Natural Resources Evaluation Technical Memorandum

US 98 / SR 35 / SR 700 From CR 54 to US 301 / SR 39

Project Development & Environment (PD&E) Study



Florida Department of Transportation District 7

Work Program Item Segment No. 443368-3

ETDM Project No. 14374

Pasco County, Florida

December 2024

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

Natural Resources Evaluation Technical Memorandum

US 98 / SR 35 / SR 700 From CR 54 to US 301 / SR 39

Project Development & Environment (PD&E) Study

Work Program Item Segment No. 443368-3 ETDM Project No. 14374 Pasco County, Florida

Prepared for:



Florida Department of Transportation District Seven

Prepared by: H.W. Lochner, Inc. 4300 West Cypress Street, Suite 500 Tampa, FL 33607

December 2024

Table of Contents

SECTION 1	INTRODUCTION	1-1
1.1 P	roject Description	
SECTION 2	Existing Environmental Conditions	
	xisting Land Use	
2.2 E	xisting Soils	
SECTION 3	Protected Species and Habitat	
	lethodology and Assessment	
3.2 F	eld Review	3-2
3.3 S	pecies Evaluation	
SECTION 4	Wetland Evaluation	
SECTION 5	Conclusion	5-1
5.1 C	OMMITMENTS	5-1
SECTION 6	References	6-1
List of Fig	gures	
Figure 1-1	Project Location Map	1-3
Figure 1-2	Reevaluation Area Map (1)	1-4
Figure 1-3	Reevaluation Area Map (2)	1-5
Figure 1-4	Reevaluation Area Map (3)	1-6
Figure 1-5	Reevaluation Area Map (4)	1-7
Figure 1-6	Reevaluation Area Map (5)	1-8
Figure 2-1	FLUCFCS Land Use Map (1)	2-2
Figure 2-2	FLUCFCS Land Use Map (2)	2-3
Figure 2-3	FLUCFCS Land Use Map (3)	2-4
Figure 2-4	FLUCFCS Land Use Map (4)	2-5
Figure 2-5	NRCS Soils Map (1)	2-10
Figure 2-6	NRCS Soils Map (2)	2-11
Figure 2-7	NRCS Soils Map (3)	2-12
Figure 2-8	NRCS Soils Map (4)	2-13
Figure 3-1	Gopher Tortoise Map	3-3
List of Ph	otos	
Photo 1	Current Condition of USDA Parcel	2-6
Photo 2	Current Condition of Pond 400	2-6
Photo 3	Current Condition of Permanent Easement 805	2-7
Photo 4	Current Condition of Townsend Road west of US 98	2-7
Photo 5	Current Condition of Land south of Townsend Road west of US 98	2-8
Photo 6	Current Condition of Parcel 115	
List of Ta	bles	
Table 2-1	Land Uses within Reevaluation Area	2-1
Table 2-2	Soils within Reevaluation Area	2-9

SECTION 1 INTRODUCTION

1.1 PROJECT DESCRIPTION

The Florida Department of Transportation (FDOT) District 7 is conducting a Design Change Reevaluation to evaluate and document changes to the previously approved Type 2 Categorical Exclusion along US Highway 98 (US 98)/ State Road 35 (SR 35) / SR 700 from County Road 54 (CR 54) to US 301 / SR 39, in Pasco County. The proposed improvements consist of widening US 98 from a 2-lane undivided facility to a 4-lane divided facility from CR 54 to north of Townsend Road, approximately 6.8 miles, and realign US 98 from north of Townsend Road to US 301, approximately 2.0 miles. The realignment allows US 98 to align with the Clinton Avenue (New SR 52) intersection at US 301 and was the result of a separate Alternative Corridor Evaluation (ACE) study (Work Program Item (WPI) Segment No. 443368-1). The project is located in Sections 11, 12, 13, and 14, Township 25S, and Range 21E; and Sections 18, 19, 20, 27, 28, 29, 34 and 35, Township 25S, and Range 22E; Pasco County, Florida (**Figure 1-1**).

A Project Development and Environment (PD&E) study was completed for the project to analyze the need for improvements. Following a Public Hearing held on December 2, 2021, the FDOT's Office of Environmental Management (OEM) approved the Type 2 Categorical Exclusion for this project on December 6, 2022. The reevaluation analyzes design changes made since the approval of the Type 2 Categorical Exclusion.

As part of the design-build final design and right of way acquisition process, the following modifications to the Preferred Alternative Concept Plans from the approved Type 2 Categorical Exclusion have been made. The changes include the following:

- 1. Acquisition of U.S. Department of Agriculture (USDA) Parcel for access to Pond 400 (Figure 1-2)
- 2. Relocation of Pond 400 (Figure 1-2)
- 3. Permanent Easement 805 (Figure 1-2)
- 4. Modification of right of way (ROW) acquisition at US 98 and Townsend Road (Figure 1-3)
- 5. Acquisition of additional right-of-way at the Old US 98 Roundabout (Figure 1-4)
- 6. Elimination of Pond 800-1 (East) (Figure 1-4)
- 7. Change from a partial acquisition to a full acquisition of Parcel 115 Parcel 115 (Figure 1-5)
- 8. Elimination of floodplain compensation sites (FPC) 300-1 North and FPC 300-1 South Modification of medians(Figure 1-5)
- 9. Modification of medians: A full median opening added at Station (Sta.) 1122; the median opening at Sta. 1140 was modified to a directional opening; and, the configuration of the directional opening at Sta. 1173 was modified.
- 10. Landscaping has been added to the project.

The purpose of this report is to evaluate changes in impacts to protected species and their suitable habitat, in addition to wetlands and other surface waters based on the proposed design changes. Findings from the approved Type 2 Categorical Exclusion are included to compare the impacts proposed in the current design.

