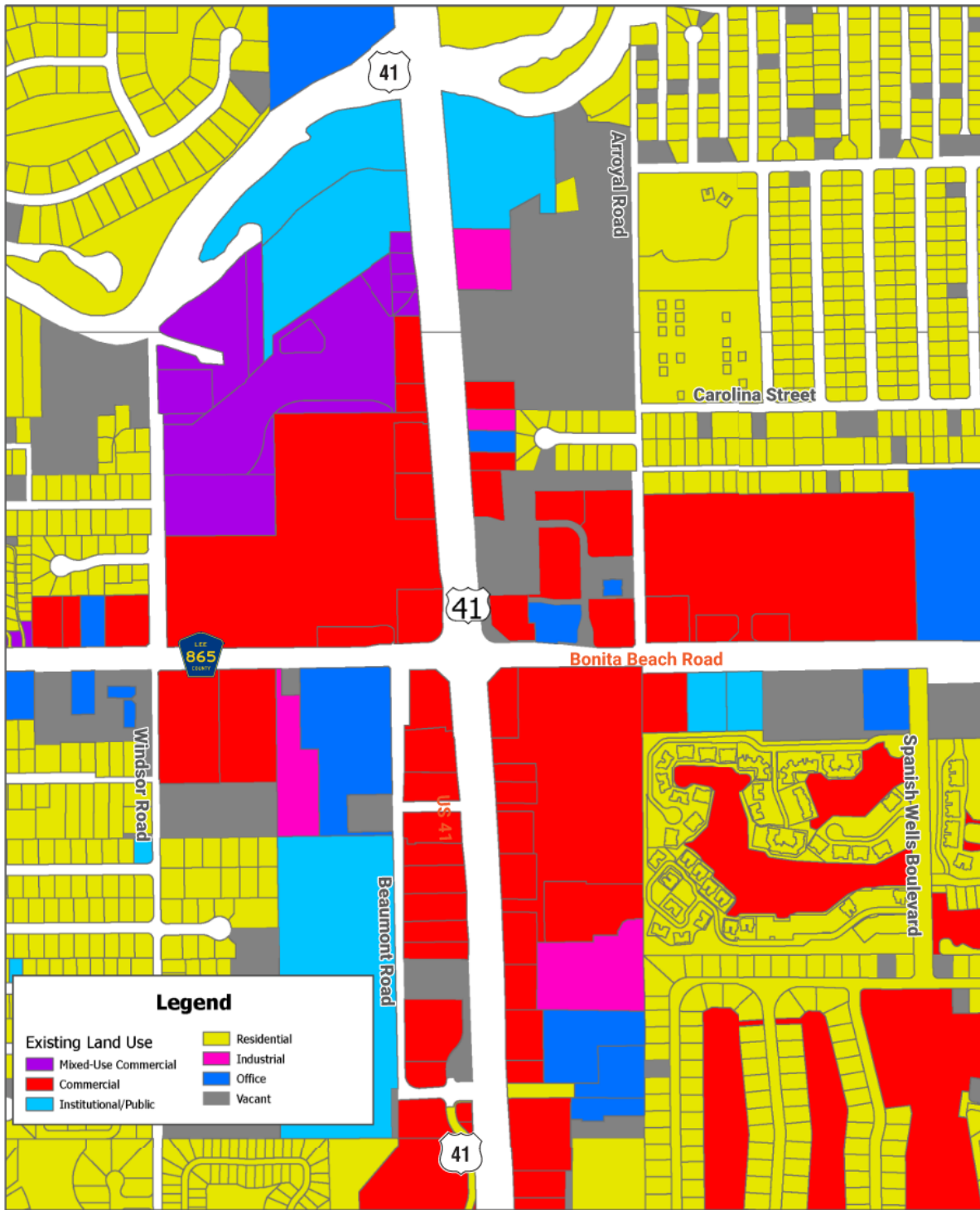
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Figure 6 | Existing Land Use



US 41 at Bonita Beach Road PD&E Study

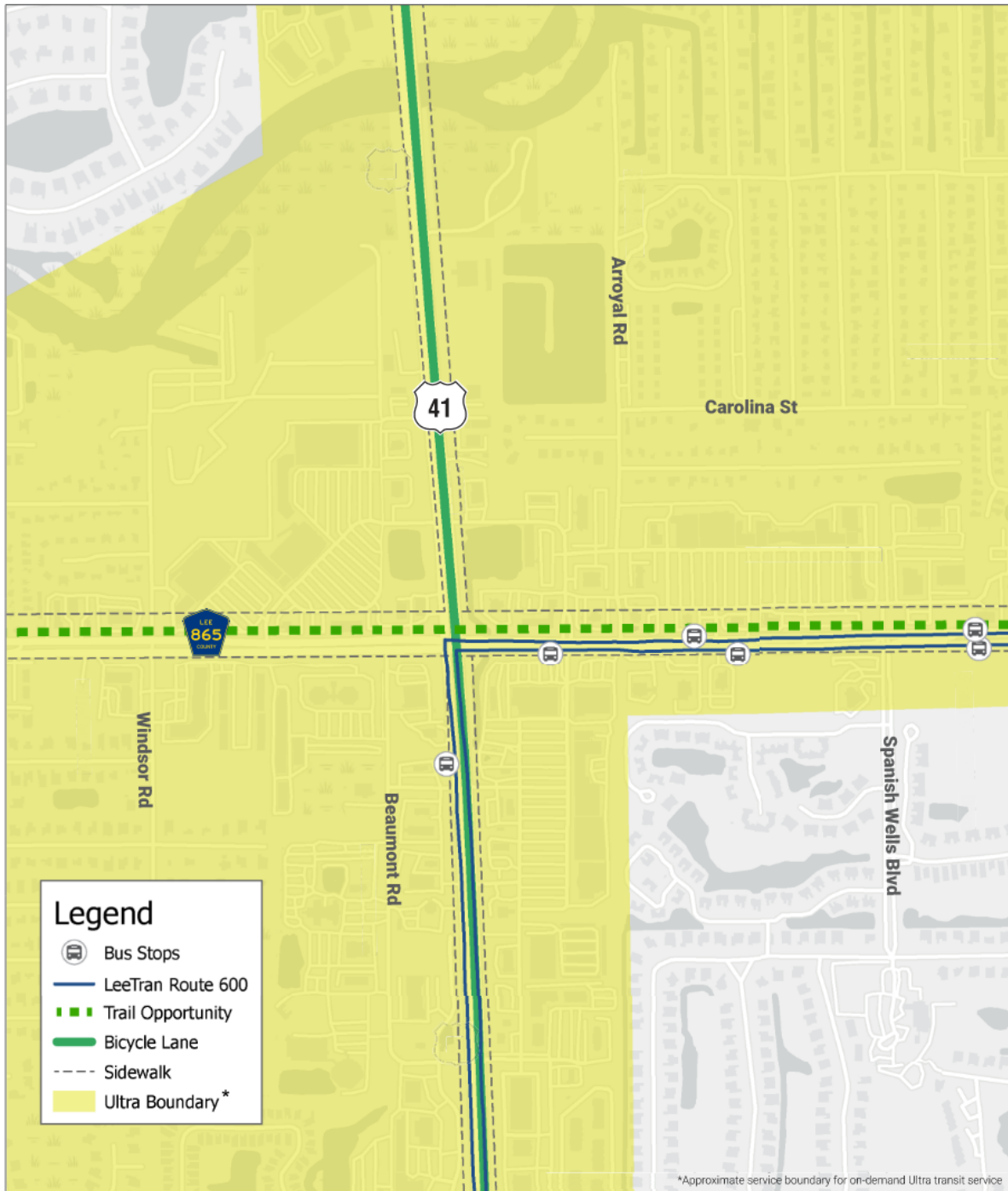
FPID 444321-1-22-01

Figure 7 | Future Land Use

3.4 Mobility

The US 41 and Bonita Beach Road intersection improvements have the potential to account for future travel demand, enhance transit access and improve the existing bicycle and pedestrian facilities. Based on the U.S. Census Bureau 2018-2022 American Community Survey 5-Year Estimates, approximately 20 percent of the population is over the age of 65 (from the populations identified within adjacent census block groups). Providing improved multi-modal facilities for non-motorized users will enhance the quality of life for those individuals living and working in or near the study area.

As shown in the Trail and Transit Facilities Map, **Figure 8**, Lee Tran operates Routes 600 Coconut Point/Immokalee Road with four total transit stops (two eastbound and one westbound on Bonita Beach Road and one southbound on US 41) within the study area. Lee Tran Transit Route 600 connects Immokalee Road and Plaza Del Lago Drive. The eastbound bus stops and westbound bus stop on Bonita Beach Road and bus stop along US 41 only have a sign and do not have a shelter or bench. The proposed improvement will impact the US 41 southbound bus stop and the relocation has been coordinated with LeeTran. This stop will be relocated further south to be in front of Kentucky Fried Chicken (28200 S Tamiami Trail, Bonita Springs, FL 34134). Associated with this relocation, a US 41 northbound bus stop will be added across the street from the southbound bus stop. Connecting the two bus stops will be a proposed crosswalk with Pedestrian Hybrid Beacon (PHB).



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Figure 8 | Trails and Transit Facilities

Along Bonita Beach Road, three bus stops east of US 41 (two eastbound and one westbound) will remain in the same location.

Additionally, ULTRA provides on demand transit service within a defined service area in Bonita Springs. Service operates from approximately 7:00 AM to 6:00 PM on Monday through Sunday. The service provides curb to curb service in a mini-bus and is available on a first-come, first-served basis.

The Office of Greenways and Trails and the Lee County Metropolitan Planning Organization (MPO) identified a trail opportunity within the study area as part of the Coastal Loop Trail network. The Coastal Loop Trail is a spur loop from the Southwest Coast Regional Trail which is part of the larger FDOT Shared-Use Nonmotorized (SUN) Trail Program. The proposed loop trail begins at the Southwest Coastal Regional Trail in Bonita Springs and travels along Bonita Beach Road to the barrier islands, then travels through Fort Myers Beach and southern Fort Myers before connecting back to the Southwest Coastal Regional Trail east of US 41. Through discussions with Lee County MPO, no future funding has been dedicated for Coastal Loop Trail improvements in the vicinity of the US 41 and Bonita Beach Road intersection. The proposed trail within the study area is show above in **Figure 8**.

Along US 41 in the northbound direction, a 6' wide sidewalk is proposed from Foley Road to Springs Plaza and a 12' wide shared-use path is proposed from Springs Plaza to just north of the Imperial River Boat Ramp intersection. In the southbound direction, a 12' wide shared-use path is proposed from just north of the Imperial River Boat Ramp to Bonita Funeral Home and a 6' wide sidewalk is proposed from Bonita Funeral Home to Foley Road.

According to comments received from Lee Tran, if feasible, the bus stop should be located approximately 100 feet into the turn lane and should follow the Transit Land Development Code when making any improvements to bus stops on Bonita Beach Road.

3.5 Aesthetic Effects

The improvements to the US 41 and Bonita Beach Road intersection will not impact any viewsheds, bisect any communities or otherwise have an impact on the aesthetic nature of the study area. Currently there is landscaping including royal palms and shrubbery beds within all four quadrants of the intersection, as well as trees within the existing medians along US 41. The project is anticipated to remove a portion of this landscaping to accommodate the preferred alternative. A landscaping plan will be developed in future phases that will define the aesthetic enhancements that may be installed at or near the intersection.

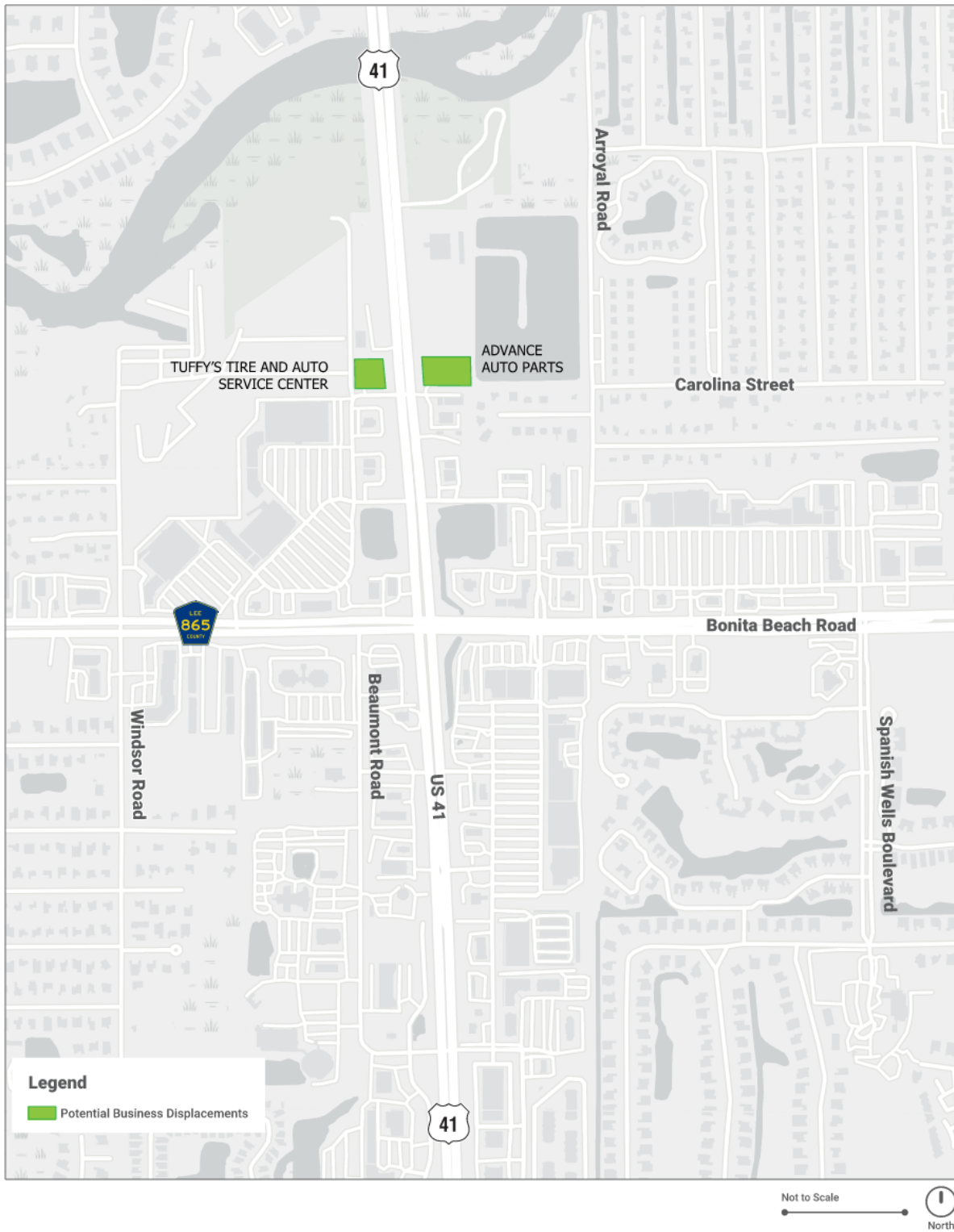
3.6 Relocation Potential

There are two business displacements resulting from the recommended alternative. This includes both the Tuffy's Tire and Auto Service Center located at 27790 S US 41, Bonita Springs, FL 34134 in addition to the Advance Auto Parts located at 27791 S US 41, Bonita Springs, FL 34134. Additional information about these business displacements can be found in the attached Conceptual Stage Relocation Plan and is summarized in **Table 2**. **Figure 9** shows the locations of the proposed business displacements.