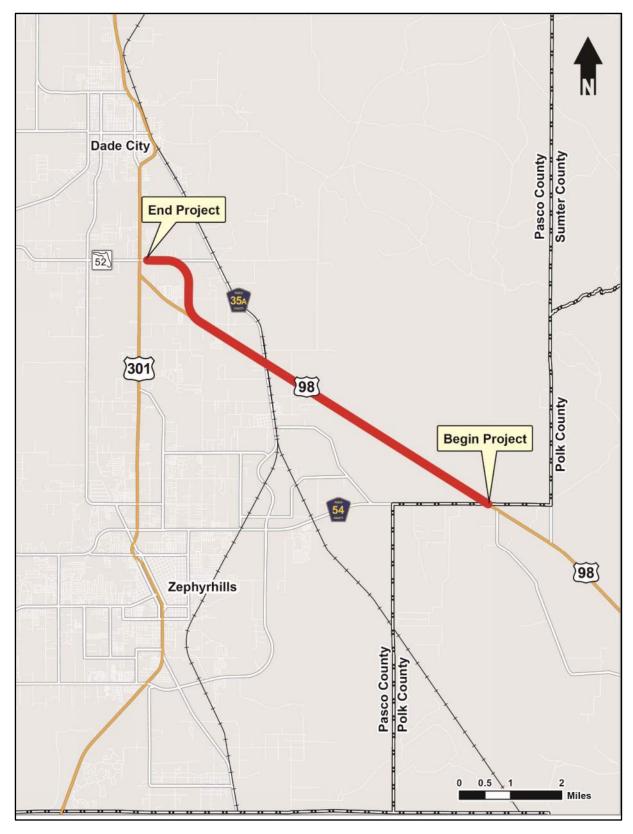


Figure 1-1 Project Location Map



Figure 1-2 Reevaluation Area Map (1)

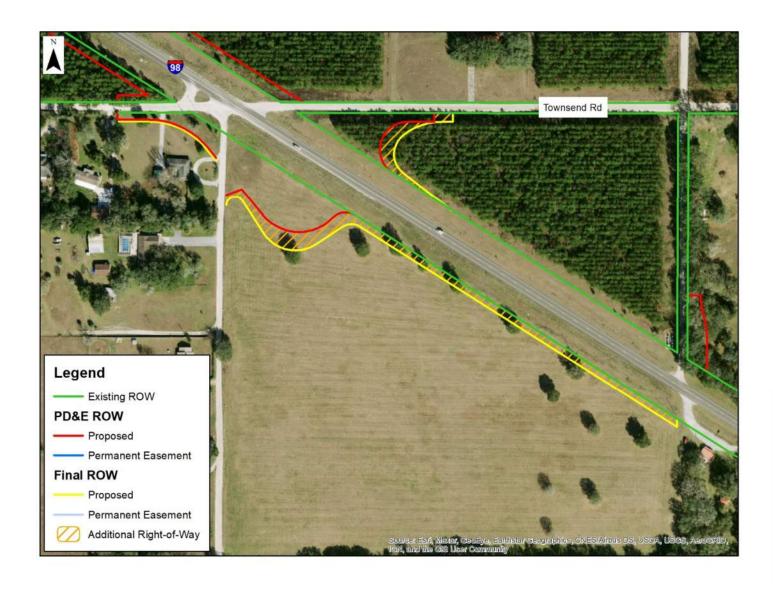


Figure 1-3 Reevaluation Area Map (2)

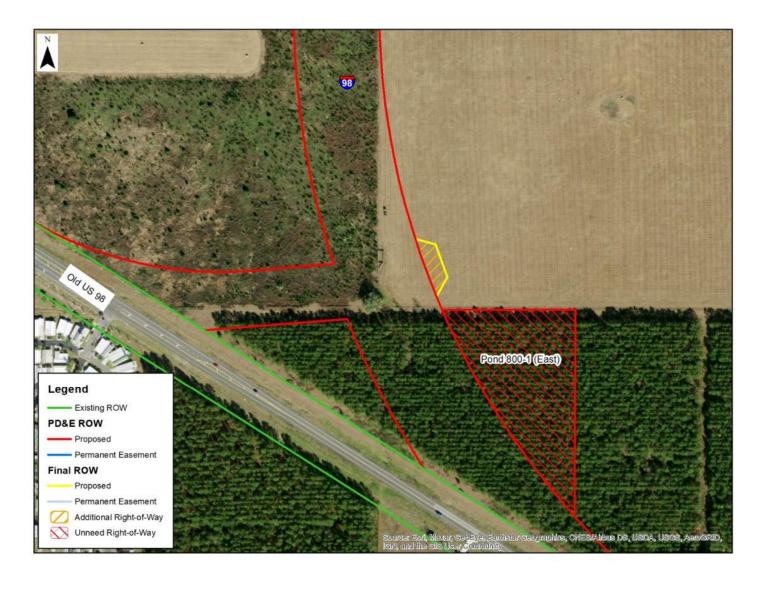


Figure 1-4 Reevaluation Area Map (3)

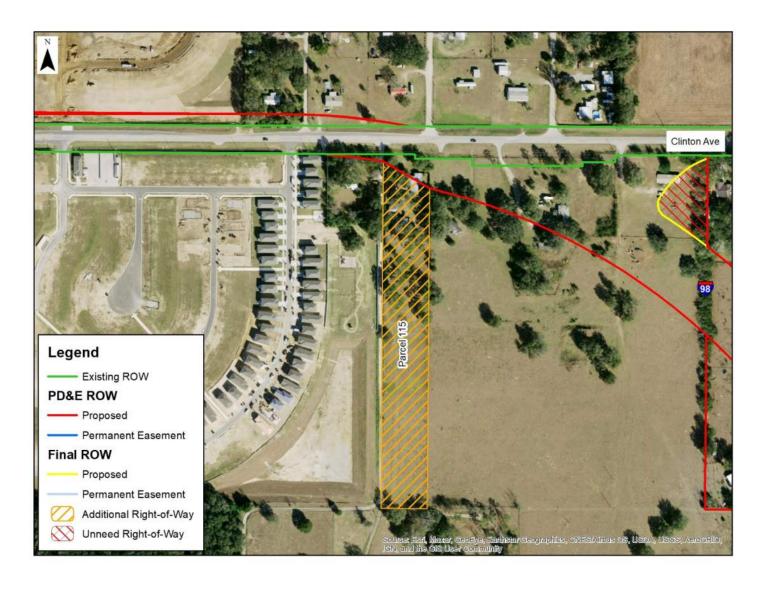


Figure 1-5 Reevaluation Area Map (4)