Table 2: Business Displacements

Parcel ID	Business Name	Site Address	Type	Acres	Year Built
33-47-25-B3-00260.0020	Casce Inc, (Tuffy Tire & Auto Service Center)	27790 S TAMIAMI TRL BONITA SPRINGS FL 34134	Automotive Repair	0.63	1997
33-47-25-B3-00260.002A	Advance Auto Parts	27791 S TAMIAMI TRL BONITA SPRINGS FL 34134	Automotive Part Sales	1.00	2007

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Figure 9 | Parcel Relocation Map

In order to minimize the unavoidable effects of Right of Way acquisition and displacement of people, 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).

In order to minimize the unavoidable effects of Right of Way acquisition and displacement of people, 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).

Comparable replacement housing for sale or rent is not available in the area. In accordance with USC Title 42 Chapter 61 Section 4626, replacement housing of last resort will be used to assure that comparable decent, safe, and sanitary housing will be made available to a displaced person when such housing cannot otherwise be provided within the person's financial means.

3.7 Farmland Resources

Through coordination with the Natural Resources Conservation Service, it has been determined that the project area which is located in the urbanized area of Lee County does not meet the definition of farmland as defined in 7 CFR Part 658. Therefore, the provisions of the Farmland Protection Policy Act of 1981 do not apply to this project.

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 these resources do not meet the eligibility criteria for inclusion in the National Register of Historic Places (NRHP), and State Historic Preservation Officer (SHPO) concurred with this determination on . Therefore, FDOT, in consultation with SHPO, has determined that the proposed project will result in No Historic Properties Affected.

The purpose of the Cultural Resource Assessment Survey (CRAS) was to locate and identify any archaeological sites and historic resources within the project area of potential effect (APE) and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). As defined in 36 Code of Federal Regulations [CFR] Part 800.16(d), the APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Based on the project type and location of the proposed work, the archaeological APE is limited to the footprint of construction. The historical/architectural APE included the footprint of construction as well as resources within immediately adjacent parcels where proposed road widening will occur and new roadways are expected to be constructed. The archaeological and historical field surveys were completed in September 2023.

This CRAS was initiated in consideration of Section 106 of the National Historic Preservation Act of 1966, as amended by Public Law 89-665; the Archaeological and Historic Preservation Act, as amended by Public Law 93-291; Executive Order 11593; and Chapter 267, Florida Statutes (FS). All work was carried out in conformity with Florida Department of Transportation's PD&E Manual, and the Florida Division of Historical Resources' (FDHR) standards contained in the Cultural Resource Management Standards and Operational Manual (FDHR 2003), as well as with the provisions contained in the Chapter 1A-46, Florida Administrative Code (FAC). Principal Investigators meet the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture. Archaeological background research and a review of the Florida Master Site File (FMSF) indicated that no archaeological sites are recorded within or adjacent to the APE but five sites are recorded within one mile. These consisted of various types of mounds, only one of which has been evaluated by the State Historic Preservation Officer (SHPO). A review of relevant site locational information for environmentally similar areas within Lee County and the surrounding region indicated that the APE was considered to have a low to moderate potential for archaeological sites although the ETDM report 6291 indicated a minimal impact to cultural resources. As a result of field investigation, including the excavation of 35 shovel tests, no archaeological sites were discovered. Historic background research, including a review of the FMSF and the NRHP databases, indicated that two historic resources (8LL01426 and 8LL02543) were previously recorded within the APE. The circa (ca.) 1920 Frame Vernacular style building, located at 27750 Arroyal Road, was evaluated as ineligible for listing in the NRHP by the SHPO in 2001. Following the development of an enlarged pond site, the building was demolished and documented as such within the FMSF. Similarly, the Angler's Paradise Clubhouse (8LL02543), a ca. 1958 Masonry Vernacular style building, located at 27711 Windsor Road, was not evaluated by the SHPO for NRHP eligibility. In 2022 the FMSF was notified that the building was no longer extant. A review of relevant historic United States Geological Survey (USGS) quadrangle maps, historic aerial photographs, and the Lee County property appraiser's website data revealed the potential for four new historic resources 45 years of age or older

(constructed in 1978 or earlier) within the APE (Caldwell 2023). Historical/architectural field survey resulted in the identification and evaluation of four historic resources (8LL02984, 8LL02985, 8LL02986, and 8LL02987) within the APE. These include three buildings (8LL02984, 8LL02985, and 8LL02986), constructed between ca. 1945 and 1975, and one linear resource (8LL02987). The buildings consist of two Commercial style buildings (8LL02984 and 8LL02985) and one Masonry Vernacular style building (8LL02986) that have been altered, lack sufficient architectural features, and are not significant embodiments of a type, period, or method of construction. The linear resource is an unnamed drainage ditch (8LL02987) that is a common example of a drainage canal found throughout Lee County and Florida and does not possess any unique engineering features. Background research did not reveal any historic associations with significant persons and/or events. Thus, these five historic resources do not appear eligible for listing in the NRHP, either individually or as a part of a historic district.

Based on the results of the background research and field investigations, no archaeological sites or historic resources that are listed, determined eligible, or that appear potentially eligible for listing in the NRHP were located within the APE. Therefore, it is the professional opinion of the project team that the proposed undertaking will result in no historic properties affected.

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.

Bonita Springs River Park under the jurisdiction of the City of Bonita Springs and the Imperial Board Ramp under the jurisdiction of Lee County are the two Section 4(f) resources present in the study area. No impacts are anticipated to either facility. A Section 4(f) No Use Determination form is attached.

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

There are no other protected public 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.

Team ecologists used online resources and field surveys to determine whether protected species and habitat occur or have the potential to occur in the US 41 and Bonita Beach Road Study Area. The term protected species refers to those species that are protected by law regulation, or rule. Specifically, the term protected species refers to those species listed under the Endangered Species Act (ESA) of 1973, as amended; those species listed under Florida's Endangered and Threatened Species List, Chapter 68A-27, F.A.C.; or those species listed under the Preservation of Native Flora of Florida, Chapter 5B-40, F.A.C. Florida also affords protection to federally-listed species, thus all federally-listed species are also state listed, pursuant to Chapter 68A-27.003(b). The study area was also evaluated for the occurrence of Critical Habitat as defined by the ESA of 1973, as amended and 50 CFR Part 424. This analysis is consistent with the Protected Species and Habitat chapter of the PD&E Manual.

A total of 35 protected species have the potential to occur in the US 41 and Bonita Beach Road Study Area, according to the information obtained during the preliminary data collection. These include the 12 bird, one (1) insect, six (6) mammal, four (4) reptile, and 12 plant species shown on **Table 3** and on **Figure 10**. Ecologists determined a species' potential occurrence in the study area based on its habitat preferences and distributions, existing site conditions, historical data, and field survey results. The likelihood of occurrence was rated as no, low, moderate, high, or observed. Definitions for the likelihood of occurrence are provided below:

No - Species with a no likelihood of occurrence are those species that are known to occur in Lee County but have specialized habitat requirements that do not occur in the project area.

Low - Species with a low likelihood of occurrence are those species that are known to occur in Lee County, limited habitat occurs within the project site, but there are no known adjacent populations, limited dispersal abilities, and the species has not been observed or documented within the site.

Moderate - Species with a moderate likelihood of occurrence are those species that are known to occur in Lee County, for which suitable habitat occurs within the project site, but there are no positive indications to verify presence, and the species has not been observed in or documented within the site.

High - Species with a high likelihood of occurrence are those species that are known to occur in Lee County, are suspected in the project area based on the existence of suitable habitat within the project site, are known to occur adjacent to the site, or have been previously documented in the project vicinity.

Observed - the species has been observed during this evaluation.

Table 3: Protected Species with Potential to Occur in the US 41 and Bonita Beach Road Study Area

Scientific Name	Common Name	USFWS	FWC	FDACS	Potential Occurrence
Birds					
<i>Apelocoma coerulescens</i>	Florida scrub-jay	T	T		No
<i>Athene cunicularia floridana</i>	Florida burrowing owl		T		Low
<i>Calidris canutus rufa</i>	Rufa Red Knot	T	T		No
<i>Egretta caerulea</i>	Little blue heron		T		Observed
<i>Egretta rufescens</i>	Reddish egret		T		Moderate
<i>Egretta tricolor</i>	Tricolored heron		T		Observed
<i>Grus canadensis</i>	Florida sandhill crane		T		Moderate
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGEPA/MBTA	M		Observed
<i>Mycteria americana</i>	Wood stork	T	T		High
<i>Laterallus jamaicensis jamaicensis</i>	Eastern black rail	T	T		No
<i>Platalea ajaja</i>	Roseate spoonbill		T		Moderate
<i>Sternula antillarum</i>	Least tern		T		No
Insects					
<i>Danaus plexippus</i>	Monarch butterfly	C			Moderate
Mammals					
<i>Eumops floridanus</i>	Florida bonneted bat	E	E		Moderate
<i>Perimyotis subflavus</i>	Tricolored bat	C			Moderate
<i>Puma concolor coryi</i>	Florida Panther	E	E		Low
<i>Sciurus niger avicennia</i>	Big Cypress fox squirrel		T		Low
<i>Trichechus manatus</i>	West Indian manatee	T	T		No
<i>Ursus americanus floridanus</i>	Florida black bear		M		High
Reptiles					
<i>Crocodylus acutus</i>	American crocodile	T	T		No
<i>Drymarchon couperi</i>	Eastern indigo snake	T	T		Moderate
<i>Gopherus polyphemus</i>	Gopher tortoise		T		Burrows Observed
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake		T		Moderate
Plants					
<i>Andropogon arctatus</i>	Pinewoods bluestem			T	Low
<i>Calopogon multiflorus</i>	Many-flowered grass-pink			T	Low
<i>Chamaesyce cumulicola</i>	Sand-dune spurge			E	Low
<i>Deeringothamnus pulchellus</i>	Beautiful pawpaw	E			Low
<i>Harrisia aboriginum</i>	Aboriginal prickly-apple	E			Low
<i>Lechea cernua</i>	Nodding pinweed			T	Low
<i>Lechea divaricata</i>	Pine pinweed			E	Low
<i>Linum carteri var. smallii</i>	Small's flax			E	Low

<i>Nemastylis floridana</i>	Celestial lily			E	Low
<i>Nolina atopocarpa</i>	Florida beargrass			T	Low
<i>Pteroglossaspis ecristata</i>	Giant orchid			T	Low
<i>Stylisma abdita</i>	Scrub stylisma			E	Low

E = Endangered **T** = Threatened **C** = Candidate **M** = Managed **T/S** = Threatened due to Similarity of Appearance
BGEPA = Bald and Golden Eagle Protection Act **MBTA** = Migratory Bird Treaty Act
FDACS = Florida Department of Agriculture and Consumer Services
FWC = Florida Fish and Wildlife Conservation Commission
USFWS = United States Fish and Wildlife Service

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Figure 10 | Protected Species and Habitat Map

Federally Listed Species and Designated Critical Habitat

American Crocodile

The American crocodile is federally listed as threatened. It is one of two species of crocodylians in the United States; the other is the American alligator. The crocodile is distinguished from the alligator by its head shape and color. The crocodile's snout is narrower than the alligator's, and its lower teeth are visible when its mouth is shut. The crocodile is a brownish color whereas the alligator is a blackish color. The crocodile typically inhabits brackish or saltwater habitats, such as ponds, creeks, and coves within mangrove swamps. They are occasionally found inland in freshwater habitats, typically due to South Florida's canal system. Its nesting habitat includes sandy shorelines, raised marl creek banks next to deep water, and even man-made structures such as canal berms. The USFWS identified critical habitat for the crocodile in extreme south Florida, outside the project area.

Suitable habitat for the crocodile was not observed within the study area. No crocodiles were observed during the field survey. The project will not impact suitable crocodile habitat and no in-water work is proposed. Therefore, the proposed project will have "**no effect**" on the American crocodile.

Eastern Black Rail

The eastern black rail is listed by the USFWS as threatened due to habitat loss, destruction, and modification; sea level rise and tidal flooding, and incompatible land management. They are wetland-dependent birds and are primarily associated with herbaceous, persistent emergent plant cover (USFWS 2019). They require dense overhead perennial herbaceous cover with underlying moist to saturated soils with or adjacent to very shallow water (Flores and Eddelman 1995; Legare and Eddleman 2001; Haverland 2019).

No eastern black rails were observed during the field reviews and no suitable habitat was observed. Based on the best available information, there is no evidence that the eastern black rail occurs within the project area. According to Florida Natural Areas Inventory (FNAI), no individuals have been documented in the project area. As part of this project, wetland impacts will be mitigated to prevent loss of wetland functions and values. Based on this information, the proposed project is anticipated to have "**no effect**" on the eastern black rail.

Eastern Indigo Snake

The eastern indigo snake is a large, stout-bodied, shiny black snake with a red throat and chin. The eastern indigo snake is listed by the USFWS as threatened due to over-collecting for the pet trade as well as habitat loss and fragmentation (USFWS 1999) and is widely distributed throughout central and south Florida. They occur in a broad range of habitats, from scrub and sandhill to wet prairies and mangrove swamps. Indigo snakes are most closely associated with habitats occupied by gopher tortoises whose burrows provide refugia from cold or desiccating conditions (USFWS 1999).

Suitable habitat is present for the indigo snake within the study area. No indigo snakes were observed during the field reviews. Suitable habitat for the gopher tortoise was also observed within the study area. A 100% gopher tortoise survey was not conducted during this PD&E Study but will be required before construction activities commence. Multiple gopher tortoise burrows were observed during meandering pedestrian surveys in the project area. To address any potential effects to the eastern indigo snake, all potentially occupied gopher tortoise burrows within the limits of construction will be excavated and the Standard Protection Measures for the Indigo Snake (USFWS 2013; **Appendix E**) will be implemented during construction activities. According to the *Eastern Indigo Snake Effect Determination Key* (**Appendix F**), the proposed project will result in the following sequential determination: A>B>C>D>E = "**may affect, but is not likely to adversely affect**" the eastern indigo snake.

Florida Bonneted Bat

The entire study area is within the USFWS Florida bonneted bat consultation area (CA). The Florida bonneted bat is classified as endangered due to habitat loss, degradation, and modification, as well as other man-made and natural factors including a small population size with few colonies, restricted range, slow reproductivity, and low fecundity (USFWS 2013). It has short glossy fur consisting of bicolored hairs and large broad ears that project over the eyes and are joined at the midline of the head. The Florida bonneted bat is a subtropical species that does not hibernate and is active year-round. Habitat consists of relatively open areas that provide sources of prey and drinking water, including open fresh water, permanent or seasonal freshwater wetlands, wetland and upland forests, wetland and upland shrub, and agricultural areas. In urban areas, suitable foraging habitat can be found at golf courses, parking lots, and parks. Potential roosting habitats include forests or areas with tall or mature trees or other areas with potential roost structures, including utility poles and artificial roosts. This includes habitat in which suitable structural features for breeding and sheltering are present. Roosting habitat contains one or more of the following structures: tree snags, and trees with cavities, hollows, deformities, decay, crevices, or loose bark. The study area contains stormwater ponds, forested upland and wetland habitat, and wetlands associated with the Imperial River. There is proposed Critical Habitat for this species; however, the proposed project is not within the Critical Habitat.

A full acoustic survey and roost survey were conducted in October 2023 to determine Florida bonneted bat activity within the study corridor. The survey methodology was submitted and approved by the USFWS prior to the commencement of the surveys (**Appendix D of the NRE**). A supplemental survey methodology was developed based on the need to adjust proposed detector locations due to ongoing construction activities and access. This amended survey methodology was submitted and approved by USFWS (**Appendix D of the NRE**). Qualified ecologists with the required acoustic survey course training and experience conducted the acoustic and roost surveys. The acoustic survey was conducted from October 04 through October 10, 2023.