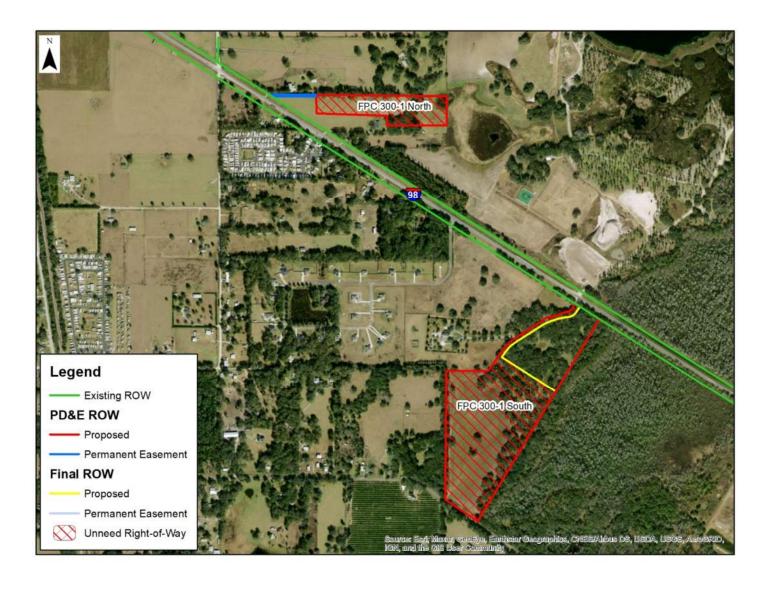


Figure 1-6 Reevaluation Area Map (5)

SECTION 2 EXISTING ENVIRONMENTAL CONDITIONS

2.1 EXISTING LAND USE

The existing land uses and habitats within the project area have had no changes from the approved Type 2 Categorical Exclusion. With the proposed right of way acquisiiton, the modifications to the proposed ROW are generally within the same land uses as previously evaluated. The land uses were identified by classification using the FDOT's Florida Land Use, Cover and Forms Classification System (FLUCFCS) description as well as the FLUCCS code (number that represents the type of land use). The predominant land use types within the project reevaluation areas are: 6.11 acres of Residential Low Density (FLUCFCS 110), 6.51 acres of Cropland and Pastureland (FLUCFCS 210), and 0.20 acres of Tree Plantation (FLUCFCS 440). Table 2-1 summarizes the land use acreages and corresponding percentages of total area within the reevaluation area. The land use for the reevaluated areas are shown in Figure 2-1 to Figure 2-4. Current conditions of the reevaluation areas are shown in Photo 1 to Photo 6 taken during a field review on September 10, 2024.

From the field review, there is one land use modification that was observed. The Tree Plantation (FLUCFCS 440), in the southeast quadrant of US 98 and Townsend Road has been cleared since the original study.

Table 2-1 Land Uses within Reevaluation Area

Land Use Description	FLUCFCS Code	Size (Acres)	Percent of Reevaluation Area
Residential Low Density	110	6.11	47.7%
Cropland and Pastureland	210	6.51	50.7%
Tree Plantation	440	0.20	1.6%
	Total	12.82	100.0%

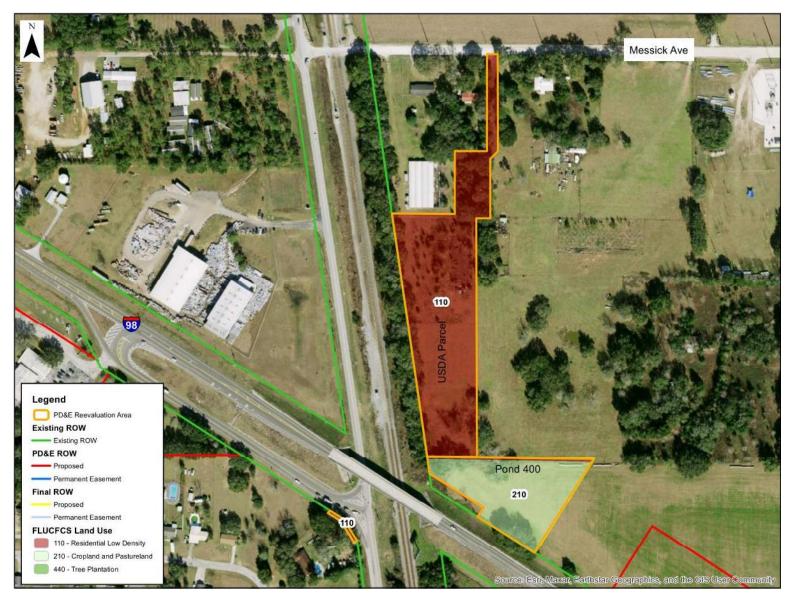


Figure 2-1 FLUCFCS Land Use Map (1)