Based on the results of the roost and acoustic surveys, no evidence of roosting or foraging by the Florida bonneted bat within the project corridor was detected. No Florida bonneted bat calls were detected as a result of the acoustic survey. A **"No Effect"** determination was made utilizing the Florida Bonneted Bat Consultation Key (USFWS 2019). This effect determination was made using the following sequence from the key: **1a-2a-3b-6b**. The survey report is included in **Appendix G of the NRE**.

Florida Panther

The Florida panther is listed by the USFWS as endangered due to habitat loss and degradation. The project area is not within the USFWS Florida panther CA; however, according to the IPaC tool and ECOS, the project site is within the panther's range. Panthers require large blocks of mostly forested communities with a mosaic of habitats to utilize as resting and denning sites, hunting grounds, and travel corridors. Numerous factors influence panther home range size, including habitat quality, prey density, and landscape configuration (Belden 1988; Comiskey et al. 2002).

The proposed project is within the range of the Florida panther and approximately 3.5 miles from the primary habitat zone. Telemetry and roadkill data suggest they do not utilize the project corridor, with the nearest occurrences approximately three miles away near the I-75 corridor. The proposed project corridor lacks the habitats the panther requires to fulfill its life history requirements. No suitable habitat, individuals, or signs of habitat utilization were observed. Therefore, the proposed project will have **"no effect"** on the Florida panther.

Florida Scrub-Jay

The entire study area occurs within the USFWS Florida scrub-jay CA. The scrub-jay is classified as threatened due to habitat loss, degradation, and fragmentation (USFWS 1987). They are restricted to xeric scrub habitats with optimal

habitat consisting of fire-dominated, low-growing oak scrub found on well-drained sandy soils with patches of bare sandy soil.

The study area consists mostly of urban and built-up land uses. The natural areas present within the study area include wetland and upland habitats that do not contain the xeric scrub required by the Florida scrub-jay. According to FNAI and FWC's statewide occurrence data, there are no documented occurrences within the study area. No individuals or suitable scrub-jay habitat was observed within the project area. Due to the lack of suitable habitat, the proposed project will have "**no effect**" on the Florida scrub-jay.

Monarch Butterfly

The monarch butterfly is a candidate species proposed for federal listing. In many regions, monarchs breed year-round, including southern Florida. During the breeding season they lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.). Milkweed and flowering plants are needed for monarch habitat. No monarchs or milkweed was observed during the field reviews, however flowering plants and habitat suitable to support milkweed species was observed. Consultation with USFWS under Section 7 of the ESA is not required for candidate species, like the monarch. FDOT will continue consultation with the USFWS regarding the monarch butterfly listing status and potential impacts to this species during the design and permitting phase as needed.

Rufa Red Knot

The rufa red knot is listed as threatened due to the loss of breeding and nonbreeding habitat from sea level rise, coastal engineering/stabilization, coastal development, and arctic ecosystem change; reduced prey throughout the nonbreeding range; and increasing frequency and severity of asynchronies in the timing of annual migration relative to favorable food and weather conditions. Florida's central Gulf Coast is one of four wintering regions for the red knot. Coastal habitats used by this species include coastal marine and estuarine habitats with large areas of exposed intertidal sediments, including sparsely vegetated beaches, shoals, tidal or mud sand flats, or mangrove-dominated shorelines.

Habitats associated with the Imperial River may provide suitable habitat for wintering and migratory populations. However, these habitats are outside the project area and will not be impacted as a result of the Preferred Alternative. No individuals or suitable habitat was observed within the project area during the field reviews. As a result, the proposed project will have "**no effect**" on the rufa red knot.

Tricolored Bat

The tricolored bat is a candidate species proposed for federal listing. It is Florida's smallest bat and is distinguished by its unique tricolored fur and pink forearms that contrast their black wings. This wide-ranging species is found throughout the central and eastern United States and portions of Canada, Mexico, and Central America. Typically hibernating in caves and mines during the winter, tricolored bats in the southeastern U.S. have increased utilization of culverts as hibernacula, with shorter hibernation durations and increased winter activity. The tricolored bat is mostly associated with forested habitats and requires habitat suitable for roosting, foraging, and commuting between winter and summer habitats. Roosting singly or in small groups, the tricolored bat prefers to roost in caves, tree foliage, tree cavities, Spanish moss, and man-made structures such as buildings and culverts. They form summer colonies in forested habitats, utilizing cavities, bark, and foliage. They forage most commonly over watercourses and along forest edges.

Suitable roosting and foraging habitats are present within the project limits. Acoustic and roost surveys were conducted in October 2023 in accordance with the Florida bonneted bat survey guidelines. No tricolored bat calls were identified as a result of the acoustic survey. No evidence of bat roosts was observed. FDOT will continue consultation with the USFWS regarding the tricolored bat listing status and potential impacts to this species during the design and permitting phase as

needed. If the listing status of the tricolored bat is elevated by USFWS to threatened or endangered and the proposed project site is located within the consultation area during the design and permitting phase of the proposed project, During the design phase, FDOT will confirm the listing status of the tri-colored bat and, if necessary, reevaluate it's effect determination and the need for further coordination

West Indian Manatee

The West Indian manatee is a large, aquatic mammal distributed from the southern United States through the Caribbean Islands, Central America, and to northern South America. In the United States, the Florida manatee (a sub-species of the West Indian manatee) inhabits Florida's coastal waters, rivers, and springs, where they graze on seagrasses and other aquatic plants. The manatee is federally listed as threatened due to habitat loss, degradation, and fragmentation; watercraft collisions; loss of winter warm-water habitat; and poaching.

The study area is located approximately 0.5 miles outside of the USFWS CA for the manatee. The Imperial River, which is located outside of the study area adjacent to the northern limits, is designated critical habitat for the West Indian manatee. While manatee observations and mortality are documented in the Imperial River, no occurrences have been documented within the study area according to FWC manatee synoptic survey data. Critical habitat for the manatee will not be impacted by the proposed project. The project is not located in waters accessible to manatees and will not directly or indirectly affect manatees. Therefore, the proposed project will have **"no effect"** on the West Indian manatee

Wood Stork

The wood stork is listed by the USFWS as threatened due to a reduction in food attributed to the loss of suitable foraging habitat (SFH). Wood storks are associated with freshwater and estuarine wetlands that are used for nesting, roosting, and foraging. Nesting typically occurs in medium to tall trees that occur in stands located in swamps or islands surrounded by open water (Ogden 1991; Rogers et al. 1996). Because of their specialized feeding behavior, they forage most effectively on shallow water with highly concentrated prey. The USFWS defines SFH for the wood stork as shallow open-water areas that are relatively calm and have a permanent or seasonal water depth between two to fifteen inches. SFH includes freshwater marshes, swamps, lagoons, tidal creeks and pools, ponds, ditches, and flooded pastures.

According to the USFWS South Florida Ecological Service Office, the habitats within 18.6 miles of a wood stork breeding colony are considered to be wood stork Core Foraging Areas (CFAs). The proposed project site is within the core foraging area (CFA) of one wood stork colony: the Corkscrew colony. SFH is limited to the littoral edge of existing stormwater ponds and roadside ditches. The proposed project will impact approximately 0.49 acres of SFH. This acreage was calculated based on direct impacts to surface waters and herbaceous wetlands which provide SFH for wood storks. According to the *South Florida Programmatic Concurrence Key for the Wood Stork* (USFWS 2010) (**Appendix H of the NRE**), the proposed project will result in the following sequential determination: A>B = **"may affect, but is not likely to adversely affect"** the wood stork. Based on the current design, the project will impact less than five acres of wetlands, and therefore, a foraging prey base analysis is not required. SFH will be restored in the post-construction condition with the construction of two new ponds and expansion of the existing FDOT pond. This will result in no net loss of SFH and therefore, the project will have no adverse impact on the wood stork. The final impacts will be calculated during the design phase and any mitigation will adhere to the requirements of the U.S. Army Corps of Engineers (USACE) and USFWS Effect Determination Key.

Federally Protected Plants

According to the FNAI and USFWS, two (2) federally protected plants have the potential to occur within the study area in **Table 3**. These species are listed as endangered and include beautiful pawpaw and aboriginal prickly-apple. Beautiful pawpaw occurs in slash pine woods on sandy substrates in Charlotte, Lee, and Orange counties, while aboriginal prickly-

apple inhabits coastal hammock strands that have become uncommon in many coastal areas of central and south Florida due to clearing for development. Limited habitat occurs within the project footprint. Due to the development within and adjacent to the study area, these species are unlikely to occur within the project area. Ecologists did not observe federally protected plants during field surveys. The FNAI database listed no Elemental Occurrences of protected plants within the study area. The proposed project will have "**no effect**" on federally listed plants.

Critical Habitat

No Critical Habitat designated for listed species occurs within the US 41 and Bonita Beach Road Study Area. The Imperial River, located north of the project area, is designated Critical Habitat for the West Indian manatee; however, this Critical Habitat area is located entirely outside of the study area and will not be impacted by project activities. Therefore, no destruction or adverse modification will occur.

State Listed Species

Big Cypress Fox Squirrel

The Big Cypress fox squirrel is listed by the FWC as threatened due to the loss, degradation, and fragmentation of their habitat and lack of regulatory protection. They are endemic to Florida and geographically restricted to southwest Florida. Optimal habitat requires trees for nesting, year-round food, and an open understory. Big Cypress fox squirrels build their nests almost exclusively in bald cypress trees, and occasionally in cabbage palm or slash pine.

The preferred pond alternatives will impact forested wetlands and pinelands. The forested wetlands within the proposed alternative are dominated by invasive exotic plant species with minimal cypress and are thus considered low-quality habitat for fox squirrels. Suitable habitat was observed within the proposed pond site located near the eastern terminus of the project. No fox squirrels were observed during the field reviews. Due to the limited suitable and low quality habitat within the project area, "**no adverse effect is anticipated**" for the Big Cypress fox squirrel.

Florida Burrowing Owl

The FWC listed the Florida burrowing owl as threatened due to loss of native habitat, dependence on altered habitat, and lack of regulatory protections (FWC 2013a). The burrowing owl is a non-migratory, year-round breeding resident of Florida, and maintains home ranges and territories while nesting. Burrowing owls inhabit upland areas that are sparsely vegetated. Natural habitats include dry prairie and sandhill, but they will make use of ruderal areas such as pastures, airports, parks, and road rights-of-way because much of their native habitat has been altered or converted to other uses.

Limited suitable habitat was observed within the study area. No burrowing owls were observed during general wildlife surveys or species-specific surveys. Burrowing owls usually dig their own burrows but are known to utilize gopher tortoise burrows and armadillo burrows as well. Gopher tortoise burrows and mammal burrows were observed within the site. Pre-construction surveys will be conducted to adhere to the components of the Imperiled Species Management Plan (ISMP) and permitting guidelines and the necessary FWC coordination and permitting will be required if burrows are found prior to construction; therefore, "**no adverse effect is anticipated**" for the burrowing owl resulting from the proposed project.

Florida Pine Snake

The Florida pine snake is listed by the FWC as threatened due to habitat loss, fragmentation, and degradation to upland habitats from development and fire suppression (FWC 2013b). They inhabit areas that feature well-drained sandy soils with a moderate to open canopy (Franz 1992; Ernst and Ernst 2003). Preferred habitats include sandhill and former sandhill, including old fields and pastures, sand pine scrub, and scrubby flatwoods. The pine snake often coexists with gopher tortoises and pocket gophers, spending the majority of its time underground.

No pine snakes were observed during the field surveys. Suitable habitat was observed within the site. Gopher tortoise burrows and mammal burrows were observed within the site. A 100% gopher tortoise survey will be conducted prior to construction and gopher tortoise burrows within the construction limits will be excavated. Current FWC guidelines for the relocation of the Florida pine snake state that any incidentally captured pine snake should be released on-site or allowed to escape unharmed if habitat will remain post-development. Based on existing conservation measures, "**no adverse effect is anticipated**" for the Florida pine snake resulting from the proposed project.

Florida Sandhill Crane

The FWC listed the Florida sandhill crane as threatened due to the loss and degradation of nesting and foraging habitat from development and hydrologic alteration to their potential nesting habitat (FWC 2013c). The Florida sandhill crane is a heavy-bodied gray bird, with a long neck and long legs. It is widely distributed throughout most of peninsular Florida. Sandhill cranes rely on shallow marshes for roosting and nesting and open upland and wetland habitats for foraging (Wood and Nesbitt 2001).

No sandhill cranes were observed during field surveys. Suitable foraging habitat was observed; however, no nesting habitat was observed within the study area. Due to lack of suitable nesting habitat within the project limits, "**no adverse effect is anticipated**" for the Florida sandhill crane resulting from the proposed project.

Gopher Tortoise

The gopher tortoise is listed as threatened by the FWC. They occur in the southeastern Coastal Plain from Louisiana to South Carolina; the largest portion of the population is located in Florida (FWC 2012). Gopher tortoises require well-drained, sandy soils for burrowing and nest construction, with a generally open canopy and an abundance of herbaceous groundcover, particularly broadleaf grasses, wiregrass, legumes and fruits for foraging. Gopher tortoises can be found in most types of upland communities including disturbed areas and pastures.

There are upland areas within and adjacent to the project limits that provide suitable habitat for tortoises. No gopher tortoises were observed; however, 12 potentially occupied gopher tortoise burrows were observed during the field survey. A 100% gopher tortoise survey was not conducted, but a survey will be performed prior to construction. A relocation permit may be necessary from the FWC if tortoises are present within any permanent or temporary construction area. Mitigation contributions for the gopher tortoise will be calculated and provided to FWC during the gopher tortoise permitting process. Based on the information provided above, "**no adverse effect is anticipated**" for the gopher tortoise as a result of the proposed project.

Imperiled Wading Birds

Four wading birds have the potential to occur in the study area. These species are the little blue heron, reddish egret, roseate spoonbill, and tricolored heron. All are listed by the FWC as threatened due to the loss and degradation of habitat, particularly from hydrologic alterations to their essential foraging areas (FWC 2013e). Little blue herons, roseate spoonbills, and tricolored herons are widely distributed throughout peninsular Florida. Reddish egrets are found almost exclusively in coastal areas (Greenlaw 2014). Wading birds depend on healthy wetlands and vegetated areas suitable for resting and breeding which are near foraging areas (FWC 2013e). They forage in freshwater, brackish, and saltwater habitats. They tend to nest in multi-species colonies of a variety of woody vegetation types including cypress, willow, maple, black mangrove, and cabbage palm (FNAI 2001).

Little blue herons and tricolored herons were observed within the project area during field reviews. These observations include flyovers and foraging in stormwater ponds. No suitable nesting habitat for wading birds was observed within or

adjacent to the site. Foraging habitat is limited and includes roadside ditches and the littoral edges of existing stormwater ponds. No nesting activity was observed within the project area, and there is no evidence that nesting occurs within the project site. According to the FWC Wading Bird Rookery Data, the nearest rookery is approximately 4.7 miles northwest of the project site. Based on the information provided, **"no adverse effect is anticipated"** for wading birds resulting from the proposed project.

Least Tern

The least tern is listed as threatened by FWC and is the smallest tern in North America. They are distributed along the Atlantic Coast of the United States, mid-Atlantic states, and down from Mexico to northern Argentina. They inhabit areas along the coasts of Florida, including estuaries and bays. Nesting occurs in colonies from one to several hundred pairs and may often be collocated with other seabirds like black skimmers. Nesting can occur in freshly disturbed areas that have had the removal of beach material, dumping of dredge sand, or clearing and scraping existing sand. Least terns also can nest in areas of gravel. Least terns typically nest between the middle of April and the beginning of May.

According to the FWC's ShoreMapper for imperiled beach-nesting birds, the project is not within a recent breeding site, critical brood-rearing site, or a critical roosting site for least tern. Suitable nesting habitat for the least tern is not present within the study area. No individuals were observed during field reviews.

Therefore, as a result of the proposed project, **"no effect is anticipated"** for the least tern.