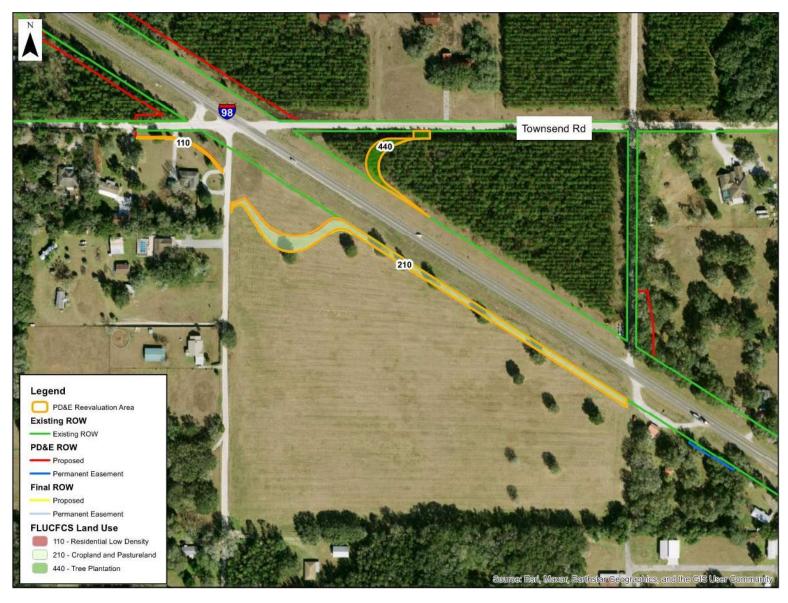


Figure 2-2 FLUCFCS Land Use Map (2)

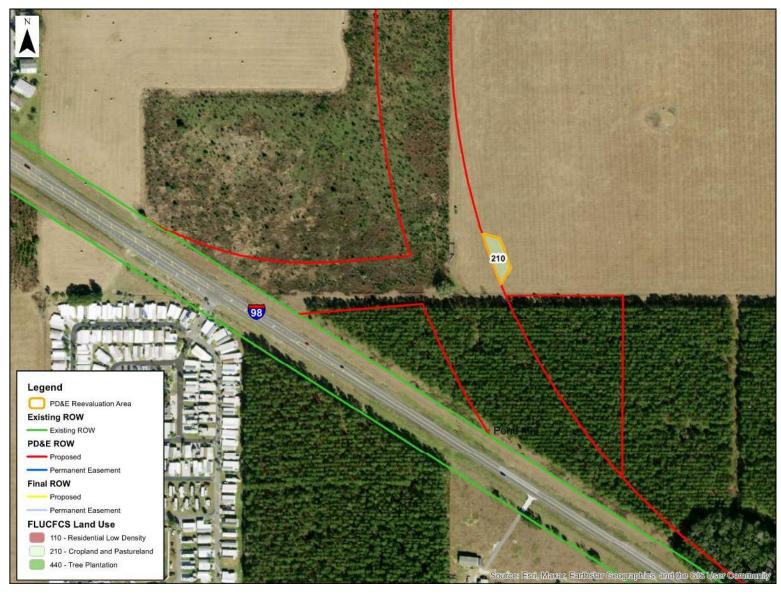


Figure 2-3 FLUCFCS Land Use Map (3)

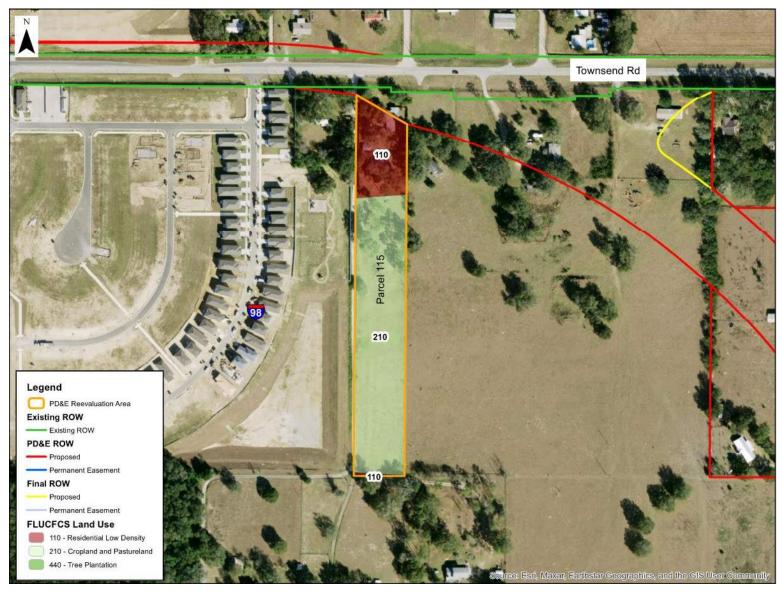


Figure 2-4 FLUCFCS Land Use Map (4)



Photo 1: Current Condition of USDA Parcel



Photo 2: Current Condition of Pond 400



Photo 3: Current Condition of Permanemt Easement 805



Photo 4: Current Condition of Townsend Road west of US 98



Photo 5: Current Conditions of Land south of Townsend Road west of US 98



Photo 6: Current Condition of Parcel 115

2.2 EXISTING SOILS

From review of the US Department of Agriculture, Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Florida (2021), it was determined that three (3) soil types are present within the reevaluation area. None of the soil types are classified as hydric, according to the Hydric Soils of Florida Handbook (Hurst, 2007). A detailed description of each soil type is found below. **Table 2-2** summarizes the soils within the reevaluation area. **Figure 2-6** to **Figure 2-9** depicts the soils within the reevaluation area.

Table 2-2 Soils within Reevaluation Area

Soil Series Name	Hydric (Yes/No)	Size (Acres)	Percent of Reevaluation Area
Candler Fine Sand, 0 to 5 Percent Slopes	Non-Hydric	8.14	63.5%
Lake Fine Sand, 0 to 5 Percent Slopes	Non-Hydric	2.92	22.8%
Arredondo Fine Sand, 0 to 5 Percent Slopes	Non-Hydric	1.76	13.7%
	Total	12.82	100.0%



Figure 2-5 NRCS Soils Map (1)

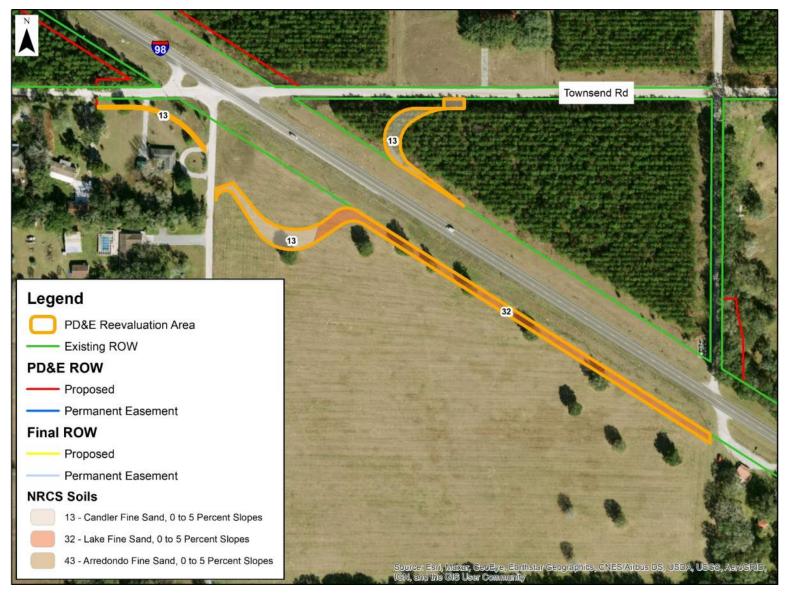


Figure 2-6 NRCS Soils Map (2)

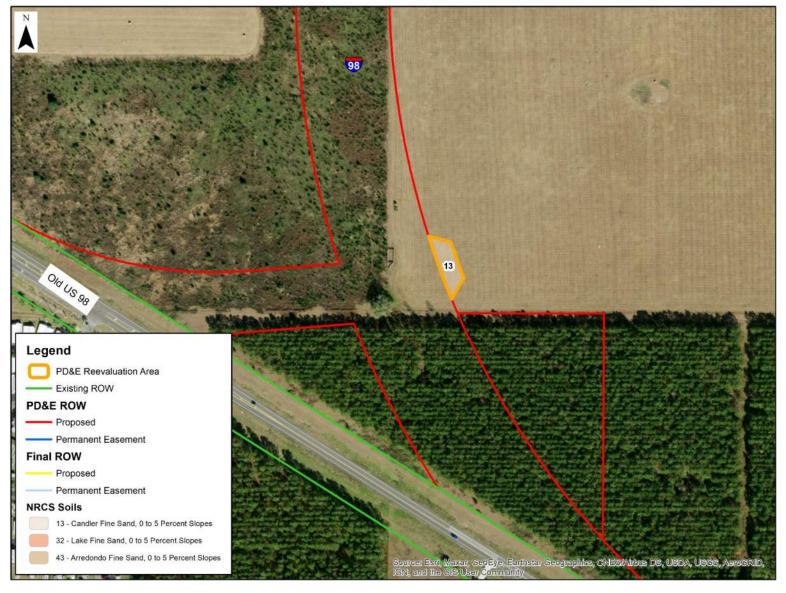


Figure 2-7 NRCS Soils Map (3)

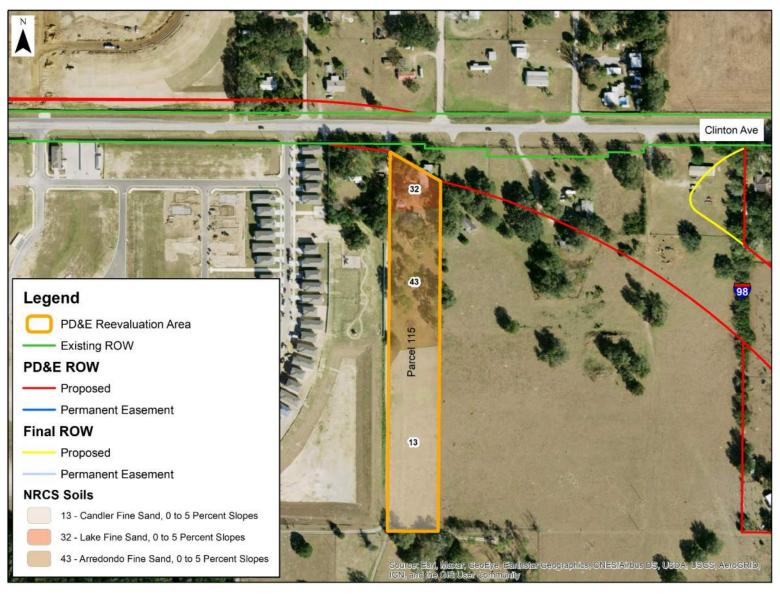


Figure 2-8 NRCS Soils Map (4)

SECTION 3 PROTECTED SPECIES AND HABITAT

3.1 METHODOLOGY AND ASSESSMENT

A Natural Resource Evaluation (NRE) (October 2021) was prepared for this project. The 2021 NRE (October 2021) was submitted to the US Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), Florida Department of Agriculture and Consumer Services (FDACS), Southwest Florida Water Management District (SWFWMD), and Florida Department of Environmental Protection (FDEP) on October 27, 2021. USFWS concurred with the findings of the NRE on November 19, 2021. FWC concurred with the findings of the NRE on November 18, 2021. SWFWMD provided comments relative to permitting on November 19, 2021. No response was received from FDACS or FDEP.

A NRE Technical Memorandum (August 2022) was prepared for additional ROW requirements associated with conceptual design modifications made after the Public Hearing. As the design modifications reduced wetland impacts without changing the permitting requirements for the project and species effect determinations remained the same or were reduced, additional agency coordination was not required.

The reevaluation area was assessed for the presence of suitable habitat for protected species in accordance with 50 CFR Part 402 of the ESA of 1973, as amended, Chapter 5B-40: Preservation of Native Flora of Florida, F.A.C., Chapter 68A-27: Rules Relating to Endangered or Threatened Species, F.A.C., and the FDOT PD&E Manual.