State Listed Plants

Through regulation by the FDACS Division of Plant Industry, Florida protects plant species native to the state that are endangered, threatened, or commercially exploited. The Florida Regulated Plant Index includes all plants listed as endangered, threatened, or commercially exploited as defined in Chapter 5B-40.0055, F.A.C. According to the FNAI and FDACS, 10 state protected plant species have the potential to occur in Lee County (**Table 3**). State threatened plant species include the pinewoods bluestem, many-flowered grass-pink, nodding pinweed, Florida beargrass, and giant orchid. Endangered plants with potential to occur in Lee County include sand-dune spurge, pine pinweed, Small's flax, celestial lily, and scrub stylisma. However, the FNAI database listed no Elemental Occurrences of protected plants within the study area. Habitat for these state-listed plant species is limited within the study area, and particularly within the project limits. Ecologists did not observe state listed plants during the field surveys. Additional surveys for listed plant species will be conducted during design and permitting. **"No effect is anticipated"** for state listed plant species resulting from the proposed project.

Other Protected Species or Habitats

Bald Eagle

The bald eagle was removed from the ESA in 2007 and Florida's Endangered and Threatened Species list in 2008; however, it remains protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The bald eagle is a member of the Accipitridae family. Bald eagles tend to nest in the tops of very tall trees that provide unobstructed lines of sight to nearby habitats, particularly lakes and other open waters. Because eagles are piscivorous (fish-eating) raptors, nearly all eagles' nests occur within 1.8 miles of water (Wood et al. 1989).

Suitable habitat for the bald eagle was observed throughout the study area. Two bald eagles were observed during the field reviews. According to FWC's Eagle Nest locator and the Audubon Florida EagleWatch Nest website (EagleWatch), there are five (5) nests identified within and adjacent to the study area. Three (3) of these nests (LE050, LE050b, and LE097a) have been documented as destroyed by EagleWatch, and their absence was confirmed in the field. Nest LE050a

was documented as "inactive" for the 2023 breeding season and could not be located during the October 2023 field reviews. Construction activities associated with the Angler's Paradise development are currently underway within the 660-foot buffer of this nest's previously documented location. Nest LE097 was observed, and the two eagles observed in the field were perched in a pine near this nest. No other bald eagle nests were identified in the field. The proposed activities are outside of the 660-foot buffer of eagle nest LE097, and the project will therefore have no impact on bald eagles.

Florida Black Bear

The Florida black bear was removed from Florida's Endangered and Threatened Species list in 2012; however, it remains protected under Chapter 68A-4.009 F.A.C., the Florida Black Bear Conservation Plan. The project area is within the abundant range of the South Bear Management Unit (BMU). The black bear requires large amounts of space for its home range and a variety of forested habitats, including flatwoods, swamps, scrub oak ridges, bayheads, and hammocks. Self-sustaining populations of bears are generally found on large tracks of contiguous forests with understories of berry producing shrubs or trees.

According to the most recent FWC data, three recent bear calls have occurred within the study area. These calls occurred in June and July of 2018. The project area is highly developed and does not provide suitable habitat or connectivity to suitable habitat. The proposed project will have no impact on the Florida black bear. No further coordination with FWC will be required.

Strategic Habitat Conservation Areas

Strategic Habitat Conservation Areas (SHCA) are lands in need of protection to maintain natural communities and viable populations of many species that are indicators of the state's biological diversity. In 1994, FWC biologists completed a project entitled Closing the Gaps in Florida's Wildlife Habitat Conservation System (Cox et al. 1994), which assessed the security of rare and imperiled species on existing conservation lands in Florida. This research identified important habitat areas in Florida with no conservation protection. These SHCA serve as a foundation for conservation planning for species protection through habitat conservation. No SHCA occurs within the study area. **Table 4** provides information on the Effect Determinations for listed species.

Table 4: Effect Determinations for Listed Species

Scientific Name	Common Name	Status	Effect Determination
Birds			
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	FT	NO EFFECT
<i>Athene cunicularia floridana</i>	Florida burrowing owl	ST	NAEA
<i>Calidris canutus rufa</i>	Rufa Red Knot	FT	NO EFFECT
<i>Egretta caerulea</i>	Little blue heron	ST	NAEA
<i>Egretta rufescens</i>	Reddish egret	ST	NAEA
<i>Egretta tricolor</i>	Tricolored heron	ST	NAEA
<i>Grus canadensis</i>	Florida sandhill crane	ST	NAEA
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGEPA/MBTA	N/A
<i>Mycteria americana</i>	Wood stork	FT	MANLAA
<i>Laterallus jamaicensis jamaicensis</i>	Eastern black rail	FT	NO EFFECT
<i>Platalea ajaja</i>	Roseate spoonbill	ST	NAEA

<i>Sternula antillarum</i>	Least tern	ST	NAEA
Insects			
<i>Danaus plexippus</i>	Monarch butterfly	C	N/A
Mammals			
<i>Eumops floridanus</i>	Florida bonneted bat	FE	NO EFFECT
<i>Perimyotis subflavus</i>	Tricolored bat	C	N/A
<i>Puma concolor coryi</i>	Florida panther	FE	NO EFFECT
<i>Sciurus niger avicennia</i>	Big Cypress fox squirrel	ST	NAEA
<i>Trichechus manatus</i>	West Indian manatee	FT	NO EFFECT
<i>Ursus americanus floridanus</i>	Florida black bear	M	N/A
Reptiles			
<i>Crocodylus acutus</i>	American crocodile	FT	NO EFFECT
<i>Drymarchon couperi</i>	Eastern indigo snake	FT	MANLAA
<i>Gopherus polyphemus</i>	Gopher tortoise	ST	NAEA
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	ST	NAEA
Plants			
<i>Andropogon arctatus</i>	Pinewoods bluestem	ST	NEA
<i>Calopogon multiflorus</i>	Many-flowered grass-pink	ST	NEA
<i>Chamaesyce cumulicola</i>	Sand-dune spurge	SE	NEA
<i>Deeringothamnus pulchellus</i>	Beautiful pawpaw	FE	NO EFFECT
<i>Harrisia aboriginum</i>	Aboriginal prickly-apple	FE	NO EFFECT
<i>Lechea cernua</i>	Nodding pinweed	ST	NEA
<i>Lechea divaricata</i>	Pine pinweed	SE	NEA
<i>Linum carteri var. smallii</i>	Small's flax	SE	NEA
<i>Nemastylis floridana</i>	Celestial lily	SE	NEA
<i>Nolina atopocarpa</i>	Florida beargrass	ST	NEA
<i>Pteroglossaspis ecristata</i>	Giant orchid	ST	NEA
<i>Stylisma abdita</i>	Scrub stylisma	SE	NEA
<p>MANLAA = May Affect, Not Likely to Adversely Affect NAEA = No Adverse Effect Anticipated NEA = No Effect Anticipated</p> <p>FE = Federally Endangered FT = Federally Threatened</p> <p>SE = State Endangered ST = State Threatened C = Candidate M = Managed</p> <p>BGEPA = Bald and Golden Eagle Protection Act MBTA = Migratory Bird Treaty Act</p>			

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.

Team ecologists performed a wetland evaluation of the study area. The wetland evaluation relied on literature reviews and field surveys to identify the location, extent, and functional value of wetlands in the study area; the potential direct, indirect, or cumulative effects of the project's actions to those wetlands; and available mitigation options to satisfy permit requirements from regulatory agencies. This wetland evaluation was performed in accordance with the Presidential Executive Order (EO) 11990 ("Protection of Wetlands"); U.S. Department of Transportation Order 5560.1A ("Preservation

of Nation's Wetlands"); Federal Highway Administration Technical Advisory T6640.8A regarding the preparation of environmental documents; and the *Wetlands and Other Surface Waters* chapter of the FDOT's PD&E Manual.

Wetlands and other surface waters with potential to be affected by the proposed project were identified within the study area are shown in **Figure 11**. The following section includes a brief description of each wetland type and other surface water within the study area. **Table 5** provides details identifying each wetland and surface water including number, Florida Land Use, Cover, and Forms Classification System (FLUCFCS) and National Wetland Inventory (NWI) classification, and a brief description. FLUCFCS classifications are based on the results of the data analysis and field reviews of the study area. NWI classifications were not altered and are based on the listed classification of the nearest NWI wetland system as applicable.

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Figure 11 | Wetlands and Surface Waters

Table 5: Other Surface Waters in the US 41 and Bonita Beach Road Study Area

Surface Water ID	FLUCFCS Classification	NWI Classification	Description
WL 1	630	PFO4/1A	Wetland Forested Mixed
WL 2	617	PFO3/2C	Mixed Wetland Hardwoods
WL 3	612/625	PSS4A, PFO4A, PSS1/EM1R, E2SS3N	Mangrove Swamps/Hydric Pine Flatwoods
WL 4	612	E2SS3N, E2EM1P	Mangrove Swamps
SW 1	510	N/A	Streams and Waterways
SW 2	510	N/A	Streams and Waterways
SW 3	510	PUBHx	Streams and Waterways
SW 4	510	N/A	Streams and Waterways
SW 5	530	PUBHx	Reservoirs
SW 6	530	PUBHx	Reservoirs
SW 7	510	N/A	Streams and Waterways
SW 8	510	N/A	Streams and Waterways
SW 9	530	N/A	Reservoirs
SW 10	510	N/A	Streams and Waterways

Mangrove Swamps

FLUCFCS: 612

NWI: PSS4A, PFO4A, PSS1/EM1R, E2SS3N, E2EM1P

Wetlands: WL 3, WL 4

Mangrove swamps are communities of coastal hardwoods dominated by mangroves. These areas are found at the northern terminus of the project on both the east and west sides of US 41. Species observed in these communities include red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), Brazilian pepper (*Schinus terebinthifolia*), cabbage palm (*Sabal palmetto*), and salt bush (*Baccharis halimifolia*). The proposed project will have no impacts to WL 3 and WL 4.

Mixed Wetland Hardwoods

FLUCFCS: 617

NWI: PFO3/2C

Wetlands: WL 2

Mixed wetland hardwood habitat is located in the northeastern quadrant of the US 41 and Bonita Beach Road intersection, north of the proposed pond site. This habitat consists of hardwood species with cabbage palm, slash pine (*Pinus elliotti*), Australian pine (*Casuarina equisetifolia*), and Brazilian pepper encroachment. The proposed project will have no impacts to WL 2.

Hydric Pine Flatwoods

FLUCFCS: 625

NWI: PSS4A, PFO4A

WL 3

Hydric Pine Flatwoods are located at the project's northern terminus, east of US 41. This habitat type is associated with the Imperial River and makes up a portion of WL 3. This canopy consists of slash pine and cabbage palm. Understory and groundcover species include Brazilian pepper, elderberry (*Sambucus nigra*), Carolina willow (*Salix caroliniana*), Peruvian primrose willow (*Ludwigia peruviana*), wax myrtle (*Morella cerifera*), rush Fuirena (*Fuirena scirpoidea*), and swamp fern. No impacts to WL 3 are anticipated as a result of the proposed project.

Wetland Forested Mixed

FLUCFCS: 630

NWI: PFO4/1A

Wetlands: WL 1

Wetland Forested Mixed wetlands contain communities in which neither hardwoods nor conifers achieve 66 percent canopy composition. WL 1 occurs east of US 41, and is adjacent to the western edge of the existing FDOT pond. Observed canopy vegetation includes slash pine, cabbage palm, melaleuca (*Melaleuca quinquenervia*), laurel oak (*Quercus laurifolia*), Australian pine, and earleaf acacia (*Acacia auriculiformis*). Understory and groundcover species include Brazilian pepper, Carolina willow, Peruvian primrose willow, and swamp fern (*Telmatoblechnum serrulatum*). Direct impacts to WL 1 are 3.21 acres.

Streams and Waterways

FLUCFCS: 510

NWI: PUBHx

Surface Waters: SW 1, SW 2, SW 3, SW 4, SW 7, SW 8, SW 10

Streams and waterways include rivers, creeks, canals, and other linear bodies of water. The surface waters within the study area consist of canals and roadside ditches. These ditches generally contain standing water during the rainy season and are shallow or dry during the dry season. Many of these systems support hydrophytic vegetation. Typical vegetation observed in these surface waters includes duck potato (*Sagittaria latifolia*), pickerelweed (*Pontederia cordata*), frog's bit (*Limnobium spongia*), and Carolina willow. Total impacts to these surface waters are approximately 0.42 acres. Mitigation is not required for impacts to these upland cut ditches pursuant to Subsection 10.2.2.2 of the Applicant's Handbook, Volume 1. SW 4 was identified as part of this study. However, SW 4 is located within the City's Northwest Quadrant Roadway proposed alignment and is not within the limits of the US 41 and Bonita Beach Road Preferred Alternative. No impacts to SW 4 will result from the Preferred Alternative. The northern extent of SW 8 is wetland cut. Direct impacts resulting in 0.02 acres of impacts to the wetland cut portion of this ditch were included in the functional loss detailed in **Table 6** below.

Reservoirs

FLUCFCS 530

NWI: PUBHx N/A

Surface Waters: SW 5, SW 6, SW 9, SW 11

Reservoirs are artificial impoundments of water used for irrigation, flood control, and municipal and rural water supplies. SW 5 and SW 6 are located on either side of US 41 north of the US 41 and Bonita Beach Road intersection. SW 9 is located within one of the proposed pond sites. These surface waters are permitted stormwater ponds. SW 11 was identified as part of this study. However, SW 11 is located within the City's Northwest Quadrant Roadway proposed alignment and is not within the limits of the US 41 and Bonita Beach Road Preferred Alternative. No impacts to SW 11 will result from the Preferred Alternative. SW 9 will be expanded by the proposed project and incur approximately 0.40 acres of impacts from the proposed roadway construction. Impacts to SW 6 are approximately 0.07 acres. No impacts to SW 5 and SW 11 are anticipated.

Wetland and Surface Water Impacts

Data collected during the literature review, previous permit history, and field survey were used to evaluate the potential adverse direct and secondary impacts of the project to wetlands and the potential cumulative impacts to those wetlands and surface waters in the project limits. Practicable measures to avoid or minimize impacts to wetlands and surface waters were considered during the US 41 Study. Any unavoidable adverse impacts will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and U.S.C. 1344. **Table 6** details the proposed wetland and surface water impacts.

Table 6: Proposed Wetland and Other Surface Water Impacts

ID	FLUCFCS	Description	Type	Direct Impact (ac)
WL 1	630	Wetland Forested Mixed	Pond North	3.21
*SW 1	510	Streams and Waterways	ROW	0.14
*SW 3	510	Streams and Waterways	ROW	0.14
*SW 6	530	Reservoirs	ROW	0.07
*SW 7	510	Streams and Waterways	ROW	0.10
SW 8	510	Streams and Waterways	ROW	0.02
	510	Streams and Waterways (wetland cut ditch)	Pond North	0.02
*SW 9	530	Reservoirs	ROW	0.40
Total Proposed Impacts				4.10 acres
Total Impacts Included in UMAM				3.23 acres
* No mitigation required for upland cut ditches and reservoirs				

Wetland Impacts

The Preferred Alternative will result in 3.21 acres of direct impacts to wetlands and 0.89 acres of direct impacts to other surface waters, including permitted stormwater ponds and upland cut roadside ditches. Final direct impacts will be determined during design and permitting and will be assessed accordingly. No secondary impacts are anticipated as a result of the proposed project. Cumulative impacts can result from incremental but collectively significant impacts within the basin over time. In order to provide reasonable assurances that the project will not cause unacceptable cumulative impacts, mitigation will be provided from within the same drainage basin as the anticipated impacts or the project will utilize a regional mitigation plan pursuant to Section 373.4137, F.S.

The project was designed to avoid and minimize impacts to wetlands, other surface waters, and protected species habitat to the greatest extent practicable. This was accomplished by utilizing the existing right-of-way and stormwater ponds when practicable. Complete avoidance of impacts was not feasible due to the nature of the intersection improvement project and the occurrence of wetland habitats immediately adjacent to the proposed project, including proposed pond sites.

Wetland Assessment

Wetlands and other surface waters (OSWs) with potential to be affected by the proposed project were identified within the US 41 and Bonita Beach Road Study Area. The wetland assessment was conducted in accordance with the UMAM, as described in Chapter 62-345, F.A.C. The UMAM is the state-wide methodology for determining the functional value provided by wetlands and other surface waters and the amount of mitigation required to offset adverse impacts to those areas for regulatory permits. The 0.47 acres of impacted OSWs are considered upland cut components of the existing manmade drainage system; and therefore, these OSWs were not included in the wetland assessment as mitigation is not anticipated pursuant to Subsection 10.2.2.2 of the Applicant's Handbook, Volume 2. Under this subsection, wetland mitigation is not required for impacts to drainage ditches that were constructed in uplands and do not provide significant habitat for threatened and endangered species and were not constructed to divert natural stream flow. The results of the UMAM assessment are provided in **Table 7**. UMAM summary sheets can be found in Appendix I of the NRE. These values may be refined during the design and permitting phases of the project.

Table 7: Proposed Functional Loss

Wetland ID	Wetland Type	Impact Type	LLS	WE	CS	Impact Area (ac)	Functional Loss
WL 1	630	Forested	5	5	4	3.21	1.498
SW 8	510	Surface Water	3	3	3	0.02	0.006
Total						3.23	1.504

LLS = Location and Landscape Support **WE** = Water Environment **CS** = Community Structure

Conceptual Mitigation

Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and U.S.C. 1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements.

The study area is within the Estero Bay and West Collier regulatory basins. Freshwater forested credits are available from Corkscrew Regional Mitigation Bank and Little Pine Island Mitigation Bank to cover the anticipated mitigation credits needed for the proposed wetland impacts.

5.3 Essential Fish Habitat (EFH)

This project has been coordinated with NMFS and there is no involvement with, or adverse effect on Essential Fish Habitat; therefore, Essential Fish Habitat consultation and preparation of an Essential Fish Habitat Assessment are not required.

The National Marine Fisheries Service (NMFS) is the regulatory agency responsible for the nation's living marine resources and their habitats, including essential fish habitat (EFH). This authority is designated by the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended. The MSFCMA defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S.C. 1802(10)).

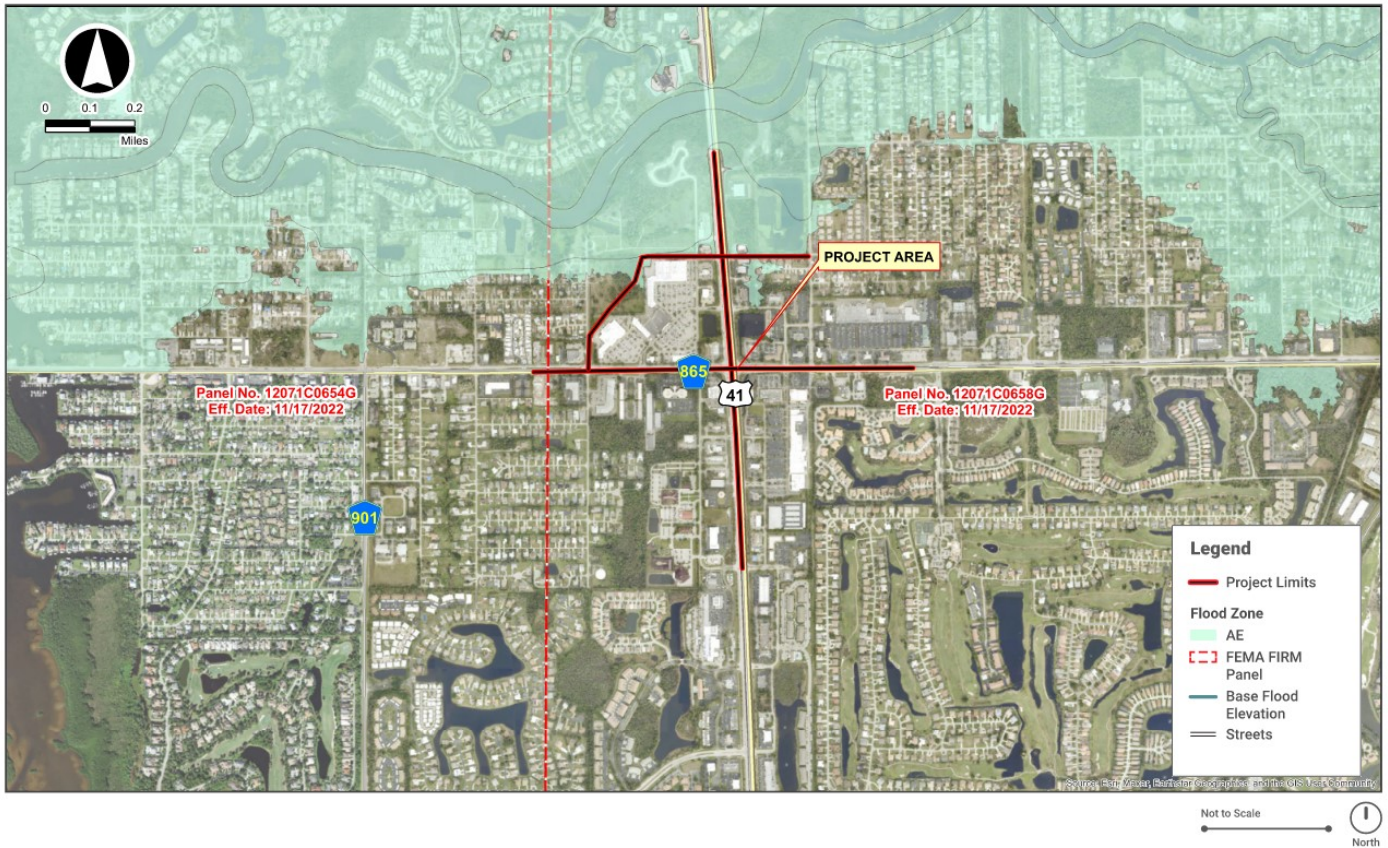
In accordance with the MSFCMA, Section 7 of the ESA, and Part 2, Chapter 17, Essential Fish Habitat, of the FDOT's PD&E Manual, the US 41 and Bonita Beach Road Study Area was evaluated for potential EFH. According to their ETDM Summary Report No. 6291, dated January 18, 2020, NMFS staff did not indicate that the project will impact EFH. It was noted that the Imperial River, which is located adjacent to the study area, drains to Little Hickory Bay and Fish Trap Bay.

The mouth of the Imperial River, Little Hickory Bay, and Fish Trap Bay contain estuarine habitat used by federal managed species and their prey. Best management practices will be utilized during project activities to prevent impacts to proximate estuarine habitats.

5.4 Floodplains

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

The Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) for Lee County (Map No. 12071C0658G) dated November 17, 2022 indicates that portions of the study area are within Zone AE floodplains (Flood EI. 10.0 feet NAVD and EI. 9.00 feet NAVD). The floodplain area within the study limits is tidally influenced and will not require compensation for impacts anticipated from the proposed study per coordination with South Florida Water Management District (SFWMD). The project will impact approximately 8.20 ac-ft of floodplain based on the proposed improvements to the US 41 and Bonita Beach Road intersection and for the proposed quadrant roadways. The Imperial River is considered a regulatory FEMA floodway; however, the proposed improvements considered for this study will not impact the roadway or bridge at the river. The project will result in an insignificant change in the capacity to carry floodwater. This change will cause minimal increases in flood heights and flood limits. The proposed structures should be hydraulically equivalent to or greater than the existing structures, and backwater surface elevations are not expected to increase. As a result, the project will not affect existing flood heights or floodplain limits. This project will not result in any new or increased adverse environmental impacts. There will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that these encroachments are not significant. The FEMA floodplain map is shown in **Figure 12**.



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Figure 12 | FEMA Floodplains Map

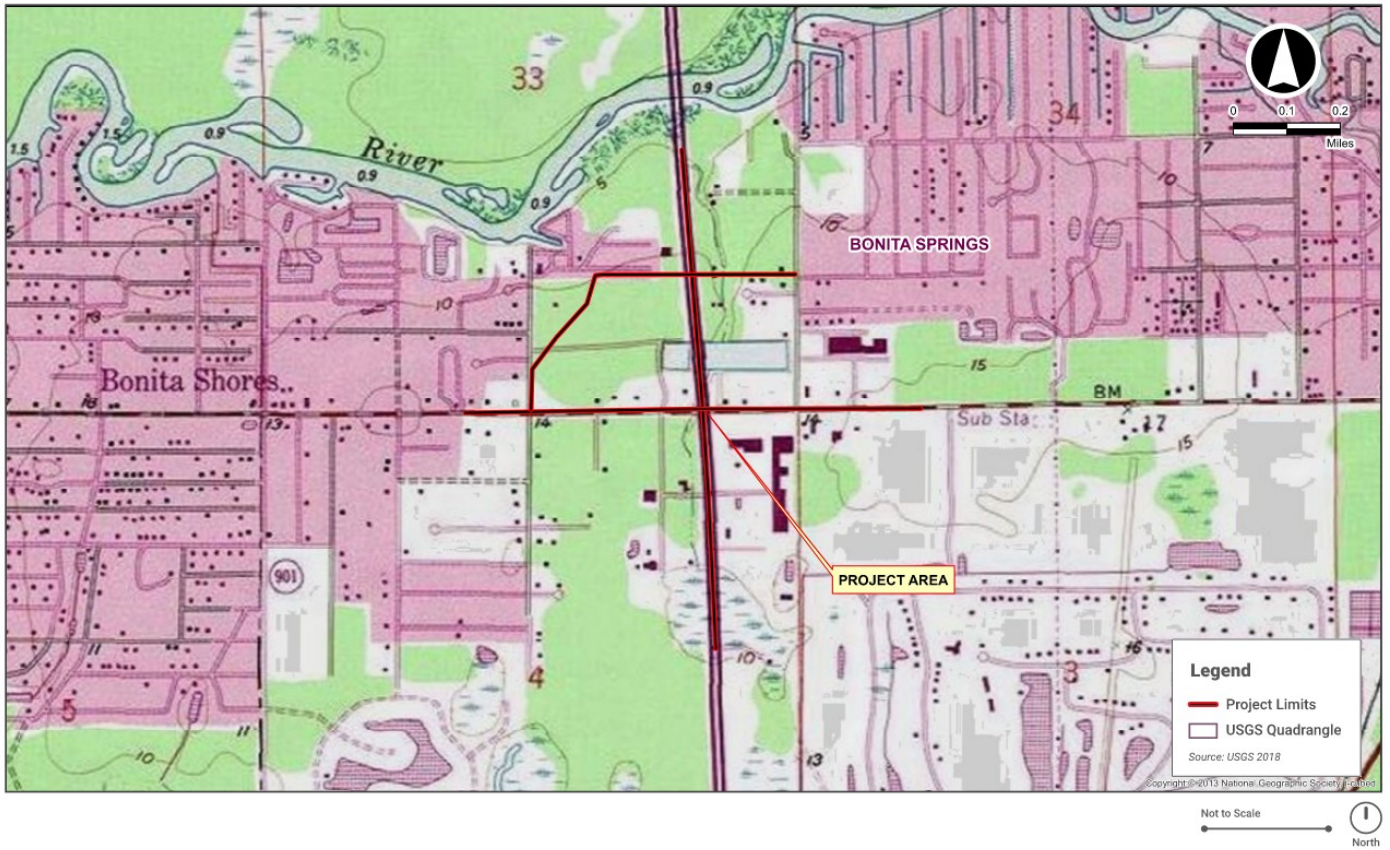
5.5 Sole Source Aquifer

There is no Sole Source Aquifer associated with this project.

5.6 Water Resources

Proposed ponds (wet detention and dry retention) and linear swale systems will provide water quality treatment and water quantity attenuation for the project, following guidelines by SFWMD. The proposed stormwater systems will provide a total of 16.84 ac-ft of treatment and attenuation volume, more than the 16.55 ac-ft of the required treatment and attenuation volume. The project is located in the Estero Bay Watershed and just south of the Imperial River, Waterbody ID (WBID) 3258EB - Imperial River (Marine Segment), an Outstanding Florida Water (OFW) and the project's ultimate outfall. Please refer to **Figure 13** for the USGS Quadrangle Map and **Figure 14** for the WBID Map. The Imperial River has a Total Maximum Daily Load (TMDL) for Dissolved Oxygen (DO) and Total Nitrogen (TN) meaning nutrient loading analysis will be required. Basins discharging to an OFW will provide an additional 50% water quality treatment volume. All analysis was performed using BMPTRAINS 2020 software, developed by the University of Central Florida Stormwater Management Academy. All of the recommended pond sites showed a reduction in Phosphorus and Nitrogen loadings

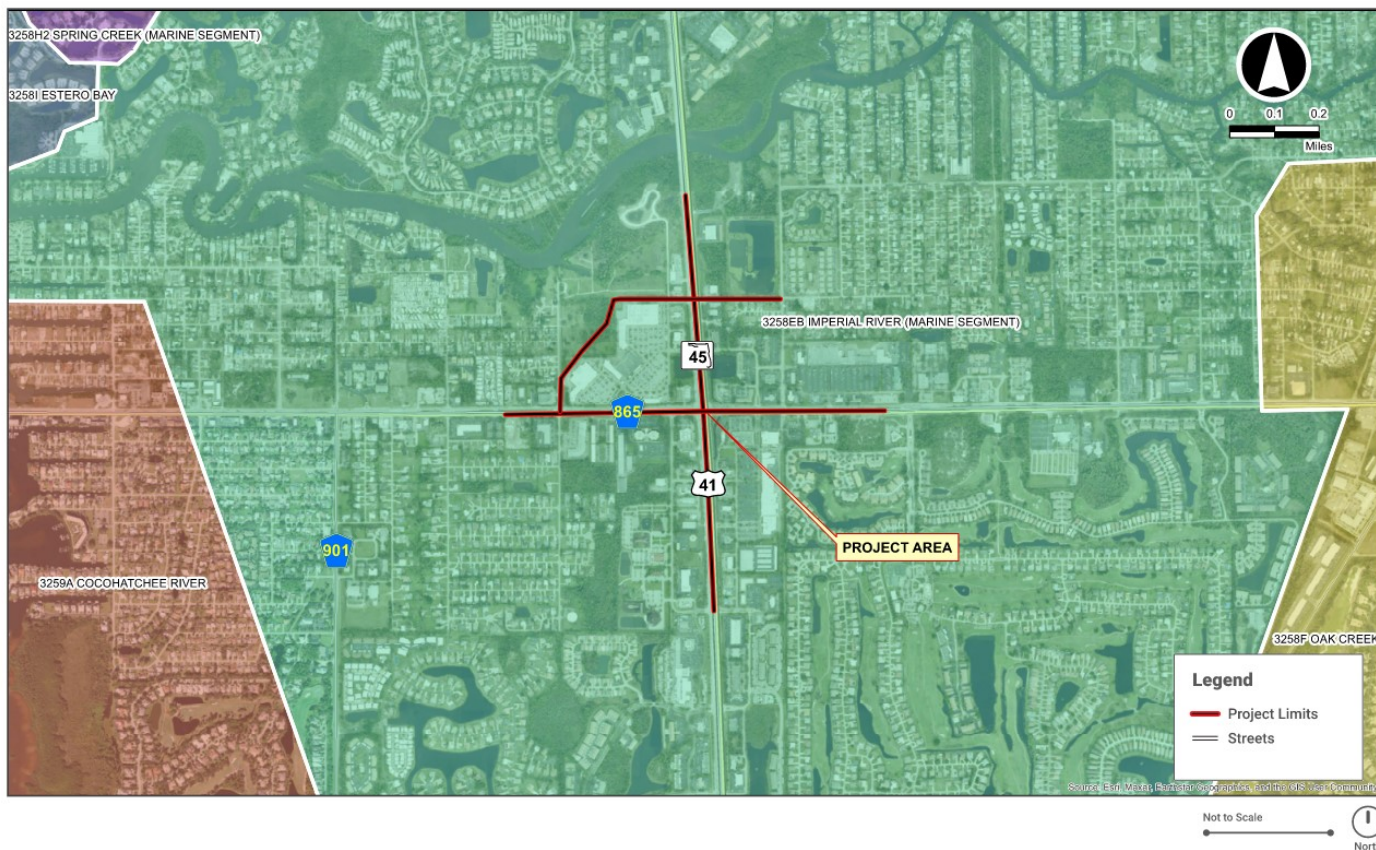
when compared with the pre-development conditions.



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Figure 13 | USGS Quadrangle Map

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Figure 14 | Drainage WBID Map

A Water Quality Impact Evaluation checklist was prepared for this study. The receiving water body is the Imperial River and impaired for Dissolved Oxygen and Total Nitrogen. In addition, it is an Outstanding Florida Water. The project is not within a known Sole Source Acquire (SSA). Water quality requirements are provided in the proposed stormwater facilities following guidelines set forth by SFWMD.

5.7 Aquatic Preserves

There are no aquatic preserves in the project area.

5.8 Outstanding Florida Waters

The Imperial River, a tributary of Estero Bay (a designated Aquatic Preserve) is located adjacent to the northern boundary of the study area. Estero Bay tributaries are designated OFWs. Special protection is given to OFWs under 62-302.700, F.A.C. The project, including the proposed stormwater management system, will be developed to meet the design and performance criteria established in the SFWMD Environmental Resource Permit Applicant's Handbook Volumes I and II for the treatment and attenuation of discharges to OFWs. Best management practices will also be utilized during project activities to prevent impacts (primarily siltation) to proximate estuarine habitats.

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.

This project's traffic noise impact analysis (Type 1) is consistent with Title 23, *Code of Federal Regulations* (C.F.R.), 772, Part II, Chapter 18 of the FDOT *Project Development and Environment Manual*, and Chapter 335, Section 335.17, *Florida Statutes*. This assessment also adheres to current Federal Highway Administration (FHWA) traffic noise analysis guidelines in *FHWA-HEP-10-025*. The FHWA Traffic Noise Model (TNM) - version 2.5 was used to predict traffic noise levels for this project, following guidelines outlined in the FDOT *Traffic Noise Modeling and Analysis Practitioners Handbook*. The analysis evaluated noise levels for the existing condition and the 2050 No-Build and Build Alternatives.

Of the 57 analyzed noise sensitive sites, the noise level at one special land use (SLU) site is predicted to approach or exceed the FDOT Noise Abatement Criteria (NAC) for the design year 2050 Build Alternative. All other sites were predicted to not meet or exceed applicable NAC because of the project. Noise barriers were analyzed and considered to abate project-related impacts to the playground affiliated with the Noah's Ark Academy (WB2-SLU2-1).

Several noise barrier options were evaluated to determine which barrier configuration would yield the greatest noise reduction within special use cost-reasonableness guidelines. For a noise barrier to meet the FDOT acoustic feasibility requirement, the barrier must provide a minimum of 5.0 dB(A) reduction in traffic noise for at least two impacted receptors. The barrier must also attain the FDOT noise reduction design goal (NRDG) of 7.0 dB(A) for at least one benefited receptor. (Note: to be considered "benefited," the receptor must receive a minimum of 5.0 dB(A) in traffic noise reduction from the barrier.) Failure to achieve the NRDG results in the noise abatement measure being deemed 'not reasonable'. Additionally, the noise barrier must meet the FDOT cost- reasonableness criteria for impacted SLU sites. The standard procedure for determining the feasibility and reasonableness of a noise barrier for an SLU site is documented in *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special-Use Locations* (FDOT 2009). This special-use site analysis procedure starts with the established cost threshold for residential locations and converts it to a person-hours of use criteria that can be applied to non-residential sites using this equation from the above-referenced document. A noise barrier for an SLU site is considered cost-reasonable if the calculated "abatement cost factor" is below the \$995,935/person-hr/ft².

An eight-foot-tall and 286-foot-long barrier meets all FDOT requirements and is a potentially feasible and reasonable method to abate traffic-related noise for 100% of the impacted playground area. A ten-foot-tall and 265-foot-long barrier option also meets acoustic criteria and abates 100% of the impacted playground but is above FDOT cost-reasonableness criteria. The PD&E special use barrier analysis results indicate that the 8-foot barrier option could potentially provide reasonable and feasible noise abatement for the impacted receptor WB2-SLU2-1.

Statement of Likelihood

The FDOT is committed to the construction of feasible and reasonable noise abatement measures. One potentially feasible and reasonable barrier has been identified for this project (see **Table 8** below) for more detail on the noise barriers and their locations in the maps in **Appendix D** in the NSR), contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project's final design and through the public involvement process; and
- Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement; and
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost-reasonable criterion; and
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to FDOT; and
- Safety and engineering aspects have been reviewed, and any conflicts or issues resolved.

The date that FDOT approves the Type 2 Categorical Exclusion will be the Date of Public Knowledge. During the design phase, a land use review will be performed to identify all noise sensitive sites that may have received a building permit between the time the PD&E noise study is finalized and prior to the project's Date of Public Knowledge. If the review identifies noise sensitive sites that have been permitted prior to the Date of Public Knowledge, then those sensitive sites will be evaluated for traffic noise impacts and abatement considerations.

Table 8: Potentially Feasible and Reasonable Noise Barrier Evaluation Summary

Noise Barrier Analysis Summary									
Evaluated Barrier Options					Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7)	Daily Person Usage Within Benefited Area	Possible for Person Hours of Daily Use Within Benefited Area to be met? ^{*3}	Recommended for further consideration in final design?
Option	Height ^{*2} (feet)	Length (feet)	Barrier Location	Total Cost ^{*1}					
WB1 Option 1	6	306	Back of sidewalk	\$55,080	58%	No 6.6 dB(A)	n/a	n/a	No
WB1 Option 2	8	286	Back of sidewalk	\$68,640	100%	Yes 9.0 dB(A)	111	Yes	Yes
WB1 Option 3	10	265	Back of sidewalk	\$79,500	100%	Yes 10.3dB(A)	111	No	No

*1 = Based on FDOT Statewide average of \$30 per square foot.

*2 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

*3 = FDOT Reasonable Cost Guideline for Special Use Sites is \$995,935/person-hr/ft².

Construction Noise and Vibration

Based on the existing land use within the limits of this project, the construction of the proposed roadway improvements will have temporary noise and vibration impacts. Vibration-sensitive sites on the project include residences and medical offices. Trucks, compaction equipment, earth-moving equipment, pumps, and generators are sources of construction noise and vibration. During the proposed project's construction phase short-term noise and vibration may be generated by stationary and mobile construction equipment. The construction noise and vibration will be temporary at any location and controlled by adherence to the most recent edition of the *FDOT Standard Specifications for Road and Bridge Construction*.

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) was completed in February 2024 for the mainline corridor. A separate report for drainage sites was issued in October 2023. The mainline and drainage reports were performed separately and therefore contain unique site numbers.

The mainline CSER report assigned FDOT risk ratings to 20 sites which may have some potential for hazardous material or petroleum impacts. All 20 contamination sites are summarized below (**Table 9**). Of the 20 identified contamination sites, four sites were assigned a risk rating of Medium, and consist of: 2 active gasoline stations, an active dry cleaning facility, and a dry cleaning site that has been redeveloped into a dentist office. One High rated site was identified as a former gasoline station (BP-Bonita-Oleum Corp; redeveloped into a bank) with unresolved soil and groundwater petroleum contamination within and adjoining the Bonita Beach Road right-of-way (ROW). Depending on final construction plans, Level II Impact to Construction Assessments may be required for the Medium and High risk sites identified within the study area. Contamination sites identified along the mainline corridor are illustrated on **Figure 15**.

Site Number	Site Name	Site Address	Risk Potential
1	Devoe Pontiac Buick Infiniti Volvo Inc / Bonita Springs Mitsubishi / Bonita Springs Infiniti	28450 South Tamiami Trail Bonita Springs, FL 34134	Low
2	Springs Plaza Sewer System	28239 South US 41 Bonita Springs, FL 33923	Low
3	7-Eleven Store #34806	28175 South Tamiami Trail Bonita Springs, FL 33923	Medium
4	Bonita Springs Central Off / Cellular Tower	28160 Beaumont Road Bonita Springs, FL 33923	Low
5	Spring Fresh Dry Cleaners	8951 Bonita Beach Road Suite 21D Bonita Springs, FL 33923	Medium
6	Martinizing Dry Cleaning	3525 Bonita Beach Rd Bonita Springs, FL 34134	Medium
7	BP-Bonita-Oleum Corp	9021 Bonita Beach Road Bonita Springs, FL 33923	High

8	7-Eleven Store #40327 / Apex Station	27990 Tamiami Trail Bonita Springs, FL 34134	Medium
9	Publix Super Market #1449 Publix Super Market #365	3304 & 3306 Bonita Beach Road Bonita Springs, FL 34141 & 34134	Low
10	Former Sunshine Dry Cleaners	9048 Bonita Beach Road Bonita Springs, FL 33923	Low
11	Former Prestige Cleaners	3300 Bonita Beach Road #107 Bonita Springs, FL 34134	Low
12	Tuffy Tire & Auto Service Center	27790 South Tamiami Trail, Bonita Springs, FL 34134	Low
13	Bonita Boat Center	27760 South Tamiami Trail, Bonita Springs, FL 34134	Low
14	Advance Auto Parts	27791 South Tamiami Trail Bonita Springs, FL 34134	Low
15	NCH Healthcare Systems	24020 South Tamiami Trail Bonita Springs, FL 34134 3302 Bonita Beach Road Bonita Springs, FL 34134	Low
16	Discarded Buckets / Construction Site / Disaster Debris Management Site	27711 Windsor Road/Anglers Paradise Bonita Springs, FL 34134	Low
17	Super Suds Car Wash	28301 South Tamiami Trail Bonita Springs, FL 34134	Low
18	Jiffy Lube	28145 South Tamiami Trail Bonita Springs, FL 34134	Low
19	Tires Plus	9050 Bonita Beach Road Southeast Bonita Springs, FL 34135	Low
20	Lexpert Automotive Inc.	27861 Crown Lake Boulevard Bonita Springs, FL 34135	Low

Figure 15: Mainline Contamination Sites



US 41 at Bonita Beach Road PD&E Study

Figure 15 | Mainline Contamination Sites

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The Contamination Technical Memorandum (completed October 2023, under a separate cover, and included in the project file) assigned FDOT risk ratings to four drainage sites. The risk ratings for all four drainage sites are summarized below (**Table 10**). One drainage site (Pond West) was assigned a risk rating of Medium due to Tuffy Tire & Auto Service Center (Map ID 3) operating within its footprint with an AST and hydraulic lifts. One drainage site (Pond East Alternative 1) was assigned a High risk rating due to BP-Bonita-Oleum Corp, a former gasoline station (Map ID 1) within and adjoining its footprint. Unresolved soil and groundwater petroleum contamination exists within the footprint of Pond East Alternative 1. Depending on final construction plans, Level II Impact to Construction Assessments may be required for the ponds with a Medium or High risk rating. Ponds and associated contamination sites are illustrated on **Figure 16**.

Table 10: Contamination Technical Memorandum Drainage Site Risk Ratings			
Site Name	Location	Risk Potential	Map ID Number(s)
Pond West	27790 South Tamiami Trail	Medium	3 & 4
Pond North Expansion	27701, 27731, 27761, & 27791 South Tamiami Trail	Low	3 & 5
Pond East (Alternative 1)	9021, 9071, 9101, & 9161 Southeast Bonita Beach Road	High	1, 2, & 6
Pond East (Alternative 2)	9161 Southeast Bonita Beach Road	Low	1

Note that contamination sites are evaluated independently in relation to the mainline and ponds; therefore, a contamination site common to the CSER (mainline) and Contamination Tech Memo (ponds) may have a different risk rating.

Figure 16: Pond Site Contamination Sites



US 41 at Bonita Beach Road PD&E Study

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Figure 16 | Pond Site Contamination Sites

6.4 Utilities and Railroads

This project does not include any existing railroads.

Existing Utilities

Nine Utility Agency/Owners (UAO) have been identified within the project area through our Sunshine 811 Design Ticket and utility coordination efforts. **Table 11** identifies the UAO's contacted and a general description of their facilities located on the project. Additional information regarding the existing utilities and anticipated impacts can be found in the Utility Assessment Package.

Table 11: Existing Utilities in the Study Area		
Utility Company	Facility	Description
City of Bonita Springs	Decorative Light/Irrigation	Decorative Street Lighting on both sides of Bonita Beach Rd Irrigation along the median <i>Note: Coordination for lighting and irrigation facilities with the City of Bonita Springs will occur through the Roadway Design Coordination, not through Utility Coordination.</i>
Bonita Springs Utilities, Inc.	Water/ Wastewater/ Sewer	Existing 12" water line along the north side of Bonita Beach Rd Existing 12" sewer force main crossing Bonita Beach Rd at Beaumont Rd, and Meadowlark Lane Existing 12" water Line going north along the east side of US 41 Two out-of-service mains on the south side of Bonita Beach Rd
Century Link - Local	FOC/Phone	BFO on the east and west sides of US 41 and the north side of Bonita Beach Rd BT on the east side of US 41 and the south side of Bonita Beach Rd Conduit System on the east side of US 41 and both sides of Bonita Beach Rd Handholes, manholes, and PEDs on both sides of US 41 and Bonita Beach Rd
Comcast	CATV	Existing COAX-BTV, FOC-BTV North and South of Bonita Beach Rd Existing OTV north of Bonita Beach Rd Existing aerial and underground facilities at Windsor Rd
Crown Castle Fiber	FOC	Existing 1.5" HDPE Conduits and handholes south of Bonita Beach Rd Existing 1.5" HDPE Conduits and handholes west of US 41
Florida Power and Light	Electric	Existing 23 kV OE on west side of US 41 Existing 23 kV BE on north and south side of Bonita Beach Rd Existing 23 kV OE on north side of Bonita Beach Rd

Lee County - Traffic	FOC	Existing BFOC on the north side of Bonita Beach Rd Existing BFOC on the south side of US 41 Existing Traffic Signals at the intersections of Bonita Beach Rd and Arroyal Rd, Bonita Beach Rd and US 41, and Bonita Beach Rd and 620LF E of Windsor Rd <i>Note: Coordination for ITS and Traffic facilities with Lee County - Traffic will occur through the Traffic Design Coordination, not through Utility Coordination.</i>
Summit Broadband Inc.	FOC	Existing buried FOC on the north and south side of Bonita Beach Rd
TECO Peoples Gas	Gas	Existing 8" Gas Main on the east side of US 41 Existing 4" PE Gas Main North of Bonita Beach Rd Existing 2" PE Gas Main at Windsor Rd

In accordance FDOT's PD&E Manual, the utility providers listed in **Table 11** were contacted on March 31, 2020, of the proposed improvements and requested to identify any easements and the location of their existing/planned utilities within the project area.

Utility Mitigation

Mitigation measures would be taken during the project's design phase to minimize impacts to the existing utilities to the fullest extent possible. If impacts are unavoidable, design alternatives would be reviewed to allow for relocation of impacted facilities in a manner that minimizes cost to the UAO and disruption to their customers.

No utility companies have indicated that they have easements within the project limits at the time of the Utility Assessment Package. Accordingly, the utility relocations presented within the Utility Assessment Package would be at the expenses of the utility. Utility coordination should be performed during the design phase of the project to confirm there are no unknown utility easements or potential reimbursable relocations present on the project.

Potential utility impacts are listed in **Table 12**.

Table 12: Potential Utility Impacts		
Utility Company	Facility	Description
City of Bonita Springs	Decorative Light/Irrigation	2.1 miles of Lighting, Irrigation and Landscaping <i>Note: Coordination for lighting and irrigation facilities with the City of Bonita Springs will occur through the Roadway Design Coordination, not through Utility Coordination.</i>
Bonita Springs Utilities, Inc.	Water/ Wastewater/ Sewer	5535 LF of 12" Water Main 2160 LF of 12" Force Main Water Removals and Valves Adjustments
Century Link - Local	FOC/Phone	24529 LF of Buried Fiber Optic Cable Handhole Adjustments
Comcast	CATV	1760 LF of Buried Cable TV and Fiber Optic Cable 5440 LF of Overhead Cable TV
Crown Castle Fiber	FOC	15,786 LF of (1) 1.5" HDPE Conduit with Fiber Optic Cable Handhole adjustments
Florida Power and Light	Electric	6913 LF of 23 KV Overhead Electric 7930 LF of 23 KV Buried Electric 32 Distribution Poles

Lee County - Traffic	FOC	10490 LF of Buried Fiber Optic Cable 1860 LF of Traffic Signals <i>Note: Coordination for ITS and Traffic facilities with Lee County - Traffic will occur through the Traffic Design Coordination, not through Utility Coordination.</i>
Summit Broadband Inc.	FOC	27612 LF of 1.25" Duct with Fiber Optic Cable Handhole Adjustments
TECO Peoples Gas	Gas	6885 LF of 8" Coated Steel Gas Main 3253 LF of 4" PE Gas Main 1650 LF of 2" PE Gas Main

6.5 Construction

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.

Noise and vibration impacts may be generated by heavy equipment and construction activities. Adherence to local construction noise and/or construction vibration ordinances by the construction contractor will also be required where applicable.

Visual impacts associated with the storage of construction materials and establishment of temporary construction facilities will occur but are temporary and short term.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with FDOT's Standard Specifications for Road and Bridge Construction and using BMPs. Erosion and sedimentation will be treated in accordance with the Florida Department of Environmental Protection (FDEP's) National Pollutant Discharge Elimination System Permit and Stormwater Pollution Prevention Plan.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays during project construction. Signs will be used as appropriate to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction-related activities which could inconvenience the community so that motorists, residents, and others can plan travel routes in advance. Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling.

7. Engineering Analysis Support

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

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8. Permits

The following environmental permits are anticipated for this project:

State Permit(s)

DEP or WMD Environmental Resource Permit (ERP)
DEP National Pollutant Discharge Elimination System Permit
FWC Gopher Tortoise Relocation Permit
State 404 Permit

Status

To be acquired
To be acquired
To be acquired
To be acquired

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9. Public Involvement

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

Summary of Activities Other than the Public Hearing

To announce the project's start, and in place of a project kick-off meeting, letters were emailed to elected and appointed officials, and newsletters were mailed to those whose property lies, in whole or part, within at least 300 feet on either side of each project alternative, as well as other local citizens who may be impacted by the construction of this project. The project kick-off letter described the PD&E study process, the project purpose and need, and the project schedule. Elected and Appointed Officials contact information is listed in the Public Involvement Plan (PIP). Names and mailing addresses were obtained from the Lee County property appraiser website. The project's Comments and Coordination Report includes a package of the kick-off letters, Newsletters #1 and #2, contact information, mailing addresses, and a map identifying properties receiving mailed notifications.

Project Update Meetings

Various agency meetings were conducted to give a project update and collect comments. Project update meetings were performed with the following agencies on the following days:

1. City of Bonita Springs and FDOT District 1 - In-Person Meeting in Bartow, FL on January 29, 2020. - Project coordination meeting with City Council member and Assistant City Manager
2. City of Bonita Springs and FDOT District 1 - Virtual via Microsoft Teams on 2/24/2021 - Discuss Purpose & Need, traffic analysis, and initial intersection alternatives
3. Lee County and FDOT District 1 - Virtual via GoToMeeting on 3/5/2021 - Discuss Purpose & Need, traffic analysis, and initial intersection alternatives
4. Bonita Springs City Council coordination meetings (online) - 4/12 and 4/13/2022 - Miscellaneous discussion with City Council members to discuss the PD&E Study process, alternatives development, etc.
4. City of Bonita Springs and FDOT District 1 - Virtual via Microsoft Teams on 8/30/2021 - Project update meeting
5. City of Bonita Springs - 1/19/2022 - reviewed of the SPUI and DLT alternatives.
6. City of Bonita Springs and FDOT - 1/24/2022 - update meeting with the City of Bonita Springs
7. City of Bonita Springs and FDOT District 1 - In-Person Meeting on 01/05/2023 at City Office. - Project update meeting
8. Lee County Department of Transportation and FDOT District 1 - In-Person Meeting on 01/05/2023 at County Office. - Project update meeting
9. Lee County MPO staff and FDOT District 1 - In-Person Meeting on 01/05/2023 at MPO Office. - Project update meeting
10. Lee MPO Governing Board - In-Person Presentation on 6/16/2023 at Board Meeting. - Presented update on study, overview of intersection alternatives, and summary of the Alternatives Public Workshop. Also held during this time were the TAC, CAC and BPAC, which took place on June 1, 2023.
11. FDOT, Bonita Springs, Lee MPO, Kittelson and RK&K - 7/14/2023. The main discussion items was the final design funding and the Lee County MPO said they can have \$2.8 million in FY 26. The City said they have \$770K in their BBR Visioning funds which can be used for the final design
12. Bonita Springs, FDOT, RK&K - 8/3/2023 - Coordination meeting to discuss the NW quadrant roadway

Meeting agendas, along with questions and comments obtained from these project update presentations, are contained in the project's *Comments and Coordination Report*.

Business Working Group

FDOT created a Business Working Group (BWG) of businesses in the immediate US 41 and Bonita Beach Road. The BWG's purpose was to meet virtually to obtain input about the transportation needs of the area, answer questions and keep business owners informed regarding the study. Letters were sent to eight business owners in May 2021. These were followed up with emails to each business owner on June 21, 2021, and one response was received. On June 29, 2021, a second email was sent to the business who had not responded. These emails included a Doodle poll to select a potential date for a virtual meeting. There were two responses showing interest in a virtual meeting. A different approach was taken. On July 21, 2021, FDOT District 1 and consultant team representatives traveled to Bonita Springs and conducted impromptu meetings with six of the eight businesses with a series of prepared questions we asked the person in-charge at the business at that time. The businesses were generally very cooperative, provided answers to our questions and supported improving the intersection. Following these meetings, no further BWG activities have occurred.

The PDLT concept will impact transit stops within the intersection study area thus coordination efforts were performed with the FDOT District 1 and LeeTran as part of refinements to the Preferred Alternative. FDOT District 1 Transit staff reviewed the Preferred Alternative PDLT concept and provided comments on transit stop impacts. A follow up meeting was held with these FDOT District 1 Transit staff on September 21, 2023 to discuss potential transit stop relocations prior to coordinating with LeeTran.

LeeTran was then contacted via email on September 22, 2023 to verify existing transit stops within the study area and provide input regarding relocation of potential transit stops as part of the PDLT concept. Dawn Huff, the Planning and Scheduling Manager with LeeTran, responded via email on October 11, 2023 with a review of the PDLT concept and input regarding each transit stop. A copy of this email and Ms. Huff's response to comments can be found in the project's *Comments and Coordination Report* and **Appendix F**. The proposed transit stop locations are discussed in **Section 7.7**.

Public Workshop Announcements

To announce the virtual (April 3, 2023) and in-person (April 4, 2023) Alternatives Public Meeting and solicit participation, the following notifications were sent to potential attendees or published on the following dates:

1. Invitation letters emailed to 84 elected and appointed officials - emailed 03/06/2023;
2. Newsletters mailed to 754 property owners and interested persons - 03/06/2023;
3. Display advertisement published in the News-Press - 03/24/2023;
4. Notification posted in the Florida Administrative Register (FAR) - 03/24/2023;
5. Notification posted to the project website and FDOT public notices webpage - 03/27/2023; and
6. Press release sent by FDOT District 1 - 03/27/2023.

A package of the announcements is contained in the project's *Comments and Coordination Report*.

Alternatives Public Workshop

The Alternatives Public Workshop was performed in a hybrid format consisting of both a virtual component hosted online via GoToWebinar from 6:00 PM to 7:00 pm on Monday, April 3, 2023, as well as an in-person component located at the Bonita Springs Recreation Center (26740 Pine Ave., Bonita Springs, FL 34135) from 5:00 PM to 7:00 PM on Tuesday, April 4, 2023. This process followed and was consistent with the most current FDOT guidelines for Hybrid Public Meetings.

The online component consisted of a live introduction by the FDOT Project Manager followed by a narrated presentation and a live question and answer period with the project team. The in-person meeting consisted of an open house format to provide an opportunity for the public to review the proposed project, speak one-on-one with project team members, and

voice their comments or concerns. Project documents, including comment forms, were available for public review on the project website: <https://www.swfroads.com/project/444321-1> beginning on March 27, 2023. Additionally, there was a link on the project website that allowed citizens to submit comments without the use of the comment form. Phone and email were also available for providing input. A total of 12 guests attended the public workshop virtually using GoToWebinar and a total of 30 guests attended the public workshop in person. Of the 30 public citizens that attended the in-person workshop, eight were public officials or representatives.

A total of 18 comments (emailed comments, in-person, virtual, and website) were received during the comment period between April 3 and April 14, 2023. Of these, 11 in-person submissions, 5 virtual submissions, 2 emailed comments, and 1 website comment were received.

The following list provides a high-level overview of the concerns:

6 traffic concerns - expressed concern for congestion surrounding the intersection, and traffic displacement to surrounding areas.

5 signal location concerns - requests to clarify locations of new/moving traffic signals, suggesting proposed signal locations.

3 plaza access concerns - expressed concerns regarding the location of access to Springs Plaza and Center of Bonita Springs.

9 Partial DLT Alternative supporters - expressed support for the Partial Displaced Left Turn.

3 pedestrian and bicycle concerns - expressed concern for time crossing the intersection and availability of pedestrian and bicycle accommodations.

3 speed concerns - expressed concerns regarding the current and proposed speed limits.

10 specific concerns - these comments were lengthy and requested specific items that cannot be grouped into any of the previous categories, such as noise, stormwater runoff, impact to nature, flyover alternative, public transportation, using AI for changing signals, Angler's Paradise access and specific property concerns.

Details of the specific public comments and responses to those are available in the *Comments and Coordination Report*.

Date of Public Hearing: 03/26/2024

Summary of Public Hearing

To be updated following the Public Hearing.

10. Commitments Summary

1. • The most recent version of the USFWS Standard Protection Measures for the Eastern Indigo Snake will be utilized during construction.
 - If the listing status of the tri-colored bat is elevated by USFWS to Threatened or Endangered and the Preferred Alternative is located within the consultation area during the design and permitting phase of the proposed project, FDOT commits to initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.
2. The FDOT is committed to the construction of feasible and reasonable noise abatement measures, specifically noise barrier WB1 (CNE WB2), as identified in the Noise Study Report, contingent upon the following conditions:
 - Final recommendations on the construction of abatement measures are determined during the project's final design and through the public involvement process;
 - 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 FDOT;
 - Safety and engineering aspects have been reviewed, and any conflicts or issues resolved.

11. Technical Materials

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

Conceptual Stage Relocation Plan
Bonita Springs River Park Location Map
Imperial River Boat Ramp Location Map
Cultural Resources Assessment Survey (CRAS)
Location Hydraulics Report
Pond Siting Report (PSR)
Water Quality Impact Evaluation (WQIE)
Natural Resources Evaluation (NRE)
Noise Study Report (NSR)
CSER for Pond Sites
Contamination Screening Evaluation Report (CSER)
Utilities Assessment Package
Preliminary Engineering Report
Public Involvement Plan

Attachments

Social and Economic

NRCS Coordination Documentation

Farmland Conversion Impact Rating Form (NRCS-CPA-106 or Form AD 1006)

Cultural Resources

Section 4(f) Report

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Social and Economic Appendix

Contents:

NRCS Coordination Documentation

Farmland Conversion Impact Rating Form (NRCS-CPA-106 or Form AD 1006)

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Jesse Blouin

From: Jada Barhorst <jbarhorst@inwoodinc.com>
Sent: Tuesday, January 2, 2024 9:21 AM
To: Amanda Ashby
Subject: FW: [External Email]Farmlands Determination - 444321: US 41 PD&E Study
Attachments: 444321_US 41 PD&E Study_Soil_Report.pdf

Jada Barhorst
SENIOR ECOLOGIST
FWC Authorized Gopher Tortoise Agent

INWOOD CONSULTING ENGINEERS
3000 Dovera Dr., Suite 200, Oviedo, FL 32765
P: 407-971-8850
inwoodinc.com

From: Riley Campana <rcampana@inwoodinc.com>
Sent: Tuesday, January 2, 2024 8:32 AM
To: Jada Barhorst <jbarhorst@inwoodinc.com>
Subject: FW: [External Email]Farmlands Determination - 444321: US 41 PD&E Study

Hi Jada,

The soil scientist got back to me last week regarding the US 41 farmland impacts. They concluded that no farmland will be affected and we are exempt from filing a NRCS CAP 106 form.

Riley Campana
Ecologist

INWOOD CONSULTING ENGINEERS
3000 Dovera Dr., Suite 200, Oviedo, FL 32765
P: 407-971-8850
inwoodinc.com

From: Giuliani, Isabelle - FPAC-NRCS, FL <isabelle.giuliani@usda.gov>
Sent: Wednesday, December 27, 2023 11:46 AM
To: Riley Campana <rcampana@inwoodinc.com>
Subject: RE: [External Email]Farmlands Determination - 444321: US 41 PD&E Study

Good afternoon Mr. Campana

The area in question (444321: US 41 PD&E) meets one or more of the above criteria for Non-Farmland. No farmland area will be affected or converted according to the Code of Federal Regulation 7CFR 658, Farmland Protection Policy Act, Section 658-2; and the 2010 Census Bureau Maps. You are exempt from filling the NRCS CAP 106 at this time.

Attached to the email soil report for the study indicating no farmland.

Thank you,

Isabelle Giuliani
State Soil Scientist

USDA-Natural Resources Conservation Service
Florida State Office
4500 NW 27th Ave. Suite A
Gainesville, FL 32606
Cell: 941-889-9345

From: Riley Campana <rcampana@inwoodinc.com>
Sent: Monday, November 20, 2023 2:06 PM
To: Giuliani, Isabelle - FPAC-NRCS, FL <isabelle.giuliani@usda.gov>
Cc: Jada Barhorst <jbarhorst@inwoodinc.com>
Subject: [External Email]Farmlands Determination - 444321: US 41 PD&E Study

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Hello Ms. Giuliani,

We are conducting a PD&E Study for improvements to US 41 at its intersection with Bonita Beach Road (CR 865) in Lee County, Florida. This project requires a Farmlands Conversion Impact Determination. The project limits extend along US 41 from Foley Road to just south of the Imperial River bridge, and along Bonita Beach Road from Windsor Road to Spanish Wells Boulevard.

I have attached Form NRCS-CPA-106 and ROW impact shapefile which includes the preferred ponds.

Please let me know if you have any questions or need any additional information.

Sincerely,

Riley Scherer Campana

Ecologist

INWOOD CONSULTING ENGINEERS

3000 Dovera Dr., Suite 200, Oviedo, FL 32765

P: 407-971-8850

inwoodinc.com

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**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)	3. Date of Land Evaluation Request 11/20/23	4. Sheet 1 of 2
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1. Name of Project US 41 Intersection Improvement PD&E Study	5. Federal Agency Involved Florida Department of Transportation
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2. Type of Project Intersection Improvements	6. County and State Lee County, Florida
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PART II (To be completed by NRCS)		1. Date Request Received by NRCS	2. Person Completing Form
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3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated	Average Farm Size
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5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ % _____	7. Amount of Farmland As Defined in FPPA Acres: _____ % _____
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8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS
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PART III (To be completed by Federal Agency)

Alternative Corridor For Segment <u>A</u>				
	Corridor A	Corridor B	Corridor C	Corridor D

A. Total Acres To Be Converted Directly	53.08
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0
C. Total Acres In Corridor	53.08

PART IV (To be completed by NRCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points				
1. Area in Nonurban Use	15				
2. Perimeter in Nonurban Use	10				
3. Percent Of Corridor Being Farmed	20				
4. Protection Provided By State And Local Government	20				
5. Size of Present Farm Unit Compared To Average	10				
6. Creation Of Nonfarmable Farmland	25				
7. Availability Of Farm Support Services	5				
8. On-Farm Investments	20				
9. Effects Of Conversion On Farm Support Services	25				
10. Compatibility With Existing Agricultural Use	10				
TOTAL CORRIDOR ASSESSMENT POINTS	160	0	0	0	0

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100	0	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	0	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
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5. Reason For Selection:

Signature of Person Completing this Part: _____ DATE _____

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points
 90 to 20 percent - 14 to 1 point(s)
 Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points
 90 to 20 percent - 9 to 1 point(s)
 Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points
 90 to 20 percent - 19 to 1 point(s)
 Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points
 Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)
 As large or larger - 10 points
 Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
 Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
 Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points
 Some required services are available - 4 to 1 point(s)
 No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points
 Moderate amount of on-farm investment - 19 to 1 point(s)
 No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points
 Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
 No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
 Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
 Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

Cultural Resources Appendix

Contents:

Section 4(f) Report

DRAFT

Section 4(f) Resources

Florida Department of Transportation

SR 45 (US 41) AT BONITA BEACH ROAD

District: FDOT District 1

County: Lee County

ETDM Number: 6291

Financial Management Number: 444321-1-22-01

Federal-Aid Project Number: D123-081-B

Project Manager: Patrick Bateman

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.

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DRAFT

Summary and Approval

Resource Name	Facility Type	Property Classification	Owner/Official with Jurisdiction	Recommended Outcome	OEM SME Action
Bonita Springs River Park	City Park	Park/Rec Area	City of Bonita Springs	No Use	Determination Pending
Imperial River Boat Ramp	Boat Ramp w/Fishing Pier	Park/Rec Area	Lee County	No Use	Determination Pending

DRAFT

Bonita Springs River Park

Facility Type: City Park

Property Classification: Park/Rec Area

Address and Coordinates:

Address: Bonita Springs, FL 34134

Latitude: 26.3369 Longitude: -81.8077

Description of Property:

Owner/Official with Jurisdiction: City of Bonita Springs

Relationship Between the Property and the Project

Yes No

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

Recommended Outcome: No Use

OEM SME Determination Date: Pending

Imperial River Boat Ramp

Facility Type: Boat Ramp w/Fishing Pier

Property Classification: Park/Rec Area

Address and Coordinates:

Address: 27551 S Tamiami Trl, Bonita Springs, FL, 34134, USA

Latitude: 26.33766 Longitude: -81.80517

Description of Property:

Owner/Official with Jurisdiction: Lee County

Relationship Between the Property and the Project

Yes No

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

Recommended Outcome: No Use

OEM SME Determination Date: Pending

Resource Attachments

Bonita Springs River Park

Bonita Springs River Park Location Map

Imperial River Boat Ramp

Imperial River Boat Ramp Location Map

DRAFT

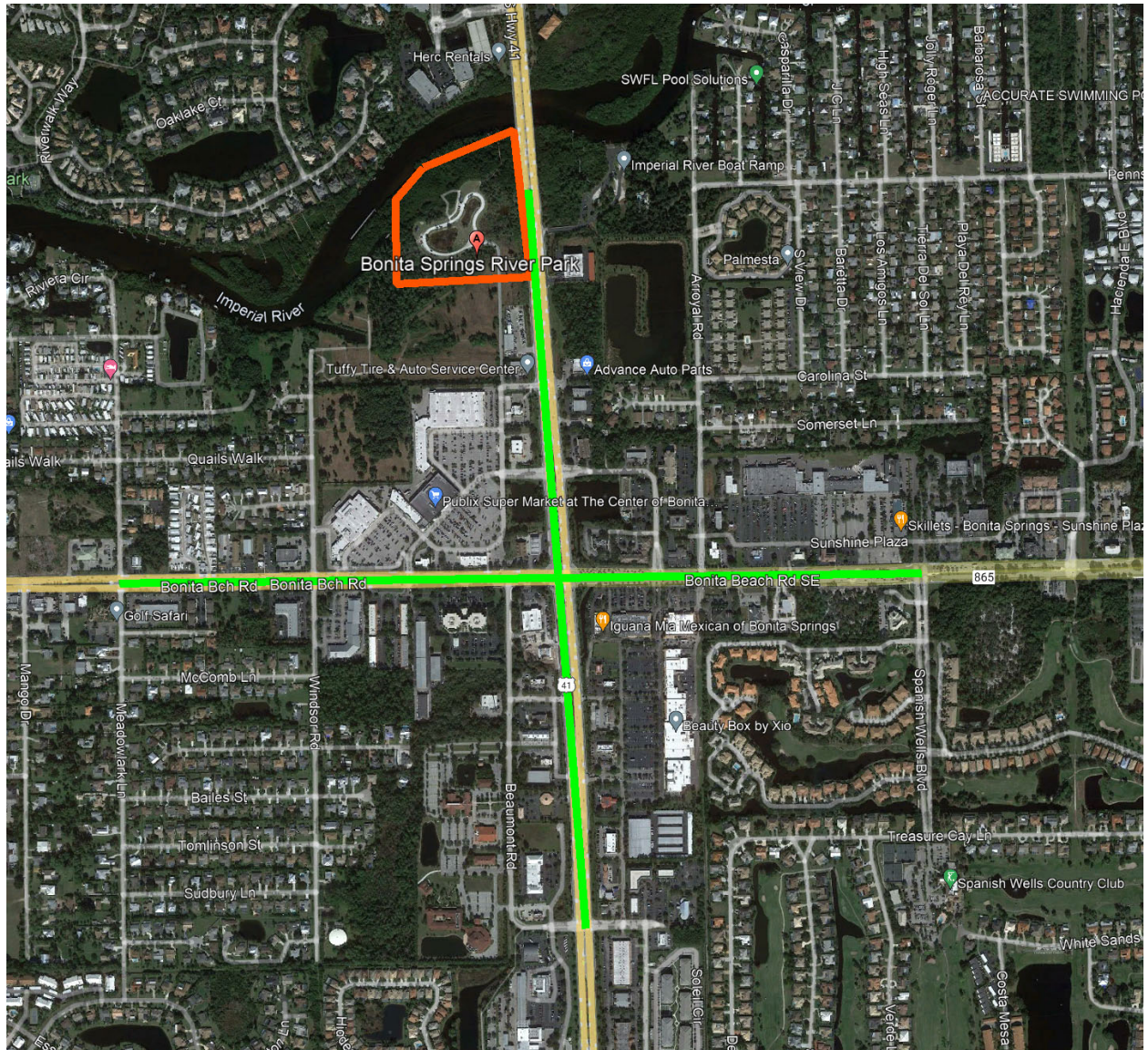
Bonita Springs River Park

Contents:

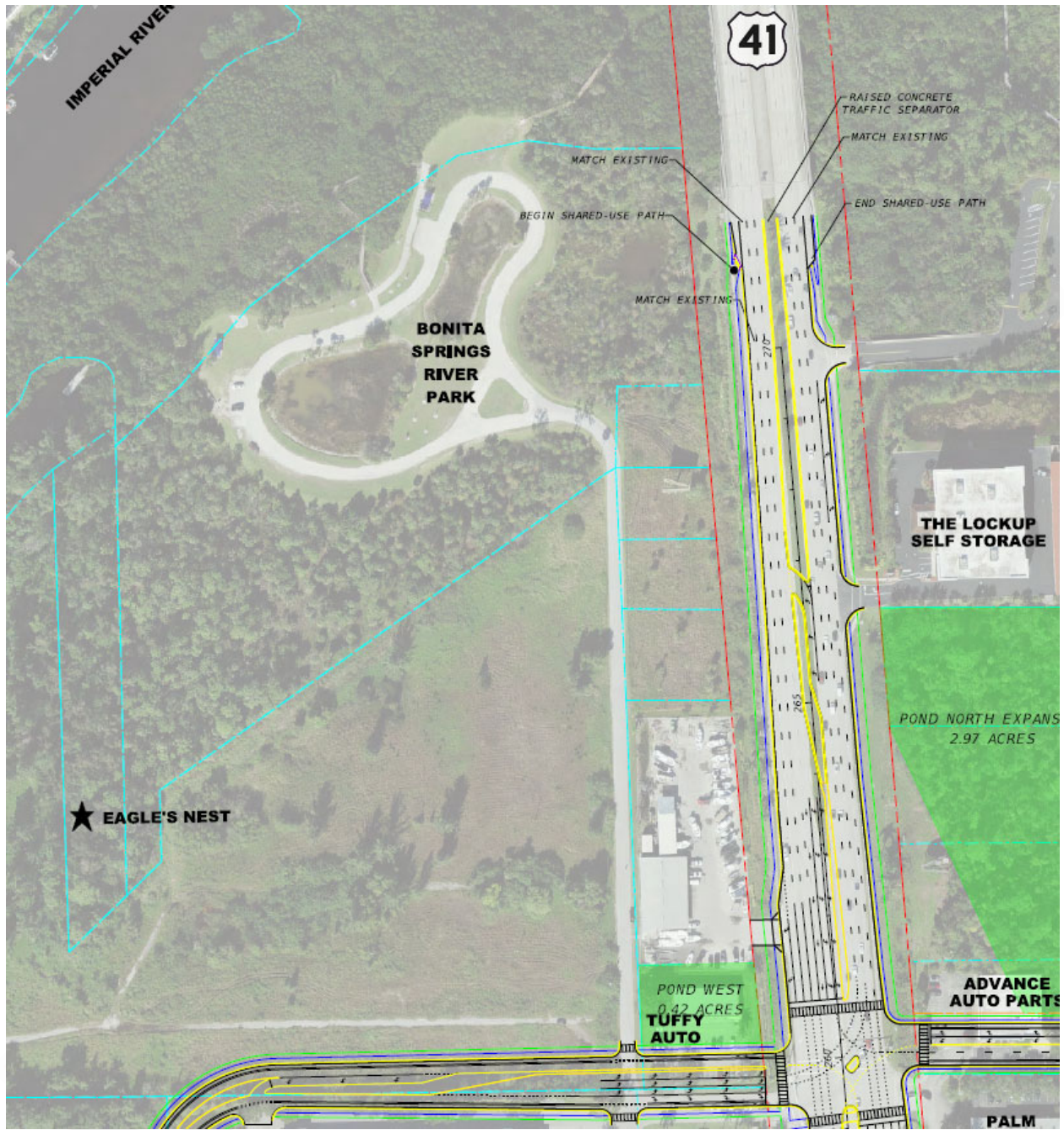
Bonita Springs River Park Location Map

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US 41/Bonita Beach Road Study Area and location of Bonita Springs River Park



Detail of Bonita Springs River Park in Relation to US 41 Improvements



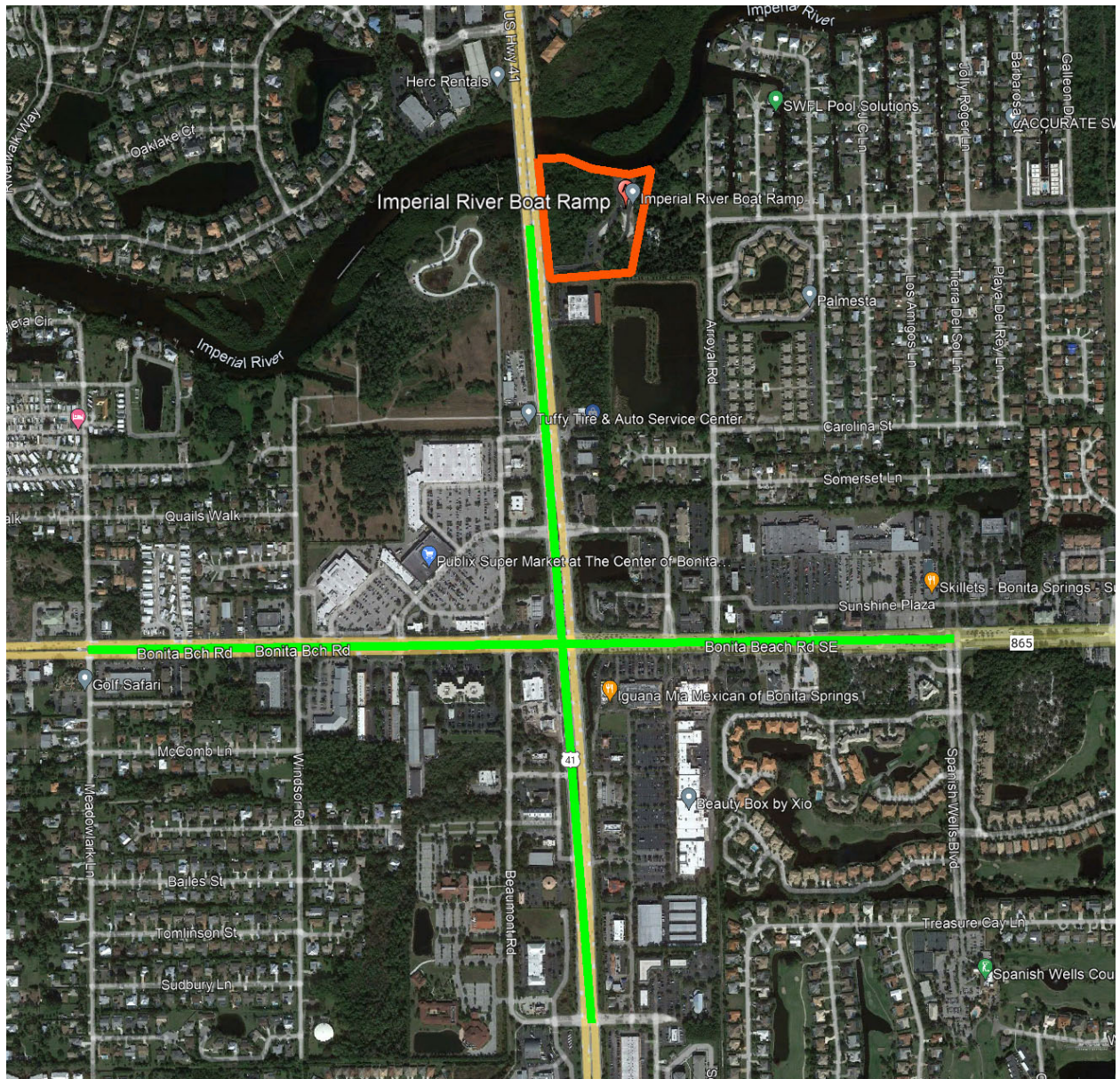
Imperial River Boat Ramp

Contents:

Imperial River Boat Ramp Location Map

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US 41/Bonita Beach Road Study Area and location of Imperial River Boat Ramp



Detail of Imperial River Boat Ramp in Relation to US 41 Improvements