The following changes in the status of federal and state-protected species have occurred since the preparation of the NRE and NRE Addendum, and the approval of the Type 2 Categorical Exclusion, pursuant to *Chapter 68A-27, F.A.C.- Rules Relating to Endangered of Threatened Species* and *50 CFR 17.11* and *17.12*.

- On September 13, 2022, the USFWS announced a proposal to list the tricolored bat (*Perimyotis subflavus*) as an endangered species under the ESA (1973). The USFWS determined that the designation of critical habitat for the species is not prudent.
- As of October 12, 2022, the United States Fish and Wildlife Services (USFWS) found that the status of the gopher tortoise populations in the eastern segment, which includes Florida, Georgia, South Carolina, and most of Alabama, does not require protections under the Endangered Species Act (ESA) and will be withdrawn as a candidate for listing in accordance with 50 CFR 17 as published in the Federal Register as 87 FR 61834.
- As of October 3, 2023, the USFWS is proposing to list the short-tailed snake (*Lampropeltis extenuata*) as federally threatened under the ESA. The USFWS has determined that the

designation of critical habitat is prudent, but indeterminable at this time. This proposed listing is currently under public review.

• As of December 12, 2024, the USFWS is proposing to list the monarch butterfly (*Danaus plexippus*) as federally threatened and designate critical habitat under the ESA. This proposed listing is currently under public review.

3.2 FIELD REVIEW

On September 10, 2024, a field review was conducted to identify suitable habitat, evidence of protected species use, and critical habitat that might be expected to occur within the reevaluation area for all protected species and the entire project area for the proposed to be listed species. The only evidence of protected species identified for the reevaluation project area were six (6) potentially occupied gopher tortoise burrows along the fence line and roadway area within Parcel 115. No other species were identified. A gopher tortoise burrow map is shown in **Figure 3-1**.

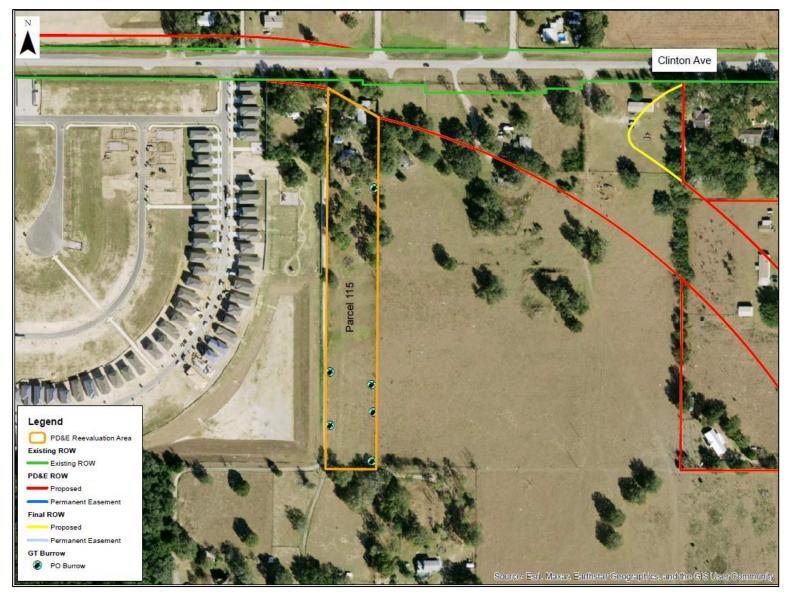


Figure 3-1 Gopher Tortoise Map

3.3 SPECIES EVALUATION

No significant changes in impacts to suitable habitat for listed species were identified; therefore, impacts for the species are minimal to none. The effect determinations made for the reevaluation, as well as those made in the approved Type 2 Categorical Exclusion, are shown in **Table 3-1**.

A brief discussion is provided below to address the following changes in applicable law or regulation.

Gopher Tortoise

The gopher tortoise (*Gopherus polyphemus*), listed by the FWC as Threatened, is a long-lived reptile that occupies upland habitat throughout Florida including forests, pastures, and residential areas. The gopher tortoise digs deep burrows for shelter and forages on low-growing plants. Gopher tortoises are commonly found in areas containing xeric, well-drained soils including sandhills, xeric pine-oak hammocks, scrubshrub habitats, pine flatwoods, coastal dunes, pastures, orange groves, and disturbed sites. The 2021 NRE and 2022 NRE Technical Memorandum concluded that the probability of occurrence within the project study area was high due to presence of suitable habitat and species observation. With the requirement that all gopher tortoise issues be addressed in accordance with FWC Gopher Tortoise Permitting Guidelines, the gopher tortoise was assigned a **no adverse effect anticipated** determination for this project. Within the reevaluation areas, suitable habitat is present and six (6) potentially occupied gopher tortoise burrows were observed along the fence line and roadway area within Parcel 115. With the requirement that all gopher tortoise issues be addressed in accordance with FWC Gopher Tortoise Permitting Guidelines, the effect determination remains valid for this reevaluation. The withdrawal of the species as a candidate for listing in accordance with 50 CFR 17 does not change or impact this determination.

Gopher Tortoise Conservation Permit (GTC-23-00412) was issued by FWC on November 6, 2023. Gopher tortoise relocation activities began on February 15, 2024 and will continue throughout the construction phase of the project. Exclusionary fencing has been installed to keep any tortoises from wandering into the right of way. If any relocations are required on Parcel 115, the Gopher Tortoise Conservation Permit will be modified accordingly.

Short-tailed Snake

The short-tailed snake (*Lampropeltis extenuata*) is listed as threatened by the FWC and, although not identified by the USFWS Information for Planning and Consultation (iPaC) as having potential to occur within the project area, is proposed as threatened for listing under the ESA by the USFWS. Short-tailed snakes are typically found burrowed in sandy soils, particularly those within longleaf pine and xeric oak sandhills, scrub, and xeric hammock habitats. The 2021 NRE and 2022 NRE Technical Memorandum concluded that native xeric habitats with sandy soils do not occur within the project study area and this species was not observed during project field reviews. Therefore, the probability of occurrence within the project study area is considered to be none and the short-tailed snake was assigned a **no effect anticipated** determination for this project. No suitable habitat is identified within the reevaluation areas

and no individuals were observed. Therefore, the effect determination remains valid for this reevaluation. The proposed federal listing of the species does not change or impact this determination.

Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is listed by the USFWS as a proposed threatened species for listing under the ESA. It is large and conspicuous with bright orange wings surrounded by a black border and covered with black veins. The black wing border also has a double row of white spots on the upper side. The adults depend on nectar-rich flowers for foraging during breeding and migration. They only lay eggs on their obligate host plant, milkweed (primarily *Asclepias* spp.). As such, anywhere that milkweed is present is considered monarch butterfly habitat. Mowed right of way can contain milkweed and is considered potential habitat; however, naturally occurring milkweed has become rarer. Monarch butterflies are present year-round in Florida and, as such, construction cannot be timed to avoid impacts to potential habitat. This species was not addressed in the 2021 NRE, 2022 NRE Technical Memorandum, or approved Type 2 Categorical Exclusion. During the field review of the project, no milkweed, potential habitat or monarch butterflies were observed. The probability of occurrence within the project area is designated as low due to the species being known to occur in Pasco County, but suitable habitat is limited. If the monarch butterfly is listed by USFWS as Threatened or Endangered and the project may affect the species, FDOT commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.

Tricolored Bat

The tricolored bat (*Perimyotis subflavus*) is listed by the USFWS as a proposed endangered species for listing under the ESA. The tricolored bat is a small insectivorous bat that is distinguished by its unique tricolored fur and often appears yellowish to nearly orange. The once common species is wide ranging across the eastern and central United States (including all of Florida except the Florida Keys) and portions of southern Canada, Mexico and Central America. The bats roost in caves, abandoned mines, human structures such as road-associated culverts, and forested habitats/trees, primarily among leaves of live or recently dead deciduous hardwood trees, Spanish moss, and pine trees. This species was not addressed in the 2021 NRE, 2022 NRE Technical Memorandum, or approved Type 2 Categorical Exclusion. No bats or evidence of bat activity (i.e. guano, staining, insect remains, smell or noise) was observed during field reviews. The probability of occurrence within the project area is designated as low due to the species being known to occur in Pasco County, but suitable habitat is limited. With clearing activities associated with construction, there is a potential temporary loss of roosting locations. If the tricolored bat is listed by USFWS as Threatened or Endangered and the project may affect the species, FDOT commits to reinitiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.

Overall, the changes identified as part of this reevaluation occur within the same habitat types as previously identified, and as shown in **Table 3-1**, no changes in effect determinations have been made.

The proposed project changes are not anticipated to result in adverse effects to protected species or their habitat.

Table 3-1 Protected Faunal and Fauna Species Effect Determination

145.651	recteu Fauliai allu Fauli	и орсенс		eterrimatio.		
Species	Common Name	Federal Status	State Status	Type 2 CE Effect Determination	Reevaluation Effect Determination	
Plants						
Centrosema arenicola	Sand Butterfly Pea		SE	NEA	NEA	
Litsea aestivalis	Pondspice		SE	NEA	NEA	
Monotropsis reynoldsiae	Pygmy Pipes		SE	NEA	NEA	
Nemastylis floridana	Celestial Lily		SE	NEA	NEA	
Pecluma plumula	Plume Polypody		SE	NAEA	NAEA	
Salix floridana	Florida Willow		SE	NEA	NEA	
Tillandsia fasciculata)	Stiff-leaved Wild Pine		SE	NAEA	NAEA	
Triphora rickettii	Craighead's Nodding Caps		SE	NEA	NEA	
Insects						
Danaus plexippus	Monarch Butterfly	С			4	
Reptiles						
Drymarchon corais couperi	Eastern Indigo Snake	Т	FT	MANLAA	MANLAA	
Eumeces egregius lividus	Bluetail Mole Skink	Т	FT	NE	NE	
Gopherus polyphemus	Gopher Tortoise		ST	NAEA	NAEA	
Lampropeltis extenuata	Short-tailed Snake	PT	ST	NEA	NEA	
Pituophis melanoleucus mugitis	Florida Pine Snake		ST	NAEA	NAEA	
Birds						
Aphelocoma coerulescens	Florida Scrub-Jay	Т	FT	NE	NE	
Antigone canadensis pratensis	Florida Sandhill Crane		ST	NAEA	NAEA	
Athene cunicularia floridana	Florida Burrowing Owl		ST	NAEA	NAEA	
Charadrius melodus	Piping Plover	Т	FT	NE	NE	
Egretta caerulea	Little Blue Heron		ST	NAEA	NAEA	
Egretta rufescens	Reddish Egret		ST	NAEA	NAEA	
Egretta tricolor	Tricolored Heron		ST	NAEA	NAEA	
Falco sparverius paulus	Southeastern American Kestrel		ST	NAEA	NAEA	
Haliaeetus leucocephalus	Bald Eagle	BGEPA ¹	BGEPA ¹	NEA	NEA	
Lateralus jamaicensis jamaicensis	Eastern Black Rail	Т	FT	MANLAA	MANLAA	
Mycteria americana	Wood Stork	Т	FT	MANLAA	MANLAA	

Picoides borealis	Red Cockaded Woodpecker	E	FT	NE	NE	
Platalea ajaja	Roseate Spoonbill		ST	NAEA	NAEA	
Polyborus plancus audubonii = Caracara cheriway	Audubon's Crested Caracara	Т	FT	NE	NE	
Rhynchops nigers	Black Skimmer		ST	NEA	NEA	
Sternula antillarum	Least Tern		ST	NEA	NEA	
Mammals						
Perimyotis subflavus	Tricolored Bat	PE	State Rules ²		4	
Ursus americana floridana	Florida Black Bear		NL ³	NAEA	NAEA	

E = Endangered C = Candidate
T = Threatened NL = Not Listed

PE = Proposed Endangered MANLAA = May affect, not likely to adversely affect

PT = Proposed Threatened NE = No effect

FT = Federally Threatened NEA = No effect anticipated

SE = State Endangered NAEA = No adverse effect anticipated

ST = State Threatened

- 1 The bald eagle is protected under the Bald and Golden Eagle Protection Act (BGEPA), the Migratory Bird Treaty Act (MBTA), and State law (F.A.C. 68A-16.002).
- 2 Bats are State-protected from take by Rule 68A-4.001 F.A.C. and 68A-29.002 F.A.C.
- 3 The Florida black bear is afforded protection under the Florida Black Bear Conservation Rule 68A-4.009 F.A.C.
- 4 Effect determinations are not applicable to candidate and/or proposed to be listed species.

SECTION 4 WETLAND EVALUATION

No wetlands or Other Surface Waters (OSW) were identified from the Reevaluation review.

SECTION 5 CONCLUSION

There are minimal changes to the impacts on resources identified in the ROW addition and modifications. The modifications to the design do not result in changes to effect determinations for protected species or proposed wetland impacts.

5.1 COMMITMENTS

The approved Type 2 Categorical Exclusion included several commitments relative to protected species. These commitments remain valid and in effect.

 The FDOT will implement the most current version of the USFWS' Standard Protection Measures for the Eastern Indigo Snake.

Status: Commitment In Progress. The most current version of the USFWS' Standard Protection Measures for the Eastern Indigo Snake is being implemented during construction.

• The FDOT will complete a wood stork suitable foraging habitat assessment during the project's Design phase to ensure that the proper amount of mitigation is procured for impacts to suitable wood stork foraging habitat in accordance with The Corps of Engineers, Jacksonville District, U. S. Fish and Wildlife Service, Jacksonville Ecological Services Field Office and State of Florida Effect Determination Key for the Wood Stork in Central and North Peninsular Florida.

Status: Commitment Fulfilled. During the permitting of the project, an evaluation of the impacts to wood stork suitable foraging habitat (SFH) was performed and a SFH compensation plan developed that provides an amount of habitat and foraging function equivalent to that of impacted SFH. The project will more than compensate for the SFH loss through the purchase of wetland mitigation bank credits. In addition, the designated stormwater management areas, including conveyance swales, treatment ponds, and floodplain compensation areas will provide foraging opportunities for wood storks in the post-construction condition.

The FDOT will resurvey the project footprint for the presence of burrowing owls, Florida sandhill
cranes and Southeastern American kestrels during the nesting season and prior to construction
commencement. If nesting activity is noted, coordination with the FWC will be completed, as
necessary.

Status: Commitment Fulfilled. Field surveys of the project footprint for the presence of burrowing owls, Florida sandhill cranes and Southeastern American kestrels were conducted during the nesting season and prior to construction in August 2023, September 2023, January 2024, and February 2024. No burrowing owls, Florida sandhill cranes, Southeastern American kestrels, or other evidence of these species (e.g., burrows, nests, calls) were observed.

The FDOT will resurvey two known osprey nests in cell towers within the study area during the
osprey nesting season and prior to construction to determine if these nests are still used by
ospreys or other bird species.

Status: Commitment Fulfilled. The two known osprey nests in cell towers within the study area were surveyed September 8th, 2023, to determine if they are still being used by ospreys or other birds prior to construction. An additional survey occurred on February 16, 2024, during the osprey nesting season (~December to late February). During both these surveys, nests were observed in both cell towers, but no osprey or other bird species were observed using the nests. The osprey nest at the southern end of the project area, at the Polk County Line, appeared to be in good condition. The nest within the Upper Hillsborough Preserve appeared to be falling apart and unusable by an osprey or other bird species.

The FDOT will conduct surveys for the stiff-leaved wild pine, plume polypody and other state-listed plant species during the project's design/environmental permitting phase and prior to construction. If listed plants are observed, the FDOT will continue coordination with the FDACS and Florida Native Plant Society or similar organization to facilitate the relocation of protected plants within the project footprint.

Status: Commitment Fulfilled. Field surveys were conducted during the project's design/environmental permitting phase and prior to construction in August 2023, September 2023, and February 2024. No stiff-leaved wild pine, plume polypody or other state listed plant species were observed.

To facilitate wildlife movement between the state-owned lands on both sides of the road, a
wildlife feature will be provided. This feature will consist of 10-foot-wide shelves constructed at
the seasonal high-water elevation on both sides of the Hillsborough River beneath the US 98
bridge.

Status: Commitment In Progress. The wildlife feature is permitted and under construction.

With the proposed listing of the monarch butterfly and tricolored bat, the following commitments are added:

- If the monarch butterfly is listed by USFWS as Threatened or Endangered and the project may affect the species, FDOT commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.
- If the tricolored bat is listed by USFWS as Threatened or Endangered and the project may affect the species, FDOT commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.

SECTION 6 REFERENCES

Florida Department of Transportation (FDOT). Florida Land Use, Cover and Forms Classification System (FLUCFCS), 3rd edition, 1999.

Florida Fish and Wildlife Conservation Commission. (https://myfwc.com/conservation/you-conserve).

Hurt, G.W. 2007. Hydric Soils of Florida Handbook. Florida Association of Environmental Soil Scientists. Gainesville, Florida. 223 pp.

- U.S. Department of Agricultural. Natural Resources Conservation Service (NRCS), Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx).
- U.S. Fish and Wildlife Service. Information for Planning and Consultation (IPaC) (https://ecos.fws.gov/ipac).
- U.S. Fish and Wildlife Service. National Wetlands Inventory (NWI) Wetlands Mapper (http://www.fws.gov/wetlands/Wetlands-Mapper.html).
- U.S. Fish and Wildlife Service. Tricolored bat species information webpage (https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus).